

ONESMEC

2016 | Q3 OUR FEATURE | Water Supply & Wastewater





Our News | In Brief



SMEC began this quarter on a high, entering into a partnership with Surbana Jurong, marking a new chapter for both companies. This partnership brings together our complementary strengths and expertise, reflecting the strategic value of our business and its potential to further deliver solutions internationally.

SMEC has also been awarded a number of prestigious projects across several Divisions this quarter. We have continued to strengthen our position in the Australian market, securing a number of notable projects in the Transport sector. In the Asia Pacific Division, SMEC and Surbana Jurong's combined expertise has led to our engagement in one of Hong Kong's largest reclamation projects. This project win marks the first win as a result of the combined expertise of Surbana Jurong and SMEC.

I am delighted to announce that SMEC's rankings in Engineering News Record (ENR) Magazine's 2016 annual design lists have improved. SMEC was ranked at number 48 in the '2016 Top 225 International Design Firms' list, up three places from SMEC's 2015 ranking. SMEC also improved its position in the '2016 Top 150 Global Design Firms' ranking at number 69, a significant increase of seven places from SMEC's 2015 ranking. SMEC also received a High Commendation at the Australian Engineering Excellence Awards (AEEA) for design services undertaken on the Constitution Avenue Upgrade Project in Canberra.

I am also pleased to announce that the iconic Snowy Mountains Hydroelectric Scheme has been added to Australia's National Heritage List, cementing SMEC's place in history.

Andy Goodwin Managing Director and Chief Executive Officer

Local Government Capabilitites Australia

Brisbane City Enterprises (BCE) was established in 1996 by Brisbane City Council to provide consultancy on local government services. Over the last 20 years, BCE has provided expertise in municipal services and local government administration, delivering more than 170 projects in 30 countries. Combining BCE's history with SMEC's global footprint and reputation for delivering technical excellence, BCE will continue to offer best practice consulting services as part of the SMEC Local Government Group.

Gold Coast Light Rail Project Australia



SMEC, in Joint Venture with GHD (GHD SMEC JV), has been appointed as the Independent Verifier (IV) for the A\$420 million Gold Coast Light Rail Stage 2 Project. Stage 1, a 13 km dedicated light rail corridor connecting Griffith University and the Gold Coast University Hospital to Broadbeach, opened to the public in July 2014. The GHD SMEC JV will provide the following services: the verification, review and certification of the design; construction testing and commissioning, and completion of the project works to ensure compliance with the Stage 2 Works Deed; and Independent Certification (IC) services.

Irrigation and Drainage Project Kazakhstan



SMEC will provide project implementation services on a major Irrigation and Drainage (I&D) systems rehabilitation and modernisation project in Kazakhstan. The objective of the project is to improve water supply to approximately 10,000 farms across more than 110,000 hectares. SMEC's services are divided into four components: surveys, investigations, design and construction supervision; institutional development; agricultural development; and project management.

Hydropower Design and Consultation Malaysia



SMEC has been engaged by Tenaga Nasional Berhad to provide consultancy services and construction supervision on the Nenggiri Hydropower Project in Malaysia. Located in the North-Eastern region of the Malaysian peninsular, the Project covers a catchment area of 4,000 km². SMEC's scope of work includes: the reappraisal of the 1986 feasibility study; tender and detail design; and construction supervision.



Major Hydropower Project



SMEC and EGC (a SMEC subsidiary), in a consortium with two Chinese partners, will provide consultancy services on the Karot Hydropower Project in Pakistan. Operated by Karot Power Company (KPCL), a subsidiary of China Three Gorges South Asia Investment Limited, the 720 MW Karot Hydropower Project is a major energy project located on the Jehlum River, 60 km from Islamabad. SMEC's services includes: design review; project and contract management; construction supervision; and stakeholder engagement.

Tinley Manor



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SMEC has been appointed as Preliminary Engineering Services Designer for the Tinley Manor South Banks Development by Tongaat Hulett Developments in KwaZulu-Natal, South Africa. The project comprises 437 hectares of mixed use development located on the North Coast of KwaZulu-Natal and includes leisure and recreational facilities requiring new road and service infrastructure. SMEC's responsibilities include the preliminary design of earthworks, roadways, water reticulation, and storm water and sewage infrastructure.

KwaZulu-Natal Industrial Hubs

South Africa



SMEC has been engaged to prepare a feasibility study on the development of three industrial hubs in KwaZulu-Natal, South Africa. The study comprises: site appraisals; market demand studies; preparation of the business model and operational plans; architectural and concept design; engineering services plans; financial feasibility reports; business plans; and a tenancy model.

