

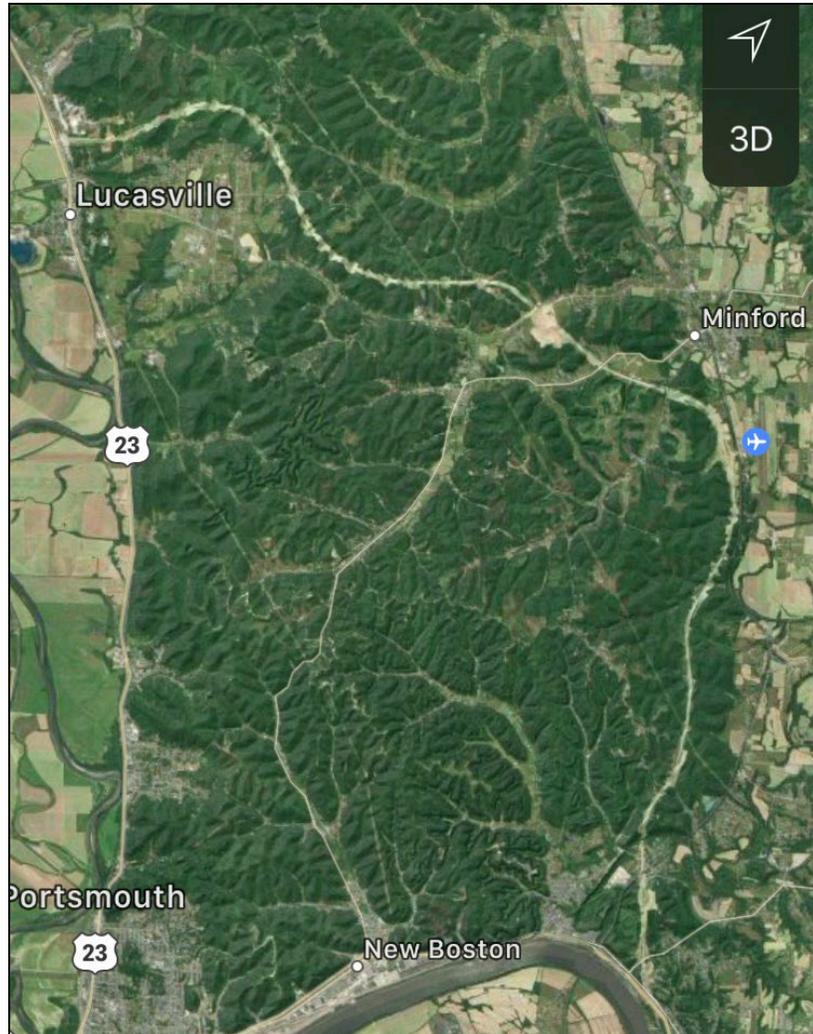
Unique Staffing Challenges Require an Out of the Box Solution

Jason A. Sander, PE

Sr. Principal, Regional Manager

Terracon Consultants

The Challenge



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Partnering to Solve the Challenge



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Getting the Job Done



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What Does Success Look Like?



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Questions?

Jason A. Sander, PE

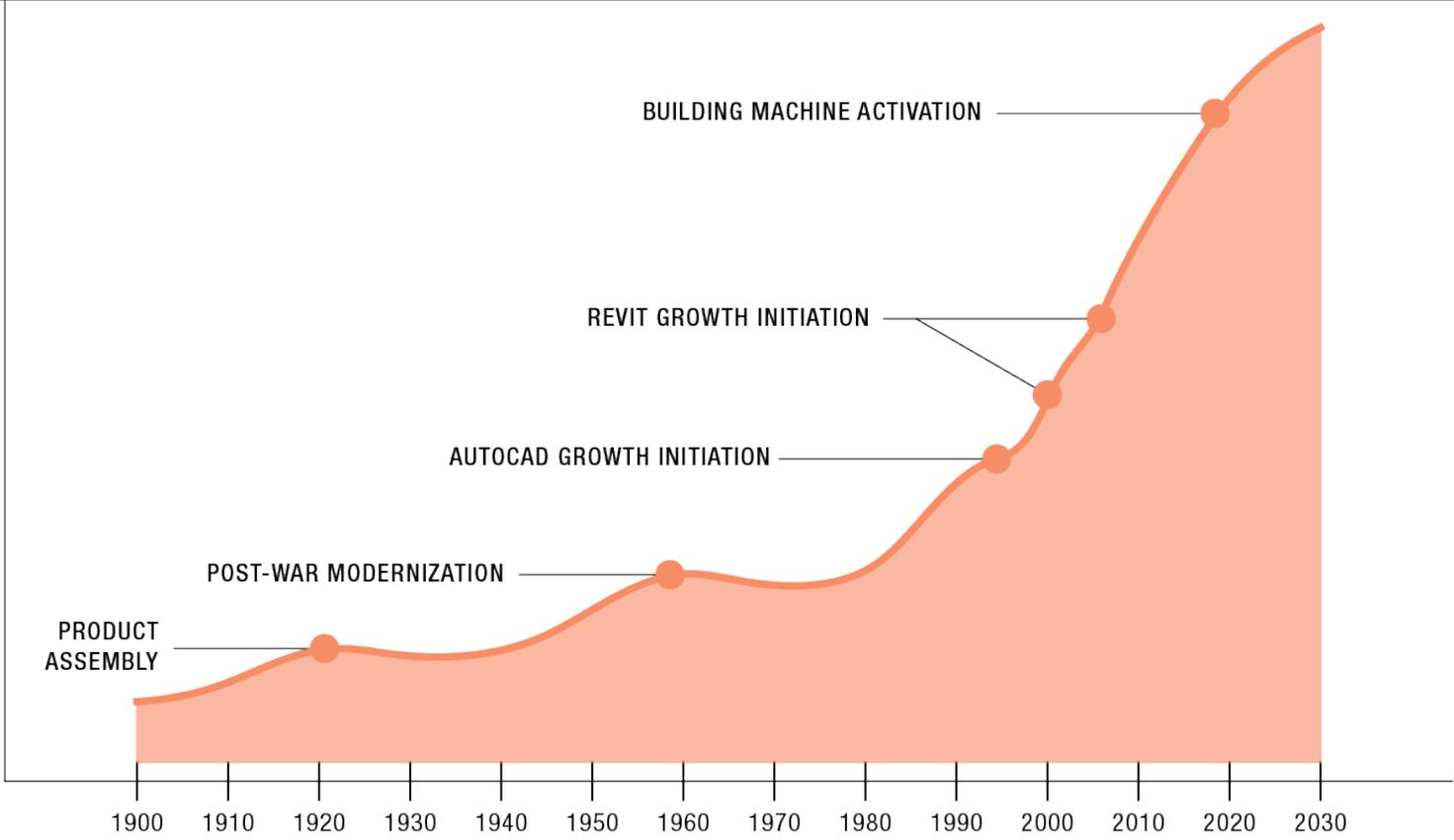
jason.sander@terracon.com

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Smart Technologies Integration

Michael Schuster, FAIA LEED AP
Principal/Owner at MSA Architects

PERCEIVED RATE OF GROWTH IN ARCHITECTURAL / BUILDING TECHNOLOGY



WE BUILD CARS WITH GREAT TECHNOLOGY.
WE BUILD BUILDINGS IN THE MUD.



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COMPONENT FABRICATION

- Built off-site
- Rapid construction



DESIGN PROCESS

a) Revit Model b) 3D Illustration c) 3D Printing



ADVANCED CONSTRUCTION METHODS

- Robotics
- 3D Building Printers
- New Fabrication Technology



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Questions?

Michael Schuster, FAIA LEED AP
mschuster@msaarch.com

Design-Assist: The Hidden Advantages

WHAT HAVE YOU GOT TO LOSE?

Tadhg O’Crowley, PE

Design-Build Manager, Brewer-Garrett

Member of COGENCE Alliance

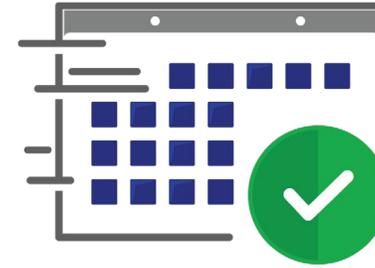
Major Design-Assist Advantages:



Reducing the owner's risk

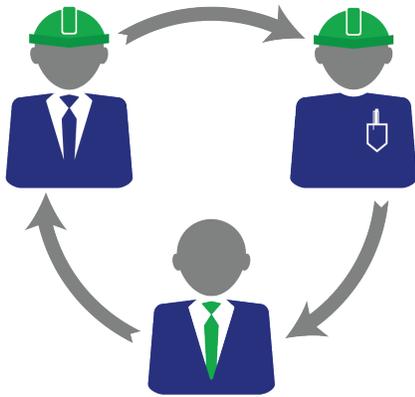


Protecting the budget



Enhancing the schedule

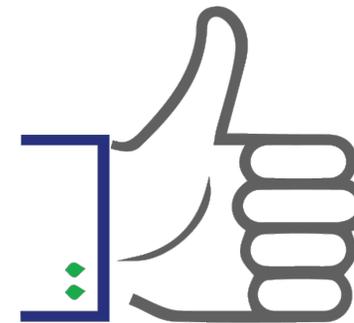
Hidden Design-Assist Advantages:



Promoting Teamwork

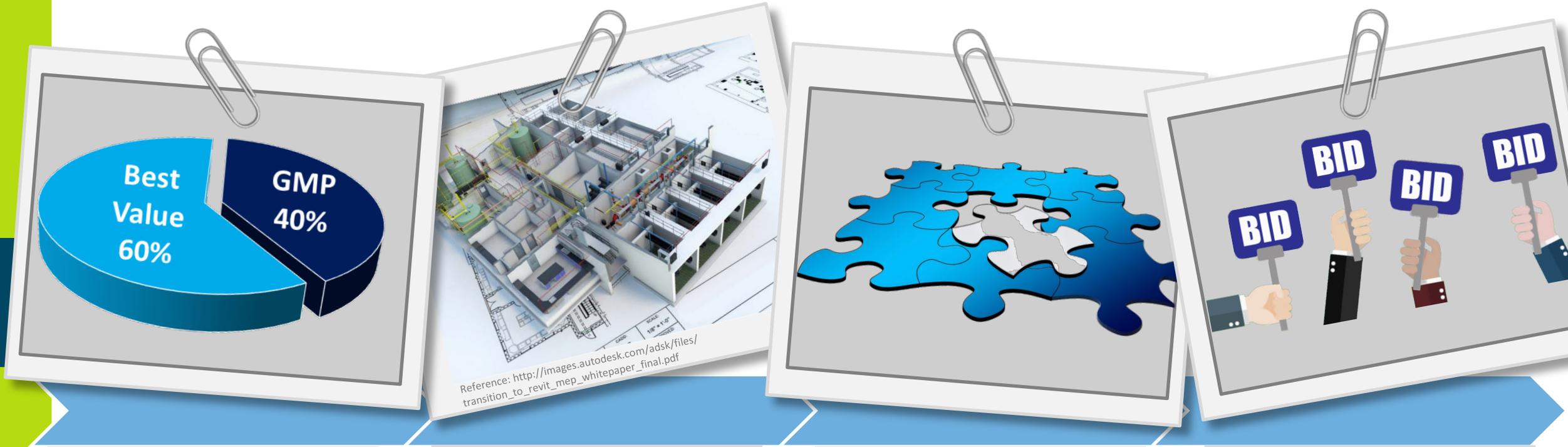


Educational



Fun

Utilizing Design-Assist through ORC 153



D-A Partner selected through best value selection process under the CMR or D-B

D-A Consultants can begin services at any time during design or construction

If target price is achieved, D-A partner can be awarded subcontract without bidding to other contractors

If target price is not achieved, CMR/D-B may request bids from other firms

Playhouse
Square Ohio
Theater
Lobby



COGENCE Alliance Design-Assist Survey Results

“What are the hidden advantages of design-assist?”

