

# SAE eNEWSLETTER

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## Dear Colleagues:

On behalf of the Editorial Board members of the SAE eNewsletter, I am wishing you, your respected families, friends, and colleagues a Happy New Year 1399.

We are looking forward to the prosperity and peace in Afghanistan and the entire world. We are also wishing you safety from coronavirus.

It is a pleasure to provide you the second issue of the 2020 SAE eNewsletter (newsletter) with latest information about the activities of the Society of Afghan Engineers (SAE).

This is the tenth year of the quarterly update from the SAE through the publication of this newsletter.

Thanks to the readers of the newsletter who have sent us technical articles, comments, suggestions, and news.

This issue of the newsletter features an article by Mr. Amanullah Mommandi about Kabul City Groundwater Aquifer Storage and Recovery; and another article by Dr. Said Sharif Hossainy about Canadian Advanced Building Design and Construction. There is a report by Mr. Ghulam Feda, AEBT President, regarding tele-education training activities in Afghanistan.

The newsletter includes information about this year's SAE Election for the positions of the Society President and Board of Directors. The elected members will serve in their positions during the years 2021 - 2023.

We are looking forward to the receipt of your technical news, articles, comments, suggestions, questions, and opinions about SAE activities, especially this publication.

As always, we welcome your feedback, questions, technical news, and articles about Afghanistan.

Very Truly Yours, G. Mujtaba, MS- CE, P.E., CPM; Editor- In- Chief, SAE eNewsletter.

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## **GREETINGS FROM THE SAE PRESIDENT**

Dear SAE Colleagues Salaam:

I wish everyone a happy, healthy, and prosperous New Year 1399. I pray that you and your loved ones are staying safe during this uncertain time.

In light of the coronavirus pandemic, on behalf of the Executive Committee, I would like to remind everyone to practice and respect good social distancing and other protective measures while you are in direct contact with the public. Our hope is that together we will be able to contain and stop the spread of this virus.

Although we understand that we are in a difficult time dealing with the disruptive effects of coronavirus, we believe that SAE should continue to pursue its important work to the extent possible through virtual communication and other means. As mentioned in my January message, SAE is undergoing its process to elect the Society's new leadership for the



next three years. The volunteer Election Committee has been selected and confirmed by the Board of Directors.

The Election Committee will publish its guidelines and requirements for candidates shortly. I ask that all qualified members exercise their rights and privileges and participate in this democratic process. If you have time and are willing to serve the Society, I asked that you consider applying for a leadership committee of your choice. Your active participation in this process is critical. I call on all Afghan professional engineers and Architects as well as other professionals to participate and become active with the day-to-day operations of the Society.

I sincerely thank you for your willingness to participate in SAE's activities and to help our beloved country Afghanistan prosper.

Stay Safe

Sincerely,

Atiq Panjshiri

President, The Society of Afghan Engineers

## **Kabul City Groundwater Aquifer Storage and Recovery**

Amanullah Mommandi, M.S., P.E.

#### Abstract

Rapid population growth and other factors have led to reduced groundwater supply for Kabul City residential and commercial use. In this article the author proposes the implementation of Aquifer Storage and Recovery (ASR) programs and the construction of two new dams to augment ASR programs in order to provide adequate water to recharge KabulCity groundwater aquifers.

#### Introduction

Kabul, the capital of Afghanistan, since 1775 is the fifth fastest-growing city in the world. Its population in 2017 was estimated at five million and is expected to increase to about eight million by 2050. Rapid population growth and expected temperature rises due to climate change mean that the area will need six times more water by 2050, according to the US Geological Survey. Despite this urgency, after a review of the literature related to Kabul City drinking water projects, the author did not find literature on the subject of how to increase ground water levels to prevent aquifer depletion. Much of the existing efforts and related literature center on small tasks and funding availability.

Development of a modern water supply system for Kabul was initiated at the end of 1920s when the King Ghazi Amanullah Khan invited a British engineer to bring water from Paghman River to Kabul residences.<sup>3</sup> The project consisted of four components. The first component was the construction of a water intake structure on the Paghman River in Paghman to withdraw surface water. The second component was the installation of a five-inch conveyance pipeline from Paghman to Deh Afghanan, a distance of 26 kilometers. The third component was the construction of a storage facility at Deh Afghanan. The fourth component was the construction of a water distribution network from the storage facility to Kabul. This was the only drinking water project that drew water from the Paghman River. Municipal consumers were supplied water through service connections and public standpipes. A historical feature of Kabul is the water vendor, or Saquau, who delivered water in goatskin bags from public standpipes.<sup>4</sup>

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<sup>&</sup>lt;sup>1</sup> Draft Kabul City Master Plan. June 2011, RECS International Inc. and Yachiyo Engineering Co., Ltd.

<sup>&</sup>lt;sup>2</sup> https://www.theguardian.com/world/2010/jul/19/kabul-faces-severe-water-crisis

<sup>&</sup>lt;sup>3</sup> Afghanistan National Plan including Kabul City, 1919 (First National Plan)

<sup>&</sup>lt;sup>4</sup> Appraisal of the Kabul Water Supply & Sanitation Project Afghanistan, May 22, 1975. International Bank for Reinstruction and Development Report No. 746-A

After the 1920s, future drinking water projects, which are outlined in Kabul City Master Plans listed below, used deep wells to draw drinking water from Kabul groundwater aquifers.

- 1. 1974: Second Kabul City Master Plan
- 2. 1978: Third Kabul City Master Plan
- 3. 2011: Fourth Kabul City Master Plan (current)

It took thirty-four years after the 1920 project that pulled water from the Paghman River for the second major development in supplying water to Kabul. The Allaudin well-field was constructed between 1954 and 1965 under a bilateral agreement between Japan and Afghanistan. The third major project was the Afshar Groundwater utilization funded by Federal German Republic.<sup>5</sup>

Following the above milestone projects, several additional drinking water projects for Kabul City have been initiated through the government of Afghanistan, donor countries, non-governmental organizations.

## **Kabul City Groundwater Aquifers**

Today, the main source of municipal water for commercial and residential customers in Kabul are groundwater aquifers, which generally flow in the direction of surface-water drainage.

Kabul groundwater aquifers are under increased stress from various sources, which is putting a great strain on future water supply for the Kabul City. One cause is the surge in population in Kabul City, which has led to a higher demand for drinking water. In response to a growing population, the Kabul City municipality has been digging more wells and building storage and distribution networks to provide drinking water for new residential and commercial users.

Another cause of strain on future water supply are that recent droughts have hindered the ability of the Kabul, Paghman and Logar rivers to recharge the aquifers through seepage. Currently, the Kabul and Paghman rivers run dry during the summer months. Previously the rivers were able to recharge 80% of the aquifers. Therefore, together, precipitation and river seepage were adequate for groundwater replenishment.

There are two other major factors that affect Kabul groundwater resources. One of them is an increase in commercial water usage. The second is that the private sector has increasingly been allowed to drill their own wells and access groundwater resources in Kabul and surrounding areas. There are more than 72 private companies in Kabul, drilling wells and depleting groundwater storages.

The Afghanistan Geological Survey (AGS), with technical assistance from the U.S. Geological Survey, established a water-level monitoring network in the Kabul Basin, Afghanistan, in 2004 Water levels were monitored in 69 wells in the Kabul Basin, Afghanistan, starting in July 2004 and continuing through March

<sup>&</sup>lt;sup>5</sup> Appraisal of the Kabul Water Supply & Sanitation Project Afghanistan, May 22, 1975. International Bank for Reinstruction and Development Report No. 746-AF

2007.<sup>6</sup> Static water levels have seasonal fluctuations from 0.5 to 3 meters. As a result of increased demand and reduction in ground resources, there has been a five to ten meter decline in groundwater levels since 1980 and, according to a 2013 USGS report the rate of groundwater level is decreasing 1.5 meters per year on average. In one monitoring well a decline of 30 meters has been observed. <sup>7</sup> As expected, many shallow wells have dried up completely.

