



St Petersburg Pier

AZPML

ARUP

Charles H. Benson
& Associates

ARQUITECTURA
AGRONOMIA

Design Approach

St. Petersburg Pier Redevelopment: A Maritime Interface for Flexible Public Infrastructure

Our approach to the redevelopment of St. Petersburg Pier is to recycle the existing infrastructure as much as possible rather than perpetuating the wasteful cycle of demolition and construction which has characterized the history of this pier. At an age when we are aware that construction activities are one of the main causes for carbon emissions and energy consumption, it is important that our intervention in the pier is conscious of issues that were not pressing at the time when the last Pier building was built.

The current landmark Pier is the seventh in a succession of waterfront piers. The Pier's lineage dates back to 1889, when the Orange Belt Railway built the Railroad Pier on Tampa Bay as a sightseeing and recreational destination. The Railroad Pier was succeeded in 1906 by the Electric Pier, which generated buzz with its dramatic night lighting.

It was opened in 1973 –coincident with the first oil crisis- and is in a state of disrepair. The functions that once inhabited the building have now vacated the building.

Leaving aside the architectural merits of “inverted pyramid”, the existing Pier designed by William B. Harvard, which we believe are not few because the inverted pyramid shape is in some ways an environmentally effective form, which protects the building's façade from solar radiation, enabling a decrease of cooling loads in the building. The inverted pyramid shape is also effective at producing and enlarged rooftop zone, which becomes an important asset when considering a building in this location.

We are not proposing here a strict maintenance of the finishes and the material textures of the old building, but on the contrary, a careful study of the possibilities to recycle the new structure for the new uses, and a potential resurfacing, and perhaps growth of the existing structure to accommodate new functions. Likewise, we do not want to make re-programming proposals here, which will require a much more careful analysis, but we believe that the uses of the new pier should not be “destination” programs, like the aquarium, but on the contrary, the Pier should become a true maritime interface for the city of St Petersburg, open to a multitude of functions that can be temporarily attached to the pier. The functions in the Pier should be rather related to side programs, such as retail, restaurants, tourist infrastructure for tours and sports, perhaps a small information or interpretation center for St. Petersburg and the Tampa Bay. Cycling and jogging paths, fishing platforms and boardwalks will be part of this flexible infrastructure for the city.

Using floating platforms, and with minor revisions of the existing pier structure, we believe that it will be possible to use the pier as the backbone of a sort of “instant city”, and infrastructure that would enable St. Petersburg to install almost any type of destination function on a rotating rather than on a permanent basis. The pier could become the mooring point of “instant hotels”, the anchoring structure for a floating stage for public concerts, or for platforms to witness fireworks. It could become a constantly changing cultural infrastructure for the city of St. Petersburg.

We have envisioned two phases in the redevelopment of the pier, which can be done sequentially.

-The inverted pyramid will be recycled –as opposed to preserved- in a structure that will concentrate a substantial amount of the enclosed space in the new pier, dedicated to support functions such as retail, restaurants, information and viewing platform. The refurbishment of the building may entail a certain amount of growth of the building surface, possibly upwards. The extension and recladding of the pier can be done with timber materials, to reduce embedded energy in the construction process.

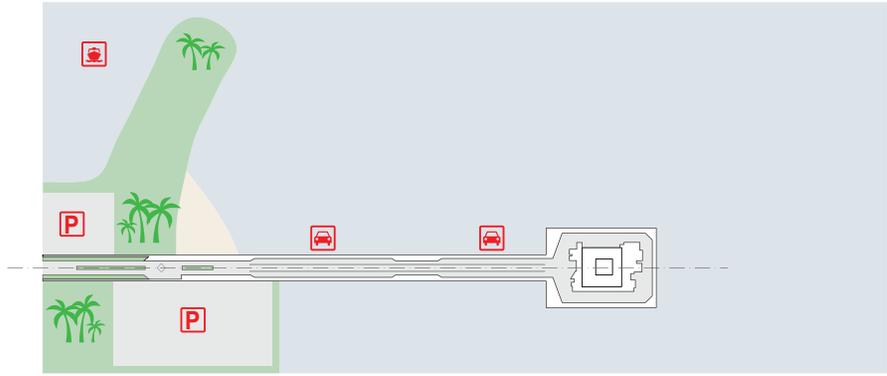
-The parking on the pier's stem will be removed and replaced by an electric shuttle running along the pier for ease of access to the pierhead.

-Mooring points for floating platforms, ships can be installed along the pier to connect to these type of temporary attachments to the pier. A management structure for the ensuing “temporary cultural city” can be established by the city with public participation, so the program for the pier can be established in consultation with the citizens. Resurfacing and landscaping of the pier, to provide natural shading and a more appropriate microclimate should be considered. Alternatively we suggest the installation of a canopy to protect from solar exposure to people walking along the pier. Again, we suggest to use timber and vegetation as the main materials for the furnishing of the existing pier.

-On a second phase, two new docks, flanking the pier's stem can be added to reinforce the pier's strength, and allow for heavier moorings, which could also imply some dredging of the waterbed. The additional docks will add a substantial amount of retail opportunities, which will turn the pier into a mayor shopping and entertainment destination in Pittsburgh. It is important the edges of the piers will always be preserved as public spaces for walking, cycling, fishing and bird watching. The roofs of these new constructions will always remain accessible for the public, as viewing platforms, and as linkage to new floating platforms/instant infrastructure.

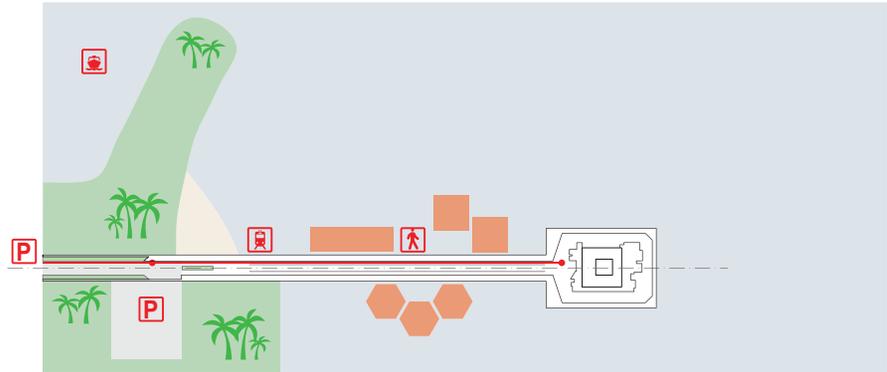
EXISTING

-  PEDESTRIAN CONNECTION TOO WEAK
-  NO PUBLIC TRANSPORT
-  PARKING ALONG THE STEM OF THE PIER



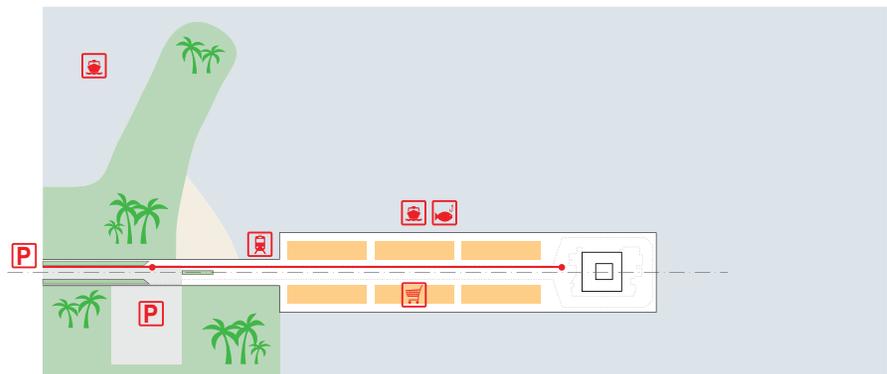
FIRST PHASE

-  ENLARGEMENT OF PEDESTRIAN PATH
-  BICYCLE LANE
-  FLOATING EXTENSIONS. INSTANT CITY
-  ELECTRIC SHUTTLE (TRAM) →
-  PERIFERIC PARKING + SHUTTLE



SECOND PHASE

-  ENLARGEMENT OF PIER
-  RETAIL AREA
-  FISHING AND LEISURE ACTIVITIES
-  SHIPS DOCKING ALONG THE PIER



For the purpose of this project, we have assembled an ideal team, with track record in similar projects worldwide, and years of collaboration experience. Alejandro Zaera-Polo, the founding partner and director of AZPML was the designer of the groundbreaking Yokohama International Port Terminal, the Barcelona Park and Auditoriums and the Santander Bay redevelopment with the new facilities for the World Sailing Championship. AZPML is currently involved in the recycling of existing infrastructure for cultural purposes, most notably in the new facilities for the Locarno Film Festival. He is currently based in the US, as the Dean of Princeton School of Architecture.

AZPML has a long relationship with Ove Arup and Partners, a multidisciplinary engineering company with global presence and long experience in waterfront construction, and with Teresa Gali, an international Landscape Architect who is now based also in the US in her capacity of Chair of Landscape Design in Virginia School of Architecture. Beyond their collaborations with AZPML, Ove Arup and Partners have extensive experience in coastal engineering, and are the engineering team of the Perez Art Museum in Miami, designed by Herzog & De Meuron, ICA Boston, from Diller Scofidio, the Hudson River Park and the East River Waterfront Esplanade. Teresa Gali collaborated with FOA, the former company from Alejandro Zaera-Polo, in the Barcelona waterfront Park and Auditoriums, and has been involved in large scale landscaping of transport infrastructure such as the Logrono High Speed train Station.

For this project we have teamed up with local Architect of Record Charles H. Benson, based in Miami, who will ensure an immaculate delivery of the project. Charles Benson has acted in this capacity for a number of important projects done in collaboration with international designers like Herzog & De Meuron and Roberto Cavalli.

We sincerely hope to be able to be given the chance to work on this fantastic opportunity.





Standard Form 330

ARCHITECT – ENGINEER QUALIFICATIONS

PART I – CONTRACT-SPECIFIC QUALIFICATIONS

A. CONTRACT INFORMATION

1. TITLE AND LOCATION *(City and State)*

St. Petersburg Pier

2. PUBLIC NOTICE DATE

August 11, 2014

3. SOLICITATION OR PROJECT NUMBER

N/A

B. ARCHITECT – ENGINEER POINT OF CONTACT

4. NAME AND TITLE

Alejandro Zaera-Polo, Partner

5. NAME OF FIRM

AZPML

6. TELEPHONE NUMBER

+4402070336480

7. FAX NUMBER

N/A

8. EMAIL ADDRESS

lon@azpml.com

C. PROPOSED TEAM

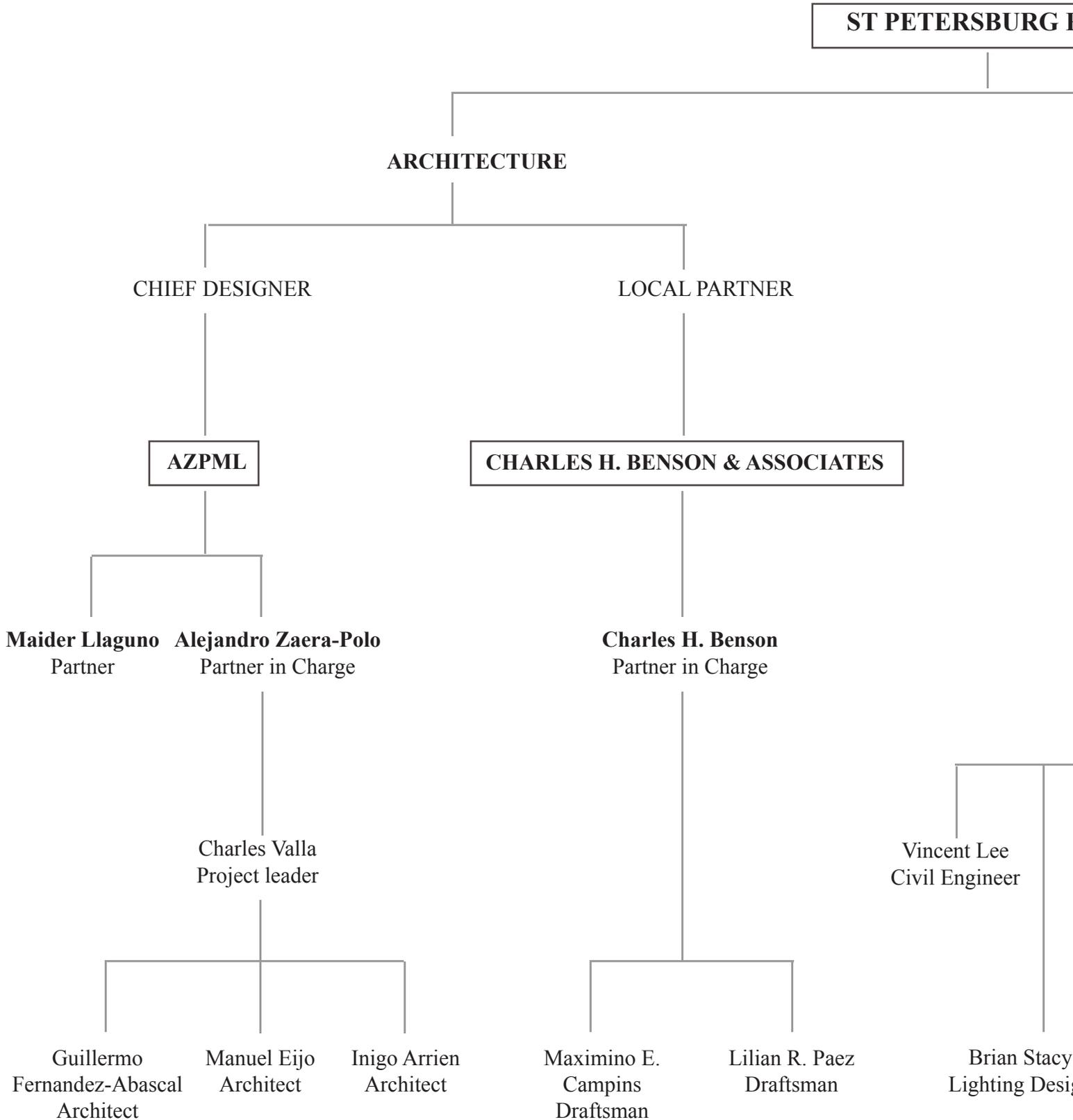
(Complete this section for the prime contractor and all key subcontractors)

	CHECK ITEMS			9. FIRM NAME	10. ADDRESS	11. ROLE IN THIS CONTRACT
	PRIME	J-V PARTNER	SUB CONTRACTOR			
a.	X			AZPML <input type="checkbox"/> CHECK IF BRANCH OFFICE	55 Curtain Road London EC2A 3PT UK	Lead Designer
b.			X	Arup USA, Inc. <input type="checkbox"/> CHECK IF BRANCH OFFICE	77 Water Street, NY, NY 10005 USA	SMEP engineering
c.			X	Charles H. Benson & Associates, Architects, P.A. <input type="checkbox"/> CHECK IF BRANCH OFFICE	1665 Washington Avenue, 2nd Floor Miami Beach, FL 33139 USA	Architect of Record
d.			X	Arquitectura Agronomia <input type="checkbox"/> CHECK IF BRANCH OFFICE	18 bxs Clos de Sant Francesc Barcelona, 08034 Spain	Landscape Architecture
e.				<input type="checkbox"/> CHECK IF BRANCH OFFICE		
f.				<input type="checkbox"/> CHECK IF BRANCH OFFICE		

D. ORGANIZATIONAL CHART OF PROPOSED TEAM

(Attached)

D. ORGANIZATIONAL CHART OF PROPOSED



PIER

SMEP ENGINEERING

LANDSCAPE ARCHITECTURE

ARUP

ARQUITECTURA AGRONOMIA

Dan Brodtkin
Project Manager

Jordi Nebot Roca
Partner

Teresa Gali-Izard
Partner in Charge

Peter Tillson
Structural engineer

Cliff McMillan
Maritime Engineer

Trent Lethco
Transportat Engineer

Cameron Thomson
LEED/Sustainability

gn
Ray Quinn
Mechanical engineer

Igor Kitagorsky
Plumbing engineer

Gary LaMonica
Electrical engineer

Daniel Granyena
Landscape Architect

E. Resumes of Key Personnel

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person)

12. NAME		13. ROLE IN THIS CONTRACT		14. YEARS EXPERIENCE	
Alejandro Zaera-Polo		Chief Architect		a. TOTAL 23	b. WITH CURRENT FIRM 23
15. FIRM NAME AND LOCATION (City and State) AZPML Ltd, London, UK					
16. EDUCATION (Degree and Specialization) Master in Architecture with Distinction(MARCH II), Graduate School of Design, Harvard University, USA. Dipl. Architecture Degree (Hons), E.T.S. of Architecture in Madrid, Spain			17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline) RIBA UK ARB UK COAM Spain REG Switzerland		
Education: Current Dean of Princeton University; Ex-Berlage Institute Dean of Architecture, professor at Columbia, Yale, AA, Madrid Awards:7 RIBA Awards, Charles Jencks Award, Enric Miralles Prize, Finalist Mies van der Rohe Award Books: The Sniper's Log :An Architectural Perspective of Generation-X; Monographs:El Croquis, 2G, Phylogenesis foa's ark, The Yokohama Project					
19. RELEVANT PROJECTS					
a.	(1) TITLE AND LOCATION (City and State) Yokohama Port Terminal, Japan		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2004	CONSTRUCTION (If Applicable) 2004	
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm It is a new type of transportation space integrated with urban facilities. Rather than conceiving of the building as an object on the pier, detached from its context, it is designed as an extension of the pier ground hosting functions as terminal and a park. Area:48,000m2(building);Budget:\$200 million;Role:Lead Designer					
b.	(1) TITLE AND LOCATION (City and State) Masterplan Port of Santander Santander, Spain		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2014	CONSTRUCTION (If Applicable) 2014	
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Developing the harbour masterplan for the harbour and building some of the key elements such as the Sailing Center for the 2014 World Championship. Area:841,300m2(masterplan)2,500m2(building);Budget:\$6million(building);Role:Lead Designer					
c.	(1) TITLE AND LOCATION (City and State) South East Coastal Park and Auditoriums Barcelona, Spain		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2004	CONSTRUCTION (If Applicable) 2004	
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm The South-East Coastal Park and Auditoriums project forms part of the infrastructure built by the City of Barcelona as Host City for the International Forum of Cultures in 2004. Area 48,000m2; Budget : \$ 200 million;Role: Lead Designer					
d.	(1) TITLE AND LOCATION (City and State) Ravensbourne College London, UK		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2010	CONSTRUCTION (If Applicable) 2010	
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Construction of the new Ravensbourne College facing the O2 Arena in Greenwich Peninsula. The building is designed to enforce cross-fertilisation between the different department in the school and the community of practitioners. Area 21,500m2; Budget : \$ 50 million;Role: Lead Designer					
e.	(1) TITLE AND LOCATION (City and State) Meydan Retail Complex and Multiplex Istanbul, Turkey		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2007	CONSTRUCTION (If Applicable) 2007	
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm The Meydan Retail Complex and Multiplex performs not just as an efficient retail complex but as a true urban centre in one of the fastest growing areas of Istanbul. Area 44,000m2; Budget : \$ 40 million;Role: Lead Designer					

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person)

12. NAME Dan Brodtkin	13. ROLE IN THIS CONTRACT Principal – Structural Engineer	14. YEARS EXPERIENCE	
		a. TOTAL 25	b. WITH CURRENT FIRM 25
15. FIRM NAME AND LOCATION (City and State) Arup – New York, New York			
16. EDUCATION (Degree and Specialization) MS, Massachusetts Institute of Technology, Boston, Massachusetts, 1988 BS, Carnegie Mellon University, Pittsburgh, Pennsylvania, 1986		17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline) PE, State of New York, Pennsylvania, Michigan, Connecticut, Kentucky, Missouri	
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)			

19. RELEVANT PROJECTS

a.	(1) TITLE AND LOCATION (City and State) Miami Science Museum Miami, Florida	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2014	CONSTRUCTION (If Applicable) 2014
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Director and Principal Structural Engineer for the design of a new 200,000ft ² science museum in Miami. The project features an aquarium, a planetarium and a science theatre. Although designed by different architects, the Miami Science Museum will sit alongside the new Miami Art Museum; both of which will sit atop a joint parking structure and plaza. Both designs promise to be signature works of architecture on a prominent site in Museum Park along Biscayne Bay.		
b.	(1) TITLE AND LOCATION (City and State) Miami Art Museum Miami, Florida	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES Ongoing - 2015	CONSTRUCTION (If Applicable) Ongoing - 2015
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Principal Structural Engineer for a new 125,000ft ² building for the collection and exhibition of international art. The project features extensive use of architecturally exposed cast-in-place concrete.		
c.	(1) TITLE AND LOCATION (City and State) Marina Bay Sands Integrated Resort Singapore	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2010	CONSTRUCTION (If Applicable) 2010
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Director and Principal Structural Engineer for the Americas region team. The project waterfront project features approximately 7.5mft ² of space, including a museum, performing arts center, casino, convention center, three high-rise hotels, and restaurants.		
d.	(1) TITLE AND LOCATION (City and State) Byzantine Fresco Chapel Museum Houston, Texas	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 1997	CONSTRUCTION (If Applicable) 1997
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Structural Engineer for the design of the new museum building and its feature exhibit; a free-standing cable and glass sculpture representing a historic chapel		
e.	(1) TITLE AND LOCATION (City and State) Muhammad Ali Center Louisville, Kentucky	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2005	CONSTRUCTION (If Applicable) 2005
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Director and Lead structural engineer for a new 100,000ft ² museum consisting of exhibit space, orientation theater and arena. Project features a cable-braced glass wall defining the main lobby.		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person)

12. NAME Raymond Quinn	13. ROLE IN THIS CONTRACT Lead Mechanical Engineer	14. YEARS EXPERIENCE	
		a. TOTAL 24	b. WITH CURRENT FIRM 24
15. FIRM NAME AND LOCATION (City and State) Arup – New York, New York			
16. EDUCATION (Degree and Specialization) MBA (With Honors), IMD, Lausanne, Switzerland, 2008 MS, Air Conditioning and Refrigeration, University of London, King's College, 1989 BEng, (First Class Honors), University of Dublin, Ireland, 1988		17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline) PE, State of New York, Commonwealth of Pennsylvania, State of New Mexico CEng, UK LEED AP	
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Member, Institute of Mechanical Engineers; American Society of Heating and Air Conditioning Engineers			

