NATIONAL FLOWER

INTRODUCTION

Lignum Vitae or Wood of Life (Guaiacum Sanctum) Jamaica The flower



2018 - Jamaican elements and weather

A flower whose form evokes mountains, clouds, seashells is a sculpture itself. Forms inspired by nature. Forms of Jamaica - lignum vitae is the national flower. Rising proudly from the garden. Shells in the sunshine, they catch the breeze and provide natural cooling.

T he spatial planning is inspired by the ideal of transparency of the government functions to the public, as well as critical functionality and ceremonial formality.

All spaces radiate around a central lobby consistent to the philosophy of Jamaica's motto **Out of Many One People**. Different functions are arranged in independent pavilions surrounding the nucleus. The whole is made from diversity.

T he pavilions, all converging towards the centre, support sculptural and breeze harnessing roof shells above.

T he National Flower design team is honoured to be selected as a finalist and have developed the design to further detail, taking into account feedback from the jury and the client while remaining consistent to the fundamental design intentions of the first phase. This brochure text is an evolution of the first phase document and the key concepts ideas retained from the first phase are shown in italics.

AN ICON IN THE PARK



The second phase of the competition is an opportunity to reflect on the initial design and to see what other competitors have proposed, comparing our ideas with those of our eminent colleagues.

This period of reflection has convinced us that the National Flower design is the most appropriate solution. It is original and iconic, with a message about the heart of Jamaica. Like Reggae, the design is original and unique. The National Flower is an icon for what is unique about Jamaica. We remarked on the very significant recent event of the recognition of Reggae as a one of the world's unique cultures. This International recognition of true Jamaicanness reinforced our belief that the Parliament must be unique to the island in a similar way. The National flower design, as recognized in the jury report, is a 'flamboyant and iconic' symbol, 'deriving it's concept from nature'. Jamaica is indeed a garden of Eden in a moment of rebirth. The National Flower is a celebration of that rebirth.

It is an array of sails symbolizing the breezes. It is a mountain symbolising the hills It is a dome symbolizing of unity and transparency. It is a stage symbolizing music It is a Phoenix flame symbolising a rebirth and a positive future, It is asymbol of harmony with nature so important for our future. It is a heart of creative artistry It is Jamaica's Sydney Opera house, Jamaica's Capitol building, Jamaica's Louvre pyramid in a park. It would be built in Jamaica, by Jamaicans with Jamaican materials.

The National flower project is not only about a building but also a dialogue of a building in the park and the park with the community surrounding it. The Parliament building location in the park is a symbiosis. The building needs the park and the park needs the building. Like a flower needs the plant and the garden around it.

ADAPTATIONS

The developement of the design has responded to the issues summarised below:

The Jury report invited the design team to respond to the 'scale and viability' of the roof shell. Also, specifically, the Jury invited the National Flower team to respond to the following issues:

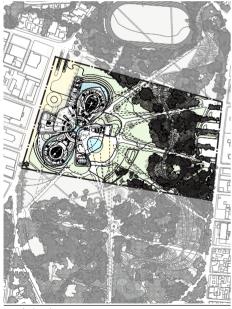
- 1. The form, scale and nature of the dramatic roof form
- 2. The interface between the roof form and the spaces below
- 3. Elaboration of the proposed landscaping strategy to the existing
- 4. The scale of the respective chambers
- 5. The nature and quality of the interior spaces

The team was also invited to present the project to the client, Including the Prime Minister, senior government and parliament officials and the UDC. During this intervention, valuable feedback and commentary was received and the following key points were made:

- 1. Respond to the desire for reverence in the design and the relationship to the park
- 2. Demonstrate programmatic functioning
- 3. Demonstrate adequate provision is made for security

EXTERIOR DESIGN - CONTEXT AND PARK PLANNING

PARK SCOPE:



The competition scope corresponding to the stated budget is limited to the central designated 11.4 Acres. However, as has been invited, the design presented has considered a full landscaping exercise for the entire park. The full landscape design involves a much greater planting area, as well as the addition of a full length water feature. It has not considered cutting the park with a distinct landscaping treatment for the 11.4 acres.

If budgets are not available for the complementary planting and water feature, the design would still be able to function, but the opportunity for the public and the community would not be realized.

Home for the parliament

POLEMIC OF PARLIAMENT IN THE PARK

The implantation of the building in the park is a polemical issue. Much has been written and spoken in the press against the idea.

The brief presents the Parliament in the Park as part of a larger vision for the development of other important government buildings around the park. Our team considers that integrating the parliament Building in the park as a sustainable development that will in fact bring a new revival and a purpose that is lacking today. Today the park is used for parking, dumping with parched grass. It needs a revival.

The park belongs to the immediate community around it as much as it belongs to the nation as a whole. The proposal is a fusion of these needs.

The proposed park designs revive it, bringing fundamental Jamaican character and activities:

- Wood and Water,
- Music,
- Athletics,
- *Art*.

The memory of our heroes deserve a revival of their resting place. Their place in the proposed garden will be enhanced to provide all future politicians and public with a fresh reminder of the context of Jamaica's political history.

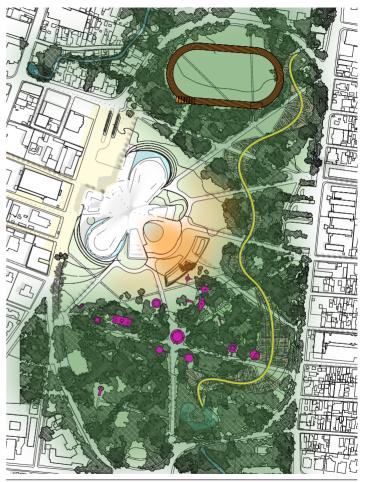
The building is part of the park. It does not take a bite out of it but enriches it by bringing a new venue. The park flows through the building that is an open shelter.

The basic concept of the building with the park has not changed in the Second phase competition development, however more attention is given to the following:

• The relationship of the building with the park has been reinforced according to a 'Centrality' concept developed below, to enhance its reverence.

• The planting has been developed to express an ecological corridor of biodiversity through the park.

• The interface with the urban west front has been developed with the creation of an Urban Plaza adjancent to the Heroes Circle.



Home for the parliament

HOME FOR THE PARLIAMENT

T he park is a natural home for the parliament. It is the mother of the building, like the island of Jamaica is the mother of its people and her culture. It nurtures the building and helps the people grow. It is the natural history. It symbolises the island itself. The park needs the trees and water that Jamaican landscape is about. To be a true expression of nature, these essential ingredients are a must. The other parks in Kingston notably have wonderful trees that provide shading for people and that attract other flora and fauna. Reviving the park will be bringing water and trees.

SITING

The building is located to the west, near the gate opposite Torrington road with the following benefits:

- The full north south axis of the park is retained.
- An urban address at a distinct location for approaching traffic from the most busy traffic routes.
- The east breeze crossing the site is best harnessed if the building is located to the west.

A erial photos allow us to track footpaths that have naturally been formed by the community as they pass through the park in their daily walks. These naturally formed pathways are evidence of how the community uses the park. This extensive network of pathways are paved and given complementary planting to recognise and formalise the ownership of the community.

WATER

COMMUNITY PATHWAYS

Historically we understand there was water flowing through the site, but that has been diverted. Today a well exists in the north west. We propose to harness this source and use it to bring water to the park. We propose a river of water feature with meandering flows from north to south. Each of Jamaica's rivers have a different character, From Dunns river agitation to Rio Grande calm The water flow ties the park together from north to south, according to the natural flow of the land.

On the river banks planting of a rich variety of Jamaican fruits and plants symbolizing this natural wealth of the island.

Paving of pathways and outdoor parking will be permeable to allow infiltration and regeneration of the aquifer.



