

# Gulf Construction

Reg No. 1 GC 027 • VOL 45 • No. 01 • JANUARY 2024 • BD3.5 | KD3 | R03.5 | QR35 | SR35 | Dh35

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## BAHRAIN

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Bahrain Bay area  
... a major centre  
of construction  
activity.

Photo: Amjad Ali (courtesy: GDN)

# PATHS TO PROSPERITY

The construction sector in Bahrain is buzzing with anticipation as it awaits the launch of several major projects that promise to transform the country's infrastructure and landscape.

**B**AHRAIN'S construction sector is poised for growth, fuelled by the government's infrastructure investment programme, the rebounding real estate market, and the revival of key cross-border projects.

The government's 2021 Economic Recovery Plan, which included a \$30-billion infrastructure investment programme, has been a key driver of construction activity over the past couple of years. In the coming years, projects such as the Bahrain Metro, the Busaiteen Link (fourth Manama-Muharraq Crossing) and the expansion of the King Fahad Causeway are expected to contribute significantly to the sector's growth and prosperity.

A proposed second causeway link to Saudi Arabia and the revival of the long-awaited Bahrain-Qatar Causeway project will further bolster the sector's outlook.

The real estate market in Bahrain has also seen a strong rebound in 2023, with ris-

ing demand for residential and commercial properties. According to the Survey and Land Registration Bureau (SLRB) real estate transactions reached a value of BD993.15 million (\$2.62 billion) during 2023 up to the end of November. This is expected to continue to support the construction sector, as developers are working to meet the growing demand for new housing and commercial spaces.

In the second quarter of 2023, the construction sector accounted for 6.9 per cent of real GDP, while the contribution of real estate and business activities stood at 5.3 per cent, stated the *Bahrain Economic Quarterly* for Q2 of 2023, produced by the Ministry of Finance and National Economy.

GDP from construction in Bahrain increased to BD239.37 million in the second quarter of 2023 from BD237.34 million in the first quarter of 2023, according to Trading Economics.

Bahrain's construction market size is ex-

pected to grow from \$2.92 billion in 2023 to \$3.58 billion by 2028, at a CAGR of 4.18 per cent during the forecast period, according to a report by Modor Intelligence.

The GCC Development Fund continues to be a key driver for growth in the construction sector, according to the *Bahrain Economic Quarterly*. The report added that progress on major development projects funded by the GCC Development Fund continued during Q2 2023. The total value of projects awarded under the Fund stands at \$6.14 billion.

## BAHRAIN METRO

Work on the first phase of the Bahrain Metro project is expected to move forward with the selection of a developer for the ambitious development. Seven consortiums from Bahrain, China, India, Egypt, Saudi Arabia and Europe are reported to have prequalified to bid for the 35-year concession contract – five years to design,



construct, fund, and 30 years to operate and maintain the metro system.

The first phase covers an estimated length of 29 km with 20 stations, including two interchanges, with two corridors – the Red Line starting from Bahrain International Airport to the Seef District and the Blue Line from Juffair to the Bahrain Metro depot in Isa Town, via Salmaniya, Farouk Junction, Manama and the Diplomatic Area.

“The project’s tender will be issued soon amongst the seven qualified consortiums and we are just awaiting final responses from other ministries and government bodies concerned so we can go ahead,” the Transportation and Telecommunications Ministry’s land transport projects chief Fadwah Zaid told *Gulf Daily News*, our sister publication.

The entire Bahrain Metro project, which will extend 109 km, is being implemented in four phases.

## ROADS & BRIDGES

Bahrain’s government is currently upgrading the existing road network by developing new road corridors to support the rapidly expanding economy of the kingdom. Among the key road projects under way is the Al Fateh Highway Upgrade, which marked its official opening last month. Work is ongoing on the final stages of the project.

Another major project on the anvil is the fourth Manama-Muharraq crossing also referred to as the Busaiteen Link or the North Muharraq Highway Project. In November, the Works Ministry launched tenders for the fourth package of the project that will see a fourth bridge being built between Muharraq and capital Manama and will connect north Busaiteen and Bahrain Bay (see Page 14).

## AIRPORTS & PORTS

Following the recent opening of the new \$1.1-billion terminal at Bahrain International Airport, the Ministry of Transportation and Telecommunications has started the ball rolling on the development of a new greenfield airport project to meet the kingdom’s airport infrastructure needs as the existing site does not allow room for further expansion. The ministry has awarded the contract for the initial study on the estimated \$10-billion project to Netherlands Airport Consultants (Naco).

The proposed new airport will eventually replace Bahrain International Airport (BIA) when the existing airport site can no longer effectively meet the kingdom’s airport infrastructure needs.

## MUHARRAQ DEVELOPMENT PLAN

Bahrain has also recently embarked on the Muharraq Development Plan, which not only aims to preserve the historical pearling city but also provide housing for citizens. The area under development in Muharraq spans 1.4 million sq m and will feature green spaces covering an area of 12,000 sq m, heritage buildings, alongside new and renovated housing units, as well as multi-storey car parks, standard car parks, and walkways.

The development plan is based on five pillars: preserving the historical identity of Muharraq, providing housing units that meet the requirements of Bahraini families, preserving heritage buildings, increasing and diversifying the greenery in the governorate, and developing infrastructure services and public facilities.

In October, HRH the Crown Prince Salman bin Hamad Al Khalifa gave the go-ahead for the launch of Muharraq Development Plan. The project also includes the restoration of the Isa Al Kabeer Palace.

## HOUSING

Bahrain started the distribution of 6,800 homes on National Day (December 16) last year. The delivery of homes to citizens will continue until next month (February).

The units are located in the first phase of East Sitra, Salman Town and East Hidd, which have been major focus areas for the country’s housing projects over the past few years.

To spearhead Bahrain’s housing goals, the Ministry of Housing and Urban Planning (MoHUP) has embarked upon the construction of hundreds of homes for its citizens under the Government Land Development Programme (GLDP) in partnership with the private sector. A total of 19,000 such homes are expected to be built for citizens over 10 years under the programme.

Under the current plans, 1,595 homes are to be built as part of the Madinat Khalifa Project, of which 280 housing units received the go-ahead in Q2 2023. Around 500 additional homes are set to be built in Madinat Salman.

Upon completion of the projects, the developer will pay MoHUP an agreed land value, while the ministry will provide a buy-back arrangement for units unsold after a 24-month sale period. The project company will sell these units commercially to Mazaya and social housing loan-eligible beneficiaries, it added.