19. RELEVANT PROJECTS

a.	(1) TITLE AND LOCATION (City and State) Robert F. Wagner Jr. Park, Battery Park City New York, NY	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 1997	CONSTRUCTION (If Applicable) 1997
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Mechanical Engineer for the early stages of the waterfront park design including two pavilion buildings. The buildings housed bathroom, park maintenance and restaurant facilities.		
b.	(1) TITLE AND LOCATION (City and State) JetBlue Terminal 3, Fort Lauderdale-Hollywood International Airport Fort Lauderdale, FL	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES Ongoing - 2015	CONSTRUCTION (If Applicable) Ongoing - 2015
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Arup was commissioned by JetBlue to provide project management, building design and technical expertise for the In-line Centralized Baggage Inspection System project. The project replaced the outdated baggage handling and screening systems with new, including new EDS machine. The baggage handling areas of the building are expanded to accommodate the larger system, new power supplies are required and programmatic functions in the building are added and / or re-located. Raymond led Arup's team of engineers and consultant for the duration of the project.		
c.	(1) TITLE AND LOCATION (City and State) Florida Southern College, Polk County Science Building Lakeland, FL	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2000	CONSTRUCTION (If Applicable) 2000
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Mechanical Engineer that carried out condition surveys of this Frank Lloyd Wright building. Involved in development of the conceptual plans for the renovation of the building. Arup provided structural, mechanical, electrical, plumbing and fire protection systems design services through to the completion of the project.		
d.	(1) TITLE AND LOCATION (City and State) Coney Island Steeplechase Plaza Brooklyn, NY	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2013	CONSTRUCTION (If Applicable) 2013
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Raymond was the Mechanical Engineer and Engineer-of-Record for a one-of-a-kind public plaza on the famed Coney Island boardwalk known as "Steeplechase Plaza". The Plaza is envisioned as a signature component of a revitalized Coney Island. The project consists of the redevelopment of the area surrounding the historic Parachute Jump and specifically the design of a 7,000sf new building to accommodate a restored carousel. In addition to the carousel space, the project also contains an event space, restrooms and cafeteria. Arup provided structural and MEPFP services. The building opened in 2013.		
e.	(1) TITLE AND LOCATION (City and State) Byzantine Fresco Chapel Museum Houston, Texas	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 1997	CONSTRUCTION (If Applicable) 1997
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Mechanical Engineer for the final design stages and the construction stage for this new building that was designed as a museum for two frescos and also a fully functioning Greek Orthodox church. The one-story with basement building is approximately 5,000ft ² .		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person)

12. NAME Cliff McMillan		13. ROLE IN THIS CONTRACT Civil/Structural- Maritime engineer		14. YEARS EXPERIENCE	
				a. TOTAL 46	b. WITH CURRENT FIRM 49
15. FIRM NAME AND LOCATION (City and State) Arup – New York, New York					
16. EDUCATION (Degree and Specialization) BEng, University of Natal, 1962 MEng, University of Witwatersrand, South Africa,			17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline) PE, South Africa CEng		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Fellow, Institution of Civil Engineers (FICE), United Kingdom, 1988 Honorary Fellow, South African Institution of Civil Engineers (HonFSAICE), 1999 President, South African Association of Consulting Engineers, 1996 Lincoln Center CMP: 2008 ACEC New York, Platinum Award for Engineering Excellence					
19. RELEVANT PROJECTS					
a.	(1) TITLE AND LOCATION (City and State) East River Waterfront Esplanade and Piers Project New York, New York		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2014	CONSTRUCTION (If Applicable) 2014	
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Deputy Project Manager for the Joint Venture appointed by NYC Economic Development Corporation for all engineering and management services for the 2-mile East River Waterfront Esplanade and Piers project in lower Manhattan. Specific responsibility for managing the interface and collaboration with EDC's Architect Team and coordinating their delivery.				
b.	(1) TITLE AND LOCATION (City and State) Hudson River Park New York, NY		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES Ongoing	CONSTRUCTION (If Applicable) Ongoing	
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager responsible for Arup's park-wide project management and design coordination services for the Hudson River Park development from Battery Park City to 59 th Street. The 550-acre, 5-mile long project will regenerate the historic waterfront, provide a continuous esplanade, and reconstruct 13 piers on the west side of Manhattan between the bulkhead wall and the west side highway. Passive and recreational park areas, public event areas, water-based recreation, and water taxi stops will promote public access to the Hudson River. A marine sanctuary, habitat areas, and eco-piers will protect wildlife.				
c.	(1) TITLE AND LOCATION (City and State) East River Walk New York, NY		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2012	CONSTRUCTION (If Applicable) 2012	
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Concept study for proposed over-water esplanade between 40 th and 50 th Streets in Manhattan.				
d.	(1) TITLE AND LOCATION (City and State) Waterfront Feasibility Study Santos, Brazil		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2013	CONSTRUCTION (If Applicable) 2013	
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Director for a World Bank funded feasibility study for a water front in Santos, the largest port in Brazil.				
e.	(1) TITLE AND LOCATION (City and State) Pier A New York, NY		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2014	CONSTRUCTION (If Applicable) 2014	
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Director for the renovation of the historic Pier A building on the Hudson River at Battery Park, Arup is working with the NYC Economic Development Corporation and Battery Park City Authority to reconstruct areas of the Pier A promenade and plaza.				

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person)

12. NAME		13. ROLE IN THIS CONTRACT		14. YEARS EXPERIENCE	
Trent Lethco		Transportation Engineering and Planning		a. TOTAL 15	b. WITH CURRENT FIRM 12
15. FIRM NAME AND LOCATION (City and State)					
Arup – New York, New York					
16. EDUCATION (Degree and Specialization)			17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline)		
MA, Urban Planning (Transportation), University of California, Los Angeles, 1998 BA, History, University of California, Berkeley, 1992			AICP, American Institute of Certified Planners		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)					
Board Member, Regional Plan Association Member, TRB Transportation Issues in Major U.S. Cities Committee, 2008-Ongoing Toronto Waterfront Lower Don Lands, Clinton Climate Initiative program to demonstrate economic, environmental strategies for sustainable urban growth, 2009 Trent Lethco, et al., Microsimulation Model Design in Lower Manhattan: A Street Management Approach. New York, NY: Arup, 2009*					
19. RELEVANT PROJECTS					
a.	(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED		
	East River Waterfront New York, New York		PROFESSIONAL SERVICES 2014	CONSTRUCTION (If Applicable) 2014	
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm The New York City Economic Development Corporation (EDC) commissioned Arup as part of a joint venture to design and develop the revitalization of the East River Waterfront between the Battery and East River Park. Trent developed various options for a multi-modal future South Street as well as met with NYCDOT and other decision makers to articulate the vision and make a case for change. He has also provided extensive input on streetscape design and impacts on vehicle, bicycle, and pedestrian safety and mobility.				
b.	(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED		
	Lower Don Lands Masterplan Toronto		PROFESSIONAL SERVICES 2012	CONSTRUCTION (If Applicable) 2012	
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Waterfront Toronto is developing a 150-acre mixed-use development in the Lower Don Lands along the waterfront. In parallel, the City is considering tearing down the overhead Gardiner Expressway, which runs along the waterfront. Trent managed the transportation components of the project which pedestrian network enhancements, waterfront bicycle strategies, vehicular and pedestrian bridges, municipal infrastructure, and major earthworks. He oversaw the development and evaluation of transportation network alternatives and creation of a transportation master plan for the area. He also oversees the development of the Lower Don Lands micro-simulation model which is used to test and evaluate transportation operations.				
c.	(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED		
	Meixi Lake Development Masterplan Changsha, China		PROFESSIONAL SERVICES 2012	CONSTRUCTION (If Applicable) N/A	
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Lead Transportation Planner for a masterplan of a 2,500-acre area. The masterplan featured a large amount of waterfront (lake and river) development, transit oriented development, renewable energy, waste minimization, water harvesting, recycling and reuse, sustainable transportation systems and urban agriculture.				
d.	(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED		
	CityArchRiver 2015 St. Louis, MO		PROFESSIONAL SERVICES Ongoing	CONSTRUCTION (If Applicable) Ongoing	
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm A team led by MVVA Landscape Architects, won the international design competition for the redevelopment of the Jefferson National Expansion Memorial (Gateway Arch) in St. Louis, Missouri. The design concept will redevelop the Arch Grounds and more importantly, will reconnect the Arch with the surrounding City which is currently separated by major highway, road and bridge infrastructure. Trent led transportation planning wayfinding, traffic modelling, parking and user experience studies. 2010-ongoing				
e.	(1) TITLE AND LOCATION (City and State)		(2) YEAR COMPLETED		
	MTC Advisory Council San Francisco, CA		PROFESSIONAL SERVICES 2008	CONSTRUCTION (If Applicable) N/A	
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Staff liaison for the MTC Advisory Council, consisting of 18 community members who advise MTC on all relevant transportation planning and funding issues. Developed 2002 work plan which focused on transportation and land use policies at MTC including: implementation of transit supportive land uses around transit expansion stations, expanding the housing Incentive Program, and developing a program proposal for a specific plan grant fund.				

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person)

12. NAME Vincent Lee		13. ROLE IN THIS CONTRACT Civil Engineer		14. YEARS EXPERIENCE	
				a. TOTAL 15+	b. WITH CURRENT FIRM 8
15. FIRM NAME AND LOCATION (City and State) Arup – New York, New York					
16. EDUCATION (Degree and Specialization) MS, Civil Engineering, 2002, New Jersey Institute of Technology BS, Civil Engineering, 1998, Pennsylvania State University Minor, Environmental Engineering 1998, Pennsylvania State University			17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline) PE, State of Illinois, Maine, New Jersey, New York USGBC LEED AP, 2006 ISI ENV SP, 2013		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Member, U.S. Green Building Council (USGBC), 2006-Present Member, New York Water Environment Association (NYWEA), 2012-Present Lee, Vincent, "Low Impact U.S. Land Port of Entry" StormCon 09, Anaheim, CA; August 18, 2009					
19. RELEVANT PROJECTS					
a.	(1) TITLE AND LOCATION (City and State) Ciudad Creativa Digital Guadalajara, Mexico		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2010	CONSTRUCTION (If Applicable) 2010	
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Lead water engineer for the development of a master plan for a new 420-hectare development district in downtown Guadalajara with the objective of transforming the area into the 'Silicon Valley' of Mexico and showcasing sustainability and smart city technology. Vincent developed a water master plan that re-introducing natural systems into the district for stormwater management to become the first urban green infrastructure in the city which would allow the public to access the water. He also developed an overall site water budget for the project to optimize water management and treatment strategies.				
b.	(1) TITLE AND LOCATION (City and State) East River Waterfront Esplanade New York, New York		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2014	CONSTRUCTION (If Applicable) 2014	
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Engineer responsible for the detailed design of a unique underground rainwater harvesting system to reduce the potable water demand for landscape irrigation. At the project onset, he provided the design team guidance on implementing sustainability principals and LEED for the proposed waterfront esplanade development between the South Street/FDR Drive corridor and the East River.				
c.	(1) TITLE AND LOCATION (City and State) Poplar Point Washington DC		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2012	CONSTRUCTION (If Applicable) N/A	
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager responsible for developing strategies to integrate sustainable engineering and infrastructure design for a waterfront community, connected physically, socially, and economically to Historic Anacostia. The vision for Poplar Point calls for a world-class, 6.4-million-square-foot, mixed-use waterfront community in historic Anacostia located in Washington, DC.				
d.	(1) TITLE AND LOCATION (City and State) CornellNYC First Academic Building New York, NY		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES Ongoing	CONSTRUCTION (If Applicable) Ongoing	
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Engineer for the sustainable stormwater management design of an Enabling Project for a proposed Arts & Transit Neighborhood at Princeton University. Design included the integration of stormwater management features into the neighborhood to alleviate flooding, improve runoff quality and provide water reuse.				
e.	(1) TITLE AND LOCATION (City and State) Miami Science Museum Miami, FL		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES Ongoing	CONSTRUCTION (If Applicable) Ongoing	
	(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Developed a concept civil engineering plan and served as a coordinator between the architect, Grimshaw, and local engineer (during permitting stages) for a new science museum including significant aquarium exhibits. The building will be located within Museum Park, alongside the proposed Miami Art Museum; both of which will sit atop a new joint parking structure and plaza.				

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person)

12. NAME Gary LaMonica	13. ROLE IN THIS CONTRACT Associate - Electrical Engineer	14. YEARS EXPERIENCE	
		a. TOTAL 14	b. WITH CURRENT FIRM 8
15. FIRM NAME AND LOCATION (City and State) Arup – New York, New York			
16. EDUCATION (Degree and Specialization) BS, Electrical Engineering, Polytechnic University, New York, 1998		17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline) PE, State of New York	
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) SFPE Seminar of the Fire Alarm Systems Design IEEE Power Engineering Society SKM Power Tools Certificate			

19. RELEVANT PROJECTS

a.	(1) TITLE AND LOCATION (City and State) Miami Art Museum Miami, FL	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2014	CONSTRUCTION (If Applicable) 2014
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Principal Structural Engineer for a new 125,000ft ² building for the collection and exhibition of international art. The project features extensive use of architecturally exposed cast-in-place concrete.			
b.	(1) TITLE AND LOCATION (City and State) East River Waterfront Park New York, NY	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2014	CONSTRUCTION (If Applicable) 2014
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Electrical Engineer responsible for Arup's work in the Joint Venture appointed by NYC Economic Development Corporation for engineering and project management services for the 1.5-mile waterfront. Responsibilities include managing the interface with the independently appointed architect team, managing the permitting and agency approval process, and integrating the work of various Arup disciplines and the Joint Venture's sub-consultants.			
c.	(1) TITLE AND LOCATION (City and State) Teardrop South Park New York, NY	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2000	CONSTRUCTION (If Applicable) 2000
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Electrical Engineer for the two-acre Teardrop park site, which is located in downtown Manhattan in the Battery Park City Development area. The park will be situated between four tall buildings and will incorporate elemental site features that recall the natural landscape of New York State. These elements take the form of stone structures, earth forms, water features and landscape. Arup is providing full design services for the park infrastructure including civil, electrical, mechanical and structural engineering to enable the park elements to be realized. In addition to the technical engineering, Arup is providing assistance to ensure the necessary approvals are obtained from the local governing authorities.			
d.	(1) TITLE AND LOCATION (City and State) SoMA – Newark Masterplan Newark, New Jersey	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2007	CONSTRUCTION (If Applicable) Ongoing
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Electrical Engineer on a 23.5-acre mixed-use development to include 7,000 residential units, 550,000ft ² of retail space, 2 million square feet of office space, a 200-room hotel, 9,000 parking spaces and 8.8 acres of open public space. The proposed buildings range from 3 to 90 stories.			
e.	(1) TITLE AND LOCATION (City and State) Free Library of Philadelphia, Expansion and Renovation Philadelphia, Pennsylvania	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2007	CONSTRUCTION (If Applicable) 2007
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Electrical Engineer for the renovation and expansion of the existing main Library in Philadelphia. Arup is providing structural, mechanical, electrical, plumbing/fire protection engineering services for the renovation and expansion of the Free Library of Philadelphia. The existing library is approximately 300,000ft ² and the project involves 170,000ft ² of renovation and an addition of 180,000ft ² . A new atrium will connect the old and the new portions of the building. The new space will create room for an expanded Children's Library, a Digital Discovery Center, an Electronic Browsing Center, and expanded room for collections, public meeting rooms, administrative offices, rare books, and a new visual and performing arts center.			

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person)

12. NAME Igor Kitagorsky	13. ROLE IN THIS CONTRACT Associate –Plumbing Engineer	14. YEARS EXPERIENCE	
		a. TOTAL 30+	b. WITH CURRENT FIRM 18

15. FIRM NAME AND LOCATION *(City and State)*
Arup – New York, New York

16. EDUCATION <i>(Degree and Specialization)</i> MS, Sanitary Engineering, Poltava Institute of Civil Engineering, Ukraine, 1980	17. CURRENT PROFESSIONAL REGISTRATION <i>(State and Discipline)</i>
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18. OTHER PROFESSIONAL QUALIFICATIONS *(Publications, Organizations, Training, Awards, etc.)*
Member, American Society of Plumbing Engineers (ASPE)

19. RELEVANT PROJECTS

a.	(1) TITLE AND LOCATION <i>(City and State)</i> Institute of Contemporary Art Boston, MA	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2007	CONSTRUCTION <i>(If Applicable)</i> 2007
	(3) BRIEF DESCRIPTION <i>(Brief Scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Plumbing and Fire Protection Engineer for a new 62,000ft2 museum on the waterfront in Boston.		
b.	(1) TITLE AND LOCATION <i>(City and State)</i> Cornell NYC Tech, First Academic Building New York, NY	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES Ongoing	CONSTRUCTION <i>(If Applicable)</i> Ongoing
	(3) BRIEF DESCRIPTION <i>(Brief Scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Lead Plumbing and Fire protection Engineer for the design of 150,000sqft Academic building on Roosevelt Island. The project has targets of zero net energy and LEED Platinum.		
c.	(1) TITLE AND LOCATION <i>(City and State)</i> Taichung Botanical Gardens Taiwan	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2007	CONSTRUCTION <i>(If Applicable)</i> 2007
	(3) BRIEF DESCRIPTION <i>(Brief Scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Plumbing and Fire Protection Engineer for a series of greenhouse structures incorporating natural ventilation methods.		
d.	(1) TITLE AND LOCATION <i>(City and State)</i> New Acropolis Museum Athens, Greece	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2012	CONSTRUCTION <i>(If Applicable)</i> 2012
	(3) BRIEF DESCRIPTION <i>(Brief Scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Plumbing Engineer for the design of a new 300,000ft2 museum near the Acropolis to house the Parthenon Marbles.		
e.	(1) TITLE AND LOCATION <i>(City and State)</i> Byzantine Fresco Chapel and Gallery Houston, TX	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 1997	CONSTRUCTION <i>(If Applicable)</i> 1997
	(3) BRIEF DESCRIPTION <i>(Brief Scope, size, cost, etc.)</i> AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Plumbing and Fire Protection Engineer for a space to house and exhibit two mid 13th century Byzantine frescos from Cyprus, involving a stand-alone chapel of glass contained within a climate and light modulating envelope. Rather than recreate the original chapel and risk devaluing the spirituality of the fresco fragments, the chapel has been conceived of as a reliquary envelope to hold the now restored frescoes and to present them as sublime relics.		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person)

12. NAME Peter Tillson		13. ROLE IN THIS CONTRACT Structural engineer		14. YEARS EXPERIENCE	
				a. TOTAL 27	b. WITH CURRENT FIRM 26
15. FIRM NAME AND LOCATION (City and State) Arup – New York, New York					
16. EDUCATION (Degree and Specialization) BE (1st class Hons), Civil Engineering, University of Canterbury, New Zealand, 1983			17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline) PE, State of New York		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) American Concrete Institute (ACI) American Society of Civil Engineers (ASCE) American Institute of Steel Construction (AISC) ASCE Management Practices in Construction					
19. RELEVANT PROJECTS					
a.	(1) TITLE AND LOCATION (City and State) Toronto Central Waterfront Toronto		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2013	CONSTRUCTION (If Applicable) 2013	
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Structural Engineer for concept design of a timber, steel and reinforced concrete esplanade in the historic waterfront. Timbers were selected to be naturally durable and as much as possible locally available.					
b.	(1) TITLE AND LOCATION (City and State) Hunters Point South Long Island City, NY		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2013	CONSTRUCTION (If Applicable) 2013	
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Structural Engineer for a waterfront park located in Long Island City being developed by NYCEDC. The park includes pavilions, canopies and a large lookout structure.					
c.	(1) TITLE AND LOCATION (City and State) Teardrop Park New York, NY		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2005	CONSTRUCTION (If Applicable) 2005	
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager & Structural Engineer for a park located in downtown Manhattan – in the Battery Park City Development area. The park is situated among four tall buildings and incorporates elemental site features that recall the natural landscape of New York State. These elements took the form of stone structures, earth forms, water features and landscape. The park is constructed over the surrounding building's basement.					
d.	(1) TITLE AND LOCATION (City and State) Hudson River Park City, State		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES Ongoing	CONSTRUCTION (If Applicable) Ongoing	
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Structural Engineer for Arup's park-wide design coordination services for the Hudson River Park development from Battery Park City to 59th Street. The 550-acre, 5-mile-long project will regenerate the historic waterfront, and includes the continuous esplanade and reconstruction of 13 piers on the west-side of Manhattan.					
e.	(1) TITLE AND LOCATION (City and State) East River Waterfront Esplanade and Piers New York, NY		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2014	CONSTRUCTION (If Applicable) 2014	
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Structural Engineer for the joint-venture appointed by NYC Economic Development Corporation for all engineering and management services for the two-mile East River Waterfront Esplanade and Piers project in lower Manhattan. Specific responsibility for managing the interface and collaboration with EDC's Architecture Team and coordinating delivery.					

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person)

12. NAME Cameron Thomson	13. ROLE IN THIS CONTRACT LEED/Sustainability	14. YEARS EXPERIENCE	
		a. TOTAL 14	b. WITH CURRENT FIRM 7
15. FIRM NAME AND LOCATION (City and State) Arup -New York, New York			
16. EDUCATION (Degree and Specialization) BTech, Environmental Pollution and Management. University of Edinburgh, 2000		17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline) LEED AP AICP (American Institute of Certified Planners) Chartered Environmentalist (UK)	
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Member Institute of Environmental Scientists Member of America Planning Association			

19. RELEVANT PROJECTS

a.	(1) TITLE AND LOCATION (City and State) East River Waterfront Esplanade Project NY, NY	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2014	CONSTRUCTION (If Applicable) 2014
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Cameron is managing a sustainability task force team to develop sustainability guidelines for the Waterfront project. The unique site is over two miles long and is being regenerated as part of a city wide initiative to improve access to parks and improve the waterfront area. All buildings within the development will seek LEED certification. As part of the work Cameron is investigating a rain water harvesting system which spans the length of the project. He is also investigating the potential use of on-site renewable technologies as well as the sourcing and selection for the significant volume of construction materials.			
b.	(1) TITLE AND LOCATION (City and State) Coney Island Steeplechase Plaza Brooklyn, NY	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2012	CONSTRUCTION (If Applicable) N/A
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Coney Island is a historical beachfront of New York City which has strong local and cultural significance. Cameron worked with the project team to develop sustainable strategies for a new park and plaza on the beachfront. The project will incorporate the Historically Landmarked Parachute Jump and seek to use sustainable materials for park furnishings whilst incorporating water and energy reduction strategies throughout the site.			
c.	(1) TITLE AND LOCATION (City and State) Sustainable DC: Vision 2032 Washington, DC	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2013	CONSTRUCTION (If Applicable) N/A
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager, in collaboration with Ayers Saint Gross, leading the development of Mayor Gray's visionary Sustainability Implementation Plan, which aims to position DC at the leading edge of urban sustainability. Arup applied a wide range of technical skills to identify, evaluate and develop practical strategies across priority sustainability areas.			
d.	(1) TITLE AND LOCATION (City and State) Abu Dhabi Eco-Park Abu Dhabi, UAE	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES Ongoing	CONSTRUCTION (If Applicable) Ongoing
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Cameron worked with an international team to develop a masterplan for a new development for Abu Dhabi in the UAE. The masterplan was for a new sustainable mixed-used development adjacent to the waterfront which is being designed to be energy and water independent. Cameron helped develop a sustainability framework, strategies and advised on technologies to achieve the project goals.			
e.	(1) TITLE AND LOCATION (City and State) St. Elizabeths East Campus Master Plan Washington, DC	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES Ongoing	CONSTRUCTION (If Applicable) Ongoing
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Project Manager and Lead Sustainability Consultant for the redevelopment of St Elizabeth's East Campus into a mixed-use site. The site is a former psychiatric hospital with many landmark buildings. Arup is working with Ayers Saint Gross to develop an overall sustainability framework and sustainable infrastructure strategies for a master plan.			

