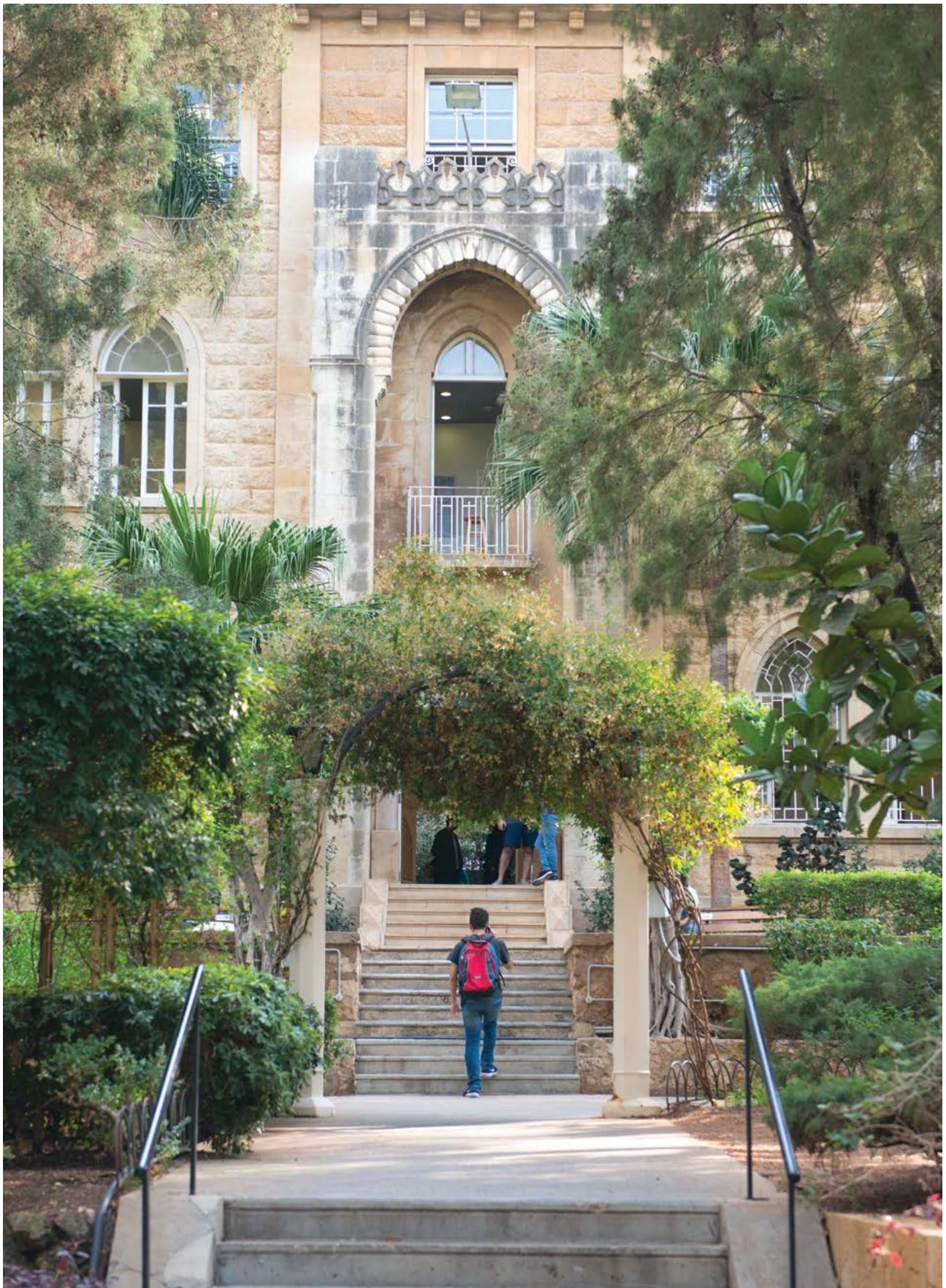


PHYSICAL **FACILITIES**



UNIVERSITY BUILDINGS & GROUNDS

BEIRUT CAMPUS



Land Area	No. of Buildings	Built-up Area	Greenery	Leased Area
27,500m ²	13	73,274m ²	4,550m ²	5,460m ²





Sage Hall – 1933

Area: 2,169 m²

- Classrooms
- Computer Labs
- Laboratories
- Offices



Shannon Hall – 1954

Area: 953 m²

- Early Childhood Center
- Offices



Nicol Hall – 1937

Area: 5,252 m²

- Classrooms
- Computer Labs
- Offices
- Studios
- Conference Room
- Writing Center



University Services – 1955

Area: 1,918 m²

- IT Data Center
- Offices



Irwin Hall – 1947

Area: 4,071 m²

- Auditorium
- Central Administration
- Conference Rooms
- Lounges
- Offices
- Innovation Center



Orme-Gray – 1965

Area: 4,372 m²

- Computer Labs
- Fabrication Lab
- Lounge
- Memorabilia
- Offices
- Studios



Gymnasium – 1970

Area: 1,766 m²

- Basketball Court (Indoor)
- Dancing Room
- Swimming Pool (Indoor)
- Tennis Courts (Outdoor)
- Offices



Safadi Fine Arts – 1970

Area: 3,902 m²

- Lecture Halls
- Classrooms
- Exhibition Room
- Gulbenkian Amphitheater
- Computer Labs
- Studios
- Offices



Wadad Sabbagh Khoury Student Center – 1998

Area: 4,310 m²

- Cafeteria
- Cyber Café
- Classrooms
- Lecture Hall
- Conference Room
- Fitness Center
- Lounges
- Study Room
- Recreational Room
- Offices



Adnan Kassab School of Business – 2005

Area: 5,872 m²

- Classrooms
- Computer Labs
- Lecture Halls
- Hospitality Simulation Labs
- Conference Rooms
- Offices



Riyadh Nassar Library – 2005

Area: 8,178 m²

- Library
- Conference Rooms
- University Archive
- Center for Innovative Learning



Underground Parking – 2005

Area: 11,226 m²

- Technical Area
- Parking



**Gezairi
Building – 2012**
Area: 18,932 m²

Major Renovation in progress
to house the School of Architecture
and Design and provide
common facilities.

