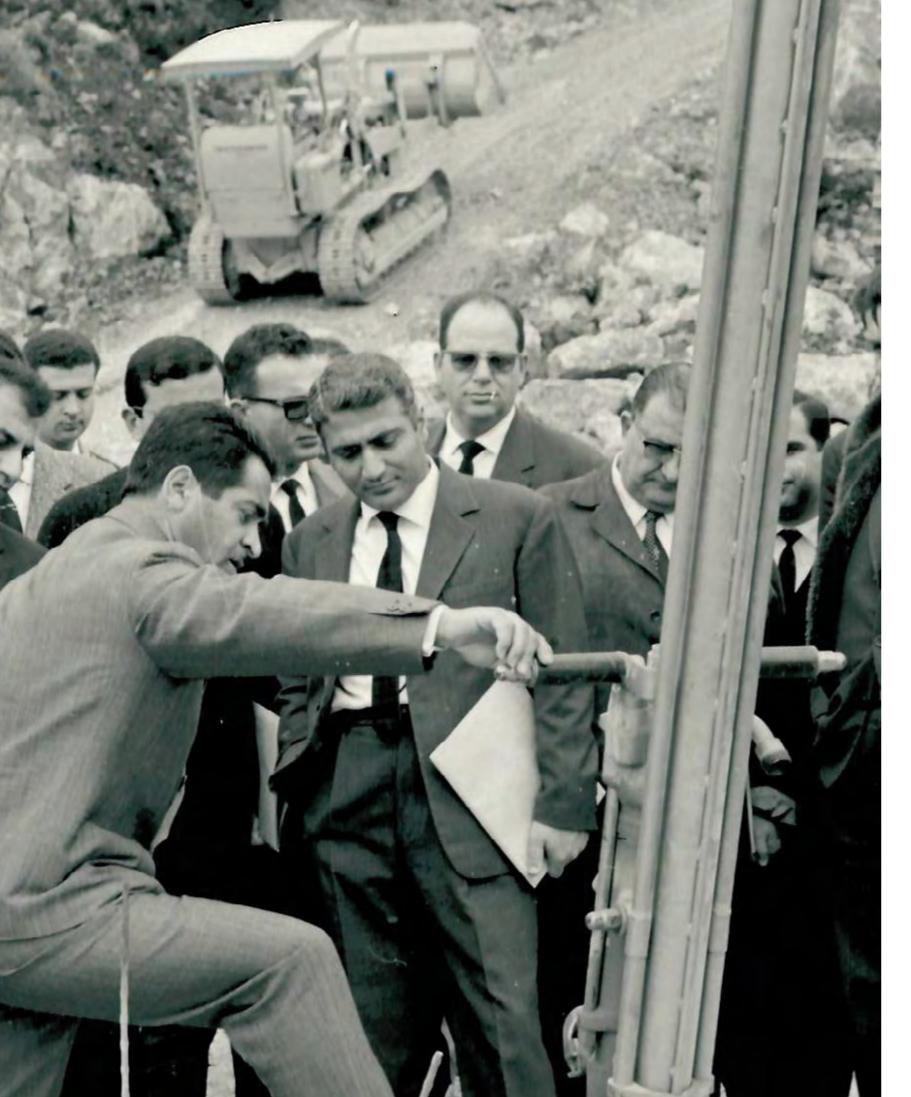
This book was published to celebrate Hourie's 50<sup>th</sup> anniversary in 2016







"When you acquire a taste for quality, there is no turning back ..."

Ramzi Salman

PRFFACE

PRFFACE

This book is the story of a great adventure that started in 1966. The story of a company that has built challenging and prestigious projects, continuously setting standards for high quality and ethics.

On its 50<sup>th</sup> anniversary, our company is in the game more than ever, meeting new challenges and continuing to play a prominent role in the Lebanese construction industry.

This book is a tribute to the outstanding man who started it all, who founded this company, and was my mentor for over 25 years, Abdul Rahman Hourie.

This book is also a tribute to the effort of hardworking men and women who have cooperated side by side, ignoring the harsh social, economical and political environment of Lebanon, always looking to the positive and the productive side of things.

And last but not least, this book celebrates the love of the art of construction.

Working in construction is a commitment to achieving excellence and durable quality. Developing this passion for the pursuit of quality in every member of the Hourie team has always been our aim.

What we build, whether an office building, a hotel, or a highway, is used and tested by thousands of people every day over many decades. The years following the completion of a project are the judges and witnesses of the quality of our work.

When colleagues start acquiring the taste for quality, they become naturally proud to belong to an enterprise that gives them the opportunity to be part of a large scheme that produces great projects. The attention to detail and the knowledge of how things are properly built are paramount to achieving excellence and subsequently the success of the Company.

This ideology of excellence was ingrained in the company since its inception. It explains the strong sense of belonging of our people. We continue to work assiduously for the pursuit of excellence by constantly updating our resources in all fields and transmitting knowledge companywide, the Hourie way.

We look positively to the present and the future, learning from our past experiences. We are keen to maintain a human environment within the company by creating a big family.

Our new headquarters, the Sequoia Building, was inspired by the way we conduct our business. Its generous spaces, high-quality furnishings and effective equipment, surrounded by tasteful art that shies away from ostentatiousness, maintain the kind of functionality and simplicity we aspire to.

Hourie is a Lebanese construction company proud of its identity; over the years, Lebanon has produced many leaders in the construction industry that have left their imprint on the Middle East and the world. This is due to the nature of the Lebanese people and their adaptability to work in different, often difficult environments, with resilience and hunger for success.

At Hourie, we believe in the positive qualities of Lebanese entrepreneurship. We promote Lebanese excellence wherever we are. Our staff is a mix of young and less-young engineers, architects, foremen, workers and administrative people, multicultural, multi-confessional, selected and evaluated solely on the basis of competence and ethics; they are truly the wealth of our company.

We will continue to be faithful to our philosophy, giving this company a soul because, without a soul, excellence can never be achieved.



Chairman - Chief Executive Officer. Entreprises A.R. Hourie, S.A.L.



8 PREFACE

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My father, Abdul Rahman Hourie, was passionate about his business. He built his company with heart and purpose. Over the years, although the construction industry faced many challenges, he managed to build a solid reputation of quality and seriousness that propelled our company to become one of the major construction firms in Lebanon.

He never compromised in his beliefs and convictions. Above all, he remained a very humble man; his office door was always open, and he would equally welcome the simple worker as well as the senior project manager.

I vividly remember my father handing me one day a French version of Rudyard Kipling's inspirational poem "If" and asking me to read it with attention. To this day, the following verses are still ingrained in my mind:

If you can dream – and not make dreams your master;

If you can think – and not make thoughts your aim;

If you can meet with Triumph and Disaster

And treat those two impostors just the same;

If you can make one heap of all your winnings
And risk it on one turn of pitch-and-toss,
And lose, and start again at your beginnings
And never breathe a word about your loss;

If you can talk with crowds and keep your virtue, Or walk with Kings – nor lose the common touch,

Yours is the Earth and everything that's in it, And – which is more – youll be a Man, my son!

Today, in hindsight, I realize that, in essence, Abdul Rahman Hourie was that "Man". He always expected the best from everyone in the company, me included. Quality was his primary target. No compromise! Trust was not given. It had to be painstakingly earned.

As we celebrate with pride our 50<sup>th</sup> anniversary, I look forward to perpetuating this legacy for the years to come. We remain committed to the work philosophy set by our founder and upheld by our current leadership, in order to pass the torch to the next generation.

RAMI HOURIE

Chairman, Entreprises A.R. Hourie Holding, S.A.L.



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# A.R. HOURIE: A MAN, AN INSPIRATION

"Greatness is an easily discernable trait, too powerful to be ignored ..."





### **ABDUL RAHMAN HOURIE**

The story of Abdul Rahman Hourie begins in the coastal Syrian town of Latakia where he was born on August 20, 1927 into a well-to-do large family operating several businesses in trade, masonry and water networks. The second boy in a family of ten, he was a bright and gifted child. In 1943, when he was sixteen, he was boarded at the Collège des Frères du Sacré-Cœur to complete his education in Beirut.

#### **THE EARLY YEARS: 1927-1965**

His first encounter with Lebanon's cosmopolitan capital was natural and pleasant. He easily fit in and developed a kinship for the city and its post-WWII multi-cultural and intellectual blend. Upon completing his high school education and obtaining his baccalaureate, he enrolled at Saint Joseph University's School of Engineering (ESIB).

"Engineering was the natural choice," says his son Rami; "it ran in his blood since the days when, as a teenager, his father would leave him on construction jobs, observing the precise work of skilled masons, expert bricklayers and masterful foremen orchestrating sites like a well-organized beehive."

In 1947, at the age of 20, he graduated top of his class, among a select few whose friendship and allegiances would grow deeper over the years.

Leaving Beirut that he had grown attached to, he returned to Syria to fulfill his military service. It was during his military service, a few months later, that he met General Adib Shishakli, a close friend of his brother's, himself an activist among the town's elites.

It was a time of promising change and fresh ideologies that filled the hearts and minds of a new generation of educated Arabs, and he wanted to be a part of it. Shishakli, then the army commander, later became President of Syria, and turned into a close friend of the family.

Upon completion of his service, Abdul Rahman Hourie was elected as the youngest mayor of Latakia shortly after his 26<sup>th</sup> birthday.

About that same period, he met Nadimeh, his future wife, the one person who would always be by his side through good times and personal tragedy. Now a married man, the young Abdul Rahman took on his father's contracting business, infusing into it his modern ways and natural optimism. "I recall my father telling me about his first day on the job at his dad's enterprise," recalls his son Rami. "His father took him to an ongoing road project, briefly described it to him, then turned away and left him with the workforce. He told me that he didn't dare give any remarks or instructions to the workers for a whole week."

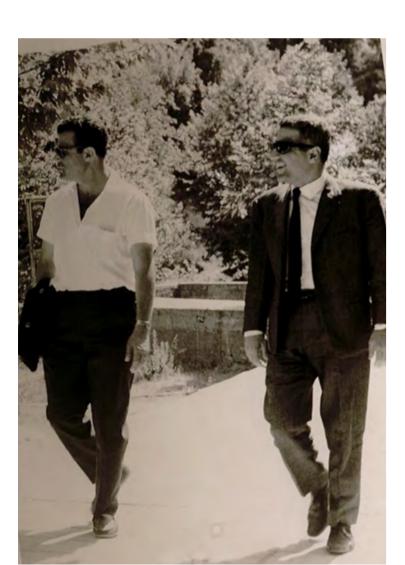
#### Abdul Rahman quickly became a major contractor in Syria, executing projects with the latest technologies of the times.

"I remember as a child the whole city waking up to the sounds of the pile driver," reminisces Rami, "as he was building the port's main administration building. As a matter of fact, this building is still in use today."

"Another of his major projects was the rehabilitation of swamps in Sahl el-Ghab, a huge plateau 70 kms north of Latakia, into viable cultivable land," continues Rami. "The region became a rich agricultural area. And there were many more projects of a similar nature."

"He was a contractor as far back as I can remember. We grew up, my sisters and I, with awareness and understanding of the immense effort and sacrifices required to run a successful contracting business. He taught us the difference between living and leading."

"And he never compromised in his beliefs and convictions. Above all, he remained a very humble man; his office door was always open, and he would equally welcome the simple worker as well as the senior project manager."





ABDUL RAHMAN AND HIS WIFE NADIMEH AT A DINNER FUNCTION



ABDUL RAHMAN HOURIE WITH SYRIAN GENERAL ABDEL KARIM ZAHREDDINE



THEN THE SYRIAN MINISTER OF PUBLIC WORKS, ABDUL RAHMAN HOURIE SITTING NEXT TO DR. NAAMAN AZHARI, MINISTER OF FINANCE, ECONOMY AND PLANNING



ABDUL RAHMAN HOURIE WITH KING ABDULAZIZ, THE FIRST MONARCH AND FOUNDER OF SAUDI ARABIA



ABDUL RAHMAN HOURIE AND HIS WIFE NADIMEH



ABDUL RAHMAN HOURIE AT SAINT JOSEPH UNIVERSITY'S SCHOOL OF ENGINEERING (ESIB), 2ND ROW, 4TH FROM RIGHT

In 1961, following Syria's secession from the United Arab Republic that united it to Egypt for three years, a government was formed to restore independent rule and return seized property and businesses to prominent industrialists and business people who had fled during the union. Among them, A.R. Hourie was appointed Minister of Public Works. During his six months in office, he spent his weekdays in Damascus, then making the 700-km roundtrip to Latakia every weekend to oversee his contracting business and spend time with his family, now composed of a son, Rami, and two daughters, Mona and Nada.

The March 8, 1963 coup by leftist Syrian Army officers of the National Council of the Revolutionary Command (NCRC) and the Baath Party took over power and preemptively arrested prominent figures to quell any anti-Baathist sentiments. A.R. Hourie was among those unwittingly arrested and jailed.

Having resumed his engineering and contracting business after his brief stint in politics, he was working jointly with structural engin eers, brought in from Denmark, on the foundation of the Ministry of Defense building in Damascus, threatened by the nearby Barada River. He was released a few weeks later and granted permission to travel to the Danish capital to complete the building's unfinished foundation design. Clearly shaken by the recent events and his unwarranted imprisonment, upon completion of his meetings, A.R. Hourie boarded a plane to Beirut. "A few days later, in May 1963, he was reunited with his family, at the Carlton Hotel," remembers Rami. He had decided to make Beirut his home. Nostalgia for Latakia and the extended family he and Nadimeh had left behind would always take them back there, but they would never permanently reside in Syria again.

# HOURIE'S INCEPTION: 1966-1990

MR. MOUNIR EL-KHATIB, FOUNDER OF KHATIB & ALAMI, ON A BRIDGE LOAD TEST ON SIN-EL-FIL'S JISR AL-WATI'S BRIDGE

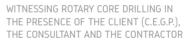


Beirut's Starco Center and started bidding on projects with the help of a few associates and trusted friends. A year later, Entreprises A.R. Hourie was founded. The year was 1966, in the middle of President Charles Helou's mandate, which was characterized by prosperity and country-wide undertakings of major infrastructure projects. Entreprises A.R. Hourie's first project was a road linking the heights of Keserwan with Ras Baalbeck.

Faced with the daunting task of relocating his young family

and starting work from scratch, A.R. Hourie opened an office in

He bid too low to get it and the project lost money. That same year, he was offered a joint venture construction project in Dammam, Saudi Arabia, with a Japanese partner. Coming at the heel of a financially-straining first undertaking, it was an opportunity to explore work in the region. He spent six months in Saudi Arabia, recovered his losses but remained unfazed by the Arab Gulf market.





FARAYA-BEKAA ROAD, 1960'S





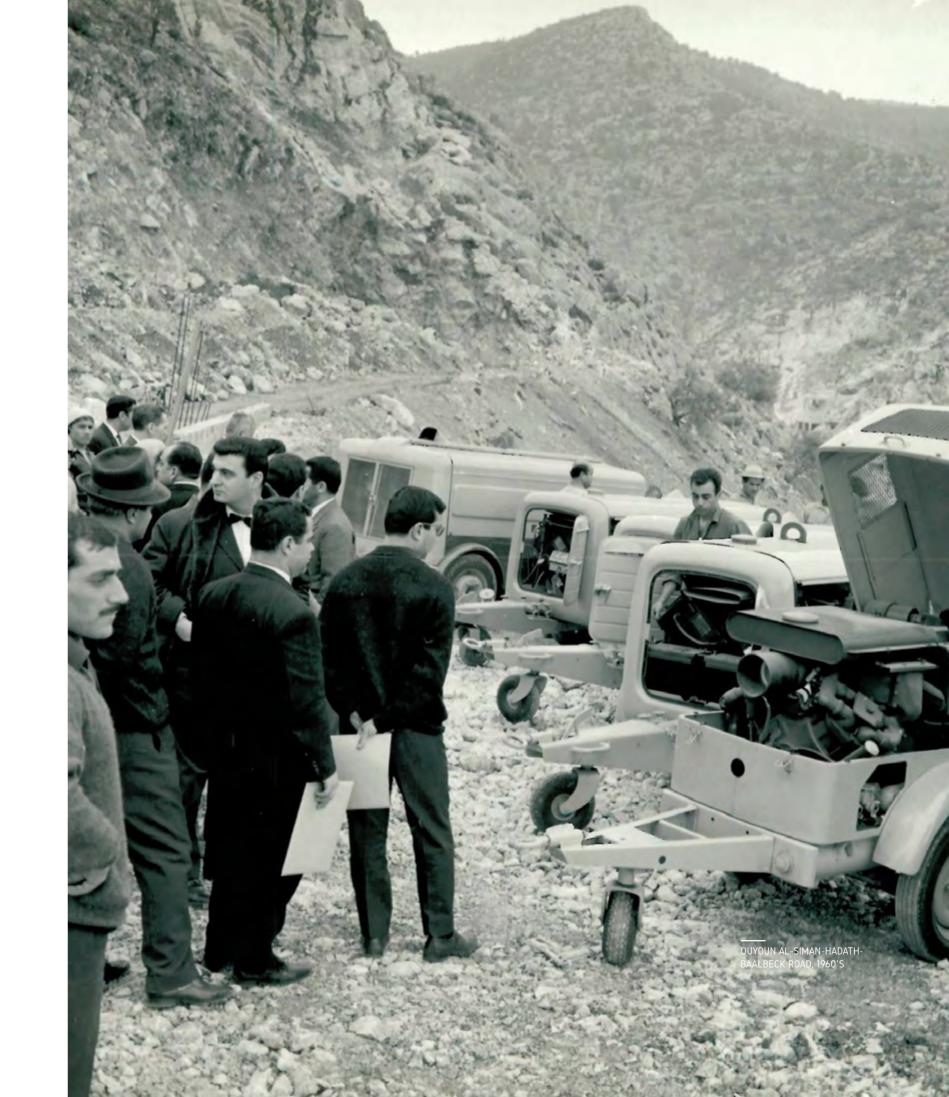


MR. MOUNIR EL-KHATIB, ON SIN-EL-FIL'S JISR AL-WATI'S BRIDGE

TESTING CONCRETE STRENGTH OF ROAD BARRIER AT OUYOUN AL-SIMAN-HADATH-BAALBECK ROAD, 1960'S

"It was in June 1967, during the 6-day Arab-Israeli war that Entreprises A.R. Hourie moved to its offices on Boulevard Sami El-Solh in Badaro," remembers Hind Demiane, Mr. Hourie's infallible and only assistant for over 46 years. "Work was plenty and one project led to the next. A project manager was assigned to each job, reporting directly to Mr. Hourie. Each evening, they would stop by the office to sit in what became jokingly known as the confessional chair to discuss pending issues. It was intense and spirited, but always pleasant and cordial, and always in the best interest of the project."

Abdul Rahman Hourie had made his mark. In the small market of big-name contractors, his was rising. The superior-quality construction the enterprise was rolling out matched by his ability to get things done away from murky deals were winning him projects. "He was a hands-on manager; he liked to keep the workload at a controllable scale with a small group of trusted project managers while staying informed of all aspects of site progress," says veteran engineer Georges Haddad, the Pan-Arab Highway's Project Manager.



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During the Lebanese Civil War, work turned to a trickle but never stopped. During long periods when shelling was a daily occurrence and the country's lifelines were severed, the Badaro office became inaccessible and operation moved to a rented apartment in West Beirut.

"Business was maintained as best as possible despite the ongoing raging war," says Jihad Khoury, topographer and trusted collaborator, who has been with the company since 1971. "During many months when everything was at a standstill, the company had zero revenues. Yet, Mr. Hourie would cash funds out of his own account to pay salaries. I remember him handing me and a few others stacks of cash so that we could dispense salaries to those who lived in our areas."

In the late 1980's, the disparity in quality of the national projects undertaken in the early years of President Amine Gemayel's mandate following Israel's 1982 invasion of Lebanon was starting to emerge. Projects that were carried out by Entreprises A.R. Hourie were just better than work completed by other contractors during the same period.

"He was an engineer who relished his work, particularly transport projects," says Samir Dghaili Abdallah, one of Abdul Rahman Hourie's most trusted people, who joined the company in 1980 and currently serves as its vice-president.

"We were the first in Lebanon to introduce the reinforced soil method in 1985 on the Kfarhim-Baakline-Wadi Zeini Road project and the first to employ the diaphragm wall method during the Banque de Syrie et du Liban Headquarters way back in 1969. Complexity and technical difficulty excited him; projects that others avoided, a bridge that others had foregone, new design solutions and new materials that some had overlooked, the latest equipment that he would have shipped from all around the world, and partnerships with specialized international firms, that was his thing."

"It was never about the money or outbidding competitors, his was a culture of doing it right, building trust and delivering with the future in mind."



ABDUL RAHMAN HOURIE ON A ROAD SITE, 1960'S

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# THE POST-CIVIL-WAR YEARS: 1991 AND BEYOND

One of Abdul Rahman Hourie's most distinguishing traits was his ability to listen and let himself be convinced when presented with persuasive arguments; another was his sense of the times, and he knew they were changing.

The early 90's brought several changes to the local construction industry. Lebanon was on an overdue rehabilitation path following a long sequestration from the rest of the world and there were new rules to play by. Days of drawn-out projects, handshakes in lieu of contractual agreements, and payments negotiated over Turkish coffee inside the dusty offices of the Council for Master Projects in the Bir Hassan area of Beirut were a thing of the past. So were days where one project manager and one foreman supervisor would conjure up site execution of rudimentary hand-drawn blueprints.

Prime Minister Rafic Hariri brought with him his zeal for the contracting business and a slew of international contracting firms anticipating new opportunities that just opened up. Faced with this new reality, A.R. Hourie's primary objective was to remain a credible contender while maintaining his homegrown competitive edge.

At the dawn of a new millennium characterized by technology, standardization, and speed, restructuring and modernizing were critical, so were investing in people and rethinking leadership. Companies die when they fail to regenerate and effort is often lost when pride foolishly blurs enduring visions. It was by partnering and mentoring that Abdul Rahman Hourie, imbued by a deep sense of duty toward the company, would turn things around.



A.R. HOURIE WITH SAMIR DGHAILI ABDALLAH, RAMI HOURIE,
HIND DEMIANE, NAJI SROUJI & THE TEAM
OF BEIRUT SOUKS

"I often compared Mr. Hourie to an unhurried large river like the Volga or the Danube, slow-moving, easing through the pillars of large bridges, soothingly parting to make way for islands in its midst. On the other hand, Ramzi Salman is more like a fastmoving unstoppable tributary, overflowing with powerful energy, capable of carrying everything in its wake. Tributaries come to flow into rivers, such was the relationship that bound those two men," describes Vahan Asrabian, Head of Tendering & Estimation Department, who joined Hourie in 1992 and worked closely with both men.



ABDUL RAHMAN HOURIE AND RAMZI SALMAN AT THE PAN-ARAB HIGHWAY PROJECT'S INAUGURATION

In 1994, a new chapter was ushered in by taking on the construction of BLOM Bank's new headquarters. A.R. Hourie was reluctant to enter the private sector market, Ramzi Salman confident Entreprises A.R. Hourie was ready for the leap.

Salman's knowledge of architectural buildings and the enterprise's solid structure would pull it through. The landmark building, designed by famed architect Pierre El-Khoury, was a changer for the Lebanese market, transforming the conventional notion of building construction. Internally, BLOM activated a culture of renewal that shifted Entreprises A.R. Hourie from a successful single-sector contractor into one of Lebanon's leading general contracting practices, commissioned for some of the country's biggest projects.

Over the last 30 years, Entreprises A.R. Hourie has substantially penetrated the private sector and the building construction market, and quintupled in size.

It provides repeat and new clients with a full range of general contracting services for complex civil works and large buildings across the entirety of Lebanon's territory.

At the helm, and until his death, was Abdul Rahman Hourie, with Ramzi Salman by his side, supported by veteran collaborators and a number of fresh engineering graduates who brought their own brand of innovation into the mix, pushing the limits of the enterprise to new heights.





ABDUL RAHMAN HOURIE WITH HIS SON RAMI

ABDUL RAHMAN HOURIE AND JIHAD KHOURY

Not one to retire or slow down, Abdul Rahman Hourie worked well into his seventies and early eighties, never missing a day of work, "stepping in his office at exactly 9 am, every day," says Hind Demiane. Very attached to his family, his most enjoyable moments were spent, simply and quietly, surrounded by his children and grandchildren. Mr. and Mrs. Hourie were avid travelers and art enthusiasts, their home filled with finds and unique artwork they brought back from their frequent trips. A very loving and dedicated couple, they shared many ups and downs through 50 years of married life but nothing compared to the grief they felt after the death of their eldest daughter Mona, who lost a battle to cancer on January 23, 2007. Her premature death was a family heartbreak, and Abdul Rahman Hourie would grieve her for the remainder of his days.

Such was Abdul Rahman Hourie, a down-to-earth, self-made family man who built a successful business against many odds. He would pass on a business with not just a good name and financial security, but also a profound sense of duty to employees, associates, and the enterprise itself.

In a tough industry where decisions are reached in stuffy meeting rooms and work is carried out by the rough hands of day laborers, he was a compassionate individual who was never afraid to get personal and offer help.

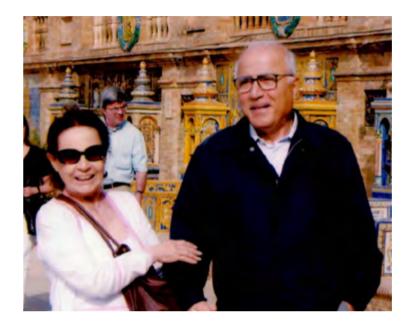
RAMI HOURIE, NADA HOURIE AND MONA HOURIE



An old-style leader, a modern-day engineer, and a guarded risk-taker, he had a keen eye for detail and a finger on the pulse of his business. In tribute after tribute from those interviewed for this book, associates who knew him well, company rising stars who worked with him, family members and old friends, consultants and clients alike, the legacy of Abdul Rahman Hourie stands out; a gracious man who believed that continuity is assured by inviting in those who would lift you up. It is a philosophy upheld by the company he created.

ABDUL RAHMAN HOURIE AND HIS YOUNGEST DAUGHTER NADA









FAMILY PHOTO



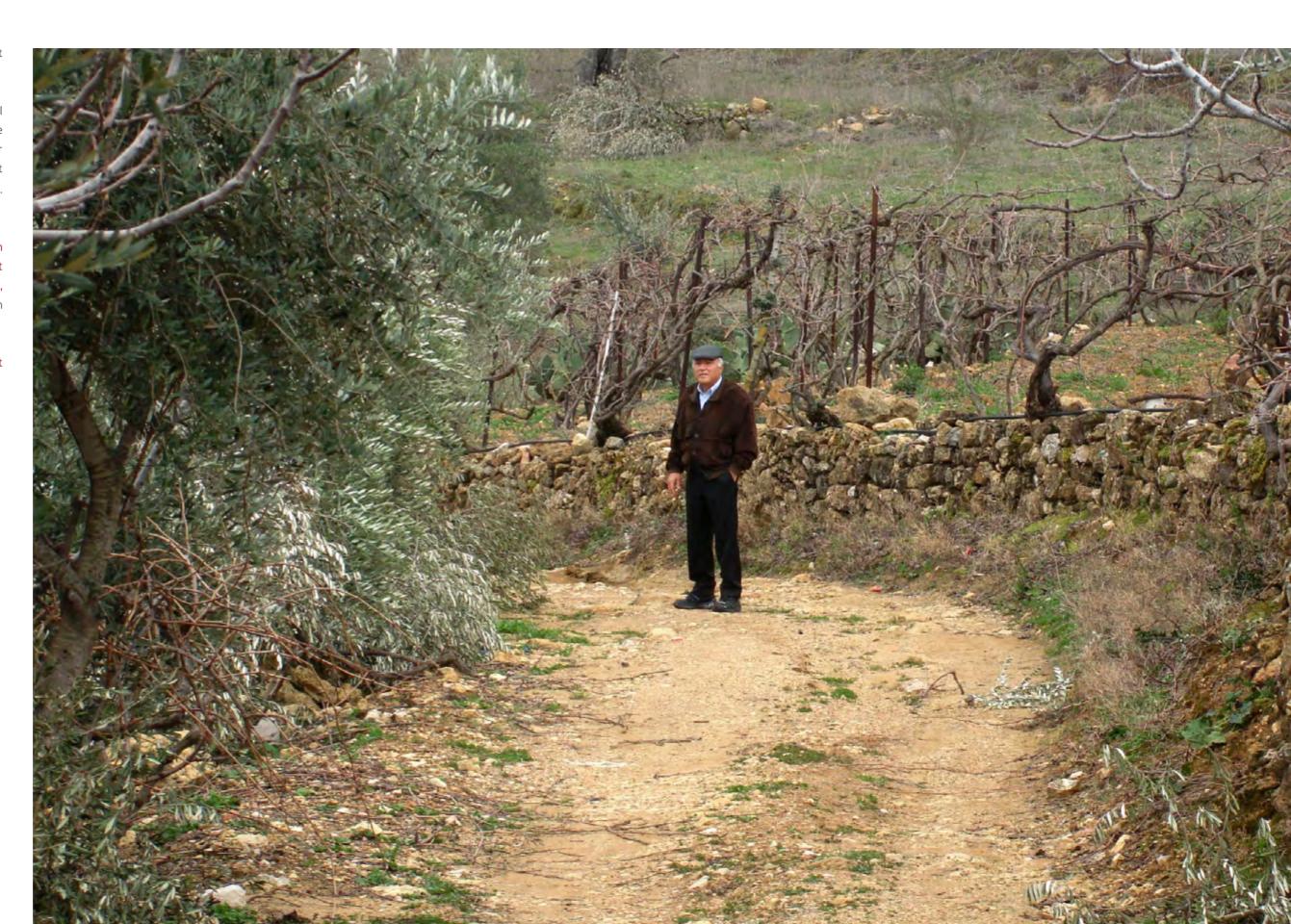
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In the words of Ramzi Salman, Entreprises A.R. Hourie's current CEO:

"Two months before his passing, he was showing signs of fatigue, I urged him to take a medical trip to Cleveland Clinic in Ohio and have himself checked out. He promised he would once the stone crusher we had purchased for the Port of Beirut Quay 16 Extension project arrived. He passed away two days after the crusher was set up. As he often did, he put himself second. Time had run out."

"Abdul Rahman Hourie was a gentleman, a dedicated family man who cared for each of its members. Highly cultured, witty, elegant and refined, yet simple and disciplined, he was a man of his word, touching and human. I feel very blessed to have accompanied him the last 16 years of his life."

Abdul Rahman Hourie died unexpectedly on the night of August 23, 2010 following complications from a cardiac intervention.



4 A.R. HOURIE: A MAN, AN INSPIRATION



MAROUN J. HELOU
President of the Board,
Lebanese Contractors' Syndicate for Public Works & Buildings

"Founded by Mr. Abdul Rahman Hourie over half a century ago, Entreprises A.R. Hourie was among the first few contracting companies in Lebanon to execute high-level construction projects.

Abdul Rahman Hourie had the ability to successfully execute projects, and this is what distinguished him as an entrepreneur from any other dreamer. A leader and a positive role model, he spent much of his time and energy shaping the spirit of his company. Professionalism, honesty, delegation, good communication, confidence, flexibility, commitment, and transparency, these were his distinguishing traits and the keys to a big success story.

Today, under the leadership of Mr. Ramzi Salman, Entreprises A.R. Hourie's current CEO, the company has succeeded in strengthening its signature as a pre-eminent leader for value-added construction services. It is ranked in the 'First Category' by the Lebanese Contractors' Syndicate for Public Works & Buildings, and maintains preferred relations with both the Public Administration and the Council for Development and Construction (CDR). We take great pride in having such a professional and reliable contracting firm in our Syndicate, and indeed in Lebanon. Entreprises A.R. Hourie is a reflection of the Lebanese contractor who values relationships and fosters a spirit of cooperation and mutual respect in keeping with the Syndicate's goals.

We believe that Entreprises A.R. Hourie is and will remain fair and true in its dealings with all contractors, clients, and partners, ensuring safe working conditions and preserving the environment."



MAHER ABOU GHAZALEH
Chairman of the Board. Clemenceau Medical Center

"Pragmatic and humble, reasonable and confident, Abdul Rahman Hourie was a well-known facilitator.

Never a dispute, never a conflict that went beyond my office walls and that was not resolved within minutes. They are good. Proof is, 10 years later, aside from routine wear-and-tear maintenance, the main hospital and clinic buildings are as structurally sound as they were at completion.

Abdul Rahman Hourie's loss was a heavy blow to his enterprise and the industry; he truly was a remarkable man. Transitions are not always successful after the passing of a founder, especially one as influential as Abdul Rahman.

Entreprises A.R. Hourie is alive and well, one of the top in the country today, capable of undertaking sizable commissions and backing their word with a solid new structure that has emerged since 2010. Rive Gauche, Beirut's tallest office building now under construction, is our latest project awarded to Entreprises A.R. Hourie.

Ramzi Salman has managed the task of maintaining and developing the enterprise, and he has kept it truly Abdul Rahman's, with all of what that entails."