Oil and Gas Park Master Plan Uganda



SMEC has been engaged by the Ministry of Energy and Mineral Development of Uganda to develop a Master Plan for an Oil and Gas Industrial Park in Kabale, western Uganda. As a result of the discovery of oil in the region, and the need to maximise value from the resource, the Government of Uganda has allocated approximately 3,000 hectares of land for the project, making it one of the largest industrial parks in the world. During construction the refinery will create approximately 5,000 jobs, and another 650 jobs during operation.

Our News | In Brief



In August 2016, SMEC and Singapore-based Surbana Jurong, one of Asia's leading consultancies in urban development, joined forces to provide global consultancy and engineering expertise in urban, infrastructure and management advisory.

Our new partnership provides a talent pool of 13,000 dedicated people working across a network of 95 offices in 40 countries throughout Asia, Australasia, the Middle East, Africa and the Americas, making SMEC and Surbana Jurong one of Asia's largest urban and infrastructure consulting companies.

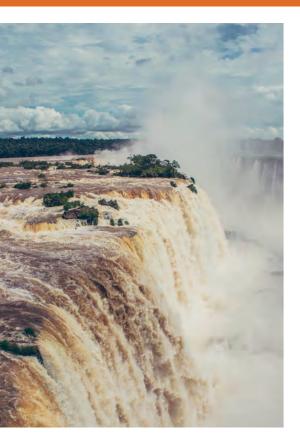
As Asia's consultancy powerhouse for urbanisation, industrial and infrastructure developments, Surbana Jurong have a distinguished track record in shaping Singapore's landscape over the last 50 years.

Commenting on the partnership, Andy Goodwin, SMEC's CEO and Managing Director, said: "This partnership is a reflection of the strategic value of our business and its potential to further deliver solutions internationally. It also signifies recognition of the professional skills at SMEC. The combined entity will not only benefit our clients, but importantly deliver enhanced growth opportunities for our employees and our partners. We are confident that the synergies between SMEC's progressive culture and Surbana Jurong's established company values will result in a mutually beneficial partnership over the long term".

SMEC's strength in major infrastructure projects, coupled with Surbana Jurong's expertise in urban planning, industrial development and management advisory enable us to provide critical value chain services to clients around the world.

For more information about Surbana Jurong, please visit: www.smec.com

Our Feature | Water Supply & Wastewater



SMEC has played a dominant role in the development and management of water supply, wastewater and sanitation systems in developed and developing countries for over 40 years.

Our experience with water supply and wastewater systems is extensive, and ranges from rural, community-based water supply systems, and storm water and wastewater reuse schemes, through to the development of major desalination and water treatment facilities.

SMEC is recognised around the world for delivering sustainable water solutions across every aspect of the water cycle.

We draw on the skills of our global team of designers, planners and engineers to provide cost-effective, innovative and sustainable water solutions through all stages of a project, from concept to completion.

Our global team of engineers provide expert, multidisciplinary water engineering and management services, and adopt a cross-sectoral approach that incorporates community participation, environment and training aspects into all projects.

Technical Expert | Nicholas Rowse, Water and Environment, South Africa



Nicholas has 20 years' experience specialising in water resources engineering. Nicholas' key strengths in Water Resources Management include hydraulic analyses, operational and condition assessments, and valuation of water infrastructure. As Functional General Manager, Waster and Environment, Nicholas is responsible implementing major Water and Environment projects across the Africa Division. Nicholas was the winner of the 2014 SMEC Project of the year, and he holds a Bachelor of Science (Civil Engineering) from the University of Witwatersrand in South Africa and a Masters of Science (Water Resources Engineering and Management) from the University of Stuttgart in Germany.

What aspect of your role do you most enjoy?

Teamwork is definitely the most rewarding and enjoyable aspect of my role. Achieving a shared objective or milestone is immensely rewarding. Over the past two years I have enjoyed working with a really motivated Water and Environment (W&E) team and we appreciate each other's contributions to successful projects. I also enjoy being part of a diverse team at SMEC where I have worked with engineers of different cultures and backgrounds.



Water Supply and Sanitation Improvement Project, Zambia: SMEC was engaged by the Millennium Challenge Account-Zambia Limited (MCA-Zambia) to undertake program management services for citywide water supply, sanitation, and drainage improvement works in the nation's capital city, Lusaka. SMEC's services included: general program management; financial reporting; technical assistance and advice; and support in ensuring MCA-Zambia's compliance with environmental, health and safety standards.

