

Tallinn Masterplan 2030

Stage 4 Report

STREAMCITY



INTRODUCTION

OUR APPROACH AND ETHOS

Zaha Hadid Architects adopt a holistic, integrated and innovative approach to master planning. We strive to create multi-faceted environments, rich in experience, exciting to live in and inspirational for its citizens: successful additions to the wider city, creating value for both the user and client. Our design process is an iterative one – it evolves through a series of examinations, adjustments and reflections across all disciplines. It is simultaneously tested for its macro as well as micro delivery. Developments, particularly large ones, must deliver on many levels to be successful, realistic and financially viable. We strongly believe that a successful design approach must account for and incorporate all complexities associated with hitting the mark on all levels.

For this purpose, we work within a wider multi-disciplinary team of experts. We believe this comprehensive approach gives depth and meaning to our work and grounds our proposals in the local condition. For each project we assemble a unique mix of expertise that best serves the specific needs and objectives of our clients' brief, locality, culture and market. Our methodology includes a thorough assessment of the local condition, physically, socially and experientially including infrastructure, transport, landscape and public realm connectivity between adjacent districts, spatial complexity and user experience. Following our investigation and analysis only then do we begin to formulate recommendations and alternative proposals.

At Port Tallinn, we deployed processes of rigorous analysis of the given conditions, aspirations and possibilities to acquire a deep understanding of the city, the port, specific site conditions, topography, culture, aesthetic aspiration, build ability and financial return.

The result of this multi-layered approach is presented here in a consolidated design proposal which incorporates all aspects of this process and responds to the brief on many levels simultaneously.

We studied and explored patterns of behaviour and usage of the city of Tallinn and the most immediate context from the port itself. We assessed relationships between the site and the city and beyond with the wider region and sought ways of providing prominence.

We scrutinised the connectivity of the site and looked at ways of improving or discovering completely new routes to connect with the immediate and broader context.

We applied methods to create a blueprint for contemporary living and imprint the on-going cultural, societal and demographic changes onto the DNA of the master plan.

We studied demographic and economic trends to create a development strategy that will be best absorbed by the market and that will provide the Port of Tallinn with the most advantageous route for long term success.

FLEXIBILITY

In line with our response to the earlier stages of work, Stage 4 of the Tallinn Port Masterplan 2030 retains the backbone for the master plan identity that can sustain the future and offer long term flexibility and adaptability of the programme.

We understand the long-term nature of master plan projects and high level of risk involved for our clients associated with planning and development implementation of such projects.

For that reason we concentrated efforts on creating a vision and design proposal supported by an infrastructure and transport strategy that will empower this master plan with the resilience to global financial movements and fluctuations in market forces, whilst retaining the overall distinct identity of the newly created brand.

ASPIRATION AND INSPIRATION

The city's elite today are profoundly urban and value proximity to transport, work, play and peer networks as a means of plugging into the quality social and economic streams of the city. The primacy of the location and the need to be near or around richness and choice of activities is on top of urban denizens' desirability list. The priority of accommodating and enhancing this lifestyle has driven our work within Tallinn Port master plan.

UNIQUE WORLD-CLASS PUBLIC REALM

Our proposal will offer iconic and user-friendly public spaces, accessible and distinctive.

Tallinn Port will become a desirable place to live and a flexible space to work. The public realm will offer high quality routes and spaces that support connectivity and place-making of the overall development and will highlight principles of sustainability and values of integration. Seamless connectivity from the ferry and cruise terminals to the city centre should reinforce liveable and accessible areas that will make the harbour redevelopment a district for today and tomorrow. The public realm bridges on the main infrastructural routes in order to create a continuous and uninterrupted high-line route for the users across all sites.

RECOGNIZABLE IDENTITY

Our master plan strives to offer a network of links (pedestrian streams) within the harbour that will redefine the identity and enhance the perception of the city whilst remaining deeply rooted in the given cultural, physical and market context. In our proposal for Tallinn, we focused on proposing exceptional and unique solutions for the site, to reinforce the link between the city centre and the port and out towards the Baltic region with a new gateway to the sea. Our proposal's recognizable identity aims to create a catalyst, a kernel of new value which quickly grows as it acquires market force and accelerates development.

SITE ANALYSIS

Our analysis of the Tallinn Port reached beyond the port boundaries to understand how the City of Tallinn and the Port of Tallinn interact with the Baltic region and the wider world, including ferry lines within the Baltic region and cruise routes from further afar. Tallinn Port is frequently and well connected. The Port of Tallinn contributes greatly to the economy of the city and Estonia and with the continued operations, growth and development of the Master plan will contribute more widely. Motorway network connectivity is important for Estonians and visitors but more importantly for the movement and transport of goods arriving and departing from the Port.

As we focused in on the port area and the City of Tallinn our analysis considered existing land use, green/landscaped and park areas, the wonderful city fabric of Tallinn and began to consider with the advice of the Port of Tallinn potential development sites and opportunity area as well as considering buildings that are or will become redundant through the evolution of the port and therefore could be removed to offer additional opportunities. As a result of the analysis we identified a SWOT, Strengths, Weaknesses, Opportunities and Threats list to guide our further thinking.

01

SITE ANALYSIS // FIGURE GROUND AND DEMOLITION SITES

City Fabric / Figure Ground



Identified Demolition Sites/Buildings and Potential Extensions



STRENGTH

- Proximity to the city: Old Town and CBD
- Attractive views towards the city and the Baltic sea
 - Inviting new gate to Tallinn from Baltic sea
 - Dynamic link with other Baltic countries
 - Potential of increasing number of cruises and ferry passengers visiting the city
 - Tallin is a tourist attraction

WEAKNESS

- Lack of biodiversity and green areas around the harbour
- Lack of connectivity and accessibility (public transportation, cycle path, pedestrian) toward the city
 - Nuisance: noise from the port activities
 - Chaotic and conflicted access to the port facilities during peak hours
 - Lack of way finding structure across the Harbour area
 - Existing buildings disturb the fluidity of the harbour development
 - New planned extension of Reidi road is an additional potential barrier between the city and the harbour

OPPORTUNITIES

- Lively waterfront and marina provide locals and visitors new and user friendly sea-side urban experience
 - New development becomes an attractive extension of the growing city
 - Providing new employment and investment opportunities
 - Providing new friendly residential and leisure environment
 - Providing green energy - wind power
 - Creating sensitive division between the development and the port users
 - Enhancing the strength of Tallinn as a vogue tourist attraction
 - Connecting the Harbour with existing green infrastructure and waterfront promenade

THREATS

- Risk of water pollution from the port activities
 - Increasing noise level from the growing harbour
 - Potential conflict of use between users of the port facilities and new neighbourhood residents / visitors
 - Planning application for some sites around the harbour area doesn't fit the development objective for the area

MASTER PLAN VISION

Tallinn 2030

02



Tallinn Opportunities

Economic Environment - Estonia: technology is everywhere

Tallinn's main economic strength is its well-developed and prosperous digital and ICT industry, this being closely linked to the fact that Estonia hosts the highest percentage of start-ups. The business network and urban fabric are already structured to support this sector, with:

- Six Business Incubators operating in the city;
- Several dedicated university centres such as Tallinn Sciences Park Tehnopol and Mektory. As the universities as pioneers in this area, the workforce is particularly skilled.
- Ulemiste City, a new modern city district in close proximity to the airport and dedicated to new technologies.

Public investment and policies further support this economic strength, notably with the existence of a large palette of e-services, a widespread public Wi-Fi network and the easing of administrative procedure for the setting of new companies.

Developing Tallinn's Harbour, in close proximity with the CBD, must complement this existing dynamic. It is an opportunity to create new employments, to attract foreign investment whilst provisioning for missing office spaces in the capital. In particular, the office market lacks Class A workspaces which the development aims to address.

Social & Cultural Environment

Estonian culture is closely intertwined with the Baltic culture. A great importance being given to nature and activities such as sauna, water parks or winter swimming. Kadriorg Park,

Nomme, Pirita and Rocca al Mara are in this respect highly attractive for the residents.

Tallinn also hosts a dynamic creative community, particularly visible in Telliskivi Creative City, but also at the Kultuurikatel Creative Hub, Tallinn Creative Incubator and Polymer Creative Factory.

Tallinn has a well-developed network of cultural and leisure infrastructures: theatres, restaurant, museums, etc. Development of the harbour area must insert itself in this network, and give an opportunity to further connect all the cultural, leisure and recreational hotspots. In particular, the close proximity of the Harbour with Seaplane Harbour, the Old Town Kadriorg Park, etc. And the future refurbishment of the Linnahall will help in activating this area of the city.

Finally, events, in particular related to singing are a strong component of the Estonian culture and offer an opportunity to offer new activities in the harbour.

Urban Structure & Residential

Urban sprawl is gradually weakening in Tallinn, therefore the development of Tallinn Harbour may offer the opportunity to create residential development that is in close proximity to the city centre and highly attractive to the residents, near the waterfront. Many residential premises in Tallinn built in the Soviet era buildings require considerable improvement to be an attractive living environment. Development of the harbour area offers the opportunity to broaden the housing typologies available to Tallinners.

Activation Strategy

Tallinn Harbour operates as the gateway to Estonia from the Baltic sea. Development, planned and built to a high standard will transform the area into a destination, a vibrant neighbourhood offering activities for all – residents, visitors, workers, young, families, older people, etc. – during all times of the day, the week, and across all seasons.

It is important to note that the city attracts 4,265,258 visitors per year, 58% of which are single day visits. This has been an important element in tailoring the program for the master plan, with the objective of making the Harbour a major stepping stone in the wider visits to the city.

Our activation strategy is underpinned by the following themes and objectives:

- Strengthen the links of the Harbour with nature and water, through the provision of new promenades, viewing points, waterfront access and pools;
- Welcoming the existing digital and creative communities, through the scheduling of events, the creation of cultural and crafting spaces and the development of facilities for start-ups;
- Giving new insights into Estonian culture, through a program of temporal events related to Estonian culture, crafting & food;
- Activate the site at different times of the day, week and season;
- Complete the network of hotspots available across the city, both thematically and spatially.

The provision of ground floor activities and retail spaces will in this regard be a key element to activate all the different areas of the harbour, and notably the ones dedicated to offices and residential development.

Distinctive Landmarks

To create a distinctive sense of place and help people find their way around the activities offered in the new development and toward the city, the creation of strong and iconic landmarks is crucial. More than assisting way-finding, recognisable landmarks will help branding the Harbour, giving it an unique identity. The urban promenade, the spine of the new Harbour, will link key focal points that will feature iconic buildings and objects: sculpture, the cruise terminal and public space.

In particular, on the North area of the Harbour, close to the entrance of the ferry and cruise terminals, the Cable Car facility, nested into an iconic and sculptural building, will establish a clear physical connection between the Harbour and the city. Visitors arriving from a cruise or ferry ship, locals residents or Talliners will be able, in a ten minutes scenic ride, to experience the link between the creative district of Telliskivi and the waterfront.

All day activation

The proposed mix of land uses will be the first step in the creation of a 24-hour neighbourhood. One that is alive throughout the work week to respond to the office time-line, active during the week and especially at lunchtime but as well complemented by the leisure and commercial time-line, active during the evening and week-ends. Spaces will therefore work differently at various times of the day, with tourists and residential flows further enhancing the dynamic of the neighbourhood. The Admiralty Basin for example, surrounded by F&B, retail and office spaces, will offer workers the opportunity to sit by the water during lunchtime, allow tourist to enjoy a scenic viewpoint in the evening, families to have a walk on the weekend, etc.

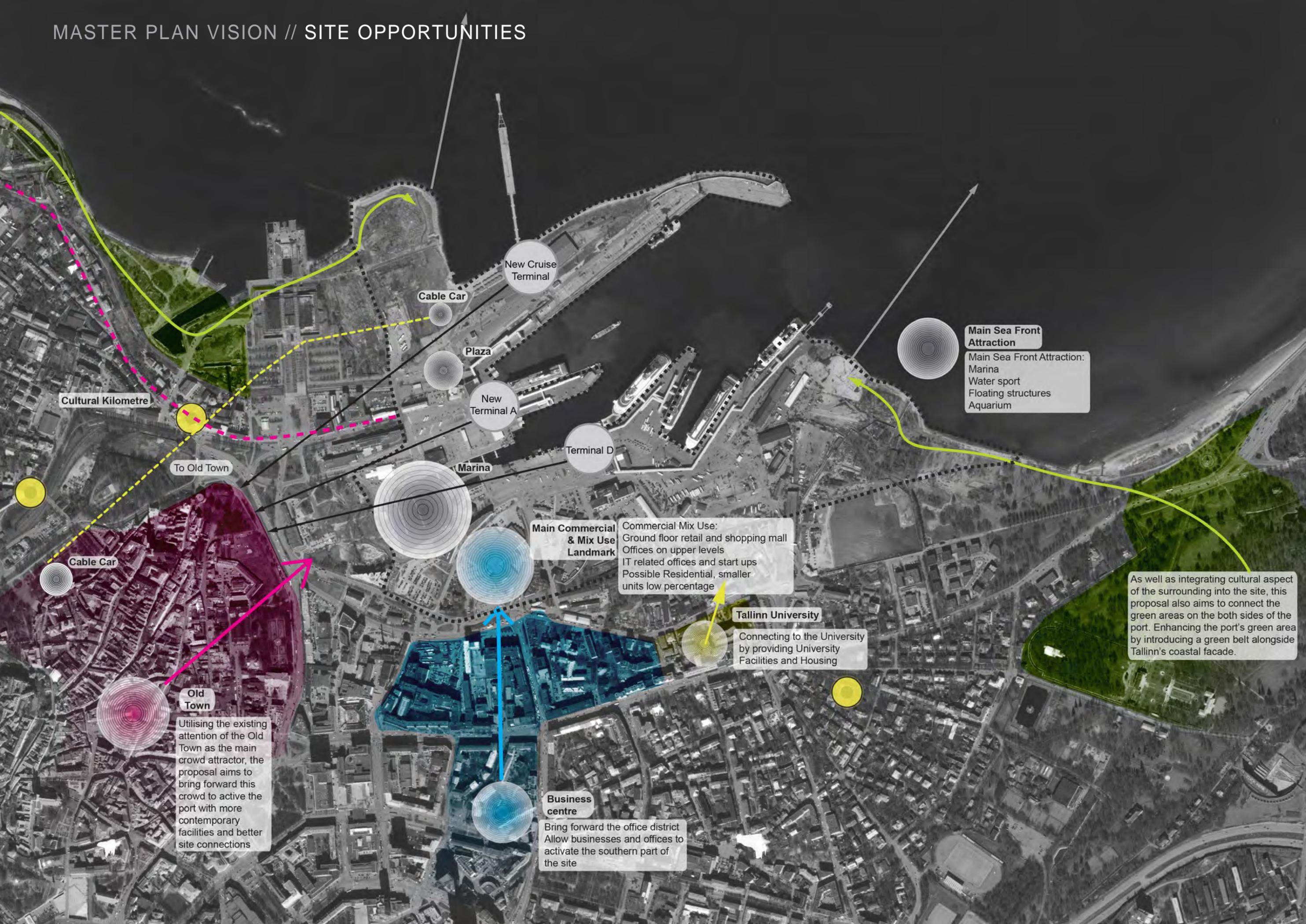
Multiple events, both regular and specialty markets, such as craft and food, and temporal events such as exhibitions or art performances can be scheduled to create specific attraction nodes at particular times of the day.

The residential districts, which include supporting retail and convenience shops on ground levels will allow active uses to be present during the day and evening. The creation of a new iconic plaza and civic centre, will enable people of this new community to meet, socialise and relax. Close proximity of residential districts with the main harbour leisure activities – ship wreck, aquarium and new marina – will reinforce connectivity and movement throughout and provide animation during the day and evening, especially at week-ends. The design of the urban fabric and building typology allows for the creation of courtyards and private garden/spaces and orientation of the building to enable those residential spaces to be quieter.

Seasonal activation

Seasonal attractions within the new district have also been considered to be present throughout the year, and temporal, varying with the seasons. The aquarium, cable car, sea water pool and shipwreck will support activity all year round while the new marina, F&B on terraces, and open-air events animate the streets in the warmer months of the year. Equally, temporary structures could facilitate events or activities throughout the year as well as seasonal activities that could be planned to animate and activate the spaces at various times year-round.

MASTER PLAN VISION // SITE OPPORTUNITIES



New Cruise Terminal

Cable Car

Plaza

New Terminal A

Terminal D

Marina

Cultural Kilometre

To Old Town

Main Sea Front Attraction
Main Sea Front Attraction:
Marina
Water sport
Floating structures
Aquarium

Main Commercial & Mix Use Landmark
Commercial Mix Use:
Ground floor retail and shopping mall
Offices on upper levels
IT related offices and start ups
Possible Residential, smaller units low percentage

Tallinn University
Connecting to the University by providing University Facilities and Housing

Old Town
Utilising the existing attention of the Old Town as the main crowd attractor, the proposal aims to bring forward this crowd to activate the port with more contemporary facilities and better site connections

Business centre
Bring forward the office district
Allow businesses and offices to activate the southern part of the site

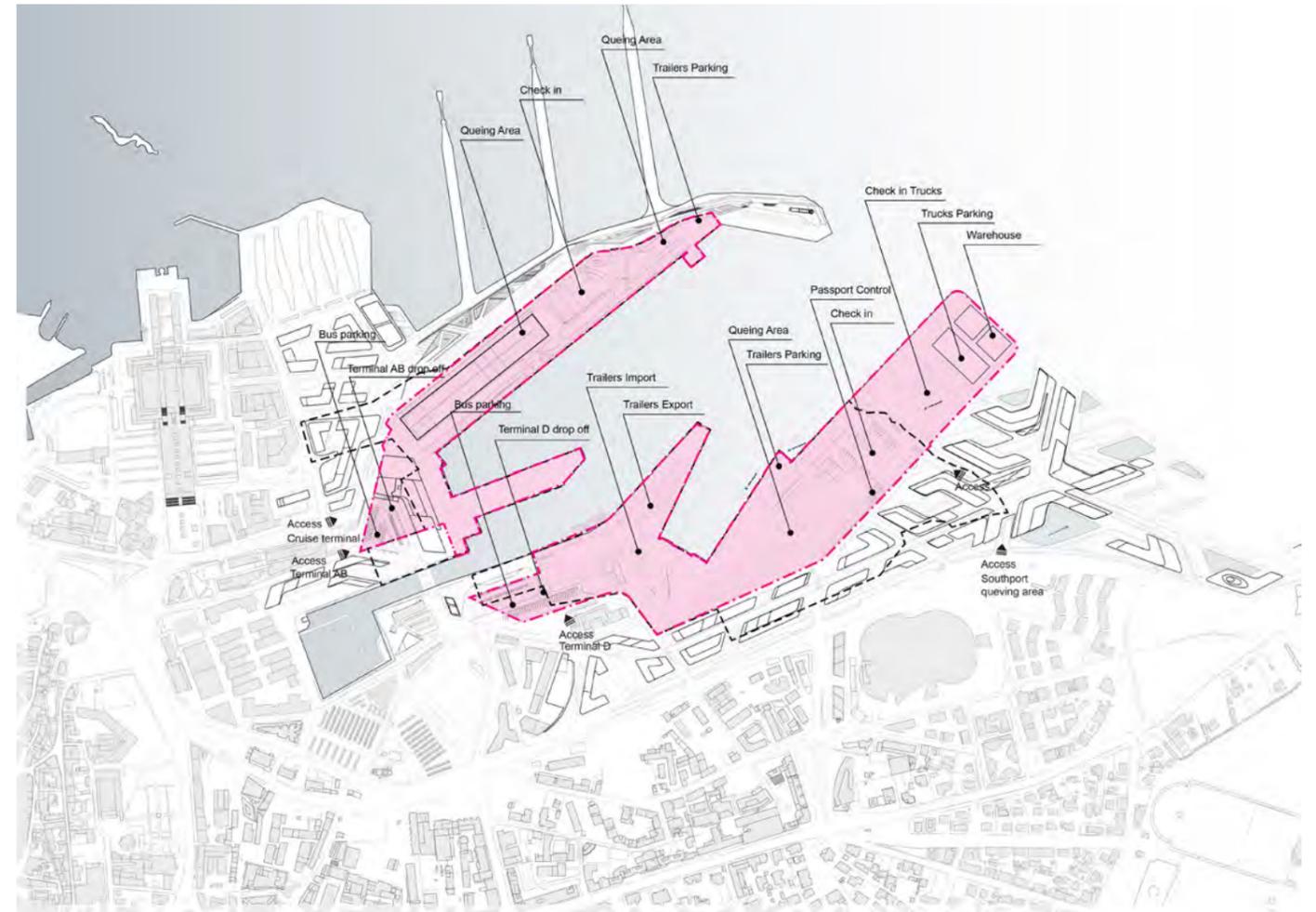
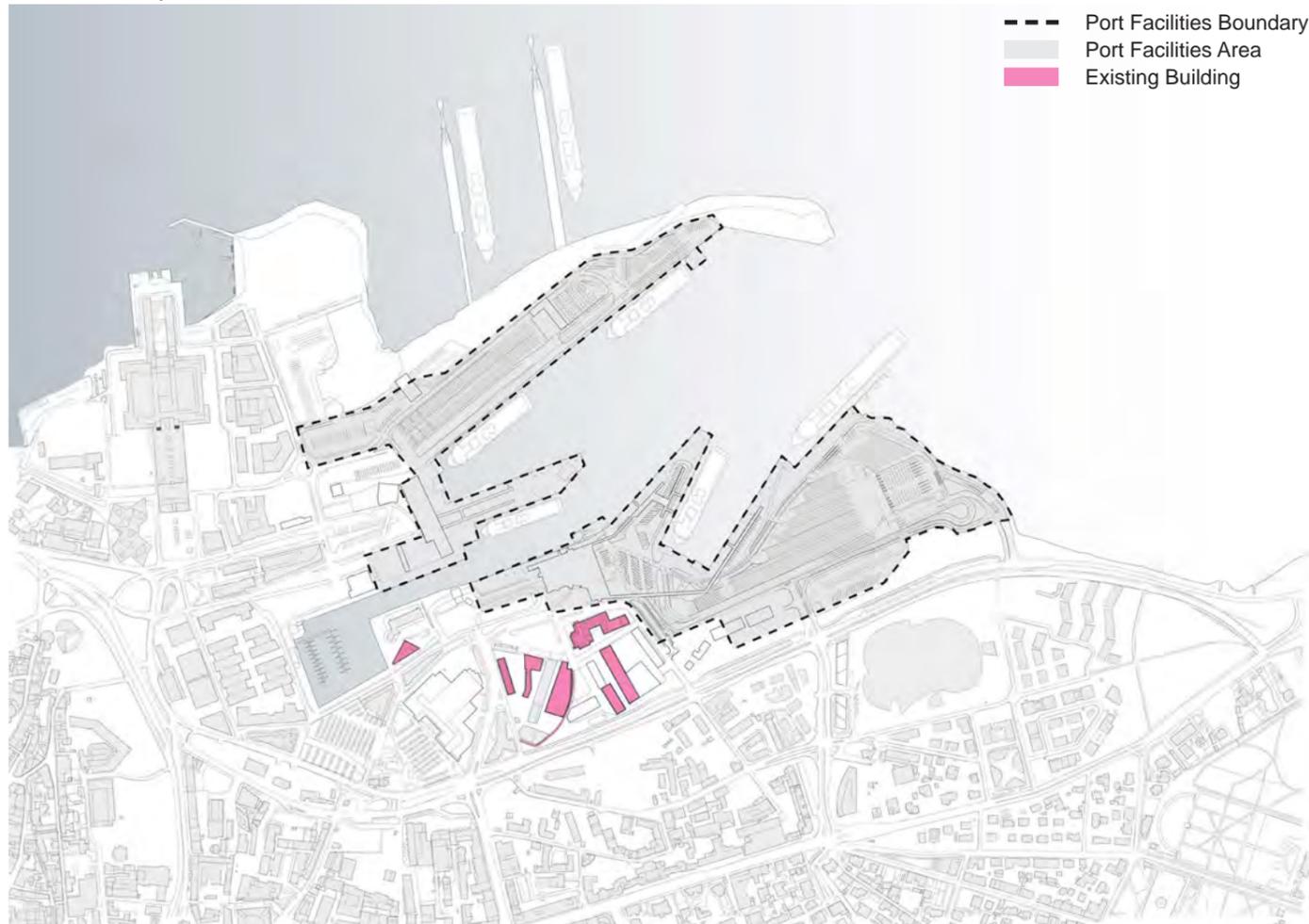
As well as integrating cultural aspect of the surrounding into the site, this proposal also aims to connect the green areas on the both sides of the port. Enhancing the port's green area by introducing a green belt alongside Tallinn's coastal facade.





MASTER PLAN VISION // CONCEPT

Site clean up



One of the most critical aspects for this master plan proposal was to understand and articulate the port facilities. The port of Tallinn must satisfy an ever growing demand due to its own success, being one of the fastest growing ports in Europe. The challenge for this master plan relies in the ability to consolidate and improve all the port functions and at the same time release and consolidate land for redevelopment.

The site is currently fragmented, the northern land reserve (plot 2) is disconnected from the city therefore making it difficult to access and reducing its potential. The constant crossing between pedestrian and vehicles and ferry related transport reduces the quality of the urban realm.

We studied in detail the needs and the accessibility deficits of the current layout. We also explored a series of solutions to increase the user access to the sea front.

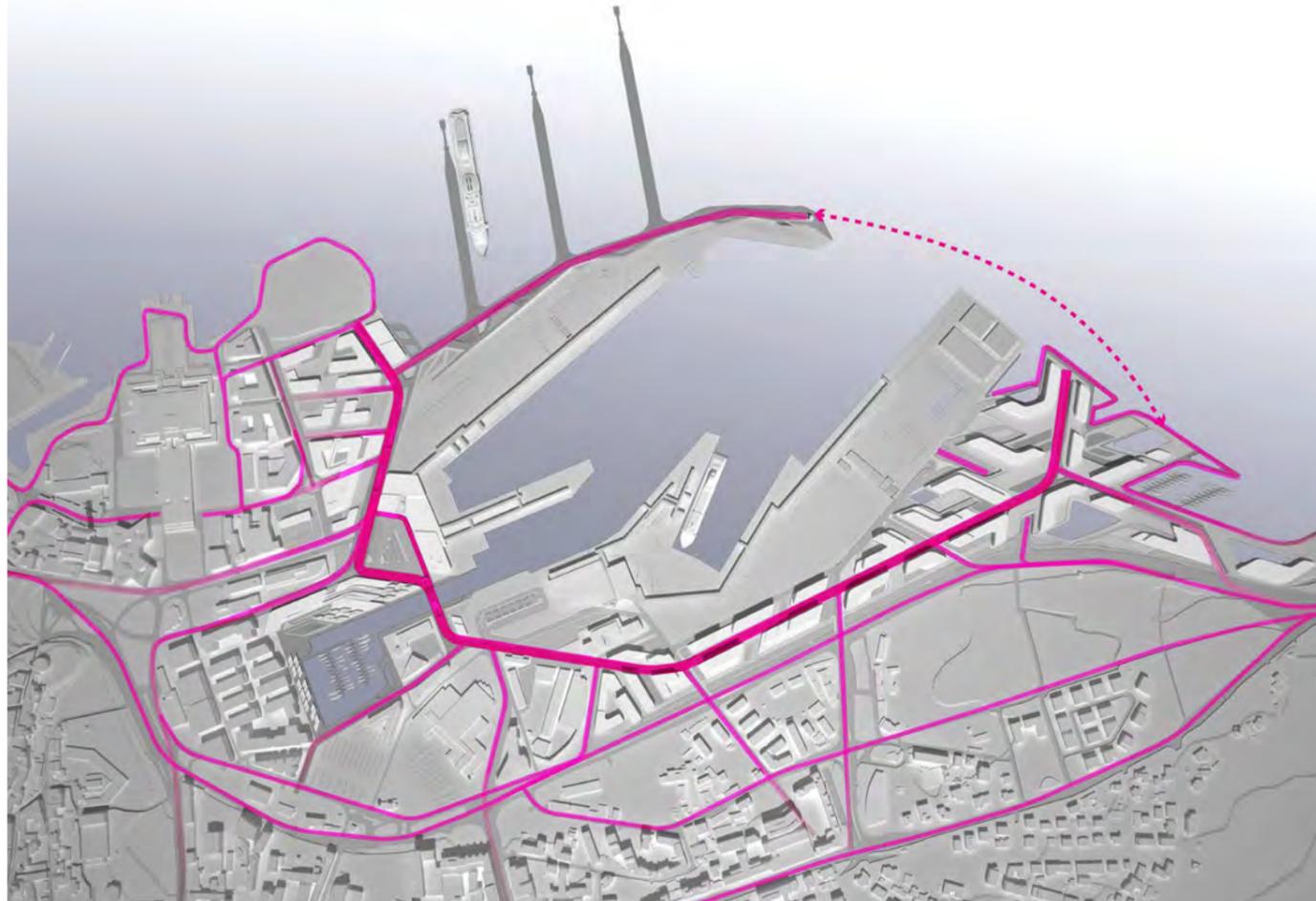
Our proposal for the northern port aims to maximise the site's potential through the following strategies. Firstly, the accessibility to the ferry facilities has been improved by a half sunken access road from Sadama, a pedestrian promenade and linear park half risen over the road improves the connection from the cruise terminal and re-connects the north sites to the marina.

Secondly, we propose a new terminal A/B and a multi-story car park in two connected volumes while retaining the historical facade of the old PoT building. The new state of the art terminal will be relocated towards the west allowing the back of house circulations and eliminating the checking area next to the marina. The new plaza with reduced traffic will enjoy terrific views to Tallinn old town and the vibrant marina. Trucks and Trailers parking have been also relocated.

Our proposal for the southern port aims to maximise possible extensions towards the Sea (plot 8). Our proposed design provides around a 20% increase in land area in relation to the current plan; the new port facilities are designed parallel to the harbour in a conventional layout. By consolidating the port facilities with the trailer parking and warehouses we reduced the roads significantly and released land for development.

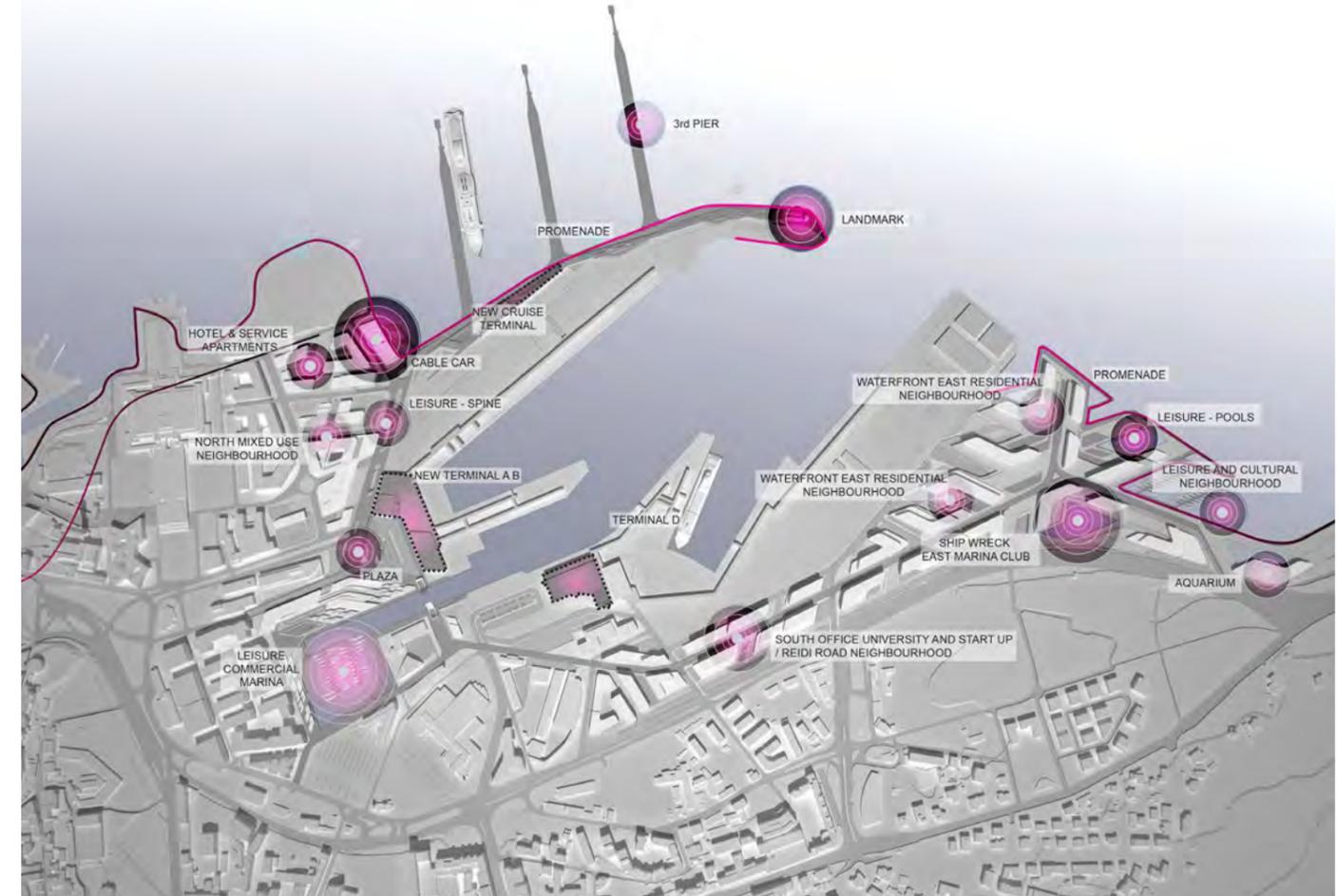
MASTER PLAN VISION // CONCEPT

Spine Connection



The principal public spine operates as an extended network of the city and waterfront promenades to the East and West of the site. The 'Stream' – facilitates the development of multiple programmatic zones and ensures the master plan achieves an interconnected flow throughout creating value along its entirety. The 'Stream' creates an armature for a series of spaces which act as magnets, 'attractors' between the city centre and the harbour, enabling the creation of exciting domains within the distinct zones of the development and enhancing the level of urban experience.

Hubs and Attractors



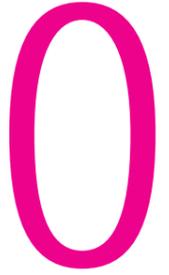
Along the interconnecting stream, we envision a series of hubs and attractors that will be clearly identified. Our proposal aims to create a sense of community for both user and visitors. The land use strategy will progressively evolve along the stream from residential on the west side, to offices mixed-use and retail near the marina on the east side. The Admiralty Basin Marina will have a leisure character which will evolve towards the north into retail, office space, until becoming hotel and service apartments towards the sea front.

MASTER PLAN VISION



03

PHASE



In preparation for the implementation of the wider Tallinn Port Master plan 2030 a number of components will form the first phase of the work:

PHASE 0

The diagram adjacent indicates the basic initial preparation strategy for setting out Phase 0 implementation.

Our understanding is the components for Phase 0 will be developed or demolished in the following order:

1. ROAD NETWORK

The new road network - access to the north port. The construction of a new site circulation system to the Cruise Terminal in the north, the main access road is half sunken under the spine.

2. THE SPINE

The northern section of the 'Spine' from Admiralty Basin to the Cruise Terminal development will present the backbone for the overall masterplan, and its foundation will be laid as part of Phase 0 preparation strategy. Required demolition of some of the redeveloped buildings will occur prior to that.

3. THE BRIDGE

The construction of the new gateway crossing bridge across the neck of Admiralty Basin.

4. TERMINAL D

The expansion of Terminal D and car park

5. CRUISE TERMINAL

The construction of the new Cruise Terminal is less problematic as the construction can take place at wintertime, when no cruise ships are arriving. The timing of construction should not overlap with the construction of terminal A/B and Terminal D.

6. Lootsi 13-1

The construction of the Lootsi 13-1 building adjacent to Admiralty Basin.

7. TRAM and TERMINAL D Drop-Off

Reconfiguration of the forecourt of Terminal D with the introduction of the Tram spur to give enhanced public transport access.

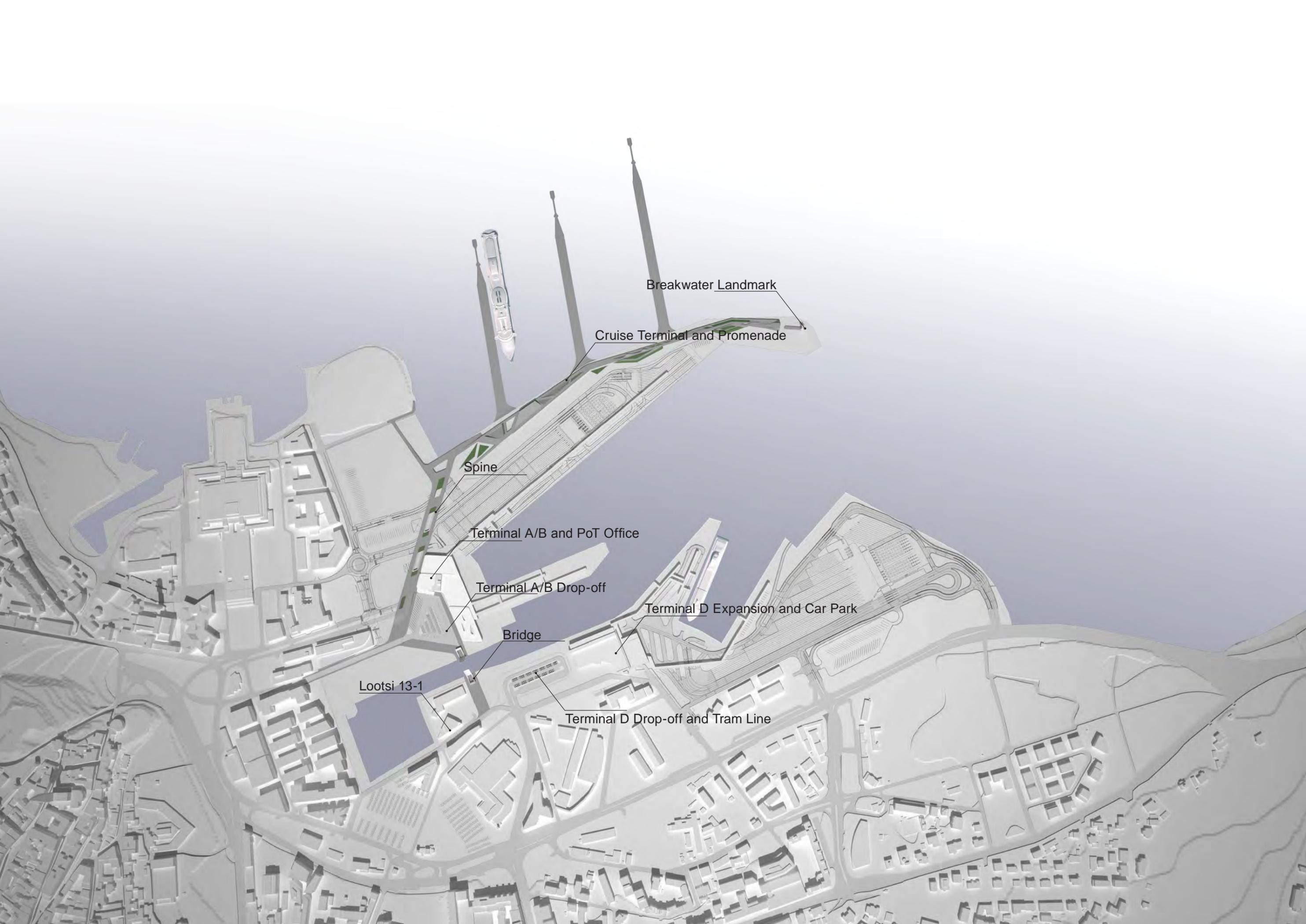
8. TERMINAL A/B

Demolish Terminal A/B as it has less capacity and construct a temporary structure to handle passenger flows. The temporary structure should be located immediately next to the existing terminal to utilise existing access infrastructure.

Construct the new Terminal A/B

9. BREAKWATER LANDMARK TOWER

Construction of the new Breakwater Landmark Tower on the end of the Cruise Terminal/Breakwater peninsula.



Breakwater Landmark

Cruise Terminal and Promenade

Spine

Terminal A/B and PoT Office

Terminal A/B Drop-off

Terminal D Expansion and Car Park

Bridge

Terminal D Drop-off and Tram Line

Lootsi 13-1

PHASE

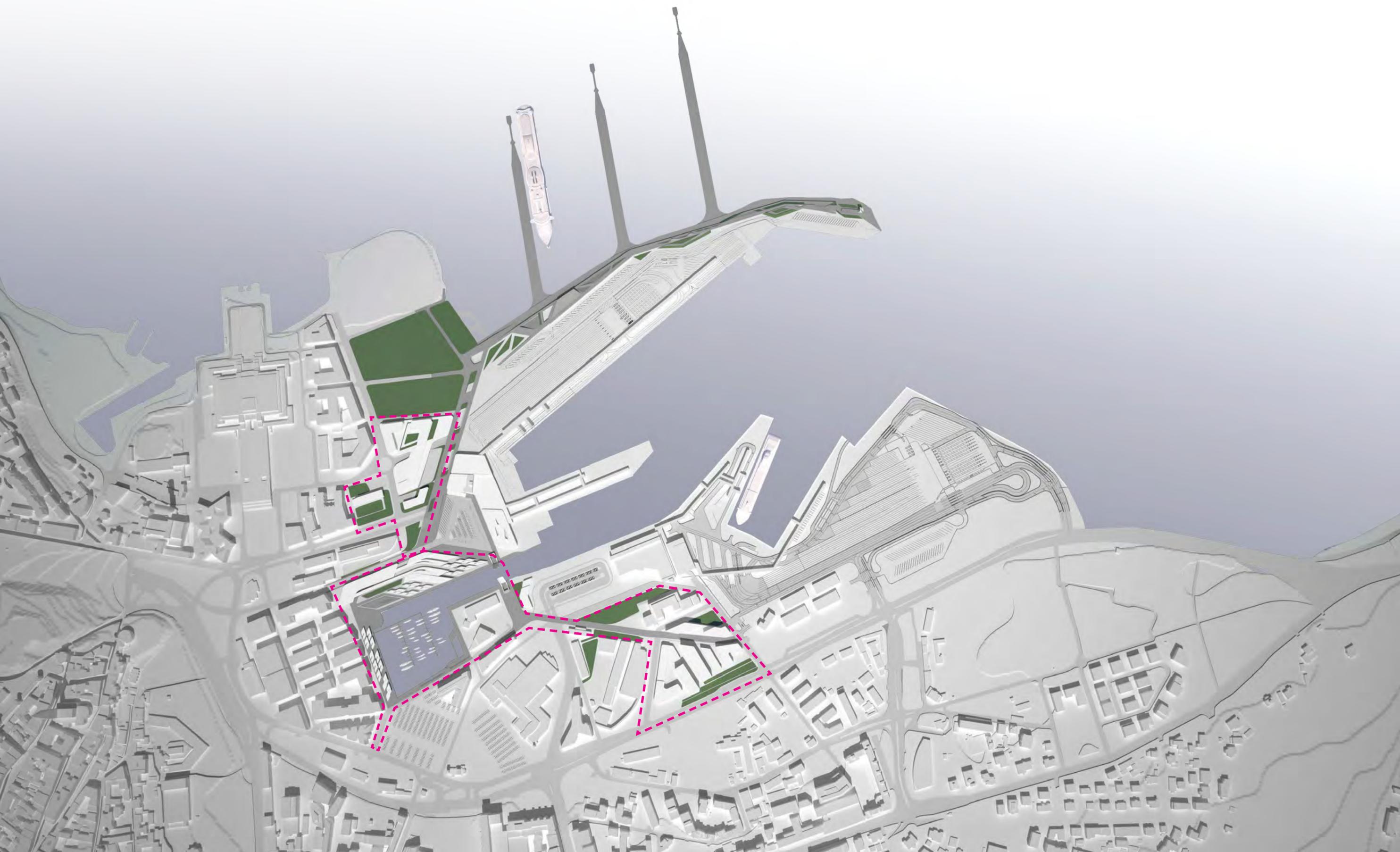
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CITY TO WATERFRONT

During phase 1 our proposal is to set out the DNA for the master plan, offering a coherent yet flexible foundation. This phase will redevelop the new and iconic Terminal A/B and Cruise Terminals, the updated Admiralty Basin marina and surroundings. During this stage we also propose to build the central spine for the development and adjacent roads. The first mixed-used development will also be included to capitalise the new urban realm that the operation has created. Terminal D Port's facilities will remain as planned during this stage. The existing Eastern plots of the port will remain operational to allow it to function as normal.

