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FGE 007	6	2440 x 1220	22.33		
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FGE012	8	2440 x 1220	29.7		
FGE 013	9	2440 x 1220	33.5		
FGE014	10	2440 x 1220	37.27		
FGE 015	-11	2440 x 1220	40.97	Partition	
FGE 016	12	2440 x 1220	44.67		
FGE 017	13	2440 x 1220	48,4		
FGE 018	14	2440 x 1220	.52.1		14.2
FGE 019	16	2440 x 1220	55.8		1 March
FGE 020	16	2440 x 1220	59.5		
FGE 021	17	2440 x 1220	63.3		ELTORO
FGE 022	18	2440 x 1220	67		Seeing Tomotrow and Devo

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<u>C O N T E N T</u>

Editor's Note **05**











SRI LANKA EMBARKS ON ITS FIRST RAPID TRANSIT SYSTEM

To the peak through innovative spirit





26 - 36 **LAND MARKS Buildings in Colombo's Colonial Architecture**







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71



Thailand makes a major plan to save the city from sinking





Why not foreign companies go for joint ventures with local counterparts?



SRI LANKA CONSTRUCTION TODAY

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Editor's Note

Sri Lanka Construction Today by the Ceylon Institute of Builders took the challenge of making available a collection of rich and vibrant articles highlighting the issues which the construction industry is facing at present. At the same time, we also took an effort to promote the sustainability in construction industry with the green concept. We are happy to announce that we have completed 24 months in brave and bold endeavour.

Meanwhile, The CIOB collaboration with the Building Economics and Management Research Unit (BEMRU), Department of Building Economics, University of Moratuwa, successfully held the 7th World Construction Symposium in Colombo providing a forum for researchers and practitioners in the area of sustainable construction worldwide to share their knowledge, experience and research findings.

In Sri Lanka, we have not given an adequate attention to identify the gap between the development and the politics. Everyone agrees that development is a complex business which should not be tackled in isolation from the political dynamics in a country. Some say "Development is essentially a locally driven political process." However, what we should understand is a better understanding of the politics strengthens the foundation of the development.

The stock brokering firm, First Capital Equities, emphasized that the construction industry saw a slowdown back in 2015, when the newly elected government took some time to make final decisions on several previously initiated high-profile construction projects. Mixing politics with development activities is anyway not a new experience for Sri Lankans. But, history again and again gives us the same bitter experience. Although it is too premature to say that the recent political changes in the country make any direct effect on the construction industry, the policymakers and the lawmakers can't just wash their hands for the disruption of the development activities for political agendas.

Construction sector is a critical sector for the Sri Lankan economy. Following the end of the humanitarian operation against the separatist terrorism in the country construction sector experienced fast pace growth for over a decade. The industry is, at present, estimated to be work around US 8 billion dollars and the construction sector is entrusted to play a key role in the much expected transformation.

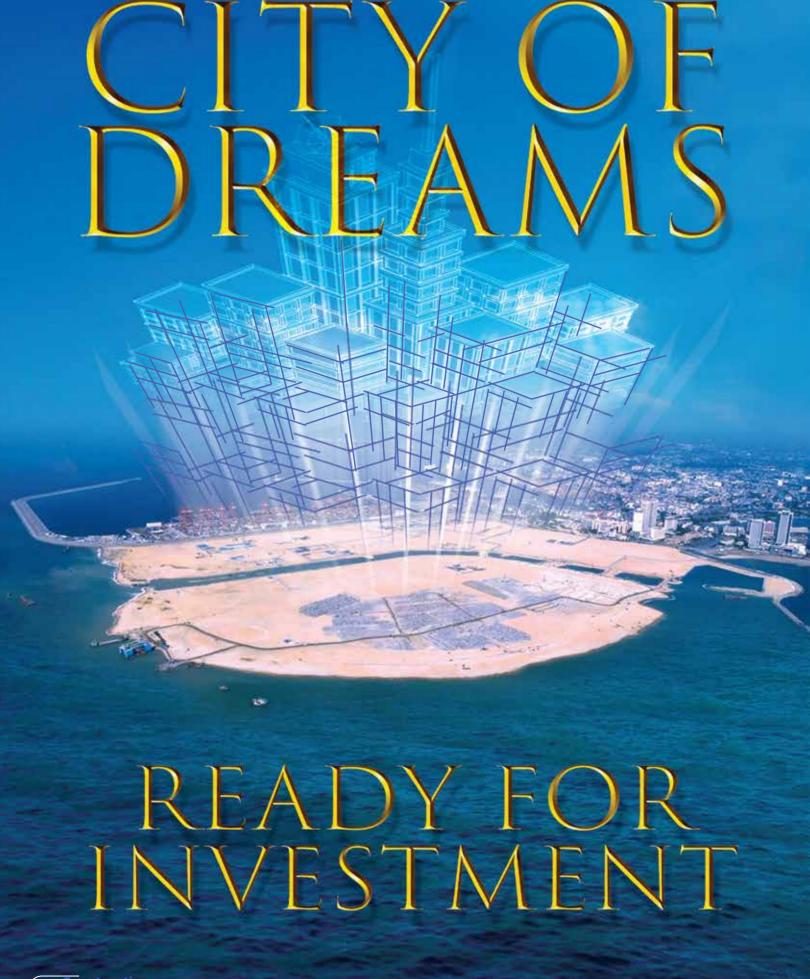
According to a very recent survey by Research Intelligence Unit (RIU) among multifarious construction industry companies operating in Sri Lanka, labour shortage, high land prices and heavy taxation on construction materiel are the top three issues faced by the construction industry. Constructors also point out that it has blocked them from offering attractive packages for the customers. However, the industry as a whole is committed to the idea of green technologies and it is possible to reduce environmental impact of the construction industry, save money and create lasting value.

Introduction of sustainable construction is a new concept for the industry for achieving sustainable development from the various environmental, social-economics and cultural facets. It has become a focal point for countries worldwide, as the earth's resources are under severe pressure due to increase in population and economic expansion. The construction sector has seen to be the primary beneficiary with the blooming of many new infrastructure projects that serves the rapid urban development. Therefore the construction industry is a vital sector in the Sri Lankan economy and it is 4th largest sector, contributing 6-7% to GDP over past decade in Sri Lanka.

'Sri Lanka Construction Today' again remind that we will make opportunities for construction industry leaders, engineers, architects, designers, academics in the field, contractors, material providers, and all to speak up their insights and issues in the field. When it comes to future issues, we will focus on many topics on industry regulations and the environment, financing trends, equipment maintenance, work force retention and many irrespective of those issues are residential, industrial and commercial constructions or buildings related.

This is your magazine and your ideas to fill it with innovative creative thinking will be a blessing. 'Sri Lanka Construction Today' is ready to be a platform for your constructive thoughts for the construction industry.

> Construction TODAY SRI LANKA 05



The ceremony to mark the completion of reclamation work at the Port City Colombo was held on January 16th, this year. 'XinHar Long', the last of the four state of the art dredgers used for the sand mining operation left the project site during the ceremony.

269 hectares of land from the ocean has been fully reclaimed, and the ground is now set for the second phase of the project. The Port City Colombo will be made up of five different precincts including the Financial District, Central Park Living, Island Living, The Marina, and the International Island.

The new city will function as a special jurisdiction area with its own economic and commercial laws to facilitate operations of global multinational corporations. The construction of the Colombo Port City project was launched on the 16th of September 2014, under the patronage of the Chinese President Xi Jinping and former President Mahinda Rajapaksa.

A highway adjoining Katunayake is also due to be constructed in the port city which consists of several state of the art facilities. The sale of land blocks at Colombo Port City (CPC) will commence after June this year following the conclusion of the legal framework that governs the reclaimed land and special incentive packages for investors.

CCC is expected to invest US \$ 1.4 billion in reclaiming land, constructing the breakwater barrier and in infrastructure development. CHEC Port has already begun work on ground improvement, construction of marina seawall, land formation and construction of marine protection structures, under the second stage.

In addition to CCC, the government is also expected to invest US \$ 1 billion in utility facilities in CPC. Last year, CHEC Port City Colombo (Pvt) Ltd., presented the Development Control Regulations (DCR) for the Colombo Port City project to the authorities, signaling for the marketing team to sell it as real estate.

Minister of Megapolis and Western Development Patali Champika Ranawaka, Chinese Ambassador in Sri Lanka Cheng Xueyuan and several other dignitaries historical moment which took place in Colombo.



Paving the way for a greener future

"Built Asset Sustainability: Rethinking Design, Construction and Operations"

The 7th World Construction Symposium was successfully held under the theme of "Built Asset Sustainability: Rethinking Design, Construction and Operations", from 29th June and 01st July 2018 at Hotel Galadari, Colombo, Sri Lanka. The Ceylon Institute of Builders (CIOB) in collaboration with Building Economics and Management Research Unit (BEMRU) of the Department of Building Economics, University of Moratuwa organised the symposium with Liverpool John Moores University, United Kingdom, Centre for Innovation in Construction and Infrastructure Development (CICID), The University of Hong Kong, Hong Kong, Indian Institute of Technology Madras (IIT Madras), Western Sydney University, Australia, East Carolina University, United States of America, Colombo School of Construction Technology (CSCT) and CIB-W122: Public Private Partnership as associate partners.

Built Environment Project and Asset Management (BEPAM), a journal published by Emerald Group Publishing has arranged several awards and a special issue based on the best research papers presented at the symposium. CIOB President Dr. Rohan Karunaratne lighting the traditional oil lamp at the symposium



A section of the head table on the first day of the symposium

This annual gathering provides a forum to exchange ideas between construction researchers covering all aspects of sustainability with a view of fostering a better link between industry and academia. In addition, it is also an ideal opportunity to discuss innovative directions in sustainability, enabling Sri Lankan researchers to enrich current knowledge to avoid reinventing of the wheel.

The 7th Symposium was inaugurated with the presence of Chief Guest, Hon Malik Samarawickrama, Minister of Development Strategies and International Trade and guest of honour was Prof. K.K.C.K. Perera, Vice Chancellor, University of Moratuwa.

Prof. Peter McDermott, Professor of Construction Management in the School of the Built Environment, at the University of Salford delivered the keynote address under the theme of "Putting sustainability at the heart of an industrial strategy: Social value for the construction and infrastructure sectors".

Sixty three (63) papers were presented during the Symposium by both local and international scholars pertaining to the main theme. Many researchers, industry practitioners and students from Sri Lanka, India, Australia, New Zealand, United Kingdom, Singapore, China, Oman, Nigeria and United Arab Emirates shared their ideas of sustainability in built environment. The diversity of participants stimulated a rich debate on the topics in the agenda.

During the second day, the symposium saw an interesting participatory panel discussion on "Challenges for Creating Liveable Cities". Panel discussion was moderated by Prof. Terrance Fernando from University of Salford with the panellists comprising of eminent academics and industry practitioners such as Prof. P.K.S. Mahanama, Prof. Srinath Perera, Prof. Siri Hettige, Prof. Sherif Mohamed, Ms. Anoja Seneviratne and Ms. Chethika Gunasiri

The symposium concluded with a fellowship and awards night with the presence of Hon. Sarath Amunugama, Minister of Science, Technology, Research, Skills Development & Vocational Training and Kandyan Heritage.



Department Head of Building Economics of the Moratuwa University Dr. Yasangika Sandanayake welcoming guest speaker Prof. Peter McDermott from the University of Salford



The Front Desk - Registering the attendance



Minister of Strategies and International Trade Malik Samarawickrama sharing his thoughts at the symposium The awards night also appreciated the authors who presented best papers.

BEPAM Journal Best Paper Award:

▲ Devindi Geekiyanage and Thanuja Ramachandra for the paper titled Significant Factors Influencing Operational and Maintenance (O&M) Costs of Commercial Buildings

BEPAM Journal Highly Commended Paper Awards:

▲ Bon-Gang Hwang, Ming Shan and Sijia Xie for the paper titled Assessment of Green Retrofit of Existing Mature Residential Estates in Singapore

▲ R.R. Omprakash, Sivakumar Palaniappan and Pandian Ganesh Kumar for the paper titled Techno-Economic Feasibility Study of Using Solar Energy for Operating Sewage Treatment Plants

CIOB Best Paper Award:

▲ *M.F.F. Fasna and Sachie Gunatilake* for the paper titled Factors Affecting the Successful Adoption and Implementation of Energy Retrofits in Existing Hotel Buildings

CIOB Best Presenter Award:

▲ *Sherif Mohamed* for the presentation of paper titled Stakeholder Management in Complex Projects

The 7th World Construction Symposium 2018 can be seen as yet another highly successful event for the organizers, particularly for Building Economics and Management Research Unit (BEMRU) of the Department of Building Economics, University of Moratuwa, with a remarkable participation by both local and international academics and industry experts presenting papers addressing a range of sustainability issues within the construction industry.

"As the chairman of the symposium from its beginning to now I am happy to say that The 7th World Construction Symposium 2018 was another successful event for the CIOB the University of Moratuwa and all other associates from international and local industry. The purpose of the symposiums are to educate and discus burning issues related to the construction industries in sri-lanka as well as around the world so that academics and industry are aware of the new research innovations and technology in the



Prof. Peter McDermott from the University of Salford delivering the keynote address

Sierra

CIOB President Dr. Rohan Karunaratne explaining the idea behind the annual construction symposium by the CIOB

form of academic

papers, discussion so that there is aware-

ness among the sector .The emphasis is on the aspects of sustainability green environment, built assets and many other topic pertaining at the time of the symposium. The world construction symposium has worldwide recognition and we are indeed proud of its success and the contribution it makes to nation region and our young members of construction in the industry" Prof. Chitra Weddikkara, Symposium Chair stated.

Dr. Rohan Karunaratne, President of CIOB explaining the reason behind selecting **Built Asset Sustainability: Rethinking Design, Construction and Operations** as the year's theme said that construction cost including labour and material in our country is comparatively high. As a country, he pointed out that we lag behind ensuring the sustainability of a construction and in technology. Our cost is high because we still follow old techniques, expensive labour, high cost material and no lean construction practices to minimize wastage. If we want to become a competitive partner in this sector we need to adapt to new global trends. That will lead us to reduce the cost.

Expressing his views on the Symposium, Dr. Karunaratne said "We received more than 60 foreign papers and we concluded a very successful event. With an understanding of the importance of these research papers we have now decided to collaborate with CIDA to set up a Research and Development Unit and implement those significant papers for the benefit of the industry. We have already selected two research papers on lean concept and sustainability will be discussed at an upcoming round table conference for their implementation.

Dr. Yasangika Sandanayake, Head, Department of Building Economics, University of Moratuwa and the Scientific Committee Co-Chair mentioned that "World Construction Symposium series provide an international forum for local and foreign scholars to share innovative concepts and research findings related to sustainable construction with world-at-large.

It further provides a platform for both local and international construction industry professionals, practitioners and builders to share practices and latest developments in the industry. On behalf of the scientific committee, I highly appreciate the support given by CIOB, University of Moratuwa and all Associate Partners in organising WCS for academic researchers to meet industry experts to identify industry requirements and also to transfer research findings and disseminate knowledge to uplift and foster the Sri Lankan construction industry."



Minister of Science, Technology and Research, Skills Development and Vocational Training and Kandyan Heritage Dr. Sarath Amunugama at the Awards Ceremony



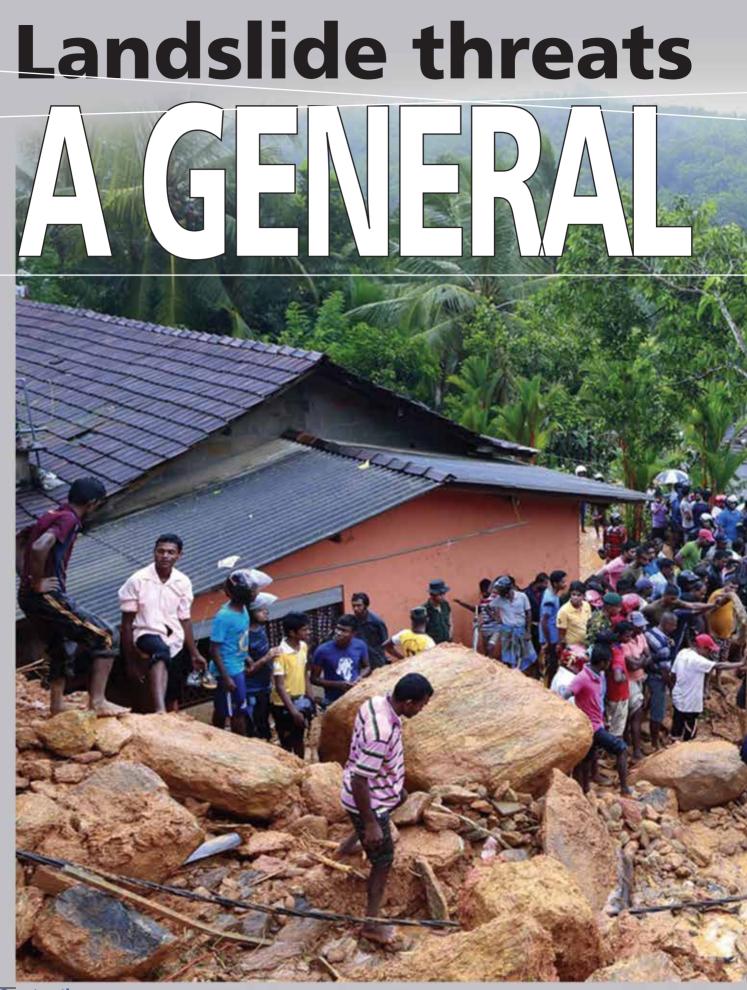
Interested participants at the sessions

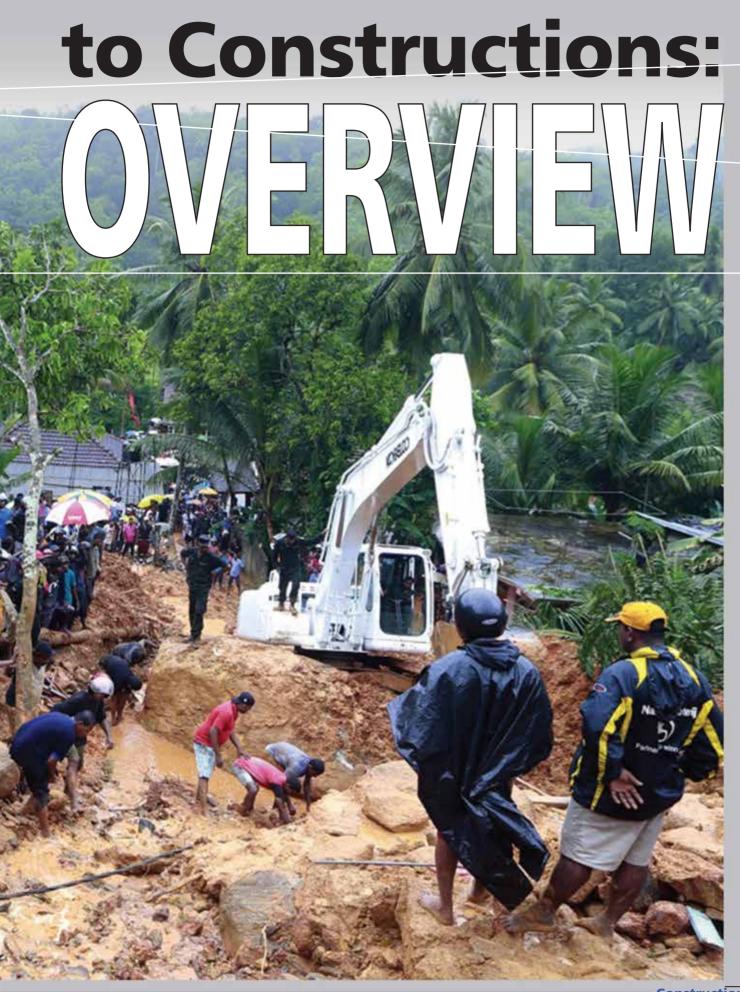


The invited guests for the symposium



WARNING





Construction 13

The recent earth slip which destroyed five houses and damaged the Hatton - Bogawantalawa Road in New Weligama, Norwood, raised concerns on buildings and roads in the hill country of Sri Lanka which could be susceptible to landslides.