The project is expected to be
completed in year 2020.

*LAU provides a perfect
study, safe and friendly
place for an active learning
environment. It is a vibrant mix
of old sandstone buildings
and modern architecture.*



LEASED SPACES

BEIRUT CAMPUS



Atiyah Building

The University leases spaces of 1,488 square meters in a number of privately-held properties to provide office spaces and additional academic spaces.



Hitti Building

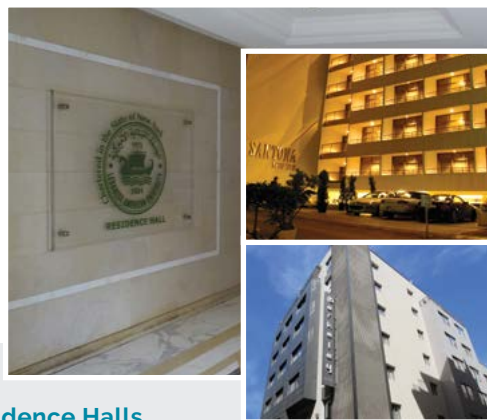
Level 1 of Hitti Building, with an area of 475 square meters, has been leased by LAU.

This space provides additional academic and administrative offices and is housing the Fashion Design program on a temporary basis.



Off-Campus Store

The University leases spaces of 727 square meters to accommodate the University storage needs.



Residence Halls

The Beirut campus is home to three separate residence halls, Santona, Berkeley Hotel, and Capital Suites.

Santona is located off campus within a 7-minute walking distance.

Berkeley Hotel is located within a 10-minute walking distance.

Capital Suites, for men, is just off campus and offers apartment-style living.

UNIVERSITY BUILDINGS & GROUNDS

BYBLOS CAMPUS



Land Area	No. of Buildings	Built-up Area	Greenery
317,643 m ²	18	100,313 m ²	13,690 m ²





Science Building – 1991

Area: 5,365m²

- Central Administration
- Classrooms
- Conference Rooms
- Studios



Architecture Hall – 1996

Area: 2,881m²

- Classrooms
- Labs
- Offices
- Studios



Tohme-Rizk Hall – 1991

Area: 948m²

This building is the first EDGE certified offices' building in Lebanon. This results in reductions of 41% in energy, 29% in water, and 34% in materials embodied energy compared to local benchmarks.



Semaan Melkan Bassil Hall – 1996

Area: 1,213m²

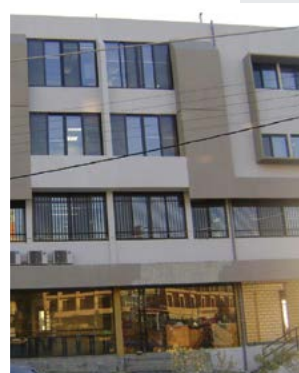
- Offices
- Lounge



Cafeteria

Area: 603m²

- Cafeteria
- Offices



Residence Hall C – 1996

Area: 901m²

- Dormitories
- Lounge
- Study Areas



Zakhem Hall – 1996

Area: 4,418 m²

- Auditorium
- Classrooms
- Exhibition Hall
- Labs
- Lecture Hall
- Offices
- Studios



Residence Hall B – 1998

Area: 11,424 m²

- Dancing Room
- Dormitories
- Writing Center
- Library Stacks
- Music Room
- Parking
- Archive



Student Center – 1997

Area: 1,227 m²

- Fitness Center
- Lounge
- Recreational Area
- Multi-purpose Activities Room
- Offices



Service Center – 2001

Area: 478 m²

- Post Office
- Academic Advising Center



Block A Building – 1998

Area: 8,589 m²

- Classrooms
- Conference Room
- Labs
- Lounge
- Offices



Frem Civic Center – 2010

Area: 5,171 m²

- Classrooms
- Conference Rooms
- Institutes
- Labs
- Lecture Halls
- Lounges
- Multi-purpose Room
- Offices



Animal Facility – 2010

Area: 176 m²

This facility will undergo needed renovation to accommodate the Animal Facility to support the University Research purposes.



Underground Parking – 2014

Area: 18,950 m²

- Parking



Gate House – 2011

Area: 128 m²

- Offices
- Lounge
- Memorabilia Gallery



Engineering Laboratories & Research Center – 2017

Area: 9,704 m²

- Research Labs
- Instructional Labs
- Offices
- Lounges
- Outdoor Cluster Seating



Gilbert & Rose-Marie Chagoury Health Sciences Center – 2013

Area: 15,625 m²

- Auditorium
- Classrooms
- Conference Rooms
- Cyber Café
- Computer Labs
- Laboratories
- Library
- Lounges
- Offices

A dynamic center of teaching and collaborative research, featuring high-end facilities strategically surrounded by the University's engineering departments. Engineering Laboratories and Research Center features high quality materials and systems to provide a safe and sustainable environment to LAU community.

Unique to this building are the designed social spaces that promote collaboration between students.



Library Building – 2018

The design of nowadays featured libraries is evolving and LAU's new Byblos Library Building is no exception to this phenomenon.

Construction commenced in April 2016 and has been substantially completed in June 2018. The new Library provides technology-rich, creative and inspirational spaces to meet current and future needs. The new 6,540 m² cutting-edge Byblos Library Building, with a landscape area of 2,614 m², will be the new focus of the LAU Byblos campus. Whereas in the past collections formed the nucleus of a library, today it is people who are at its heart.

This state-of-the-art facility houses different forms of modern day advancements that have a profound effect on the functions and design of the library. A five storey building with interior spaces that are designed to reinforce user's fluidity and communication, through transparency and openness of the study areas, the many possibilities of chance encounters and exchanges along the open staircase, the lounge corners, as well as the visual connection to the surrounding landscape.

The creation of such a green, high performance and environmentally friendly building provides a safe, inclusive, healthy and pleasant cultural environment for the LAU community while saving energy, water and materials.



