

# Request for Qualifications (Architect / Engineer)

## State of Ohio Standard Forms and Documents

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**Administration of Project:** Local Higher Education

Project Name	<u>Agricultural Education and Water Quality Building</u>	Response Deadline	<u>August 26, 2016 5:00 pm</u> local time
Project Location	<u>Wright State University Lake Campus</u>	Project Number	<u>WSU-160027</u>
City / County	<u>Celina / Mercer</u>	Project Manager	<u>Robert Thompson</u>
Owner	<u>Wright State University Lake Campus</u>	Contracting Authority	<u>Local Higher Education</u>
Delivery Method	<u>General Contracting</u>	Prevailing Wages	<u>State</u>
No. of paper copies requested (stapled, not bound)	<u>3</u>	No. of electronic copies requested (PDF)	<u>1</u>

Submit the requested number of Statements of Qualifications (Form F110-330) directly to Robert Thompson at [rob.thompson@wright.edu](mailto:rob.thompson@wright.edu), and 2455 Presidential Drive, Suite 011, Fairborn, Ohio 45324. See Section H of this RFQ for additional submittal instructions.

Submit all questions regarding this RFQ in writing to Robert Thompson at [rob.thompson@wright.edu](mailto:rob.thompson@wright.edu) with the project number included in the subject line (no phone calls please). Questions will be answered and posted to the Opportunities page on the OFCC website at <http://ofcc.ohio.gov> on a regular basis until one week before the response deadline. The name of the party submitting a question will not be included on the Q&A document.

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### Project Overview

#### A. Project Description

Please refer to the attached Program of Requirements

#### B. Scope of Services

The selected Architect/Engineer (A/E), as a portion of its required Scope of Services and prior to submitting its proposals, will discuss and clarify with the Owner and/or the Contracting Authority, the cost breakdown of the Architect/Engineer Agreement detailed cost components to address the Owner's project requirements. Participate in the Encouraging Growth, Diversity & Equity (EDGE) Program as required by statute and the Agreement.

As required by the Agreement, and as properly authorized, provide the following categories of services: Program Verification, Schematic Design, Design Development, Construction Document Preparation, Bid and Award Support, Conformed Documents, Construction Administration, Post-Construction, and Additional Services of all types.

Refer to the *Ohio Facilities Construction Manual* for additional information about the type and extent of services required for each. A copy of the standard Agreement can be obtained at the OFCC website at <http://ofcc.ohio.gov>.

During the construction period, provide not less than 4 hours (excluding travel time) on-site construction administration services each week, including (1) attendance at progress meetings, (2) a written field report of each site visit, (3) on-site representation comprised of the A/E and its consultant staff involved in the primary design of the project, all having relevant and appropriate types of construction administration experience.

For purposes of completing the Relevant Project Experience Matrix in Section F of the Statement of Qualifications (Form F110-330), below is a list of relevant scope of work requirements for this RFQ:

1. Architecture
2. Civil/Site Design
3. Mechanical/Electrical/Plumbing and Fire Protection Design
4. Laboratory Design
5. Classroom Design



## Request for Qualifications (Architect / Engineer) continued

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For all Statements of Qualifications, please identify the EDGE-certified Business Enterprises, by name, which will participate in the delivery of the proposed professional services solicited in the RFQ.

### H. Submittal Instructions

Firms are required to submit the current version of Statement of Qualifications (Form F110-330) available via the OFCC website at <http://ofcc.ohio.gov>.

Electronic submittals should be combined into one PDF file named with the project number listed on the RFQ and your firm's name. Use the "print" feature of Adobe Acrobat or similar software for creating a PDF rather than using a scanner. If possible, please reduce the file size of the PDF. In Acrobat, go to Advanced, then PDF Optimizer. Also, please label the CD or DVD and the sleeve with the project number and firm name if applicable.

Paper copies of the Statement of Qualifications, if requested, should be stapled only. Do not use special bindings or coverings of any type. Cover letters and transmittals are not necessary.

Facsimile copies of the Statement of Qualifications will not be accepted.

Firms are requested to identify professional registrations, memberships and credentials including: LEED GA, LEED AP, LEED AP+, CCCA, CCM, CCS, CDT, CPE, DBIA, and any other appropriate design and construction industry credentials. Identify that information on the resume page for individual in Block 22, Section E of the F110-330 form.

Shortlisted firms will be notified no later than Monday September 12, 2016, and will be expected to be available for interviews during the week of September 19, 2016.

# Architect / Engineer Selection Rating Form

## State of Ohio Standard Forms and Documents

Project Name Agricultural Education and Water Quality Building Proposer Firm \_\_\_\_\_  
 Project Number WSU-160027 City, State, Zip \_\_\_\_\_

Selection Criteria		Value	Score
<b>1. Primary Firm Location, Workload and Size (Maximum 10 points)</b>			
a. Proximity of firm to project site	Less than 50 miles	5	
	50 miles to 100 miles	2	
	More than 100 miles	0	
b. Amount of fees awarded by Contracting Authority in previous 24 months	Less than \$100,000	2	
	\$100,000 to \$200,000	1	
	More than \$200,000	0	
c. Number of licensed professionals	Less than 4 professionals	3	Max = 3
	4 to 10 professionals	2	
	More than 10 professionals	1	
<b>2. Primary Firm Qualifications (Maximum 30 points)</b>			
a. Project management lead	Experience / ability of project manager to manage scope / budget / schedule / quality	0 - 10	Max = 20
b. Project design lead	Experience / creativity of project designer to achieve owner's vision and requirements	0 - 10	
c. Technical staff	Experience / ability of technical staff to create fully coordinated construction documents	0 - 5	
d. Construction administration staff	Experience / ability of field representative to identify and solve issues during construction	0 - 5	
<b>3. Key Consultant Qualifications (Maximum 20 points)</b>			
a. Key discipline leads	Experience / ability of key consultants to perform effectively and collaboratively	0 - 15	
b. Proposed EDGE-certified Consultant participation*	One point for every 2 percent increase in professional services over the EDGE participation goal	0 - 5	
<b>4. Overall Team Qualifications (Maximum 10 points)</b>			
a. Previous team collaboration	Less than 3 sample projects	1	Max = 3
	3 to 6 sample projects	2	
	More than 6 sample projects	3	
b. LEED** Registered / Certified project experience	Registered projects	1	Max = 2
	Certified projects	2	
c. BIM project experience	Training and knowledge	1	Max = 3
	Direct project experience	3	
d. Team organization	Clarity of responsibility / communication demonstrated by table of organization	0 - 2	
<b>5. Overall Team Experience (Maximum 30 points)</b>			
a. Previous team performance	Past performance as indicated by evaluations and letters of reference	0 - 10	
b. Experience with similar projects / delivery methods	Less than 3 projects	0 - 3	
	3 to 6 projects	4 - 6	
	More than 6 projects	7 - 10	
c. Budget and schedule management	Performance in completing projects within original construction budget and schedule	0 - 5	
d. Knowledge of Ohio Capital Improvements process	Less than 4 projects	0 - 1	
	4 to 7 projects	2 - 3	
	More than 7 projects	4 - 5	
		<b>Subtotal</b>	