The remaining site will also be used during the master plan; our proposal is to convert the empty plots in parks, fairs, public space, etc.

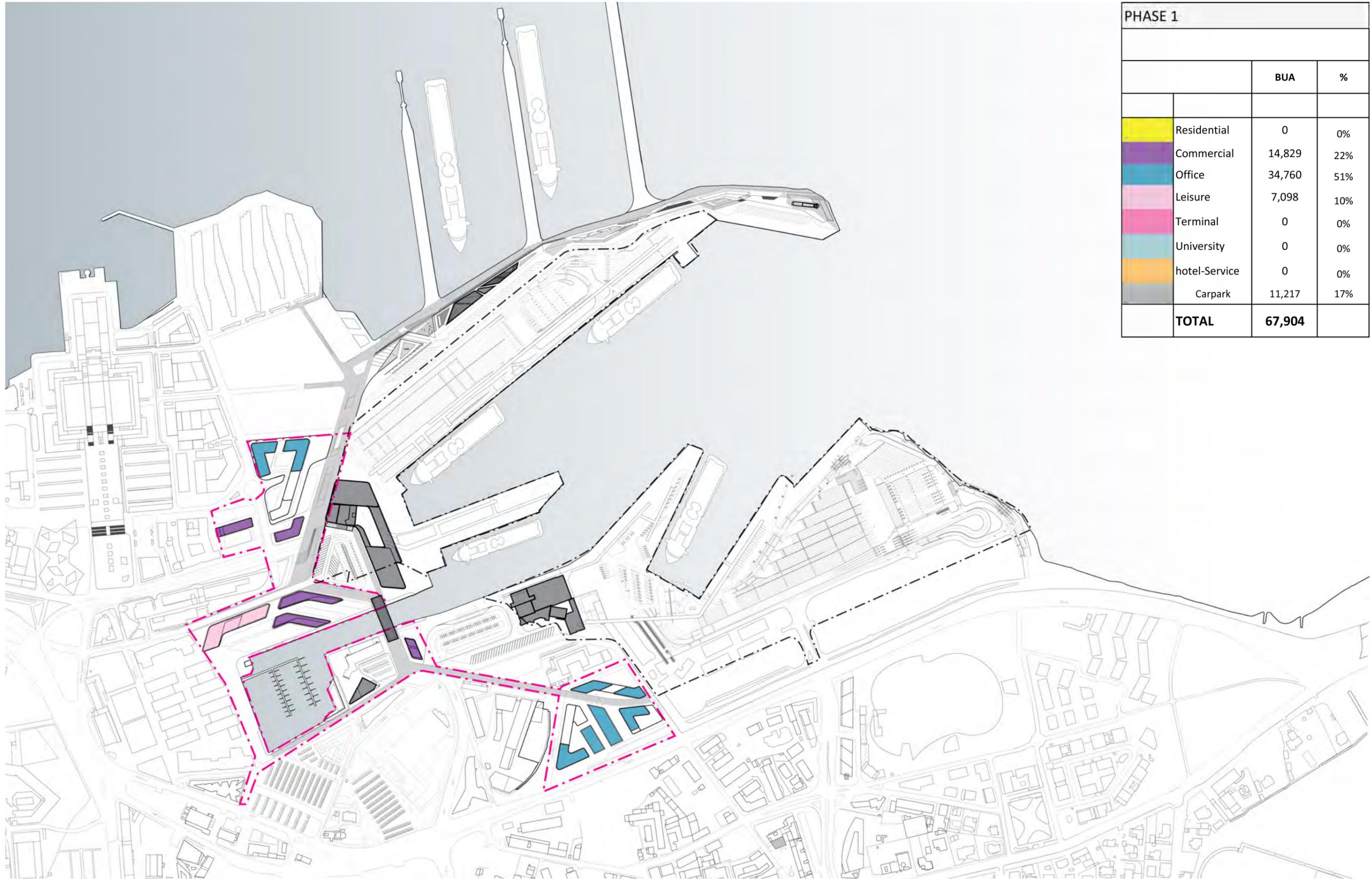
The remaining site will also be used during the master plan, our proposal is to convert the empty plots in parks, fairs, and public space. Some of those areas will be used as nurseries to grow trees and plants that will constitute the later stages of the masterplan, contributing to the economy of the masterplan and reinforcing the sustainable approach of the project.

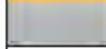


MASTERPLAN PHASING // PHASE 1 CIRCULATION DIAGRAM



MASTERPLAN PHASING // PHASE 1 PROGRAM DIAGRAM



PHASE 1			
		BUA	%
	Residential	0	0%
	Commercial	14,829	22%
	Office	34,760	51%
	Leisure	7,098	10%
	Terminal	0	0%
	University	0	0%
	hotel-Service	0	0%
	Carpark	11,217	17%
TOTAL		67,904	

PHASE 2

EXPLORER COMMUNITY

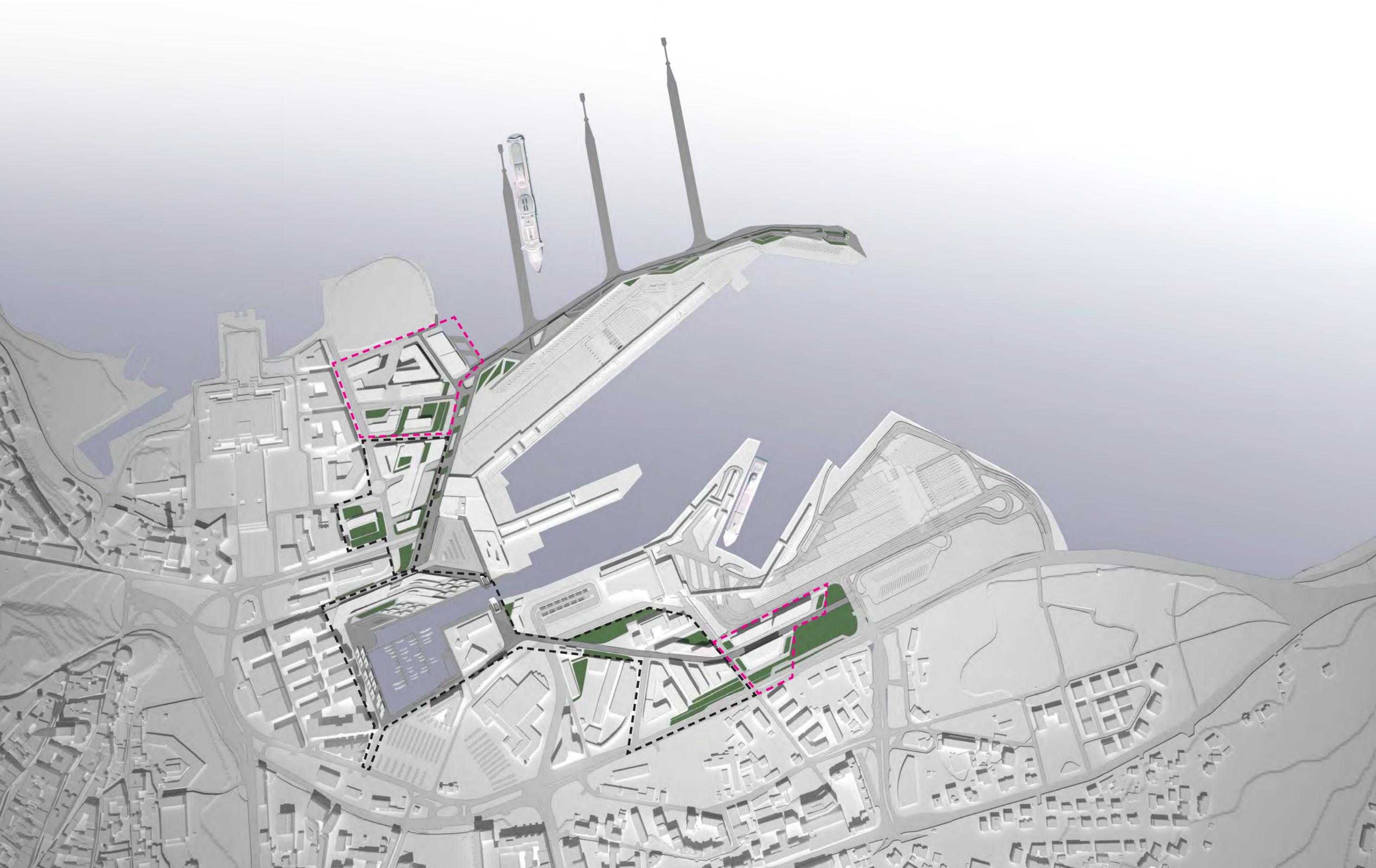
During Phase 2, the master plan proposal is to consolidate the mixed-use market.

New offices, hotel, serviced apartments, and IT oriented commercial space and a new and existing retail area will be made available for the market.

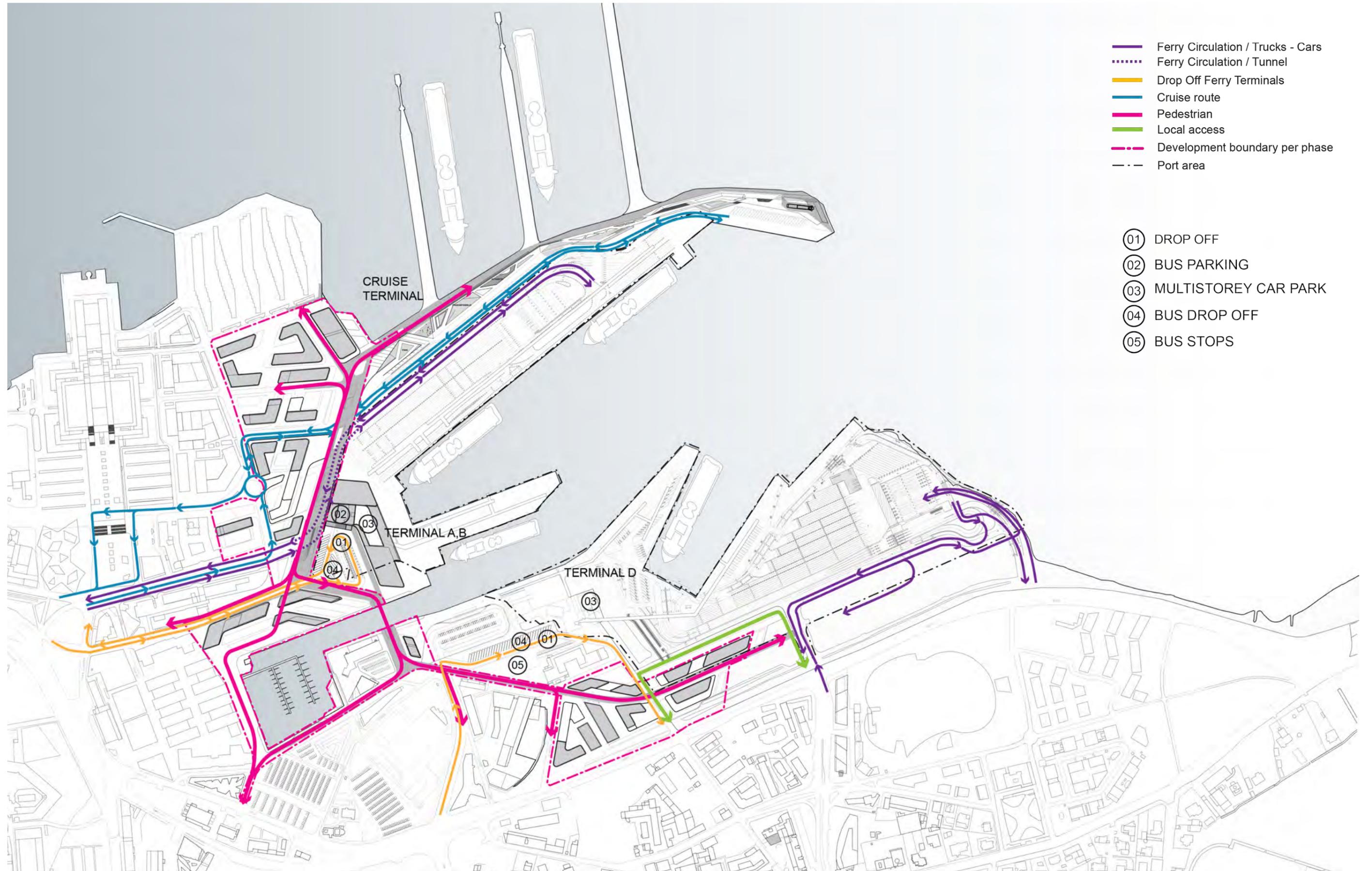
We are also proposing to activate the Cable Car landmark linking the new cruise terminal with the old city centre.

The spine will be extended to the South extension linking new commercial and office developments.

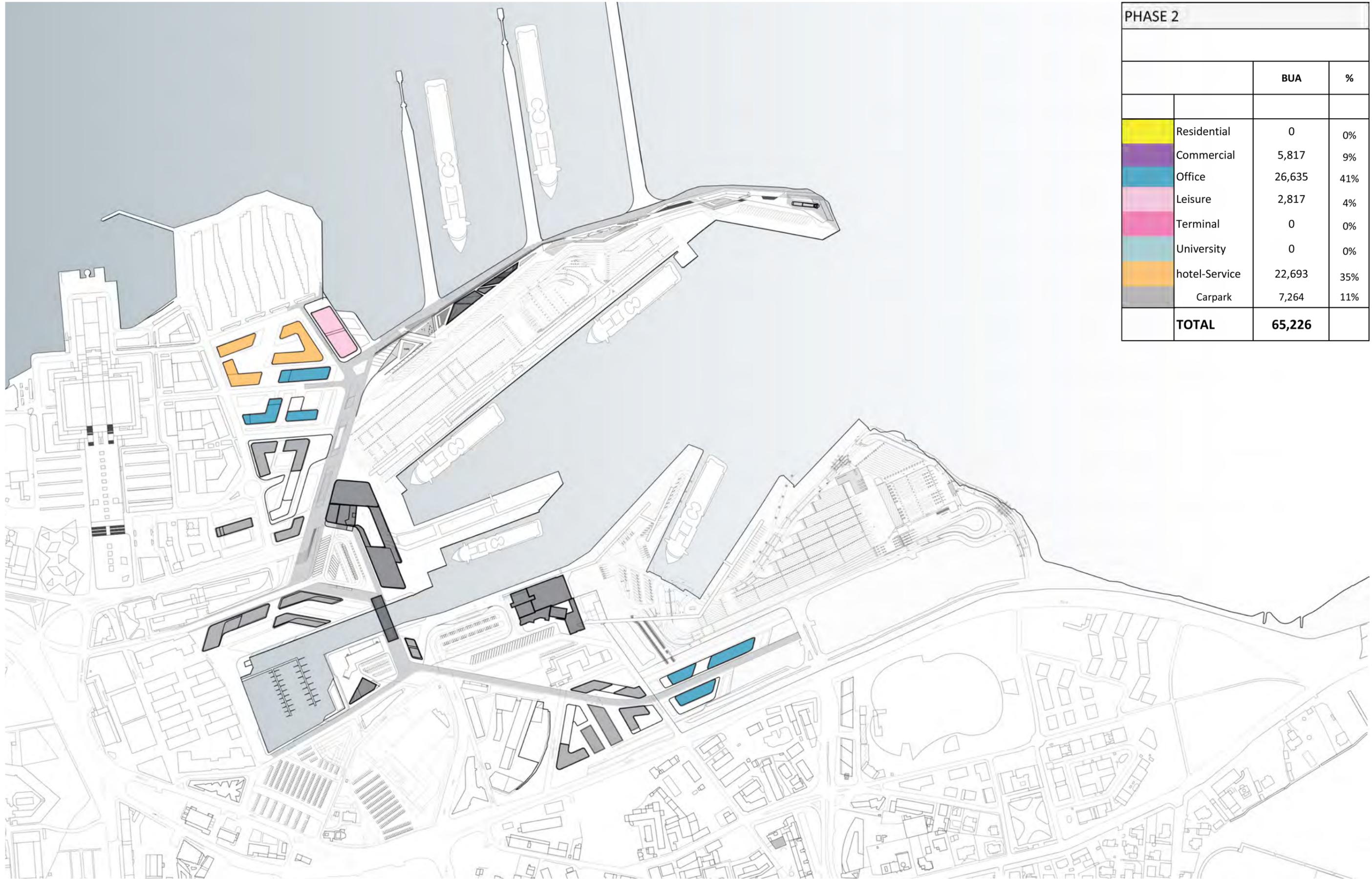
In parallel the new wellness and leisure pool facilities will create the new activator for the north development creating a new focus that will bring people from the city to the coast line.



MASTERPLAN PHASING // PHASE 2 CIRCULATION DIAGRAM



MASTERPLAN PHASING // PHASE 2 PROGRAM DIAGRAM



PHASE 2			
		BUA	%
	Residential	0	0%
	Commercial	5,817	9%
	Office	26,635	41%
	Leisure	2,817	4%
	Terminal	0	0%
	University	0	0%
	hotel-Service	22,693	35%
	Carpark	7,264	11%
TOTAL		65,226	

PHASE

3

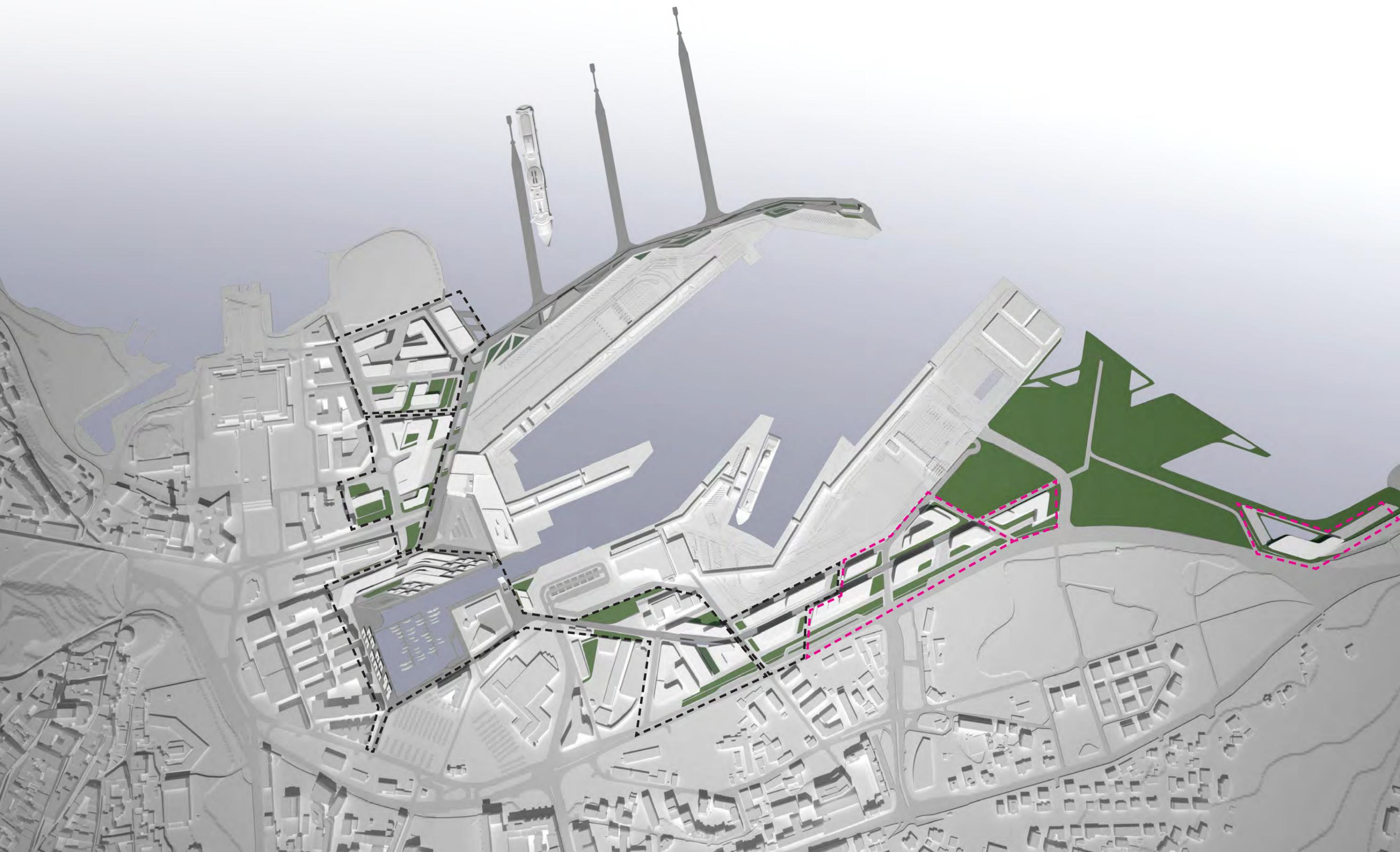
INNOVATION DISTRICT

During Phase 3 the master plan exploits the newly consolidated link towards the city by expanding towards the Sea.

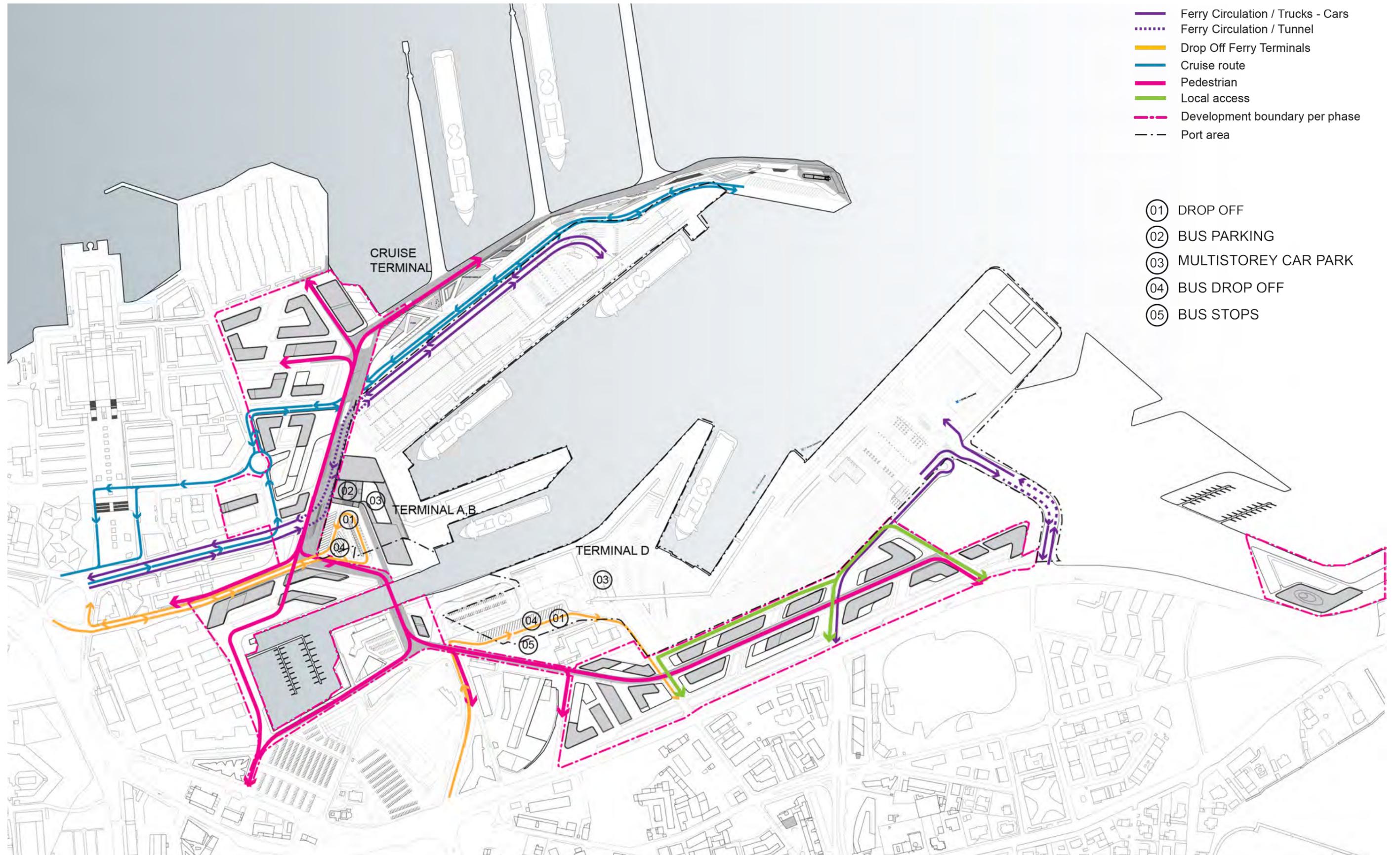
Facilities for terminal D will be built along the sea extension, new developable areas will be released to the market for offices, retail and the first residential components.

The new harbour with the new user friendly approach will make this the new destination for Tallinn.

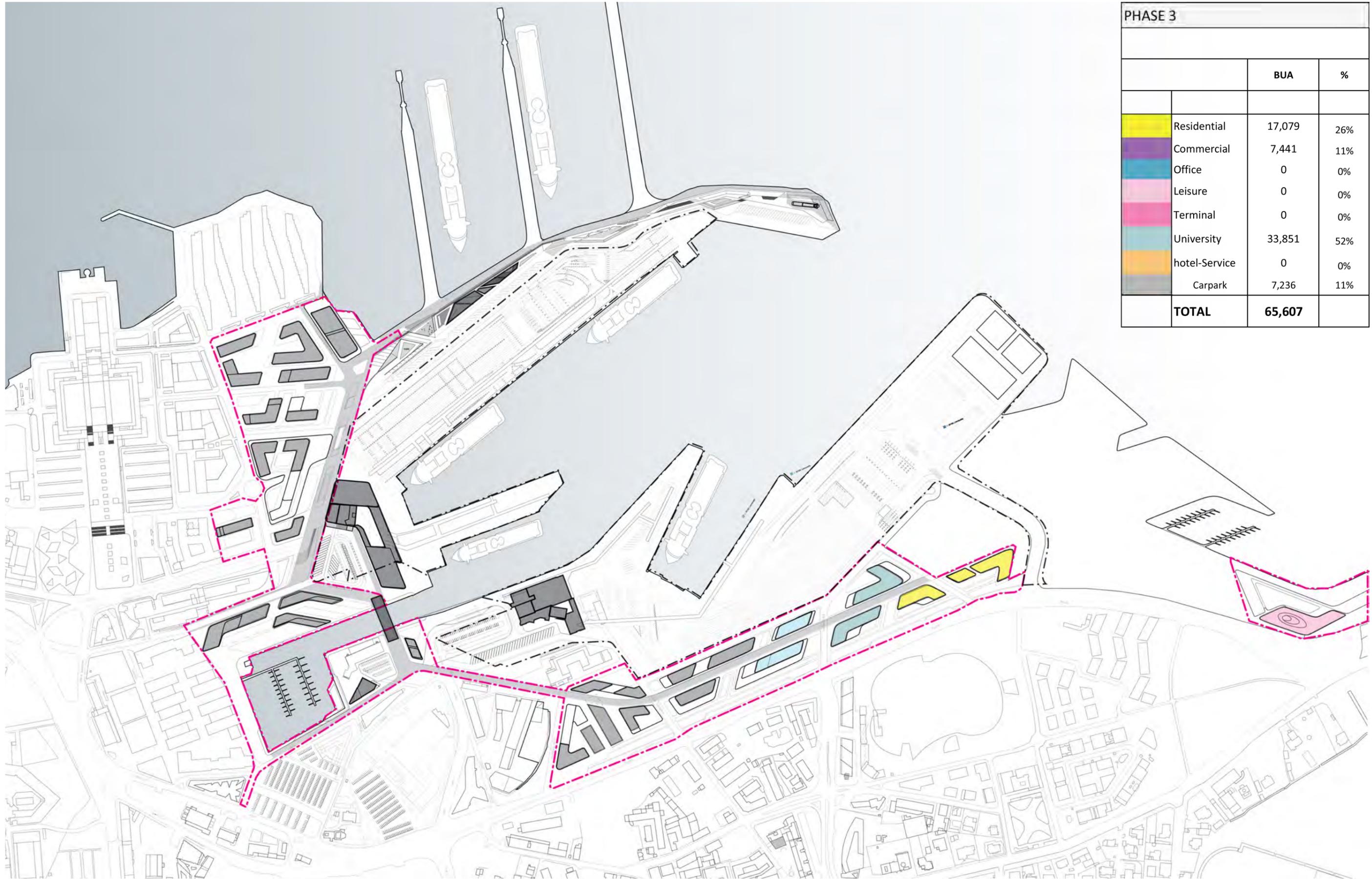
We are also proposing a new exiting landmark for Tallinn – the new Tallinn Aquarium – to be built at the sea edge along with a new marina and leisure activities that links the Kadriorg Park to the New Port.



MASTERPLAN PHASING // PHASE 3 CIRCULATION DIAGRAM



MASTERPLAN PHASING // PHASE 3 PROGRAM DIAGRAM



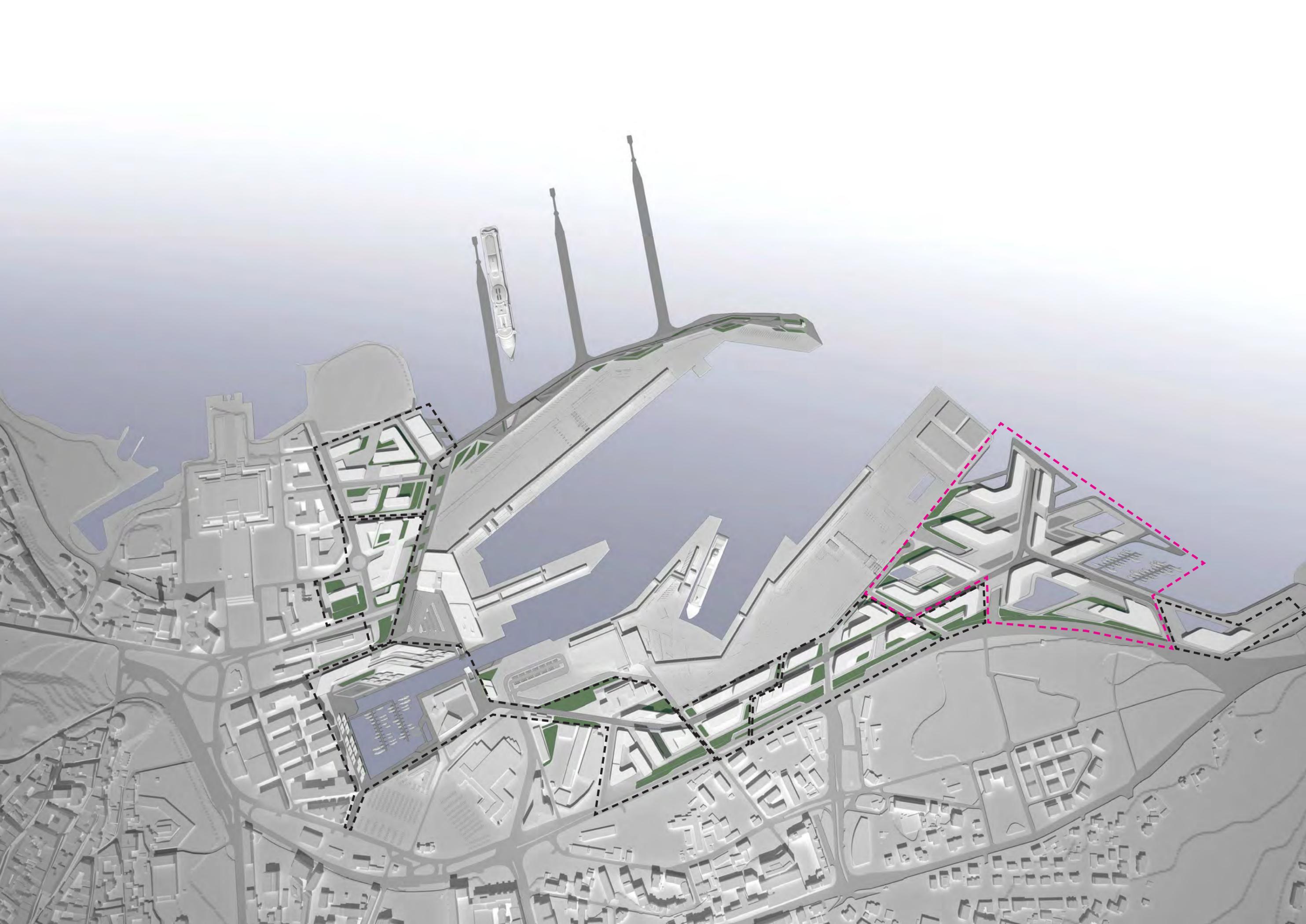
PHASE 3			
		BUA	%
	Residential	17,079	26%
	Commercial	7,441	11%
	Office	0	0%
	Leisure	0	0%
	Terminal	0	0%
	University	33,851	52%
	hotel-Service	0	0%
	Carpark	7,236	11%
TOTAL		65,607	

PHASE

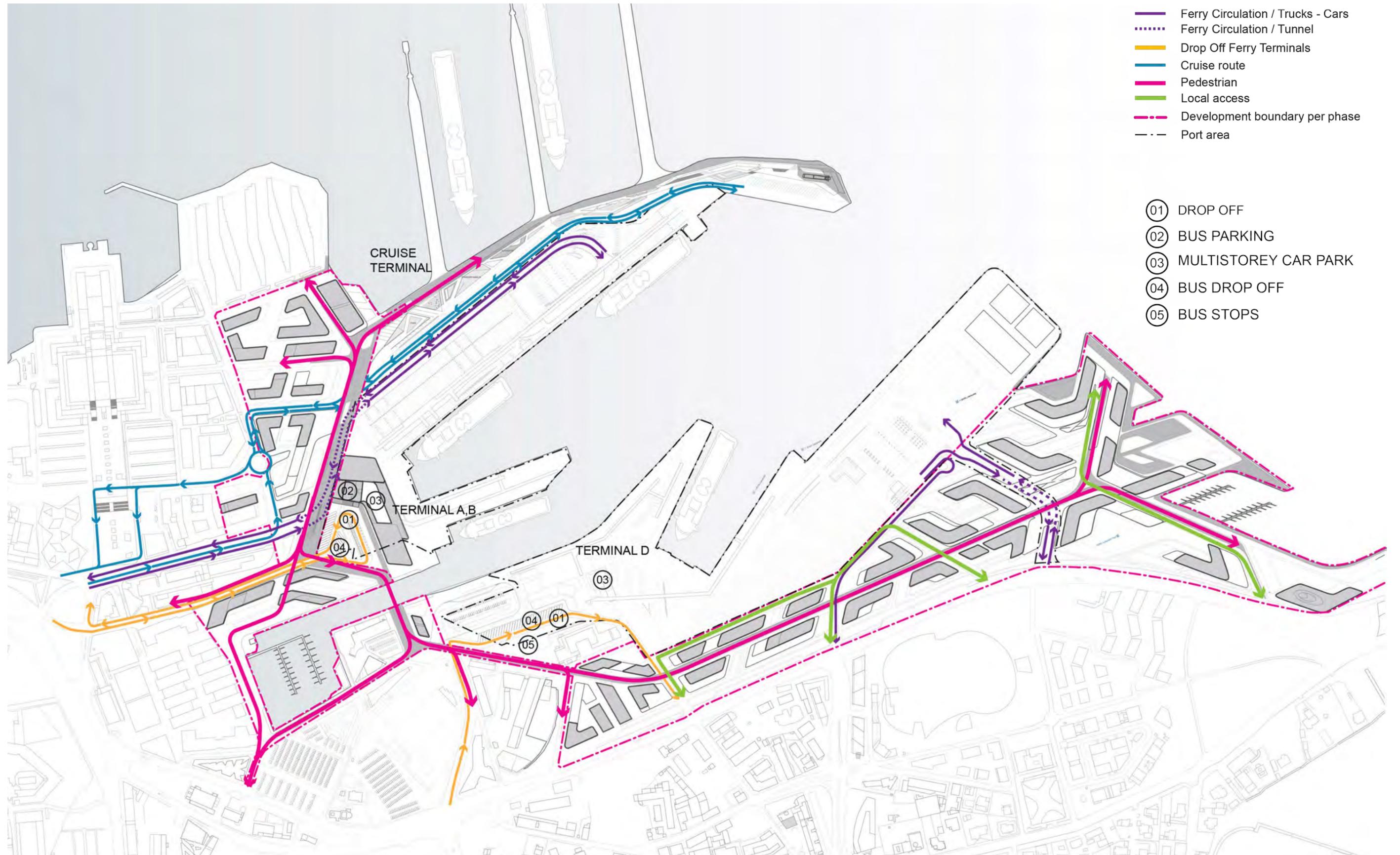
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NEW COASTAL METROPOLIS

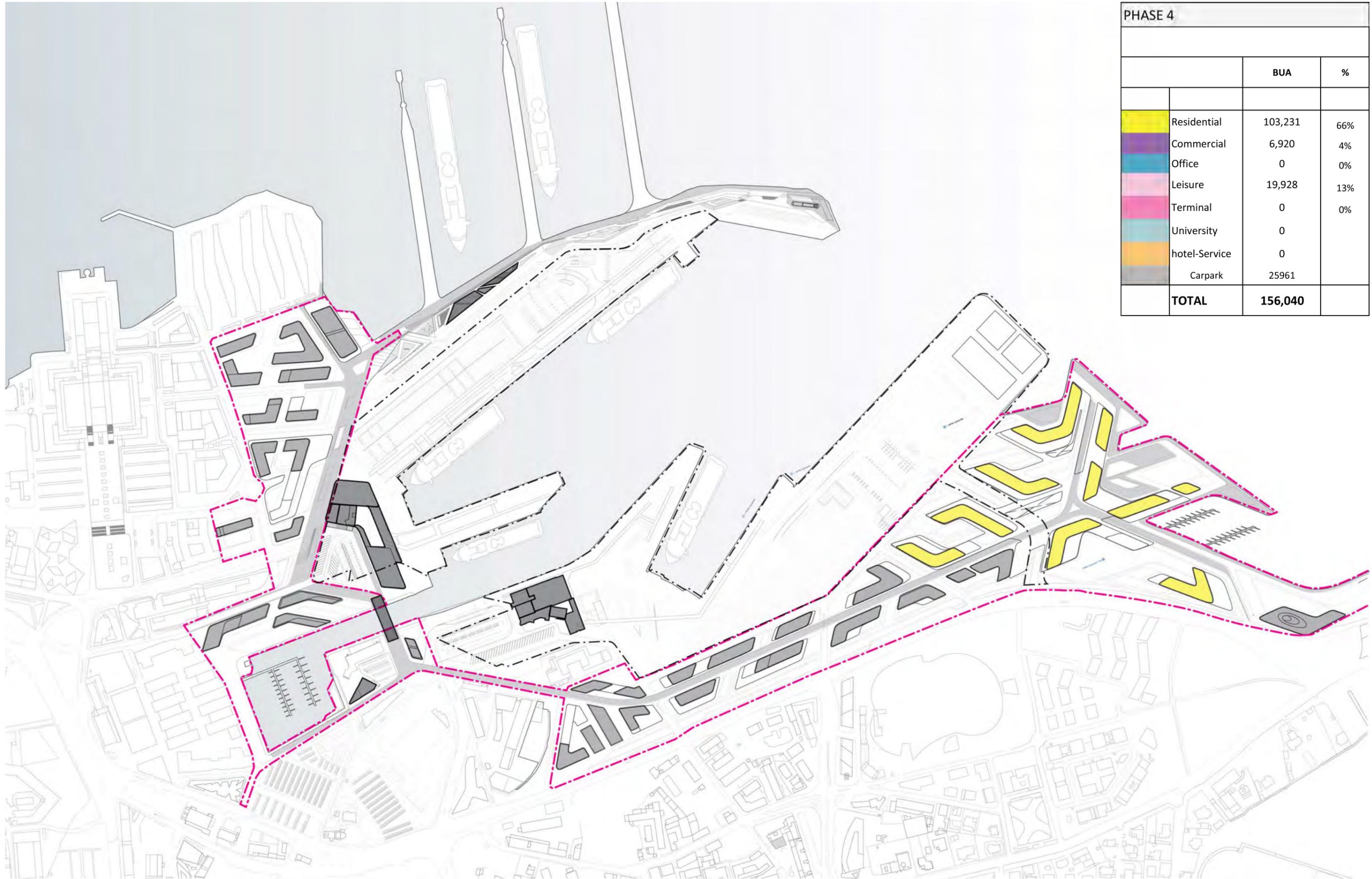
During Phase 4, the master plan will benefit from the consolidation of the port as a destination for Tallinn with provision of the largest residential component towards the west.



MASTERPLAN PHASING // PHASE 4 CIRCULATION DIAGRAM



MASTERPLAN PHASING // PHASE 4 PROGRAM DIAGRAM



PHASE 4			
		BUA	%
	Residential	103,231	66%
	Commercial	6,920	4%
	Office	0	0%
	Leisure	19,928	13%
	Terminal	0	0%
	University	0	
	hotel-Service	0	
	Carpark	25961	
TOTAL		156,040	

PROGRAM // AREA TABLE

Program Distribution

The land use and program distribution have been considered in close reference with the existing site, urban and cultural context. Key points of the strategy are:

- Boosting Estonian culture related activities;
- A focus on the provision of adequate office spaces, in particular for ICT firms
- The creation of attractive new residential typologies;
- Managing the route and journey of visitors.