WALID JOUMBLATT
Previous Minister of Public Works

"Abdul Rahman Hourie was a remarkable man. He worked hard his entire life to build a reputable contracting company, Entreprises A.R. Hourie, which turned out to be one of the leading companies in this field in Lebanon.

He was attached to professionalism. I remember how keen he was on strictly applying the standards as specified in the project plans with the highest quality possible.

His company has executed, under his supervision, a large number of projects in both public and private sectors and has employed scores of engineers, architects and specialists in various construction fields.

Projects he executed are landmarks in modern construction technologies and will always be remembered, as he will.

When I was Minister of Public Works, I insisted that he was tendered the Chouf projects as I believed he was one of the most distinguished contractors in Lebanon.

I extend to his family and company my hopes that they will preserve the heritage he left."



DR. NAAMAN AZHARI Chairman of BLOM Bank

رفيق العمر

"لديّ أصدقاء ومعارف كثر بحكم علاقاتي العائلية والمهنية. ولحيّ أصدقاء ومعارف كثر بحكم علاقاتي العائلية والمهنية. وكن رفيق العمر الوحيد هو المرحوم عبد الرحمن حورية وكان يُسمّيه أصدقاؤه وأحباؤه الكثر «عبد». فعدا أنه إبن عمّتي فإن صداقتنا تعود إلى الطفولة وأعمارنا متقاربة ودراستنا الابتدائية والثانوية كانت في مدرسة الفرير (Frères) سواء في اللاذقية أو بيروت. وبقينا على اتصال مستمرّ رغم اختياره الهندسة والتعهدات واختيارى الاقتصاد والعمل المصرفي.

والتقينـا فـي وزارتيـن متتاليتيـن سـوريتين فـي مطلـع السـتينات مـن القـرن الماضـي هــو كوزيـر أشـغال عامــة وأنـا كوزيـر ماليــة واقتصاد. ثـم جـاء التأميـم فـي سـورية فخسـرنا كلّ أسـهمنا ثـم صـودرت أملاكنـا بحكـم مشـاركتنا فـي الوزارتيـن الأنفتـي الذكـر.

إنتقلنا إلى بيـروت فبـدأ كلّ منّا تقريباً مـن الصفـر وشـقٌ طريقـه بصعوبــة، هــو فــي التعهــدات وأنـا فــي المصـارف، خــلال الأزمــات المتتاليــة التــي عرفهـا لبنــان آخرهـا وأهمّهـا الحــرب الأهليــة اللبنانيــة.

وسيأتي هذا الكتاب على تفاصيل نجاحات وإنجازات عبد الرحمن والمعالم الهندسية المميّزة التي تركها في هذا البلد الحبيب. والمعالم الهندسية المميّزة التي تركها في هذا البلد الحبيب. ولو شاء عبد الرحمـن أن يهاجـر إلـى الخليـج بعـد فـورة البتـرول لبنـى، إلـى جانـب مؤسّسته اللبنانية الكبيـرة (التي كسـبت ثقـة وسمعة ممتازتين)، ثروة ضخمة. ولكـن عبد الرحمـن فضّل البقاء فـي لبنـان الـذي أحبّـه. فقـد كنّا منـذ الطفولـة نعشـق العيـش فـي بيـروت ولـم نغيّر فكرنا رغـم الأزمـات اللبنانية المتتاليـة.

ولا يـزال «عبـد» حيـاً فـي قلبـي ومخيّلتـي. فعندمـا أمشـي صبـاح الأحـد علـى كورنيـش المنـارة أتخيّـل أنـه سـيظهر أمامـي فجـأة فقد اعتدنا منـذ وجودنا فـي بيـروت علـى ممارسـة رياضـة المشـي كلّ يـوم أحـد صباحـاً فـي ذلـك المـكان. ولا أتذكـره حتـى اليـوم إلا وتأتـى الـدمـوع إلـى عينـن.

أطـال الله بعمـر زوجتـه وأولاده الـذي كانـوا قـرّة عينـه. ولعـلٌ وفـاة ابنتـه منــى قــد قصّـر مــن عمــره إلــى حــدٌ كبيــر، فقــد كان عبــد الرحمــن عاطفيــاً وحنونــاً جــداً تجــاه عائلتــه وأقربائــه وأصدقائـه.

رحمه الله وأسكنه فسيح جنانه وألهم حميع أحياته الصير."



SHEIKH FOUAD EL KHAZEN
Honorary President,
Lebanese Contractors' Syndicate for Public Works & Buildings

"I am privileged to have been a close friend to a great man and a leader of the construction sector in Lebanon.

I knew him as a man of great modesty and humanity. A brilliant engineer, he played a significant role in his native Syria as Mayor of Latakia and Minister of Public Works before getting established in Lebanon and founding Société d'Entreprises A.R. Hourie.

Abdul Rahman Hourie was a charismatic leader, a perfectionist who looked for challenge and excellence in all his endeavors.

He will always be remembered for fulfilling his obligations on every contract he had ever signed. His outstanding values, wisdom, sharpness and warm personality allowed him to entertain the best relationships with officials, clients, employees and laborers alike.

Working uninterruptedly to his very last day, he succeeded in leaving behind a well-structured organization. Today, Entreprises A.R. Hourie maintains the same standard of leadership and excellence. His successor and close collaborator over many years, Ramzi Salman, is carrying the flag very high."



DR. JEAN B. ESTA
Geotechnical Consultant
Eulogy, L'Orient-Le-Jour, August 25, 2010

"Hommage à Abdul-Rahman Hourié: Un autre chêne vient de tomber

Voilà un autre grand ingénieur entrepreneur qui disparaît brutalement. Syrien d'origine, libanais de cœur et de raison, il fut l'un des rares à ne pas s'expatrier dans les pays du Golfe pendant la guerre du Liban et demeura, contre vents et marées, fidèle à son poste à l'avenue Sami el-Solh, opérant au Liban malgré toutes les difficultés de l'époque.

Et pourtant, Abdul-Rahman Hourié doit sa réputation de grand entrepreneur aux travaux publics qu'il a pratiqués avec une grande virtuosité dans les années 60 et 70.

Ingénieur d'une grande capacité intellectuelle, négociateur habile et difficile, mais ô combien respectueux de sa signature quand il l'a apposée, Abdul-Rahman Hourié était un entrepreneur d'une grande audace. Il fuyait souvent les solutions classiques et n'hésitait jamais à se lancer dans les nouvelles techniques quand il en avait été convaincu.

L'histoire du génie civil au Liban inscrira que Abdul-Rahman Hourié fut le premier à utiliser dans ce pays deux techniques de pointe, révolutionnaires à l'époque, à savoir la « paroi moulée » en 1974 sur un pont proche de la gare routière Charles Hélou à Beyrouth, et « la terre armée » en 1975 sur l'autoroute du Nord.

Il était l'homme auquel l'administration, au temps où il y en avait une, avait recours dans les situations techniquement difficiles, notamment les glissements de terrain qui perduraient depuis des dizaines d'années.

Toutefois, ses prouesses techniques ne pouvaient occulter en rien les qualités humaines des hommes de sa trempe : meneur d'hommes, affable, respectueux de tous, grands et petits, fidèle à ceux qui l'ont accompagné durant toute son équipée. Avec son départ, le Liban perd un entrepreneur d'une valeur exceptionnelle qui aura laissé des traces indélébiles dans son pays adoptif."



HISHAM JAROUDI Al-Riyadi Club President Eulogy, Al-Mustagbal Newspaper, August 23, 2011

"عبد الرحمن حورية كبير لن ننساه علم كبير من أعلام لبنان هوى...

عم جير

عطاء بلا كلل.

مرّ على لبنان منذ استقلاله رجال كبار من مهندسين وبنّائين ومتعهدين، خدموا وطنهم وعملوا بصدق وإخلاص. ولكن سيرتك الحميدة أيها الفقيد العزيز، ستبقى عنوان الأمانة والصدق والمثابرة والخلق الحسن. وفي الذكرى السنوية الأولى لغيابك نتذكرك.

وعمل بلا ملل. وتفانٍ في العطاء وزهد في النتاج المادي. كنت المقاول الفخّ، لا تهاب المسؤولية وكنت أهل لها وما كان المال يوماً هاجسك، بـل الإنجـاز الكامـل والمخلـص للعمـل. لأن مـا يخلـد الإنسـان ليـس مـا يُجمـــع أو يُــورُث مــن المـال بــل العمــل الصالـح والأثـر الطـــــ

كنت المعلـم بـكل مـا للكلمـة مـن معنـى، ولقـد أرسـيت قواعـد ثابتـة لمتابعـة مسـيرتك البنّـاءة بـكل مصداقيـة وأمانـة وإخـلاص. فكـم مـن مهنـدس عمـل معـك ولـن ينسـاك، وكـم مـن عامـل خـدم سـنوات عمـره بقربـك وقـد افتقـدك. ماذا أقول فى ذكراك؟

نعـم لـن ننسـى أيـام عـزُ زرعتهـا بسـاعديك فـي بنـاء وإعمـار وطنك الحبيـب... ففـي أرجائه لـك بصمـات مضيئة مـا تزال وسـتبقى. كنـت الجـار الحبيـب يـا عبـودي لأربعيـن سـنة معـاً. كنـت فيهـا خيـر جـار وخيـر صديق فـكل مـن عرفـك أحبـك واحترمـك حتى مماتك. مـن خصالـك النـادرة فـي زمننـا هـذا صحبتـك الطيبـة وإخلاصـك ومحبتـك للصدقائـك. نعـم لقـد كنـت المهنـدس والأب والأخ والصديـق.

في ذكراك السنوية نستذكر ما قامت بـه شركة عبـد الرحمـن حوريـة مـن تنفيـذ أكبـر تعهـدات للدولـة اللبنانيـة وللشـركات وللمؤسسـات الكبـرى فـي لبنـان. لـن أغـوص فـي منجزاتـك وهـي كثيـرة مـن طرقـات وجسـور وأبنيـة وسـواها، ولكـن كلنـا يعلـم أنهـا ستبقى خالـدة، معالمهـا شـامخة وشـاهدة للعيان وسـتبقى بصماتـك ومآثرهـا تضـيء فـي سـماء وطنـك مأثـرة تلـو مأثـرة.

أملنـا أن تتابـع مؤسسـاتك المسـيرة علـى هـداك وعلـى خطـى مـن أسسـها بـكل إيمـان وتفـان. عبدالرحمن حورية... لن ننساك."



**SAMIR DGHAILI ABDALLAH**Deputy General Manager, Entreprises A.R. Hourie

"Through this tribute, I would like to share the first lesson I ever learned from Mr. Hourie:

At the time, the project I was working on was the rehabilitation of the Zahrani-Nabatieh Road. Plans called for a 40-cm-thick base layer of crushed stones. In one section of this road, the platform was particularly rocky and I proposed to reduce the base's thickness to 20 cm, and by doing so gaining 20 cm of base over the entire surface of this section of the road. Serious and with a firm, albeit charming, reaction he replied:

'My dear friend, the policy of this company is to bill exactly what we execute.'

This story illustrates the code of ethics Mr. Hourie lived by, one that he managed to instill in me and that I continue to apply to this day."

# **ENTREPRISES**A.R. HOURIE TODAY





# A SOLID INSTITUTION WITH RENEWED VITALITY

Established in 1966 and headquartered in Beirut, Entreprises A.R. Hourie is a leading Lebanese contracting company focused on achieving complex building and large-scale infrastructure projects to public and private clients.

The success and stability the company enjoys today are a result of a series of transformations implemented under a new leadership starting in 1994. These changes helped to gradually and effectively modernize the company, streamline its management structure and allow the introduction of critical new work methods along the way.





Coinciding with infrastructure rebuilding following the civil war, for both Lebanon and Entreprises A.R. Hourie, the 1990's was a decade for modernizing, redeploying and, for Hourie, a time to largely penetrate the private and building sectors.

The internal operations' overhaul touched every aspect of the enterprise's business, starting with defining a clear set of organizational principles and introducing standardization and industry-transparent governance practices. Policies and procedures instituted at the time constitute the backbone of its operations today.

Work was segmented and trades departmentalized; a new information technology infrastructure was deployed yielding to effective management, archiving, and an efficient system of communication.

The company's human resources increased significantly. Newly employed graduates and seasoned engineers, architects, trade specialists and an updated cost estimation department formed a new layer of empowered middle management professionals within a clearly designed company organizational chart, able of handling larger and more complex projects.

RAMZI SALMAN, ABDUL RAHMAN HOURIE, SAMIR DGHAILI ABDALLAH AND RAMI HOURIE

ABDUL RAHMAN HOURIE, RAMZI SALMAN AND SAMI AZHARI AT THE SOUKS OF BEIRUT



RAMZI SALMAN AND RAMI HOURIE

Over the last twenty-five years, Entreprises A.R. Hourie has maintained a proactive policy of constantly adjusting to the pace of the industry, as competition grows fiercer with only the fittest surviving.

The company continues to embrace construction technologies and improve its expertise in green building requirements. It strives to reduce wasteful discrepancies and energy overconsumption and monitors work through an in-house management system. It has boosted jobsite safety, and brought costs under control through automation and streamlining. It has also plugged into information technology by jacking up critical information cross-sharing between the various sites and the main office.

It is a strategy that has paid off as the company maintains steadfast delivery on the industry's three essential pillars of speed, quality and budget.

## **AREAS OF ACTIVITY**

#### **INFRASTRUCTURE**

- Heavy civil and infrastructure construction since the company's inception in 1966
- Major earthworks
- Marine works
- Civil works
- Specialized construction works (geotechnical consolidation, tunneling and innovative construction solutions)
- Road construction
- Bridges and viaducts
- Infrastructure networks



#### **BUILDING CONSTRUCTION**

- A wide range of building construction projects (residential, commercial, mixed-use complexes, hotels, hospitals, warehouses, high-rises, headquarters, and industrial buildings)
- High-quality concrete works
- Electro-mechanical works
- Complete interior fit-outs
- Intricate façades and building envelopes
- · High-end finishing works
- Hardscape and landscape works
- Design/build projects
- Green-certified projects



PAN-ARAB HIGHWAY, LOT A

RIVE GAUCHE TOWER, BEIRUT

### **COMPANY'S PHILOSOPHY**

- We do not gamble, we take calculated risks that we assess fully.
- We are very careful when selecting clients, we study each project and the people behind it.
- Once a new project is secured, we ensure adequate human resourcing and equipment allocation.
- Once a project is on track, it becomes highly autonomous.
- We are one entity with our suppliers and subcontractors. We provide a protective umbrella for all those working with us.
- Our golden rule is never to undertake more than our capacity.
- Our readiness is what sets us apart; we don't get sluggish midway.
- Respect is how we do it; we earn it and we give it.
- In instances of disagreement, the amicable way is always chosen; we believe that all disputes can be resolved by way of reason and communication rather than litigation.
- We honor our agreements and complete any project even when there are disagreements along the way.
- Our contracts are thought of as partnerships.
- The durability of our projects is a major objective; we build projects that withstand the test of time.
- No compromise on quality.
- A transparent organization: One leadership, a clean operation, substantiated numbers,
   well-defined lines of authority and open communication across departments and levels.
- The feeling of belonging and loyalty in the company is organic; it stems from a fundamental way
  we run our internal affairs.





ABDUL RAHMAN HOURIE, RAMZI SALMAN, SAMI AZHARI AND COLLABORATORS IN A MEETING RAMZI SALMAN AND SAMI AZHARI WITH COLLABORATORS AT THE SEQUOIA BUILDING'S MEETING ROOM



## HOURIE'S NEW HEADQUARTERS THE SEQUOIA PROJECT

#### THE PERENNIAL SEQUOIA TREE

The sequoia is the world's most massive tree. Its ability to protect itself against natural threats allows it to survive for thousands of years and grow to become large and stable.

A sequoia is too massive to be uprooted by the strongest wind, its bark so thick and rich in tannins that its core remains are protected from fires and insect damage.

As a matter of fact, fire strengthens the immunity of the sequoia because it thrives on rich soil and clear surroundings. There is a gentle but powerful sacredness about the sequoia and a strong association with its essence of sharp insight, clarity of purpose, and an innate awareness of what must be achieved. A sequoia invariably reminds us that there is always enough time: great changes and enduring growth occur in due time.

THE SEQUOIA BUILDING AFTER ITS

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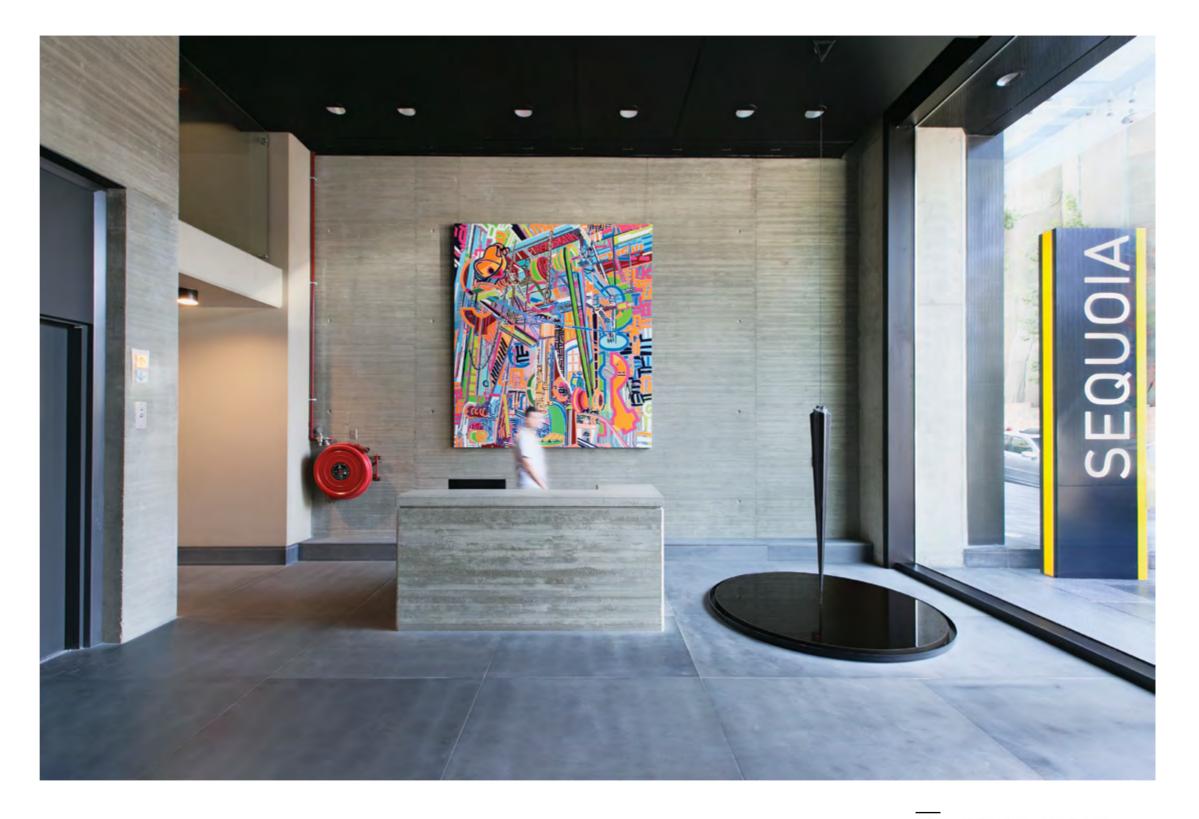
# STAYING IN THE NEIGHBORHOOD BUT MOVING INTO THE FUTURE

Entreprises A.R. Hourie's relocation in early 2016 to its current headquarters, the Sequoia Building, reflects the company's new reality. To accommodate the company's impressive growth, a decision was taken to upgrade our home to our standards in a quality environment in a flagship building.

Plans to consolidate all departments and functions into one headquarters began in 2013 when a prime piece of real estate was earmarked. The idea was to build an ultramodern office building doubling as a cultural venue and invite likeminded companies looking for a prestigious address to share in one space.

Sequoia sits on a well-situated lot, across from the Palace of Justice and adjacent to the city's main arteries that connect the coastal and Damascus highways with the inner city districts. It is developed, engineered and constructed by Entreprises A.R. Hourie with renowned architect Youssef Haidar providing architectural design.

The building totals  $18,000 \text{ m}^2$  on a  $2,000\text{-m}^2$  site at the corner of Sami El Solh Avenue and Najib Azouri Street, with wider frontage on the Avenue.



TURKISH ARTIST YIGIT YAZICI'S PAINTING AND RANYA SARAKBI'S SCULPTURE 'PENDULUM NO. 11 (2015)' AT THE SEQUOIA'S MAIN ENTRANCE Lateral access on Karam Rahal Street offers entry into a 5-level parking substructure and a gated entrance fronting a charmingly landscaped garden.

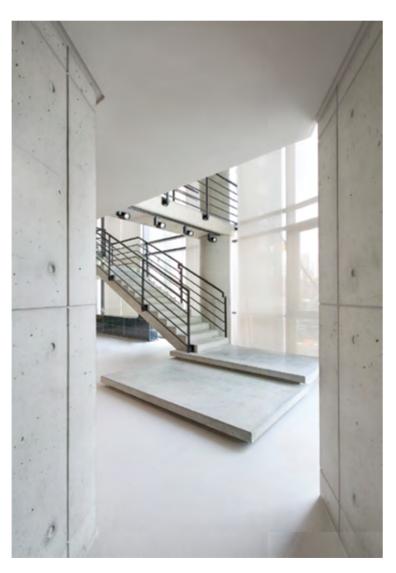
The architecture owes its legibility to two elements: its boomerang shape that curls around an inner elevated courtyard above the atrium podium and the façade's modular-ribbon window pattern that stretches around its outer curve. The stacked glass windows are framed by thin concrete overhangs and vertical panels jutting 50 cm the length of the façade. Non-reflective glass louvers are affixed on the longitudinal cornices of each window box for additional luminosity and heat control.

A steel tension-rod support system fixed back to the concrete superstructure, right under the eight rows of concrete slats encircling the building and providing an exterior demarcation between the podium and upper floors, provides support for the glass-and-steel canopy running the full width of the entrance and street-level retail space. At night, the façade is illumined by a linear composition that deconstructs its design through continuously changing colors and hues.

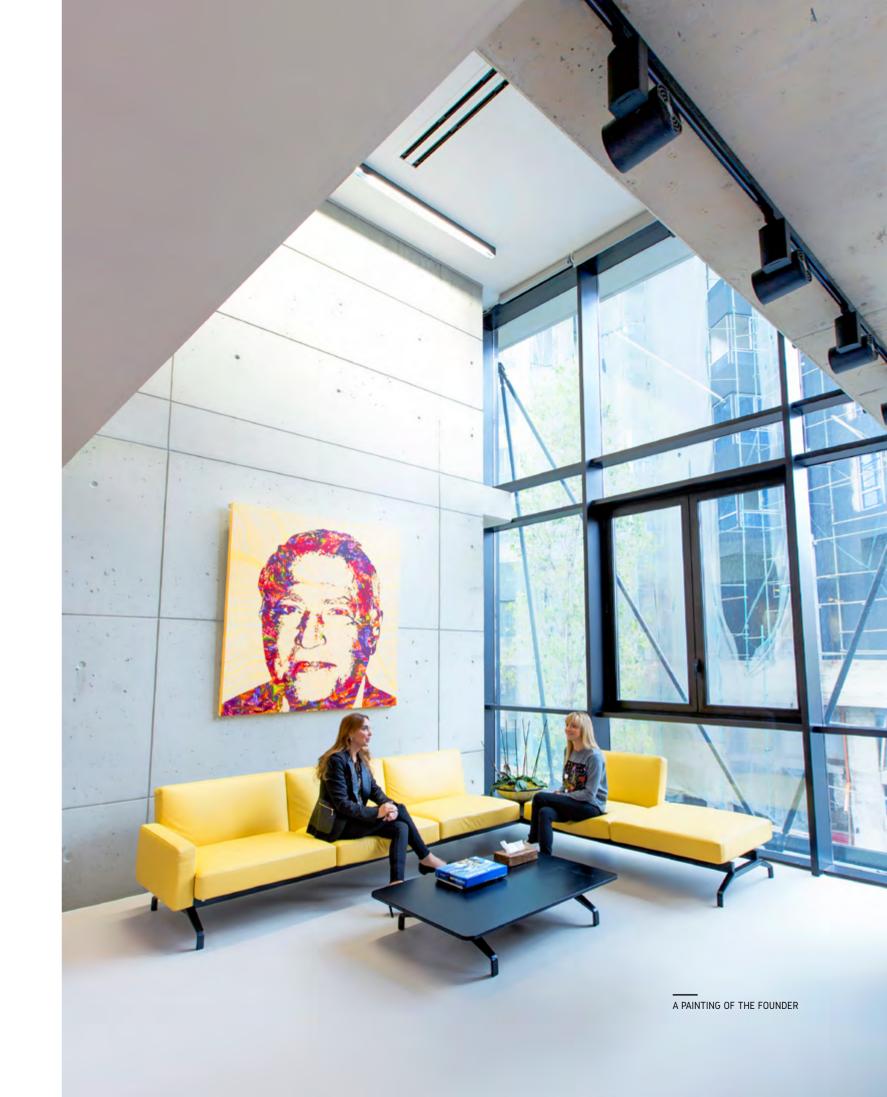


THE SEQUOIA'S DISTINCTIVE FAÇADE WITH VARIOUS PRECAST AND IN-SITU CONCRETE TECHNIQUES

Entreprises A.R. Hourie's offices are housed within the double-height wrought-profile glass first floor and mezzanine podium between the upper floors and the street level double-void entrance. The relatively small and muted atrium entrance features a sober, cast-in-situ, fair-faced concrete reception desk and a three-elevator concrete core frame. Behind the desk hangs a commissioned colorful canvas by Turkish artist Yigit Yazici and, to its left, suspended from the double-height ceiling, drops Ranya Sarakbi's Pendulum No. 11 (2015), flawless in its reflection on its circular oil-filled plate. These are two of the carefully curated art pieces that are part of Entreprises A.R. Hourie's permanent collection housed within the premise.



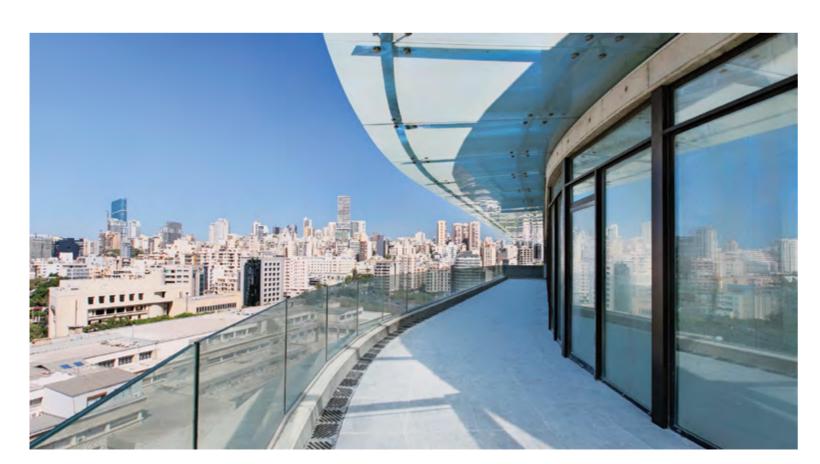
THE DETACHED CONCRETE STAIR WITH ITS CENTRAL LANDING AND BLACK METAL BALUSTRADE AND HANDRAIL LEADING ONTO THE MEZZANINE FLOOR





CONCRETE CURVILINEAR BENCHES BY HOURIE AT THE REAR FAÇADE

A MODERN ADAPTATION
OF THE 60'S ARCHITECTURE
AT THE TOP FLOOR



A portrait of Abdul Rahman Hourie, also by Yazici, and an emblematic rendition of the Lebanese flag adorn the concrete walls of the reception area on the first floor. One dominant feature of the reception area is the detached concrete straight stair with its central landing and black metal balustrade and handrail leading onto the mezzanine floor.

The offices are functionally furnished with Nomos System, Norman Foster's furniture design collaboration with Tecno, and USM cabinetry system to complete the ergonomics of the space for seating, circulating, storing and lighting.

The floor plates above are open for full modularity. They can be either configured on both sides of a central corridor or joined as an open-floor workspace to create collaborative and flexible working environments. Offices on the outer edges enjoy views of the avenue, Ashrafieh, and the mountains, while those situated inside the inner curve of the boomerang look onto each other and over the inner courtyard's lone olive tree, flanked by 4 curvilinear, poured-concrete benches. One feature of the courtyard is the circular service metal stairs adjoining the industrial, stainless steel mesh grill cleverly covering the utility service shaft. The spiraling stairs are mounted around one of the unused 1.30-m-diameter, 64-m-high steel piles recovered from the Port of Beirut Quay 16 project.

Another courtyard feature, the exterior fire escape pouredconcrete staircase on the building's northernmost point, wraps around an atypical geometric void.

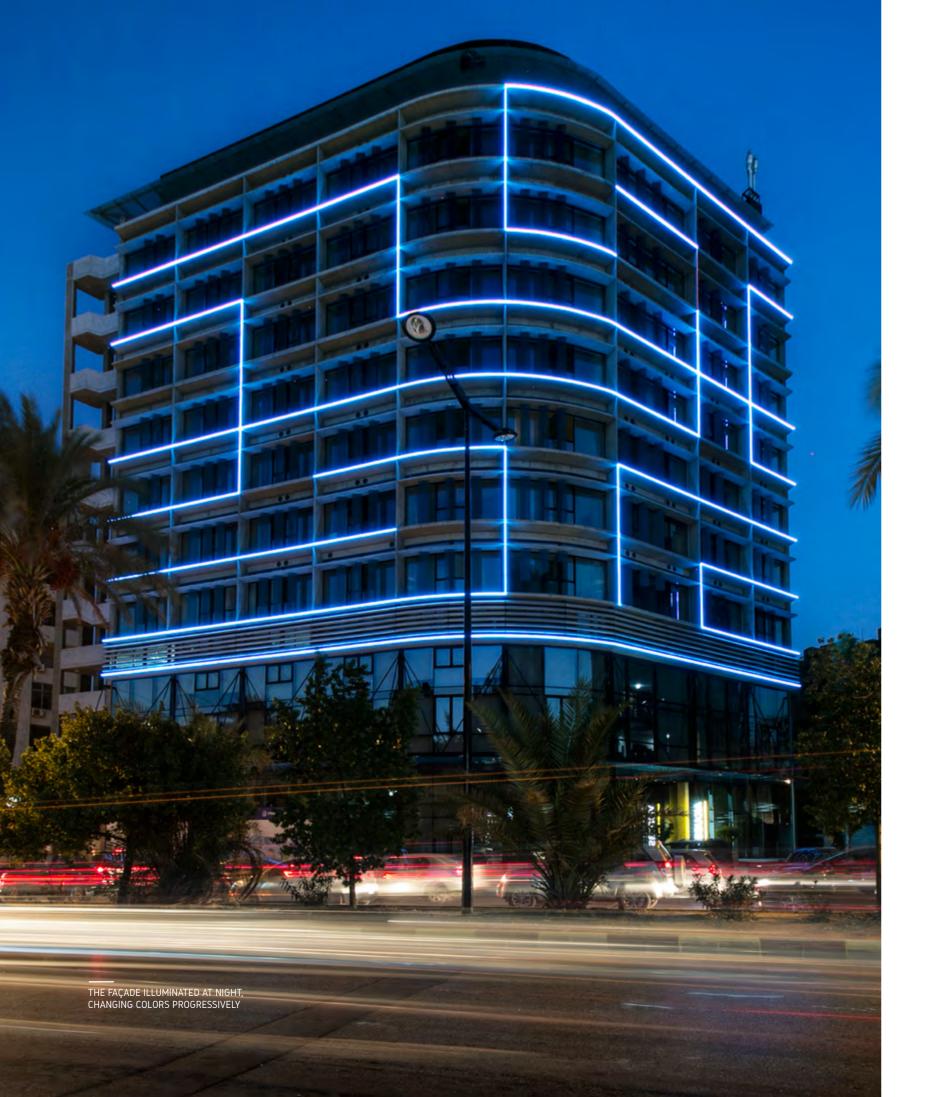
HOURIE'S ESTIMATION
DEPARTMENT

Sitting like a colon in a semi-colon configuration to the rear of the building, at street level, lies an igloo-like domed structure designed to resemble a chiseled precious stone.

It is the building's independent utility shed housing a standby generator, MEP utilities and storage space.

The Sequoia is readily open to endless possibilities reflected by the personality of the organization that built it to house its headquarters, and others who will also call it home, to create a breathing, collaborative and flexible environment to carry them toward new challenges.









HOURIE'S EXECUTIVE OFFICES HOURIE'S MAIN ENTRANCE DESK





INTERIOR VIEWS OF HOURIE'S NEW OFFICES



#### THE ARCHITECT'S BRIEF



**YOUSSEF HAIDAR**Architect, museographer, scenographer, preservationist and painter

"Sequoia was an unconventional arrangement because the client, who was the developer, was also the contracting firm, and it was headed by two architects.

