



APPLIED TECHNOLOGY CLASSROOM BUILDING

SCHEMATIC DESIGN BROCHURE

November 2008

## Project Overview

### **The WSU Applied Technology Classroom Building**

The WSU Applied Technology Classroom Building (ATCB) is the first building on the Washington State University Vancouver Campus located in what is envisioned to be the campus Science Precinct. This is an important building for the Campus from the standpoint of future growth on campus along the Mount St. Helen's view corridor, but also pivotal in developing the future of research facilities on campus. This new building will provide general classrooms for the campus along with dedicated laboratories, a clean room facility and office spaces to support a new academic program in electrical engineering and the existing computer science program. It will be located across the Mt. St. Helens view corridor from the existing Engineering and Life Sciences Building which is the current home to the School of Engineering and Computer Science.

### **The Washington Technology Center Semiconductor Component Testing Facility**

One of the institutional goals of Washington State University Vancouver is to develop partnerships with local businesses, industries and professionals to enrich the learning environment and contribute to the economic and cultural development of the region. The Washington Technology Center Semiconductor Component Testing Facility (WTC) is a statewide economic development agency focused on technology and innovation. WTC's mission is to spark ideas, form connections between people and resources, and foster job growth to position Washington as a national technology leader. This project is a first step in establishing this partnering relationship by locating the WTC directly east of the ATCB. The WTC would operate a facility on this campus similar to their existing facility on the University of Washington Campus to provide companies and University researchers access to facilities and specialized equipment for Micro Electro Mechanical Systems (MEMS) research and product/process development.

### **Site Strategy and Building Organization**

The two buildings are arranged linearly on the site stretching from the Mt. St. Helen's corridor at the west end of the site, down the hillside to the east. The west elevation of the ATCB becomes a focal point for those arriving on campus from the west parking lot, being three stories high on this uphill side, and four stories high on the downhill side. A 45' wide gap developed into a working courtyard connects the lowest level of the ATCB with the upper of two levels of the WTC. The buildings are sited perpendicular to the contours of the hillside site, allowing pedestrians to use the buildings to negotiate the topography of this part of campus. The WTC is located on the downhill side, allowing the building to have its own entrance and identity, while still connecting to the overall campus building fabric. A graceful interior stair on the north side of both buildings celebrates this interior hillclimb, bringing pedestrians up or down the site, adjacent to the large meadow which engages the building and future science research buildings planned across it.

The form of the ATCB is a simple, slender gabled roof with the mass of the building at the west end carved away under the roof resulting in a large outdoor entry porch. Classrooms and laboratories are located at the east end of the building, all organized on a typical lab module. The smaller modular spaces of the faculty offices are clustered at the west end of the building looking down over the entry porch and out to the north meadow.

The WTC is also housed under a gabled roof. The volume of this building is also carved away, but at the lower floor at the east end. This massing allows the overall volume of the building to remain simple, while creating a sheltered area for the entry and a portion of the visitor parking. Upon entering the lower level of the WTC, an open stairway leads up to the main floor which houses the cleanroom facility and all of the other program spaces like offices and the workstation area. The stairway also provides the opportunity to by-pass the WTC specific spaces, leading the pedestrian to the working courtyard and to a similar interior stairway in the ATCB. The WTC will utilize the loading platform across the courtyard at the ATCB. A covered pathway connects the loading area of the two buildings.

The buildings are separated to accommodate a future eastward expansion of the ATCB. The plaza space between the facilities would allow the ATCB to be expanded by four typical lab bays.

## Building Materials

Exterior materials for the ATCB have been chosen to relate to the existing campus buildings and campus standards. The 8x8 brick found on almost every WSU Vancouver building will be the primary building material, forming a brick surround for the west, south and east faces of the building. The window openings on the south elevation will be supplemented by horizontal sunshades for daylighting, heat gain and glare control.

