



Construction Specifications Canada is an organization representing diverse interests in the construction industry and related professions. It is dedicated to improving the quality and flow of information between these interests, whether in the form of specifications, contract administration or marketing.

October 2020 Edition

Editor: Tracey Stawnichy



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We're Planning a Scavenger Hunt!

Save the Date: Wednesday, October 21, 2020

Time: TBA

Location: TBA



Details to follow!



2020 / 2021 Edmonton Chapter Executive

Director	Tracey Stawnichy	780 994 3699
Chairman	Andrew Brassington	587 341 5268
Vice-Chairman	Dylan Leclair	587 335 9552
Secretary	Jessica Prosser	587 340 7169
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Architect	Position Open	
Chapter Liaison	Position Open	
Education	Mike Ewaskiw	780 237 7844
Engineer	David Henriquez	780 669 0504
General Contractor	Renee McKenzie	780 717 7798
Interior Design	Corry Bent	780 995 1647
Manufacturer/Supplier	Mike Lafontaine	780 907 4920
Marketing, Promotion, and Communications	Position Open	
Membership	Joseph Trivellin	587 785 6484
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Specifications	David Watson	780 758 4147
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	Jessica Prosser	587 340 7169
Owner's Rep	Cam Munro	780 231 1739
Sustainability	Darlene Helfrich	587 930 3432
At Large	Dave Lawrence	780 901 7260

Advertising Rates**Business Card: April 1 to May 30**

Rates cover your ad on our website 24 hours per day, 7 days per week.

Business card on-line:

Annual \$100 if received by May 1;

\$75 if received by August 1;

\$50 if received by November 1;

\$25 if received by February 1

Add \$50 to have a link to your company web site from the CSC Edmonton Chapter web page.

Chapter Sponsor**New Chapter Sponsor Bundles:**

edmonton.csc-dcc.ca/About+Us/Sponsor+Opportunities+-+CSC+Edmonton+Chapter/

Student Sponsor**Meeting Sponsor**

\$50 for Individual (personal) Sponsor
\$250 for Corporate Sponsor

FOR FURTHER INFORMATION

Contact any member of the Executive, attend one of our Chapter Meetings, send your name and address to CSC Edmonton Chapter, PO Box 35093 Mid Town PO. Edmonton, AB T5J 0B7, or go to edmonton.csc-dcc.ca for additional contact information.

GOALS OF CSC

Construction Specifications Canada is a multi-disciplinary non-profit association dedicated to the improvement of communication, contract documentation, and technical information in the Construction Industry. CSC is a national Association with Chapters in most major Canadian Cities.

To this end, CSC pursues the study of systems and procedures that will improve the coordination and dissemination of information relevant to the construction process.

We seek to enhance the quality of the design and management aspects of the construction activity through programs of publication, education, and professional development, believing that by so doing, we can contribute best to the efficiency and effectiveness of the construction industry as a whole.

OBJECTIVES OF CSC

To foster the interest of those who are engaged in or who are affected by the compilation or use any forms of specifications for the construction industry.

To publish literature pertaining to the construction industry.

To engage in activities to improve procedures and techniques related to the construction industry.

The opinions and comments expressed by the authors do not necessarily reflect the official views of Construction Specifications Canada. Also, appearance of advertisements and new product or service information does not constitute an endorsement of those featured products or services.

Announcements:

A message from CSC member Kevin Magill:

Thanks to you all for recognizing my close friend, Gary Hartman, at the ACM chapter meeting. Below is a narrative that his wife, Carol, sent to me shortly after his passing. I worked with Gary at Stantec in the mid-2000's and we have remained friends ever since. We both left Stantec - Gary left in 2007, and I in 2012. Gary was an accomplished and widely respected owner's project manager, from whom I learned a lot. He is well remembered for his superior construction knowledge, and keen ear to the ground - not much slipped by Gary. He was also well known in construction circles, and managed many projects at the UofA, including a key involvement in the Edmonton Clinic buildings, as well as projects at Grant McEwan.

It is with great sadness that we share the passing of our beloved Gary, with family by his side.

Gary will be lovingly remembered by his wife of 53 years, Carol, son Ryan (Elene) of St. Albert, daughter Randene (Ryan) Rishaug of Sherwood Park, 7 grandchildren: Noah, Caelum, Avery, Khai, Carter, Ella and Maxton, sister Dorothy (Bob) Marshall of Edmonton, brother Bryan of Houston, Texas, and many nieces, nephews and beloved friends. Gary was predeceased by his parents Alvin and Helen, and sister Shirley Walker.

Born August 5th, 1945 in North Battleford, Saskatchewan, Gary spent most of his youth in Cold Lake, Alberta, discovering his love of fishing and hunting. These were passions that he passed down to his children and grandchildren and enjoyed with them well into his final years. His favorite place was often out on the boat, with a line in the water, CCR on the cd player, and family close by. He enjoyed countless fish fry's at the cabin, and smokies cooked over campfires on remote beaches all around Cold Lake.

