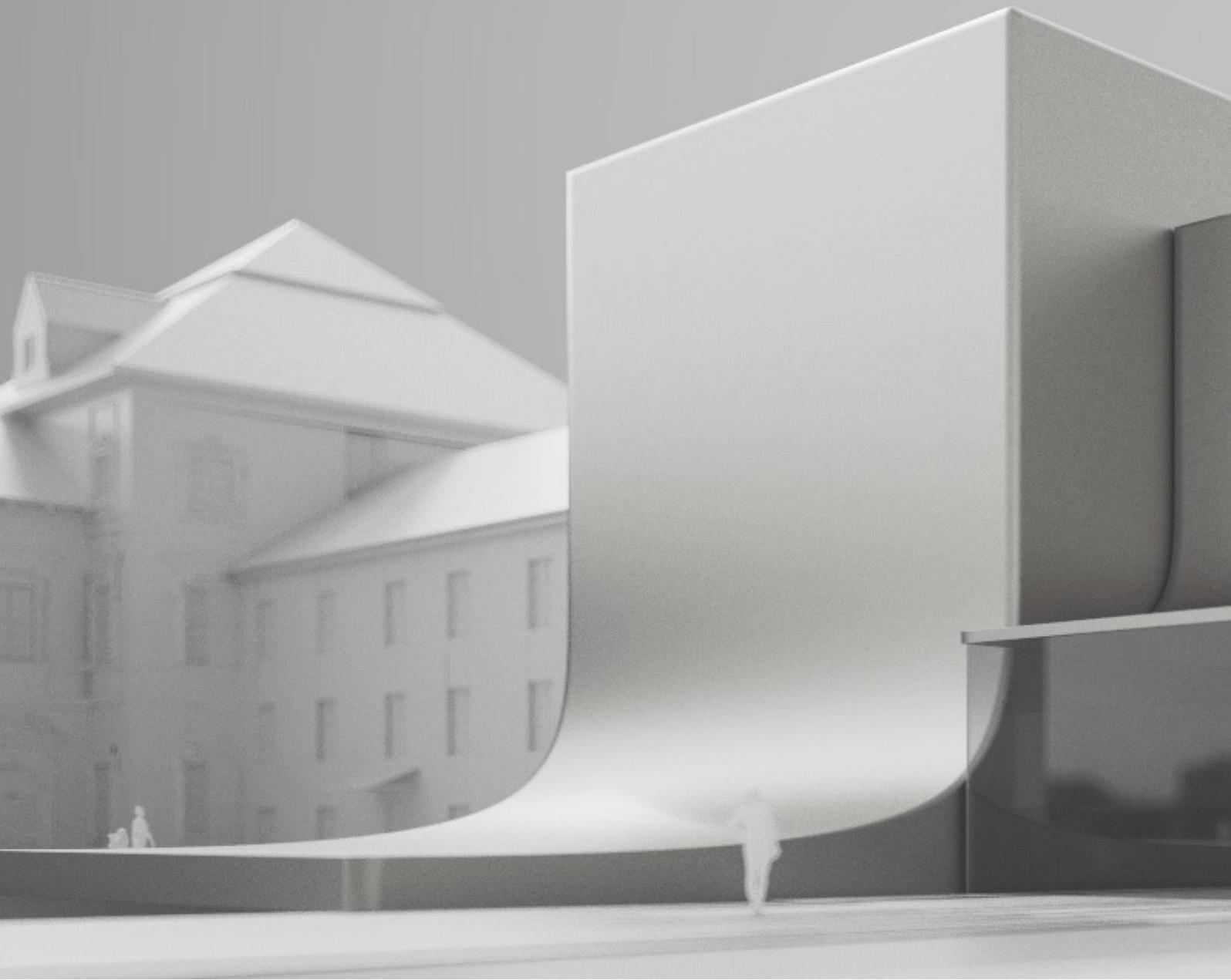


JONAS RADVILA PALACE MUSEUM OF ART DESIGN
VILNIUS, LITHUANIA

000VNO



1 Urban idea



The project aims to recreate the lost in the past symmetrical 5 towers (Pavilions) of the Vilnius Jonas Radvila palace building complex connected with building wings, volumetric composition, forming U-shaped cultural public exhibition space. All Jonas Radvila palace buildings are connected with vertical and horizontal connections into one functional museum, providing a possibility to function as separate exhibition spaces as well as a whole, connecting existing building with new additional volumes including a newly revived courtyard.

The revived new cultural Old Town public space will have a double purpose, as an additional external exhibition space but also as a lively city's point of attraction with areas for entertainment, dining, recreation, education and other public functions (outdoor cinema, concerts etc.), additionally using the sunken plaza entrance as an amphitheatre space. In order to achieve a synergy between the city's cultural life and museum, the existing public space is expanded to maximum scale towards Vilnius and Liejyklos streets, removing the existing parking as well as non-lively linden trees which grow in the Central Pavilion space, instead planting new vegetation, preserving the greenery next to Vilnius street – especially the valuable oak there in southwest of the territory relocated next to the new kiosk-

Newly designed volumes recreate the historical urban pattern, but at the same time the chosen language expresses the modern vision without overshadowing the historical monument but instead respects it. The museum expansion solutions, connections, uses and materials – harmoniously blend with the authentic Jonas Radvila palace and old town surroundings. The design follows the main architectural quality requirements in written in LT law of architecture. All restoration works are being done following the detailed research work.

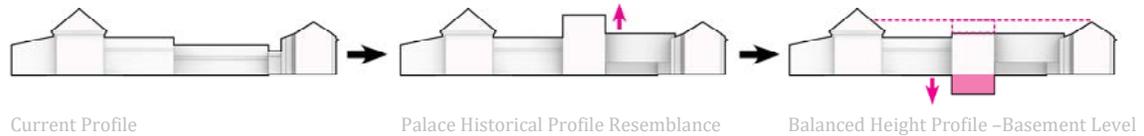
The public transport stop is designed in the competition territory. In order to achieve smooth traffic in the public space, only disabled access with cars and service access are allowed in territory. The arrival of staff is suggested with public parking or to use existing car parks in the old town area in order to reduce the traffic noise in the overall territory. Bicycle parking is offered on site in order to minimize the vehicular movement on the site and enhance the public offering. All public space design solutions are done according to universal design principles.

2 Architectural idea

The Jonas Radvila Palace Museum of Art Design creates a new place, a new social and educational environment, a new 'home' that communicates the culture of the city. We propose a concept design that creates this "collective city" and dynamic community that brings together fun, flexible, fluid and feel good spirit. The design responds to the different needs and conditions and all different scales from global – environmental, regional - local, to human - personal, for the contemporary world we live in today.

The museum provides openness and communal space that maximizes flexibility and future-use adaptation possibilities. The vision is to develop and create a new inspirational environment for visitors of all age groups.