Original pathway



Community pathway

CENTRALITY

Reverence–Superposition of national centrality with the Life of the park.

The parliament in the park needs to respond to the to the central role of the Parliament as a national monument that is the seat of the government of the nation as well as respecting the park and community context.

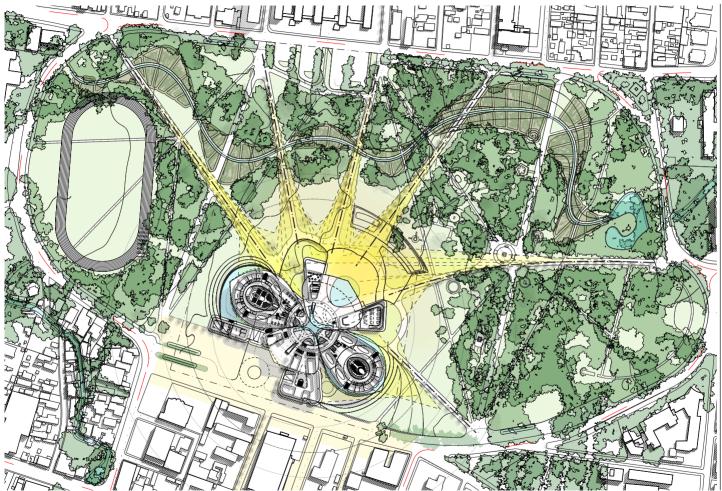
 ${
m W}$ e must find a balance between National presence and respecting the park.

Firstly, giving the building a street façade on the Heroes Circle to the west with a grand hardscape plaza as formal urban façade anchors it in the city.

Then the setting of the building in the landscape provides key perspective vantage points for a viewer on the ground. Radial pathways, emanating from the centre of the Parliament building cross the community pathways to major entry points that correspond to the surrounding ministries of Finance, Education, Culture and Labour. They provide formal axes that relate the Parliament to these important government institutions. Visual corridors provide perspective views along these axes for clear visibility of the Parliament. The axial paths merge and integrate with the community pathways.

Superimposing the centrality expression of the radial axis with the enriched landscaping and community life provides this balance.

 ${
m T}$ he superposition is in itself very symbolic, how government can co-exist with nature.



Home for the parliamen

URBAN FRONT

The western edge of the parliament project is an urban façade. The Parliament is set back from Heroes Circle to provide a pedestrianized plaza is formed that is both a noble public plaza as well as a functional security threshold. It can be closed for special events or functions within the Parliament with traffic diverted to circuit through Slipe road to ensure smooth flow.

 $T_{\rm he}$ plaza is in paving compatible to that of the other pedestrian routes in the park and traffic routes are identified with kerbs and bollards.

 ${
m B}$ us stops in front of the parliament provide a public access point to the park and building





ACTIVITIES

Bringing uses to the park will revive it, and the following are proposed for consideration in the full future park development:

• The Heroes monuments are already framed with small scale planting and lighting highlights. This strategy would be reinforced and the Community Pathways bring people to mingle with the monuments and communicate the link to Jamaica's political history.

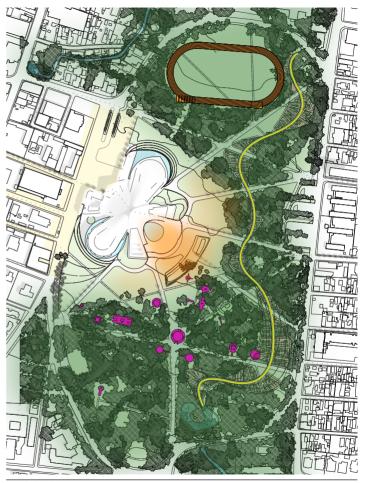
• An amphitheatre is realised with a subtle berm opposite the park entrance canopy of the Parliament building. It will frame the ceremonial functions. Large guango trees are intended to provide shading and background

• A water feature will bring calm and encourage reflection and connection with nature

• Cultivation parcels are proposed along the river presenting Jamaica's natural wealth and potentially providing a source for community participation

• A Running track in the north can be seen in the traces of past use of the park. It could be reinstated as a reminder and a tribute to Jamaica's other heroes of athletics

• Art installations of sculpture can punctuate the pathways at intersections such as to encourage artistic expression and appreciation of Jamaica's creative artists.



Home for the parliament

DESCRIPTION OF EXTERIOR DESIGN

- A: REQUALIFIED ENTRIES FROM THE PARK
- B: CIRCULATION AREA QUIETED
- C: PUBLIC PARKING WITH TREES
- D : PARLIAMENT
- E : The Heroes Monuments used for ceremonies
- F: Amphitheatre for national events
- G: WATER FEATURE
- H: Orchard for communities
- I : RUNNING TRACK
- J : Community Pathways
- K: ART INSTALLATIONS





PLANTING

Generally large indigenous Jamaican trees, to provide shade to the lawns. Visual perspectives will remain open for security. At the present time the following plant types are being considered. Use of native drought tolerant species reduces the irrigation requirements.

AROUND THE BUILDING (NATIVE/ENDEMIC/CULTURALLY SIGNIFICANT)

 Royal Palm (Roystonea regia), Blue Mahoe (Hibiscus elatus), Lignum Vitae (Guaicum officinale), Black Olive (Busidia buceras), Buttonwood (Conocarpus erectus), Jamaican Mahogany (Swietenia mahagoni), Bull Thatch Palm (Sabal jamaicensis), Silver Thatch Palm (Coccothrinax jamaicensis), Pimento (Pimenta dioica), West Indian Ebony (Brya ebenus), Coffee (Coffeea arabica), Cocoa (Theobroma cacao)

Around the park	• Cannonball (Couroupita guianensis), Frangipani (Plumeria spp.), Guango (Samanea saman), Jacaranda (Jacaranda mimosifolia), Quick Stick (Gliricidia sepium), Red Birch (Bursera simaruba), Silk Cotton (Ceiba pentandra), West Indian Cedar (Cedrela odorata), Scarlet Cordia (Cordia sebestena), Pouis (Tabebuia spp)
Fruit trees along the river	Ackee (Blighia sapida), Otaheite Apple (Engenia malaccensis), Avodaco Pear (Persea amencana), Starapple (Chrys- ophyllum cainito), Breadfruit (Artocarpus incisus), Guava (Psidium guajava), Mango (Mangifera indica), Tamarind (Tamarin- dus indica), Coconut (Cocos nucifera), Hog Plum (Spondias mombin)

INTERIOR PLANTS

• Ferns, Tree Ferns, Ti Plant (*Cordyline spp*), Philodendron spp, Bromeliad spp, Alpinia and Heliconia spp, Elephant Ear (*Alocasia spp*), Cocoa (*Colocasia spp*), Palms- Lady Palm, Parlour Palm, Bamboo Palm, Areca Palm, King Alexander Palm, Christmas Palm, Queen Palm



Royal Palm



Jamaican Mahogany



Guango



Buttonwood



Lignum Vitae



Pimento







Silver Thatch Palm



Otaheite Apple



Ti plant



Tamarind









DESCRIPTION OF EXTERIOR DESIGN

Parliament opening ceremony

During the opening ceremony, the Governor General will disembark at the southern concourse to proceed to the ceremonial entry Plaza along on a newly orientated route through the Heroes monuments flanked by the military guard of honour. Each political party will disembark at the eastern gateways and proceed along designated paths lined with the military guard of honour and the public to converge at the apex on the ceremonial entry Plaza. The processions can then follow directly through the central lobby into the chamber through the Park level ceremonial doors. These pathways are planted with Royal Palms to reinforce the importance of the moment.