Polokwane Waste Water Treatment Works, South Africa: SMEC prepared preliminary designs for a new 40 Ml/day Waste Water Treatment Works facility (WWTW) on behalf of the Polokwane Municipality, home to more than one million people. In addition to the WWTW design, SMEC was engaged to design the extension of the outfall sewer, which will convey wastewater from the existing Polokwane and Seshego WWTW facilities to the site of the new works.

Western Water and Sanitation Project, Zambia: Zambia's Ministry of Local Government and Housing (MLGH) and the Western Water and Sewerage Company Limited (WWSC) is upgrading, rehabilitating and expanding water supply and sanitation services for 10 towns in Zambia's western province. SMEC's scope of work included: a feasibility study, preliminary and detailed designs, and tender documentation. Upon completion, this project is expected to nearly double the access to and quality of water in the 10 towns.

Lilongwe Water Treatment Plant Project, Malawi: Lilongwe Water Board (LWB) supplies water to the City of Lilongwe with water sourced from two reservoirs on the Lilongwe River. LWB intends to construct a third water treatment plant to meet projected future demand. SMEC's scope of work includes: soil investigation; treatment process evaluation; Environmental and Social Impact Assessments (ESIA); initial cost estimates; economic and financial analysis; and preliminary designs.

The Khulna Water Supply Project, located in southwest Bangladesh, was developed by the Government of Bangladesh to secure a sustainable urban water supply for residents of Khulna.

The Government of Bangladesh Khulna Water Supply and Sewerage Authority (KWASA) aim to implement major capital works to ensure safe drinking for more than 700,000 people.

The Project was jointly financed by the Asian Development Bank (ADB), the Japan International Cooperation Agency (JICA) and the Government of Bangladesh.

Approximately 18% of Khulna's residents have access to a piped water supply, with the remainder of the population using alternative sources such as rivers and ponds.

This project seeks to provide access to safe drinking water, through the rehabilitation and strengthening of the water supply system as part of a long-term investment plan.

Nicholas Rowse - Functional General Manager, Water and Environment, South Africa

What does the future hold for the industry?

I am very optimistic regarding opportunities in the water and environment industry. Rapid urbanisation over recent decades has increased demand on water systems. We need to look at areas of innovation as these are likely to be the industry standard in the next few years. Computeraided design and flow simulation packages have taken a quantum leap in the last decade and SMEC are innovators and early adopters of this technology.

SMEC was engaged to provide management development support to KWASA, to transform the authority into a professionally managed corporate body.

Project work was divided into three components: delivery of augmented and sustainably managed water sources; development of an extended and efficiently managed distribution network; and establishment of professional and sustainable corporate management of KWASA.

SMEC provided mechanical and electrical designs, a corporate business plan, financial management, performance monitoring and support and capacity development to KWASA management.

As a result of the project, 490,000 people have been connected to the network for the first time, and 220,000 people have received improved water supply services.

Our Divisions | Resources

The Resources Division entered this quarter with strong activity across all regions.

In Africa, SMEC won a contract for a major Oil and Gas Industrial Park, in Uganda, while continuing to develop our partner collaborations on developments in Ethiopia.

In Asia Pacific, SMEC has continued work on a number of major mining projects, including Mining Hydro Geology in the Philippines, and Tailings Dam Review in Laos.

Across Australia and New Zealand, the outlook for the Resources division remains strong across the Northern, Central, and Southern regions of Australia, while in South Asia Middle East, we are undertaking business development activities with a number of mining and oil and gas institutions.

This quarter, the Division has worked with Surbana Jurong (SJ) to gain an understanding of potential joint opportunities. We have identified future projects in Liquefied Natural Gas (LNG), petrochemical storage, Master Plan development, petrochemical industrial parks, low-cost design and process services.

John Stocco – Chief Operating Officer, Resources





IndoMet Coal Indonesia

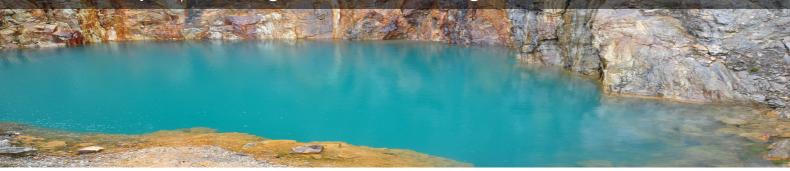
IndoMet Coal is a proposal to develop seven mine sites located in Central and Eastern Kalimantan, Indonesia. SMEC, in partnership with Hatch and Associates, provided project control services to Lampunut Mine study, one of the seven proposed IndoMet Coal sites. SMEC's scope of works included: project planning, cost estimation, procurement, and contracts and document control support. SMEC subsequently provided construction-phase services to one of the mine sites in Central Kalimantan.