Meanwhile, construction work is in progress on the East Hidd project where a further 50 apartment projects have recently been given the go-ahead under the Masaken Housing Project 2.

## POWER & WATER

Bahrain’s overall generation capacity was



The signature bridge of the North Manama Highway project.



boosted to 5,044 MW of electricity and 204 million gallons of desalinated water daily with the launch of the Al Dur 2 Independent Water and Power Project (IWPP) in June 2023.

Built at a total investment of \$1 billion, the IWPP generates 1,500 MW of electricity and processes 50 million gallons of desalinated water daily. It is the first plant in the kingdom connected to the high-voltage electricity transmission network of 400 kV. It was established by Bahrain's Electricity and Water Authority (EWA) in partnership with Acwa Power, a leading Saudi-based developer and operator of power generation, water desalination and green hydrogen plants worldwide, and Japanese companies.

Meanwhile, in line with the kingdom's goal of reaching carbon neutrality by 2060, and achieving sustainable economic development, Bahrain is set to develop a 72 MW solar power project – the largest of its kind in the country – at Sakhir. The project comprises rooftop, ground-mounted and car-park solar systems and electric vehicle charging stations.

Under Bahrain's National Renewable Energy Action Plan, the kingdom aims to achieve 250 MW of its electricity requirements from renewable energy sources by 2025. This solar power project constitutes 28 per cent of this goal.



**Bahrain Metro ... a key project that aims to ease the country's traffic congestion.**

## INDUSTRY

Two of Bahrain's largest industrial facilities have embarked upon major expansion plans, which are now well advanced.

The country's oil refining giant Bapco has reported that steady progress is being made on its multibillion-dollar expansion project being implemented by a number of prestigious international companies, including Technip Energies (Italy), Technicas Reunidas (Spain) and Samsung (South Korea).

The ambitious Bapco Modernization Program (BMP), the largest project ever undertaken in the history of Bahrain, is aimed at increasing the refining capacity,

enhancing the product list and improving energy efficiency so as to make Bahrain Refinery one of the most competitive in the region and one of the most environment-friendly.

This multibillion-dollar venture is the largest capital investment in its 90-year history, according to the *Bahrain News Agency (BNA)*. The project reached a completion rate of around 93 per cent as of July 2023, according to the *Bahrain Economic Quarterly* for Q3.

Meanwhile, major developments have been under way at another industrial giant, Aluminium Bahrain (Alba) – one of

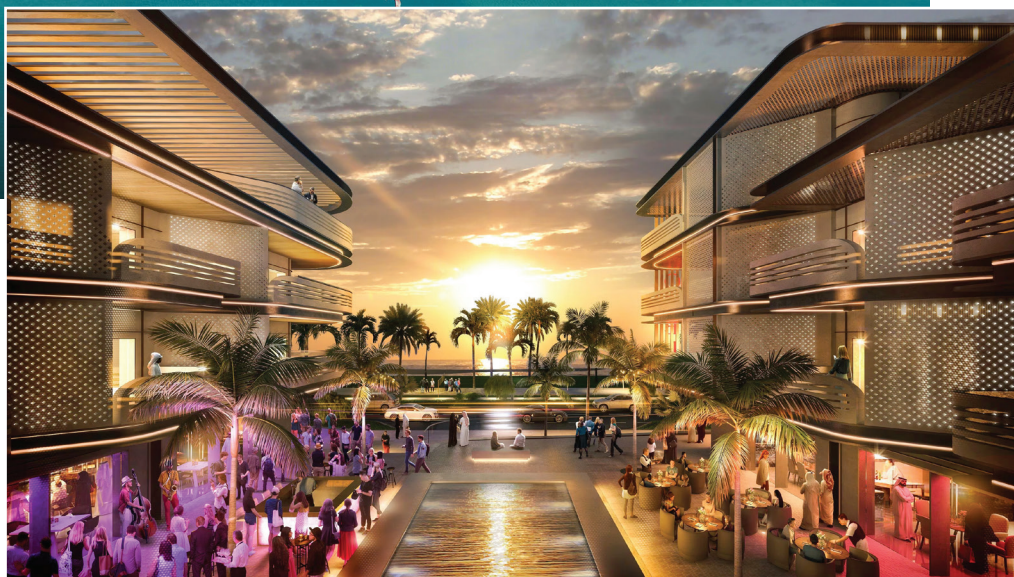


**Marassi Galleria mall ... scheduled to open in February.**





**Bilaj Al Jazayer beachfront project will feature the four-star Avani and the five-star Tivoli (below).**



the world's largest aluminium smelters – which is considering setting up its seventh potline.

Alba has signed up Bechtel, a global leader in engineering, procurement and construction (EPC) sector, to conduct a feasibility study for its Line 7 project. Now due for completion, the study will provide a comprehensive evaluation of all factors to determine the viability of the Line 7, which is expected to have a similar production capacity as Line 6 – within the range of 540,000 tonnes per annum.

Work is currently in progress on Alba's Power Station 5 (PS5) Block 4 Project, which is expected to be operational in Q4 2024. Block 4 will increase the nameplate capacity of the PS5 Complex from 1,800 MW to 2,481 MW and reduce its overall greenhouse gas emissions intensity ratio by 0.5 tonnes of CO<sub>2</sub> per 1 tonne of aluminium produced.

Alba recently marked a new milestone on the project with the recent arrival of Mitsubishi Power's M701JAC Gas Turbine (GT), which is a first-of-its-kind gas turbine in the world manufactured for a primary aluminium smelter.

Alba is also installing 11,300 solar photovoltaic (PV) panels over 37,000 sq m with a capacity of more than 6 MW. The solar farm will consist of around 11,300 panels to be fixed on the rooftop of Alba's car parks and some of its buildings in-

cluding its Spent Pot Lining Treatment (SPL) Plant. The project will generate around 10,539 MWhr per year and reduce 7,591,760 kg of carbon emissions per year – corresponding to a total reduction of 189.79 million kg of carbon emissions over a 25-year span, Alba said.

Among other key expansion projects, Bahrain Steel Company, a fully owned unit of industrial group Foulath Holding Company and a leading producer of high-grade iron pellets, has embarked upon projects worth \$250 million. These include establishing a storage shed and 100 MW solar energy plant on industrial land dedicated for the company's broad operations. The new stockyard shed, due to be completed in 2026, is expected to be the world's largest pre-engineered building, according to the *Gulf Daily News*.

