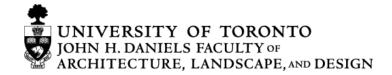
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News from MTI

Hello Mass Timber Colleagues!

Feature: 97 Victoria - An Interview with BNKC Architects

Construction is currently underway at 97 Victoria, where local non-profit, The Working Centre, is developing a complex that will provide transitional housing, a community kitchen, and other essential support services. This project is a collaborative effort involving BNKC Architects, The Working Centre, and Perimeter Development Corporation. MTI Editor Sanjana Patel spoke with Elie Newman and Jonathan King, Principals of BNKC Architects, to discuss the project in detail.

SP: What was the design brief for this project, and what were your design goals?

Elie Newman & Jonathan King: The brief was centered on creating a complex that addresses the growing needs of the homeless community by incorporating transitional housing, a community kitchen, food distribution services, and other community services. While there are local organizations that help this community, the project's goal was to establish a focused center that consolidates these services in one location. In the words of the client, we aimed to create a sense of "making home" at 97 Victoria. We recognized that many individuals in this community lack a secure place and often find themselves in limbo. Their needs vary significantly; some require 24-hour transitional housing, while others seek meals or dental care.

In response to this brief, the ground floor of their existing warehouse was designated for diverse community functions. The warehouse's 2nd floor was converted to transitional housing together with a new third floor addition for the same purpose. St.

John's kitchen has been relocated to a new 1 ½ storey addition at the ground level. This design effectively created a courtyard for the community that encompasses a comprehensive range of services all in one place. Additionally, we were mindful of the existing community and aimed to integrate the design of the old industrial building into a welcoming home-like environment.



Courtyard and Entry to St. John's Kitchen. Image Credit: BNKC

SP: With so many needs to consider, how long was the design phase? Can you outline the project timeline?

EN & JK: The initial phase of clarifying the design brief began in 2020, followed by schematic design from mid-2021 to early 2022. A design hiatus ensued while The Working Centre concentrated on securing funding. By late 2022, as various funding sources were confirmed, we commenced design development. In late 2023, contract documents were finalized, and construction officially began in February 2024.

Recognizing the importance of mass timber, Element5 was engaged early in the process to assist with technical design and cost assessments of that component.

It's worth noting that the selection of Element5 wasn't predetermined; since it was a publicly funded project, bids were solicited from multiple contractors. The team spent considerable time evaluating various options. Although the design evolved over time, maintaining a clear central vision was essential, particularly in choosing the appropriate materials for their intended uses.

SP: Why was mass timber selected for this project? What specific type of mass timber was chosen?

EN & JK: Our firm has been exploring how to incorporate mass timber into various building types. When we proposed this material to the client, it resonated with their desire to avoid an institutional appearance for the project. The speed of construction was also a critical factor, particularly considering our tight timelines to meet public funding requirements. Additionally, our clients prioritized sustainability, which plays a significant role in their fundraising efforts.

We adopted a hybrid approach to material selection. The existing floors and roof of 97 Victoria featured wood deck structure, to which we added Nail Laminated Timber (NLT) infill panels. For the new third floor columns and roof, structural steel was determined to be the most appropriate solution. The new mass timber St. John's Kitchen addition received a CLT roof and glulam columns, alongside inverted wood trusses with steel king-posts specifically designed for the cafeteria area. This open space benefits from reduced beam thickness while adding unique character to the building.

SP: How did the program requirements influence material selection, particularly in terms of acoustics, durability, and other practical needs?

EN & JK: Given that this is a 24/7 facility, it will see extensive use and must withstand significant wear. Our clients communicated the importance of creating a home-like atmosphere while ensuring durability and ease of maintenance. Consequently, we detailed the mass timber elements to address these considerations. Polished concrete floors, extending up to the base of the timber columns, were used to protect the columns from wear and tear. We believe that the combination of mass timber and natural materials provides a biophilic element that can have a calming effect; everything will remain exposed except in the kitchen's prep areas due to program requirements. Ensuring access to natural light was also a priority in our design.