Hidden Design-Assist Advantage:

Fun

77%

“Gain industry insight to new trends / ideas / pitfalls”

“Hearing opinions of other disciplines / trades”

“Design solution with multiple perspectives”

“Solutions in-line with budget early in design - avoid VE at end”

“Learn from each other”

“More innovative / collaborative solutions” **ARCHITECTS**

“Better alignment of budget/scope”

“Capitalizes on individual strengths” **ENGINEERS**

“Open communication lines, building relationships & trust”

“Collaborative relationships reduces conflict”

“Less coordination issues in the field”

“Buy-in to good of project mindset”

“Plays on strengths from each D-A”

“Better value / earlier recognition of cost & schedule”

“Risk management and navigation”

“Creates psychological safety”

“Keep owner focused and grounded” **OWNERS** “Helps with long lead-time processes”

CONSTRUCTION MANAGERS

“Avoid additional costs later”

“Early trust developed”

“Expert advice on a topic the owner may not be familiar with”

“Creates strong team”

“Transparency”

“Shared buy-in of successful outcome”

“Early budget / cost”

“Timely coordination and constructability review = no change orders”

“Project delivered below GMP reduces project cost”

TRADE CONTRACTORS

“Early risk identification with realistic or variable resolutions”

“Fluidity amongst project tradesman consistently makes a successful schedule”

“Sets common goals and expectations”

Potential Design-Assist Challenges & Solutions

1

Eliminates
Competitive
Selection (Bidding)

Asking for a GMP with D-A selection ensures the process is competitive. The D-A contractor is incentivized to meet or exceed the GMP by being awarded the project without further bidding. The owner/CM has the option to go out to bid at any stage during the process.

2

Inexperienced D-A
Partner

Contractor selected based on Best Value Selection Process. This process provides the owner/CM with the control to select qualified partners.

3

Early Cost to
Engage D-A
Partners

Although there are D-A fees added to the design phase, these are minimal compared to the potential construction savings. Early coordination and constructability review results in fewer change orders and a faster project delivery.

4

Increased
Coordination Required
by the Design Team

This increased coordination will significantly reduce time required during construction and minimize value engineering.

Quotes from COGENCE Alliance Design-Assist Survey



“Increased participation by trade contractors in managing risk earlier in the project, leads to higher level of buy-in and engagement in managing risk throughout the project.”

-Pen Wolf, Director of Construction, Cleveland Clinic

Questions?

Tadhg O’Crowley, PE

tocrowley@brewer-garrett.com

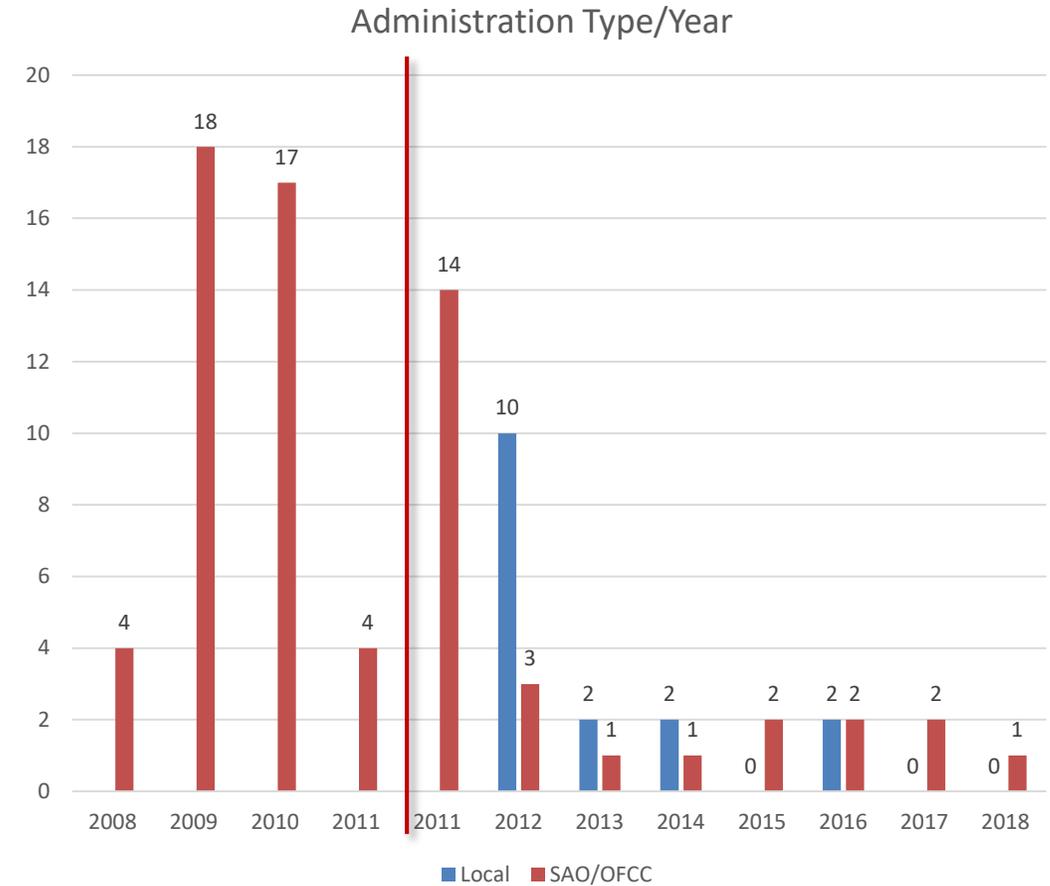
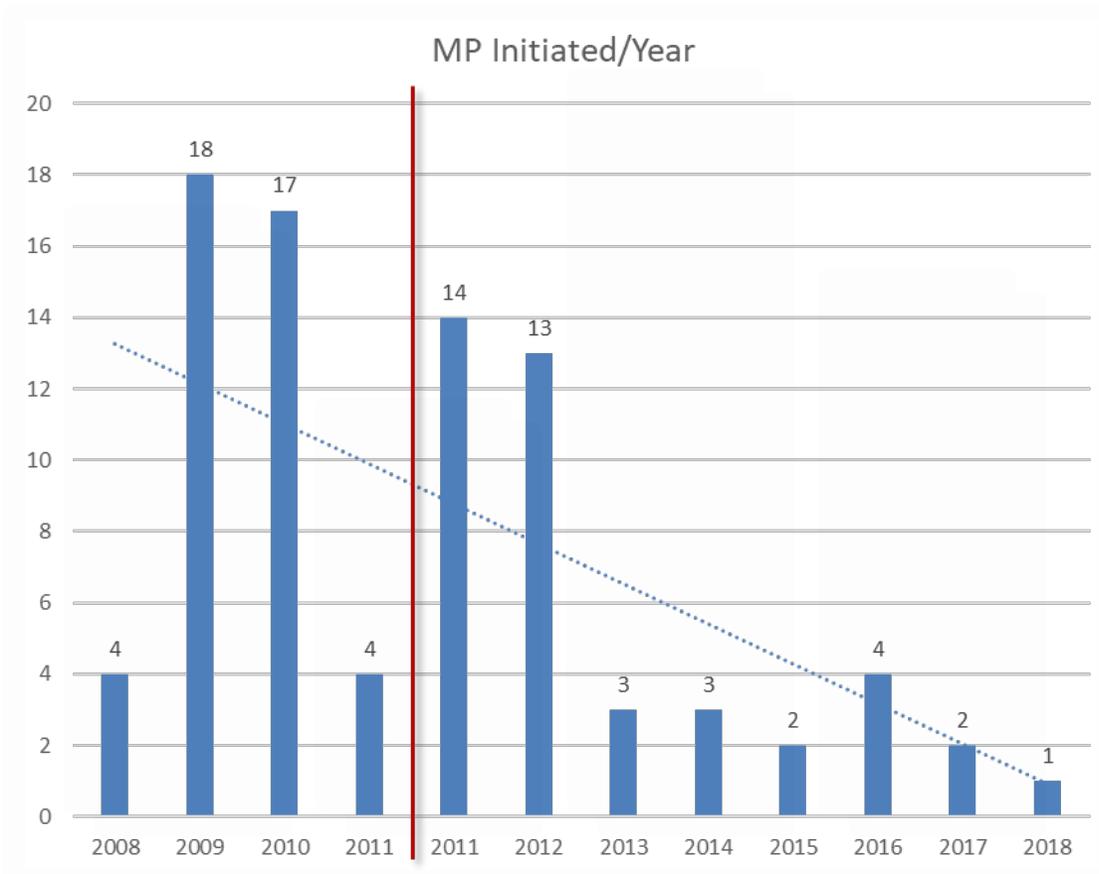
WHAT HAVE YOU GOT TO LOSE?