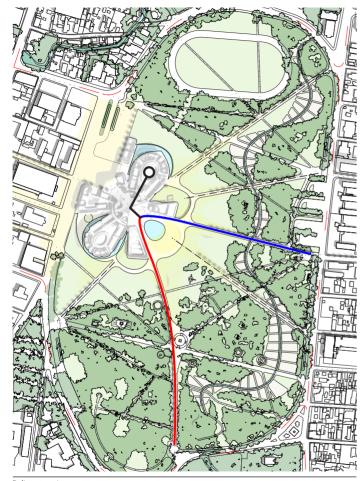
Traffic circulation & access

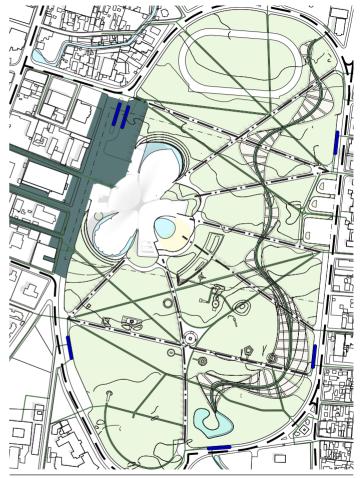
The peripheral National Heroes Circle is retained as a two way circuit, with access form all existing roads.

Bus laybys are around the periphery of the park on the Heroes Circle.

Vehicle access to secure parking for Parliament is concentrated at the West Plaza with checkpoints for security at the entrances to both parking areas beneath the House of representatives to the north and the senate to the south.

Open public parking has been removed from the south of the building because it would detract from the quality of the park environment. The biref has allowed to consider public parking off site and this aproach has been adopted. The team would study parking options in the subsequent project development if retained.





Bus and circulation

Parliament opening ceremony

The building needs to be a balance between the seemingly contradictory transparency of government to the people and security for all users. It must be a welcoming venue and a fortress at the same time.

 ${
m T}$ he strategy employed is one of visibility and security presence whilst remaining open.

The building is clearly visible around the entire perimeter with an open urban plaza to the west and an unobstructed grass band around it. The clear visibility allows security personnel to monitor all approaches at all times, whilst giving the building a clear monumentality. The main security facilities centre are located at the highly visible entrance.

A continuous but discreet security barrier around the building is comprised of sunken gardens, sunken walls, ponds and decorative railings.

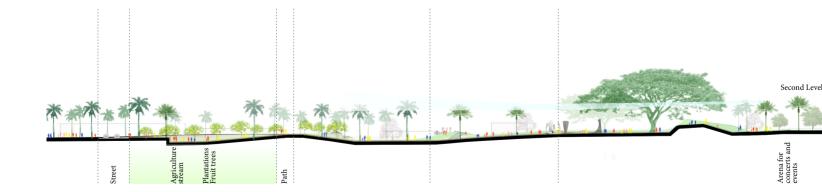
Controlled access through this barrier is provided at strategic entry points:

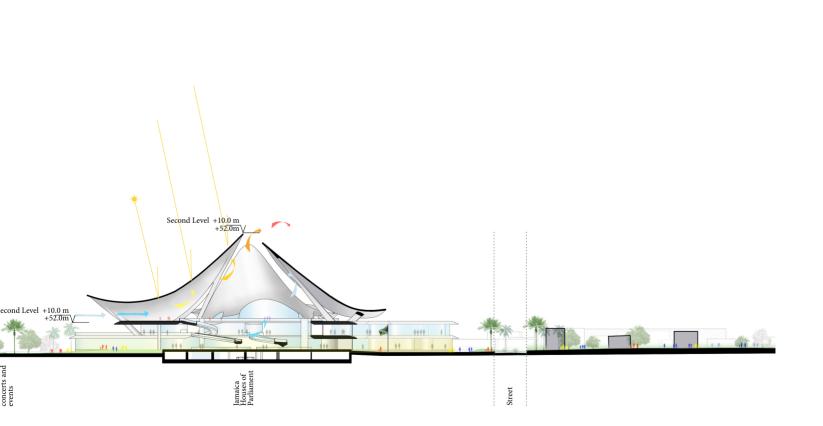
- One main entrance onto the west Heroes Circle plaza
- Two ramped entrances on the park façade either side of a pond
- Controlled vehicle entry into secure parking beneath the building with a foot traffic checks into the central lobby.

These security control points are the only entries throught the integral barrier. Emergency exit doors would be linked to alarms and surveillance.

Within this external and public barrier a second security barrier exists for Parliamentary users and staff. It is presumed a badge identity card will be provided for all users that will allow them access to the main entrances and lifts that are the control points for entry into this zone.









PROGRAMME

Component distribution & Functional connections

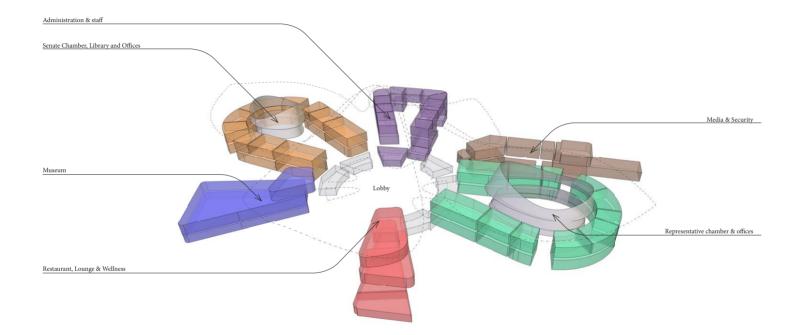
T he "Out of Many one People" centrality concept permeates the entire building and functioning. All facilities have close access to each other by radiating around the central lobby. The concept provides adaptability allowing evolution of the programmatic facilities in response to specific requirements that may arise in future development of the project with the client.

Basic requirements of comfort, daylight, spatial quality, fresh air and views of the park are provided for all offices and facilities with the radiating pavilions concept.

The circular Central Lobby includes all the necessary reception and security functions required to provide optimal operation of the building at both ground level and basement level. All functions, Public or Government, are accessible through the Central Lobby directly or indirectly under the control of police and security review. Vertical circulation to the Government level above is provided by lifts around the perimeter of the Lobby or by ramps and stairs.

The lobby is open air with a landscaped pond and a sculptural void to the sky above. It includes spiral ramps and stairs for users to experience the space as they enter the building.

Once at the gallery level, the public can exploit a belvedere overlooking the Park. The belvedere can also be exploited in reverse as a high level stage for events to express to public on the park plaza and amphitheatre lawn.



PARLIAMENT SUITES, OFFICES AND MEETING FACILITIES

The Representatives Chamber is surrounded by attendant Government and Opposition Suites on the upper level. A clear distinction is made between Government and Opposition facilities by arranging them either side of the central axis of the Chamber itself behind closed doors. Additional office space has been provided for eventual opposition 'shadow' ministers as a complement to the government minister's offices.

On the lower level the chamber is surrounded by key parliamentary function offices and suites, such as the Speaker, President and House Leader. All these functions are provided with full height facades with balconies behind sun screening louvers and breezeblocks. All offices can enjoy fresh air and a view of the park.