The Library and Central Administration Project is targeting: LEED-GOLD Certification





Byblos Library Physical Spaces include:

- Open space reading area accommodating 186 print periodicals
- Archive space
- Compact Shelving (Fixed and Mobile) for 180,000 information records
- Open-space study areas with inspiring furniture and integrated power outlets
- Open Space Computer tables (124 computers)
- Open space private study tables
- Group study rooms with integrated IT equipment and different occupancies
- Multi-purpose rooms with mobile furniture open to the Sunken garden
- Conference room with latest video-conferencing equipment
- Intimate lounges
- EIC room with the latest technology and IT equipment (14 computers)



OTHER LOCATIONS WITHIN LEBANON



Executive Center at Beirut Central District

Spread across 600 square meters in the heart of Beirut, the Executive Center includes fully equipped classrooms, conference room, Institute of Islamic Art & Architecture, lounge and offices to best serve its goal for offering executive learning.



LAU Louis Cardahi Foundation

The Cardahi Family bequeathed the foundation in 2013 to the Lebanese American University, as part of an agreement to enhance its visibility and its cultural role within the city. It houses historical artifacts, artwork, documentary films and a small library to promote respect for Byblos' architectural, cultural and historical legacy.



LAU Medical Center – Rizk Hospital

LAU's expansion into the field of medical education was buttressed by the acquisition of a majority shareholder position in the LAUMC-RH with a land area of 7,900 square meters and total built-up area of 39,901 square meters. It serves as the primary teaching hospital for LAU's Schools of Medicine, Nursing and Pharmacy.

Selected members of the Facilities Management team were dispatched since January 2016 to assist LAUMC-RH in their planned renovation projects, the planning process for future upgrades and expansions, the launching of the design and execution of the Strategic Plan and finally in the Master Planning effort. The urgently needed renovations that were identified in the Strategic Plan are well underway to foster a leading academic medical facility.

Inauguration of 3 new floors to accommodate more patients and create an atmosphere of well-being and comfort to all of them.



INTERNATIONAL LOCATIONS



LAU New York Headquarters and Academic Center

The state-of-the-art facility in New York, inaugurated in September 2013, houses LAU's New York Academic Center. A built-up area of 2,400 square meters accommodates fully equipped instructional resources, library, student lounge and offices. The opening of the New York center exemplified the university's pioneering commitment to global education and cross- cultural understanding.

PARKING SPACES INVENTORY 2017–2018

BEIRUT CAMPUS

The Beirut campus houses several parking lots, including a multi-storey underground car park below the Adnan Kassar School of Business and Riyad Nassar Buildings, as well as an external parking for students, and two parking spaces for LAU shuttles and authorized personnel.



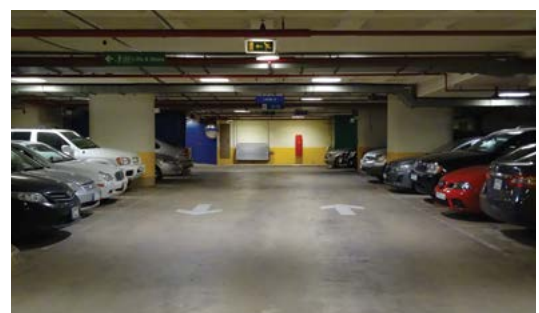
P M Middle Gate Parking
(Students/Faculty/Staff)

P U Underground Parking
(Faculty/Staff)

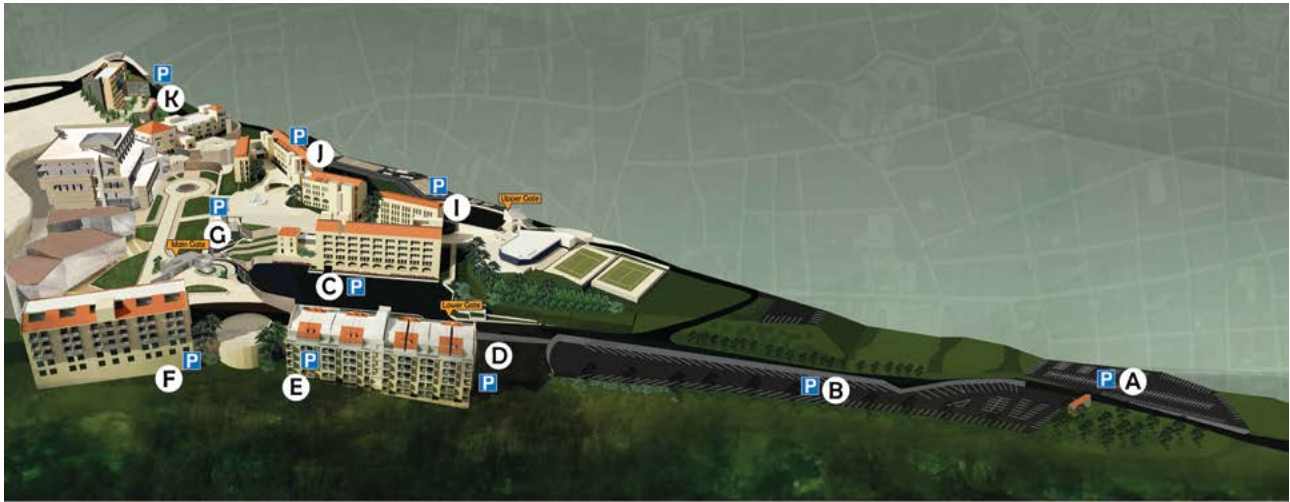
P L-a Lower Gate Parking A
(Authorized Parking)

P L-b Lower Gate Parking B
(LAU Vehicles/Authorized Parking)

Location	Code on Map	No. of Vehicles
Middle Gate Parking (Students/Faculty/Staff)	M	82
Underground Parking (Faculty/Staff)	U	260
Lower Gate Parking A (Authorized Parking)	L-a	14
Lower Gate Parking B (LAU Vehicles/Authorized Parking)	L-b	18
Total No. of Vehicles		374



BYBLOS CAMPUS



Location	Code on Map	No. of Vehicles
Lower Parking	A	180
Lower Parking	B	180
Science Parking	C	94
Residence Hall B Outdoor Parking	D	13
Residence Hall B Underground Parking (Faculty/Staff)	E	79
Block A Underground Parking (Faculty/Staff)	F	18
Byblos Underground Parking (Students/Faculty/Staff)	G	568
Upper Gate (Faculty/Staff)	I	55
Parking in front of Engineering Laboratories & Research Center (Faculty/Staff)	J	44
Parking behind Frem Civic Center (Faculty/Staff)	K	160
Total No. of Vehicles		1,391