Interior view of St. John's Kitchen. Image Credit: BNKC



97 Victoria. Image Credit: BNKC

SP: Can you tell us more about The Working Centre? Is it a city-owned division or an independent organization? How did this effect the relationship between the client and

EN & JK: The Working Centre is a private non-profit organization run by its founders, Joe and Stephanie Mancini. Their unwavering dedication to the community has shaped the vision of "Making Home" at 97 Victoria. When they first conceptualized this project, they reached out to David Gibson and Craig Beattie, founders of local developer Perimeter Developments, seeking their support for the cause. This collaboration has led to a project fueled by a non-profit vision, bolstered by the generous assistance and contributions of a development company.

Joe and Stephanie, along with Perimeter, then sought funding from various levels of government and public sources. The project received backing from organizations such as CMHC and regional and municipal grants, while also engaging the whole Kitchener-Waterloo community in the process. It truly took the combined effort of many to bring this project to fruition. Additionally, sustainability consultants played a role in helping secure specific grants, unlocking funding opportunities that might otherwise be unavailable.

SP: As construction progresses, have there been any unexpected challenges along the way?

EN & JK: In working with existing buildings, surprises are a common occurrence. For instance, the existing structural frame often presents conditions that differ from our expectations. These challenges are typical but still require adjustment.

SP: What lessons or strategies from your previous projects have influenced this one?

EN & JK: We have undertaken many complex addition and renovation projects, and one key lesson is that you can never have enough information regarding the existing structure. Expect surprises, no matter how thorough your research. Flexibility is essential; this project operates as a construction management project, which is vital for complex renos particularly in today's market with fluctuating costs. Our construction manager, Govan Brown, emphasizes the importance of collaboration with fabricators early in the process for cost certainty. This collaboration is invaluable and allows us to implement value engineering in a timely manner if necessary.

SP: When is the projected completion date for construction?

EN & JK: Construction began in February 2024, and we anticipate that the building will be completed by late 2025.

SP: Is there anything else you would like to add?

EN & JK: The Working Centre's and our goal is to ensure that no one is left behind in society. It makes this project at 97 Victoria particularly rewarding. Our aim is to create good and humane design for a vulnerable population while also addressing durability needs. Mass timber exemplifies this balance—it feels like home, endures wear and tear, and maintains its aesthetic appeal even after a century of exposure to the elements.

News from the Institute

Welcome Rasoul Yousefpour

We would like to welcome Rasoul Yousefpour, MTI's new Executive Director, to our team. Yousefpour is a professor of Forestry at U of T and has a background in forest economics. His extensive research experience in timber products and forest ecosystems will be a valuable asset to the institute as it works to connect academics and position Canada as a leader in sustainable mass timber technology. Rasoul will take over the Executive Director role from Dr. Anne Koven, who will remain involved with the institute as a Founding Director. For further detail, see the article from the Daniels Faculty.



Mass Timber Today Podcast

The Mass Timber Today Podcast is preparing to launch its second season! Stay tuned for new discussions about the mass timber industry with experts in the forestry,

building, design, and academic sectors, coming this fall.

Other Updates

- Congratulations to the Whitefeather Forest Initiative for becoming one of the inaugural affiliate members of the Circular Bioeconomy Alliance. Scroll down to the affiliate members page
 - https://circularbioeconomyalliance.org/members/affiliate-members/.
 - The goals of the Whitefeather Forest Initiative to establish Indigenous mass timber enterprise through carbon cascades (CO2 drawdown) opportunities, including with biochar, provide a perfect context to contribute to the CBA.
- Ontario government announces \$3.5M in funding to support the expansion plans of mass timber manufacturer Element5. Read the article here.
- B.C. government provides a \$7M grant to Mercer Mass Timber to support a
 mass timber manufacturing facility in Okanagan Falls, B.C.

Mass Timber Institute Website









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