On July 29, 1967, Gary married the love of his life, Carol, raising their family together on their beautiful acreage in Sherwood Park, Alberta.

Gary was very accomplished professionally. He earned a diploma in Civil Engineer Technology at NAIT in 1965. His first employ was with Minsos Jamieson Vaitkunas Architects Ltd. working on the Edmonton Centennial Library. He branched over to Vaitkunas Jamieson Architects Ltd. and became a Specification Writer, working on various projects across Alberta, predominantly building hospitals. He remained a member of Construction Specifications Canada (CSC) for 50 years. His passion was as a Project Manager, ending his career with the building of the Faculty of Fine Arts and Communication, Grant McEwan downtown Edmonton campus. He also served for 15 years on the Canadian Construction Documents Committee (CCDC) and was a mentor to many in his field.

Gary and Carol enjoyed travelling, often with family, to Hawaii, Switzerland, Disneyland, Disneyworld, the Caribbean, Newfoundland, New Orleans, Mexico, Italy, Greece, New York, and Iceland, to name a few. Gary and Carol spent 10 years as Snowbirds, wintering in Yuma, Arizona, enjoying quality time with each other and many of their dear friends. Gary will rest easy with the knowledge the men were firmly ahead of the women on their canasta scorecard.

Gary loved his children and grandchildren fiercely. He was a huge part of their lives, always welcoming them with a hug and a funny joke, and an offer to help with anything that was needed. There wasn't a thing that needed doing or fixing that Gary wasn't willing to jump right in and help with. He was a talented handyman, had a razor-sharp mind, and never forgot an important detail about anything.

Gary did not want a formal funeral. To respect his wishes but honor him in our own way, immediate family and a few long-time friends gathered at the acreage on Saturday, August 22 for an intimate celebration of his life.

Interment will be taking place in the summer of 2021, and so, to bring some closure while also reflecting on happy memories during such a difficult time, we decided to create a memory box.

One of Gary's favourite pastimes was fishing, and so it seemed fitting that the memory box was nothing other than a tackle box.

Those in attendance were able to fill the box with mementos, photos and written memories and the box was buried in Carol's flower garden - a spot that brings her much happiness and allows for a quiet area for those who want to feel close to Gary/Grumpa when visiting the acreage. He will be missed dearly by his family, and the many wonderful friends he had in his life.

Interment will take place in Cold Lake South in the summer of 2021. In lieu of flowers, we encourage you to visit the Organ and Tissue Registry site and sign your donor card, or a charity of your choice.

The family would like to thank everyone for their condolences and heartfelt words of comfort...Gary passed peacefully and we find comfort in that...we have such wonderful memories of Grumpa..

Chair's Message



Andrew Brassington, CSC Edmonton | Chapter Chair

"Hello Chapter Members,

I would like to start by thanking Jeff Halashewski for all his efforts with the Edmonton Chapter. Jeff has served in several capacities throughout the chapter. He has provided excellent support, guidance and showed a willingness to step up and help with any task. He now heads to Woodstock where he will be part of the London Chapter. He will be missed, and we wish him the best of luck.

We just had our 2020 ACM recently. Thank you to everyone that attended. I know through these challenging times it may be hard to find time to attend events, but I believe it is important for us to continue to communicate with each other. If you did not receive or would like a copy of the ACM please send a request to myself or the other executive and we provided it to you.

With Thanksgiving on the way, please take some time to appreciate all that you have accomplished over the year despite the unforeseen challenges. Here at the CSC, we like to engage in or garner the interest of those in the specification and construction industry. We want to be more than that. Let's lean on each other to ensure that everyone is supported the best way possible. We are likeminded people and a conversation can go a long way.

Take a look at our events as we have our first face to face event at the end of the month. The program chairs will have further details. It will sell out quickly, so get your tickets as soon as you can.

Happy Thanksgiving!"

Membership in CSC

Joseph Trivellin, CTR



In the construction industry's fast-paced environment, the need for and value of Construction Specifications Canada is greater than ever. CSC brings together individuals from all segments of the construction industry. All who have a vested interest in Canada's largest industry are invited to join CSC. When you join CSC, you become part of the only association that brings together professionals from all aspects of the construction industry.

DESIGN TEAM

CSC offers members of the Design Team the opportunity to meet with other members and exchange information. It also affords you the chance to help improve technology and its management, and the means to improve ways in which your ideals are translated into clear, concise, and complete documentation.

BUILDING TEAM

If you are a member of the Building Team, CSC offers you the opportunity to become involved in formulating specifications. Your valuable input into the programs can help generate time and cost savings, as well as improve performance.