To summarize, today, the water seepage from Paghman, Kabul, and Logar Rivers; and current precipitation are not adequate to recharge the Kabul groundwater aquifers due to the skyrocketing demand for drinking water, the rapid increase in commercial use, and the unregulated private sector's use of the groundwater.

## **Looking to the Future: Aquifer Storage and Recovery Programs**

The mechanically recharging of the Kabul City ground water aquifers were recommended 45 years ago in 1975. Now is the time to take practical steps to explore new water sources to recharge Kabul City groundwater aquifers prior to groundwater allocation becomes an unmanageable reality. In 2017, the author attended the American Water Resource Association Annual Conference in Sacramento California where there were many excellent presentations related to water resources. Two presentations related to Aquifer Storage and Recovery (ASR) programs were of special interest to the author due to their urgent and immediate applicability to Kabul City and other cities in Afghanistan. (See Figure 2 for a general ASR schematic overview.)

One promising example of artificial recharge of aquifers comes from the City of Yakima located in the state of Washington. In the United States, the artificial recharge of aquifers dates back to the early 1900s. Yakima uses an ASR program that stores spring runoff from nearby streams in unground storage (see Figure 1). The stored runoff water is then accessed during the summer months when demand is high. The recharge water is chlorinated and used as drinking water. There are over 400 similarly operating ASR wells across the United States.<sup>9</sup>

<sup>&</sup>lt;sup>6</sup> Ground-Water Levels in the Kabul Basin, Afghanistan. 2004-2007USGS Open file Report 2007-1294

<sup>&</sup>lt;sup>7</sup> Ground-Water Levels in the Kabul Basin, Afghanistan. 2004-2007USGS Open file Report 2007-1294

<sup>&</sup>lt;sup>8</sup> Appraisal of the Kabul Water Supply & Sanitation Project Afghanistan, May 22, 1975. International Bank for Reinstruction and Development Report No. 746-AF

<sup>&</sup>lt;sup>9</sup> Policy, Permitting & Particulars of Aquifer Storage and Recovery in Washington State, Melissa Downes, November 6, 2017

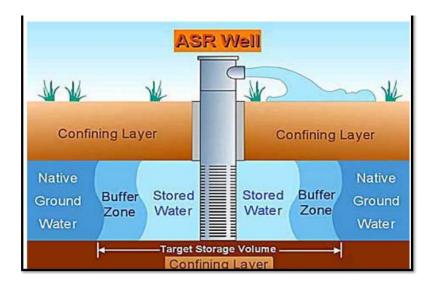


Figure 1. General ASR Schematic<sup>10</sup>

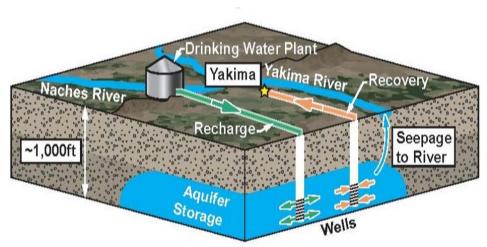


Figure 2. Yakima ASR Program<sup>11</sup>

<sup>&</sup>lt;sup>10</sup>Illustration by Melisa Downes Office of Columbia River – Technical and Policy Lead, American Water Resource Association (AWRA) 2017 Annual Conference November 6, 2019

<sup>&</sup>lt;sup>11</sup> Illustration by David Brown Water /Irrigation Manager City of Yakima, American Water Resource Association (AWRA) from the 2017 Annual Conference November 6, 2019

## Killing Two Birds with One Stone: Recharge and Recreation

The increase in water use has also put recreation under stress. The Paghman recreation area as well as the Qargha Dam have been affected. One solution to this problem is the construction of two new dams on the Kabul River: The Shah Arose in Shaker Dara Dam and the Shatoot Dam in Tanghi Saidan. These projects will attract new visitors for recreational purposes and provide additional water supplies for irrigation and municipal use.

In addition to the two aforementioned dams under the construction, the author recommends the construction of two new dams: a diversion dam on the Logar River at Sangi Naweshta and second dam on the Kabul River at the mouth of the Tangy Gharu. There are a number of benefits associated with the construction of these two new dams. First, the additional dams will provide adequate water to recharge Kabul City groundwater aquifers in addition to additional recreation facilities for the public to enjoy. Additionally, the Logar River diversion would also provide running water through the City, during the months where water is not needed for irrigation in Waylayati, Beni Hesar and Bagrami. This new source of running water will keep the riverbed clean and provide a pleasant environment. The second dam that the author propose is, at the mouth of Tangy Gharu, which would provide, in addition to drinking water for ASR projects, an additional recreation area and, importantly, it would retain sediment from the Logar and Kabul rivers sending clean water to the Mahipar Power plant. At the present time, the sediment load damages the turbine blades of the Mahi Par power plant. Clean water would extend the life of the turbines.

## **Conclusion: Looking Ahead and Next Steps**

During a 2012 trip to Kabul, the author first brought the City's drainage and aquifer depletion issues to the attention of Cty officials. Several years later, the author prepared two presentations for the Society of Afghan Engineers (SAE) conference in January of 2019 in Washington D.C. related to urban storm drainage and Kabul groundwater recharge. At the time issue of Kabul groundwater recharge was tabled for the next meeting due to time constraints.

It is beyond the scope of this report to include the issue of groundwater contamination that is a result of raw sewage flow in theCity. This issue, however, is critically important and should be addressed as many contemporary health concerns are linked to water contamination in Kabul.

In closing, it is important to revisit the fact that most reports and articles related to issues pertaining to Kabul groundwater are very limited in scope. This piecemeal is primarily due to funding specifications and restrictions put into place by donors. Because of this, comprehensive plans that include the entire city have not come into fruition.

#### **Recommendations:**

The author recommends that the Afghanistan Urban Water Supply and Sewerage Corporation (AUWSSC), complete comprehensive studies that cover the entire Kabul basin and then, upon completion, work to implement the findings. This effort will require active participation from various Afghan ministries, among them the Afghanistan AUWSSC, Ministry of Agriculture Irrigation and Livestock, Ministry of Energy and Water, Ministry of Urban Development, National Environmental Protection Agency, Ministry of Public Health and many more.

The immediate steps the author recommends for implementing a Kabul City Groundwater Aquifer Storage and Recovery Pilot project are listed below<sup>12</sup>:

- 1. Lease land from farmers every year after their crops are harvested until the next farming season in order to pond water from current irrigation systems on leased farming land. This practice will recharge shallow aquifers and will generate funds for farmers.
- 2. Install recharging pumps along the existing irrigation ditches to help recharge aquifers.
- 3. Construct a 25 to 30-meter dam on Logar River at Sangi Naweshta to divert Logar River surplus water after crop season is over. Ensure there is a minimum flow in Logar River to keep recharging the Bagrami deep wells aquifers and support wildlife and wetlands in Bagrami area.
- 4. Construct a dam on Kabul River at Tangi Gharu to retain spring runoff from the Kabul and Logar rivers, allowing for recreation and an ASR Project.

### **Additional references**

- 1. Groundwater Levels in the Kabul Basin, Afghanistan, 2004-2013. USGS Open -File Report 2013-1296
- 2. Word Bank Report No. 1955a-AF, Afghanistan Staff Appraisal Report, Kabul Water Supply and Sewerage Project, June, 1978.
- 3. World Bank Report No. T7670-AF, Urban Water Sector Project, April 14, 2006
- 4. Kabul City Current Status Report for Urban Development, Japan International Cooperation Agency (JICA) June 2011

<sup>&</sup>lt;sup>12</sup> For long term water demands, the author contends the only dependable and adequate water source is the construction of a dam on the Panjshir River in Gulbahar.