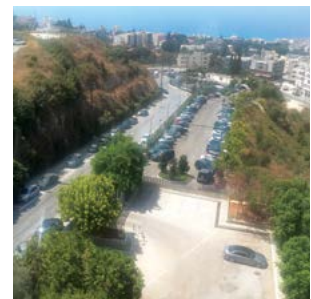
Parking A



Parking B



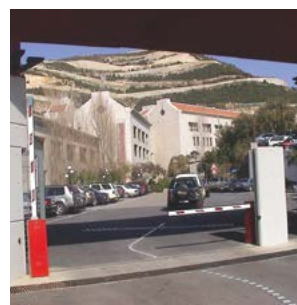
Parking C



Parking Aerial View



Parking G



Parking L



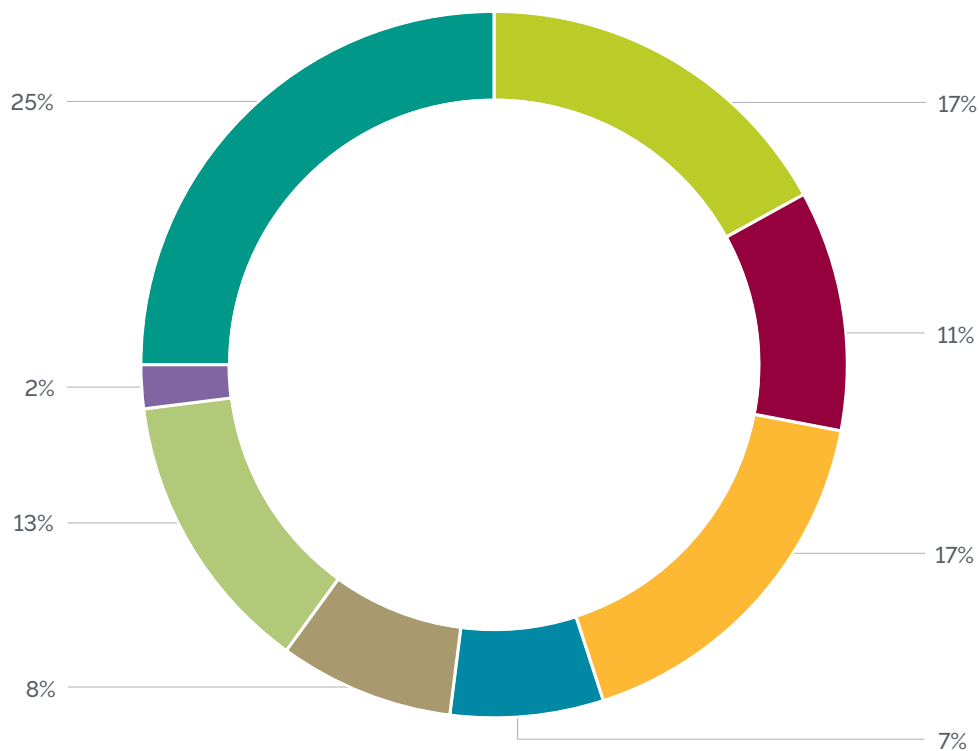
Parking K

SPACE UTILIZATION PER CAMPUS 2017–2018

BEIRUT CAMPUS

Functional Space	Area (m ²)
Academic Space (Classrooms, Lecture Halls, Computer Labs, Laboratories, etc.)	7,006.51
Academic Support Space (Early Childhood Center, Innovation Center, Writing Center, etc.)	568.72
Common Space (Conference Rooms, Meeting Rooms, Lounges, etc.)	3,569.77
Faculty Space (Offices)	2,305.87
Housing Space (Dormitories and related amenities)	1,918.1
Library Space (Study Areas, Group Study Rooms, Stacks, Computer Area, etc.)	4,619.8
Recreational Space (Music Room, Recreational Rooms, Cafeteria, Cyber Café, etc.)	2,908.9
Staff Space (Offices)	4,599.58

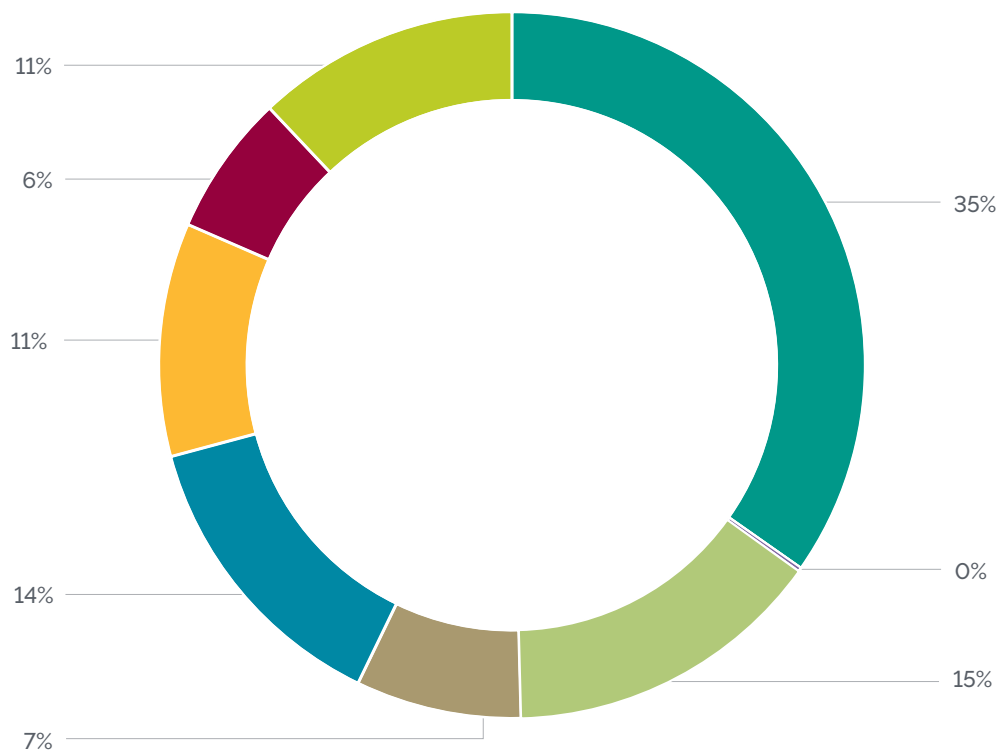
Space Utilization Per Campus (Area m²/Function)



