



— Mount Vernon Library Commons —

Monthly Update
July, 2021

Form & Function

Preliminary design work is focused on the function of the building's various programs, making sure the size, adjacency, and flow between spaces meets the needs of the users. Working in gray-scale models helps the design team focus on the form of the building, the feeling of the spaces, natural daylighting effects, and visibility.



Youth Services



Collections and Staff Work Area



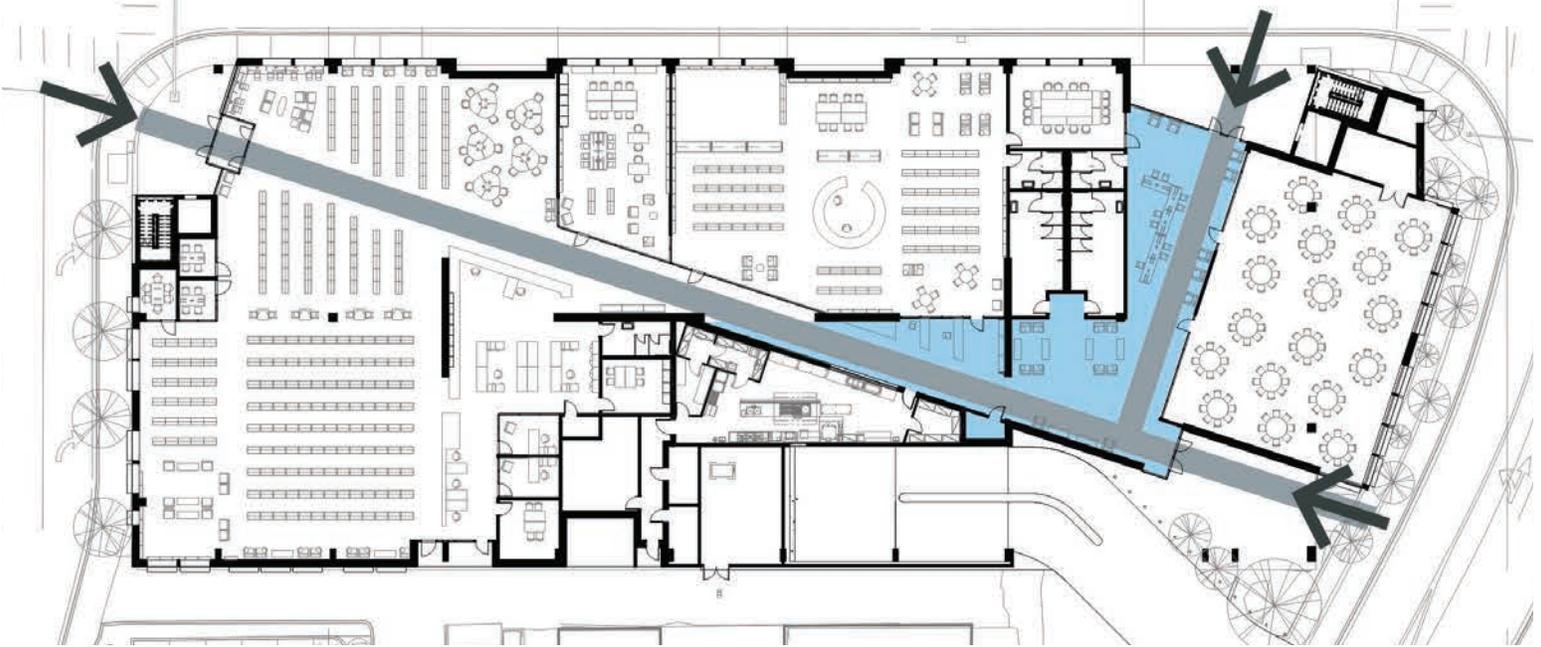
Community Room



Preliminary Massing Models of Northeast corner (top), West Entry (bottom)

50% Schematic Design

Mid-way through July, the Architectural and Engineering (A&E) team submitted the 50% Schematic Design package to the City. It is the first milestone submittal which includes the initial set of preliminary site and building plans, building sections and massing, utility connections, structural systems, parking garage functionality studies, and mechanical, electrical, kitchen, and wayfinding & signage analysis.



Preliminary Flow Diagram

Month in focus

One of the areas of focus this month is on **carbon reduction strategies**. What is embodied-carbon and why do we care about reducing it in the design of buildings?

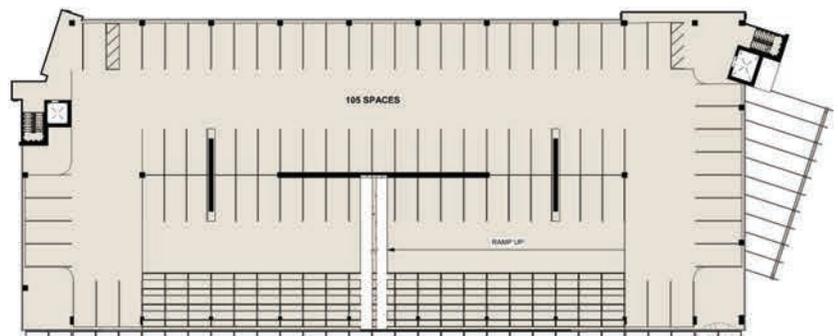
Carbon is one of the earth's most common elements, and it is found in almost every product made. However, when carbon is burned, usually in the form of fossil fuels, it creates carbon monoxide (CO) and carbon dioxide (CO₂), both of which add to the **global warming** that is causing climate change. Buildings contribute 40% of all the global warming potential (GWP) worldwide.

Our goal is to reduce the amount of embodied carbon in the products we use. This includes all of the carbon burned in the making of, transporting of, installation of, and ultimate demolition of reuse/recycling of the material (total life cycle).

Since concrete is a large portion of this project, and it is high in embodied carbon, we will be looking at newer mix types that **reduce** the energy used during manufacturing, and even **sequester** some of the carbon used during its making within the concrete itself.

July 2021 Activities.

- Weekly Owner Meetings
- Geotechnical Investigation Draft Report
- Site Survey
- Preliminary Boundary Line Survey
- City-wide Community Space Inventory Analysis
- Preliminary Daylighting Studies
- Passive House registration with PHIUS
- Project Carbon Baseline Analysis
- Pre- Pre-Application Meeting with Planning
- 50% Schematic Design Submittal (July 19th)
- Funding Support for RAISE grant and fundraising videos
- Reviewed alternative on-site power generation strategies
- Owner 50% SD Review Comments
- Plan Revisions based on Owner Review
- Preparation for 100% Schematic Design (Sept 9th)



Parking Functionality Planning

HKP Architects

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