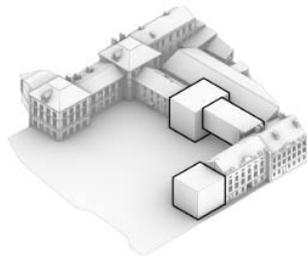
The proposal recreates the original palace volumes and symmetries in a contemporary yet respectful way. The original gate line of the palace and access points are recreated in a subtle way by the floor pattern and the long bench fronting the palace, making of the old barrier a public feature. The original pavilions and overall mass articulation, as well as the original symmetry, is re-proposed in the new volumes, re-establishing the original rhythm and hierarchy of the palace.



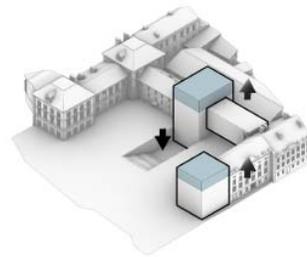
The central pavilion becomes the central distribution hub, allowing to distribute the different flows in all directions. The newly proposed sunken entrance, creates a more dramatic experience of the palace, adding an extra layer of experience. It also allows maximisation of the exhibition space by converting the sports hall in a flexible exhibition space, and freeing the front square creating an outdoor exhibition area, activated throughout the day and night with public programs and leisure activities, bringing the public and the city inhabitants to the art scene and the art scene to the public in an informal way. By locating the auditorium under the main square, we propose to maximise the opportunity of the new venue with a distinct access, with possibilities to be used independently from the museum, and creating a new state of the art auditorium free from the constraints of existing spaces. The loading access has been studied so to be minimised in its visibility when in use, and also to have the most efficient direct access from outside the site, but also the most efficient accessibility to the different storage areas, and exhibitions spaces throughout the palace.

The southern pavilion acts as a more independent unit, with functions and programs that start from the exhibition of the heritage basement, and culminate with a roof terrace that will give the user a new point of view towards the city and this roof-scape. The interface with the road is negotiated by a series of information and advertisement devices, in line with the palace design solutions, that give a functional yet coherent vision to the site as a whole.

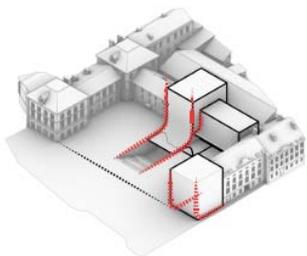
The exhibition spaces merge seamlessly between outdoor and indoor spaces, and with a tailored renovation we propose the option to have a single loop exhibition or possible separated routes, in order to cater for different art installation or exhibition with flexibility. The materiality of the project is complementing the original palace strive for monumentality, with the intent to project the venue in the future of Vilnius architectural scene. Minimal materials and elegant reflection on the new cladding will blend seamlessly between the old and the new, between the square and the sky. The articulation of the façade, and the architectural language of the new palace is a fluid yet respectful articulation of the historical ornamental qualities of the palace, and is inspired by one the historical layers of the interior spaces, where gentle curves were articulating the wall and ceiling transition. This is taken and adapted into the urban scale, and defines the design of the new palace extension.



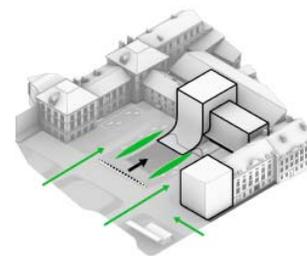
Museum Original Volumetric Articulation



The new volumes are a reinterpretation of the original mass, rhythm and symmetry. The new sunken plaza allows to maximise the exhibitions areas and the public offering and enhanced the monumentality of the central pavilion



The curvilinear language refers to a smooth transition between different elements while preserving the mass and hierarchy of spaces in a contemporary way



The original palace courtyard organization is re-proposed in a subtle way, by using flooring and benches to recreate the original fence and access points.

3 Description of the proposed solutions for the competition area – the land parcel (zone A) and its adjacent areas (zone B)

3.1 Functional layout of the spaces to be occupied by the designed complex

PROGRAM BREAKDOWN CHART			AREAS		
Area	Building	Program	SQM	sqm	
LMNA Extension		Permanent Exhibition Spaces	3863	Exhibition halls (including ex-sport hall)	2820
				Corridor/Staircase	528
				Storage	284
				Auxiliary room	148
				WC	83
	n. 12	Staff Facilities	914	Work Space - 50 or more staff members	409
				Meeting Rooms	33
				WC	126
				Kitchen/Eating Area	55
				Corridor/Staircase	216
		Auxiliary room	75		
	n. 11	New Exhibition Spaces	1797	Exhibition	939
	n. 8			Exhibition	312
	n. 7			Exhibition	546
	n. 7	Multifunctional Event	616	Event Hall - 500 seats	482
	n. 7			WC Women	30
	n. 7			WC Men	30
	n. 7			Disabled WC	9
	n. 7			Cloakroom	21
	n. 7			Technical	18
	n. 7			Storage	26
	n. 7			Cloakroom	20
	n. 7	Visitor Infrastructure	1182	Foyer	213
	n. 7			Reception Area	100
	n. 8			Children's recreation areas	76
	n. 9			Café	323
	n. 9			Bookstore	148
	n. 9			Roof Terrace	175
	n. 8			Gift Shop	18
	n. 7			WC Women	25
	n. 7			WC Men	25
	n. 7			Disabled WC	5
	n. 7			Admin Office with Meeting Room	30
	n. 7			First Aid	6
	n. 7			Storage	11
	n. 7			Cleaning Room	7
	n. 8			Storage	579
	n. 8	Loading Area	49		
	n. 8	Exhibition reception	65		
	n. 8	Exhibit preservation and pasportisation workshops	27		
	n. 8	Storage area for machinery	49		
	n. 8	Temporary storage repository	49		
n. 8	Packaging materials/containers storage area	49			
n. 8	Cargo handling staff room	38			
n. 8	Waste Room	25			
n. 8	MEP	236	Power Unit	45	
n. 8			Power Control Room	25	
n. 8			MEP	166	
		Total Internal		9187	

The positioning, heights and sizes of the new extensions of the museum reflects the history and symmetry of the original palace, while introducing a contemporary take on site, reflecting the contents of the exhibitions; both historical and contemporary art.

The activated square brings the exhibitions to the forefront, where the positioned sculptures in the external exhibition area interacts with the public as an introduction to the exhibitions within the museum throughout the day and night. Around the site, the visitors will also find advertising totems to guide them around the exhibitions, as well as providing information. This enables the visitors to explore the full site and understand the different

connections to each part of the building. Furthermore, the introduction of the projection area, the kiosk and the café activates the area by attracting visitors who are not necessarily entering the museum.

The South Pavilion inhabits the café, bookshop and roof terrace creating an independent recreational building activating the south corner of the site.