#### **About the Author**

Amanullah Mommandi, M.S., P.E. Vice President of Society of Afghan Engineers

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Mr. Mommandi was born in Logar, Afghanistan in 1947. He attended Kabul University where he graduated from the College of Engineering with a bachelor's degree in Civil Engineering in 1968. Subsequently, he joined the Water and Soil Survey Authority in the Ministry of Agriculture and Irrigation where he served as a water resource engineer until 1973.



Mr. Mommandi pursued graduate studies in Water Resource and Hydraulics at Colorado State University located in Fort Collins, Colorado where he obtained his master's degree in 1975. Mr. Mommandi then returned to Afghanistan and started working for the Ministry of Water and Power (MPW) initially as a water resource engineer before assuming the roles of General Director of Planning, General Director of Technical Monitoring and Inspection, and finally as the President of Kunduz Khanabad Water Resource Authority.

After immigrating to the United States, Mr. Mommandi transitioned to the private sector as a consultant before landing at the Colorado Department of Transportation (CDOT). Mr. Mommandi's career at CDOT spanned 33 years before his retirement in 2019. At CDOT, he served as the Hydraulic Program Manager and later on as the Director of the Applied Research and Innovation Branch. Mr. Mommandi co-authored many publications related to water resource and transportation.

In 2012 Mr. Mommandi went to Afghanistan where he presented on various water resource hydraulics and transportation applications at the Ministry of Public Works and the College of Engineering at Kabul University.

Mr. Mommandi joined the Society of Afghan Engineers (SAE) in the early nineties, chaired the SAE Colorado Chapter and served two terms in SAE Board of Directors. Currently Mr. Mommandi is the Vice President of SAE.

# Afghan Education for Better Tomorrow (AEBT) and Society of Afghan Engineers (SAE) Training Activities in Afghanistan

By

### **Ghulam Feda, AEBT President**

#### **Introduction:**

In 2009, a group of Afghan Americans founded AEBT as a total volunteer Non-Governmental Organization (NGO) registered in both Afghanistan and California, to support the Afghans that are left behind in their war-torn home country. By networking and working with other NGOs, AEBT has been able to provide educational and health services to people in remote areas of Afghanistan.

In 2018, the AEBT President developed a concept that allows AEBT to concentrate on installing the necessary equipment to deliver Tele-Education and Tele-Medicine to Afghanistan.

## **Tele-Education Program:**

Herat University and the Aschiana School's male and female students in Afghanistan have benefitted from AEBT's Tele-Education program.

AEBT and the other volunteer Afghan expatriate professionals in the USA, Australia and Canada have offered Herat University classes ranging from Psychology and Stress Management, Sociology, Arabic language, Afghan Art History and Archeology, Microsoft Office as well as Flood Prevention in Herat; and Structural Engineering classes by an SAE member, Mr. Amin Mahmood, PE, SE; President, AM Structural Design Inc.

Mr. Mahmood offered training classes to Herat University students in the field of structural engineering along with one class in flood and erosion control. The students as well as the Faculty members found his lectures to be informative.

Aschiana School has benefited from classes ranging from English as a Second Language, Psychology instruction and Counselling, a Stress Management class, and classes for the preparation for University Entrance Examination. By the Way: In 2019, two female Ashiana students who graduated from Mr. Feda's program on college preparatory were so well prepared that they have been accepted into Kabul University!

To date, approximately 200 students have participated in AEBT on-line classes.

#### Tele-Medicine

AEBT Tele-Medicine Clinics are in Kalacan, Badakhshan and the Aschiana School in Kabul. AEBT first identifies physical space, retrofits it and installs the necessary satellite dishes, and furnishings. Then, using Tele-Medicine equipment purchased in India, a trained medical technician, in consultation with an on-line, volunteer Afghan expatriate physician and/or psychologist in the US, consults with a patient in a private room, performs diagnostic physical health tests and gets vital signs, then upload the results via 3G to a dedicated World Health Organization (WHO) website and to the Afshar Hospital in Kabul where their laboratory and medical staff view the patient's input from AEBT and they coordinate the patients follow-up healthcare. See AEBT's video on u-tube to follow the process (https://youtu.be/7ai3Me\_y7aU).

In 2018, a total of 55 medical and/or Mental patients were treated through AEBT's Tele-Medicine. It will not surprise you to know that a majority of Afghan's health-related problems stem from stress and therefore receive counseling and skills for stress management from AEBT's staff.

In 2019, AEBT and Mr. Farouk Achikzad, founder of Raqim Foundation and Aschiana NGO Schools formed a Memorandum of Understanding (MOU) to provide additional programs and clinics. The AEBT is indebted to Mr. Achikzad for providing support with physical space, equipment, instructors and finances to help AEBT realize its potential.

Recently, the AEBT president, has been asked by Herat University administration to expand Tele-Education to departments beyond Engineering and History. AEBT will consider this once a formal request has been submitted.

In addition, the Afghan Ministry of Higher Education assigned the Director of Online Programs to discuss Tele-Education with AEBT and seek potential expansion to other universities. This meeting has yet to be scheduled.

How can you or your organization help AEBT expand and continue its programs?

Firstly, by providing volunteer instructors to teach classes on state-of-the-art techniques and technology in their areas of expertise. Second, assisting AEBT fund their programs. Purchasing and installing the technical equipment such as satellite dishes, computers, internet fees and paying technical assistance in Afghanistan all require money.

Being an all-volunteer 501(c)3 non-profit organization, the AEBT does not have the funds to expand, let alone continue maintaining and offering their great programs.

The AEBT President and Board of Directors look forward to discussing their organization and how YOU can work to help them continue to meet their goals. The current corona virus break from the normal lives offers an excellent opportunity to instigate phone and email discussions on how we can all work together to help Afghanistan rebuild.

For additional information, please contact Ghulam Feda at your earliest convenience by telephone

on 916 505-2364 or by email on gfeda12@gmail.com.

## **About the Author**

Mr. Ghulam Feda graduated from University of Cincinnati with a master's degree in electrical and computer engineering, He has more than 30 years of leadership experience in industrial R&D projects including but not limited to organizational efficiency. He has also served on the advisory boards of several state colleges and universities, was a founding member of science and technology centers in the U.S. and abroad, and has been the recipient of a patent award in "Glass Technology" and a Congressional award for his work in the implementation of innovative energy efficiency projects.

Engineer Feda is passionate about projects that make promising uses of technology to transform education (e.g., tele-education) primarily to foster deeper learning in underserved and under-resourced communities in parts of the world where the need is greatest.

An avid traveler, Mr. Feda has written several articles on the architectural techniques of ancient civilizations and about Afghan history and culture. He is co-founder and the president/CEO of Afghan Education for a Better Tomorrow, an organization at the forefront of developing and delivering educational resources to war-torn Afghanistan

## **Canadian Advanced Building Design and Construction**

**Central City** 

By

Dr. Said Sharif Hossainy

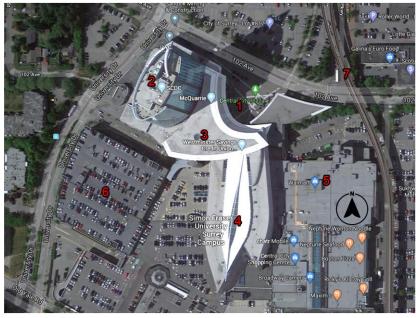
#### **Introduction:**

This article describes Central City project, which the author was involved as part of the architectural design team of this great Mixed Complex project. The list of design team member is included in this article. This project is located in the City of Surrey, in the province of British Columbia-Canada.

During the design, the project was considered to be the second largest project in Canada and the first largest project in the province of British Columbia.

The author served as one of design architects of this structure, an award winning development in the City of Surrey.