SUPPLY TEAM

The multi-disciplinary composition of CSC allows members of the Supply Team to meet with other members of the construction team. CSC programs in data filing and information retrieval are geared to present convenient and concise information on your products for proper evaluation and specification.

THE STUDENT

If you are a student of architecture, engineering, or construction technology, CSC will provide you with a greater exposure to, and a better understanding of, the construction industry, giving you an excellent opportunity if you plan a career in the construction field.

People and Places – Welcome to our new CSC Edmonton Chapter Members!

Fresh Faces (New Members)

Mr. Daniel Riske, P.Eng.
Mechanical Engineer
CIMA+
100, 14535 – 118 Avenue
Edmonton, AB T5L 2M7
Tel: 780-488-6008 Fax: N/A
Email: Daniel.riske@cima.ca
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Mr. Daniel Gamble, P.Eng.
Mechanical Engineer
CIMA+
Tel: 587-338-7267 Fax: N/A
Email: Daniel.Gamble@cima.ca
Website: www.cima.ca

Yes, We've Moved (Contact / Mailing Address Update)

None this month.

Previous Members Re-Joining / Re-Activated

None this month.

CSC Education:



Mike Ewaskiw, CTR

Principles of Construction Documentation

The PCD course is an introductory course that will enable the student to have a better understanding of construction documentation (specifications, drawings, and schedules), products, bidding procedures, and contracts. **It is also a prerequisite to all the other CSC education courses.**

Specifier 1

Specifier 1 is an intermediate level course that will take the individual beyond the concepts previously introduced in the PCD Course. Although some of the same topics are included, the depth of comprehension and explanation exceed that of the PCD course. The Specifier 1 is a prerequisite for the **Certified Specification Practitioner (CSP)** designation from CSC. Successful completion of the course may be credited toward the experience component requirements for the Registered Specification Writer (RSW) designation.

Technical Representative

The TR course provides a better understanding of contract documents and bidding procedures, product representation, professionalism, and ethics, and will provide a new depth of understanding

and explanation of concepts beyond what was previously introduced in the PCD course. The course is designed for the individual involved in the supply section of the construction industry, such as manufacturer representatives, agents, or distributors of products. The student will have successfully completed the PCD course.

Contact Mike for all your education needs.

Mike Ewaskiw, CTR, Manager
Architectural & Engineering Services
P: 780-237-7844 E: mewaskiw@stonhard.com

EDUCATION COURSES

Upcoming Classes:

- [Principals of Construction Documentation \(PCD\)](#) – TBD
- [Specifier](#) – TBD
- [Construction Contract Administration \(CCA\)](#) – TBD
- [Technical Representative \(TR\)](#) – TBD

Upcoming Classes Online:

[Principles of Construction Documentation \(PCD\)](#) – TBD
[Technical Representative \(TR\)](#) – TBD

Upcoming Workshops:

[Principles of Construction Documentation \(PCD\) 5 Day Workshop](#) – TBD
[Construction Contract Administration \(CCA\) 5 Day Workshop](#) – TBD
[Specifier \(SP\) 7 Day Workshop](#) – TBD
[Technical Representative \(TR\) 5 Day Workshop](#) – TBD

Social Media:

Check us out:





New CCDC 2 and online training

The Canadian Construction Documents Committee (CCDC), is pleased to announce that this winter CCDC will be publishing the new version of the CCDC 2 'Stipulated Price Contract' and the brand-new Master Specification for Division 01 'General Requirements' and CCDC 31 'Service Contract Between Owner and Consultant' documents. CCDC will also be providing online training to explain the key changes to CCDC 2 and to introduce the new Division 01 document.

Online training will be held in November, consisting of four distinct presentations. [\(French\)](#)

Presentation 1: An introduction to CCDC (Pre-recorded, you may review at your convenience)

This 20-minute opening presentation will summarize the operation of CCDC, including how documents are developed, the new documents coming this winter, and what documents the committee is currently working on.

Presentation 2: Changes to CCDC 2 - Sessions will be held each weekday from November 16 to 27 at the following times 8:30AM – 10:30AM (ET) and 1:30PM to 3:30PM (ET)

This 120-minute presentation will provide an in-depth explanation on the biggest and most crucial changes with the new version of the CCDC 2 'Stipulated Price Contract'. This includes the "Ready-for-Takeover" project milestone, provisions regarding early-occupancy by owner, how new provincial legislations like the Ontario Construction Act are addressed, and more. This presentation will also include a 30-minute Q&A period for attendees to pose their questions directly to some of the documents' authors.

Presentation 3: The new Division 01 - Sessions will be held each weekday from November 16 to 27 at the following times 11:00AM – 12:30PM (ET) and 4:00PM to 5:30PM (ET)

This 90-minute presentation will introduce the brand-new Master Specification for Division 01 'General Requirements'. Attendees will learn about the key provisions of this new document and how to get the most out of its use. This presentation will also include 15 minutes for a Q&A period for attendees to pose their questions directly to some of the documents' authors.