Offices spaces are located in two main locations.

In area 2, some offices are located to strengthen the attractiveness of this area and engage in the dynamic of the creation of the City Hall, the refurbishment of the Linnahall and the development of its adjacent land. The provision of new public transportation in this area and the reduction of nuisance from the port activities through displacement of truck parking and the creation of a semi-underground road will ease the implementation of offices spaces here. Also, the location of office space in between two marinas and the waterfront vistas and related retail activities will create a highly attractive space for business. This area will be the main focus for the setting of new start-ups and creative hubs, whose existence will further activate this part of the harbour.

Malls are the most successful retail typology in Tallinn.

We are proposing to pick up this typology while transforming it into spaces that are more urban, flexible and open toward their surroundings. The main commercial spaces will be located near the terminal and marinas, in order to encourage visitors in staying in the Harbour area rather than heading directly toward the city centre or Old Town. In those locations, commercial spaces will also ease the setting of offices.

The residential area is located primarily South of the Harbour.

There being well-connected to the city centre and close to existing attractive residential districts such as Kadriorg. This location also allows the new buildings to have views toward the sea and to be in close proximity to the waterfront. Those new residential typologies will be protected from traffic nuisance through the creation of new entry points into the harbour and the creation of a pedestrian and light traffic only route.

The North area of the Harbour is not adequate for the location of residential development, due to its lack of connectivity with the city and nuisances from the sea, in particular winds. We are therefore proposing to create hotel and service apartment, with iconic views to the Baltic sea and prime location near the ferry and cruise terminals.

Leisure activities will mainly be located in the south part of the harbour, near existing nodes such as Kadriorg Park or the future amusement park. They will relate strongly on the Estonian culture and allow completing the existing network of facilities. Sea water pools, the Aquarium and Ship Wreck have been designed to work as all-yearlong activities that can attract both a local and visiting public.

2625 - TALLINN PORT MASTERPLAN BUA - Schedule

Scenario 1 Proposed Master Plan BUA																							
	FAR	PLOT COVERAGE (%)	HEIGHT (LEVEL)	GFA BUA (m ²)	RESIDENTIAL		OFFICE		COMMERCIAL		HOTEL		LEISURE		TERMINAL		UNIVERSITY RESIDENCE		UNIVERSITY FACILITIES		EXISTING		
					(m ²)	GF CARPARK (m ²)	(m ²)	GF CARPARK (m ²)	(m ²)	GF CARPARK (m ²)	(m ²)	GF CARPARK (m ²)	(m ²)	GF CARPARK (m ²)	(m ²)	GF CARPARK (m ²)	(m ²)	GF CARPARK (m ²)	(m ²)	GF CARPARK (m ²)	(m ²)	GF CARPARK (m ²)	(m ²)
PLOT 1	0.5	33%	3 - 5	35,195	0	0	15,640	9,945	5,073	0	0	0	0	341	0	4,196	0	0	0	0	0	0	0
PLOT 2	1.6	42%	2 - 5	54,490	0	0	18,723	1,956	4,339	0	25,602	1,053	2,817	0	0	0	0	0	0	0	0	0	0
PLOT 3	0.7	23%	1 - 3	36,247	0	0	4,000	0	6,649	0	0	0	7,098	0	13,500	5,000	0	0	0	0	0	0	0
PLOT 4	1.1	14%	0	41,247	0	0	0	0	0	0	0	0	0	0	16,107	12,000	0	0	0	0	0	13,140	0
PLOT 5	1.7	52%	5	39,843	0	0	28,686	1,734	4,930	0	0	0	0	0	0	0	0	0	0	0	0	4,493	0
PLOT 6	2.7	49%	7	124,288	33,455	5711	24,570	3,793	12,541	0	0	0	0	0	0	0	21,958	0	18,710	3,550	0	0	0
PLOT 7	2.5	45%	7	40,662	28379	6083	0	0	2,688	0	0	0	0	0	0	0	3,512	0	0	0	0	0	0
EXTENTION EAST	1.2	28%	2 - 7	121,362	78943	17853	0	0	4,638	0	0	0	19,928	0	0	0	0	0	0	0	0	0	0
TOTAL AREA				493,334	140,777		91,619		40,858		25,602		30,184		33,803		25,470		18,710		17,633		
TOTAL CARPARK AREA				68,678		29,647		17,428		0		1,053		0		17,000		0		3,550		0	
				100%		29%		19%		8%		5%		6%		7%		5%		4%		4%	

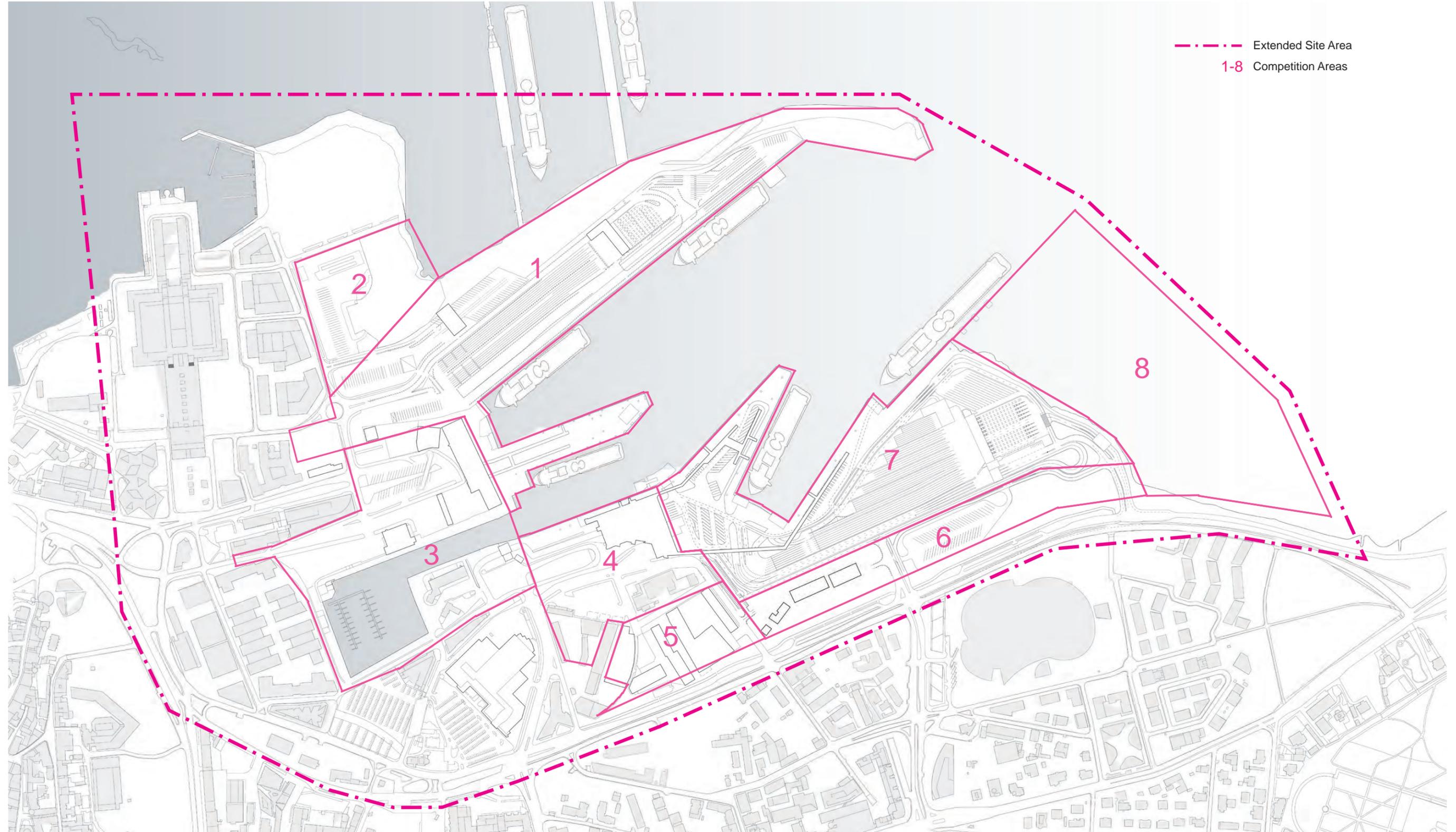
Note: with the maximum number of floor the carpark will be partially underground

Formula:

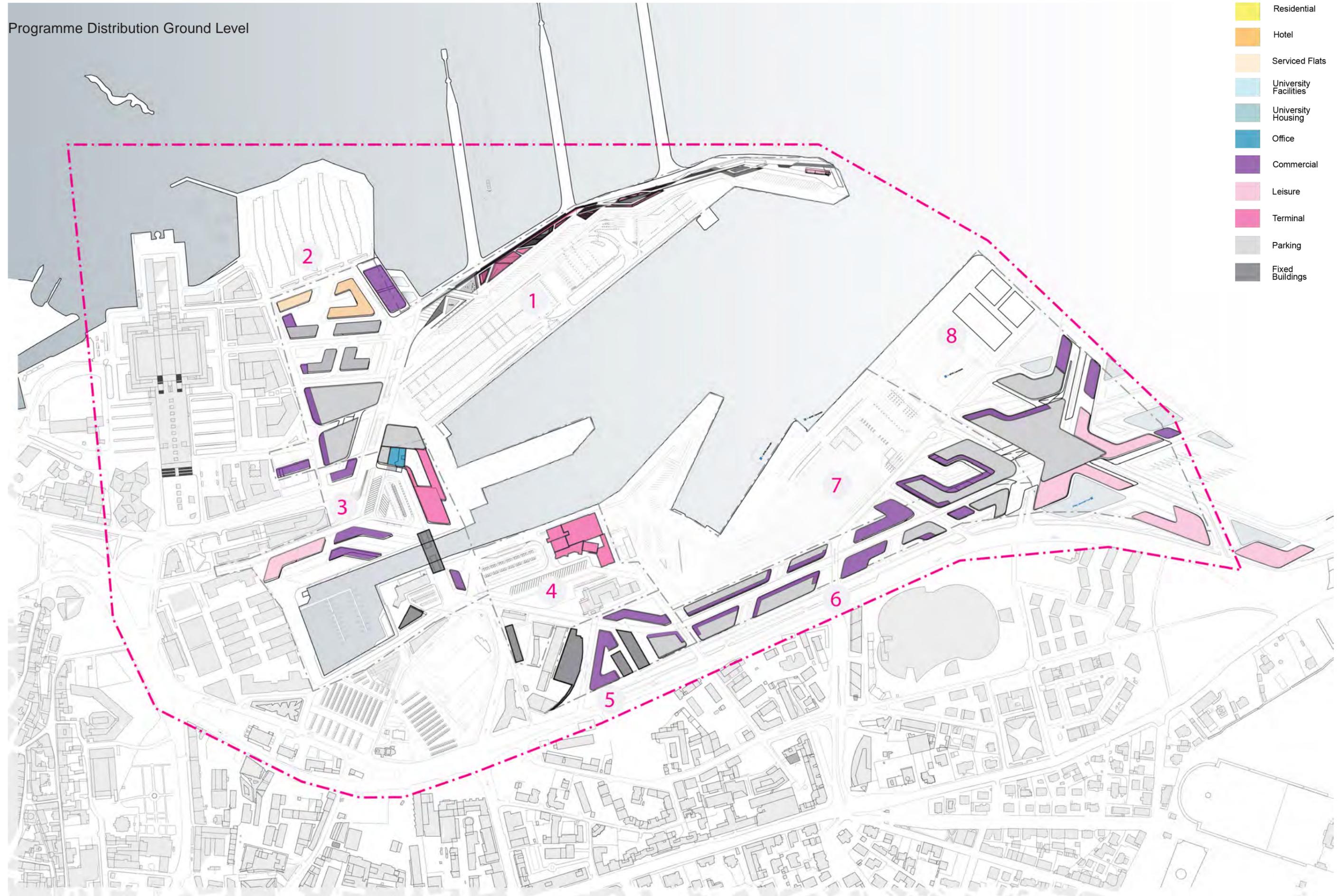
Net land: Site area - existing - Road - Port Marina
 Plot Coverage: Net land Area / Gross building area
 FAR: GFA / Net land area

SITE ANALYSIS // DEVELOPMENTS SITES AND OPPORTUNITIES AREAS

Site Plan

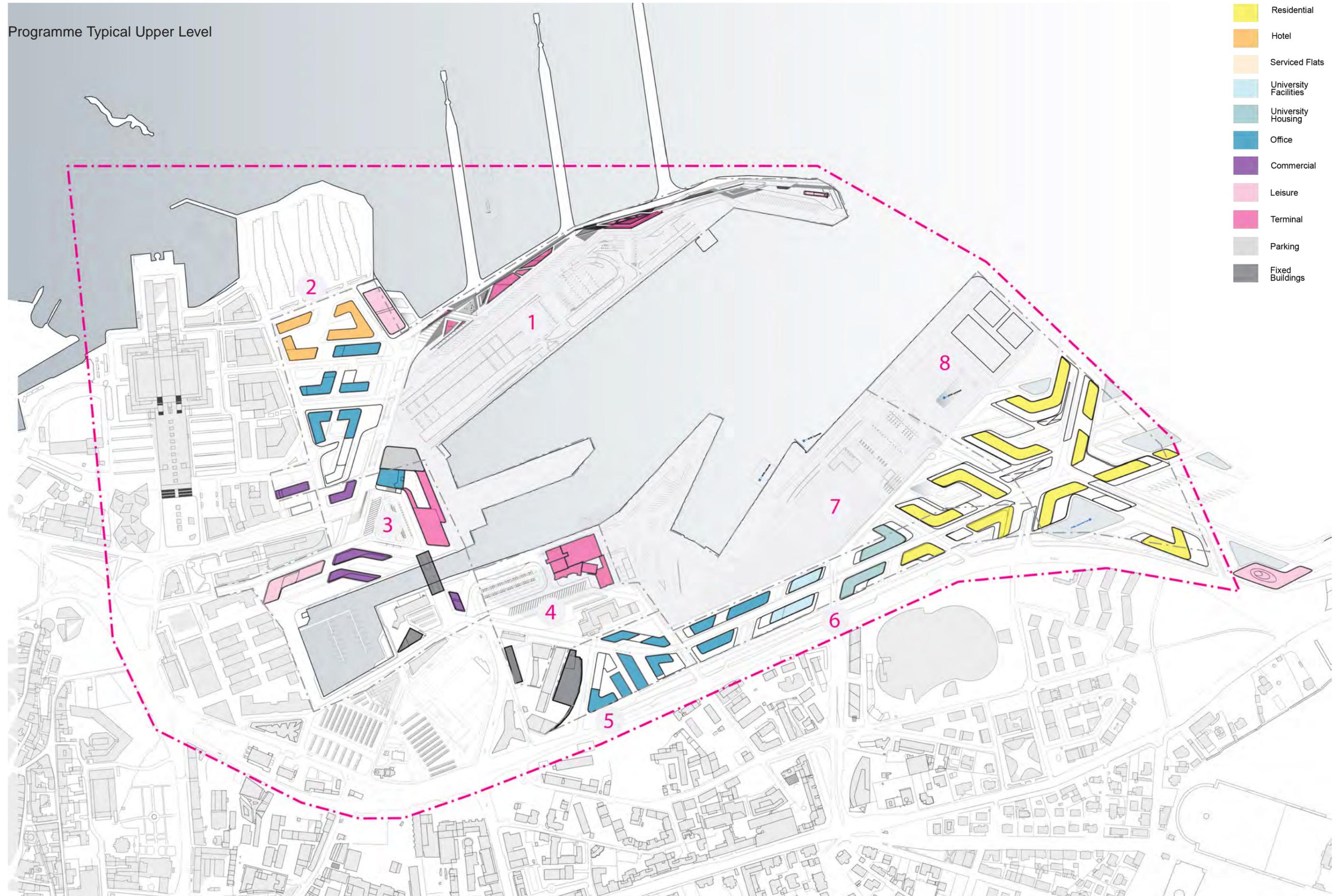


PROGRAM // DISTRIBUTION



PROGRAM // DISTRIBUTION

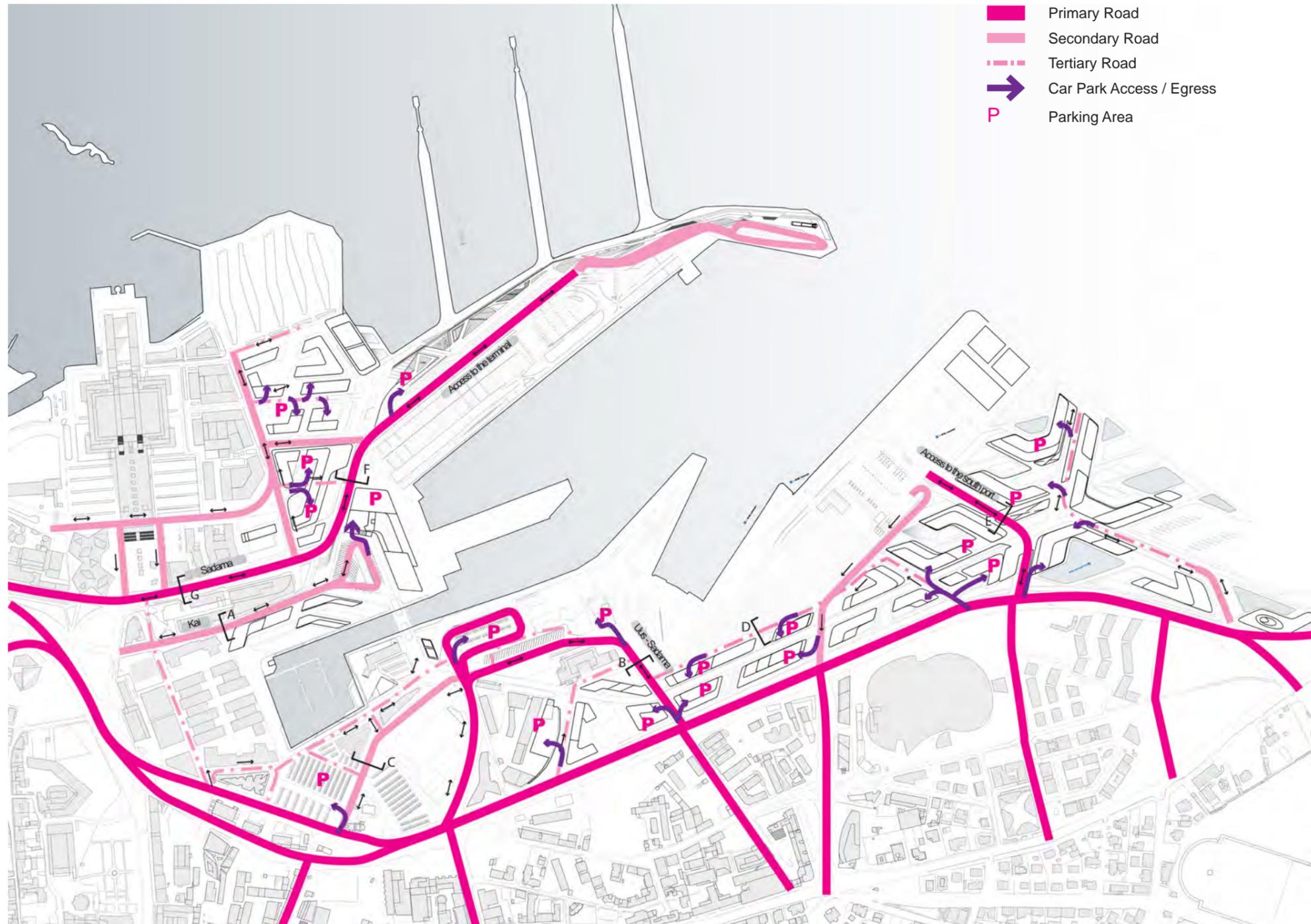
Programme Typical Upper Level



PROGRAM // HEIGHTS - LEVELS



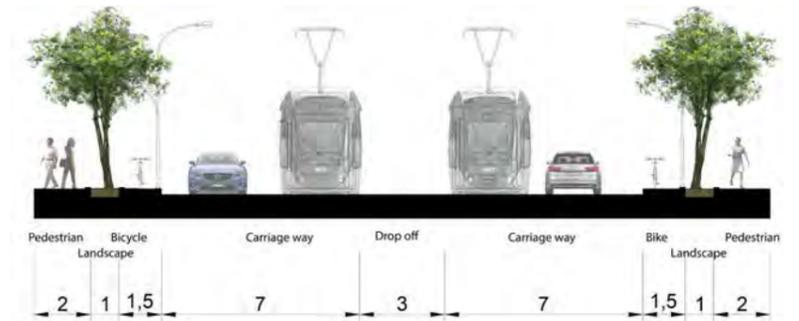
TRANSPORT // STREET NETWORK



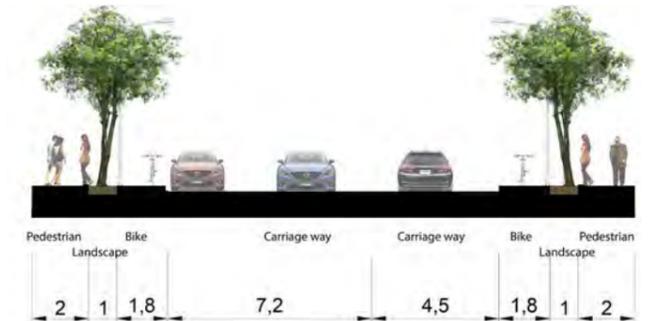
- Primary Road
- Secondary Road
- Tertiary Road
- Car Park Access / Egress
- P Parking Area



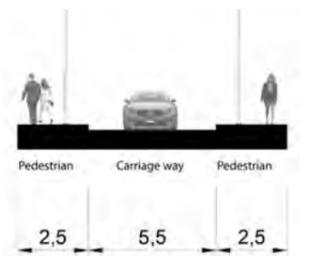
A Kai Road



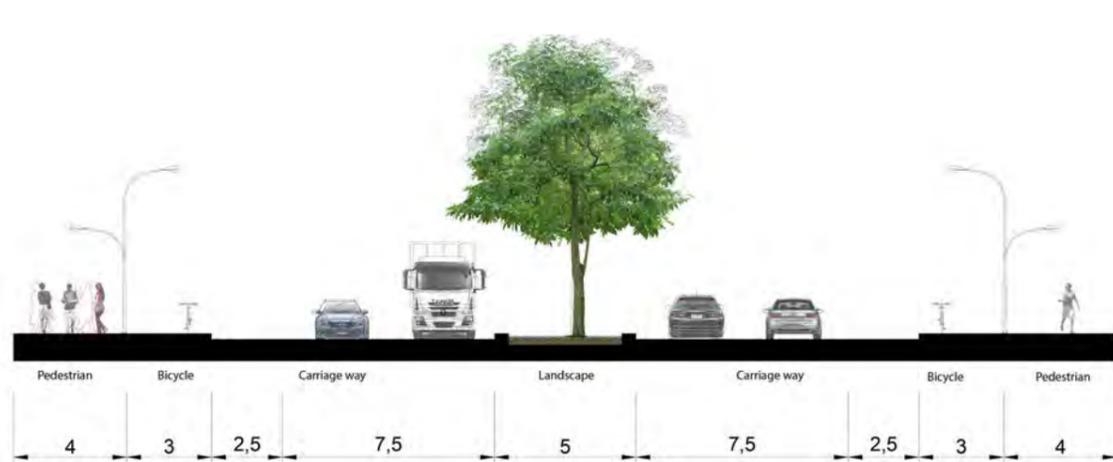
B Uus-Sadama Road



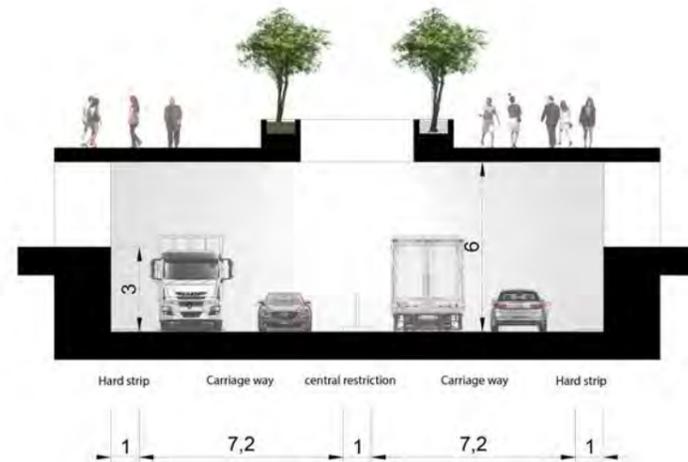
C Secondary Road



D Tertiary Road



G Sadama Road



F Access to Ferry Road (North)



E Access to Ferry Road (South)

05

3.4 RESULTS OF PARKING SPACES ANALYSIS

Table 5, which shows a summary of the parking analysis results, indicates that based on the current standards a maximum 3,168 car parking spaces associated with all proposed development across the masterplan are allowable. This level of parking is likely to require around a 100,000 sqm of space, which represents a significant proportion of the entire masterplan area.

In deriving these numbers it should be noted that private car, taxi and bus parking associated with the port operations (i.e. ferry passengers or terminal buildings) are not included in these parking numbers. Further details on parking for the terminal building will be included later in this report.

With regard to leisure development, the current parking standards have no appropriate category associated with the Yacht Club, which is to be relocated within plot 3. So for the purpose of this study the parking required for this land use is assumed to be the same as the requirements for a restaurant/café type development. This assumption is likely to result in an over estimation of the number of spaces required for the Club and is subject to revision once more detailed analysis is carried out during the later stages of the masterplan delivery process. However, the assumption should provide a robust assessment on the required spaces to be accommodated within the parking layout concept designs described later in this report.

Whilst the 3,168 spaces represent the maximum permissible parking level, there is a mechanism within the parking standards for this number to be reduced. Clause 4.2.6 of the standards state that:

“The number of parking spaces in the vicinity of a public-operated parking garage or good public transport connection may be adjusted by applying a coefficient of between 0.5 and 1.0.”

Therefore based on a particular characteristics and location of a site, it is possible for the parking requirements to be reduced by up to 50% from the maximum permissible and still be compliant with the standards. This clause within the standards is in recognition of the need to introduce traffic demand management (TDM) measures to reduce car travel and congestion in the Tallinn area. A key TDM is to limit parking to reduce the attractiveness of using the car for some journeys. Indeed empirical evidence from local professionals suggest the current maximum parking standards are quite high and there is a growing need to reduce parking to support sustainable development across the City.

With regard to car parking requirements across the masterplan area, it is proposed to adjust the maximum parking spaces (as shown above in table 5) by a coefficient factor of 0.5. There are a number of reasons why the masterplan area is particularly suitable for such a reduction in parking requirements, namely:

- In the interests of supporting sustainable development, the proposed transport strategy for the masterplan will support high levels of public transport accessibility, particularly with the proposals for new bus services along the new planned road and the proposed tramline spur, which accesses the terminal area;
- The site proposals, being a large scale mixed use masterplan development should provide a significant amount of internal link trips between different

land-uses (for example, residents on the site are unlikely to drive to the retail area or to the office development). Therefore, car trip demand (and hence car parking requirements) across the masterplan is likely to be lower than if each plot was treated as an individual development;

- The location of the masterplan with its close proximity to the City Centre and Old Town should result in a higher level of walking and cycling trips to and from these key attraction areas as opposed to the private car trips; and
- The masterplan proposals include improvements to pedestrian and cycle routes and wayfinding, which should encourage these sustainable forms of transport, thus reducing car use and the need for car parking.

Table 6 shows the total car parking requirements for all development plots across the masterplan is 1,584 spaces, with the 0.5 coefficient factor applied to the maximum permissible. This level of spaces is viewed as the ‘optimum’ parking level, taking into account the parking demand on the sites and the need to support sustainable development, which limits traffic growth and congestion in the local area. It should be noted that this optimum level of car parking presented in table 6 is compliant with the current parking standards.

Plot	Car Parking Spaces							Total
	Residential Apartments	Hotel and Serviced Apartments	University Residence	University Facilities	Office	Commercial	Leisure	
1	0	0	0	0	86	49	0	135
2	0	76	0	0	87	71	14	247
3	0	0	0	0	33	108	222	363
4	0	0	0	0	0	0	0	0
5	0	0	0	0	190	80	0	270
6	300	0	46	69	149	142	0	706
7	249	0	7	0	0	44	0	300
Extension East	1047	0	0	0	0	75	138	1260
Total Area	1546	76	53	69	545	569	374	3282

TABLE 5: MAXIMUM PERMISSIBLE CAR PARKING SPACES (COMPLIANT WITH PARKING STANDARDS)

Plot	Car Parking Spaces							
	Residential Apartments	Hotel and Serviced Apartments	University Residence	University Facilities	Office	Commercial	Leisure	Total
1	0	0	0	0	43	24	0	67
2	0	38	0	0	44	35	7	124
3	0	0	0	0	17	54	111	182
4	0	0	0	0	0	0	0	0
5	0	0	0	0	95	40	0	135
6	150	0	23	35	74	71	0	353
7	125	0	4	0	0	22	0	150
Extension East	524	0	0	0	0	38	69	631
Total Area	799	38	27	35	272	284	187	1642

TABLE 6: 'OPTIMUM' CAR PARKING SPACES (COMPLIANT WITH PARKING STANDARDS)

PARKING STUDY // CONCEPT PARKING LAYOUT AND CIRCULATION

4.1 INTRODUCTION

Having determined the optimum number of parking spaces required across the masterplan, the next stage of this study is to identify the location of this parking, the layout of spaces and details on the parking access and circulation proposals.

The layout designs presented in this report are based on a concept stage of design and are therefore subject to further update and refinement following more detailed design work, which will be required in later stages of the masterplan delivery process.

4.2 CONCEPT CAR PARKING DESIGNS

It is proposed that all car parking, with the exception of some parking associated with the Terminal A/B building, which is located within a three level multi-storey car park, will be contained at ground level within the building plots as illustrated as concept in Figure 3. Note the parking is to be hidden from main active frontages of the buildings via commercial space, which wraps around the building at ground floor level.

Figure 4 shows the location of the proposed car parks together with access and circulation arrangements within and surrounding the masterplan.

Figures 5 to 8 show the proposed design layouts and internal circulation associated with each car park area.

The concept designs presented are in accordance with the local design standards. Key design parameters include all car parking bays are at least 5m long by 2.5m wide and all aisle widths (where car parking is accessible from) are a minimum of 7m.

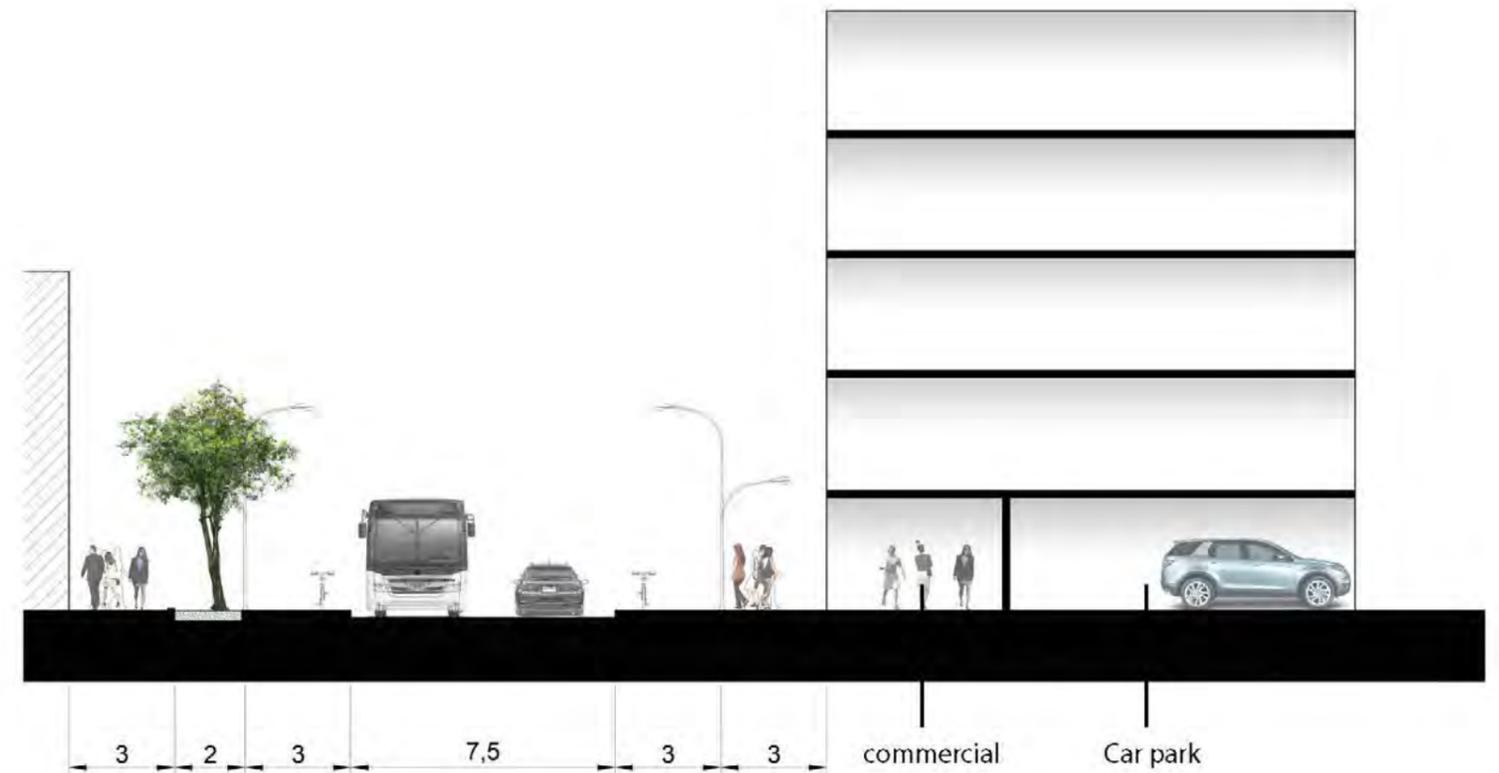
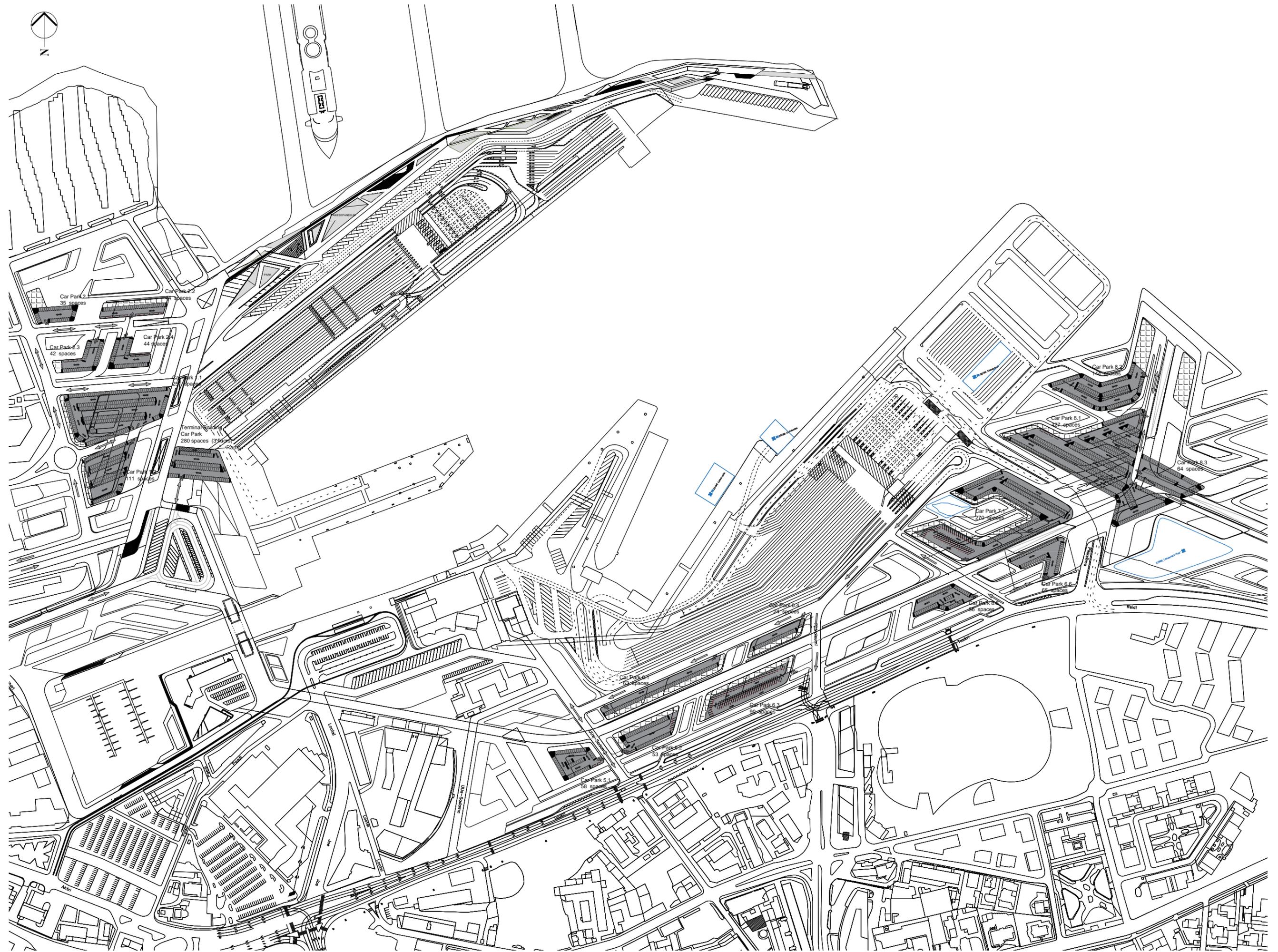


FIGURE 3: CAR PARKING AT A GROUND LEVEL



PARKING STUDY // REVIEW OF CAR PARKING LAYOUT DESIGN AND PARKING SPACES REQUIREMENTS

This next chapter reviews the number of car parking spaces provided within the proposed concept design layouts and identifies whether there are a sufficient number of spaces to meet the requirements associated with the optimum number of car parking spaces (as shown in table 6).

Table 7 shows the number of parking spaces that can be accommodated within each plot, based on the concept parking layout designs. This analysis indicates that overall up to 1,841 car parking spaces could be provided within the masterplan (not including parking associated with the terminal buildings), which compares with a total of 1,642 spaces required at the optimum level of parking, i.e. the designs provide an over provision of 199 spaces.

It is recognized however that it is impractical for some car parking areas to be used by people visiting sites and certain plots. For example, given the walking distance, people who wish to visit development within plot 2 are unlikely to want to park their car within plot 7. It is therefore assumed that people who visit plots either 1, 2 or 3 will park in any car parks included within these plots. The same principal applies for people visiting plots 5, 6 and 7, and the extension east area.

The analysis indicates that overall 373 car parking spaces should be provided within plots 1, 2 and 3. Based on the concept layout designs, the parking areas allocated within these plots can provide up to 527 parking spaces.

For plots 5, 6 and 7 a total of 609 car parking spaces are required and the concept layout designs can provide up to 638 spaces.

For the extension east, 631 car parking spaces are required and the concept layout designs can provide up to 635 spaces.

So in conclusion, this analysis demonstrates it is practical to provide the number of optimum parking spaces required across the masterplan. Indeed, there should be sufficient flexibility to reduce the size of the car parks and / or revise the layouts during the more detailed design phases of the project, to match the optimum level of parking required.

Plot	Optimum Car Parking Spaces	Car Park Spaces in Concept Design
1	67	362
2	124	165
3	182	0
4	0	0
5	135	58
6	353	351
7	150	270
Extension East	631	635
Total	1642	1841

TABLE 7: COMPARISON OF CAR PARKING REQUIREMENTS AND CONCEPT DESIGN SPACES

PARKING STUDY // OTHER CAR PARKING ISSUES

7.1 INTRODUCTION

This parking study has been prepared to a high concept level of detail. It should be noted that there are a number of parking issues that require further consideration as the masterplan design evolves into the later stages of its delivery.

7.2 PARKING SPACES BELOW OPTIMUM LEVEL

This study has identified the maximum and optimum level of car parking that should be provided across the masterplan, based on the latest development schedule and local car parking standards. However, consideration should also be given in the development of the masterplan to further reduce car parking levels below the optimum level. Whilst such levels would be outside the current parking standards, it should be recognized that to reduce traffic and congestion in Tallinn, the direction of policy making should be moving towards the lowering of parking requirements to support sustainable forms of transport. Lower parking levels would also provide additional benefits to the masterplan environment, enabling more space to be allocated to development land uses and/or improvements to the landscape and urban realm.

7.3 BASEMENT AND ABOVE GROUND FLOOR PARKING

This study has demonstrated that all the parking requirements across the masterplan (other than the proposed multi-storey car park adjacent to the Terminal A/B building), should be able to be accommodated at ground floor level within the confines of the building plots. However, as sites come forward for development, developers potentially may have the option to move the parking of their site, either below ground via basement structures or in multiply levels, above ground.

Having car parking in basements has advantages with the movement of parking away from the ground floor, which can free up valuable floor space within the building to be used for more land-uses such as residential, commercial or office space. However, including basements will have significant implications on costs and engineering issues such as flood mitigation. Alternatively, parking could be raised with spaces provided multi-level on both the ground and first floors. Such a design arrangement is likely to be more cost effective in comparison to basement construction, although it would reduce valuable floor space. Decisions on parking location, layout and design will need to be assessed through more detailed analysis, viability and design as schemes evolve.

7.4 PARKING FOR DISABLED PEOPLE

Within the parking space requirements and layout designs, parking facilities should also be provided for disabled people. In doing so there are a number of issues to consider:

- The mobility of such people is limited and so parking should be close to the development they occupy or visit;
- At 3.6m width, the space required for disabled parking is greater than conventional parking. This is to take into account the additional space requirements associated with the access to the vehicle;
- The number of disabled spaces will need consideration and be in accordance with current policy and demand requirements.

7.5 PEDESTRIAN CIRCULATION

At more detailed design stages, further consideration will need to give to pedestrians within car parking layout arrangements to ensure safe access and circulation to and from their parked car. This should include sufficient space for pedestrian routes, which is in accordance with local design guidelines.



FIGURE 11: EXAMPLE CAR PARK PEDESTRIAN FACILITIES

7.6 ELECTRIC VEHICLES

It is important to consider the change in car parking requirements in the future. In particular, the masterplan will need to take account of the rapidly shifting market dynamics in the Electric Vehicles (EV) market and should future proof the development by enabling greater choice in terms of EV ownership and usage.

EV charging infrastructure comes in two types – Active and Passive infrastructure. Active provision requires fully wired and connected ‘ready to use’ charge points at parking spaces. Passive provision requires the necessary underlying infrastructure (e.g. capacity in the connection to the local electricity distribution network and electricity distribution board, as well as cabling to parking spaces) to enable simple installation and activation of a charge point at a future date.