BYBLOS CAMPUS

Functional Space	Area (m²)
Academic Space (Classrooms, Lecture Halls, Computer Labs, Laboratories, etc.)	12,647.49
Academic Support Space (Early Childhood Center, Innovation Center, Writing Center, etc.)	65.3
Common Space (Conference Rooms, Meeting Rooms, Lounges, etc.)	5,340.9
Faculty Space (Offices)	2,759.97
Housing Space (Dormitories and related amenities)	4,973.5
Library Space (Study Areas, Group Study Rooms, Stacks, Computer Area, etc.)	3,888.5
Recreational Space (Music Room, Recreational Rooms, Cafeteria, Cyber cafe, Basketball Court, Tennis Court, etc.)	2,346.3
Staff Space (Offices)	4,383.7

Space Utilization Per Campus (Area m²/Function)



RENOVATION PROJECTS 2017–2018

BEIRUT CAMPUS



Upper Gate Guard House

The scope of work was to refurbish the Upper Gate Guard House by revamping the doors and windows of the two old rooms, creating a kitchenette, re-tiling and painting the area, adding a shelter at both porches, installing A/C units and a new electrical panel-board with all related Civil, MEP and NTM works.



Nicol Hall Ground Floor Classrooms Renovation

The scope of work was to refurbish the four classrooms in Nicol Hall Building and ensure all instructional spaces are in the best conditions. It involved Civil, Mechanical, Electrical and NTM works.



Sage Hall L2 Toilets Refurbishment

The scope of work was to refurbish the old public toilets in Sage Hall's level 2 with all related Civil and MEP works.



Irwin Hall L7 Innovation Center

The scope of work was to refurbish 3 classrooms and the main circulation area in Irwin Hall level 7 to house the new Innovation Center. It involved Civil, MEP and NTM works in addition to furnishing. The Center will host educational and training activities in the field of innovation.



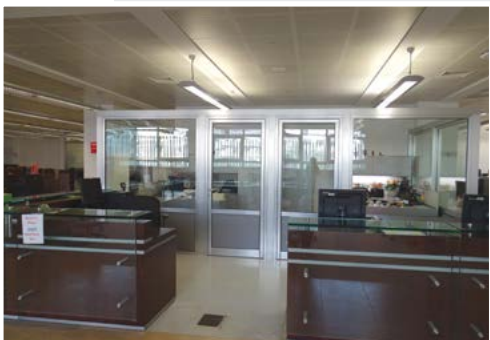
Nicol Hall L2 Toilets

The scope of work included refurbishing the old public toilets in Nicol Hall's level 2 with all related civil and MEP works.



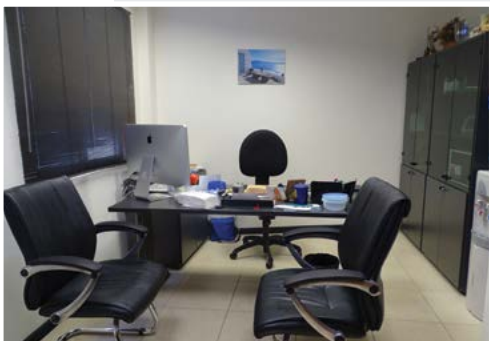
Irwin Hall Canopy

The scope of work included supplying and installing glass canopy for the main entrance of Irwin Hall Building, providing shelter from rain.



Riyad Nassar Library L8 Partitioning

The scope of work included remodeling the existing space by installing partitions and creating two new office spaces in Riyadh Nassar Library's level 8.



University Services L2 IT Security Offices Remodeling

The scope of work included remodeling the existing space to house a new conference room and administrative offices 2501 and 2502 for the IT Department.

RENOVATION PROJECTS 2017–2018

BYBLOS CAMPUS



Gymnasium Expansion

The scope of work was to refurbish the area between the Byblos underground parking and the Student Center into a gym extension; it involved Civil, MEP and NTM works.



Underground Tunnel

The scope of work included refurbishing the existing warehouse and opening the tunnel connecting the Underground Parking to Block A Building. A new underground access has been created to connect Block A to the campus and secure a safe passage for LAU community. The project also included creating an extra office in the Supply Office in Block A L3 and refurbishment of the IT store in Block A L2. It involved Civil, Electrical and NTM works.



Simulation Center Control Room

The scope of work included relocating the IT multimedia room and transforming the space into a control room for the Simulation Center. A B-Line Simulation Management System was installed in the Control Room of the Chagoury Health Sciences Center, Level 5.



Block A 303 and 701 Renovation

The scope of work was to refurbish the old store room 303 to provide a Janitor room and remodel room 701 into an Office for three persons. It involved Civil, Electrical and NTM works.



Underground Parking External Stairs

In order to provide covered access to students in rainy days, the scope of work was to cover the existing staircase by installing aluminum louvers and composite panels (Alucobond) to the elevations, in addition to sandwich panels with aluminum louvers roofing. It involved Civil and MEP works.



Food Innovation Lab

The project's scope was to refurbish part of the vacated space of the Civil Engineering Lab in Science Building level 1 into a new Food Processing Lab. It involved major Civil, MEP and NTM works. This new campus facility was provided to meet the academic requirements of the Nutrition Program of the University.



Traffic Driving Simulator

The scope of work was to refurbish room 2210 and provide a new window/opening with its adjacent classroom and install the related electrical outlets. The work was needed to accommodate the driving simulator, requiring a control room.



Post Office

The scope of work was to refurbish the existing offices in the Library extension level 1 that has been vacated by the Protection office. It included covering the metal walls, refurbishing the existing toilet, replacing the flooring and adding a connecting sliding window between offices, in addition to all related Civil, MEP and NTM works.

UPDATE ON CAPITAL PROJECTS 2017-2018

BEIRUT CAMPUS



Gezairi Building Renovation



The project has been awarded for execution in September 2017, construction work in progress.