We had entered into a working relationship that could have easily tanked. Privately perhaps, we all entertained that possibility. I was skeptical about the project being executed the way we wanted because of our desire to be true to the integrity of the design and building specifications. We realized we were onto something good when views over design intent converged and this spoke 'volumes' of both our experience and maturity in the business. Entreprises Hourie, what it represents, greatly influenced the entire design scheme starting with volumetric logic and building massing.

The down-to-earth volumes emerge among the surrounding buildings, their simple geometry and massive character reflected in their strong curve and the levitating quality of cast-in-place reinforced concrete. We made an early design decision not to surpass a 50-m elevation or have an ostentatious façade. We were looking to create a monolithic design with limited use of building materials and monochromatic range of colors, using slab-to-slab fair-faced concrete ribs, and a textured concrete, stacked and uninterrupted ribbon window façade.

There was no room for error. We refused to be lenient, rejecting a common construction practice of masking imperfections with expensive architectural finishes.

We wanted a concrete finish done one time, the first time: In a nutshell, stripping the building to its bare functional necessities and exposing their aesthetical value.

Such a building, if not impossible to construct, is too exacting to execute, too expensive, not worth attempting, many would say. Collectively, we turned it into a challenge. Concrete in its most barren form followed a precise constructional order.

The dialogue that developed between myself and Mr. Naji Srouji, Concrete Operations Manager at Entreprises A.R. Hourie, resulted in the feeling of lightness we were looking to achieve.

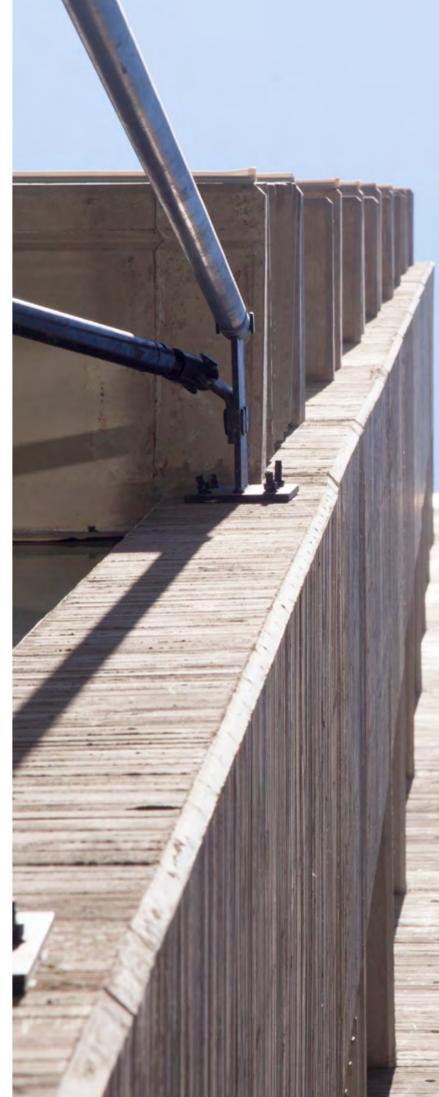
It looks simple but, in fact, it is quite complex, a very carefully engineered structure to perform efficiently and breathe with its surroundings. I love this building. It is one project that cannot be attempted again. Nothing in it can be replicated, it is a one-shot deal. The client, the neighborhood, the context, everything about it is deliberately suggestive, and that's why Sequoia is so unique.

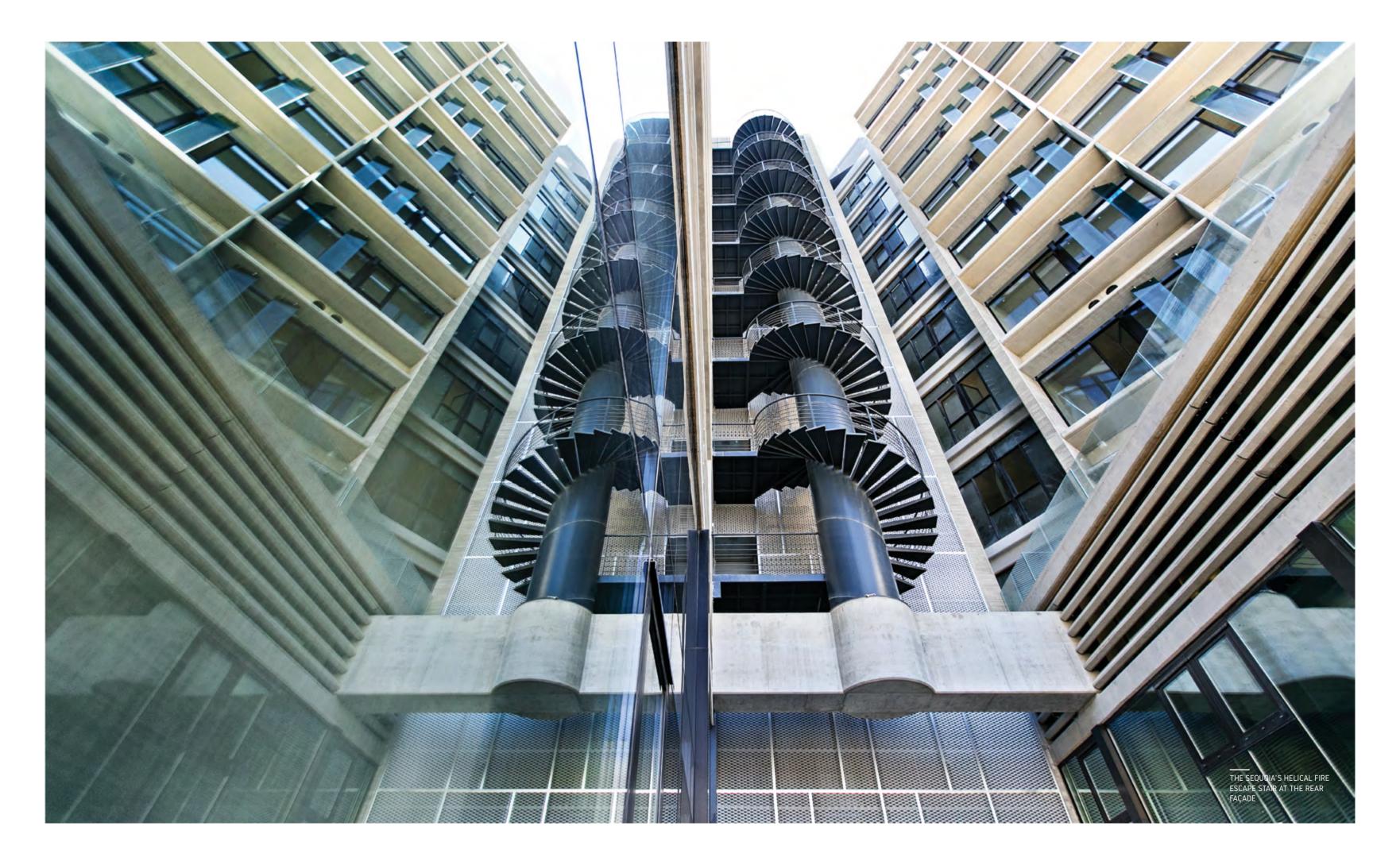
The jobsite was monitored very closely. We worked hand-in-hand with Entreprises A.R. Hourie on a daily basis. Structural shop drawings that are ordinarily executed and reviewed by engineers became architectural concerns as well.

We were a good team: Hourie, as precast concrete experts, designed and executed the concrete casting, and we ensured the superb finish we have today. Even the concrete louvers were poured off-site into specially-shaped panel frames and seamlessly slid on tracks inside the façade.

## Sequoia is built with integrity; it demonstrates the beauty of the non-superfluous.

It is a sober and elegant structure appropriately designed for its occupants: They are served with cross views through the curvilinear windows alongside the exterior envelop and inward onto the spiraling exterior metal stairwell and multi-leveled courtyards. We worked a lot on the interior space's functionality and ergonomics, namely proportions and scale, leaving plenty of room for users to project their individual corporate identity. The building is not striking in it being excessive or imposing. What it does, however, and very well I might add, is link the institutional character of the neighborhood with an urban future; the establishment of a new urban language, so to speak. I can honestly say nothing was compromised, nothing spared, neither money, nor effort, and certainly not insight and experience. For me, as a practicing architect, it is one of those rare projects in one's professional career where execution truly honors the initial vision."





ENTREPRISES A.R. HOURIE TODAY



**ELIE RAFIE**Geotechnical Consultant

"I am one of a handful who sat in the chair to the left of Abdul Rahman Hourie's desk, and quite proud of that. The notorious stark chair blending with the sparsely furnished, unassuming office where we often met, was witness to countless whispered discussions and heated debates. Sitting across from him, I relished convincing him of an idea after all options had been thoroughly tallied. Ours was a professional relationship, but it is through his professionalism that I got to know the person behind the chairman.

It is impossible to separate the outstanding engineer from the righteous man; they are one and the same. Through fifteen years of collaboration, I came to value the virtue of respect that he garnered; respect for the individual, for work put in to complete a task and complete it well, for ingenuity when he saw it, and for the hard physical work that is so much at the core of our business.

Who would ask his consultant to double his fees because the report he had rendered on a problematic soil study deserved double what he had charged for? I still think of how he asked me that with utter admiration, not because of his righteousness, but for his acute engineering knowledge which enabled him to appreciate the complexity of the solution presented.

On many projects we collaborated on, he assumed his responsibility with an unlikely mix of humility and clout, never considering personal gain, always putting the project first.

I will always remember him as a man of his word, the one who would step up to the plate and own the project, the fair negotiator, the trustworthy partner, the gentlemen, the diplomat."



**SAMI AZHARI**Deputy General Manager, Entreprises A.R. Hourie

#### "Managing a construction project is like managing a football team.

The project manager is the coach, a leader constantly watching everything happening all over the field. The construction manager is the goalkeeper, performing best under pressure. The site team members are the defense, never getting enough recognition for the work they do. The midfielders are the engineering team, the final outcome hinging on their performance. Management are the attackers, always with a star and a striker. Tender estimations are comparable to the long hours of training and preparation and the construction process is the field match to be played.

As for the match itself, the first half is the concrete phase, laying the groundwork. The second half is "finishing" the game off, down to the last 5 crucial minutes of handing over and securing victory.

With a strong formation and every position filled with the right person, the lines of defense cannot be infiltrated and the lines of attack cannot be stopped. It takes a loyal team of experienced players blended with new blood and inspired by stars and playmakers led by a first-class coach with good judgment to lead, motivate, facilitate, make the tough decisions and come up with the right strategy.

We, at Entreprises A.R. Hourie, play for the joy of the game. We enjoy scoring and winning, but always with fair play, and always as a team."



SAMIR KHAIRALLAH
Chairman, Samir Khairallah & Partners (SKP)

"Contractors are the ones who interpret the architect's working drawings and specifications that have been established in conjunction with the developer. Architects tend to know local contractors well but it is not always their choice which one the client signs up with. They prefer working with a contractor they know, like, and can rely on, in a nutshell, a contractor they can entrust to realize their vision.

The enduring relationship between SKP and Entreprises A.R. Hourie was not born yesterday. Rather, it is the result of years of common projects and confidence in the integrity of their delivery.

They have always delivered to our full satisfaction. Because they are good, because they have the resources, and because they don't cut corners.

We see it in the preciseness of their work and the diligence of their employees. It is not too often that one finds a contractor more demanding than the architect."



MAZEN RICHANI
C.E.O., Glassline Industries S.A.L.

#### "A thrilling journey!

Starting at the Sheraton Four Points Hotel in Verdun, our relation with Entreprises A.R. Hourie's management and team developed throughout the years.

Together we grew along with our challenging projects: the double-skin unitized façade of CMA-CGM, the skylights of Beirut Souks, the minimalistic façades of Beirut Marina's Town Quay, the modernization of the Lebanon National Library, the new Hourie Headquarters, the fast-track erection of Rive Gauche Tower and, last but not least, one of the most prestigious residential green buildings in the region, Achrafieh 20|30.

We worked as partners and witnessed the talent, the inspiration and, above all, the ethical values shared by Hourie's professional team members, whose integrity and skills speak for themselves.

Congratulations, Entreprises A.R. Hourie!"

# **SELECTED PROJECTS**







BEIRUT'S HISTORICAL CENTRAL DISTRICT

# **URBAN INFRASTRUCTURE**

Beirut Central District, Sector G, Streetscape and Infrastructure 1998
Beirut Central District, Saifi Village, Sector I, Streetscape and Infrastructure 2000
Rehabilitation of Beirut's Coastal Corniche, Streetscape and Infrastructure 2006

## BEIRUT CENTRAL DISTRICT, SECTOR G, **STREETSCAPE AND INFRASTRUCTURE**



### LOCATION

Beirut Central District

### CLIENT

Solidere

### CONSULTANTS

Dar Al-Handasah (Shair and Partners)

### ARCHITECTS

Archicentre Associated Ltd.

### COMPLETED

1999

### OLD WAYS AND NEW METHODS

Preservation of the historical Sector G in Beirut Central District called for the area's restoration to its authentic character by resurfacing streets and thoroughfares with basalt cobblestones. The original basalt cobblestones were recuperated and stored by Solidere, and reused in the project.

The project required highly skilled craftmanship, using ageold techniques enhanced by modern technology. Shop drawings included a stone numbering system to achieve the right pattern that cobble artisans found staightforward to follow.

Scope included resurfacing a 34,000 m<sup>2</sup>-area with new and reclaimed basalt and a 16,000 m<sup>2</sup>-area with granite. Additional works included street lighting, irrigation and other tertiary infrastructure. The project covered Avenues Foch, Allenby and Weygand, as well as Maarad and Parliament Streets, Parliament Square and adjoining alleways.

ICONIC NEJMEH SQUARE WITH ITS SURROUNDING STREETS UPON COMPLETION OF HARDSCAPE WORKS







RAMI HOURIE INSPECTING
THE WORKS









## BEIRUT CENTRAL DISTRICT, SAIFI VILLAGE, SECTOR I, STREETSCAPE AND INFRASTRUCTURE



### A VILLAGE IN THE CITY

This project consists of all street hardscape and landscape finishes, signage, lighting, cobblestone resurfacing and pavements of the new-urbanist style Saifi Village designed by French architect François Spoerry jointly with Erga Group. The scope covered, in addition to Saifi Village, several streets and piazzas: Said Akl, Moukhallasiah, Monot, Charles Debbas, and Georges Haddad Streets as well as adjoining vehicular streets.

### LOCATION

Saifi Village, Beirut Central District

### CLIENT

Solidere

### ARCHITECTS/CONSULTANTS

Erga Group Dar Al-Handasah (Shair and Partners)

### COMPLETED

2001

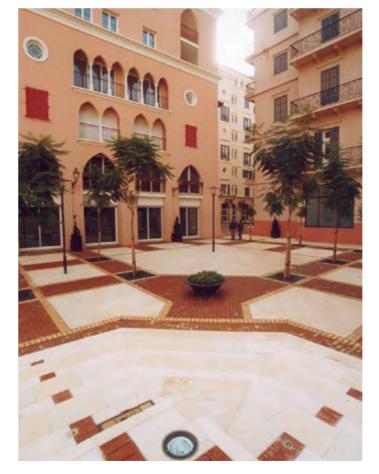
82 | SELECTED PROJECTS, INFRASTRUCTURE WORKS



TREE-LINED PAVEMENT AND COBBLESTONE STREET IN SAIFI VILLAGE



ARTISTIC STONE BOLLARDS





# REHABILITATION OF BEIRUT'S COASTAL CORNICHE, STREETSCAPE AND INFRASTRUCTURE



### Ι Ο ΓΑΤΙΟΝ

Beirut Seafront Corniche, St. Georges Hotel to Summerland Hotel

### **CLIEN**1

Council for Development and Reconstruction (C.D.R.)

### CONSULTANTS

Rafik El-Khoury & Partners

### COMPLETED

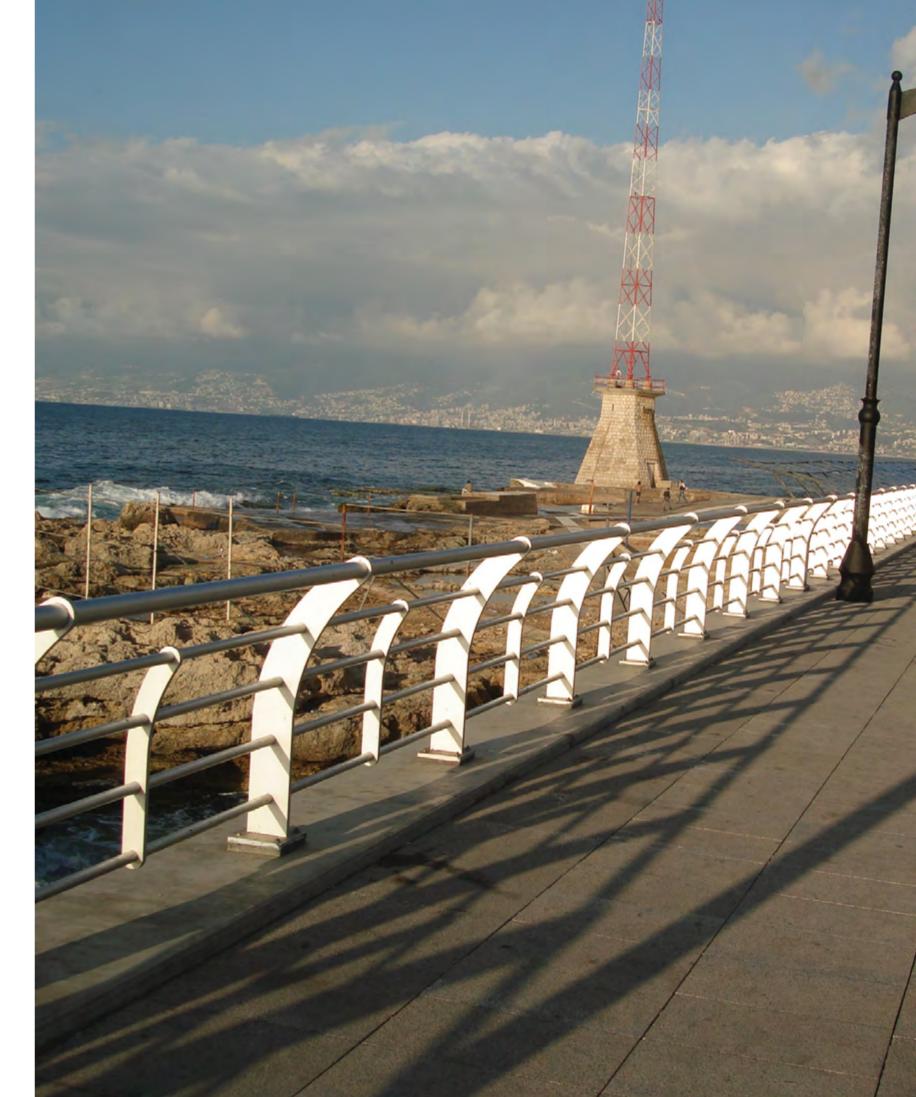
2009

### ON THE SEAFRONT CORNICHE

The rehabilitation of the coastal boulevard and its 7-km-long seaside promenade, better known as the Corniche, between St. Georges Hotel and Summerland Hotel, going through Ramlet El-Bayda, Raoucheh, AUB Beach, Ayn Mraysseh and Minet El-Hosn, was executed while keeping this busy primary artery open to traffic.

Contract included a storm water network with 500-m-long reinforced concrete box culverts, a sewage and water supply network, a street lighting system including lighting poles and traffic lights, pedestrian guardrail protection, a large sidewalk promenade, landscaping and irrigation networks including a 200-m³ underground water tank, a pumping station, paving and re-asphalting works.

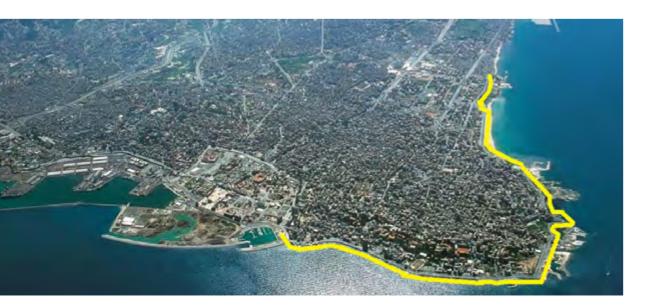




86 | SELECTED PROJECTS, INFRASTRUCTURE WORKS



STREET LIGHTING, GALVANIZED BALUSTRADE, INFRASTRUCTURE AND PAVEMENT WORKS COMPLETED (MINET EL-HOSN SECTION)



AERIAL PHOTOGRAPH SHOWING EXTENT OF COASTAL CORNICHE WORKS



INFRASTRUCTURE AND EARTH WORKS
IN PROGRESS (RAMLET EL-BAYDA SECTION)

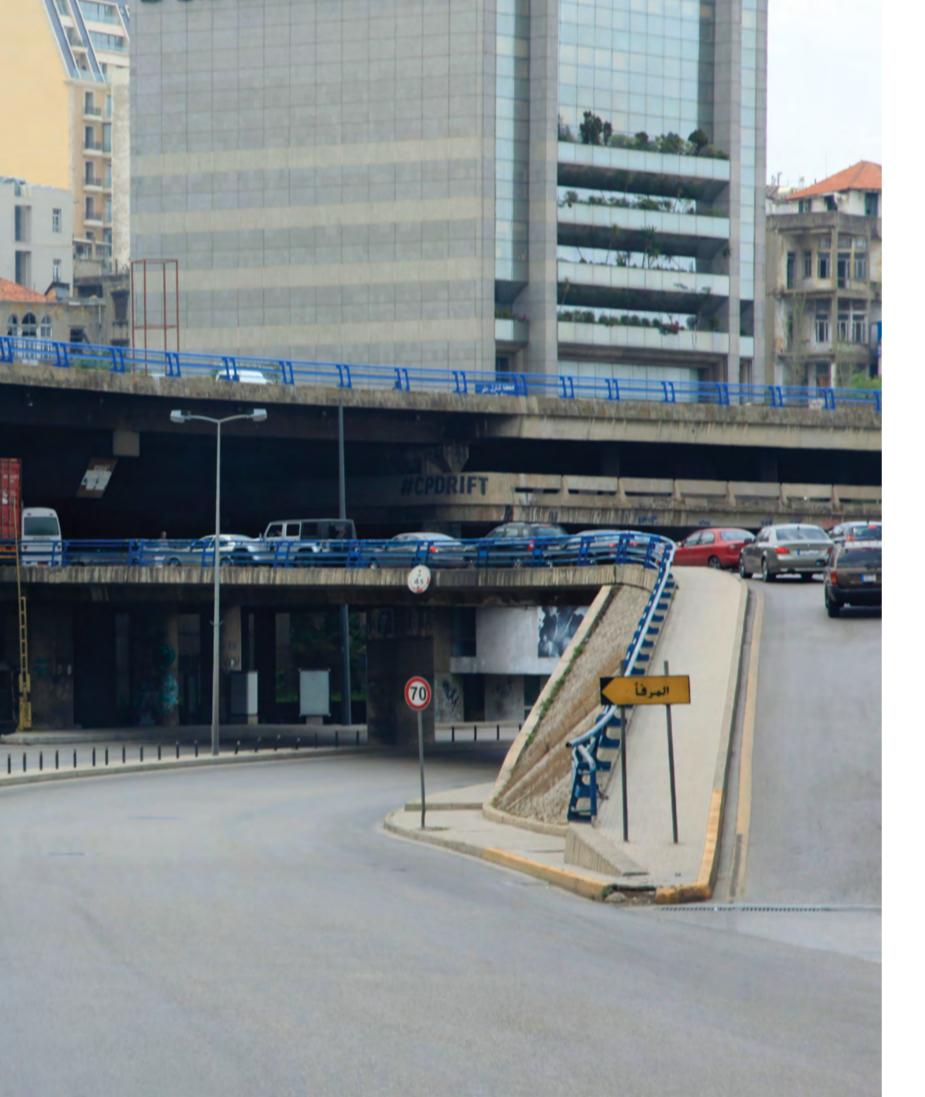




PAN-ARAB HIGHWAY, LOT B

# **HIGHWAYS AND ROAD WORKS**

Charles Helou Multi-Level Bus Terminal, Beirut East Entrance 1969
Tabarja-Tripoli Highway, Lots 1A, 2B & 3, North Lebanon 1973
Pan-Arab Highway, Lot A, Bekaa 2009
Kfarhim-Bchetfine-Ammiq Road, Chouf 2010



# **CHARLES HELOU MULTI-LEVEL BUS** TERMINAL, BEIRUT EAST ENTRANCE



### LOCATION

Beirut

Conseil Exécutif des Grands Projets de la Ville de Beyrouth (C.E.G.P.V.B.)

Gicome (Antoine Salamé & Associés S.A.R.L.)

ORIGINAL CONSTRUCTION COMPLETED

1971

REHABILITATION COMPLETED

### UNDER THE BRIDGE

In the 1950's the city of Beirut was served by Tramway Beirut, operated by the Municipality of Beirut in partnership with Electricité du Liban. By the late 1960's, the tramway was phased out and replaced by a fleet of 138 'Saviem-Chausson' buses. Through a network of lines and stops, these buses linked outer suburbs with inner neighborhoods of the capital, all within an interval of six to seven minutes.

In 1969, a plan was outlined to build the Charles Helou Bus Terminal Station along Beirut Sea Port, widening the network and connecting remote mountain villages to Beirut. Commissioned as a joint venture with Entreprise Raffoul Fakhry, the Charles Helou Bus station is a modern multi-use terminal running 450 m long and 7 m wide over 3 floors. The bus terminal is topped by a 2-floor car park with a ramp leading to the upper deck's motorway.

RAMP CROSSING CHARLES HELOU BRIDGE AND LEADING TO GEMMAYZEH AND MAR MIKHAEL

The project also included two 50-m-span access bridges in pre-stressed concrete and access ramps to parking areas and side roads. One of the largest construction sites in the Middle East at the time, the unconventional scope included a foundation on diaphragm walls (barrettes) excavated and cast under bentonite. Pre-stressed and precast beams were utilized for the roof and bridges.

The terminal was only partially completed at the onset of the Lebanese civil strife in 1975 and remained a vacant structure, a vestige of pre-war achievements and war ruins.







THE TERMINAL AND THE OVERPASS BRIDGE

THE BRIDGE DECK AND THE TERMINAL IN THE BACKGROUND



# TABARJA-TRIPOLI HIGHWAY, LOTS 1A, 2B & 3, NORTH LEBANON



### LOCATION

Tabarja to Tripoli

### CLIEN

Conseil Exécutif des Grands Projets (C.E.G.P.)

### CONSULTANTS

Conseil Exécutif des Grands Projets (C.E.G.P.)

### COMPLETED

1986

### TABARJA-TRIPOLI IN THREE PACKAGES

An offshoot of President Chehab's program for reform and development established a decade earlier, the Tabarja-Tripoli Highway project was executed in three packages. During the decade it took to complete it, Lebanon was transformed from a country of relative peace and prosperity to one of war and infighting.

The northern section of the coastal highway linking Tabarja to Tripoli is a 27.4-km-long dual-lane, two-way highway connecting Keserwan Caza to the North. A vital artery following the natural coastline, the highway carries most of the circulation from Beirut to the North.





(In joint venture with Alfred Kunz GmbH)

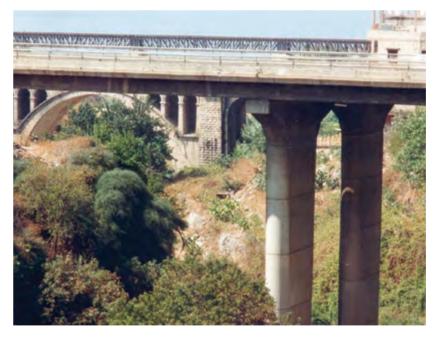
Scope included the construction of:

- A pre-stressed concrete bridge over Nahr Ibrahim, with 3 spans: 26-m, 40-m and 30-m-long.
- A pre-stressed concrete bridge over Nahr El-Fidar, with 2 arches: 97-m and 132-m-long, 35-m high.
- 20-m diaphragm walls (barrettes) cast under bentonite for foundations in the river.

THE MAIN POST-TENSIONED ARCH







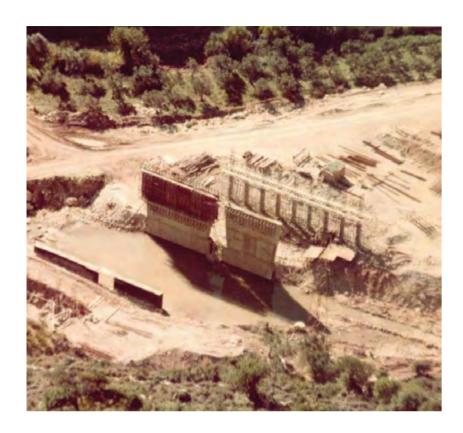
SPAN AND PIER OF NEW BRIDGE WITH THE HISTORICAL BRIDGE IN THE BACKGROUND

### LOT 2B: JBEIL-BATROUN

(In joint venture with Alfred Kunz GmbH and Entreprise Khlat et Mouawad)

Scope included the construction of:

- A 14.4-km-long, 2-way motorway.
- Earthworks with 800,000 m<sup>3</sup> of rock excavation.
- 2 fly-overs, 9 overpasses, and 19 culverts.
- A 3-span pre-stressed concrete bridge on Wadi Eddé, with 3 spans: 31-m, 29-m and 34-m-long.
- Drainage system, sub-base, base course, gravel cement base and bituminous concrete.
- Concrete structures and walls.



SHUTTERING AND EXECUTING PIERS AND ABUTMENT BRIDGE

### LOT 3: BATROUN-CHEKKA

(In joint venture with Alfred Kunz GmbH and Entreprise Khlat et Mouawad)

Scope included the construction of:

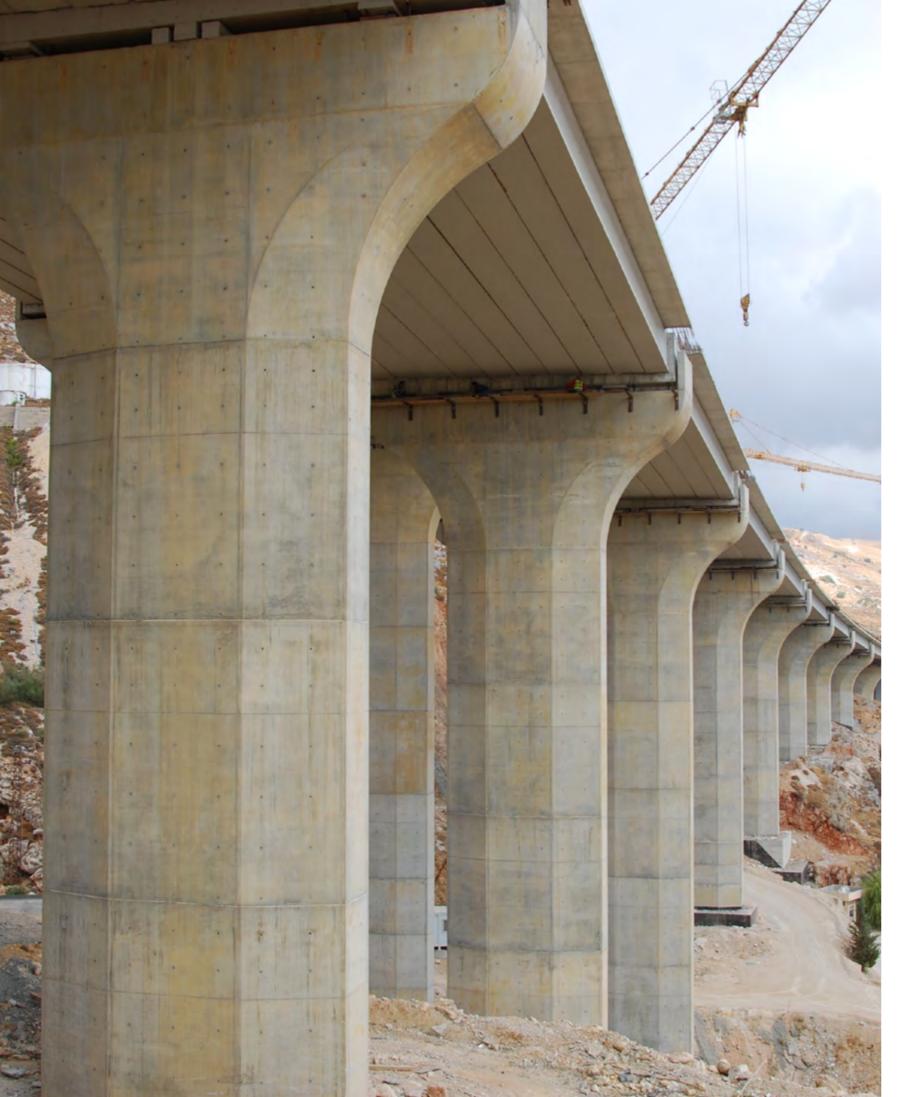
- A 13-km-long, 2-way motorway.
- 2,400-m-long tube tunnels.
- Earthworks with 1,800,000 m³ of rock excavation and 1,400,000 m<sup>3</sup> of rock excavation.
- Fly-overs, overpasses and box culverts.
- Drainage system, sub-base, base course, gravel cement base and bituminous concrete.
- Concrete structures and walls.