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person)

12. NAME Brian Stacy	13. ROLE IN THIS CONTRACT Lighting Design	14. YEARS EXPERIENCE	
		a. TOTAL 20	b. WITH CURRENT FIRM 17
15. FIRM NAME AND LOCATION (City and State) Arup – New York, New York			
16. EDUCATION (Degree and Specialization) BFA, Lighting Design, DePaul University, Chicago, Illinois, 1995		17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline) LEED AP Lutron Controls: Commercial A/V Lighting; Future of Lighting Controls	
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Professional Member, International Association of Lighting Designers Member, Illuminating Engineering Society of North America Sustainability Committee, International Association of Lighting Designers (IALD)			

19. RELEVANT PROJECTS

a.	(1) TITLE AND LOCATION (City and State) Coney Island Center New York, New York	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 20012	CONSTRUCTION (If Applicable) N/A
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Acting as lead lighting designer for this iconic performing arts venue in Brooklyn, Brian worked to create a visual icon with Grimshaw Architects set in a redesigned Asser Levy Park. The project features a iconic lit canopy, full architectural lighting of the venue, and pedestrian lighting that worked to incorporate refurbished existing lighting with new luminaires to support the project's sustainable agenda.			
b.	(1) TITLE AND LOCATION (City and State) Regione Lombardia, Architectural and Daylighting Design New York, New York	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Led the architectural and daylighting design for the entry lobbies, private offices, open plan offices and other public transitional spaces at this new 1 million square foot office space designed by Pei Cobb Freed. A significant component of the project was a custom luminaire for the open plan office space to incorporate DALI lighting control.			
c.	(1) TITLE AND LOCATION (City and State) Exposition Park Intergenerational Community Center Los Angeles, CA	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2005	CONSTRUCTION (If Applicable) 2005
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Responsible for providing quality aesthetic and technical solutions for this integrated building design and area redevelopment for external sports fields and public amenities as a part of the multi-disciplinary team on this award-winning project.			
d.	(1) TITLE AND LOCATION (City and State) Songdo Central Park–Lighting, New Songdo City South Korea	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES 2012	CONSTRUCTION (If Applicable) 2012
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Lighting Design Leader for this new 100-acre park, centrally located in New Songdo City. Major lite features include public amenity buildings, pedestrian bridges, congregation and exercise areas, public art features and variable scales of pathways.			
e.	(1) TITLE AND LOCATION (City and State) Washington Dulles International Airport Sterling, VA	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (If Applicable)
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Led the Arup lighting effort and was involved in the lighting in the public support spaces and apron lighting.			

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person.)

12. NAME <u>Charles H. Benson</u>	13. ROLE IN THIS CONTRACT Architect of Record	14. YEARS EXPERIENCE	
		a. TOTAL 23	b. WITH CURRENT FIRM 18

15. FIRM NAME AND LOCATION (City and State)
Charles H. Benson & Associates, Architects, P.A. Miami Beach, FL

16. EDUCATION (DEGREE AND SPECIALIZATION) Bachelor of Architecture (Cum Laude), School of Architecture, Florida A & M University Technical Minor in Interior Design, School of Interior Design, Florida State University General Contractor, Scotty's School of Construc	17. CURRENT PROFESSIONAL REGISTRATION (STATE AND DISCIPLINE) Florida: Architect Florida: Certified General Contractor
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18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)
Several projects appeared in publications such as Architectural Record, The New York Times, and The New Yorker. Member of the NCARB. Received several local awards for historical restoration/renovation projects and new condo build-out projects.

19. RELEVANT PROJECTS

(1) TITLE AND LOCATION (City and State) Artech Condominium and Docks Aventura, FL	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2008	CONSTRUCTION (If applicable) 2008
a. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE 9-story, 232 residences, 807 foot long boomerang-shaped condominium. A second detached 3-story parking/recreation structure is connected to the condo building by 2 double-decker pedestrian bridges. Features a 848 foot private marina of 43 boat slips. Total gross floor area is 631,612 SF. Estimated cost +\$150,000,000.00.		
<input checked="" type="checkbox"/> Check if project performed with current firm		
(1) TITLE AND LOCATION (City and State) Carpark @ 1111 Lincoln Road Miami Beach, FL	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2010	CONSTRUCTION (If applicable) 2010
b. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE New 7 levels of varying height, mixed-use parking structure with retail at the ground level and private residence at the top floor. The new structure was connected at different levels to the existing structure at the East. Total gross floor area is 230,826 SF. Estimated cost +\$65,000,000.00.		
<input checked="" type="checkbox"/> Check if project performed with current firm		
(1) TITLE AND LOCATION (City and State) Bocas Del Toro Floating Dock Panama City, Panama	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2014	CONSTRUCTION (If applicable) 2016
c. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE New T-shaped floating dock for a 520'-0" wide cruise ship and twelve (12) finger piers. Extended 360'-0" into bay. Currently in design development. Estimated cost is + \$160,000,000.00.		
<input checked="" type="checkbox"/> Check if project performed with current firm		
(1) TITLE AND LOCATION (City and State) Cruise Ship Terminal Expansion West Palm Beach, FL	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES 2014	CONSTRUCTION (If applicable) 2016
d. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE New expansion to existing terminal. Expansion will include mid-rise parking structure and 75,000 SF of mixed used retail, restaurant, and additional terminal. Project to be done in two phases. Currentlty in conceptual stage. Estimated cost is +\$48,000,000.00.		
<input type="checkbox"/> Check if project performed with current firm		
(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (If applicable)
e. (3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE		
<input type="checkbox"/> Check if project performed with current firm		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT
(Complete one Section E for each key person)

12. NAME		13. ROLE IN THIS CONTRACT		14. YEARS EXPERIENCE	
Teresa Galí-Izard		Landscape architect		a. TOTAL 21	b. WITH CURRENT FIRM 21
15. FIRM NAME AND LOCATION (City and State) Arquitectura Agronomia SLP, Barcelona, Spain Founding partner					
16. EDUCATION (Degree and Specialization) Agricultural Engineer. School of agriculture of Barcelona. Polytechnic University of Catalonia(UPC). Postgraduate in gardening and landscape. School of agriculture of Barcelona. UPC			17. CURRENT PROFESSIONAL REGISTRATION (State and Discipline) COAC Catalonia – Spain- UE REG Switzerland		
18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.) Education: Chair of Department of Landscape, School of Architecture, University of Virginia. Awards:EUROPEAN URBAN PUBLIC SPACE AWARD, 2004//MEDITERRANEAN LANDSCAPE PRIZE 2006. Category: constructed work//WORLD ARCHITECTURE FESTIVAL 2008 Category: Energy Waste Recycling WINNER //FAD Awards’ finalist. Outdoor spaces. 1999 Books: “THE SAME LANDSCAPES, ideas and interpretations.” Edited by GUSTAVO GILI. 2005					
19. RELEVANT PROJECTS					
a.	(1) TITLE AND LOCATION (City and State) Landscape restoration of the controlled rubbish dump Garraf Barcelona, Spain		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2004	CONSTRUCTION (If Applicable) 2004	
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Landscape restoration of the controlled rubbish dump "la Vall d'en Joan", Design and control of project implementation of landscape integration of the restoration of the landfill in the Garraf Natural Park. Area:20ha; Budget:\$20 million; Role:Lead designer and Landscape architect					
b.	(1) TITLE AND LOCATION (City and State) Santander Port Harbour Santander, Spain		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2014	CONSTRUCTION (If Applicable) 2014	
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Masterplan and developing the harbour masterplan for the harbour and building Area:841,300m (masterplan); Budget:\$6million(building); Role:Landscape architect					
c.	(1) TITLE AND LOCATION (City and State) Barcelona Auditoriums Park Barcelona, Spain		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2004	CONSTRUCTION (If Applicable) 2004	
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm The South-East Coastal Park and Auditoriums project forms part of the infrastructure built by the City of Barcelona as Host City for the International Forum of Cultures in 2004. Area 48,000m2; Budget : \$ 20 million; Role: Landscape architect					
d.	(1) TITLE AND LOCATION (City and State) Public spaces and rooftop of AVE (High-speed train) station Logroño, Spains		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2013	CONSTRUCTION (If Applicable) 2013	
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm Construction of a new park on the new train station and public spaces around. Area 13,500m2; Budget : \$ 7 million; Role: Landscape architect					
e.	(1) TITLE AND LOCATION (City and State) Park on bus depots Barcelona, Spain		(2) YEAR COMPLETED		
			PROFESSIONAL SERVICES 2006	CONSTRUCTION (If Applicable) 2006	
(3) BRIEF DESCRIPTION (Brief Scope, size, cost, etc.) AND SPECIFIC ROLE <input checked="" type="checkbox"/> Check if project performed with current firm The construction of a parking lot for buses enables the creation of a new urban park. A drainage system throughout the area of the cover design sets the rules of the park. Area 20,000m2; Budget : \$ 10 million; Role: Lead Designer and Landscape Architect					

F. Example Projects

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)</i>		20. EXAMPLE PROJECT KEY NUMBER 1	
21. TITLE AND LOCATION (City and State) Yokohama Port Terminal Japan		22. YEAR COMPLETED PROFESSIONAL SERVICES 2004	
		CONSTRUCTION (If Applicable) 2004	
23. PROJECT OWNER'S INFORMATION			
a. PROJECT OWNER Port & Harbour Bureau		b. POINT OF CONTACT NAME Toru Kazama	c. POINT OF CONTACT TELEPHONE NUMBER 81-456712880
24. BRIEF DESCRIPTION OF PROJECT RELEVANCE TO THIS CONTACT (Include scope, size and cost)			
SCOPE Lead architects from competition until completion.		SIZE 48,000m2	COST \$200m (anticipated \$195m)
<p>The Yokohama International Port Terminal is a new type of transportation space integrated with urban facilities.</p> <p>Rather than conceiving of the building as an object on the pier, detached from its context, it is designed as an extension of the pier ground, simultaneously hosting the terminal functions and creating a very large urban park on the roof of the terminal.</p> <p>To ensure maximum urban life throughout the terminal, the building is organised around a circulation system which challenges both the linear structure characteristic of piers, and the directionality of the circulation, using a series of programmatically-specific interlocking circulation loops designed to produce an uninterrupted and multi-directional space, rather than a conventional gateway to flows of fixed orientation.</p> <p>The building is designed as an extension of the urban ground; constructed as a systematic transformation of the lines of the circulation diagram into a folded and bifurcated surface which hosts the alternative program. In order to maximise flexibility, a unique structural system is designed as an integral part of the folded surface, avoiding interruptions due to vertical structure. A hybrid structural system of steel trussed folded plate and concrete girders allows the structural system to be coincident with the diagonal folded surface, especially adequate in coping with the lateral forces generated by the seismic movements which characterise Japanese geography.</p> <p>The tectonic system of the folded surface maximises the cruise terminal's flexibility - both hybridising the circulation, program and structural system and exploiting their differences to produce spatial variety.</p>			
25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
a.	(1) FIRM NAME AZPML Ltd.	(2) FIRM LOCATION (City and State) London, UK	(3) ROLE Lead Architect
b.	(1) FIRM NAME Arup	(2) FIRM LOCATION (City and State) London, UK	(3) ROLE Structural Engineering
c.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)</i>		20. EXAMPLE PROJECT KEY NUMBER 2	
21. TITLE AND LOCATION (City and State) Masterplan Port of Santander Spain		22. YEAR COMPLETED PROFESSIONAL SERVICES 2014	
		CONSTRUCTION (If Applicable) 2014	
23. PROJECT OWNER'S INFORMATION			
a. PROJECT OWNER Santander Port Authority		b. POINT OF CONTACT NAME Confidential	c. POINT OF CONTACT TELEPHONE NUMBER Confidential
24. BRIEF DESCRIPTION OF PROJECT RELEVANCE TO THIS CONTACT (Include scope, size and cost)			
SCOPE AZPML was lead architect for the masterplan and the Sailing Center. ARUP was in charge of all the engineering services and Arquitectura Agronomia took care of the landscape areas.		SIZE 840,000 m2; 2500m2 (Sailing center)	COST Confidential; \$ 6 million (as in the original project)
<p>Santander and its metropolitan area, which sit in the largest estuary of the northern coast of Spain, are home to nearly half the region of Cantabria. Following the 1941 great fire, which burned for 2 days, thousands were left homeless and Santander's historic were greatly destroyed. Despite the loss of property and cultural heritage, the event duly created the opportunity for the city's regeneration. AZPML's new masterplan for the city's port aims at creating the conditions for that same regenerative impulse to take place again, addressing the issues of today.</p> <p>The design strategy proposes 3 approaches, each responding to issues such as population density and urban terrain, and all addressing the specificities of each site. For densely populated quarters, - higher than 600 people/ha - such as Hermida, Varadero and Barrio Pesquero, restructuring is the underlining principle. The project vies to provide a new fully functional urban grid, new building structures, as well as the extension of the Paseo Maritimo, itself the most important interface between city and sea. Conversely, in areas of less than 250 people per hectare, such as San Martín and the Palacio de los Festivales, the goal is to restore the landscape to its natural condition, refurbish existing building structures, and to provide a usable city - river public area. Where the city - and its contact with the sea - is more consolidated, intervention will be restricted to conservation standards. This will take place in areas such as Muelle de Calderón, Puerto Chico and also around the Jardines de Pereda. Being a hub of economic activity within the city, the port should neither be seen as border nor barrier. Instead it should open itself to the people, as it contributes to Santander's social vibrancy. AZPML's urban design strategy aims at opening the city to the sea, be it either by refurbishing buildings and gardens, or by design new residential and commercial structures. This will in turn add to the port's crucial role, while enhancing area as a natural interface between Santander and its bay.</p> <p>Furthermore, we have developed two projects into the masterplan such as the new Ferry Terminal and the Sailing Center delivered on time for the 2014 ISAF World Championship.</p> <p>The project for the storage facilities of the High Performance National Sailing Centre, located in Santander, consists in consolidating the existing obsolete storage buildings for a single container over which we have planned a public rooftop. The project presents the problem of integrating in a limited space two activities that must be physically segregated, - i.e. private use of the CEAR and public use of the canopy - while simultaneously creating a whole whose parts harmoniously coexist. Our proposal is to extend the public space above ground level, ensuring both storage and public space functions can be combined through an unconventional approach to public space design.</p> <p>Conscious of the privileged setting where the project is sited, and for the choice of Cantabria as the location for the new headquarters, this project is an opportunity to bring both city and citizens closer to the harbor through a design that integrates an elevated rooftop viewpoint; a design in line with the public space masterplan; general wide and clear views to harbour and the bay of Biscay.</p> <p>The elevated viewpoint in relation to the dock's height may be read as an intensification of the public space, which in Santander is very much determined by the local terrain.</p>		  	
25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
a.	(1) FIRM NAME AZPML Ltd.	(2) FIRM LOCATION (City and State) London, UK	(3) ROLE Lead Architect
b.	(1) FIRM NAME Arup SA	(2) FIRM LOCATION (City and State) Madrid, Spain	(3) ROLE Full Engineering services
C	(1) FIRM NAME Arquitectura Agronomia	(2) FIRM LOCATION (City and State) Barcelona, Spain	(3) ROLE Landscape Architect

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)</i>			20. EXAMPLE PROJECT KEY NUMBER 3
21. TITLE AND LOCATION (City and State) South East Coastal Park and Auditoriums Barcelona, Spain		22. YEAR COMPLETED PROFESSIONAL SERVICES 2004	
		CONSTRUCTION (If Applicable) 2004	
23. PROJECT OWNER'S INFORMATION			
a. PROJECT OWNER Barcelona City Council	b. POINT OF CONTACT NAME Josep Acebillo	c. POINT OF CONTACT TELEPHONE NUMBER +34 932237404	
24. BRIEF DESCRIPTION OF PROJECT RELEVANCE TO THIS CONTACT (Include scope, size and cost)			
AZPML was lead architect for the project and Arquitectura Agronomia was the landscape subconsultant.		SIZE 50,000 m2	COST \$ 16 million (As expected an on time for the event)
<p>The South-East Coastal Park and Auditoriums project forms part of the infrastructure built by the City of Barcelona as Host City for the International Forum of Cultures in Barcelona in 2004. The project aims to resolve the location of two open-air auditoriums and the provision of abundant vegetation in a coastal location exposed to salty breeze. We resorted to topographical devices to achieve these requirements.</p> <p>The park's topography provides open air auditoria and spaces for events and activities, wind protection and suitable habitats for local vegetation. The topography has also been designed to control the views and site-lines for users. Areas of the park are differentially protected from the prevailing south-westerly wind to provide suitable conditions for vegetation and also to provide zones planned for different activities as well as site-lines and shaded areas.</p> <p>The park allows and encourages a wide range of sports and leisure activities, from walking to running, cycling, skateboarding and relaxing areas through a network of paths and activity zones. Views are deliberately controlled by the demarcation of these zones; narrow, focused views broaden to wide open views. The proposal tries to develop an alternative to the traditional dichotomy between the rational geometries of the French landscape and the organic and picturesque qualities of the English landscape by proposing a topographical device that reacts differentially to the functional requirements, producing a complex, nature-like effect ruled by precise constraints rather than through mimicking nature.</p>		  	
25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
a.	(1) FIRM NAME AZPML Ltd.	(2) FIRM LOCATION (City and State) London, UK	(3) ROLE Lead Architect
b.	(1) FIRM NAME Arquitectura Agronomia	(2) FIRM LOCATION (City and State) Barcelona, Spain	(3) ROLE Landscape Architect
c.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)</i>			20. EXAMPLE PROJECT KEY NUMBER 4
21. TITLE AND LOCATION (City and State) Ravensbourne College of Design and Communication London, UK		22. YEAR COMPLETED PROFESSIONAL SERVICES 2010	
		CONSTRUCTION (If Applicable) 2010	
23. PROJECT OWNER'S INFORMATION			
a. PROJECT OWNER Port & Harbour Bureau	b. POINT OF CONTACT NAME Prof Robin Baker	c. POINT OF CONTACT TELEPHONE NUMBER +44 020 8289 4902	
24. BRIEF DESCRIPTION OF PROJECT RELEVANCE TO THIS CONTACT (Include scope, size and cost)			
SCOPE Lead architects from competition until completion.		SIZE 21,500m2	COST \$50m
<p>The new building for the Ravensbourne College of Design and Communication in Greenwich will be located facing the O2 Arena in London. By relocating to this extraordinary location, the College aims to update its facilities, engaging with digital technologies and becoming a hub for the design and media industry which are expected to flourish in this new sector of London.</p> <p>The building is designed to enforce cross-fertilisation between the different departments in the school and the community of practitioners.</p> <p>The functions are structured around a system of two interconnected atria. The atria have been systematically attached to the external façade in order to be used not only as ventilation devices, but also to visually connect the core of the public spaces in the building with its urban surroundings.</p> <p>In order to achieve optimum environmental performance, low-maintenance and high flexibility, the massing has been kept as compact as possible, with a very low ratio of façade to area. The need for studio spaces and workshops and the low-lighting levels required by the film studios and predominantly IT-based activities lend themselves naturally to this typology of space.</p> <p>The architecture of the building aims to capitalise on the tradition of Arts and Crafts Schools in the UK, from which Ravensbourne College is an offspring. Gothic rose windows and flower patterns have been a rich field of inspiration for the project, but in this building they will not be produced as imitation of nature but as an abstract mathematical construction, based on a non-periodic tessellation pattern which allows seven different types of windows to be built out of only three different tiles.</p>			
25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
a.	(1) FIRM NAME AZPML Ltd.	(2) FIRM LOCATION (City and State) London, UK	(3) ROLE Lead Architect
b.	(1) FIRM NAME Arup	(2) FIRM LOCATION (City and State) London, UK	(3) ROLE Accessible Environments Engineering
c.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)</i>		20. EXAMPLE PROJECT KEY NUMBER 5	
21. TITLE AND LOCATION (City and State) Meydan Retail Complex and Multiplex Istanbul, Turkey		22. YEAR COMPLETED PROFESSIONAL SERVICES 2007	
		CONSTRUCTION (If Applicable) 2007	
23. PROJECT OWNER'S INFORMATION			
a. PROJECT OWNER METRO Group Asset Management		b. POINT OF CONTACT NAME Prof. Michael Cesarz c/o Betting Feldgen	
		c. POINT OF CONTACT TELEPHONE NUMBER +49 211 6886-4240 _+49 151 1511 1979	
24. BRIEF DESCRIPTION OF PROJECT RELEVANCE TO THIS CONTACT (Include scope, size and cost)			
SCOPE Lead architects for the project.		SIZE 44,000m2	COST \$40m
<p>The Meydan Retail Complex and Multiplex performs not just as an efficient retail complex but as a true urban centre in one of the fastest growing areas of Istanbul. Located in a suburban area on the Asian sector of Istanbul, the site borders an IKEA as well as residential plots to be developed in the near future.</p> <p>Through its geometry and circulation strategy, the complex anticipates its subsequent integration into a dense inner city context as an alternative to the usual out-of-town retail box development. The different retail spaces are clustered together and parking is placed underground, liberating the ground entirely for a large urban square in the centre of the scheme. The central square is activated through a number of new pedestrian routes, linking the underground car park to the ground level and accessible from the wider city context through two new routes across the roofs of the retail spaces.</p> <p>To organise the retail volumes as an extension of the surrounding topography rather than as sheds on an asphalt platform – as is common with out of town retail developments – all roofs are connected to the surrounding topography at several points and designed as gardens with extensive vegetation. In addition to physical continuities between the new development and the surrounding context, rooflights are introduced to retail areas that create visual contact between the retail spaces and the gardens on the roofs. In this way, the experience of shopping at Meydan is connected with the urban space beyond.</p>			
25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
a.	(1) FIRM NAME AZPML Ltd.	(2) FIRM LOCATION (City and State) London, UK	(3) ROLE Lead Architect
b.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
c.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)</i>	20. EXAMPLE PROJECT KEY NUMBER 6
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21. TITLE AND LOCATION (City and State) Pérez Art Museum Miami Museum Park, FL	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES 2014	CONSTRUCTION (If Applicable) 2014

23. PROJECT OWNER'S INFORMATION

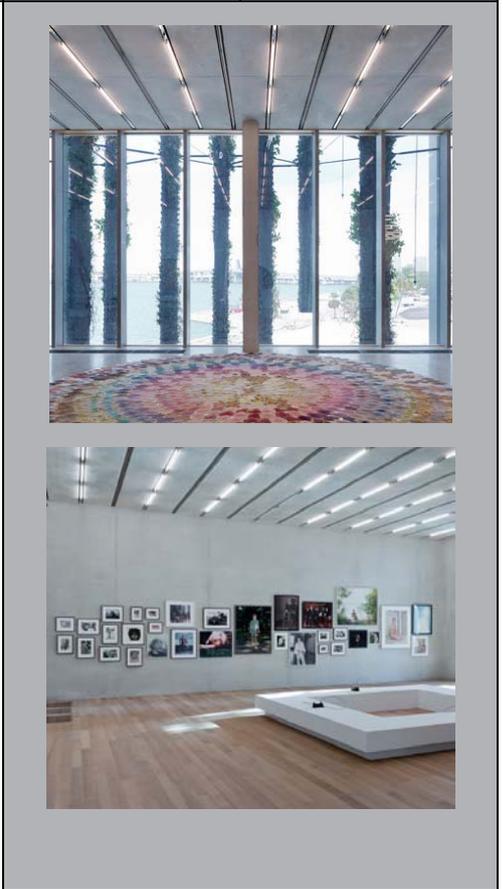
a. PROJECT OWNER Miami Art Museum	b. POINT OF CONTACT NAME Confidential	c. POINT OF CONTACT TELEPHONE NUMBER Confidential
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24. BRIEF DESCRIPTION OF PROJECT RELEVANCE TO THIS CONTACT (Include scope, size and cost)

SCOPE Structural, mechanical, and electrical engineering, IT and communications consulting, LEED consulting, and lighting design	SIZE 120,000sqft	COST \$131m
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The new Miami Art Museum will be an anchor of the 29-acre Museum Park, a redeveloped downtown waterfront that will provide a vibrant mix of green space and cultural offerings. Set on a raised podium and under a broad canopy, the museum will include Class 1 fine art gallery space, a museum shop, bistro, auditorium and additional visitor facilities.