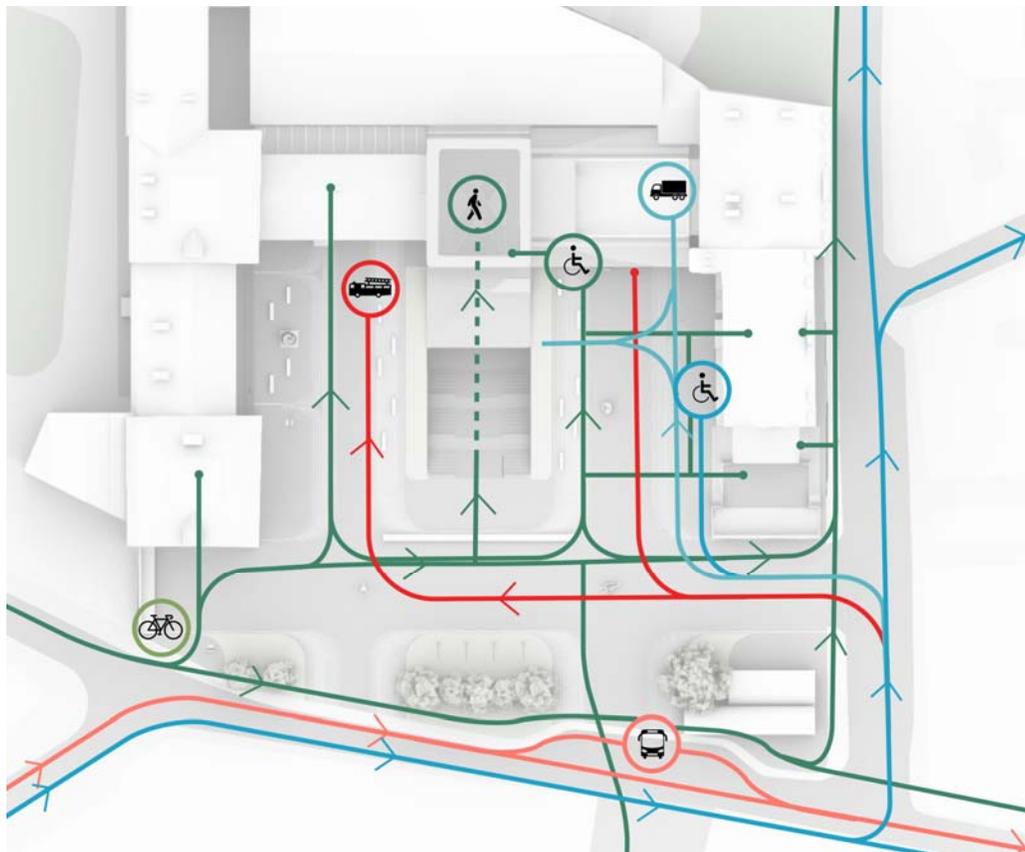
The Multi-Functional Hall has its own entrance located in the Sunken Plaza enabling events/conferences/lectures to take place outside of museum opening hours.

With internal and/or covered connections to the existing buildings of the North Pavilion and Sports Riding Hall, the visitor can enter all exhibition spaces within a continuous and enclosed route. The museum is a family-friendly space including a secure activity area for children.

A private entrance is provided for staff in the First House containing staff facilities, the First Eastern Wing with conference rooms, and the secure Loading Area connecting to the storage and space for packing and unpacking in the basement alongside the MEP rooms.

PROGRAM BREAKDOWN CHART				AREAS	
Area	Building		Program	SQM	sqm
LMNA EXTERNAL SPACES		Courtyards, Intermediate Space, External Exhibition, Public Areas	Screening Zone	5025	223
			Kiosk		65
			Bus Stop		75
			Greenery		629
			Sculpture Park/External Exhibition Area		4033
			Café - Outdoor Seating		86
			Sunken Courtyard & Steps		408
			Intermediate Spaces		353
			Total External		5025

3.2 Solutions for pedestrians, non-motorised transport, traffic circulation and parking

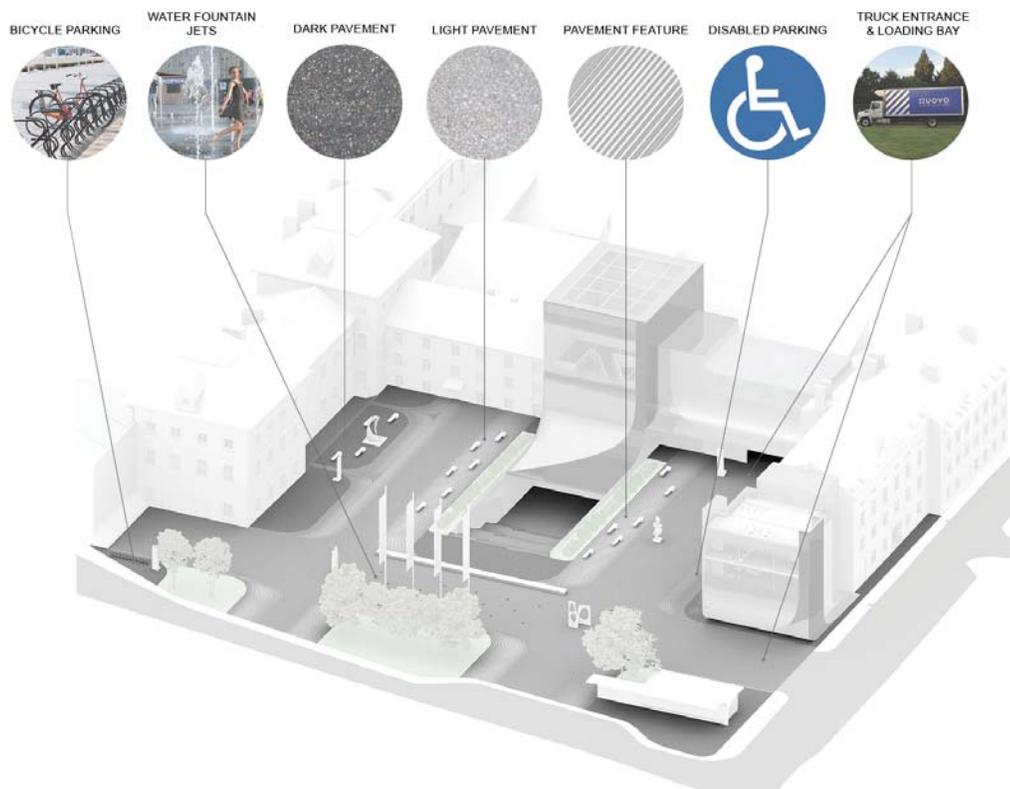


For those visiting the site by public transport, there is a bus stop located on the site, bringing people in directly. There is also a drop-off point for people arriving by car, and two allocated car park spaces for disabled users. Bicycle parking is provided to the west of the site.

There are provisions to drive onto the site at the south from Liejyklos Street for fire trucks, service trucks and disabled parking access.

3.3 The concept of the pavement/coatings proposed for the Competition territory, the site and its approaches

The pattern in the stone mimics the original gates to the palace, drawing the visitors to the entrances of both wings, and zoning the main spaces in the square. The linear pattern subtly leads the visitors to the entrances of each of the buildings. The original cobbles from the square will be retained and reused for the darker stone of the pattern. The road access will mostly be used for loading only at early morning/late night, and is disguised with the pedestrian stone paving maintaining the idea that this is an active and dynamic pedestrian public square for exhibitions and sculptures.