To its credit, the National Building Research Organization (NBRO) had given prior warning to the residents of the area who had already evacuated. Therefore no lives were lost due to the incident which occurred on October 15. However, the damage caused to the road created transport difficulties to the residents and others who are taking the road.

However, landslides continue to be a hazard which troubles residents of more than ten districts in the island. Hilly areas and mountains cover 20 percent of the island's area and 30 percent of the population live in these parts of the country. Therefore, landslides are a recurring threat to the inhabitants of a sizable area.

While new constructions in landslide-prone areas have to be done with NBRO clearance, there are constructions which have been done earlier which could be in threatened areas. Therefore, in such cases, proper vigilance is essential, as in the Norwood incident of October 2018.

Landslides

The movement of a considerable mass of rock and or soil along with the vegetation and structures thereon from a higher to a lower elevation under the influence of gravity is termed as a landslide.

The material that falls in a landslide can also vary due to the composition in the area. It can take place as the sliding of a huge soil mass or a mudslide or even a mixture of rock and soil.

A landslide can have three parts, namely, the crown, the body and the toe. is the upper most part of the sliding terrain from where it is originated. This region is usually subjected to subsidence and cracks. The "Body" of the landslide is the middle part of the sliding mass below the crown. This zone is usually wide and contains most of the sliding matter which collects material and swell causing crack in the lower area of the landslide body. "Toe" is the lowermost part of a slide.

Types of Landslides

The broad term landslide may not be able to describe the nature of what has happened. Therefore, they are further



named according to the nature of the incident. There are five types of landslides, namely, fall, toppling, subsidence, lateral displacement and debris flow.

Can landslides occur anywhere?

Theoretically a landslide can occur anywhere with a sloping terrain. Generally it is thought that most landslides occur when the inclination is between 15 degrees to 45 degrees. The likelihood of landslides in slopes with higher inclination is unlikely because soil layers will not accumulate enough to produce landslides.

Causes

Landslides can be caused by the combination of several factors. They are both man - made and natural. Usually a landslide does not happen due to one factor.

Natural causes for landslides include steepness of the slope, rock or soil material, poor drainage conditions, high rainfall, weathering of rock material, thickness of colluvium deposits down the slope collected due to gravity and floods or water bodies which could weaken the "toe" of the soil body and, in some countries, earthquakes.

Man-made causes which create the possibility of landslides include denudation of forests in the hilly areas which exposes the topsoil, use of land with no proper planning, construction and mining work with no prior investigation and blocking natural water paths in the mountains.

Identification of Landslide-prone areas

In an area vulnerable to landslide, subsidence of the ground (a portion of the terrain subsides or dips from its natural topographic relief level) and tension cracks could be seen towards the upper region of the slope. Also tall trees may be seen slanting towards the hill. If such observation can be made it is a strong indication of the land area being prone to landslide.

In addition, if cracks are observed on the wall and floors of houses located down slope, it is a further clue to an impending landslide. If these cracks enlarge progressively, it indicates that the landslide is still active in the area.



In a vulnerable area, water springs suddenly begin to appear while at the same time water in the wells in the vicinity can get murky. In contrast, small streams or superficial watercourses may also disappear suddenly before the occurrence of a landslide in the area.

Other facts about landslides that cannot be observed in the above manner can be identified by geotechnical and geological investigations. Moreover, by analysing the landform, pattern, water systems, dips, rock types and their structure in the area, maps can be prepared depicting various zones from high to moderate to low hazard level.

Landslide Maps

The NBRO has developed 1:50000 and 1:10000 maps on landslide-prone areas. In the more detailed 1:50000 maps, the regions are categorized in four ranges from 1 to 4 depending on the landslide hazard potential. Range 4 includes the regions with high likelihood of landslides and Range 1 includes the regions with no visible likelihood of such instances.

In Range 4 regions where the landslide risk is high several precautions are to be taken. No new constructions should be allowed and additions to existing constructions should be carried out only after thorough investigation. An early warning system should be in place.

Even in Range 3 areas with moderate level of danger, new constructions are discourages and land use planning are encouraged to halt and reverse the process of slope degradation. In Range 2 areas with modest risk of landslide threat, thoroughly planned construction and cultivation could be done.

Landslide - prone Districts

Following some serious landslides in the 1980s, the government took the steps to find out the landslide hazard potential in parts of the country. The NBRO has declared that there are ten landslide prone districts, namely: Kandy, Matale, Nuwara Eliya, Badulla, Kegalle, Ratnapura, Kalutara, Galle, Matara, and Hambantota. Therefore, all construction those take places within those ten (10) districts need to obtain NBRO's clearance. Local authorities and other project approving agencies, which approve any construction within the landslide prone districts, need to request their clients to submit NBRO's clearance certificate.

Landslide Mitigation

There is nothing to say that a land which was subjected to a landslide can never be used again. By taking proper mitigation efforts, the threat can be reduced. Some of these methods are fairly simple and anyone can start making a change. However, other methods are scientifically done to mitigate landslide threats.

Simple methods at mitigation include reforestation of the risk area, planting suitable vegetation, cutting down the upper slope to reduce weight and establishing a suitable drainage system. Cultivation in terraces could be used as a useful and suitable drainage system.

People should refrain from converting agricultural land in such areas for other purposes, digging up the soil and unauthorized filling up of land using soil material dug up. Constructions should always be done under proper guidance. These also help mitigate landslide threats and prevent the threat becoming more severe.

More expensive methods of mitigation are tying soil layers with wire mesh, erecting concrete or rubber retaining structures and staggered anchoring of the unstable sloping ground with reinforced concrete posts or timber posts or iron fence posts pile-driven into the bedrock.



To the peak through innovative spirit



Jan Kunigk, Executive Vice President /Commercial Director of



Siam City Cement, more popularly known as the INSEE Cement owns the Lion share of the cement market in the country. Executive Vice President & Commercial Director of INSEE Cement Jan Kunigk says that their strong innovative spirit brought them to the peak as the only integrated cement manufacturer in the country with its own quarry and ability to grind its own clinker. Kunigk says "All our competitors import the raw materials, then pack and sell."

You have experienced an outstanding career in a tough industry. Can you describe the milestones that helped you to reach your current position?

Holcim, the global cement company was my stepping stone into the construction industry. I spent 10 years at Holcim including in Indonesia where I spent three and a half years before coming over to Holcim Lanka.

In Sri Lanka I had the opportunity to develop innovative strategies to expand the business that we now know as Siam City Cement, more popularly called INSEE Cement. I was pleased to contribute to the progress of the company which has now grown into the market leader in Sri Lanka and delighted to be among my long standing and very close friends here. I'm proud of the fact that Siam City Cement is one of the fastest growing companies in the construction sector in the Asia-Pacific region, with around six thousand employees and generating over USD 2 Billion revenue.

INSEE Cement has secured a leading position, making an impact in the industry. How would you describe its role in the construction sector in Sri Lanka?

INSEE Cement has 39% of the market share here, which is indeed the lion share. How did we manage to achieve this you may ask. The answer is our strong innovative spirit that has made us the only integrated cement manufacturer in the country with our own quarry and ability to grind our own clinker. All our competitors import the raw materials, then pack and sell.



We on the other hand sell our very own brands of cement, the much sought after Sanstha and Mahaweli Marine, the oldest brands of cement in the country. We aim to continue the rich heritage and momentum of these products in addition of course to the INSEE Cement brand. Our products are made of Sri Lankan raw materials for Sri Lankan citizens. That's how we help to build the nation and shape Sri Lanka's rapid development by bringing state-of-the-art innovation and sustainable construction practices.

In contrast, I would like to point out that Sri Lanka is lagging behind in the broader Asian picture because the country is still using Ordinary Portland Cement which is the oldest cement recipe and probably the worst when it

comes to cost benefit. New innovative products and practices ensure the durability and sustainability of a construction and ensures optimal utilization of limited resources, especially government funds.

We feel it is our responsibility as an industry leader to promote new techniques. In fact, we train thousands of masons every year and this contributes significant benefits to the industry. We also



Altair Residencies

240M Heigh 68 stories High early strength concrete Products: INSEE Rapid flow Project Status: Ongoing

train technical officers and engineers of government institutes at provincial and national level. Not only that. We train university students on concrete technology. We have been conducting training programmes for the past five years and it is free for anyone who is enrolled in an engineering course and aspire to gain qualifications and experience. We conducted the first Concrete Mixed Design Challenge this year among University teams competing with each other. This year our objective is to develop mixed designs with improved compositions. We have also promoted green products with superior composite cements which are widely used in markets around the globe while Sri Lanka is lagging far behind for the past 20 years.

We recently launched a new solution named CONWOOD which is a cellulose fibre product. It is a cement based product which looks like wood and feels like wood but is not made of wood. It is fire resistant, water resistant and is economical and a welcome choice for customers who desire a wood finish without cutting down trees.

Can you comment on the current situation in the construction field in Sri Lanka?

INSEE Cement has been heavily involved in he construction work of the Lotus Tower. Our products have been used in Altair; we are the exclusive supplier to the Krish Tower. We are a vital contributor to projects such as the Port City, Central Expressway and Soutern Expressway. The majority of the landmark projects are using **INSEE** Cement products. We are very proud

that our innovative products are contributing to major government projects.

From our point of view, this year is a typical cyclical year. Most sectors are down. The economy as well as the construction sector. Yet, many projects are in the pipeline. In thelong term, I am confident Sri Lanka has significant potential to grow.

What are the quality control measures that you follow to stay ahead?

INSEE cement is the only multi-national company in the construction sector here. We follow the highest standards in all aspects from manufacturing, quality control measures to sustainability endeavours. We do not take short cuts. We have daily quality control for all the products that go out. What we want to bring to our consumers is that INSEE cement with its retail brands Sanstha and Mahaweli

Marine stand for the highest quality and trusted expertise and reliability. What we clearly strive for is to exceed the expectations of our customers on a daily basis. That is the target that all our teams are working to achieve.

What are the challenges and the opportunities you face at the moment?

I see the challenge as the opportunity. One of the biggest opportunities for the country is that the current standards that are existing must change; must be aligned with the European norms or the British standards to produce truly superior composite cement. By doing so,



Colombo City Center

173.5M Heigh 48 stories Products: INSEE Rapid Flow / INSEE Extra

all funds invested by the government would be more wisely spent whereby either the project lifetime lasts longer or less cement could be used.

We should also follow certain rules to protect the environment. For example, Singapore has forbidden OPC or Ordinary Portland Cement. The situation is similar in Australia too. In India, 80% of the cement that are being used are modern composite cement. Indians have adapted to European norms which are fully incorporated into Indian standards.

What can you say regarding the competition from foreign companies?

Competition is essential for innovation and growth in any sector to drive the society forward. Local and foreign companies have very different cost structures and they operate in an opportunistic manner so that they can

> come and go. That is a challenge but we are dealing with it by providing a superior service and superior quality products. Daily quality control is very important in the end and we strive to maintain this.

If you are afraid of competition you should stop doing business. Challenges are a driving force in the sector. INSEE has so far shaped the industry and continues to do so. I am proud to state that our competitors are following the examples set by us because they know our strength is providing superior more advanced products and solutions to the industry.

How do you rate the local talent in the construction sector?

In certain areas it is clearly a challenge. Quality and the reliability in the construction industryare limited. That is one of the reasons why bigger companies recruit foreign workers to build their projects. I think Sri Lanka definitely has very good engineers.





However, some work needs to be done at the level below. That's why we sponsor the training and vocational skill development needs of the industry. Every month we have a knowledge-sharing session at our new Innovation & Application Center where we invite all stakeholders on different aspects related to construction. Many progressive things happen as a result but I think, overall especially the younger generation, should receive assistance to innovate.

How do you cope up with issues related to material and labour?

Sri Lanka is an island and materials need to be imported if they are not locally manufactured or available. Cement is not the main cost driver; it is just a small portion of the overall construction operation. Cement is around 10% of the total value of a construction. Other construction materials cost much higher.

Further, devaluation of the Sri Lankan Rupee has affected every sector. Labour cost is also increasing every day. However, we as a company are always committed to provide best solutions to the society.

What are the measures your company takes to ensure the Green Value?

We clearly promote composite cement. For each bag of OPC replaced by Sanstha cement or other composite cement we can save 50 kilograms of CO2. This statistic is importantfor everyone to understand the impact of OPC on the environment. OPC must be forbidden except for very rare cases.

We reforest and restore vegetation in around quarry. Rehabilitation process is at the heart of our quarry operations. Our environment sustainability is focused at minimizing environmental impact and carbon footprint in our manufacturing operations.

How do you see the future of the construction sector in our country?

We see growth.

Civil war ended only 10 years ago, and we are still on the recovery mode. Even though we are progressing fast there is volatility in the market. The trust of the foreign investors has not been fully assured. Introducing legislation changes to protect foreign investment would contribute to growth in the construction sector. However, the continuous unstable market could be less attractive not only for the construction sector but also for other sectors. Investors are continuously looking for opportunities globally. Sri Lanka is just one option. If other countries could provide more attractive incentives for foreign investments, they would obviously choose that country. The stability in the country ensure a sound flow of investment.

END





Sri Lanka, which currently stands in middle-income category two, is focusing on long-term strategic and structural development challenges as it strives for the transition to an upper middle income country. One of the key initiatives with respect to this is the proposed Western Region Megapolis Master Plan. The Japan International Cooperation Agency (JICA); the official overseas development assistance arm of the Japanese Government will provide a US\$ 1.7 billion equivalent yen denominated loan at 0.1 percent interest for the project. The loan will have 40-year repayment term with 12 year grace period. The financing agreement for Phase One of the project will be completed by the beginning of new year. Construction work of the first phase of the project will commence in 2020 while commercial operations are projected to kick off by 2024.

The overall construction plan is drafted in seven phases, with phase One encompassing the construction of part of RTS One (Fort to Union Place) and RTS Five (Battaramulla to Malabe), along with the entirety of RTS Four and phases



Incorporating the said Megapolis structure plan, the Western Region Megapolis Transport Master Plan was then developed encompassing all aspects of transportation to provide a framework for urban transport development in Western Region up to 2035. One of the proposed key initiatives of the Transport Master Plan is the introduction of a Light Rail Transit system or a Light Rail System (LRS). The draft bill for the project had been given the green light by the Cabinet of Ministers in March 2018.

Sri Lankan Government plans the project with the main objective of easing traffic congestion on roads leading to Colombo from the suburbs and the feasibility report on the first project was already completed. The Ministry of Megapolis and Western Development recently announced the commencement of acquisition of lands required for the construction of the proposed fully elevated Light Rail System in Colombo which is set to revolutionise Sri Lanka's transportation system. Two through Seven expanding the network throughout the planned Western Region Megapolis.

Under the first phase of the project, the 25 kilometer LRT system comprises 16 stations and a depot that will run from Malabe IT Park to Pettah. The LRT will connect some of the highly commercialised areas including Borella, Rajagiriya and Battaramulla and will also have a station at Town Hall, making the easy access for the Colombo General Hospital.

The proposed LRT powered solely by electricity and comprising of seven light rail transit lines and two high priority lines will have four compartments enabling the carriage of 165 passengers at once. The total cost of the project for the seven phases is estimated at around US \$ 6 billion.

Subject minister Patali Champika Ranawaka who has taken the responsibility of the giant project is in the view that this will be a novel breakthrough in the transport sector after 1860, the year in which railways was first introduced to Sri Lanka. Minister Ranawaka assured that all the necessary studies and analysis are conducted to make sure this not to be another debt trap.

"For a project to be successful, a proper feasibility analysis, environmental analysis, societal analysis and, especially, a financial analysis are crucial. Due to improper financial comprehension and analysis of projects in the past, the country has suffered. Massive initiative of transportation under Megapolis is the introduction of this LRT system. It spreads across Colombo and suburbs as a network to cater to the projected demand induced by the proposed Megapolis structure plan by improving the interconnectivity between different modes of transportation such as buses, ferry transportation and suburban railway,' the minister briefed speaking over the project. around Colombo. A number of researches has found out that said it is crucial to improve public transportation and increase the percentage of public transport commuters due to the current saturated traffic condition at major roads in Colombo city.