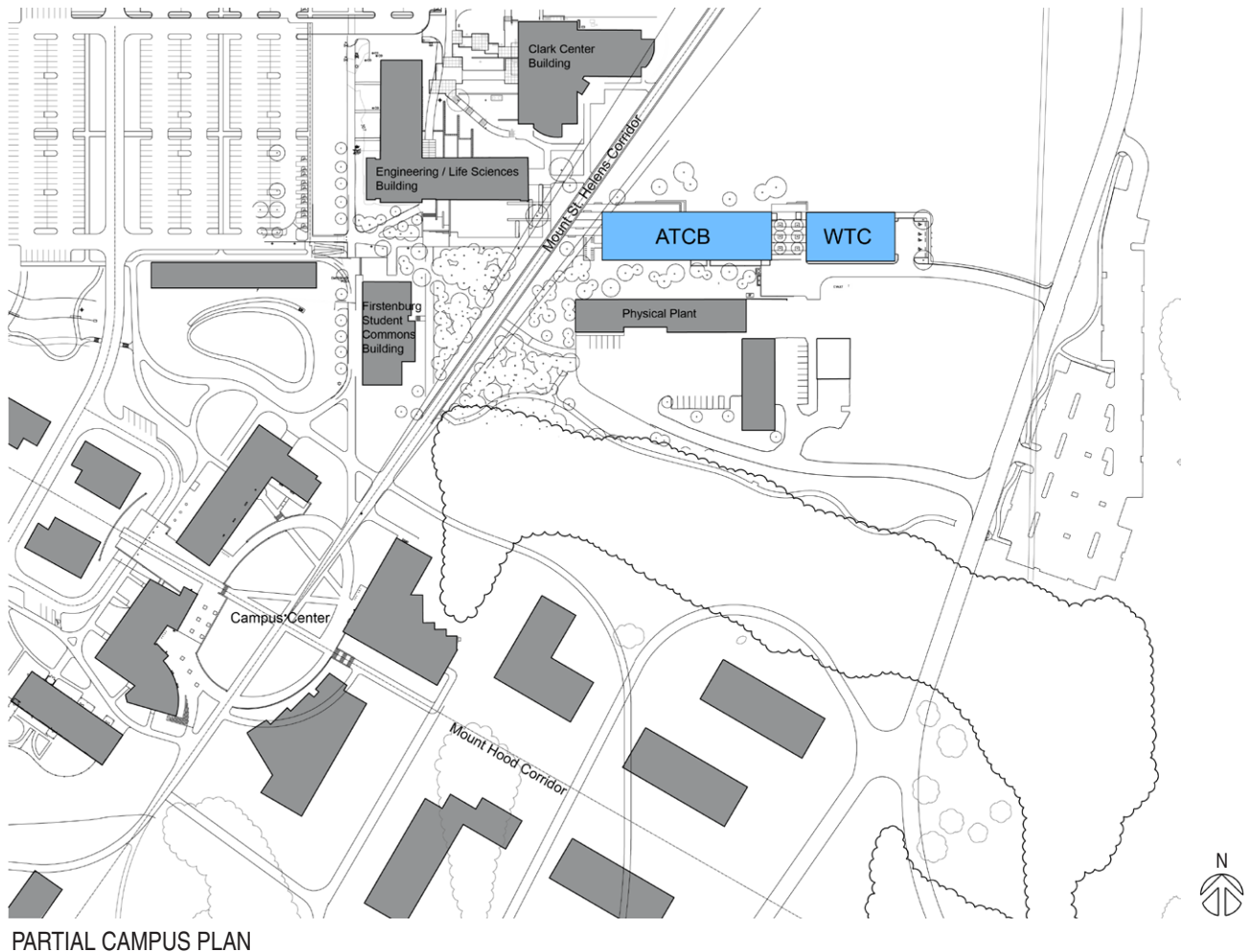
The north elevation of the ATCB offers the opportunity to bring in generous amounts of daylight through a curtainwall system which will be mixed with areas of metal panel and translucent glass. This elevation of the building is more textured and structurally expressive intending to break down the scale of the building on this north side which faces the meadow and other future research buildings.

The WTC is treated more simply in its exterior materials due to its simplicity of form and program. It takes cues from the proportions of window openings in the ATCB and will use a metal roof and wall panel that can relate in a very direct way to the metal panel portions of the ATCB as well as its metal roof.