## REAL ESTATE

The real estate and business activities

sector in Bahrain witnessed a 4.9 per cent year-on-year growth in Q2 2023. This growth is driven by a strong increase in the value of real estate trading, which was up by 19 per cent compared to the same period last year, according to the *Bahrain Economic Quarterly* for Q2 of 2023.

This view is echoed by Knight Frank in its latest report *Bahrain Real Estate Market Review – Autumn 2023*, which states that the surge has been driven by the residential sector, which has seen a 5.1 per cent rise in real estate transactions during the first nine months of 2023. Additionally, there has been a marginal increase of 1.9 per cent in the total transaction value, reaching BD814 million, it said.

The sustained relocation of corporate occupants to high-quality Grade A developments has fuelled a strong demand for office space in upscale buildings over the past year, the report added.

With the real estate sector witnessing an



upsurge, a number of developers have embarked on key property projects to meet the demand for commercial and residential space. Significant construction activity can be seen in the heart of the capital Manama, where cranes dot the horizon in the Bahrain Bay area, including at The Avenues-Bahrain that is in the midst of a major expansion as well as at third-party developments within the Bahrain Bay development.

Work on Phase Two of The Avenues-Bahrain – the first commercial and leisure mall of its kind in the kingdom with a unique 1.5-km-long waterfront – kicked off in September 2022 and is due for completion by Q2 2024. Leading Bahraini construction group Nass is the main contractor for the project.

Following the expansion, The Avenues-Bahrain will boost its leasable space by 41,000 sq m, which will include 244 units, two entertainment areas, an ice rink, a supermarket, as well as a basement parking, thus bringing its total leasable area to approximately 80,000 sq m.

A subsidiary of its developer leading Kuwaiti group Mabane, meanwhile, looks set to develop a Bahrain Bay plot, having recently reached a deal to purchase a 9,554-sq-m vacant plot of land there.

Also, at the striking man-made-island development, work is nearing completion on Four Seasons Private Residences Bahrain Bay. Offering a new standard of luxury waterfront living, the development will boast a collection of 112 bespoke homes in the heart of Bahrain Bay. It is being built in co-ordination with Bahrain-based Bayside Developments.

Among other developments at Bahrain Bay, Bahrain-based developer Grnata Group has completed the structural work

on the prestigious 58-storey Golden Gate Towers project and Arcal is set to start on the façade work. The project boasts one of the largest residential buildings in Bahrain (see Page 16).

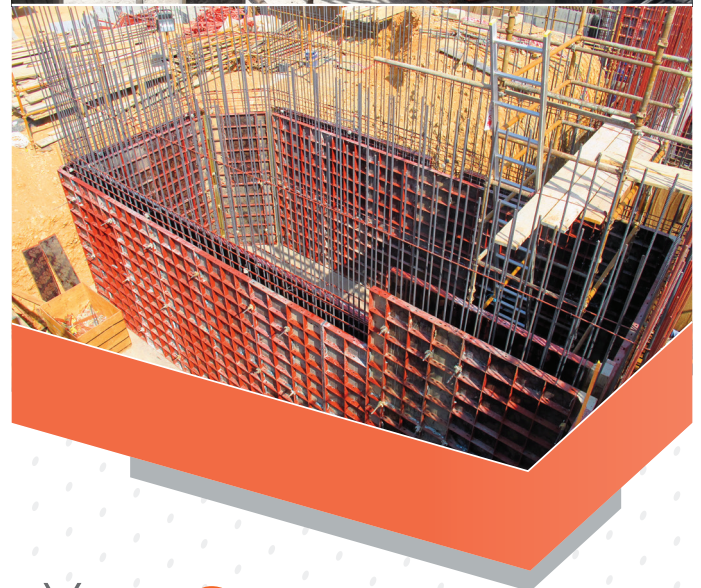
Elsewhere on Manama's eastern coastal strip, the ground has been broken on the BD200-million Bahrain Marina project (see Page 23); while on the northern coast, Infracorp has announced the launch of Marina Bay, a luxurious residential development at Reef Island, which involves an investment of \$200 million. Infracorp has also entered into a partnership with Kempinski Hotels to manage a landmark hotel and residences at one of the three signature towers at Bahrain Harbour, an urban community in the heart of the capital.

Meanwhile, work continues on another landmark beachfront development on Bahrain's southwestern coast at Bilaj Al Jazayer, which is being spearheaded by Bahrain Real Estate Investment Company (Edamah), the real estate arm of Mumtalakat, the kingdom's sovereign wealth fund.

Work is under way on two boutique hotels – the four-star Avani and the five-star Tivoli – within the 1.3-million-sq-m mixed-use sustainable city, which focuses on a holistic beachfront lifestyle. Bilaj Al Jazayer comprises resorts, residential villas and apartments, food and beverage outlets, offices, retail and entertainment establishments, and a 3-km-long beachfront.

The boutique hotels are being built under a partnership deal between Edamah and Thai multi-national hospitality group Minor. Both hotels are scheduled to open in 2025. ■