Presentation 4: The top five questions (Pre-recorded, you may review at your convenience)

This final presentation will be 60 minutes in length, and feature members of the CCDC committee answering some of the most important questions received during the various sessions of the second and third presentations.

Registrants are welcome to select any session to attend, but it is recommended that attendees register for specific sessions based on their region to ensure that the Q&A period is more relevant to everyone's local practices. These regional recommendations can be found [here](#).

FEES:

The registration fee for the training is \$400 plus applicable taxes, with a \$150 discount for each additional registrant from the same firm. This includes access to all four presentations and copies of the new CCDC 2 and Division 01 documents, an approximate value of \$400.

REGISTRATION:

Each session will be capped at 50 attendees on a first-come, first-serve basis. Don't miss this unique opportunity to hear directly from CCDC document authors. [Register today!](#)

Please send any questions regarding this online training to info@ccdc.org.

CCDC documents are developed through a consultative process with representatives from all sectors in the construction industry. These consensus-based documents carry the endorsement of the four constituent national organizations:

Association of Consulting Engineering Companies – Canada (ACEC)
Canadian Construction Association (CCA)
Construction Specifications Canada (CSC)
The Royal Architectural Institute of Canada (RAIC)

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Articles of Interest

‘Architects are the Rodney Dangerfields of the Building World’, says Vancouver Architect

Sourced from: <https://canada.constructconnect.com> / Peter Caulfield

Architects are Rodney Dangerfields of the building world, says Vancouver architect Michael Geller.

“Unlike a song that keeps earning royalties for its writer, architects are paid only once for a building they design,” Geller said. “We get no respect.”

Architects are paid a negotiable percentage, usually around 3%, of the construction cost of the building they design.

“But the selling price of the building, once the cost of land, municipal fees and other soft costs are included, is higher, sometimes much higher, than the construction cost,” said Geller.

He said it’s “terribly wrong” that architects get so much less than real estate agents.

“And architects have more legal liability worries than real estate agents,” he said.

There needs to be a greater appreciation for architects in Canada, the way there is in other parts of the world, Geller stated.

“In Europe and South America, architects’ names are prominently displayed on the buildings they design,” he said. “With a few exceptions, in Canada real estate companies are better known than architects.”

Geller said if architects promote their role on projects, that will lead to being paid more for their work.

“Society would benefit in the form of better buildings if architects received greater recognition and earned more for their designs,” he said.

Some architects, including Geller, are changing their compensation arrangements/business model by innovation – expanding their role in a project.

“I started out as an architect and in the 1980s I also became a developer,” Geller said. “I wanted to have more control over the process of designing and building a project.”

Geller said the process of designing and constructing a building is similar to making a movie.

“A movie has stars, a director and a producer,” he said. “A building project has a developer to produce it, an architect to direct it and real estate agents and interior designers to star in it.”

Although developers can earn good money, very few architects have made the transition.

“Most architects don’t have the right temperament or the range of skills that are required to be a successful developer,” Geller said. “They’re creative people, not businesspeople.”

Some architects have forged close working relationships with developers.

“Architects should be creating projects for developers for which they become the designer,” he said.

“For example, in the 1970s and ‘80s, Vancouver architect Gerald Hamilton would go looking for a likely building site, then turn it over to a developer and he became the architect for the project. He became very busy as a result. More architects should copy him.”

Darryl Condon, managing partner of HCMA Architecture + Design (Vancouver, Victoria and Edmonton), said the practice of architecture needs to evolve for the sake of the building industry and to keep up with the public’s changing expectations.

“The building industry has changed, and is constantly changing, with new delivery methods, new construction techniques and new management approaches,” said Condon. “Architecture needs to evolve in response.

“Public expectations change more gradually, but there has been significant shift around diversity and inclusiveness and accessibility. Architects today need to think of a wide range of societal wishes.”

Condon said there’s no single way for architecture to evolve.

“The possible business models are many and varied and that’s a good thing,” he said.

HCMA follows an interdisciplinary model, with a variety of in-house design disciplines such as communications, strategy, branding, research and fashion design.

“We’ll add more disciplines in the future, too,” said Condon. “With so many in-house capabilities, we can address many of our clients’ problems in a fast and integrated way.”

Omicron Canada Inc. (Vancouver and Victoria) was founded as a way for architects, designers, engineers and builders to work together to deliver building projects.

“We’re a full-service company that does everything from design to construction,” said Omicron principal and director of architecture Kevin Hanvey.

The company’s business model has evolved over the years as it has taken on new disciplines.