Gulbenkian Amphitheater Renovation

The Gulbenkian Amphitheater, located in the Safadi Fine Arts Building, is gearing up for a major renovation project necessary to upgrade and maintain this storied space as one of Lebanon's premier performance venues. The tendering phase has been completed and project awarded for execution.



Irwin Hall Auditorium Renovation

This project includes the renovation of the premises, upgrading the building's systems, renovating the storied Irwin Hall Auditorium and optimizing the utilization of space in order to better accommodate the ever-growing needs of the university's administration. A preliminary design has been prepared and design work is in progress.

UPDATE ON CAPITAL PROJECTS 2017-2018

BYBLOS CAMPUS



Library & Central Administration Buildings

The construction of the Central Administration Building is in its final phase to be completed in year 2019. The Library Building has been completed in year 2018.

The project, with a built-up area of 8,386m², targets USGBC's LEED Gold certification. Various Sustainability features are implemented in this project, resulting in 35% water use reduction and 34.8% savings on energy expenditure.

Facilities Management are committed to developing sustainable buildings that reduce resource consumption, while protecting the environment and providing a high indoor environmental quality.



The Library and Central Administration Project is targeting LEED-GOLD Certification: Sustainable Site/ Water Efficiency/Energy & Atmosphere Measures/Materials & Resources/Indoor Air Quality.





Byblos Infrastructure Utilities

The project has been completed in year 2018 and consists of infrastructure plants and networks with their associated earthworks, civil and finishing works along with a 400 m² maintenance quarter. The utilities supplied to the Campus are chilled water from a 2,300 TR central cooling plant (extendable to 3,700 TR), heating from a 4,400 kW central heating plant (extendable to 7,350 kW), power from a 9 MW central power plant (extendable to 11 MW), irrigation, domestic and soft water as well as fire fighting from a 3,175 M³ central elevated water reservoir all through distribution networks of 2.5 Km long, including a 0.5 Km underground tunnel.



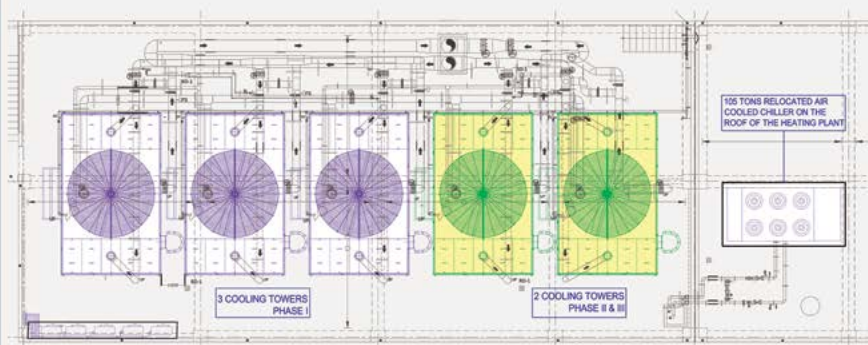
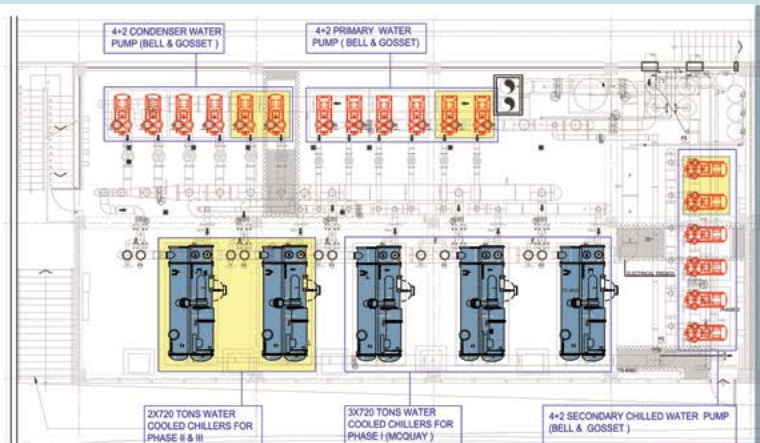
Chilled Water Cooling Plant

CURRENT COOLING CAPACITY (PHASE I): 2,265 TONS R.

- SERVING:
 - FREM CIVIC CENTER
 - GILBERT & ROSE-MARIE CHAGHOURY SCHOOL OF MEDICINE
 - ENGINEERING LABS & RESEARCH CENTER
 - LIBRARY & CENTRAL ADMINISTRATION
- 3 CENTRIFUGAL WATER COOLED CHILLERS (MCQUAY)
 - 1 AIR COOLED CHILLER (CARRIER) FOR NIGHT LOADS.
 - HIGH COP 6.5
 - MODULATING COMPRESSORS DOWN TO 10%
 - DIVERSITY
 - OPTIMIZED ENERGY SAVING SEQUENCE OF OPERATION
- CROSSFLOW COOLING TOWERS (MARLEY) WITH VARIABLE SPEED FANS.
- 4 PRIMARY PUMPS (B&G)
- 4 VARIABLE SPEED SECONDARY PUMPS (B&G)
- 4 CONDENSER PUMPS (B&G)

PLANNED COOLING CAPACITY (PHASE II & III): 3,705 TONS R.

- SERVING:
 - MAIN (OLD) CAMPUS
 - RESIDENCE HALLS
 - FUTURE SPORTS CENTER
- 2 CHILLERS
- 2 COOLING TOWERS
- 2 PUMPS
- 2 PUMPS
- 2 PUMPS