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# BAHRAIN AT A GLANCE

Package name	Owner	Status*	\$ Million **
100 MW Askar Solar Power Plant	Acwa Power, Almoayyed Contracting Group, Mitsubishi	E&P	130
Al Dur Independent Water & Power Project (IWPP) – Overview	Electricity and Water Authority (EWA)	Project Announced	6,000
Al Dur Independent Water & Power Project (IWPP) – Phase 3 - 1,500 MW Power Plant	EWA	Feasibility Study	2,000
Al Jazayer Beach Development – Overview	Bahrain Real, Estate Investment Company (Edamah)	Construction	1,200
Alba Line 7 Project	Aluminium Bahrain (Alba)	Feasibility Study	3,500
Alba Power Station 5 (PS5) Expansion	Alba	Construction	500
Bahrain Airport Project	Ministry of Transportation and Telecommunication (MTT)	Project Announced	10,000
Bahrain Marina – Phase 1 – Five Star Luxury Hotel	Amlak International Investment	E&P	244
Bahrain Marina – Phase 2 – Aqua Park	Amlak International Investment	EPC ITB	200
Bahrain Metro	MTT	EPC ITB	2,000
Bahrain Offshore Wind Generation Project	EWA	Feasibility Study	100
Busaiteen Link Causeway (New Manama to Muharraq Bridge)	Ministry of Works	Construction	300
Danat Al Bahrain	Durrat Khaleej Al Bahrain Company, Tameer	Construction	1,500
East Sitra Town Development	Ministry of Housing	Construction	700
GCC Railway Network	MTT	Design	15,400
Golden Gate Project	Grnata Group	Construction	212
Harbour Heights	Gulf Holding Company (GHC )	Construction	650
Hawar Development	Edamah	Feasibility Study	930
Integrated Sport City Stadium	Ministry of Youth and Sports Affairs	Design	267.4
King Abdulla Bin Abdulaziz Medical City	Arabian Gulf University (AGU), Ministry of Health	Construction	1,000
King Hamad Causeway (Bahrain-Saudi Link)	MTT	Design	3,500
Layan Project	Bin Faqeeh Real Estate Investment Company	Construction	80
Marassi Al Bahrain	Eagle Hills Diyar	Construction	400
Marsa Al Seef Project	GBCorp (Global Banking Corporation)	Design	2,500
New 400 kV Jasra Grid Substation – 220 kV Feeder Cable Works	EWA	EPC ITB	210
New 400 kV Jasra Grid Substation – 400 kV Feeder Cable Works	EWA	E&P	300
New 400 kV Jasra Grid Substation – Overview	EWA	E&P	670
New 400 kV Jasra Grid Substation – Substation Switchgear, Systems and Civil Works	EWA	EPC ITB	190
New 400 kV Jasra Grid Substation – Transformer and Reactor Works	EWA	EPC ITB	180
North Isa Town Junction (Bahrain Gas Interchange)	Ministry of Works	EPC ITB	52
Offshore Blocks 1,2,3,4 Exploration and Production – Overview	Bapco Energies	Construction	800
Qatar-Bahrain Friendship Causeway	Qatar Bahrain Causeway Foundation	Feasibility Study	4,000
Ras Abu Jarjour Reverse Osmosis Plant Upgrade	EWA	EPC ITB	53
Southwest Sewage Treatment Plant (STP)	Ministry of Works	Design	400
Symphony Al Tijaria Tower	Commercial Real Estate Company	Construction	45
Tubli STP Expansion – Phase 4 – Secondary Treatment Unit Upgrade	Ministry of Works	Construction	410
Waste-to-Energy Plant	Ministry of Works	EPC ITB	1,000
Water Bay	Bin Faqeeh Real Estate Investment Company	Construction	2,500

\* E&P = Engineering and procurement; EPC ITB = Engineering, procurement and construction invitation to bid; PMC = project management consultancy.





Consultant	Contractor	Start date	End date
-	Acwa Power, Al Moayyed Contracting, Mitsui	2017-Q3	2024-Q2
Mott MacDonald Indonesia	Acwa Power, Al Moayyed Contracting, Gulf Investment Corporation (GIC), Hyundai Heavy Industries Company (HHI), Mitsui, Sepco3, Sidem, Siemens, Suez Energy International	2007-Q1	2028-Q3
-	-	2014-Q4	2028-Q3
Haji Hassan Group, Mohammed Salahuddin Consulting and Engineering Bureau (MSCEB)	Al Hassanain, Nass Contracting	2008-Q1	2025-Q1
-	-	2022-Q1	2026-Q4
-	Mitsubishi Corporation, Sepco3	2020-Q3	2024-Q4
-	-	2022-Q4	2030-Q1
Bruce Shaw	MSCEB, Nass Contracting	2014-Q2	2026-Q1
Bruce Shaw	-	2015-Q3	2026-Q1
-	-	2015-Q3	2027-Q3
-	-	2018-Q2	2026-Q1
-	Boskalis Westminster Al-Rushaid, Boskalis Westminster Contracting	2014-Q2	2026-Q1
-	Master Construction Company, Tamcon Contracting, United Marine Trading Company	2006-Q1	2027-Q4
Aecom	CMEC Corporation	2014-Q4	2026-Q4
Khatib & Alami, Systra Consulting	-	2005-Q2	2026-Q4
-	Gnata Group	2018-Q2	2025-Q1
Cowi, KEO International Consultants	Al Hamad Construction & Development Company	2007-Q1	2025-Q1
-	-	2015-Q3	2027-Q1
-	-	2016-Q2	2025-Q4
-	Al Fouzan Trading and General Contracting Company, Hafeera Contracting	2011-Q1	2024-Q1
-	-	2005-Q1	2027-Q1
Projacs International	Al Taitoon Contracting	2014-Q1	2025-Q2
-	Cebarco, Dadabhai Construction, Shapoorji Pallonji & Company	2015-Q2	2025-Q4
Global Real Estate Development Company (Gredco)	-	2009-Q1	2026-Q4
-	-	2023-Q1	2026-Q1
-	-	2022-Q4	2026-Q4
-	Iljin Electric	2022-Q3	2026-Q4
-	-	2022-Q4	2026-Q4
-	-	2022-Q4	2026-Q4
-	-	2015-Q4	2024-Q4
Vinson & Elkins	ENI, Halliburton	2015-Q3	2025-Q4
Halcrow, KBR	-	2001-Q2	2027-Q4
-	-	2023-Q3	2026-Q1
-	-	2018-Q1	2025-Q4
-	Fundament SPC	2016-Q4	2024-Q2
KEO International Consultants, P2M Berlin	Azmeel Contracting & Construction Corporation, Bluewater Bio-Tecton Engineering and Construction, WTE Wassertechnik	2012-Q4	2024-Q1
-	-	2009-Q3	2027-Q1
Projacs International	Al Jameel Construction	2015-Q2	2024-Q2

\*\* List includes projects worth over \$45 million only.

Source: DMS Projects



# Vital roadworks set to ease traffic congestion



The Al-Fateh Highway upgrade project was inaugurated last month.

**W**ITH work drawing to a close on the important arterial road development, Al-Fateh Highway upgrade, motorists in Bahrain eagerly await the flagging off of yet another vital road link in the capital – known variously as the North Manama Highway, the fourth Manama-Muharraq Crossing and the Busaiteen Link.

Tenders for the latest package – the fourth – of the North Manama Highway were launched in November by the Works Ministry and this will see a fourth bridge being built between Muharraq and the capital Manama.

The project scope includes development of Busaiteen Link (Junctions 4 to Junction 5), a signature bridge and related approach ramps, a loop road bridge connecting the new Busaiteen Link to Phase One of the existing North Manama Causeway, according to Bahrain Tender Board. The deadline for submitting the tenders has been set at February 4, 2024.

The strategic project is one of the major infrastructure schemes being financed by the Saudi Fund for Development (SFD).