The building represents materials manipulation at its finest, with architectural and structural concrete melding to form a plastic union of textural expression. The overhead canopy forms a dramatic capstone to the building, providing shading even from the punishing winter sun while tempering the natural daylighting in the interior galleries. Vertical hanging gardens and lush landscaping provide an exterior articulation of life from an otherwise imposing façade.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

a.	(1) FIRM NAME Arup USA, Inc.	(2) FIRM LOCATION (City and State) New York, NY	(3) ROLE Engineering and consulting
b.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
c.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)</i>	20. EXAMPLE PROJECT KEY NUMBER 7
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21. TITLE AND LOCATION (City and State) Hudson River Park New York, New York	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES 2006	CONSTRUCTION (If Applicable) N/A

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER Hudson River Park Trust	b. POINT OF CONTACT NAME Connie Fishman ,President and CEO (Left in Feb 2011)	c. POINT OF CONTACT TELEPHONE NUMBER +1 917 661 8740
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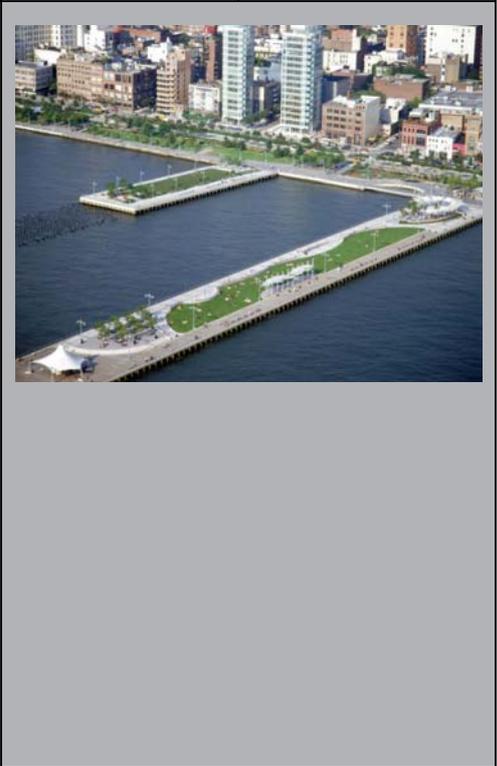
24. BRIEF DESCRIPTION OF PROJECT RELEVANCE TO THIS CONTACT (Include scope, size and cost)

SCOPE Complete range of sustainable development design issues including social, economic and environmental.	SIZE 550-acre, 5-miles long	COST \$330 million
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The Hudson River Park Project is the most significant park development project in New York City in decades.

The 550-acre, 5-mile long project regenerates the historic waterfront on the west side of Manhattan between the bulkhead wall and the west side highway providing public access to the Hudson River. It provides a waterfront esplanade, a bike lane and landscaping along the full length of the park and reconstructed piers for public use, both active and passive. Boat piers and water taxi stops were provided to encourage water based recreation such as sailing and canoeing. Areas also were provided to allow public events including concerts and arts performances.

The historic setting is an important aspect of the design and features such as a historic rail transfer pier and the old Cunard cruise ship loading piers emphasized. Get downs, floating platforms and beach areas were provided to allow access to the water's edge. A number of piers were isolated from the land and planted to provide a human-free habitat for wildfowl; and regulations have been set to ensure minimal effect on the river's aquatic life. Arup, together with Bovis Lend Lease, was appointed by the Hudson River Park Trust as its project manager and design coordinator for all 7 segments that make up the park. Arup, Bovis and their sub-consultants were responsible for all data collection related to the park. Park-wide design criteria, for all aspects of the park, were set for adoption by the designers of each segment and the resulting designs were reviewed.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
a.	Arup	New York, NY	Project Management and Design Coordination Services
b.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
c.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
d.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
e.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
f.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE



F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)</i>			20. EXAMPLE PROJECT KEY NUMBER 8
21. TITLE AND LOCATION (City and State) East River Waterfront Esplanade and Piers New York, New York		22. YEAR COMPLETED	
		PROFESSIONAL SERVICES Ongoing	CONSTRUCTION (If Applicable) Ongoing
23. PROJECT OWNER'S INFORMATION			
a. PROJECT OWNER NYC Economic Development Corporation	b. POINT OF CONTACT NAME Terri Bahr, Vice President	c. POINT OF CONTACT TELEPHONE NUMBER +1 212 312 3714	
24. BRIEF DESCRIPTION OF PROJECT RELEVANCE TO THIS CONTACT (Include scope, size and cost)			
SCOPE Structural, mechanical, electrical, and plumbing engineering, geotechnical engineering, sustainability consulting		SIZE 2-mile-long waterfront	COST \$200 million
<p>Arup and its Joint Venture partner HDR/Daniel Frankfurt were appointed by the NYCEDC, are providing multidisciplinary engineering, sustainability, cost estimating and related consulting services for the East River Waterfront and Piers project. The scope also included acting as prime consultant and managing the deliverables of the EDC-appointed architect for the project, SHoP.</p> <p>The rainwater harvesting system is a part of the sustainability goals for the East River Waterfront Esplanade and Piers project near South Street Seaport with regard to water use where rainwater is reused to reduce the potable water use for landscape irrigation. An annual water balance was optimized between the demand and supply to size the system. The aim was to provide a reliable source of irrigation during normal precipitation patterns while minimizing system size and cost.</p> <p>In addition to the reduction in potable water demand, the system treats the stormwater runoff from the heavily travelled elevated highway, FDR Drive; and stores the runoff underground for future use, alleviating the city sewer system. Arup designed the system consisting of collection, conveyance, removal of oils/sediments, storage and disinfection. The provision of rainwater storage for irrigation has the benefit of reducing runoff from the site and reducing CSOs into the East River.</p> <p>The two main challenges of the design were water quality and available space. Collected water is treated and stored before being used for irrigation of park landscaping, but because of risk of human contact, water must meet high water quality standards. A critical component of the design process was to review the pollutant concentrations of highway runoff and select the appropriate technology to treat the rainwater to a level necessary for reuse. For example, significant highway pollutants such as heavy metals needed to be removed before reuse.</p> <p>In a dense urban environment, lack of available space is an obstacle for many projects. The stormwater conveyance system and underground rainwater harvesting storage was fit in amongst many existing utilities. The groundwater table, located approximately two meters below the ground surface, vertically constrained the location of the system.</p> <p>The new rainwater harvesting system at East River Waterfront demonstrates that this type of design can be accomplished in a city environment where space is limited and urban pollutants are prevalent, and is one of the first of its kind in New York City. The project involved a progressive client, NYCEDC, and designers who emphasized that rainwater is a sustainable water solution. Construction of the system will commence in summer 2012.</p>			
25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
a.	(1) FIRM NAME Arup	(2) FIRM LOCATION (City and State) New York, New York	(3) ROLE Engineer
b.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
c.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
d.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
e.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
f.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)</i>	20. EXAMPLE PROJECT KEY NUMBER 9
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21. TITLE AND LOCATION (City and State) Institute of Contemporary Art Boston, Massachusetts	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES 2007	CONSTRUCTION (If Applicable) 2006

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER Institute of Contemporary Art	b. POINT OF CONTACT NAME Melissa Kuronen	c. POINT OF CONTACT TELEPHONE NUMBER 617.478.3100
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24. BRIEF DESCRIPTION OF PROJECT RELEVANCE TO THIS CONTACT (Include scope, size and cost)

SCOPE Structural, mechanical, electrical and plumbing and fire protection engineering, electric and daylighting	SIZE 65,000 square feet	COST \$40,000,000
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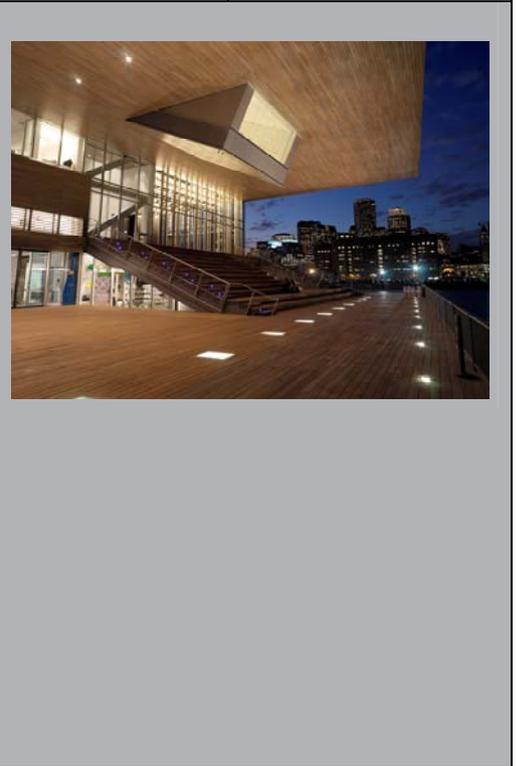
The project is located on the waterfront at Fan Pier in Boston. The Institute for Contemporary Art is a non-profit institution devoted exclusively to the presentation of contemporary art. Through a comprehensive schedule of exhibitions of local, national and international significance and a program of educational outreach, the museum provides the public access to contemporary art, artists and creative processes.

The new building for the ICA was the first art museum to be built in Boston in almost 100 years and symbolizes the architectural future of one of the nation's most historic cities. As one of New England's most vibrant cultural institutions, the ICA will be the cultural centerpiece of the waterfront and one of the city's most recognized architectural landmarks. The building's dramatic cantilevered design integrates the city's Harbor Walk into the museum and offers shifting views of the harbor throughout. The building received critical acclaim and increased public awareness towards modern architecture in Boston.

The project includes a performing arts theater, educational facilities, galleries, a media and technology center, a bookstore, a gift shop, a restaurant and a loading dock.

Arup scope through all design and construction phases:

- Structural engineering services
- Mechanical, electrical, plumbing and fire protection engineering
- Electric lighting and day lighting



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

a.	(1) FIRM NAME Arup	(2) FIRM LOCATION (City and State) New York, New York	(3) ROLE Engineer
b.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
c.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
d.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
e.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
f.	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT <i>(Present as many projects as requested by the agency, or 10 projects, if not specified. Complete one Section F for each project)</i>		20. EXAMPLE PROJECT KEY NUMBER 10
--	--	---

21. TITLE AND LOCATION <i>(City and State)</i> Artech Condominium and Docks Aventura, FL	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES 2008	CONSTRUCTION <i>(If Applicable)</i> 2008

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER Loft Marina L.L.L.P.	b. POINT OF CONTACT NAME Gilbert Benhamou/Claudio Stivelman	c. POINT OF CONTACT TELEPHONE NUMBER Confidential
--	--	--

24. BRIEF DESCRIPTION OF PROJECT RELEVANCE TO THIS CONTACT *(Include scope, size and cost)*

<p>SCOPE Artech is a 9-story, 232 unit condominium, 870 foot long boomerang-shaped structure. The top level units have access to private rooftop decks. The structure includes a second 3-story structure that houses the 464 space parking garage and entertainment amenities: full service spa center, theatre, entertainment and billiards rooms, and double tennis courts. The two buildings are connected by a porte-cochere at the third level which extends into the 4th level of the 4-level lobby of the condominium building. There is a 177 foot waterfront triangular shaped pool (two separate) and whirlpool spa. The project also features an 848 foot private marina of 43 boat slips.</p> <p>The structures are concrete set on auger-cast pilings and clad primarily in glass.</p>	<p>SIZE 631,612 SF</p>	<p>COST \$150M</p>
	  	

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

a.	(1) FIRM NAME Charles H. Benson & Associates, Architects, P.A.	(2) FIRM LOCATION <i>(City and State)</i> Miami Beach, FL	(3) ROLE Architect of Record
b.	(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE
c.	(1) FIRM NAME	(2) FIRM LOCATION <i>(City and State)</i>	(3) ROLE



G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS

26. NAMES OF KEY PERSONNEL (From Section E, block 12)	27. ROLE IN THIS CONTRACT (From Section E, block 13)	28. EXAMPLE PROJECTS LISTED IN SECTION F (Fill in "Example Projects Key" section below before completing table. Place "X" under project key number for participation in same or similar role)									
		1	2	3	4	5	6	7	8	9	10
Alejandro Zaera-Polo	Chief Architect	X	X	X	X	X					
Dan Brodtkin	Project Manager, Lead Structural Engineer						X			X	
Raymond Quinn	Lead MEP Engineer									X	
Gary LaMonica	Lead Electrical Engineer						X		X		
Igor Kitagorsky	Lead Plumbing Engineer									X	
Cliff McMillan	Civil/Maritime Engineer							X	X		
Pete Tillson	Structural Engineer							X			
Vincent Lee	Civil Engineer							X			
Trent Lethco	Transport Planning								X		
Brian Stacy	Lead Lighting Designer						X	X	X		
Cameron Thomson	LEED/Sustainability								X	X	
Charles Benson	Architect of Record										X
Teresa Galí-Izard	Landscape Architect		X	X							

29. EXAMPLE PROJECTS KEY

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	Yokohama Port Terminal Japan	6	Pérez Art Museum Miami Museum Park, FL
2	Masterplan Port of Santander Spain	7	Hudson River Park New York, New York
3	South East Coastal Park and Auditoriums Barcelona, Spain	8	East River Waterfront Esplanade and Piers New York, New York
4	Ravensbourne College of Design and Communication London, UK	9	Institute of Contemporary Art Boston, Massachusetts
5	Meydan Retail Complex and Multiplex Istanbul, Turkey	10	Artech Condominium and Docks Miami, Florida

H. Additional Information

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION REQUESTED BY THE AGENCY. ATTACH ADDITIONAL SHEETS AS NEEDED.

AZPML

Profile

AZPML (Alejandro Zaera-Polo and Maider Llaguno Architecture) is an international practice, based in London, Barcelona, Zurich and Princeton. AZPA (Alejandro Zaera Polo Architecture) was born in 2011 as a legacy practice of FOA after its demerger, and follows former FOA's partner Alejandro Zaera-Polo. In 2013 Maider Llaguno former FOA architect, partnered Alejandro Zaera-Polo architecture. As part of that legacy, AZPML architecture has a commitment to innovation in architecture and urban design, combining technical innovation with design excellence.

Alejandro Zaera Polo's award-winning projects include the Yokohama International Cruise Terminal in Japan, noted for its use of dramatic form, innovative materials, and fascination with the interplay of architecture, landscape, and nature, credited by the Design Museum as a design sensation alive with bustling urbanity and seaside tranquillity. Other projects include a new building for Ravensbourne in Greenwich, the John Lewis Department Store, Cineplex and Footbridges in Leicester, Carabanchel Social Housing in Madrid, Meydan Retail Complex and Multiplex in Istanbul, the Spanish Pavilion at the 2005 International Expo in Aichi, a large coastal park with outdoor auditoriums in Barcelona, a Municipal Theatre and Auditorium in Torre Vieja, La Rioja Technology Transfer Centre in Logrono and the Dulnyouk Publishing Headquarters in Paju, South Korea.

AZPML's current projects in the UK include Birmingham New Street Station in Birmingham and Trinity EC3 office complex in the City of London. In Spain, AZPML is involved in a new Hospital in Lleida, a Biotechnology centre in Barcelona, the redevelopment of the Santander Waterfront, including the design of a new ferry terminal and the yacht club which will host the World Cup in 2010, the Gurrutxaga Winery in Lekeitio and the Cerezales Foundation. AZPML is also involved in the development of two high-rise residential towers in Busan, Korea and the Locarno cinema film festival headquarters in Switzerland.

The work of Alejandro Zaera-Polo has been widely published and exhibited, and represented Britain at the 8th Venice Architecture Biennale in 2002; he has received the Enric Miralles Prize for Architecture, five RIBA Awards, the 2004 Venice Architecture Biennale Award, and the Charles Jencks Award for Architecture.

Principals

Alejandro Zaera-Polo is an architect and co-founder of London/Barcelona/Zurich/Princeton based Alejandro Zaera-Polo and Maider Llaguno Architecture (AZPML). He graduated from the Escuela Técnica Superior de Arquitectura de Madrid with Honors and obtained an MARCH2 degree from Harvard GSD with Distinction. He worked at OMA in Rotterdam prior to establishing first FOA in 1993, and Alejandro Zaera-Polo architecture in 2011, the vehicles where he has developed a successful international professional practice since.

In parallel to his professional activities, Alejandro Zaera-Polo has developed a substantial role within academia. He is currently the dean of the school of architecture at Princeton University and was the former Dean of the Berlage Institute in Rotterdam. He was a Visiting Professor at Princeton University and the inaugural Norman R. Foster Visiting Professor at Yale. He has published extensively as a theorist in *El Croquis*, *Quaderns*, *A+U*, *Arch+*, *Volume*, *Log* and many other international magazines and is a member of the London School of Economics Urban Age project. He has recently published *Sniper's Log*, a compilation of his most relevant writings.

Maider Llaguno, becomes Alejandro Zaera-Polo's partner in 2013 after having worked for Foreign Office Architects in London since 2006 where she was involved in several projects such as the Trinity office complex in the city of London and the Ravensbourne college of design and communication as well as in various design competitions. She graduated from ETSASS/ETSAB with honors in 2006 and from GSAPP Columbia University with distinction (excellence in design) in 2009. She has taught at different universities in USA and Europe, Barnard college and GSAPP Columbia University in New York, the Structural design department at the architecture school at the ETH Zurich, and together with Alejandro Zaera-Polo at Yale School of Architecture and Berlage Institute in Rotterdam. She has finished the doctorate coursework at the Institute of Technology in Architecture ETH Zurich, and she is currently developing her thesis on urban physics, focusing on the role of architectural form and materiality in the microclimate of the street canyon, research that is being developed between the Environmental Engineering department at Princeton University and the architecture school ETH Zurich.

Methodology

AZPML aims to integrate as many stakeholders as possible in the initial stages of the design process, and setting effective feedback during the project. This strategy creates a high degree of support for the project and helps to encourage new insights leading to innovative solutions. To sustain the level of diversity of commissions undertaken, we organise the practice in project-specific design teams. We believe that the best value and quality emerge from an intense involvement with the stakeholders of the project, clients, end-users, advisors and contractors.

We proceed through a ruthless analysis of constraints and specificities as the primary drivers of each project. Performing with rigor and precision, exploring the possibilities of contemporary architectural technologies, and embracing accountability constitute the core of our operative ethos.

A wide range of supporting skills underpins the work of the practice, including model-making, materials research, specialist computer modelling and visualisation, as well as in-house communications, photographic and printing systems.

We deliberately maintain a diverse population in the office and subscribe to the Equal Opportunities Act. Our staff is young, energetic, committed, multilingual and multicultural. This diversity and energy supports the broad vision and effectiveness that we curate as our trademark.

I. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

31. SIGNATURE



32. DATE

09/03/2014

33. NAME AND TITLE

Alejandro Zaera-Polo, Principal

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION REQUESTED BY THE AGENCY. ATTACH ADDITIONAL SHEETS AS NEEDED.

ARUP

Who we are

Arup is the creative force at the heart of many of the world's most prominent projects in the built environment and across industry. We offer a broad range of professional services that combine to make a real difference to our clients and the communities in which we work. We are truly global: 90 offices in 38 countries with 11,000 planners, designers, engineers and consultants deliver innovative projects across the world with creativity and passion.

Founded in 1946 with an enduring set of values, our unique trust ownership fosters a distinctive culture and an intellectual independence that encourages collaborative working. This is reflected in everything we do, allowing us to develop meaningful ideas, help shape agendas and deliver results that frequently surpass the expectations of our clients. The people at Arup are driven to find a better way and to deliver better solutions for our clients. We shape a better world.

Our approach

The ideals and principles of Sir Ove Arup, the founder of the firm, are a driving force in the practice. Foremost among these are belief in "total design", the integration of the design and construction process and the interdependence of all the professionals involved; the creative and innovative nature of engineering design; the value of ingenuity and invention and the social purpose of design; the ability to think beyond the boundaries of one's chosen disciplines to help the other team members. Small design teams, each under the guidance of a Project Director, ensure we provide clients with the personal, professional service to which we are committed. Project teams can call on an extensive range of specialist support from central technical services to complement their own skills. Many of the specialists employed are world authorities in their fields.

Government

Arup has a long history of working with public agencies and advocacy groups to create and complete successful government projects. We are committed to creating high quality government buildings on time and at reasonable cost. We understand that these facilities are a vital asset to our nation and citizens. Good design adds value to government projects. Our breadth of world-class expertise and our track record of innovation allow us to address government's unique environmental, operational and social responsibility goals. In many instances our government clients have achieved special recognition as a result of our work, both in the built environment and beyond.

Recreational waterfront facilities

As the population continues to grow there is a shift to urban centers creating an increased need and recognition of the value of designing quality urban places for work, live, and play. Arup is continually searching for ways to make truly sustainable places. Achieving this requires an approach that encompasses urban design, planning, transportation, landscape, infrastructure, sociology and economics. Control structures are required to reduce flood risks to improve hydraulic flow and to facilitate navigation. Many new canals are now being built to improve recreational opportunities and to enhance the value of adjacent sites. We have worked for private developers and authorities designing a range of hydraulic structures including flood defenses, locks and weirs.

Renovation/Adaptive reuse

Buildings by nature have long lives, but the requirements of occupiers have shorter horizon. There is an increasing risk that underperforming buildings will become obsolete long before their useful life is over. Business models, operational needs and technology evolve rapidly and your buildings must be able to respond quickly to maintain value. High-performing buildings are more able to respond to changing business needs, providing flexibility in the types of spaces available and accommodating changing technology and evolving electronic communication networks. High-performing buildings also create better environments, improving how businesses deliver - better offices can help increase worker productivity. Arup has extensive experience assisting businesses to embrace sustainability and transforming their properties. Our expertise covers the complete property lifecycle of new green buildings through to retrofitting of existing assets and developing strategies to reduce energy use and change behaviors.