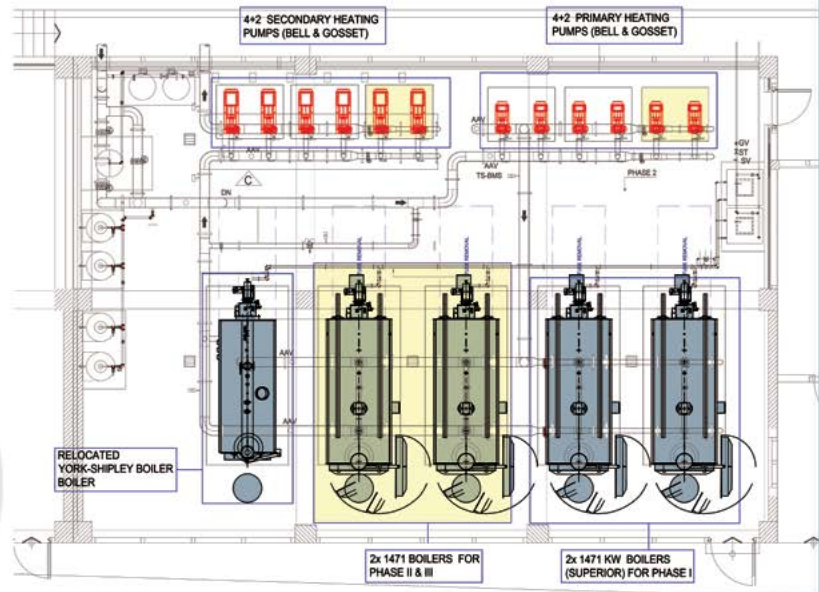
Heating Plant

CURRENT HEATING CAPACITY (PHASE II): 4,400 KW

- SERVING:**
 - FREM CIVIC CENTER
 - GILBERT & ROSE-MARIE CHAGHOORY SCHOOL OF MEDICINE
 - ENGINEERING LABS & RESEARCH CENTER
 - LIBRARY & CENTRAL ADMINISTRATION
- 2 NEW BOILERS(SUPERIOR)+ 1xRELOCATED BOILER(YORK SHIPLEY)
- FEATURES:**
 - HIGH EFFICIENCY 85%
 - PARALLEL POSITIONING CONTROLLER WITH OXYGEN TRIM
 - VARIABLE SPEED DRIVES
 - DIVERSITY & OPTIMIZED ENERGY SAVING SEQUENCE OF OPERATION
- 4 PRIMARY PUMPS (B&G)
- 4 VARIABLE SPEED SECONDARY PUMPS (B&G)
- 2 VERTICAL BALLISTIC FUEL OIL STORAGE TANKS - 140 M3

PLANNED HEATING CAPACITY (PHASE II & III): 7,350KW

- SERVING:**
 - MAIN (OLD)CAMPUS
 - RESIDENCE HALLS
 - FUTURE SPORTS CENTER
- + 2 BOILERS
- + 2 PUMPS
- + 2 PUMPS



Power Plant

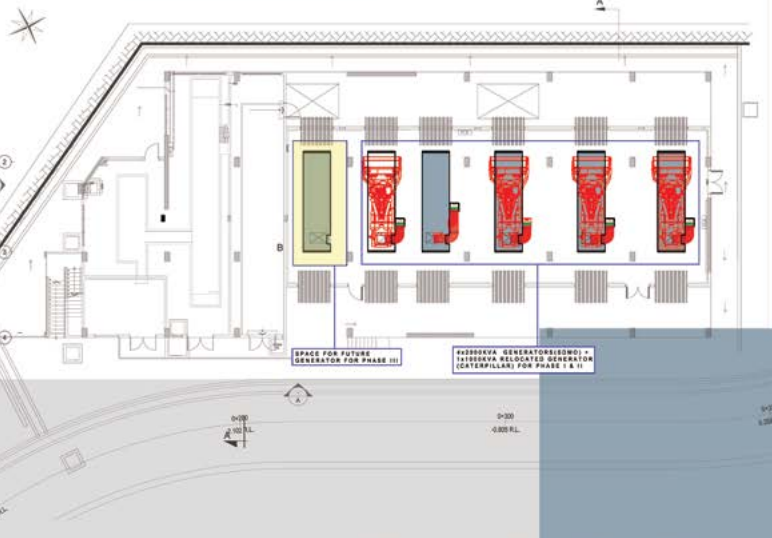
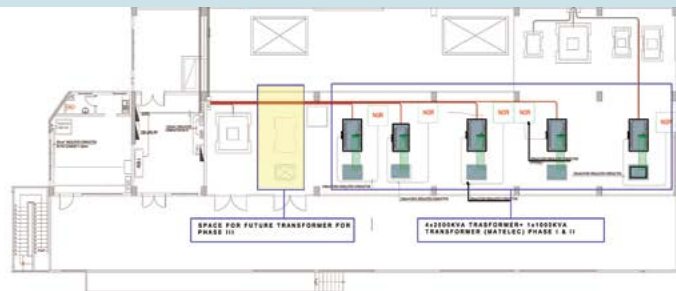
CURRENT CAPACITY (PHASES I&II) 9MW

- SERVING:**
 - MAIN (OLD) CAMPUS
 - FREM CIVIC CENTER
 - GILBERT & ROSE-MARIE CHAGHOORY SCHOOL OF MEDICINE
 - UNDERGROUND PARKING
 - ENGINEERING LABS & RESEARCH CENTER
 - LIBRARY & CENTRAL ADMINISTRATION
 - INFRASTRUCTURE
- 4 x 2000KVA LOW VOLTAGE GENERATORS(SDMO) -380V AND 1x 1000KVA RELOCATED CATERPILLAR GENERATOR
- 4 x 2000 KVA AND 1x1000 KVA STEP UP TRANSFORMERS (MATELEC) 380V / 15-20 KV
- SWITCHGEAR 24KV (SCHNEIDER)
- LOAD MANAGEMENT SCADA SYSTEM (SCHNEIDER)