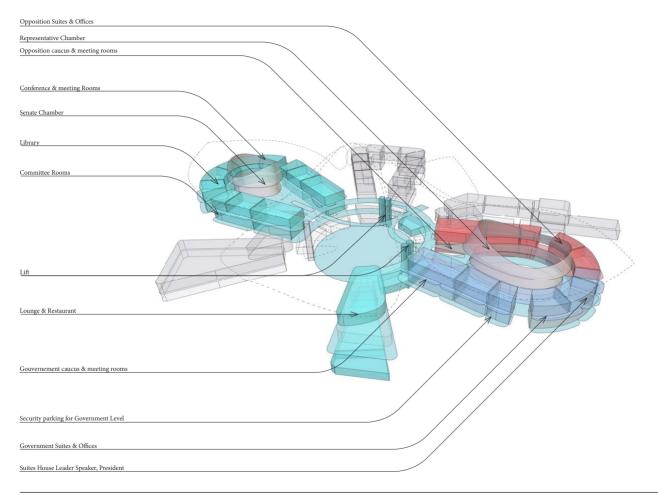
Similar facilities are provided for the senate leader, and additional spaces for government business offices complementary to those of the opposition have been provided if required.

Centralised offices for the Clerks have been provided on the lower park level adjacent to the house of representatives.

Restaurant and Lounge facilites for all members of parliament, either representatives or Senate, as well as VIPs or other guests are available adjacent to the House with park views in an independent pavilion.

The committee rooms surround the senate on the lower Park level. 4 large committee rooms are arranged around a central foyer adjacent to the senate itself. Access is provided from the main lobby directly from either level to a central committee room foyer.

T he library surround the Senate on the upper level. It has a continuous peripheral façade with views on the park and notably to the Heroes shrine to the south.



Government Member

PARLIAMENT CHAMBERS

The two Debating Chambers, the Senate and Representatives, are arranged opposite each other on either side of the Central Lobby. They are generally accessible from the government level but can be also accessed from the public Garden level in the case of ceremonial functions from the Central Lobby.

 $T\ensuremath{\text{he}}$ House of representatives chamber has been developed in the second phase. The chamber is larger, the gallery provisions have been developed and a daylight lighting feature ceiling has been added.

 $The \ Senate \ Chamber \ is a smaller but almost identical to the main \ Representatives \ chamber \ as regards form, access \ and \ gallery \ functions$

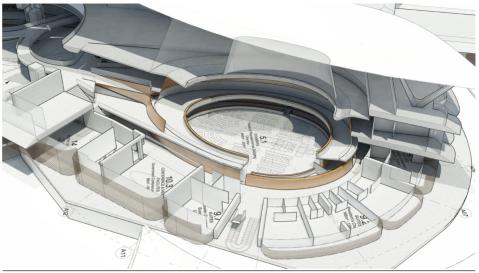
GALLERIES

The relationship of the Galleries with the Chamber floor itself takes into consideration that they are used by some people who need to have direct access to the floor and others that don't. One level of gallery is provided at chamber floor level and another at a mezzanine level.

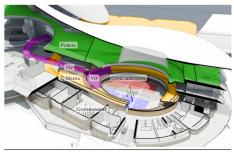
Chamber floor gallery provisions are for all people needing direct access to the representatives or vice versa, such as civil servants, assistants, hansard writers etc.

The mezzanine level accessible from the upper level for people who should remain a certain distance from the floor to witness the proceedings without participating. Media participation can be accomodated at the mezzanine level behind the president and speaker. VIP and invited guests may have a direct and independent gallery also on the mezzanine level.

F inally the public who should remain distant but still be able to appreciate the events are able to do so from the top Gallery level without ever entering the secure chamber level and upper Government level.



Parliament Chambers



Galleries

Staff & Administration Facilities

Generally all Staff and Administrative functions are located in a two storey independent pavilion forming a western urban façade of the building onto National Heroes Circle.

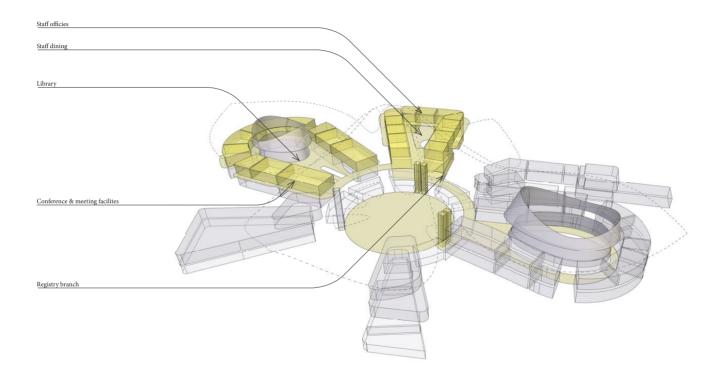
The facilities are accessible on two levels, either from Park or Government levels or from the basement parking and deliveries vehicle level below.

On the upper Government level, offices of hansard writers, legal advisors, ICT personnel, auditing, and general administration are provided.

On the lower Park level, a staff cafeteria is provided in a central court beneath a skylight. Adjacent kitchen, staff facilities and storage rooms with a goods lift to the loading bay below are provided.

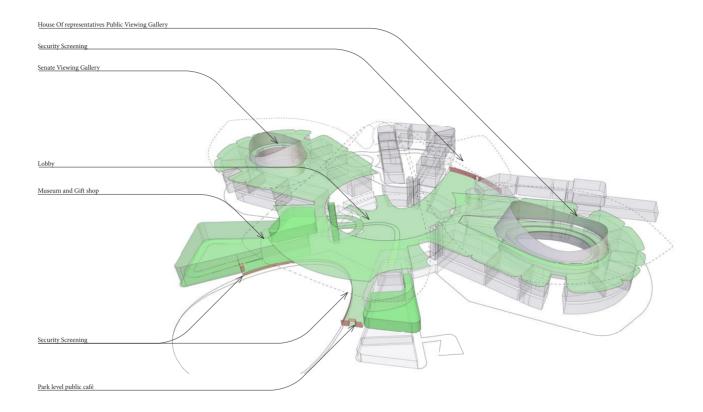
There are additional conference and meeting facilities which could be used by administrative personnel in the adjacent Senate pavilion on the upper Government level.

A basement registry branch is adjacent to the loading bay to facilitate access for deliveries.