Lessons Learned: Multiple Prime

Ned Thiell

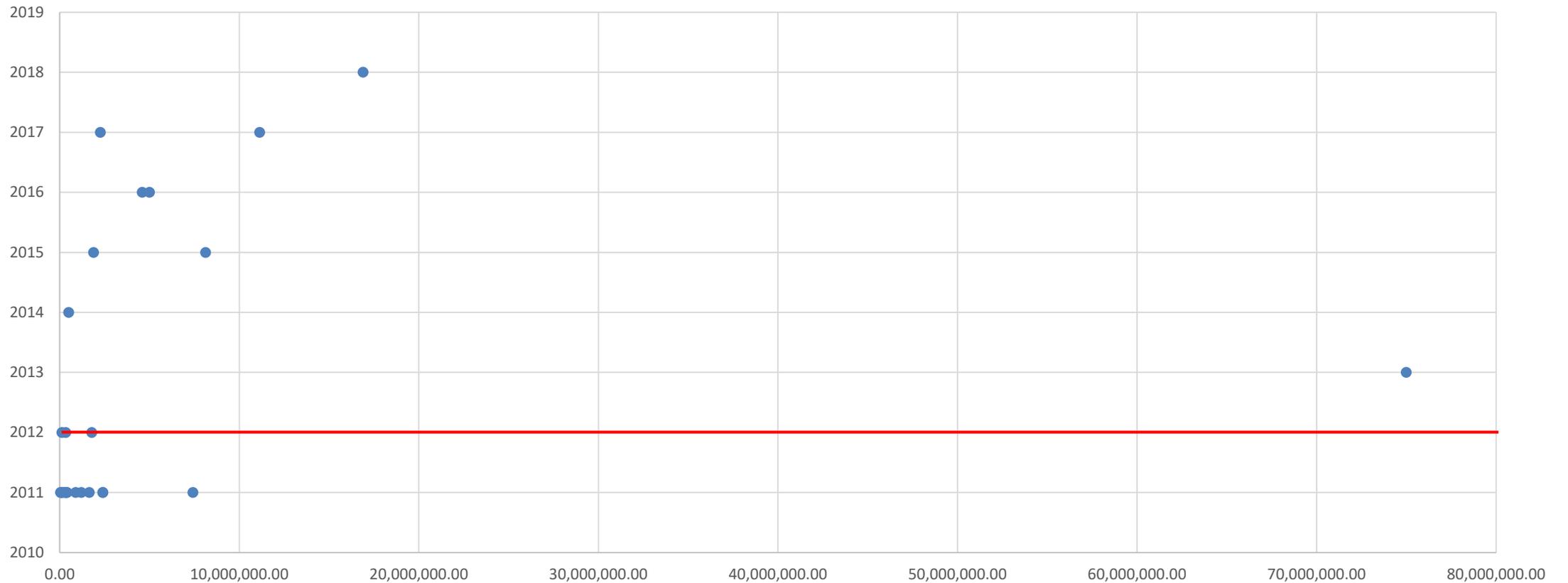
Program Manager, Agency | Higher Education

Multi-Prime Over the Last Decade



Project Costs

OFCC Project Cost/Year



When is Multi-Prime a Good Fit?

- Contracting Authority/Owner has a strong Project Manager
- Project scale is small
- Project design is NOT complex
- Number of Trades are limited
- Owner team is supported with additional resources
 - Independent estimating services
 - Scheduling consultant during construction

Why?

- + Better Management Control with appropriate “resources”
- + 3rd party Scheduling expertise
- + Faster response and resolution

- More contracts to financially administer
 - + Supplement Schedule Services as a consultant

“Resources” Needed for Success

- Contracting Authority Project Manager
- Scheduling Consultant
- the Contract
- Attitude
- Communication
- Aiming for success

Management Set-Up | “Stack the Deck for Success”

- Scheduling Consultant
- Project Manager
- “Partnering”

Contract Information

Ned Thiell

ned.thiell@ofcc.ohio.gov

BREAK

Managing School Security

**Tom Sorrell, RCDD, InfraGard, LEED AP BD+C, NICET
Principal / CMTA Technology Solutions**

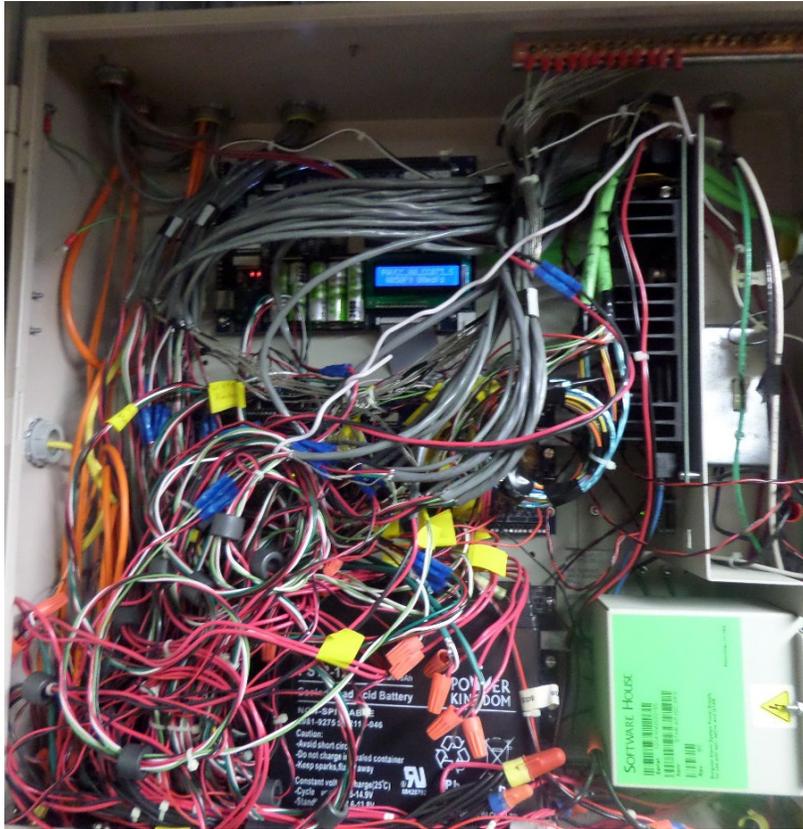
Managing School Security

Safety must be a priority for all campuses, large and small!

Today's Objective:

- ✓ Assess legacy facility security systems
- ✓ Evaluate security technology solutions available
- ✓ Integrate video, access control and emergency notification
- ✓ Importance of following Industry Standards

Managing School Security

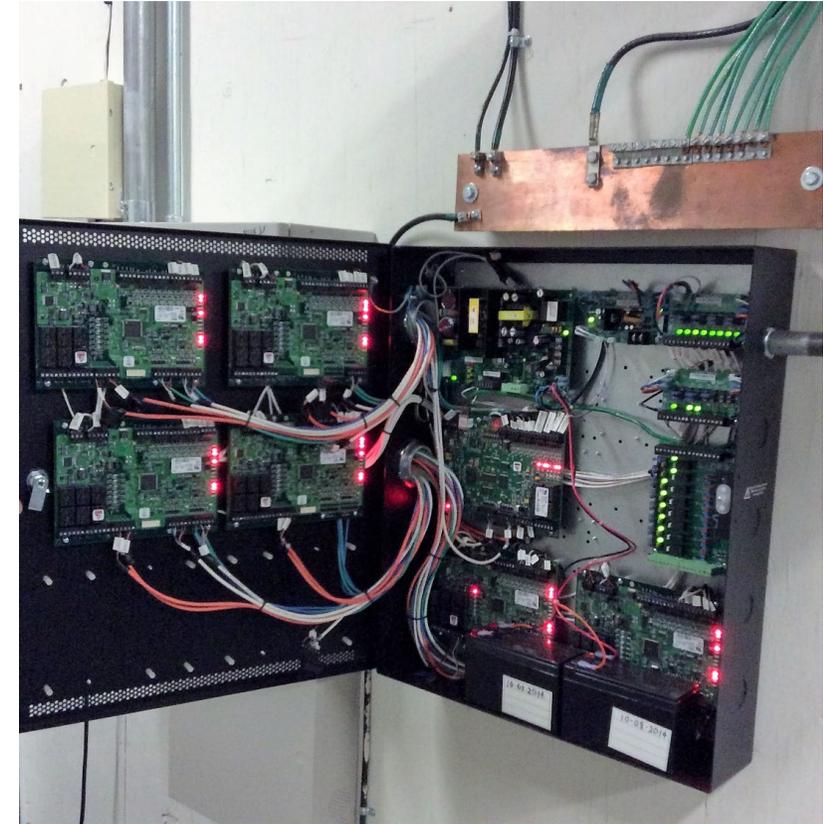


Existing ESS Practices
working to your
advantage?

Multiple Legacy
Systems?

Central Management?

Updated Campus
Security Standards?



Managing School Security

Trending: What is being done on other campuses?

Convergence!

**Video (VMS) + Access Control (SMS)
+ Panic Alarms = Analytics**

Usable Information / Lockdown



Managing School Security

Does Video Detection Enhance Security?

Threat Deterrent / Situational Awareness

Faster Response Time / Video Forensics

Improved Safety

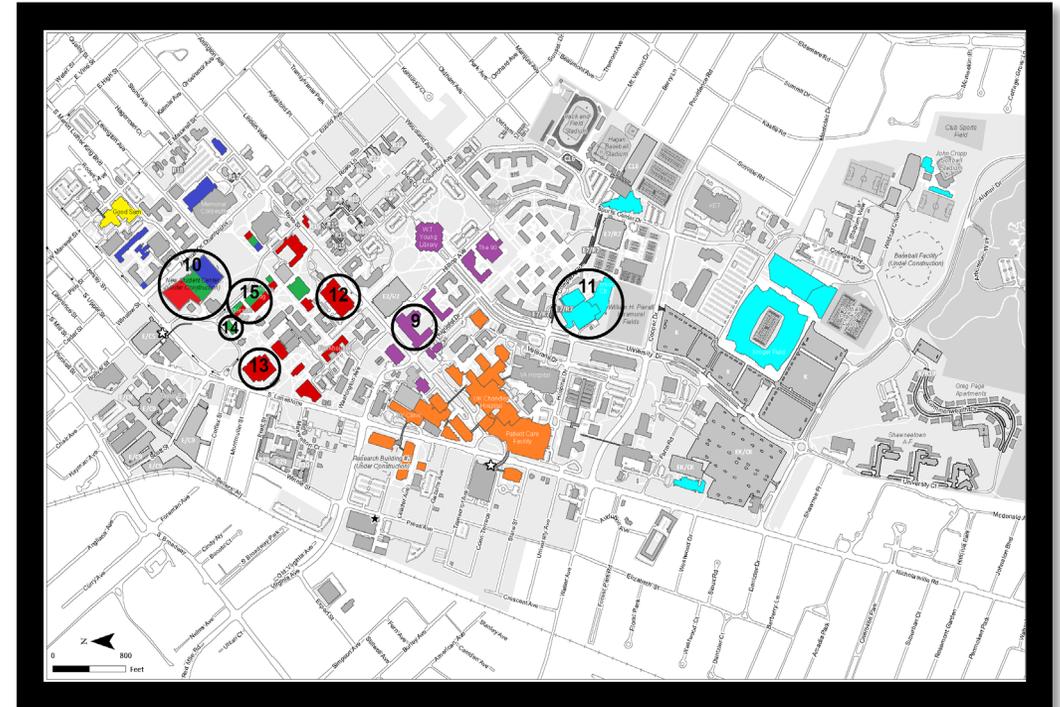
Reassurance/Peace of Mind for All!



Managing School Security



Multi-Layered Approach
For a Complete Solution!



Managing School Security

Crime Prevention Through Environmental Design (CPTED)

“Your School Here” Path is a series of recommended walking routes through a campus that provides the community with a convenient means of traversing campus on a network of popular paths.



Questions?