Project Director-Colombo Light Rail Transit Project of the Ministry of Megapolis and Western Development, Eng. Commander (Rtd) Chaminda Ariyadasa said the project will provide connectivity between Malabe and Colombo Fort, which is one of the busiest traffic corridors in the Colombo Metropolitan area. He further ads that the project is mainly focused on improving the lives of commuters passing through the Malabe and Fort corridor facilitating minimum traffic congestion,



Minister Ranawaka also noted that the US\$ 1.7 billion light rail project, one of the key public transport improvements identified in the Megapolis Transport Masterplan will ease congestion, speed up travel time from Malabe to Colombo to 30 minutes from the current 45 to 90 minutes. According to the Minister, as the severe problem of traffic within and around Colombo city results in a negative impact to the economic performance of the country, it is vital to solve the problem of congestion through which people will be benefited with saved time, fuel and low carbon foot print. The minister is in the view if that the new project will enhance the economic development, environmental sustainability and inter-modality which support socio, cultural, economic and wellbeing of all citizens.

According to statics, nearly one million people enter the city of Colombo on a day to day basis thus causing severe traffic congestion in and reduced travel time, low passage cost, improved air quality, safe travel and economic development.

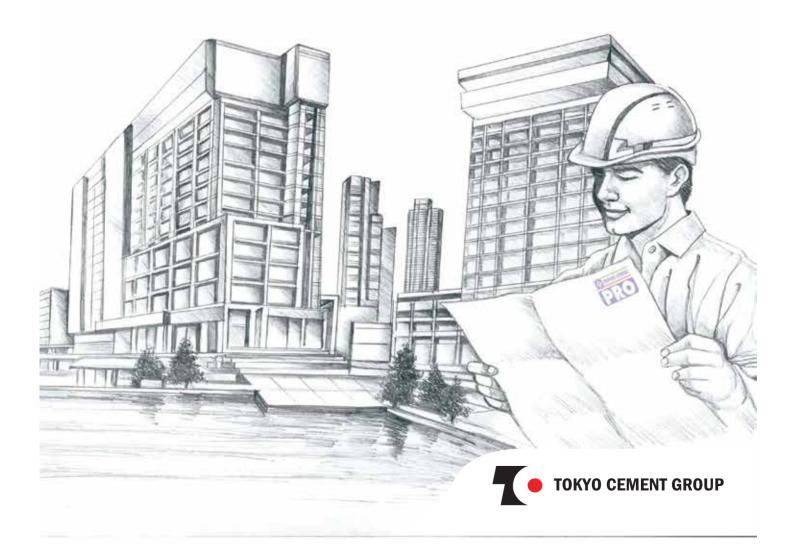
The ministry officials also highlighted that the project has the capacity to repay the loan in full before the stipulated period. The LRTP will no doubt be a blessing to the country and a big boost to the economy because it will reduce the travelling time from Malabe to Fort or Pettah. They further say when more and more people prefer to travel in comfort by modern light trains which will save time and money; it will also reduce the use of petrol and diesel vehicles contributing to environment protection.

The minister also assured that the project will also help to minimize road accidents when moving to this form of travel adding that another three in the pipeline to minimize traffic snarls on Galle Road, Kandy Road and High Level Road on the basis of Public Private Partnerships.



Redefining Construction

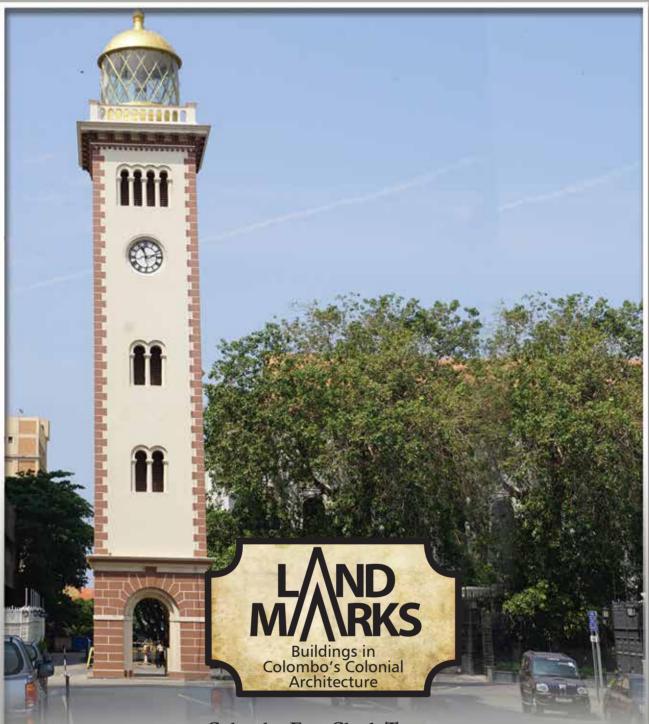
The nation's highest grade cement Specially formulated for megastructures





From the first arrival of the Portuguese in 1505, western nations have had various influences on Sri Lanka; be it arts, crafts, languages or lifestyle. While the Portuguese influence in architecture remains relatively small, the Dutch and especially the British influence is prominent in many parts of the island. This is true especially regarding coastal areas and some cities in the interior.

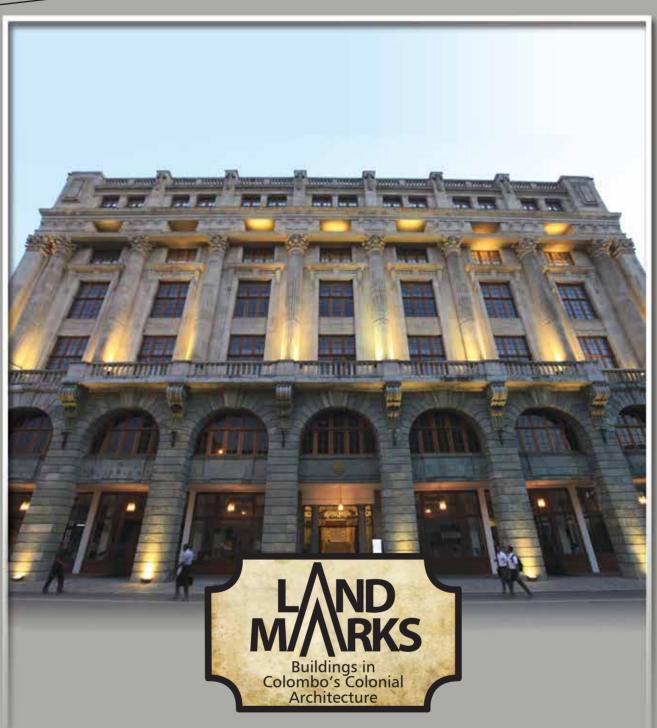
Around Colombo there are a number of colonial buildings, out of which many belong to the British period. These show different influences and add color to the cityscape. We decided to take a closer look at a few of these buildings.



Colombo Fort Clock Tower

This is an iconic building for a number of reasons. It is located at the junction of Janadhipathi Mawatha and Chatham Street. This is "kilometer zero" from which point all distances starting from Colombo were measured. The original clock for the tower was made in 1813 by Dent Clockmakers, who later became famous for

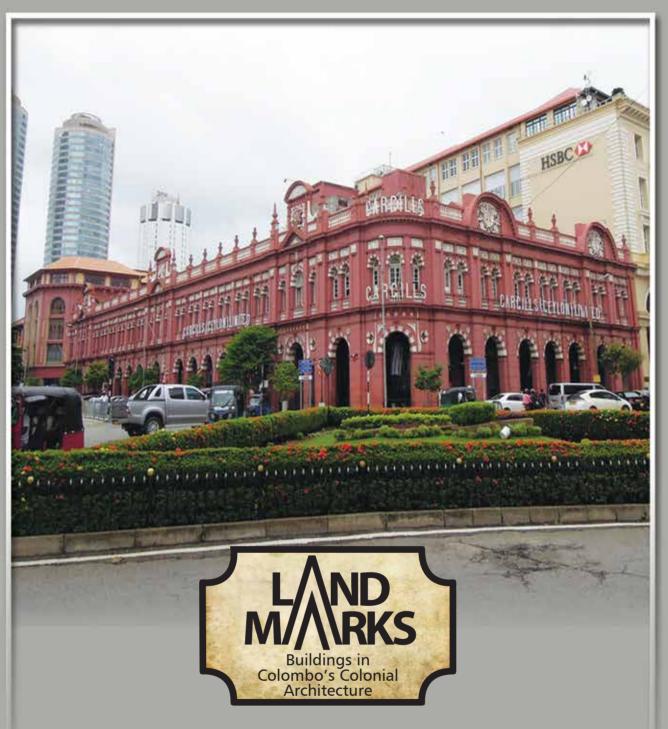
the Big Ben. However, the 96 feet clock tower was only completed in 1857. A new clock was affixed to it in 1913. In 1867, a light was affixed to the top of the clock tower to serve as a lighthouse. The light was lit by oil till 1907 when it was converted to gas and then to electricity in 1933. The clock tower stopped its duties as a lighthouse in 1952.



Central Point Building

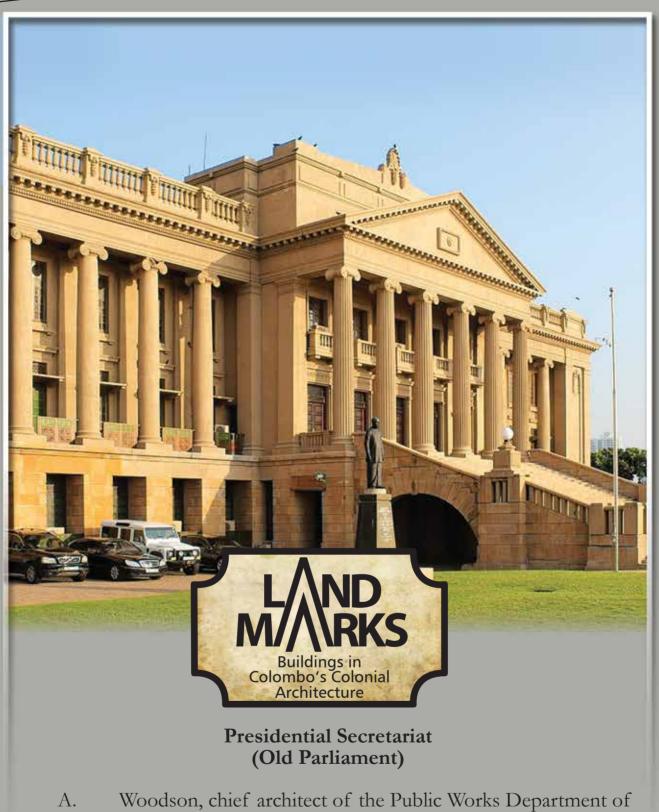
The Central Point Building is located in Chatham Street, close to the clock tower. It was finished in 1914 and at the time, was the tallest building in Colombo. It was unused for some time before it was repaired in recent years. The Central Bank owns the building and the Economic History Museum is located there.

The striking feature from the outside is the Greek style columns and the symmetrical facade. Inside, there is a tall atrium which reaches the top of the building. There you find a tall chandelier, which is said to be the tallest in Sri Lanka.

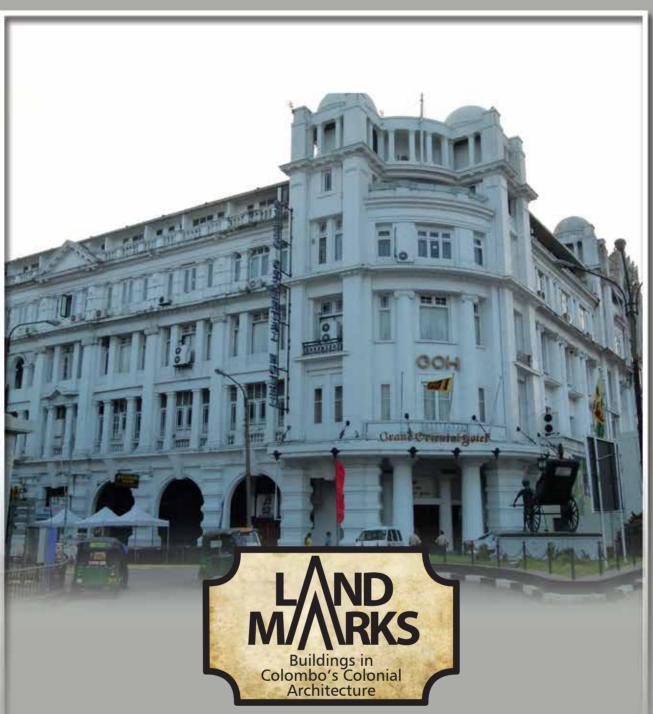


Cargills & Millers Building

This red colored building is an icon of Colombo Fort area. This red-brick structure is the icon of the oldest department store in the country. While the Cargills company's history goes back to 1844, this building is even older. It is known that it was the resident of a certain Peter Slusken, commander of Galle, in 1788.

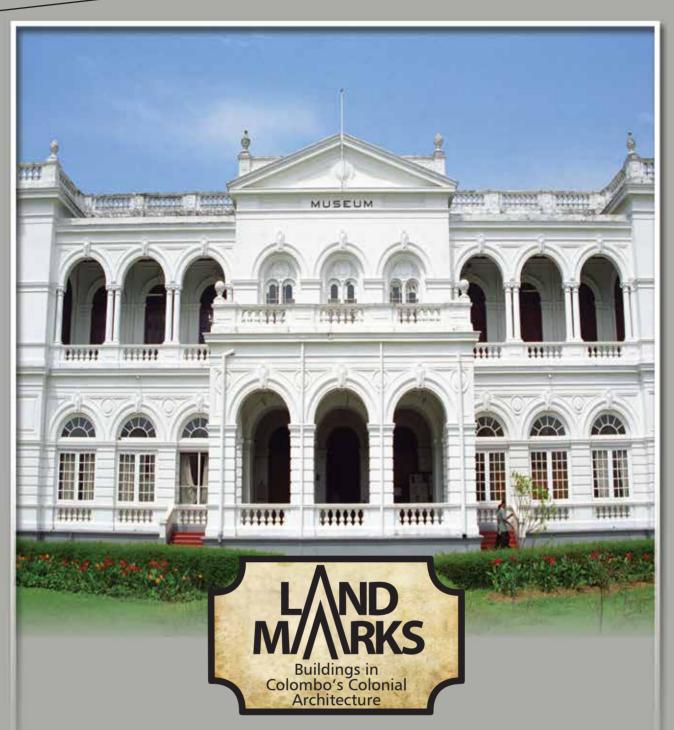


 A. Woodson, chief architect of the Public Works Department of Ceylon, was tasked with the designing of the building for the Legislative Council of Ceylon. This building, finished in 1930, housed the State Council from 1931. It remained the House of the Parliament till 1983 when the new Parliamentary Complex was opened in Kotte. This building shows some aspects of neoclassicism such as the Greek columns and symmetric facade.



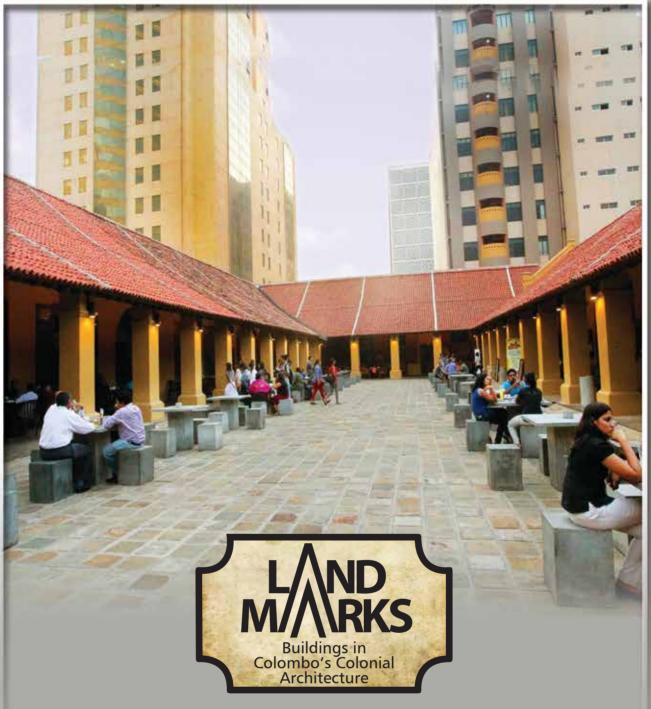
The Grand Oriental Hotel

The site where we find the Grand Oriental Hotel originally had a single storied building. It was built in 1837 as an army barrack, with British colonial style verandas opening to the street. However, the location was ideal for a hotel as it was in very close proximity to the Colombo Harbour. Thus, architect J.G. Smithers was tasked with the redesigning of the building as a hotel. Thus, what we see today was constructed. The hotel opened in November 1879 and has been a landmark in Colombo ever since. It is best known by its famous initials G.O.H. The hotel bar offers one of the best views of the Colombo harbour even today.



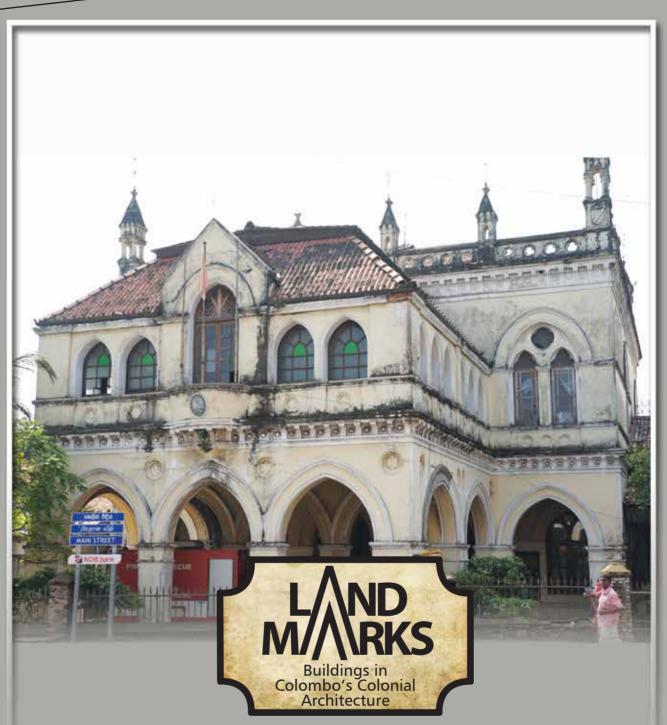
The Colombo National Museum

The Colombo National Museum building was finished in 1876. Built in the Italian style, its architect was, once again, J.G. Smithers. The national museum could not have been established without the insistence of the Royal Asiatic Society. When Sir William Henry Gregory was appointed governor in 1872, the RAS lobbied for the establishment of a public museum and after considerable difficulty persuaded the government. The museum opened on January 1, 1877.