The project is located along King George street which is a main rout running North- South, next to the Surrey City Sky Train and the City Bus Stations, It transformed the existing area into a vibrant location for residents to work, study, and trade. The bird's eye image below shows the complex. The building Tower is shown in Figure 1



(Google Picture)

Central City Mixed Complex Project Site Plan

- 1 Main Entrance Courtyard
- 2 Tower Office Spaces
- 3 Atrium
- 4 Galleria
- 5 Existing Shopping Mall
- 6 Parking Lot
- 7 Skytrain



Figure 1 - Central City Mixed Complex building Tower (Photo, by Author Hossainy)

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## The project description:

The main goal of the Provincial government of British Columbia was to build a new university in front of a shopping mall in the city of Surrey, for which, the architects created a new urban center and incorporated the university into a business / commercial center.

The benefit of this type of combined project is to make the economy more prosperous and to make it easier for students and other people to walk and shop.

The idea is well thought of, with the new campus located on top of the existing shopping center, integrate the educational, administrative, and commercial spaces together, while meeting the needs of the university, including books, stationery, shops, cafes and the recreational area.

The complex has been recently renamed as Central City, and with its sensational and superb buildings, making it the most modern area in the province.

The project was completed in 2004 at a cost of \$ 135 million covering an area of 1,000,000 square feet (92903.04 square meters) of living space. The project covers an area of 12.40 hectares of construction and utilized advanced building materials.

The architects and structural designers of this project deliberately responded to advanced technology by using re-processed materials and various types of natural materials.

This Central City project complex has four main parts:

- 1. An elliptical 23 story tower office building with three lower floors occupied by Simon Frasier University (SFU).
- 2. The building of the SFU.
- 3. A large courtyard or hall called the Atrium. Where functions as the foyer of the complex.
- 4. A large parking facilities for 1,400 cars.

A large courtyard (Exterior) provides the main entrance to the tower's office building, SFU and the Atrium (Figure 2).

The outer wall of the large entrance hall is adorned with glass from the ground up to the ceiling. The wall is about four degrees tilted outside to prevent light reflection to some extent. The glass wall is almost invisible and hung on massive wooden columns (Figure 3).

The Atrium expansive roof structure is called the wood space frame and it is held by wooden bases and concrete columns. The ceiling space is truly amazing and spectacular because it demonstrates a unique structure (Figure 4).

As it is mentioned above, a large amount of recycled material was used in this project. For example, a blend of stainless steel and brass shavings mixed with concrete created an attractive Terrazzo surface.

Exterior walls are cladded with material made of zinc (Canada is one of the largest producers of zinc in the world) and raw titanium. The panels transform in bright sunlight to orange color.

At elevations, site of the building a new type of chemical stainless-steel board has also been used, which, after being immersed in nitric acid, changes slightly with the color difference, especially black, and ultimately the elevations is not looking monotone.

In the interior walls facing the large entrance hall, colored glass and concrete boards are used in addition to the exterior wall materials (Figure 6).

The SFU takes up three floors, and connecting tower, atrium and galleria. The galleria was built on top of the existing shopping center building and has evolved into a commercial mobility center. It should be noted that the floor plan has the shape of a shark.

The galleria's ceiling is made of a staggering wooden structure, where the upper part is designed from glass to catch the daylight. Since the floor plan has been designed in the form of a shark, the ceiling of the complex is mimics shark ribs (Figure 5). The use of wood is another example of natural material commonly used in this project.

SFU occupied the lower, three floors of the building. The tower part of the building is elliptical, built for governmental and non-governmental offices, and offers spectacular views from every side.

Each floor of the tower covers an area of between 951 and 1575 square meters, which together provides approximately 90,000 square meters of space for office use. Ceiling height in rooms vary from 3 to 3.50 meters.



Figure 2 – The Courtyard-Entrance to the Central City Mixed project. (Photo, by Author Hossainy)



Figure 3 – The Entrance hall with glass wall. (Photo, by Author Hossainy)

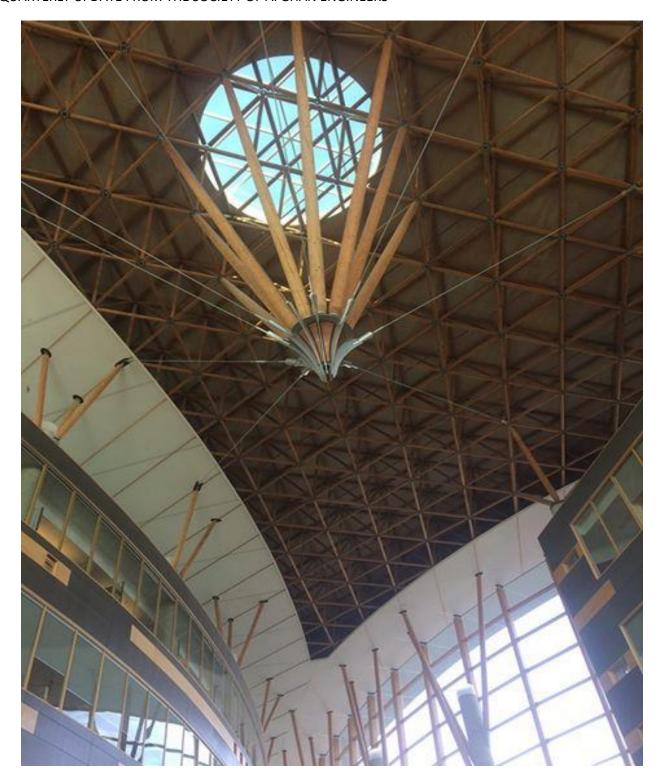


Figure 4 – Atrium's large wooding ceiling. (Photo, by Author Hossainy)

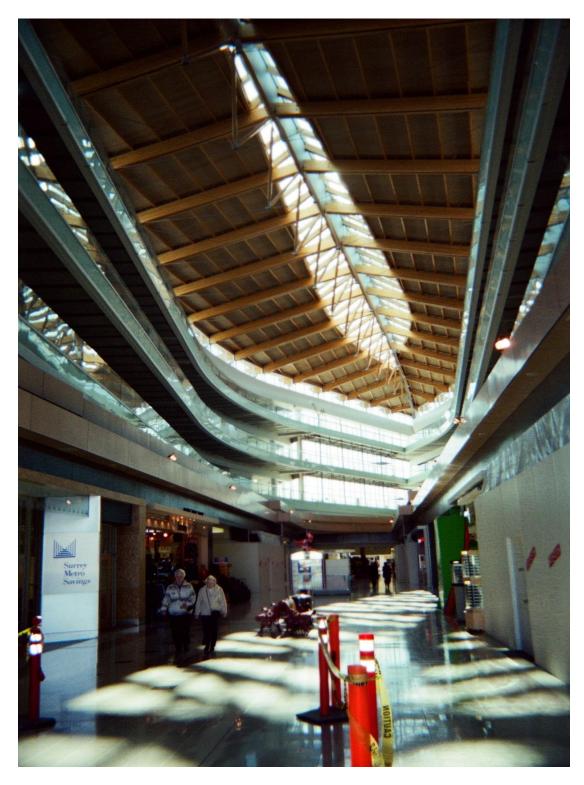


Figure 5 - The galleria's celling is astonishing and mimics shark ribs. (Photo, by Author Hossainy)

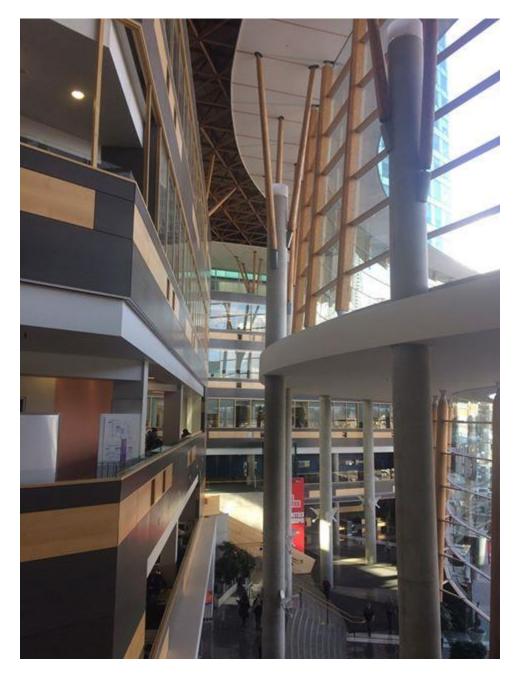


Figure 6 – Interior wall facing the large hall. (Photo, by Author Hossainy)

Exterior walls (curtain walls) are generally aluminum-glass frames. The project utilizes the latest heat control technology. In the long run, the energy saving will no doubt be tangible. Controlling the energy consumption of a building is one of the most important design issues in North America.

