

**Appendix 7A: Hub Design Concept Narrative, Diamond Schmitt Architects**  
See attachment

# Diamond Schmitt Architects

## Brampton Community HUBS

By definition community is created by social interactions which connect residents and support neighborhood cohesion, essential to healthy urban living.

Over the past seven decades the physical dispersal of elementary schools, community recreation and cultural centres, public libraries, daycares, health and social services centres for site cost and availability expediency has decentralized neighbourhood networks. Extended travel time, compromised convenience and access has been the consequence. In the absence of sustainable public transit reliance on the car has increased. In a community like fast growing Brampton, with the demographic of visible minorities, a majority of recent immigrants, and modest per capita income community cohesion has significant importance.

Within this context of rapid urbanization a Community Hub co-locates elementary schools, daycare, public library, community sports, recreation and event space, arts and culture facilities, social services spaces and coworking technology centres. In order to lower land cost and develop a more efficient use of site area co-located community programs were tested in multistory, three and four floor buildings. Located adjacent to park space in support of emerging urban neighborhoods access is provided to the Hub within a 20 minute walking radius. One prototype was tested on an emerging high street, Queen St E. and the second prototype within the emerging Shoppers World development. Both hubs were co-located with public park space with adjacent elementary school playgrounds.

Both Hubs were designed with exposed mass timber structures, a renewable material which sequesters carbon and supports short construction schedules. The Hubs are designed on a modular basis. The elementary schools are located on lower floors with excellent natural light and view and secure grade level access for parents and students. Students are also provided with secure playground and playing field space. In those communities where two school boards are operating co-location can result in shared use spaces and lower capital and operating cost. Access to grade level public libraries with public visibility and ease of access is also a benefit to students. Daycare centres with associated, secure outdoor gross motor play space and grade level locations for Community Event and Community Centre entry enhances public connection. Middle and upper floors are programmed with coworking technology spaces, arts and culture space and large volume community recreation spaces like gymnasias co-located with school gymnasias can result in capital cost savings. The highly flexible, modular structure was designed to accommodate institutional needs but also to adapt to change over time to meet emerging community needs.

Environmental sustainability is matched by social and operational sustainability of this significant municipal investment. The heart of the modular plan is centred around a naturally lit agora or community space. The agora is made up of a series of public terraces which step up the interior of the Hub connecting all floors. The stepped terraces, linked by stairs and ramps which provide accessibility to all levels allow community food or commercial markets to flourish,

community gatherings and meetings to take place, arts and cultural exhibitions space for performance and a place for neighborhood and holiday festivals within indoor public space. This is an added community benefit in the six months of cold and wet weather. The agora extends the public ground level of street and park to the interior of the Hub thus supporting its role as a public crossroads and neighborhood Centre.

The roofscape is developed for allotment gardens, supporting food security and is equipped with an outdoor walking or running track, gardens and public gathering space.

The HUBS are designed achieve net carbon zero and net energy zero performance. The exterior walls are clad in Building Integrated Photovoltaic (BIPV) panels for electricity generation with walls insulated to Passivhaus standard. Natural light is delivered in large windows within thermally efficient exterior walls and is harvested in abundance in the central public agora.

Below grade parking is provided as well as short term parking for secure drop off to schools or daycare. Below great access is sized for secure school bus access for student pickup and drop off.

The Community HUBS will become a focus for the community, a place serving diverse needs and age groups, creating a healthy supportive neighborhood at lower capital and operating cost.

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