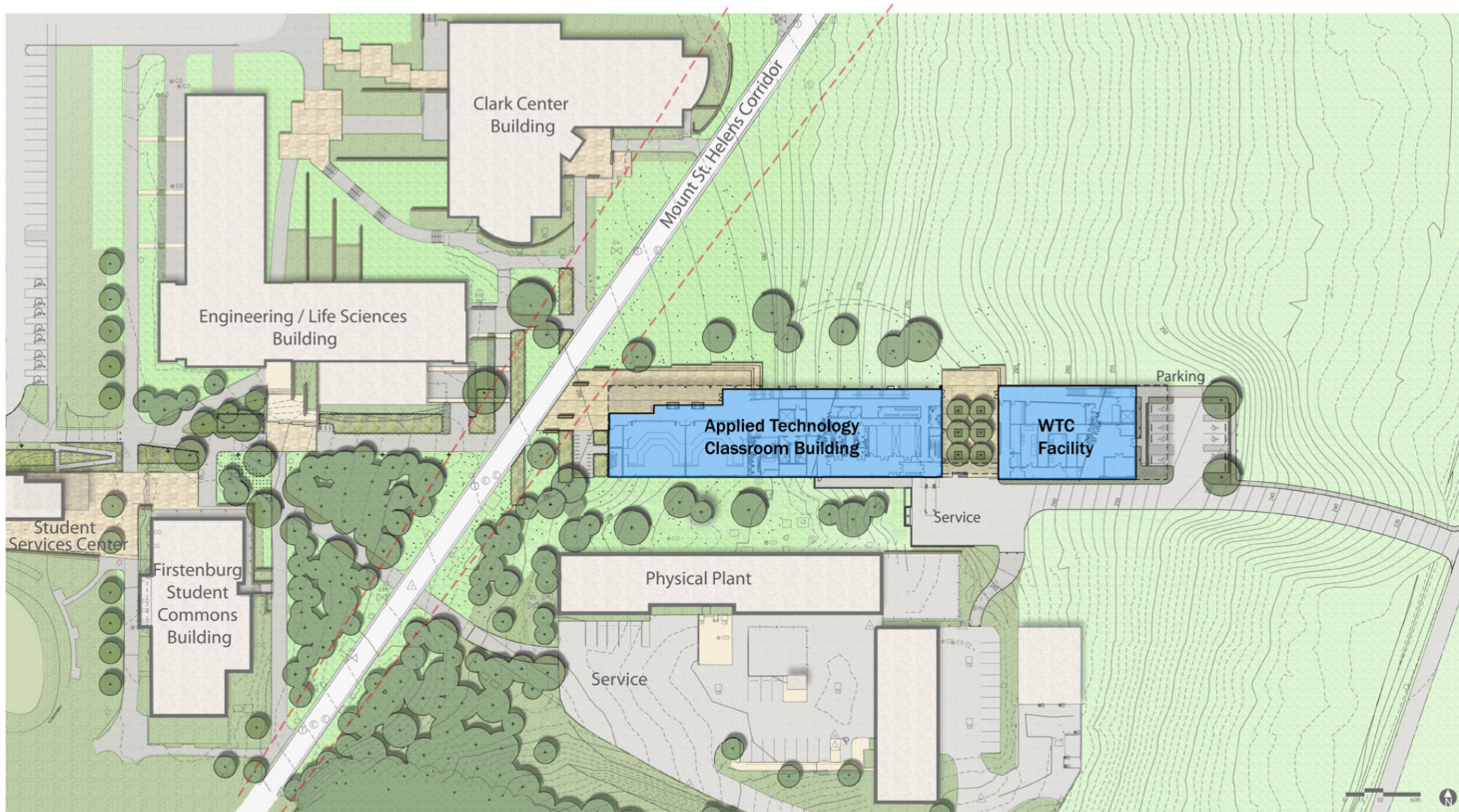
Both buildings have the greatest amount of continuous glass along north elevation at ground level. This continuous glass expression celebrates the interior stairs which link the two buildings to each other, link both buildings to the top and bottom of the hill and to the meadow landscape to the north.