Tom Sorrell, RCDD
tsorrell@cmta.com

@OHFacilities #OFCCConf18

Contracts Update: The Dotted Line

Lane Beougher, FAIA, FCSI, LEED BD+C

Energy Program Manager (*and Contracts Dude*)

Which contract template can I use? [ORC 153.503 (D)]

- **OAC 153:1-2-01 Form of CM at Risk Contract Documents**
 - **The State and State Institutions of Higher Education:** *The Standard Requirements for Public Facility Construction* developed by OFCC
 - **All other public authorities:** *The Standard Requirements* or contract documents published and licensed by: American Institute of Architects (AIA); ConsensusDOCS, LLC (Associated General Contractors and its endorsers); or Construction Management Association of America (CMAA)
- **OAC 153:1-2-02 Form of Design-Build Contract Documents**
 - **The State and State Institutions of Higher Education:** *The Standard Requirements for Public Facility Construction* developed by OFCC
 - **All other public authorities:** *The Standard Requirements* or contract documents published and licensed by: AIA; ConsensusDOCS; Design-Build Institute of America (DBIA); or Engineers Joint Contract Documents Committee (EJCDC: a joint venture of ACEC, ASCE, and NSPE)

What's new in the CM at Risk Contract?

Phase: *A separation in the Work of the Project by sequence or time intervals, which may include different Subcontractors for each Phase.*

Punch List Milestone: *The date 30 days after the achievement of Substantial Completion of all or a portion of the Work.*

Self-Performed Work: *Work performed by direct employees of the CM or a CM Affiliated Entity, which does not include Work performed by direct employees of a Subcontractor...*

CM Affiliated Entity: *Any entity related to or affiliated with the CM or with respect to which the CM has direct or indirect ownership or control...*

What's new?: Phase

5.7.1.1 This **Section 5.7** is based on the assumption there will be only one GMP Amendment. The parties recognize, however, that they may decide to use more than one GMP Amendment for *phased* construction. In that case, they will execute each GMP Amendment for one or more *Phase(s)* with each amendment supplementing the previous amendment(s).

- This may now affect Liquidated Damages (§8.7.1), the CM's Contingency (§9.2.6.1.1), and the CM's Retainage (§9.2.12.3 and §9.2.14.5) which will *apply on a per Phase basis if Phases are explicitly identified* in tables on the Agreement Form and/or GMP Amendment. (currently only in the K-12 forms)

What's new?: Punch List Milestone

6.26.3.1 Before expiration of the *Punch List Milestone* and before the date of Contract Completion, the CM shall complete all items on the A/E's Punch List. After completing all items on the A/E's Punch List, the CM shall provide a written request for Final Inspection of the Work to the A/E.

8.7 Liquidated Damages

Contract Sum	Liquidated Damages per day for Milestones <i>other than the Punch List Milestone</i>	Liquidated Damages per day for the <i>Punch List Milestone</i>
Less than \$1,000,000	\$500	\$125
From \$1,000,000.01 to \$2,000,000	\$1,000	\$250
From \$2,000,000.01 to \$5,000,000	\$2,000	\$500
From \$5,000,000.01 to \$10,000,000	\$5,000	\$1,250
From \$10,000,000.01 to \$20,000,000	\$7,500	\$1,875
From \$20,000,000.01 to \$50,000,000	\$10,000	\$2,500
More than \$50,000,000	\$15,000	\$3,750

What's new?: Self-Performed Work

4.7.6 If the Contracting Authority awards to a *CM Affiliated Entity* the right to *Self-Perform* a particular scope of Work by operation of **Sections 4.7.2** and **4.7.3**, the *CM Affiliated Entity* **will be a Subcontractor** under the Contract and the CM's Subcontract with the *CM Affiliated Entity* shall be on the **State of Ohio Subcontract Form** prescribed in OAC 153:1-03-02.

4.7.7 If the Contracting Authority awards to the *CM* the right to *Self-Perform* a particular scope of Work by operation of **Sections 4.7.2** and **4.7.3**, the *CM* **shall not be a Subcontractor** under the Contract and shall not enter into a Subcontract with itself for that Work.

7.7.2.10 Subcontractor Overhead and Profit. ...equal to 15 percent...

.1 The allowance *applies to CM Affiliated Entities* and to each Subcontractor tier. The *CM is not entitled to recover overhead and profit* under **Section 7.7.2.10** on account of changes in *CM Self-Performed Work* or Work the *CM* performs as a Subcontractor at any tier.

What's new?: Acknowledgement of Surety

10.1.5 Any time the CM increases the penal sums of the Bonds under **Section 10.1.3** or **Section 10.1.4**, the CM shall deliver to the Contracting Authority an *Acknowledgment of Surety* from the affected Surety or Sureties to evidence the Surety's or Sureties' receipt of notice of the increased penal sums.

10.1.5.3 If any Surety fails or refuses to provide a required *Acknowledgement of Surety*, the Contracting Authority may require the CM to deliver to the Contracting Authority *new Bonds* showing the increased penal sums and *written consent* of the affected Surety or Sureties *confirming the increased penal sums*.

10.1.5.4 Each Acknowledgment of Surety shall be **(1)** *on a form provided by the Contracting Authority* and **(2)** subject to the acceptance of the Contracting Authority.

Questions?

Lane Beougher, FAIA, FCSI, LEED BD+C
lane.beougher@ofcc.ohio.gov

Solutions to Protect your New Construction Sites

David D'Elia

Axis Communications

Analytics – Benefits of Analytics

- 1. Cost savings** – the less video sent over your network the less the network load & storage requirements (\$\$\$)
- 2. Time** - monitoring & searches via recorded video afford operators more time to manage more cameras.



Motion Guard



Fence Guard



Loitering Guard



People Counter



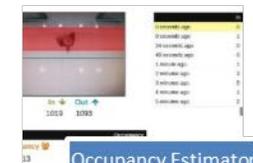
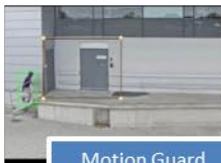
Tailgating Detector



Occupancy Estimator

Analytics – Benefits of Analytics

- 3. Greater efficiency** - automatic monitoring of security event video helps prevent crime vs simply reacting after the crime.
- 4. Creation of business value** - integrating video data into other systems, such as people-counting at store entrances means the surveillance system can contribute insights, value-add, and new solutions for other business functions, such as marketing data.



Solution Example: Perimeter Protection

- **Intrusion:** When one or more persons or vehicles enter a predetermined zone.
- **Zone crossing:** When a person or vehicle pass through two predetermined zones in a predetermined order and direction.
- **Loitering:** When a person or a vehicle are in a predetermined zone for more than a determined amount of time.
- **Conditional zone crossing:** When a person(s) or a vehicle(s) enter a predetermined zone without starting in or passing through one or more other, sequentially intended/identified zones of your 'approved' choice.



Solution Example: Perimeter Protection

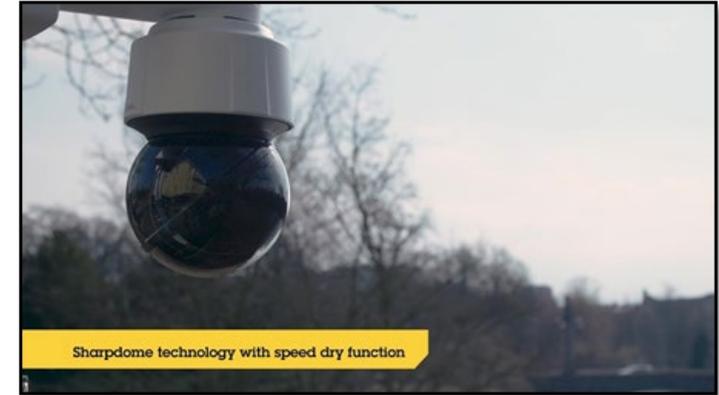
- **Free system-management application:** Connect to and manage all cameras from a single interface
- **Free system-design tool:** 'Drag & Drop' camera icons on a map to see approximate detection ranges & blind spots
- **Optional VMS integration modules:** Understand the cause of an alarm by outlining the person or vehicle triggering the alarm in the recorded video .



Building your Solution



Audio



PTZ Camera

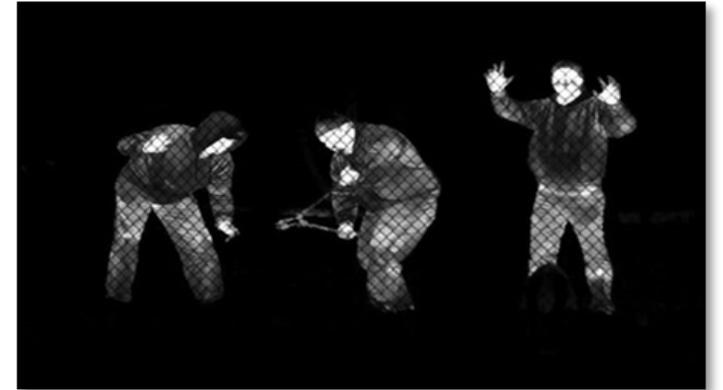


Multi-sensor Cameras

Building your Solution



Timelapse



Thermal Cameras



Radar

Questions?

David D'Elia

David.delia@axis.com

Lessons Learned: General Contracting

Ramzi Najjar

Program Manager | K-12 North

General Information

- OFCC has started 180 GC projects since January 2012
- GC projects range in value from \$49K to \$29M
- Most diverse scale and type of projects in comparison to other delivery methods used by OFCC

Lessons Learned

- Need for Preconstruction Stage Support
 - Estimating experience
 - Conducted at end of each Design Stage
 - Independent validation
 - Knowledge of market conditions
 - Ability to perform compliance/constructability review
 - Basic knowledge of means & methods
 - Assistance in phasing construction

Lessons Learned

- Public Bidding Challenges (similar to Multiple Prime)
 - Soliciting sufficient GC bidder interest to ensure competitive prices
 - Scope, scale, timing and location of project
 - Bonding capacity
 - Lack of transparency to Subs
 - Harder to identify true cost drivers
 - Potential need for rebidding (>10% over estimate)
 - + First-hand knowledge of market conditions
 - Confidence varies with number of bids received

Lessons Learned

- Need to Verify Quality of Schedule
 - While GC is responsible for schedule performance by all Subs, Owner team still needs to evaluate and carefully monitor schedule (both technical development of schedule & its outcomes)
 - Schedule logic (predecessors/successors)
 - Relationship types (finish to start, etc)
 - Durations
 - Constraints
 - Float (total, free)
 - Lags

Questions?