“The architectural profession began to fragment in the middle of the 20th century, with more and more responsibilities formerly undertaken by architects being taken over by a new generation of specialists,” said Hanvey. “Now Omicron and other architectural practices are combining those disciplines and putting them under one roof again.”

Hanvey said architects will need to respond to the ways in which COVID-19 changes how people work.

“For example, there will be more regional centres away from downtown, such as Metrotown in Burnaby, lower Lonsdale Avenue in North Vancouver, and Surrey City Centre,” he said. “They will become new growth hubs and will grow disproportionately faster than downtowns.”

5 Construction Innovations Bridging the Labour Shortage Gap

Sourced from: <https://www.constructiondive.com>



The USG Corporation + U.S. Chamber of Commerce reported in December that 89% of contractors are having at least a moderate level of difficulty finding skilled workers. “As a result, contractors say they are asking skilled labor to do more,” the press release notes.

As the labor shortage continues to make headlines, doors also open for new opportunities.

High-tech advancements have allowed construction technology to boom, and many firms are working diligently to provide the industry with options to help bridge the labor shortage gap.

Robotics

For example, robotics are easing the burden of the labor shortage, improving the quality of the builds and shortening the time to complete a project.

Robots, like those of Scaled Robotics, are being introduced to the job site to increase efficiency and reduce risk. These robots navigate autonomously to create detailed maps, process data and compare it to the BIM model to catch errors before they become costly mistakes.

SpotWalk integrates HoloBuilder's technology with Boston Dynamic's Spot robot. This four-legged robot, controlled by a mobile app, walks the job site to capture 360° images to document progress over time.

Other robots have been designed to fulfill the role of laborers, like Material Unit Lift Enhancers (MULE) and a Semi-automated Mason (SAM). As the name implies, the MULE is a smart lift-assist device that can pick up items weighing up to 135 pounds. SAM is another robotic device that works with masons to lay bricks. "A mason can typically lay about 500 bricks per day, while SAM can lay between 200 and 400 bricks per hour, depending on the layout," reports Constructor Magazine.

There is also Tybot, a robot that ties rebar for a bridge project in Pittsburgh. In all instances, robots reduced the need for skilled labor and produced significant savings in labor costs.

Virtual and Augmented Reality

Virtual and augmented reality (VR/AR) technology is transforming how construction projects are designed, constructed and shared, and thus, increasing productivity throughout the life span of the project. This increased productivity allows a reduced labor force to do more with greater efficiencies.

There are several tools on the market that allow users to navigate a model as if they were inside it, but now there is also software that enables team members to interact with each other.

Through IrisVR, teams can collaborate on a project in a virtual conference room – no matter where they are geographically located. This allows design and construction issues to be identified before they become costly and keeps projects on schedule and on budget.

With AR, workers use wearable gear, like Microsoft's HoloLens 2, to view layers of data and plans while on the job site. AR is also used to compare the project's progress against its schedule, providing a greater level of project management and, ultimately, enhanced productivity.

Safety Technology Tools

According to OSHA, 21.1% of worker fatalities in 2018 were in construction, and 58.6% of those are due to the "fatal four" hazards: falls, electrocutions, being struck by an object and being crushed.

When a worker gets injured (or worse) on the job site, it has exponential effects – from increased insurance premiums and fines to loss of productivity and decreased morale. And while protecting the health and welfare of workers has always been a top industry priority, a secondary catalyst has emerged: the labor shortage. Progressive thinkers recognize the correlation between significantly improved worker safety and attracting people to well-paying career paths in construction.

Triax's Spot-r clip uses RFID technology that triggers an automatic alert when a worker falls. Medics can identify precisely who they are looking for and close proximity to where the worker has been injured.

Another wearable tech advancement is SolePower SmartBoots. These OSHA-approved boots are equipped with low-power sensors (GPS, RFID and IMUs) that monitor situational awareness, real-time location and other environmental factors. Shumbu's hardhat upgrade kit also uses GPS and can detect overheating conditions.

Also, in the coming years, watch for greater adoption of exoskeletons that reduce fatigue and stress on the body.

Equipment Management and Asset Tracking

The industry has been notoriously slow to adopt technology. In a time when the construction space is facing an acute labor shortage – where more than 250,000 jobs need to be filled – companies cannot afford to be inefficient with the workforce they have.

Tracking assets across multiple locations has always been plagued with difficulty, which is why equipment management software is becoming a must-have tool. With asset tracking software, organizations know the precise location of every asset, its usage/idle time, availability and condition—all in real-time.

Using this strategy to manage an entire fleet can save a company on unnecessary rentals, purchases and/or internal moves. Like project management software, having everything bundled on one platform provides better visibility and efficiencies across the business.

What's Next?

At a time where skilled labor is at a critical low, today's construction firms must take proactive steps to adopt technological innovations.