## Sustainability

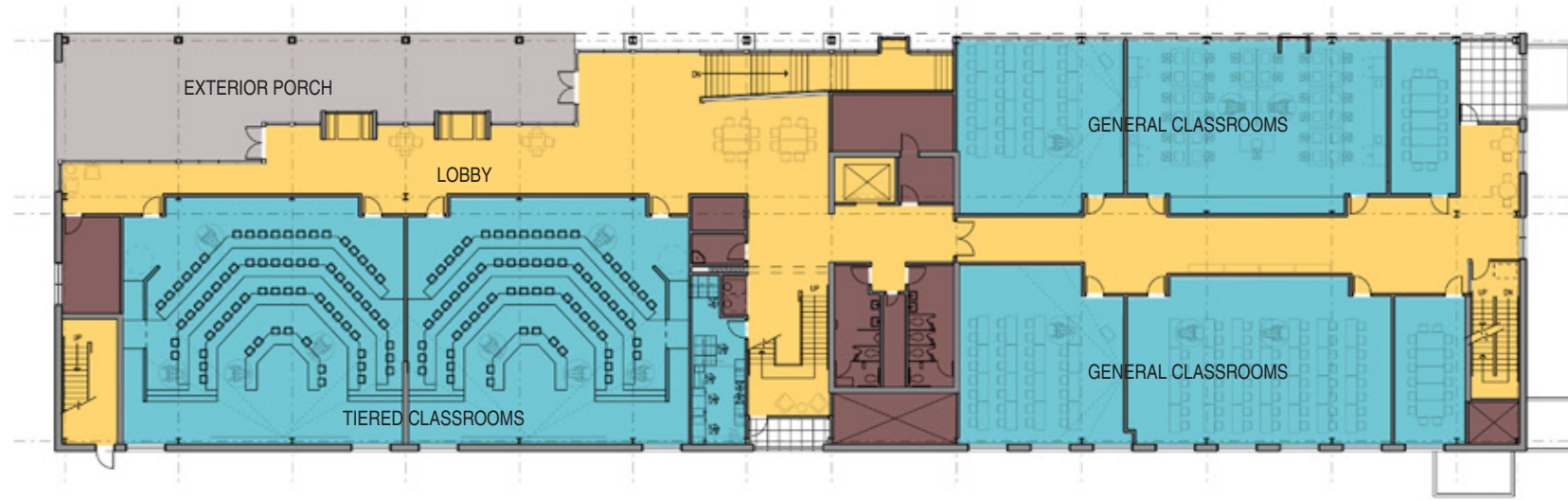
Both the ATCB and the WTC will be targeting the LEED Silver certification standards.