\* Must be comprised of professional design services consulting firm(s) and NOT the lead firm  
 \*\* Leadership in Energy & Environmental Design administered by the Green Building Certification Institute

Notes:

Evaluator:

Name \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

**Wright State University**

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**Agriculture and Water Quality  
Building**

Program of Requirements

5/20/2016

# Wright State University

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**Project Information** Water Quality and Agriculture Education Building

**WSU Project Number** WSU 160027

**Project Scope** The project is to design, construct, and commission a new facility to house laboratory space, classrooms, common space and offices to support water quality testing and agricultural education. The facility will be a single story building of approximately 7,000 square feet, with future planned expansion

The building will include:

- New limited parking lot
- Extension of utilities to the building
- New foundation, frame, envelope and interior construction
- All required HVAC, plumbing, electrical, telecommunication, security, and life safety systems
- Laboratory casework
- Furniture
- A/V equipment

**Executive Summary** The Water Quality and Agricultural Education building is a project that intersects State and Community interests with a growing program at Wright State University Lake Campus. The building will consist of laboratory space for use with community partners and educational laboratory space, classroom and faculty offices. The building will be organized around a commons area that will serve as the primary circulation space of the building as well as gathering space for the occupants

A goal of the facility is to provide spaces for outdoor agricultural education by means of a covered exterior space.

# Agriculture and Water Quality Building

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The location of this project is on the field to the east of Lake Campus proper. Refer to Appendix C for graphic.

## Proposed Location

## TYPES AND QUALITY OF SPACES

## General Characteristics of the Project

### Sustainability and Energy Conservation

The University is continually striving to increase its energy conservation. When, within the scope of the project, and in coordination with existing University efforts, increased energy efficiency and sustainability can be achieved, the University will pursue those techniques.

### Building Equipment Information

All major building systems are existing. An inspection should be performed to evaluate the suitability of all building systems for archival use.

### General Description of Existing Facility

The building is intended to be a functional, durable facility that is suitable for the rigors of agricultural education. The design of the building should reflect a high degree of fiscal stewardship and responsibility with an emphasis on pragmatic solutions. The building will require connection with both the Lake Campus and Grand Lake St. Mary's, with the architecture responding to those influences.

Materials should be selected focusing on durability and compatibility with the existing campus environment. Given the success of Agricultural Education at Wright State University Lake Campus, a modular design that allows for simple, cost-effective additions is preferable.

In keeping with the educational connection with the outdoors, the building design should have a strong connection with the exterior, including providing a covered space for outdoor demonstrations.

## **ACCESS FOR PEOPLE WITH DISABILITIES**

Today, more than forty-three million Americans have some type of impairment, either physical or mental. For many of these individuals, every day activities such as working, using public transportation, and having access to educational opportunities is hampered or even denied by physical and programmatic barriers.

In 1990, the Americans with Disabilities Act (ADA) was enacted to ensure that no qualified individual with a disability shall be discriminated against or excluded from participation in the programs offered by a public entity, such as Wright State University. Wright State University has a national reputation for serving the physically impaired student.

The final design for this project must recognize the minimum standards established by the Americans with Disabilities Act Architectural Guidelines and that Wright State University standards may require additional design features to support the special needs of students, faculty, staff, and visitors of the university who have a disability.

## **BUILDING SYSTEMS**

### **Building Management System (BMS)**

A powerful Building Management System will be used to monitor and automate building controls. The mechanical equipment including hydronic equipment and air handling equipment including air terminal devices will be centrally monitored. The building automation system will be by

# Agriculture and Water Quality Building

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Siemens, with BACNet compliant end devices. The system will be provided with local and remote graphical monitoring and control integrated into the existing Siemens Apogee system. Automatic temperature controls will be DDC with electric actuation for large dampers and control valves. Chemical fume hoods will be appropriately located, filtered and exhausted for each research work process and sensitive receptor, with services integrated into engineered and architectural systems.

## **Structural System**

The building is anticipated to use a spread footing system and steel frame, pending geo-technical analysis. Bay spacings should be as economical as possible, and likely sized to accommodate the planned lab module of 11'-0" x 30'-0".

## **HVAC**

The building will have stand-alone cooling and heating systems because the campus does not have central or regional chilled water, steam, or heating water plant capacity available at the proposed site. The HVAC system will be designed to meet all applicable ASHRAE standards. The cooling will be from variable speed, air cooled chillers utilizing CFC-free refrigerant or DX cooling with remote condensers located outside, depending on the load. The boilers will be MBH natural gas input, of the condensing type and minimum 90% efficient, and will be sized at 66% of the total building load to provide a measure of redundancy. A variable speed primary/secondary heating water loop will be used to provide heating water to the building finned tube radiators, unit heaters and reheat coils as required.