Rumaila Oil Field

SMEC Oil & Gas (a SMEC subsidiary) was engaged to provide engineering consultancy services to the China Petroleum Engineering and Construction Corporation (CPECC) for Front End Engineering Design (FEED) of new water processing facilities at the Rumaila Oil Field. Rumaila produces over 1.3 million barrels of oil per day. Project works are divided into three stages: a free water knock out Project; a produced water treatment project; and a high pressure water re-injection pumps project.

Feature Project | Challenger Gold Mine Tailings Dam, Australia



SMEC is providing construction supervision services on a tailings dam at the recently re-opened Challenger Gold Mine, located approximately 600 km north west of Adelaide, Australia.

Tailings dams are typically earth-filled embankment dams designed and constructed for the permanent containment of tailings (mining waste).

The raise of the tailings dam will give the operator approximately 12 months worth of storage.

The mine site functions as a committed environmental leader within the South Australia mining industry. The Challenger Gold Mine utilises innovative landform designs, a progressive rehabilitation strategy, on-going rehabilitation research and environmental monitoring to ensure regulatory compliance during all stages of operations.

The Challenger Gold Deposit was a virgin gold discovery made in 1995. Open pit mining commenced in mid-2002 and plant and infrastructure was soon completed.

SMEC's scope of work includes supervision of the raising of the 2.5 m upstream tailings dam wall, using tailings from the mine itself. Earthworks carried out under SMEC's supervision required the collection of material from waste rock stockpiles and clay materials from a shallow open pit mine which was then placed on the 2 km perimeter of the tailings dam.

Subsequently, waste rock from the underground mine was used to construct the decant causeway and access-road surfaces. Armour rock was then placed on the outside of the previous lift to provide protection from future erosion.

The raise will give the operator approximately 12 months worth of storage but will require additional earthwork raisings as the gold operation continues.

This work is a very important milestone for our Client, who recently purchased this mine as part of a strategy to open two satellite gold mine deposits at the Challenger site.





Pakistan Petroleum Limited Call-out Services Pakistan

SMEC Oil & Gas (a SMEC subsidiary) provided Pakistan Petroleum Limited (PPL) with design, engineering and construction supervision services, for natural gas and Liquefied Petroleum Gas (LPG) processing facilities in Pakistan. SMEC Oil & Gas undertook modification and development works at PPL's operating fields. Scope of works included: studies to improve existing systems; developing designs for improved systems; basic and detailed design; and engineering and associated activities.



Maintenance Procedure USA

SMEC provided assistance with the development of documented procedures for pre-planned corrective maintenance for new onshore oil and gas production facilities, located in Southern Texas, USA. SMEC's scope of works included: developing task lists which detail the sequence, duration and resources necessary; field studies to determine step-by-step job instructions; and resources required to safely and efficiently complete each maintenance activity.

Our Divisions | Australia and New Zealand

The Australia and New Zealand Division has secured a number of significant project wins across all regions this quarter.

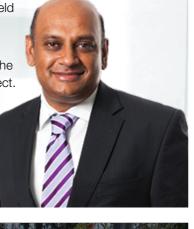
In the Southern Region, SMEC, in partnership with APP, will provide Independent Certification (IC) services on Stage 2 of NorthLink WA in Perth. While in Melbourne, SMEC has been engaged to provide design services on the A\$300 million M80 Ring Road Upgrade Project.

In the Central Region, SMEC is providing Geotechnical Site Investigation work for the Sydney Metro project. SMEC has also been

engaged by the Eurobodalla Shire Council to carry out the detailed design on the first large Greenfield dam project in NSW for over a decade.

In the Northern Region, SMEC and GHD have been appointed as the Independent Verifier for the \$420 million Gold Coast Light Rail Stage 2 Project. This is a high-profile, highly anticipated project which will be completed before the 2018 Gold Coast Commonwealth Games.

Hari Poologasundram - Chief Operating Officer, Australia and New Zealand





Henbury School is a purpose-built public school catering to children with varied physical and learning abilities in both the Middle and Senior Years of schooling.

SMEC was engaged by Halikos Constructions to complete the landscape design for the external classrooms and play spaces throughout the new school grounds.