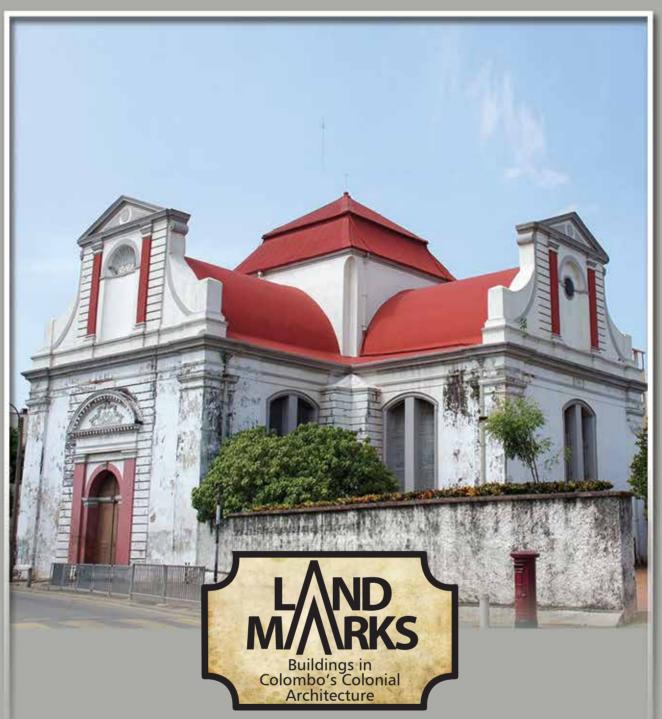
The Old Dutch Hospital

This is, as the name says, a Dutch building. It is thought that this is the oldest surviving building in Colombo with records dating back as far as 1681. The structure, with a half-a-metre wall and teak beams, is sturdy. The building is designed with a large open inner courtyard and in a manner in which the heat and humidity can be kept out. Serving as a shopping and hanging out location after extensive repairs, the Old Dutch Hospital is a well known place in Colombo Fort.



The Old Town Hall

This is a building which is easily missed amidst the hustle and bustle of Pettah. Located near the Gas Works Junction, this building could be preserved much better. This sense of indifference is one reason for its apparent invincibility. Built in Venetian Gothic style, this was the building which housed the Colombo Municipal Council from its inception in 1865 until the present day Town Hall Building was finished in 1928.
A word about the present Town Hall can be said here. Although it is inspired by neoclassical architecture, S.J. Edwards' design for the Town Hall draws heavily from the design of the US Capitol. It is as if the building was not built by the British.

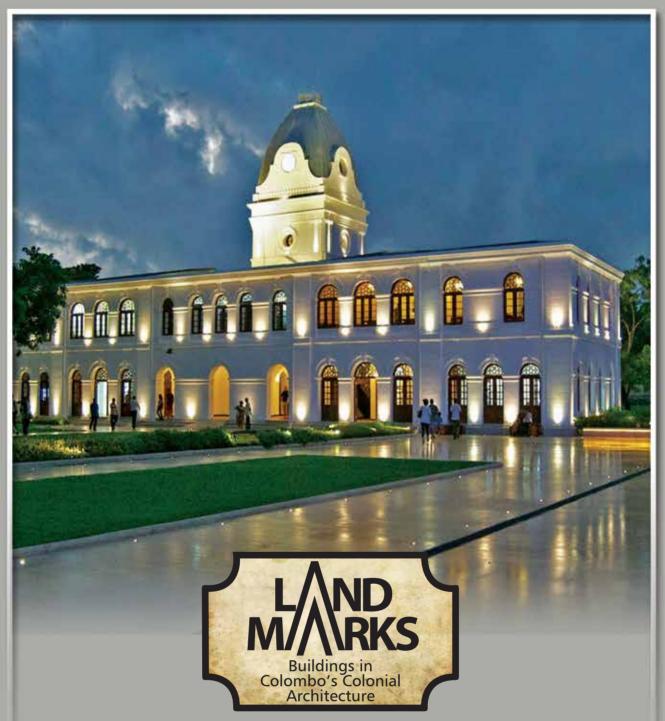


Wolvendaal Church

Wolvendaal is the largest and the oldest surviving Dutch Reformed Church in the island. It replaced an older church which was located within the Fort. The new church was constructed on top of a hill outside the city walls.

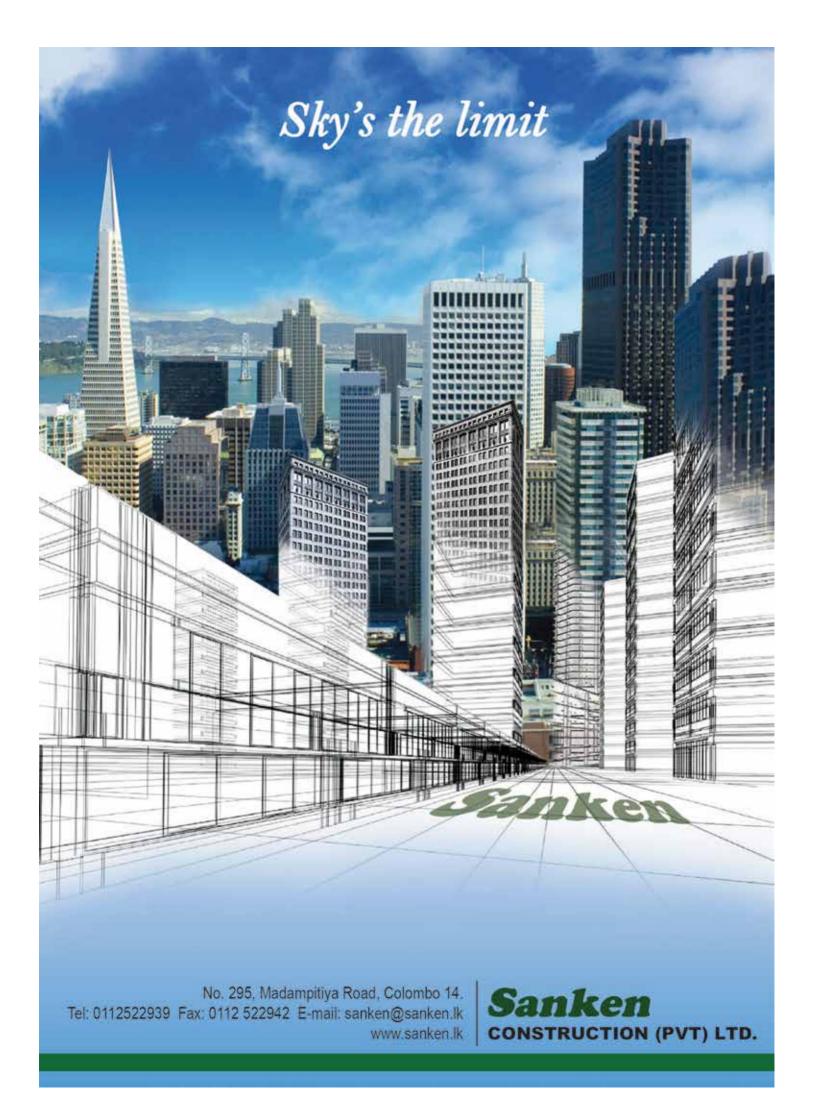
Construction began in 1749 and was finished in 1757. It is said that Europeans mistook jackals roaming in the area for wolves and named the area as Wolvendaal, meaning Wolves' Dale or Wolves' Valley. Some old tombstones were carried from the old church and placed in the Wolvendaal

Church. The old church was finally demolished in 1813. The church has been built according to the Doric style. The walls are quite thick, nearly 1.5 meters, and are made of cabok. The tall interior used to be capped by a dime which was damaged by lightning.



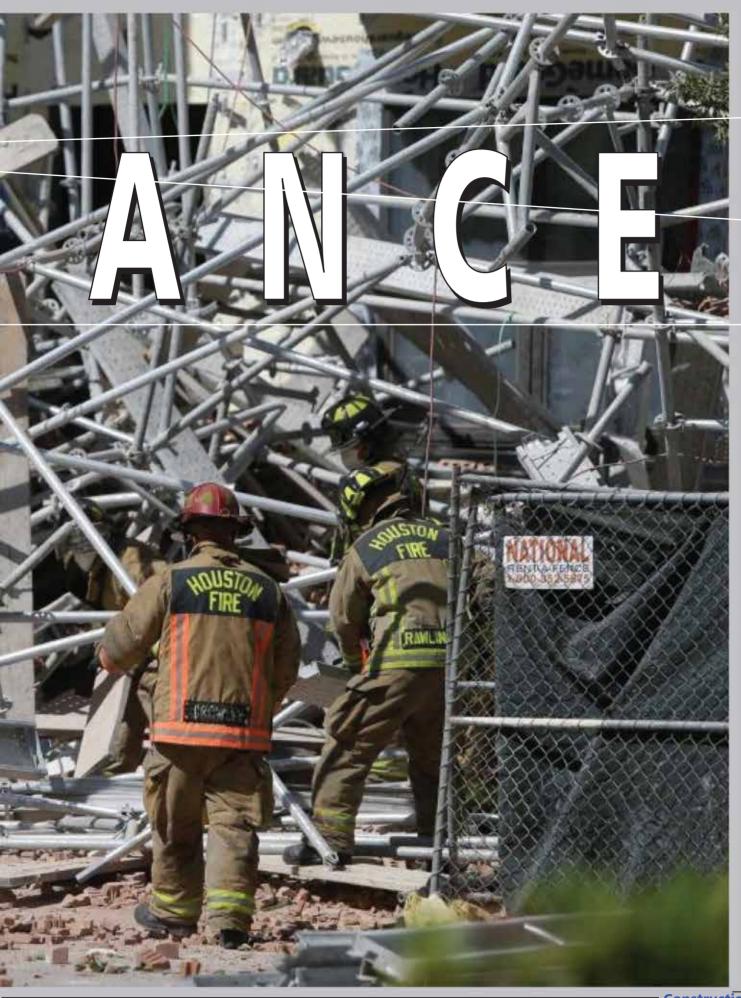
Arcade Independence Square

Arcade Independence Square is at present a shopping complex with a fascinating history. It was constructed as a Lunatic asylum, named the Jawatte Lunatic
Asylum. It was finished in 1889. There was not much extravagance in the building like what is seen today. It was a hospital with a main entrance building and two wings which could house 400 patients. Even this proved to be inadequate and therefore the new facility at Angoda in Mulleriyawa was constructed. The Jawatte asylum closed down in 1926. Thereafter it was used for different purposes. The Auditor General's Department and the Government Analyst's Department were two prominent offices located there before the repairs were undertaken.
The Urban Development Authority commenced the work on the refurbishment of the building complex in 2012 and Arcade Independence Square was born.

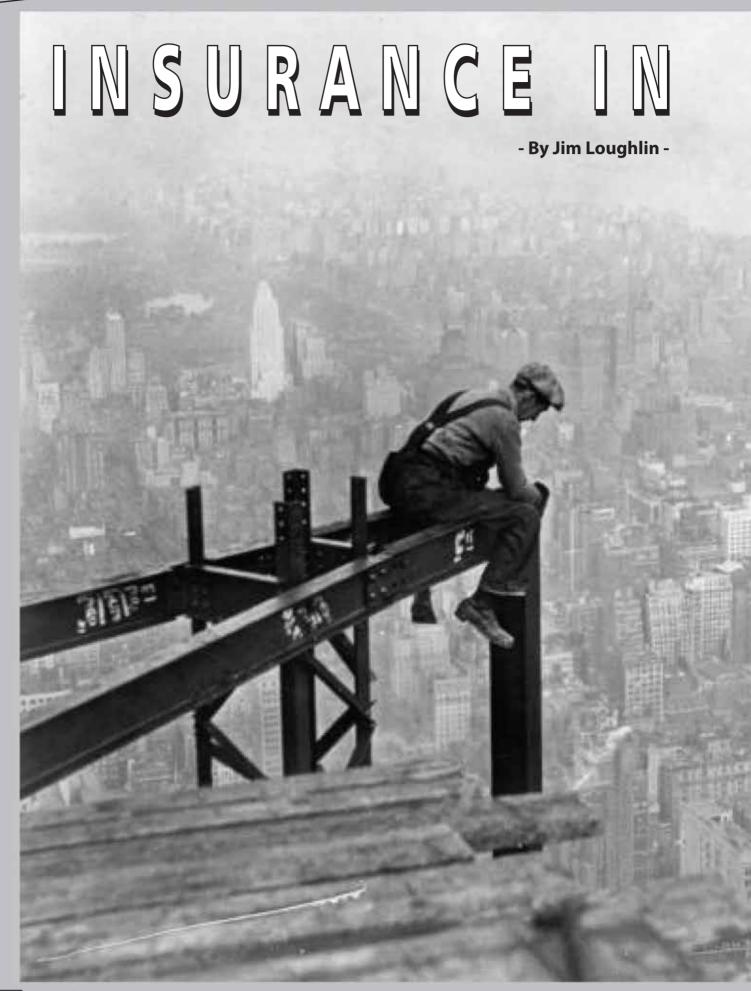




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CONSTRUCTION 5 things to know

A lot of companies have a love-hate relationship with insurance. They might not be fans of paying for it, but they absolutely realize the importance of having insurance when an unlikely incident occurs. As with all businesses, the construction industry is not exempt from the need to be insured. Depending on the nature of the trade, the area in which the business operates, the business' unique traits, and the number of employees, the insurance needed varies from one company to the next.

However, with vast amounts of available options and different carriers, it can be hard to figure out which insurance plan is the right one. Looking at different policies, mandated requirements, and confusing terms and coverage details can seem overwhelming, but once you know your risks and understand what you're looking for it becomes simple.

Understand business risks

No matter how well trained employees are, and no matter how cautious companies are in running their businesses, there is no guarantee to be protected when unpredictable events and circumstances occur. Natural disasters can damage equipment, fires can destroy existing projects, hazards can pose safety issues, employees can suffer from injuries at work, and company-owned vehicles can be involved in accidents.

Before purchasing any insurance product, it is important to first determine and understand the insurance needs and risks of the specific company, namely the type of equipment at work, the activities employees perform, the procedures carried out, and the ability to support the financial needs of the business when accidents or unfortunate events occur. Recognizing these risks early on will give business owners a great head start when they are looking at different types of policies and coverages.

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Find an advisor who knows the construction industry and its business needs

Just as there's a wide variety of insurance packages designed for contractors and construction businesses, there's no shortage of insurance advisors. The challenge in having such a wide selection to choose from is finding the right advisor that is highly adept regarding the industry and business' needs.

Typical agents who know the ins and outs of insurance but are not technically proficient in the construction business aren't hard to find, but they are the ones you should be wary of. To check the expertise of your advisor, make sure they are able to explain the most common insurance policies for construction businesses.

General Liability Insurance - this protects the business from common accidents that could happen on the job. It includes injury to third parties, damage to others' property, damage to your own property, and even personal or advertising injuries. structures undergoing construction, this protects the building components from various incidents such as fire, earthquake, theft, lightning, and any other covered disaster.

Commercial Auto Insurance - construction vehicles can cause danger to anyone. Commercial Auto covers liability, collision, and medical expenses should an accident happen that involves your vehicle while carrying out official business.

Inland Marine Insurance - if the business often transports building materials from one place to another, your goods will need to be protected while being transported on land. Inland Marine protects your cargo during shipment and while on delivery, even if they are stationary during the process.

License Bonds / Permit Bonds - before you begin bidding for a project, you will need to have license and permit bonds to legally engage in such activities. Commonly referred to as commercial bonds, these ensure that the construction business complies with state and local laws.



Workers' Compensation Insurance - this policy protects your business by covering medical costs and lost wages should your employee incur an injury or become ill on the job. It also protects you as the business owner from lawsuits caused by negligence.

Prioritize value over price

Keep in mind that construction insurance is not an elective expense, but rather a necessary overhead that will protect your business from unforeseen events. The cheapest insurance package isn't always the best, but expensive plans also can leave businesses paying too much and being over-insured.

Value bears a huge importance over price, and the coverage and reputation of the provider matters more than the cost of the insurance. Choosing a comprehensive insurance policy may cost a bit more, but it provides wider coverage to eliminate any gaps and loopholes. A Business Owner's Policy, for example, typically costs around \$600 a year on average.

Read the small print

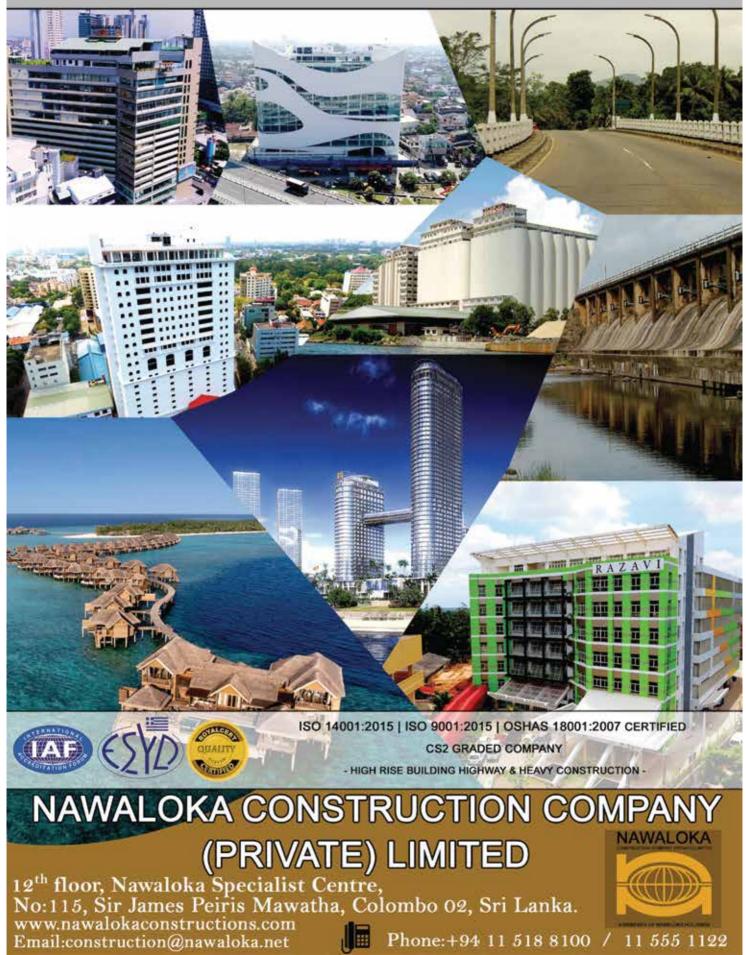
It might seem like a tedious task, but reading the insurance policy down to the very last detail is crucial. Since insurance policies vary, it is vital to know the exact coverage, declared limits, and agreed exclusions in order to prevent filing a claim in the future only to find that the liability is not included in your policy. A single minor clause in the fine print of your insurance policy, if not understood correctly, could eventually leave you in trouble. Bear in mind that as with other businesses, the construction industry is not without gaps or loopholes. To ensure that you are protected thoroughly, always read the policy, including the fine print that is often neglected.