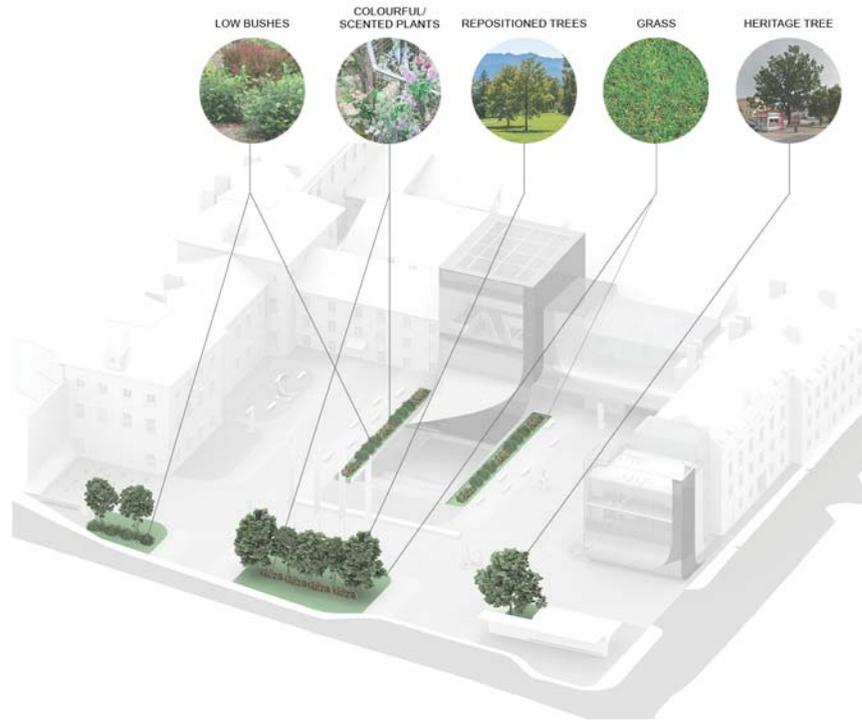
3.4 The plantations and greenery grouping solutions proposed for the Competition territory, the site and its approaches

Along with the pattern of the stone paving, the shapes of the greenery emphasises the symmetry of the site and the history of the two original gated entrances. By introducing the greenery there is a place for the filtration of water from the square and balancing out the man-made sculptures with nature and the trees. The existing oak tree is retained and repositioned next to the kiosk. The remaining healthy trees which are currently on the site will be preserved and repositioned in the front central green zone. The central green space will be planted with colourful and scented plants to add to the sensory experience of walking through the site.

Greenery in the Competition territory has three areas:

1. Relaxed richly planted relaxation area between the North Pavilion, renovated Sport Riding Hall and office block.
2. Greenery close to entrance area chosen to emphasize the monumental emotion, so selection of smaller variation of plans from hedge family is chosen.

3. Next to Vilnius str. – old oak tree is preserved, vegetation selected usual to Vilnius city scape, mix of grass and linden trees are suggested.

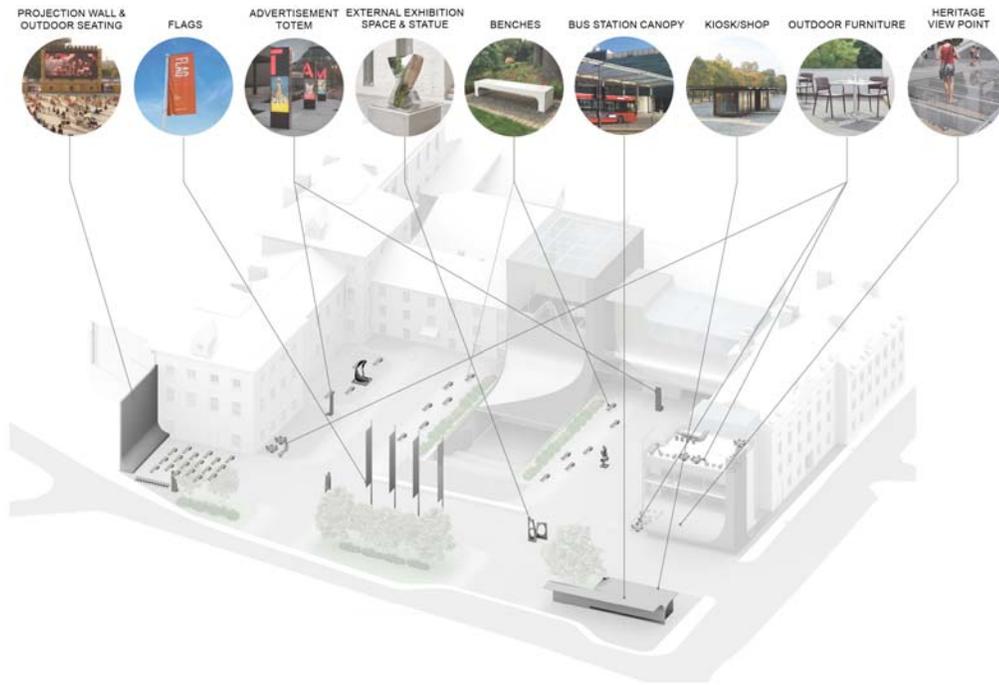


3.5 Lighting solutions proposed for the competition area – the site and its approaches.

Lighting solutions provide maximum functionality of the public space and emphasise the Palace complex. Lights activate the entrance area and outdoor art exhibitions also provide a safe environment. The firewall of Vilnius str. adjacent building is used for video projections and becoming part of the exhibition offering.



3.6 The proposed small-scale architectural solutions in the Competition territory, the site and its approaches.



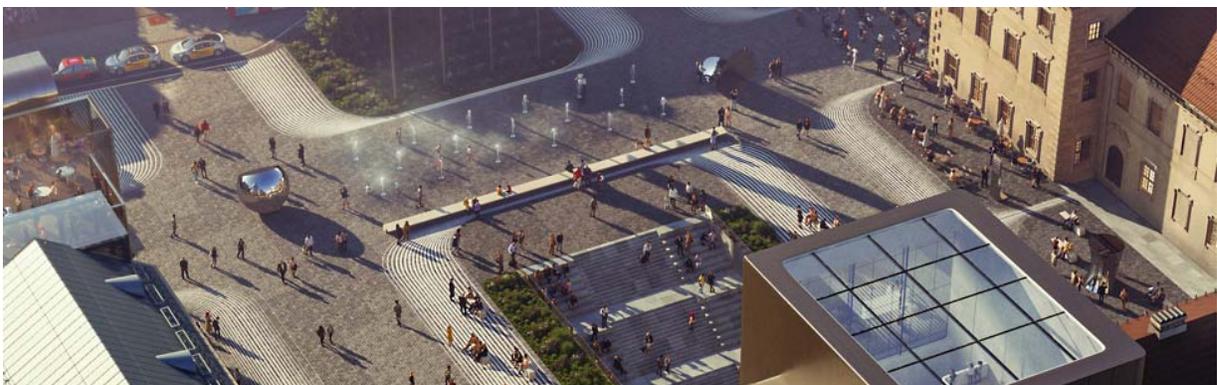
With the introduction of the External Exhibition Area, the projections in the evenings, the kiosk on the site, the water feature, the roof terrace and cafe with outdoor seating, these elements will culminate and create a dynamic energy to the square for both daytime and nightlife, making the museum an interactive Cultural Hub of Vilnius and attracting visitors to the exhibitions.