Specific expertise

MEP engineering

Mechanical, electrical and plumbing engineering are integral to Arup's integrated building engineering services. The goal of our MEP practice is to design energy-efficient core building services that support occupant comfort, health and well-being. Each discipline is aided by skills networks that share knowledge across a broad range of issues including design, theory, analysis, construction techniques and design solutions. These networks help to leverage the skills and capabilities of the entire firm, providing clients with a powerful international resource at a local level.

Commissioning

Arup's commissioning experts make sure that buildings meet performance requirements throughout their lifespans. Commissioning is particularly critical for sustainable design: even the most environmentally friendly building can perform poorly if its systems are not properly commissioned. Our commissioning services involve all technologies and systems found in the built environment and include condition surveys, site inspections, system design specifications, building network integration, integrated systems technology, project management, value engineering studies, budget estimates, vendor selection and procurement strategies, energy management, energy audits, problem solving, operations and maintenance manuals, and engineering and contingency planning.

LEED/Sustainability

Arup provides sustainability advice on a wide range of environmental, social and economic issues. These services can be provided either alone or as part of a package, incorporating the firm's wider planning, design, engineering and management skills. We offer comprehensive services aimed at developing and implementing policies, plans, strategies and management systems, assessing impacts, managing risk, designing mitigation measures, gaining regulatory approvals, undertaking audits and reviews, reporting publicly and controlling costs. At Treasure Island in San Francisco, Arup is advising on transportation planning, site infrastructure and sustainability strategies, helping to transform a former naval base into a 6,000-unit residential and mixed-use development.

Arup teams in all regions are experienced in helping clients gain the green building accreditations for new and existing buildings. We have provided critical services in earning high LEED ratings for many projects, including the LEED Platinum Northern Arizona University Applied Research and Design, Kresge Foundation Headquarters, and Syracuse Center for Excellence, among others.

Transportation engineering and planning

Arup offers a complete range of transportation planning and engineering skills, from initial assessment to implementation and construction. Our scope of expertise encompasses transportation planning, traffic engineering and development planning. We believe that effective transportation planning is an integral component of sustainable development. Our planners see the big picture. Arup is a fully integrated planning and engineering firm with a culture of collaboration across disciplines. Our transportation planners are supported by a wide range of specialists including civil engineers, transit and highway infrastructure designers and sustainability consultants.

Lighting design

We offer a comprehensive lighting design, from initial strategic advice and concept development through construction documents and on-site support. Our approach operates at the cross roads of art, science and technology; and always combines conceptual design thinking and technical expertise. Our work is a testament to the meaningful application of light in architecture, finding purposeful ways to make buildings expressive, coherent and visually strong in engaging with people. It is our responsibility to combine this holistic vision with the ever emerging range of technical possibilities to achieve a sustainable lighting solution.

Civil engineering

Arup provides design, procurement, project management and supervision services across the broad field of civil engineering, which encompasses disciplines from geotechnics to lighting. With decades of experience on projects around the world and significant expertise in site selection and evaluation, economics, engineering and infrastructure design, we offer high-value service to collaborators and clients. Arup's civil engineering expertise includes economic assessment and feasibility studies, masterplanning, urban design, landscape design, geotechnics, foundation engineering, hydrology, transportation planning, environmental assessment, lighting, and advice on statutory planning requirements and public inquiries.

Structural engineering

From the Sydney Opera House to Centre Pompidou in Paris to CCTV in Beijing, the firm's highly skilled structural engineers understand not only structural theory but all the processes of design and construction. Arup's expertise makes the most ambitious structures buildable. The ability to design buildings that are stable, strong, stiff and durable under all imposed conditions while using materials efficiently is the essence of structural engineering. Arup teams are skilled in designing structures of economy and elegance to realize architects' and clients' ambitions.

I. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

31. SIGNATURE



32. DATE

08/28/2014

33. NAME AND TITLE

Dan Brodtkin, Principal

30. PROVIDE ANY ADDITIONAL INFORMATION REQUESTED BY THE AGENCY. ATTACH ADDITIONAL SHEETS AS NEEDED.

Firm profile

Director Profile

Charles H. Benson graduated in 1988 *cum laude* from the Florida Agricultural and Mechanical University School of Architecture with a Bachelor of Architecture and from Florida State University School of Interior Design with a Technical Minor in Interior Design. He is a licensed professional Architect with licenses from the Florida Board of Architecture and Interior Design, Georgia Board of Architects and Interior Designers, and New York Board of Architects. He also holds a professional Sales Associate license from the Florida Real Estate Commission and a professional General Contractor license from the Florida Construction Industry Licensing Board. He is a member of the National Council of Architectural Registration Board.

His professional experience at inception was as an intern at the Architectural Office of George Lopez, in the summer of 1985. There he worked the Overtown Development of Downtown Miami. For the summers of 1986, 1987, and 1988, he went on to Isaac Sklar & Associates (ISA) where he remained from the latter summer through 1996. At ISA he was chief designer, project manager, and architect on various projects. During his tenure at ISA he worked on numerous projects such as high-rise condominiums, warehouses, shopping centers with tenant space improvements, and single and chain restaurants.

Charles H. Benson founded Charles H. Benson & Associates, Architects, P.A. (CHBAA), in 1996. He continued working extensively on various project types. His portfolio is nothing short of diversified with projects ranging from high-end retail and restaurants to high-rise condominium projects. His extensive experience and success with historic projects in the area is a notable attribute that has brought to fruition many exciting new projects while still maintaining the beauty of the local Miami Beach historic architecture. His dedication to client satisfaction is at the forefront of his work ethic and is projected on his long-term relationship with many repeat clients, some of which have collaborated with the firm on different project types.

Charles H. Benson has a strong belief in personal attention to clients and a hands-on approach no matter the size of the project. This is unequivocally one of the main ingredients to the clients' contentment which in turn yields the firm's success.

Philosophy

When we enter a relationship with a client we do so with the intent on making it a long-term success story. We know that our success and yours are the same. Rarely is the relationship between trust and success as apparent as in the undertaking of a major construction project. With all the financial resources at stake and number of variables to be managed, an essential element to a successful relationship lies in the sheer volume of accurate communication that must occur between client, architect and construction manager. The firm stands ready to provide a wide range of diverse services for your next building or build-out. We invite you to consider us as a partner for success.

Practice Profile

Charles H. Benson & Associates, Architects, P.A., was founded in 1996 by Architect Charles H. Benson. Its office is in the heart of South Beach in Miami Beach, Florida. With over twenty-five years of experience,



the firm's solidity is undoubtedly reflected by its savoir-faire and continued growth and success.

The practice works on commercial, industrial, and residential projects; providing full architectural and partial interior designing as well as master planning and development for the private sector. The practice's diverse built portfolio includes condominiums, garages, historic renovations, hotels, lounges, clubs, offices, residential, restaurants, retail, shopping centers, schools, place of worship, and warehouse facilities.

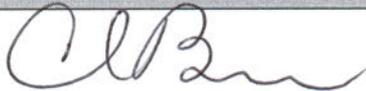
The firm has had the pleasure of collaborating on various local projects with world-renowned international architects and interior design firms which have brought international recognition from the industry. Amongst the practice's major recent works are the renowned 1111 Lincoln Road parking garage and Artech condominium project collaborations with world-renowned firm Herzog & De Meuron and world-renowned Uruguay architect Carlos Ott, respectively. The practice has also had the distinct pleasure of working on projects for notables such as actors Cameron Diaz and Danny DeVito and clothing designer Roberto Cavalli. The firm has garnered a few award recognitions from some of the exciting projects it has worked on. Most recently, the firm was awarded in 2013 the Outstanding Historic Renovation award by Dade Heritage Trust for the Breakwater and Edison Hotels renovation and in 2007 it was awarded the Project of the Year award in the Landmark Category by Developers & Builders Alliance for the Artech project. The Juvia restaurant project was awarded in 2013 the Best Restaurant Design or Renovation in North America Since January 1, 2010 award by the James Beard Foundation. As well as awards, some of the practice's projects have been featured in numerous magazine articles. Such magazine publications include *The New Yorker*, *Architectural Record*, *Hospitality Design*, and *Ocean Drive*, among many others. It is a rewarding and humbling experience for the firm of the many mentions of its projects through the different media outlets.

Charles H. Benson also holding licenses in general contracting and real estate has further enhanced a better understanding in cost effecting end product results, early delivery, and value engineering. Having a clear understanding of all three elements – architecture, real estate, and construction – allows for a viable cost-effective approach to prepare a buildable set of documents which facilitates an expedited process to deliver a cost-effective final product. This is unequivocally a strong attribute of the practice which has a low record of unrealized projects.

I. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

31. SIGNATURE



32. DATE

09/04/2014

33. NAME AND TITLE

Charles H. Benson, President



H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION REQUESTED BY THE AGENCY. ATTACH ADDITIONAL SHEETS AS NEEDED.

Firm profile

Teresa Galí-Izard, after being in Batlle and Roig Architecture Office where she worked 10 years, -developing a lot of urban, gardening, watering and general landscaping plans- created her own Office in 1995.

Various awards endorse her career:

2008. WAF2008 World Architecture Festival. Category Energy, Waste & Recycling. Obra: "Landscape restoration of the controlled rubbish dump la Vall d'en Joan"

2006. Mediterranean Landscape Award. Category: Built Works. Work: "Restoration of Can Joan Rubbish Dump", Garraf (Barcelona-Spain), with BiR and Proser."

2004. European Public Urban Space Award 2004. Work: "Restoration of Can Joan Rubbish Dump", Garraf (Barcelona-Spain), with BiR and Proser."

Finalist Award FAD Public space 2004. Work:"Restoration of Can Joan Rubbish Dump", Garraf (Barcelona-Spain), with BiR and Proser.

Finalist Award FAD Outdoors Space 1999. Work: the Garden of Cantarell House (Púbol-Girona-Spain).

Author of the book "THE SAME LANDSCAPES, ideas and interpretations." Editorial GUSTAVO GILI. 2005

She has been a professor at the School of Architecture in Madrid, School of Architecture of Navarra, Escola Tècnica Superior d'Architecture of Barcelona, University of Girona, in different courses and Masters. Now she is associate professor and Chair of Landscape Department in School of Architecture (University of Virginia, USA)

Jordi Nebot begins his professional career the year 1996, as responsible of Public Space Department in professional studio "Batlle i Roig, arquitectes", forming professional office with Teresa Galí-Izard since 2003. Professor at the Master of Landscape Architecture (UPC-ETSAB, Barcelona,2006), Professor of Projects at the School of Architecture Senior La Salle (Barcelona, 2007). Lecturer professor in School of Architecture in University of Virginia (Charlottesville, USA, 2012-2014,)

In 2003 **Teresa Galí-Izard** got associated with **Jordi Nebot** creating **ARQUITECTURA AGRONOMÍA** office.

ARQUITECTURA AGRONOMÍA. is a company by an interdisciplinary team of agricultural engineers, and architects who collaborate with forestry engineers, biologists, civil engineers and geologists.

Since first day carrying out projects of private gardens, urban gardens, parks, interventions in the landscape, restorations of natural environment, city-planning and management plans, investigating new ways to focus the projects with materials from the nature. Our projects explore new languages consistently resolve the relationship with the environment, and integrate the temporal dimension through the management and development of the project over time.

ARQUITECTURA AGRONOMÍA collaborates with various architectural and engineering firms , bringing his unique vision to develop projects, such AZPML, Arata Isozaki, Ábalos and Herreros, NOMAD-Eduardo Arroyo, Guillermo Vázquez-Consuegra, Torres-Nadal, Kengo Kuma, Rogers Stirck harbour and partners, UN STUDIO, MVRDV, ARUP...

I. AUTHORIZED REPRESENTATIVE

The foregoing is a statement of facts.

31. SIGNATURE



32. DATE

08/28/2014

33. NAME AND TITLE

Teresa Galí Izard, Principal

Part II

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (if any)

N/A

PART II – GENERAL QUALIFICATIONS

(If firm has branch offices, complete for each specific branch office seeking work)

2a. FIRM NAME (or Branch Office) Arup USA, Inc.				3. YEAR ESTABLISHED 1999	4. DUNS NUMBER 023255081	
2b. STREET 77 Water Street				5. OWNERSHIP		
2c. CITY New York		2d. STATE NY	2e. ZIP CODE 10005		a. TYPE Professional Corporation	
6a. POINT OF CONTACT NAME AND TITLE Dan Brodtkin, Principal				b. SMALL BUSINESS STATUS N/A		
6b. TELEPHONE NUMBER +1 212 896 3000		6c. E-MAIL ADDRESS daniel.brodtkin@arup.com		7. NAME OF FIRM (If Block 2a is a branch office) Arup Group Ltd.		
8a. FORMER FIRM NAMES (If any)				8b. YEAR ESTABLISHED	8c. DUNS NUMBER	
Ove Arup & Partners Massachusetts Inc.				1999	023255081	
9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. No. of Employees		a. Profile Code	b. Experience	c. Revenue Index Number (see below)
		(1) FIRM	(2) BRANCH			
01	Acoustics	23	13	A01	Acoustics, Noise Abatement	7
02	Administration	48	14	A06	Airports; Terminal and Hangars; Freight Handling	6
04	Airport Planning	12		B02	Bridges	7
06	Architecture	1		S13	Storm Water Handling Facilities	7
08	CAD	82	21	I06	Irrigation; Drainage	7
12	Civil	97	19	S10	Surveying; Platting; Mapping; Flood Plain Studies	6
18	Cost & Quantity Surveying	1		W02	Water Resources; Hydrology; Ground Water	6
20	Economic Planning	2		W03	Water Supply; Treatment and Distribution	6
21	Electrical	56	12	S04	Sewage Collection, Treatment and Disposal	5
23	Environmental (including Ecological Sustainable Design)	21	11	E08	Engineering Economics	4
02	Facilities Management	12	7	E03	Electrical Studies and Design	8
02	Finance	31	9	E07	Energy Conservation; New Energy Sources	6
25	Fire	28	5	S11	Sustainable Design	6
27	Geotechnical	31	8	S06	Solar Energy Utilization	3
29	GIS	1		V01	Value Analysis; Life-Cycle Costing	3
60	Highways	3		C08	Codes; Standards; Ordinances	6
02	Human Resources	17	5	F03	Fire Protection	6
13	IT/Communications	32	12	G04	Geographic Information System Services; Development, Analysis, and Data Collection	6
02	Legal	3	2	S05	Soils & Geologic Studies; Foundations	6
37	Lighting	14	8	H07	Highways; Streets; Airfield Paving; Parking Lots	4
48	Management Consultancy	3		L05	Lighting (Interior; Display; Theater, Etc.)	5
02	Marketing	24	8	L06	Lighting (Exteriors; Streets; Memorials; Athletic Fields, Etc.)	5
42	Mechanical	129	35	H04	Heating; Ventilating; Air Conditioning	9
48	Project Management	23	15	R06	Rehabilitation (Buildings; Structures; Facilities)	7
31	Public Health/Plumbing	27	9	C15	Construction Management	7
50	Risk Assessor	4		P07	Plumbing & Piping Design	7
54	Security Specialist	4	3	R03	Railroad; Rapid Transit	3
57	Structural	172	41	R10	Risk Analysis	4
60	Transport Planning	35	14	S02	Security Systems; Intruder & Smoke Detection	4
62	Water	2	1	S09	Structural Design; Special Structures	9

	OTHER	47	16	S03	Seismic Designs & Studies	6
				M08	Modular Systems Design; Pre-Fabricated Structures or Components	6
				T03	Traffic & Transportation Engineering	7
				T06	Tunnels & Subways	5
TOTAL		985	288			

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS <i>(Insert revenue index number shown at right)</i>		PROFESSIONAL SERVICES REVENUE INDEX NUMBER			
		1. Less than \$100,000 2. \$100,000 to less than \$250,000 3. \$250,000 to less than \$500,000 4. \$500,000 to less than \$1 million 5. \$1 million to less than \$2 million	6. \$2 million to less than \$5 million 7. \$5 million to less than \$10 million 8. \$10 million to less than \$25 million 9. \$25 million to less than \$50 million 10. \$50 million or greater		
a. Federal Work	8				
b. Non-Federal Work	10				
c. Total Work	10				

12. AUTHORIZED REPRESENTATIVE
The foregoing is a statement of facts.

a. SIGNATURE 	b. DATE 08/28/2014
--	-----------------------

c. NAME AND TITLE
Dan Brodtkin, Principal

ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (if any)

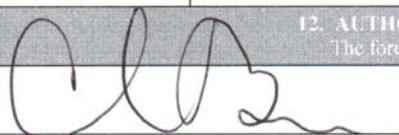
PART II – GENERAL QUALIFICATIONS

(If firm has branch offices, complete for each specific branch office seeking work)

2a. FIRM NAME (or Branch Office) Charles H. Benson & Associates, Architects, P.A.			3. YEAR ESTABLISHED 1996	4. DUNS NUMBER TBD
2b. STREET 1665 Washington Avenue, 2 nd Floor			5. OWNERSHIP	
2c. CITY Miami Beach	2d. STATE FL	2e. ZIP CODE 33139	a. TYPE Professional S-Corporation	
6a. POINT OF CONTACT NAME AND TITLE Charles H. Benson, President			b. SMALL BUSINESS STATUS 541310	
6b. TELEPHONE NUMBER (305) 532-6161 / (305) 532-6151 (Fax)		6c. E-MAIL ADDRESS carkitect@aol.com		7. NAME OF FIRM (If Block 2a is a branch office) N/A.
8a. FORMER FIRM NAMES (If any)			8b. YEAR ESTABLISHED	8c. DUNS NUMBER
N/A			N/A	N/A

9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. No. of Employees		a. Profile Code	b. Experience	c. Revenue Index Number (see below)
		(1) FIRM	(2) BRANCH			
06	Architect	1		C06	Churches	2
08	CADD Technician	7		E02	Educational Facilities	1
02	Administrative	2		G01	Garages	3
				H01	Piers	1
				H08	Historical Preservation	5
				H10	Hotels	4
				H11	Housing	5
				I05	Interior Design	1
				001	Office Buildings	1
				W01	Warehouses	1
TOTAL		10				

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS <i>(Insert revenue index number shown at right)</i>		PROFESSIONAL SERVICES REVENUE INDEX NUMBER	
a. Federal Work	1	1. Less than \$100,000 2. \$100,000 to less than \$250,000 3. \$250,000 to less than \$500,000 4. \$500,000 to less than \$1 million 5. \$1 million to less than \$2 million	6. \$2 million to less than \$5 million 7. \$5 million to less than \$10 million 8. \$10 million to less than \$25 million 9. \$25 million to less than \$50 million 10. \$50 million or greater
b. Non-Federal Work	6		
c. Total Work	6		

12. AUTHORIZED REPRESENTATIVE The foregoing is a statement of facts.	
a. SIGNATURE 	b. DATE 09/04/2014
c. NAME AND TITLE Charles H. Benson, President	



ARCHITECT – ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER (if any)

N/A

PART II – GENERAL QUALIFICATIONS

(If firm has branch offices, complete for each specific branch office seeking work)

2a. FIRM NAME (or Branch Office) Arquitectura Agronomia SLP.			3. YEAR ESTABLISHED 2007	4. DUNS NUMBER (EIN Spain) B64448848 (EIN USA) 98-1165366
2b. STREET c. clos de sant francesc 18 lcl			5. OWNERSHIP	
2c. CITY Barcelona	2d. STATE Spain	2e. ZIP CODE 08034	a. TYPE Professional Corporation	
6a. POINT OF CONTACT NAME AND TITLE Teresa gali-Izard, Principa / Jordi Nebot-Roca, Principal I			b. SMALL BUSINESS STATUS N/A	
6b. TELEPHONE NUMBER +34 932063481		6c. E-MAIL ADDRESS aqag@telefonica.net	7. NAME OF FIRM (If Block 2a is a branch office) Arquitectura Agronomia SLP.	
8a. FORMER FIRM NAMES (If any)			8b. YEAR ESTABLISHED	8c. DUNS NUMBER

9. EMPLOYEES BY DISCIPLINE				10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL AVERAGE REVENUE FOR LAST 5 YEARS		
a. Function Code	b. Discipline	c. No. of Employees		a. Profile Code	b. Experience	c. Revenue Index Number (see below)
		(1) FIRM	(2) BRANCH			
39	Landscape architect	5	-	L03	Landscape architect	3
TOTAL		5	-			

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS <i>(Insert revenue index number shown at right)</i>		PROFESSIONAL SERVICES REVENUE INDEX NUMBER	
a. Federal Work	-	1. Less than \$100,000	6. \$2 million to less than \$5 million
b. Non-Federal Work	2	2. \$100,000 to less than \$250,000	7. \$5 million to less than \$10 million
c. Total Work	2	3. \$250,000 to less than \$500,000	8. \$10 million to less than \$25 million
		4. \$500,000 to less than \$1 million	9. \$25 million to less than \$50 million
		5. \$1 million to less than \$2 million	10. \$50 million or greater

12. AUTHORIZED REPRESENTATIVE	
The foregoing is a statement of facts.	
a. SIGNATURE 	b. DATE 08/28/2014
c. NAME AND TITLE Teresa Gali-Izard, Principal	

Company Certificates



THE COMPANIES ACT 2006

Company No. 7564414

The Registrar of Companies for England and Wales hereby certifies that AZPML LIMITED (originally called AZPA LIMITED which name was changed by resolution on 17th April 2013 to AZPML LIMITED) was incorporated under the Companies Act 2006 as a limited company on 15th March 2011.

The Registrar further certifies that according to the documents on the file of the company:-

- a) MAIDER AINARA LLAGUNO and ALEJANDRO ZAERA-POLO are the directors of the company,
- b) the situation of the registered office is 55 CURTAIN ROAD, LONDON EC2A 3PT,
- c) ALEJANDRO ZAERA-POLO and MAIDER LLAGUNO are the shareholders of the company.

According to the documents on file and in the custody of the Registrar, the company is up to date with its filing requirements and has at least 1 director, who is a natural person over the age of 16.

The company has been in continuous unbroken existence since its incorporation and no action is currently being taken by the Registrar of Companies to strike the company off the register or to dissolve it as defunct. As far as the Registrar is aware, the company is not in liquidation or subject to an administration order, and no receiver or manager of the company's property has been appointed.*****

Given at Companies House, the 10th May 2013

G COOK
for the Registrar of Companies

This certificate records the result of a search of the information registered by the Registrar. This information derives from filings accepted in good faith without verification. For this reason the Registrar cannot guarantee that the information on the register is accurate or complete.



Companies House

State of Florida

Department of State

I certify from the records of this office that ARUP USA, INC. is a Massachusetts corporation authorized to transact business in the State of Florida, qualified on April 25, 2001.

The document number of this corporation is F01000002211.

I further certify that said corporation has paid all fees due this office through December 31, 2014, that its most recent annual report/uniform business report was filed on April 27, 2014, and its status is active.

I further certify that said corporation has not filed a Certificate of Withdrawal.

*Given under my hand and the
Great Seal of the State of Florida
at Tallahassee, the Capital, this
the Twenty-ninth day of July, 2014*



Ken DeFoner
Secretary of State

Authentication ID: CU9369604175

To authenticate this certificate, visit the following site, enter this ID, and then follow the instructions displayed.