Many logistical problems were resolved thoughtfully. During construction, the existing shopping center continued their business activities without interruption.

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The complex is a new center, which has stimulated the expansion and development of Surrey, one of Canada's fastest growing cities.

To illustrate the extent of this large project, the architectural drawings involved over 350 drawing. This does not include structural, mechanical, electrical and HVAC drawings.

The author was involved in design of galleria floor plans, "all lines are curved," and the design of the elevations and some roof details. The other responsibilities of the author included coordination MEP and architectural drawings,

The complex was constructed by the Canadian Construction Company and would not have been possible without the skill and expertise to complete such an abstruse and large-scale project.

#### **Conclusions:**

As it is mentioned above, the Central City project was a very sophisticated project, especially the galleria building at the top of the shopping mall. The entire team; including, architects, engineers, and contractors work together to accomplish this project. The success of the project was that qualified design and construction teams were responsible for the work. The quality materials were used in the project. There were strict quality control and quality assurance during construction to ensure that the project is built in accordance with contract documents; including design standards, project plans, construction specifications, and building code requirements. This project was an example that, the designers contractors should work as team members. During construction it is important that the proper inspection, materials testing, quality control and quality assurance should be performed.

## **Project Spotlight**

## **Central City**

**Location:** City of Surrey, province of British Columbia, Canada.

### **Architects:**

Bing Thom – Principal

Michael Heeny - Executive Director

Chris Doray – Design Director

Francis Yan – Associate Director

John Camfield - Associate Director

Architectural Team Members: Stefan Aepli, Allan Alomes, Sara Bgornson, James Brown, Mattew Cencich, Kori Chan Stewart Child, Rosalyn Chung, Clint Cuddington, Sturt Curran, Dan Du, Robert Enslie, Brian Gee, Stephaine Gerbrandt, Shinobu Homma, Sharif Hossainy, Helmut Kassautzki, Eileen Keenan, Greg Leano Tanya McLean, Michael Motlagh, Jun Nan, Jennifer Notte, Pavlina Ryvola, Robert Sandilands, Patrick Schilling, Peter F. Smith, Eric Stedman, Johannes Visser, Andrew Weyrauch, Michael Wong, Matthew Woodruff, Tony Yip Luciano Zago, and Yong Zhang.

Structural Engineers: Jones Kwong Kishi

**Electrical:** R.A. Duff Associates

**Mechanical:** Keen Engineering

Contractor: PCL Contractors of Canada

**Client/Owner:** ICBC Properties Ltd. (Insurance Corporation of British Columbia Properties)

## **Author's Biography**

Said Sharif Hossainy, Eng. Arch. PhD.

Former deputy minister,

Ministry of Urban Development

Senior advisor to the Minister

Canadian Architectural Registration No: 2280

Member of the Society of Afghan

Architects & Engineers (SAAE) ID No: 0018

Member in the Roster of CANADEM No: 2808 - CANADEM is an Ottawa

based non-profit, government related organization, originally designed as Canada's national roster of civilian experts.

Received an award from the Speaker of the House of Parliament, January 12, 2016 (22-10-1394 HS) The following web link includes Author's Biography and interview with Editor of the SAE eNewsletter in April 2018:

http://www.afghanengineers.org/wp-content/uploads/2018/04/SAE-eNewsletter-April-2018.pdf



## **Membership News**

## The 2020 SAE Election

This year the SAE Election Committee will conduct the election process for the positions of the Board of Directors and the President of the Society. The elected members will serve in their positions during the years 2021 - 2023. The Election Committee will schedule and start the election process at the time so that the results of the election will be announced in accordance with the established plan.

The first step of the election process is the appointments of the Election Committee, which consists of Committee Chairperson and members. The Committee is formed during the election years and will be dissolved upon completion of each election process.

The President nominates the Committee members and proposes the list of the nominees to the SAE Board of Directors for review and approval. Upon their appointments, the Election Committee performs the Election in accordance with SAE bylaws. For this round, the President has nominated Mr. Nazeer Babacarkhial, Mr. Fayeq Fasihi, and Mr. Hafizullah Wardak as the Election Committee members. The nominees of the Election Committee have been approved by the SAE Board of Directors.

The Election Committee will start the 2020 Election process in accordance with the Society bylaws. In the July issue of the SAE eNewsletter a detailed report about the progress of the Election will be included.

## The Election Committee Message to SAE Members

The Election Committee has three volunteers to assist and process the SAE 2020 election in accordance the SAE Bylaws. Mr. Hafiz Wardak, Mr. Fayeq Fasihi and Mr. Nazeer Babacarkhial will serve as the Election Committee members.

Upon their elections, the elected President and Board of Directors will serve in their positions during the years 2021 - 2023.

The Election Committee started their first meeting on March 12, 2020. Thanks to Mr. A. Manan Khalid, the former Election Committee Chairman, who joined the meeting voluntarily as guest to assist and share his experience with the Committee. The Committee appreciated his valuable suggestions and answers to their questions. During the meeting, the Committee elected Mr. Nazeer Babacarkhial as Election Committee Chairman.

The Election Committee will assure that the SAE have a fair and transparent election for the year 2021. Hoping that all SAE members actively participate in the election process by being candidates for the elected positions and/or nominate their colleagues to serve in the SAE vacant posts.

Please update your email addresses to make sure you receive the Election Committee's news and updates.

Thank you.

Nazeer Babacarkhial
The SAE Election Committee Chairman

## The Biographies of the Election Committee Members

## Nazeer Babacarkhial, PE- Election Committee Chairman

NAZEER BABACARKHIAL, PE 29641 Vanderbilt Street Hayward, CA 94544 (510) 331-1463 engineernaz@aol.com

Mr. Nazeer Babacarkhial was born in a middle-class family in Kabul, Afghanistan. He graduated from Habibia High School and attended Faculty of Engineering at Kabul University. He continued his higher education in the United States and earned his Bachelor of Science degree in Civil Engineering from the University of Maryland at College Park, Maryland in 1987.

He is employed as a Transportation Design Engineer at the California Department of Transportation (CALTRANS) since 1999. He reads, writes and speaks Pushto, Dari and English and limited German language.

Mr. Nazeer Babacarkhial is currently serving at the SAE Board of Directors and he was one of the first consultants participated at the SAE "Capacity Building" training program traveled to Kabul, Afghanistan in 2007. As a Community volunteer, he has been involved in the Design, construction and completion

of a Mosque, "Ibrahim Khalilullah Islamic Center" in Fremont, California.

Mr. Nazeer Babacarkhial is a man of visions, common sense and a strong talent and ability in problem solving. His believe is with active involvement and participation of SAE members.

For SAE, Mr. Nazeer Babcarkhial believes in positive and constructive changes in the leadership. He supports allocating sufficient resources to effective and beneficial programs, promote active chapters participation in support of SAE activities. As a board member, Nazeer Babacarkhial will advocate for transparency and accountability throughout the



organization and push for getting members more involved in all aspects of the organization through mutual communication.