Ramzi Najjar

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@OHFacilities #OFCCConf18

Business Opportunities

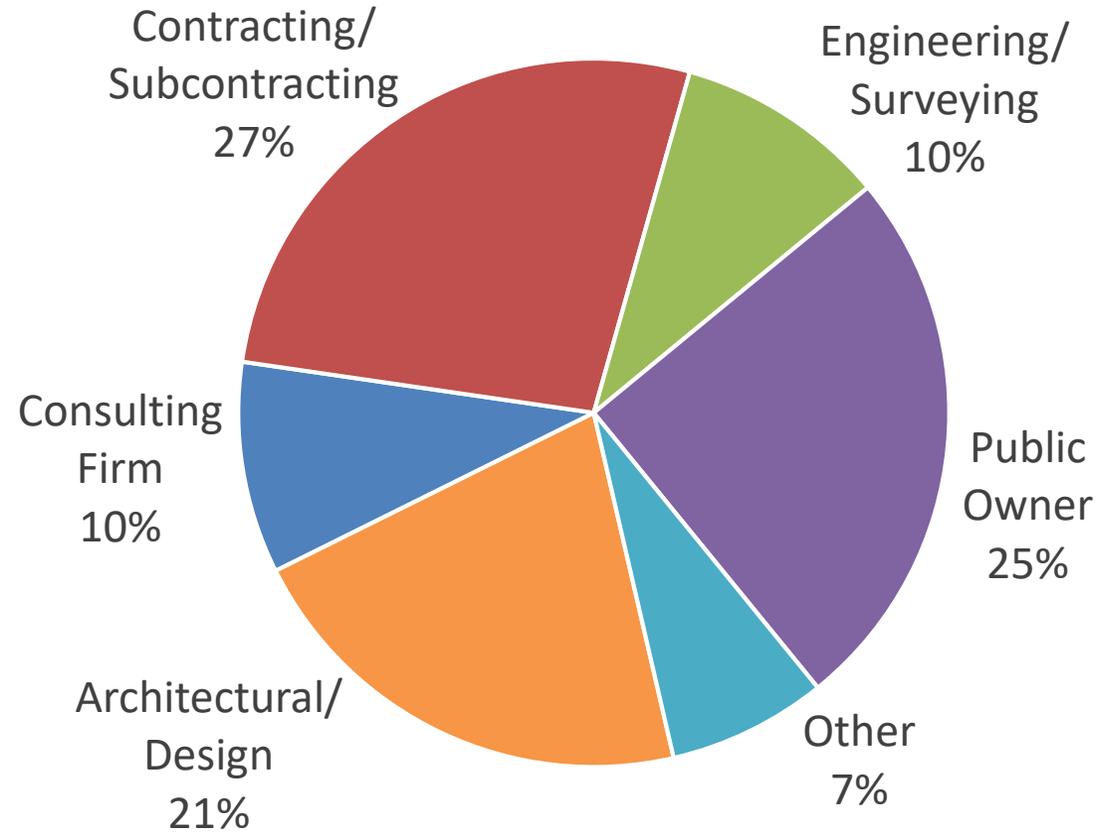
Jeff Westhoven, OFCC

Tony Shaffer, Ohio Department of Rehabilitation and Correction

Teri Swart, Ohio University



Audience profile



Business Opportunities: Topics

- Finding opportunities
- Cultural facilities projects
- Finding background on other capital projects
- K-12 projects
- State agency/higher education projects

Finding Opportunities ... Opportunities Map



Opportunities

- A/E
- CxA
- Planning

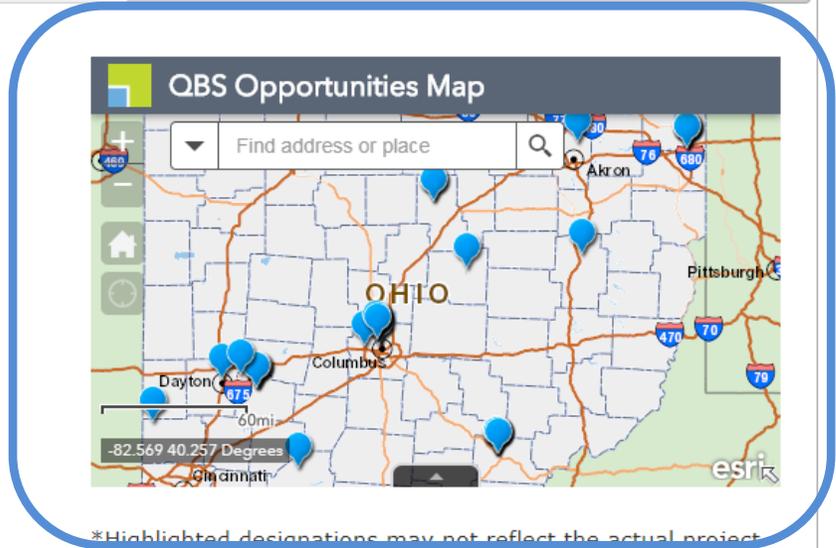


Qualifications-based Selection (QBS) Requests for Qualifications

Qualifications-based Selection" (QBS) refers to a procurement process used by state agencies, institutions of higher education and school districts for the selection of Architect/Engineer (A/E) and A/E services for public construction projects. It is a competitive contract procurement process where bidders submit qualifications to the public over a set schedule, budget and fees.

For the...Architect/Engineer (CMA); Owner Agent (OA); C Services (CxA) provider; and provider.

- CMR
- D-B
- Energy PC



*Highlighted designations may not reflect the actual project location.
*To enlarge the map, click icon.

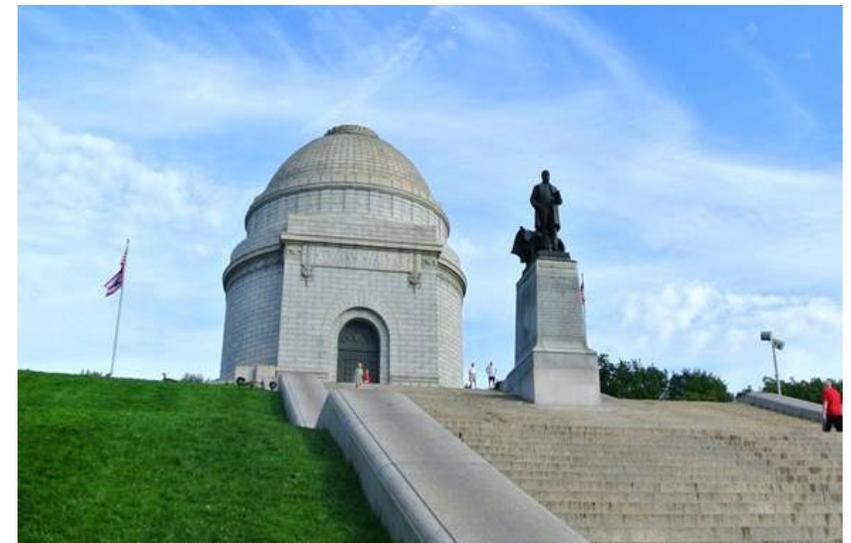
[Website Opportunities](#)

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Finding Opportunities ...

Cultural Facilities Projects

- Community projects
 - Economic development projects of local or regional importance
 - OFCC, DNR, higher education; others
 - \$ 149 Million in new capital bill
- \$78 million assigned to OFCC for cultural facilities projects
- Theaters, museums, historical sites, others that support culture



Finding Opportunities ...

Cultural Facilities Projects

- Mostly renovation work
- \$ 5,000 to \$ 5,000,000 (avg. \$330 K)
- Local match
- Local grantees award contracts
 - Non-profit organizations
 - Local government
- Not all publicly advertised
- Could be at any stage of design or construction



Finding Opportunities ...

Opportunities Map: Cultural Facilities Projects



- Community School Classroom Facilities Grants - Round 2
- Cultural Facilities Grants**
- Program Eligibility
- Funding & Grant Process
- Program Resources
- Contacts
- School Security Grants
- Lead Fixture Replacement Grants - Round 2

[Cultural Facilities Projects](#)

Cultural Facilities Grant Program



Approved
129 projects
 \$ 50 M state
 \$ 230 M total

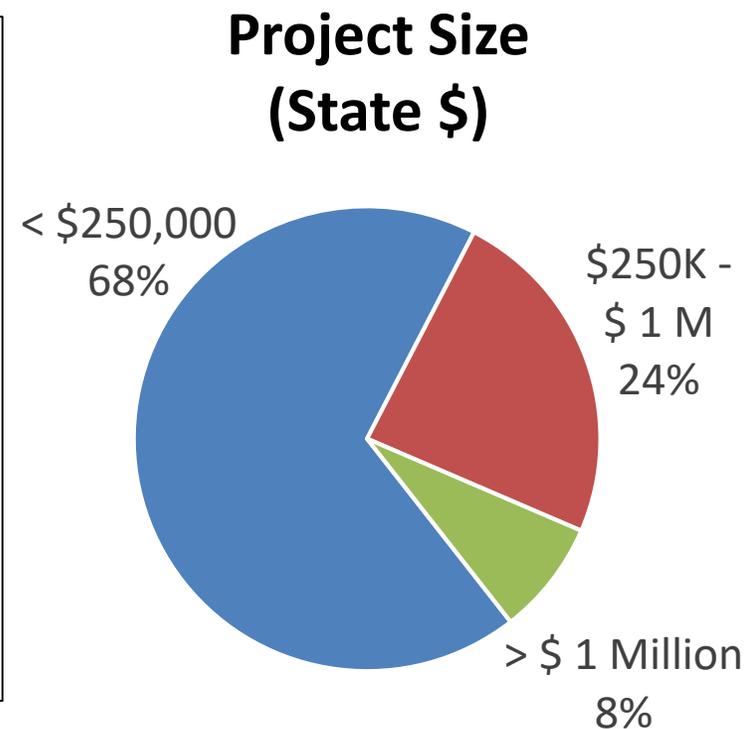
To be approved
227 projects
 \$ 86 M state
 \$? M total

Finding Opportunities ...