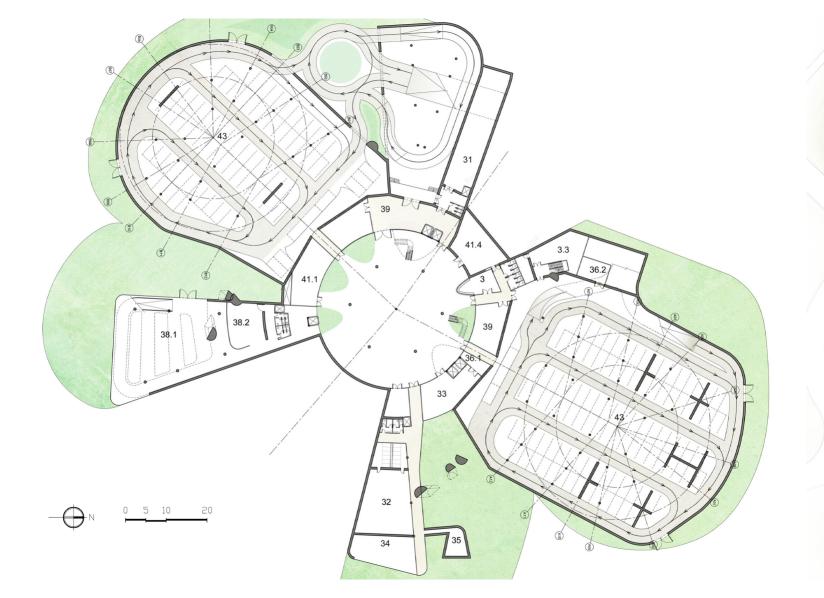


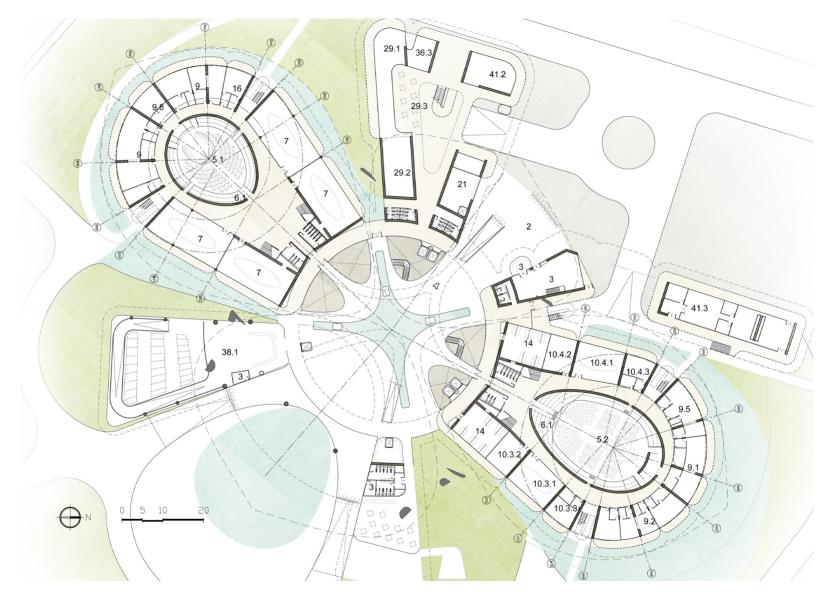
Public Access & Museum

The museum, projecting into the Park to the south east of the Central Lobby is an open and transparent pavilion, housing a small shop and with the possibility of a rooftop terrace for sculpture expansion or events. As such the Museum location contributes to the cultural dialogue between the Parliament Building and the country's political heroes. The gesture of the museum opening in the direction of the Heroes monuments enhances this gesture.

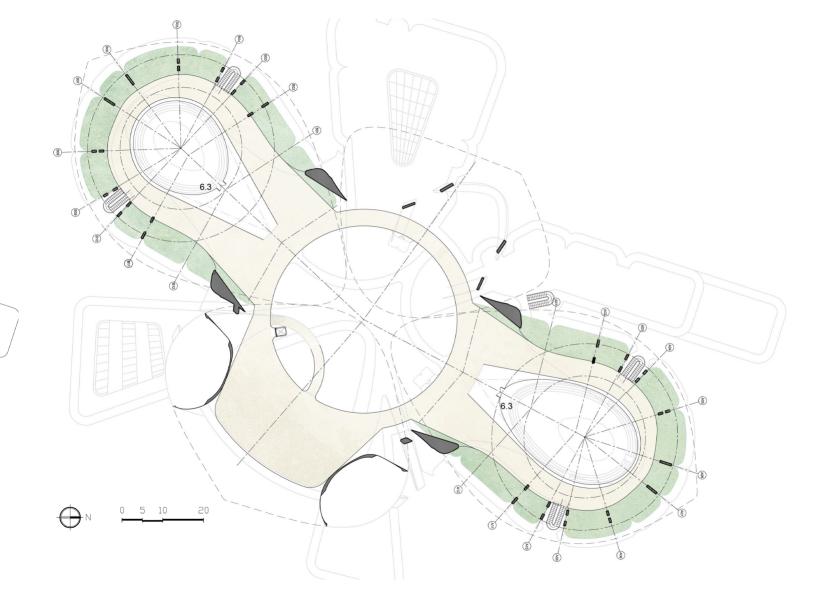


Public access & Museum









clr	Level	Nbr	TITLE	Project m ²
	-1	3	: SECURITY AND PROTOCOL	240
	-1	32	: WELLNESS CENTRE/GYMNASIUM	244
	-1	33	: SICK BAY/FIRST AID FACILITY	108
	-1	34	: AFTERCARE FACILITY	119
	-1	36,1	FACILITIES SPACE Facilities for Orderlies	18
	-1	36,2	FACILITIES SPACE Facilities for Drivers	36
	-1	39	: BUILDING SERVICES	373
	-1	41,1	: LODGE FACILITIES Janitors' Quarters	107
	-1	41,4	LODGE FACILITIES Panic/Strong Room	112
	-1	43	PARKING SECURED AREA Senators	175
	-1	31	: REGISTRY BRANCH	232
	-1	38,1	² PARLIAMENT MUSEUM Art Gallery	769
	-1	38,2	PARLIAMENT MUSEUM Souvenir/Gift Shop	91
	-1	35	: MEDITATION ROOM/CHAPEL	36

clr	Level	Nbr	TITLE	Project m ²
	0	1 :	PLAZA	
	0	2 :	CENTRAL LOBBY	412
	0	5,1 [:]	CHAMBERS Senate Debating Chamber	219
	0	5,2 [:]	CHAMBERS House of Representatives Debating Chamber	361
	0	6,1 [:]	GALLERIES - Lower Gallery	200
	0	9,1 [:]	SUITES Speaker's Chamber	139
	0	9,2 [:]	SUITES President's chamber	168
	0	9,5 [:]	SUITES House leader office	73
	0	9,8 [:]	SUITES Leader of opposition business (senate)	53
	0	10,3,1 [:]	CONFERENCE & MEETING FACILITES Government conference room (large)	98
	0	10,3,2 [:]	CONFERENCE & MEETING FACILITES Government conference room (small)	53
	0	10,4,1 [:]	CONFERENCE & MEETING FACILITES Opposition conference Room (large)	98
	0	10,4,3 [:]	CONFERENCE & MEETING FACILITES Opposition conference Room (small)	53
	0	14 [:]	CLERK OF THE HOUSES	208
	0	7 :	COMMITTEE ROOMS 4 *Accommodates 75 persons	708
	0	16 :	COMMITTEE DIVISION	51
	0	21 :	SECURITY & PROTOCOL BRANCH	83
	0	29,1 [:]	FOOD & BEVERAGE SERVICES BRANCH F&B Staff	100
	0	29,2 [:]	FOOD & BEVERAGE SERVICES BRANCH Kitchen	103
	0	29,3 [:]	FOOD & BEVERAGE SERVICES BRANCH Staff Dining	135
	0	36,3 [:]	FACILITIES SPACE Janitorial & Kitchen Staff	45
	0	41,2 [:]	LODGE FACILITIES Security Personnel Quarters	90
	0	42,2	AMENITIES Helipad	90
	0	41,3 [:]	LODGE FACILITIES Barracks outside	257

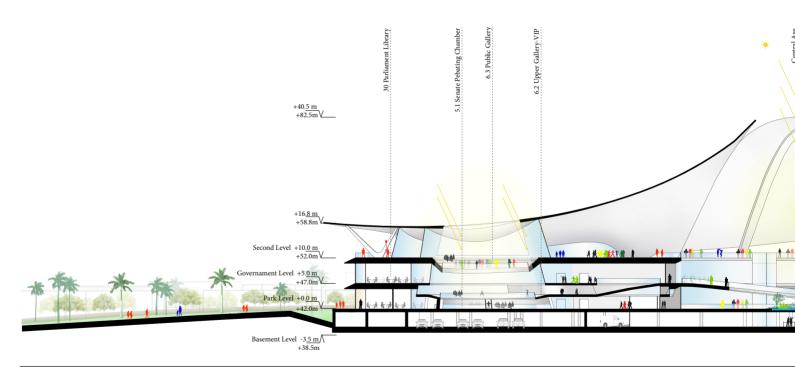
FACILITIES SPACE Janitorial & Kitchen Staff	45	27
LODGE FACILITIES Security Personnel Quarters	90	90
AMENITIES Helipad	90	90
LODGE FACILITIES Barracks outside	257	225