## Mohammad Fayeq Fasihi – Election Committee Member

Mr. Mohammad F. Fasihi (Fayeq) moved to the state of Virginia from Afghanistan in late 2000. He studied civil engineering at George Mason University in Virginia, where he received a B.S. degree in Civil, Environmental, and Infrastructure Engineering in December 2013.

Mr. Fasihi proceeded to work as a land development design engineer immediately after graduation. With encouragement from friends and family members, Mr. Fasihi decided to pursue his Master's degree in Construction Project Management at George Mason University, where he completed his graduate program in May 2018.



Mr. Fasihi currently works with Jacobs Engineering Group and is on the Jacob's team working on the Metro Silver Line Extension Project in Northern Virginia. In his free time, Mr. Fasihi loves to spend time with his family/friends, play soccer, go for a run, work on computers, and learn new challenging things.

### Hafizullah Wardak, Election Committee Member





Mr. Hafizullah (Hafiz) Wardak is the former professor of Kabul University, currently a Technical Fellow at the Boeing Aerospace Company, and serves as a current member of the Board of Directors of the Society of Afghan Engineers.

He has received his BS degree in Civil Engineering from the University of Hawaii, Honolulu Hawaii and MS degree in Civil (Structural) Engineering from Case Western Reserve University, Cleveland, Ohio. He has completed all required course work for PhD (Fracture Mechanics) at the University of Alabama, Huntsville, Alabama.

Mr. Wardak has been working with Boeing for 30 years performing structural analysis, fatigue and damage tolerance analysis, and has supported diverse programs at Boeing. In addition to regular technical work, he has been teaching Structural Integrity -Damage Tolerance-Airworthiness to other engineers for over 20 years. He has also worked with Sargent & Lundy- Chicago, Illinois on structural analysis of several nuclear power projects for over six years, member of the Structural Specialist Organization.

In Afghanistan, he worked at the Civil Engineering Department, Faculty of Engineering of Kabul University, as professor of the civil engineering department, and deputy-chairman of the Afghan Seismological Center.

## **Achievements and Awards**

The newsletter will inform their readers of winners of awards or any other successes of Afghan professionals and students, especially, their Society members. You can help the SAE eNewsletter editors by providing the news of the achievements, award winners, promotions, retirement, and any other success stories.

"Advise us of success stories or achievements of the Society members, any Afghan professionals, and Afghan students."

# Professor Amin Mahmood's Training Videos on Confined Masonry in Afghanistan

Ustad Aminullah Mahmood, President of AM Structural Design Inc. and former professor of the Faculty of Engineering of Kabul University has developed training lectures related to confined masonry in Pashto & Dari. The SAE eNewsletter Editor asked him to write an abstract of his presentation and information about confined masonry. Professor Amin Mahmood has submitted a brief discussion about confined masonry and his training videos.

#### CONFINED MASONRY IN AFGHANISTAN

By

Amin Mahmood, PE, SE

President, AM Structural Design Inc.

Confined Masonry is a technology that performs very well in earthquake. It uses the same basic concrete materials ingredients and bricks that are found in unreinforced masonry construction and reinforced concrete with masonry infills, but, with different construction sequence.

A year after the Haiti earthquake, which killed more than three hundred thousand people, a team of engineers from thirteen countries, prepared a masonry design standard that is easier to understand and can be used throughout the world for seismic resistant construction. This method of construction, called confined masonry, uses unreinforced masonry, confined with reinforced concrete ties and bands horizontally and vertically, which locks masonry units in place. This method has proven to be very effective in resisting seismic forces. Although this method was in use for decades in some countries, but was not publicized sufficiently throughout the world. Using a few simple design principals, most one and two-story buildings can be built without complex engineering calculations or lab testing of construction material. That had been the fact in most poor countries for centuries. Construction material can be selected by the buyer by performing a few very simple tests on the samples before purchasing large quantities.

A team of engineers and architects in Switzerland has prepared a guide for masons based on confined masonry method and has produced a few YouTube videos. However, the guide and videos are all in English. Most of the masons and construction workers in Afghanistan cannot read or write and do not understand English videos. Understanding the urgent need for proper construction methods in Afghanistan, the author has prepared videos in both Pashto and Dari based on the Swiss Masons guide. With permission from the original authors, some sections of the guide have been modified for conditions and cultural norms of Afghanistan. Here are the YouTube Weblinks to those videos in Pashto and Dari Languages.

For Pashto Video Click at the following weblink:

https://www.youtube.com/watch?v=Rv7uEPWLqwg&list=PLWwT1QHzbB768DxqJ1iYoia\_moI5RYBfF

For Dari Video Click at the following weblink:

https://www.youtube.com/watch?v=R0SAhjjituQ&list=PLWwT1QHzbB75hYXS3t-tQLbP4bQukDjYC

## **Establishment of BioNatural Healing College.**

Congratulations to Professor Nadir Sidiqi and his team members for Establishment of BioNatural Healing College.

Dr. Sidiqi has also published a book entitled as "Water with Four Perceptions: Transparent, Blue, Gray, and Green".

The SAE eNewsletter Editor asked him to write a brief description of the college. He has submitted the following article about BioNatural Healing College:



**BioNatural Healing College (BNHC)** is a legal online educational institution entity that has been approved to operate by the State of California's Bureau for Private Postsecondary Education that set forth in the educational code. BNHC offers online 5 diplomas, it is a convenient way to earn your diploma, under highly qualified professors. Time is a precious gift to every person, apply now!

## Online Five Diploma Program (30 credits per diploma) as follows:

- **1. Herbal Science & Master Herbalist (Diploma):** To graduate successfully, one should be able to utilize his or her knowledge of medicinal plants through therapeutic consultation in the applications to promote health and prevent illness. With the opportunities to work in community & Health Agencies, Health & Natural Supplements Companies and many more related companies.
- **2. BioNatural Health Practitioner (Diploma):** To graduate successfully, one should understand and perform the business ethics that help in growth and development of planning for nutritional, lifestyle and whole-body wellbeing. With the opportunities to find employment in the Health Care Facilities & Nursing Home, Sports & Nutrition Clinic, Natural Food & Supplement Companies and other related businesses.
- **3. Holistic Health Practitioner (Diploma):** To graduate successfully, one should understand and perform the principle consultation of holistic diet-based therapy based on natural remedies. With the opportunities for employment in Naturopathic doctor clinic, Hospital, Health Clubs & Massage Therapy & Spas, Women, Infant & Children Program (WIC) and other related industries.
- **4. Nutrition & Brain Function Consultant (Diploma):** To graduate successfully, one should be able to understand the relationship between nutrition, brain, and mind connection and the body's function in a

healthy mood. With the opportunities for employment in Hospital & Rehab Centers, Psychologist Doctor Clinics, Women, Infant & Children Programs (WIC), Sports & Health Clubs and other related agencies.

**5.** Wellness & Lifestyle Consultant (Diploma): To graduate successfully, one should be able to plan a healthy lifestyle that can restore the health of the individual based on diet, exercise, and sleep pattern. With the opportunities for employment in Wellness & Family Center, Elementary & Secondly School Cafeteria, Health & Nutrition Centers, Nursing Home & Hospital, Natural Vitamins & Supplement Companies, Women, Infant & Children Programs (WIC).

**Tuition:** \$2400 plus registration fee \$90 total \$2,490, with 4 payment option plans free of interest.

**Note:** Special 15% discount will be given to the needy students from Afghanistan.

**Faculty and Staff:** Prof. Rosalie Stafford, Dr. David Isley, Dr. Tanveer Alam, Dr. Christine F. Irene, Dr. Augustine A. Okukpe, Dr. Amna Parveen and Dr. Vivek Sharma and Mr. Wais Seddiqi Student Research Assistant.