Ample seating areas and amphitheatre style steps create many meeting points and places to regard the spaces, sculptures, and take in the atmosphere of the art scene.

3.7 Use of essential green/sustainable solutions offered in the Competition territory, the site and its approaches, conceptual engineering solution.

Sustainability goals are achieved by using electrical instalation form outside solar farms, LED lighting, effciant cooling and ventialtion systems. As city centre museum we use no-car policy to reduce carbon footprint. The public space provides plenty of space for bicycle, electric scooter parking stands.

3.8 The conformity of the Competition territory and the site and its approaches with the principles of universal design;



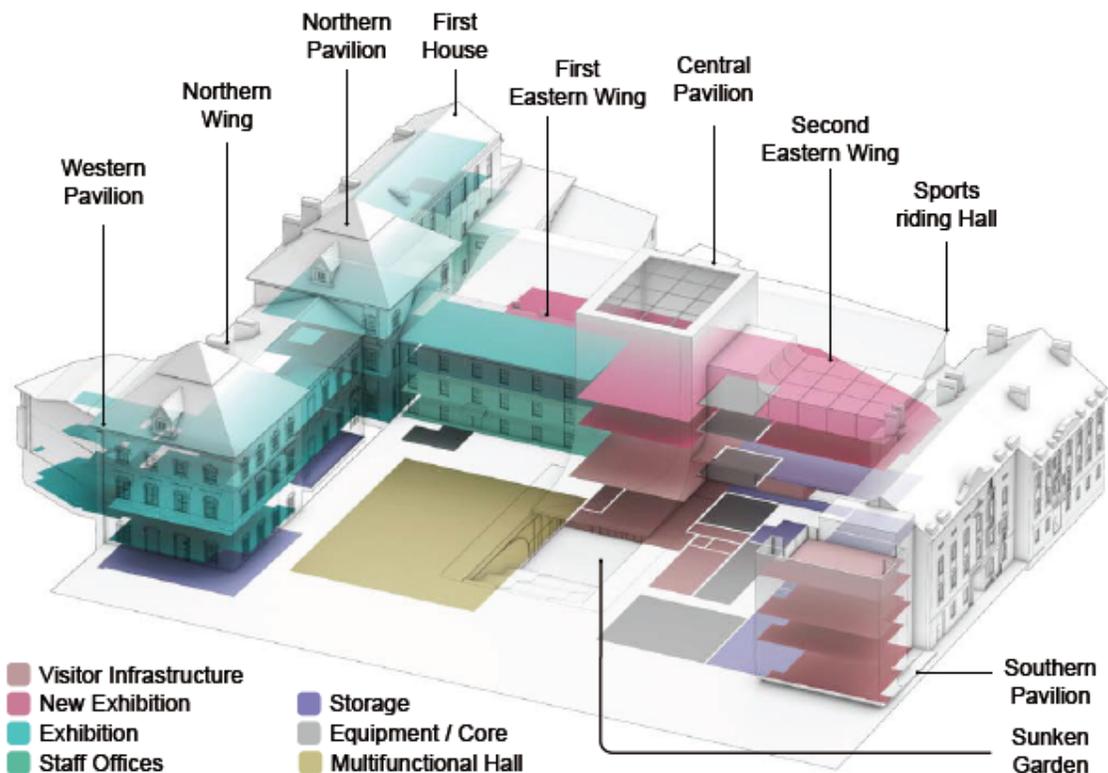
The main square is predominantly a pedestrianised flat terrain allowing all users accessibility to explore all aspects of the square, including the kiosk, screening area and sculpture park. Two parking bays are provided for disabled users on site. The grand entrance is at the Sunken Plaza level, and a secondary entrance is provided at the same level as the square which provides direct access to the elevators to all floors, including the multi-functional hall. All other buildings are accessed at the same level as the square, including the existing buildings and the South Pavilion which has direct access to the elevator for all levels.

3.9 Landscaping phases of the site and its approaches;

Design solutions provide clear division between territories zone A and Zone B in order to develop territory in phases. Landscape is enveloped around the museum, connecting visually with the wider townscape, and connecting directly with Vilnius G. Vegetation will define the spaces and create areas with different uses around the museum. Fully accessible primary external spaces, plus smaller secondary spaces, allow diverse programmes, with visual and direct connections to the museum internal and external spaces.

4 Description of the solutions of the designed complex

4.1 Functional layout of the building complex;



Internally, the expression of the central void that interlink the two Eastern Wings as a continuous journey of experiential movement and spatial adventure. Internal spaces are expressed as fluid flow interconnecting volumes form the exhibition spaces, workshop, meeting room and other communal spaces. The displacement of spaces aim to achieve the greatest functionality, operational efficiency and visitor experience. The central foyer/atrium is located at the core of the museum. All exhibition and gallery spaces are accessed from the stairs and lifts within the triple height central atrium. All visitors are generously accommodated regardless of physical impairment.

The main entrance to the Museum is located in the Sunken Plaza forming a grand entrance to the museum. Either side of this is the independent entrance to the Multi-Functional Hall and the entrance to the Children's Recreational

Area. The permanent exhibition will be housed in the sensitively renovated North Pavilion, Northern Wing and West Pavilion which are all connected. The new Central Pavilion and Second Eastern Wing will not only house part of the new exhibitions and small gift shop, but also serve as the central hub of the museum where the goods lift transports all artwork from the loading bay, to the storage in the basement, to the other levels of the new extension. From the Central Pavilion there is an enclosed connection to the Northern Pavilion, the connections to the upper levels of the First Eastern Wing and the entrance to the Sports Riding Hall which also houses the new exhibition within a large flexible space adaptable to all temporary exhibition spaces. These connections enables the visitor to access all parts of the exhibition within a continuous route that is enclosed, secure and comfortable, and/or direct access to a certain part of the exhibition they wish to visit. The staff offices and facilities are accommodated within the First House which has a private entrance, and smaller connecting buildings. Finally, the Southern Pavilion works as an independent building for the breakout spaces of the café and bookshop becoming a building for recreation and collaboration. The large windows in the Central Pavilion, upper level of the Second Eastern Wing and the roof terrace of the South Pavilion creates impressive views to the public square and surroundings. Furthermore, the voids carved out of the floorplates in the new buildings create a variety of exciting views for the visitor of the remarkable art pieces and sculptures.