Donté Shannon, CAE, chief executive officer for the Association of Equipment Management Professionals (AEMP), agrees. His association is committed to a strategic initiative to use technology to train the next generation of workers. "To attract young workers, you start by changing the story of what it means to have a career in construction, which, today, includes cool technology that plays a role in construction every day."

What is the Future of the Gas Station?

Sourced from: <https://www.archdaily.com> / Niall Patrick Walsh

For decades, the gas station has been a staple of both urban and rural landscapes. As the 20th century saw the democratization of automobiles, the gas station became arguably one of the most generic, universal architectural typologies. Today in the USA alone, there are 130,000 gas stations serving 268 million cars. However, as populations move to condensed, urban areas with ever-improving public transit systems, and as the internal combustion engine evolves into electric alternatives, it is time to either redesign or retire the gas station.

The gas station typology is already in decline. In 2016, there were an estimated 116,000 gas stations in operation across Europe. By the end of 2017, this had fallen to 77,000. In the UK alone, the number of gas stations has fallen by 80% since 1970, despite the usage of petrol and diesel rising by 75%. A July 2019 study by the BCG concluded that "up to 80% of the fuel-retail network as currently constituted may be unprofitable in about 15 years." There are several reasons for this.

On one hand, the ongoing global population shift from rural to urban areas has seen citizens swapping private transport with ever-evolving public alternatives. In late 2018, for example, Luxembourg became the first country to offer free public transport to all citizens, while only weeks later, Paris made their public transport free for all children under 11, among other radical concessions. As cities adopt progressive policies towards public transport and invest in new systems such as recent examples in Sydney and Gothenburg, the decline of the gas station will continue to accelerate.

Meanwhile, even the private transport industry is driving the gas station into irrelevance. In 2018, the

global electric car fleet surpassed the 5 million mark, a staggering increase of 2 million from 2017. While the electric car as it exists today still relies on a public network of electric charging points, many located at gas stations, the current 200-300 mile range of cars such as Tesla are only set to rise. As Elon Musk demonstrated with his Solar City venture, a future scenario where electric cars drive by day, and charge at home by night, will all but eliminate the need for roadside gas stations.

The technological revolution that is leading to long-range electric vehicles may also radically reduce the demand for private vehicles. In 2014, the MIT Senseable City Lab conducted the HubCab experiment, where 150 million taxi journeys across New York City were mapped to identify commuter patterns, with the goal of developing an efficient car share system. The Lab estimated that improved transport-sharing technology could potentially reduce the number of car journeys by 40%, thus cutting congestion and emissions, and saving people time and money.

If cities embraced the concept of shared mobility, four out of every five private vehicles could be taken off city streets, leading to faster journey times, less noise and cleaner air. Given that the average city car is idle for 95%-99% of the day, new sites once occupied by car parks would become available for development. With the success of car-sharing companies such as ZipCar and DriveNow, the supply/demand ratio for car ownership will render gas stations further unprofitable.

ArchDaily's own metrics reflect the paradigm shift towards public, or green transport initiatives. In our annual report on trends that will influence architecture in 2019, we noted a substantial growth in reader interest towards Public Transport (+206% YoY) and Mobility (+143% YoY) over those related to private means of transport. Even for private transport, the main points of interest were self-driving cars (+160% YoY) and electric cars (+177% YoY). Architects, along with the wider world, are leaving the traditional gas station typology in the rear-view mirror.

So is there a future for the gas station? The question has been put to architects several times as of late. In 2015, Combo Competitions ran a competition titled "Rethink Refueling", asking participants to reimagine the ubiquitous filling station that could be easily recognized regardless of its location, while maintaining visibility. Four years later, GoArchitect has followed suit, with their current design competition titled "Gas Station of the Future" calling for ideas to be submitted by December 1st, 2019.

One tangible evolution of the gas station is offered by sustainable energy company GRIDSERVE. The British company is investing £1 billion in 100 stations across the United Kingdom that will take the petrol station typology and apply it to the age of electric vehicles. Designed in collaboration with ARUP, the stations will aim to charge electric vehicles in 30 minutes while offering coffee shops, supermarkets, airport-style lounges with high-speed internet, and education hubs for the exploration of electric vehicle solutions.

Leaders from all sides of the energy world are also pondering how gas stations will either evolve, devolve, or disappear in the coming years. The CEO of Chargepoint, the world's largest charging company, predicts that the rise of electric cars will lead to the "deforestation" of inner-city filling stations as drivers charge their vehicles from home or work. In a story carried by the Financial Times in February 2018, Pat Romano said that "we're not going to need as many of them because the 'around town' need to fill up will be much lower." Meanwhile, oil companies such as Shell and BP have committed to installing electric vehicle charging points at their retail sites, with Shell purchasing the electric charging group NewMotion and BP investing \$5 million in FreeWire. Last year, Elon Musk also floated the idea of building retro drive-in restaurants cinemas at Tesla charge points.