Air will be distributed from central station air handling units located on the roof outside, or in a mechanical room. Where required, the laboratory spaces will be served with 100% outside air and have venturi valve style supply air,

fume hood exhaust and general exhaust controls based upon the Phoenix system. Negative room pressurization will be achieved with the modulation of these devices to account for fume hood sash position, temperature control requirements and minimum room exhaust offsets all analyzed by a room pressurization controller that will in turn be integrated with the campus Siemens Apogee building automation system. Occupancy sensors will be employed in laboratory spaces to bring exhaust air set points to minimum values when the labs are unoccupied for maximum energy savings. Given the low quantity of fume hoods anticipated for the project, fume hood exhaust will be from a single fan per hood paired with a constant volume Phoenix air valve.

## **Electrical**

Power will be provided from the Celina Power at 12,500 volts nominal and will enter the building's electrical room. There will be one single ended substation that will transform utility power to 208/120V, 3ph, 4W power. The transformer shall be sized for 125% of the total building load including any spare or future capacity. Building substations shall consist of a 15 kV primary HVL switch, a dry type transformer, a dedicated metering cubicle, a secondary main electronic trip circuit breaker, and a fusible switch distribution. The 15 kV primary switch shall be an HVL load break switch. The fusing shall be sized accordingly. The switch shall be bused to the transformer as an integral part of the unit substation. The unit substation will contain an electronic trip circuit breaker with adjustable trip settings as the secondary main on the load side of the transformer. This switch shall be an integral part of the unit substation and all bussing shall be copper. Spaces in switchboards shall be fully bused. Spaces shall have insulated covers over bus stabs and ready for fusible switch installation. Bus shall be fully rated and shall have factory provisions for extension of main bus.

TVSS shall be installed at the building 208V substation level

# Agriculture and Water Quality Building

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and at all 120/208V panelboards. Power to the classrooms, labs and offices will be through distribution panels located in dedicated electrical closets located throughout the building. Surface mounted raceways with duplex receptacles and a separate telecommunications channel will be provided on laboratory work benches. Power and communications will be distributed to laboratory benches from an overhead raceway and umbilical system allowing easy reconfiguration of laboratories as research needs change and evolve.

All lighting both interior and exterior shall be of LED source and meet WSU Electrical Basis of Design Standards and Guidelines. Occupancy sensors will be utilized in all classrooms, laboratories, offices and restrooms for lighting control per ASHRAE 90.1. Hallway lighting shall be contactor controlled by BAS (Siemens).

A natural gas emergency generator shall provide power to all emergency lights and power via an automatic transfer switch and distribution system.

## **Fire Alarm**

The fire alarm system will be a microprocessor based, addressable, voice annunciated system matching the existing campus networked system (Simplex 4100ES), providing building wide general alarm.

The electrical engineer shall adhere to WSU Electrical Basis of Design Standards and Guidelines, which can be downloaded from WSU's web site.

## **Plumbing and Fire Protection**

Combination fire protection and domestic cold water piping will be extended from the campus potable water system into the building. Domestic cold water will be supplied to restrooms, lab sinks, service sinks, and as input to de-ionized and reverse osmosis water systems. Treated water from these

systems will be provided for point of use delivery in the laboratories and for use in autoclave equipment. Water saver fixtures will be installed in the restrooms. Low flow faucets will be used on all service sinks, restroom sinks and break room sinks. Laboratory sinks will be provided with integral vacuum breakers to prevent cross contamination. Water conservation principals in accordance with LEED and campus sustainability goals will extend to outside the building: e.g. there will be no irrigation at the facility. Domestic hot water will be provided from a high efficiency gas condensing water heater and distributed throughout the building. Tempered water from mixing valves served by the hot and cold water will be distributed to the emergency showers and eyewashes in the building per ANSI Z358.1. In addition to the main backflow prevention for domestic water on the service entrance, the fire service will have a double detector check installed and will be distributed to a wet pipe sprinkler system throughout the building. Supervised fire protection zone control valves will be provided at each floor. Laboratory compressed air will be supplied from a duplex medical grade oil free compressor with a receiver tank, refrigerated air dryer and final filters. Vacuum will be supplied by a duplex vacuum pump and receiver. Piping from this equipment will extend to outlets on the laboratory benches and in the fume hoods.

## **Communication**

Because of the unique features of existing and projected communication systems (voice, data, and video), these systems need to be developed by university staff in consultation with the relevant architects and engineers to ensure the proper placement of cable trays, conduits, and raceways.

Computing and Telecommunications Services (CaTS) will perform the development of system design criteria/standards and all necessary reviews in consultation with the affected units in the building. The actual costs of installation

# Agriculture and Water Quality Building

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(such as wiring, electronic devices, installation, testing, and start-up) will be a part of the project construction budget, although these systems may be individually or collectively bid.

Wherever communication systems are deployed, they must be:

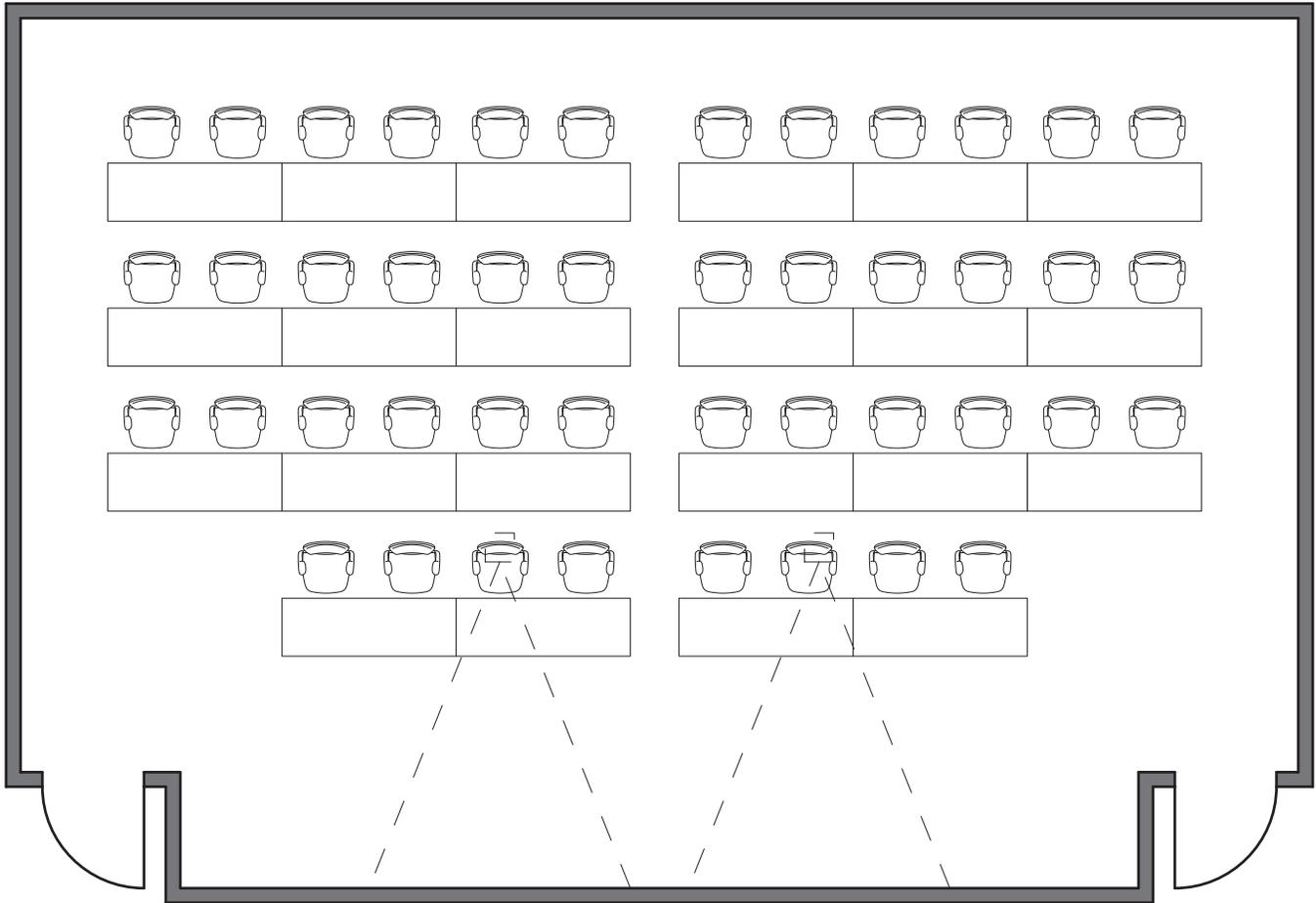
- Easily expandable while minimizing the impact on existing uses
- Compatible with existing computer resources, as well as with potential future computer technologies
- Affordable
- Capable of integrating current and emerging networking technologies
- Fault-tolerant
- Commercially available (hardware and software)
- Capable of offering electrical, topographical, and bandwidth isolation
- Connectible to various hardware and software that allows students and staff with disabilities to have access

To ensure that proper connections can be made, a room of one hundred square feet on each floor of each facility should be available for communication equipment. This room will house only telecommunications/networking facilities. All electrical panels, busbars, and so on must be housed elsewhere. This room must be adequately ventilated to reduce heat build-up.

This project will utilize the Single Prime General Contracting delivery method.

**Project Delivery Method**

## Classroom



## Narrative

Instruction in the classroom will involve soils, plants, water and animal feed, easily cleanable and durable surfaces on furniture and floors are required. The classroom should be able to accommodate a flexible learning environment, serving both lecture and group work. A movable partition will allow the classroom to serve 44 students, or two classes of 22.

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Project Liaison

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Project Sponsor

# Agriculture and Water Quality Building

## Spatial Requirements

Net Assignable Square Feet:	1500
Quantity:	1
Total Net Assignable Square Feet:	1500
Occupant(s):	Students and Faculty
Exterior Access:	
Daylighting:	Y
Floor Location Preference:	1

## Architectural Requirements

Direct access to Commons
Flexible arrangements
Hard surface flooring
Movable Partition

## Furniture

Moveable Tables
Chairs
Laptop/PC storage
Instructors Station

## Equipment

Laptops/Computers for student use
Smart Boards
Projectors and Screens or Monitors

## Plumbing

Water Systems

Hot Water	<input type="checkbox"/>	Cold Water	<input type="checkbox"/>
DI	<input type="checkbox"/>	Process	<input type="checkbox"/>

Gas Systems

Type:  Source:

## HVAC

Conditioned Space

Temperature/Humidity Requirements

## Lighting

Type and Requirements

LED Indirect/Direct
Multiple lighting scenarios

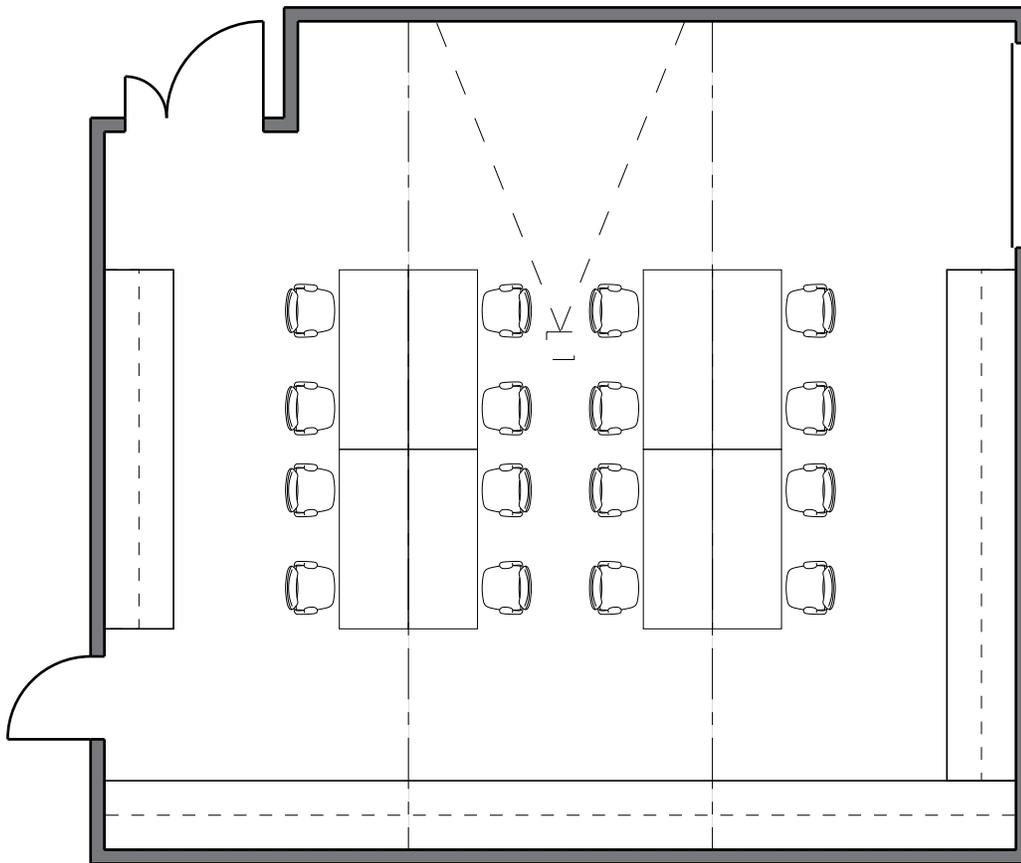
## Electrical

Convenience Power	<input type="checkbox"/>	Special Requirements
Floor Boxes	<input type="checkbox" value="Y"/>	
Backup Power	<input type="checkbox"/>	

## Communications

Wired Data	<input type="checkbox" value="Y"/>	Voice	<input type="checkbox"/>
Wireless Data	<input type="checkbox" value="Y"/>	Video	<input type="checkbox" value="Y"/>

## General Purpose/Agronomy/Biotechnology Laboratory



### Narrative

The lab will be primarily used for student instruction, accomodating about 16 students. Lab activities will include use of soil, plants, and animal specimens, durability and cleanability is essential for lab finishes.

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Project Liaison

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Project Sponsor

# Agriculture and Water Quality Building

## Spatial Requirements

Net Assignable Square Feet:	990
Quantity:	1
Total Net Assignable Square Feet:	990
Occupant(s):	Students and Faculty
Exterior Access:	
Daylighting:	
Floor Location Preference:	1

## Architectural Requirements

Modular overhead utility infrastructure

## Furniture

Modular laboratory casework  
Lab stools

## Equipment

Projector and Screen  
Fume Hood with Chemical Storage

## Plumbing

### Water Systems

Hot Water	Y	Cold Water	Y
DI and RO	Y	Process	

### Gas Systems

Type:	Source:
Natural Gas Vacuum	

## HVAC

Conditioned Space	Y
Temperature/Humidity Requirements	Standard Lab

## Lighting

Type and Requirements

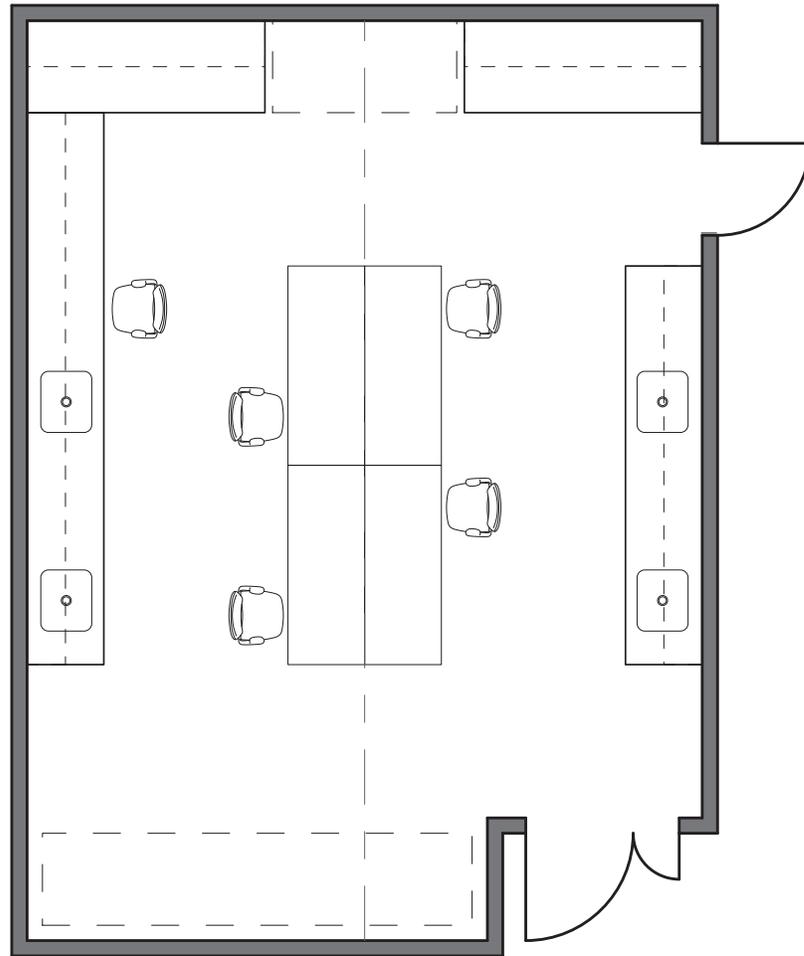
## Electrical

Convenience Power	Y	Special Requirements
Floor Boxes		Plan for 220V equipment
Backup Power		

## Communications

Wired Data	Y	Voice	Y
Wireless Data	Y	Video	Y

## Water Quality Lab



### Narrative

The Water Quality Lab will serve a dual role, with research as well as instructional uses. The lab should be equipped with four sinks, movable tables, a fume hood, and sufficient counter space to house water quality testing equipment.