Be prepared

Most project owners require contractors or construction companies to carry certain insurance before they are allowed to bid on and win a project. Without insurance, the business cannot even participate in any legal construction activities. Obtaining the right insurance and getting insured quickly is relevant to the success and growth of every business.

Choose an insurance platform that offers a streamlined, no-fuss process. They should be able to offer you competitive insurance plans that cover your business in a simple and fast manner. Time is of the essence when bidding on construction projects. After all, you are paying the premium, so it's right for you to have a quick and speedy experience.

EXCELLENCE IN CONSTRUCTION







ලංකාවේ කොළඹ සහ තදාසන්න පුදේශවල එනම් කොළඹ මෙන්ම නුගේගොඩ, රාජගිරිය, මාලඹේ, තලවතුගොඩ, සීදූව, ජාඇල, ගල්කිස්ස, මොරටුව, කොට්ටාව, ගාල්ල, මාතර, මහනුවර ආදී පුදේශ රැසක මහල් නිවාස සංකීර්ණ ඉදිවෙමින් පවතී. නාගරික පරිසරයෙහි බොහෝ නවීන සහ සුපිරි පහසුමකම් සහිතව ඉදිවන මේ නිවාස වාාපෘතිවලින් නිවසක් මිලට ගැනීමට අද බෙහෙවින් ඉහළ ගොස් තිබේ. කොළඹ බොහෝ නිවාස වාාපෘතිවල නිවෙස් ඒකක 50%ක් පමණ ඒවා තනා නිම කිරීමට පෙරම විකිනී අවසන් වෙයි. කොළඹ ඉදි කිරීමට සැලසුම් කරන මහල් නිවාස වාාපෘති දෙකක නිවාස 1/4ක් එහි ඉදිකිරීම් කටයුතු ආරම්භ කිරීමට ද පෙර විකිණි අවසන් වී තිබුනි.

සියල්ල අතේ දුරින් පිහිටි නාගරික පරිසරයෙහි සුපිරි නිවාස වාාපෘතියක් මගින් ලබා දෙන පහසුකම් පෞද්ගලික නිවසක් ඉදිකිරීම මගින් ලබා ගැනීමට සිතීම පවා කළ නොහැක්කකි. එහෙයින් මෙම මහල් නිවාස වාාපෘතිවල නිවාස ඒකක ඉතා වේගයෙන් අලෙවි වෙයි. කෙසේ වුවද මහල් නිවාස සංකීර්ණයක නිවසක් මිලයට ගැනීමට පෙර එමගින් අත්වන වාසි, නීති රෙගුලාසි සහ සීමා පිළිබඳ අවබෝධයක් ලබා තිබීම වැදගත්ය.

ඉතිහාසය

ලෝකයේ නිවාස සංකීර්ණ ඉතිහාසය සිය වස් ගණනාවක් අැතට දිවෙයි. රෝම අධිරා-ජායේ මහ නගරවල ඉතාමත් ධනවත් පවුල් හැර එක පවුලක් ජීවත් වූ සියලූ නිවාස නාගරිකරණ තදබදය සමග සමූහයක් ජීවත් වන නිවාස බවට පත්විය. මෙම බොහෝ නිවාසවල කාමර හතරක් දැකිය හැකි වූ අතර කාමර හය, හත, අට සහිත නිවාස ද ඉදි කෙරිණි. යුරෝපයේ මධානන යුගයේ සේවකයන් සහ විශේෂ අමුත්තන් සඳහා වෙන්වුණු කොටස් සහිත නිවාස සංකීර්ණ කුමයක් ද තිබුනි. වර්තමානයේ හඳුනා ගන්නා පන්නයේ උස් මහල් නිවාස මුල් වරට දක්නට ලැබෙන්නේ 18 වෙනි සියව-සේ පුංශයේ සහ වෙනත් යුරෝපා නගරවලය.

19 වන සියවසේ මැද භාගය වන විට කාර්මීකරණය සමග යුරෝපා සහ ඇමරිකානු නගරවලට ඒකාරාශි වූ කම්කරුවන් සඳහා අඩු වියදම් නිවාස වාාපෘති වාාප්ත විය. ඒවා සනීපාරක්ෂක පහසුකම් අඩු, අඳුරු, දුර්වල සැලසුම් මත ඉදි වූ දුම්රිය මැදිරි වැනි නිවාස වාාපෘති විය. ඊට සමගාමීව 19 වන සියවසේ දෙවන භාගය වන විට පැරිසිය වියනාව වැනි යුරෝපා නගර ආශිතව ඉහළ මධාම පන්තිය සහ ධනවතුන් උදෙසා නිවාස වහාපෘති ඉදිවන්-නට විය. සෝපාන, මධාම වායු සමිකරණ පද්ධති සහ පොදුවේ පාවිච්චි කළ යුතු වෙනත් පහසුකම් සහිත නූතන මහල් නිවාස සංකීර්ණ බිහි වන්නේ 20 වෙනි සියවසේය. පසුව ඒවාට විවිධ සුබෝපභෝගී පහසුකම් එකතු විය.

මෙම නිවාස වාාපෘති දෙවන ලෝක යුද්ධයෙන් පසු ඇති වන නාගරීකරණයත් සමග ජර්මනිය ඉතාලිය වැනි රටවල් ඇතුළු ලෝකය පුරා පැතිරිණි. එකල යුද්ධය නිසා නිවාස බොහෝමයක් විනාශයට පත් වී තිබූ නිසා භූමිය නැමති සම්පත හිඟ විය. තමන්ගේ නිවාසවල තවමත් පුපුරා නොගිය යුද ෂෙල්වෙඩි වැනි දේ තිබේදැයි පැහැදිලිව නිරීක්ෂණය කරගත නොහැකි වූ අතර එවැනි පුපුරනසුලු දෑ රහිත බවට සහතික කරගත් බෝම්බ නිශ්කීය පුදේශයක් ලෙස හඳුනා ගත් පුදේශවල මෙම මහල් නිවාස ගොඩතැගීම ආරම්භ කෙරිණි.

ලෝක යුද්ධයත් සමග මේ රටවල් බොහෝ ආර්ථික දුෂ්කරතාවලට මුහුණ පෑ අතර හැතැප්ම ගණනක් දුර විහිදෙන ගෙවල්වලට විදුලි පහසුකම්, ජල පහසුකම්, ගෑස් නළ පහසුකම්, අපදුවා බැහැර කිරීම සනීපාරක්ෂක සේවා සැපයීමට තරම් විශාල වියදමක් දැරීමට අපහසු විය. ඒ නිසා එක ගොඩනැගිල්ලකට මේ සියලූ පහසුකම් එක්රැස් කොට භාවිත කිරීම වඩා අරපිරිමැ-සුම්දායක වූ අතර මේ මහල් නිවාස සංකල්පය බෙහෙවින් වහාප්ත වීමට එය මූලික හේතුවක් විය.

ලංකාව

විවෘත ආර්ථික කුමය කාර්මිකරණය සහ නාගරීකරණය සමග ශී ලංකාවේ ජනතාව ද කොළඹ සහ ඒ අවට උප නාගරික පුදේශ-වලට සංකුමණය වන්නට පටත් ගැනීමත් සමග කොළඹ මහල් නිවාස වාහපෘති ඉදිවන්නට විය. රැකියා, අධාහපනය ඇතුළු බොහෝ පහසුකම් සංකේන්දුණය වූ කොළඹ නිවාස වාහපෘති සඳහා පැවති ඉල්ලූම ඉහළ යාමට මෑත කාලයේ බලපෑ පුමුඛ හේතුවක් වූයේ 2009 වසරේ කොටි තුස්තවාදය පරාජය කිරීම සමග රට තුළ සාමකාමී වාතාවරණයක් නිර්මාණය වීමය.

වාහප්තිය

කොළඹ නගරයේ මහල් නිවාස වහාපෘති මගින් නිවාස ඒකක 3000ක් ඉදිකිරීමට සැලසුම් සකස් කළ අතර 2014 - 2017 කාලයේ වසරකට නිවාස ඒකක 1600ක් පමණ එකතු වී තිබේ. මේ අනුව 2023 වන විට කොළඹට නව නිවාස ඒකක 14000ක් එකතු වනු ඇතැයි ගණනය කර ඇත. මෙම නිවාස පවතින පුදේශය අනුව ඒවායේ මිල ගණන් තීරණය වන අතර කොල්ලුපිටියේ රුපියල් කෝටි දහයක්, පහක් පමණ වන කාමර තුනක් හෝ ඊට වැඩි සුපිරි නිවාසද මොරටුව වැනි සෙසු පුදේශ වලින් එක්කෝටි හැට ලක්ෂයකට ආසන්න මුදලකින් මිල දී ගත හැකිය.

පහසුකම්

මේ සෑම සුපිරි නිවාස සංකීර්ණයක ම විසි හතර පැය පූරා ආරක්ෂක සේවයක් කියාත්මක හෙයින් සොර සතුරු උපදව පිළිබඳ කරදර විය යුතු තැත. ආරක්ෂක සේවාවවට අමතරව, සීසීටීවී පහසුකම්, කසළ කළමනාකරණය හා ක්ලබ් හවුස්, පිහිනුම් තටාක, කාය වර්ධන මධාාස්ථාන, ලොන්ඩ් සේවාව, අමතර ගබඩා කාමර පහසුකම්, මධාම ගෑස් ඉන්ධන පහසුකම, ජෙනරේටර් පද්ධතිය ආදී බොහෝ පහසුකම් ලබා ගත හැකිය. මේ සෑම නිවාස වාාපෘතියකම ඉහළ මහළ මල් සහ කුඩා ගස් වවා විවේක ගත හැකි ස්ථානයක් ලෙස සකසා තිබේ. ඇතැම් නිවාසවල එහි පිහිනුම් තටාකයකි. මේ පහසුකම් සඳහා මාසික ගාස්තුවක් ගෙවීමට සිදුවන අතර එම මුදල නිවාස හිමියන් පිහිටුවා ගන්නා සංවිධානයක් මගින් තීරණය කෙරෙයි.

සීමා

කෙසේ වුවද ලංකාවේ මහල් නිවාස වහාපෘති බටහිර රටවල මහල් නිවාස වහාපෘති සමග සැසදීමේ දී බොහෝ සීමා දැකිය හැකිය.

සාමානා ගෘහ නිර්මාණ සැලසුමක් අඳින කෙනකුට මේ ගොඩනැගිලි සඳහා සැලසුම් ඇඳිය නොහැකි අතර ඊට විශේෂඥ දැනුමක් තිබිය යුතුය. එහෙත් ලංකාවේ දී මෙම කරුණ එතරම් සැලකිල්ලට ගන්නා බවක් පෙනෙන්නට නැත. යුරෝපයේ සෑම මහල් නිවාස වාාපෘතියක බිම් මහලක් තිබේ. එය වාහන නැවතුම් පහසුකම් අැතුළු පොදු පහසුකම් සඳහා වෙන්වෙයි. සෑම නිවසකටම ස්වභාවික වාතාශුය ලැබෙන පරිදි සැකසූ 10X10 අඩි පුමාණයේ කාමරයක් හිමි වෙයි. එසේම ගිනි නිවන රථයකට ගොඩනැගිල්ල වටා යා හැකි පරිදි ඉඩ තැබීම අනිවාර්ය වෙයි.

අපේ බොහෝ මහල් නිවාස වහාපෘතිවල මේ පහසුකම දැකිය නොහැකිය. එසේම බටහිර රටවල මෙවැනි නිවාස වහාපෘතිවල තට්ටු 14කට වඩා උස වහාපෘති බෙහෙවින් අඩුය.

නීතිය

ලංකාවේ මෙම මහල් නිවාස කුමය මැත කාලයේ බෙහෙවින් වාාප්ත වූ නිසා දෝ ඒ හා සම්බන්ධ නීතිමය තත්ත්වය පිළිබඳ බොහෝ දෙනාට ඇත්තේ ඉතාම අඩු දැනුමකි. රථ වාහන, ඉඩම්, නැව් ආදි ක්ෂේතු සඳහා වෙනම නීතියක් ඇත්තා සේම මෙම මහල් නිවාස වහාපෘති සඳහා ද වෙනම නීතියක් තිබේ. එම නීතිය හඳුන්-වන්නේ කොන්ඩොමිනියම් නීතිය යනුවෙනි. මෙම නීතිය අනුව නිවාස වහාපෘතිය තනා ඒවා අලෙවි කර අදාළ සමාගමට නිදහස් විය නොහැකි අතර ඔවුහු කිසියම් වගකීම් සමුදායක් දැරීමට බැඳී සිටිති. ඒ සඳහා ස්වාධිපතා කළමනාකරණ අධාක්ෂ මණ්ඩලයක් පත් කළ යුතුය. නිවාසවල අයිතිය නඩත්තුව ආදි බොහෝ කරුණු පිළිබඳ මෙම නීතියෙහි ඇතුළත්ය. අදාළ සමාගම කිසියම් නීතියක් උල්ලංඝනය කළහොත් නිවැසියන්ට අධිකරණයට ගොස් වන්දි ලබා ගැනීමේ හැකියාව පවා යුරෝපයේ තිබේ. එසේම නිවැසියන්ට නිවාසයේ අයිතිය හිමි වුවද එහි කොටස් කඩා ඉවත් කිරීමට හෝ අලූතින් එකතු කිරීමට නොහැකිය.

මාසික නඩත්තු ගාස්තු

යුරෝපයේ මහල් නිවාස හිමි නිවැසියන්-ෙ ගත් ආරක්ෂක සේවා ගාස්තු, පොදු ජල විදුලි සැපයුම්, සෝපාන (Lift) නඩත්තුව, ගරාජ් නඩත්තුව, පිහිනුම් තටාක, ජිම් සේවා ගාස්තු ආදිය ඇතුළත් නිශ්චිත නඩත්තු මුදලක් මාසිකව අය කෙරෙයි. කොන්-ෙ ඩාමිනියම් නීතිය අනුව කිසිවකු මහල් නිවාස වාාපෘතියක නිවසක් මිලයට ගත් පසු එහි පදිංචි වී සිටිය ද නොසිටිය ද අදාළ මුදල ගෙවීම අනිවාර්ය වෙයි. මෙම නීති තත්ත්වය නොදැන මහල් නිවාස වාහපෘතිවලින් නිවෙස් මිලයට ගැනීම නිසා සමහරු මහත් අසීරුතාවලට මුහුණ දෙති. එමගින් කියවෙන්නේ එම නීතිය අසාධාරණ බව නොවේ. නො එසේ නම් කිසියම් නිවාස වාාපෘතියක නිවාස 20ක් තිබුණ ද ඉන් 10ක් වසා දමා තිබුණොත් අදාළ සම්පූර්ණ ගාස්තුව දැරීමට සිදුවන්නේ පදිංචි වී සිටින දස දෙනාටය. එය කිසිසේත් සාධාරණ තත්ත්වයක් නොවේ. එහෙයින්



කිසියම් නිවසක් වසා දමා තිබුණ ද මාසික නඩත්තු ගාස්තුව ගෙවීමට නිවාස හිමියා නීතියෙන් බැඳී සිටියි. යුරෝපීය රටවල මෙම නීතිය ඉතාම තදින් කියාත්මක වෙයි.

කිසිවකු මහල් නිවාස වාාාපෘතියකින් නිවසක් මිලයට ගැනීමට සිතන්නේ නම් එම වාාපෘතිය රජයේ ස්වාධිපතාය නීතියට කොන්ඩොමිනියම් නීතියට බැඳී ඇත්දැයි තහවුරු කර ගැනීම වැදගත්ය. ඇතැම් විට එම නීතියට අනුගතව නිවාස ඉදිකිරීමේ දී එහි නිවාස ඒකකයක මූල ගණන් විශාල ලෙස ඉහළ යන නිසා නීතියට පිටින් කටයුතු කරති. එවැනි අවස්ථාවල ගැනුම්කරුවන්ට සහ ණය දෙන බැංකුවලට විවිධ දූෂ්කරතාවලට මුහුණ දීමට සිදුවෙයි. එහෙයින් නිවාසයක් මිලයට ගැනීමට පෙර මෙම නීතිමය තත්ත්වය තහවුරු කර ගැනීම බෙහෙවින් වැදගත්ය. අපේ රටේ ඇතැම් නිවාස වාහපෘති මෙම නීතියට පිටින් ගොස් ඉදි කර ඇති බව තහවුරු වී තිබේ. ස්වාධිපතා නීතියට අනුව ඉදි කළ නිවාස වාහාපෘති නඩත්තු කටයුතුවල දී වුව කිසිදු ගැටලූවක් ඇති වන්නේ නැත. නාගරික සංවර්ධන අධිකාරියට ද එම නීතියට අනුව කටයුතු කිරීමට සිදුවෙයි.