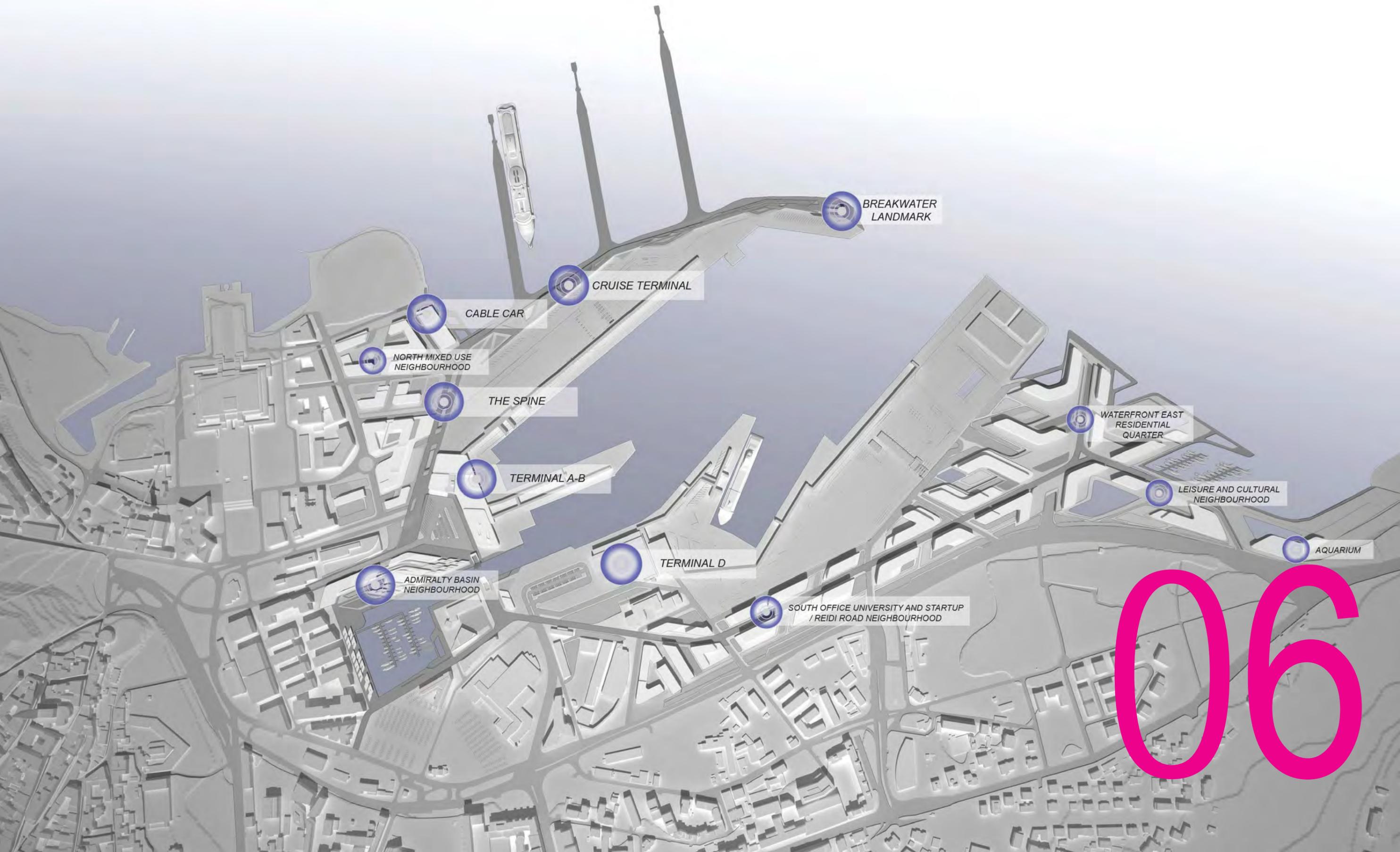
Passive charging infrastructure future-proofs new developments for the projected increase in take-up of EVs over the longer term. It is significantly cheaper and less disruptive to install the underlying infrastructure for EV charge points during construction than to retrofit later. Passive charging infrastructure enables future users of that development to not only choose whether or not to own an EV, but also provides future choice as to which charging point best suits their requirements.

7.7 CAR PARKING MANAGEMENT

The development of parking across the masterplan will need to consider the most appropriate approach to the management of car parking. This should include:

- The management of parking across different land-uses. For example, the potential operational requirements associated with office and residential car parking and whether this parking should be managed together or separately;
- The parking charges that should be applied to each car park. Charges are likely to influence parking behaviour across the masterplan and should be consistent with the wider charging regime policy across Tallinn. Consideration should also be given to developing short and long stay parking for occupiers and visitors to the masterplan area; and
- Smart City technology in the form of variable message signs on the approaches to the masterplan, which provide drivers with real-time information on the availability of parking for each particular car park. Such a system should improve the efficiency of the road and car parking network.

MASTERPLAN FEATURES



CABLE CAR



NORTH MIXED USE
NEIGHBOURHOOD



THE SPINE



TERMINAL A-B



ADMIRALTY BASIN
NEIGHBOURHOOD



TERMINAL D



SOUTH OFFICE UNIVERSITY AND STARTUP
/ REIDI ROAD NEIGHBOURHOOD



BREAKWATER
LANDMARK



WATERFRONT EAST
RESIDENTIAL
QUARTER



LEISURE AND CULTURAL
NEIGHBOURHOOD



AQUARIUM

006

The public realm and movement around the site is structured around a main pedestrian centred promenade, linking the different development zones and attraction nodes.

The promenade will be protected from the main traffic streams, thus protecting pedestrians and cyclists from nuisances such as noise or exhaust.

In particular, around the entrances to the north terminals, a variation in levels will allow separation of flows of trucks – entering an under path - from the pedestrian flows. Pedestrians will move on a planted highline, offering scenic views into the whole site - Admiralty Basin, waterfront, City and terminals.

The promenade will connect with the existing green network: the seafront promenade toward Kadriog Park on the West and Kalaturg Fish Market, Linnahall and Lennusadam on the East.

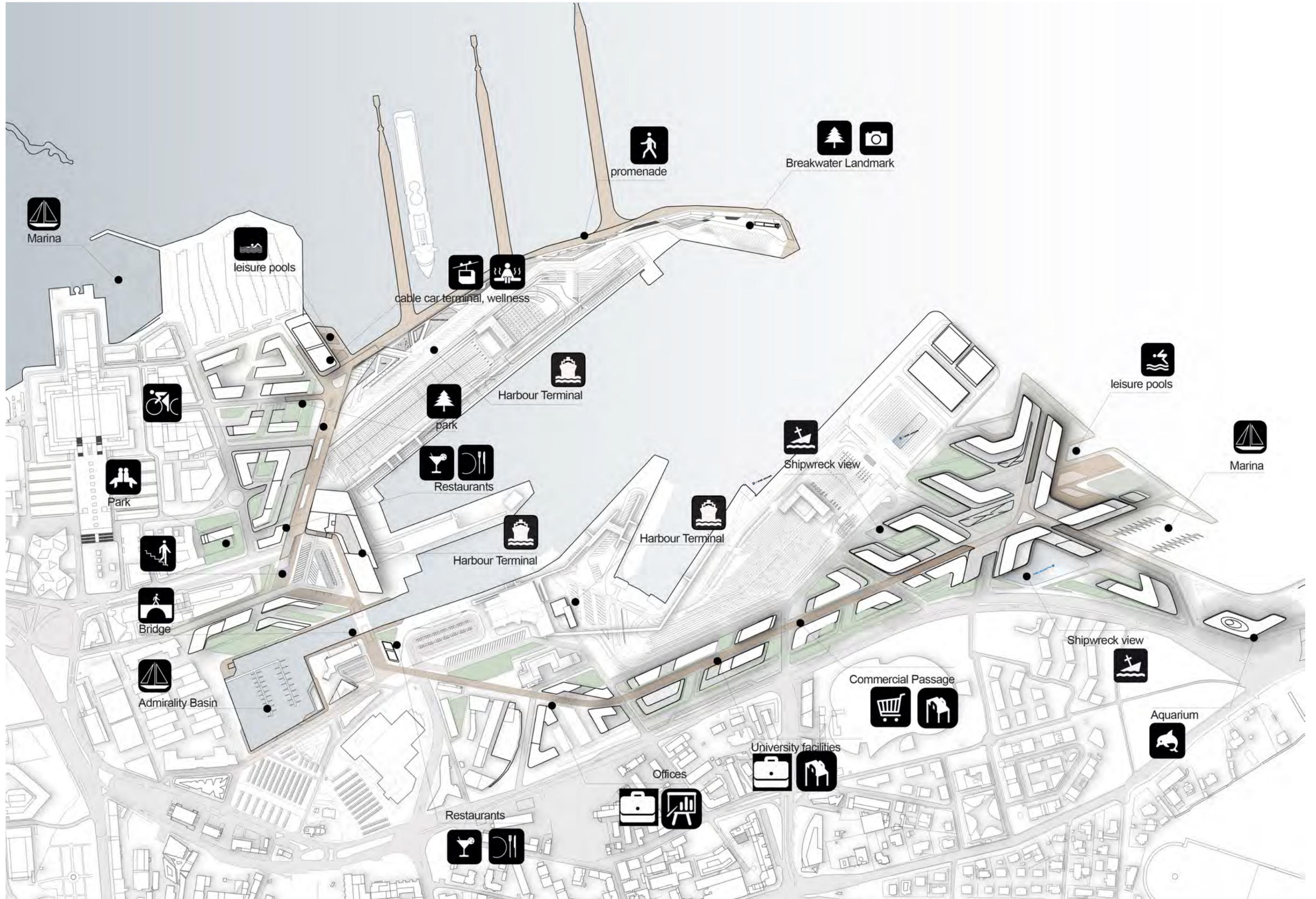
Light traffic modes include smart mobility solutions, such as cyclo-taxis, pods or small trolleys will give different mobility options, encouraging people to move from one attraction of the site to another.

This main pedestrian avenue, more than 15 meters wide, will feature clear paving and linear tree planting, giving it a sense of spaciousness and creating a strong green corridor, promoting biodiversity and habitat exchange. Local tree species, such as *Tilia cordata* Mill will be used.

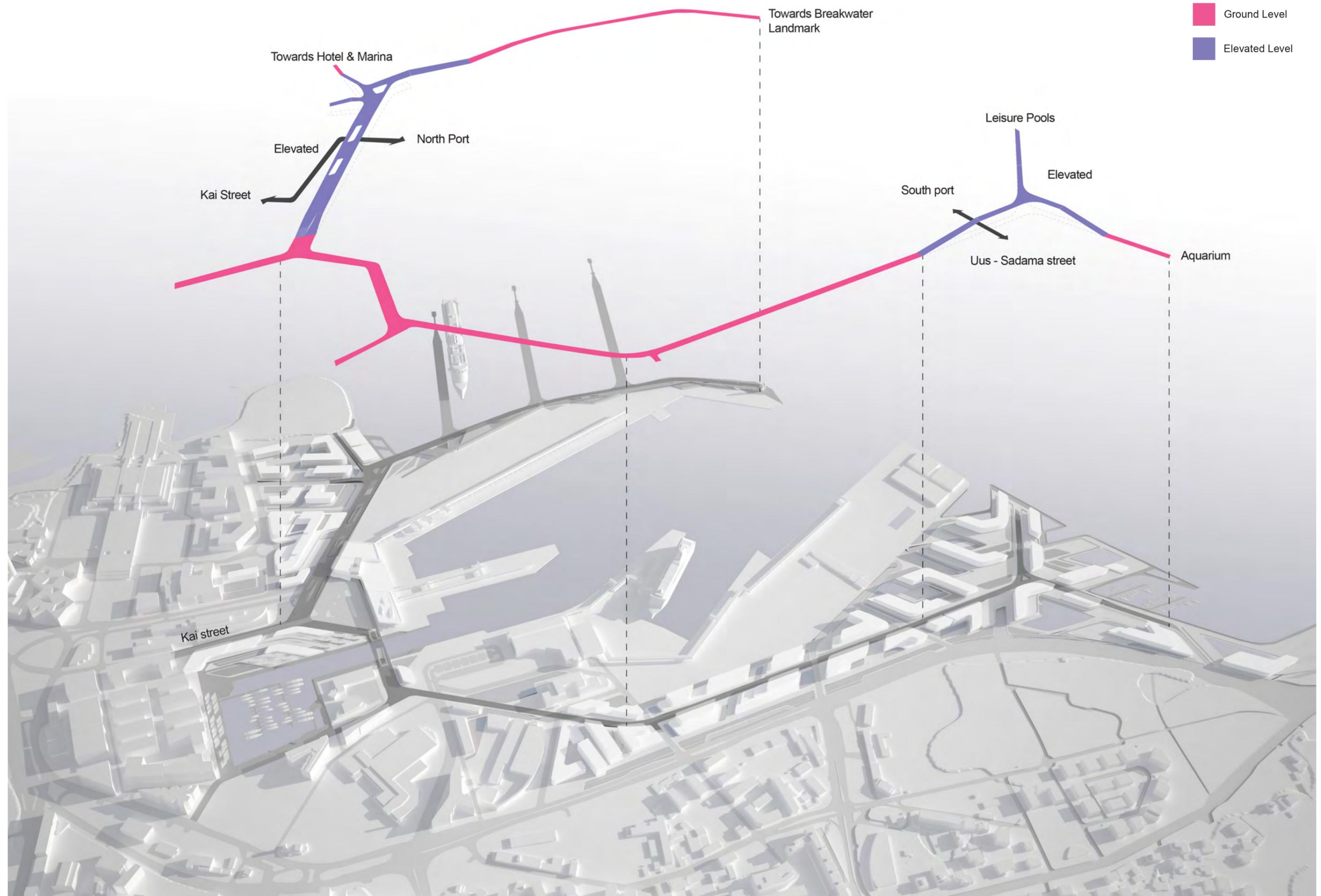
In winter the cycle lanes of the promenade can be used for a cross country skiing lane which will give the users another opportunity of enjoying the area.

06.1

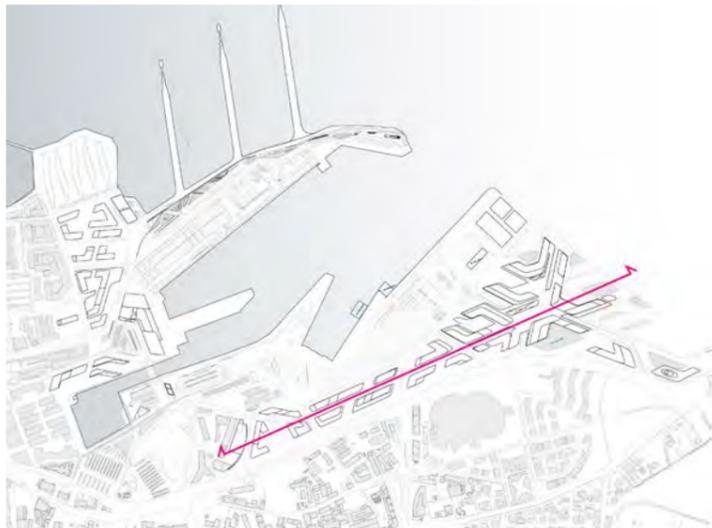
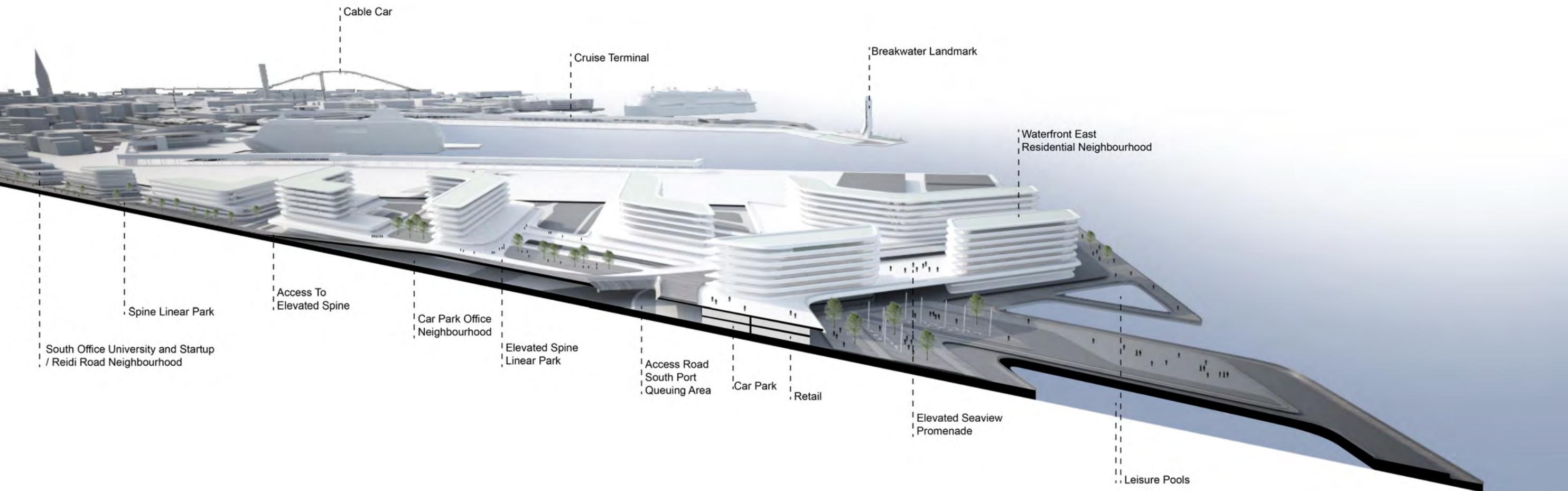
SPINE // SPINE PROGRAM AND ACTIVATION



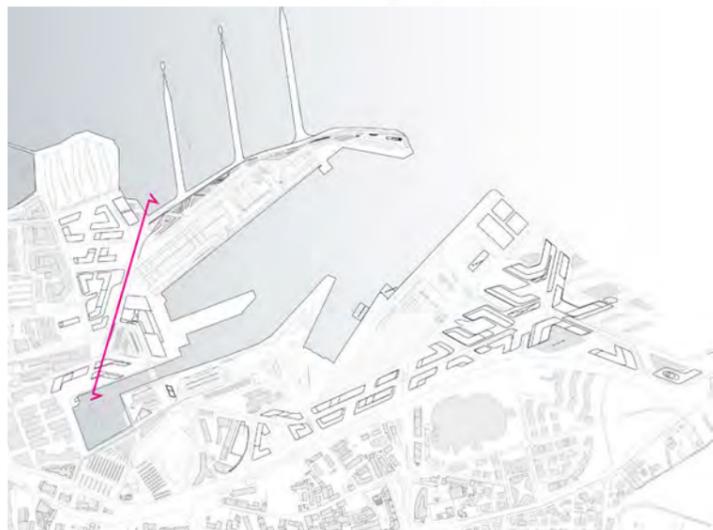
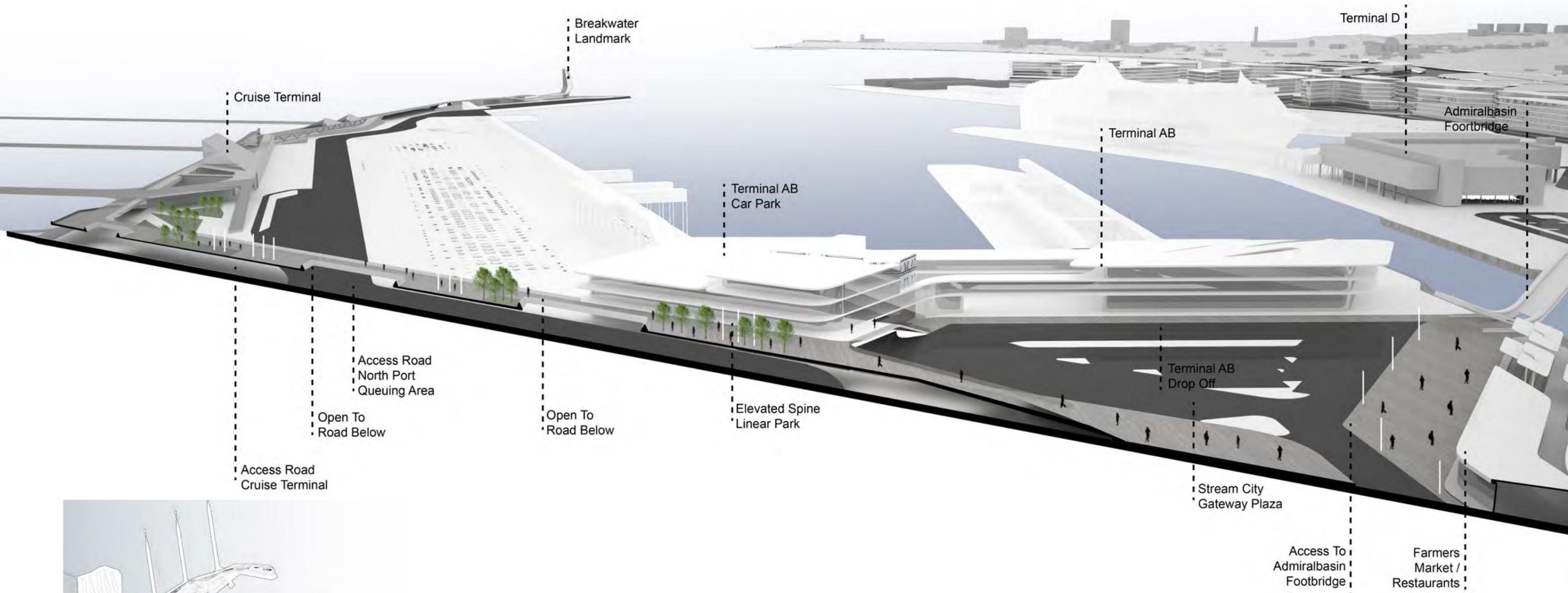
SPINE // SPINE ELEVATED DIAGRAM



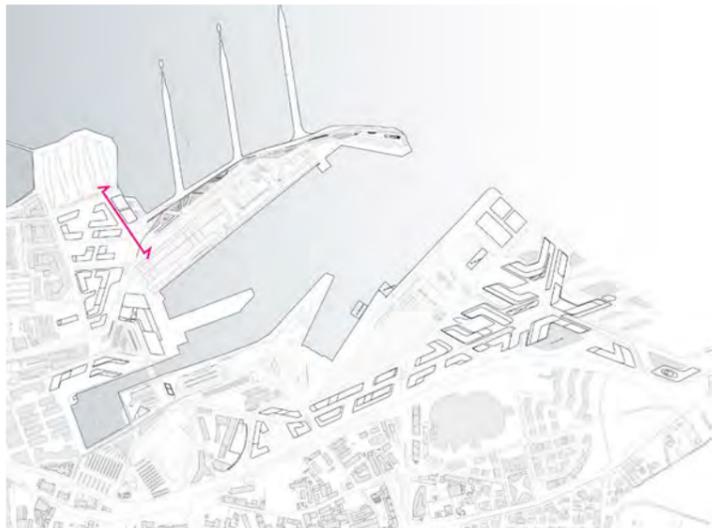
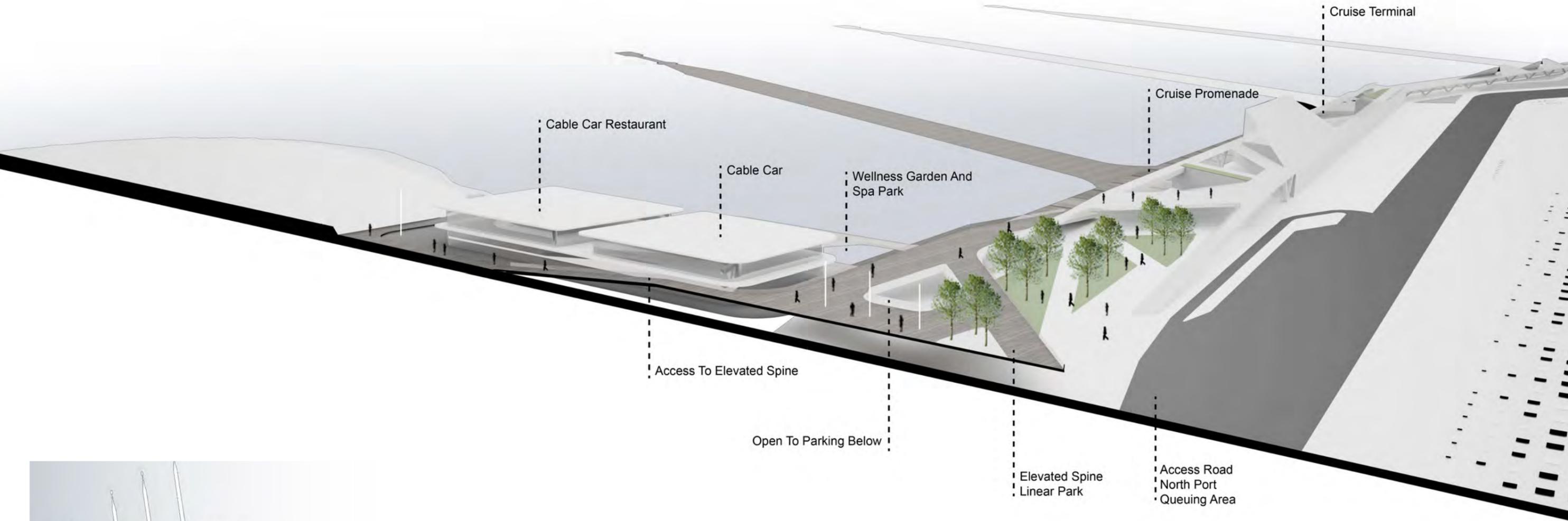
SPINE // SECTION SPINE SOUTH SECTION



SPINE // SECTION SPINE CENTRE SECTION



SPINE // SECTION SPINE NORTH SECTION



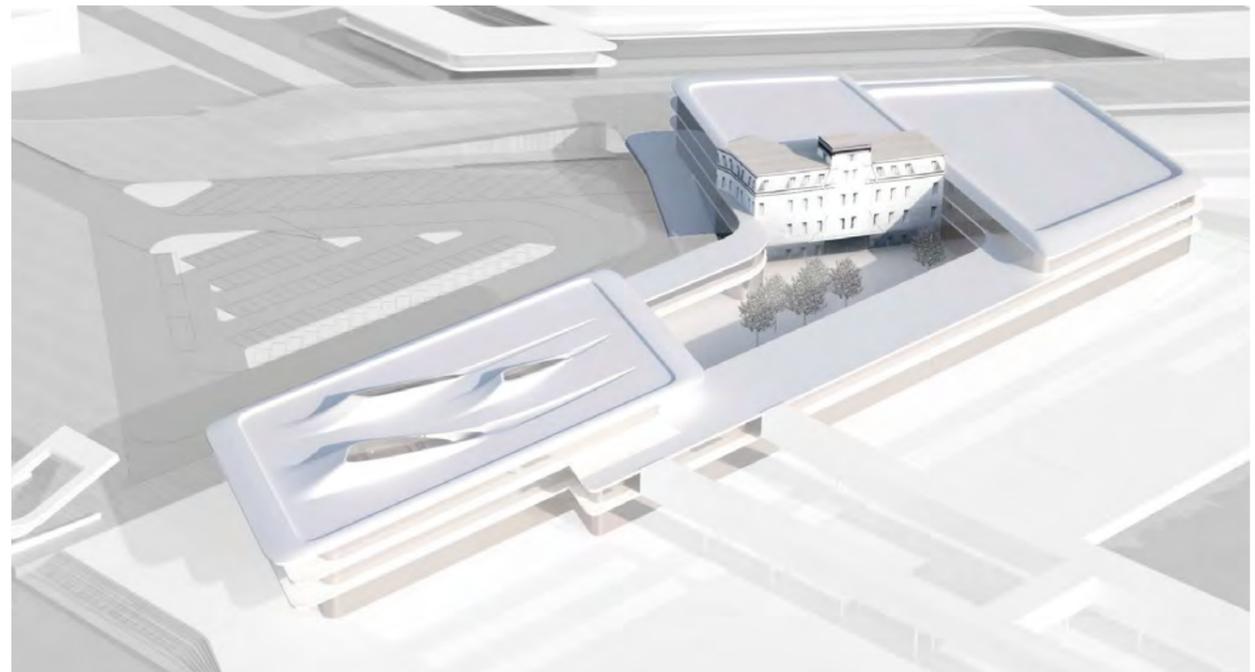
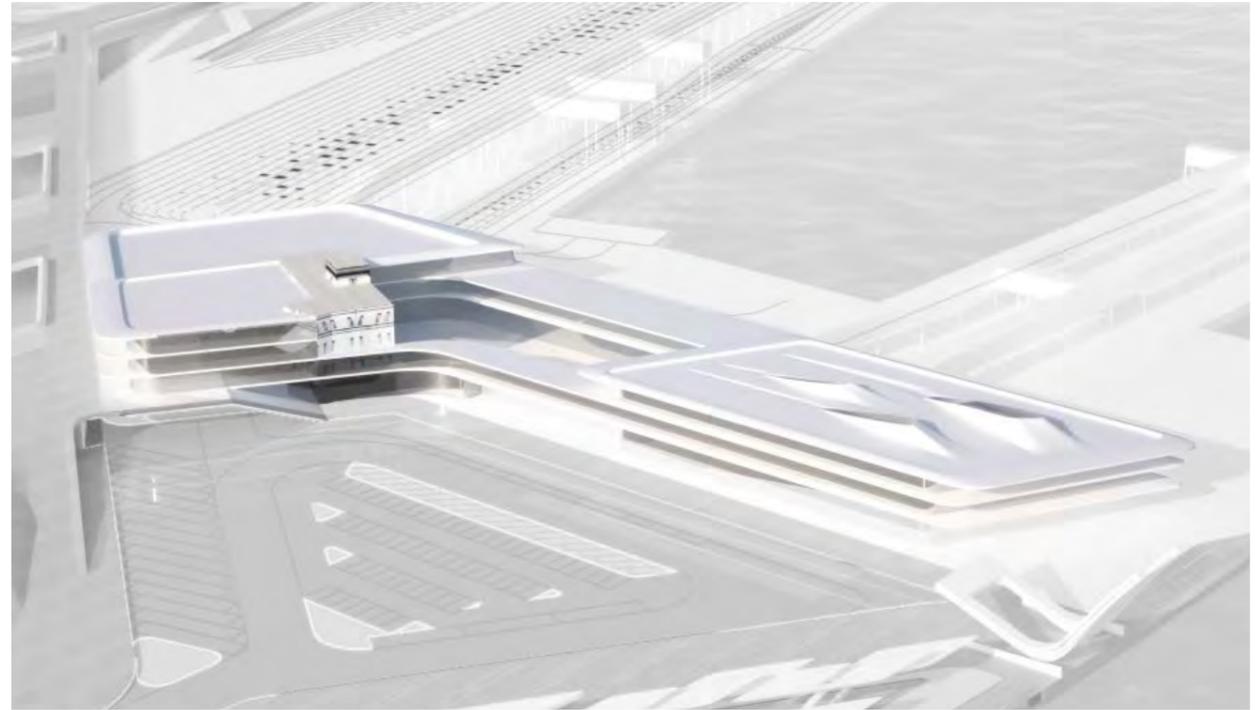
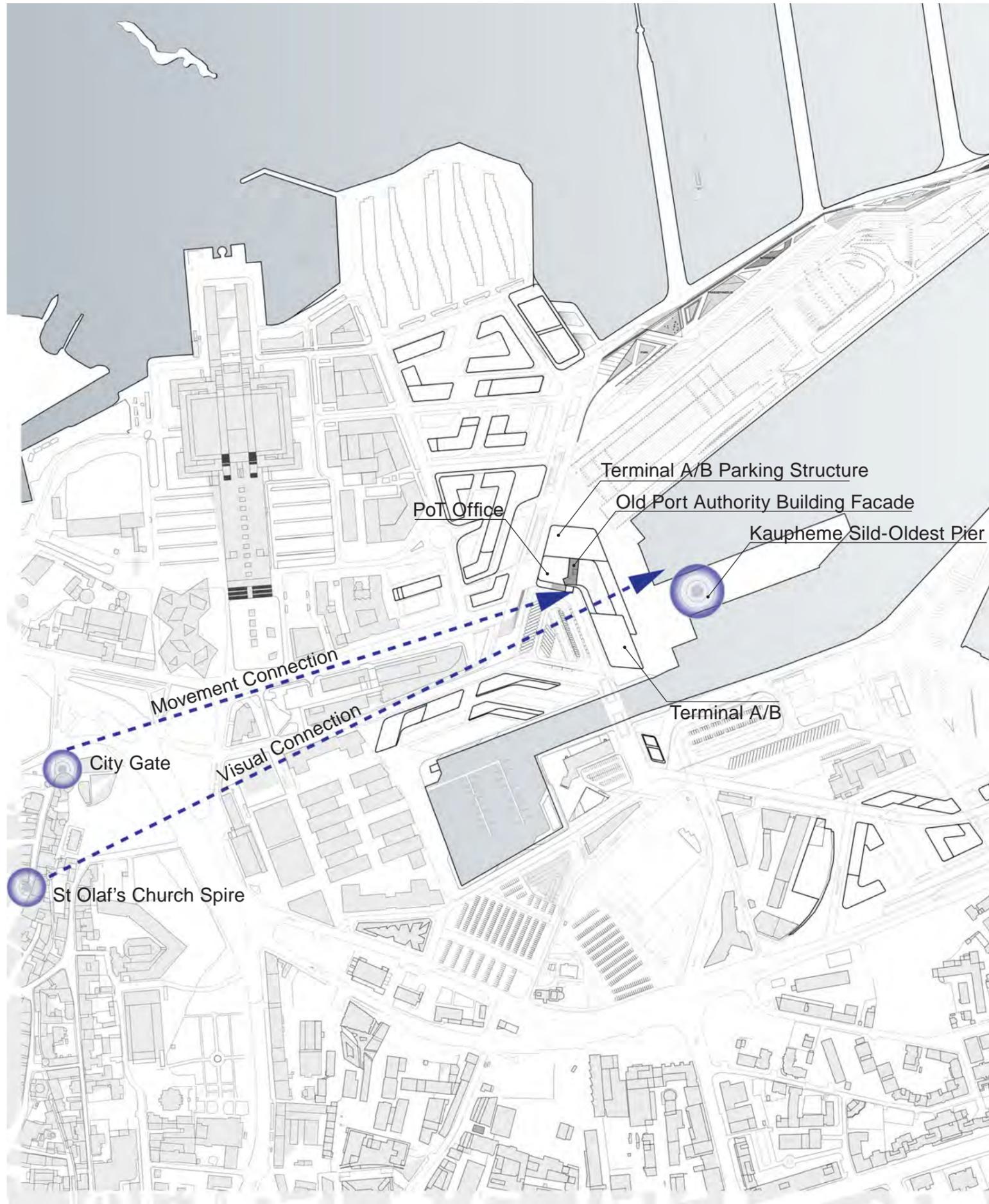
TERMINAL A/B

A new Terminal A/B has been proposed in the existing location. The location has only slightly changed relative to our proposal to help improve the space for circulation for cars, trucks, taxis and coaches/buses towards the ferries behind the terminal.

The proposed concept massing separates the mass of the building into two sections to enable the strategic views from the city via Sadama Street and Kai Street to continue through the building to the old pier. The two segments of the building frame this view. The northern section includes a multi-storey car park structure for long term and short term parking and the southern section for terminal functions. The sections are connected by walkways affording access between the two elements. The building opens up towards the Admiral Basin to create a new civic plaza, a forecourt in front of the terminal, which should be inviting and recognisable for tourists as well as commuters or locals who work in the new marina area. The existing façade of the PoT building, including the 'Clock Tower' has been integrated into the building.

06.2

FERRY TERMINALS // TERMINAL A/B



FERRY TERMINALS // TERMINAL A/B



OPERA HOUSE

Two potential locations have been proposed for an opera house for Tallinn City within the Tallinn Port Master plan 2030.

Option one proposes the opera house to be located on the northern edge of the North Mixed-use Neighbourhood, close to the Cruise Terminal and supporting facilities. This location is more generous than the Admiralty Basin location and could potentially support greater car parking numbers. The location is unfortunately further away from the city centre, but could operate as an anchor to the neighbourhood.

Option two is to locate the opera house close to the old city, on the northern edge of Admiralty Basin. The location has a number of advantages and disadvantages which we have only identified on a tertiary level. The location would enable a strong and close link between the basin and the city, providing ease of access and a high level of activation to the basin when opera performances are being held. The opera would give the basin further identity as a performance space.

On a less positive view, the available space for the opera is restricted and significant car parking may need to be provided. Equally the space would be in part neutralised for other activities with the opera, however opera patrons are likely to contribute considerable spending which could support other high end uses, retail and restaurants.

Additional pros and cons have been listed in the following diagrams.

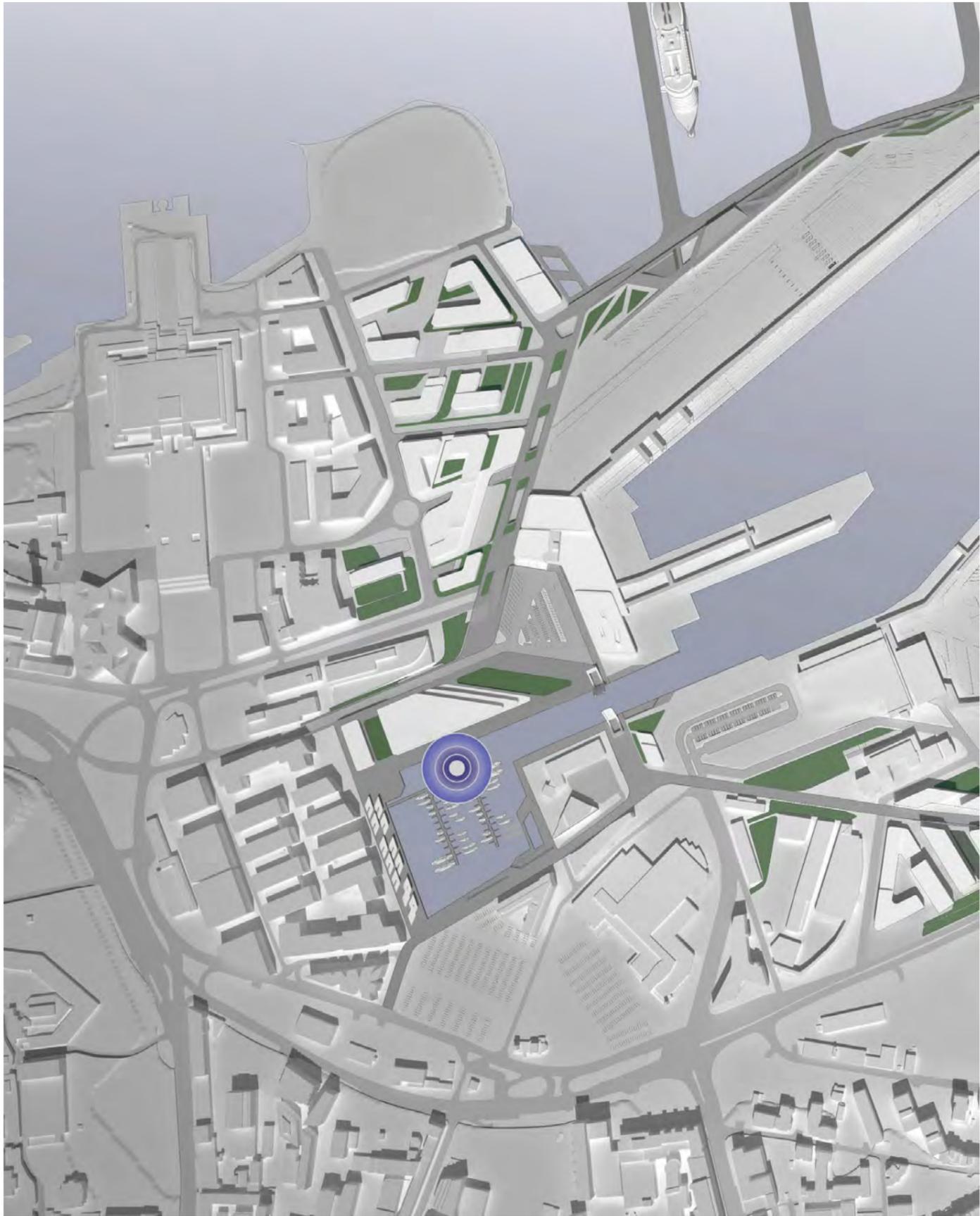
06.3

OPERA HOUSE // LOCATION OPTIONS

OPTION 01 // NORTH WATER FRONT



OPTION 02 // ADMIRALTY BASIN



Landscape Approach

Our approach to landscape architecture structures public realm and the 'green' planted network to reinforce the strategic objectives and concepts of the masterplan: 'Stream City', the spine connectors, hubs and attractors. Enhancing connectivity, effective place-making and creating beautiful and distinctive pleasant routes and spaces for all to enjoy. An enhanced Public Realm will enable the city to reclaim a part of Tallinn that is today difficult to access and not particularly inviting. The green network will accommodate varying flows of movements linked to the activity of the terminals, reinforce legibility and way-finding and create a vibrant and relaxing environment for people to experience. Landscape will harmonise and humanise the space.

An overreaching spine to the Harbour: the boulevard and seafront promenade

The public realm and movement around the site is structured around a main pedestrian centred promenade, linking the different development zones and attraction nodes. The promenade will be protected from the main traffic streams, thus protecting pedestrians and cyclists from nuisances such as noise or exhaust gasses. In particular, around the Cable Car Plaza and entrances to the north terminals, a variation in levels will allow the separation of traffic flows – entering a tunnel - from pedestrian flows. Pedestrians will move via an elevated planted highline, offering scenic views into the site - Old Marina, Waterfront, City and Terminals. The promenade will connect with the existing green network: the seafront promenade toward Kadriog Park on the West and Kalaturg Fish Market, Linnahall and Lennusadam on the East.

This main pedestrian avenue, more than 15 meters wide, will feature high quality paving and linear tree planting, providing identity and a sense of spaciousness and creating a strong 'green' corridor, promoting biodiversity and habitat exchange. Local tree species, such as *Tilia cordata* Mill will be used.

