# REHABS AND RENOVATIONS: WHERE DO I START?

**University at Buffalo Business Day 2015** October 14, 2015 Ramada Hotel & Conference Center





### WE ARE HERE TO HELP:

CHERYLA. BAILEY

Associate Director

**CAPITAL PLANNING GROUP** 

BRIAN J. FOTI

Environmental Programs Manager

**ENVIRONMENT, HEALTH &** 

SAFETY

MARTIN E. HOHLE, PE

Assistant Director

**FACILITIES PLANNING & DESIGN** 

SCOTT R. LUDTKA

Associate Director

**FACILITIES OPERATIONS** 





#### WHO ARE WE?

# Vice President Finance & Administration

Associate Vice President **Facilities** 

Real Estate & Property Management

# **Facilities Operations**

**Event Support Lock Shop Heating & Cooling** Moving/Relocation **Signage Production Pest Control** Service Notification **Work Orders Janitorial** 

# **Facilities Planning & Design** (FP&D)

Design **Project Management Project Delivery Code Review Building Permits** Floor plans **Building Profiles Campus Maps Physical Space Inventory** 

# **Capital Planning Group** (CPG)

Planning &

Implementation of Physical Development Initiatives Planning of large & small scale capital projects Space planning principles & processes Space requests, allocation & utilization **Interior Design Master Planning Move Management** 

# **Environment. Health & Safety**

(EHS)

**Biological Safety Construction Safety Environmental Programs** Fire & Life Safety Hazardous Waste **Radiation Safety Small Claims Incident Ergonomics Food Permits** 



### RENOVATIONS PROCESS

# Facilities Operations Work **Orders**

Smaller projects that involve one or two trades including carpentry, custodial, electrical, lock shop, mechanical repair, lock shop, painting, plumbing, recycling, signs, etc. may be submitted through the facilities work order system and will be completed by Facilities Operations.

# Small Scale Capital (Rehab)

Typically a project that will not have a major impact on the campus and the total cost of which shall be paid for my the unit and require building permits

- Design and/or construction are completed in-house. The use of consultants may be necessary in times of high project demand
- No fee for in-house planning + design services

### **WORK ORDER PROCESS**

- Initiated by the client
- Work Order form online or call 645-2025
- Estimates are available
- RF & UBF Authorization Forms required
- •Please refer to the facilities web site for more additional information:

http://www.buffalo.edu/facilities.html

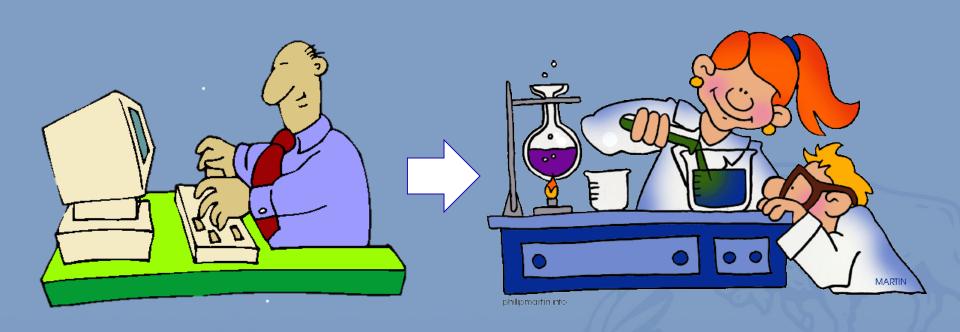






WHEN DO YOU NEED ONE?