clr	Level	Nbr	TITLE	Project m ²
	1	42,1	AMENITIES Café/Coffee Shop	242
	1	9,3	SUITES Prime minister's office	139
	1	9,4	SUITES Opposition Leader's office	88
	1	9,6	SUITES Leader oppostion business house	53
	1	9,7	SUITES Leader govt business office	53
	1	10,1	CONFERENCE & MEETING FACILITES gouvernment caucus room	156
	1	10,2	CONFERENCE & MEETING FACILITES opposition caucus room	88
	1	10,3,2	CONFERENCE & MEETING FACILITES Government conferences room (medium)	80
	1	10,4,2	CONFERENCE & MEETING FACILITES Government conferences room (medium)	80
	1	13,1	OFFICE Minister of government	75
	1	13,2	OFFICE Governement Members	98
	1	13,3	OFFICE Opposition Menbers	98
	1	4	: MEMBERS LOBBY	150
	1	6,2	GALLERIES -Upper Gallery	200
	1	8,1	MEDIA FACILITY Press / reporters Area	155
	1	8,2	MEDIA FACILITY Press conference room	102
	1	8,3	MEDIA FACILITY Broadcasting studio (PBS / JIS)	40
	1	8,4	MEDIA FACILITY Parliament Printing Facility	129
	1	11	DINING / BANQUET FACILITY menbers' Dining Hall	261
	1	12	: LOUNGE BAR AREA lounge for menber and guest	120
	1	15	: LEGAL SERVICES BRANCH	70
	1	17	: PUBLIC RELATIONS & CORPORATE COMMUNICATIONS BRANCH	51
	1	18	: HANSARD WRITING UNIT	69
	1	19	: HANSARD EDITING DIVISION	91
	1	20	: INTERNAL AUDIT BRANCH	48
	1	22	: CORPORATE SERVICES DIVISION	55
	1	23	EINANCE & ACCOUNTS BRANCH	155
	1	24	: HUMAN RESOURCE MANAGEMENT & DEVELOPMENT BRANCH	62
	1		: ICT BRANCH	50
	1		: INFORMATION TECHNOLOGY BRANCH	18
	1		: FACILITIES & OFFICE MANAGEMENT BRANCH	51
	1		: CONFERENCE/MEETING ROOMS Large Room	184
	1		: CONFERENCE/MEETING ROOMS Large Room	95
	1		: CONFERENCE/MEETING ROOMS small Room	93 60
	1		: PARLIAMENT LIBRARY	
				711
	1	37	: REFERENCE AREA	87

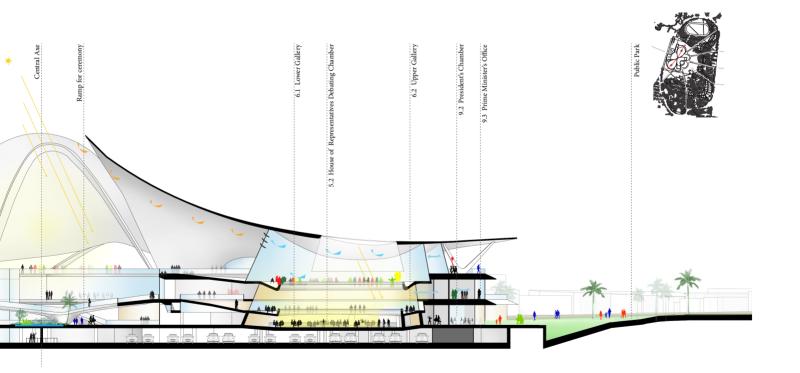
clr	Level	Nbr	TITLE	m2
	2	6,3	GALLERIES - 2 x Public Gallery	396

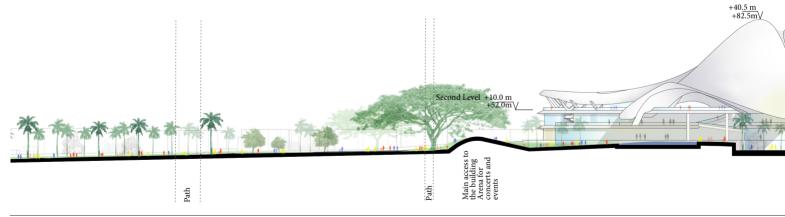
cir Level Nbr

TITLE	Project m ²	Br
AMENITIES Café/Coffee Shop	242	203
SUITES Prime minister's office	139	91
SUITES Opposition Leader's office	88	91
SUITES Leader oppostion business house	53	57
SLITTES Leader gout husiness office	53	57

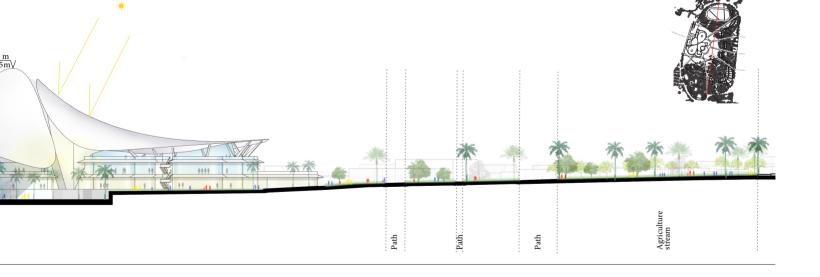


Longitudinal Section





Longitudinal Section of the Park



DESCRIPTION OF OTHER KEY ARCHITECTURAL ELEMENTS

Structure

&

Geometry of the Shell

The shells are iconic forms that give the building its unique form. Though they are complex and their appeal lies in that complexity of form in light. They are also conventional structural systems that have been tried and tested in recent times. They are modern and innovative. Jamaica's Wilson Chong has designed several structures of this type on the island.

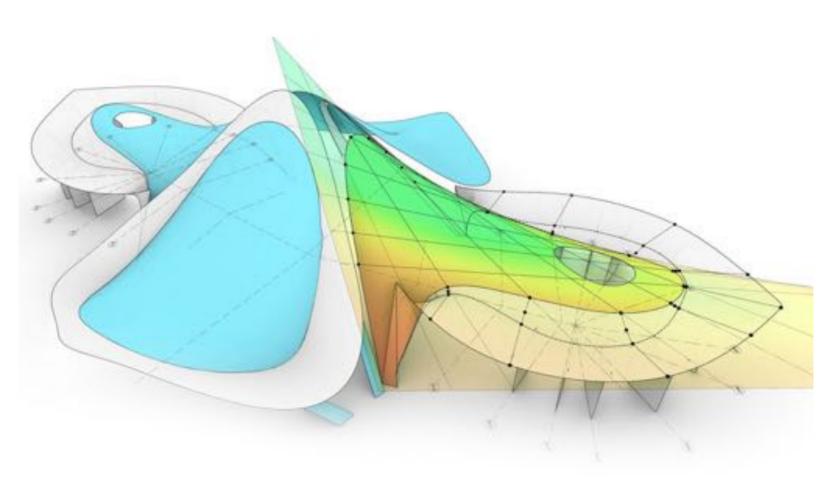
Most importantly, they are constructible in Jamaica with Jamaican resources and therefore, are an appropriate choice for the Island's economy.

The shells do require complex engineering. Indeed the National flower design is about a cultural fusion and exchange with international high technology knowhow in Jamaica. The National Flower team has broad experience in complex engineering design throughout the world. Other complementary specialist design resources have been taken into account in the design fee proposals to provide the necessary consulting services for the shell design.

The flower petals are Structural shells in cast concrete in optimal hyperbolic paraboloid funicular shapes.

The shell surfaces are 'ruled surfaces', i.e. created by sweeping straight lines in space. The ruled surface is a clear and classic form that is simply definable and controllable given that it is constructed from straight lines. The perimeter edge curves generate the form and controlling the edge curve, control the surface.

a



Structure concept

Shells

They are reminiscent of engineer Felix Candela's dramatic shells, they are efficient forms whose geometry ensures their stability. The double curved surface, though generated by straight lines, is inherently structurally stable.