4.2 Description of solutions for the movement and distribution of visitors and staff of the building complex. Conceptual schemes can be provided;

The visitor of the museum is able to do a full loop of the exhibition spaces, or access a certain part of the exhibition directly. Upon arrival at the Sunken Plaza the visitor will collect their ticket from the Foyer in Level -1 and travel up to Level 1 entering the Second Eastern Wing. From there, they can take the stairs to Level 2 and walk through to the renovated First Eastern Wing, and back down to Level 1. From here, ascending one level down the main staircase the visitor has the option of entering the Sports Riding Hall at Level 0 or walking through the enclosed walkway leading to the North Pavilion. From the North Pavilion, the visitor can access all of the permanent exhibition throughout the North Pavilion, West Pavilion and connecting Northern Wing, either exiting from the existing entrance in the West Pavilion, or returning to the Central Pavilion to collect their belongings from the cloakroom. Separate access to the gift shop at Level 0 of the Second Eastern Wing, and the café and bookshop South Pavilion allows the visitor to enter in their own time.

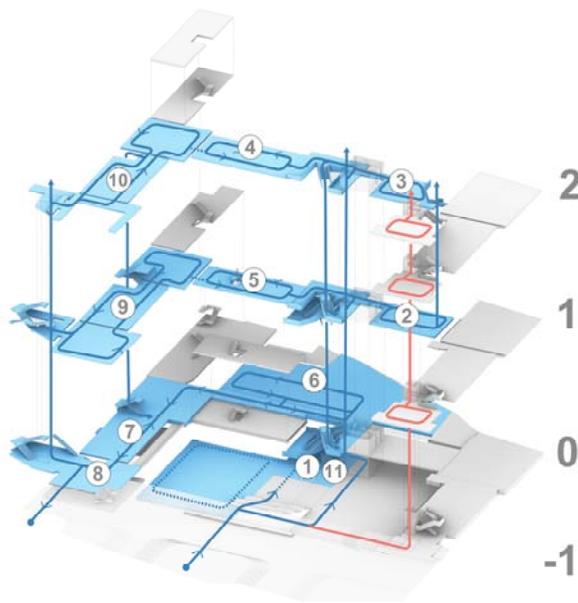


Diagram of Single Exhibition Route

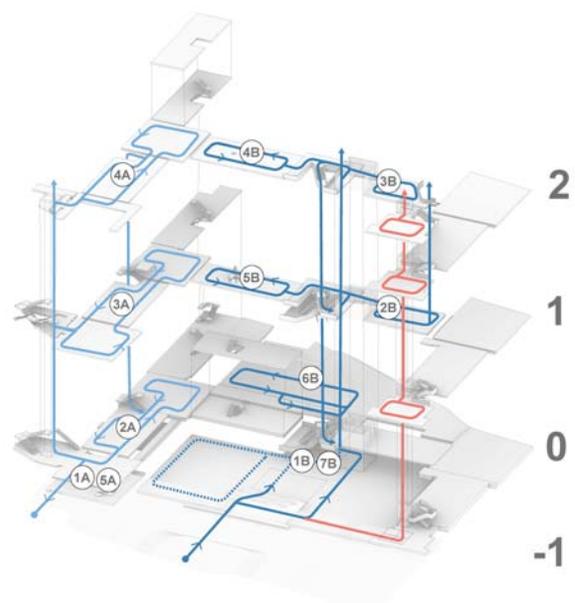


Diagram of Diverse Direct Exhibition Routes

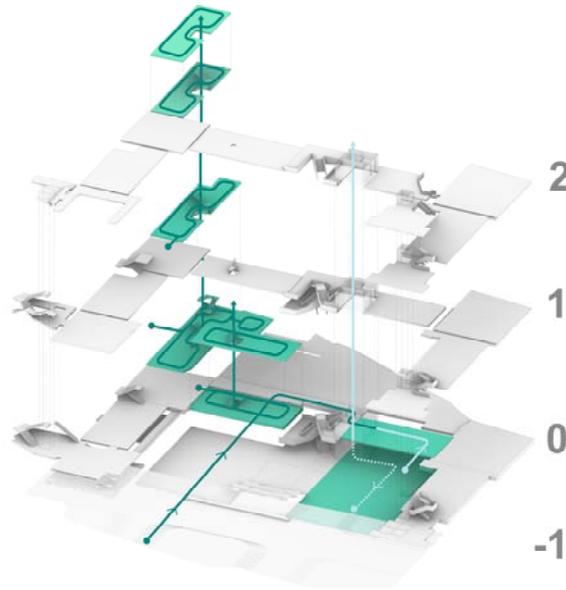
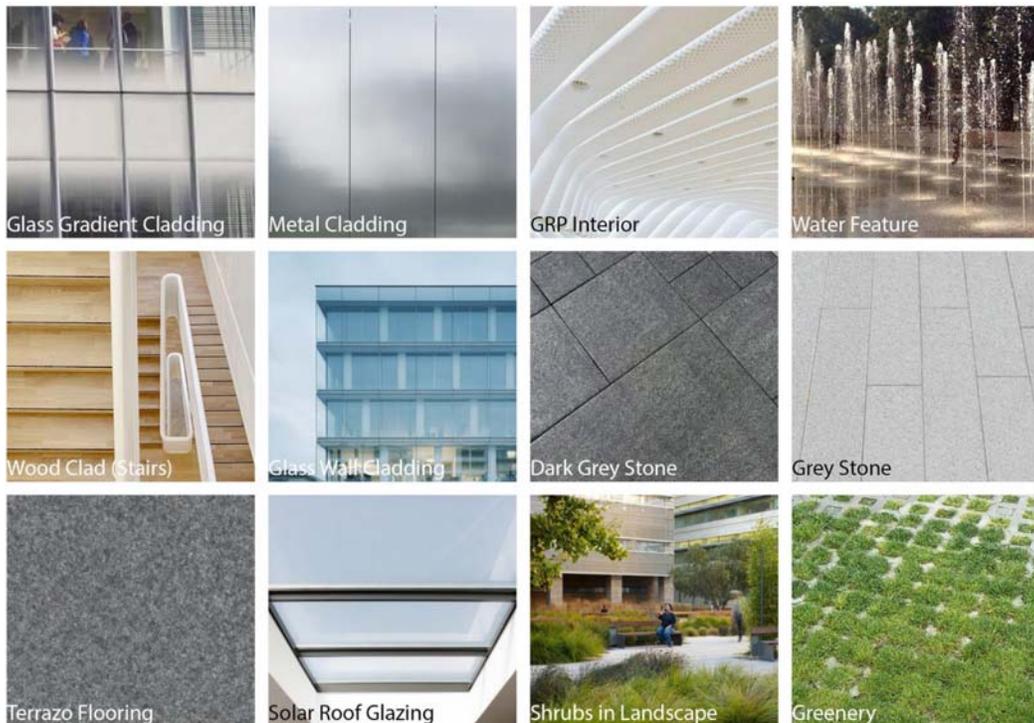


Diagram of Staff Route

The staff have their own private entrance to the First House, which leads to the Second House, accommodating their office space, meeting rooms, facilities and breakout spaces. The two lower levels (Level 0 and Mezzanine) of the First Eastern Wing also houses small conference rooms and meeting spaces for staff with direct access to the square.