# **CHANGE IN OCCUPANCY OR USE**



# **BUILDING OR REMOVING WALLS AND DOORS**





# PLUMBING WORK, ADDING SINKS, ETC.

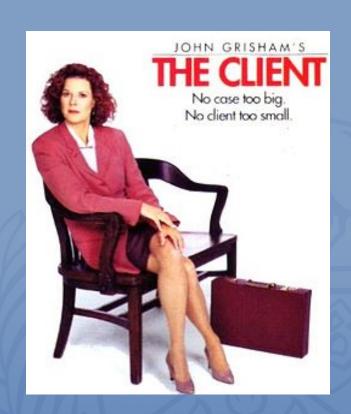




MODIFICATIONS TO HVAC SYSTEM

### PROJECT INCEPTION

- Initiated by the Primary Client
- Small Scale Capital (Rehab) Request form
- Signed by your units Facilities Planning & Management Officer (FPMO)
- CPG review for appropriate use of space and alignment with the master plan and attainability
- •May determine if work should be performed as a Work Order at this point (or later in the process)



### WHO IS MY FACILITIES PLANNING & MANAGEMENT OFFICER?

Academic Affairs Administration and Finance

**Architecture Athletics** 

**Business Services & Human Resources** 

CAS CIO

**CTRC** 

Communications
Dental Medicine

**Philanthropy & Alumni Relations** 

**Education** 

**Educational Opportunity Center** 

**Engineering** 

**Environmental Health & Safety** 

Facilities Planning & Design

**International Education** 

Law

Libraries

Management

Medicine

Nursing

**Pharmacy** 

President

Provost

**Public Health** 

Research

**Research Institute on Addictions** 

Social Work

**Student Union** 

**UB** Foundation

**University Life & Services** 

Hernandez

Bailey McDonnell

Titus

Krzystofiak

Greenfield

Kielar

Smith

Manne Colombo

Mahon

Ragland

Osswald Bovino

Raab

Thompson

Shyhalla

Cook

Hood

Costello

Koenig Emminger

Konovitz

Hashem Pfohman

Whitehead

Smith

Krygier

Cerrato Odojewski

Schneider Nadbrzuch Christina R.

Cheryl A. William J.

Nickolas

Susan A.

Kimberly M.

Nancy M.

**Terry-Ann** 

Kathleen

Stephen P.

Gary E. Kevin

Lawrence C.

Linda H.

Joseph T

Kevin M.

Patricia

Marlene M.

Kenneth E.

David

Andrew

Lynn Cindy

Cindy Stacie L.

Sandra

April E. Elizabeth A.

James J.

Anna R.

Michael

Edward P. James S.

### PROJECT NUMBER AND TEAM ASSIGNMENT

planning phase

- •CPG assigns a planner and a secondary planner
- •CPG requests a project number from FP&D
- FP&D assigns a project team members including:
  - Architect in Charge (AIC)
  - Project Manager (PM)
  - Team Members
- The entire project team consists of the Primary Client, FPMO, Planner, AIC and the PM (and are involved in most meetings and decisions)
- CPG/FP&D sends a Project Notification Letter to the all involved