Opportunities Map: Cultural Facilities Projects

Legislative Service Commission: [Community Projects by County](#)

CAPITAL PROJECTS BY COUNTY-COMMUNITY PROJECTS ONLY				
County and Funding Agency	Fund	Line Item	Item/Project Name	Appropriations
Ohio Facilities Construction Commission	7030	C230FM	King Arts Complex Renovations	\$500,000
Ohio Facilities Construction Commission	7030	C230FM	Motts Military Museum - New 9/11 Building	\$50,000
Ohio Facilities Construction Commission	7030	C230FM	Upper Arlington Veterans Memorial	\$200,000
Ohio Facilities Construction Commission	7030	C230FM	BalletMet Renovation and Building Connector	\$1,000,000
Ohio Facilities Construction Commission	7030	C230FM	Renovations of the Palace Theater	\$750,000
The Ohio State University - Main	7034	C315GN	PAST Innovation Lab Renovation Project	\$300,000
The Ohio State University - Main	7034	C315GO	Canine Companions Regional Training Facility	\$750,000
The Ohio State University - Main	7034	C315GP	Smart Columbus Experience Center	\$500,000



[Cultural Facilities Projects](#)

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Finding Background on Other Capital Projects

Legislative Service Commission: [Capital Projects by County](#)

- Service needed
- **Project size**
- **Location**
- Timing
- Delivery model
- **Owner**

CAPITAL PROJECTS BY COUNTY-ALL PROJECTS				
County and Funding Agency	Fund	Line Item	Item/Project Name	Appropriations
Statewide				
Adjutant General	7026	C74535	Renovations and Improvements	\$5,561,505
Adjutant General	3420	C74537	Renovation Projects - Federal Share	\$10,330,366
Adjutant General	7026	C74541	Armory Technology Infrastructure	\$120,000
Adjutant General	5340	C74542	Renovations and Improvements	\$1,000,000
Department of Agriculture	7057	C70009	Clean Ohio Agricultural Easement	\$12,500,000
Department of Administrative Services	7026	C10011	Statewide Communications System	\$7,000,000
Department of Administrative Services	5KZ0	C10035	Building Improvement	\$39,424,700
Department of Developmental Disabilities	7033	C59004	Community Assistance Projects	\$24,000,000
Development Services Agency	7046	C19505	Coal Research and Development	\$5,000,000
Department of Natural Resources	7061	C72514	Clean Ohio Trail Fund	\$12,500,000
Department of Natural Resources	7031	C72549	Facilities Development	\$1,500,000
Department of Natural Resources	7035	C725A0	State Parks, Campgrounds, Lodges, Cabins	\$57,554,343

Finding Background on Other Capital Projects

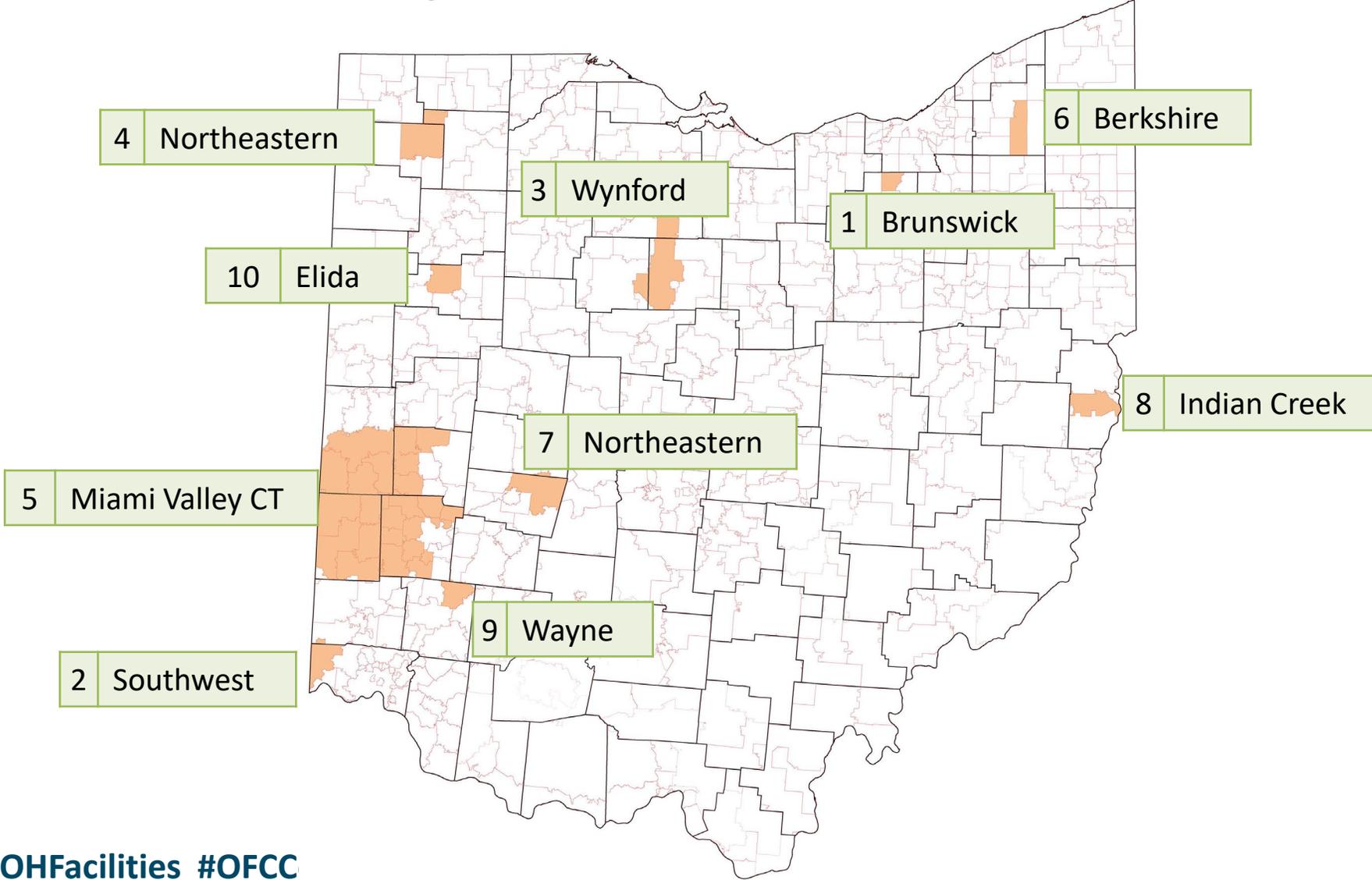
Legislative Service Commission:
[Capital Appropriations, Complete Analysis, pp. 65-183](#)

- Service needed
- Project size
- Location
- Timing
- Delivery model
- Owner

(AGO) ATTORNEY GENERAL		
Administrative Building Fund	\$3,813,752	
TOTAL - All Funds	\$3,813,752	
ADMINISTRATIVE BUILDING FUND (7026)		
C05517	General Building Renovations	\$200,000
<i>County:</i>	Multi-county - Madison, Summit	
<p>This capital appropriation will support general renovation projects in facilities operated by the Attorney General. The Ohio Facilities Construction Commission has identified a number of small projects where building renovations are necessary to remediate issues that absent this capital money might require the Office of the Attorney General to use money appropriated for its operating budget.</p>		
C05521	BCI London Renovations	\$969,752
<i>County:</i>	Madison	
<p>This capital appropriation will be used to complete a three-phase HVAC upgrade project at the Bureau of Criminal Investigation (BCI) headquarter facility in London, Ohio. The age of the existing HVAC controls and components, along with the need for improved compatibility between the newer chillers (installed in phases 1 and 2 of the project) and existing controls created the need for this final phase of the upgrade project.</p>		

Upcoming K-12 Projects ...

New K-12 Projects 2018-2019



Upcoming K-12 Projects ...

New K-12 Projects 2018-2019

Map #	District	County	Co-funded Budget	Delivery Method	A/E Solicitation	CMR/DB/GC Solicitation
1	Brunswick City School District	Medina	\$ 50,322,457	CMR	Dec 2017	Jan 2018
2	Southwest Local School District	Hamilton	\$ 84,695,998	CMR	Feb 2018	March 2018
3	Wynford Local School District	Crawford	\$21,528,679	CMR	Feb 2018	March 2018
4	Northeastern Local School District	Defiance	\$ 33,981,044	CMR	Feb 2018	March 2018
5	Miami Valley Career Tech	Montgomery	\$ 61,409,284	CMR	Feb 2018	April 2018
6	Berkshire Local School District	Geauga	\$ 41,572,615	CMR	June 2018	July 2018
7	Northeastern Local School District	Clark	\$ 102,422,404	CMR	Aug 2018	Sept 2018
8	Indian Creek Local School District	Jefferson	\$ 45,778,588	CMR	Sept 2018	Sept 2018
9	Wayne Local School District	Warren	\$ 22,007,490	GC	Jan 2018	Spring 2019
10	Elida Local School District	Allen	\$ 53,502,328	TBD	Feb 2019	April 2019
	Total		\$ 517,220,887			



Tony Shaffer, Project Manager
Bureau of Construction, Activation, Maintenance and Sustainability

FY19-20 Capital Bill: Largest state agency budgets

Ohio Department	Capital Budget
Natural Resources	\$ 234,618,104
Rehabilitation and Correction	\$ 220,024,071
Mental Health & Addiction Services	\$ 168,605,600
Administrative Services	\$ 105,674,700

Local Jails (Earmark)	\$ 4,525,000
Water System/ Plant Improvements	\$ 10,377,795
Community Residential Program	\$ 1,526,250
General Building Renovations	\$ 203,595,026

Master Plan

Ohio Reformatory for Women

- Design & Construction of 100 bed SMI Healing Center

Franklin Medical Center

- Design addition to FMC and renovate existing HUB area

Pickaway Correctional Expansion

- Construct 504 bed General Custody Housing & Program Building





General Area	Project Name	Budget
LIFE SAFETY HVAC	ORW HVAC REPLACEMENT	3,500,000
LIFE SAFETY PLUMBING	ORW SITE DRAINAGE PROJECT	3,000,000
LIFE SAFETY HVAC	TOCI HVAC CONTROL UPGRADE	385,000
LIFE SAFETY HVAC	TOCI HVAC REPLACEMENT	1,260,000
STUN FENCES/PERIMETER SECURITY	BECI SALLYPORT	460,000
OPERATIONAL IMPACT	BECI TPU BLDG REPLACEMENT	5,748,000
WATER/WASTEWATER RENOVATIONS	CCI WATER PLANT SOFTENING UPGR	3,000,000
SECURITY	NCI DOOR FRAME REPLACEMENT	322,500
LIFE SAFETY HVAC	RCI HVAC CONTROL UPGRADE	2,500,000
LIFE SAFETY FIRE	SCC FIRE SYSTEM PANEL REPLACEM	695,660
OPERATIONAL IMPACT/SAFETY	SCC TUNNEL STUDY	50,000
WATER/WASTEWATER RENOVATIONS	SCC WASTEWATER UPGRADE	3,742,795
LIFE SAFETY HVAC	SOCF HVAC REPLACEMENT	3,000,000
LIFE SAFETY PLUMBING	SOCF SHOWER PH 2	3,639,500



General Area	Project Name	Budget
LIFE SAFETY PLUMBING	CTA PLUMBING REPLACEMENT	635,000
LIFE SAFETY PLUMBING	GCI BACKFLOW PREVENTER REPLACE	541,250
SECURITY	GCI ELECTRONIC CELL DOOR PH 3	878,750
LIFE SAFETY ROOF	GCI ROOF REPLACEMENT	5,625,000
LIFE SAFETY PLUMBING	LORCI SHOWER RENOVATION	635,000
STUN FENCES/PERIMETER SECURITY	NERC FENCE UPGRADES	1,000,000
LIFE SAFETY HVAC	OSP JOHNSON CONTROLS UPGRADE	3,760,000
SECURITY	TCI CONTROL CENTER UPGRADE	947,500
OPERATIONAL IMPACT	AOCI OCF WINDOWS REPLACEMENT	3,991,250
SECURITY	AOCI SEG DOOR CONTROL REPLACE	710,000
LIFE SAFETY FIRE	MANCI FIRE SYSTEM PANEL REPLAC	2,135,000
OPERATIONAL IMPACT	MANCI WINDOWS PHASE 2	4,000,000
LIFE SAFETY ELECTRICAL	MCI ELECTRIC POWERHOUSE PHASE2	5,010,000
LIFE SAFETY HVAC	MCI GYM HVAC AND AIR BALANCING	641,000