<https://efile.sunbiz.org/certauthver.html>



State of Florida
Board of Professional Engineers
2639 North Monroe Street, Suite B-112
Tallahassee, FL 32303-5268

Arup USA, Inc.
77 WATER ST
5TH FLOORAttn: Sandy Rai
NEW YORK, NY 10005

Each licensee is solely responsible for notifying the Florida Board of Professional Engineers in writing the licensee's current address.

Name changes require legal documentation showing name change. An original, a certified copy, or a duplicate of an original or certified copy of a document which shows the legal name change will be accepted unless there is a question about the authenticity of the document raised on its face, or because the genuineness of the document is uncertain, or because of another matter related to the application.

At least 90 days prior to the expiration date shown on this license, a notice of renewal will be sent to your last known address. If you have not yet received your notice 60 days prior to the expiration date, please call (850) 521-0500, or write, Florida Board of Professional Engineers, 2639 North Monroe Street, Suite B-112, Tallahassee, FL 32303-5268 or e-mail: board@fbpe.org. Our website address is <http://www.fbpe.org>.

State of Florida

Board of Professional Engineers

Attests that
Arup USA, Inc.



is authorized under the provisions of Section 471.023, Florida Statutes, to offer engineering services to the public through a Professional Engineer, duly licensed under Chapter 471, Florida Statutes.

Expiration: 2/28/2015

Audit No: 228201504927 D

Certificate of Authorization

CA Lic. No:

8898

9/06/96

P96000073772

FLORIDA DIVISION OF CORPORATIONS
PUBLIC ACCESS SYSTEM
ELECTRONIC FILING COVER SHEET

9:51 AM

((H96000012372 4))

TO: DIVISION OF CORPORATIONS

FAX #: (904)922-4001

FROM: EMPIRE CORPORATE KIT COMPANY
CONTACT: RAY STORMONT
PHONE: (306)641-3894

ACCT#: 072460003265

FAX #: (306)641-3770

NAME: CHARLES H. BENSON & ASSOCIATES, ARCHITECTS,
AUDIT NUMBER.....H96000012372
DOC TYPE.....FLORIDA PROFIT CORPORATION OR P.A.
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CERT. COPIES.....1

PAGES..... 8
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** ENTER 'M' FOR MENU. **

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Help F1 Option Menu F2

NUM Connect: 00:14:1

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55 SEP -5 AM 10:39

DIVISION OF CORPORATIONS

*Ray
9/5/96*

FILED
96 SEP -5 PM 3:19
SECTION OF CLERK OF CIRCUIT COURT
TALLAHASSEE, FLORIDA

**CITY OF MIAMI BEACH
CERTIFICATE OF USE, ANNUAL FIRE FEE, AND BUSINESS TAX RECEIPT**

1700 Convention Center Drive
Miami Beach, Florida 33139-1819

TRADE NAME: CHARLES H. BENSON & ASSC, ARCHITECTS,
IN CARE OF: CHARLES H. BENSON
ADDRESS: 3700 PINE TREE DR
MIAMI BEACH, FL 33140-3936

RECEIPT NUMBER: RL-03001951
Beginning: 10/01/2013
Expires: 09/30/2014
Parcel No:

A penalty is imposed for failure to keep this Business Tax Receipt exhibited conspicuously at your place of business.

A certificate of Use / Business Tax Receipt issued under this article does not waive or supersede other City laws, does not constitute City approval of a particular business activity and does not excuse the licensee from all other laws applicable to the licensee's business.

This Receipt may be transferred:

A. Within 30 days of a bonafide sale, otherwise a complete annual payment is due.

B. To another location within the City if proper approvals and the Receipt are obtained prior to the opening of the new location.

Additional Information

Storage Locations

TRADE ADDRESS: 1665 WASHINGTON AVE, FL 2

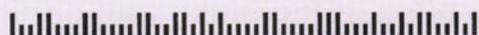
Code	Certificate of Use/Occupation
001200	ARCHITECT

CERTIFICATE OF USE	400
C_U # OF UNITS	1888
Architect FF	Y
Profess Assoc FF	Y

FROM: CITY OF MIAMI BEACH
1700 CONVENTION CENTER DRIVE
MIAMI BEACH, FL 33139-1819

PRESORTED
FIRST CLASS
U.S. POSTAGE
PAID
MIAMI BEACH, FL
PERMIT No 1525

CHARLES H. BENSON & ASSC, ARCH
1665 WASHINGTON AVE, FL 2
MIAMI BEACH, FL 33139-3172



001428

Local Business Tax Receipt

Miami-Dade County, State of Florida
-THIS IS NOT A BILL - DO NOT PAY

3790525

BUSINESS NAME/LOCATION

BENSON CHARLES H & ASSOCIATES ARCHITECTS PA
1665 WASHINGTON AVE 2FL
MIAMI BEACH FL 33139

RECEIPT NO.

RENEWAL
3957504

LBT

EXPIRES
SEPTEMBER 30, 2015

Must be displayed at place of business
Pursuant to County Code
Chapter 8A - Art. 9 & 10

OWNER

CHARLES H BENSON & ASSOC ARCH PA
Employee(s) 1

SEC. TYPE OF BUSINESS

212 P.A./CORP/PARTNERSHIP/FIRM

**PAYMENT RECEIVED
BY TAX COLLECTOR**

\$45.00 07/10/2014
CREDITCARD-14-025700

This Local Business Tax Receipt only confirms payment of the Local Business Tax. The Receipt is not a license, permit, or a certification of the holder's qualifications, to do business. Holder must comply with any governmental or nongovernmental regulatory laws and requirements which apply to the business.

The RECEIPT NO. above must be displayed on all commercial vehicles - Miami-Dade Code Sec 8a-276.

For more information, visit www.miamidade.gov/taxcollector

001366

Local Business Tax Receipt

Miami-Dade County, State of Florida
-THIS IS NOT A BILL - DO NOT PAY

3616969

BUSINESS NAME/LOCATION

BENSON CHARLES
1665 WASHINGTON AVE 2FL
MIAMI BEACH FL 33139

RECEIPT NO.

RENEWAL
3779072

LBT

EXPIRES
SEPTEMBER 30, 2015

Must be displayed at place of business
Pursuant to County Code
Chapter 8A - Art. 9 & 10

OWNER

BENSON CHARLES

SEC. TYPE OF BUSINESS

212 PROFESSIONAL
AR0014022

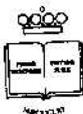
**PAYMENT RECEIVED
BY TAX COLLECTOR**

\$60.00 07/14/2014
CREDITCARD-14-026707

This Local Business Tax Receipt only confirms payment of the Local Business Tax. The Receipt is not a license, permit, or a certification of the holder's qualifications, to do business. Holder must comply with any governmental or nongovernmental regulatory laws and requirements which apply to the business.

The RECEIPT NO. above must be displayed on all commercial vehicles - Miami-Dade Code Sec 8a-276.

For more information, visit www.miamidade.gov/taxcollector



REGISTRO MERCANTIL DE BARCELONA
REGISTRE MERCANTIL DE BARCELONA

212/27017358

ARQUITECTURA AGRONOMIA SL

Previo examen y calificación del precedente documento, presentado en el diario 990 asiento 1909, al amparo del art.18 del Código de Comercio y 6 del Reglamento del Registro Mercantil, queda inscrito, en fecha 19 de Febrero de 2007, en el TOMO 39305, FOLIO 218, HOJA B 345099, INSCRIPCION 1, de la entidad "ARQUITECTURA AGRONOMIA SL"; inscripción practicada en los términos previstos en el art.185.6 del Reglamento del Registro Mercantil.

Se ha realizado la comprobación exigida por el artículo 61 bis del Reglamento del Registro Mercantil.

A efectos de la Ley Orgánica 15/1999, de 13 de diciembre, de Protección de Datos de Carácter Personal, se hace constar que los datos personales expresados en el título inscribible y los de su presentante, han sido incorporados a los libros de este Registro y a los ficheros informatizados que se llevan en base a dichos libros, en cumplimiento de la legislación reguladora de dicha Institución. En cuanto resulte compatible con la legislación específica de ésta, se reconoce a los interesados los derechos establecidos en la Ley Orgánica citada.

BARCELONA, 19 de Febrero de 2007
EL REGISTRADOR

DA3.L 8/89

Base de cuantía declarada

Arancel: 1,5,13,20,21,22,23,24,25

Honorarios: 108,70 euros

Reducción honorarios RDL 6/8



Professional Certificates

This is to certify that

Alejandro Zaera-Polo

MArch(Harvard), DiplArch(Hons)(Madrid)

was elected on the thirteenth day of
February 2002 into Corporate Membership of
the Royal Institute of British Architects

Founded in the year of Our Lord one thousand eight hundred and thirty four, and afterwards constituted under Royal Charters granted by King William the Fourth, Queen Victoria, King Edward the Seventh, King George the Fifth and Queen Elizabeth the Second, a body politic and corporate for the general advancement of Architecture, and for promoting and facilitating the acquirement of the knowledge of various Arts and Sciences connected therewith.

In witness whereof the Common Seal has been
hereunto affixed by authority of the Council
on the thirteenth day of February 2002



President



Richard Hastman
Chief Executive

Serial No. 8392828

This Diploma is held subject to the conditions of Byelaw 4.2



HARVARD UNIVERSITY

AT CAMBRIDGE IN THE COMMONWEALTH OF MASSACHUSETTS

THE PRESIDENT AND FELLOWS OF HARVARD
COLLEGE, acting on the recommendation of the
Faculty of Design

and with the consent of the Honorable and Reverend
the Board of Overseers, have conferred on

ALEJANDRO ZAERA-POLO
the degree of Master in Architecture
with distinction.

*In witness whereof, by authority duly committed to us,
we have hereunder placed our names and the University
seal on this sixth day of June in the Year of Our Lord
nineteen hundred and ninety-one and of Harvard College
the three hundred and fifty-fifth.*


PRESIDENT


DEAN OF THE FACULTY OF DESIGN





Juan Carlos I, Rey de España

y en su nombre el

Rector de la Universidad Politécnica de Madrid



Considerando que, conforme a las disposiciones y circunstancias prevenidas por la actual legislación,

Don Alejandro Zaera Polo

nacido el día 17 de octubre de 1963 en Madrid, de nacionalidad española

ha superado los estudios universitarios correspondientes organizados por la Escuela Técnica Superior de Arquitectura, conforme a un plan de estudios aprobado por el Ministerio de Educación y Ciencia, expide el presente título universitario oficial de

Arquitecto

con validez en todo el territorio nacional, que faculta al interesado para disfrutar los derechos que a este título otorgan las disposiciones vigentes.

Dado en Madrid, a 15 de noviembre de 1988

El interesado,

A. Zaera Polo

El Rector,

Juan Carlos I



El Secretario General, Universidad Politécnica de Madrid

Escuela Técnica Superior de Arquitectura

José M. Herrero
retra el interesado

Fdo.: José M. Herrero Verdú, 25 de Mayo de 1988

EL FUNCIONARIO

José Carrero

1-AA-007495

Registro Nacional de Títulos | 1990/002163

Fdo.: Rafael Perdomo Baeza | 28026870

2319

Registro Universitario de Títulos





Architects Registration Council of the United Kingdom

ESTABLISHED UNDER THE ARCHITECTS (REGISTRATION) ACTS 1931 TO 1938

73 Hallam Street London W1N 6EE Tel: 071-580 5861 Fax: 071-436 5269

Registrar: David W. Smart BA, FMS.

14 October 1993

YOUR ARCUK REGISTRATION NO IS: 059244G

Alejandro Zaera-Polo
46A Petherton Road
Highbury
London
N5 2RD

Dear Mr Zaera-Polo,

ADMISSION TO THE REGISTER OF ARCHITECTS

I am pleased to inform you that at their meeting on Wednesday, 13 October 1993, the **Architects Registration Council of the United Kingdom** directed that your name be entered on the Register of Architects in accordance with the provisions of the **Architects (Registration) Acts 1931 to 1969**.

The address I am required to print after your name in the Register, and to which all official communications should be sent, is your regular business address (ie. where you are to be found in normal business hours). It is, therefore, important that you notify the Council immediately you change it.

Your registration number, which you should quote on all correspondence, is shown above your name and address at the head of this letter. The address shown is the one recorded on our computer files and forms the basis of our records. If any details are incorrect please inform this office.

Your first annual Retention Fee of **£30.00**, will be due for payment on **1st January 1994**. A Direct Debiting Instruction form is enclosed which it is suggested will simplify the process of annual payment of your Retention Fee. Please complete and return to this office at your earliest convenience.

On receipt of your payment you will be issued in due course, with a registration card as evidence of registration only until **31st December 1994**. A new card must be obtained for each subsequent year in which you wish to be registered.

Yours sincerely

David W. Smart
Registrar



**DON SANTIAGO DE LA FUENTE VIQUEIRA, ARQUITECTO,
SECRETARIO DEL COLEGIO OFICIAL DE ARQUITECTOS DE
MADRID.**

C E R T I F I C A :

Que, según los antecedentes obrantes en la secretaria de esta Corporación Profesional se desprende que el Arquitecto **ALEJANDRO ZAERA POLO**, de nacionalidad **ESPAÑOLA**, con residencia en **MADRID (MADRID)** y Título de **ESCUELA TECNICA SUPERIOR DE ARQUITECTURA** de **MADRID**, obtenido con fecha de **7/11/1.988** se encuentra colegiado en este Colegio Oficial de Arquitectos con el número **8.738**, desde el día **4/4/1.989**, no constando en su expediente nota desfavorable alguna en relación con el ejercicio de la profesión hasta el día de la fecha.

Y para que conste y surta sus efectos donde proceda, a petición del interesado, expido y firmo el presente en Madrid a 30 Septiembre 2002.





RIBA

Alejandro Zaera-Polo

Membership No: 8392828

Expires: 31-Dec-13

RIBA Chartered Member

For all membership queries please
telephone +44 (0)20 7307 3800 or
email membership.services@riba.org
or access your details at www.architecture.com

REG Hirschengraben 10 CH - 3011 Bern

Alejandro ZAERA POLO (1963)

Berne le 29.08.2013

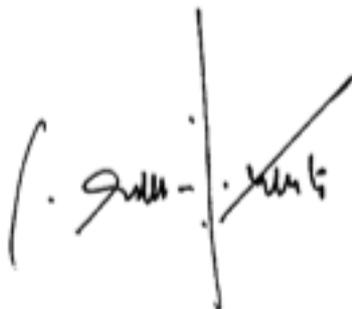
Attestation

Par la présente, nous attestons que le diplôme de

Arquitecto, Escuela Técnica Superior de Arquitectura, Espana

Daté 15.11.1988

répond, avec la preuve de l'exercice de la profession, aux exigences d'inscription dans le Registre A des architectes, conformément au Recueil de dispositions en vigueur.

A handwritten signature in black ink, appearing to read 'P. Schmutz', is written over a vertical line that serves as a signature separator.

Pierre Henri Schmutz
Directeur

1. Le titulaire du diplôme susmentionné, doit pouvoir produire, sur demande du mandant, les documents et attestations originaux y relatifs
2. Le présent document atteste que le candidat présente les qualifications nécessaires à la participation à un concours, conformément aux exigences de la Commission SIA 142. Aucun autre usage de ce document n'est autorisé



Office of the Professions

Verification Searches

The information furnished at this web site is from the Office of Professions' official database and is updated daily, Monday through Friday. The Office of Professions considers this information to be a secure, primary source for license verification.

License Information *

08/28/2014

Name : QUINN JOHN RAYMOND
Address : NEW YORK NY
Profession : PROFESSIONAL ENGINEERING
License No: 074774
Date of Licensure : 08/07/97
Additional Qualification :
[Status](#) : REGISTERED
Registered through last day of : 11/14

* Use of this online verification service signifies that you have read and agree to the [terms and conditions of use](#). See [HELP glossary](#) for further explanations of terms used on this page.

- Use your browser's back key to return to licensee list.
- You may [search](#) to see if there has been recent disciplinary action against this licensee.
- Note: The Board of Regents does not discipline physicians (medicine), physician assistants, or specialist assistants. The status of individuals in these professions may be impacted by information provided by the NYS Department of Health. To search for the latest discipline actions against individuals in these professions, please check the New York State Department of Health's [Office of Professional Medical Conduct](#) homepage.





Office of the Professions

Verification Searches

The information furnished at this web site is from the Office of Professions' official database and is updated daily, Monday through Friday. The Office of Professions considers this information to be a secure, primary source for license verification.

License Information *

08/28/2014

Name : LAMONICA GARY W
Address : OAKLAND GARDENS NY
Profession : PROFESSIONAL ENGINEERING
License No: 082058
Date of Licensure : 07/20/04
Additional Qualification :
[Status](#) : REGISTERED
Registered through last day of : 09/15

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- Use your browser's back key to return to licensee list.
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- Note: The Board of Regents does not discipline physicians (medicine), physician assistants, or specialist assistants. The status of individuals in these professions may be impacted by information provided by the NYS Department of Health. To search for the latest discipline actions against individuals in these professions, please check the New York State Department of Health's [Office of Professional Medical Conduct](#) homepage.



THE UNIVERSITY OF THE STATE OF NEW YORK
Commemorating 100 Years of Professional Regulation 1891 1991
EDUCATION DEPARTMENT



BE IT KNOWN THAT

DANIEL BRODKIN

HAVING GIVEN SATISFACTORY EVIDENCE OF THE COMPLETION OF PROFESSIONAL
AND OTHER REQUIREMENTS PRESCRIBED BY LAW IS QUALIFIED TO PRACTICE AS A

PROFESSIONAL ENGINEER

IN THE STATE OF NEW YORK

IN WITNESS WHEREOF THE EDUCATION DEPARTMENT GRANTS THIS LICENSE
UNDER ITS SEAL AT ALBANY, NEW YORK
THIS SIXTH DAY OF AUGUST, 1992.

LICENSE NUMBER
069315



Thomas S.M.

THOMAS S.M.
SECRETARY

Douglas C. Hradovack

DOUGLAS C. HRADOVACK
COMMISSIONER

AC# 706377

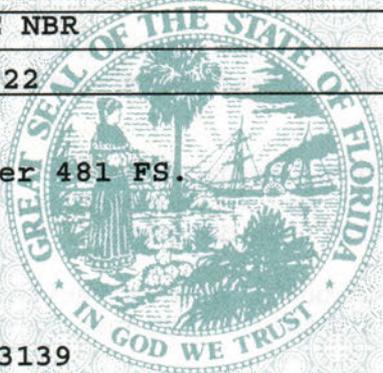
STATE OF FLORIDA

DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
BOARD OF ARCHITECTURE & INTERIOR DESIGN

SEQ# L12121700626

DATE	BATCH NUMBER	LICENSE NBR
12/17/2012	120246362	AR0014022

The ARCHITECT
Named below IS LICENSED
Under the provisions of Chapter 481 FS.
Expiration date: FEB 28, 2015



BENSON, CHARLES HARVEY
1665 WASHINGTON AVENUE
2ND FLOOR
MIAMI BEACH

FL 33139

RICK SCOTT
GOVERNOR

KEN LAWSON
SECRETARY

DISPLAY AS REQUIRED BY LAW



Col·legi d'Arquitectes
de Catalunya

M. ASSUMPCIÓ PUIG HORS, ARCHITECT, SECRETARY OF THE COL·LEGI D'ARQUITECTES DE CATALUNYA (CATALAN ARCHITECTS CORPORATION),

C E R T I F I E S :

FIRST.- That, as registered in the records of this Professional Corporation, ARQUITECTURA AGRONOMIA SLP is listed in the register of professional companies of this Corporation, as follows:

Name: ARQUITECTURA AGRONOMIA SLP,

Nationality: Spanish.

Residence: BARCELONA (BARCELONA) CLOS DE SANT FRANCESC 18, BAIXOS

Association membership number: B64448848.

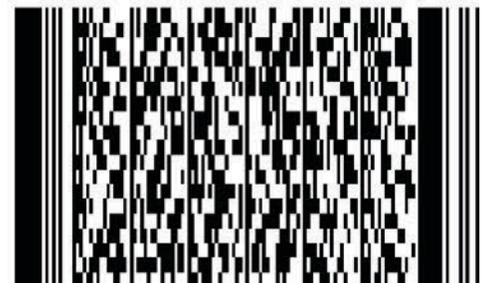
Associated since: 21/03/2007.

Composed of the following members:

- TERESA GALÍ IZARD - Enginyer tècnic agrícola (núm.col.2962)
- JORDI NEBOT I ROCA - Arquitecte

SECOND.- That ARQUITECTURA AGRONOMIA SLP is an architects' practice company duly registered in our Registry, according to Professional Practice Law 2/2007 of 15 march 2007, and it is also fully entitled to do architectural, urban planning, and landscape architecture works according to the academic and formal qualifications of its members named above, as established in Directive 2005/36/EC of 7 September 2005 on the recognition of professional qualifications architecture.

And for the record, to whom it may concern and at the request of the company in question, I issue this certificate in Barcelona on 02/09/2014. Recipients can verify the authenticity and integrity of the printable version of this electronic document following the verification code: S2014/0/6128; Col. B64448848; Date: 02/09/2014 on <http://www.coac.net/3>



REG Hirschengraben 10 CH - 3011 Bern

Teresa Eulalia GALI IZARD (1968)

Berne, le 27.06.2013

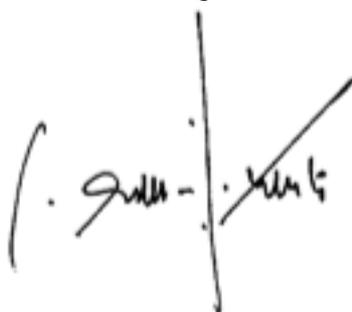
Attestation

Par la présente, nous attestons que le diplôme d'

Agricola, Escola Superior d'Agricultura de Barcelona, Espana

daté du 31.08.1993

répond, pour autant qu'il justifie d'une pratique suffisante de 3 ans acquise après la fin de la formation professionnelle, aux exigences d'inscription dans le Registre B des ingénieurs, conformément à l'index FEANI en vigueur.



Pierre Henri Schmutz
Directeur

1. Le titulaire du diplôme susmentionné, doit pouvoir produire, sur demande du mandant, les documents et attestations originaux y relatifs
2. Le présent document atteste que le candidat présente les qualifications nécessaires à la participation à un concours, conformément aux exigences de la Commission SIA 142. Aucun autre usage de ce document n'est autorisé

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 EFLA EUROPEAN FEDERATION FOR LANDSCAPE ARCHITECTURE

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Client: Network Rail
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John Lewis Department Store and Cineplex

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Meydan Retail Complex and Cineplex

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Trinity EC3

Client: Minorities Estate Limited
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Carabanchel Social Housing

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Municipal Theatre and Auditorium, Torrevieja, Spain

Client: Torrevieja City Council
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Torrevieja City Council
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AZPML Experience



AZPML COLLABORATIVE WORKING

Alejandro Zaera-Polo and Maider Llaguno architecture has a long history of successful collaborations with other contractors, architects and consultants to deliver schemes regionally, locally and internationally. These formations have aimed to optimise delivery, ease communication, utilise specialist skills, ensure budgetary performance and promote efficient communication with all stakeholders.