# PAN-ARAB HIGHWAY, LOT A, BEKAA



Dahr El Baidar to Taanayel, Bekaa

Council for Development and Reconstruction (C.D.R.)

Saudi Consult-TEAM International

IN PROGRESS

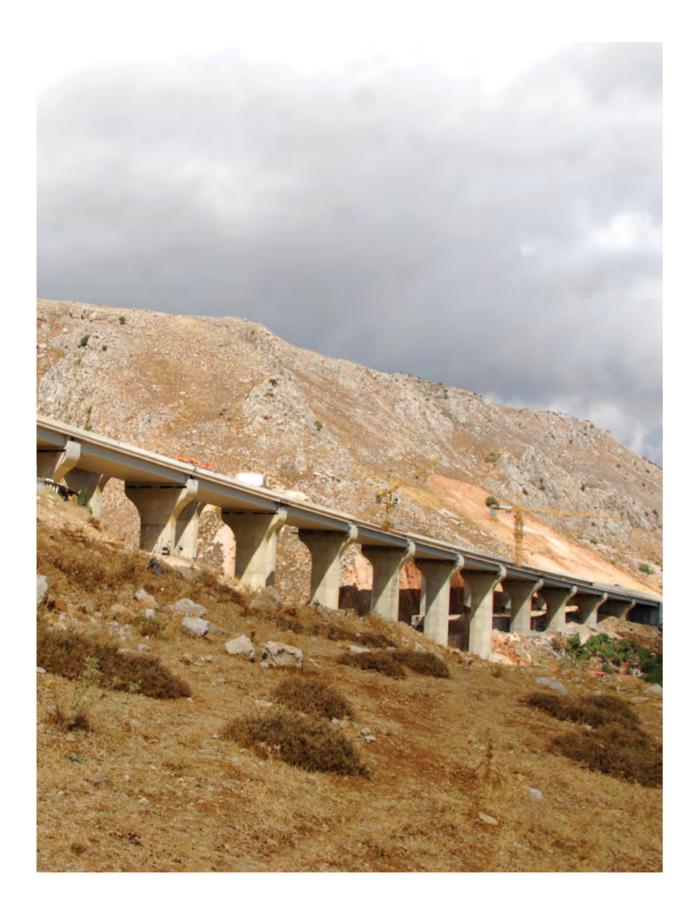
### LINKING BEIRUT TO DAMASCUS

The Lebanese transportation network is defined by the intersection of the coastal road linking Tripoli and Tyre with the international road connecting Damascus to Beirut. This configuration, as ancient as it may seem, was only reinforced in the late 19th century with the development of activities and infrastructure along its path, including the laying of railway tracks at a time when travel by train between Europe and Cairo became possible.

The idea of a Pan-Arab Highway linking Beirut to Damascus was introduced by the Arab League as early as 1967, driven by the nationalistic unionist sentiments of the times. Construction works, however, did not start until the late 1990s, during a period of relative prosperity and investment in infrastructure upgrade projects.

CONCRETE FOOTERS AND PIERS HOLDING
THE MASSIVE DECK OF THE PAN-ARAB HIGHWAY

102 | SELECTED PROJECTS, INFRASTRUCTURE WORKS





Geopolitically and strategically significant, the project's more practical attributes help alleviate congestion on the Beirut-Bekaa-Damascus axis by increasing the number of lanes to 8 on the Hazmieh-Baabda section, then down to 6 for the remainder of the 63-km-long total distance to the Syrian border.

Construction of the first phase of the highway began in February 1998 by the Italian firm Toto Costruzioni Generali under the supervision of the Council for Development and Reconstruction (C.D.R.). Funded by the public treasury and inaugurated in 2001, the project included the construction of the Sawfar Mdeirej Bridge boasting the highest pier in the Middle East (71-m-high).



104 | selected projects, infrastructure works



The Mdeirej-Chtaura-Taanayel Lot B project was awarded to Entreprises A.R. Hourie in joint-venture with Consolidated Engineering and Trading (CET) in 2009, starting where the previous phase had left off and ending 7 km from the Syrian border. Funded by the European Investment Bank, works consisted of the construction of a 17-km-long highway section connecting Namlieh Bridge at Dahr El Baidar to Taanayel.



Still on-going in 2016, works already executed include over 2,000,000 m³ of earthwork and 230,000 m³ of concrete casting, associated retaining walls, box culverts, and bridges.

Three viaducts (165-m-long and 8-m-high, 450-m-long and 45-m-high, and 220-m-long and 30-m-high) have also been completed. Finishing works include completion of asphalt paving, storm water and drainage networks, road lighting, steel balustrades, roads signs, equipment, and controls.





106 selected projects, infrastructure works









# KFARHIM-BCHETFINE-AMMIQ ROAD, CHOUF



### JOINING 5 VILLAGES IN THE CHOUF

The 7-km-long road links the Chouf villages of Kfarhim, Kfar Faqoud, Bchetfine, Deir Kousheh, and Ammiq.

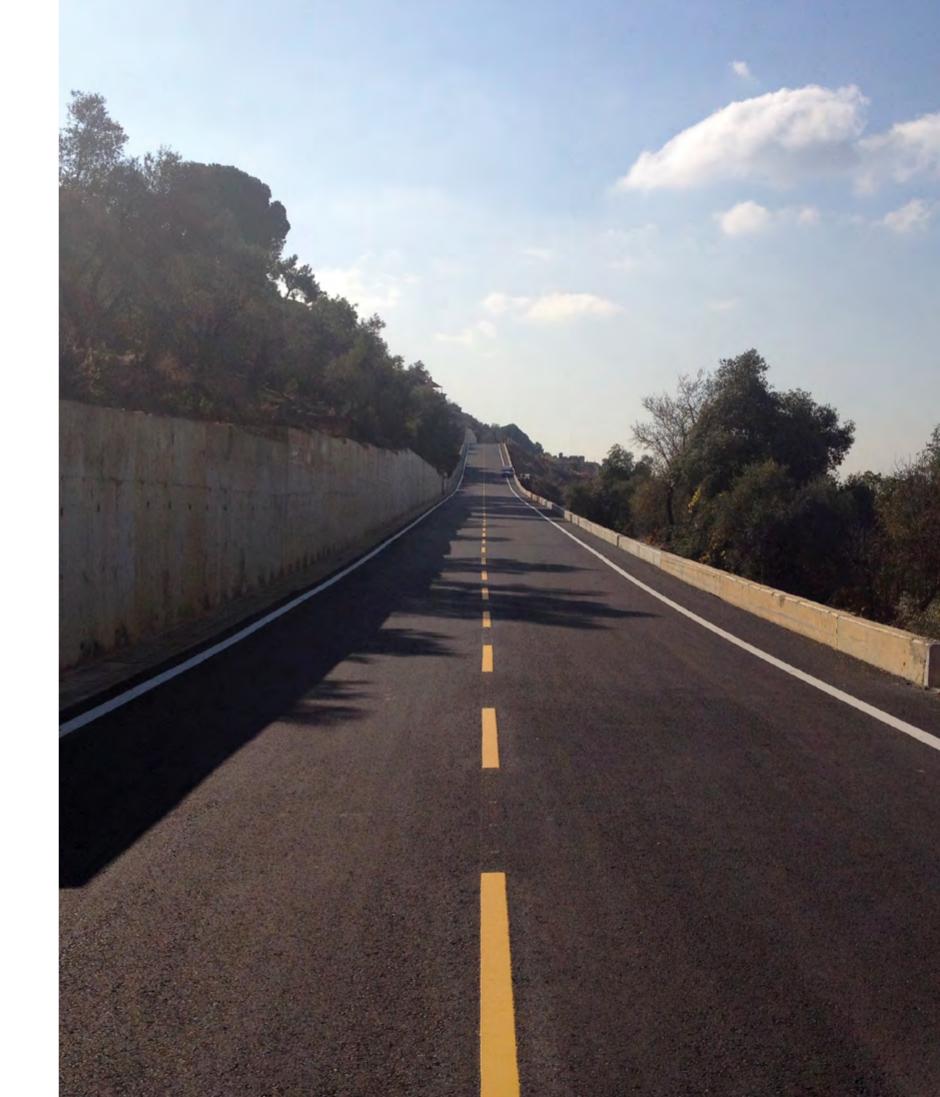
Scope of work covered excavation, piling, earth works, concrete retaining walls, reinforced soil walls, infrastructure networks (storm water and electrical networks). Also included in the contract: all asphalting and paving works, signage and marking, lighting, and road furniture.

LOCATION Kfarhim-Bchetfine-Ammiq, Chouf

CLIENT Ministry of Public Works

CONSULTANTS Engineer Samih Abou Chakra

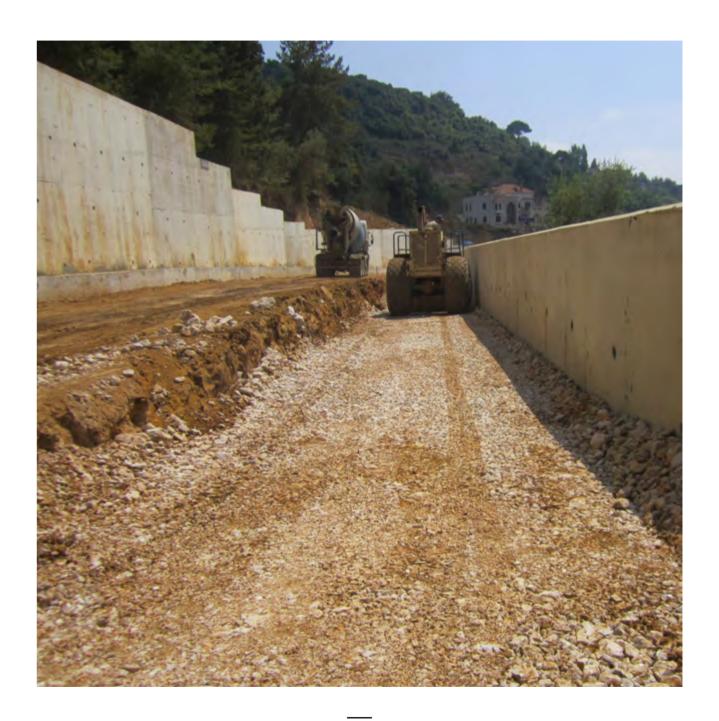
COMPLETED 2014



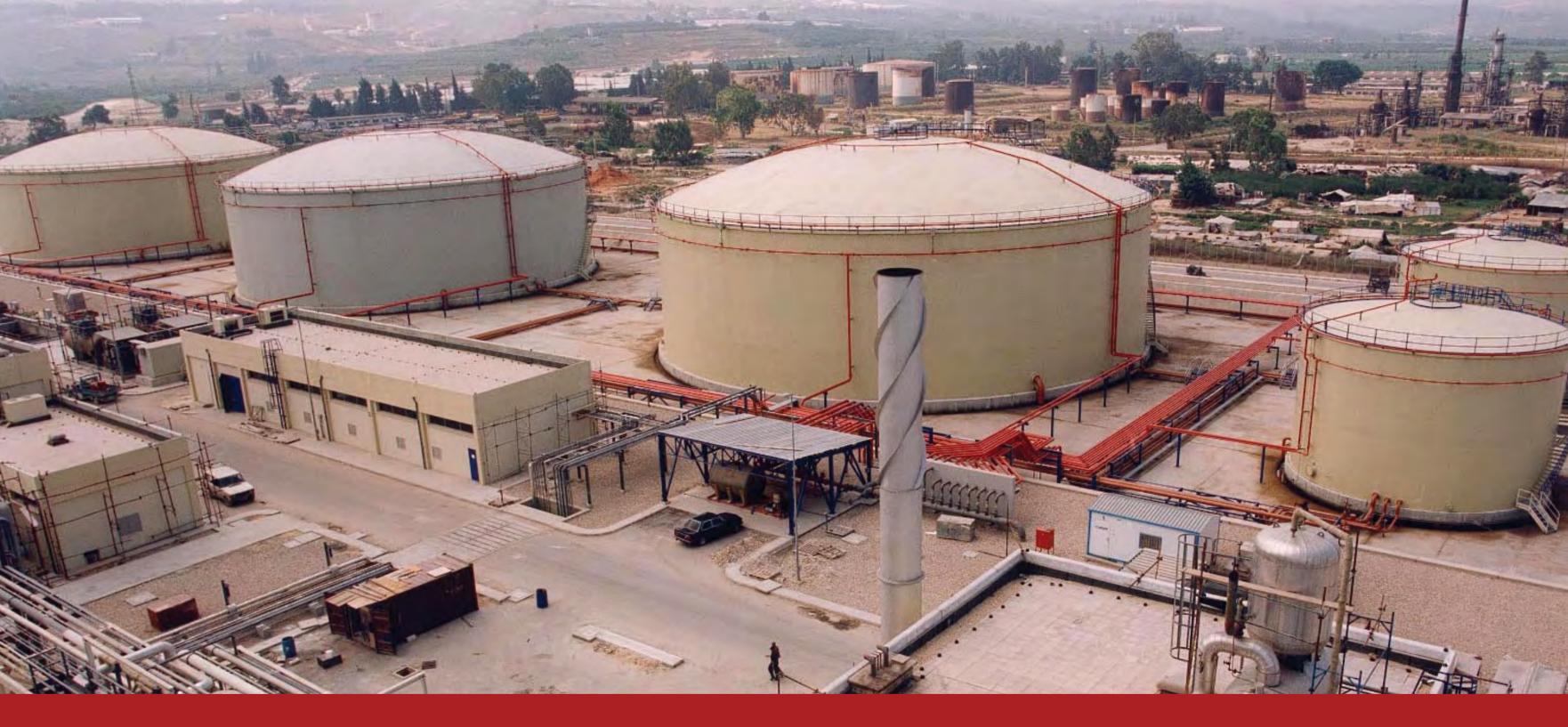
110 | SELECTED PROJECTS, INFRASTRUCTURE WORKS | 111







INSTALLATION OF BASE COURSE ADJACENT TO RETAINING WALLS



ZAHRANI POWER PLANT

# **POWER PLANT**

Zahrani Combined-Cycle Power Plant (450MW), South Lebanon 1995



## **ZAHRANI COMBINED-CYCLE POWER PLANT, SOUTH LEBANON**



### LOCATION

Zahrani, South Lebanon

Electricité du Liban (EDL)

### CONSULTANTS

Electricité de France (EDF)

### MAIN CONTRACTOR

Ansaldo Energia Spa

### COMPLETED

1998

### BUILT FOR NATURAL GAS, RUNNING ON FOSSIL FUEL

The Zahrani-Deir Ammar combined-cycle power plant is a 450-MW power generation project built to run on natural gas based on recommendations from Electricité de France and the Lebanese National Energy Strategy Report completed in 1993. This would have reduced Lebanon's dependency on fossil fuel, estimated to be around 22% of total imports, lowered production costs and environmental impact, and lengthened the service life of the two generating units.

In March 2005, the section of the Arab Gasline, the natural gas pipeline that connects Lebanon to Syria, was completed but it was never put in use. Because of the turmoil affecting Egypt and Syria, the region's main natural gas exporters, and Lebanon's own political instability, the plants never received the natural gas supply they were designed for and have ran almost exclusively on oil derivatives ever since they were built, obviating most of their design advantages.

The Zahrani plant supplies power to Beirut and regions in Mount Lebanon and the South. At full capacity, the plant produces 450 megawatts, 150 from each of its two gas units, and another 150 from a steam unit that runs off of them. But the steam unit requires both gas units to operate, so the plant is currently producing just 150 megawatts from its sole functioning unit.

Started in 1995, Entreprises A.R. Hourie's civil works scope, as a primary subcontractor to Ansaldo Energia Spa, covered the construction of all industrial facilities, the sub-sea pumping station (containing 5,000 m³ of reinforced concrete), a 300-m seal pit with discharge channel, and all access roads and infrastructure. Works also included 620,000 m<sup>3</sup> of earthwork, 39,200 m<sup>3</sup> of reinforced concrete, 28,000 m<sup>3</sup> of base courses and 34,000 tons of bituminous concrete.

The Zahrani project presented a first endeavor into marine works for Entreprises A.R. Hourie, with the construction of the coastal defense breakwater alongside a portion of the shoreline. Stones quarried from the nearby Kfarhim Road project being executed simultaneously by Entreprises A.R. Hourie were hauled in and used as armorstones for the breakwater.









PORT OF BEIRUT, EXTENSION OF QUAY 16 AND CONTAINER TERMINAL

# **MARINE WORKS**

Quay 16 & Detached Breakwater, Port of Beirut 1998 Extension of Quay 16 & Container Terminal, Port of Beirut 2009

## **QUAY 16 AND DETACHED BREAKWATER, PORT OF BEIRUT**



### LOCATION

Beirut Port

### CLIENT

Gestion et Exploitation du Port de Beyrouth (GEPB)

CONSULTANTS
Dar Al-Handasah (Shair and Partners)

### COMPLETED

2001

### INCREASING BEIRUT'S PORT CAPACITY

The project was executed in joint venture with E. Pihl and Son and MT Højgaard and Schultz, respectively the third and first largest contracting firms in Denmark.

Started in 1998 to upgrade and increase Beirut Port capacity, the Quay 16 project consists of building:

- a 600-m-long, 40-m-deep breakwater,
- a 600-m-long, 15.5-m-deep quay (Quay 16),
- a 60-m-long, 15.5-m-deep quay (Quay 15),
- a 65,000-m<sup>2</sup> container terminal,
- 6 STS (Ship-to-Shore) cranes on top of the quay.

INSTALLATION OF ACCROPODES FOR THE BREAKWATER



122 | SELECTED PROJECTS, INFRASTRUCTURE WORKS | 123



LIFTING ACCROPODE THROUGH THE CONCRETE BLOCKS STORAGE YARD

### THE BREAKWATER:

Scope of work:

- Dredging 465,000 m³ of sea-bottom sediments for breakwater foundation and 147,000 m³ in the harbor area, including underwater blasting.
- Construction of a 600-m-long, 40-m-deep detached breakwater.
- Placing of 2,000,000 tons of quarry run and 400,000 tons of armored rock at sea bottom.
- Construction of breakwater with 4,800 accropodes (916/m³ each).



ABDUL RAHMAN HOURIE, RAMI HOURIE AND RAMZI SALMAN SURROUNDED BY THE HOURIE TEAM FOR THE PORT CONSTRUCTION

### THE QUAY:

Scope of work:

- Construction of a 600-m-long, 15.5-m-deep quay.
- Manufacturing and placing 2,000 concrete blocks, weighing 100 tons each.
- 150,000 m<sup>3</sup> of poured concrete.
- Quay furniture: bollards, fenders and crane rails.
- Bases for 6 STS (Ship-to-Shore) cranes on the quay.



CONSTRUCTION OF THE BREAKWATER AMIDST HEAVY TRAFFIC IN BEIRUT PORT



SLOPE-AND-SCOUR PROTECTION WORKS

### THE CONTAINER TERMINAL:

Scope of work:

- Reclamation works and base course layer.
- 50,000 m<sup>2</sup> of concrete block pavers.
- 65,000 m<sup>2</sup> of multilayer asphalt concrete.
- Road markings.

CRANE ON FLAT-DECK BARGE

# **EXTENSION OF QUAY 16 AND CONTAINER TERMINAL, PORT OF BEIRUT**



### **ENLARGING BEIRUT'S PORT**

In 2009, Entreprises A.R. Hourie was awarded the Extension of Quay 16 and its Container Terminal in a joint venture with E. Pihl and Son. The quay was extended 500 m and the container terminal's capacity an additional 180,000 m<sup>2</sup>. Six new STS (Ship-to-Shore) cranes were placed.

### LOCATION

Beirut port

### CLIENT

Gestion et Exploitation du Port de Beyrouth (GEPB)

### CONSULTANTS

Sellhorn Ingenieurgesellschaft Dar Al Handasah (Nazih Taleb & Partners)

### PROJECT MANAGERS

D.G. Jones & Partners (ME) Ltd.

# COMPLETED 2013



126 | SELECTED PROJECTS, INFRASTRUCTURE WORKS



### PREPARATORY WORKS:

- Borehole sampling and sea floor investigations
- Soft and hard soil dredging to -16.5-m depth alongside the quay and maneuver area.

DRIVING PILES WITH THE 275-T ELEPHANT CRANE, AND GRAB DREDGING WITH THE CRANE BARGE'S CLAM-SHELL BUCKET

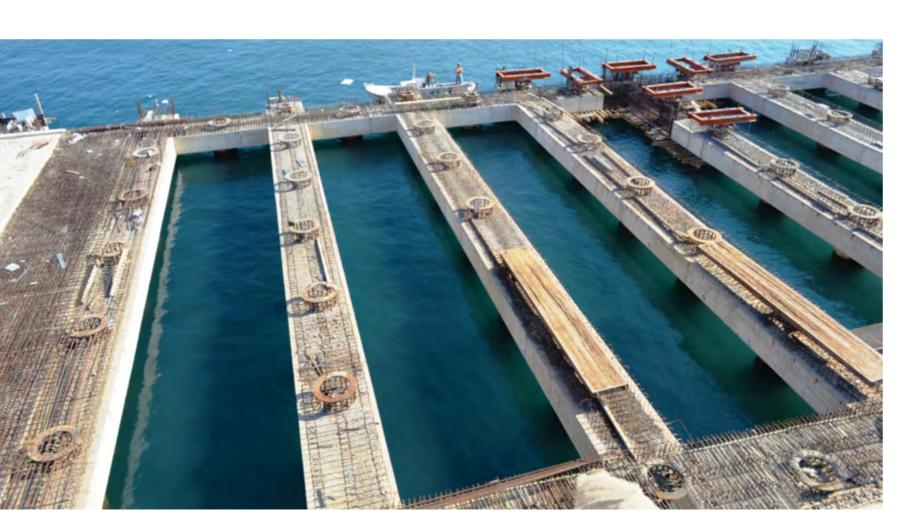
TRANSVERSAL BEAMS SUPPORTING THE CONCRETE DECK

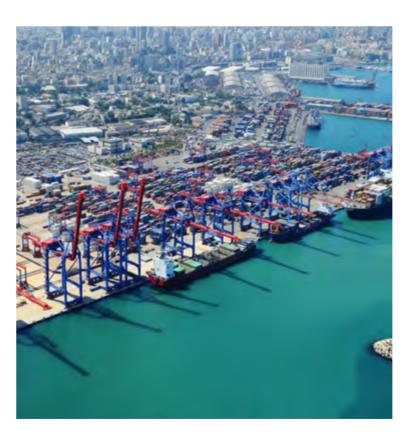


### **QUAY EXTENSION:**

- 100-t concrete blocks reclamation to fill in and close off old Quay 16 area.
- 574 steel piles (1.32-m-wide) driven into sea bed (longest piles were 64 m).
- Concrete deck poured over cast-in-situ beams skimming water surface, (in-water maneuver conducted by specialized SCUBA divers).
- 500-m-long, 16.5-m-deep quay extension.

RECLAMATION WORKS IN PROGRESS





GENERAL VIEW FOR PHASES I AND II OF THE EXTENDED CONTAINER TERMINAL, WITH STS (SHIP-TO-SHORE) CRANES

### CONTAINER AREA EXPANSION:

- 2,000,000 m³ of reclaimed surface (structural and general fill) placed by split barges to level -8 m then pushed by land.
- 20,000 m<sup>3</sup> of concrete
- Scour and slope protection of the new reclaimed areas enclosed by rock barrier (sizes vary from 500 kg to 4 t) and 390 accropodes.
- Vertical drains placed through soft sea bed to accelerate soil settlement under surcharge.
- Concrete pavement of 180,000 m<sup>2</sup> of new container area over top concrete slab.
- Infrastructure and services (11 lighting poles' masts, 30-m-high, 9 galvanized steel reefer stacks, manholes, drainage, storm water and electrical network, and 3 MV switchgear rooms).

### SCOPE OF WORK:

Boreholes were drilled and sea-bottom soil investigations were conducted to produce final soil reports. Dredging of 1,000,000 m<sup>3</sup> of soft soil and 75,000 m³ of hard soil was executed in order to remove inadequate soil and achieve the required depth of -16.5 m adjacent to the quay and maneuver area. Concrete blocks weighing 100 t each were placed to fill in and close the old Quay 16 area and 574 steel piles (1.32-m-wide) were driven into the sea bed in order to become foundations for the new deck. The longest piles were around 64 m long.

Then, the concrete deck was built on cast-in-situ beams skimming the sea surface, a challenging and delicate operation to execute near the sea. Behind this concrete deck, around 2,000,000 m<sup>3</sup> of reclamation (structural and general fill) were placed by split barges till level -8 m, then pushed by land. 20,000 m<sup>3</sup> of concrete was poured.

On the east side of the project, the reclamation area was protected and closed by rock barrier. Rock sizes varied from 500 kg to 4 t. At the corners, 390 accropodes were placed. On the east side of the project, where the soil was very soft, vertical drains were placed through the sea bed in order to accelerate soil settlement under surcharge.

Finally, the 180,000 m<sup>2</sup> container terminal area was paved on top of a concrete slab. In addition, the scope of work included all related infrastructure and services (11 lighting poles' masts, 30-m-high, 9 galvanized steel reefer stacks, manholes, drainage, storm water and electrical networks, and 3 MV switchgear rooms).

STS (SHIP-TO-SHORE) CRANES INSTALLED
ON THE NEW DECK AND RTG (RUBBER TYRED GANTRY)
CRANES TO BE INSTALLED ON THE NEW CONCRETE BEAMS

POURING OF 35-CM-THICK CONCRETE SLAB OVER THE CONCRETE BEAMS

STEEL PILES (1.32-M-WIDE) DRIVEN INTO

RECLAMATION WORKS IN PROGRESS











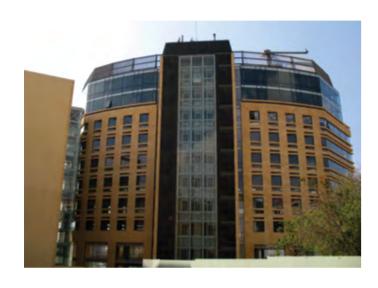


RIVE GAUCHE TOWER

# **OFFICE BUILDINGS**

Berytus Parks, Beirut Central District 2004 Foch 126, Beirut Central District 2005 Rive Gauche Tower, Achrafieh, Beirut 2014

## **BERYTUS PARKS**



### LOCATION

Beirut Central District

### CLIENT

Berytus Parks S.A.L.

### ARCHITECT

Pierre El-Khoury Architects

### CONSULTANTS

STRUCTURAL Bureau d'Etudes Rodolphe Mattar

ELECTRO-MECHANICAL Pierre Dammous & Partners

### PROJECT MANAGERS

Nassar Engineering Services S.A.R.L.

### COMPLETED

2006

### A DISTINCTIVE FAÇADE

Berytus Parks is a mixed-use commercial building located at the corner of Park Avenue and Avenue des Français in the Minet El Hosn neighborhood of Beirut Central District. One of the last projects designed by Pierre El-Khoury, the building is an 18-story complex in a dual-section configuration with 4 basements housing a 200-car park, 3 mezzanines, a fitness center, street level retail stores and restaurants. The built-up area totaling 22,388 m<sup>2</sup> rises on a 2,244 m<sup>2</sup> footprint surrounded by 6,500 m<sup>2</sup> of landscaped terraces and gardens.

The core-and-shell scope included concrete works from raft foundation to the top of the angular glass roof. Elevations consisted of stone cladding, steel structure, aluminum and glazing. Works also covered interior woodwork, fit-outs and finishes of all common areas, and irrigation and drainage networks.

One of Berytus Park's highlights was the execution of the metallic, stainless steel, and point-fixed screen printed glass for the 40-m lift core installed in the tight space between the two building blocks.



136 | SELECTED PROJECTS, BUILDINGS | 137







FAÇADE REFLECTING MIX BETWEEN ACOUSTIC LOUVERS, STONE, GLASS AND ALUMINUM CURTAIN WALL



## **FOCH 126**



# EXECUTING THE ARCHITECT'S VISION: LINES, PROFILES, COLORS AND MATERIALS

Foch 126 includes 3 basements, a retail ground floor, and 3 office floors, with an additional 4<sup>th</sup> floor luxury penthouse and rooftop with an open terrace. Commission includes structural concrete work, MEP, façade, and interior finishes of common areas. Entreprises A.R. Hourie and Nabil Gholam Architects have teamed up on several projects scattered across the city of Beirut. Their collaborative assignments are always guided by a common philosophy for innovation and constructability.

### LOCATION

Beirut Central District

### CLIENT

Ajnadine Al Ikariya S.A.L.

### ARCHITECT

Nabil Gholam Architects

### CONSULTANTS

STRUCTURAL Bureau d'Etudes Rodolphe Mattar

ELECTRO-MECHANICAL Kamal J. Sioufi et Associés

TECHNICAL CONTROL Apave Liban

### COMPLETED

2008

FOCH 126 CORNER VIEW SHOWING INTEGRATION OF THIS NEW BUILDING WITH THE HISTORICAL STREET 140 | SELECTED PROJECTS, BUILDINGS | 141



ELEVATION WITH MIX OF CHISEL-PICKED-FINISH STONE AND CEDAR WOOD FENESTRATION



### THE ARCHITECT'S REVIEW

Located on the edge of Beirut's historic central district, Foch 126's unobstructed five-story sandstone building is sensitive to its surroundings, picks up the street's lines in a respectful attempt to complement the existing urban fabric, and effortlessly bridges the gap between itself and surrounding Ottoman and French Mandate structures through choice of materials and abstract detailing.

Occupying land owned by the Sunni Waqf, a religious trust, the building has been constructed on a BOT basis. In private hands for the next fifty years, a shop occupies the ground floor, the next three levels house a law firm and the top floor is a private apartment with two enclosed internal garden courtyards that are open to the roof, flooding the apartment with natural light.

Internally, the building responds fully to contemporary needs and the historically sensitive façade conceals a subtly hightech floor plate. By relying for its structure on meter-thick peripheral walls and by placing the service core at the far end of the building, Foch 126 is completely free of internal columns, which maximizes the flexibility of floor space. On the office levels, floors are laid out in a U shape around a central staircase that not only serves as a means of communication, but also adds significant visual drama to the interior. Windows are deeply recessed to provide protection from exposure to the sun. Though visually they echo the surrounding architecture, they are subtly modernized through wood shutters that open and close rather like eyelids.

Arranged vertically along the street front, windows are horizontal on the building's north side. Additionally, the temptation to minimize windows on the building's façade, which faces the blank wall of a neighboring building, was resisted.

Instead, this façade is fully glazed to capitalize on the facing wall's reflective properties, which help flood the interior of the building with so much natural light that even into late afternoon, artificial lighting is not necessary. Meanwhile, angled recessing on the corner of the building lends the otherwise monolithic façade the suggestion that it has been carved out of a solid mass, while opening onto views of the city and the harbor.

The hand-scratched shahouta stone of its façades, last used in Beirut's city center during the first half of the 20<sup>th</sup> century, visually echoes the stonework of the Dabbagha Mosque, diagonally opposite Foch 126, which also belongs to the Waqf. Though now divided by the road, both properties occupy what was once a single parcel of land, making them in effect sister properties.

Nabil Gholam Architects



### **RIVE GAUCHE TOWER**



### THE TALLEST OFFICE BUILDING IN BEIRUT

Rive Gauche is one the first high-rise office buildings built in Beirut, towering 122 m over a 4,000-m<sup>2</sup> site and totaling 47,000 m<sup>2</sup> in built-up area. A lump-sum project targeting LEED-Certified rating, Rive Gauche, on the left bank of Nahr Beirut, counts 5 basements, ground and mezzanine retail floors, lower and upper parkings and 28 commercial floors. The work scope covers core and shell construction from raft foundation to roof including excavation, shoring and dewatering, MEP, building envelope, and common area interior architectural finishes.

LOCATION Achrafieh, Beirut

CLIENT

Rive Gauche S.A.L. (represented by Mr. Maher Abou Ghazaleh)

ARCHITECT

Ayman Sanyoura Architecture & Management S.A.L.

INTERIOR DESIGNER Abdo Hazim Architects

CONSULTANTS

Khatib & Alami

COMPLETED 2017

144 SELECTED PROJECTS, BUILDINGS 145





GENERAL VIEW OF THE JOBSITE



BEIRUT NORTH SOUKS DEPARTMENT STORE, DESIGN BY ZAHA HADID

# **MIXED-USE PROJECTS**

Mina El Hosn, Lot 1056, Beirut Central District 2002
Beirut Souks & Gold Souk, Beirut Central District 2005
Beirut North Souks Department Store, Beirut Central District 2014



### MINA EL HOSN, LOT 1056



### A HOURIE DEVELOPMENT PROJECT

Mina El Hosn 1056 is a development project undertaken by Entreprises A.R. Hourie to rebuild two historical houses in Beirut Central District preserving the integrity of the historical architecture. The shared substructure of the two vernacular dwellings was reinforced and an extension was added to bring the total built-up area to 5,000 m². The existing elevations were disassembled and reconstructed after the construction of a 3-level underground parking. The complex was converted to commercial use, containing offices and street-level retail spaces.

