Flex Lab Building at CU-ICAR

Project Concepts and Feasibility Study Information

Clemson University
Land Stewardship Foundation

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CU-ICAR Campus Master Plan
Technology Neighborhood 3
Technology Neighborhood 3
Concept Master Plan Narrative Information

The initial development will be for construction of a single facility (identified in this document as Building 1), but the master plan for Technology Neighborhood 3 does allow for an additional two facilities of similar size and function with shared/common truck access at the rear.

The future Flex Lab Buildings (shown as Buildings 2 and 3) should be considered in the scope work on the master plan. Other proposed buildings for the development master plan include Building 4, which is envisioned possibly as an assembly or tech center with some level of truck access of approximately 160,000 square feet. Building 5 is envisioned as a possible multi-tenant, class A office building of approximately 80,000 square feet with four or five levels. Master planning should consider all development options beyond Building 1 as speculative with Buildings 2, 3, 4, and 5 as space holders. It is anticipated that the entire neighborhood will ultimately be built-out with shared utilities, access roads, and parking as deemed appropriate.

Consideration of adjacent properties should be considered in the master planning for Technology Neighborhood 3. This should include views from Innovation Drive, Innovation Apartment Homes and other surrounding areas. It is anticipated that the CU-ICAR campus storm water detention pond, which is located in the northern portion of the neighborhood, may at some point in the future serve as home to walking trails and possible an extension of the Swamp Rabbit Trail.
Proposed Initial Development
Proposed Initial Development Narrative Information

The proposed initial development plan for the Flex Lab Building is intended to be approximately 40,000 to 50,000 square feet in 8,000 square foot bays. This facility is intended to be a multi-tenant high-bay, flexible laboratory and office building shell project intended for business tenants related to the CU-ICAR campus industry partners. It is expected to attract new start up type companies or established businesses related to the automotive, transportation, manufacturing, and engineering support service businesses. Anticipated businesses located in the building will use the space for laboratory, small-scale distribution, engineering/technical services, etc. with truck access at the rear. It is anticipated that some tenants may desire some office spaces located in the front areas of the building.

The initial development is anticipated to be five or six acres. The owner desires to mass grade the entire developable areas of Technology Neighborhood 3 as part of this project to gain economy of scale for grading while working toward a balanced site. The total developable acreage in this neighborhood is estimated between 20 and 25 acres. The selected firm will work with the owner to fine tune the concept master plan for this neighborhood while providing engineering documents for mass grading. Mass grading is expected to be provided independent of the building development/construction and will require a separate bid package from the building.

Site access will allow for truck access to the rear of the facility with turn around capabilities. Employee and visitor parking will be located in the front of the facility.

Site lighting should be planned to meet the campus Architectural Guidelines and be consistent/blend with existing site lighting on the campus.

The conceptual estimated construction cost of the project, including mass grading/clearing for Technology Neighborhood 3, is $3,650,000.
Conceptual Rendering

Looking Northwest
Conceptual Rendering

Looking East
Conceptual Rendering

Looking Southwest
The Flex Lab Building is proposed to be a single story facility with traditional foundations. The initial construction will provide for a concrete apron on the perimeter of the building and the interior floor left open with gravel for future build-out. Pits for truck leveling devices should be planned, but not for the entire truck unloading area.

The structure is proposed to be a prefabricated metal structure allowing for approximately a 24 foot interior clearance. Exterior facades are proposed to be a combination of minimal storefront, corrugated metal siding, and some insulated metal siding. Minimal canopies should be planned for each pedestrian and truck entry point.

Interior finishes should be minimal in the shell project with no finished walls allowed for. All interior finishes will be part of tenant up fit.

Basic HVAC systems are proposed in the form of root top units that will dump air directly into the open shell space. Distribution of air is not included in the initial construction planning.

Plumbing should be minimal for the shell project and allow only for convenience domestic water. Restrooms or other occupant facilities should not be included in the initial design as these will be planned for future tenant up fit. Sanitary sewer should be brought to the facility, but no interior service points provided in the shell design.

Power service should include service to the facility to accommodate anticipated occupant functions. Minimal lighting should be planned as well as minimal convenience power for the shell space. Distribution of power should be considered, but not planned for in the shell design.

All allowances should be considered in the shell development for fire alarm systems with the expectation for future tenant up fit. The initial project should include fire protection systems for shell space only. Any future tenant up fit will require modifications to the fire protection system.

Landscaping for the initial project should include full plantings of trees, grasses, and other plantings in keeping with the campus Architectural Guidelines and consistent with other landscaping on the CU-ICAR campus. Adequate screening of the truck unloading areas should be included in landscaping plans.

Site signage should be in keeping with the campus standards.
End of Project Concepts
and
Feasibility Study Information