The design aims to provide learning outcomes that are embedded in play through practical, easily maintainable surface treatments and furniture. These elements enhance the experience, orientation and presentation of the site.

These learning outcomes are realised through attention to the sensory environment, specific engagement activities, scale of space and flexibility of those spaces to allow children to self-regulate their own behaviour and social interaction.

As an initiative to promote and support Indigenous engagement in construction, SMEC, in partnership with Halikos, worked with the Larrakia Development Corporation (LDC) to implement the landscape works.

The LDC provides employment and business opportunities for the Larrakia people, the traditional owners of the lands and waters in and surrounding Darwin.

Henbury School supports student learning via valuable community partnerships.

SMEC worked with 20 Indigenous LDC employees on the project, teaching them how to read landscape construction drawings and project plan for the materials, equipment and tasks for the week. SMEC also provided guidance on professional techniques for the installation of garden beds, topsoil, mulching and planting.



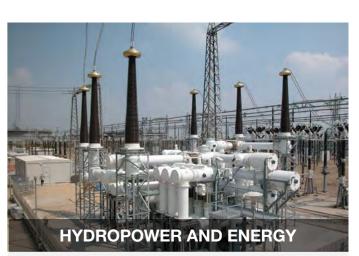
Pacific Highway Upgrade Design New South Wales

SMEC was engaged by Roads and Maritime Service (RMS) to provide detailed design for an 18 km section of the Pacific Highway upgrade between Broadwater and Pimlico near Ballina. This project comprised both the development of a greenfield section and the duplication of an existing section of the highway, in order to upgrade the roadway to a four-lane, dual carriageway. SMEC undertook detailed design of the roadway, 14 bridges, drainage, fauna structures pavements, and road furniture.



Northern Beaches Hospital Project New South Wales

The Northern Beaches Hospital is a major investment in public health infrastructure in the Northern Beaches region of Sydney. SMEC provided environmental and project management services for the Northern Beaches Hospital precinct. SMEC's scope of work included preparation of Environmental Impact Statements (EIS) of hospital and roadworks developments, as well as project management for the development of the reference design, including refinements to mitigate potential environmental impacts.



Epping Traction Substation Project New South Wales

Epping substation is an important traction substation on the Sydney Trains network, supplying traction power to the train lines servicing northern Sydney. The outdoor 33 kV switchgear has reached the end of its life and requires replacing with a new 33 kV VOX outdoor switchgear. SMEC has provided detailed design for this project, in addition to performing a heritage determination and assessment of the current building in order to meet Building Code of Australia standards.



URBAN AND SOCIAL DEVELOPMENT

Oceanside Infrastructure Upgrade Queensland

The new Sunshine Coast Health Precinct will contain the University Public Hospital, Kawana Private Hospital, a mix of commercial and residential developments and a multi-modal transport corridor. SMEC provided consultancy and construction management services for several infrastructure upgrade packages including detailed design, contract administration and construction surveillance for the upgrade of Kawana Way, Lake Kawana Boulevard and a proposed future transit precinct.

Our Divisions | Asia Pacific

This is an exciting time for the Asia Pacific Division as SMEC's partnership with Surbana Jurong (SJ) has created a number of new opportunities, and we are already collaborating with SJ on projects and proposals, as steps are taken to strengthen this business relationship.

SMEC has been engaged to provide tender design services for the Airport Authority Hong Kong (Contract 3206) Main Reclamation Works Project, the largest reclamation undertaken in Hong Kong.

In Papua New Guinea (PNG), SMEC has been contracted by PNG Power Limited to undertake the

detailed design and construction management of the Tsak Valley Electrification Project in Enga Province.

Also this quarter, the Division arranged a small-scale grant from the SMEC Foundation, in partnership with Habitat for Humanity, for a low income housing, water and education project in Northern Vietnam. The Division also facilitated a grant to the Australian Foundation for Fostering Learning in the Philippines, Inc. (AFFLIP) for its health and nutrition project in southern Philippines.

Kalai Arumugam – Chief Operating Officer, Asia Pacific





Macau Light Rail Project Phase 1 Macau

Macau's Light Rail Transit (LRT) system is a driverless rubber-tyred system which will service the residents of Nova Zona of Taipa, Macau. The Phase 1 line will run along elevated guideways and connect major entry-exit points at the Macau Peninsula and Taipa Island residential and tourist areas. SMEC provided environmental monitoring services including air quality, airborne noise, vibration, and ecological monitoring. Upon completion, the LRT will improve access to the Macau East Asian Games Dome.