### LOCATION

Beirut Central District

#### CLIENT

Entreprises A.R. Hourie S.A.L.

### ARCHITECTS

AK Architects - Kamel Abboud Architecture Gilbert Bocti

### INTERIOR DESIGNERS

GM Architects (Galal Mahmoud)

### CONSULTANTS

MAIN

AK Architects - Kamel Abboud Architecture

### STRUCTURAL

Bureau d'Etudes Rodolphe Mattar

### ELECTRO-MECHANICAL

Pierre Dammous & Partners

### COMPLETED

2004



THE BUILDING'S CONDITION BEFORE WORKS STARTED



FRONT ELEVATION SHOWING
THE TRADITIONAL ARCHITECTURE





### **BEIRUT SOUKS & GOLD SOUK**



LOCATION Beirut Central District

### CLIENT

Solidere

### ARCHITECTS

SOUKS: Raphael Moneo Architects GOLD SOUK: Kevin Dash Architects

Samir Khairallah & Partners (SKP)

### TECHNICAL CONTROL

SOCOTEC Liban S.A.R.L.

COMPLETED 2010

### REBUILDING THE HEART OF BEIRUT'S DOWNTOWN

One of the most prestigious and emblematic undertakings for Beirut Central District's regeneration, Beirut Souks & Gold Souk was a resource-intensive project mobilizing multiple teams on and off site, and large construction equipment. The turnkey project included site coordination, supervision of specialty contractors, procurement management for all building materials and supervision of all finishing installation.

The historical souks date back to Phoenician times when the first street plans emerged; subsequently every civilization that settled Lebanon left an indelible mark. From the 17<sup>th</sup> century onwards, the souks became a heart of commerce and trade with specialized souks for jewelry, clothing, food and flowers. They were one of the few spaces bringing people from all walks of life together for business, entertainment and social opportunities.

ELEVATION SHOWING THE FISHBONE-PATTERNED STONE CLADDING AND THE COPPER FRAMES FOR THE WINDOWS AND SHOP FRONTS



### INTERNATIONAL COLLABORATION

An international design competition held in 1994 challenged designers to reinterpret the extensively damaged souks, and reconcile sentimental memory with contemporary needs, and tradition with modernity. A consortium of international designers featuring architects Rafael Moneo and Kevin Dash as well as French landscape architect Olivier Vidal were allocated specific projects within Solidere's master plan.

The scope of work included a multi-cinema complex, department stores, retail spaces, underground carparks, together with the preservation of historic landmarks including the Al Majidieh Mosque and the Ibn Iraq Al Dimashqi Mausoleum.

An exhaustive project carried out as a single integrated site covering construction of Souk Al Tawile, Souk Al Jamil, Souk Ayass, Souk Al Arwam, the Gold Souk, as well as Trablous and Fakhry Bey Streets and Al Ajami Square. Works performed included construction of ten building blocks of varying heights and a 4-level carpark for a 77,000-m<sup>2</sup> built-up area. Scope included concrete and civil works, MEP including MV substation and switchgears, generators, conveying systems, fire detection, EPABX system, building management system, integrated security system, chillers, HVAC, drainage, and firefighting CO<sup>2</sup> system. Architectural finishes scope covered stone cladding, decorative bronze works, brick roofing system, and all landscaping and hardscaping.





THE NEW GOLD SOUK



SOUK EL JAMIL UNDER CONSTRUCTION



SOUK EL TAWILEH UNDER CONSTRUCTION

156 SELECTED PROJECTS, BUILDINGS SELECTED PROJECTS, BUILDINGS





THE HOURIE TEAM FOR THE SOUKS

OUTLINE OF BEIRUT SOUKS PROJECT

### THE SPIRIT OF THE OLD SOUKS, THE MODERNITY OF A PUBLIC SPACE

The carefully controlled architectural language intersects with an urban framework where shifts in scale and lighting, colors and materials combine to produce different experiences. Each street, alleyway and arcade was named after its original counterpart, with the grid mimicking the original one. The South Souk opens into a series of interconnected buildings, alleys and open spaces. Unlike the closed souks of Istanbul, Damascus and Aleppo, the souks in Beirut were characterized by their openness.

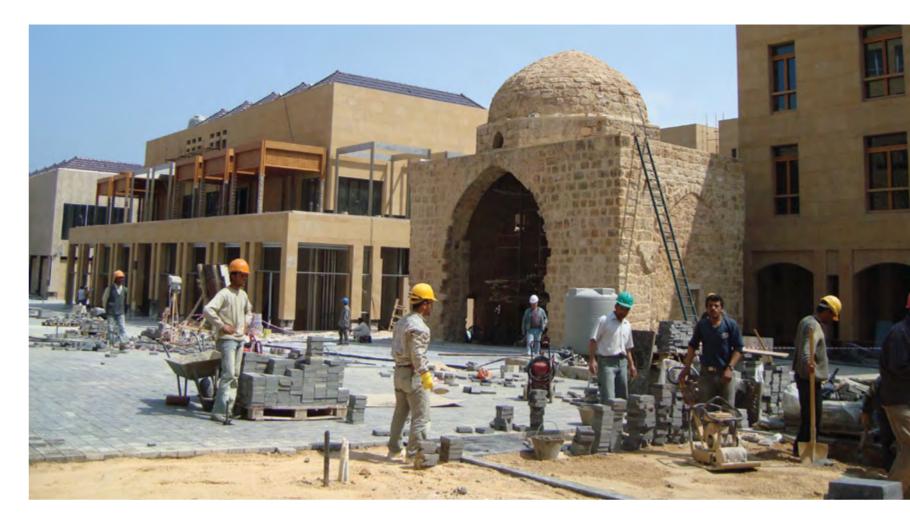
The same airiness and permeability is maintained in Moneo's design. Accessed from multiple entrances, eight major and five minor sections are aligned within an open north-south framework.

Over 150 retail outlets are found within the complex, including the Jewelry Souk. More human in scale, Kevin Dash's Gold Souk recreates a feeling of cultural continuity rather than a singular architectural vision. Designed over two-floor pavilions, it is characterized by wooden shading grilles, giving the tight passages their darker appearance. The lateral columns holding the monumental vaulted ceiling inside the pedestrian street of Souk El Jamil were cast in situ in custom-made molds.

Beirut Souks have not been without controversy, sparking numerous debates regarding modernism, tradition, and globalization and the role of Solidere. But one thing most agree on is that the Souks have demonstrated that they are more than just a conventional mall.

PAVING AROUND IBN IRAQ MAUSOLEUM

GOLD SOUKS AND COPPER LOUVERS FOR SOUK EL TAWILEH ENTRANCE











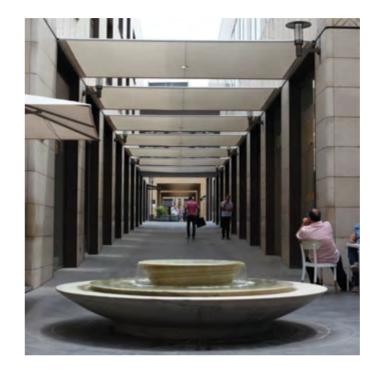
ABDUL RAHMAN HOURIE, ALEXANDRE TRABOULSI (RESIDENT ENGINEER) AND RAMZI SALMAN



162 | SELECTED PROJECTS, BUILDINGS | 163



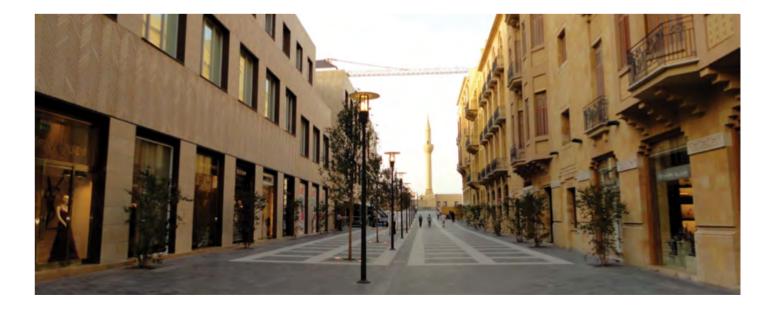
GOLD SOUKS STREET CORNER WITH STONE ARCHES
AND WOODEN WINDOWS





THE NEW INTABLI FOUNTAIN

HISTORICAL BUILDING, DAMAGED DURING
THE WAR, COMPLETELY RENOVATED



FAKHRY BEY STREET



### **BEIRUT NORTH SOUKS DEPARTMENT STORE**



### A ZAHA HADID DESIGN

Five years after completion of Beirut Souks, Entreprises A.R. Hourie was commissioned by Solidere to construct the North Souks extension designed by Zaha Hadid with local architectural firm Samir Khairallah & Partners. The mixed-use mall sits on a combination of two plots over an existing 3-story underground carpark. Original design code and new seismic classification were reinterpreted to integrate the substructure into Hadid's twisted rattan basket scheme. Splayed cylindrical cast concrete columns that function as structural elements were realized using specially designed formwork to stabilize the base. North Souks will achieve a LEED-Silver rating and has a 35,300-m² built-up area.

### LOCATION

Beirut Central District

### CLIENT

Solidere

### ARCHITECTS

Zaha Hadid Architects Samir Khairallah & Partners (SKP)

### CONSULTANTS

Samir Khairallah & Partners (SKP)

### TECHNICAL CONTROL

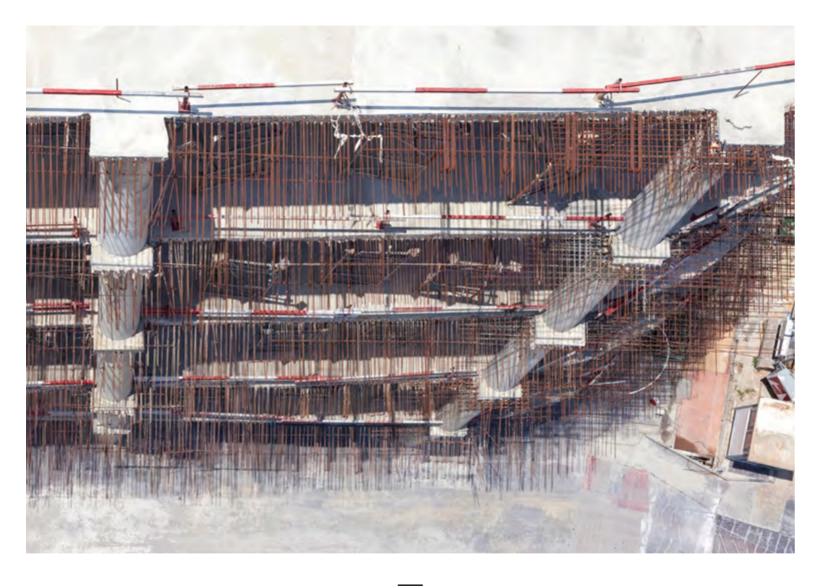
Bureau Veritas

IN PROGRESS

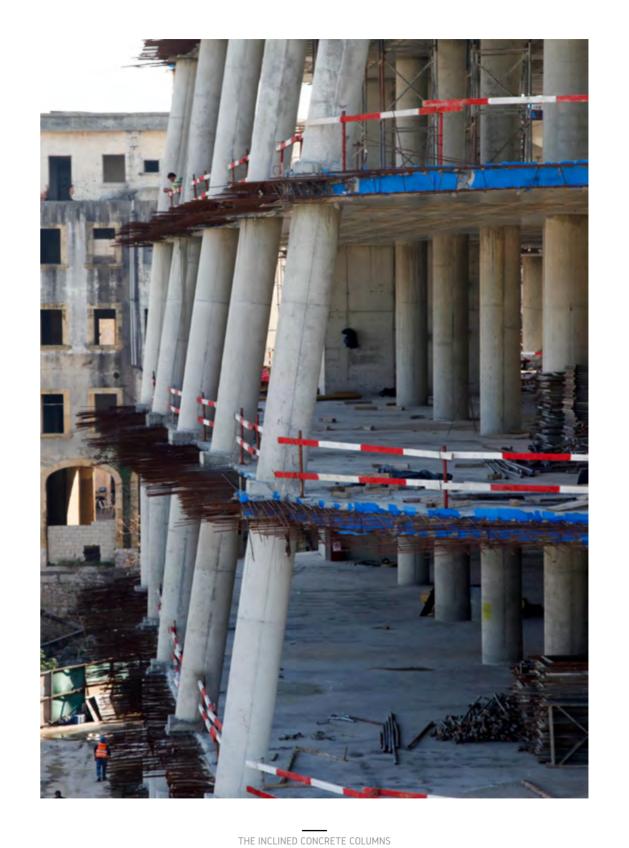
166 SELECTED PROJECTS, BUILDINGS 167



168 SELECTED PROJECTS, BUILDINGS SELECTED PROJECTS, BUILDINGS 169



CONCRETE WORKS IN PROGRESS



170 | SELECTED PROJECTS, BUILDINGS | 171



**TONY MATTA**Project Manager, Samir Khairallah & Partners (SKP)

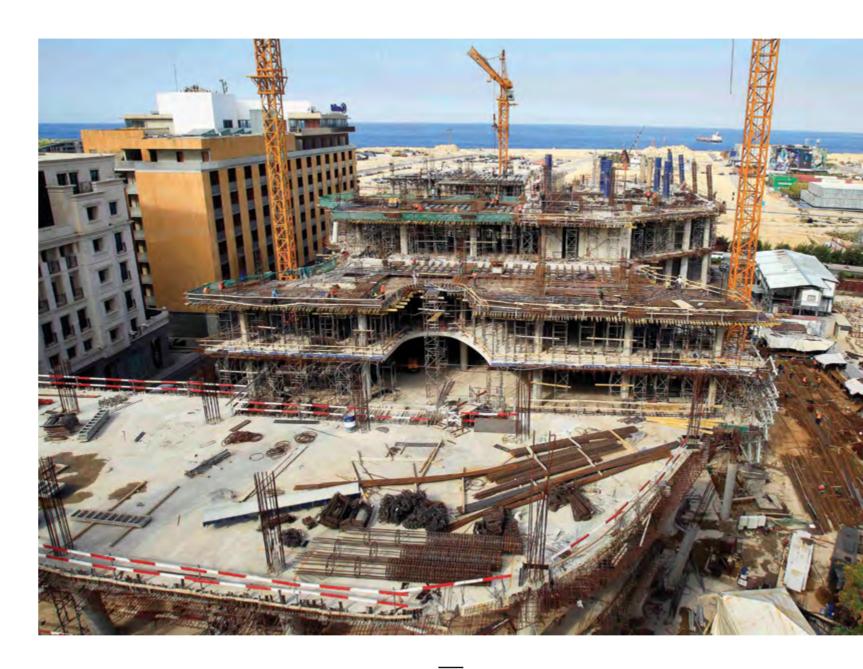
"The North Souks project became Zaha Hadid's first Beirut landmark structure when the initial Solidere plans were scraped and replaced by an iconic design by the celebrated architect in collaboration with local architectural firm Samir Khairallah & Partners. The original design extended the Souks' traditional style of high vaulted ceilings and yellow stone cladding to a mixed-use mall, offices, and residences stacked on top. During construction, the North Souks' entire 3-floor, 25,000-m² underground parking was built and closed off, to be completed during a future expansion.

The new design typifies ZHA's curvilinear fluid lines with an iconic basket-weave envelope draping an infinity-sign-shaped structure.

The 26,500-m<sup>2</sup> built-up area superstructure is spread over five floors and positioned around two atypical circular atriums formed by the intersection of several circles. Upon completion of the concrete structure and envelope, interior finishing was handed over to the building's only tenant, Lebanese retailer Aïshti, to house their luxury brands, restaurant, casual café and spa.

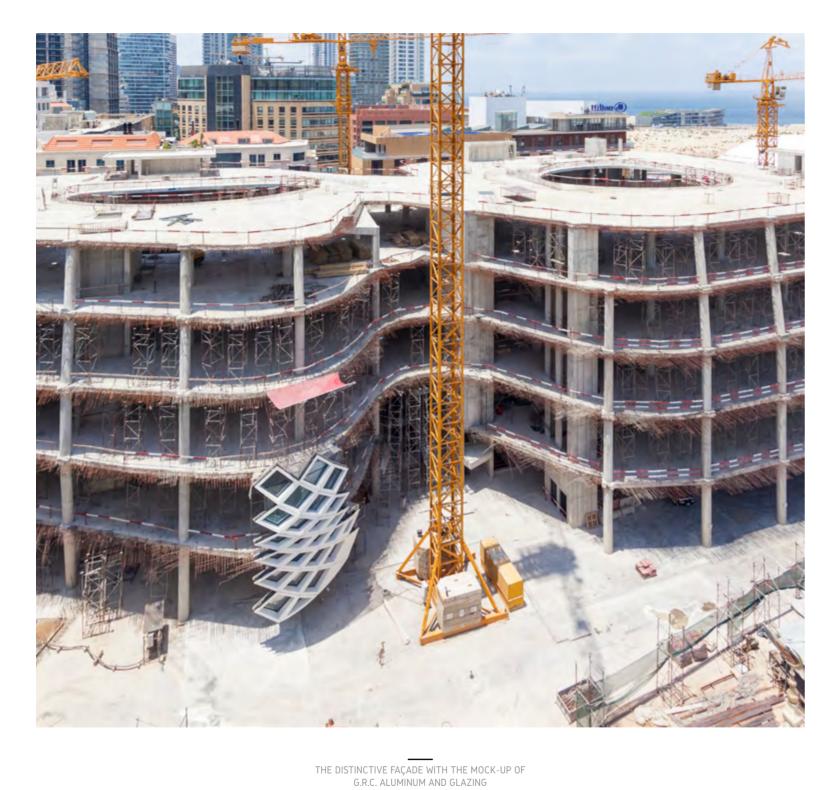
In addition to being the local architect on the project, SKP's scope covered MEP and structural design, as well as project management. The real challenge was to integrate the new structural requirements into the existing substructure. Massive demolition works in the existing parking basement were needed before coming up with the new core walls and columns designed to support the new loads. As lead contractor, Entreprises A.R. Hourie signed a one-year contract with Solidere, including 5 months of substructure works broken down into 3 months of demolition and 2 months of concrete pouring.

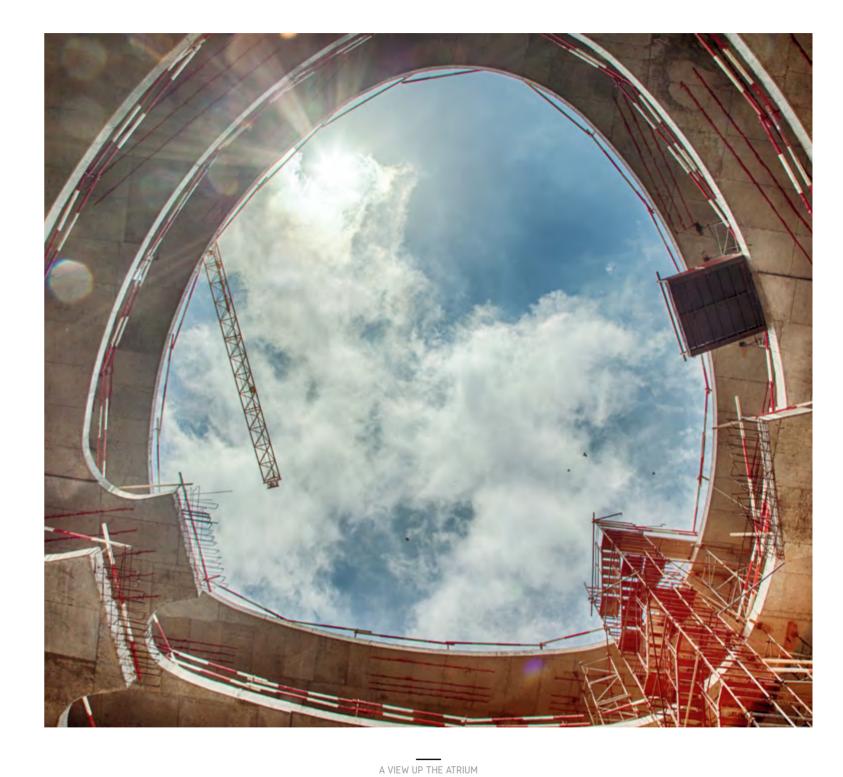
The latter phase included the revised substructure and the whole superstructure; it was completed within nine months, and included approximately 13,000 m<sup>3</sup> of reinforced fair-faced concrete."



TOWER CRANES OVER THE CONSTRUCTION SITE SHOWING THE CURVE OF THE ATRIUM

SELECTED PROJECTS, BUILDINGS 173 172 | SELECTED PROJECTS, BUILDINGS







CLEMENCEAU MEDICAL CENTER

# **MEDICAL FACILITIES**

Clemenceau Medical Center, Beirut 2003 Clemenceau Specialized Clinics, Beirut 2006

### **CLEMENCEAU MEDICAL CENTER**



#### LOCATION

Clemenceau, Beirut

Clemenceau Medical Center S.A.L.

### ARCHITECTS/CONSULTANTS

Khatib & Alami

#### INTERIOR DESIGNERS

Abdo Hazim Architects

### CONSULTANTS FOR MEDICAL EQUIPMENT

Universal Hospital Services (UHS)

### TECHNICAL CONTROL

Bureau Veritas

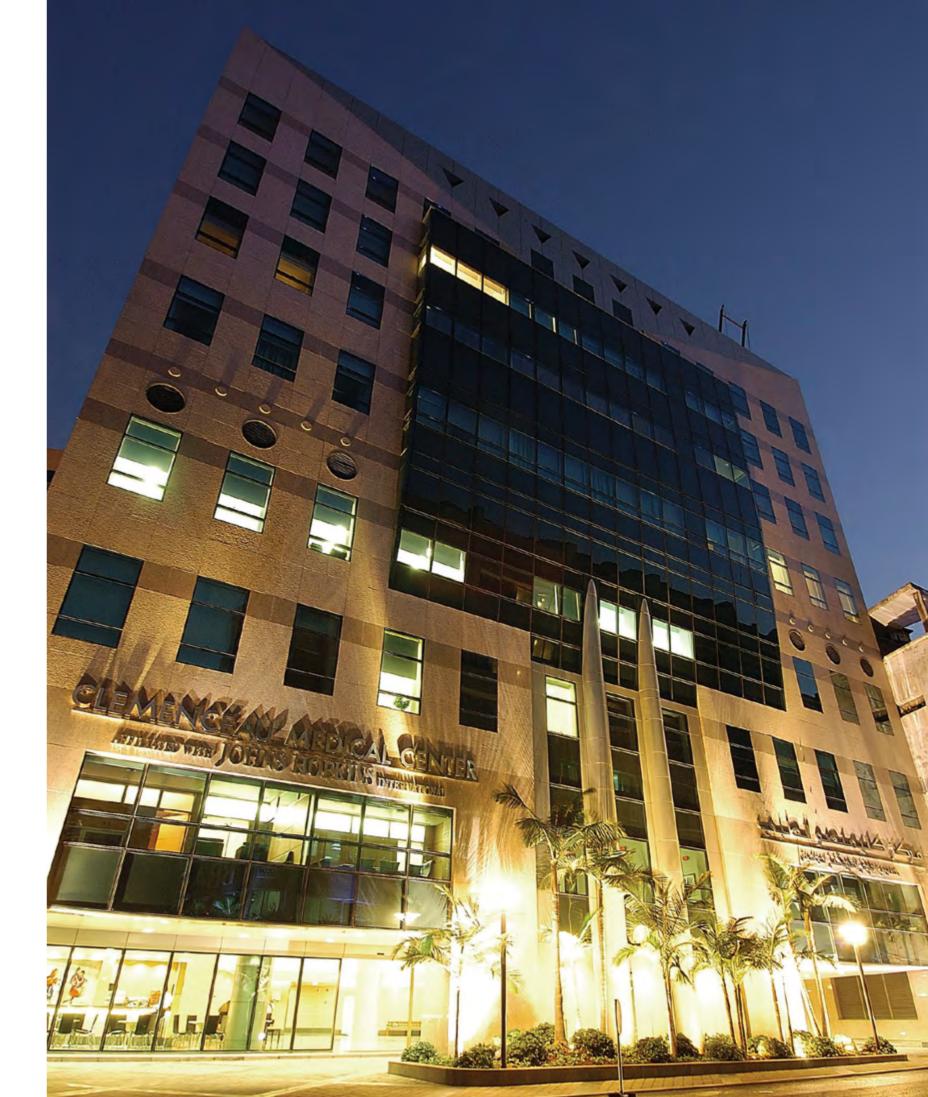
### COMPLETED

2006

### A TURNKEY MEDICAL FACILITY

Award-winning Clemenceau Medical Center is one of the top private hospitals master-planned to serve patients from Lebanon and across the Middle East. The modern facility affiliated with Johns Hopkins Medicine International opened in 2006 offering comprehensive in-and out-patient care in a 5-star hotel ambiance. The hospital facility consists of 6 basements and 9 floors with a total built-up area of 25,000 m<sup>2</sup>. The hospital is equipped with 9 modern operating rooms, a special ward for day surgeries, full emergency room, and urgent care facilities.

Awarded as a turnkey, scope included the concrete structure, MEP, elevations, interior finishing and fit-outs in addition to procurement and installation of all non-medical furniture and equipment.



178 selected projects, buildings



MAHER ABOU GHAZALEH
Chairman of the Board, Clemenceau Medical Center

"The initial idea of a state-of-the-art medical facility with a novel approach to healthcare began in 1997 and a first market study was undertaken in 1998. A second in 2002 came to validate the results of the first one and the project was launched. Our approach was, and still is, based on preventive health, which addresses the cause at the root of a medical problem rather than just treating it. Our design Consultants, Khatib & Alami, worked closely with our partners, Johns Hopkins Medicine International, who provided a full healthcare program, an architectural scheme, and codecompliance reviews. Our partnership with Johns Hopkins Medicine International was signed in 2002 and is still on-going.

Entreprises A.R. Hourie was among a handful of pre-qualified general contractors invited to bid for tender. Mutual respect and admiration set in between Abdul Rahman Hourie and myself and the evaluation process followed its course. The real estate market in 2003, when contractor selection was taking place, was slow and bids were competitive. Our selection criteria relied on a hybrid process combining reputation, relevancy of experience, depth of organization, financial stability, and safety records. Naturally, bid price was a major determining factor but, in our case, it was not necessarily a deal-breaker.

Entreprises A.R. Hourie came in third, being \$2 million above their nearest competitor, which is a sizable difference. I knew they wanted the project; their reputation in building was good but they had never done any healthcare project, let alone anything with such strict requirements. Abdul Rahman Hourie stood his ground and didn't go down on price; he believed the quality we were requiring could not be achieved for a lower amount. And I knew that to be true.

They are good. Proof is, 10 years later, aside from routine wearand-tear maintenance, the main hospital and clinic buildings are as structurally sound as they were at completion."





### **CLEMENCEAU SPECIALIZED CLINICS**



### LOCATION

Clemenceau, Beirut

### CLIENT

Balasem S.A.L. (represented by Mr. Maher Abou Ghazaleh)

### ARCHITECTS/CONSULTANTS

Khatib & Alami

### INTERIOR DESIGNERS

Dada & Associates

### COMPLETED

2008

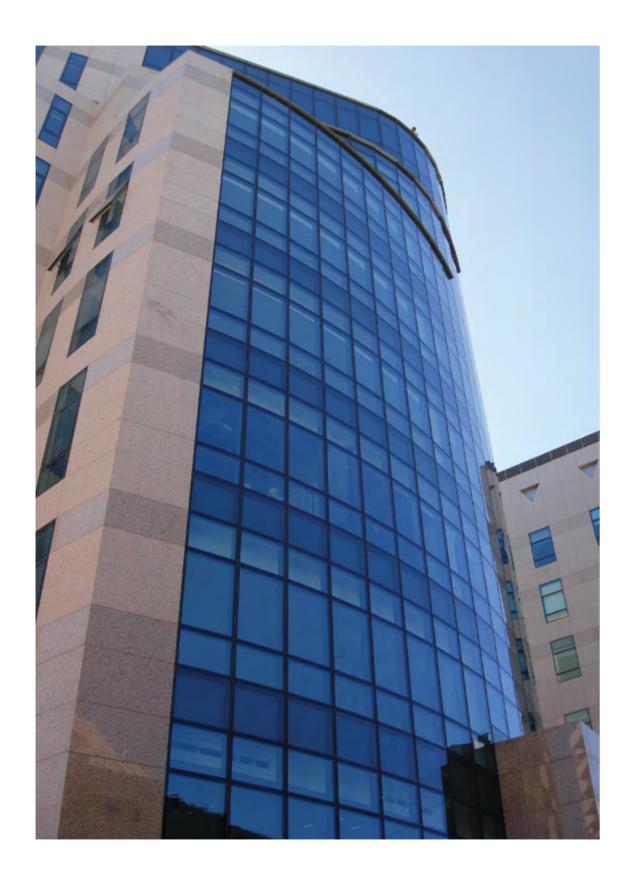
ELEVATION MIXING ALUMINUM CURTAIN WALL, STONE CLADDING AND ALUMINUM COMPOSITE PANELS

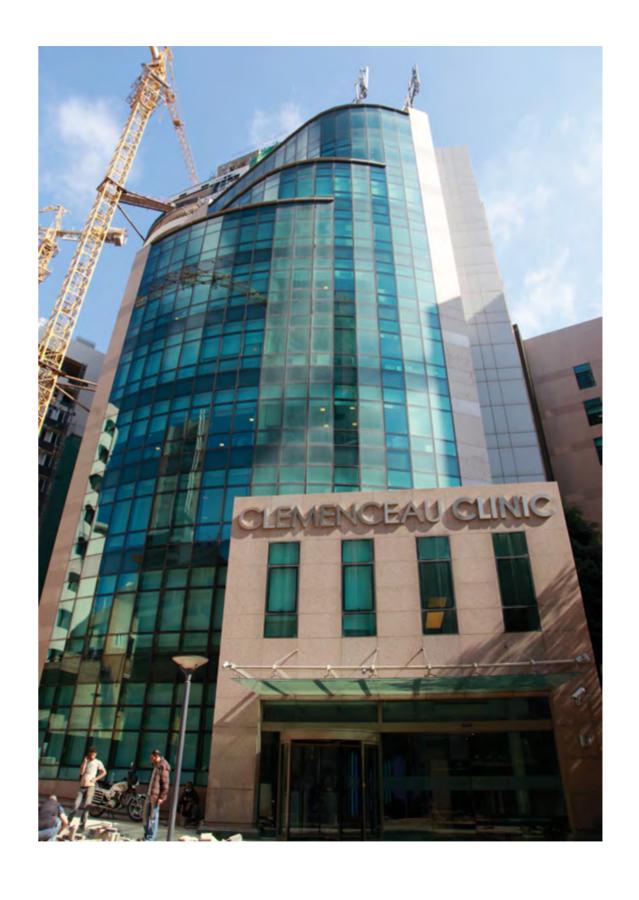
### A PRESTIGIOUS CLINICS ANNEX

The Clemenceau Specialized Clinic project, adjacent to the main Hospital building, kicked off as soon as the main building was delivered. Work broke ground in 2006 and the project was completed in under two years. Also awarded as a turnkey, scope consisted of the construction of the concrete structure, façade, MEP, and all interior non-medical finishes of the high-end specialty medical clinic with 8 floors and 4 basements for a total built-up area of 5,000 m<sup>2</sup>.

This project consists of the construction of the prestigious clinics building annex to the Clemenceau Medical Center. This luxurious medical building is composed of 8 floors and 4 basements and a total built-up area of 5,000 m<sup>2</sup>.

182 | SELECTED PROJECTS, BUILDINGS | 183







LE YACHT CLUB, ZAITUNAY BAY

# **TOURISTIC PROJECTS**

Automobile & Touring Club Of Lebanon (ATCL), Kaslik /	1969
Jounieh Harbor and Jounieh Naval Base, Building B, Jounieh	
Coral Beach Hotel Addition & Enlargement Works, Beirut	1981
Four Points Hotel by Sheraton Le Verdun, Beirut	2002
Zaitunay Bay, Town Quay Lot 1456, Phase I, Beirut Marina	2006
Zaitunay Bay, Town Quay Lot 1456, Phase II, Beirut Marina	2009

# AUTOMOBILE & TOURING CLUB OF LEBANON (ATCL), JOUNIEH HARBOR, AND JOUNIEH NAVAL BASE, BUILDING B



### LOCATIONS

Kaslik and Jounieh

### CLIENTS

Automobile & Touring Club of Lebanon (ATCL)

Council for Development and Reconstruction (C.D.R.)