COMMUNICATION

Good architecture is a collaborative effort with everyone making their unique contribution. Effective partnership promotes the sharing of information and appropriate prioritisation of resources. It also supports 'joined up' provision of integrated design. The quality of dialogue in collaborative working is critical so that problems can be identified and common solutions agreed. As lead designer, AZPML's approach to collaboration is to establish both a well-conceived brief, since early decisions will have enormous influence right through the life of the building, and an efficient communication system. Our overall philosophy is that there should be no surprises, and that this can only be achieved through successful collaboration with the team members and other stakeholders. (For example, we believe that cost should inform design; therefore we would welcome pro-active cost advice as the design develops, rather than wait until the end of a stage only to find that the design is over budget.)

We would structure a collaborative design process through:

- > Regular meetings with the client, contractor and stakeholders
- > Strategic teams who will be responsible for key decisions
- > Identify those who will be responsible for day to day project decisions
- > Set up design workshops to identify major goals of the brief
- > Establish clear lines of communication and ensure that they are always open

We always ensure this communication will be recorded in the form of meeting minutes as well as reports at the relevant stages.

WORKING WITH MULTIPLE STAKEHOLDERS

2012 OLYMPICS

Our most complex local collaborative project was the London 2012 Olympic Masterplan in the Lower Lea valley. In partnerships with the LDA, ODA, and other teams, Alejandro Zaera-Polo and Maider Llaguno architecture, as part of the Masterplanning team, played a core role in developing the planning strategies, and delivering the planning permissions for the 2012 Games and Legacy. The Masterplanning team established excellent working relationships with the relevant local planning authorities, the Olympic JPAT officers group, and statutory consultees and was been closely involved in wider stakeholder and public consultation. Working alongside the LDA and co-consultants within the Masterplanning team, and separately appointed environmental and legal advisors, our team, played a key role in structuring and developing the planning application material and securing permissions.

WORKING WITH MULTIPLE ARCHITECTS

JOHN LEWIS DEPARTMENT STORE AND CINEPLEX

More recently, we have worked collaboratively on a large-scale inner city retail scheme in Leicester. Here, Hammerson as client and developer, appointed five architects to design buildings within a Chapman Taylor Masterplan. The scheme was divided into several building blocks, with our team appointed to design the Anchor Store, the John Lewis Department Store and Cineplex. Following the appointment of the different architects, joint meetings and design workshops began, to develop the masterplan and ensure that the wide range of architectural languages communicated and complimented each other. Over the 15 month process from Basic to Detailed Design we collaborated intensely on the most likely and unlikely interfaces imaginable, working to exploit the opportunities of collaboration, from jointly developed solutions for floor finishes to door handle specifications, and in doing so drawing upon the strengths of each of the team members. This collaboration was so successful that it was used as a template for Hammerson's Sheffield development which involves 9 architectural practices.

WORKING WITH CONTRACTORS

BIRMINGHAM NEW STREET STATION, RAVENSBOURNE COLLEGE OF DESIGN AND COMMUNICATION, JOHN LEWIS DEPARTMENT STORE AND CINEPLEX

In recent years, Alejandro Zaera-Polo and Marder Llaguno architecture has worked with several of the UK's leading construction firms at both a local and regional level: we were novated by Bovis Lend Lease on the Ravensbourne College of Design and Communication in Greenwich and also by Sir Robert McAlpine on the John Lewis Department Store and Cineplex in Leicester. Our team is currently working with Mace Construction on a complex façade design for the Birmingham New Street Station, which is soon to undergo construction. We have experience both in working with an existing team of consultants, as was the case with Birmingham New Street Station and Euston Station, and in bringing to a project our regular set team of consultants, as has been the case with the John Lewis Department Store and Cineplex and Ravensbourne College of Design and Communication.

REGIONAL COLLABORATION

BIRMINGHAM NEW STREET STATION

AZPML is currently working with MACE, ATKINS, Network Rail, Advantage West Midlands, Centro and Birmingham City Council on Birmingham New Street Station. Alejandro Zaera-Polo and Marder Llaguno architecture has been commended by MACE for its efficiency, flexibility and pragmatic approach to the construction of this complex project, which has resulted in saving both time and money without compromising the delivery of a high quality product.

As a Practice we believe the most successful way of developing designs during the early stages is through design workshops. On Birmingham New Street Station, we have managed the collaboration through fortnightly interface meetings and progress meetings and regular design workshops with the consultants working on the project. Since the project is located outside of London, it has been important to balance meetings and maximise desk-time. Here, we have developed effective electronic communications systems via which information is recorded and disseminated. AZPML's efficiency in solving outstanding issues is characteristic of the benefits of working with a smaller practice.

LOCAL COLLABORATION

RAVENSBOURNE COLLEGE OF DESIGN AND COMMUNICATION

The new Ravensbourne College of Design and Communication has been an exercise of collaboration both in terms of the partnership agreement between the College as the user and MDL as the developer, and teamwork between the Client and members of the Design Team. This has required a number of meetings and workshops at various levels. Principal meetings were held monthly to resolve key issues at a high level. These were enhanced with fortnightly progress meetings in which the Design Team reported to the Client on progress and design issues. Weekly Design Team meetings were held with the designers to develop and coordinate, and these were supplemented with regular workshops to resolve specific issues. Communication is the key to good collaboration and AZPML encourages a good working relationship between all members involved in the build process.

AZPML ADDING VALUE

YOKOHAMA INTERNATIONAL FERRY TERMINAL

The Yokohama International Ferry Terminal is a £150m mixed-use facility in Japan. The Terminal comprises national and international passenger handling facilities for cruise ships; support facilities including offices, shops and restaurants; a conference centre; parking; a rooftop plaza as well as a traffic plaza. Our design team was responsible for full architectural services on the project, from inception to construction completion.

ADDING VALUE

The Yokohama International Port Terminal needed to host both the influx of visitors commuting by sea between Japan and Korea, the joint World Cup hosts, the closing celebrations of the World Cup, and ongoing use by cruise ships who would be moored there for a third of every year. Taking into account the building's function post-World Cup, and the seasonality of cruise ship use, Alejandro Zaera-Polo saw particular relevance in considering the legacy function of the Terminal.

For this reason, new functions were programmed into the building, and the Terminal was designed as a flexible space. This included the design of a conference centre at the end of the terminal to stimulate different uses and encourage occupation through the entire range of spaces along the building, and a new public waterfront park on the roof, proposed by the office in addition to the Client's brief. Also, the entire Terminal was designed with ancillary uses set along the edges of the departure and arrival halls, ensuring that in times when cruise ships were not moored, the terminal could be used as a large event hall for markets, fashion show, book fairs, lectures, etc.

Turning the Cruise Terminal into a flexible space involved extensive negotiation with the immigration authorities, as all immigration furniture had to be designed as mobile. Furthermore, to provide budget for the additional 17,000m² roof plaza, we had to assist the client with many fundraising initiatives.

Both the flexibility built into the terminal and the roof plaza added enormous value to the Terminal building, bringing activity as well as revenue throughout the year. Furthermore, Yokohama International Port Terminal adds value because its vision is founded on how construction of a Terminal would benefit not only cruise passengers but the local community as well. The horizontal structure respects views of existing neighbourhoods to the waterfront while the public roof plaza provides Yokohama citizens with an opportunity to enjoy leisure activities close to the waterfront.

WATERMARK WESTQUAY

Watermark WestQuay is a mixed-use development occupying a 3.9 ha council-owned brownfield site adjacent to the medieval Town Walls in the Southampton. The £100m leisure-led extension to an existing retail centre is comprised of over 500,000sqft of commercial space and offers a 14 screen cinema, a 150 key hotel, a major anchor store, a new retail circuit, a 25 storey residential tower, and a new public plaza activated by cafes and restaurants. The office was commissioned to provide architectural design services and subsequently appointed to design the public realm for an outline planning application.

ADDING VALUE

Our design process for Watermark WestQuay has been characterised by an extensive period of what we call 'optioneering', whereby we exhaust numerous design directions in pursuit of the right design solution. During this process, we were able early on to suggest two key decisions which have resulted in the increase in value for the client: firstly, extending the site footprint over the neighbouring car park in exchange for its reprovision within the scheme, and secondly the demolition and renovation of part of the existing centre which in turn provides an improved link to the new proposal and a net gain of 50,000sqft of retail space.

Through the process of challenging protected views in the local development guidelines that had been compromised by developments beyond our site, the opportunity for more mass on the site was also created. We were pleased with the Client's decision to include a hotel in the proposal due to the contribution it has in creating a destination and improving the 24 hour life of the development. The council and CABI have lauded our urban design strategies for creating active frontages on all sides of the scheme through the placement of the lobby towards Harbour Parade. This arrangement helps to future proof the western side of the site for positive street level development.

The Watermark WestQuay development includes over 150,000 ft² of exterior public space, and will offer the community a diverse set of accessible spaces as well as a new plaza for concerts and public events. Our public realm design strategy received strong support during the public consultation, and the Council intends to have the team extend the design to include an additional 250m length of the Town Walls esplanade to the south of the site.

The team's design for Watermark WestQuay adds value in commercial terms for the client, in addition to improving the city's urban development and also benefitting the community through the addition of a new public plaza and promenade, and by reconnecting the city to its historic Old Town walls.

MEYDAN RETAIL COMPLEX AND MULTIPLEX

The Meydan Retail Complex and Multiplex is a €34m development in the rapidly growing suburban landscape of Istanbul. The 55,000m² complex comprises shops and cinemas surrounding a new public square. We provided architectural design services from schematic design to tender and was retained to provide supervisory review during construction documentation and construction administration.

ADDING VALUE

The office was selected through a design competition and appointed to develop their proposal with a local architect of record and team of local consultants. Meydan Shopping Square differs from normal out-of-town developments which are typically metal sheds surrounded by vast extents of car park, like the neighbouring IKEA. Our design proposes locating the car park under the development and organising the retail circuit around an open square. The success of this proposal is evident in the popularity of the square as a destination – a new centre for a rapidly expanding suburban community.

In addition to geothermal climatisation, the retail centre is covered by an extensive 30,000m² green roof, which not only provides the benefits of improved insulative performance and rain water management, but has added value added to the community surrounding the development. During construction, towers of flats started to crop up around the centre advertising spectacular vistas over a green landscape. It has become a local destination, a park and oasis.

By considering the wider impact of the proposal and designing a square at the heart of the development, the office managed to create more than a successful retail circuit for the developer. The Meydan Retail Complex is now the centre of a burgeoning residential district, bringing added value to the community through sustainable development and place-making.

JOHN LEWIS DEPARTMENT STORE AND CINEPLEX

The £44m John Lewis Department Store and the Cineplex and footbridges in Leicester are part of a larger mixed-use development initiated as an extension to an existing inner-city shopping center. We were appointed by developer, Hammerson, after the approval of Chapman Taylor's outline masterplan to design the department store, Cineplex and associated pedestrian bridges, totaling 34,000m², through stage E. The office was subsequently novated by Sir Robert McAlpine to carry the project through to completion.

ADDING VALUE

When we were appointed to work on the John Lewis and Cineplex block, these anchor elements were attached to the mall extension, presenting an extensive all-indoor environment. After doing precedent studies, the design team proposed detaching the department store and cineplex from the mall complex, producing an open-air pedestrian street between them, maintaining the "all indoor" retail continuity through connecting the mall to the department store via an enclosed pedestrian bridge over the open-air street. This broke down the mass into smaller blocks, better integrating the large development with the existing context and making it permeable. The added value of offering people both indoor as well as outdoor experiences (shopping, cafes, outdoor terraces, and street spectacle) has been significant.

We also increased the building footprint and overall buildable area. This was achieved by carefully adjusting the approved outlining plan to suit the irregularities of the site. In place of a standard retail box superimposed onto the site, John Lewis floor plate was designed to bulge out along its long elevations to mirror the geometry of the dual carriageway. In doing so, the building length is foreshortened in perspective as the elevations bend against a viewer's eye, breaking down the perceived length of the building. This strategy also provided extra buildable area which benefitted both the developer as well as the tenants.

By carefully negotiating between the spatial and experiential concerns and commercial criteria, We were able to add value to the project on many fronts – making the development more permeable, adding space and breaking down the scale of a large retail box. The John Lewis Department Store and Cineplex is an example of how a mix of uses of different scales can be introduced into a historic fabric through carefully finding optimal scale and layout as well as sensitivity to the geometry of the existing fabric. Alejandro Zaera-Polo believes that by working with existing fabrics, it is possible to generate designs that are at once unique as well as specific.

BIRMINGHAM NEW STREET STATION

The redevelopment of Birmingham New Street Station includes a £35m envelope and atrium roof designed by AZPML. The office was selected through a design competition and has been commissioned to develop the concept design to tender stage and monitor this through to completion.

ADDING VALUE

AZPML's Birmingham New Street Station is an important transport hub and a key aspect of the city's public realm, providing a first impression of the city to a large influx of visitors to the Midlands. The current architecture of the station and the quality of the surrounding public realm is not consistent with the ambitions and caliber of the City of Birmingham. AZPML's proposal is aimed at improving urban design through correcting this situation and providing the station with an iconic architecture that will become an important urban reference, and a source of urban pride.

Our new design, which focuses on creating a highly animated reflective street edifice and a bright day lit public atrium. The building is enclosed in a reflective screen which climbs the façade and wraps around the building. The facade's surface will produce a controlled reflection of the urban field, tilting to avoid the reflections of surrounding buildings, and shaping itself to reflect instead the famously cloudy Birmingham Sky, the moving crowds of passengers and the trains entering and exiting the station, and thus be able to communicate the function of the building to the public.

Birmingham new Street Station will be many people's first impression of Birmingham. The high profile city centre site required particularly high quality design commensurate with its significance in the local community. The design competition was instigated after CABA's lack of support for the previous proposals. Our scheme has received repeated commendations from CABA.



AZPML PUBLIC SECTOR PROJECTS

Alejandro Zaera-Polo and Mainer Llaguno architecture has a track record of designing and delivering various scales and types of public sector projects. Our publicly-funded commissions include the Yokohama Ferry Terminal (Japan); Birmingham New Street Station, the BBC Music Box and the 2012 Olympic Masterplan (UK); and Carabanchel Social Housing, the South-East Coastal Park, La Rioja Technology Transfer Centre, Torre vieja Municipal Theatre and Auditoriums and La Villajoyosa Police Station (Spain).

DESIGN EXCELLENCE

A commitment to design excellence is a particularly important consideration when selecting architects to work within the public realm. AZPML's practice is recognised as one of the most significant architecture and urban design practices working today.

WORKING WITH STAKEHOLDERS

Understanding and addressing the diversity of stakeholder issues in a public project is a key part of our design process. In each of our previous public projects, through working either in large multi-stakeholder teams, with local councils, neighbourhood committees or public partnerships, the form of the project has emerged in part from a rigorous analysis, and response to, the specific requirements of these groups. Our approach here would be to integrate as many users and advisors as possible at an early stage of the design process, producing effective feedback during the project. This strategy aims both to create a high degree of support for projects and to encourage the insights which lead to innovative solutions.

CONTROLLING TIME AND BUDGET

YOKOHAMA INTERNATIONAL FERRY TERMINAL; SOUTH EAST COASTAL PARK

In our experience, a key issue in the successful delivery of publicly-funded projects is making sure that projects do not expand beyond the time and cost allocated. We have a track record of managing design teams and delivering project on time and within budget. We understand that the architect's role is critical in holding the project to its scope and maintaining efficiency of timing.

Possibly the most frequent factor which causes projects to overrun budget is uncontrolled change. Therefore if there are strict budget limits, there must be equally strict change control procedures sitting alongside it. We will work with the Client, Quantity Surveyor and Project Manager in identifying and setting up the most appropriate change control procedures to adopt on the project.

It is important that we develop a clear understanding of the Client's budget at the outset. Internally, we usually work with Charles Rich Consultancy from the design stages to ensure that the budget and developed brief remain in sync and match the client's aspirations, and to ensure that the Client, with our assistance, is able to balance its needs within the available funds in the most appropriate manner. Charles Rich has over 40 years experience - 25 years as contractor 18 years partner at Foster + Partners.

Two projects in particular, the Yokohama International Ferry Terminal and the South East Coastal Park in Barcelona, illustrate the office's success in delivering high-profile, publicly-funded projects with fixed price budgets and very tight deadlines. The terminal had to be ready for the closing celebrations of the Soccer World Cup in Japan in 2002 and the Barcelona Park had to be open in time for the opening ceremonies of the Infrastructures Festival 2004 in Barcelona. Both buildings were technically complex and architectural challenges, for ourselves as well as our consultants, and we took great pleasure in shaping and forming the value driving elements without compromising the overall quality of the design intent. Both projects have been widely awarded and published. The Yokohama International Ferry Terminal received a RIBA International Award for Best International Building 2004 and the Enric Miralles Prize for Architecture. The South East Coastal Park was shortlisted for the Mies van der Rohe Prize and the Stirling Prize in 2005.

SUSTAINABILITY

We believe that all public buildings should be designed and built considering a durable life cycle. Sustainability is a concept which Alejandro Zaera-Polo and Mainer Llaguno take seriously in a broad sense, not just in the conventional sense of use of particular materials or climatic devices, but also in terms of the programmatic mix that maximises the use of a particular urban space and extends its use in time.



AZPML WORKING WITH PUBLIC SECTOR ORGANISATIONS

YOKOHAMA INTERNATIONAL FERRY TERMINAL

The Yokohama International Ferry Terminal is a £150m mixed-use facility in Japan. The Terminal comprises national and international passenger handling facilities for cruise ships; support facilities including offices, shops and restaurants; a conference centre; parking; a rooftop plaza as well as a traffic plaza. The office was responsible for full architectural services on the project, from inception to construction completion.

WORKING WITH PUBLIC SECTOR ORGANISATIONS

Yokohama International Ferry Terminal presents an extreme example of how the demands of working on a public sector project can require a special organisation of the design team to manage an inherently more bureaucratic organisation system through active involvement and direct engagement. By being directly accessible and available throughout the process, issues were resolved quickly, and the project proceeded more efficiently.

The Yokohama International Ferry Terminal was a joint commission by the Port and Harbour Bureau of the City of Yokohama and Japanese Central Government, with the Port and Harbour Bureau given the role of delivering the project.

Working with the public authority involved intense administration, frequent meetings as well as consultations with interested external parties and stakeholders. The office's involvement during all stages of the work was key to the success and outcome of the planning application. For this reason, the office moved to Japan and set up office there, grew its Japanese staff and collaborated with Japanese engineers to deliver this public sector project.

Despite the proposal's unusual form, complexity of proposed construction system and unusual mix of program, Alejandro Zaera-Polo was successful in obtaining planning permission and several "Article 38" approvals, given to different aspects of the building which were not compliant with existing building codes in Japan. Together with the rest of the design team, we prepared documents and presented evidence of each element to teams of experts and professionals to prove that the noncompliant elements were safe and buildable. This process is standard, though complex in Japan, and the office managed to obtain all the necessary approvals. During the construction phase, the design was based at the site office, to ensure a close collaborative team approach was in place, with all the consultants working together in one joint site office.

2012 OLYMPICS

The 2012 Olympic Masterplan involved planning for infrastructure, transport and 11,000 homes plus waterway and open space strategies for the forthcoming games in London and beyond with an investment value of £4 billion. The office was part of a masterplanning team comprising EDAW, Allies & Morrison, HOK Sport and Buro Happold. The overriding objective for the Olympic and Legacy masterplan was to use the investment and construction of the games as a catalyst for the regeneration of the Lea Valley area. Alejandro Zaera-Polo and Maider Llaguno architecture lead workstreams for the design of the Olympic Concourse, the Legacy Park, Bridges and Temporary structures.

WORKING WITH PUBLIC SECTOR ORGANISATIONS

The office's experience in the Olympic masterplan project demonstrates a sophisticated approach to working with public sector organisations. It involved a rigorous design process where goals were established early, and developed through an analysis of the client's needs, available resources and site and programme contingencies. Developing options and analysing them with the client ensured best fit for purpose and value while a clear series of milestones held the project to the programme and cost targets.

The client body for the Olympic park was complex and multi-headed. Our key client interfaces were the Olympic Delivery Authority (ODA) and London Organising Committee for the Olympic Games (LOCOG). Toward the end of 2006, CLM was brought on board as the delivery partner. As the project was formidable in terms of its size, complexity and investment, the team had to work in close collaboration with the client bodies. To facilitate the flow of information between the design team and the client body, the ODA appointed a "project sponsor" for each workstream who was in direct and regular contact with leader of each design team.

Each workstream followed a set of clear steps in the collaborative process with the client. The first was to establish goals in terms of programme, design and cost for the task with the client body. Following that, the design team undertook an "option-eering" exercise to develop a set of possible solutions that could then be analysed by the client and deliverability partners in terms of cost and buildability. Once an option was selected, regular design workshops with the client and delivery partner ensured that the direction continued to head in the right direction.

AZPML CULTURE & LEISURE BUILDINGS

RAVENSBOURNE COLLEGE OF DESIGN AND COMMUNICATION

The new building for Ravensbourne College of Design and Communication is located in Greenwich, opposite the O2 Dome. By moving to this extraordinary location, the College aims not only to update its facilities to engage with the new opportunities that digital technologies offer to design and media production, but also to becoming a hub for the burgeoning design and media industry in this new sector of London.

MEDIA AND PERFORMANCE SPACES

The College's new state of the art media facilities are designed to be used by both the different departments in the school and the community of practitioners. In order to encourage cross-fertilisation between these user groups, the project is organized around two atria which are staggered in section to bring together different college departments and the public, and encourage exchange. Each brings different views and light into the centre of the college: one is north-facing with views over Greenwich Peninsula, the other south-facing views over the Thames. The lower atrium has public access and the upper atrium is restricted for the college. The public and college physically exchange in the lower half of the building, while the upper section allows visual exchange. Also, these atria provide natural ventilation.

The new College includes a state of the art multipurpose lecture theatre, TV studio, and post-production facilities. These facilities are extended to the public at specific occasions throughout the year, like the annual live broadcast, Rave on Air, graduation shows and conferences. The 360sqm multipurpose lecture theatre is designed with a flat floor and flexible seating to be capable of hosting events from lectures to registration to experimental performance. It has data provision throughout, full audio-visual capability and a flexible lighting grid for easy rigging of lights. The industry standard 120sqm TV studio, suitable for both teaching and industry use, has required particular attention to acoustic treatment. The new production and post-production facilities support a range of communications media programmes offered by the college, including broadcasting facilities. This includes 4 post-production booths for sound/visual editing, two of which are fully enclosed with radio and presentation capability; 2 digital studios with specialist lighting and acoustic ability for experimental work in emerging digital technologies (like total immersive environments); and open plan post-production workstations with flexible, modular furnishing systems. Exceptional acoustic treatment has been required in all of these facilities.

The building's massing was designed to be compact and provide a low ratio of facade to area. Each space within the building is designed to have its own required fenestration, rather than being subject to a uniform window size or position. A TV studio, for example, has very different light and air requirements to an office. The building's cladding is derived from a non-periodic tiling pattern which allows seven different types of windows to be built from just three different tiles, allowing the envelope to respond to the facility's diverse spatial needs. The pattern also recalls the experiments with pattern in Arts and Crafts schools in the UK, on which Ravensbourne's roots rest.