Fundamentally, the question of the future of the gas station presents an interesting paradigm for architects. These typologies, with consistent plot sizes, infrastructures, aesthetics, and strategically located across hyper-urban and hypo-rural landscapes, offer endless possibilities. They could continue to be used and evolved for the changing nature of the transport sector, embracing

commerce and the user experience in the same way the Duty-Free concourse was embraced by airports. They may also be repurposed for other industries with global, ubiquitous characteristics in a digital age, from drone delivery ports to modular data farms. Or perhaps, the gas station will become another “ruin of modernity,” ubiquitous relics to the uneasy relationship between urbanism and automobiles.

Disappearing Dome Homes are Casualty of Eroding Beaches

Sourced From: <https://www.curbed.com> / Liz Stinson

The dome homes were built in the 1980s as an experiment in sustainability – today they’re under water.

As sea level rises and erosion eats away at coastal landscapes, we’re starting to see the casualties of climate change. In southern Florida, that’s particularly true with the number of critically eroded beaches rising every year.

On Marco Island, a small barrier island off the coast of southwest Florida, a curious architectural feature has been lost to the ocean. The “Dome Homes,” a series of domed concrete houses, were at one point a vision of future sustainability. Bob Lee, a builder from Tennessee, built the unusually shaped house in the mid 1980s as a vacation home.



The house was ahead of its time in some ways; Lee built the house without electricity, instead relying on solar power. A rainwater capture system was used for drinking, bathing, and other chores. “Daddy was just trying to build something that could withstand the weather,” Lee’s daughter Janet Maples told The Weather Channel.

The utopian vision was no match for the ocean. Despite being built a long walk from the beach, persistent beach erosion allowed the water to creep up to the home, eventually

submerging the white structure in the ocean. Two domes have since completely collapsed into the water.

The home was deemed uninhabitable in 2007, and jurisdiction over the domes is now with the state since they are in the water rather than on land. Whether they will be completely destroyed is undecided, but for now, the domes are a particular breed of climate change disaster porn.

Frank Gehry Forges Crinkled Gold Bottle to Mark 150th Anniversary of Hennessy X.O

Sourced From: <https://www.dezeen.com>



Pritzker Prize-winning architect Frank Gehry has created a limited-edition bottle for the 150th anniversary of drinks brand Hennessy's X.O cognac, which he hopes is unlike "anything people have seen before".

The handcrafted cover, which encases the distinctive shape of the Hennessy X.O bottle, was forged from 24-carat gold-dipped bronze to evoke feelings of drinking cognac and the process by which it is made.

"I wanted to personify the hand-made quality of Hennessy X.O with a hand-made bottle – one that feels good to hold, catches the light beautifully, and one that expresses the hand of the artisans who helped make the cognac," Gehry told Dezeen.

"If you look at the Greek sculptures like the Charioteer in Delphi or the prize fighter, they are able to transmit feelings through thousands of years with inert materials," he continued.

"That was in my mind when we were doing this bottle. I wanted to make something that transmits feeling."

For the bottle's crinkled shape, Gehry looked to the water in the Charente River, which runs alongside the Hennessy distillery in the town of Cognac, west France.

He wanted the form to recall the light reflecting in the river, the craftsmanship that goes into creating the cognac and the drink's history.

"The existing Hennessy bottle is iconic, so we wanted the new design to respect the history and the brand identity that came before us," Gehry explained.

"A big part of the history of Hennessy is the involvement of the family and the craftspeople that have committed their lives to making this the best product on the market. You feel this when you drink Hennessy," he continued.

"With this design, I wanted people to also feel the human hand by the craftspeople who made the bottle. I wanted to be respectful of the history, but different."

Gehry, who's best known for designing large public buildings including the Guggenheim Museum in Bilbao, Walt Disney Concert Hall in Los Angeles and Fondation Louis Vuitton in Paris, said he enjoyed working on a much smaller scale to create the bottle.

"I have been very fortunate to have collaborated with excellent craftspeople on these smaller-scale projects over the years, including this project," said Gehry.

"There is an intimacy to the scale that you don't always get to explore in larger buildings. These smaller projects also have shorter schedules, so it's nice to design something and have it realised quickly."





Although many of Gehry's buildings, including the stainless-steel clad Walt Disney Concert Hall, have a sleek appearance, this was not the aesthetic he deemed appropriate for the bottle.

"The Walt Disney Concert Hall has that persona for a reason," explained Gehry. "It is a civic building, and it, therefore, needed a certain level of iconicity in the city," he continued.

"Every building is different, as is every design project. They are the result of the time, place, client, budget and program. This project is a reflection of my relationship with Hennessy and the capabilities

of many skilled hands that helped make it a reality."