Connecting key spaces as stepping stones through the site

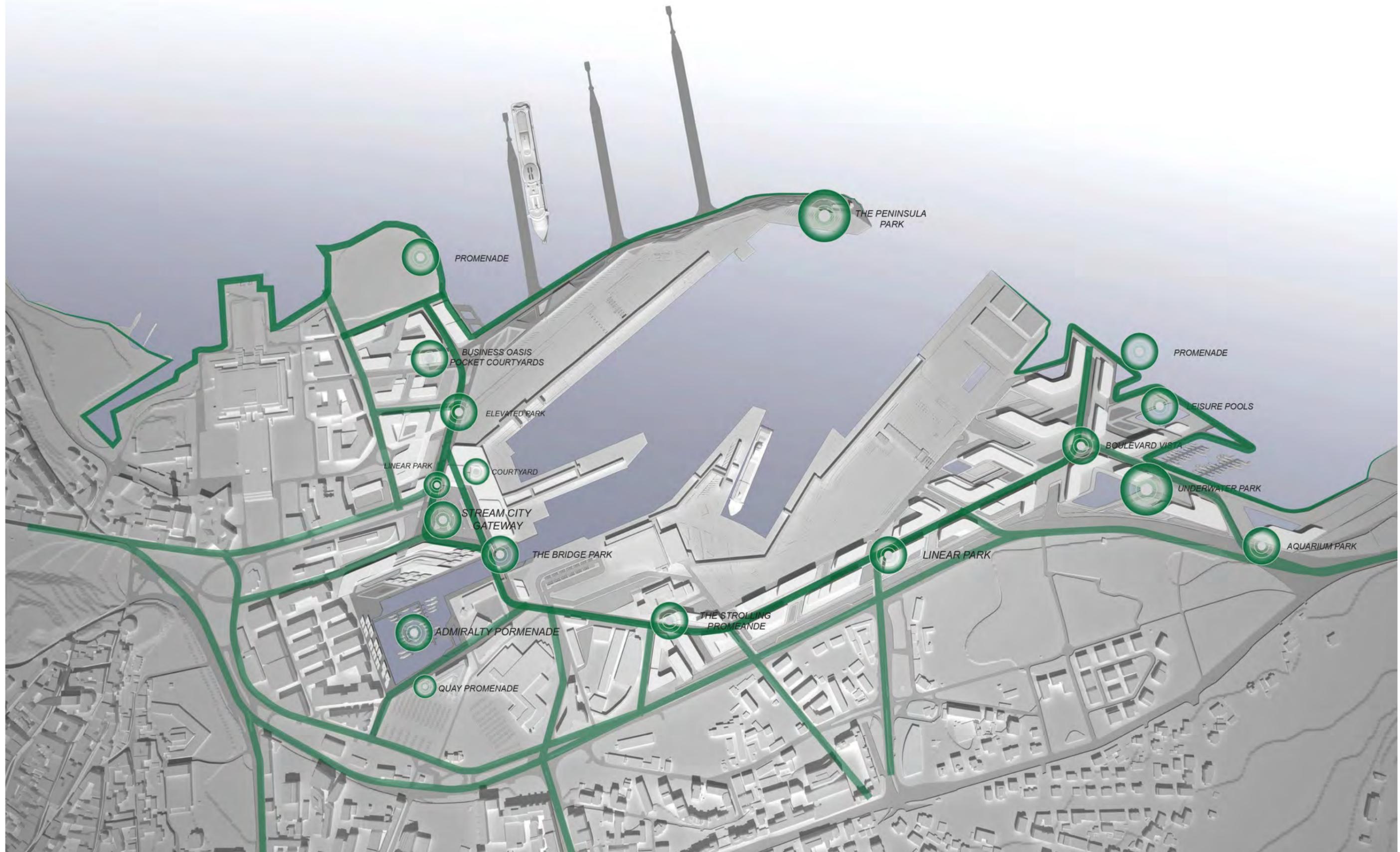
The promenade will be punctuated by series of key spaces acting as stepping stones through the site. Those key spaces, reflecting the atmosphere of the surrounding buildings and facilities and featuring special attractions, will form plazas and strong landmarks. The spaces will facilitate way-finding creating spaces to rest, meet, gather and enjoy. Located at key points throughout the site, they will also offer strong vistas, either toward the water, the Harbour, the city or a special landmark building, thus further easing orientation.

These plazas will support a variety of attractions, such as temporal events, food and beverage facilities, markets and exhibitions. Their changing program will allow the Harbour to evolve and adapt over the days, seasons, years and provide exciting and vibrant venues that respond to local culture, the market and the seasons.

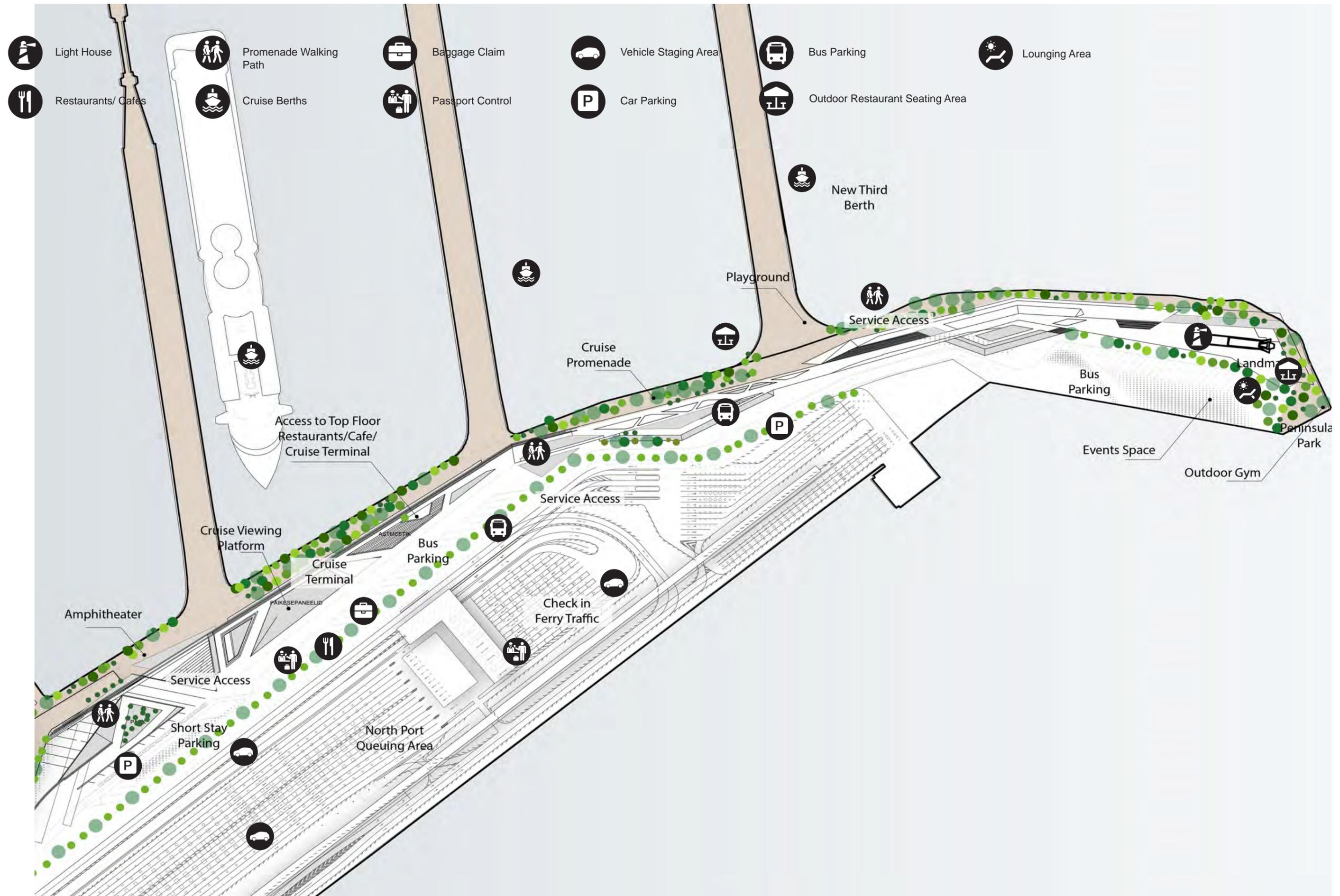
All key spaces will reveal special features, such as wooden furniture (deck, platform), distinctive trees and planting, paving and public art. Framed by the most exceptional buildings possible will distinguish those spaces giving them a unique identity. We are proposing a red buff paving, getting more vibrant, exploring textural and/or colour change near the heart of those areas, will further enable a distinct and identifiable places.

All key spaces will be planted with local or native species, such as *Betula Pendula* (European white Birch) or *Acer Platanoides* (Norway Maple). Coniferous species, such as *Pecea Abies* (Norway Spruce) will give a Scandinavian atmosphere to the site.

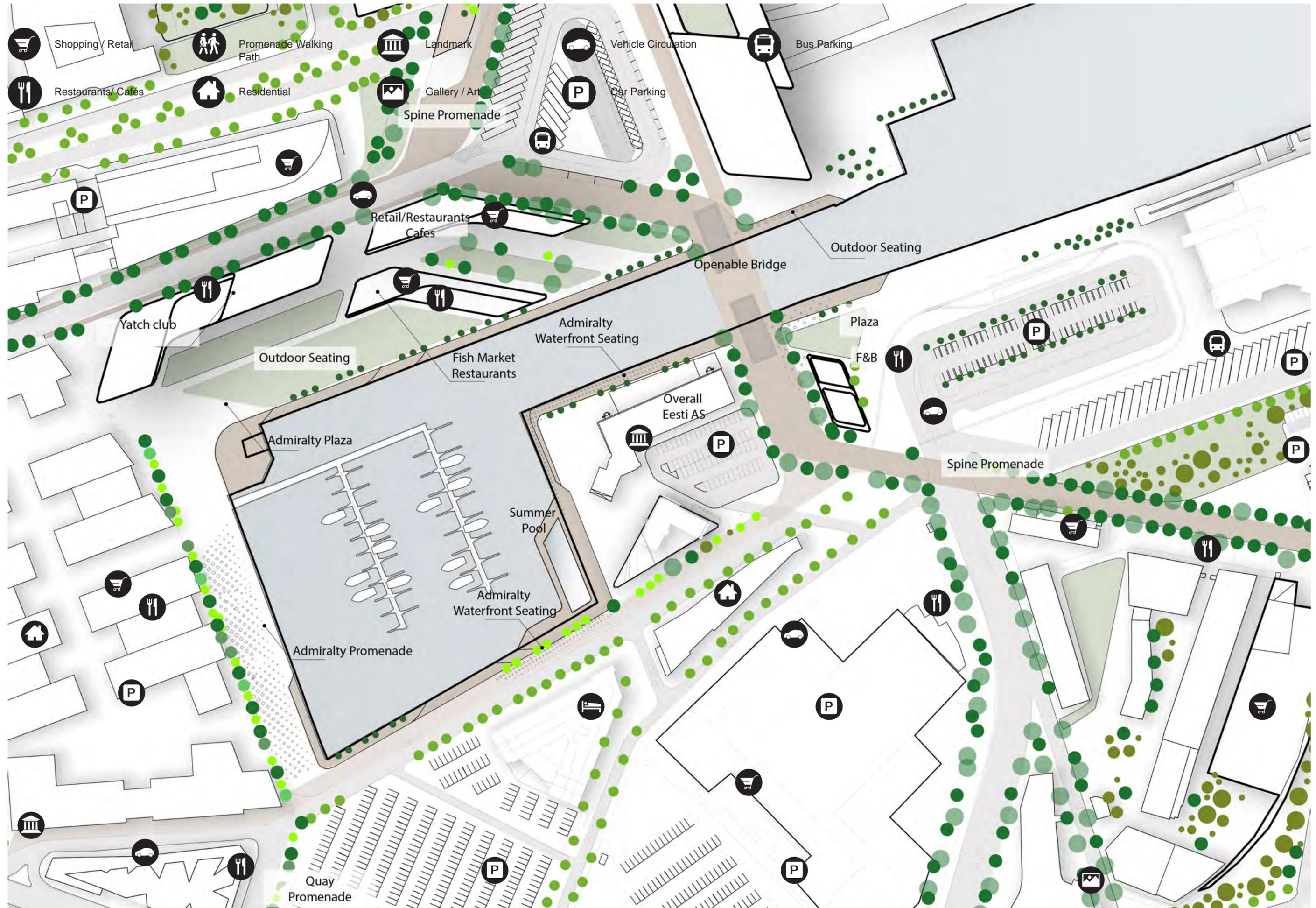
LANDSCAPE // LANDSCAPE / PUBLIC REALM HIGHLIGHTS



LANDMARK / PROMENADE // PROMENADE PROGRAM DISTRIBUTION



ADMIRALTY BASIN // PLAN



LANDSCAPE // MOOD AND MATERIAL PALETTE

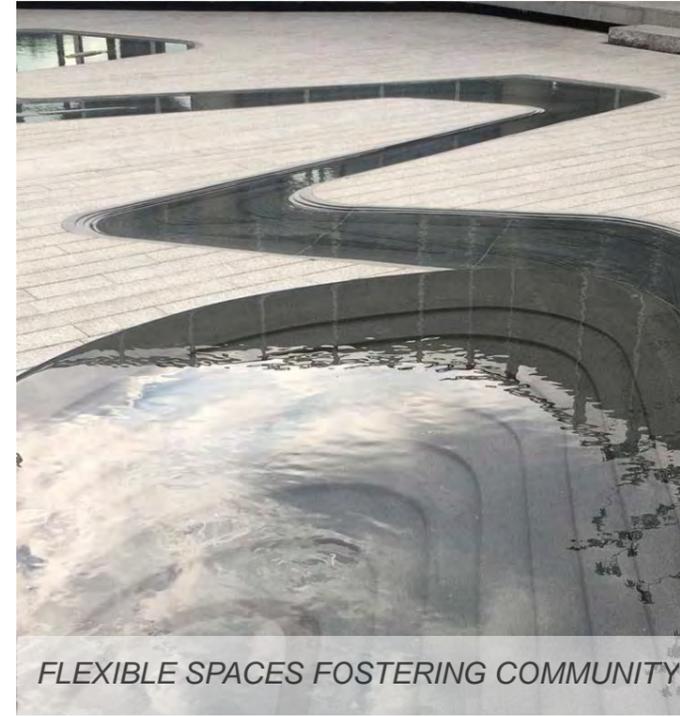
Swimming pools



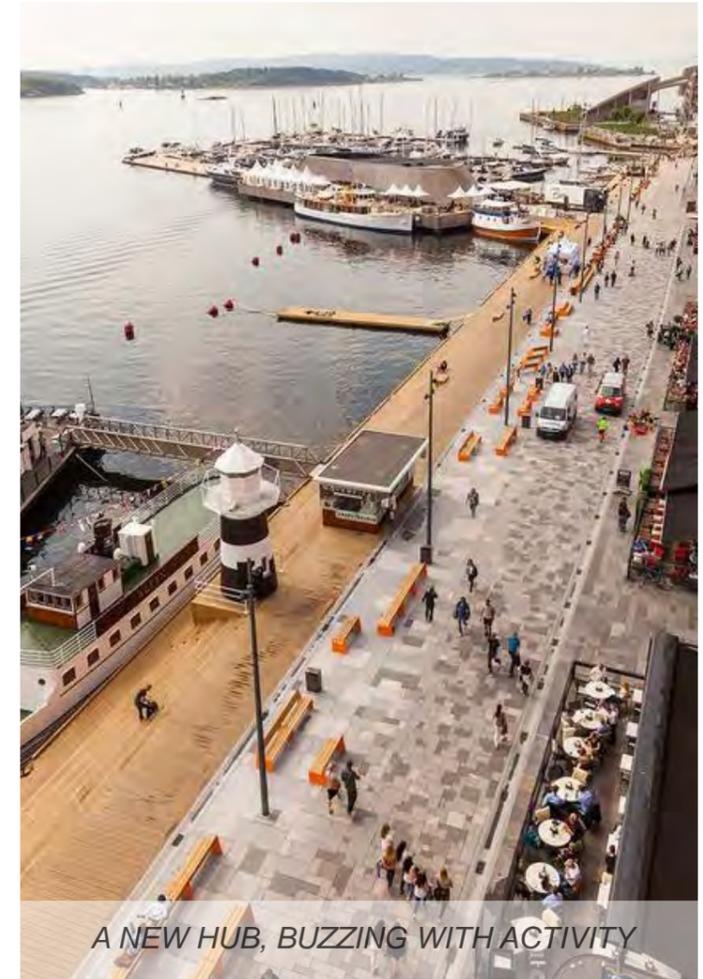
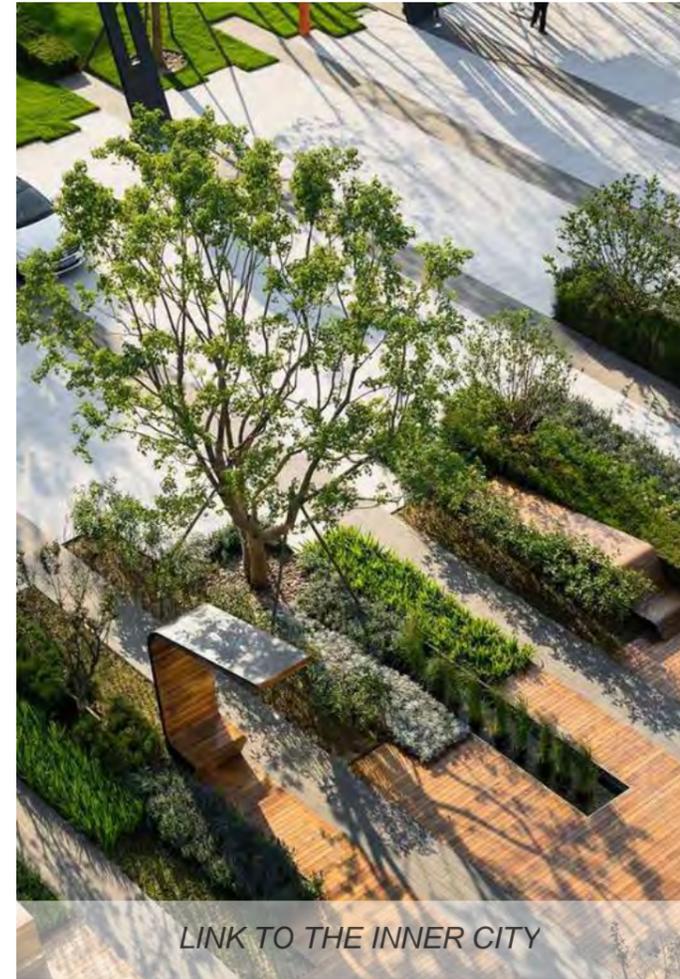
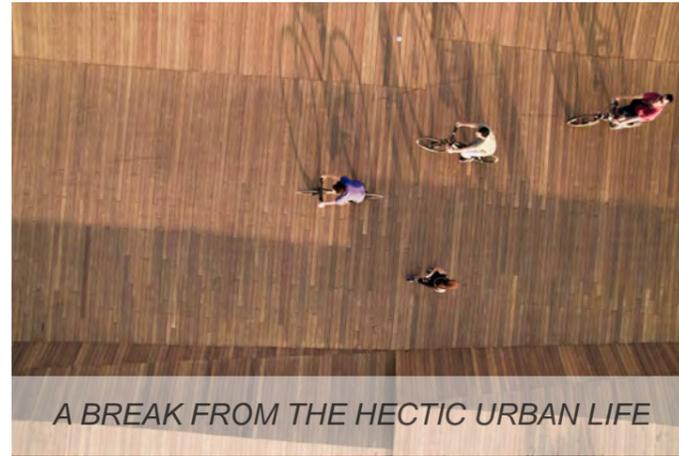
Pedestrian Spine



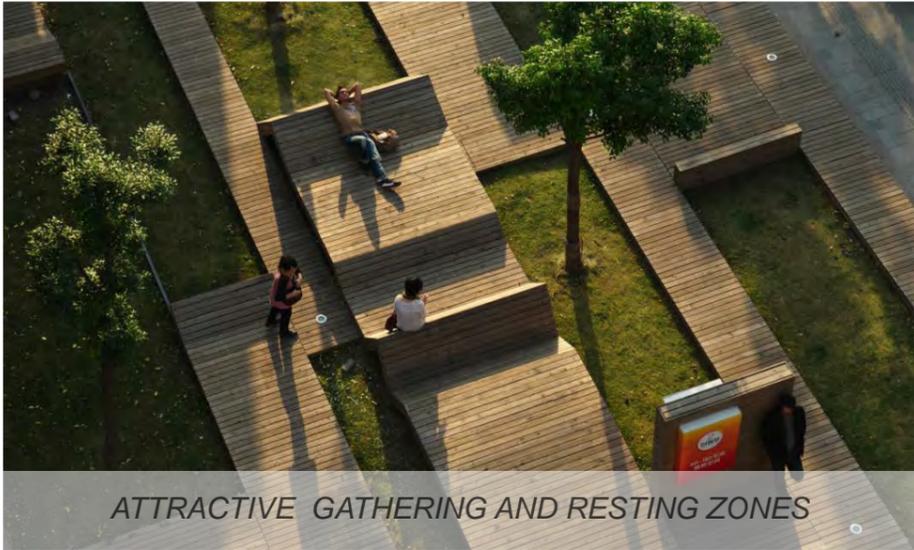
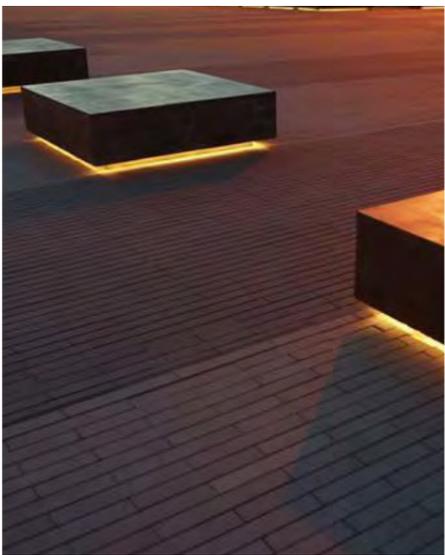
Spine Plazas



Marina Plaza



LANDSCAPE // STREET FURNITURE / LIGHTING / LAND ART



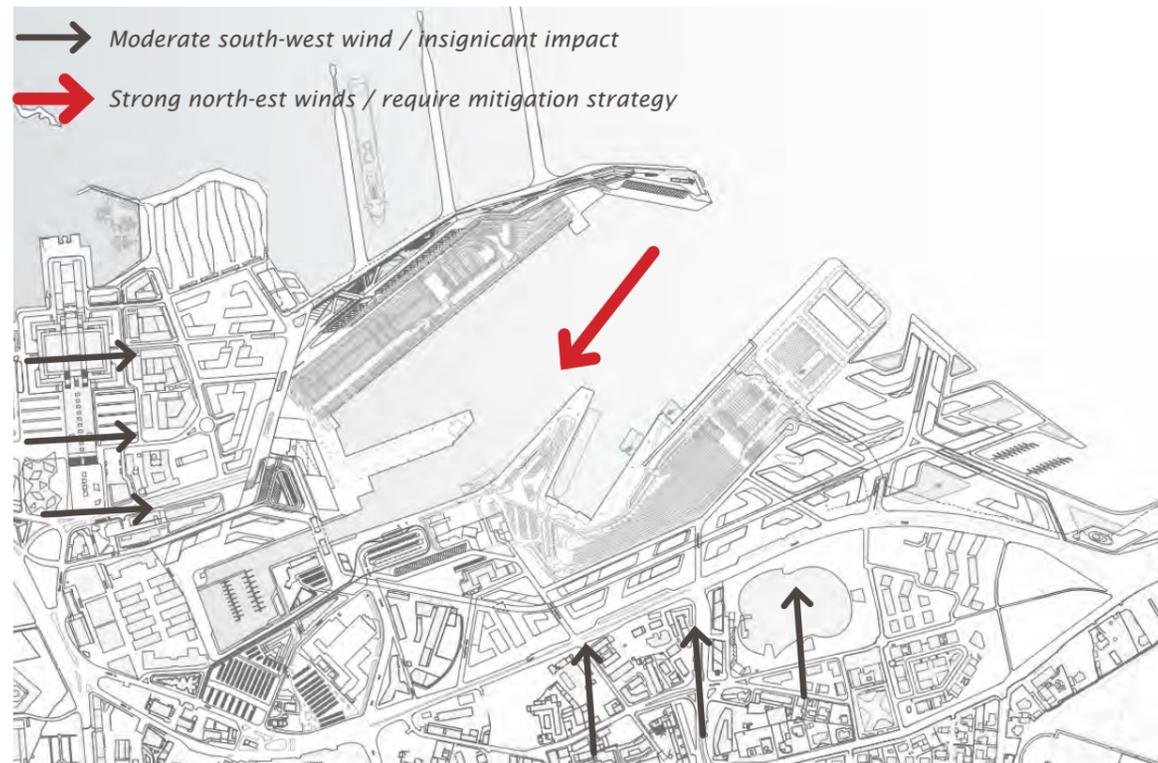
1.1 Site Analysis

The predominant average hourly wind direction in Tallinn varies throughout the year: it is mostly from the south between the end of January and the end of March, and from mid-October to the end of December, with a peak in November. The rest of the year - from end of March to mid-October and from the end of December to the end of January - the wind is most often from the west, with a peak in June.

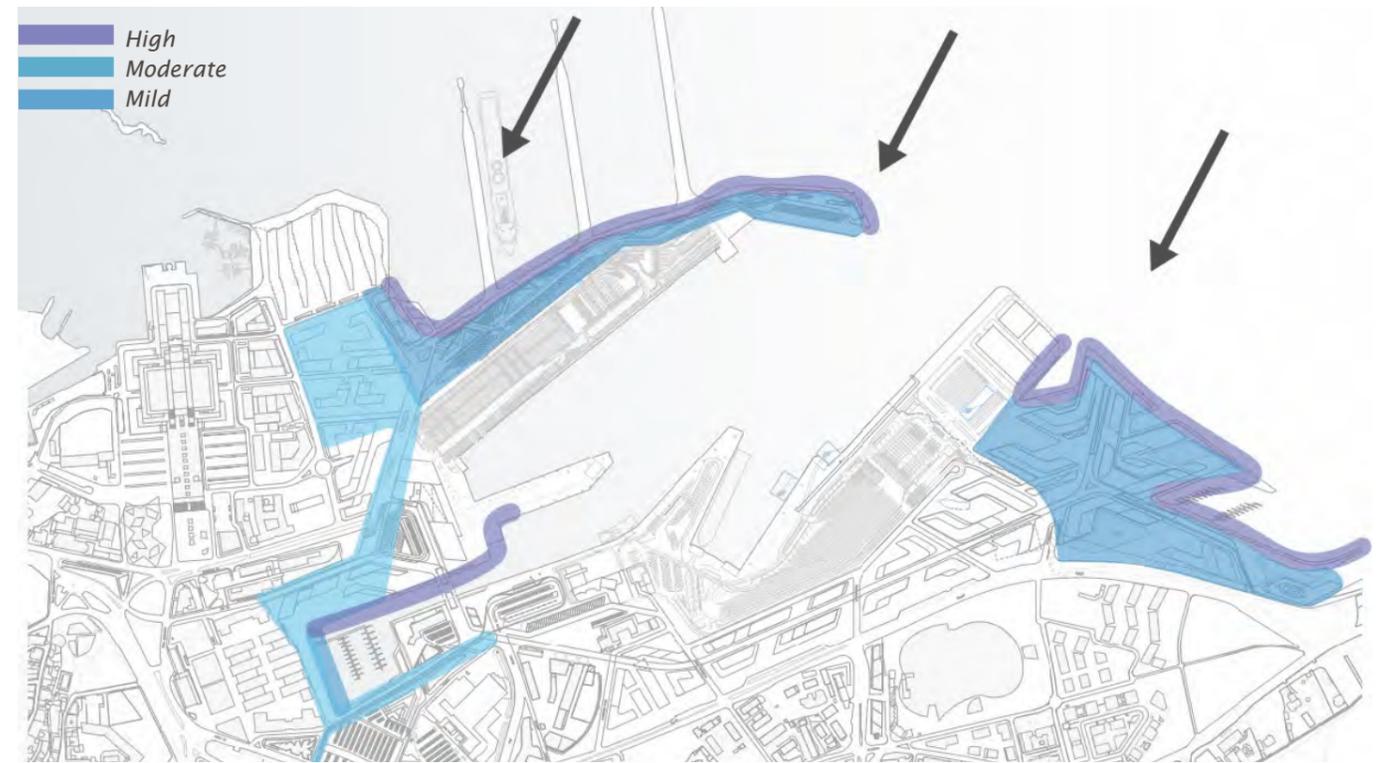
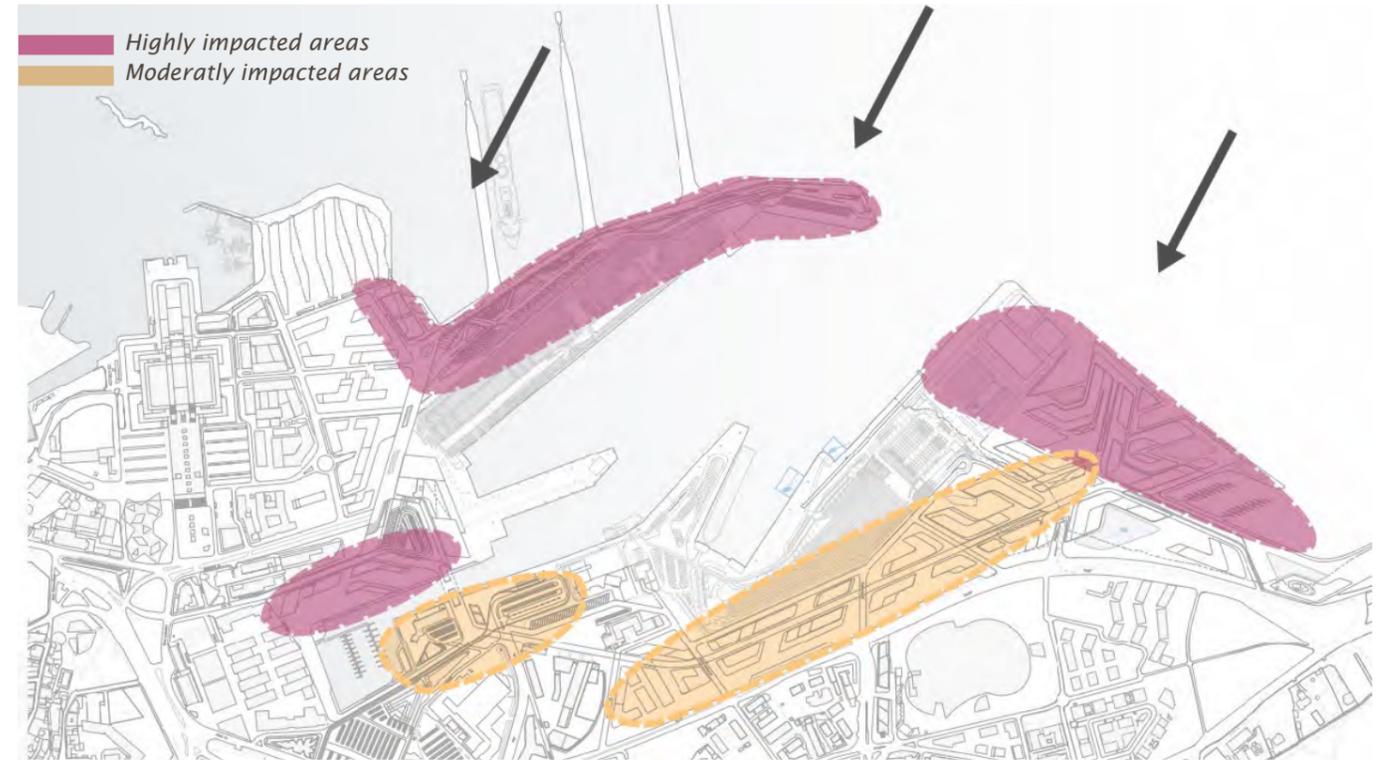
The windiest part of the year is in wintertime, from the end of September to the beginning of March, with average wind speeds of more than 7.4 miles per hour. The calmer time of the year is in summertime from March to September, with average wind speeds of 5.9 miles per hour. Those winds speeds equal number 2 and 3 (out of 12) on the Beaufort scale and can therefore be described as a light / gentle breeze.

Due to the proximity of Tallinn Harbour to the waterfront, the site is also characterised by stronger winds - around 20 mph - from the north-east. Further data collection and analysis will be needed to more accurately assess average wind direction and speeds within the Tallinn Harbour.

The present analysis shows moderate speeds of south-west winds that do not require particular mitigation measures. However, stronger winds coming from the north-east are likely to cause nuisances, especially around the waterfront promenade, the Old Marina and in proposed new the residential quarter built on land-fill.



Wind distribution over Tallinn Harbour



Impact of strong north-east winds on Harbour areas

1.2 Mitigation measures

To protect key spaces - waterfront promenade, Old Marina, residential quarter - from strong winds, possible mitigation measures are the following:

- **Increased built density**

Increasing the building density within the site as proposed by the master plan will naturally contribute to decrease street-level winds.

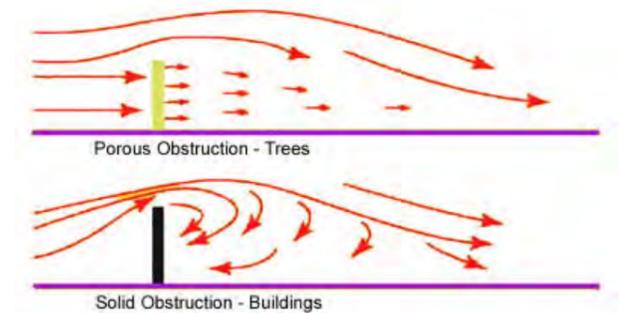
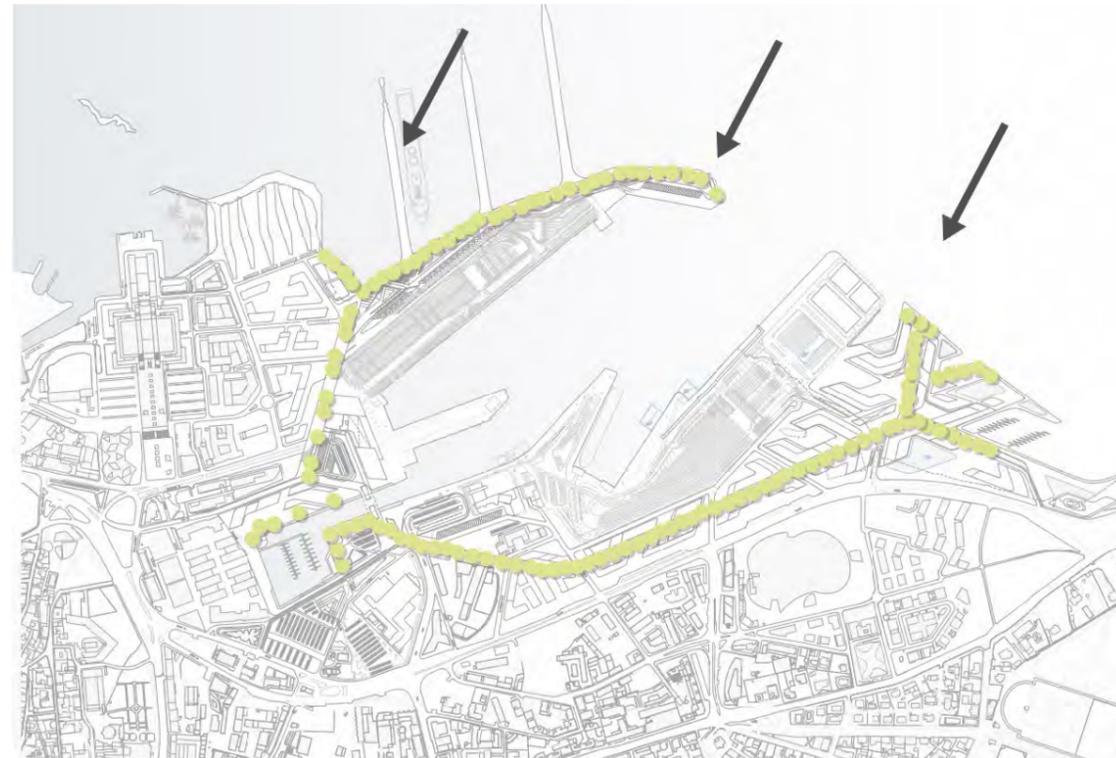
- **Massing and Orientation of the buildings**

Uniform building height and uniform distance between buildings will create less flow disturbance. Streets that are not aligned with the direction of the winds allows to avoid the creation of wind corridors. Finally, the orientation of the buildings should avoid direct exposure to prevailing winds coming from the north-east. Buildings should therefore tend to face the south-west direction.

- **Appropriate planting acting as living windbreaks**

The choice of appropriate planting can help slowing wind speed. For Tallinn Harbour, we will choose trees and shrubs species that are tolerant of coastal sites and suitable for cold areas. We will alternate rows of evergreen and deciduous plants to avoid creating a solid barrier that can cause wind turbulence.

Trees	Shrubs
<p><i>Deciduous</i></p> <ul style="list-style-type: none"> • Acer platanoides (Norway maple) • Acer saccharinum (silver maple) • Liquidamber styraciflua (sweet gum) • Sorbus aucuparia (mountain ash) • Tilia cordata (small-leaved lime) <p><i>Evergreen</i></p> <ul style="list-style-type: none"> • Pinus nigra (European black pine) • Pinus radiata (Monterey pine) • Pinus sylvestris (Scots pine) • Quercus ilex (holm oak) • Thuja plicata (western red cedar) 	<p><i>Deciduous</i></p> <ul style="list-style-type: none"> • Amelanchier canadensis (serviceberry) • Cornus mas (Cornelian cherry) • Corylus avellana (hazel) • Prunus spinosa (blackthorn) • Syringa vulgaris (lilac) <p><i>Evergreen</i></p> <ul style="list-style-type: none"> • Elaeagnus x ebbingei (Ebbinge's silverberry) • Pinus mugo (dwarf pine) • Rhamnus alaternus (Italian buckthorn) • Sasa palmata (broad-leaved bamboo) • Taxus baccata AGM (yew)



Planting strategy for wind impact mitigation within Tallinn Harbour



Examples of trees and shrubs species acting as windbreaks

URBAN DESIGN GUIDELINES // KEY CRITERIA

The Urban Design Guidelines for the Tallinn Port Master Plan 2030 seek to establish high level fundamental principles of urban design which will provide a framework for development across the port area. The guidelines are objective, flexible and adaptable to changing economic and development conditions. Equally, whilst objective the guidelines establish clear parameters and principle design intent for the level of quality of the built environment across the whole of the port and throughout the neighbourhood character areas. These must be retained in principle irrespective of changing or evolving conditions.

Urban Design is the art of creating places for people, concerned as much with the spaces between buildings as the buildings themselves. Good urban design is essential to create attractive, high quality, safe and sustainable places where people want to live, work and spend time. Urban Design is critical to creating sustainable developments, economic, social and environmental responsibility.

Many urban design principles are common and applicable across cultures and places. They must however be adapted to and be embedded into the specific local condition, respond to particular local situations and requirements and delivery of local aspirations. The Urban Design guidelines proposed for Tallinn Port Master plan 2030 attempt to meet these conditions by applying best practice common principles of urban design and aligning these with specific City and Port of Tallinn ambitions, objectives and requirements.

A set of key criteria must be considered to define the kind of place we want to create, to make the city centre and Port area more integrated, work together more successfully and operate as a guide for development.

- Character and Genius Loci
- Continuity and Enclosure
- Civic Quality and Public Realm
- Connectivity, Permeability Ease of Movement
- Legibility and Identity
- Adaptability and Responsiveness
- Diversity and Choice
- Integration and Efficiency

Whilst the Urban Design Guidelines aim to provide high level guidance to development, further more detailed analysis will need to be undertaken. The guidelines are working documents that can adapt, accept change and evolve with the development of the port area and as the more detailed work and input from the City of Tallinn informs the process.

Tallinn Port will have its own distinctive identity which will be embedded in its local history and character. The guidelines indicate a number of reference images which are illustrative of the quality and character of the place that Tallinn Port Master plan 2030 can become.



LINNEHAL MARINA

THE PENINSULA PARK

BREAKWATER LANDMARK

CRUISE PROMENADE

CRANE

WELLNESS GARDEN AND SPA PARK

HOTEL PLAZA PARK

CRUISE TERMINAL

CHECK IN AREA

CABLE CAR STATION

SERVICE APARTMENTS

BUSINESS OASIS POCKET COURTYARDS

NORTH PORT QUEUING AREA

NORTH COMMERCIAL OFFICE NEIGHBOURHOOD

ELEVATED SPINE

LINEAR PARK

SHIPWRECK

SHIPWRECK

RESIDENTIAL NEIGHBOURHOOD

LEISURE POOLS

BOULEVARD VISTA

TERMINAL A/B

SHIPWRECK SOUTHPORT QUEUING AREA

CHECK IN AREA

SHIPWRECK

ACCESS NORTH PORT QUEUING AREA/CRUISE

STREAM CITY GATEWAY

DROP OFF

TERMINAL D

SOUTH OFFICE NEIGHBOURHOOD

EAST PARK MARINA

AQUARIUM PARK

ACCESS TERMINAL AB

ADMIRALTY FOOT BRIDGE

F&B

DROP OFF

SPINE LINEAR PARK

UNIVERSITY RESIDENCE AND UTILITIES

ACCESS SOUTHPORT QUEUING AREA

MARINA CLUB

SHIPWRECK AQUARIUM

ADMIRALTY PLAZA

ADMIRALTY PROMENADE

ADMIRALTY BASIN

QUAY PROMENADE

STROLLING PROMENADE

ACCESS TERMINAL D

ACCESS TERMINAL D

URBAN DESIGN GUIDELINES // KEY CRITERIA

Character and Genius Loci

Character of an area is enhanced by respecting its locally distinctive patterns of development, sense of history, culture and traditions. The urban design objectives should seek to improve and contribute to the overall context and identity of Tallinn. Tallinn has an incredibly rich history. The city and port have evolved collectively and integrally throughout history. Tallinn's historic character should be enhanced when considering any redevelopment opportunity. Tallinn should aim to meet the needs of the community and preserve the heritage and identity of the area whilst supporting local diversity. The distinctive natural and historic setting, views and local topography and ecology should be an inspiration for new development. Materials, building volume and texture and scale of development should consider local and regional traditions. Tallinn must continue to be place with the highest quality architecture, landscape architecture and public realm design that will enhance and complement its significant historic character and context.



Continuity and Enclosure

Achieved by reinforcing the continuity of street and the enclosure of space by development, which clearly defines public and private space. Successful urban space is defined and enclosed by buildings, structures and landscape. The positive relationship between building and street is fundamental. Buildings must relate to a defined building edge and reinforce and frame the street. Primary access to buildings must be from the street, i.e. the front of the building. Building height and scale should relate directly to the width of the street and space between backs of buildings. Buildings must provide a clear distinction between public and private space.