The shell is a thin surface of reinforced concrete that is largely tensile between stiff edge beams. In some of Candela's shells, the concrete is a thin as 4cm for 10's of meter spans. The shells can therefore be lightweight, though built in concrete. They can be stiffened and reinforced simply by adding thickness or adapting the shapes to increase curvature.

Supports

As requested in the Jury comments, the supports critical to the shell structure have been defined.

In order to preserve the visual purity of the shells as they approach each other in the centre, each one is independent. As such they are structurally simpler, but require additional gravity support for the central cantilevering tips. The internal edges have been reinforced with inclined parabolic arches that provide direct gravity support as well as edge stiffness down to the ground.

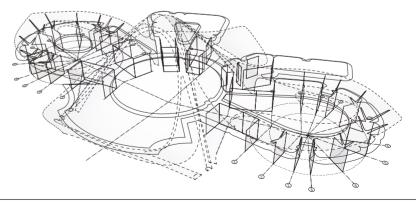
Perimeter supports to the flared out edges above the House and Senate chambers are provided by radiating wall planes with triangulated branch supports carrying the shells. Together the inclined parabolic arches and the radiating supports provide stiff anchorage for the tensile shell surface that is swept between them to provide the hyperparabolic surface required.

T he 'feet' of the parabolic arches find their way to the ground in the gaps between the pavilions. They become dramatic design features, in these voids and, in the case of the Museum, can engage with the space providing visual interest.

Clearly readable structural performance provides visual harmony.



Felix Candela - IVAM Institut Valencià d'Art Modern



Analysis

SEISMIC CONDITIONS

Preliminary modelling of the typical Chamber shell has been carried out to demonstrate the basic structural stability of the independent shell and support conditions. The shell thickness has been assumed at 12cm with peripheral reinforcement to 16cm.

Jamaica is classified as a sensitive seismic zone. Structures of high mass are sensitive to seismic loading. The relatively compact form of the shells and the fact the tall portions are the thinnest means they are appropriate for seisme conditions. Base isolation systems at the interfaces with the foundations will provide an intelligent way of protecting the shells from seismic forces.

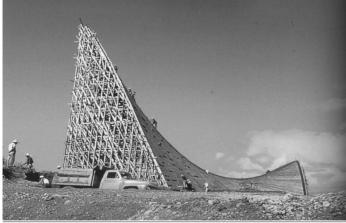
CONSTRUCTION

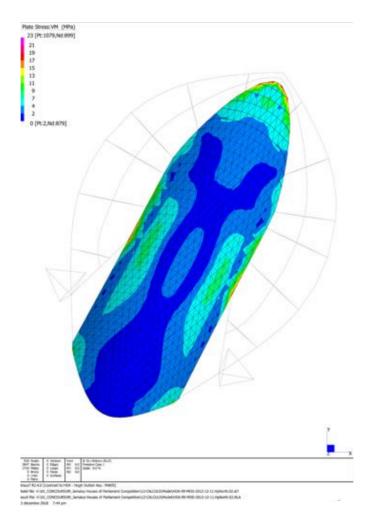
Kingston has a concrete factory and the concrete construction is a known and traditional technique on the island. The materials are durable and resistant to hurricanes and the test of time.

T he forms can be built on a traditional scaffolding using timber formwork. Shuttering formwork can be defined simply from the ruled surface shapes with planks. The plank shapes are visible on the interior surface and provide a subtle surface texture that reflects the construction process.



vaci k), 4.4 (Januari Indon - Naji Astar Asi, 1985) Joh Tev VIII, CONCORRIJ Januari Nova of Instantel Cargotter (J. Cir, Cit, Sylvady Karilli, 40-40, 2014; -2-1, splite B. S. F. J. Manufari, 2018 - 1, 25 pr





elix Candela - Chapel of Lomas de Caernavaca

FACADES

The facades are designed for security and solar exposure as well as optimal visual transparency.

All internal volumes may have full height glazing to provide optimal transparency and daylight. All air conditioned spaces can be double glazed with high performance solar energy performance treatments to optimise energy consumption and comfort.

Circulation spaces, notably around the central Lobby are full height glazed.

All glazed surfaces can be in a safety laminate to provide resistance to hurricane winds and safety against falling. Laminated glass provides protection against intrusion.

Generally all floors have generous cantilever projections that provide solar protections and also deter an intruder from climbing the façade to an upper floor.

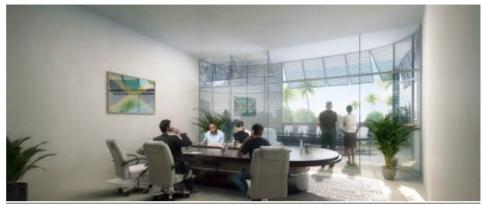
Lower Park level external facades are additionally protected by a ceramic "breezeblock" type protection around external balcony projections. The block sections, made from extruded ceramic forms, are optimised to protect from solar exposure. The occupants of the space inside will have views of the surrounding park through the voids in the blocks. The ceramic blocks provide a robust protection from infraction.

Upper Government level external facades are also additionally protected with openable jalousie louvers to attenuate solar exposure and provide visual privacy to these important spaces.

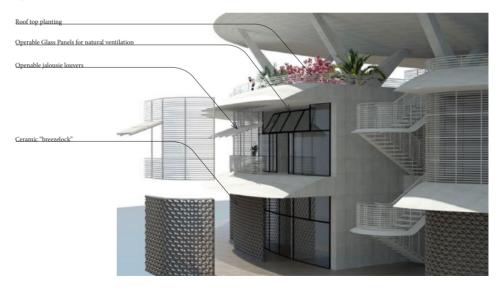


F.Escobedo - La Tallera Siqueiros

Devon House, Kingstone



Typical Office

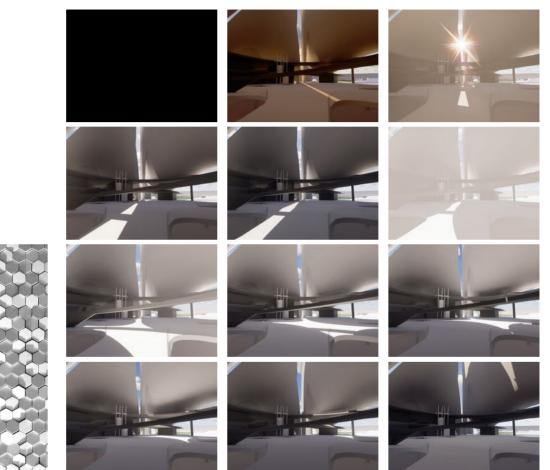


Day Light

The play of the shells in light is an important design feature. Light is encouraged to bounce and reflect from the shell surfaces so they provide a shimmering reflection of the ponds and water features surrounding the building on the internal surfaces.

The design team has consulted Spiers and Major, an internationally experienced lighting consultant for advice on the lighting performance.