නීතිය නොදැනීම

ලංකාවේ මහල් නිවාස මිල දී ගැනීමේ කියාවලියෙහි ඇති මූලික ගැටලුවක් නම් මෙම ස්වාධිපතා නීතිය පිළිබඳ නොදැන සිටීමය. මෙහිදී නිවාස ඉදි කරන සමාගම, ණය පහසුකම් ලබා දෙන බැංකුව සහ ගැනුම්කරු යන පාර්ශව තුනක් මුණ ගැසෙයි. නීතියට අනුගත නොවී කටයුතු කරන අවස්ථාවල අදාළ ඉදිකිරීම් සමාගම අල්ලස් ලබා දී බැංකු ණය අනුමත කරවා ගෙන නිවාස විකුණා මුදල් රැගෙන මගහැර යයි. අවසානයේ ණය ලබා දූන් බැංකුව ද ගැනුම්කරුවන් ද කරකියාගත නොහැකි තත්ත්වයට ඇද වැටෙන්නේ එම නිවාස මිලයට ගත් වටිනාකමින් අඩකටවත් නැවත අලෙවි කළ නොහැකි නිසාය. මෙවැනි වාහපෘතිවලට දිගින් දිගටම ණය දීම නිසා රටේ බැංකු පද්ධතිය කඩා වැටී රටේ සමස්ත ආර්ථිකයම කඩා වැටිය හැකිය. අද වන විට එම තත්වයට අප සමාජයද මුහුන දෙමින් සිටී.

නිවාස වහාපෘතියක නිවාස ඒකකයක් මිලට ගැනීමේ දී එහි ඔප්පුව පවා ලිවිය යුත්තේ ස්වාධිපතා නීතියට අනුවය. එහි දී පරිශුය නඩත්තු කිරීම සඳහා වර්ග අඩියක් සඳහා වැයවන මුදල පවා ඇස්තමේන්තු ගතකොට තිබිය යුතුය. එහෙත් ලංකාවේ මෙම නීතිමය තත්ත්වය පිළිබඳ බොහෝ දෙනා අවධානය යොමු කරන්නේ නැත. නිවාස ඒකකයක් මිලට ගෙන මුල් අවුරුදු පහ තුළ කිසිම මහ පරිමාණ නඩත්තුවකට නොයන නිසා නිවැසියෝ ඒ කාලයත් අදාළ තත්ත්වය පිළිබඳ අනවබෝධයෙන් ගෙවා දමන අතර ඊට පසු නඩත්තු කටයුතු සිය වියදමින් ම අදාළ නඩත්තු කටයුතු කර ගැනීමට කටයුතු කරති.

මේ වන විට මහල් නිවාස සඳහා ඉල්ලූම ඉහළ ගොස් ඇති නිසා එය අතිශය ලාහදායි වාාාපාරයක් බවට පත්ව තිබේ. ලංකාවේ එකම පාර දෙපස එක පෙළට ඉදිවන නිවාස වාාපෘති අපට දැකගත හැකිය. එහෙත් මේවායේ මිල ගෙවා මිලයට ගත හැකි පිරිස සීමිතය. බොහෝ දෙනා රාජා හෝ පෞද්ගලික බැංකුවලින් ණය ලබා ගෙන නිවාස මිලට ගනිති. කිසියම් අවස්ථාවක මෙම නිවාස විකුණාගත නොහැකි තත්ත්වයක් ඇති වුවහොත් එය අතිශය භයානක ආර්ථික අර්බුදයක සමාරම්භය විය හැකිය. ස්වාධිපතා

නීතියට අනුව අදාළ ඉදිකිරීම් සමාගම ගිවිසුම් ගත වී නොමැති නම් ගැනුම්කරුත් බැංකුවත් අසරණ වෙයි. මෙම අර්බුදය නිසා ලෝකයේ ඇතැම් රටවල ආර්ථිකය සම්පූර්ණයෙන් බිඳ වැටුණු අවස්ථා තිබේ. ස්වාධිපතා නීතිය හඳුන්වා දීමට හේතුව ද එයමය.

එහෙයින් අපේ රටේ මෙම ගැටලූව ඇති වීමට පෙර ඒ පිළිබඳ අධාායනයක් කිරීම වැදගත්ය. විශේෂයෙන් මහල් නිවාස වාාපෘතියක නිවාස කිහිපයකට පමණක් ගිනි රක්ෂණයක් මිලයට ගෙන පලක් නැත. අනෙක් අතට ණය ගෙවන තුරු පමණක් බලපැවැත්වෙන රක්ෂණයකින් කිසිදු පලයක් නොමැත. එහෙයින් ලංකාවේ ජනතාව මහල් නිවාසවලට අදාළ නීතිමය තත්ත්වය පිළිබඳ අවධානය යොමු කිරීම වැදගත්ය.

එසේම සෑම නිවාස ඒකකයක් සඳහා ම එය වයරින් කළ විදිහ, ජල නළ එළා ඇති ආකාරය ආදී විස්තර ඇතුළත් අත්පොතක් ලබා දිය යුතු අතර සෑම නිවසකටම ජල ටැංකියක්, මෝටරයක් සහ ඊට ළඟා වීමට පඩි පෙළක් තිබීම අනිවාර්ය වෙයි. නිවැසියත්ට යාමට සහ බඩු ගෙන යාමට සෝපාන දෙකක් තිබිය යුතුය. ස්වාධිපතා නීතියට අනුව සෑදු නිවාසවල උවමනා විටක මෘත දේහයක් අඩු මහළට ගෙන යාම සඳහා වෙනම සෝපානයක් පවා තිබේ. එහෙත් ලංකාවේ නිවසක් මිලයට ගැනීමේ දී කිසිවක් සලකා නොබැලෙයි. එය දැන දැන අමාරුවේ වැටීමකි.

පුචාරණ උපකුම

එසේම අපේ රටේ නිවාස වාාපෘති සැලසුම් කළ අවස්ථාවේම ගැනුම්කරුවෝ මුදල් බැඳ සිය නිවෙස වෙන් කර ගැනීමට කටයුතු කරති. එහි දී තමන්ට හිමි වන තට්ටුව තමන්ගේ සෞඛා තත්ත්වයට උචිත ද යන්න පවා බොහෝ දෙනා නොසිතති. නිදසනක් ලෙස ශ්වසන ආබාධ ඇති අයකුට ඉහළට යන්න යන්න හුස්ම ගැනීම අපහසු විය හැකිය. එහෙත් අත්තිකාරම් මුදල් තැන්පත් කළ පසු අදාළ නිවස ගැනීමට සිදුවෙයි. ඒ නිසා විශාල මුදලක් වියදම් කර නිවෙසක් මිලයට ගෙන බොහෝ අපුසන්න අත්දැකීම් ලබමින් එහි ජීවත් වන්නට සිදුවෙයි. මෙවැනි හේතු නිසා යුරෝපයේ නිවාස වාහපෘති කඩා වැටීමට ලක්ව ඇති අතර නිවාස අලෙවි කිරීම අලෙවි පුවර්ධන ආයතනවලට පවරා තිබේ. ඔවුහු සර්ව සුබවාදී සිහින මවා පාමින් ණය පහසුකම් සලසා දෙමින් එම නිවාස අලෙවි කිරීම උදෙසා අරගලයක නිරත වෙති.

මෙම පුචාරණවලට යුරෝපයේ සිටින ශී ලාංකිකයන් පවා හසු වූ අවස්ථා තිබේ. ඔවුන් බොහෝ විට නිවාස මිලයට ගන්නේ අවුරුදු 20 - 30ක් වැනි කාලයක් පුරා වැටුපෙන් ගෙවීමටය. නැතහොත් කෙඩිට්කාඩ් පතින් ගෙවීමටය. මෙසේ නිවාස ගත් බොහෝ දෙනා අද අසී්රතාවට පත්ව සිටිති. ඔවුන්ට ණය පහසුකම් ලබා දුන් බැංකුව ද කරකියාගත හැකි දෙයක් තොමැති තැනට පත්ව ඇත. සිය දරුවන්ගේ අධාාපන කටයුතු නිමා වූ වහා නැවත සිය රට ඒමේ බලාපොරොත්තුවෙන් ඔවුහු රැදී සිටිති.

පැවැත්ම

ලංකාවේ අද ඉදිවන මහල් නිවාස සංකීර්ණයක් වුව තව අවුරුදු 40ක් හෝ 50ක් තුළ ගරා වැටෙයි. ලංකාවේ මහල් 12කට අවසර ලබා ගෙන මහල් 15ක් ඉදි කළ ද එහි අත්තිවාරම යොදා ඇත්තේ මහල් 12කට පමණක් නිසා පැවැත්ම තවත් අඩු වෙයි. එවිට එහි සුවිශාල වියදමක් දරා අලුත්වැඩියා කළ යුතු තත්ත්වයට පත් වෙයි. එය කිසිවකුට තනිව කළ හැකි දෙයක් නොවේ. එසේම බිම් මහළ, පඩිපෙළ, සෝපාව ආදිය සඳහා ඇත්තේ පොදු අයිතියකි. එහෙයින් මේ සියල්ල නීති පුකාරව කිරීම අතිශය වැදගත්ය.

නීතිගරුක වන්න

එහෙයින් මහල් නිවාස වාාපෘතිවලින් නිවාස මිලයට ගැනීමේ දී ඊට අදාළ නීති රීති සහ එහි පුමිතිය පිළිබඳ සැලකිලිමත් විය යුතුය. ස්වාධිපතා නීතියට අනුගත නොවන නිවාස වහාපෘතිවලින් නිවාස මිලයට ගැනීම විශාල ගැටලුවක් වනු ඇත. එහෙයින් කොන්ඩොමිනියම් නීතියට අනුගත නොවී ඉදිකරන නිවාස වාසතියක නිවසක් මිලයට ගෙන සදාතනික ණයකරුවකු වනවාට වඩා මේ වන විට දියුණු මාර්ග පද්ධති, අධිවේගී මාර්ග, විදුලිය බොහෝ ගම් දනව් දක්වා පැතිර ඇති නිසා ගමක නිවසක් තනා ගෙන වාහනයක් ද මිලයට ගෙන පිරිසිදු වාතාශුය ද ලබමින් ගමක සතුටින් ජීවත් වීම හොඳය. මේ නිසා කො-න්ඩොමිනියම් නීතියට අනුගත නිවාස වාාපෘතියක නිවාසයක්ම මිලයට ගැනීමට වගබලා ගත යුතුය.

සමාප්තිය

මෙහිදී අප උත්සාහ කළේ ඔබ මහල් නිවාස වාාපෘතියක නිවසක් මිලයට ගැනීමට යොමු කිරීමට හෝ අධෛර්යමත් කිරීමට නොව එහි දී සලකා බැලිය යුතු කරුණු කාරණා කිහිපයක් පෙන්වා දීමටය. මා යුරෝපයේ පුධාන නගරයක් වූ රෝමයේ ශීු ලංකා තාතාපති කාර්යාලයේ සේවය කරනු ලැබ කාලයේදී යම් කෙටි කාලයක් මහල් නිවාස සංකීර්ණයක නිවසක පදිංචි වී සිටි අතර එම අත්දකීම හා අවබෝධය තුලින් මෙම කරුනු ඉදිරිපත් කිරීමට කල්පනා කලෙමි. එබැවින් යුරෝපයේ මේ කොන්ඩොමිනියම් නීතියට යටත්ව ඉදිකළ මැනවින් නඩත්තු වන නිවාස යෝජනා කුම ඕනෑතරම් තිබේ. ඔබත් යොමු විය යුත්තේ අනාගත සුරක්ෂිතතාව තහවුරු කරන එවැනි නිවාස වාාපෘති වෙතය. එබැවින් ඔබද ඒ පිළිබඳව අවධානය යොමු කල යුතුය. එවිට ඔබත් රටත් දෙකම සුරක්ෂිතය.





MAIDEN VOYAGE ON MATARA- BELIATTA RAILWAY TRACK

The Sri Lanka Ministry of Transport conducted a test run along the newly constructed railway line between Matara and Beliatta on January 6th 2019. The 26.75 km long-track which features Sri Lanka's longest train tunnel was funded by EXIM Bank of China. This railway track has been constructed as the first phase of the proposed railway line running from Matara to Kataragama. The second phase of the project is the 48 kilometer segment from Beliatta to Hambantota and in the third phase the track will be extended another 39 kilometers from Hambantota to Kataragama.

The newly constructed Matara-Beliatta section of the track is 26 km long and will be accompanied by 04 major railway stations and 02 sub-stations. A major portion of the construction was carried out by China Railway Group 5 (CR5) and the Central Engineering Consultancy Bureau (CECB) which acted as the consultant.

The railway line also includes one of the tallest railway bridges, the longest railway tunnel and the most modern railway station buildings in the country. The new railway line is expected to increase traffic into the south and boost trade between Colombo and the south region of the country.

Main stations have been constructed at Kekunadura, Bambarenda, Wevurukannala and Beliatta. Two sub stations have been setup at Piladuwa and



Veherahena. About 10 percent of the railway track has been built as flyovers. A flyover of one kilometer was built from Matara to Kekunadura. The flyover from Bambaranda to Vavurukannala is the tallest and the longest railway bridge in Sri Lanka.

The main railway station at Beliatta has a length of 300 meters and it will have three platforms. Underground tunnels have been made for the passengers to move across the platforms at the four main railway stations.

There are unique features attached to this railway line. The track from Matara to Beliatta will feature both, the longest railway tunnel and longest railway bridge in Sri Lanka. The 615-metre long railway tunnel has already been constructed in Nakutiya near the future Kekanadura railway station. The longest bridge will be located near the Wattegama area.

Another key factor is, this being constructed as the fastest possible railway line of the country. At the moment, the Northern rail line from Colombo to Kankesanthurai on which the famous Yaal-Devi runs, is the fastest, with 100 Kmph; the Matara- Kataragama railway line will beat this speed with a flashing 120 Kmph.

The Matara-Kataragama railway project which was commenced in 2013 is the first new railway line constructed in Sri Lanka since the island country gained independence in 1948.

CITE-EN- TTTTE



The Latest Trends in Home Construction and Renovation

The whole point of building a custom home or doing a major renovation is to create a space that is wholly personal, which means you shouldn't be beholden to trends. But in the interest of education, let's talk about some things that are happening now.







NATURAL SELECTIONS

Step away from the super-dark. hand-scraped floors for a second. Consider engineered woods with a lighter, more natural finish. Our experts say that white, gray, and washed-wood finishes are making a comeback. Think about bleached, limed, or fumed woods with matte finishes or sealed-only floors. Don't count out engineered products. They aren't necessarily cheaper, but you can achieve a more exotic look. You might also consider porcelain tiles. Porcelanosa's Parker line boasts a "wood" look. Stone floors are also showing up in unexpected places, like master bedrooms.

CLEAN LINES, OPEN SPACES

Our experts say that, on the whole, new construction is going more contemporary. This doesn't mean that everyone is moving into glorious, Rachofsky-like glass houses. But on the whole, houses have cleaner lines with less focus on turrets and more use of Austin stone and standing-seam roofs. Europhiles, relax. The Mediterranean isn't going anywhere-this is Italy Dallas, after all.

Even those who choose to stay with more traditional exteriors are going with modern, open concepts on the inside. That means fewer hallways and tiny, wasted rooms. Open floor plans afford more useable space-the kitchen that opens to the den and possibly dining areas. An abundance of glass and lift-and-slide doors, designed to open and disappear, bring the outdoors in. Again, efficiency is key. Homeowners are better understanding that 100 percent of their spaces should be completely usable.

TAKE SOME RISKS

Even the most risk-averse person should have some fun when building their dream home. Maybe you're not ready to wallpaper all the ceilings. Fine. But get on board with the glass and metal trends and employ both on your staircase. In fact, why not create a fabulous, floating staircase? Too contemporary? Consider patterned woods,







intri.cate wood designs, or an iron-and-steel combination. (On a side note, you might only need to do one staircase. It seems fewer new homes have two sets of stairs because they take up so much square footage.)

The powder bath is also a great place to try a bold wallpaper, daring paint color, or outrageous tile and hardware. There's nothing better than stepping into an unexpected and divine powder bath. But what if you hate it? That's a drag, but it's not the end of the world. "It's such a small space, so it's not significant to change it. That's why it's a good place to take chances," Michael Munir says.

FORMAL REFORMED

There has been a lot of talk about how the formal living and dining rooms have been eradicated from new homes, but that's simply not true. The rooms still exist; they function differently. The formal living room is now more of a "parlor" or an "away room," as in, "I have to get away from the televisions that seem to have shown up in every flipping room, including outdoor spaces, in this house." Many people choose to make it multi-functional -it could be a library and a bar area. It could open to the patio and be more of a party room. The point is, it doesn't disappear from the floor plan. It just becomes something that you'll actually use for more than fancy-but-uncomfortable furniture storage.

Likewise, the designated dining room still exists, but it's more open and casual. It could be the serving space for even more casual parties. Add bookcases, and, it, too could become a library.

KITCHEN CONVERSATION

We've all heard it: Kitchens (and baths) sell homes. Kitchens are the heart of the home. Grandma's kitchen: Tasters welcome. We get it! Kitchens are important. But they're also expensive. Jennifer Fordham of Poggenpohl Dallas says she tries to educate her clients from the beginning about what things cost and parse their needs. "I have to tell them that they don't single inch of the kitchen,"

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she says. "You have to think about the odd-shaped things that won't fit in a drawer." She also says ventilation is ke-folks come in the showroom and ask if there's any way around having it at all. "They think it's ugly, but you need it, if only to pass code," she says with a laugh.

We've come to expect stainless steel and granite in high-end kitchens, but maybe it's time to expand your horizons. "Granite used to be a premium, but now it's everywhere," Michael Munir says. "Most apartments have granite now." Consider engineered stone and other countertop options.

As for stainless steel, it's still a thing. But like granite, it's pretty standard stuff. You might want to take a chance on some of the new designs that Miele is producing-basically glassed appliances in all black, white, or chocolate. Think how fantastic they'll look with the tasteful Ann Sacks tile and Waterworks plumbing fixtures you've so carefully chosen.

For cabinets, think about some of the lighter woods or more natural-colored walnuts, or go bold with some matte lacquers. Fordham says white kitchens are coming back, too.

No matter your tastes, we can all agree that the two most important items in your kitchen will be a Hoshizaki ice maker and the Miele Whole Bean/Ground Coffee System. Sonic ice and caffeine always make everything better.

GO GREEN, GET SMART, & STAY HEALTHY

Having Energy Star appliances does not make you an environmentalist. That being said, if you employ geothermal pumps, you can get a tax credit-not a deduction. So if you have the money, that seems like a smart thing to do.