SPANISH WORLD EXPO AT AICHI

The Spanish Pavilion at the World Expo in Aichi was designed to represent Spain in Japan. It required exhibition spaces and as well as spaces where different events and performances would take place during the Expo. The challenge posed by the Spanish national pavilion was how to structure the pavilion to allow exhibits and performances to take place in a way that would be unique to the Spanish culture and also unique to the Japanese city of Aichi: How can the pavilion connect people to the Spanish culture and address simultaneously Japan, as the host of the exhibition?

Our design for the Spanish Pavilion aimed to set up a productive relationship between the Western and the Eastern cultures. Spain has a unique position in respect to this very contemporary debate as its own cultural tradition grew out of the hybridisation between the Jewish-Christian cultures that formed Europe as well as the Islamic occupation of the Iberian Peninsula between the 8th and 15th Centuries.

Expressing this theme through architecture, our design aimed to connect the historical legacy of Spain with a vision of future. We identified the most characteristic architectural elements of this culture of synthesis and combined them in the design of the pavilion. The element we selected consisted of a repertoire of spatial organisations; courtyard types, churches and chapels, structural elements (arches and vaults) and enveloping and decorative elements (lattices and trceries).

SPATIAL ORGANISATION

The Pavilion was organised around a large, central plaza which connects all the seven different spaces in which the themed exhibits are to be housed. This dramatic oval plaza, with changing images of Spain, projected onto sixteen high-level screens, gave access to the smaller exhibition spaces, each developed by a different artist to illustrate a Spanish theme, from Don Quixote to Spanish foods.

This central plaza space in addition resonated with the Romanesque and gothic naves of ecclesiastical architecture with their focus on the vertical, and whose monumentality was achieved through size and the disproportion between the space and the visitor. Small rooms were arranged around the plaza, abruptly shrinking the scale of the space. These rooms echoed cathedral chapels, hermitages and sanctuaries and even the rooms in Muslim homes that follow on one from another and give structure to Muslim domestic life. They are places for intimate withdrawal, where people's attention shifts to the objects and icons they come into direct contact with. This shrinking and stretching of space works very well in an exhibition context to change people's level of attention or surprise them or endow a small space with greater spatial variety.

Within the pavilion a tapas bar and a shop were incorporated to encourage other forms of gathering. During the six months of the EXPO, the Spanish Pavilion offered a wide range of programs for people in Japan to experience and enjoy the world of Spain and to develop an understanding of Spain's art, culture, historic heritage, scientific development and quality of life. Under the tagline "Spain in Japan", a variety of activities were offered including art exhibitions focusing on introducing Spain's rich art, culture and quality of life, exhibitions of leading Spanish artists, trends in contemporary Spain, and the lasting impact of Spanish culture to the world. Seven exhibitions such as contemporary art (painting and sculpture), photography, ceramics and fashion were provided over six months.

ENVELOPE

Lattices are a very traditional Spanish architectural element reflecting the fusion between Christian and Islamic architecture and also resonating the concept of "engawa" present in traditional Japanese architecture. Very important sources of inspiration for our proposal were the Islamic lattices and Gothic rose-windows and traceries found in the late-gothic Spanish cathedrals in Toledo, Segovia, Seville or Palma. Our design for the Spanish Pavilion therefore involved a lattice envelope consisting of six different pieces, based in a hexagonal grid (like most of gothic and Islamic tracery), coded with a colour. The pieces were manufactured with glazed ceramic, a technique common in the Mediterranean Spanish coast, but also in the Japanese traditional ceramics. Therefore the actual process of making the ceramic facade symbolised bringing Spanish earth to Japan. The six colours chosen were variations of the red and yellow of the Spanish flag which reflect the colours of Wine, Roses, Blood (bullfights), Sun, Sand- internationally associated with Spain. When these pieces were assembled they would produce a non-repetitive pattern of geometry and colour that would provide visitors with changing images.

The lattice envelope was located at a distance of 1.5 meters away from the interior, leaving an interstitial space that aside from performing as porch to provide visitors with shelter while waiting in line for a long time, also filtered the light that would reach the interior. Once the exhibition was over; the colored hexagons were disassembled and donated to the kindergartens of Nagoya for the children to play with and to the municipalities of the region for use as garden sculptures. In this way, the material used to make them, brought from Spain, will stay in Japan permanently.

TORREVIEJA MUNICIPAL THEATRE AND AUDITORIUMS

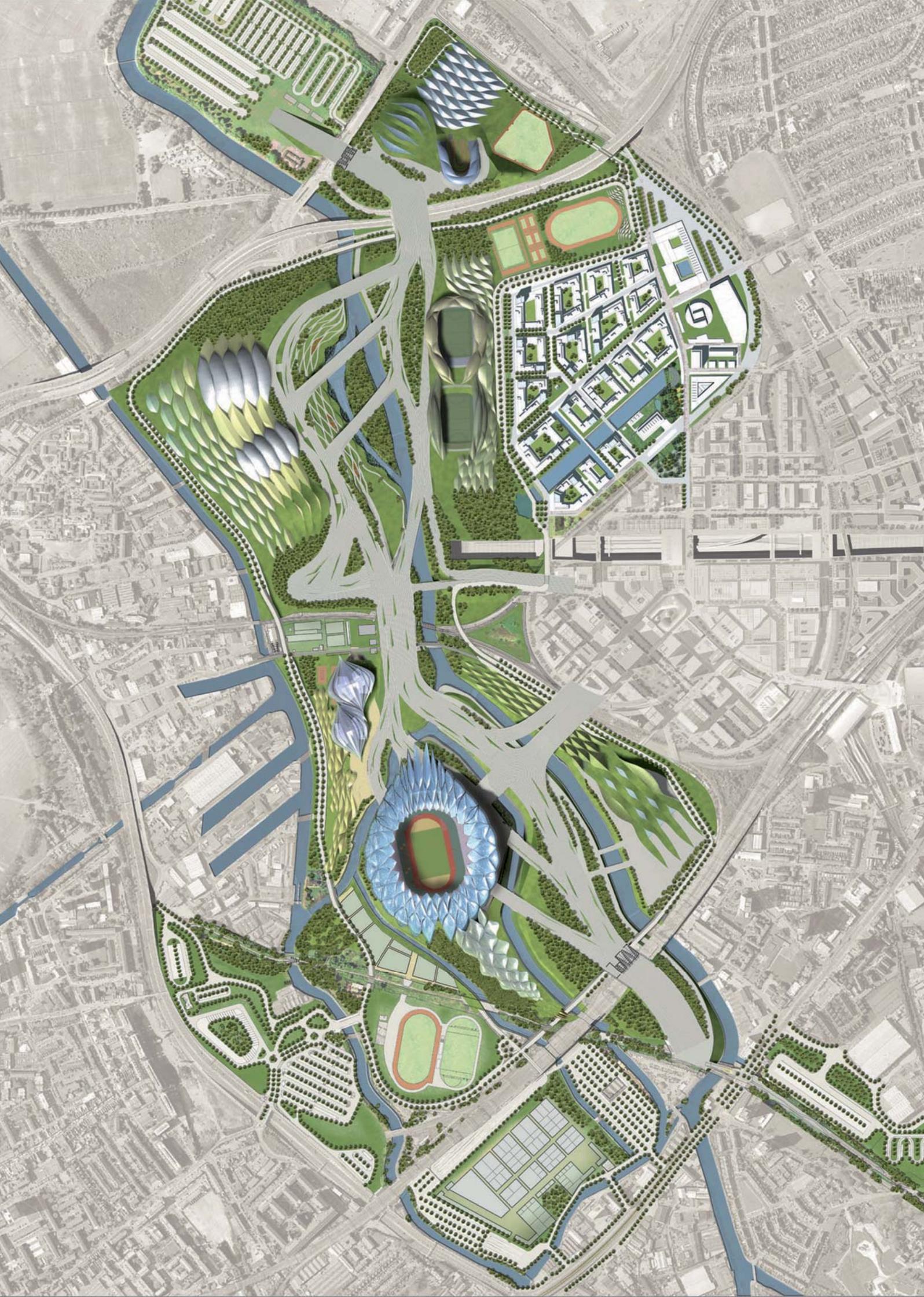
This Torrevieja Municipal Theatre and Auditoriums is the result of a commission to implement a new urban infrastructure in Torrevieja, one of the main tourist towns in Southeast Spain, as part of a program of improvements to raise the profile of the town beyond its current status as a mass tourist destination.

PERFORMANCE SPACES

The project includes a 650-seat theatre and auditorium located on a corner site inside one of the town centre blocks, and the redevelopment of a neighbouring existing plaza. The location is intensely urban, as the building is literally encrusted in the urban fabric. There was too little space in the plot to provide for the required program, so we had to devise a strategy to maximize the use of the available space, without exceeding the allowed volume in an inner city site. Our strategy was to lift the auditorium from the ground level, letting the plaza extend into the building to form a foyer that sits beneath the cantilevered mass of the auditorium. This relationship the function room and the public realm and foyer etc, is one of the most crucial aspects of a public building of this nature. In Torrevieja, the public space appears as an incision into the solid mass of the Auditorium, clad in local limestone, which fills the maximum volume allowed on the site and completes the urban block's corner.

The geometry of the auditorium is the main feature of the cantilevered, stone mass; a reminder of the landscape of limestone quarries that surrounds the town. The building has been designed as a single container in which the proscenium has been made removable, allowing a seamless continuity between the audience, the stage and the scenic tower. This provides maximum flexibility of use to the theatre/auditorium. The auditorium is raked in order to provide optimal viewing lines for the theatre's activities, and its interior

finish has been designed as a system of folded planes which reflects sound to provide ideal acoustic conditions, both for theatre and musical performances. The reverberation time that has been specified to accommodate both music and speech performances. Also, we maximised the width of the room in order to reduce the distance between the seats and the stage to under 20m, meaning that the audience is able to hear direct sound, rather than relying on sound reflection or amplification. Both the crystalline geometry of the interior finish and its white color are a reference to the town's trademark salt lakes.



AZPML PLANNING EXPERIENCE

WATERMARK WESTQUAY

Watermark WestQuay is a mixed-use development occupying a 3.9 ha council-owned brownfield site adjacent to the medieval Town Walls in the Southampton. The £100m leisure-led extension to an existing retail centre is comprised of over 500,000sqft of commercial space and offers a 14 screen cinema, a 150 key hotel, a major anchor store, a new retail circuit, a 25 storey residential tower, and a new public plaza activated by cafes and restaurants. Alejandro Zaera-Polo was commissioned to provide architectural design services and subsequently appointed to design the public realm for an outline planning application.

TRACK RECORD IN SECURING PLANNING CONSENTS

Watermark WestQuay presented a particular planning challenge, both as a major development in a city centre context and through its historically sensitive location adjacent to the longest stretch of medieval walls in the UK. The planning process involved direct engagement with a host of vested parties – English Heritage, CABI, Southampton City Council and its Design Officers, Planning Officers, the local Access Group, the Old Town Residents Association, Hampshire Counter Terrorism and Crime Prevention Design Advisors, key Anchor Tenants, Transport Officials, Natural England. Through these consultations we developed a design which is now supported as a proposal capable of enhancing the setting of the scheduled ancient monument as well as providing a positive contribution to the city itself. In April of 2009, the outline planning application was approved with near unanimous support from the Members, who claim it the most exciting application in Southampton since post-war reconstruction.

This project succeeded in securing planning despite unusually challenging physical and historical contexts, as well as the inflated expectations of local residents from previous planning applications. The approved outline plan has inherent flexibility, with the scope for more or less commercial density, providing the necessary commitment for the city and necessary flexibility for the developer.

TRINITY EC3

Trinity EC3 a £350m mixed-use scheme within London's financial district. The project includes approximately 120,000m² of office space plus 2500m² of retail facilities, the relocation of an existing TfL bus station to an integrated transport hub, an accessible entrance to Aldgate Underground Station and a high quality public realm. Car, motorcycle and bicycle parking are provided as well as loading facilities, servicing and a central plant located in the central basement. AZPML provided architectural design services from inception to tender stage and will be novated to the successful contractor.

SUCCESSFUL PLANNING APPLICATIONS

The Trinity EC3 project is an important regeneration project on the eastern edge of the City helping to re-structure an area which has an inconsistent physical and social fabric, becoming a new landmark in London. The concept has been not only to provide a substantial amount of high quality commercial space but also to contribute to the system of public spaces and transportation schemes.

Our concept provides for 3 iconic crystalline forms characterised by fully glazed envelopes connected with a glass canopy to produce a system of public arcades. This central space connects directly with the London Underground and Bus systems and will host a lively complex of amenities on ground level that will regenerate urban life in the area.

Planning permission was awarded in 2008 and enabled us to experience what is probably the most stringent planning procedure in the world, with a very large group of consultants and a demanding commercial client. The scheme was devised in consultation with neighbouring buildings (including social housing) and was revised to accommodate the amended strategic views of the Tower of London. The buildings will operate on energy-efficient technology which retains heat in winter and cools buildings in summer. A public roof garden, covered all-weather public plaza and community centre are also planned.

This is a large mixed use development within a sensitive city centre site requiring extensive revision to its transport links. Securing planning permission required extensive consultation with multiple stakeholders including the residents of the adjoining social housing complex and TfL. AZPML responded to various concerns from sunlight and daylight issues to the revision of the protected views without detracting from the original design concept which had the backing of CABI.



AZPML PUBLIC CONSULTATION

WATERMARK WESTQUAY

Watermark WestQuay is a mixed-use development occupying a 3.9 ha council-owned brownfield site adjacent to the medieval Town Walls in the Southampton. The £100m leisure-led extension to an existing retail centre is comprised of over 500,000sqft of commercial space and offers a 14 screen cinema, a 150 key hotel, a major anchor store, a new retail circuit, a 25 storey residential tower, and a new public plaza activated by cafes and restaurants. Alejandro Zaera-Polo was commissioned to provide architectural design services and subsequently appointed to design the public realm for an outline planning application.

PUBLIC CONSULTATION

The site of Watermark WestQuay has been identified as a major development opportunity, which necessitates extensive public consultation. Zaera-Polo has both supported and led discussions with diverse group of stakeholders, ranging from the general public to key private investors and board members.

A Public Consultation was held in August of 2008, to wide approval. Presentation materials were widely publicised and exhibited in the atrium of Hammerson's existing Watermark WestQuay 2 shopping centre. The office generated visualisations, animations and a model, and architects who worked on the scheme were available for the duration of the consultation to meet directly with the public and answer questions.

Responses were overwhelmingly positive, with members of the public seeing the scheme as an asset to the city, responding with particular excitement to the quality of the architecture and the increased access to the Old Town walls. Even the notoriously critical local press showed support for the development.

2012 OLYMPICS

The 2012 Olympic Masterplan involved planning for infrastructure, transport and 11,000 homes plus waterway and open space strategies for the forthcoming games in London and beyond with an investment value of £4 billion. Alejandro Zaera-Polo was part of a masterplanning team comprising EDAW, Allies & Morrison, HOK Sport and Buro Happold. The overriding objective for the Olympic and Legacy masterplan was to use the investment and construction of the games as a catalyst for the regeneration of the Lea Valley area. Zaera-Polo lead workstreams for the design of the Olympic Concourse, the Legacy Park, Bridges and Temporary structures.

PUBLIC CONSULTATION

This project involved major investment of public funds and was of great importance to the future of the city, so consultation with the public and stakeholders formed a key aspect of the process.

A series of monthly workshops chaired by Sir Richard Rogers were set up with CABI and directors of the design team where the ODA would meet and discuss design progress. Rather than rely on a single presentation – a “take it or leave it” situation - this process was established to bring in regular feedback on all aspects of the design.

A series of meetings with the public were set up in which members of the design team would present the project's development and engage in direct dialogue. The team also organised road shows in which members of the ODA, the design team and spokespeople for the 2012 games would go to public places like Stratford Station and explain the project to the public. People were furnished with comment cards on which they could write or draw their hopes and ambitions for the Olympic Park.

There were a series of “issue specific” stakeholders such as British Waterways and Transport for London, each of whom have longer term goals and ambitions which needed to be brought into the masterplan. This was achieved through regular workshops.

This process clarified the importance of engaging the public and stakeholders early in the process. By bringing the views and aspirations of the local community into the design in a thoughtful manner, a successful planning application can be ensured, as the project will better fulfill the needs and desires of the community it will eventually serve.

RAVENSBORNE COLLEGE OF DESIGN AND COMMUNICATION

Ravensbourne College of Design and Communication is a £50M higher education building in a prominent location across from the 02 Dome on a brownfield site on the Greenwich Peninsula. The 18,500m2 college building includes educational facilities - a library,

teaching rooms, TV, sound and media studios, prototype rooms, offices and a student deli, with commercial facilities at street level. Alejandro Zaera-Polo's design was selected through a design competition and is providing full architectural services, having been novated to the contractor to see the project through to completion.

WORKING WITH PUBLIC CONSULTATION AND MULTIPLE STAKEHOLDERS

Meridian Delta Ltd (MDL) completed a development agreement with Ravensbourne College and English Partnership for the provision of a specialist education facility within the Masterplan on the Greenwich Peninsula fronting the O2 and adjacent to Peninsula Square and North Greenwich underground station.

A series of public consultations were undertaken with the assistance of MDL and the Planning Consultants. Planning considerations included the requirements of the Town and County Planning (Development procedure), CABE guidance and DCLG Circular 01/2006. This includes the Good Design Principles as set out in "By design: urban design in the planning system – towards better practice" and CABE's document "The principles of inclusive design".

AZPML's design integrates with the surrounding buildings and is intended to complement future schemes on the Peninsula. This will be one of the first buildings to be completed in the MDL development and importantly, sets very high standards of design and execution, acting as an exemplar for subsequent development.

BIRMINGHAM NEW STREET STATION

The redevelopment of Birmingham New Street Station includes a £35m envelope and atrium roof designed by our office. His design was selected through a design competition and has been commissioned to develop the concept design to tender stage and monitor this through to completion.

PUBLIC CONSULTATION

The redevelopment of Birmingham New Street Station - the New Street Gateway Project - is a publicly funded project with multiple stakeholders, and as such it is important to form part of an integrated project team. Network Rail, Advantage West Midlands, Centro and Birmingham City Council are working with Atkins and AZPML's team to deliver a project that will reflect the aspirations of The City. A series of presentations to the Funders, Birmingham Planning Department and CABE has resulted in favorable reviews for the office's designs.

AZPML SUSTAINABILITY

GENERAL

Sustainability is integrated into AZPML's design process from the outset, spanning both conventional measures like using renewable materials and energy, and through the design of programmatic mixes which both maximise use of a particular urban space and extend its use over time. With regards to sustainability, we believe that there are no preconceived solutions. Each project attempts to integrate sustainability within the assessment of an overall carbon economy and the wider design evolution of each scheme. A perfect solution for a scheme in Spain or Japan based on local climates and a full life-cycle analysis might prove inefficient for a similar program in UK. In the 15 years since it was founded, Alejandro Zaera-Polo has collaborated with the best consultants in the field to achieve design solutions which stand not only as landmark architecture but exemplary environmental schemes.

Our sustainability goal is to cover the following main principles suggested by RIBA: to enhance biodiversity; support communities; use resources effectively; minimize pollution; create healthy environments (The office complies with all CDM regulations, 2007), and utilize environmental guidance. To set this standard, our office supports the recommendations given by the Building Research Establishment BREEAM documents. In terms of environmental performance, we are committed to the benchmarking process of obtaining an "Excellent" certification under the Building Research Establishment Environmental Assessment Method (BREEAM).

Alejandro Zaera-Polo and Maider Llaguno architecture offers a wealth of expertise which avoids token solutions that make sustainability visible rather than performative. Below is a list of the practice's schemes which illustrate our approach to sustainability:

YOKOHAMA INTERNATIONAL FERRY TERMINAL

Consultants: The International Timber Trade Organisation

AZPML's design of the Yokohama International Ferry Terminal is a built example of a project that embodies sustainable architecture. Among its features are the project's intelligent environmental conditioning strategies, like using sea water as a cooling mass for the environmental conditioning systems, only conditioning the inhabited area, recycling rainwater and using double decks to dissipate heat gains. The Yokohama project's environmental considerations extend to the use of materials – the tropical forest wood was sourced under the supervision of the International Timber Trade Organisation to make the Rain Forest economically sustainable. This has become an international example of regional development in developing countries associated to the construction industry in developed economies.

TRINITY EC3

Consultants: atelier ten

The Trinity project, a large office development in the Eastern fringe of the City of London, is a prime example of innovative environmental systems used in intensified environments. It is being developed in collaboration with environmental consultants, atelier ten. One of the buildings' sustainable features is their form and fenestration – developed to maximise the use of available daylight with a high performance façade which controls solar gains and minimises U-values. Thermal energy and air conditioning systems, using an open-loop ground source geothermal or ground-source heat pump (GSHP) system which comprises boreholes from which groundwater is extracted and returned as a source of heating and cooling energy, mean that the building is almost completely self-sufficient – the quantity of energy harvested and consumed are approximately equal.

MEYDAN RETAIL COMPLEX AND MULTIPLEX

Consultants: WSP

This revolutionary new mall concept transforms the normal out-of-town retail shed into a landscaped, intelligent and sustainable development through the use of functional and architectural interventions. The client, the third largest shopping mall owner worldwide, wanted to make the Meydan Retail Complex an exemplary case in implementing green policy in a large scale shopping centre. The geometry and placement of the scheme on the site maximises natural shading and creation of wind shelters, using architectural massing to change and improve the local environment instead of resorting to mechanical reparative measures. Also, all roofs were designed as green roofs – providing a park in the heart of the suburb – and openings on the roof, rather than artificial ventilation, bring air and sunlight into the building. Renewable energy is supplied through solar panels and GSHP. AZPML worked with environmental consultants, WSP, in the design of this project.

CARABANCHEL SOCIAL HOUSING

The Carabanchel Social Housing scheme encompasses sustainability principles in both its design and technologies. The building's

bamboo shutters allow in natural light and ventilation, and can be adjusted by residents reducing the need for a centralised conditioning system. Further green strategies are a grassy plinth used to conceal the parking garage and take up the level changes around the building as well as rooftop solar panels for water heating and wind chimneys to ventilate internal bathrooms and kitchens.

JOHN LEWIS DEPARTMENT STORE AND CINEPLEX

The Shires West development in Leicester is a successful product of collaboration of consultants contracted as a multidisciplinary team by the client, Hammerson Plc, to deliver a sustainable, mixed-use re-development in the heart of the city of Leicester. With only a Shell and Core scheme from our design team, we have succeeded in designing a new cladding system which introduces large amounts of natural daylight into the retail shop floor through the design of a double skin triple-glazed façade. As well as reducing the need for artificial lighting during the day, the scheme incorporates a number of additional functions in its skin, including passive solar shading to minimize solar gain and a return air plenum that reuses exhaust air to insulate the building fabric. This, together with a number of other features like the elimination of mechanical ventilation in all mall spaces and a solar panel installation on the roof contribute to our BREEAM 'excellent' rating, one of the first ever for a new-build John Lewis Store.