When asked what buildings the bottle most resembled, he said: "That is for others to weigh in on. I hope that it doesn't look like anything that people have seen before."

As well as the bottle, Gehry designed a crystal glorifier to display it and a fusil, which is used to taste a small quantity of the drink to test its quality, from brass and gold.

All of the items are packaged in a protective cardboard case that was created in homage to the corrugated-cardboard furniture that the architect designed in the 1970s.

The Hennessy distillery was founded in 1765, with Hennessy X.O – the XO stands for extra old – first produced as a drink for the owner's family and friends in 1870.

Hennessy now forms part of luxury brand Louis Vuitton Moët-Hennessy, which also owns champagne label Moët and fashion brand Louis Vuitton.

Gehry previously worked for the conglomerate designing the Fondation Louis Vuitton in Paris, and believes that there are a lot of similarities between crafting buildings and making cognac.



"Both architecture and product design require a dedication to honing your craft," said Gehry. "I visited Cognac and met the team in charge of making the Cognac."

"The gentleman I met was from the family that had been creating the liquid for over 100 years. He spoke very beautifully about his process, which requires a lot of research, a lot of dedication, a lot of work, and a reliance on feelings and intuition," he continued.

"These are the same traits that go into making architecture, so it's not really about applying an aesthetic, but letting the

process unfold so that the client can participate in the process. At the end of the day, it has to satisfy their hopes, dreams, and realities."

ASSOCIATION LINKS

- **Alberta Construction Safety Association (ACSA)**
www.acsa-safety.org
- **BuildingSMART Alliance** (North American Chapter of BuildingSMART):
www.buildingsmartalliance.com
- **BuildingSMART International (formerly IAI)**
www.buildingsmart.com
- **Biomimicry Guild**
www.biomimicryguild.com
- **Canadian Green Building Council (CaGBC)**
www.cagbc.org
- **CCDC Documents**
www.ccdc.org/home.html
- **Construction Specifications Institute (CSI)**
www.csinet.org
- **International Construction Information Society (ICIS)** www.icis.org
- **OmniClass**
www.omniclass.ca
www.omniclass.org
- **Uniformat**
www.csinet.org/uniformat
- **Institute for BIM in Canada (IBM)**
www.ibt-bim.ca
- **Architecture 2030**
www.architecture2030.org
- **Building Information Modeling (BIM) Forum**
www.insightinfo.com/bimforum
- **Biomimicry Institute**
www.biomimicryinstitute.org
- **Canada BIM Council**
www.canbim.com
- **Canadian Green Building Council (CaGBC) – Alberta Chapter:** www.cagbc/chapters/alberta
- **Construction Specifications Canada (CSC)**
www.csc-dcc.ca
- **buildingSMART Data Dictionary**
bsdd.buildingsmart.org
- **MasterFormat**
(<https://secure.spex.ca/siteadmin/freedocuments/images/1.pdf>)
- **buildingSMART Canada**
www.buildingsmartcanada.ca
- **Ace BIM**
www.acebim.ca

ASSOCIATION LIAISONS

Alberta Association of Architects (AAA)

<http://www.aaa.ab.ca/>

Alberta Painting Contractors Association (APCA)

www.apca.ca

Alberta Roofing Contractors Association (ARCA)

<http://www.arcaonline.ca>

info@arcaonline.ca

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)

<http://www.ashrae.org/> / ashrae@ashrae.org

The Canadian Wood Council (CWC)

<http://www.cwc.ca>

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Portland Cement Association

ConcreteTechnology@cement.org

Interior Designers of Alberta

www.interiordesignalberta.com

Alberta Painting Contractors Association (APCA)

www.apca.ca

Association of Professional Engineers, Geologists, and Geophysicists of Alberta (APEGGA)

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Association of Science and Engineering Technology Professionals of Alberta (ASET)

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Bulletin Board

Message from the Executive:

We in the Executive are looking for creative-minded individuals who can take on a position and follow through with ideas...if this is YOU, send a message to information@cscdmonton.ca and we will be quick to get back to you!

Open Positions Include:

Newsletter Editor
Chapter Liaison

You don't need to be a member of the Committee to come and participate in our monthly Chapter meetings but watch out if you do! You may find yourself holding a position...maybe even as Chapter Chair...














****Important Update ****

Alberta Infrastructure's Technical Resource Centre (TRC) is relocating to the new Alberta.ca platform. It is very similar to the old site, with the largest change being formatted to the new corporate identity style. Almost all of the documents on the new site are still in the same organization as the old site.

The old TRC site (<http://www.infrastructure.alberta.ca/500.htm>) will be non- operational as of February 1st, 2020.

Please update any links to pages and/or documents that you have to the new location. The new TRC site is located at <https://www.alberta.ca/infrastructure-technical-resources.aspx>

The Executive

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