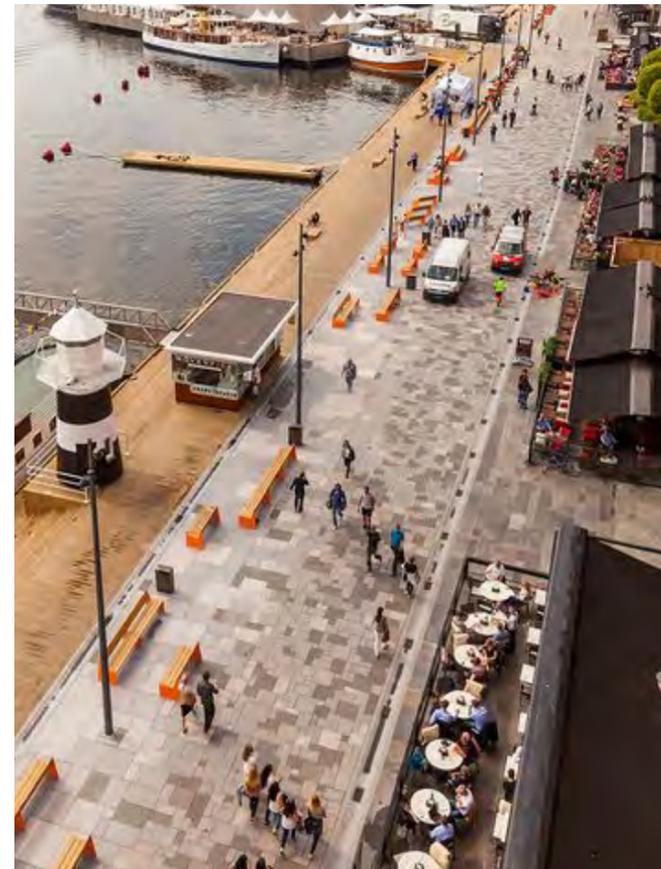


Civic Quality and Public Realm

The quality of the space between buildings must provide spaces and routes that are safe, uncluttered, active and identifiable. A safe, attractive, and a usable public realm is key to the success of a place. The public realm needs to encourage public life by allowing a variety of activities to take place, responding to different daily and seasonal needs, and catering for all members of the community. Activities such as the staging of local events, impromptu street entertainment, children's play or celebratory events and parades, are best accommodated in the public realm through well designed, multi-purpose streets and spaces.

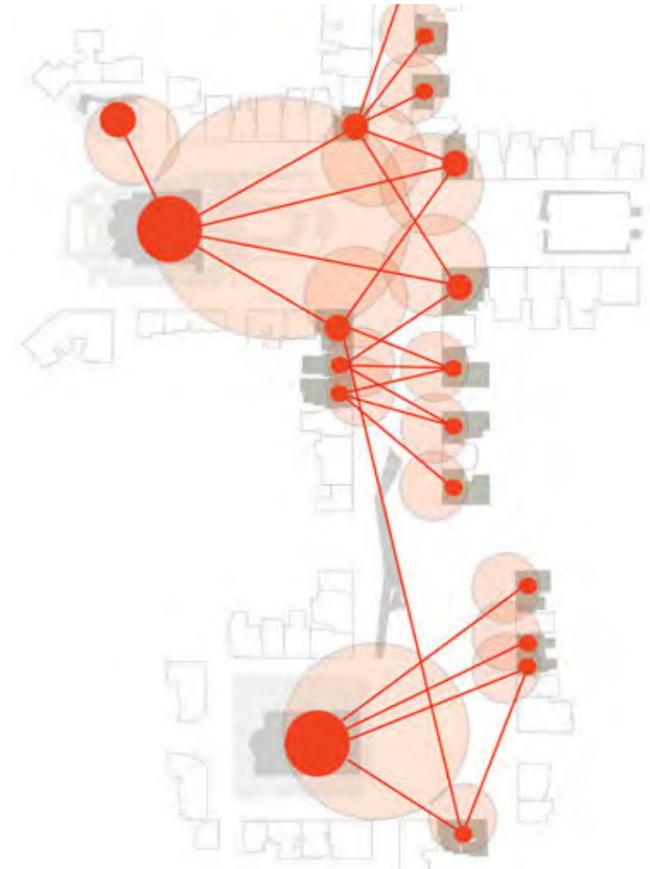
Spaces and routes need to be multi-functional, attractive and inviting regardless of the quantity of people populating the space. This should allow a range of people to use the same space, at the same time but in different ways. People should feel safe when they walk and cycle in the city, in relation to the risk of personal attack and road safety hazards. Streets are part of the public realm as are the spaces immediately adjacent to ground floor uses. Proper interface between building and public space creates a dialogue promoting surveillance and interaction. Active ground floor frontages, which encourage 'comings and goings' will enhance the interface and increase safety.

The detail of the public realm manifested in the paving, materials, details, planting, lighting and signage all contribute to its success. The provision of a well-lit and populated public realm can reduce crime and is fundamental to how safe it is perceived to be by the public. The introduction of public art adds character and significance to special places and along key routes.



Connectivity, Permeability, Ease of Movement

Achieved through high accessibility and local movement by making places that connect with each other and are easy to move through. In order to promote an efficient form of development that minimises reliance on private cars, movement patterns should provide an armature for development that relates land use and density to the accessibility of public transport, and provides a complementary mix of uses. A regular urban/block structure facilitates good connectivity and permeability between places. New development should maintain this principle. A clear hierarchy of routes: Primary routes should link together key nodes, uses and transport facilities. Secondary routes should provide further integration. Tertiary routes provide a finer grain network of connectivity. As with all aspects of the design of the public realm, the critical issue to the success of achieving ease of movement, will be finding the right balance between the different transport modes, practical engineering solutions and design quality.



Legibility and Identity

Legibility and identity is achieved through the ease of navigation through development that provides a system of recognisable routes, nodes and features to orientate users. Tallinn is a place that has a clear identity and is easy to understand primarily due to the structure and layout of the city, notwithstanding its landmarks and heritage. New landmarks, gateways and focal points will reflect the city's character and identity, help people find their way around, provide more memorable features and appropriate entry points. Development should support existing routes and reinforce views and vistas. Building design should support the importance of these routes. Well-designed corners, good detailing and quality of materials all contribute to creating a distinctive identity and memorable places. Landmark building opportunities exist on a variety of sites and should operate on a range of levels, those that work within the context of the city and those that work within the context of the neighbourhood.

Adaptability and Responsiveness

Development should respond to changing social, technological and economic and market conditions. The Port of Tallinn has evolved throughout its history. Operational requirements must be carefully considered so these are not compromised by new development. Tallinn should be a place that can change, evolve and adapt to changing social, technological, economic and market conditions. The overall layout and physical fabric of the area must be able to accommodate change which represents a significant challenge for both the Port and the City of Tallinn. In new development a robust urban structure, street network and building form is one of the best ways to achieve flexibility in proposed use and future adaptation. Places and spaces must encourage use and accommodate a range of activities as well as be able to adapt to future requirements.

Diversity and Choice

Diversity and choice is achieved through a mix of compatible developments and uses, which work together to create vital, viable places that meet a range of local needs. The Tallinn Master plan 2030 promotes a wide mix of compatible uses that work together to create greater vitality, meet local needs, and offer variety and choice at a range of scales. Equally, additional uses that complement the city and Port. Buildings should be able to accommodate a range of uses within the same envelope. Mixed-use development offers the greatest opportunity for flexibility in the future and can help to attract a range of people to live, work and play in the same area. Diversity of tenure allows residents and businesses to adapt to changing levels of economic conditions, expansion and contraction of operations and size or changing family units.

Integration and Efficiency

Sustainable development should integrate land uses, transport and the natural environment, promote walkability and reduce the need to travel. The relationship between pedestrian movement and public transport provision should maximise convenience and accessibility. All new development should be of high quality, designed and built with sustainable principles, within reach of public transport and with an overarching aim of achieving a beautiful built environment.

The translation of these objectives into the spatial structure and appropriate form of development relative to the unique characteristics of the Master plan area is expressed below in terms of the following Urban Design principles of development form:

- Structure and Grain
- Form, Scale and Massing
- Landscape and Public Realm
- Building Interface
- Streets, Movement and Connectivity
- Appearance and Materials
- Density and Mix of use

The principles will headline the strategic guidance for each neighbourhood character.



URBAN DESIGN GUIDELINES // COMMENTS

The broad overarching Urban Design Guidelines utilise robust principles of urban design to provide overall guidance to the form and structure of new development. For the Port of Tallinn this translates into how new development is formed and how the network of streets and routes are integrated and assimilated into the port area and the city. Comments from the City, Port of Tallinn and the City Forum were focused on a number of themes and recommendations which have been illustrated earlier in the report. When possible, we have integrated the comments into the master plan. The Urban Design Guidelines have considered these in structuring the guidance.

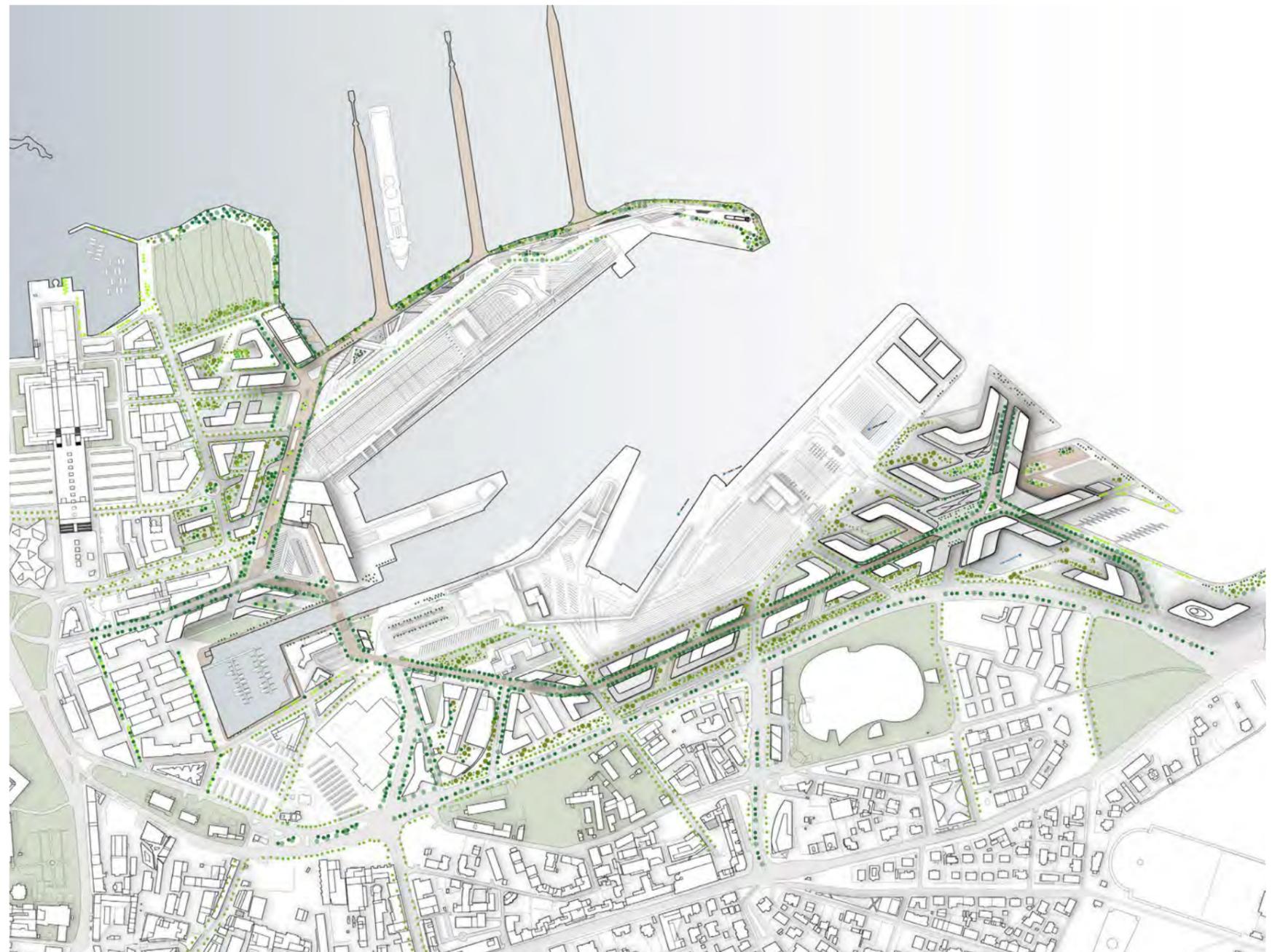
Quality: Quality of the built environment and public realm are paramount, top priorities of the guidance. Quality of design, architecture, landscape architecture and public realm as well as public transport infrastructure must align with and be commensurate to the exceptional historic character of Tallinn. Quality of materials and finish must be of the highest order possible, durable and robust to ensure they are compatible with the challenging conditions and climate of Tallinn.

Structure/View Corridors: A vital strategic Integration principle, Zaha Hadid Architects have considered the key view corridors and modified the layout of blocks across the master plan area to ensure that the majority of these vistas are maintained and where possible enhanced with street improvements, new development and key buildings/attractors. Collectively, they will provide greater integration and legibility between the City and Port. The most important view corridors include, Kai, Sadama, Rumbi and the Cultural Kilometre, the Linnahall cross routes, Uus Sadama and Tuukri Põik/Petrooleumi. Pikksilma is made more visible and legible as a key connecting route.

Connectivity: Connections from the historic town core and districts of the city to the south along the proposed Reidi Road will be enhanced. Improved links between the city and all Port Terminals will encourage greater pedestrian flows with the aim to reduce the number of taxi and bus movements from the terminals to the city. If the connections can be made more active and legible the potential positive impact on the public realm and environment of Tallinn can be dramatic. Equally, visitors will be presented with a greater understanding and conceivably appreciation of the city when arriving on foot. A new shuttle link is proposed between Waterfront East Residential Neighbourhood and the tip of the Cruise Terminal pier, at the historic crane.

Context/Historic Buildings: A greater integration of the historic fabric and infrastructure was another key comment theme. The master plan required restructuring in areas to accommodate these influences. Lootsi Quarter Wall and the 'Limestone' buildings have been integrated into the masterplan to ensure the most important historic elements of the masterplan area are kept at the forefront of the design.

Public Transport Infrastructure: Considerable work has been undertaken planning new public transport infrastructure specifically around Terminal D. The principles of the coach, car parking and tram route have been incorporated into the design. Unfortunately, due to the area of land required for this infrastructure, the built environment has been compromised and how the architecture and landscape can create a high quality built environment and public realm in this location.



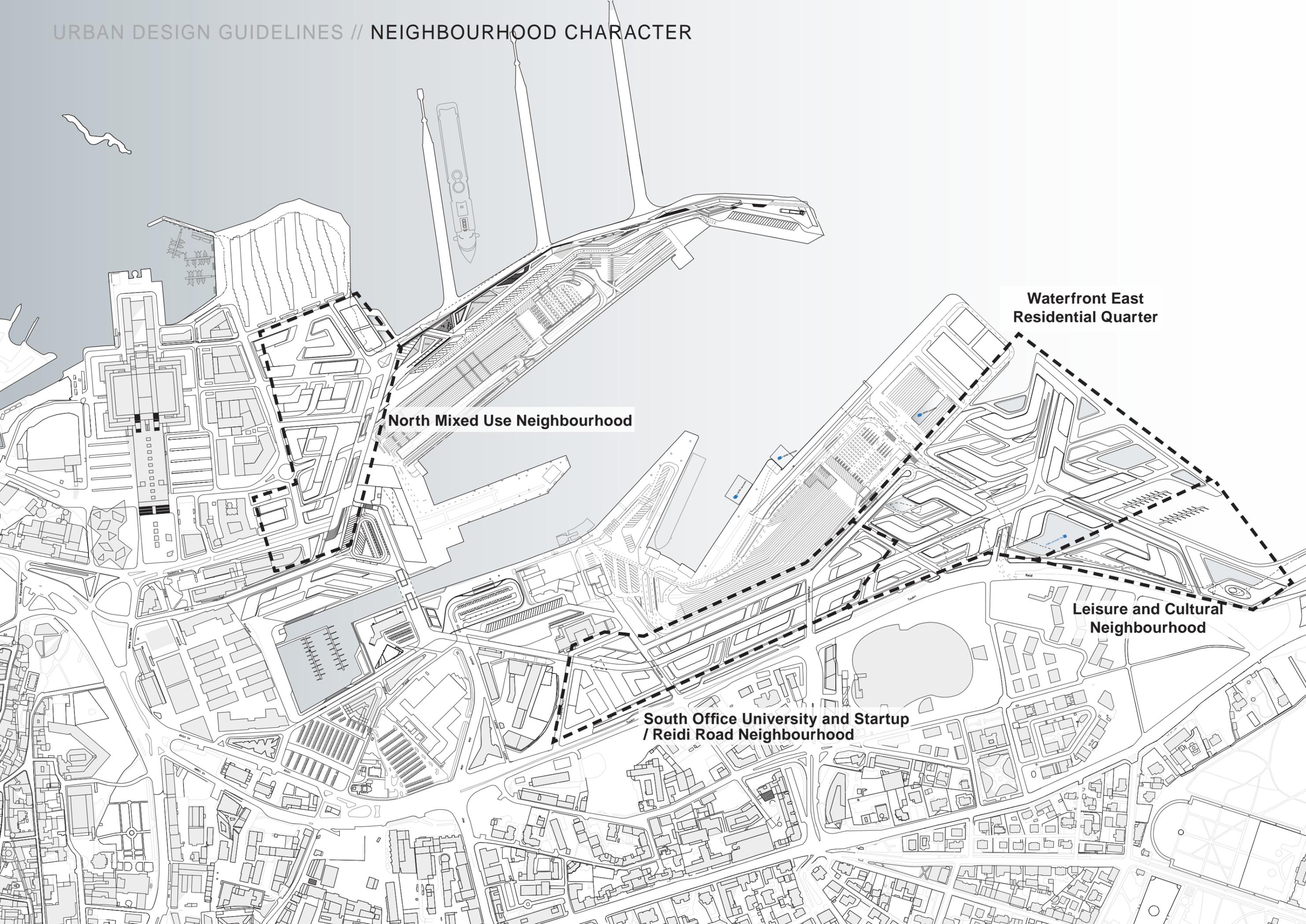
NEIGHBOURHOOD IDENTITIES



09

URBAN DESIGN GUIDELINES // NEIGHBOURHOOD CHARACTER

Each neighbourhood, whether predominantly residential, office, cultural/leisure or otherwise will be described according to a defined built and public realm environment, distinct and or unique to one another and how they might relate to and complement one another. Whilst a prominent use may be suggested, the guidelines promote a flexible approach that is able to evolve and be amended as economic and development conditions change. All neighbourhoods promote a mix of use to encourage sustainable urban developments.



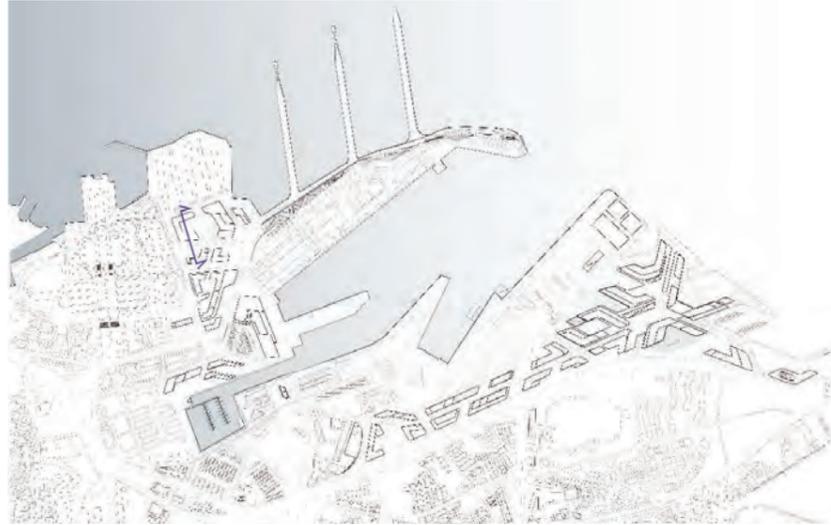
North Mixed Use Neighbourhood

Waterfront East Residential Quarter

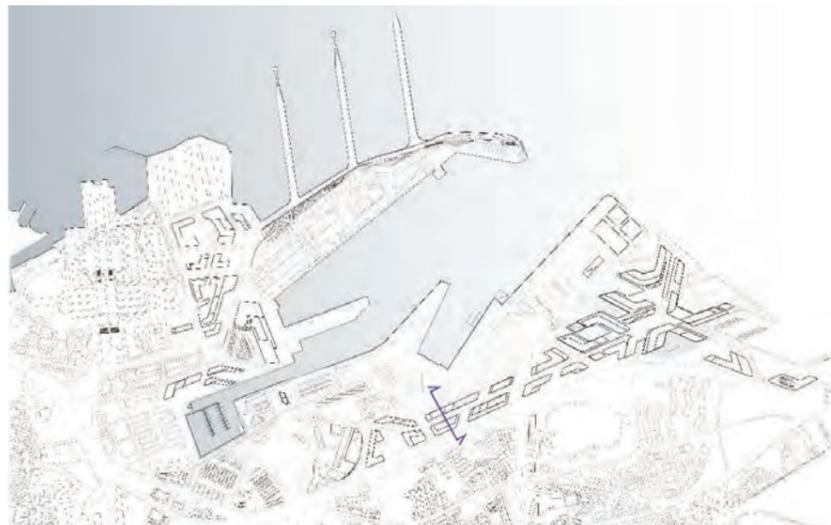
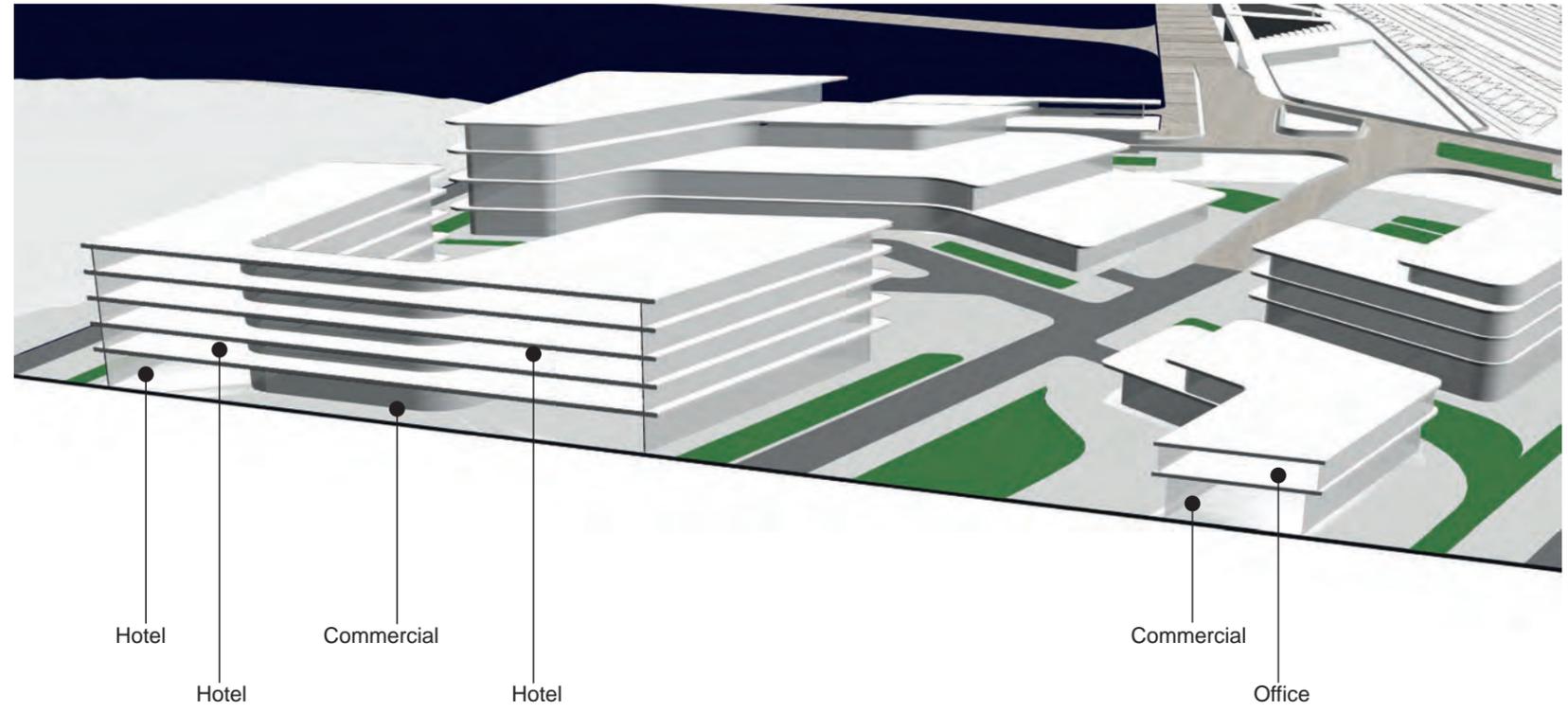
Leisure and Cultural Neighbourhood

South Office University and Startup / Reidi Road Neighbourhood

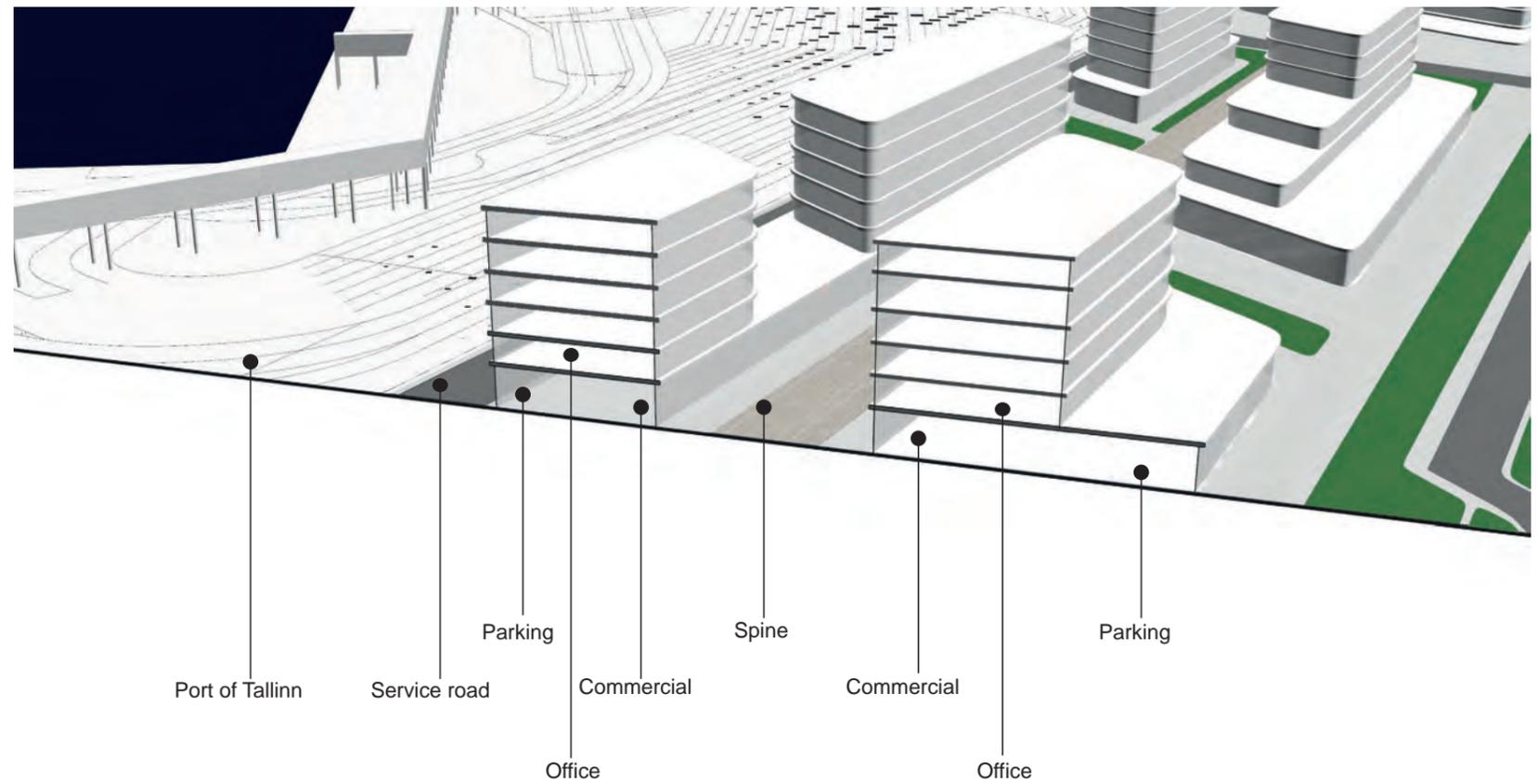
NEIGHBOURHOOD CHARACTER // SECTIONS



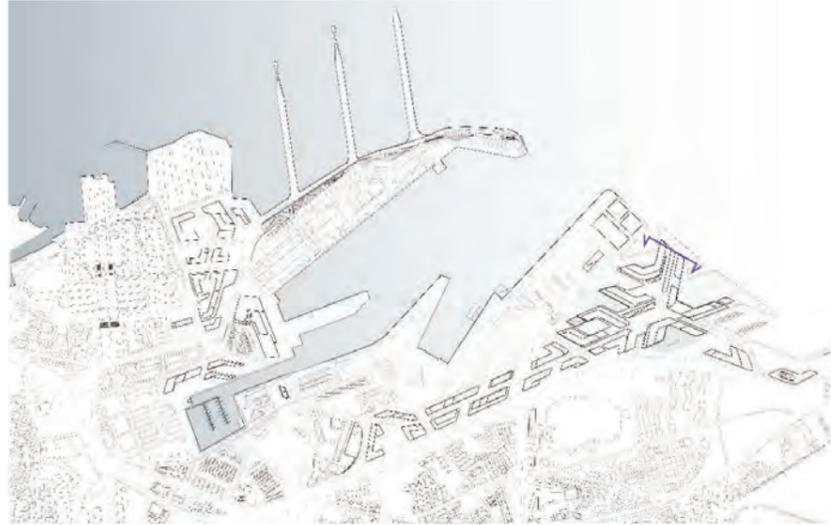
North Mixed Use Neighbourhood



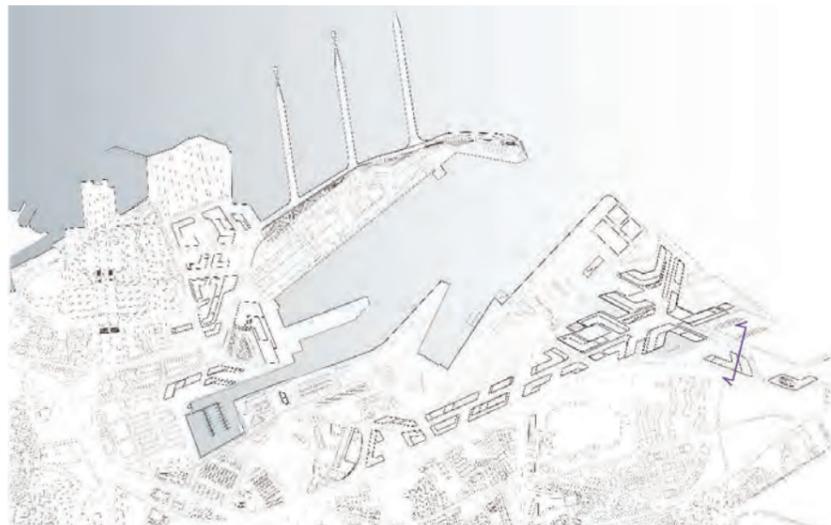
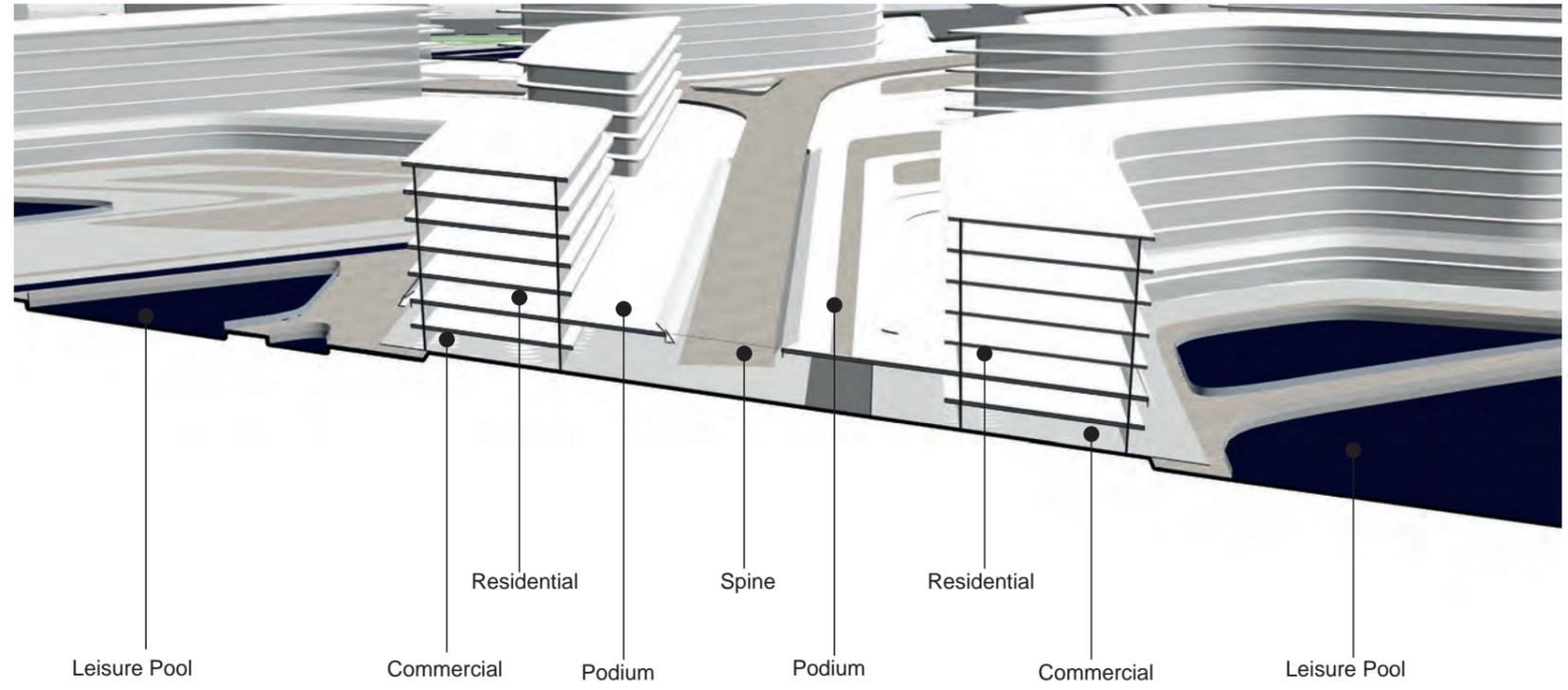
South Office University and Startup/ Redi Road Neighbourhood



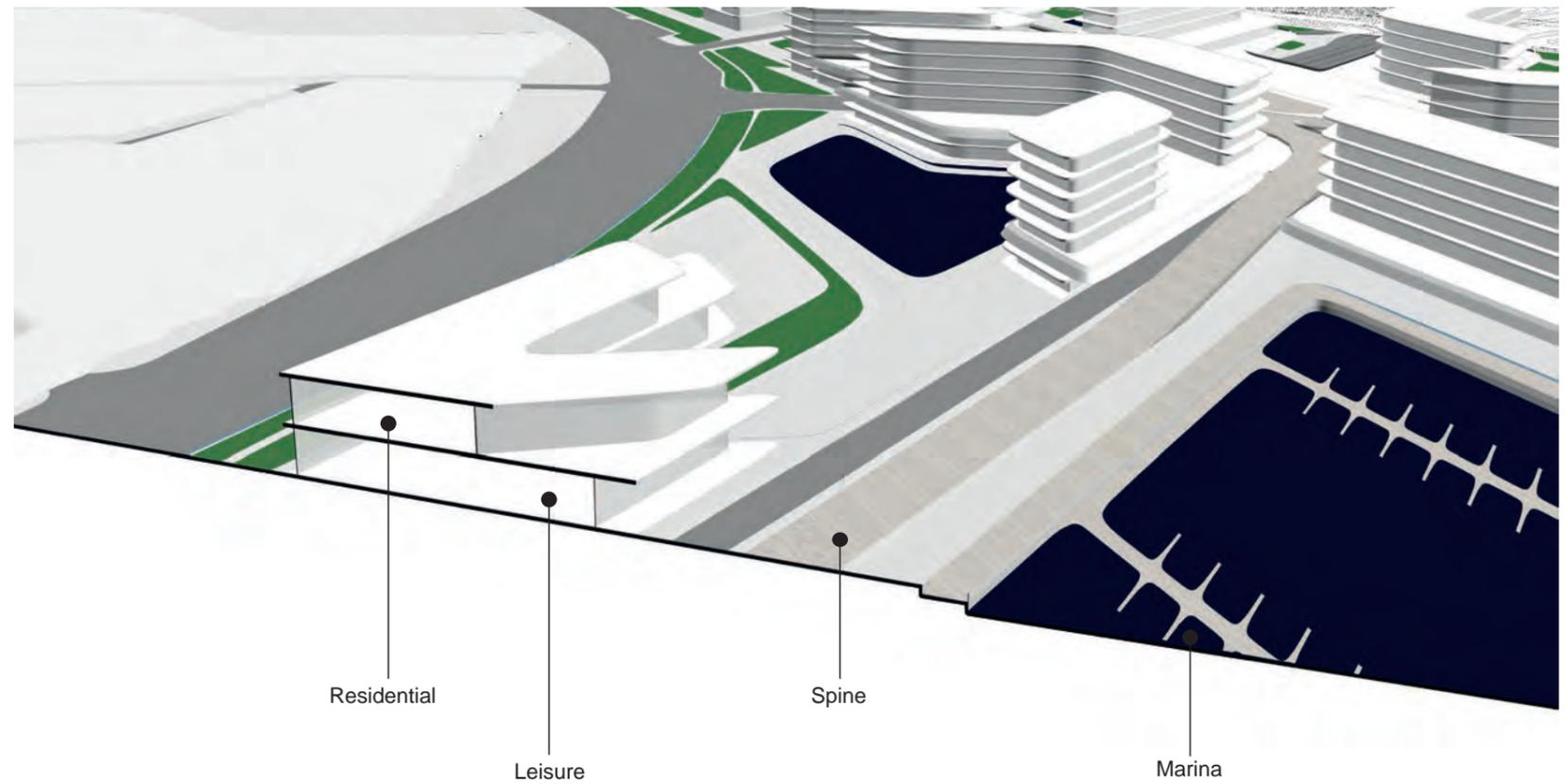
NEIGHBOURHOOD CHARACTER // SECTIONS



Waterfront East Residential Neighbourhood



Leisure and Cultural Neighbourhood



SOUTH OFFICE UNIVERSITY AND STARTUP/
REIDI ROAD NEIGHBOURHOOD

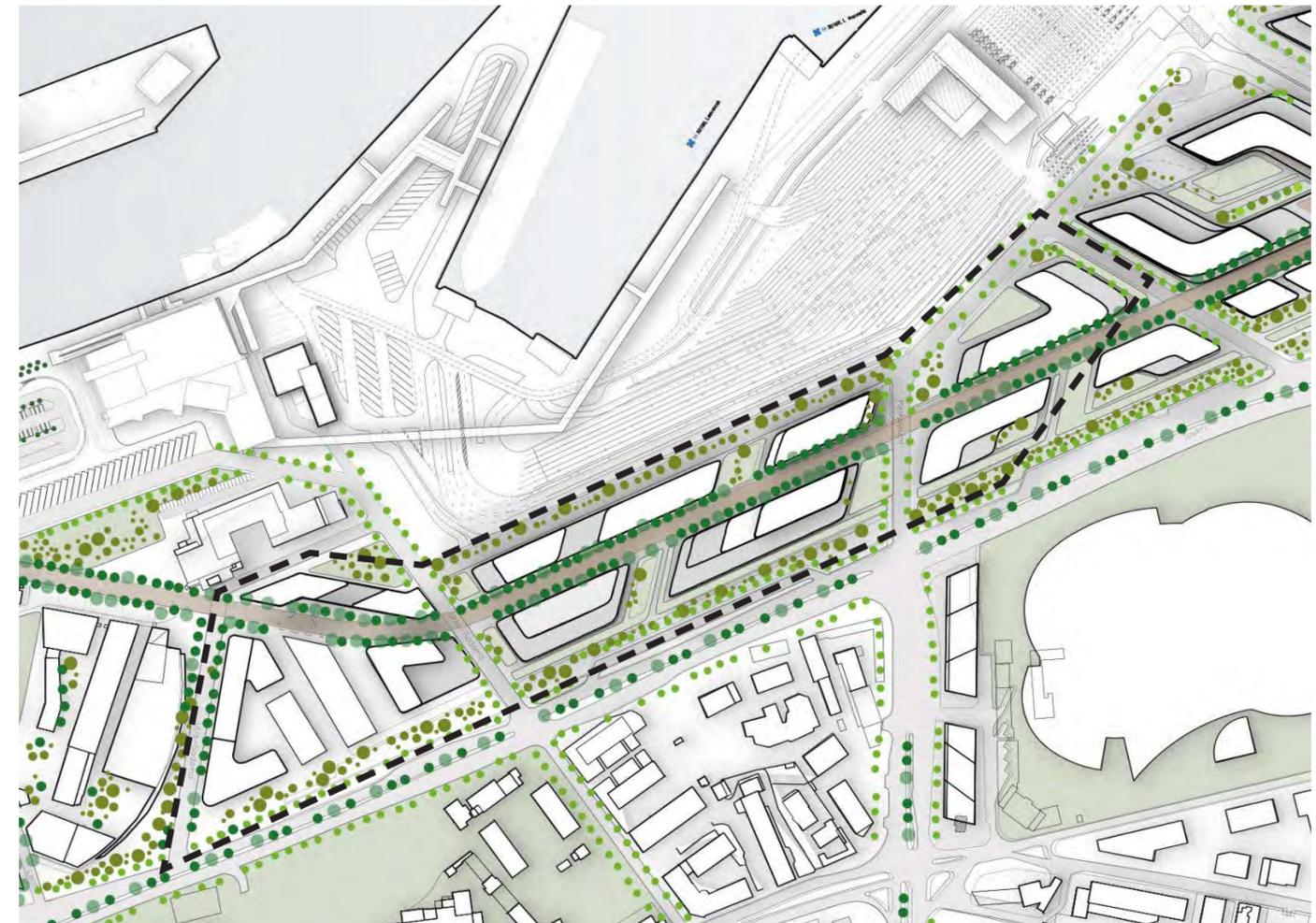
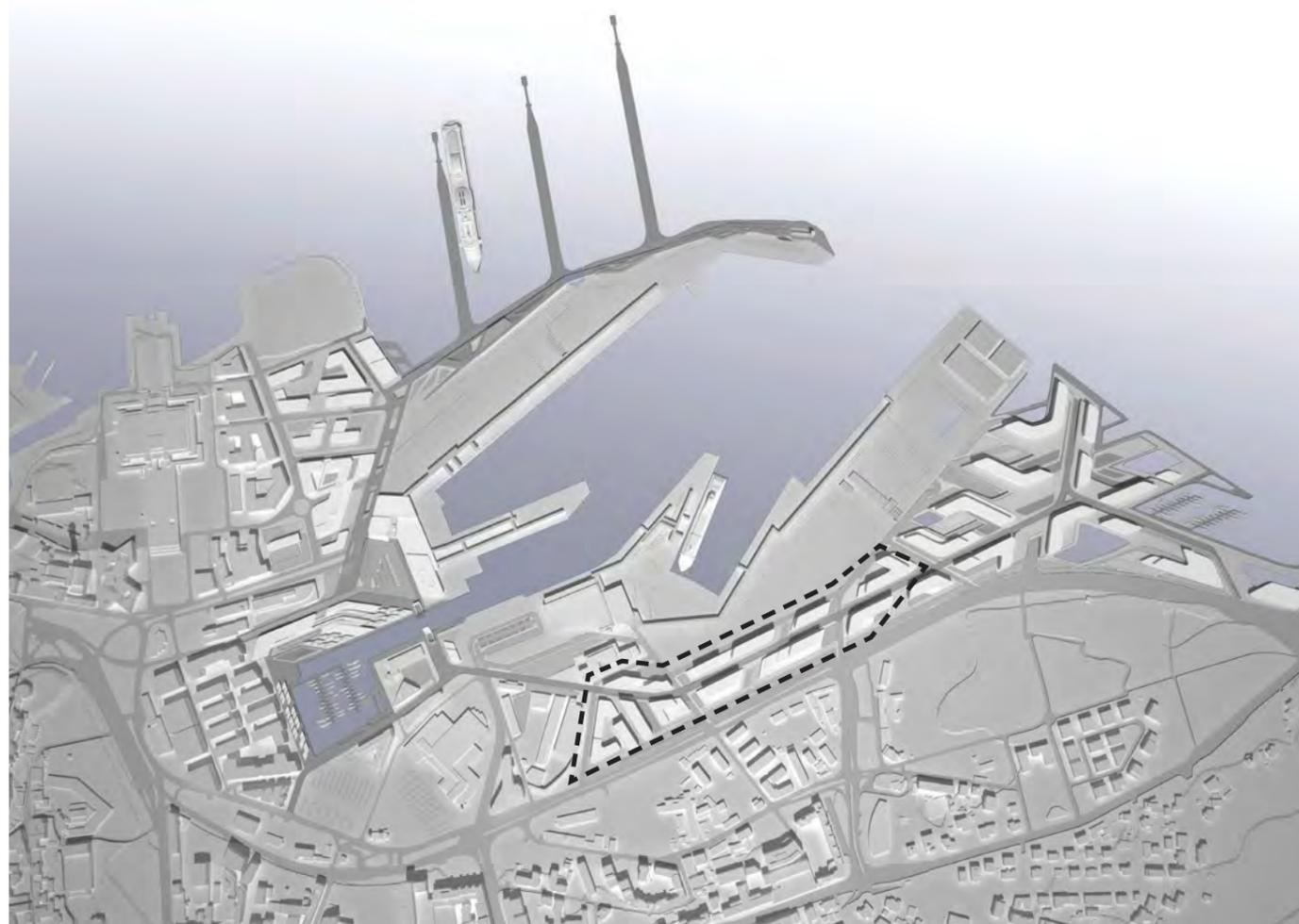
09.1

NEIGHBOURHOOD CHARACTER // SOUTH OFFICE UNIVERSITY AND STARTUP/ REIDI ROAD NEIGHBOURHOOD

South Office University and Start-up/Reidi Road Neighbourhood is located to the North of the proposed Reidi Road including the areas West of the Lootsi Quarter Wall/Uus Sadama, 'Limestone' buildings, Tallinn Seaport Hotel/City Hotel Portius and the portion of land between Reidi Road and Terminal D Ferry Terminal, docking and staging areas. The neighbourhood retains the most direct adjacency to the city fabric and extension of the city centre. The neighbourhood is envisaged as a mixed-use neighbourhood comprised of office and university facilities, accommodation above existing buildings ('Limestone' buildings) and structured car parking. Complementary food and beverage and retail accommodation located at ground floor will provide supporting local services and amenities for the neighbourhood. Car parking will be provided within the neighbourhood. Characterised by high quality commercial accommodation, the architecture frames a collection of gardens and public realm including the 'Spine'. The neighbourhood will present an attractive face to the Port fronting on Reidi Road, providing a recognisable identity and enhanced value for the overall Port development.