#### planning phase

# **SMALL SCALE CAPITAL PROCESS**

### **University at Buffalo**

Small Scale Capital Process (Pohah)\*

Small Scale Capital Process (Rehab)*								
PHASE	PLANNING PHASE	TRANSITION TO DESIGN PHASE	DESIGN PHASE	TRANSITION TO CONSTRUCTION PHASE	CONSTRUCT	ION PHASE		
ADDRESSES	Program Scope / Bo	udget / Schedule	Design and Cost Quotation		Construction Schedule / Project Completion			
CONTACT	CONTACT A Planner		CONTACT B Architect in Charge		CONTACT C Project Manager			
MEETING	Scope Walk-Through & Planning Meetings		Kick-Off Meeting & Review Meetings	Sign Off Meeting	Updates & Meetings	Close Out Meeting		
MEETING ATTENDEES	PROJECT TEAM:  • Primary Client  • FPMO or Rep  • Planner  • Architect in Charge  • Project Manager	ject ager	PROJECT TEAM:  • Primary Client  • FPMO or Rep  • Planner  • Architect in Charge  • Project Manager INVITED:  • Financial Responsibility  • Other specialists as necessary	PROJECT TEAM: • Primary Client • FPMO or Rep • Planner • Architect in Charge • Project Manager INVITED: • Financial Responsibility	Project Manager provides weekly written updates to Primary Client FPMO or Rep Planner Financial Responsibility Architect in Charge	PROJECT TEAM: • Primary Client • FPMO or Rep • Planner • Architect in Charge • Project Manager INVITED: • Financial Responsibility		
REQUIRED DOCUMENT SIGNATURES		Scope Statement  REQUIRED: (electronic turn around: 5 business days) • Primary Client • FPMO or Rep • Planner • Architect in Charge • Financial Responsibility • Project Manager	30% 60% 90% design review and meetings as necessary Estimate is updated with each submittal	Cost Quotation & Drawings  REQUIRED: Primary Client FPMO or Rep Planner Architect in Charge Project Manager Financial Responsibility  Funds are transferred	Client Requested Change Orders  REQUIRED: Primary Client FPMO or Rep Planner Project Manager Financial Responsibility COPY: Architect in Charge  Punch List Primary Client Project Manager OPY: FPMO			
MEETING MINUTES	Sign-in sheets and meeting n and CIT. Meeting minutes are distribut			ttendees and to appropriate sta	aff in Facilities Operations, Envi	ronment Health & Safety		



planning phase **SCOPE** 

- The Point of Contact during the Planning stage is the Planner from the Capital Planning Group (CPG)
- The Planner arranges a scope kick-off meeting with the Project Team at the project site
- •The Planner submits a preliminary *Scope* to Project Team for input by the Design Team on
  - Scope Budget (historical Square Foot Cost)
  - Schedule
  - Preliminary Code Review
- Facilities Planning + Design (FP&D) will arrange for hazardous materials testing at this time
- Bi-weekly meeting are held with Operations, UBit and EHS to explain the projects intent and to solicit feedback
- •The Planner will finalize the *Scope* and forward electronically to everyone that signs the document before moving forward to design



# SMALL SCALE CAPITAL PROCESS

design phase

#### **University at Buffalo**

Small Scale Capital Process (Rehab) \*

Siliali Scale Capital Process (Kellab)								
PHASE	PLANNING PHASE	TRANSITION TO DESIGN PHASE	DESIGN PHASE  TRANSITION TO CONSTRUCTION PHASE		CONSTRUCTION PHASE			
ADDRESSES	Program Scope / Bo	udget / Schedule	Design and Cost Quotation		Construction Schedule / Project Completion			
CONTACT	CONTACT A Planner		CONTACT B Architect in Charge		CONTACT C Project Manager			
MEETING	Scope Walk-Through & Planning Meetings		Kick-Off Meeting & Review Meetings	Sign Off Meeting	Updates & Meetings	Close Out Meeting		
MEETING ATTENDEES	PROJECT TEAM: Primary Client FPMO or Rep Planner Architect in Charge Project Manager	ject ager	PROJECT TEAM: • Primary Client • FPMO or Rep • Planner • Architect in Charge • Project Manager INVITED: • Financial Responsibility • Other specialists as necessary	PROJECT TEAM:     Primary Client     FPMO or Rep     Planner     Architect in Charge     Project Manager INVITED:     Financial Responsibility	Project Manager provides weekly written updates to • Primary Client • FPMO or Rep • Planner • Financial Responsibility • Architect in Charge	PROJECT TEAM:     Primary Client     FPMO or Rep     Planner     Architect in Charge     Project Manager INVITED:     Financial Responsibility		
REQUIRED DOCUMENT SIGNATURES		Scope Statement  REQUIRED: (electronic turn around: 5 business days) • Primary Client • FPMO or Rep • Planner • Architect in Charge • Financial Responsibility • Project Manager	30% 60% 90% design review and meetings as necessary  Estimate is updated with each submittal	Cost Quotation & Drawings  REQUIRED: Primary Client FPMO or Rep Planner Architect in Charge Project Manager Financial Responsibility  Funds are transferred	Client Requested Change Orders  REQUIRED: Primary Client FPMO or Rep Planner Project Manager Financial Responsibility COPY: Architect in Charge  Punch List REQUIRED: Primary Client Project Manager COPY: FPMO			
MEETING MINUTES	Sign-in sheets and meeting rand CIT. Meeting minutes are distribut			ttendees and to appropriate sta	aff in Facilities Operations, Env	ironment Health & Safety		