General Area	Project Name	Budget
LIFE SAFETY BOILERS	CRC BOILER LOOP HEATING REPLAC	625,948
LIFE SAFETY PLUMBING	CRC SHOWER RENOVATION	768,000
OPERATIONAL IMPACT	DCI CEILING AND FLOOR REPLACEM	1,000,000
SECURITY	DCI EXTERIOR DOOR REPLACEMENT	200,000
SECURITY	FMC DOOR AND FRAME REPLACEMENT	595,468
OPERATIONAL IMPACT/SAFETY	FMC DORM 3 DEMO REPLACE MECHAN	1,300,000
SECURITY	LECI DOOR CONTROLS UPGRADE	4,000,000
OPERATIONAL IMPACT	LOCI REPOINTING PHASE 3	3,000,000
LIFE SAFETY ROOF	MACI METAL ROOF REPLACEMENT	3,760,000
SECURITY	MACI TOILET SINK REPLACEMENT	408,000
LIFE SAFETY BOILERS	PCI FHC BOILER FLU REPLACEMENT	447,500
LIFE SAFETY PLUMBING	PCI SANITARY SEWER PHASE 2	3,135,000
LIFE SAFETY BOILERS	CRC BOILER LOOP HEATING REPLAC	625,948
LIFE SAFETY PLUMBING	CRC SHOWER RENOVATION	768,000



General Area	Project Name	Budget
OPERATIONAL IMPACT/SAFETY	PCI UTILITY TUNNEL RENOVATIONS	2,010,000
WATER/WASTEWATER RENOVATIONS	PCI WATER WASTEWATER TREATMENT	635,000
LIFE SAFETY ELECTRICAL	WCI LIGHTNING PROTECTION	250,000
LIFE SAFETY FIRE	WCI FIRE ALARM SYSTEM REPLACEM	3,250,000
LIFE SAFETY ADA	STW ADA LEVEL 3 RENOVATIONS	197,000
OPERATIONAL IMPACT	STW EDUC CAREER TECH CLASSROOM	700,000
ELPAS	STW ELPAS P2	10,015,000
IT INFRASTRUCTURE	STW FIBER INFRASTRUCTURE P1	3,000,000
STUN FENCES/PERIMETER SECURITY	STW NON LETHAL FENCES P4	10,000,000
OPERATIONAL IMPACT	STW UNDERGROUND STORAGE TANK R	447,500
WATER/WASTEWATER RENOVATIONS	WATER SYSTEM/PLANT IMPROVEMENTS CONTINGENCY	3,000,000
OPERATIONAL IMPACT/SAFETY	PCI UTILITY TUNNEL RENOVATIONS	2,010,000
WATER/WASTEWATER RENOVATIONS	PCI WATER WASTEWATER TREATMENT	635,000
LIFE SAFETY ELECTRICAL	WCI LIGHTNING PROTECTION	250,000



OHIO
UNIVERSITY

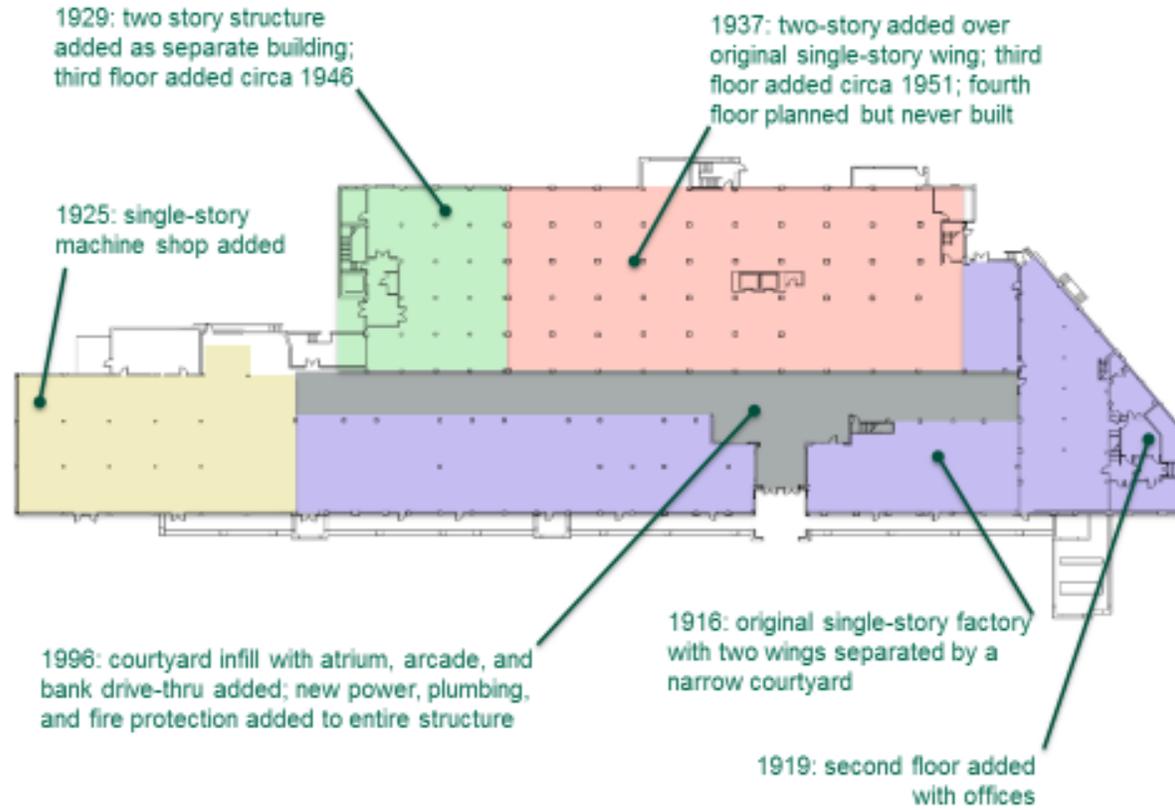
Teri Swart, Architect, LEED AP
Director for General Construction Projects

Project	Construction Budget	Method	A/E Selection	BVS/Bid
Russ Research Opportunity Center	\$ 25 M	TBD	TBD	TBD
Chilled Water Plant 3 - Plant	\$ 8.7 M	TBD	RMF	TBD
Chilled Water Plant 3 - Distribution	\$ 11 M	GC	M Engineering	Bid
Ridges 13, 14 & 18 Renovation	\$ 10 M	GC	Champlin	Bid
Bromley Infrastructure Improvements	\$ 5.6 M	GC	Prater Engineering	Bid
Konneker Research Ridges 25 HVAC and Boiler System Upgrade	\$ 4.3 M	GC	TBD	Bid

Upcoming Capital Projects:

Russ Research Opportunity Center

Construction History provides vibration isolation opportunities & ability to meet today's goals



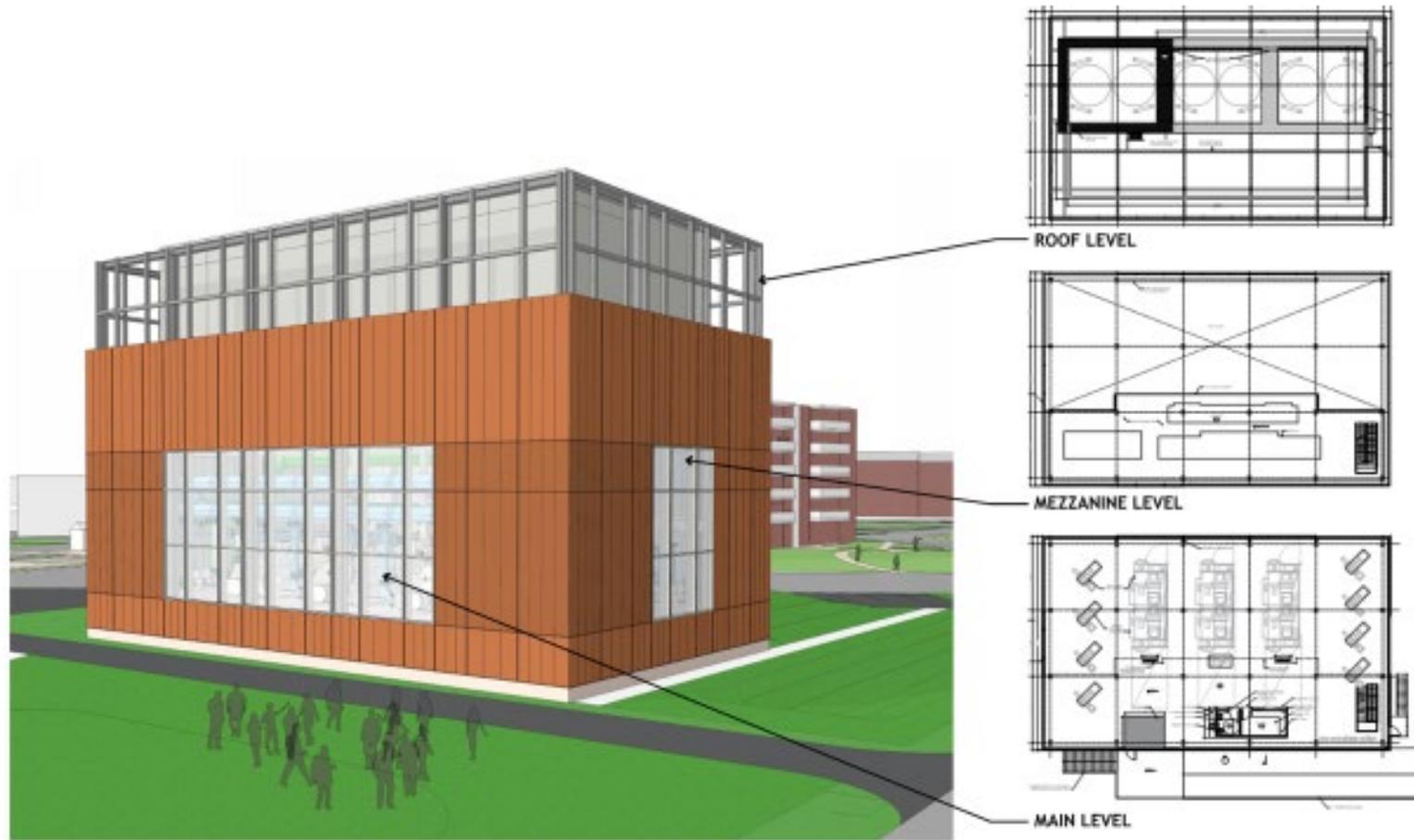
West Union Street Office Center

- 110,000 GSF
- Occupied by Administrative Units
- Adaptability:
 - Construction began in 1919, several additions through 1996
 - Built as a manufacturing facility
- Facility has approximately \$16M of critical deferred maintenance needs to continue occupancy
- Flexible, simple space for large scale interactions