Flood Estimation Manual Papua New Guinea

SMEC provided consultancy services to the Papua New Guinea (PNG) Department of Works for the review and revision of the PNG Flood Estimation Manual (PNGFEM). SMEC revised and updated the PNGFEM to meet international standards and best practice, providing a standard guideline for estimating rainfall runoff and floods throughout the country. The revised PNGFEM was designed using state-of-the-art software, and assesses the potential impacts of climate change on flood estimation.

Feature Project | Telom Hydroelectric Project, Malaysia



The Telom, Bertam and Lemoi Rivers, located in the Cameron Highlands District of Malaysia, are important water sources providing irrigation for agricultural activities and water for hydroelectricity generation. These three river systems drain the northern, central and southern parts of the district respectively.

SMEC was engaged by the Malaysia's national electricity utility company, Tenaga Nasional Berhad, to carry out a number of feasibility studies on a proposed hydroelectric project on the Telom river.

The proposed Telom Hydroelectric Project includes a reservoir with a surface area of more than 84 km².

The Telom HEP located on the Telom River, will have an installed capacity of 230 MW and will generate approximately 300 GW/h of energy annually.

Power generated from Telom HEP will be evacuated and transmitted to Ulu Jelai substation via a 29 km double circuit 275 kV transmission line.

The proposed Telom HEP structures will include a 112 m high concrete faced rock fill dam and a surface power station accommodating two 115 MW vertical axis Francis turbines.

The proposed reservoir will have gross storage capacity of 2.6 m³ and a two-bay intake adjacent to a 30 m wide un-gated ogee spillway.

Additionally, the project includes two steel surface penstocks, 10 saddle dams, a 10 km long transfer tunnel and a re-regulating weir on Telom River, approximately 5 km downstream of the main dam.

SMEC's scope of work included geotechnical site investigations, cost estimates and economic evaluations. The works also included design of the main dam, power station and diversion scheme and the assessment and analysis of hydrological elements, power intake and waterways.

SMEC's work in the area ensures sustainable development, harnessing the power of the river system while taking into account the ecological and economical considerations necessary for the region.

Bakun Hydroelectric Project Malaysia

Bakun Hydroelectric Project (Bakun HEP) is located in central Sarawak, on the Balui tributary of the Rejang River. The project features a 205 m high concrete faced rock fill dam (the third highest dam of its type in the world) with a twin chute spillway. The power station comprises eight 300 MW nominal capacity generating units in a surface power station structure located at the base of the dam. SMEC provided consultancy services for the management and engineering audit of the Bakun HEP.



Integrated Urban Development Sector Project Tonga

This project aims to improve living standards in Nuku'alofa, Tonga, through improved urban infrastructure development particularly in low-income residential areas. SMEC's scope of work included the rehabilitation of 10 km of primary roads and all existing drains in Nuku'alofa's Central Business District (CBD); construction of 2 km of flood relief drains; development of a storm water drainage maintenance program; construction of eight groundwater monitoring wells; and associated works.

Our Divisions | South Asia and Middle East

The South Asia Middle East Division had a positive start to the quarter with a number of project wins across the Division.

In Pakistan, SMEC was engaged to provide consultancy services for 400 km of the Peshawar to Karachi Motorway Project and commenced work on the Karot 720 MW Hydropower Project.

SMEC has also won a number of projects in Bangladesh including the Multi-Lane Road Tunnel under the Karnaphuli River and the Jamuna Railway Bridge. The Division has also secured several wins in the Indian transport sector. The Division held its Senior Management Meeting in Almaty, Kazakhstan on 25 and 26 August. The theme of this conference was Sustainable Growth and Technical Excellence, and offered an opportunity for senior managers to network, collaborate, and discuss potential growth opportunities.

The Division continues to promote growth through its ongoing collaboration with Surbana Jurong on a number of Smart City Master Planning Opportunities.

George Lasek – Chief Operating Officer, South Asia and Middle East





Delhi Metro Rail Project India

The Delhi Metro is the world's 12th largest metro system, both in terms of length and number of stations, and services Delhi and its satellite cities. SMEC provided detailed design of a section of ballastless track plinth for the network. Design works were carried out on the standard gauge railway tracks of the Mukundpur to Lajpat Nagar line. The Mukundpur to Lajpat Nagar line is comprised of 20 km underground tracks and 40 km elevated tracks, spanning a total length of 60 km.