The focus is moving toward "healthy homes" or "wellness homes." People are choosing surfaces that are easier on the body and clean-air filtration systems.

(Courtesy: D Magazine)



Architect and civil engineering firm Woods Hardwick chooses its top 10 green buildings...



This article has been written as a team effort. They wanted to use the opportunity to have a discussion about <u>sustainability and green</u> <u>buildings</u> that spanned across their design practice studios

The selection for the buildings arose from a discussion between:

Simon Bennet

Director of the Structural Engineering Studio

Nicole Portieri

Design Director of the Commercial Studio

Peter Prescott

Associate Director of the Design Delivery Studio

They have selected buildings based on what has inspired us throughout our careers as <u>architects</u> <u>and engineers</u>, buildings we have admired, that struck a chord with us and shaped our experience and interest rather the most famous or the greenest, as this ultimately is part of the conversation.

How green is green?



Ford End Watermill Ivinghoe, Buckinghamshire

Built primarily with sustainable, recyclable, and

- compostable materials (timber)
- Zero carbon emissions from its process.
- Long service life (at least 1787 to 1963)
- Now a museum

Why choose it? Because it demonstrates why we now have to think hard about green issues. In years past, our technology was much greener. Now we are trying to reduce the environmental impact of our inherently nongreen modern technologies. Should we be learning from the past more?





Sainsburys

Greenwich, London, UK

- Chetwood Architects' award winning 1999 building now demolished
- Genuine attempt to produce a low carbon version of this building typology
- Lots of natural light. Earth sheltered. All on a contaminated former industrial site

Why choose it? A pioneering building that showed what is possible. It was a nicer place to be than other supermarkets. It was refused listing and controversially demolished in 2016. The building raises lots of questions. Does it make sense to deny a building listing just because it is too young? Would it have been OK to demolish St Paul's cathedral 15 years after its completion? Was there a lack of commitment from big business? Or does the fact that it's now gone prove that it wasn't a good building anyway? Whatever your view, the building moved the debate about sustainability





- New academic building
- Uses energy piles
- Full integration of the structural and services design

Why choose it? Because, unusually, it uses the foundation piles as a source of heat/cooling via a closed loop ground source heat pump system. This is hidden and required very careful engineering and coordination to make it work.

UNDERGROUND



Canary Wharf underground station

London, UK

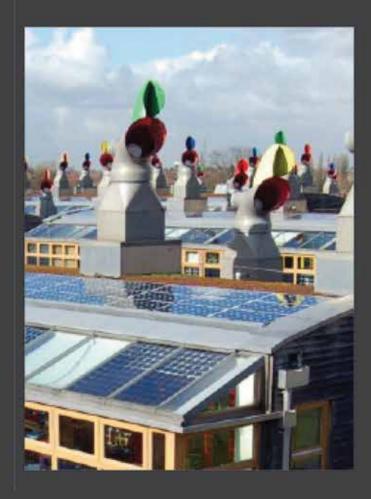
- Built to facilitate sustainable public transport
- Exposed structure reducing embodied carbon by reducing the need for finishes
- Thermal mass of structure helps keep the spaces cool
- Generous spaces for circulation to account for future passenger growth
- Public park provided on top

Why choose it? This project used the opportunity provided by a major infrastructure project (the Jubilee Line extension) to provide public space in an area where that commodity was being squeezed out. It brilliantly expresses the engineering of the building with its beautiful architecture, without the need for energy consuming and maintenance requiring finishes.



- South London eco village - 'zero carbon'

Why choose it? It is perhaps rather predictable and its architecture is not to everyone's taste, but it was a ground-breaking scheme in its time and, like the Greenwich Sainsbury's, is a benchmark against which other projects are still compared.







The Glass Chapel

Alabama, USA

- In its initial years, the Studio (founded in 1993 by Samuel Mockbee so early days for green ethos) became known for establishing an ethos of recycling, reusing and remaking. It is now an undergraduate program at the School of Architecture Auburn University Alabama, US
- Part of Rural Studio's philosophy is to continually question what should be built, rather than what can be built, both for the performance and operation of the projects.
- A local project: the glass Chapel is a community building built by and with the community.
- Multi-functional: the Glass Chapel serves as a transportation stop, community gathering space, chapel for the local choral group and distribution centre for children's summer school meals.
- Materials re-use: car windows salvaged from a Chicago scrap yard provide striking roofing material on the north side atop



Across Building

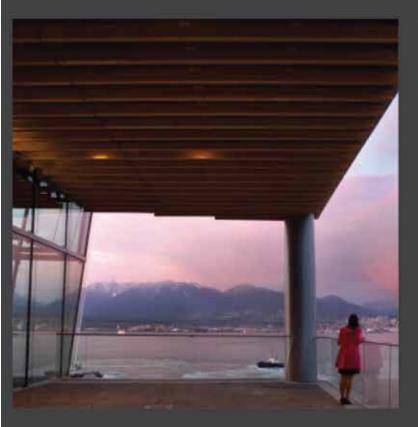
Fukuoka, Japan

Why choose it? Opened in 1995, it is an early example of a having a green roof as the theme for the project. The green roof build was chosen in order to salvage one of the last parks in Fukuoka City.



"In order to be certified as a Living Building, a structure is required to <u>produce</u> <u>as much energy as</u> <u>it uses</u> in a year"

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The Bullitt Center

Seattle, Washington, USA

 Built for the Living Building Challenge. In order to be certified as a Living Building, a structure is required to produce as much energy as it uses in a year, as well as capture and treat rainwater for all its needs for at least 12 continuous months. The structure must also meet rigorous standards for "Red List" compliant materials and for the quality of its indoor environment.

- The building has a 250-year lifespan.

03

Vancouver Convention Center

Vancouver, Canada

- "I've been and it's remarkable"
 Nicole Portieri
- Massive green roof among other green features
- Operations and Maintenance Second Accreditation
- "The Vancouver Convention Centre is proud to announce that its iconic West building has been awarded LEED Platinum certification (version 4) for Existing Buildings: Operations and Maintenance by the Canada Green Building Council. Coupled with its 2010 Platinum certification for New Construction, the Vancouver Convention Centre is the first double LEED Platinum convention centre in the world."





01

Upton Housing Scheme

Northampton, UK

- National PLC house builder (David Wilson) challenging its usual housing model
- One of the first schemes of its kind to achieve excellent Eco Homes ratings
- Contemporary approach using BRE A-rated Green Guide materials together with rainwater harvesting and PV water heating

Why choose it? Because it demonstrates a flagship scheme built by a volume house builder. The scheme was used as a primary case study of the former Code for Sustainable Houses (sustainability monitoring accreditation), which has subsequently been incorporated as a compulsory requirement within the current national building regulations.





-Smart Panelsfor Smart People in a Smart World

- Rasika Wijewardana - Asanka Wijeweera -

Have you built your dream home yet or are you planning to do so? If you are planning to build your dream home, then it is certain that you have thought on having the best place or land to build your home, the best architect to design your home, the best civil engineer in your area to design the structure of your home, the best cement type along with the quality bricks to build your walls, having a luxurious bathrooms equipped with modern bathware and having the most beautiful light fittings to enhance the beauty of your home. But what about the power distribution system & wiring of your home? If your reply is "Ah, electrician will take care of that"

then you are leaving behind one of the most important aspects of your dream home letting that selection to be done by a party who may not know of your tastes. If you need your home to be a "modern home", the conventional electrical distribution system of your home is certainly a barrier. While a toy car with remote controlling facility is available in any toy store less than 300 rupees, if you are walking to the switch point to switch off the lights or if you are returning back to your home after rushing in to workplace since you are not sure that you have switched off the electric iron or not, the electrical distribution system of your home dates back to 20th century.



Appreciating Venora Lanka Power Panels with the Silver Award in the Electronic and Electrical Products Category at the 26th Annual NCE Export Awards Last Year.

Now we are living in the 21st century where IoT(Internet of Things) is the talk of the town. IoT is the network of physical devices, vehicles, home appliances, and other items embedded with electronics, software, sensors, actuators, and connectivity which enables these things to connect, collect and exchange data(Definition -Wikipedia). IoT has already reached you on many ways in day-to-day world with the faces of online banking, Taxi services similar to Uber, smart CCTV networks etc. Same as the queuing up in the bank is replaced by online banking systems, world has already replaced conventional distribution boards on electrical distribution systems with smart panels which can be connected to your mobile phone or a PC through internet.



Smart Panel (Source - https://www.schneider-electric.com)

By connecting cutting-edge hardware with innovative software, Smart Panels enable you to pinpoint overloads and inefficiencies proactively, make informed decisions that improve operational efficiency, and finally stop chasing vague alarms. Smart panel allows you to monitor your building in real time no matter where you are in the world and by giving necessary alerts & inputs to you it helps you proactively increase operational efficiency, energy efficiency, reliability, and safety. Matching smart panel concept to a widely useful application segment, Venora Lanka Power Panels (PVT) Ltd developed a smart panel which is able to communicate through GSM network. It has the ability to inform you the necessary status updates through SMS without using 3G or smart phones. Upon receiving SMS instructions from you it can carryout defined functions providing you the remote controlling facility from anywhere in the world. This smart panel is ideal for unmanned remote stations such as mini hydropower intakes or remote irrigation outlets where generally located in rural areas where internet facility or 3G network is not available. Imagine a situation with a heavy downpour to the catchment area of a mini hydro plant which the intake reservoir & power plant has a considerable distance and plant running at its maximum capacity & intake at the spill level. If the operator needs to open the silt ejector or any other gate at intake, the only option is travelling to intake in the middle of the downpour abandoning the plant. In this situation Venora smart Panel comes in to the picture providing necessary remote controlling facility, allowing operator to know the reservoir water level, gate position & other necessary parameters through SMS while being in the power plant enjoying a hot cup of tea.

As the trend setters, Venora is proud to introduce this GSM based smart panel to Maldives and Ethiopian market. In Maldives it is planned to implement this concept for proactive maintenance of electrical distribution systems, telecommunication towers and Reverse Osmosis(RO) plants so the maintenance engineer can reside in one central place monitoring & controlling the equipment located at several islands. Since the cost factor is relatively low compared to a fully IoT powered solution, this concept is ideal for developing countries.





KEEPING CONSTRUCTION PROJECTS ON TIME AND UNDER BUDGET

By Mike Winn, CEO and co-founder of <u>DroneDeploy</u> a drone mapping software with the largest drone data platform in the world

WRITTEN BY MIKE WINN

esearch conducted by Dodge Data & Analytics and McKinsey & Company recently identified keeping a project on schedule and cost control as the two most highly valued performance metrics for owners in construction. However, the same data reveals 53% of typical construction projects are completed behind schedule and 66% are completed over budget.

With dismal numbers like that, it's no surprise to see drones becoming a day-today tool on construction sites of all sizes. Before drones, documenting site progress was a challenge, requiring paper-based tracking, or by manned aircraft photography – both inaccurate and expensive. This made it difficult for construction companies to detect issues early, communicate them to stakeholders and implement necessary adjustments to keep on schedule.

While drones are new to construction, they have come a long way in a short time. Just four years ago, companies had to dish out thousands of dollars and endure a multi-month process to get a surveyor the authorisation to fly a drone. Today, certifying a surveyor simply requires passing a 20-minute written test, which can be completed at any of the approx. 200 test centres around the United States. In the same timeframe, the price of drones have



Mike Winn, CEO and co-founder of <u>Drone Deploy</u>

decreased by nearly 90% making them a cost-effective solutions. Today's average drone used on the job site costs around \$1,500.

By easily documenting the progress of a project, producing dynamic visuals, and streamlining communication and collaboration, drones are able to improve the overall efficiency of construction projects.

MONITORING SITE PROGRESS

Daily site documentation allows managers to determine if contractors are hitting their targets and, if they aren't, to make whatever modifications are needed to get a project back on track. The real-time photo delivery capabilities of drones not only speed up this process, but also potentially cut weeks off of a project timeline.

In order to properly monitor a job's progress, photographs need to be taken on a weekly basis in order to inform reports of the progress that has been made. Drones allow surveyors to to track the progress of contractors on thousands of details – how many pillars have been drilled? How many of these have been filled with cement? – drones will be able to use machine learning to identify each of these individual data points and count them automatically. This will help maintain accountability and preserve contractor relationships.

"Drones allow surveyors to plan automated flights from their devices, ensuring that all visual documentation is consistent"

Mike Winn,

CEO and co-founder of Drone Deploy

plan automated flights from their devices, ensuring that all visual documentation is consistent – same angles, same altitudes, etc – throughout the life cycle of a project with the push of a button.

Moving forward, drones will be able to monitor the state of things on an even more microscopic scale. Instead of having surveyors walking sites daily with clickers Construction teams can also expect drones to soon be capable of delivering pre-scheduled site safety checks and stockpile analysis eports on a daily basis.

DYNAMIC VISUALS

Drones can quickly capture aerial imagery of a site that can

be stitched together to produce HD maps and 3D models. Being able to fly so close to a site, drones are able to get down to about half-of-a-centimetre-perpixel resolution, allowing surveyors to easily spot problem like cracks and damaged shingles, even in hard-to-reach places.

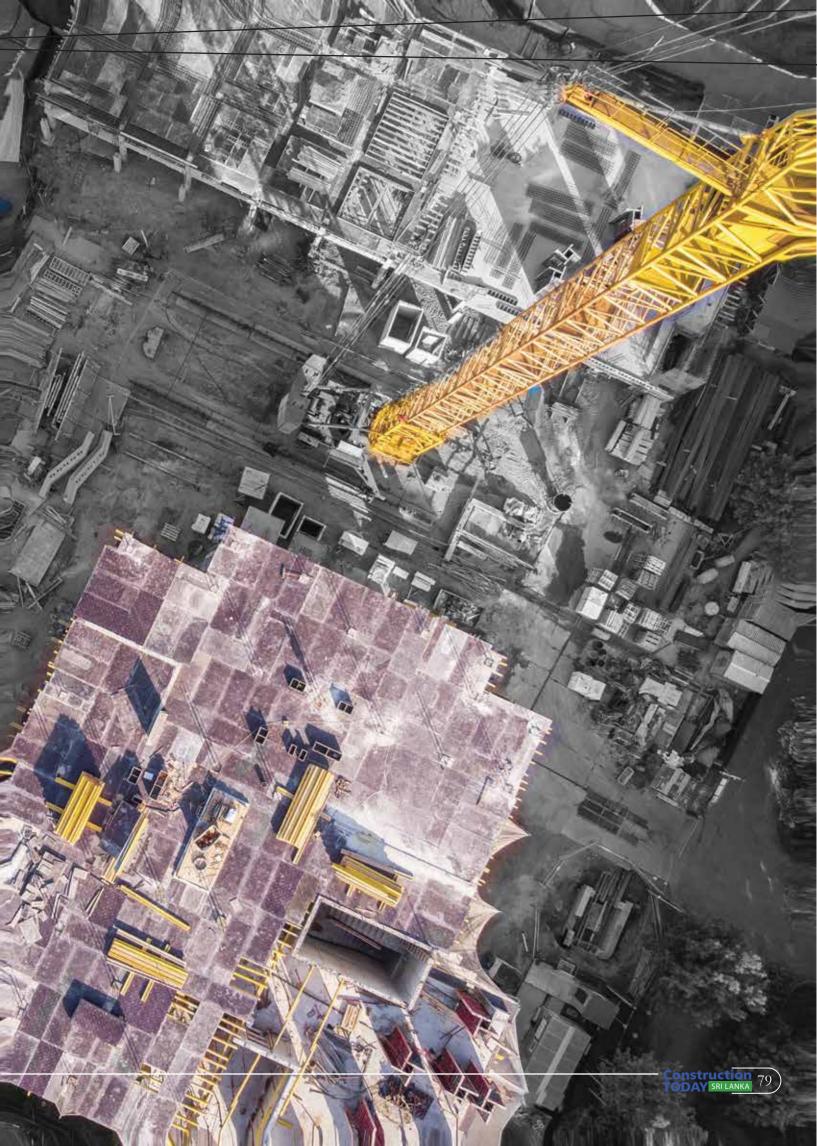
The rollout of thermal imaging has also been extremely helpful in identifying structural issues, especially for roof inspections of buildings and massive commercial complexes. These images provide heat signatures that easily show where air conditioners are malfunctioning, where there's water damage, where solar panels are dirty, and so on. This makes it a much safer process for inspectors, who are otherwise forced to scale tall buildings to check for the smallest issues that can compromise infrastructure.

STREAMLINING COMMUNICATION AND COLLABORATION

Drones simplify communication and information sharing, both internally and externally. "After completing aerial photo flights, they are able to produce progress reports immediately, delivering up-todate, easily digestible visual data"

Mike Winn, CEO and co-founder of <u>Drone Deploy</u>





"Being able to fly so close to a site, drones are able to get down to about half-ofa-centimetre-per-pixel resolution, allowing surveyors to easily spot problem like cracks and damaged shingles, even in hard-to-reach places"

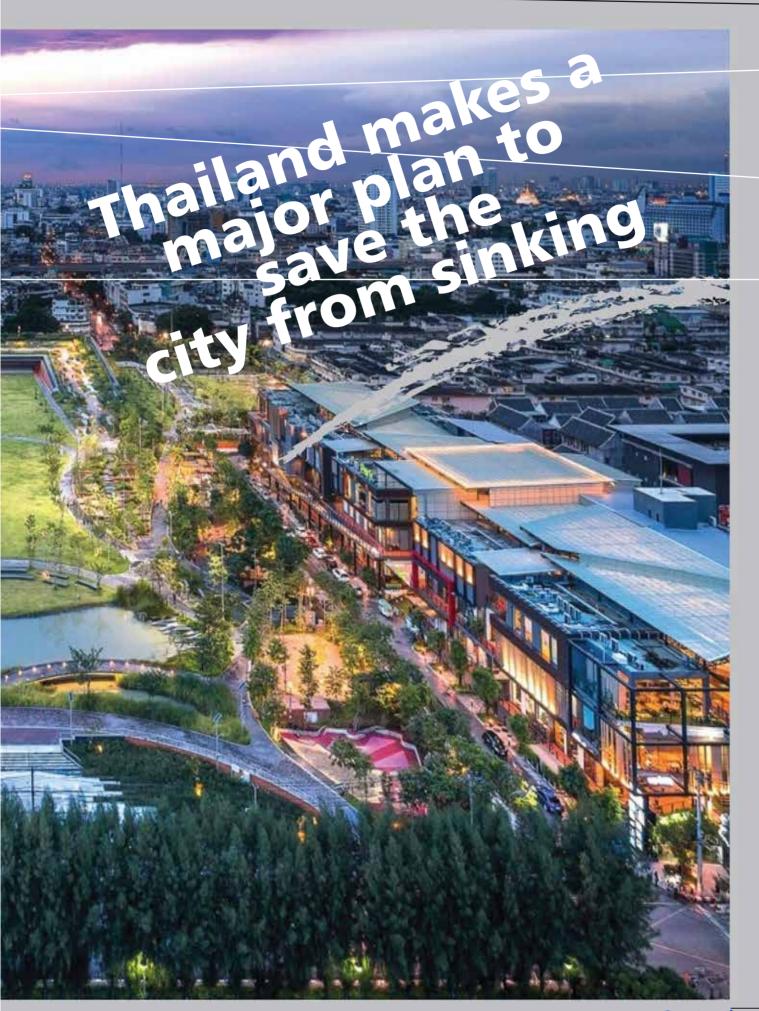
Mike Winn, CEO and co-founder of <u>Drone Deploy</u>

80 Construction TODAY SRI LANKA After completing aerial photo flights, they are able to produce progress reports immediately, delivering up-to-date, easily digestible visual data. These reports can then be sent directly to headquarters, keeping higher-ups up-to-speed on the progress of a project. By bringing the site back to the office, contractors can easily reference annotated maps and other data to more effectively address current site issues during meetings.