### ARCHITECTS (ATCL)

Jacques Liger-Belair

### COMPLETED

1971

### A TIMELESS PROJECT (ATCL)

Looking as current today as it did when it was completed in 1971, the ATCL Yacht Club and Marina is one of the earliest and the first building project undertaken by Entreprises A.R. Hourie. The Syrian-Lebanese Touring Club of Lebanon, later renamed Automobile Touring Club du Liban, was founded in 1919 with the primary objective of promoting automobile and water sports, and supporting tourism in Lebanon. Originally headquartered in the Fattal Building on the pier between the second and third basins in Beirut Port, the ATCL Yacht Club and Marina was decreed to be built by President Fouad Chehab in 1964.

Using excess funds earmarked for a new expansion of the port, the Executive Council for Master Projects took the initiative to propose with the remaining funds of 15 million Lebanese pounds the construction of a marine wharf, leisure and yacht club, and navy pier in Kaslik, the scenic southernmost point of Jounieh Bay. Scope covered all concrete work including the restaurant roof, swimming pools, MEP and finishes.

The decree called for the development of 50,000 m² of land and a 50,000-m² mooring basin housing, in addition the marina, club facilities, swimming pools, a gym, a club house and a restaurant overlooking the bay. The restaurant's distinguishing hyperbolic paraboloid roof top was designed by renowned Brazilian architect Oscar Neimeyer, who was in Lebanon working on the International Fair of Tripoli.

The project itself is the design of famed Belgian architect Jacques Liger-Belair, who was also involved in an urban development and conservation masterplan for the city of Jounieh and its southern suburb.

### **CORAL BEACH HOTEL ADDITION & ENLARGEMENT WORKS**



### **EXPANSION OF A RENOWNED HOTEL**

The renovation of the well-known Coral Beach Hotel included building a new extension, adding a swimming pool, 460 guest cabins, and new club facilities. Scope included concrete structure, MEP, irrigation and drainage networks, and finishing works.

LOCATION Beirut

### CLIENT

Société Hôtelière Libanaise S.A.L. (Mr. Georges Massoud)

### ARCHITECTS/CONSULTANTS Entreprise André Hakimé

### COMPLETED 1983





### FOUR POINTS HOTEL BY SHERATON LE VERDUN, BEIRUT



### A NEW CITY LANDMARK

Located at the intersection of two major thoroughfares, Saeb Salam Boulevard and El-Rachidine Street, Four Points Hotel by Sheraton Le Verdun is a 17-floor, 5-basement building totaling 15,800 m<sup>2</sup> built-up area. The turnkey commission included earth and civil works from raft to roof, MEP, and complete FF&E and OS&E procurement and installation.

### LOCATION

Verdun, Beirut

### CLIENT

Verdun 5000 S.A.L.

### ARCHITECTS/CONSULTANTS

Samir Khairallah & Partners (SKP)

### INTERIOR DESIGNERS

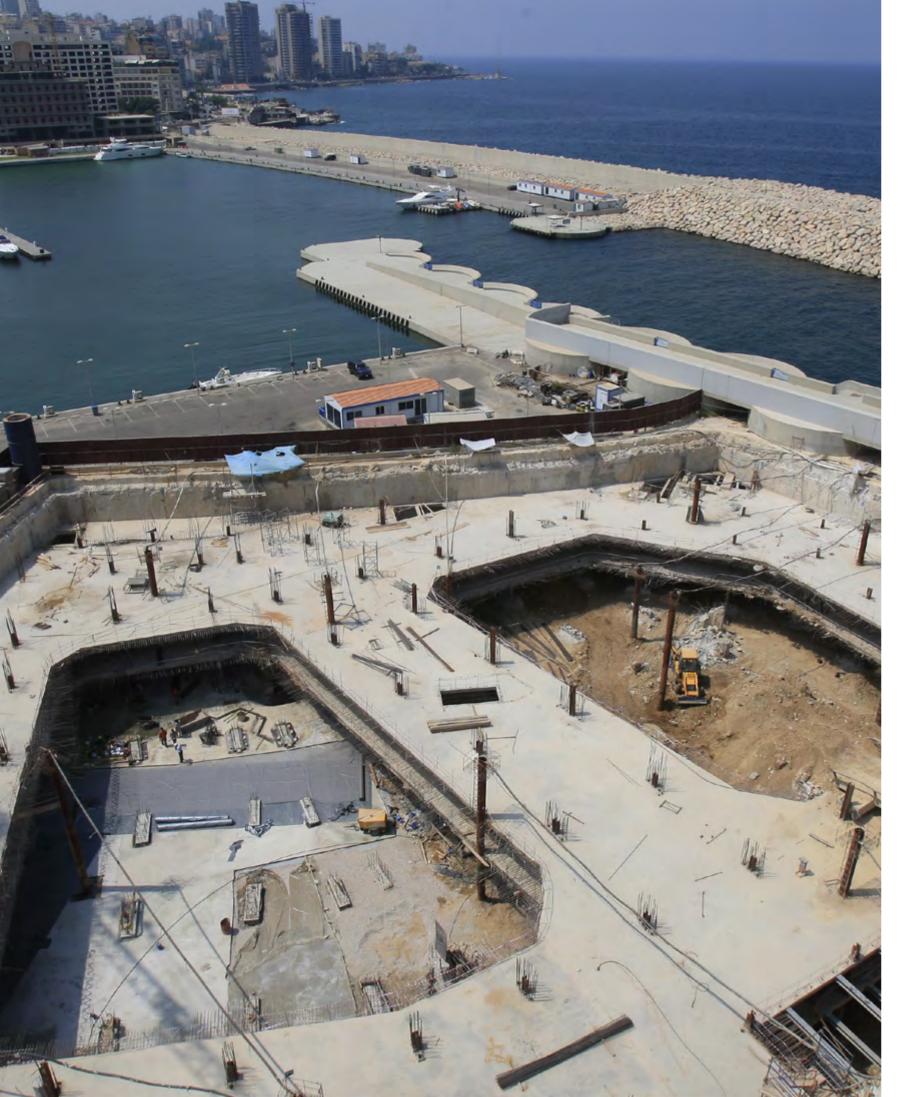
GM Architects (Galal Mahmoud)

### CONSULTANTS

ELECTRO-MECHANICAL Associated Mechanical Engineers (AME)

### COMPLETED

2004



### ZAITUNAY BAY, TOWN QUAY, LE YACHT CLUB, PHASES 1 & 2



### LOCATION

Beirut Marina

#### CLIENT

Beirut Waterfront Development S.A.L.

### ARCHITECTS

Steven Holl Architects Nabil Gholam Architects

### INTERIOR DESIGNERS

Dada & Associates S.A.R.L.

### CONSULTANTS

STRUCTURAL Rafik El-Khoury & Partners

ELECTRO-MECHANICAL Kamal J. Sioufi et Associés

### TECHNICAL CONTROL SOCOTEC Liban S.A.R.L.

### PROJECT MANAGERS

High-Point Rendel Ltd. (Phase 1)
Nassar Engineering Services S.A.R.L. (Phase 1)
International Design Engineering and Architecture
(IDEA) (Phase 2)

### COMPLETED

2014

## A FIRST IN LEBANON: TOWN QUAY'S TOP-DOWN CONSTRUCTION

Town Quay involved a top-down construction proposed by Entreprises A.R. Hourie in joint collaboration with Profond Liban, based on a design developed by Geotechnical and Soil Consultant Elie Rafie, in order to secure the stability of the adjacent caissons. It entailed the construction of a luxury four-story building with three basements on reclaimed land on Solidere's Normandy landfill. The concept consisted of installing the vertical prefounded columns and the permanent retaining walls using strip piles and diaphragm walls starting from the existing platform. Each of the three basement slabs was cast in place before proceeding with excavation underneath.

This method, employed for all three basement levels, was both innovative and delicate to implement. Most importantly, the adoption of a top-down construction resulted in the gain of an additional third parking basement encompassing 160 spots, which translated into unintended and unforeseen capital gains for the project.

TOWN QUAY TOP-DOWN CONSTRUCTION

"It was a big technical challenge. This was 2006; nothing like this had ever been attempted before in Lebanon," says Elie Rafie, Geotechnical Consultant.

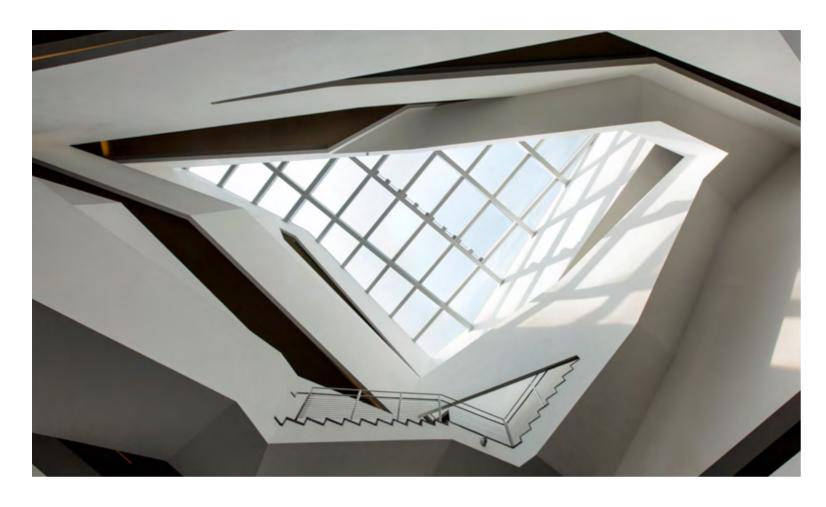
"We excavated to 12 meters below sea level for a waterfront property using a top-down method of construction; it was unheard of. We needed someone who trusted and believed in this method, someone who would appropriate the project and endorse it. I had just made a pitch for an unconventional method that forcibly involved risk. Convinced of the method's soundness, Abdul Rahman Hourie stood up to the challenge. Entreprises A.R. Hourie masterfully adopted the daring top-down construction of Beirut's Town Quay."

Zaitunay Bay Phase II consists of commercial floors (restaurant, bar, reception, health center and retail space), residential floors (53 apartments with corridors and atrium), a pool and deck, 2 access ramps, and landscaped areas. Scope covered concrete superstructure, elevations, MEP, finishes, landscaping and execution of interior common areas and apartments. Built-up area totaled  $47,000 \text{ m}^2$ .

One significant building feature is the entrance atrium, enclosed by suspended inclined walls in a zigzag pattern, and perimeter basalt stairs. The whole atrium is bathed by natural light from a 150-m<sup>2</sup> rooftop skylight, with sliding panels interfaced with the building's fire alarm system for smoke evacuation. The sloping landscaped roof has a 5-m elevation difference from East to West.

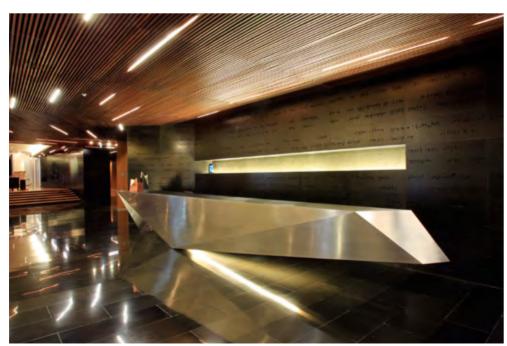
AERIAL VIEW DURING CONSTRUCTION OF ZAITUNAY BAY'S YACHT CLUB

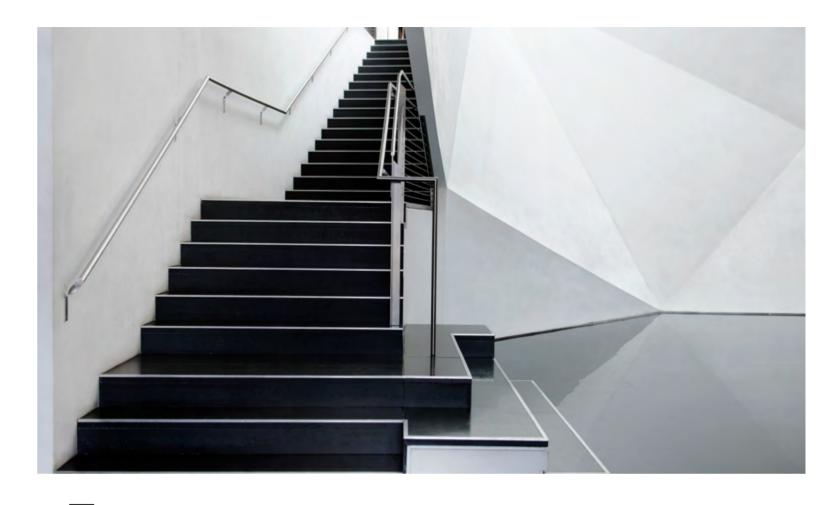
196 | SELECTED PROJECTS, BUILDINGS | 197



THE ATRIUM'S SKYLIGHT AND ZIGZAG WALLS







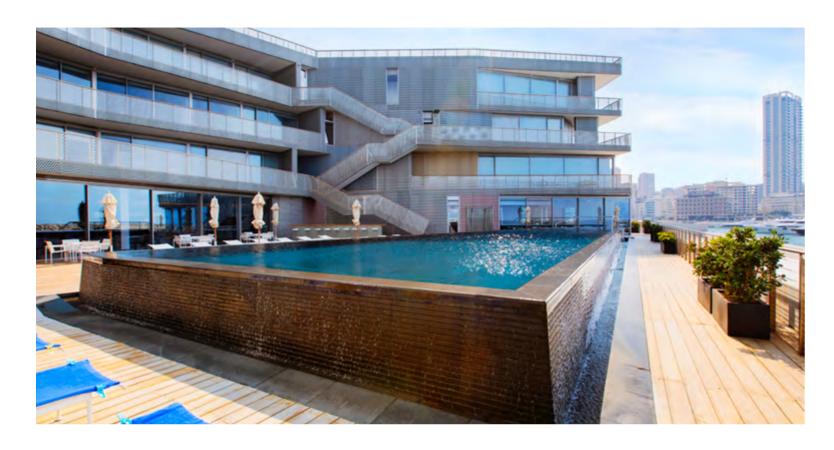
THE PERIMETER BASALT STAIR AT THE ATRIUM

ZIGZAG BALCONIES WITH GALVANIZED ALUMINUM PERFORATED PANEL CLADDING





200 SELECTED PROJECTS, BUILDINGS 201



THE POOL DECK AND INFINITY POOL OVERLOOKING BEIRUT MARINA

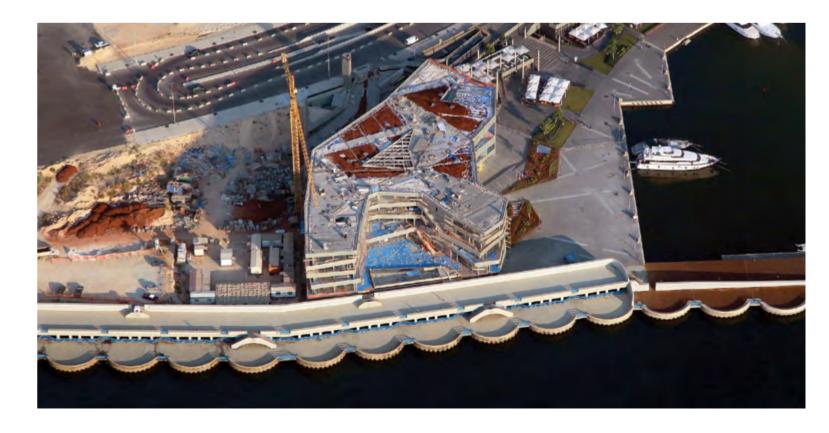


GALVANIZED ALUMINUM PERFORATED PANEL EXTERIOR CLADDING



TOWN QUAY COMPLETED, WITH ROOF LANSCAPING AND SKYLIGHT







\_\_\_\_ LEBANON NATIONAL LIBRARY

# **EDUCATIONAL PROJECTS**

Beirut Arab University, New Building for the Faculty
of Engineering & Architecture, Beirut

Ahed School for Mental Development for Children, Beirut
Lebanon National Library, Beirut
2012

### BEIRUT ARAB UNIVERSITY, NEW BUILDING FOR THE FACULTY OF ENGINEERING & ARCHITECTURE



### LOCATION

Cola, Beirut

#### CLIENT

Beirut Arab University

Faculty of Engineering and Architecture, Beirut Arab University

### COMPLETED

1975

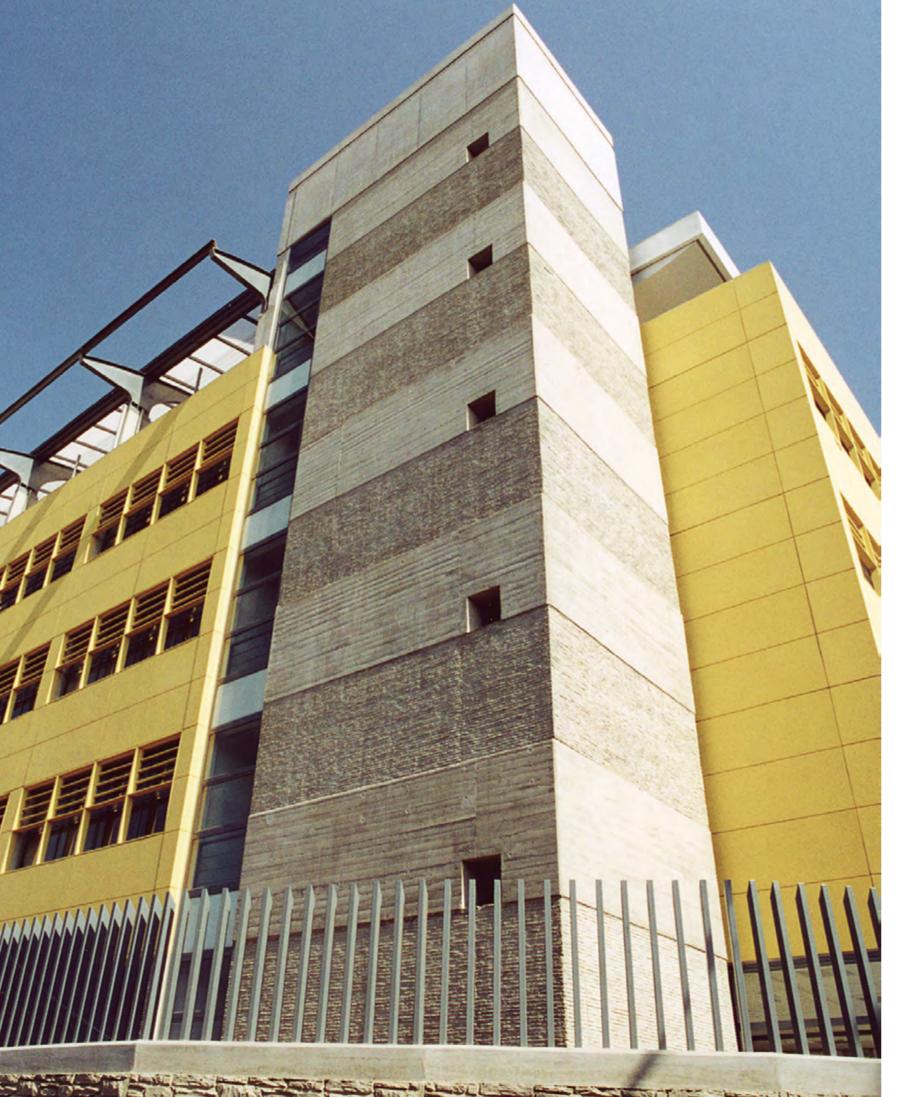
### TEACHING BUILDING DESIGN

The Faculty of Architectural Engineering at Beirut Arab University was established in 1975 and housed in the modern facility completed by Entreprises A.R. Hourie that same year. When it opened, the faculty offered two degree programs.

Forty years later, the building is still home to BAU's Engineering and Architecture Schools, now offering 250 BE degrees and 20 ME  $\,$ and Ph.D. programs.

The stone-clad, 12-floor building, with a 25,000-m<sup>2</sup> built-up area and cantilevered upper floor and rooftop, is characterized by the use of cast-in-situ piles and diaphragm retaining walls for the excavation's entire parameter. The practicality of these walls is in their reinforcingand permanent retaining function within the structure.





# AHED SCHOOL FOR MENTAL DEVELOPMENT FOR CHILDREN



### LOCATION

Bir Hassan Beirut

### CLIENT

Dar Al-Aytam Al-Islamiyah

### CONSULTANTS/ARCHITECTS

B.I.N.A. Wissam Jabr Architects

### COMPLETED

2001

## A MODEL SCHOOL FOR CHILDREN WITH SPECIAL NEEDS

The choice of architect and contractor of the 13,000-m² purpose-built Ahed School achieved the vision of Dar Al-Aytam Al-Islamiyah's General Director Mohamad Barakat for a from-the-ground-up facility built around the needs of children with mental difficulties. Over 7,700 private donors and the Ministry of Social Affairs, who funded a third of the project, contributed to the realization of this first-of-its-kind school in Lebanon. Construction broke ground in 1999 and was completed in under two years. The Ahed School, in Bir Hassan, runs on solar energy, is fire-proof and handicap-accessible, and uses a rain-recycling system to store water. It houses a dozen playgrounds, some on rooftops sheltered by solar panels, a kitchen-cafeteria, two dormitory blocks for 575 boarders, three floors of classrooms, laundry facilities, and an underground parking.

### **LEBANON NATIONAL LIBRARY**



### LOCATION Hamra, Beirut

### CLIENT

Private Engineering Office (P.E.O.) Ministry of Culture

### ARCHITECTS/CONSULTANTS

Erga Group

COMPLETED 2014

### A NATIONAL TREASURE

The Lebanese National Library revival project was accomplished with a \$25 million gift donation from HH Sheikh Hamad Bin Khalifa Al Thani, the Emir of Qatar, and completed in under two years. The project consisted of renovating and converting a historical building located within the Faculty of Law of the Lebanese University in the district of Sanayeh and adding a modern steel and glass extension.

Scope included the construction of 4 basement levels, a library space and a carpark with a rooftop garden on an adjacent plot. Excavation works around the building, shoring and pile protection works were undertaken prior to superstructure construction and renovation of the existing historical building, which included elevations, MEP, interior finishing and furniture, and audiovisual equipment installation.







212 | SELECTED PROJECTS, BUILDINGS | 213



RAMZI SALMAN AND MINISTER OF CULTURE, RAYMOND "RONY" ARAIJI, AT THE LEBANON NATIONAL LIBRARY





SAMIR EL-CHAMI (MINISTRY OF CULTURE), FIRAS KOSSAIFI (ERGA), GABY GEBRAYEL (ERGA), ZEINA MAJDALANI (ZMK), HE ALI BIN HAMAD AL-MARRI (QATAR'S AMBASSADOR TO LEBANON), ELIE GEBRAYEL (ERGA), SULTAN MUBARAK KHALIFA ISSA AL-KUBAISI (COUNSELOR AT QATARI EMBASSY), RAMI HOURIE, ALI HMAYED (HOURIE), AMID BEAINI (ERGA)

READING HALL FURNITURE





BLOM BANK HEADQUARTERS

# **HEADQUARTERS PROJECTS**

BLOM Bank Headquarters, Phases I & II, Beirut	1993
Fenicia Bank Headquarters, Beirut Central District	2006
CMA-CGM Headquarters, Beirut Central District	2008
Arope Insurance Company Headquarters, Phases 1 & 2, Zalka	2011
First National Bank Headquarters. Beirut	2016



### **BLOM BANK HEADQUARTERS** PHASES I & II



#### LOCATION

Verdun, Beirut

#### CLIENT

BLOM Bank S.A.L.

ARCHITECTS/CONSULTANTS
Pierre El-Khoury and Partners

### CONSULTANTS

STRUCTURAL

ETEC (Etudes Techniques et Economiques) (Phase I) BECT Design (Michel Chakar) (Phase II)

### ELECTRO-MECHANICAL

Barbanel Middle East S.A.L. (Phase I) Pierre Dammous & Partners (Phase II)

### TECHNICAL CONTROL

SOCOTEC Liban S.A.R.L.

### COMPLETED

Phase I in 1996 Phase II in 2001

### ENTERING THE PRIVATE MARKET

BLOM Bank's headquarters was the first sizable building project undertaken by Entreprises A.R. Hourie, and the first for a private client. A pioneering building designed by visionary architect Pierre El-Khoury, BLOM was the first high-tech smart headquarters constructed in Lebanon after the civil war.

The project was delivered in two overlapping phases as a turnkey award consisting of the construction of two 9-floor buildings sharing a 7-level substructure. Scope included steel and concrete structures, elevation glazing and cladding, MEP, a security system, a data center, a safe box and all interior fit-outs.

A PIONEERING MODERN FAÇADE



ROBERT DEBBAS
Chairman and C.E.O., Debbas Group

"The relationship between Entreprises A.R. Hourie and Debbas Group goes back to the 1980s thanks to a collaboration, started with the late Abdul Rahman Hourie, which grew over time based on trust and professionalism. A number of high-end projects were executed together, such as BLOM Blank Headquarters, CMC Hospital and Beirut Souks.

We are glad to celebrate with Hourie their 50<sup>th</sup> anniversary and wish Ramzi Salman and his team continued success!"









### **FENICIA BANK HEADQUARTERS**



#### LOCATION

Beirut Central District

#### CLIENT

Bank of Kuwait & the Arab World

#### ARCHITECTS/CONSULTANTS

ARC Group Construction & Design S.A.R.L. (Architect Ali Saad)

#### TECHNICAL CONTROL

Apave Liban

#### COMPLETED

2010

### AT THE CORNER OF FOCH AND WEYGAND

The Fenicia Bank building at the corner of Foch and Weygand Streets is a development within Beirut Central District. The retail and office building, designed and executed to Solidere's guidelines, houses the bank's headquarters, commercial offices and street-level retail area over both thoroughfares.

Inspired by traditional Lebanese architecture, the 5-basement, 2-ground-floor with multi-level accesses, and 5-floor building has a built-up-area totaling 16,500 m². Spread over the entire 14,000-m² corner plot, the building is finished in tan stonework with the charm and tradition seen in Ottoman architecture. Scope covered the concrete structure, MEP, façade cladding, and interior finishes and fit-outs.

222 SELECTED PROJECTS, BUILDINGS SELECTED PROJECTS, BUILDINGS 223





ELEVATION SHOWING THE STONE ARCHES, WOODEN PERGOLA AND THE STEEL BALUSTRADES

### **CMA-CGM HEADQUARTERS**



#### LOCATION

Beirut Central District

#### CLIENT

Merit Real Estate S.A.L.

#### ARCHITECTS

Nabil Gholam Architects

#### CONSULTANTS

STRUCTURAL

Bureau d'Etudes Rodolphe Mattar

ELECTRO-MECHANICAL Barbanel Middle East S.A.L.

FAÇADE & ENERGY Arup Façade Engineering

LANDSCAPING Atelier Renée El Khazen

TECHNICAL CONTROL SOCOTEC Liban S.A.R.L.

#### PROJECT MANAGERS

D.G. Jones & Partners (ME) Ltd.

COMPLETED

2011

#### **EMBLEMATIC STATEMENTS**

Born in Beirut in 1937, Jacques Saadé moved to Marseille in 1978 where he set up the Compagnie Maritime d'Affrètement (CMA). In 1999, CMA joined forces with Compagnie Générale Maritime (CGM) to become one of the world's biggest shipping groups. Strongly attached to his adoptive city, Jacques Saadé commissioned architect Zaha Hadid to design the CMA-CGM Tower in 2006. The 33-story, 147-m-high tower and its 135-m-long annex is the nerve center of the worldwide shipping giant. It overlooks the port of Marseille and is at once a symbol and a link between the port and the city, anchoring the Group to its environment and time.

Two years into the Marseille project, CMA-CGM embarked on an equally emblematic regional headquarters in the founder's native Beirut. The CMA-CGM Beirut building was entrusted to architect Nabil Gholam and contractor Entreprises A.R Hourie. Achieving the concepot of a visionary client and an innovative and socially conscious architect included the execution of the double-skin split functional envelope made of glass and stainless steel with embedded composite stone shading louvers on the southwestern elevation. The 4-basement, 6-floor building with a total built-up area of 9,715 m<sup>2</sup> articulates that same language of connecting the port to the city. Both buildings opened to CMA-CGM staff within months of each other in 2011.

GLASS CURTAIN WALL WITH STAINLESS STEEL STRIPS



selected projects, buildings selected projects, buildings



The building acts as a catalyst to the future development of the area, while remaining sensitive to its immediate surroundings in terms of zoning envelope and street alignments. Three carefully detailed glass prisms, intersected by a full-height atrium, slide against each other to create an efficient environment to work in. The prisms follow a rational design concept that allows for the greatest efficiency and flexibility in space planning. An ambitious structural design and a judicious location for the vertical service shafts and circulation cores mean 81% of the floor plates are virtually clear of any columns obstructing the views or the furniture layouts.

While the building offers a distinctive sculpted silhouette, all office plates are set on standard planning grids, allowing them to readily accommodate the market's standard partitions, furniture and fittings. The building operates using a high level of environmental strategies. The ground floor exhibition space is designed around an impressive 40-m-long water wall and reflection pool that filters and ripples the street views from the lobby, enhancing its serenity and establishing the company's maritime heritage while helping the cooling of the space.

The innovative façade concepts, with fixed vertical stone sun screens shading elements on the SW façade and the ventilated screen façade facing NE and NW, use high-selective glass which minimizes solar gains and protects against the high external noise level. The increased daylight supply through the highly glazed façade reduces internal needs for artificial lighting and therefore cooling consumption.

Photovoltaic panels and solar tubes covering the entire technical roof harness the same sun rays for heating water for bathrooms, kitchens and electricity support. Rainwater is collected, used for irrigation and recirculated to feed grey water networks. These strategies are developed to reduce the building operating costs for the company while enhancing the comfort of its employees.

Nabil Gholam Architects





### **AROPE INSURANCE COMPANY HEADQUARTERS, PHASES 1 & 2**



#### **BUILT ON TRUST**

The Arope building is a turnkey construction project consolidating Arope Insurance's operation into modern new headquarters. The large-footprint, 3-basement, 3-floor structure with a 9,233-m<sup>2</sup> total built-up area offers a modern work environment and stateof-the art facilities. Designed like an office park, the project features a high-performance building envelope combining metal and glass panels. Scope covered elevation works, MEP, concrete structure, interior aluminum, glass and woodwork.

#### LOCATION

Zalka

#### CLIENT

Arope Insurance S.A.L.

#### ARCHITECT

Jean El Murr

#### INTERIOR DESIGNER

Joe Farah Interior Designer

#### CONSULTANTS

Charles Maroun

#### COMPLETED

2013





### FIRST NATIONAL BANK HEADQUARTERS



#### EIGHT LEVELS DOWN

The project consists of 8 basements, a ground floor with landscaped area, and 11 floors, with a total built-up area of  $18,000 \, \text{m}^2$ . The façade is a mix of G.R.C. aluminum, stainless steel and glass. The project is targeting a LEED-Silver rating.

#### LOCATION Beirut

#### CLIENT

First National Bank S.A.L.

#### ARCHITECTS

Raed Abillama Architects

#### CONSULTANTS

STRUCTURAL

P.A.R. Consultants S.A.R.L.

ELECTRO-MECHANICAL WTA MEP Engineers

#### PROJECT MANAGERS

D.G. Jones & Partners (ME) Ltd.

#### TECHNICAL CONTROL

Apave Liban

IN PROGRESS





ACHRAFIEH 4748 PROJECT

# RESIDENTIAL PROJECTS

S.I.F. Residential Building, Beirut	1969
apital Plaza, Phases 1 & 2, Beirut Central District	2006
Foch 94, Beirut Central District	2008
Ras Beirut Residence, Beirut	2010
Moussaytbeh, Lot 5156, UNESCO Park, Beirut	2010
Achrafiah 20130 Rairut	2011

Achrafieh 4748, Beirut 2011

Lebanon Waterfront City, SP5 & SP6, Dbayeh 2015



### S.I.F. RESIDENTIAL BUILDING



#### FAIR-FACED CONCRETE

The S.I.F. project is a turnkey, 16-story luxury residential building with a detached commercial showroom.

The project was one of the first to introduce fair-faced concrete to Lebanon, both cast-in-situ and precast. Scope covered concrete structure, MEP, exterior and interior finishes.

LOCATION Beirut

#### CLIENT

Société d'Investissements Financiers S.A.L.

#### ARCHITECT

Lucien Cassia Architect

### COMPLETED 1970



### **CAPITAL PLAZA, PHASES 1 & 2**



#### LOCATION

Beirut Central District

#### CLIENT

Corporate Finance House (C.F.H.)

#### ARCHITECTS

Machado, Silvetti and Associates Builders Design Consultants (Nabil Azar Architects)

#### INTERIOR DESIGNER - MAIN LOBBIES

Atelier Abboud Homsi

#### CONSULTANTS

Builders Design Consultants (Nabil Azar Architects)

#### TECHNICAL CONTROL

SOCOTEC Liban S.A.R.L.

#### COMPLETED

2011

#### A HIGH-END RESIDENTIAL COMPLEX

Capital Plaza, on Avenue des Français in Beirut Central District, is a high-end residential complex designed by Machado, Silvetti and Associates and Builders Design Consultants (Nabil Azar Architects). The project consists of three 8-story buildings around a central courtyard and was awarded as a turnkey contract.