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Project Liaison

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Project Sponsor

# Agriculture and Water Quality Building

## Spatial Requirements

Net Assignable Square Feet:	660
Quantity:	1
Total Net Assignable Square Feet:	660
Occupant(s):	Students and Faculty
Exterior Access:	
Daylighting:	
Floor Location Preference:	1

## Architectural Requirements

Modular overhead utility infrastructure
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## Furniture

Modular laboratory casework
Lab stools
Moveable Tables

## Equipment

Fume Hood with Chemical Storage
Refridgerator and Freezer

## Plumbing

Water Systems			
Hot Water	Y	Cold Water	Y
DI and RO	Y	Process	
Gas Systems			
Type:	Source:		
Natural Gas			
Vacuum			

## HVAC

Conditioned Space	Y
Temperature/Humidity Requirements	Standard Lab

## Lighting

Type and Requirements
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## Electrical

Convenience Power	Y	Special Requirements
Floor Boxes		Plan for 220V equipment
Backup Power		

## Communications

Wired Data	Y	Voice	Y
Wireless Data	Y	Video	



# Agriculture and Water Quality Building

## Spatial Requirements

Net Assignable Square Feet:	140
Quantity:	4
Total Net Assignable Square Feet:	560
Occupant(s):	Staff and Faculty
Exterior Access:	N
Daylighting:	Y
Floor Location Preference:	1

## Architectural Requirements

Carpet Tile

## Furniture

Desk and return  
 Lateral File  
 Bookcase  
 Task chairs

## Equipment

## Plumbing

Water Systems

Hot Water		Cold Water	
DI		Process	

Gas Systems

Type:  Source:

## HVAC

Conditioned Space Y

Temperature/Humidity Requirements Standard Office

## Lighting

Type and Requirements

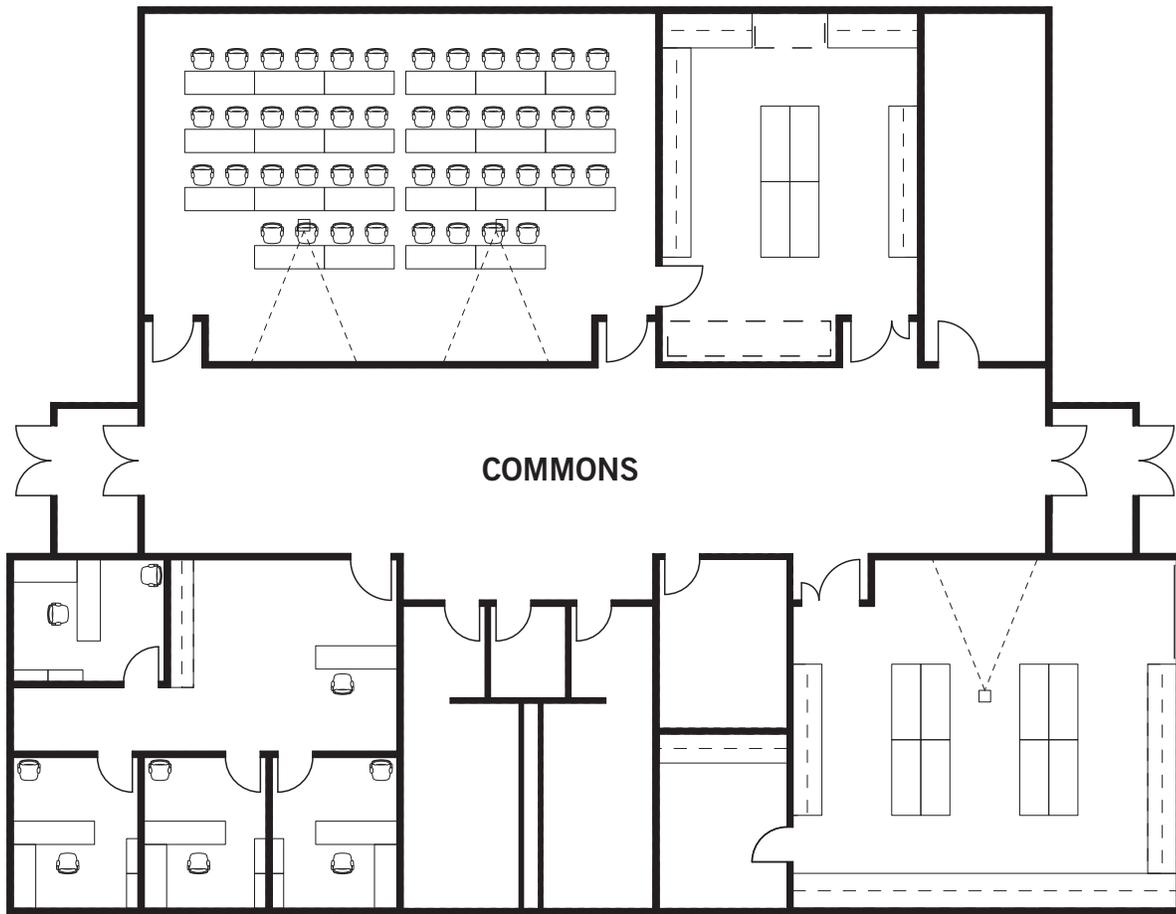
## Electrical

Convenience Power	Y	Special Requirements
Floor Boxes		
Backup Power		

## Communications

Wired Data	Y	Voice	Y
Wireless Data	Y	Video	

## Commons



## Narrative

The area should maximize seating for students and faculty, and provide a student work area and resource materials. The space should provide for a range of activities from quiet individual work to small group social. The Commons can serve as the primary connection to labs and classrooms and the principle organizing element for the building.