In the field, any design changes that often take weeks of back and forth can be implemented in the moment. Cloud-based software preserves all records in one easy-to-access location, making it easy to distribute information across teams. Further, creating a complete, visual record of a site's progress allows project managers and engineers to explore trends that can inform future jobs.

With over half of construction projects failing to hit their deadlines and financial targets, it's crucial that companies look to new technologies for a solution to this trend. With drones, companies open up the potential to complete ahead of schedule and under budget.





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Bankok is not only the capital of Thailand, but also the most populous city of the country. Although it is not much clear how the Bankok was originated, some say 'Bang' in Thai means "a village on a stream" and 'Ko' means "island."

The history of Thailand shows us that most people lived near or on the water until the late 19th century and waterway networks in the country had used for means of transport. However, the current report says the mostof those canals are now badly polluted and waiting for the treatment and cleaning

up. The geology of the Bangkok area rate of 10 to 30 millimetres per year, and parts of the city are now one metre below sea level. Therefore, some say that the city may be submerged by another 10 more years time. Warning on Bankok by OECD

Subsidence has resulted in increased flood risk, as Bangkok is already prone to flooding due to its low elevation and an inadequate drainage infrastructure.

characterized by a top layer of soft marine clay, known as "Bangkok clay", averaging 15 metres in thickness, which overlies an aquifer system consisting of eight known units. This feature has contributed to the effects of subsidence caused by extensive ground water pumping. First recognized in the 1970s, subsidence soon became a critical issue, reaching a rate of 120 millimetres per year in 1981. Ground water management and mitigation measures have since lessened the severity of the situation, although subsidence is still occurring at a The city now relies on flood barriers and augmenting drainage from canals by pumping and building drain tunnels, but parts of Bangkok and its suburbs are still regularly inundated. Heavy downpours resulting in urban runoff overwhelming drainage systems, and runoff discharge from upstream areas, are major triggering factors. Severe flooding affecting much of the city occurred in 1995 and 2011.

In 2011, most of Bangkok's northern, eastern and western districts were flooded, in some places for over two months. Coastal erosion is also an issue in the gulf coastal area, a small length of which lies within Bangkok's Bang Khun Thian District. Global warming poses further serious risks, and a study by the Organization for Cooperation and Development (OECD) has estimated that 5.138 million people in Bangkok may be exposed to coastal flooding by 2070.

Summer time is Thailand's rainy season, when Bangkok and other cities can experience powerful storms. In past years, downpours have produced enough rainfall to completely flood city streets, overwhelm drainage systems, and inundate homes Making matters worse for Bangkok, the city is sinking at a rate of more than one centimetre a year and could be below sea level by 2030.

To help prevent futureflooding, the city and local near central Bangkok in 2017. Landprocess Founder Kotchakorn Voraakhom, who grew up in Bangkok, led the design plans. The park sits on the campus of Chulalongkorn University, which commissioned the project.

The park features several characteristics that help it retain and redirect floodwater that would otherwise flow into city streets. One side of the park sits at an incline that helps

organizations have recently embarked on several projects, including mapping out an extensive water-management plan in June, 2018. One of the larger anti-flooding projects is Chulalongkorn University Centenary Park, an 11-acre green space that can hold up to a million gallons of rainwater. Bangkok-based landscape architecture firm Landprocess designed the park to address flooding in its surrounding neighbourhoods.

Known informally as the CU Park, the project was built on \$700 million worth of land f u n n e l water into a giant Tcontainer. The raised green roof directs runoff water through sloped rain gardens with native plants. The water then travels through an artificial wetland and drains into a large retention pond that soaks it up. collectiong rain water

The wetland also acts as a filtration system, where the water can be treated for toxic materials. In the case of severe flooding, the retention pond can nearly double in size by expanding onto the park's main lawn. In total, the park can hold up to a million gallons of water.

Other sections of the park include a herb garden, trails, and a recreation area. A linear rain garden - which also absorbs water - lines To Page









Eng. Saliya Kaluarachchi Dr. Rohan Karunaratne



WHY NOT FOREIGN COMPANIES GO FOR JOINT VENTURES WITH LOCAL COUNTERPARTS? - Subashini Samaranayake-



The end of 30- year armed conflict in Sri Lanka in 2009 has given a clear boost to most sectors of the economy and the construction industry became one of the vital contributors of Sri Lanka's rapid infrastructure development.

Within last couple of years country witnessed an unprecedented acceleration in the construction sectors especially after 2011 due to new airports, harbors, expressways and a number of real estate development projects. This rapid expansion paved the way for foreign construction companies coming to the country to meet the ever increasing demand in the sector.

The competition among local and foreign companies benefitted the industry and the country as a whole in many ways. However, at the same time, this created some unhealthy situations for the local investors.

Political uncertainties, drop in share market, continued decline in the dollar rate against the Sri Lankan Rupee are some of the prominent factors that triggered the situation.

The construction sector experienced a sharp slow-down in 2015 due to political uncertainty created in an election year.

Many mega projects were halted as a result of lack of foreign funds. The value of Sri Lankan Rupee against the US Dollar started plunge at a rapid rate recently reaching all time low at one point.

All these factors but not limited made a stalemate situation in the construction sector in the country which was once a thriving one in the region. Since all these above mentioned factors can be considered as domestic issues industrialists are more concern about one particular issue. That is the large presence of the foreign construction companies in the country.

Some prominent experts in the construction sector shared their generous views on the competition or one can say the dominance created by the foreign companies in the construction sector.

Dr. Rohan Karunarathne, the President of Ceylon Institute of Builders (CIOB) expressing his views said the industry growth has come down from 21% to 10% at the moment. There is a lack of projects for the local companies. Most of the high rising projects are done by Chinese com panies while only 4% to 5% of local companies are engaged in such projects.

"Already 40% of the mega construction projects are handled by Chinese companies. This has created a big challenge for our companies for their survival. Locals are struggling with their cash flow. Most of the small and medium companies have collapsed creating many economic as well as social issues" he said.

Another veteran who is also the Secretary of CIOB Eng. Saliya Kaluarachchi said the since the local companies lack the capacity to meet the ever escalating demand in the construction especially in the high rise building sector, Sri Lanka does not have a much option than opening the sector for foreign companies.

Foreign companies particularly the Chineseoffer substantially

competitive charges. Lack of innovation among companies made the foreign companies at the cutting edge of the situation. Of course there are many local companies think beyond the frame and function in the country with the ability of meeting any state-of art construction. But in general the lack of exceptional and attractive thoughts and ideas is a reason for our companies to lag behind.

"Our companies should be bold enough to move forward and work out avenues to meet ever increasing demands in the sector," he said.

Eng. Kaluarachchi pointed out that the government also have a responsibility to boost the local companies. Companies and the government should work hand in hand investing in modern technology to make this sector a more advanced one. Government should encourage foreign companies to enter into joint ventures with local counterparts by awarding initial perks and benefits.

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BOI signs deal for mixed development apartment complex with HNJ



Sri Lanka's Board of Investment has signed an agreement with HNJ Towers private limited to build a mixed development project located at R A De Mel Mawatha, Colombo 3. Board of Investment said in a statement that when completed HNJ Towers will provide employment for 14 staff members. The total value of the project is 14.82 million US dollars.

The agreement was signed on behalf of the Board by Hemasiri Fernando, Chairman of the BOI and Imzaan Haqque, Chief Operating Officer of HNJ Towers. "This is a mixed development project in Colpetty which could be described as an affordable luxury in terms of the price of the apartments. In fact, already 90% of the apartments are sold out because of the concept of sale and leaseback which we have introduced," Haqque stated.

"The project name is Raintree Residencies and it will be a very green project with a large atrium. This will contribute towards making Colombo a greener City. The complex is well equipped, as there will be a food court and a 24 hours convenience store. It could be compared to a limited service hotel. It has an excellent location as it is on Duplication Road and close to embassies and the British Council."

In addition, the BOI has signed supplementary agreements with existing BOI enterprises for an apartment complex, furniture manufacture, production of coconut milk and coconut water for export and manufacture and production of finished and semi-finished electronic products for export.

Chinese cement manufacturer to enter Sri Lankan market



A Chinese cement manufacturer is seeking to set up a new cement plant in the Hambantota Export Processing Zone in Sri Lanka. According to the Deputy Minister of Development Strategies and International Trade, Nalin Bandara, this is the first time a Chinese cement company is entering the local market directly.

"This Chinese company would mainly concentrate on the Sri Lankan market," Bandara said. "Even though, we have many manufacturers, almost 55 percent of the local consumption is imported. Therefore, there is an opportunity for a new manufacturer to market cement locally."

He said that the land allocation and environmental assessments for the project have already been completed, with the plant expected to start production in May 2020. The Chinese company is expected to source 40 percent of raw material locally and intends to increase it gradually.

Sri Lanka currently has several players active in the industry which caters to the domestic demand and imports cement from various plants in neighboring countries.

From Page 85 Thailand makes a major plan to save the city from sinking

the park's perimeter to protect the outlying roads.These roads include bike lanes and wide walkways, so that the public can easily access the park on foot. "Chulalongkorn Centennial Park is designed to face future uncertainties of climate change," the firm said in a statement. Bangkok, a mega-city of 20 million people, will continue to face the threat of sea-level rise and flooding. While 11 acres only covers a small portion of the city, CU Park is a step toward a more resilient Bangkok. Voraakhom is now designing an even larger park that will mitigate flooding like CU park. Located on the campus of Bangkok's Thammasat University, it's expected to open soon.

Capitol Twin Peaks poised to be Colombo's prime real estate opportunity



Capitol Twin Peaks, a venture under Sanken Group, located at Union Place, Colombo 2, is poised to be Colombo's prime real estate opportunity for 2019/ 2020 based on 3-factor analysis: location, time, and quality.

Real estate investment involves a relatively favourable risk/reward profile, with relatively low liquidity (ease of entry and exit). With location as one of the most important factors to consider when investing in real estate, it poses a direct profitability correlation in real estate investment.

The increase in profitability for real estate investment is proportionate to proximity to amenities, peaceful conforming areas, neighbourhood status, scenic views, leisure districts, commercial areas, transport hubs, etc. Areas such as Colombo 2 offer an attractive mid-to-long-term profitability scope, of how the locality is expected to evolve over the investment period. With the conversion of Colombo 2 to Colombo's new Metropolitan Centre there is an expected increase in property valuation in the long run.

As construction of Capitol TwinPeaks continues ahead of schedule, through Sanken's continued promise to deliver on time, in full: the project now forges forward with 20 floors completed ahead of schedule (with 50% sold). Particularly in a developing market such as Sri Lanka's, timely delivery is a vital part of ensuring maximum real estate profitability for capital gains as well as rental yields.

With the addition of the guaranteed delivery timelines, Capitol TwinPeaks is widely expected to pull in high rental yields and capital gains upon completion.

Offering international standard apartments for sale, that feature the best in quality in construction, architecture and its interiors, Capitol TwinPeaks' property specifications range from European standard finishes to customisable sky bungalows. The project has continuously appealed to those seeking apartment city living/ vertical lifestyles as well as those seeking real estate opportunities that offers a high return on investment.

Sri Lanka's Altair adjudged best condo in Asia

Sri Lanka's Altair has beaten condominium developments in 15 countries in Asia including Singapore, Hong Kong, Japan, China and Australia, to win the 'Best Condo Architectural Design' award at the 2018 Asia Real Estate Summit (ARES) hosted by Property Guru Asia in Bangkok, Thailand.

Altair was honoured at Property Guru's 'Best of the Best' awards, at which individual winners selected at country award events throughout the year, were



contenders. Markets from Sri Lanka to China competed at the largest Grand Final event to date of the 13-year-old Asia Property Awards, attended by more than 500 guests, with developers from Japan and Australia making their debut at the ceremony.

The countries that competed for awards were Singapore, Thailand, Malaysia, Indonesia, Vietnam, Sri Lanka, China, Hong Kong, Macau, Mongolia, Australia, Japan, Philippines, Myanmar

Altair's award was accepted on behalf of promoter Indocean Developers by two of the Company's directors, Jaideep Halwasiya and Pradeep Moraes. With structural construction completed and 70 percent of its apartments sold, Altair is scheduled to commence the handing over of apartments to buyers in March

and Cambodia.

2019. The building comprises of two tower blocks, a 63-storey loping tower which leans in to a taller, 68-storey vertical

tower.

Acknowledged as a new paradigm in contemporary living in Sri Lanka, the Altair building has already brought a new dimension in aesthetics to Colombo's skyline and offers its 400 apartments spectacular views of the Beira Lake, the Indian Ocean and the city of Colombo. The development's 1.5 million square feet of high-end eco-friendly living space is supported by 40,000 square feet of up-market retail space.

John Keells Properties kicks off construction for TRI-ZEN



John Keells Properties commenced the construction for their newest development, TRI-ZEN, during a special groundbreaking ceremony on the 25 th of January this year, at the site located at Union Place, with additional access from Braybrooke Place.

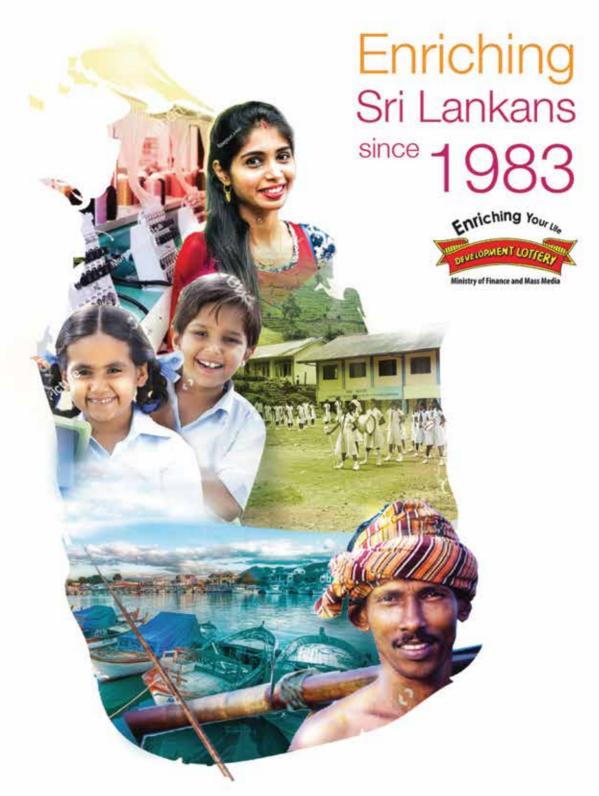
Projected for completion in 2023, this development is one of the most anticipated metropolitan projects in the country since its announcement in 2018. Positioned at the heart of Colombo, TRI-ZEN offers better convenience and value for the modern city-dweller and stays true to the developer's signature brand of smart-living, convenience, and comfort, taking the concept of urban living to the next level.

Available in one, two, and three-bedroomed units, the apartments are priced at an affordable Rs. 23 million upwards. Considering the current economic climate, the project has been priced in Sri Lankan rupees, raising the bar for investor confidence.

The groundbreaking ceremony was held in the presence of the Deputy Chairman and the Group Finance Director of John Keells Holdings PLC Gihan Cooray, President of John Keells Property Sector Suresh Rajendra, Sector Head-John Keells Properties Nayana Mawilmada, Joint Venture partners Chairman of Indra Traders (Pvt) Ltd. Mr. Indra Silva, and Managing Director-Indra Traders (Pvt) Ltd Rushanka Silva, alongside officials from construction partners China State Engineering.

At the ceremony, Nayana Mawilmada Head of Sector at John Keells Properties re-instated the thinking behind launching this development. "This is an extremely good time for both local and foreign investors to invest in the property market in Sri Lanka. Potential investors for TRI-ZEN can rest easy with the assurance that the development will not be subject to forex rate-based price variations. This was a strategic decision on our part to overcome volatility in international currency markets and deliver value to our customers."

It comes as no surprise then, that the 53-storey complex featuring 891 'smart' apartment homes is selling fast. With the knowledge that a luxury property in a prime location holds a value that rarely decreases, TRI-ZEN is growing in popularity among buyers.





As a corporate citizen, Development Lotteries Board is proud to have stayed true to their twin-pronged philosophy of enriching Sri Lankan lives since January 19, 1983. Not only through millions of rupees in prizes but as well as being a key donor to the President's Fund for the Mahapola Scholarship Programme through the Mahapola Higher Education Trust Fund (MHTF) and extending financial support for needy persons for heart/ kidney transplant/ cancer treatments. Further they have been supporting Social/ Cultural/ Sports/ Religious and emergency situations through the President's Fund.

At DLB, we are of the firm conviction that profits, and ethics are but two sides of the same coin.



Development Lotteries Board | www.dlb.lk







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