### **DESIGN PHASE**

design phase

- Point of contact through out the Design Phase is the Architect In Charge (AIC) from Facilities Planning + Design
- Coordinates the efforts of the other Project Team members and Design Team. (Example: Mechanical Engineer, Electrical Engineer, Drafts people, etc.)
- Ensures that Facilities Ops, EHS and UBit are kept informed of the project and that their input is received
- The design process begins



# ENVIRONMENT, HEALTH, & SAFTEY SERVICES

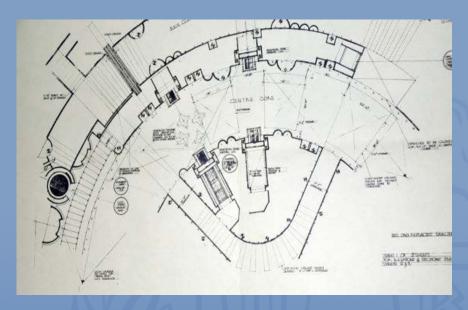
Design phase

# FP&D/EHS Liaison

- •Single point of contact for project managers and CPG
- •Understanding of multiple projects and interactions

# **Drawing Review**

- •Fire and Life Safety
- •Ergonomics
- •Laboratory layout and operation
- •Mechanical safety (tie-offs, ladders, etc.)
- •ADA
- •Environmental impacts (air and water)



design phase

# **COST QUOTATION** (Client's Maximum Cost)

• Cost to the Client: estimate and university contingency (10%)

# **DESIGN, COST QUOTATION & SCHEDULE SIGN-OFF MEETING**

- AIC will coordinate and schedule the Design & Cost Quotation Sign-Off Meeting.
- Final Construction Documents, Cost Quotation and Construction Schedule are presented to the Primary Client, FPMO and Financially Responsible Party.
- Signatures required from Primary Client, FPMO, Financially Responsible Party or CFO, Planner, AIC and Project Manager.



#### design phase

### **CONTINGENCY PROCESS**

- Construction will not begin until the sponsor identifies current funds for full project cost plus a 10% contingency based upon the *Cost Quotation*
- University Business Services (UBS), upon receipt of the signed *Cost Quotation*, will move the funds from the project sponsor's account to a centrally managed capital projects account (administered by UBS)
- Cost overruns will be paid from contingency funds with an institutional backstop (unit will never pay more than 10% over the *Cost Quotation*)
- In principle, project sponsors will receive back the difference between the *Cost Quotation* and the actual amount spent for completion of the project
- Unused contingency will be rolled to future fiscal years; as history is developed an evaluation will be made of whether the 10% should be revised up or down
- For large and specialized projects, the university may require a competitive design/build consultant to achieve project goals. Units will pay design costs and contractor profit and overhead in these situations

# **CONTINGENCY: AN ILLUSTRATION**

	Construction Estimate	Project Contingency	Total Project Cost	Actual Cost	Return to Unit	Contingency Use
Project 1	100,000	10,000	110,000	90,000	10,000	
Project 2	50,000	5,000	55,000	65,000		15,000