WATER AND ENVIRONMENT

Colombo Sewerage Service Project Sri Lanka

This project aims to address the current wastewater infrastructure problems in Colombo City by upgrading and rehabilitating sewerage infrastructure in Colombo. SMEC's scope of work included: rehabilitation of 17 pumping stations and 10 km of critical sewers; laying of four new pumping mains and gravity collection pipelines; condition assessment of 125 km of sewer network; and the installation of pre-treatment facilities at pumping stations.



In order to improve transport infrastructure and reduce severe traffic congestion in Dhaka Metropolitan area, the Government of Bangladesh identified the need for the construction of flyover bridges and interchanges in Dhaka.

Dhaka is the capital and largest city of Bangladesh. It is one of the world's most populated cities, with 17 million residents living in the Greater Dhaka Area, resulting in traffic congestion.

The Project will help to improve traffic congestion for the 17 million people living and working in Greater Dhaka Area.

The construction of the 8.7 km Moghbazar-Mouchak flyover is part of the Government's scheme to reduce congestion in the city. Constructed in three parts, the flyover crosses one of the major rail intersections in Dhaka.

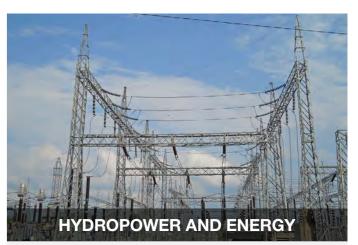
The Local Government Engineering Department (LGED) of Bangladesh engaged SMEC as Engineer's Representative. SMEC supported the LGED through the preparation of project implementation plans and contract documents while overseeing the preparation and processing of tender documents and contract awards.

SMEC reviewed detailed engineering designs and provided supervision and monitoring of construction works.

SMEC's scope of work also included: a number of studies including the necessary sub-soil investigations for design modifications, assessment of adverse social and environmental impacts, detailed engineering and traffic surveys, and traffic impact studies.

In addition, SMEC facilitated capacity development programs for LGED employees and other LGED-managed employees.

Overall the project has improved traffic congestion in the city, helping to facilitate north-south traffic movement across the Greater Dhaka Area.



Matarbari Coal Fired Power Project Bangladesh

SMEC has been engaged by the Coal Power Generation Company of Bangladesh Limited (CPGCBL) to provide consultancy services for the Matarbari Ultra Super Critical Coal Fired Power Project. The Project aims to provide a stable electricity supply in Bangladesh, contributing to sustainable economic growth. SMEC will provide: project management; a rural electrification feasibility study; procurement assistance; construction supervision; and environmental management.



Water Management Improvement Project Kyrgyzstan

The aim of the Water Management Improvement Project is to improve irrigation service delivery and water management in Kyrgyzstan. This will help to increase productivity of irrigated agriculture, generate sustainable long term growth, and improve national water resources governance. SMEC provided the Government of Kyrgyzstan and the Department of Water Resources with institutional development and capacity building services to improve water resources management.

Our Divisions | Africa

The Africa Division has secured a number of project wins across all regions, and once again this quarter the Division has set a new record of contracted work-in-hand, with impressive growth in South Africa and East Africa.

In Namibia, SMEC has been engaged to carry out the rehabilitation and upgrade of the B1 Main Road between Windhoek and Okahandja.

In Zambia, SMEC was appointed to prepare design and tender documents for the rehabilitation and expansion of water supply and sanitation systems. SMEC has strengthened its presence in Lesotho through our recent engagement on a water supply project as well as a water diversion tunnel project.

The Division has had the opportunity to meet with our Surbana Jurong counterparts this quarter, with a contingency from Surbana Jurong's headquarters in Singapore visiting a number of our offices in Africa. The Division was pleased to host our new colleagues, and looks forward to continuing our collaboration and developing our business relationship with our new partner. **Tom Marshall** – Chief Operating Officer, Africa





SMEC was engaged by the University of Pretoria to carry out design and restoration works on the Hartebeestspruit waterway in order to prevent future erosion damage.

The Hartebeestspruit waterway runs through the University's Hillcrest Campus, which is home to the LC de Villiers Sport Grounds and High Performance Centre (HPC), a major elite sports facility in South Africa.

The HPC hosts the Institute for Sport Research, Sport Science and Medical Unit and the Sports Law Centre.

The HPC was established in 2002 and has become the preferred location for the predeparture camps of South African national sporting teams, in addition to being selected by several international federations as their preferred specialisation centre. The training facilities, and surrounds, including the waterways, must be maintained to an excellent, international standard. SMEC's design works included hydraulic modelling of the Hartebeestspruit waterway and restoration works included the construction of a new 13 m spillway.

The waterway's previous spillway had been outflanked, and large scour holes had developed due to fast flowing storm water.