Scope covered concrete structure, MEP, fire safety, elevations, and irrigation and drainage networks. Working with each homebuyer and their individual interior designers, scope also included the execution of all apartment interior design finishes and fit-outs. The project's focal feature is the dramatic glass and granite enclosure wrapping the entire structure, which is accentuated by the dynamic flamed granite of the uneven balconies.



### **FOCH 94**



LOCATION Beirut Central District

CLIENT

Foch 94 S.A.L.

#### ARCHITECTS

Nabil Gholam Architects Vincent Van Duysen Architects

#### CONSULTANTS

Nabil Gholam Architecture & Planning S.A.R.L.

STRUCTURAL

Bureau d'Etudes Rodolphe Mattar

ELECTRO-MECHANICAL Kamal J. Sioufi et Associés

ACOUSTICS

Acousystem Liban S.A.L.

TECHNICAL CONTROL

SOCOTEC Liban S.A.R.L.

COMPLETED

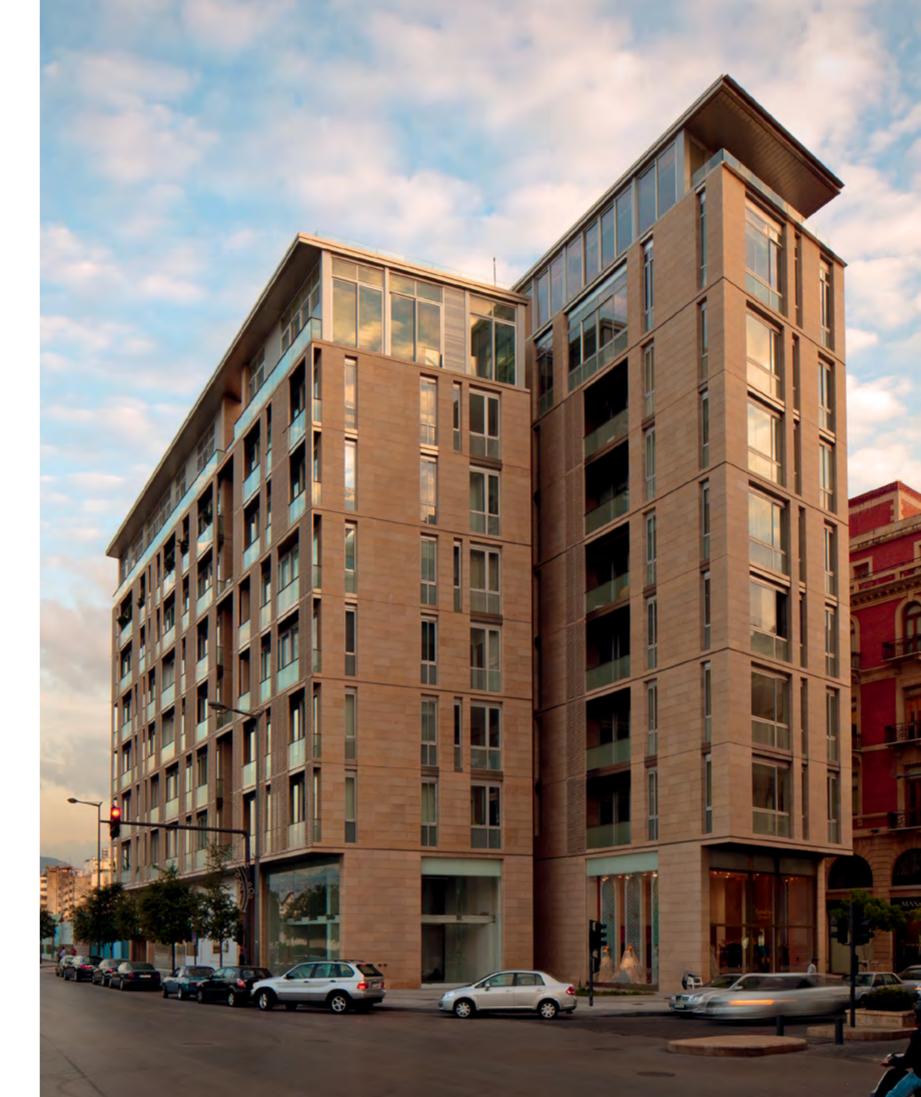
2010

#### A MATTER OF TRUST

During 2008, Entreprises A.R. Hourie had three active sites on Avenue Foch. Foch 94 is one of two designed by Nabil Gholam Architects and Vincent Van Duysen Architects. The building falls inside an ancient archaeological site overlooking the Mediterranean Sea. The contemporary design of this high-end residential building offers 7,150 m<sup>2</sup> of living space laid out over eight floors on a 1,350-m<sup>2</sup> site area.

Executing a design that combines occupant comfort with high esthetics and an inclination to experiment with the latest building materials define the relationship between architect and contractor. Entreprises A.R. Hourie was entrusted with constructing the reinforced concrete structure, executing the energy-efficient double-skin façade made with suspended limestone cladding and floor-to-ceiling aluminum windows with double glazed low-E-clear

Hourie executed all works related to this project from the foundations to landscaping. Scope included concrete works, MEP, all exterior finishes as stone cladding, steel works, and aluminum and glazing, and all interior works.

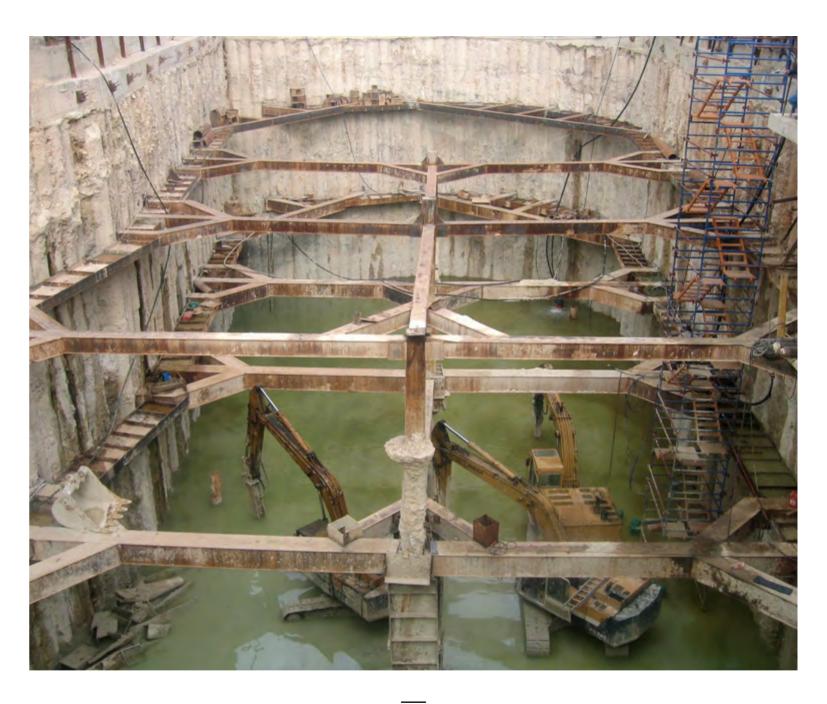




ELEVATION MIX OF STONE LOUVERS FIXED ON STAINLESS STEEL FRAMES AND STRIPS ALONG BUILDING PERIMETER, AND STAINLESS STEEL FALSE CEILING AT ROOF

RAMI HOURIE WITH MOHAMMAD AL-OMRAN, NABIL GHOLAM AND VINCENT VAN DUYSEN





CROSS BRACING OF FOUNDATION WALLS

### **RAS BEIRUT RESIDENCE**



#### A CHARMING INNER COURTYARD IN THE CITY

This project consists of the construction of a family building of 6 levels and 3 basements. Finished in grey stucco with small rectangular and round wood-framed windows and airy balconies, the residence encloses a charming inner courtyard of vernacular old Beirut architecture.

Scope covered excavation, concrete structure, MEP, and finishing and detailed ornamental works.

LOCATION Ras Beirut

CLIENT Anonymous

ARCHITECTS

Simone Kosremelli - Architect and Urban Planner

CONSULTANTS

ELECTRICAL

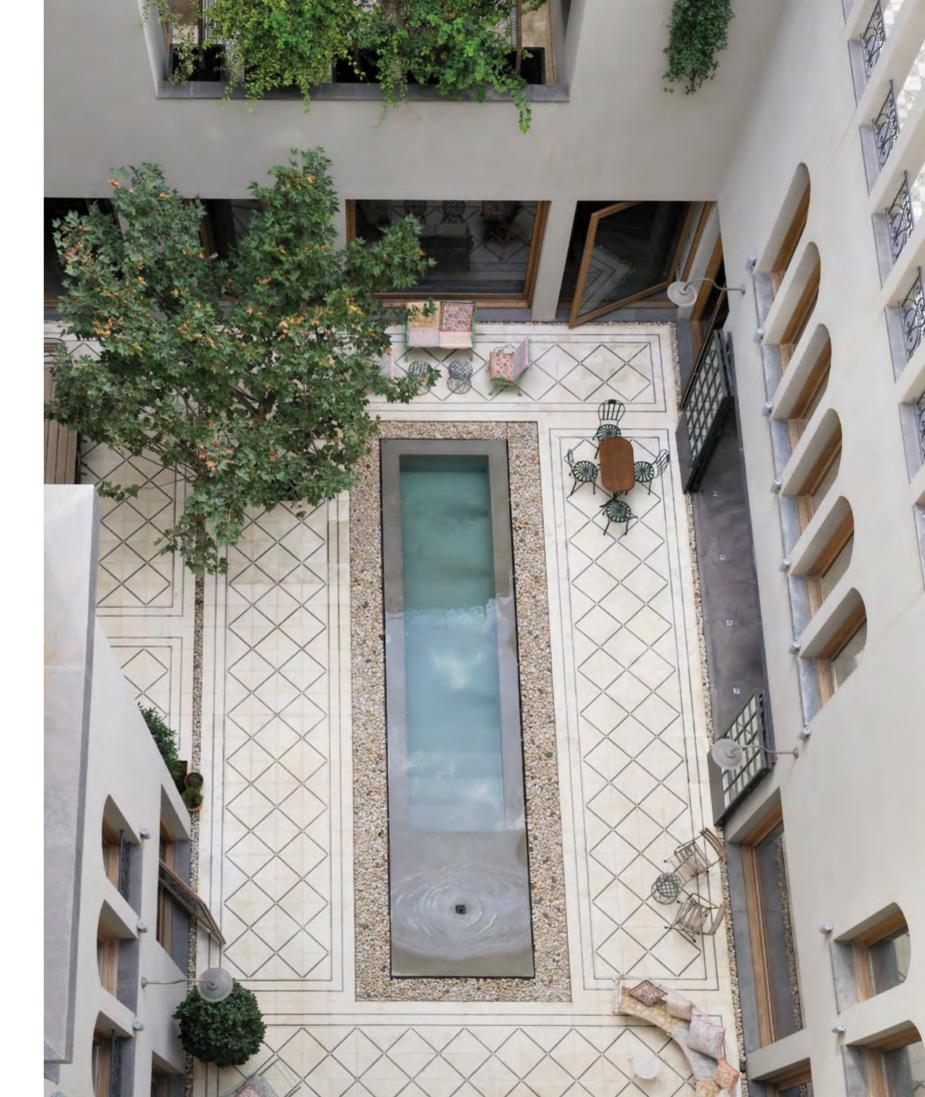
Société Gilbert Tambourgi & Partners

MECHANICAL

Fouad Hanna Mechanical Consultants

COMPLETED

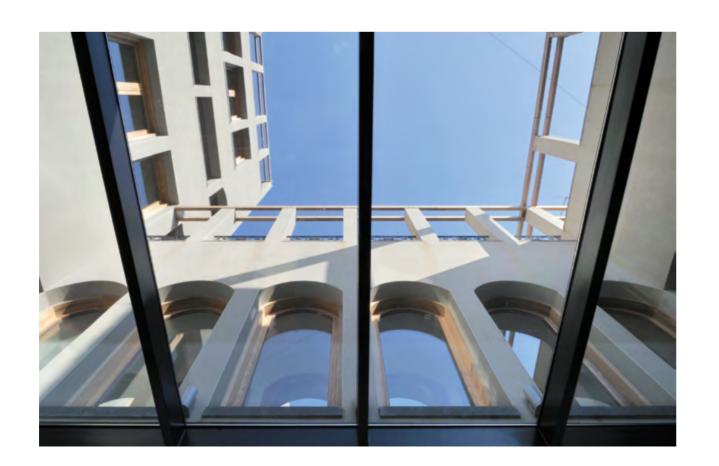
2011

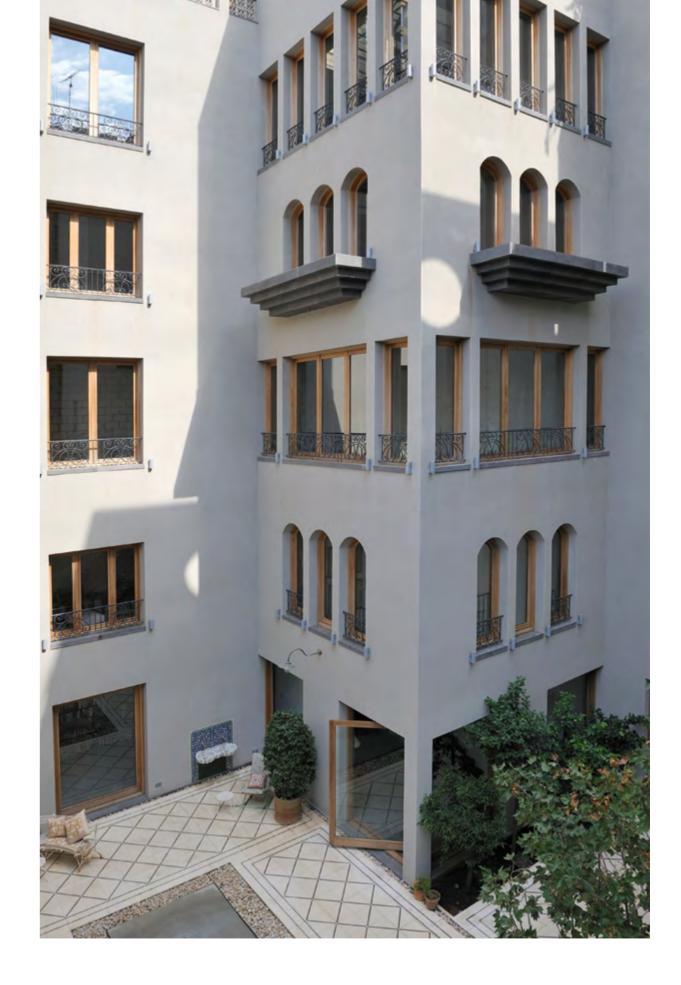


GENERAL VIEW OF INNER COURTYARD



VIEWS OF INTERIOR COURTYARD







### **MOUSSAYTBEH, LOT 5156, UNESCO PARK**



#### A RESIDENTIAL TOWER

UNESCO Park is a 13-floor residential building featuring two 350-m<sup>2</sup> apartments on each floor, 3 basements, and landscaped areas. The project is a turnkey commission with scope covering excavation, concrete superstructure, MEP, and façade in addition to apartment interior finishes coordinated with each tenant and their interior design team.

#### LOCATION

Moussaytbeh, Beirut

#### CLIENT

Mr. Rami Hourie

#### ARCHITECT

JA Design, Jacques Abou Khaled

## COMPLETED 2014

### ACHRAFIEH 20|30



#### LOCATION

Achrafieh. Beirut

#### CLIENT

Jamil Saab & Partners

#### ARCHITECTS

Marcello Lo Mauro Architect Pierre Khalil Architect

#### INTERIOR DESIGNER - MAIN LOBBIES

Zoran Architect

#### CONSULTANTS

STRUCTURAL Marwan Khalife

#### ELECTRICAL

Penta Engineering S.R.L. Société Gilbert Tambourgi & Partners

#### MECHANICAL

Studio Termotecnici Associati Fouad Hanna Mechanical Consultants

#### LANDSCAPING

Vladimir Djurovic Landscape Architecture

#### COMPLETED

#### A LEBANESE-ITALIAN DESIGN COLLABORATION

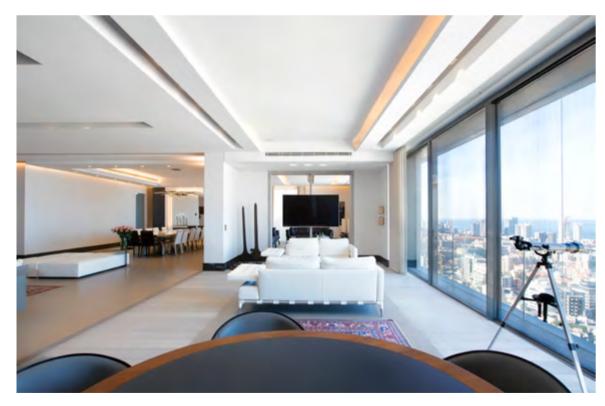
20|30 is the most prestigious residential address in Achrafieh, a successful teamwork between the perfectionist client Chafik Saab and the engineering and construction staff of Hourie. It is a Jamil Saab & Partners high-end residential project consisting of two high-rises of 20 and 30 floors, hence the name, rising 82 m and 133 m respectively, with frontage onto Furn El Hayek and Chehade Streets in Achrafieh. Each floor plate corresponds to a single apartment or penthouse of 400 m<sup>2</sup> or 600 m<sup>2</sup> for a total of 45 units and 5 basements with a built-up area of 35,000 m<sup>2</sup>. The project also includes 2,500 m<sup>2</sup> of green spaces, swimming pools, gyms, cigar lounges, wine cellars, and banquet rooms. One notable feature is the tall tower's 7-m stone lobby.

20|30 is an environmentally sound project, featuring curved photovoltaic arrays generating enough thermal energy to serve all common areas using VRV technology. Thermal insulation and zinc cladding ensure residences impart the smallest carbon footprint. Entreprises A.R. Hourie is one of only a handful of local contractors delivering quality and speed while meeting high demands, which include adherence to strict code and environmental requirements and use of specialized tall buildings formwork and construction equipment.

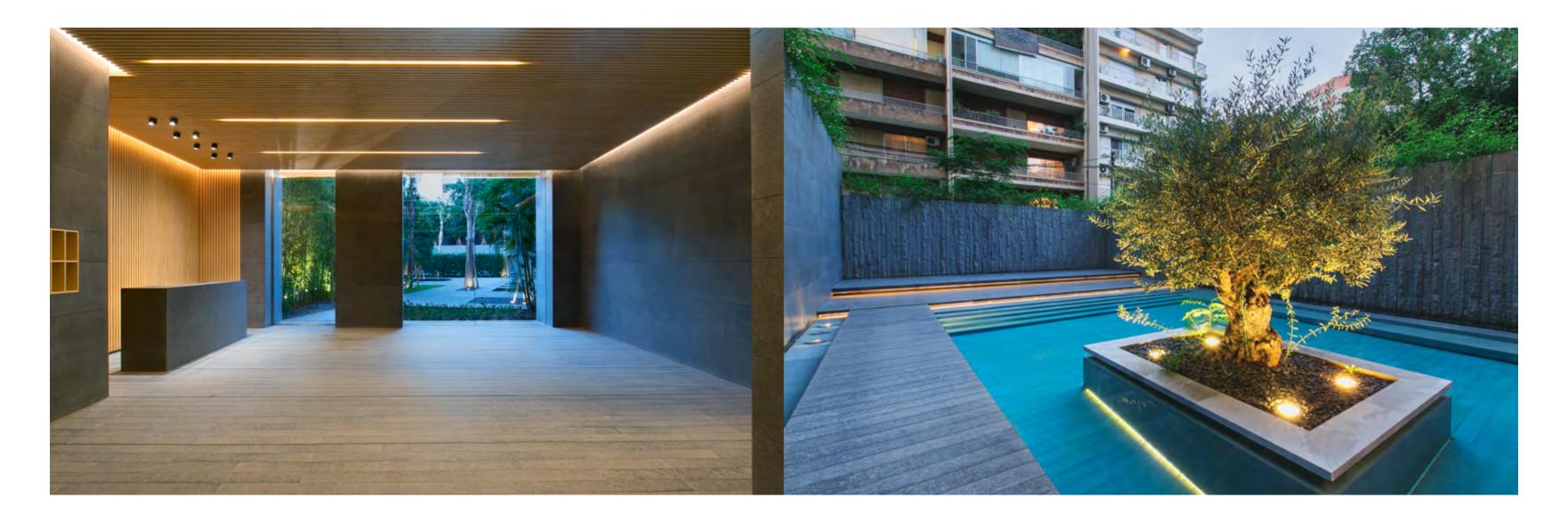
Scope covered concrete structure, exterior and common area finishes, and apartment interiors coordinated with each tenant and their interior design team.

















### **ACHRAFIEH 4748**



LOCATION Achrafieh, Beirut

CLIENT 4748 Achrafieh S.A.L.

ARCHITECTS/CONSULTANTS Erga Group

PROJECT MANAGERS
Ayman Sanyoura Architecture & Management S.A.L.

TECHNICAL CONTROL Bureau Veritas

COMPLETED 2016

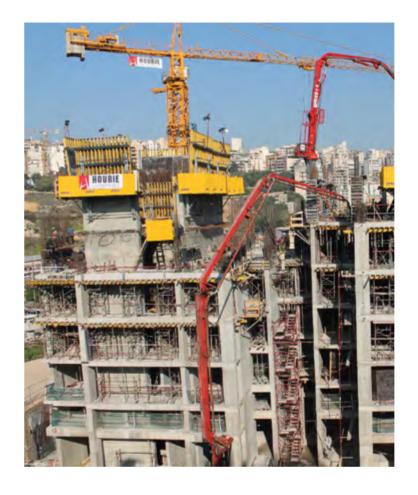
#### A THREE-TOWER RESIDENTIAL COMPLEX

Rising in the trendy district at the foot of Sioufi, Achrafieh, 4748 is a 3-tower residential project with a  $105,000-m^2$ built-up area. This new area bounded by Nahr Beirut to the East, Adlieh to the South and Mar Mikhael to the North is fast-growing, attracting young couples and upper-income first-time homebuyers looking for quality lifestyle within Beirut's outer parts.

Achrafieh 4748 is a large project requiring multi-trade coordination and close site follow-up. Each of the three towers consists of two blocks around a vertical circulation central shaft. Two of the towers are identical 30-floor high-rises. The third, different in design and structure, has a larger footprint with bigger apartments.

260 selected projects, buildings





CRANE AND CONCRETE PLACING BOOMS SERVICING THE TOWERS

A commercial podium and club house, 2 swimming pools, recreational landscaped areas and a tennis court complete the project. Entreprises A.R. Hourie was awarded construction of the anti-seismic structures designed to fire and safety codes, and all civil and electro-mechanical works. Some particular aspects of construction include the double-partition interior walls for added insulation and privacy. The building façades combining stone cladding, mechanical fixations, external textured paint, and aluminum composite panels are constructed to enhance occupant comfort, reduce thermal heat and outside noise.

Scope also covered interior finishes and fit-outs, basement ventilation system, landscape irrigation and drainage networks, water treatment system, façade and landscape lighting, monitoring and controls, Satellite Master Antenna Television (SMATV) and fire alarm systems.

STEEL REINFORCEMENT FOR THE RAFT AND ELEVATOR PITS



### **LEBANON WATERFRONT CITY, SP5 & SP6**



When Entreprises A.R. Hourie was awarded Lebanon Waterfront City's Piazza and Boulevard districts (SP5 and SP6) in April 2015, 80% of the project had already been sold. Phase II of the 250,000-m<sup>2</sup> master-planned community located on the 700-berth La Marina Joseph Khoury in Dbayeh includes 8 residential buildings totaling 282 units.

The project, divided into two packages including gardens and common areas, is expected to be completed in 2018. Heavy substructure dynamic compaction, excavation and shoring carried out prior to rising with concrete superstructures are this project's most substantial component. SP5 and SP6 are built according to BREEAM international sustainability standards.

#### LOCATION

Marina Waterfront, Dbayeh

#### CLIENT

Waterfront City S.A.R.L.

#### ARCHITECTS

Erga Group

#### CONSULTANTS

Millennium Development Erga Group

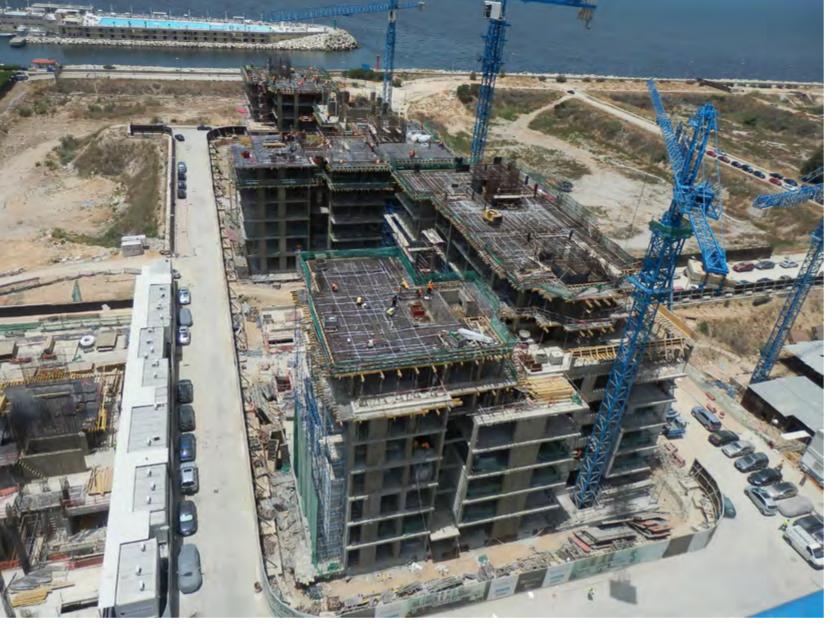
ELECTRO-MECHANICAL Pierre Dammous & Partners

#### TECHNICAL CONTROL

Bureau Veritas (SP5) SOCOTEC Liban S.A.R.L. (SP6)

IN PROGRESS













MOHAMMAD AL-AMIN MOSQUE

## **RELIGIOUS BUILDINGS**

Mohammad Al-Amin Mosque, Beirut Central District 2003 Al-Rahman Mosque, Beirut 2008

### **MOHAMMAD AL-AMIN MOSQUE**



LOCATION Beirut Central District

#### CLIENT

The late Prime Minister Rafic Hariri for Dar Al-Fatwa

#### ARCHITECTS/CONSULTANTS

Oger Liban S.A.L.

#### INTERIOR DESIGNER

Dada & Associates S.A.R.L.

#### COMPLETED

2005

#### LEBANON'S LARGEST MOSQUE

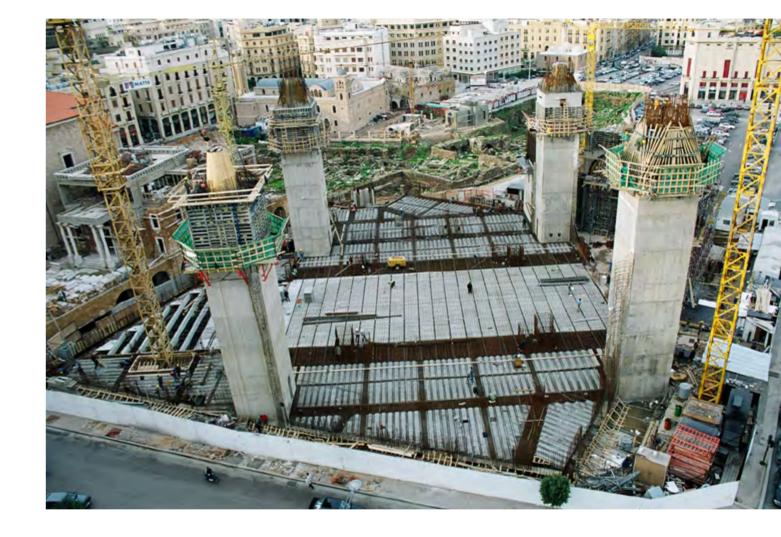
Mohammad Al-Amin Mosque is constructed on 4,200 m<sup>2</sup> of prime land in Beirut's historical Martyrs' Square. Built between 2003 and 2007, it is an emblematic image of Beirut and one of its most recognizable landmarks. The mosque's blue dome rises 47 m high between four corner minarets each over 72 m tall. It is designed in the Ottoman style of Islamic architecture with a Lebanese touch and details and illustrations inspired by the art of the Egyptian Mamelukes.

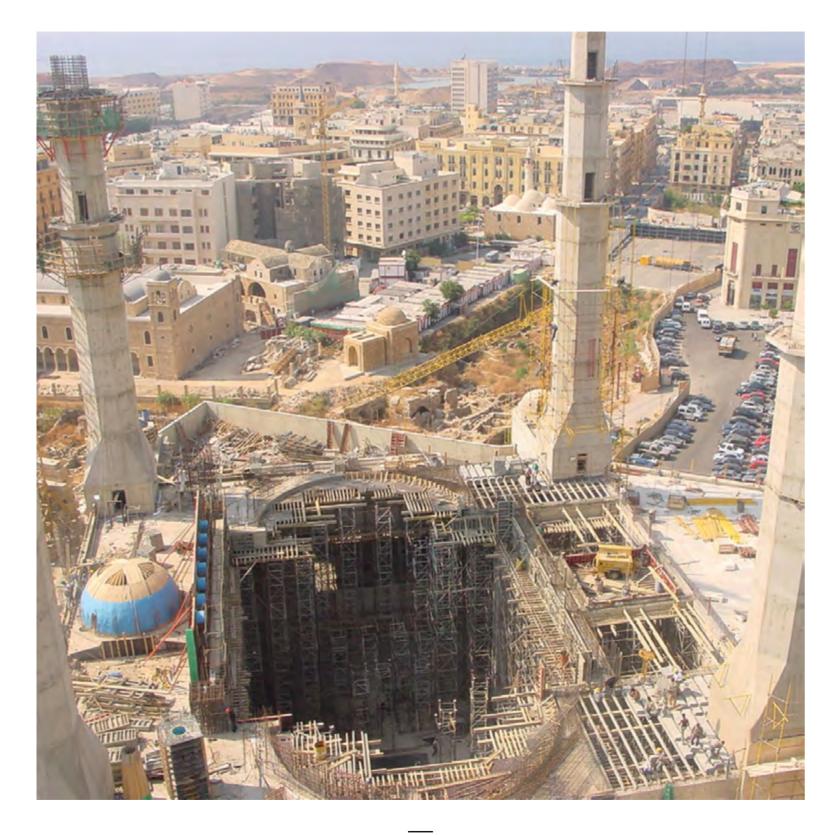
The initial plans called for four massive L-shaped reinforced concrete pillars forming niches within the large praying space. These four pillars, including 75 m<sup>3</sup> of concrete, were reduced in size after one of Prime Minister Rafic Hariri's site visits and the space of worship was redesigned to increase its openness. The mosque presents 10,700 m<sup>2</sup> of floor space distributed over four stories.

The scope of work covered the entire concrete structure including the casting of the dome and minarets, and the delicate stone cladding executed in a yellow ochre stone.



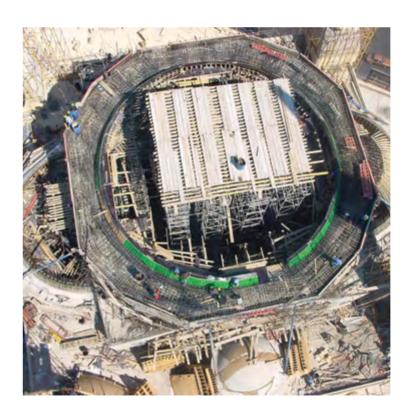














FORMWORK AND STEEL REINFORCEMENT WORKS FOR THE MINARETS,
MAIN DOME AND GROUND FLOOR SLAB



STONE CLADDING WORKS IN PROGRESS



THE LATE PRIME MINISTER RAFIC HARIRI (WITH NAJI SROUJI)
VISITING THE SITE TO CHECK ON THE NEW PILLAR ARRANGEMENT
HE REQUESTED TO INCREASE THE WORSHIP AREA'S OPENNESS

PROJECT MANAGER NAJI SROUJI AND RAMZI SALMAN ATOP THE DOME





### **AL-RAHMAN MOSQUE**



#### A PERSONAL TRIBUTE

Al-Rahman Mosque is a living memorial constructed as a tribute to Sumaya, beloved mother of businessman and Clemenceau Medical Center founder Maher Abou Ghazaleh. Al-Rahman Mosque is a contemporary Islamic architecture-style mosque executed as a turnkey project. Scope covered concrete works, MEP, and all interior and exterior finishes.

LOCATION Beirut

#### CLIENT

Mr. Maher Abou Ghazaleh

ARCHITECTS/CONSULTANTS
Batimat Architects S.A.R.L.

#### INTERIOR DESIGNER

Dada & Associates S.A.R.L.