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Project Liaison

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Project Sponsor

# Agriculture and Water Quality Building

## Spatial Requirements

Net Assignable Square Feet:	1200
Quantity:	1
Total Net Assignable Square Feet:	1200
Occupant(s):	Students, Faculty and Staff
Exterior Access:	Y
Daylighting:	Y
Floor Location Preference:	1

## Architectural Requirements

## Furniture

Workstations

Tables

Task Chairs

Lounge Chairs

## Equipment

Printers

## Plumbing

Water Systems

Hot Water	<input type="checkbox"/>	Cold Water	<input type="checkbox"/>
DI	<input type="checkbox"/>	Process	<input type="checkbox"/>

Gas Systems

Type:

Source:

## HVAC

Conditioned Space

Temperature/Humidity Requirements

No special requirements

## Lighting

Type and Requirements

## Electrical

Convenience Power	<input checked="" type="checkbox"/>	Special Requirements
Floor Boxes	<input checked="" type="checkbox"/>	
Backup Power	<input type="checkbox"/>	

Power connections to furniture

## Communications

Wired Data	<input checked="" type="checkbox"/>	Voice	<input type="checkbox"/>
Wireless Data	<input checked="" type="checkbox"/>	Video	<input type="checkbox"/>



# Appendix A - Space Program

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# Wright State University

Space Program - Summary			
Net Programmable Area		4910	
Total Gross Area		6940	
Building Efficiency		71%	
Net Programmable Area			
		Total	Notes
Laboratories and Lab Support		1650	
Classrooms		1500	
Office Area		560	
Common Areas		1200	
Total Net Programmable Area		4910	
Support Spaces (Per WSU Design Standards)			
	Quantity	Size	Total
Telecommunications Room	1	150	150
Electrical Room	1	570	570
Maintenance/ Attic Stock	1	250	250
Recycling Room	1	0	0
Custodial	1	0	0
Total Support Spaces			970
Miscellaneous			
		% of Net	Total
Restrooms		13.0%	640
Corridors		0.0%	0
Walls		7.5%	370
Chases/Plumbing		1.0%	50
Total Miscellaneous			1060
Total Building Area			6940

## Agriculture and Water Quality Building

	Program				Remarks
	Space NASF	Total Qty	Total NASF	Occupants	
Laboratory and Lab Support					
General Purpose/Agronomy/Animal Sciences	1320	1	990	25-30	4 Modules
Water Quality Lab	660	1	660	20	2 Modules
Total Laboratory and Lab Support			1,650		
Classrooms					
Classroom	1500	1	1,500	20-45	Based on 25sf/student
Total Classrooms			1,500		
Office Area					
Private Office	140	4	560		WSU Standard
Total Office			560		
Common Area					
Commons/Multipurpose	1200	1	1,200	100	
Total Common Area			1,200		
Total Program			4,910		



# Appendix B - Project Budget

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# Wright State University

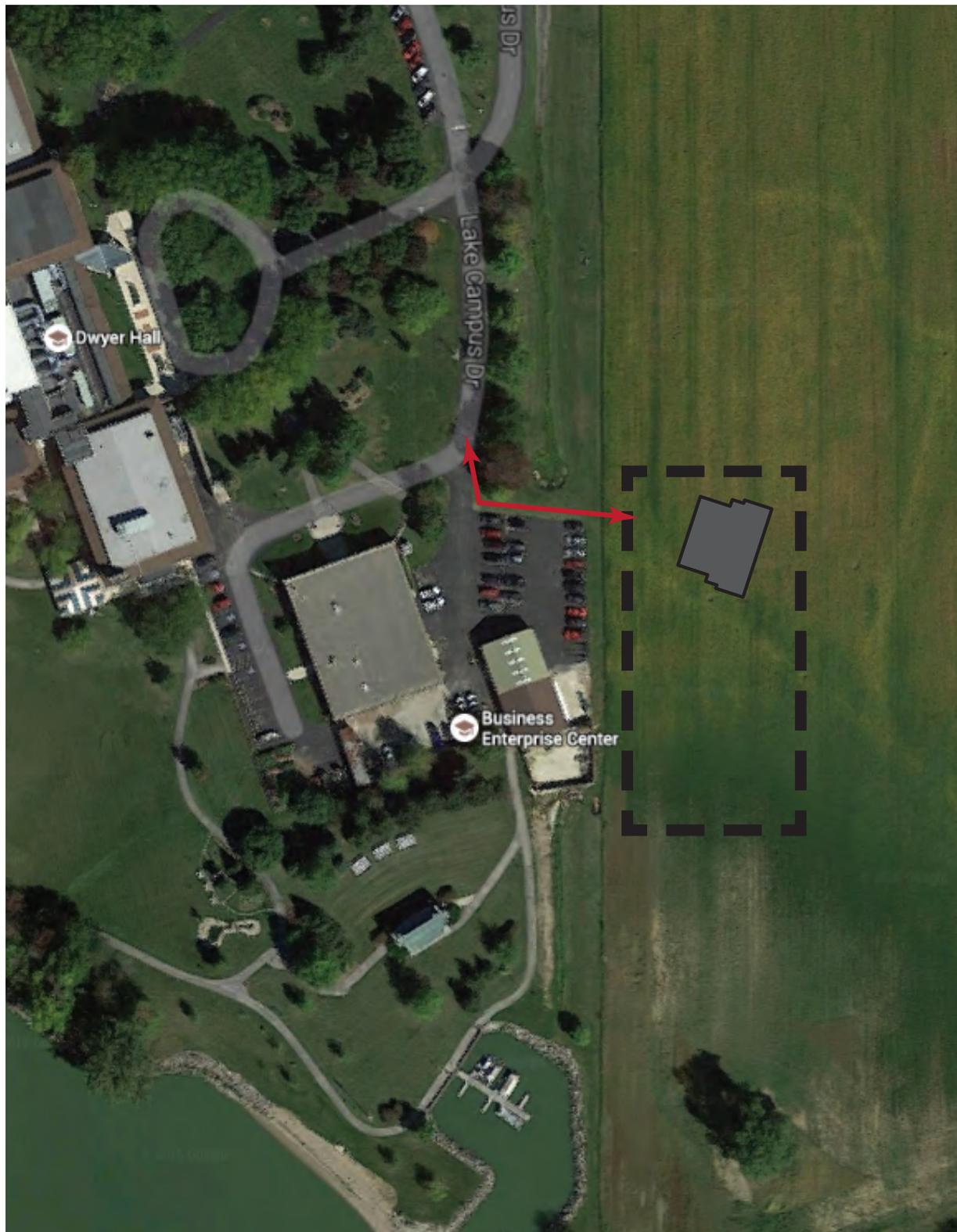
<b>Funding</b>			
State Appropriations			\$1,500,000
WSU Bonds			\$0
Gifts			\$0
WSU Other			\$1,500,000
<b>Project Budget</b>			<b>\$3,000,000</b>
<b>Contingency</b>			
Budget	Owner's Contingency	10.00%	Construction Cost \$225,000
	Design Contingency	0.00%	Construction Cost \$0
<b>Total Contingency</b>			<b>\$225,000</b>
<b>Fees</b>			
A/E Fees			
	Design Fees	8.00%	Construction Cost \$180,000
	Additional Services	1.50%	Construction Cost \$33,800
	Reimbursables	1.50%	Construction Cost \$33,800
Consultants			\$15,000
Ohio Percent for Art		0.00%	Not Required \$0
<b>Total Fees</b>			<b>\$262,600</b>
<b>Owner Furnished/Owner Installed</b>			
CaTS			\$85,000
Graphics/Art		0.50%	Construction Cost \$11,300
Furniture			Lump Sum \$125,000
Equipment			\$0
WSU Signage		0.25%	Construction Cost \$5,600
WSU Lock Shop		0.25%	Construction Cost \$5,600
<b>Total Owner Furnished/Owner Installed</b>			<b>\$232,500</b>
<b>Cost Of the Work</b>			
Site Development Costs			\$750,000
Construction Costs			\$1,500,000
<b>Total Hard Costs</b>			<b>\$2,250,000</b>
<b>Total Project Cost</b>			<b>\$2,970,100</b>