Reclamation work on the project was launched in 2019, with the first and second phases having been completed in early 2021 by Netherlands-headquartered Boskalis.

The 550-m signature bridge, suspended

93 m above sea level, will be a part of the 7.8-km-long North Muharraq Highway project which also includes the 4.2-km-long Muharraq ring road. It will connect north Busaiteen and Bahrain Bay.

Boskalis' work involved the construction of a large sand causeway for a 5-km-long, six-lane motorway. During the first phase, Boskalis had constructed a 3-km-long embankment. As well as dredging, Phase Two included revetment work. In addition to environmental protection and safety, there was a strong emphasis in the project on community support and stakeholder management, according to Boskalis' website.

To improve the flow of traffic between the districts of Manama and Muharraq, it was decided to build a road in the sea. Boskalis' job was to construct a large sand embankment for this road, it added.

## AL-FATEH HIGHWAY

Meanwhile, work is in the final stages on the Al Fateh Highway Upgrade project, which marked its official opening last month.

The BD40.5-million (\$106.75 million) project, which is financed by the SFD through the GCC Fund, will play a key role in reducing traffic congestion, and alleviating the flow of traffic along the Al-Fateh Highway network.

The project will boost the road's capacity by 61 per cent to handle around 140,000 vehicles per day. It extends from Sheikh Hamad Bridge in the north to Port Salman Interchange in the south, with a length of



The BD40.5-million project aims to ease traffic flow along the Al-Fateh Highway network.

Photo: Jayath Teki



more than 3 km, and includes providing smooth access to the areas of Juffair and Gudaibiya, in addition to the older areas of Juffair, Al Ghuraifa and Umm Al Hasam.

The main works include widening Al-Fateh Highway to four lanes in each direction and involves:

- Constructing a 595-m-long underpass with three lanes in each direction at the intersection of Al-Fateh Highway with Awal Street and Bani Otba Street (the intersection of Al-Fateh Mosque) to move traffic freely between north and south along Al-Fateh street, in addition to an intersection managed by traffic lights at ground level above the underpass. It also includes provision of a free turnaround in both directions and exits to the Juffair and Adliya areas.
- Construction of a 367-m-long, one-way flyover bridge with two lanes to turn left onto Prince Saud Al-Faisal Street towards Al-Fateh suburb, which would provide free movement to traffic heading to Al-Fateh suburb without impacting the main traffic on Al-Fateh Highway.
- Providing a 126.5-m-long U-turn bridge with two lanes near the entrance to Al-Fateh Corniche for northbound traffic. This bridge mainly serves traffic flowing from Juffair via Prince Saud Al-Faisal Street to Al-Fateh Highway heading south towards Salman Port, in addition to traffic heading southwest to Sheikh Daij Street. This bridge is believed to be the first of its kind in Bah-



**The Al-Fateh U-turn flyover was completed in December 2022.**

rain that was constructed as an overhead bridge for reverse circulation only.

The average volume of traffic on Al-Fateh Highway before the start of the project was 87,000 vehicles per day. This is expected to rise to 138,000 vehicles per day in 2030. The average speed of vehicles on the highway before the development works was 40 km/h, which will rise to 55 km/h, an increase of 38 per cent. The maximum speed on the street will be 80 km/h.

In the future, Al Fateh Highway will incorporate one of the main lines of the Bahrain Metro, which will be implemented by the Ministry of Transport and Telecommunication.

The project is part of the Ministry of Works strategy to establish north-south and west-east ring roads in Bahrain. The plan includes the construction of the Manama Ring Road, in order to facilitate the flow of traffic and reduce congestion on the road network.

The project also aims to provide traffic solutions for the Bahrain Bay area and the Bahrain Financial Harbour across the North Manama Bridge, which will relieve pressure and congestion on King Faisal Highway, and then to the Al-Farouq Intersection and Sheikh Khalifa Bin Salman Highway link with Sheikh Isa Bin Salman Highway. ■



**The signature bridge (right) forms a key component of the North Manama Highway that will facilitate traffic flow in the capital and link it with the Busaiteen area of Muharraq.**





## LOFTY HOMES AT BAHRAIN BAY

**S**TRUCTURAL work has been completed on Golden Gate, one of the tallest residential towers and largest residential developments in Bahrain, which aims to offer new heights of luxury and panoramic views across the Bahrain Bay area and the Manama skyline from its lofty glazed facades.

Located on one of the prime and highest density plots within the prestigious Bahrain Bay masterplan, the architectural icon will offer 746 luxury apartments in two towers involving an overall construction area of 144,814 sq m. The 49-storey Tower A will comprise 286 apartments while the 58-storey Tower B will offer 460 homes, an official of the developer Grnata Group, tells *Gulf Construction's* Bina Goveas in an exclusive interview.

These apartments, which overlook the canal promenade, will have access to more than 72 luxury amenities spread across three levels over an area of 7,680 sq m to

provide a resort-style lifestyle and more than 1,000 covered parks.

Elaborating on the work under way on the landmark property, Grnata Group's Public Relationship Manager Eng Zuhair Aldallal says: "Construction work on the Golden Gate project is progressing as per schedule. The structural skeleton has been completed, which comprised 55 per cent of the entire project planning. Internal blockwork is under way and has reached 80 per cent completion. MEP work is ongoing with installation of the fire-fighting system, HVAC ducts, stairwells and lift rooms having recently commenced. Structural glazing work is in the early stages following the appointment of a specialised fabricator and approval of a sample."

"Golden Gate achieved its first milestone of topping out the podium structure in July 2020. Currently, 78 per cent of the blockwork on Tower A, up to level 44, and 85 per cent of the blockwork on Tower B,

up to floor 54, has been erected. Grnata's project team has consistently maintained the highest quality with regard to the materials used and construction processes to ensure that Golden Gate is completed to top quality standards, by the first quarter of 2025," he adds.

Golden Gate has been designed to be energy efficient and sustainable; it features a high-performance facade system, highly-efficient LED lighting throughout the building, and the air-conditioning system of the entire development is connected to Bahrain Bay's central chilled water district cooling system, in addition to conforming with Bahrain Bay Development's (BBD) stringent design and construction regulations, Aldallal says.