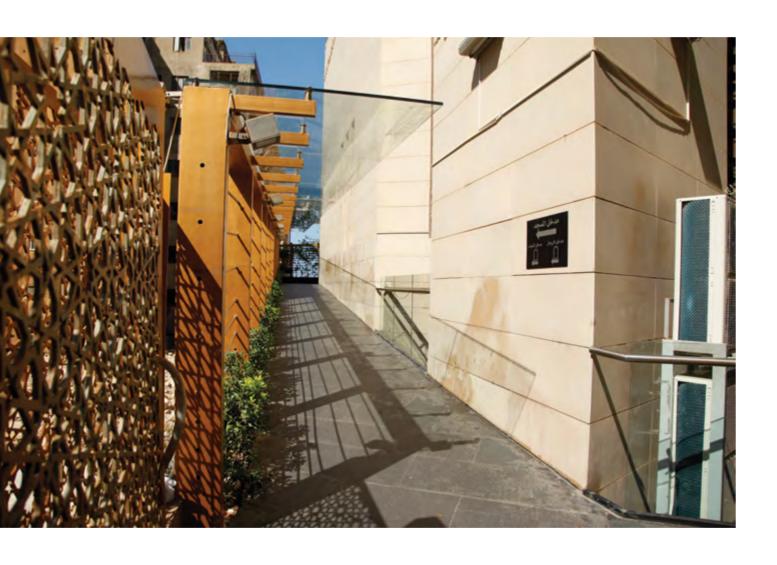
#### CONSULTANTS

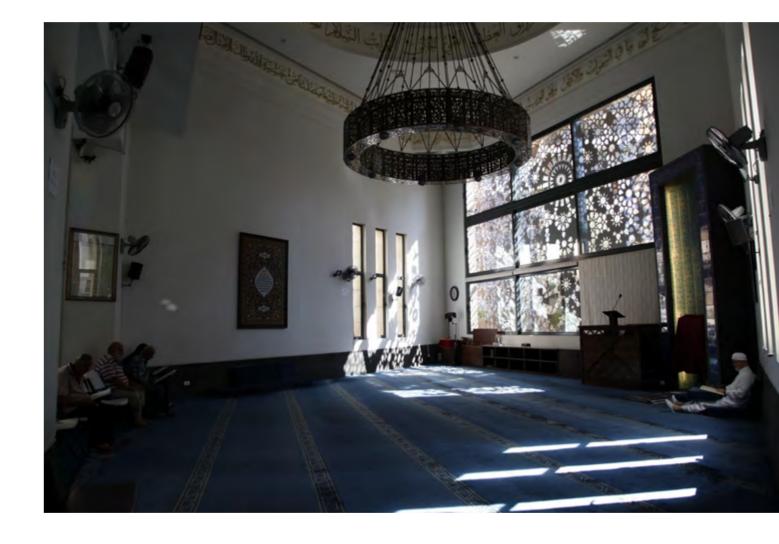
STRUCTURAL Mazen Sayyed

ELECTRO-MECHANICAL Associated Mechanical Engineers (AME)

#### COMPLETED

2010







TRANSMED WAREHOUSE IN MKALLES

## **WAREHOUSES**

Transmed Warehouses, Choueifat 1998
Transmed Warehouses, Choueifat 2009
Transmed Warehouses, Mkalles 2010

### TRANSMED WAREHOUSES, CHOUEIFAT



This project consists of 8,000 m<sup>2</sup> of new underground storage facilities, 5,500 m<sup>2</sup> of renovation works of existing storage areas, rehabilitation and hardscaping of roof to receive trailer trucks and construction of various steel structures and steel awnings.

LOCATION Choueifat

CLIENT

Transmed for Storage & Distribution S.A.L.

CONSULTANTS/ARCHITECTS Samir Ali Ahmad - Architect

COMPLETED 1999



### SCOPE OF WORK

Scope of work: renovation of an existing warehouse, concrete and steel works for the new storage place, and all related finishing works, including the pouring of the warehouse floor.

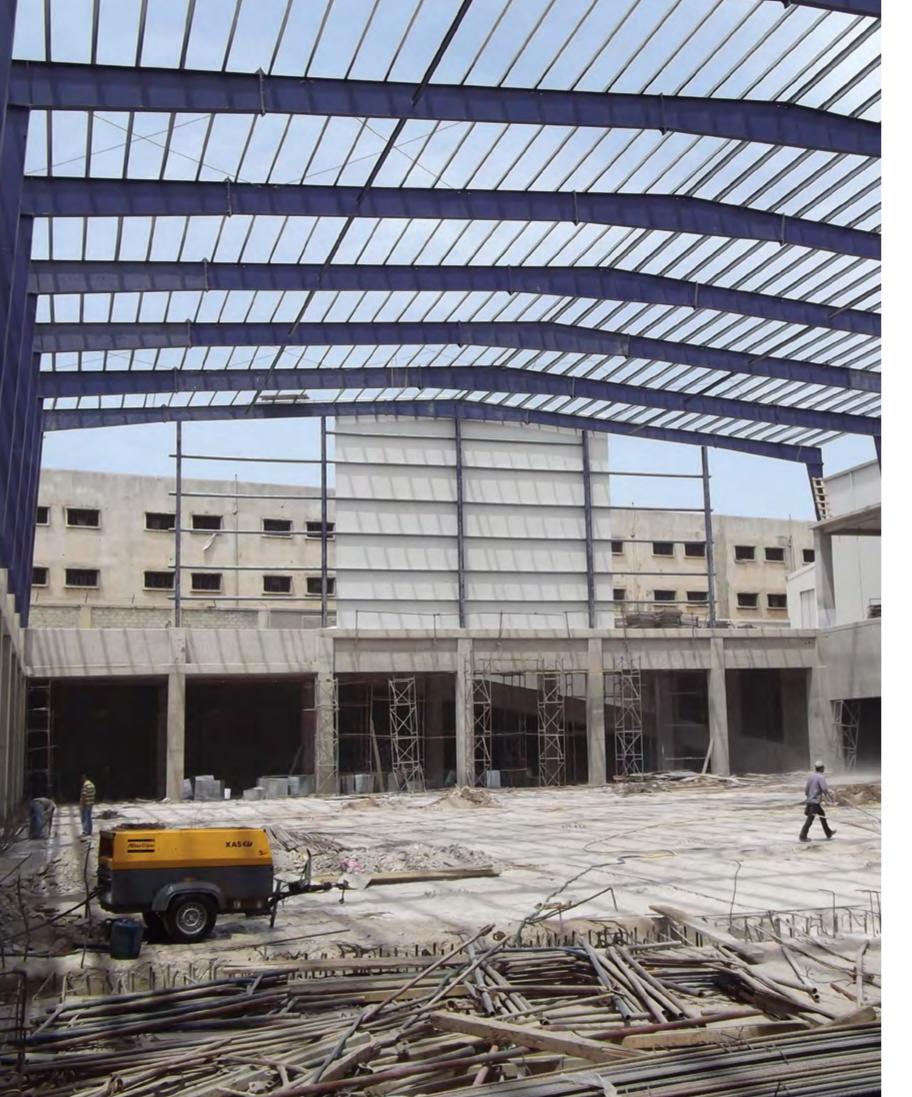
The warehouse floor was built to very exacting tolerances in order to facilitate the stackers' work.







WAREHOUSE RAMP



### TRANSMED WAREHOUSES, CHOUEIFAT



The facility was severely damaged during the June 2006 war. A rebuilding and upgrade commission got underway in 2009 to construct a new facility and restore and update the damaged one. Completed in 2014, the project increased Transmed warehouses to a capacity of 22,500 pallet positions and a total surface of 15,000 m<sup>2</sup>. Scope included excavation, earthworks, and structural concrete from foundation to rooftop, steelworks, MEP, and finishes.

#### LOCATION Choueifat

#### CLIENT

Transmed for Storage & Distribution S.A.L.

#### CONSULTANTS/ARCHITECTS

Samir Ali Ahmad - Architect

#### COMPLETED

201/

### TRANSMED WAREHOUSES, MKALLES



This project consisted of building a new storage facility with a total built-up area of 8,000  $\mbox{m}^2$  and associated parking areas to receive trucks. Scope included: excavation, earthworks, raft to roof structural concrete, MEP, steel works, all finishes, landscaping and the warehouse screed flooring built to exacting tolerances.

LOCATION Mkalles

Transmed for Storage and Distribution S.A.L.

CONSULTANTS/ARCHITECTS Samir Ali Ahmad - Architect

COMPLETED 2014



290 selected projects, buildings 291







BACK VIEW SHOWING THE FAIRFACED CONCRETE BUILDING, THE STEEL STRUCTURE WAREHOUSE AND THE FIRE ESCAPE STAIRS



# شَـركة سِبِيّ بَاتينيُول ش.م.ن.

# S P I E - BATIGNOLLES s. A. F.

SOCIETE ANONYME FRANÇAISE AU CAPITAL DE 77.000.000 F.

SIEGE SOCIAL : PARIS-8e.

فسرع لبسنان AGENCE DU LIBAN B P. 8155, Beyrouth Tel 323939 Adresse Telegraphique SPIBATI - BEYROUTH

N / Ref. V / Ref.

Beyrouth, le

## ATTESTATION

Je soussigné, Michel BOUTRON, Directeur Général de l'Agence du Liban de la Société SPIE-BATIGNOLLES pilote du Groupement Franco-libanais d'Entreprises placé sous l'égide de l'Aéroport de Paris, certifie par la présente que la Société d'Entreprises Abdul Rahman HOURIE, membre de ce Groupement, a exécuté durant les années 1970, 1971, 1972 et exécutera en 1973, dans le cadre de ce Groupement, les travaux de démolition du revêtement existant, de déblais, de remblais compactés, de drainage et de grave compactée pour la consolidation des pistes 18/36 et 03/21, des taxiways N, B, F, G, K, Q2 de l'aire Est (TMA), de l'Apron Central et des accotements à l'Aéroport International de BEYROUTH.

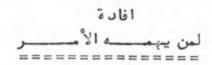
La valeur de ces travaux exécutés et à exécuter en 1973 par la Société d'Entreprises Abdul Rahman HOURIE est de : 2.920.000 Livres Libanaises. (DEUX MILLIONS NEUF CENT VINGT MILLE L.L.)

En foi de quoi et sur la demande de la Société d'Entreprises Abdul Rahman HOURIE, la présente attestation a été délivrée.

Fait à BEYROUTH, le 18 JUILLET 1973









تفيد جامعة بيروت العربية بان شركة عبد الرحمن حورية للمقاولات قد قامت بتنفيذ الا شفال الانشائية الخاصة بالمبنى الجديد لكليات المهندسة والعلوم على العقلل رقلم ٣٢٨٢ مزرعة ، الكائن في بيروت \_ الطريق الجديدة ، والموالف من اثنتي عشرة طبقة فوق الارض واثنتين تحت مستوى الارض ، البالغة مساحته الاجمالية ، ٥٠٠٠ مترا مربعا ، وذلك خلال الفترة الممتدة من ١٩٧٥/٥٢١ ولفاية ، ١٩٧٥/٧/٣٠ ، وقد بلغت قيمة هيذه الاشفال المنفذة مير،،،،،، ١ ليرة لبنانية ،

وذلك باشراف المكتب الهندسي محمد وزياد حورى .

شملت هذه الاشفال الاعمال التالية :

١\_ الحفريات = نفذها بالتعاون مع المقاول من الباطن نسيب الريس .

٧ - تد عيم الحفريات بالا وتاد = نفذ ها بالتعاون مع المقاول من الباطن موريس مصور .

٣- تد عيم الحفريات بواسطة جد ار الدعم نوع بروا موليه = نفذ ها بالتعاون مع المقاول من الباطن سيف باشي .

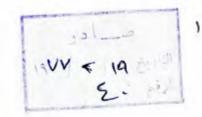
إ\_ اعمال الخرسانة المسلحة وبناء البلوك = نفذ ها بالتعاون مع المقاول من الباطـــن
 سعيد عمار .

هذا وكان مستوى تنفيذ هذه الاشفال جيدا بشكل عام مع حصول بعض التأخير في اشفال التنفيذ التي بدأت في ١٩٧٥/٥/٣٠ واكتملت في ١٩٧٥/٥/٣٠ . اعطيت له هذه الافادة بناء لطلبه وعلى مسوّوليته . ،،

رئيس جامعة بيروت العربية

· alely = ints

( د كتور محمد كامل ليلة )



بيروت في ١٩٧٧/١/١٥

# المهندس عبد الرحمن حوريه

# السيد محافظ درعا المحترم

مقدمه المهند سعبد الرحمن حوريه يعرض ما يلي:

ارجو اعطائي شهاده تثبت باني قد التزمت لديكم بالاشتراك مع السيدين عبد الله شاهين ومختار ملص مشروع خط الد فع والخزان لجر مياه مزيريب الى درعا بمبلغ ٢٥٧٤٣٢٧٥٠ ليره سوريه ، وقد تم تنفيذ هذا العمل اعتبارا من مطلع آب ١٩٧٢ ولفايه ايلول ١٩٧٤ .

وتفضل وتفضل فائه فائه مترام

المهندس رعبد الرحمن حــــوريه

درعا ۲۰ -۱ - ۱۹۲۱



# الے ش محد الأر

عَ سَفِيد بَاء خزان ماه و خط الحرين عرة

المزير يب الحرعا م شل الموري عبرالمن عور وعبرالم المريد المعد المع



# الجه كهوركة اللبثنائية على تنفيذ المشاريع الحبي المستنفيذ المشاريع الحبي المستنفيذ ال

افسادة لمسر لمسر

نفيد أن المتعهد شركة عبد الرحمن حورية للمقاولات قد نفذ لحساب مجلس تنفيذ المشاريع الكبرى لمدينة بيروت أشغال البولفار البحرى \_ القسم الواقع بين مبنى السفارة الا ميركية وبيت المحترف اللبناني \_ وقد بلغت قيمة الاشغال الا جمالية : \_ / ٠٠٠ ( ٢٦١ ٢٦١ ٩/ل ٠ ل ٠ فقط تسعة ملايين وسبعماية واحد عشر الفا واربعماية وواحد وثلاثون ليرة لبنانية ، وذلك في الفترة الواقعة بين ١٩٧٤/٥/٣٠ و٨١/٨/٩ وان الاشغال قد نفذت بشكل مقبول وضمن المهلة المحددة لها ٠

7

بيروت في ٢٩/٦/٩٨ مدير عام مجلس تنفيذ المشاريع الكبرى لمبورية البيروت لمبدروت لمبدروت المهندس عاصم سنو المهندس عاصم سنو

.0.1

المجهورية اللبنيانية مجاسِ من يندلِك ربع الإنشائية

بار حسن - هانف: ۲۷۰۱٤٦ بروت - هانف: ۲۰۰۸۰ ص. ب.: ۳۰۷۰ تلغرافیاً: المشاریع عدد عادی

## شم ادة

يفيد مجلس تنفيذ المشاريع الانشائية بان شركة عبد الرحمن حورية للمقاولات متعهدة تنفيذ اشغال انشاء الجسر الجديد في سن الفيل قد نفذت اشغال الجسر المذكور وفقا لمواصفات دفتر الشروط الخاص وضمن المهل المحددة للالتسسزام والواقعة بين ١٩٦٢/١٠/١٣ و ١٩٦٨/١١/٣٠ ولمفت قيمة الاشغال بموجب آخر كشف موقت /٤٠٠ر٤ ١٩٩٥ ل ول فقط اربعماية وتسع وتسعون الفا وثلاثماية واربع وخمسون ليرة لبنانية واربعون قرشا لا غيره

وان تنفيذ الاعمال قد تم بصورة موضية وجرى استلامها استلاما مواقتاً حسب الاصول •

وبناء على طلب الملتزم اعطيت له هذه الشهادة

20

بئر حسن في آ ترز ١٩٢٩ رئيسس

للم مجلس تنفيذ المشاريع الانشائية

Terco





reiber



# الجُهُوريَّة اللَّهُ نَانيَّة

1168 75-

## افــــاد ة

ان شركة عبد الرحمن حورية للمقاولات قد التزمت في شهر ايلول ١٩٦٩ مشروع جسر المدخل الشرقي لمدينة بيروت ( جادة الرئيس شارل حلو) وقد انجزت هذا المشروع ضمن المهلة المعطاة لها وبلغت قيمة الاعمال / ٣٢ م ١٦٢٥ ٨٨ ل ٠ ل ٠ ثمانية ملايين ومايتين وواحد وخمسين الغا وستماية وخمسة وعشرين ليرة لبنانية واثنين وثلاثين قرشا ٠

ان كمية الباطون المسلح والباطون المسبق الاجهاد المنفذة في هذا المشروع باستثناء الباطون المسلح للاساسات تبلغ / ٢٣٠٠٨/ مترا مكعبا ( ثلاثة وعشرين الغا وثمانية امتار مكعب) .

كما يغيد المجلس بان اعمال المشروع قد نفذت بشكل مقبول وانتهت بتاريخ ١٩٢١/١١/١٦ وجرى استلامها موقتا حسب الاصول ٠

اعطيت هذه الافادة بناء لطلب شركة عبد الرحمن حورية للمقاولات.

بيروت في الكبرى رئيس مجلس تنفيذ المشاريع الكبرى لمدينة بيروت

محمد غــــزيــــرى





طبق درصل دنیس الداندة درسکو بول شکور

9x/9V 200 1997 11- 17

يفيد مجلس تنفيذ المشاريع الانشائية ان شركة عبد الرحمن حورية للمقاولات قد نفذت لصالح المجلس اعمال اوتوستراد خــلدة \_ الدامـــور بطول عشرة كيلومترات وبكلفة اجمالية يلغت في حينه / ٥٠٠،٥٠٠ ر ٢٣/ ليرة لينانية ( ثلاثة وستون مليونا واربعماية الف ليرة لبنانية ) •

ان هذه الاعمال نفذت بشكل مطابق لمواصفات المشروع وانجزت ضمن المهلة المحددة بتاريخ ٣/ ١٠/ ١٩٨٧ وتم استلامها موقتا ونهائيا ٠

وبناً للطلب اعطيت هذه الافسادة ٠

رئيس مجلس تنفيذ المشاريع الانشائية نور الدين غزيري

هـَاتِف ؛ ٤/١٨٦٠٠ - ص.ب : ٥٣٠٧ - ١١ - تــلكسن : ١١٩٥٩ كه تــلفرافيا : المشارب - برحسن - المينان

# شركنرعيد الرحمن حورية للمقاولات - شركة توسية لبنانية

يثاية عطالله-الطابق الأوّل - شارع سَامي الصلح - بيروت يص · ب ٥٧٤٩ - مَامْرا فِيا : انعهورية - السجل التجاري ٦٤ ١٨٤ هاتف: ٣٨١٥٧٦ - ٣٨٠٧٧١ - ٣١٥٣٢٠ – ٣١٧٤٩٣ - ٣١٥٣٢٢ - تلكس رقم ٢٤١٨ حورية

بيسروت ني ١٩٩٣ / ٢ / ١٩٩٣

رقم : ۱۱۳

مجلس الانمــــاء والإعـــــار محتب الرئامــة تاریخ الرروه ع م م المح رنے 213/فرر

فعوريبة للمقاولات

جانب مجلس الانماء والاعمار المحتمار والمحتمار المحتمار المحتمار والمحتمار والمحتماروت

بواسطة دار الهندسة - نزيه طالب - المحترمة .

بعد التحيدة ٥

ان شركتنا قامت باعادة تأهيل طريق ريفون ـ دير شمرا لحساب مجلسكـــم الكريع وذلك خلال الفترة الواقعة بين ١/١١/١ ١٩٨٤ و ٣١٦/١٢/٢١ بط\_\_\_ول سبعة عشر كيلو مترا"

تضمنت الاشد فال كمية ٧٠٠٠ متر مكعب من الحفريات العادية والصخيرية و ١٧٦٠٠ مترا" من المسالك الهاتفية و ٣٤٠٠ متر مكعب من البيتون المسلح و٢٣٤٠٠ متر مكعب من بحص الشوسة و ٣٠٠٠ ه طن من البتون الاسفلتي و ١٢٣٠٠ متر مربع مــــن تبليط الارصغة وحوالي ٧ر٥ كيلو متر من الحواجز المعدنية وبالغات كلف المشــروع ثلاثماية وسبع ملايين ليرة لبنانية .

نرجو اعطا "ندا افادة بان هذه الاعمال نفذت وفقا" للمواصفات الفني الموضوعة لها وضمن المهل المقررة وجرى استلامها موقتا" ونهائيا" •

وتفضل الحت وا بقب والمام وتفضل المسائدة الاحت والمسائدة

ان الاعمال والكميات المذكورة أعلاه قد نفذت تحت اشرافنا في حينه وجرى استلامها موعقتا ونهائيا •

دار الهندسة نزيه طالب ش٠م٠م٠

17, 2 har /c/2

المهندس زار كرم ب المدير العام

مخليك الانماء والاعمار رمنس داى اكتاك

المجمهور ثالب النه مجاس تف يذالث ربع الإنشائية

ئر حسن- حالف : ٢٧٠١٤٦ من. ب. : ٢٠٠٧ تلترانبا : المشاريع عدد ٢٢٠٥/كالم

## اف\_\_\_ادة

ان رئيس مصلحة الاوتوسترادات في مجلس تنفيذ المشاريع الانشائية يغيد بان تجمع الغريد كونز اند كو وشركة عبد الرحمن حورية للمقاولات قد التزما بتاريخ ١١/١١/١٣ اعمال القسم (١٩) من اوتوستراد طبرجا \_ جبيل ( اعمال جسرى نهر ابراهيم ونهر الغيدار) وان المعتمد الوحيد الرئيسي للتجمع هو شركة عبد الرحمن حورية للمقاولات،

كما يفيد بان جسرى نهر ابراهيم ونهر الغيدار قد انجزا باستثناء بعض الاعمال التكميلية وان التنفيذ تم بشكل مرض وضمن البرنامج الزمني الموضوع وقد بلغت قيمة الاعمال المنفذة لغاية تاريخه / ٠٠٠٠٠٠٠ ٣/ ليرة لبنانية ( ثلاثة ملايين وتسعماية الف ليرة لبنانية تقريبا ) وان مجموع كمية الباطون المسلح والباطون المسبق الاجهاد والمنفذ ضمن المشروع باستثناء باطون الاساسات هي / ١٩٣٣/ مترا مكعبا ( ثمانية آلاف وماية وثلاثة وتسعون مترا مكعبا ) •

وبناء على طلب شركة عبد الرحمن حورية للمقاولات اعطيت لها هذه الافادة .

رئيس مصلحة الاوتوسترادات

عبد المنعم شحادة





ns. rif. BZ/ANL/MISC/ L-098

Lebanon, June 7<sup>th</sup>, 1999

TO WHOM IT MAY CONCERN

We ANSALDO ENERGIA SPA, certify that SOCIETE D'ENTREPRISES ABDUL RAHMAN HOURIE, has executed for us, in their quality of Subcontractor approved by the Client all the civil works for Zahrani Power Plant Project in Lebanon.

The project includes the construction of twenty buildings with all finishes and has a total cost of 20.750.000 USD (Twenty Million Seven Hundred Fifty Thousand US Dollars). It was completed in conformity with specifications and within the allocated time. A provisional acceptance report was issued by us.

ANSALDO ENERGIA S.p.A.

Giacorio Lagorio
PROJECTS DIRECTOR
Apsaldo Energia S.p.A.

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FINMECCANICA GRUPPO IRI

انجمهورتهٔ اللبْ اینهٔ مجاس تفیدالث ربع الإنشائیهٔ مغرحس - هانف: ۲۷۰۱۶

> بروت - هاتف: ۲۰۰۸۰ ص.ب: ۳۰۷۰ تلغرافیا: المشاریع عدد کرار

حضرة المتعهد السيد عبد الرحمن حورية بناية منصور سلامه ـشارع شا توبريان صب ٩٤٩ه بيـروت

الموضوع: المنشآات العليا في مرفا بيروت مسال ما مسال

١ \_ اعمال شبكات الطرق وسكك الحديد والمياه والمجارير في قسم الاهرائات من مرفائ بيروت بقيمة ١٦١٢١٣٦ / لل • مليون وستماية وسبعة عشر الغا وماية وستة وثلاثون ليرة لبنانيـــة وان امر المباشرة بالاعمال قد اعطي لكم بتاريخ ٢٨/ ١/ ١٩٦٥ •

٢ \_ اعمال تجهيز وتركيب مزلقان تصليح السغن في مرفا بيروت بقوة ١٠٠٠ طن وبقيم ـ ـ ـ ـ ١٠٠٠ عن المباشرة بالعمل
 ٢ ٢ . ٠ ٢ / ١ / ١ / ١ مايتان وثمانون الفوسبعة وثلاثون ليرة لبنانية واعطيتم امر المباشرة بالعمل بتاريخ ٨/ ١٢/ ١٩٦٥ ٠

ونثبت كذلك انكم قمتم بتنفيذ كل من الالتزامين المذكورين اعلام ونقا لدفتر شروط الالتزام وضمسن المدة المحددة لكل منهما وقد جرى استلام اعمال الالتزامين استلاما موقتا بدون اى تحفظ ·

بئر حسن في المراكز ال



ولا جري المحودية المراجي

ع سانان

المجمهور فاللب انيه مجدر منعني فإلث يرم الإنشائية

بلا حسن -- حلاف: ۲۷۰۱۱۹ بسیرون -- حانف: ۲۰۰۸۰ م. ب. : ۲۰۰۷ نلفرافیاً : المشاریع عدد ۲۰۰۱ - ۲۰۰۷

شهادة ٠

رئيس مجلس تنفيذ المشاريع الانشائية

مالسك سلم





سياسة الجودة

تهدف سياستنا الى تطوير مرفأ بيروت ليصبح قدوة عربية وعالية ومرجعيًا للخدمات المشارة ان خدمة الريائن بسرعة وكنفاءة عالية هي سياسة تنبعها الادارة في مجال المنافسة مع المرافئ الجاورة، من خلال تقنية وعايد تنبعها الادارة في مجال المنافشة وعالية ان الاهتصام بالنوعية الميزة للخدمات من خلال التطوير والتجهيز والتدريب وتبسيط للعاصلات هو النزام كل عامل وموظف في صرفاً بيروت. تطبق هذه السياسة من خلال نظام إدارة الجودة الايزة على على المنافقة على عدادة العاصلات والنشاطات في المرفأ بيطبق على كنافة العاملين بمختلف مستوياتهم الادارية حضافاً على الاستورار نشافة الجودة.

الجمهورية اللينانية République Libanaise



127101 ×

## TO WHOM IT MAY CONCERN

2 1 AUG 2001

This is to certify that Pihl/Højgaard/Hourié (P.H.H.), a joint venture among E. Pihl & Son A.S., Højgaard and Schultz A/S and Société D'Entreprises Abdul Rahman Hourié, has completed the construction of Quay 16 and Detached Breakwater at Port of Beirut – Lebanon in the period from 1998 to 2001.

The Project consisted of the construction of a 600 m quay wall in concrete blocks involving manufacturing and placing of 2000 blocks (approx. 100 Tons each) and the construction of 600 m detached breakwater involving 2,000,000 tons of quarry run, 400,000 tons of armoured rock, 4800 Accropodes (9/16 m³), and infrastructure works including 50,000 m² of concrete pavers and 60,000 m² of multilayer asphalt concrete. In addition, the project included dredging for breakwater foundation (465,000 m³) and in the harbour area (147,000 m³) including underwater blasting.

The works were completed to our satisfaction according to the conditions of contract and to the technical specifications. The total value of these works amounted to 54,300,000 U.S. Dollars.

This certificate has been issued upon P.H.H. request.

Beirut, 2 /8/2001

President General Director

Eng. Issam Bekdache

AB./JA 1859/41/2001

> مدير الإدرام المشترة ٢٠٠١ آب ٢٠٠١ خليسل عاسرو

سياسة الجودة

تهدف سياستنا الى تطوير قدرات مرفأ بيروت وتلبية متطلبيات الزيسان بسر وكفاءة مع مراعاة الفسو الين و التسسريعات. وذلك من خلال الترامنا بسسما با نوفر البنية النحفية المنطورة و التجهيزات الحديثة والموارد اللازمة / تدريب العاما بكافة مسئوياتهم لتطوير قدر الهم وتحسين أدانهم، والنسر اكهم بسعلية التطو المسئور أم والمدر اكهم بسعلية التطو خودتها والعمراء من المسئور أن وتطويرها العنمان استمراق خودتها والعمراء المسئورات والمامان المسئورات المامان المسئورات والعمان المسئورات المسئورات الإستان الريب خودتها والعمراء المسئورات والمسئورات والمسئورات المسئورات المسئور

الجمهورية اللبنانية République Libanaise



24 7 0 1 U MAY 2016

To whom it may concern

**Project:** Extension of Quay 16 Container Terminal at Port of Beirut

This reference has been issued upon the request of: Societe d'entreprises Abdul Rahman Hourie

We hereby confirm that the joint venture Pihl/Hourie s.a.r.l has successfully completed the following project under a signed contract agreement with ourselves, details of which are given below:

Name of Project: Extension of Quay 16 container terminal at Port of Beirut

Brief scoop of work:

Works comprised the construction of 500m length, 16.5m depth, New Quay wall based on tubular steel pipes, 1320 mm length 30-70m, 574 piles (15000 Ton total) also comprised of reclamation areas from sea and from land; 1.185.000m3 general fill and 515000m3 structural fill materials including dynamic compaction, sheet piles (7,700m2) dredging 1.000.000m3 softsoil and 75000m3 hard sea bed material, scour protection (43000m3 rocks 1t to 8t) and 390 accropodes. Also comprised the execution of infrastructure works and utilities (drainage, sewage, potable water, firefighting, electrical networks and road works.

Date Project undertaken

Capital cost of Project

Start June 2009

Finish October 2013

Location and Country Beirut- Lebanon
Contract Duration 4 years

TION DU PO

4 years US \$ 152,000,000 4 months

\_ .

Beirut, /0 /05/2016
President Director General

Eng. Hasan Kamel Koraytem

بغر حسن - علاف : ٢٧٠١٤٦

نشهد ان شركة عبد الرحمن حوريه للمقاولات قد نفذت لمجلسنــــا عملية انشا \* المبنى " ب " من القاعدة البحرية في جونيه في المدة الواقعــة بين ١١/ ٨/ ١٨ الى ٢١/ ١١/ ١٩ بمبلغ وقدره ٨٨، ٩٥٧ ٢٩٢ الل وكذا اعمال انشاء ٨ مستودعات و ٣ مشاغل في مرفأ بيروت في المدة الواقع .... بين ١٩ ه/ ١٨ و ١١ ه/ ٧٠ بمبلغ وقيمته ٥٩، ٩١ه ١٥٦ ١ ل ل وقيد تم تنفيذ هذه الاعمال بصورة مقبولة وضمن المهل المحددة •

بئر حسن في ١٠ أكسيد ١٩٧٠

رئيس مجلس تنغيذ المشاريع الانشائيــة

/ =ع الجمهورية اللبنانية وزارة السدفساع الوطنس ~ 9/V/ N مدديريسة الهندسي 1 Nex صدد جميء، م 1 - 22.

ان المقدم المهندس فارس مديسر الهندسة يصرح بأن شركة عبد الرحمن حوريه للمقداولات قد نغذت لصالح مديريدة الهندسة في الجيدش الاشغال السينة نوعيتهدا و قيمتها ادناه و ذلك وفقا لدفاتر الشروط الموضوعة لها وضمن المهل المعددة و جـــرى استلامها جميعها استلاما مواقدا و

J	فترة التنه	قيمـــة	نــوع الاشغــــال	الرقيم
انتها التنفيذ	بـد العمـل	الاشفال		· ·
11/ 0/17	14/ 1/17	79.0714Y	طريق الخربة ـ الحميرى (شق واعمال صناعية )	1
14/11/10	۱ /۱۲/۲۲	የለ፥ • ፣ • ዓለን	اشغال ابنية خزانات المياه و محطة الكهرباء و محطات الدفع و التكريسر و محطات التحويل في القاعدة الجوية الشمالية	٢
14/11/10	1Y/ 1/ Y	779 778 40 1	اشغال شبكات المجارير والمياه العلوة مع تجهيزات الضخ ومعطة تنقية المياه القذرة في القاعدة الجوية الشمالية .	٣
14/11/10	14/ 4/11	T7 +094+1	شبكة كمربائية لشبكات الايقاف فـــي القاعدة الجويـة الشماليـة .	
11/ 1/ 1	17/11/11	AY A	اشفال معدنية وهندسة مدنيسة لانشاء ثلاثة مرائب في القاعدة الجوية الشمالية	۰
			ان الاشغال موضوع البند " ه " اعلاه قد لزمت للشركة المذكورة اعلاه بالاشتراك مع شركة الانشاء المعدنية و كانت شركة عبد الرحمن حورية للمقاولات الممثلسة الوحيدة المعتمدة تجاه الادارة .	

روم فسي ۱۹۲۹ / ۱۹۲۹

- N.

310 CREDITS AND THANKS CREDITS AND THANKS

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