Immediately adjacent to South Office University and Start-up/Reidi Road Neighbourhood, Waterfront East Residential Neighbourhood and the Leisure and Cultural Neighbourhood provides a wide mix of accommodation including residential accommodation, leisure and cultural uses. An overlap of accommodation between these neighbourhoods will occur i.e. between residential, office and university accommodation. As the plan evolves over time, further integration/mix of accommodation will likely occur. The adjacency with Waterfront East and the Leisure and Cultural Neighbourhood with supporting local services and amenities will help promote a sustainable urban development.

South Office University and Startup / Reidi Road Neighbourhood _ Site Plan



NEIGHBOURHOOD CHARACTER // SOUTH OFFICE UNIVERSITY AND STARTUP/ REIDI ROAD NEIGHBOURHOOD

Structure and Grain

The structure of South Office University and Start-up /Reidi Road Neighbourhood has been informed by the urban structure and street network of the adjacent city neighbourhoods opposite the proposed Reidi Road. South Office University and Start-up / Reidi Road Neighbourhood should promote a mix of larger and finer grain block structures to both maximise the accessibility for pedestrians and all users. The structure, depth and size of building parcels allow for a range of accommodation types with an appropriate provision of exterior space within the building parcel. Building widths should allow a variation of fine and medium grain fabric and building sizes providing a diverse mix of accommodation. Access to individual buildings should be frequently spaced to avoid long continuous uninterrupted façades.

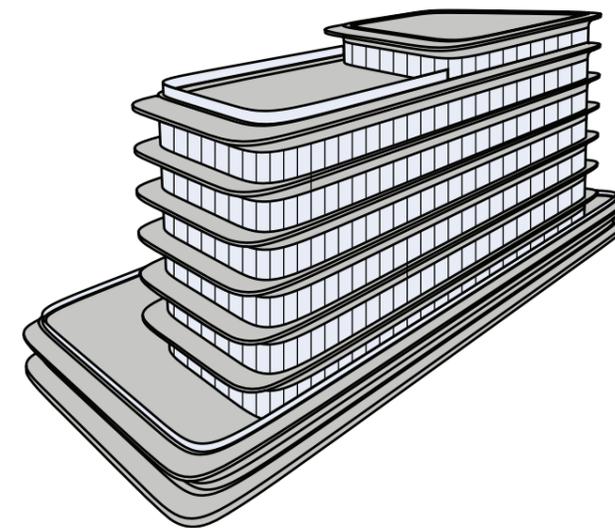
In the commercial areas on the East of the neighbourhood, adjacent to the Lootsi Quarter Wall, the existing pattern of streets has been retained, Uus Sadama both in its current orientation and a new route along the Lootsi Quarter Wall. This forms a regular structure framing existing and new development. The grain of buildings is fine, with closely spaced thin buildings.

Form, Scale, and Mass

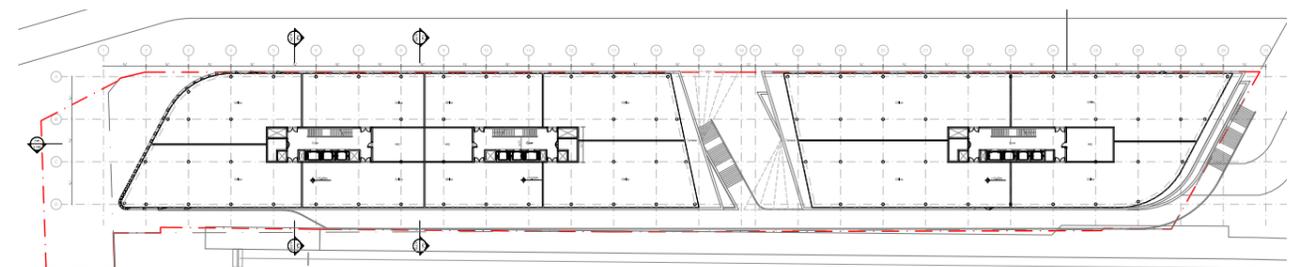
Building form shall demonstrate the overall theme of the master plan: Fluidity and the relationship of the waterfront with the sea. Heights of buildings are proposed to be predominantly 6 no. levels to ensure an urban scale is achieved, provide a robust and continuous building façade and enclosure to the street. Building mass on the eastern end of the neighbourhood is lower to relate to existing development, i.e. the 'Limestone' Buildings and Tallinn Seaport Hotel/City Hotel Portius.

Ground level accommodation shall have a higher floor to floor dimension. The ratio of 1.5 times the height of upper levels is an appropriate guideline. Overall floor to floor ratios depend on the intended use of the building. Guidelines for office accommodation are 4.0 – 4.1m and 5.5 - 6.0m for ground level accommodation respectively. The uppermost level of accommodation could have a double level appearance, which could result in a varied roofline. Building façades should incorporate a high level of articulation to avoid bland continuous façades. Special attention should be made to how buildings address the ends and corners of blocks through building geometry greater articulation or taller elements. Key strategic views should equally be addressed through landmark features to aid legibility and navigation.

Building orientation shall maximise views to the seafront, to the street and allow generous levels of daylight to all habitable areas. A balance must be achieved between large areas of glazing, proportion of more highly insulated opaque façades and the thermal envelope requirements of the building regulations.



Typical Office Block
Groundfloor / Podium: Parking
1st Floor: Commercial
2nd - 5th Floor: Office



Typical Office Floor Plan

Building Interface

Development parcels should enable building mass to be located on all edges thereby promoting a continuous frontage and enclosure to the block and provide distinction between public and private space. Setbacks between building façade, footpath and carriageway will be defined through street sections. Setbacks should be considered at ground level to enable covered access into ground floor accommodation and the potential for covered exterior dining where proposed and at upper most levels to allow for exterior terraces and to achieve greater daylight penetration at street level. Building frontage to the street should enable interface and vision between the building and street, therefore uses at ground level should be active to enable an animated and active façade. Upper levels of accommodation should provide 'eyes to the street' supporting both active and passive surveillance and promoting interaction at levels above ground floor.

As the majority of the accommodation is office, or office related, large areas of glazing will be likely ensuring a strong interface between building and street. Operable windows and terraces will enhance interface.

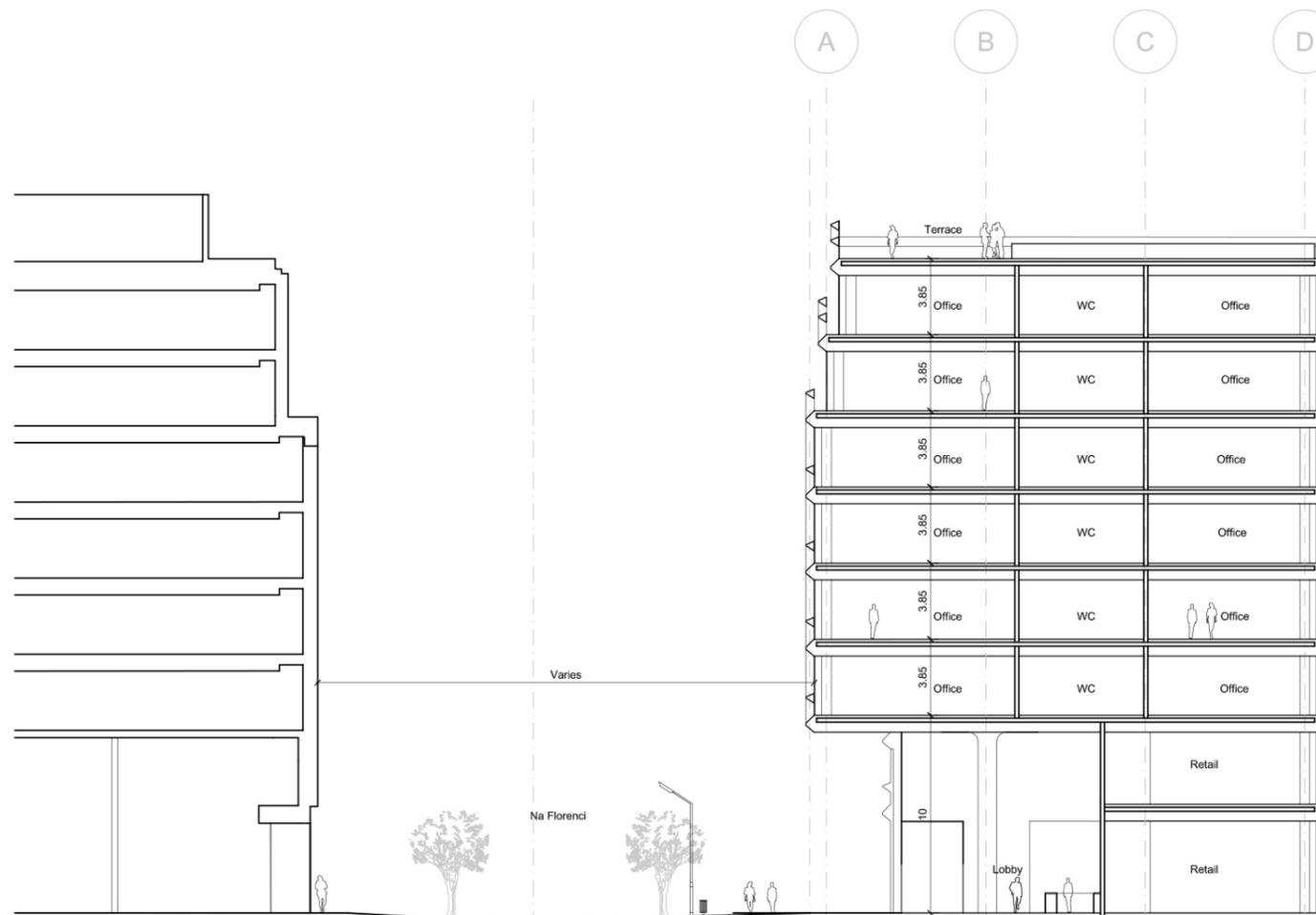
Good quality, efficient and appropriate lighting will strengthen the interface of building and public realm during twilight and evening hours as well during darker winter days. Lighting in the public realm will enable use over extended hours and will create both perceived and actual safety for users. Lighting levels could vary in different areas, at times of the day and seasonally to create varied and contrasting environments and respond to varying natural light conditions. Each neighbourhood could have a particular lighting theme to add to the specific character and identity of the place. Lighting types, colour and level should respond to the route hierarchy and movement mode.

Landscape and Public Realm

The master plan promotes a clear hierarchy of routes and spaces which also ensures connectivity works at a number of levels consistent with a fundamental understanding of how a city operates and is enjoyed by its citizens. The public realm in South Office University and Start-up /Reidi Road Neighbourhood is driven primarily by the 'Stream' spine. It is positioned at the uppermost level of the public space hierarchy. The 'Stream/Spine' forms the conduit for activity and movement internal to the South Office University and Start-up Reidi Road Neighbourhood. Externally, the spine reaches out to connect with the existing street network to ensure movement between the master plan area and the city is maximised. The 'spine' is framed by active ground floor uses, flexibly planned and articulated. The spine leads to the Waterfront Plaza which forms the fulcrum between Waterfront East Residential Neighbourhood and the Leisure and Cultural Neighbourhood immediately adjacent to the Shipwreck, Marina Club, East Park Marina and the Aquarium. The public realm must be of the highest quality design and material specification. Natural stone, granite or basalt paving is recommended. This could be complemented with precast concrete, in-situ concrete, timber/wood and various textures and colour of gravel. Planting should be clean, simple and promote diversity of planting species, texture, colour and layered landscapes. Planting should also encourage movement and diversity of wildlife throughout the master plan area.

Courtyards, when possible at the front of the building parcel, could serve as entrance forecourts to the buildings. When located at the rear or side, these should be made private and controlled for the adjacent accommodation. Gardens should be landscaped to a high level of quality offering a range of landscaping textures, densities and colours utilising indigenous plant species wherever possible.

Whilst the use of roof gardens in Tallinn may be challenging due to climatic conditions, the aspiration should be to provide planting on the roofs of building where possible to reduce surface water runoff and to complete the 5th elevation of the building. Rooftop plant/mechanical should be minimised where possible to ensure that the roof-scape is kept visually attractive.



Streets, Movement and Connectivity

The design of the street is fundamental to creating a high quality civic environment that can be enjoyed and shared by all users. Streets form the backbone and basis for determining spatial quality and life between buildings to create exemplar liveable and close knit communities. The Tallinn 2030 Port Vision Master Plan proposes a clear hierarchy of routes and spaces across the whole of the harbour development to ensure an appropriate and varied level of access is maintained throughout. The hierarchy of routes connects a network of hubs and attractors which are located at key strategic points distributed across the master plan area and linked into key historic routes.

The street network has been derived from the existing routes in adjacent neighbourhoods. Jõe, Lootsi, Poldri, Uus Sadama, Yuukri Põik and Filmi inform the route network of the South Office University and Start-up/Reidi Road Neighbourhood facilitating connectivity and integration with the city. Pedestrians and cyclists are prioritised in the movement system. Enhanced view corridors, in particular Uus Sadama are aligned with the key existing streets. A direct link between the university and proposed university facilities will further heighten connectivity and use between the master plan area and city districts. As substantial numbers of vehicle movements will continue with the ongoing Port activities, these must be accommodated for in both the street network, in the neighbourhood and wider road network of the city. Junctions and signalling must be designed to accommodate these movements and minimise their impact on the environment.

The 'Spine' forms the strategic internal pedestrian route within the master plan and within the neighbourhood, connectivity between the South Office University and Start-up Reidi Road Neighbourhood, Waterfront East Residential Neighbourhood and the Leisure and Cultural Neighbourhood and west to Admiralty Basin.

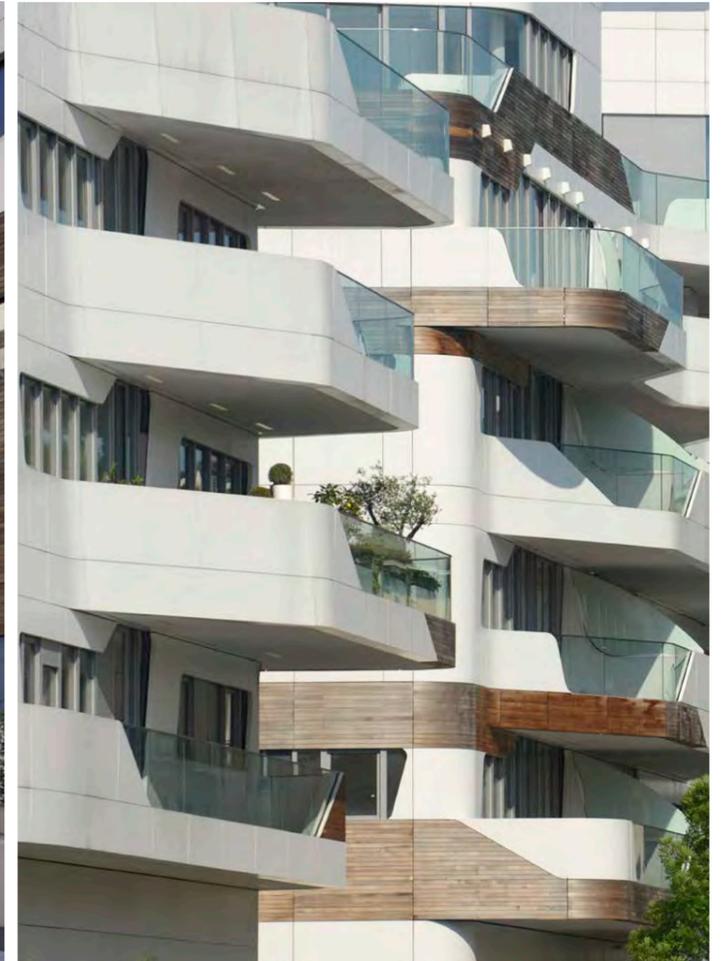
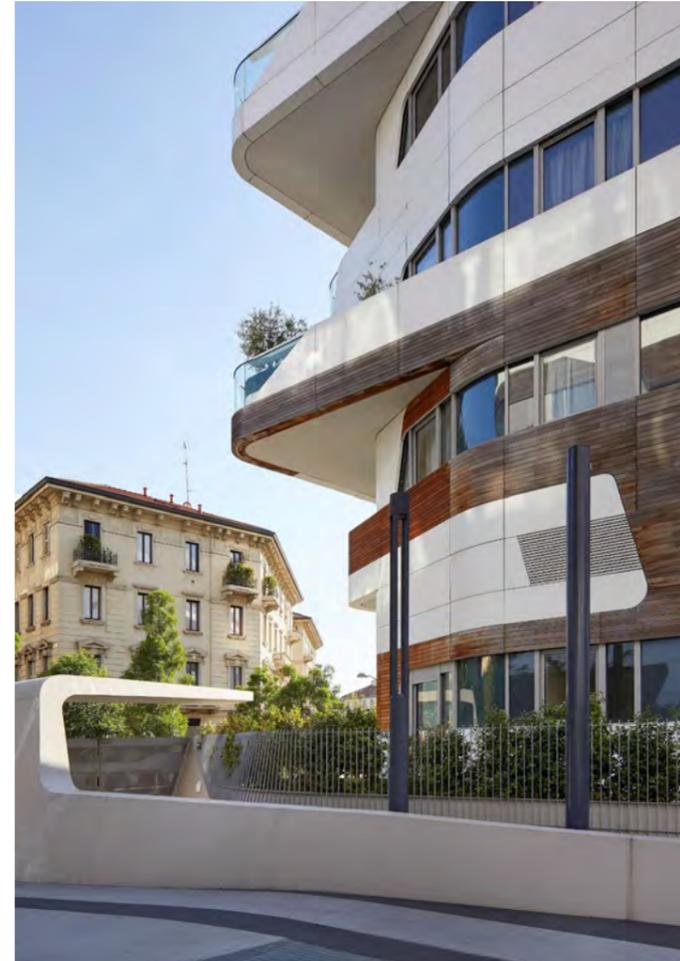
An access road will be provided along the northern boundary with the Port, for local vehicle movements within the neighbourhood.

Appearance and Materials

The Urban Design Guidelines promote a flexible approach for the use of materials and overall architectural appearance. Most importantly a high level of design and material quality to complement and be commensurate with the quality of the historic city. The appearance and materiality of buildings and public realm will create a benchmark for quality and contribute to the character and identity of the neighbourhood. Following the preparation of the urban design guidelines, further guidance should be prepared in later stages of development of the masterplan. The reference images suggest the level of material quality across the built form and public realm.

Building form and overall architecture appearance shall demonstrate the overall theme of the master plan, fluidity of building form and the relationship of development with the sea. Building construction and materials must be rigorously robust to withstand the challenging climate of Tallinn and location next to the sea. Materials should be specified to meet these demands without premature aging or weathering. GFRC panelling is one of the preferred exterior façade materials. Glazing mullion profiles should be designed to be as thin as possible. A high level of modern, contemporary articulation of external façades is promoted.

Office accommodation will require large areas of glazing to maximise daylight in working spaces, however the extent of glazing must be balanced with the requirements of the building regulations, the thermal performance of the envelope and the conservation of fuel and energy. Further, more detailed guidance must aim to address the more technical aspects of the building envelope, a holistic approach to sustainability, the use of materials and their embodied energy, the appearance of the buildings within the neighbourhood, the challenging Tallinn climate context and the overall master plan. The guidance outlined at this stage of the work must be general and non-prescriptive. Additional accommodation which has been proposed as an extension to the 'Limestone' buildings will complement the historic structures.



Density and Mix of Use

Density of development is driven by the prescribed structure, grain and scale of development, which is informed by the local condition. The South Office University and Start-up/Reidi Road Neighbourhood is comprised of a mix of uses including office, commercial and university facilities including potentially university housing. Retail, food and beverage located at ground floor will complement the neighbourhood's program, provide local services and amenities and active frontage to streets, the 'Spine' and public areas. The introduction of university facilities and accommodation support a broad mix of both use and user. The intent of all neighbourhoods is to establish a wide mix of use that creates a strong interface with the city, encourages diversity and promotes a sustainable urban development.

At this stage of the masterplan we have defined the predominant use within each neighbourhood. Market conditions evolve, therefore the master plan must be flexible enough to react to the changes in the market. As the neighbourhoods naturally overlap and contribute to the overall masterplan, the type of accommodation could evolve as well. We have defined the estimated areas for the South Office University and Start-up/Reidi Road Neighbourhood in the adjacent table based on the block structure and the proposed height and mass of development.



WATERFRONT EAST RESIDENTIAL NEIGHBOURHOOD

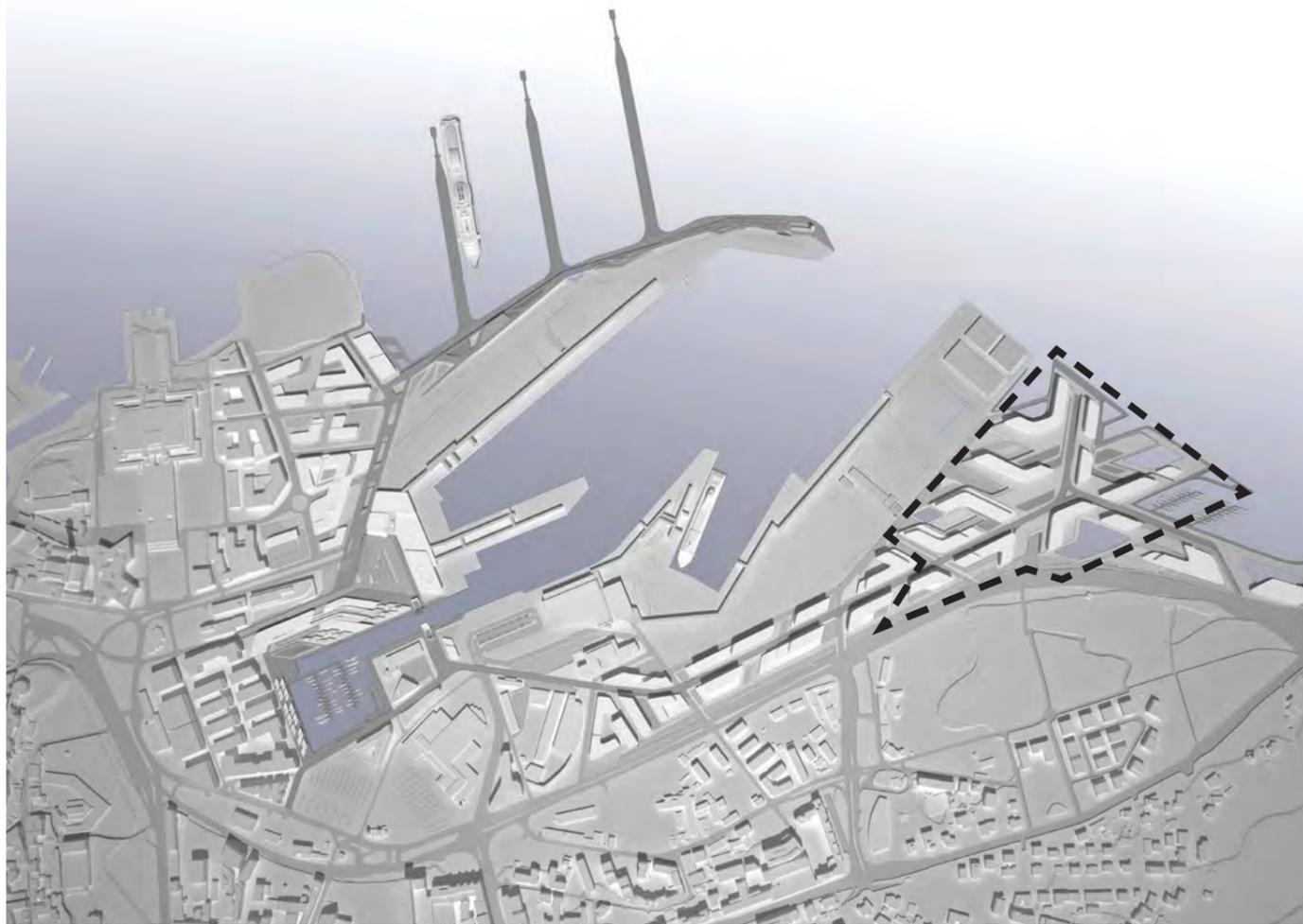
09.2

NEIGHBOURHOOD CHARACTER // WATERFRONT EAST RESIDENTIAL NEIGHBOURHOOD

Waterfront East neighbourhood is located to the northeast of the masterplan area. Formed on reclaimed land, the neighbourhood is intended to be a new, predominantly residential neighbourhood characterised by high quality residential accommodation including a range of apartment sizes and types on levels above ground. Retail, cafés, restaurants, bars (F & B) located at ground floor will complement the quarter's residential program, provide local services and amenities and provide active street frontage to public areas. Car parking will be located on ground floor underneath the elevated podium and behind commercial accommodation.

Immediately adjacent to Waterfront East, the Leisure and Cultural Neighbourhood provides number of leisure activities including open air pools, a spa, restaurants, cafés with exterior terraces facing the seafront further enlivening the area.

Waterfront East Residential Neighbourhood _ Site Plan



NEIGHBOURHOOD CHARACTER // WATERFRONT EAST RESIDENTIAL NEIGHBOURHOOD

Structure and Grain

The Waterfront East Residential Neighbourhood urban structure evolves as a continuation of the 'spine/stream' as it flows through the South Office University Start-up/Reidi Road Neighbourhood and realigns to the waterfront. Waterfront East promotes a wide mix of larger and finer grain block structures to maximise the accessibility for pedestrians and all users and to support activity and movement along the spine. The mix of building uses should be diverse providing predominantly residential accommodation with supporting local services and amenities. Building parcels/blocks are positioned to frame public spaces. The structure, depth and size of building parcels should allow for a range of residential accommodation types with an appropriate provision of exterior space each building parcel. Terraces and/or balconies should be provided for each residential unit in addition to exterior space at ground level.

Form, Scale, and Mass

Building form shall demonstrate the overall theme of the master plan, fluidity and the relationship of the waterfront development with the sea. Height of buildings shall be between 3 no. and 7 no. levels to ensure an urban scale is achieved, provide a robust and continuous building façade and enclosure to the street and spaces. Ground level accommodation shall have a higher floor to floor ratio of at least 1.5 times upper levels. Guidelines are 3.2m for upper level residential accommodation, 4.0-4.1m for commercial space above ground and 4.8-5.0m for ground level accommodation respectively. The uppermost level of accommodation could have a double level appearance, which would result in a varied roofline and double level accommodation. For residential accommodation this could translate into double level units which could maximise the opportunity for spatial complexity with double height spaces with intermediate mezzanine levels. Residential accommodation should equally maximise the opportunity to address the corners of blocks and key and/or strategic routes and views. Building orientation for residential accommodation shall be planned to maximise views to the seafront and back to the city and allow generous levels of daylight to all habitable rooms.



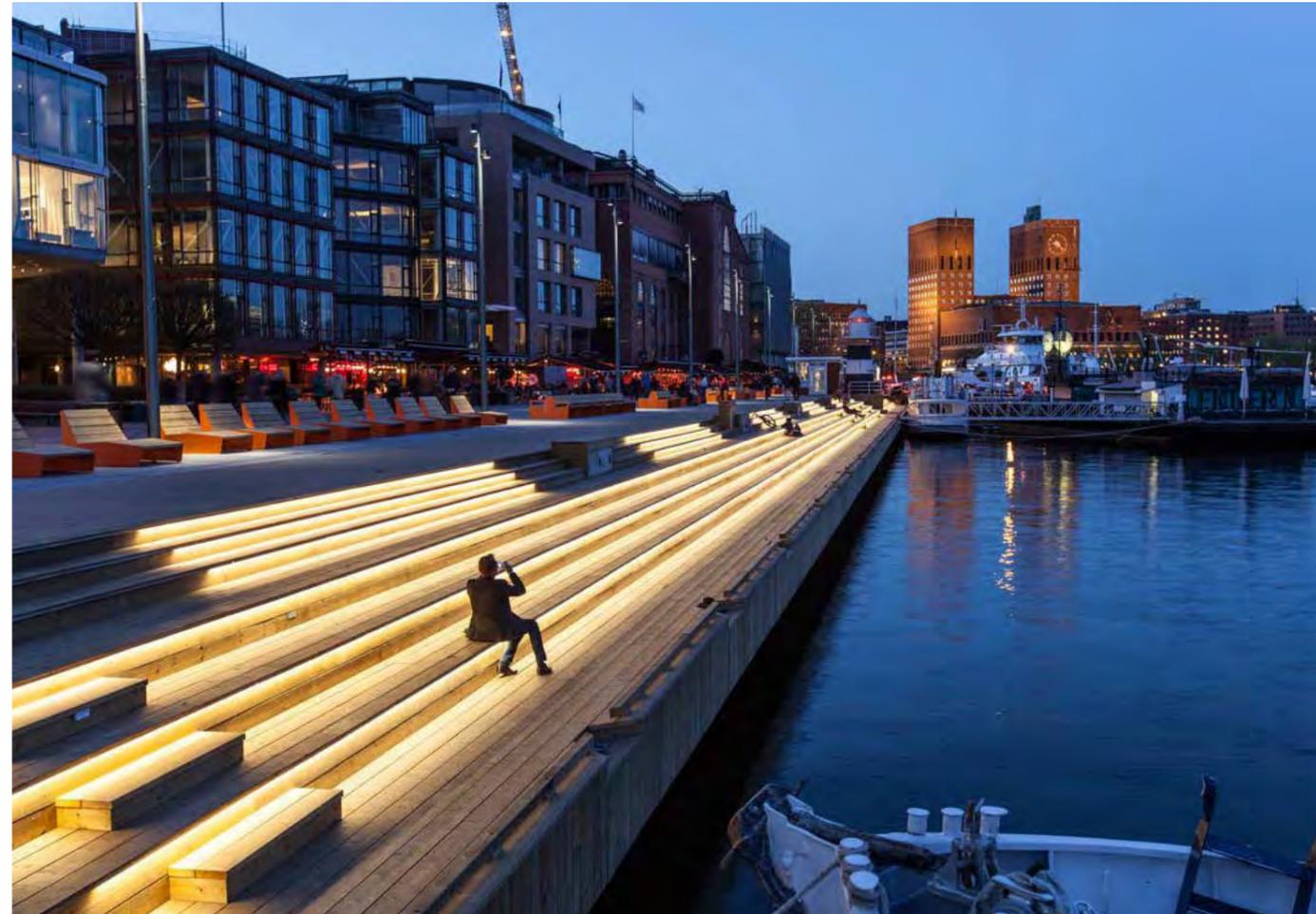
NEIGHBOURHOOD CHARACTER // WATERFRONT EAST RESIDENTIAL NEIGHBOURHOOD

Building Interface

Building mass should be located on edges of the development parcel where possible promoting a continuous frontage and enclosure to the block and providing distinction between public and private space. Setbacks should be considered at ground level to enable covered access into ground floor accommodation and the potential for covered exterior dining. Setbacks to residential accommodation on the upper most level should allow for exterior terraces and to achieve greater daylight penetration at street level.

Building frontage to the street should enable interface between the building and street, therefore uses at ground level should be active to enable an animated and vibrant façade. Required numbers of car parking will be located behind the commercial accommodation at ground level. As in Reidi Road, basement car parking has been avoided due to the potential cost of excavation and the risk of flooding, however as the spine and adjacent land has been elevated, car parking is located underneath the 'podium' or elevated ground plane. Residential accommodation should provide both active and passive surveillance with window and exterior spaces/terraces facing the public areas and promoting activity at levels above ground floor. Residential accommodation has been oriented to face onto public spaces or more private landscaped gardens. Private and communal gardens will be landscaped to a high level offering a range of landscaped areas which give residents the flexibility of enjoying both a larger and more intimate garden spaces. Children play areas should be provided within these areas.

Good quality, efficient and appropriate lighting will strengthen the interface of building and public realm during twilight and evening hours as well during darker winter days. Lighting in the public realm will enable use over extended hours and will create both perceived and actual safety for users. Lighting levels could vary in different areas, Waterfront Plaza, along the waterfront promenade, at Reidi Road and/or at times of the day and seasonally to create varied and contrasting environments and respond to varying natural light conditions. Lighting types, colour and level should respond to the route hierarchy and movement mode.



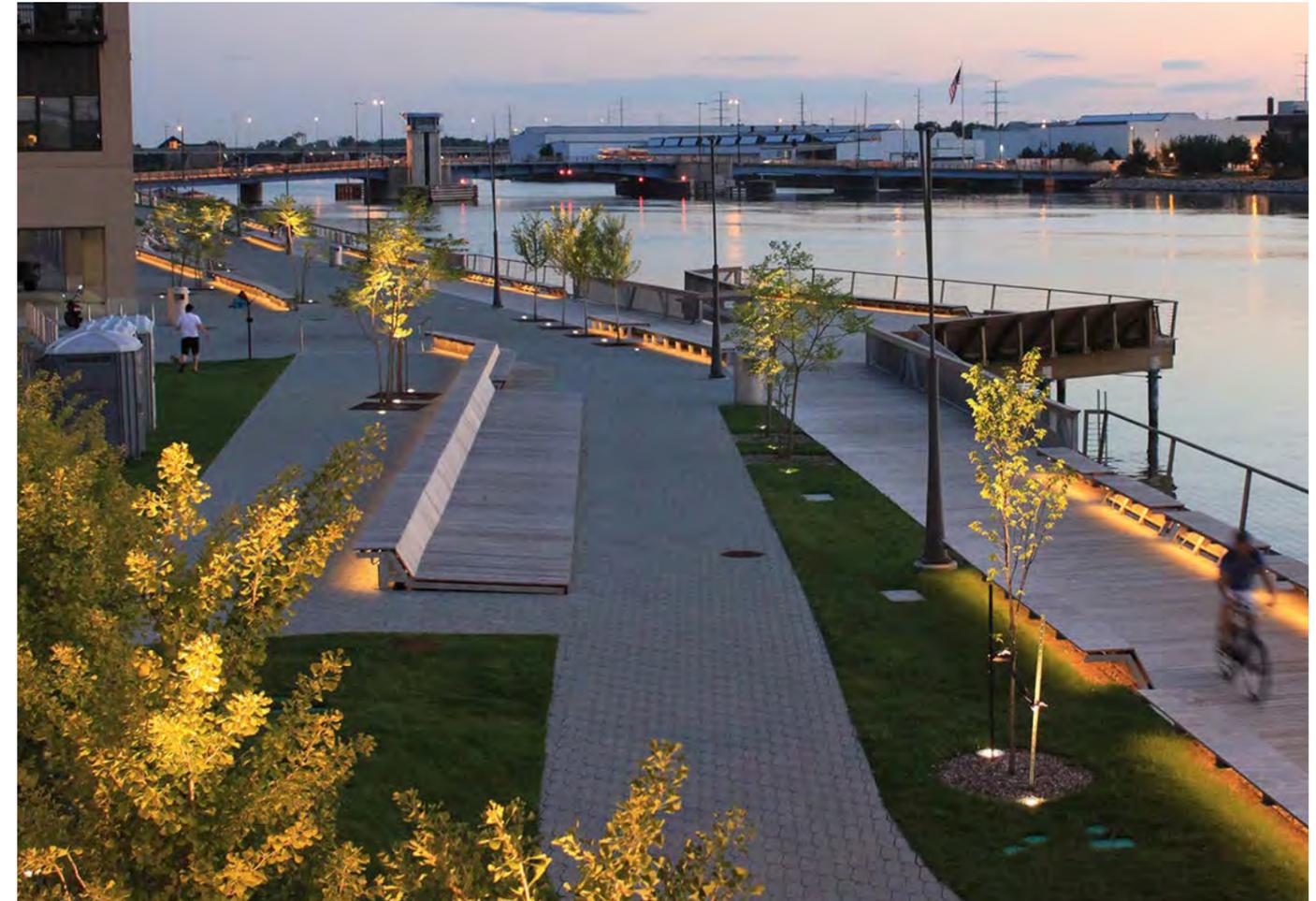
Landscape and Public Realm

The public realm in Waterfront East is led by the public square formed at the junction of the Spine. Waterfront Plaza is positioned at the uppermost level of the public space hierarchy. It forms the life centre of the neighbourhood. Framed by active uses, flexibly planned and articulated, the space will accommodate a range of public and neighbourhood activities and uses throughout the year. Waterfront Plaza also forms the fulcrum at the top of the Spine and between Waterfront East and the Leisure and Cultural Neighbourhood immediately adjacent; Shipwreck, Marina Club, East Park Marina and the Aquarium.

The public realm must be of the highest quality design and material specification. Natural stone, granite or basalt paving is recommended. This could be complemented with precast concrete, in-situ concrete, timber/wood and various textures and colour of gravel. Planting should be clean, simple and promote diversity of planting species, texture, colour and layered landscapes. Planting should also encourage movement and diversity of wildlife throughout the master plan area.

Waterfront East provides a substantial area of landscaped gardens and spaces which provide the neighbourhood with a wide range of green space for residents and wider public. Gardens located closer to the residential buildings will be made private to the residents, gardens closer to the quayside and seafront should be publicly accessible. Internal garden courtyards will be kept private for residents.

The use of roof gardens in Tallinn is challenging due to climatic conditions, however rooftop areas could be made accessible for residents as an elevated communal space with spectacular views back to the city and out to the sea. Mitigation of cold winds and capturing sunlight when available will enable these spaces to be used more often. Rooftop plant should be minimised or screened from view where possible to ensure that the roof-scape and rooftop terrace is made as attractive as possible.



NEIGHBOURHOOD CHARACTER // WATERFRONT EAST RESIDENTIAL NEIGHBOURHOOD

Streets, Movement and Connectivity

As for all areas of the master plan in Waterfront East Residential Neighbourhood, the design of the street is fundamental to creating a high quality civic environment that can be enjoyed and shared by all users.

The route network within Waterfront East is led by both Spine continuing through South Office/Reidi Road Neighbourhood. The Spine gently rises within Waterfront East to form the elevated platform and wider public realm in the neighbourhood. The Spine is re-aligned to the sea forming the armature space Waterfront Plaza. An extension of the spine leads southeast to the Leisure and Cultural Neighbourhood.