For detail information: www.bionaturalhealingcollege.org

Email contact Wais Seddiqi: info@bionaturalhealingcollege.org or Phone: (909) 242-6342 or

Dr. Nadir Sidiqi Ph.D., President/Dean of Academics Email address: <a href="mailto:dr.sidiqi@bionaturalhealingcollege.org">dr.sidiqi@bionaturalhealingcollege.org</a>

## **Announcements:**

## (1) The 2020 SAE Membership Renewal

Dear Members of the Society:

The Management of the Society of Afghan Engineers (SAE) would like to remind all members that 2020 membership renewal and Annual fee of \$60 are due. Your membership fee collectively would enable us to pay for some basic needed services of the Society such as Website security monitoring, updating, and maintenance. Also, your membership fee would provide SAE's management, the financial means to organize and host events and seminars on relevant technical topics. The membership renewal application is attached to the Newsletter and also can be downloaded from our website at <a href="www.afghanengineers.org">www.afghanengineers.org</a>

Please visit the SAE Face book when you get the opportunity. We appreciate your kind attention to the membership due request.

Sincerely,

Atiq Panjshiri, President Page | 29

The Society of Afghan Engineers

## (2) SAE eNewsletter Regional Representatives

The positions of the SAE eNewsletter Regional Representatives are open. Please let us know if you are interested to volunteer for one of these positions or if you want to nominate other qualified members to serve in these positions. The representatives will inform the newsletter Editorial Bard of any technical news in their regions and contact authors for their contributions in the activities of newsletter. For additional information please send an email to SAE eNewsletter Editorial Board: Ghulam Mujtaba, E-Mail: <a href="mujtabaghulam@bellsouth.net">mujtabaghulam@bellsouth.net</a>; A. Wahed Hassani, Email: <a href="mujtabaghulam@gmail.com">awhassani@gmail.com</a>; A. Manan Khalid, E-Mail: <a href="mujtabaghulam@gmail.com">mujtabaghulam@gmail.com</a>; and Hafizullah Wardak, Email: <a href="mujtabaghulam@gmail.com">hwardak@comcast.net</a>

## (3) The SAE Year 2020 Membership Renewal Updates

The following are the status of the membership renewal fee payments and donations to the Society of Afghan Engineers during Year 2020. The SAE management would like to thank all members for their financial support and other contributions to the Society activities.

The YEAR 2020 MEMBERSHIP RENEWAL FEE AND DONATIONS Paid in Earlier Years						
The Society of Afghan Engineers						
Date	First Name	Last Name	Fee Paid \$	Donation \$	Total Payment in 2020	Remarks
2/26/2018	Abdul Nazeer	Babacarkhial	180	70	0	Paid \$250 in 2018 for Years 2018 - 2020
8/4/2018	Saleh	Keshawarz	180		0	Paid \$180 in 2018 for Years 2018 - 2020

# MEMBERSHIP RENEWAL FEE AND DONATIONS IN Year 2020

## **The Society of Afghan Engineers**

Date	First Name	Last Name	Fee Paid \$	Donation \$	Total Payment in 2020 \$	Remarks
1/07/2020	Atiq	Panjshiri	60		60	
2/07/2020	Ghulam	Mujtaba	60	140	200	
2/07/2020	Amanullah	Mommandi	60	40	100	
12/26/2019	Abdul Manan	Khalid	60	40	100	
12/26/2019	Gul Afghan	Saleh	60	40	100	
2/29/2020	Hafizullah	Wardak	120			Paid \$120 in 2020 for Years 2020 & 2021
3/03/2020	Hashim	Rayek	60	0	60	
3/03/2020	Abdullah	Noorzad	60	0	60	
3/03/2020	Shapooor	Hamid	60	0	60	
3/03/2020	Najim	Azadzoi	60	0	60	
03/05/2020	Sohaila	Shekib	60	60	120	
3/05/2020	Nadir	Sidiqi	60	60	120	
03/05/2020	Yar Mohammad	Ebadi	60	0	60	
03/06/2020	Bahaudin	Mujtaba	60	40	100	
03/21/2020	Reza M.	Afshar	60	40	100	
3/23/2020	Zarjon	Baha				Mailed check on 3/23/20
3/23/2020	Hashem Baluch					promissory Note Emailed

The attached form includes application for the new members and membership renewal. The application forms may be viewed at SAE website. The members are requested to take a few minutes of their time to inform the Society by sending their updated contact information.

The completed application/renewal forms may be mailed to

Mr. Atiq Pnajshiri,

Page | 31

SAE President P.O. BOX 11097 Alexandria, Virginia 22312

Thanks to members who have updated their membership renewal and have paid their annual membership fees.

Thanks for their generosity.

## **Comments and Suggestions**

The Editorial Board of the SAE eNewsletter has received comments and suggestions from the respected Society members and readers of the Newsletter related to its January 2020 issue.

The Editor has responded to the readers' comments and suggestions individually by emails upon their receipt; and would like to take this opportunity to thank all for comments, suggestions, and kind words. The comments and responses are included for information of all readers of the SAE eNewsletter.

The following are the comments/suggestions and Editor's responses:

## 1. Comment from Dr. Zarjon Baha, Former Dean of the Faculty of Engineering of Kabul University

Dear Mujtaba Khan: Us-Salamu-Alaikum

Thank you for the new year greeting and I wish you and your respected family a very happy new year.

I would like to express my sincere thanks to you and your editorial board for the outstanding work of publishing the quarterly newsletter of our Society for the past ten years.

I would like to add that I have reduced my academic responsibility at Purdue University to half time as of Fall of 2019. My new title at the college is Mentor for the College. Our College is now called "Purdue Polytechnic Institute". My job is to make sure we have the resources available so our students will succeed academically at the college. It is a new job, and no one has done it before.

Have a great day

Zarjon

## **Editor's Response:**

Dear Dr. Sahib Baha, Walaikum Salam:

Thanks for your kind words about the work of the Editorial Board of the SAE eNewsletter. It is an honor that we have received such comment from our former Dean and respected professor of the Engineering College of Kabul University.

It is a pleasure for the Editorial Board that they have continuously published the quarterly issues of the SAE eNewsletter and this year is the tenth year of its publication. I have copied the Editorial Board in this email. They will be very pleased to read your comment.

I was delighted to read the good news about your new position as the Mentor for the Purdue Polytechnic Institute. This is a well-earned promotion indeed. I am confident that your ideas and experience will have great effect in the further improvements of the availability of the of student resources and their academic successes.

Please accept my very best wishes for your continued success in your new job.

Best regards,

## 2. Comment from Jim Olshefsky, Director, External Relations, ASTM INTERNATIONAL

Dear Ghulam,

Your email with attached Newsletter was received with much thanks for arranging the ASTM International article to be published. For your information, our VP of Global Cooperation has recently invited the Acting Director of ANSA, Khaliq Babur, to consider a candidate for ASTM's 2020 Technical Visitor Grant Program.

Wishing you all the best for the New Year!

Regards,

Jim Olshefsky

Director, External Relations ASTM INTERNATIONAL 100 Barr Harbor Drive, PO Box C700 West Conshohocken, PA 19428-2959, USA tel +1.610.832.9714 www.astm.org

## **Editor's Response:**

Dear Jim,

You are welcome. Thanks to you for submittal of a valuable article for the January 2020 issue of the SAE eNewsletter. The readers of the Newsletter have enjoyed reading your article.

Thanks for further information that ASTM's Vice President of Global Cooperation has invited the Acting Director of ANSA, Mr. Khaliq Babur, to consider a candidate for ASTM's 2020 Technical Visitor Grant Program. This is good news.

I am also wishing you and your respected family a Happy New Year.