PLANNED CAPACITY (PHASE III) 11MW

- SERVING:**
 - RESIDENCE HALLS
 - FUTURE SPORT CENTER
- +1 GENERATOR
- +1 TRANSFORMER

POWER UTILITY (EDJ/EDL) 2.5MW +





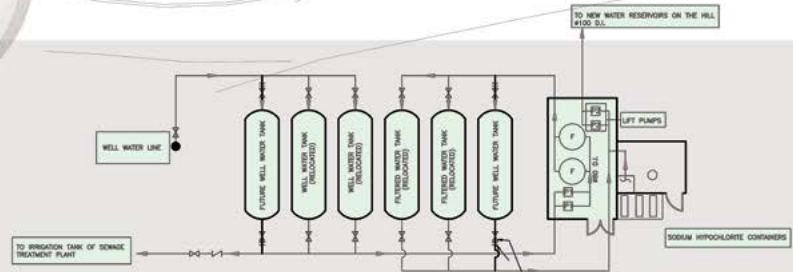
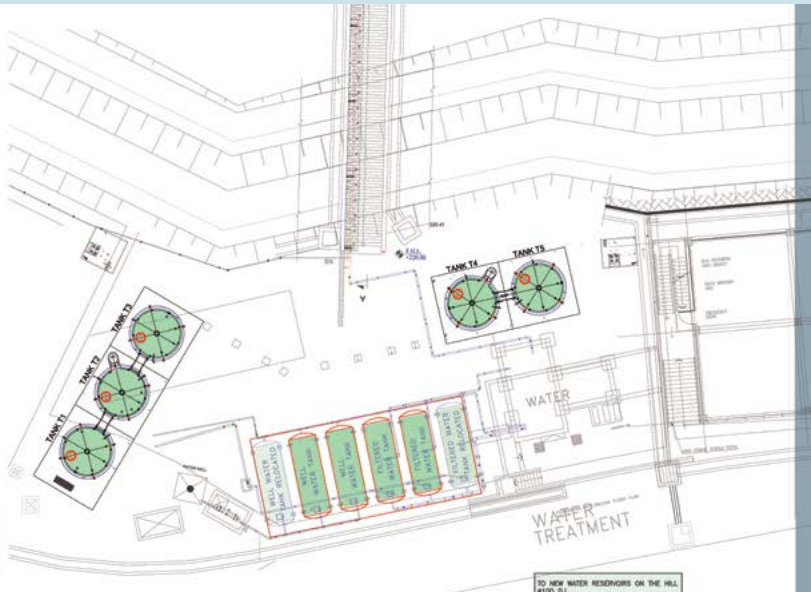
Water Supply & Treatment

60%

- ARTESIAN WELL
 - CURRENT PRODUCTIVITY 42,000 M³/Y
 - (11 MILLION GAL/Y)
 - PUMPFLOW RATE 25 M³/HR
 - AVERAGE OPERATION 8HRS/DAY
- 3 WELL WATER TANKS
 - CAPACITY 30M³ (8000 GAL.)
- FILTRATION SYSTEM:
 - CARBON / MEDIA FILTER / CHLORINATION
- LIFTING PUMPS 40 M³/HR

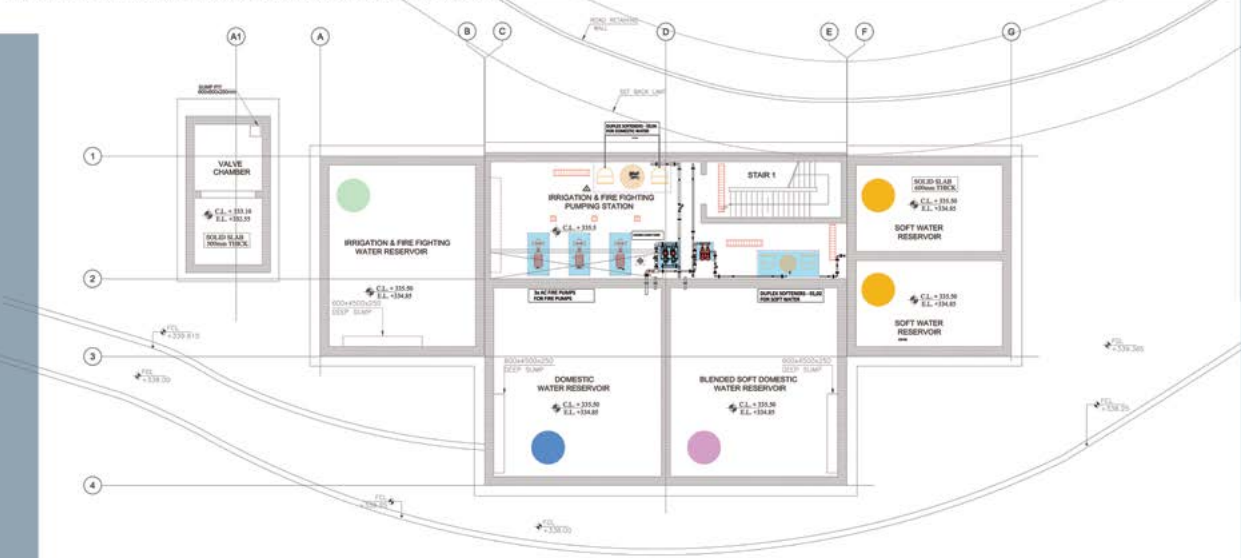
40%

- MUNICIPALITY WATER
 - CONSUMPTION 28,000M³/Y
 - (7.4 MILLION GAL/Y)



Water Tanks Buildings

- IRRIGATION RESERVOIR - 265 M³
- DOMESTIC WATER RESERVOIR - 870 M³
- BLENDED SOFT DOMESTIC WATER RESERVOIRS - 870 M³
- 2 SOFT WATER RESERVOIRS - 700 M³
- AN OVERALL WATER STORAGE OF 2705 M³ (11 DAYS STORAGE)
- DOMESTIC WATER & IRRIGATION SUPPLIED TO THE CAMPUS BY GRAVITY
- A FIRE RESERVE OF 470M³ (AROUND 1.5 HOURS)
- CENTRAL FIREFIGHTING STATION 3X750 GPM PUMPS (AC FIRE) - NFPA





Waste Water Treatment Plant

EXISTING CAPACITY 210 M3/ DAY

- WILL CATER FOR ALL CAMPUS IRRIGATION NEEDS
- 3 WASTE WATER TREATMENT PLANTS (EMCO)
- WATER TREATMENT ROOM FOR EACH PLANT
- MULTIMEDIA & CARBON FILTRATION
CHLORINATION
- IRRIGATION COLLECTION TANK -CAPACITY 50 M3
- IRRIGATION LIFTING PUMPS 9M3/HR

FUTURE EXPANSION TO 420 M3/ DAY

- + 3 WASTE WATER TREATMENT PLANTS



EFFLUENT TANK



Infrastructure Utilities



OPEN CHANNEL



UNDERGROUND TUNNEL

Medium Voltage & Load Management - Low Current - Fiber Optic - Low Voltage Emergency

Firefighting - Potable Water - Irrigation - Tanks Supply Effluent

Heating - Chilled Water