# Appendix C - Diagrams

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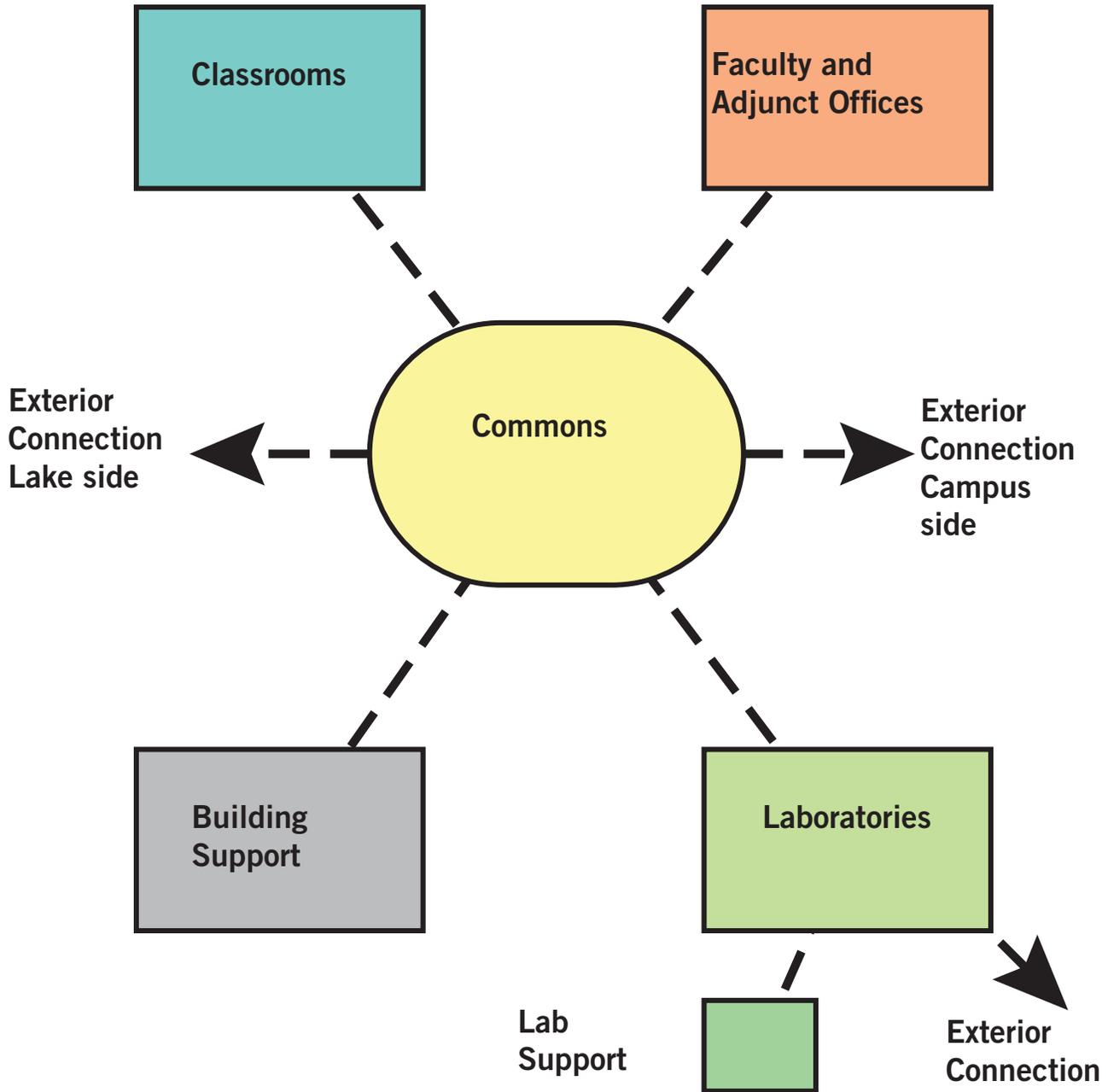
# Wright State University

## Proposed Site Location



# Agriculture and Water Quality Building

## Organizational Diagram



# Wright State University

## Conceptual Floor Plan