Best regards,

Editor-In-Chief SAE eNewsletter

## 3. Comment from Dr. Bahaudin G. Mujtaba, Professor of Management / HRM Huizenga College of Business and Entrepreneurship

Salam,

I enjoyed reading the newsletter. That was a good article on the status of Dar-ul-Aman Palace prior to the rehabilitation.

Regards,

Bahaudin

Dr. Bahaudin G. Mujtaba, Professor of Management / HRM Huizenga College of Business and Entrepreneurship Nova Southeastern University 3301 College Avenue Fort Lauderdale, FL. 33314-7796. USA.

Faculty Website: http://www.business.nova.edu/about/faculty-bio.html?mujtaba

### **Editor's Response:**

Bahaudin Jan Walaikum Salam:

Hoping that you are enjoying your University teaching activities. Thanks for letting us know that you have enjoyed reading the newsletter, especially the article on the status of Dar-ul-Aman Palace prior to its rehabilitation.

I have copied the author of the article about Dar-ul- Aman Place and the newsletter editorial Board for their information.

4. Comment from Dr. Zarjan Baha, Mentor for the Purdue Polytechnic Institute, former Dean of the Faculty of Engineering of Kabul University

Dear Ghulam Mujtaba: Us-Salamu-Alaikum

I would like to express my sincere thanks to you and the rest of your editorial board for the outstanding quality E-Newsletter for our society.

The two topics presented in the last edition, Volume 10, issue 1, are unique and very interesting to me:

1. ASTM International Memorandum of Understanding with Afghanistan National Standardization of 2005 is a great accomplishment and made me very happy.

I would like to thank Mr. Jim Olshefsky and his team for writing the article and I hope this cooperation will continue to develop national standards for Afghanistan. I hope our Society will play the role of a facilitator to promote this cooperation.

2. The SAE collaboration with Herat University is a great initiative and this type of delivery of knowledge was my dream when I visited Afghanistan in 2002. At that time the internet facilities in the country were practically non existing and thus was not possible. The USAID's focus at that time was primary education and were not keen to help higher education. We had some meetings with them and could not convince them to prioritize higher education. We tried to get support from World Bank but were not sure if the minister of higher education will have the power within the government to get such an allocation.

I would like to congratulate the SAE leadership for this initiative and would like to thank Mr. Ghulam Feda for his facilitator role. I would like to thank the outstanding volunteers who are going to contribute in their fields of expertise. I know firsthand, most of the volunteers and it will be very difficult to find someone with their qualifications.

My thanks are again extended to the SAE leadership for the above initiatives and wish them luck.

Zarjon Baha

Purdue University West Lafayette, Indiana

## **Editor's Response:**

Dear Dr. Sahib Baha, Walaikum Us-Salam:

Thanks for your valuable comments about the quality of the SAE eNewsletter, especially your discussions about Mr. Jim Olshefsky's article. We are very pleased to receive such comments and suggestions from a respected scholar at Purdue University and our former Dean of the Faculty of Engineering of Kabul University.

You have also mentioned about the collaboration of the Society of Afghan Engineers (SAE) with Herat University and thanked, SAE Leadership, and Mr. Ghulam Feda's role in these activities.

Our colleagues, authors, SAE leaders, and Editorial Board will be pleased to read your comments and suggestion. I have copied them in my response to your email.

Once again, thanks for your present and past contributions in the activities of the SAE eNewsletter by comments, suggestions, and articles that you have sent for publications.

Best regards,

## THE SOCIETY OF AFGHAN ENGINEERS ORGANIZATION

**SAE E-Executive Committee Members:** President: Atiq Panjshiri, Vice President: Amanullah Mommandi, Treasurer: Mohammad Hashem Baluch, Secretary: TBA, Manager: TBA

**SAE Board of Directors-Officers:** Chairperson: Sohaila Sanie Shekib, Vice-Chairman: Gul Afghan and Saleh Executive Director: Abdul Nazeer Babacarkhial

**Members SAE Board of Directors:** Farid Abass, Reza Afshar, Nazeer Babacarkhial, Rafaat Ludin, Gul Afghan Saleh, Mahmoud Samizay, Mohammad Saber Sarwary, Sohaila Sanie Shekib, and Hafizullah Wardak

**SAE Past Presidents:** Ghulam Mujtaba, Abdul Hadi Rakin, M. Qasem Kadir, Abdul Hadi Rakin, Mohammed Hashim Rayek, Ahmad Wali Shairzay, Sohaila Sanie Shekib, and Malik Mortaza

**SAE Chairpersons of Committees/Subcommittees:** Ghulam Mujtaba, Chairman -SAE eNewsletter Subcommittee, E- Mail: <a href="mailto:mujtabaghulam@bellsouth.net">mujtabaghulam@bellsouth.net</a>;

**SAE Local Chapter Coordinators:** A. Hamid Layan – Kabul, Afghanistan; M. Qaseem Naimi – Toronto, Canada;

Najim Azadzoi – Massachusetts, M. Qasem Kadir - Southern California; A. Manan Khalid – New York and New Jersey, Amanullah Mommandi – Colorado; Atiq Panjshiri – Virginia and Washington DC

**SAE eNewsletter Subcommittee: Subcommittee Chairman:** Ghulam Mujtaba, M.S, CE, P.E., E- Mail: <a href="mujtabaghulam@bellsouth.net">mujtabaghulam@bellsouth.net</a>; **Members:** A. Wahed Hassani, Ph.D., P.E. Email: <a href="maybassani@gmail.com">awhassani@gmail.com</a>; A. Manan Khalid, M.S., P.E., LEED AP E-Mail: <a href="manank10@gmail.com">manank10@gmail.com</a>; Hafizullah Wardak, Email:

hwardak@comcast.net; Abdul Hamid Layan: Email: hamid.layan@gmail.com;

**SAE eNewsletter Editorial Board: Editor –In –Chief:** Ghulam Mujtaba, M.S, CE, P.E., CPM E-Mail: <u>mujtabaghulam@bellsouth.net</u>;

**Editorial Board Members:** A. Wahed Hassani, Ph.D., P.E. Email: <a href="mailto:awhassani@gmail.com">awhassani@gmail.com</a>; A. Manan Khalid, M.S., P.E., LEED AP E-Mail: <a href="manank10@gmail.com">manank10@gmail.com</a>

**SAE eNewsletter Regional Representatives:** Abdul Hamid Layan - Kabul: Email: <a href="mailto:hamid.layan@gmail.com">hamid.layan@gmail.com</a>;

**Subscribe/Unsubscribe:** The subscription to the SAE eNewsletter is free. If you are not receiving the SAE eNewsletter directly and would like to subscribe, please send a note to: <a href="mujtabaghulam@bellsouth.net">mujtabaghulam@bellsouth.net</a> with the subject "Subscribe: SAE eNewsletter". To unsubscribe, send a note with the subject "Unsubscribe: SAE eNewsletter".

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## THE SOCIETY OF AFGHAN ENGINEERS MEMBERSHIP APPLICATION

		Name:	
	Address:		
		Office:	
	Email:		
			Years of Experience:
	e active members of the stress and other contact i		: Please mark (X) the appropriate box related to you
	Yes, the above is a cha	nge in address or contact informa	tion.
	No, the above address	is the same as recorded on the SA	AE's current membership list
	Please mark (X) the ap	propriate box if you are submittin	g this application to join as a new member.
	A Regular member: 1 h	ave at least four (4) years of arch	tectural or engineering education.
	Associate member: 11	nave at least two (2) years of arch	itectural or engineering education
Γhe	e SAE is a 501(c) (3) non-	profit organization.	
٩m	ount of Annual 2020 Me	mbership: \$60.00	
וחר	nation:		
0.	al:		

## THE SOCIETY OF AFGHAN ENGINEERS

P. O. Box 11097 ALEXANDRIA, Virginia 22312-1097