Golden Gate boasts separate entrances and lobbies for Towers A and B and offers dedicated coffee shop/restaurants both indoor and outdoor, cinema halls, kids' playrooms and multi-purpose halls, business



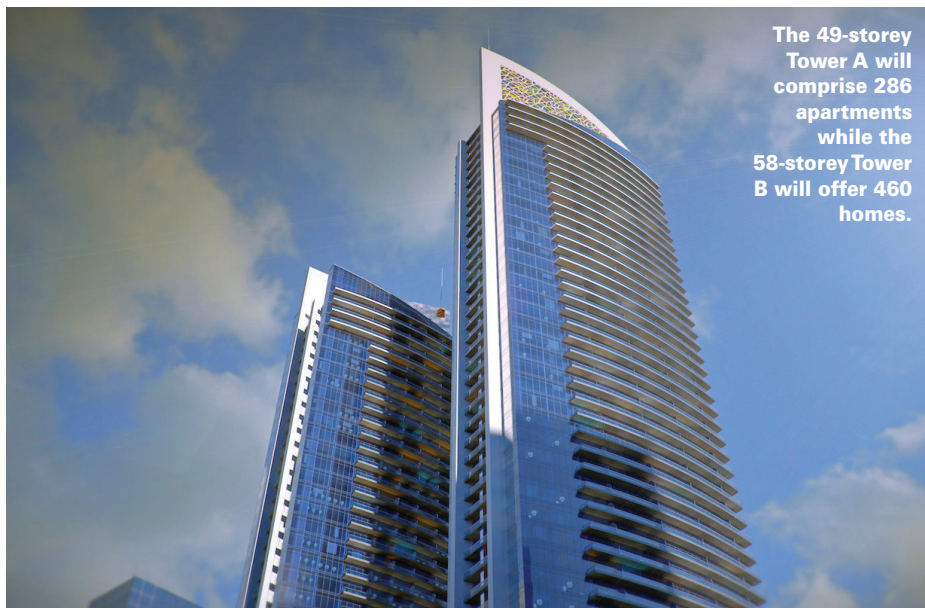
centre and meeting rooms as well as many convenience stores to cater to the needs of its residents. It also hosts fitness and multi-sports facilities such as a jogging track, multi-use sports arena, climbing walls as well as an indoor squash court, separate gymnasiums for men and women, swimming pools and a spa.

The complex will have four pools including one of the largest infinity pools in the country that boasts the best views of the sea, an outdoor kids' pool and two temperature-controlled indoor pools. All outdoor deck areas will have soft and hard landscaped areas with barbecue and dining area facilities, overlooking the infinity pool and water features.

The towers offer beautifully-appointed studio, one-, two-, three- and four-bedroom apartments with superior quality interiors, furniture and fit-outs, kitchen appliances and bathroom accessories as well as home automation and smart solutions. The kitchens boast state-of-the-art European appliances, stone countertops and wooden cabinetry and are finished with beautiful detailing and soft lighting, while bathrooms combine Marvel Lappato polished wall tiles and Evolution Marble Tafurett floor tiles with fittings sourced from leading European brands such as Duravit and Hansgrohe (Germany).

## CONSTRUCTION & CHALLENGES

Golden Gate's towers rise above the largest raft foundations cast in Bahrain's construction industry using 9,200 cu m of special very high-strength readymix concrete and 1,800 tonnes of high-strength reinforcement steel, according to Aldallal. "A



The 49-storey Tower A will comprise 286 apartments while the 58-storey Tower B will offer 460 homes.

total of 377 piles, each driven 23 m deep into reclaimed land, were capped with integrated pile caps to support the 3.2-m-deep raft foundation.

The structure comprises a combination of solid reinforced concrete slabs and post-tensioned floor slabs that sit on framed RCC columns, with lift and stair cores and infill blockwork. The towers have been designed to withstand wind speeds in excess of 120 km/hour with dead and live loads critical combinations to ensure that the sway of the buildings will be well controlled to human comfort tolerance levels.

The construction of the project has been assigned to Grnata Contracting.

Commenting on some of the challenges of the project, Aldallal says: "After Grnata took over Golden Gate from the earlier developers, its management and teams have strived to put the project back

on track and make progress despite the adverse Covid-19 pandemic while performing site operations under stringent health, safety and environmental standards in compliance with directives of the Ministry of Health and Ministry of Works."

Grnata aims to complete the entire Golden Gate project in one phase and hand over fully completed and ready-to-use operable amenities.

"Under Grnata leadership, Golden Gate has successfully crossed important milestones like topping out of the structure and achieving 3 million safe manhours without any loss time accidents and any Covid casualties," he adds.

## BUILDING COMPOSITION

The towers have been built using high-grade readymix concrete, high-strength steel and structural steel inserts in the main columns to minimise structural member sizes in a bid to boost carpet areas for home buyers and to efficiently and safely transfer all building loads including lateral wind loads and earthquake dynamic loads to the foundations, while enabling the required structural movement. Seismic loads have been considered in the structural design as per relevant intentional standards (Zone 1) along with other critical load combinations, Aldallal explains.

"Dynamic force transfer through the Lumped Mass method has been considered in structural design to ensure building movements are accurately assessed to ensure they fall within human comfort



The apartments will feature superior quality interiors, furniture and fit-outs.



levels," he adds.

The high-performance façade system comprises fully glazed curtain-walling, aluminium composite panels (ACP) and granite stone cladding along the base. This includes aesthetically appealing full-height glazing panels, full-height smooth sliding door systems for the balconies, and spaced-out mullions and transoms with the slimmest possible profiles to maximise views out of all apartments in both the towers, Aldallal points out.

"The full glass façade aims to maximise daylight in indoor spaces, while complying with the stringent specifications set by EWA to achieve best possible on heat transmissions U-values, and efficient shading coefficients. Fully weather-tight (air and water), hermetically-sealed double-glazed units featuring high-quality premium proprietary accessories that offer the best acoustic insulation have been tested rigorously before installation," he adds.