The loading of goods and artwork will take place at Level 0 of the Second Eastern Wing with direct access to the goods lift taking the works to the basement for unpacking and storage, and then up to the other floors to be exhibited.

4.3 Materials of the building complex;



The main cladding material for the Central Pavilion, Second Eastern Wing and South Pavilion will be polished aluminium cladding in a champagne colour. This will give a reflection of the bricks of the existing buildings, the landscape of the square and the sky and integrate with the site. Complimenting this will be the glazing that will have some fritting applied in most places controlling the amount of natural daylight that is absorbed into the building and creating a show of silhouettes of shapes from the outside, and a warm glow from the lighting at night.

Internally, there will be a material palette of polished concrete, white GRP, terrazzo flooring and wooden cladding applied to walls, the underbelly of the stairs and timber flooring for durability and warmth.

4.4 Use of essential green/sustainable solutions of the building complex, conceptual engineering solutions (if such solutions are envisaged);

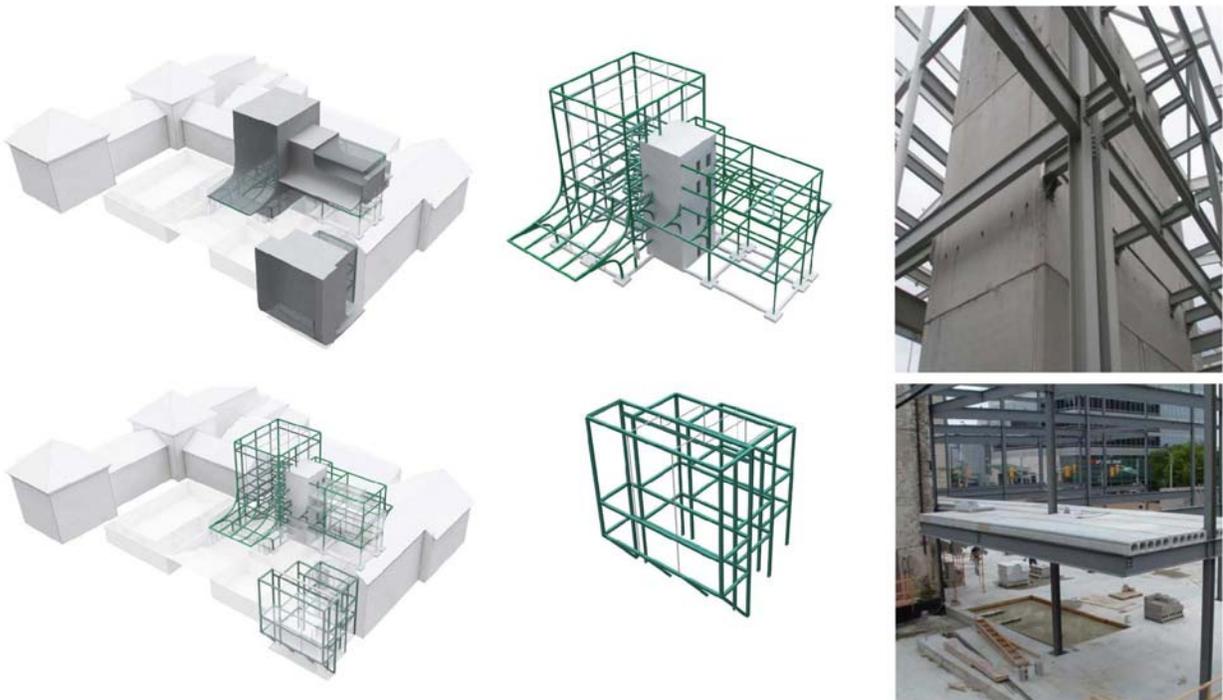
Major focus in the Museum is climate control, constant 50% humidity is supplied via ventilation system, windows use special glazing and additional blinds are installed to protect valuable art pieces from direct sunlight.

Consistent control of humidity, airflow, and temperature is critical for the longevity and safety of the art collection so an HVAC application for a human comfort takes a back seat to the “comfort” of the collection.

4.5 The essential structural solutions of the building complex (essential diagram(s));

For the new Central Pavilion and Second Eastern Wing the core connecting the two will be constructed from reinforced concrete with steel beams, and steel columns as the primary structure braced with reinforced concrete pile foundations. A secondary steel frame will support the glazing and the cladding. The largest span would be at 9.8m enabling plenty of clear space at the loading bay.

In the South Pavilion the elevator is glazed and therefore the structure will be predominately steel frame.



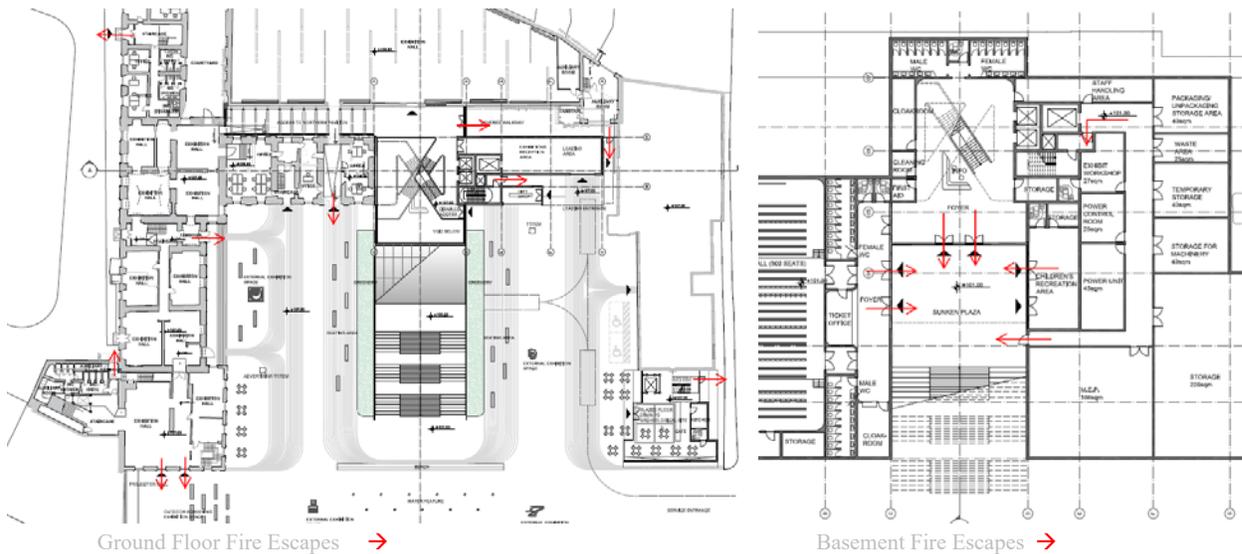
4.6 Essential engineering solutions of the building complex;

The Mechanical, Electrical and Plumbing system is located in the southern east basement. The access for maintenance is provided from a goods lift and a staircase coming from the main square and also from the sunken main entrance of the museum. An MEP room of 166 sqm and Power control room and Power unit of 70 sqm are the core areas that provide all the required services to the museum buildings. The distribution of HVAC and electric networks are supplied partly via a tunnel network to main shafts of the building. Ventilation, lighting and sprinklers

are located at the ceiling voids within the exhibition spaces. Building services are designed to meet the strict environmental conditions of gallery spaces, ensuring consistent relative humidity and temperature. The museum will be connected to district heating and cooling networks. High quality indoor gallery air is produced by a chiller. The chillers condensing heat is utilized in the drying process and hot water before it is cooled by district cooling. Supply air intake is located on the north façade, protected with an anti-snow grille. Air extract is located on the façade and roof to prevent mixing with intake air.