# SMALL SCALE CAPITAL PROCESS

construction phase

#### **University at Buffalo**

Small Scale Canital Process (Rehah)\*

Small Scale Capital Process (Renap) *								
PHASE	PLANNING PHASE	TRANSITION TO DESIGN PHASE	DESIGN PHASE	TRANSITION TO CONSTRUCTION PHASE	CONSTRUCTION PHASE			
ADDRESSES	Program Scope / B	udget / Schedule	Design and (	Cost Quotation	Construction Schedule / Project Completion			
CONTACT	CONTACT A Planner		CONTACT B Architect in Charge		CONTACT C Project Manager			
MEETING	Scope Walk-Through & Planning Meetings		Kick-Off Meeting & Review Meetings	Sign Off Meeting	Updates & Meetings	Close Out Meeting		
MEETING ATTENDEES		ject ager	PROJECT TEAM: Primary Client FPMO or Rep Planner Architect in Charge Project Manager INVITED: Financial Responsibility Other specialists as necessary	PROJECT TEAM:     Primary Client     FPMO or Rep     Planner     Architect in Charge     Project Manager INVITED:     Financial Responsibility	Project Manager provides weekly written updates to • Primary Client • FPMO or Rep • Planner • Financial Responsibility • Architect in Charge	PROJECT TEAM:     Primary Client     FPMO or Rep     Planner     Architect in Charge     Project Manager INVITED:     Financial Responsibility		
REQUIRED DOCUMENT SIGNATURES		Scope Statement  REQUIRED: (electronic turn around: 5 business days) • Primary Client • FPMO or Rep • Planner • Architect in Charge • Financial Responsibility • Project Manager	30% 60% 90% design review and meetings as necessary Estimate is updated with each submittal	Cost Quotation & Drawings  REQUIRED: Primary Client FPMO or Rep Planner Architect in Charge Project Manager Financial Responsibility  Funds are transferred	Client Requested Change Orders  REQUIRED: Primary Client FPMO or Rep Planner Project Manager Financial Responsibility COPY: Architect in Charge  Punch List REQUIRED: Primary Client Project Manager COPY: FPMO			
MEETING MINUTES	Sign-in sheets and meeting minutes are taken at all meetings and distributed to all attendees and to appropriate staff in Facilities Operations, Environment Health & Safety and CIT.  Meeting minutes are distributed by the designated contact leading the Phase.							

#### CONSTRUCTION PHASE

construction phase

- Point of contact during construction is the Project Manager (PM) from FP+D.
- Upon project approval, the PM shall work with Facilities Customer Service to send out a Customer Service Email notice about the project two weeks in advance.
- Materials ordered.
- Project Manager sends out *Project Status Reports* periodically
- Construction Coordinators direct utility shutdowns in advance
- Construction Coordinators shall arrange for all inspections
- •Construction Coordinators arrange for all required safety permits from EHS
- PM shall schedule a walk-through with the team and the client to create a Punch List



# ENVIRONMENT, HEALTH & SAFETY SERVICES

Ensure a safe environment for University faculty, staff, students, and visitors who may be directly or indirectly affected by the construction activities

- Fumes, Dusts, Odors
- Emergency egress and hazard area access control
- Noise
- Physical hazards
- Exhaust vapors/Carbon monoxide
- Heavy equipment and cranes

# Protect research from construction activities

- Dust
- Vibrations
- Noise (animals)
- Utility shut-down
- Relocation



# ENVIRONMENT, HEALTH & SAFETY SERVICES

#### construction phase

### Ensure a safe environment for contractors

- Safety plans
  - Fire Safety
  - Carbon monoxide safety
- Dig-Safe
- Work Zone Safety
- Contractor Safety Guidebook

http://www.buffalo.edu/facilities/ehs/construction-safety.html







# **CLIENT SURVEY**

construction phase

- A Customer Survey is sent out to the **Primary Client**
- Honest feedback is encouraged
- Some selected projects will receive a much more in-depth review



# **QUESTIONS?**



### **CONTACT US**

# www.buffalo.edu/facilities

# CHERYLA. BAILEY

Associate Director
Capital Planning Group
cbailey2@buffalo.edu 645-3835

# MARTIN E. HOHLE

Assistant Director
Facilities Planning & Design
mehohle@buffalo.edu 645-6844

# SCOTT R. LUDTKA

Assistant Director
Facilities Operations
sludtka@buffalo.edu 645-5283

# **BRIAN J. FOTI**

Environmental Programs Manager Environment, Health & Safety brianf@buffalo.edu 829-3454