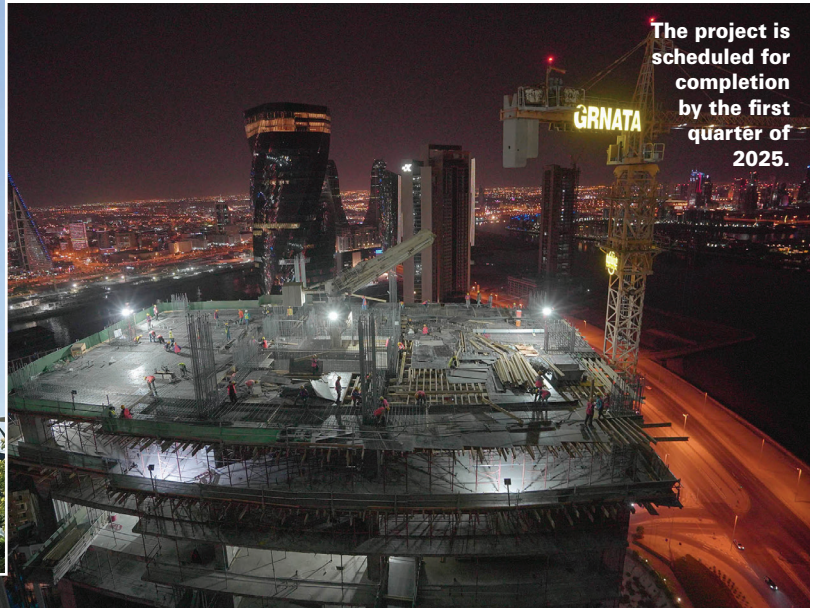
Access to and maintenance and cleaning of the facade will be facilitated by a dedicated highly efficient building façade cleaning system.

Premium Otis elevators, including some of the fastest lifts in Bahrain will ferry residents and visitors at speeds of 4 m/sec within the towers. Tower A will have three passenger lifts and one service lift

and Tower B will have four passenger and one service lift.

"Grnata Contracting aims to equip the lifts with the latest smart features including multi-media screens to keep residents well informed and engaged during vertical movements; the latest access control systems (ACS) and face recognition features; hybrid destination control systems; keypad or sensor-type control panels with antibacterial properties; mobile app controlled lift calling; and remote maintenance capabilities to enhance lift reliability – all as first time installations in Bahrain," he says.

The air-conditioning system will be connected to BBD's district cooling system. Individual fan coil units (FCUs) are provided in the living rooms and each bedroom has contemporary designed thermostats. All flats are provided with treated fresh air, with the intake systems



The project is scheduled for completion by the first quarter of 2025.

### STATISTICS

Readymix concrete used:  
**75,000 cu m**

Steel reinforcement used:  
**12,500 tonnes**

Total post-tensioned slabs:  
**140,000 LM**

Equipment on site:  
**5 tower and luffing cranes,  
10 hoists  
5 diesel generators**

Workforce:  
**500 per day in two shifts**



All outdoor deck areas will have soft and hard landscaped areas.

designed to recover the heat energy from the exhaust air before discharging it into the atmosphere, thus enhancing building services efficiency at Golden Gate Towers.

Golden Gate has received the five-star award for the Best Residential High-Rise Development and The Best Apartment/Condominium Development in Arabian Property Awards 2023-2024, Aldallal remarks.

"Grnata Contracting is proud to have received this prestigious award and regards it as an independent international certification that proves the excellence of the project and its implementation in accordance with the best international specifications, advanced engineering designs, high-end entertainment facilities and modern technology," he concludes. ■





Raffles Al Areen Palace Bahrain ... launched last month.

## Areen to emerge as a new township

**A** GROUND-BREAKING masterplan has been unveiled for Areen that will position the development in Bahrain's southern region as a premier, high-end destination for living, hospitality, entertainment and commerce over a 2-million-sq-m area near Al Areen Wildlife Park.

Areen also marked the opening of a new hotel operated by the internationally acclaimed Raffles Hotels & Resorts brand, with a capacity of 120 keys, on an area exceeding 131,000 sq m, according to GFH Financial Group (GFH), one of the premier financial groups in the Gulf region, which owns the property.

Bahrain's newest five-star hotel, Raffles Al Areen Palace Bahrain, is located at the heart of Areen's masterplan. Designed according to Raffles' exacting standards, the hotel is earmarked to be one of the kingdom's most opulent hospitality offerings, exuding Arabian charm and world-class sophistication and elegance.

The signature hotel hosts 78 villas, which include one- to three-bedroom units, each boasting private pools and gardens. The hotel also features five food and beverage (F&B) outlets, a rooftop restaurant and an award-winning spa.

The masterplan was launched under the

patronage of Shaikh Abdullah bin Hamad bin Isa Al Khalifa, Personal Representative of His Majesty King of Bahrain and the President of the Supreme Council for Environment.

### NEW TOWNSHIP

Located in close proximity to Bahrain International Circuit and Al Dana Amphitheatre, the development will create a new township involving a built-up area of 1.5 million sq m capable of accommodat-

ing about 25,000 people.

It will comprise 16 major clusters, including commercial offices, retail units, restaurants and hotels, health and education facilities, and a range of residential communities. The masterplan has been updated and enhanced to accommodate new health and wellness trends in addition to walkable shopping streets, according to GFH.

At the launch ceremony of the masterplan and the hotel, Hisham Alrayes, Chairman of Al Areen and CEO of GFH, said: "We are delighted to unveil plans for Areen, our unique, high-end, mixed-use development that embodies the finest of Bahraini ingenuity, natural beauty and drive. We are also proud to announce the establishment of Bahrain's newest five-star hotel to be operated by the world-renowned Raffles, who are set to offer visitors from the region and around the world a new standard of excellence and luxury at Areen. Working closely with an outstanding group of partners, we look forward to turning our vision and groundbreaking plan into reality."

Omer Acar, CEO of Raffles Hotels & Resorts, commented: "We are delighted to bring the Raffles brand to the Kingdom of Bahrain through the debut of Raffles Al Areen Palace Bahrain. This captivating resort will feature Raffles' legendary service, culinary excellence, and exceptional amenities, offering guests an inspiring retreat from which they can explore and connect with the country's rich culture."

Areen will continue to develop other projects within the masterplan which will be announced in the near future. ■



The masterplan for the Areen development.



# Work begins on Bahrain Marina development



**T**HE BD200-million (\$530.9 million) Bahrain Marina project celebrated its official ground-breaking recently, marking the launch of the prestigious development on the capital's eastern coast along the arterial road Al Fateh Highway. Comprising the Bahrain Marina Residence, a luxurious hotel, and a pristine beach resort, the iconic development aims to offer a unique blend of living, shopping, scenic beaches and diverse water sports activities.

Spread over a 256,425-sq-m area, the Bahrain Marina project will boast a total of 274 freehold residential units; 192 retail outlets including international shops, luxurious restaurants, renowned cafes and a prestigious commercial complex hosting 33 stores; as well as hotel facilities spread over 68,637 sq m offering 304 rooms.

The development will have 1,769 underground parking spaces; 162 berths for yachts and boats; and a 3,200-sq-m marina clubhouse that will offer entertainment activities and marine programmes.