While the spillway was the primary focus of the Project, there were other erosion issues caused by the flow of the river. These included two scour holes, each approximately 1.5 m deep, which were repaired and filled to prevent further erosion and to slow the flow downstream.

The retaining walls alongside the river were also repaired, rebuilt on concrete slabs to prevent any future erosion of the waterway.

SMEC also designed and implemented a debris grate at the outlet of the river. The new design will carry debris over the outlet and prevent blockage of the culvert which leads to flooding and damage to the surrounding area.

The completion of this project will provide improved control of the river flow and help to prevent further erosion.



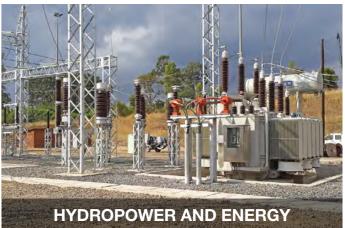
Wild Coast Bridges South Africa

SMEC has been engaged to carry out the design and construction supervision of two major bridges as part of the N2 Wild Coast Toll Road in South Africa. A 410 km road will be constructed between East London and Mtamvuna and will include nine major bridges, reducing travel time by three hours. SMEC's scope of work includes design and construction supervision of two of the bridges: the Msikaba Bridge, spanning 580 m over the Msikaba Gorge, and the Mtentu Bridge, spanning 1.1 km over the Mtentu River.



Muranga Water Supply Project Kenya

The Muranga Independent Community Water Supply project will provide reliable, affordable and sustainable water services to communities situated upstream of the Thika dam, north of Nairobi, Kenya. SMEC provided engineering and construction supervision for the project and undertook civil works for two water treatment plants (each with a capacity of 4,000 m³ per day), treated water transmission mains, storage and break pressure tanks, and other associated works.



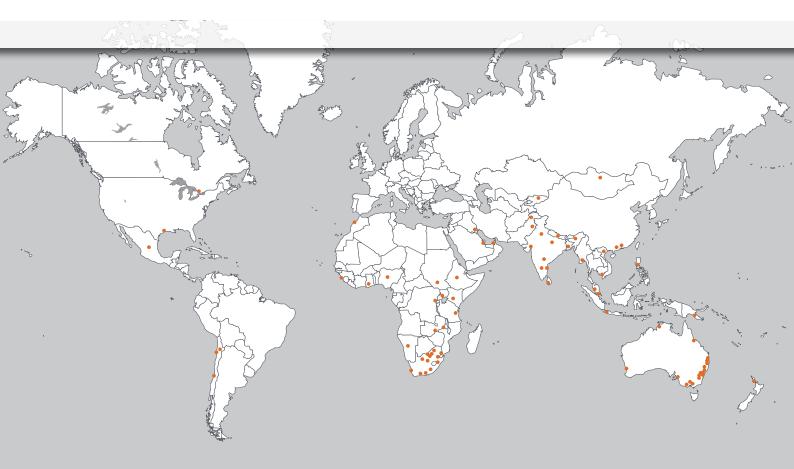
Energy Sector Support Project Malawi

SMEC provided consultancy services to Electricity Supply Corporation of Malawi Limited (ESCOM), as part of the Energy Sector Support Project in Malawi. Funded by the World Bank, this Project is part of the Malawi Government's Growth and Development Strategy. SMEC's services included: project assessment and design; preparation of tender documents; bid evaluation, construction and contract supervision; materials management; and post construction defects liability supervision.



Tanzania Strategic Cities Project Tanzania

The Tanzania Strategic Cities Project is a major social development project funded in part by the World Bank. The objective of the project is to improve the quality of basic urban services in participating Local Government Authorities (LGAs). SMEC was engaged to provide consultancy services for the rehabilitation and expansion of urban infrastructure, and facilitate institutional strengthening activities to improve the fiscal and management capabilities of the participating LGAs.



ABOUT SMEC

SMEC is recognised around the world for providing high-quality consulting services on major physical and social infrastructure projects.

SMEC's origins date back to the iconic Snowy Mountains Hydroelectric Scheme in 1949. Today SMEC is consistently recognised for technical excellence and design innovation by the world's leading engineering bodies. Striving to deliver service excellence across a range of industry sectors, SMEC has developed and refined a core service offering covering the lifecycle of a project.

With over 5,800 committed people working within an established network of over 80 offices throughout Australia, Asia Pacific, the Middle East, South Asia, Africa, North and South America, SMEC provides professional services that contribute to national development in some of the world's fastest growing economies.

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