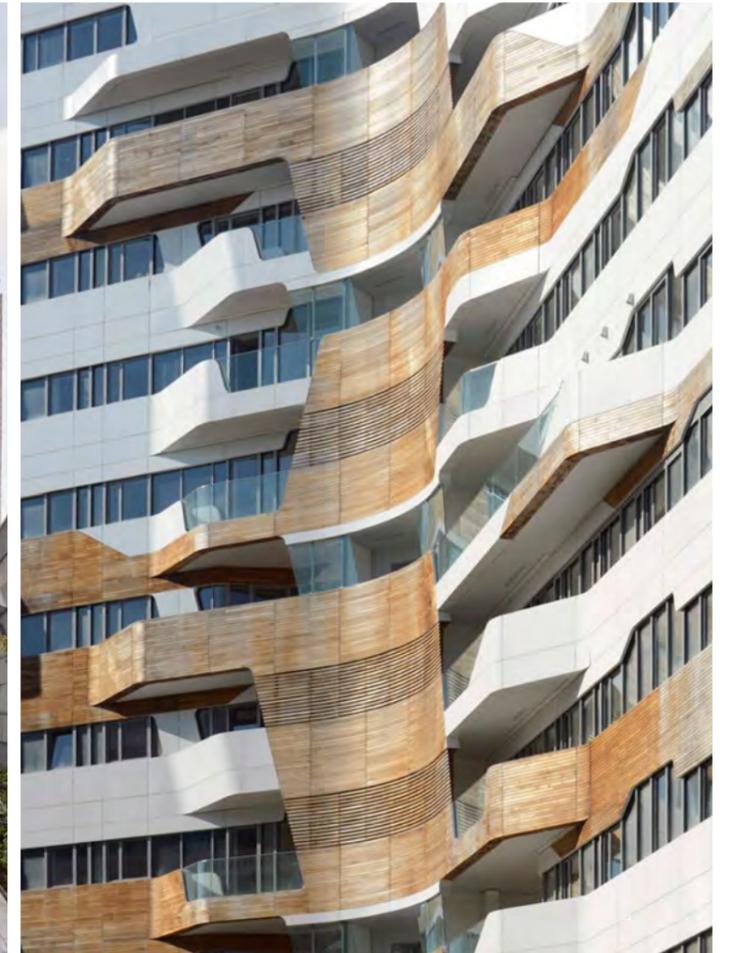
Pikksilma Street has been extended from the city through the neighbourhood. Located under the elevated spine, Pikksilma Street allows direct access to the port minimising the direct impact of port traffic on the public realm and the neighbourhood overall. Secondary access through the neighbourhood is provided by a network of streets/pedestrian routes which provide a further level of access and connectivity between the city and within the neighbourhood.

Appearance and Materials

As in all other neighbourhoods, the Urban Design Guidelines promote a flexible approach for the use of materials and overall architectural appearance. Most importantly a high level of design and material quality to complement the historic city. The appearance and materiality of buildings and public realm will create a benchmark for quality and contribute to the identity of the neighbourhood but do not prescribe a strict limitation to materials. Following the preparation of the urban design guidelines, further guidance should be prepared in later stages of development of the masterplan. The reference images suggest the level of material quality across the built form and public realm which contributes to the character, quality and identity of the place.

Building form and overall architecture appearance shall demonstrate the overall theme of the master plan, fluidity of building form and the relationship of development with the sea. Building construction and materials must be rigorously robust to withstand the challenging climate of Tallinn and location next to the sea. Materials should be specified to meet these demands without premature aging or weathering. GFRC panelling is one of the preferred exterior façade materials. Glazing mullion profiles should be designed to be as thin as possible. A high level of modern, contemporary articulation of external façades is promoted.

Residential accommodation must comply with the local and national Estonian requirements for the size of windows to achieve minimum light levels, sunshine, ventilation and overall thermal performance of the building façade. Equally, external spaces, balconies and terraces for the residential units will begin to articulate and give variation and depth to the façade. As in the South Office/Reidi Road Neighbourhood, further more detailed guidance should address technical aspects of the building envelope, a holistic approach to sustainability, the use of materials and their embodied energy, the appearance of the buildings within the neighbourhood, the challenging Tallinn climate context and the overall master plan.



NEIGHBOURHOOD CHARACTER // WATERFRONT EAST RESIDENTIAL NEIGHBOURHOOD

Density and Mix of Use

Density of development is driven by the prescribed structure, grain and scale of development, which is informed by the local condition. Waterfront East Residential Neighbourhood is defined as predominantly residential in character. Retail, food and beverage located at ground floor will provide local services for the residential accommodation and amenities and active frontage to streets and public areas. The intent of all neighbourhoods is to establish a broad mix of use that promotes sustainable urban development.

At this stage of the masterplan we have defined the predominant use within each neighbourhood. Market conditions evolve, therefore the master plan must be flexible enough to react to the changes in the market. As the neighbourhoods naturally overlap and contribute to the overall masterplan, the type of accommodation could evolve as well. We have defined the estimated areas for the Waterfront East Residential Neighbourhood in the adjacent table based on the block structure and the proposed height and mass of development.



NORTH MIXED-USE NEIGHBOURHOOD

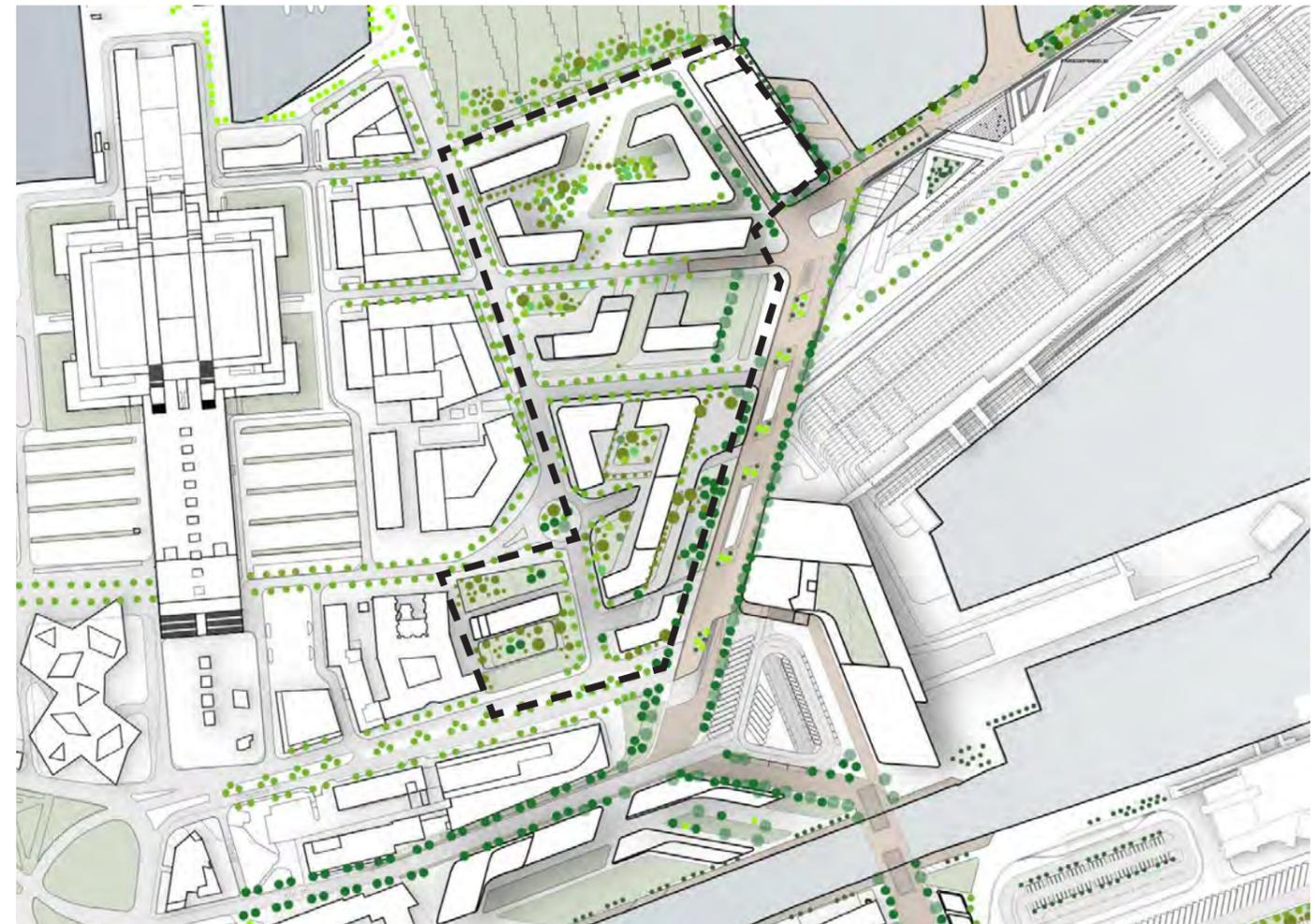
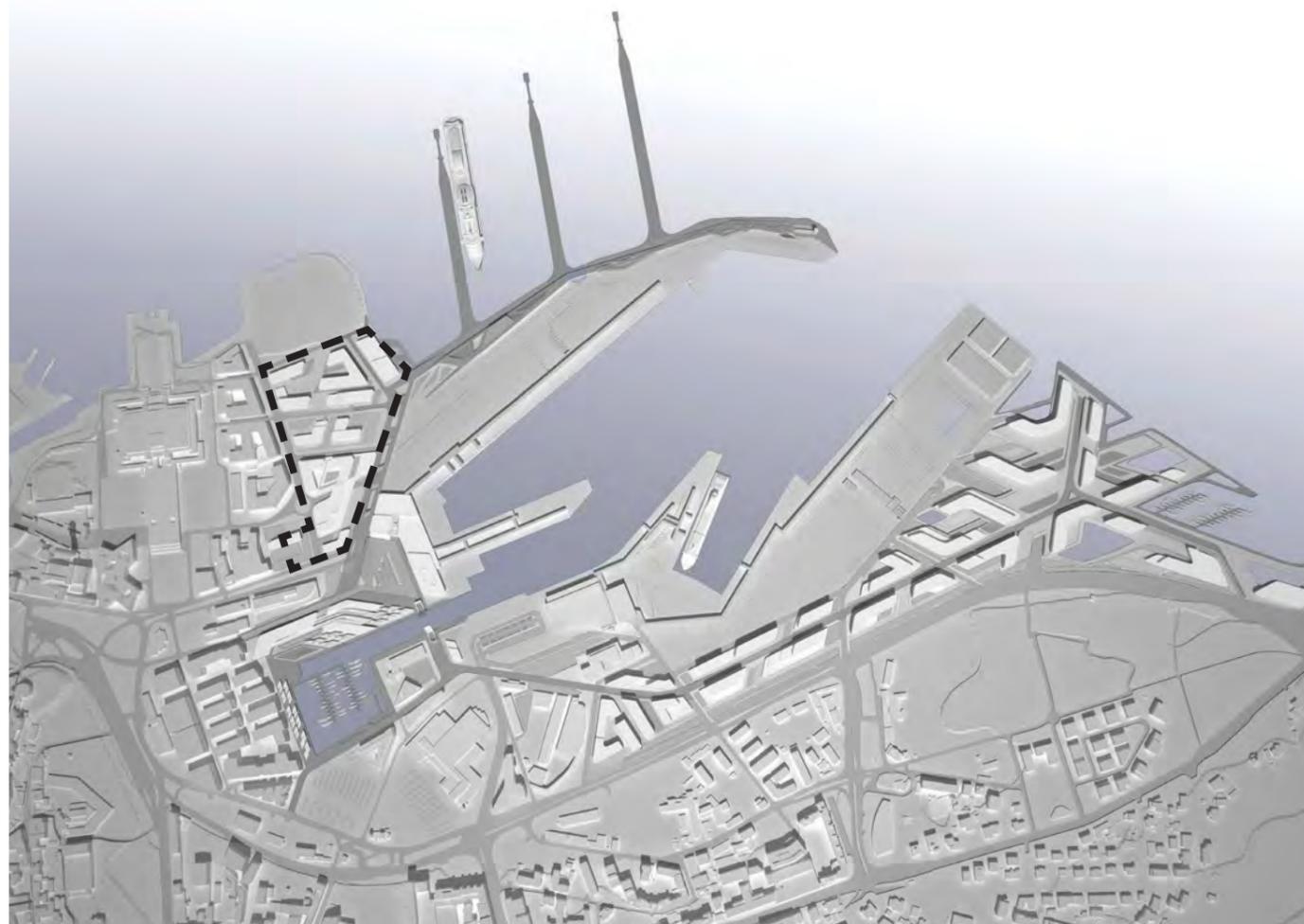
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NEIGHBOURHOOD CHARACTER // NORTH MIXED-USE NEIGHBOURHOOD

North Mixed-Use Neighbourhood is located in the north of the masterplan area, West of Linnahall between the area of the cruise terminal, landscape and supporting facilities and north of Admiralty Basin. The neighbourhood includes Admiralty Basin, Reisterterminal A/Terminal A/B. The neighbourhood, feature architectural components and public realm will have substantial visual prominence and presence for cruise ship and ferry passengers when they arrive to Tallinn Port. Port offices are also located on Admiralty Basin. The neighbourhood is envisaged as a diverse neighbourhood comprised of substantial areas of public realm around Admiralty Basin and Reisterterminal A/Terminal A/B, high quality office, residential, leisure, cultural and hotel accommodation. Complementary food and beverage accommodation located at the basin and ground floor of buildings will provide supporting local amenities and services for the neighbourhood and for visiting passengers. Specific food and beverage and a Yacht Club are located around the Admiralty Basin. Car parking will be provided on ground level, behind street facing commercial space.

An overlap of accommodation between neighbourhoods will occur i.e. between residential, office and leisure accommodation. As the plan evolves over time, further integration/mix of accommodation will likely take place. Admiralty Basin, Reisterterminal A/Terminal A/B and the cruise terminal adjacent will produce a high numbers of passenger movements, taxi, coach and pedestrian traffic which will encourage a high level of activity in and around the neighbourhood. supporting local services and amenities will help promote a sustainable urban development. Equally, an enhanced level and quality of the public realm around the Ferry terminal and Admiralty Basin will encourage pedestrian movement to and from the city, potentially easing the impact on the transport infrastructure.

North Mixed-Use Neighbourhood _ Site Plan



NEIGHBOURHOOD CHARACTER // NORTH MIXED-USE NEIGHBOURHOOD

Structure and Grain

The structure of North Mixed-Use Neighbourhood has been informed by the urban structure of block and the street network of the adjacent city neighbourhood opposite. The structure of blocks have been reoriented to respond to views through the neighbourhood from areas to the West. Key structural and visual corridors, Sadama and Kai Streets have been retained to facilitate access and connectivity between the city and the Port. A regular block structure similar to adjacent blocks have been proposed. Recent adjacent development retains a larger built/building structure, i.e. the building footprints/blocks are substantial however retain a reasonably robust urban structure along Sadama and Kai Streets including the Talink Spa and Conference Centre. A portion of recent development however comprises less compatible uses.

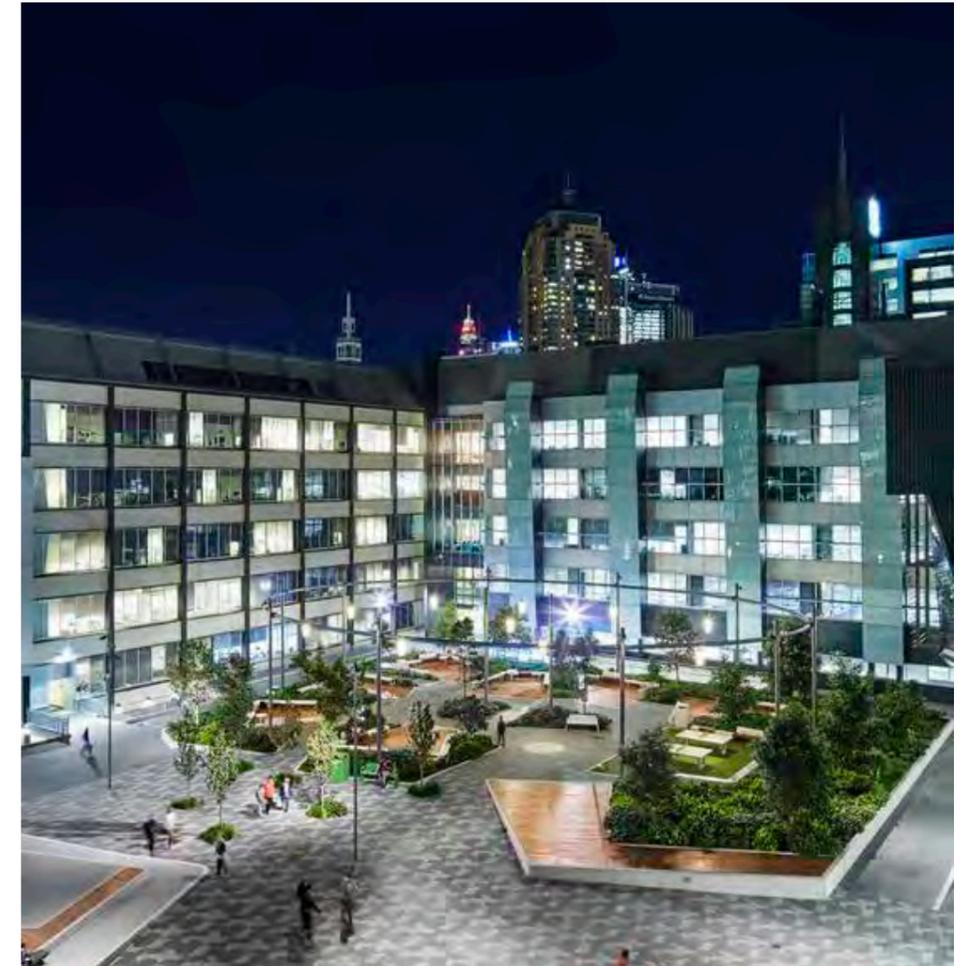
North Mixed-Use Road Neighbourhood should promote a higher quality and more compatible mix of larger and finer grain block structures to both maximise the accessibility for pedestrians and respond to all potential users, citizens of Tallinn and visitors. The proposed structure, depth and size of building parcels allow for a range of accommodation types with an appropriate provision of exterior space within the building parcel. Building widths should allow a variation of fine and medium grain fabric and building sizes providing a diverse mix of accommodation. Access and entrances to individual buildings should be frequently spaced to avoid long continuous uninterrupted façades.

Form, Scale, and Mass

As in all other neighbourhoods, building form shall demonstrate the overall theme of the master plan: Fluidity and the relationship of the waterfront with the sea, marina and basin. Heights of buildings are proposed to be between 2 and 5 no. levels. The lower heights are proposed to ensure that key views through and over development to the sea are achieved. Buildings should aim to provide a continuous building façade and enclosure to the street and courtyard spaces and frame the public realm.

Ground level accommodation shall have a higher floor to floor dimension. The ratio of 1.5 times upper levels is an appropriate guideline. Overall floor to floor ratios depend on the intended use of the building. Guidelines for office accommodation are 4.0 – 4.1m and 5.5 - 6.0m for ground level accommodation respectively. Residential accommodation shall have 3.0-3.2m floor to floor heights. Hotel accommodation has similar height proportions depending on the profile and rating of the envisaged hotel. The uppermost level of accommodation could have a double level appearance, which could result in a varied roofline and identity to the top of buildings. Building façades should incorporate a high level of articulation to avoid bland continuous façades. Special attention should be made to how buildings address the ends and corners of blocks through building geometry greater articulation or taller elements. Key strategic views should equally be addressed through landmark features to aid legibility and navigation.

Building orientation shall maximise views to the seafront, to the street and allow generous levels of daylight to all habitable areas. A balance must be achieved between large areas of glazing, proportion of more highly insulated opaque façades and the thermal envelope requirements of the building regulations. The neighbourhood includes the proposed location of a hotel and alternative location of the Opera House and adjacent Reisterterminal A/Terminal A/B. We are proposing that Zaha Hadid Architects are retained as the lead designer for these key buildings. The new terminal building as well the hotel (and if feasible the Opera House) will enhance the overall character and quality of the built environment and add value to the neighbourhood.



NEIGHBOURHOOD CHARACTER // NORTH MIXED-USE NEIGHBOURHOOD

Building Interface

Development parcels should enable building mass to be located on edges thereby promoting frontage and enclosure to the block and providing distinction between public realm and private space. Setbacks between building façade, footpath and carriageway will be defined through the street sections. Setbacks should be considered at ground level to enable covered access into ground floor accommodation, provide covered routes for users and the potential for covered exterior dining where proposed. Specifically, at Admiralty Basin, covered areas on the south facing areas, facing the basin will enable a spectacular outdoor dining experience. At upper most levels, setbacks will allow for exterior terraces and achieve greater daylight penetration at street level. Building frontage to the street should enable vision between the building and street, therefore uses at ground level should be active where possible to facilitate animated, vibrant façades. Upper levels of accommodation should provide 'eyes to the street' supporting both active and passive surveillance to the street.

Where possible, car parking should be held back from the external façade and faced with retail/commercial space to allow active uses along the street edge. Providing active street frontage must be balanced with the need to provide sufficient car parking spaces for the proposed uses and the cost of development. Further more detailed work will need to be undertaken to address these potentially conflicting issues.

Good quality, efficient and appropriate lighting will strengthen the interface of building and public realm during twilight and evening hours as well during darker winter days. Lighting in the public realm will enable use over extended hours and will create both perceived and actual safety for users. At North Mixed-Use Neighbourhood, lighting types and levels should vary according to the place and hierarchy of the public realm. The 'Spine', Admiralty Basin and around Terminal A/B should be specifically targeted. The individual squares and plaza could also have specific themes. As per other neighbourhoods, lighting should vary at times of the day and seasonally to create varied and contrasting environments and respond to varying natural light conditions. Lighting types, colour and level should respond to the route hierarchy and movement mode.



Landscape and Public Realm

The master plan promotes a clear hierarchy of routes and spaces which also ensures connectivity works at a number of levels consistent with a fundamental understanding of how a city operates and is enjoyed by its citizens. The public realm movement network in North Mixed-Use Neighbourhood is driven primarily by the 'Stream' spine, positioned at the uppermost level of the public space hierarchy. The 'Stream' forms the conduit for activity and movement internal and adjacent to the Neighbourhood. The 'spine' is framed by active ground floor uses, flexibly planned and articulated. The spine is located on the Eastern edge of the neighbourhood and leads to the cruise terminal, the landscaped ground and substantial staging areas of the cruise terminal.

Admiralty Basin is located along the 'spine' and at the centre of the master plan. Admiralty Basin is located at the uppermost level of the public realm hierarchy. The public realm must be of the highest quality design and material specification. Natural stone, granite or basalt paving is recommended. This could be complemented with precast concrete, in-situ concrete, timber/wood and various textures and colour of gravel. Planting should be clean, simple and promote diversity of planting species, texture, colour and layered landscapes. Planting should also encourage movement and diversity of wildlife throughout the master plan area. Planting at the basin should aim to mitigate cold breezes to help ensure the exterior areas adjacent to the F & B and Yacht Club are as comfortable as possible.

The proposed new terminal building, Terminal A/B includes an entrance forecourt which will require a substantial level of temporary car parking, taxi pick-up and drop-off and coach parking. This area will require considerably more detailed assessment and design however the intention is to create a dynamic space that balances the needs of the movement/transport requirements and exemplar public realm.

Within blocks to the north, generous courtyards are proposed within the blocks to serve as entrance forecourts to buildings and accessible garden spaces. Gardens should be landscaped to a high level offering a range of planting and soft landscape utilising indigenous plant species wherever possible.

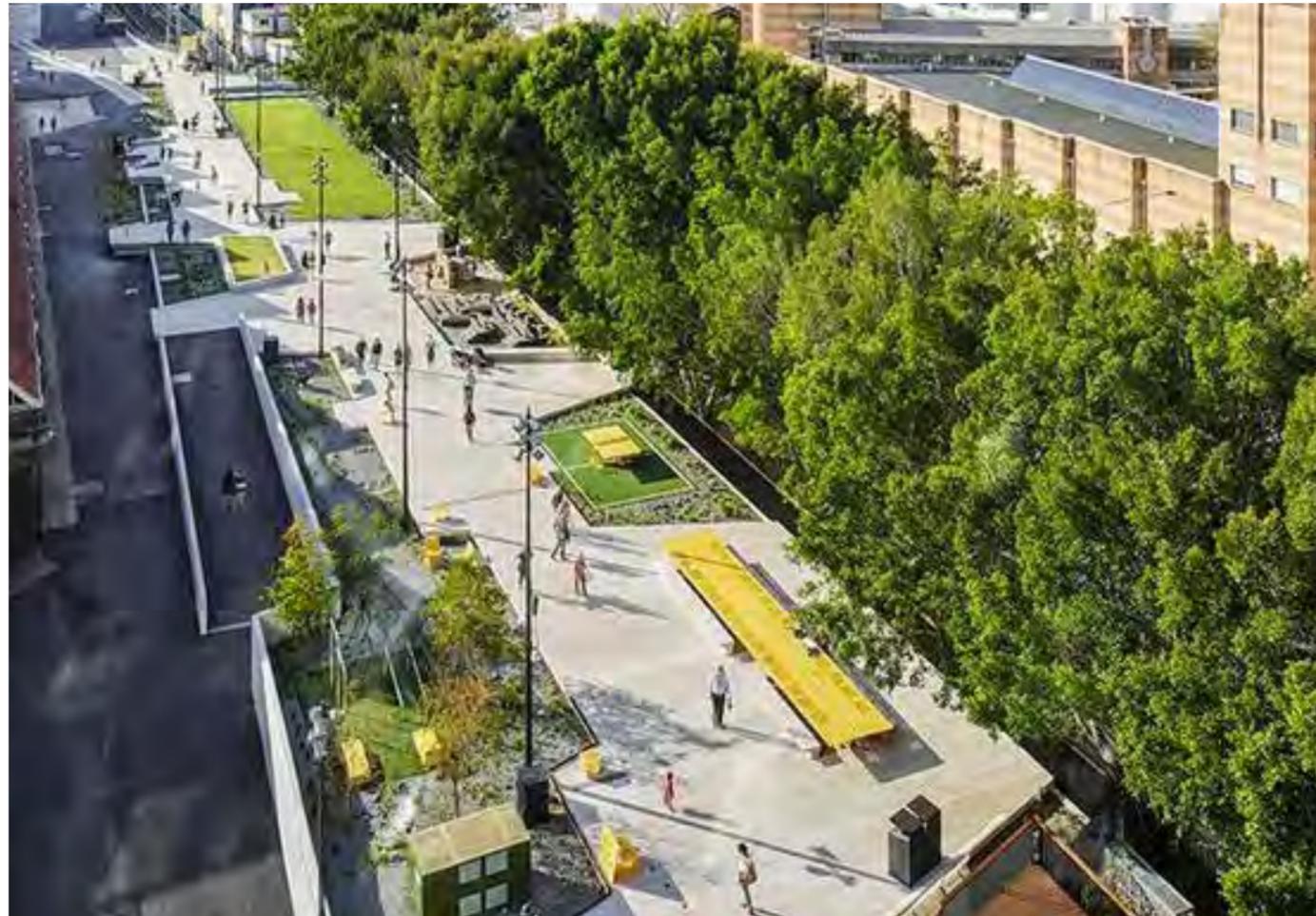


Streets, Movement and Connectivity

The design of the street is fundamental to creating a high quality civic environment that can be enjoyed and shared by all users, citizens and visitors alike. Streets form the backbone and basis for determining spatial quality and life between buildings to create exemplar liveable and close knit communities. The Tallinn 2030 Port Vision Master Plan proposes a clear hierarchy of routes and spaces across the whole of the harbour development to ensure an appropriate and varied level of access throughout. The hierarchy of routes connects a network of hubs and attractors which are located at key strategic points distributed across the master plan area and linked into key historic routes.

The street network has been derived from the routes in adjacent area, Rumbi and the Cultural Kilometre, Sadama, Kai as well the edge of Linnahall facilitating connectivity and integration with the adjacent area and city. Pedestrians and cyclists are prioritised in the movement system. View corridors are aligned with the existing streets and identified views. A direct link with the Cultural Kilometre has been defined. As substantial numbers of vehicle movements will continue with the Port, these must be accommodated for in both the street network in the neighbourhood and wider road network of the city. Junctions and signalling must be designed to accommodate these movements.

As across the entire master plan area, the 'Spine' forms the strategic internal pedestrian route with all neighbourhoods providing identity and connectivity throughout. The 'Spine' is the internal conduit for pedestrian movement.



Appearance and Materials

The Urban Design Guidelines promote a flexible approach for the use of materials and overall architectural appearance, most importantly a high level of design and material quality to complement the historic city. The appearance and materiality of buildings and public realm will create a benchmark for quality and contribute to the identity of the neighbourhood and the master plan area overall. Following the preparation of the urban design guidelines, further guidance should be prepared in later stages of development of the masterplan. The reference images suggest the level of material quality across the built form and public realm which contributes to the character, quality and identity of the place.

Building form and overall architecture appearance shall demonstrate the overall theme of the master plan, fluidity of building form and the relationship of development with the sea. Building construction and materials must be rigorously robust to withstand the challenging climate of Tallinn and location next to the sea. Materials should be specified to meet these demands without premature aging or weathering. GFRC panelling is one of the preferred exterior façade materials. Glazing mullion profiles should be designed to be as thin as possible. A high level of modern, contemporary articulation of external façades is promoted.

Office accommodation will require large areas of glazing to maximise daylight in working spaces, however the extent of glazing must be balanced with the requirements of the building regulations, the thermal performance of the envelope and the conservation of fuel and energy. Furthermore, detailed guidance must aim to address the more technical aspects of the building envelope, a holistic approach to sustainability, the use of materials and their embodied energy, the appearance of the buildings within the neighbourhood, the challenging Tallinn climate context and the overall master plan. The guidance outlined at this stage of the work must be general, aspirational and non-prescriptive.

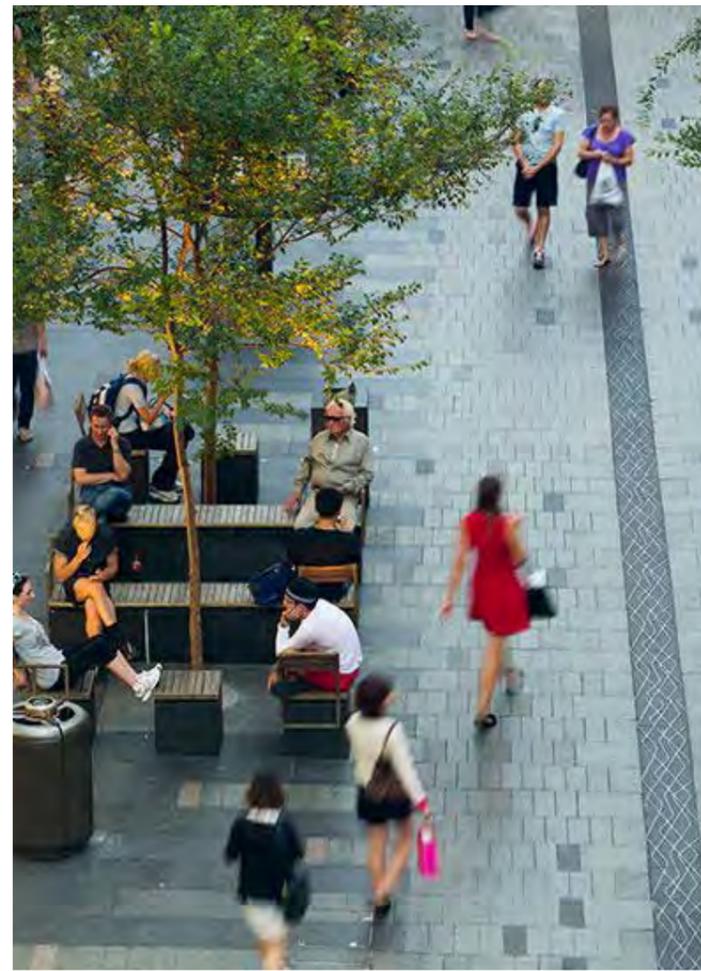
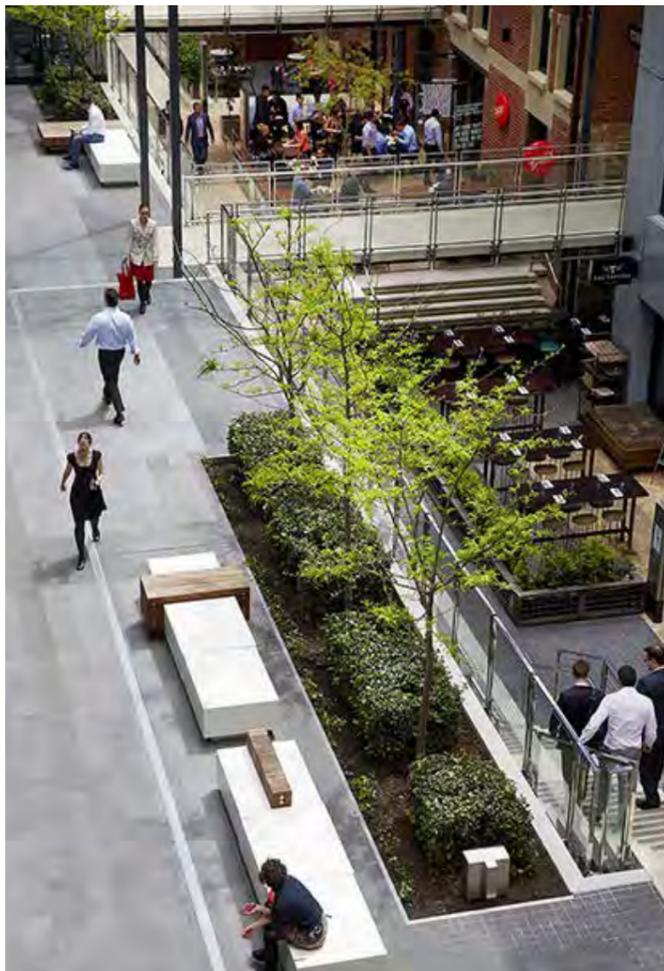
High level cultural and Port specific building should aspire to be identifiable features/elements within the built environment. The introduction of an Opera House and the proposed new terminal building Terminal A/B with Port of Tallinn offices and facilities designed accordingly are components that will raise the profile and identity of the Port and contribute to the rich architectural heritage of the City of Tallinn. Particular design and material attention should be given to these elements to ensure the Port of Tallinn continues to achieve success and contributes to the economy and vibrancy of the city.



Density and Mix of Use

Density of development is driven by the prescribed structure, grain and scale of development, which is informed by the local condition. The North Mixed-Use Neighbourhood is comprised of a diverse mix of uses including Port activities, Terminal A/B, Admiralty Basin, office, commercial, hotel, cultural and leisure uses around Admiralty Basin. Retail, food and beverage located at ground floor will complement the neighbourhood's variety, provide local services and amenities and active frontage to streets, the 'Spine' and public areas. The introduction of the hotel will further add to the diversity of use, extended hours of use and visitor numbers. Terminal A/B, the Yacht Club and high profile F & B along Admiralty Basin will create a vibrancy and anchor to the wider master plan, bring new life and animation to the area. The intent of all neighbourhoods is to establish a wide mix of use that promotes a sustainable urban development and encourages diversity across all economic, cultural, age and ethnic backgrounds.

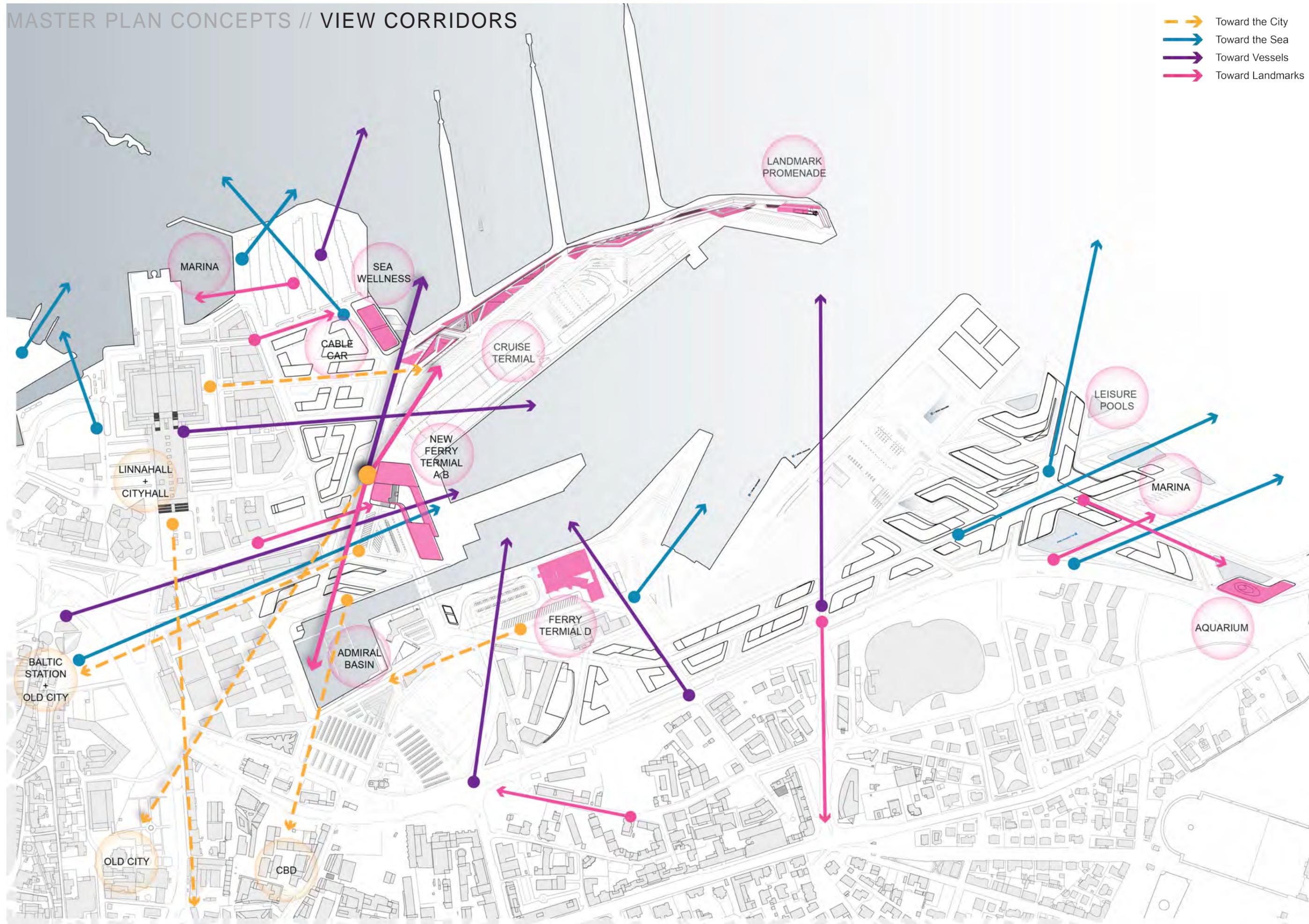
At this stage of the masterplan we have defined the predominant use within each neighbourhood. Market conditions evolve, therefore the master plan must be flexible enough to react to the changes in the market. As the neighbourhoods naturally overlap and contribute to the overall masterplan, the type of accommodation could evolve as well. We have defined the estimated areas for the North Mixed-Use Neighbourhood in the adjacent table based on the block structure and the proposed height and mass of development. Seen collectively all neighbourhoods must contribute and support one another as well as the Port and the City of Tallinn.



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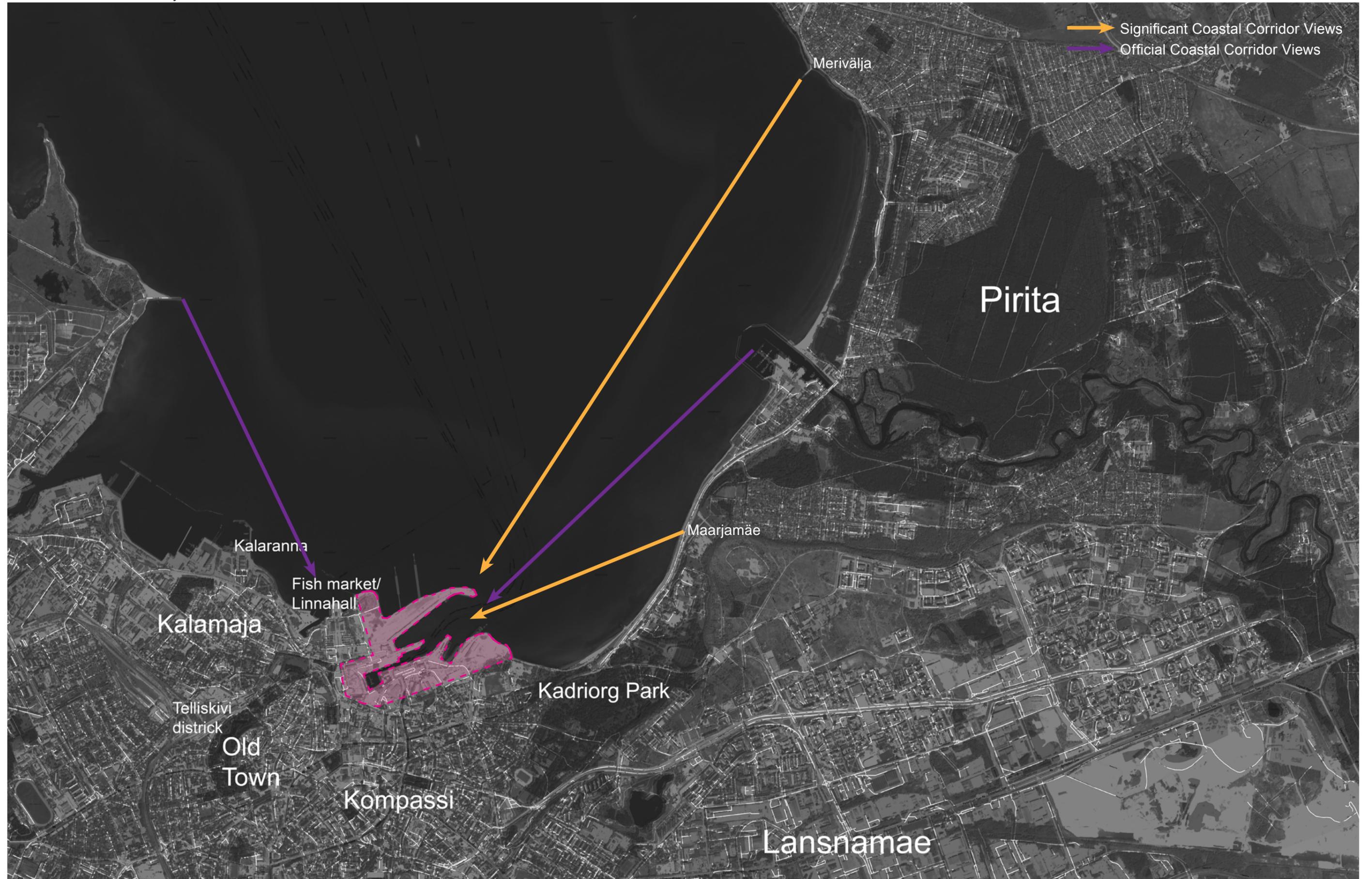
MASTER PLAN CONCEPTS // VIEW CORRIDORS

-  Toward the City
-  Toward the Sea
-  Toward Vessels
-  Toward Landmarks



MASTER PLAN CONCEPTS // VIEW CORRIDORS

Coastal View Corridor Key Plan



MASTER PLAN CONCEPTS // VIEW CORRIDORS



From Maarjamäe view corridor to OldTown



From Merivälja view corridor to OldTown





LANDMARK / PROMENADE // BREAKWATER LANDMARK TOWER VIEW