4.7 Essential fire safety solutions for the building complex;

Egress layout is studied to provide a safe escape to the outdoor areas, fire staircase and egress corridors are provided across the Central Pavilion building and the Second Eastern Wing. Egress is provided at the basement and the ground floor level also in the case of the southern pavilion. Smoke control system, Automatic sprinkler, fire alarm and mass notification systems design are part of the fire strategy in our project.



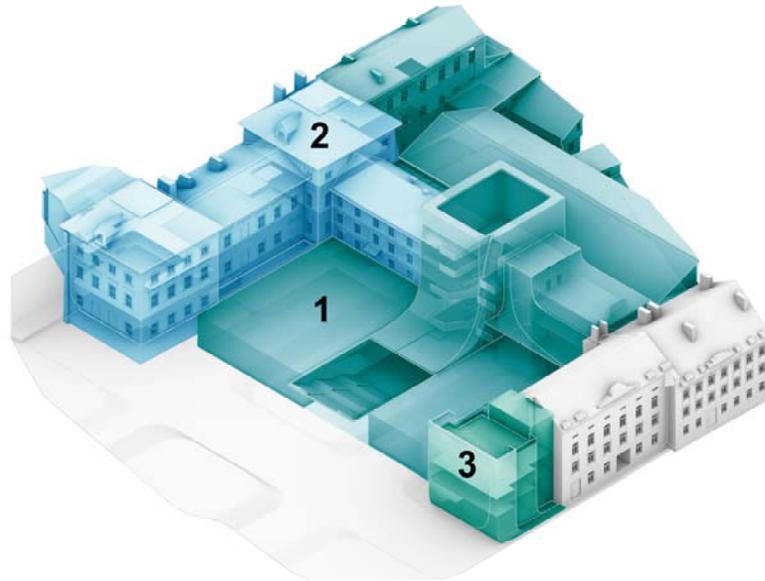
4.8 Compliance of the building complex with universal design principles;

The museum will be a sensory experience to all users, with projections played outside in the evenings and scented plants leading the visitor into the building. The advertising totems will have braille and audio. A secondary access is located at Level 0 direct from the square close to the allocated parking bays for disabled users, leading directly to the elevators. All levels are accessible by elevators, the enclosed access connecting the old with the new building will have a ramp in order to accommodate the change in level from the Central Pavilion to the North Pavilion. The renovated West Pavilion will include an elevator to access all levels and of all levels of the connecting North Pavilion. Audio guides will be provided for the exhibitions.

4.9 Phases of the construction;

The new Central Pavilion and Second Eastern Wing including the basement and Sunken Plaza, and the renovation of the staff buildings in the First House, Second House and the renovation of the Sports Hall would be considered as Construction Phase 1. The renovation of these buildings will be done at this stage in order for access to the construction site.

The renovation of the remaining existing buildings: the North and West Pavilions and connecting Northern Wing and First Eastern Wing would be completed as Construction Phase 2. Finally, Phase 3 would be the construction of the South Pavilion, completing the site.



5 General (building) indicators of the site (zone A only) and of the future and existing buildings.

GENERAL INDICATORS OF THE SITE				
		UNIT		
LMNA Extension	Site Existing			
	Plot area	8028	sqm	
	Footprint	50,69	Perc.	
	Greenery	19,18	Perc.	
	New Site			
	Plot area	8028	sqm	
	Construction intensity	0,86	Coef.	without 1B3p building
	Footprint	63,40	Perc.	
	Greenery	10,00	Perc.	
	Existing Building			
	Underground area	358	sqm	
	Above ground area	4419	sqm	
	Total area	4777	sqm	
	Levels	4		
	Roof altitude	23,46	m	130.09 m (to sea level)
	Volume underground	2250	Cub.m.	
	Volume above ground	32645	Cub.m.	
	New Building			
	Underground area	1930	sqm	
	Above ground area	2480	sqm	
	Total area	4410	sqm	
	Levels	3		
	Roof altitude	20,48	m	127.48 m (to sea level)
	Volume underground	12888	Cub.m.	
	Volume above ground	13530	Cub.m.	
	Common Buildings			
	Underground area	2288	sqm	
	Above ground area	6899	sqm	
Total area	9187	sqm		
Volume underground	15138	Cub.m.		
Volume above ground	46175	Cub.m.		

6 Heritage Notes

Combining the existing palace with new additional volumes into one museum complex are done according to these principles: Heritage buildings and their additional parts are adjusted (remodeled) to the use of the museum and public spaces, with minimal impact to the valuable features with opportunities to recreate more valuable historical features before the transformation of the palace, with help of restoration works based on detailed historical research. New connections are proposed in the areas which are proved by provided historical data, with minimal impact into heritage building, but ensuring functionality of the overall complex. For instance – we suggest to use back facade window as a connecting door from the North Pavilion to the Central Pavilion, using wall niches to recreate old connections. Such changes are done in non-publicly viewed parts of the palace – in between the palace, non-valuable existing buildings (Sport Riding Hall) and new construction. This is done in order to preserve valuable main facades, elements of decor and other valuable heritage features. Therefore between connecting slabs we maintain special partitions for displaying authentic and preserved surfaces. Part of the functional connections are designed from glass in order to display valuable facades as part of museum interior but not interfering with the autonomy of each historical part. The initial John Ulrich project for Jonas Radvila first eastern wing had two floors, in which two gates connecting palace front courtyard to the backyard of the palace were designed. Later those gates were walled up during renovation in the period between 1662 and 1737, under the Jeronim Radvila, creating windows in positions of those gates. Under the Dominykas Radvila in XIX c. the palace wing was renovated into the three storey building. These new spaces were highly decorated with wall paintings, therefore we refused to recreate the original two storey structure at this moment as more detailed discussion regarding the valuable features is required to answer these possibilities though research from facade point of view would allow it. In order to ensure smooth circulation of larger art pieces we suggest to recreate the southern gate, demolishing the slab of two rooms and restoring the original facade. All works are suggested based on the material provided in the brief of the competition with careful consideration towards valuable polychromic research. Some of the functional premises are designed underground, therefore additional archeological research is needed. All found valuable items can be preserved or displayed in the museum exhibition spaces.