 $T\,he$ internal surfaces of the shells, notably at the summits, can be complemented with ceramic incrustations that 'sparkle' and reflect light, so the internal surfaces are a spectacle of natural light that is so rich and generous in Jamaica





Day light studies

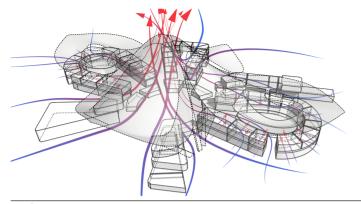
Ceramic tiles

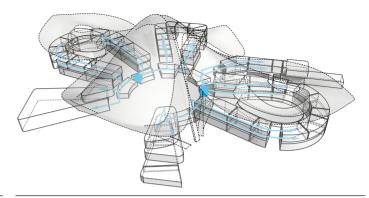
HVAC-Energy efficiency

One of the biggest consumers of energy is air conditioning. Reducing the requirement for cooling is the key intent of the proposal. Generous roof shells cover the programme pavilions protecting them from the sun. They are oriented to capture the prevailing east-south-east breezes. This air mouvement beneath the shells is further accelerated verticaly by a solar chimney stack effect. The resulting vertical flow is intended to encourage breezes to enter each of the pavilions around their perimeters and be ventilated naturally when the climate conditions permit.

Cooling workspaces is a necessity to improve working environment and productivity. Spaces are naturally cooled with breeze flow as was the traditional approach in Jamaica before the invention of air conditioning. To optimise energy consumption, cooling is provided only as a complement to the natural cooing

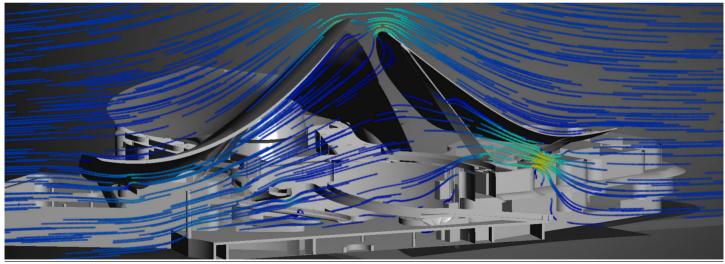
White surfaces of the shells reflect heat energy reducing the amount of solar heat absorbed.





Breeze flow

Cooling



Wind effect study

GREEN ENERGY SOURCES

A lready the concept of harnessing breezes for natural cooling is a green energy source in that it is reducing considerably the consumption required;

Ground water may be used for assisting in cooling

P hotovoltaic coverings beneath a white screen as discussed in the first phase to the roof shells is still a viable additional option for green energy source.



a few key facts

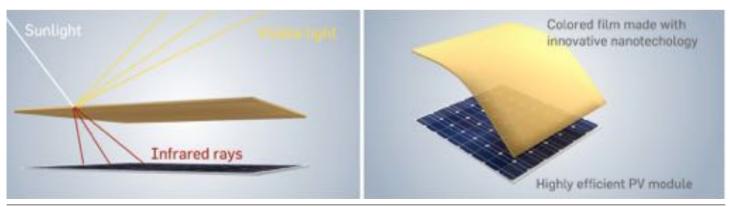
white PV façade power output

Conventional passive façade elements made of plaster, aluminium, marble or other materials can finally be replaced by active PV building elements.

The typical power output of a PV module with our most vivid white film is around 100 Wp/m². Higher powers are obtained with darker tones, since brighter appearances require more visible light to be reflected. Any colour can be developed to match the project design. Typical PV module electrical performance output using our films:

Black	Light grey	Standard white	Vivid white	
170 Wp/r	n² 121 Wp/m	2 117 Wp/m ²	106 Wp/m ²	

Values obtained with 156 x 156 mm² mono-orystalline PERC c-SI cells under STC.



PV facade performance

Sustainable materials and considerations

In general the building is conceived in materials that are available locally. This is not only sustainable from an energy point of view but is also economically sustainable.

- Concrete shells are sustainable because of local sourcing. Their thermal mass is exploited for the heat
- Paving in local limestone
- Timber interior finishes
- Ceramic breezeblocks

Water management is an important part of the sustainable design intents of the proposal. Rainwater will be collected from the roof and exploited for use where appropriate within the building, such as toilets and irrigation of internal plants.







Concrete

Paving in local limestone







Ceramic breezeblocks

PINCON

Mahogony

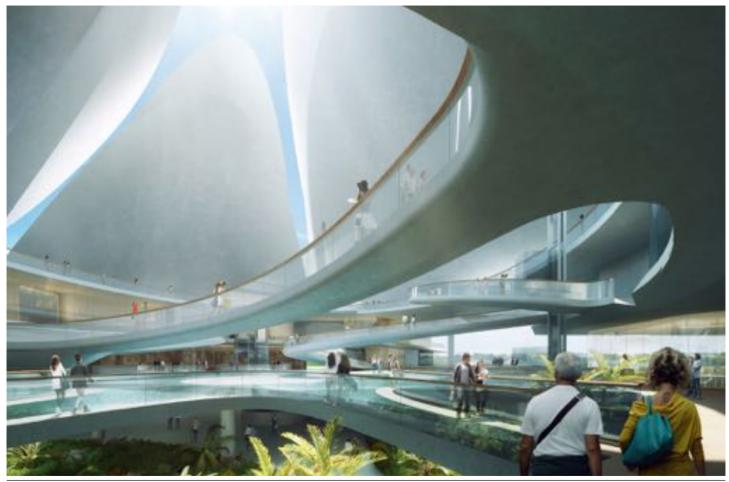




Urban entrance Torrington road



Representatives chamber



Central Lobby







DESIGN TEAM

As the second phase is no longer anonymous, we take the opportunity to present the team members.

The team was formed with the intent of a cultural exchange between Jamaica and Paris. The National Flower design team is an Jamaican group of design professionals, artists and students in architecture committed to Jamaica. All with Jamaican connections and all sharing the national ambition of a new and modern future for the island.

Stephen Facey, team leader invited architect **Hugh Dutton** with whom he grew up in Jamaica in the 60's and 70's, to collaborate as design leader for the Parliament competition together with artist sister Laura Facey. Hugh who currently has a specialist design studio in Paris, with worldwide experience in iconic climate responsive designs and structures, still considers Jamaica home.

Hugh is committed to bringing his work back to the island, creating a cultural exchange between Paris and Jamaica. Sharing what he has learned with young Jamaicans and to training tomorrow's architects, Hugh quotes his mentor: Sydney Opera House engineer Peter Rice, "*We have a duty to pass our experience on to the young*".

Patricia Elaine Green, architect specializing in heritage and urbanism, is a teaching professional at the Caribbean School of Architecture. In April 2018, Patricia conducted a workshop for the students of the Jamaican Master of Architecture First Year graduate design with Hugh's studio in Paris. This experience inspired Hugh and Stephen to invite Patricia and some of her students to join the team for the competition.

Jenna Blackwood, landscape architect, also a teaching professional from the Caribbean School of Architecture, completes the team with her extensive professional experience providing the essential landscape design support for the insertion of the Parliament building in the National Heroes Park.

This international team developed the national flower design with inspiration and creativity responding to the challenging brief of creating an iconic symbol for the government of a new Jamaica in the downtown greenspace.



Consultants:

- ٠
- Landscape: Modeling & design : Structure : ٠
- .
- Sustainability : ٠
- Cost : ٠

- Kateryn Gustavfson Gaëtan Kohler Arup London Arup Landon
- Richard Pouchet / Michel Mc Morris.

Stephen B. Facey, Architect - Team leader	panjam.com		
Laura Facey, Artist,	laurafacey.com		
Hugh Dutton, Architect - Lead designer	hda-paris.com		
Yingjie Yu, Architect			
Gaëtan Kohler, Architect	gaetankohler.com		
Azhar Khan, Architect	azharkportfolio.com		
Jean Huet	-		
Patricia Elaine Green, Architect	patricaegreenarchiects.com		
Jayce Richardson, Architecture student	-		
Kelli-Rae K Ashley, Architecture student	-		
Leslie Gordon, Architecture student	-		
Hanif James, Architecture student	-		
Kenrick Basch, Architecture student	-		
Jenna Blackwood, Landscape architect	Linkedin.com/in/jenna-blackwood-67467218		