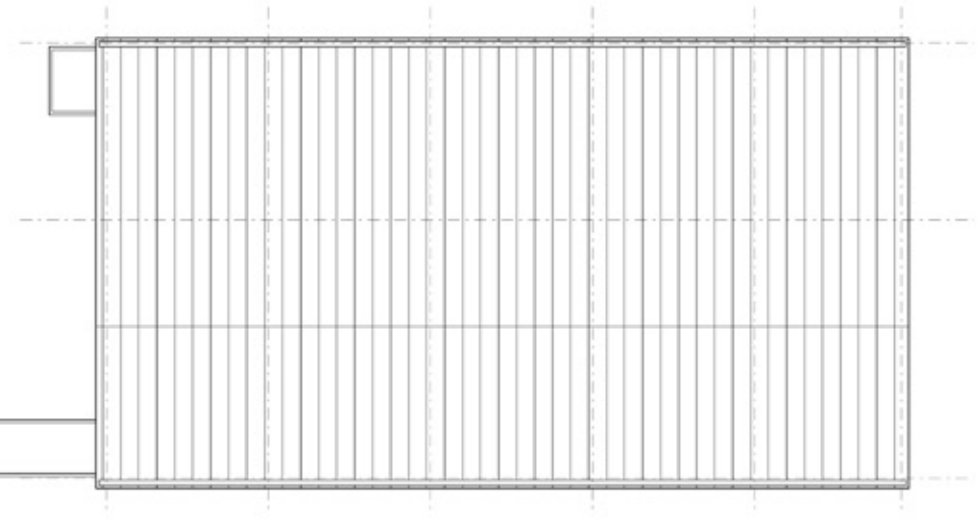
PARTIAL CAMPUS PLAN



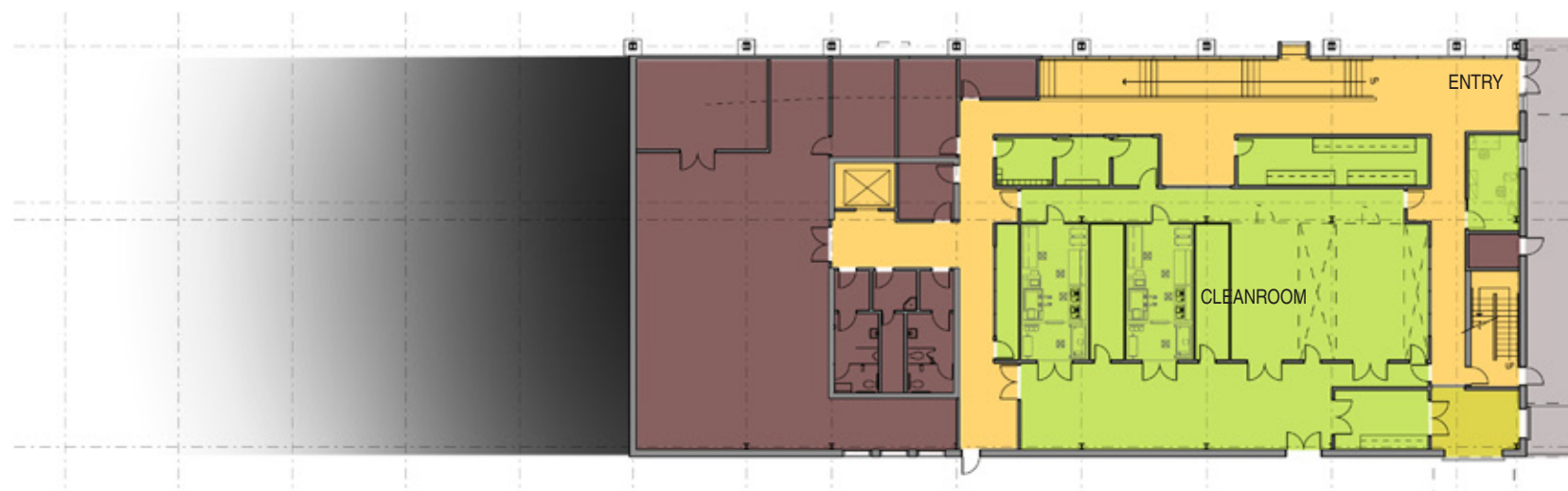
LANDSCAPE SITE PLAN



2nd FLOOR PLAN - ATCB



ROOF PLAN - WTC



1st FLOOR PLAN - ATCB

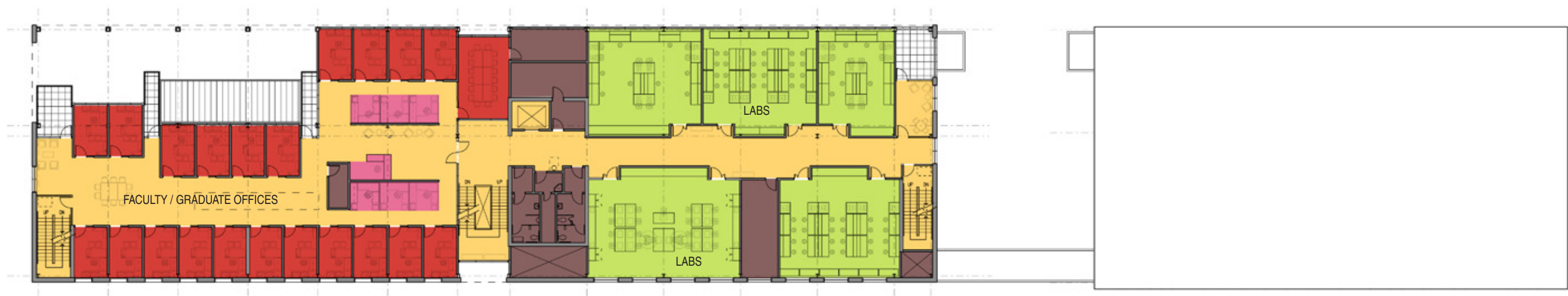


1st FLOOR PLAN - WTC





4th FLOOR PLAN - ATCB



3rd FLOOR PLAN - ATCB





WASHINGTON TECHNOLOGY CENTER

APPLIED TECHNOLOGY CLASSROOM BUILDING

NORTH ELEVATION - SITE



APPLIED TECHNOLOGY CLASSROOM BUILDING

WASHINGTON TECHNOLOGY CENTER

SOUTH ELEVATION - SITE





EAST ELEVATION - ATCB



EAST ELEVATION - WTC



SCHEMATIC DESIGN RENDERING - Looking Southeast From The Mount St. Helens View Corridor