Upcoming Capital Projects:



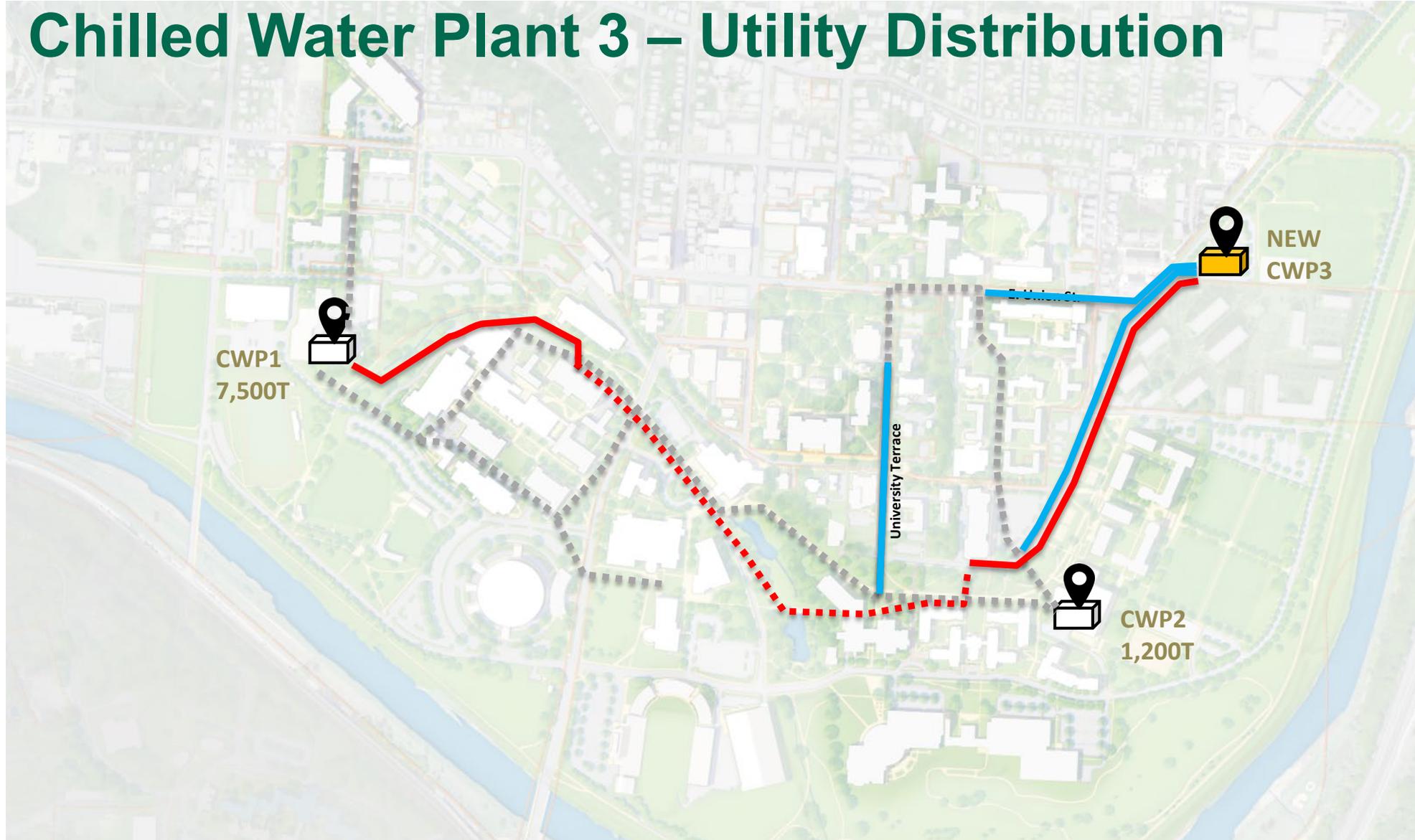
Chilled Water Plant 3-Plant



Upcoming Capital Projects:

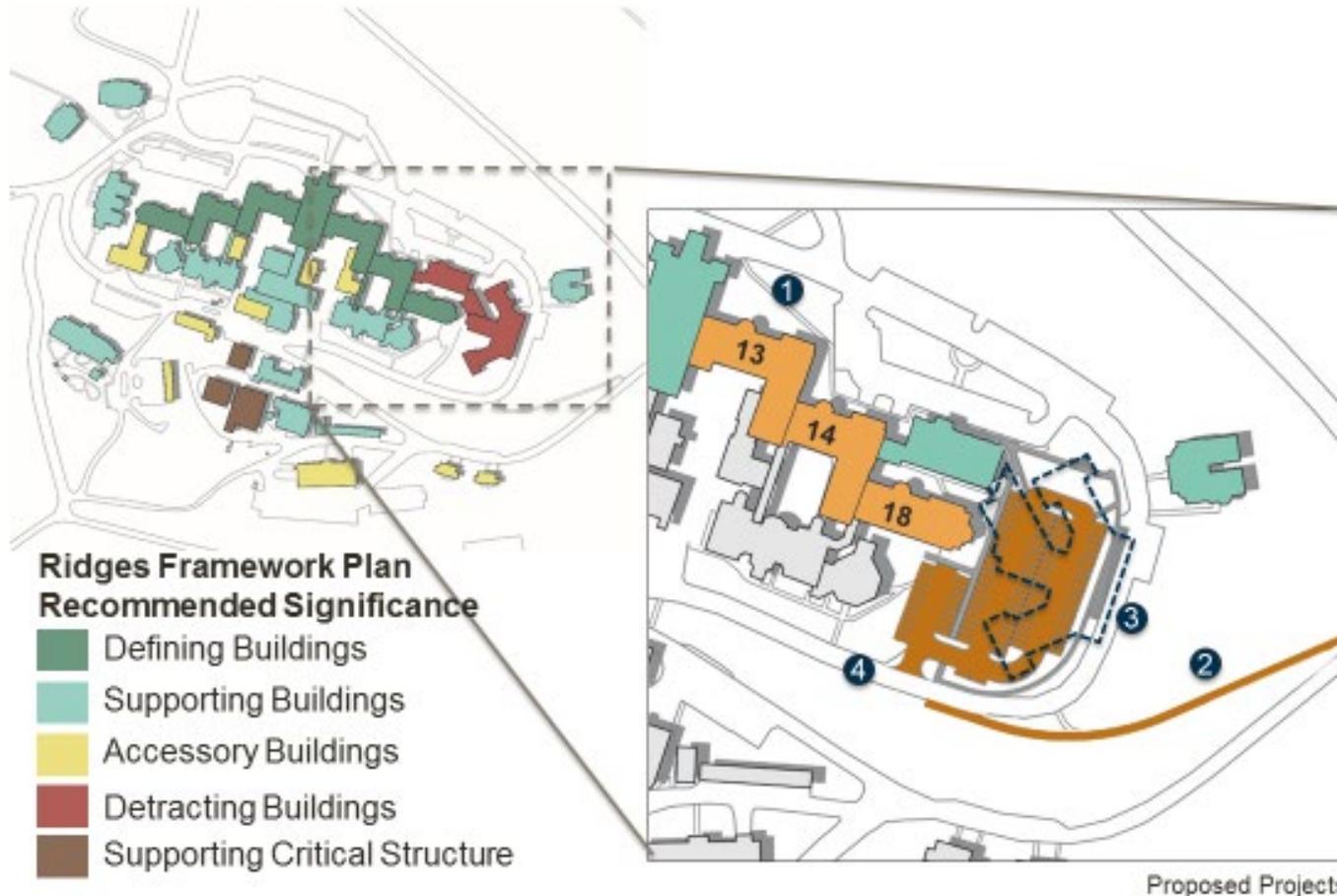


Chilled Water Plant 3 – Utility Distribution



Upcoming Capital Projects:

Ridges Renovation & Associated Projects



Renovation of Ridges Building 13, 14, 18

Installation of a pedestrian pathway from Richland Roundabout to Ridges Circle

Demolition of Ridges Building #20, per Ridges Framework Plan

Construct new Parking spaces



Upcoming Capital Projects:



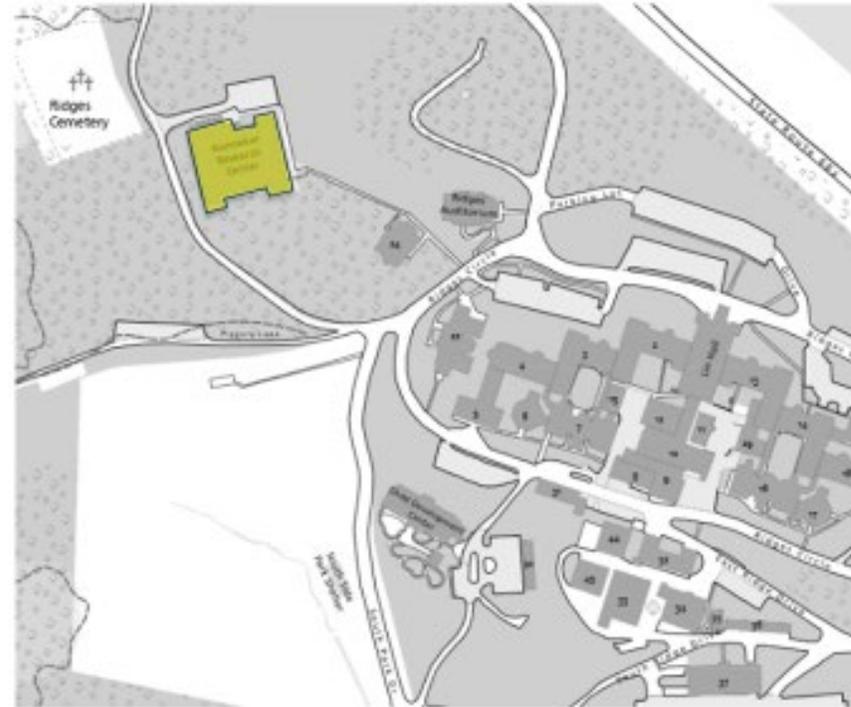
Bromley Infrastructure Improvements



Upcoming Capital Projects:



Konneker Research Ridges 25 HVAC and Boiler System Upgrade 2018



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Thank you!

@OHFacilities #OFCCConf18

ASK OFCC

Craig Weise
Chief of Projects

This concludes The American Institute of Architects Continuing Education Systems Course

Provider Name: Ohio Facilities Construction Commission
Provider #: G442
Contact: sue.meyer@ofcc.ohio.gov

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