"The ambiance of Bahrain Marina seamlessly encapsulates the heritage and essence of Bahrain, strategically situated in the heart of the Arabian Gulf. This core concept guided the design of key elements such as the Marina Club building, the scenic corniche, an array of shops and restau-



**The ambiance of Bahrain Marina seamlessly encapsulates the heritage and essence of Bahrain**

rants, and the picturesque sea promenade," says a spokesman for Bahrain Marina Development Company.

The developer has signed up Nass Contracting, a subsidiary of Nass Corporation, as the principal contractor while Mohamed Salahuddin Engineers & Architects (MSCEB) will oversee the construction of the inaugural phase of the project valued at BD92 million.

The project has received outstanding response according to Bahrain Marina Development Company which late last month announced that all the apartments offered in the project's first launch phase – 20 per cent of total number – have been fully booked in record time.

Exceeding all expectations, the success achieved during this period showcases the remarkable demand for the quality stand-

ards and features of the residences, particularly its unique sea views, says Bahrain Marina Development Company.

With its exceptional location on the eastern coastal strip of the capital, Bahrain Marina provides a unique tourist and living destination overlooking the sparkling waters of the Arabian Gulf.

The waterfront residences offer a range of options, including spacious studios, one-, two-, and three-bedroom apartments that are designed with meticulous attention to detail and boast contemporary interiors, high-end finishes, and breathtaking views of the marina and the azure waters beyond. The project will provide world-class amenities, including a marina club, shopping district and entertainment centres.

## AT A GLANCE

Site area:  
**256,425 sq m**

Retail outlets:  
**192**

Underground parking spaces:  
**1,769**

Berths for yachts and boats:  
**162**

Freehold residential units:  
**274**

Hotel area:  
**68,637 sq m**

Hotel accommodation:  
**304 rooms**

Beach resort area:  
**37,814 sq m**

Among the many amenities are a multi-purpose hall, which serves as a versatile event and banquet venue and various recreational areas, including a gaming area and a kids play area, and an aerobic studio.

According to the developer, the project adheres to the highest global standards in achieving social sustainability by using environment-friendly materials, incorporating extensive green spaces, and providing dedicated areas for sports, especially water sports, to ensure that residents of the development enjoy an active lifestyle that enhances their quality of life. ■



# Paschal enhances contractor portfolio

**C**EMENTING its position as Bahrain's go-to formwork partner, Paschal Concrete Forms – the regional arm of German giant Paschal-Werk G Maier – has recently secured the trust of industry leader Cebarco as well as contracting firm AR Momtaz. These additions solidify Paschal's reputation for providing top-notch formwork solutions, further strengthening its grip on the local market.

Its versatile formwork solutions cater to a wide range of project requirements, from high-rises and luxurious mixed-use developments to supermarkets and water tanks.

Leading Bahrain-based contractor Cebarco is utilising Paschal's modular formwork for the construction of columns, cores and basement walls of a mixed-use development for real estate developer One Eleven in central Manama. This mid-rise building encompasses retail and F&B units, a showroom, and a sports court.

AR Momtaz is relying on Paschal's modular formwork for Bahrain Steel expansion, where these solutions are helping shape 36 large foundations for fixing steel columns for the project. Each of these foundations measures 10 m by 6.5 m and has a height of 1.6 m.

Paschal Concrete Forms was established in Bahrain in January 1998, and since then it has emerged as a leading supplier of modern formwork solutions to the region's contractors. As a leading provider of formwork solutions in Bahrain, it is currently collaborating with several renowned contractors on a variety of impressive projects across the kingdom.

After successfully completing Onyx Tower and Onyx Rotana, Kooheji Contractors, a long-standing partner of the company, is utilising Paschal solutions for several landmarks taking shape in Bahrain. Among them is Onyx Skyview, a prestigious 57-storey mixed-use project by Kooheji Development, where a variety of formwork systems are helping optimise efficiency. In the tower area, Paschal's recently introduced NeoR system formwork



**Paschal formwork in use on a waterfront project by Santy Excavation.**

is being used for the core wall and its Multi column (adjustable) formwork is helping shape the columns, while Paschal Deck with props is being utilised for slab formwork. In the parking area, Paschal Modular formwork is deployed for the columns and the core wall.

Kooheji Contractors is also responsible for the construction of Marassi Bay and the twin-tower Marassi Terraces, which are part of the Marassi Al Bahrain project at Diyar Al Muharraq. Paschal's modular formwork is achieving superior concrete finishes for the columns, shear walls, and core walls, while Paschal Deck with props is being used as the slab formwork of these 10-storey towers.

Another landmark project is the 34-storey Wave Tower, an architecturally striking residential tower in Hidd, which showcases the versatility of Paschal's multi column (adjustable) formwork in the construction of columns. Here, the contractor Salah Abdulla Kameshki is also using Paschal Deck with props for the slab formwork.

Other buildings under construction with the help of Paschal formwork include the six-storey Day to Day Centre, a commercial building, where Al Sabah Construction is utilising the modular formwork

for its columns, core walls, and basement walls; a two-storey complex for Al Helli supermarket in Hamala and a four-storey accommodation building within the Aluminium Bahrain (Alba) complex, both of which are being built by Al Taitoon Contracting Company; and a three-storey

building for Nationality, Passports and Residence Affairs (NPRA) authority at Askar and an academic building for Hidd School, which are being constructed by Technical Construction Company.

Meanwhile, Paschal formwork is also being used in other structural elements such

as for the construction of nine water tanks at East Hidd Housing Project and the reinforced concrete (RC) canal protection wall and foundation for the Ras Hayan Development Project. The walls of the nine tanks – which are being erected by Dar Al Khaleej Contracting – range in height from 2.25 m to 3 m. The canal protection wall, which is being built by Santy Excavation & Construction, stretches across 800 linear m and has a height of 1.7 m.

Dar Al Khaleej Contracting has recently completed structural work on a mosque, also in East Hidd, using Paschal Modular systems for the construction of the columns and RC beams; while Santy Excavation & Construction has completed work on a RC boundary wall for EWA's Water Distribution Transmission Project at Askar.

Other projects completed with the help of Paschal systems include District 2, a unique shopping and leisure destination.

Based at BIIP in Hidd, Paschal Concrete Forms has an assembling facility for modular formwork and a stockyard in Bahrain. In addition, with a branch office in Dubai, Paschal is strongly represented in the Middle East and North Africa (Mena) region. ■