
Capital Project Delivery Handbook

Facilities Planning & Construction

1. WELCOME TO FACILITIES PLANNING & CONSTRUCTION	2
WHERE DO I START?	3
HOW MUCH WILL MY PROJECT COST AND HOW LONG WILL IT TAKE?	3
THE PROJECT TEAM	4
WHO IS REPRESENTED ON A PROJECT TEAM?	4
PROJECT TEAM ORGANIZATION & COMMUNICATION	6
FACILITIES PLANNING & CONSTRUCTION STAFF	6
WHAT ARE PROJECT PHASES?	7
2. PROJECT MANAGEMENT & CONTROLS	9
3. Project Identification & Concept Proposal Phase	10
4. Feasibility – Needs Assessment & Estimating	11
5. Programming Phase	11
6. Schematic Design Phase	13
7. Design Development Phase	14
8. Construction Document Phase	15
9. Construction	16
10. Post – Construction	18
11. Communication & Project Reporting	19
Project Reporting	19
Monthly Project Reviews	19
12. Project Coordination, Document Reviews & Approvals	21
13. Schedule Management	23
14. Funding & Budget Management	25
Special Cost Considerations	27
Government Funding Compliance	28
15. Vendor Selection & Purchase Order Management	29
16. Contract Selection, Contract Closeout & Vendor Evaluations	31
17. Invoices Review & Approval	33
18. Change Management	35
19. Recordkeeping	36
Index	37
1.	

1. WELCOME TO FACILITIES PLANNING & CONSTRUCTION

Facilities Planning & Construction (FP&C) is committed to communicating and facilitating team stewardship of University resources to complete capital construction projects within an approved schedule and budget. The size and complexity of your construction project will determine the time it takes to complete your project and the size of team involved in planning and executing your project tasks. FP&C staff provides the following services:

- ☐ Capital Project Management in:
 - Programming & Design
 - Construction
 - Post-Construction
- ☐ Construction Observation
- ☐ IBC Building Permits & Oversight
- ☐ In-house Design Services for smaller projects
- ☐ Property Management

This handbook is intended to serve as a communication tool to aid all project stakeholders in understanding the overall capital construction project delivery process and as a working tool to define implementation methods and controls. A capital construction project is a group of activities that involves constructing, renovating, changing or adding to your facility, and includes design services, construction, coordination and the documentation of fixed physical features such as walls, doors, windows, cabinets, equipment, and utilities. The delivery process includes all of the services and work and also all project management, documentation and controls, including the following:

- ☐ Project Reporting, Coordination, Document Reviews & Approvals
- ☐ Schedule Management
- ☐ Funding & Budget Management
- ☐ Vendor Selection & Purchase Order Management
- ☐ Contract Selection, Management & Evaluation
- ☐ Invoices Review & Change Management
- ☐ Recordkeeping

The combination of adhering to a clearly defined project delivery process and implementing proper project management controls result in a well-coordinated, comprehensive project delivery system with a reduction of the risks normally associated with capital projects.

FP&C has four primary goals:

<i>Cost</i>	Deliver projects of long-term value within justifiable, benchmarked budgets
<i>Performance</i>	Measure the process and outcomes
<i>Quality</i>	Deliver buildings and landscapes that continue the University of Nebraska - Kearney tradition of high quality and enhance the campus' distinctive sense of place
<i>Schedule</i>	Deliver projects in a professional, timely manner to better serve the University and to fulfill the department's goals, FP&C has developed this Construction Project Delivery

WHERE DO I START?

The project delivery process depends on the size and cost of your project. Major changes in the use of a space, such as changing from an office to lab, or the renovation of several areas will more than likely result in a mid-sized or major project. Call a Facilities Planner at 865-1800 to discuss where to begin. The Facilities Planner will assist you in determining the likely cost range and duration range of your project. Below are the three general types of delivery processes.

HOW MUCH WILL MY PROJECT COST AND HOW LONG WILL IT TAKE?

Major Projects with Budgets \$2 Million and Over

Major projects to renovate or add large areas and/or building systems require the most intensive process and begin with the Capital Project Planning Process. The time to complete a major project, including the capital planning process and Board of Regents approval processes, can range from 18-54 months.

Mid-sized Project with Budgets from \$250,000 - \$2 Million

Mid-sized projects to renovate multiple classrooms, offices, labs or other spaces begin with a space alteration request. The request form can be completed online at the FP&C website <http://facilities.unk.edu/> or by calling a Facilities Planner, at 865-1800, for assistance. The time to complete a mid-sized project can range from 14-18 Months

Small Projects with Budget under \$250,000

Small projects to renovate a single area or minor work in multiple areas also begin with a space alteration request. The request form can be completed online at the FP&C website listed above or by calling the Facilities Service Desk at 865-1800 for assistance. The time to complete a small project can range from 2*-14 Months. * Note that summer construction demand is generally high. Contacting Facilities early in the second semester will assure that a small summer project is complete for the start of the following year.

**A construction project is defined as any new building, building renovation, building addition, building remodel, major building repair, exterior site work, or infrastructure project. Maintenance projects under \$15,000 that involve only the replacement or repair of components of existing facilities and that do not require design and specification by architects or engineers may be directed to the Facilities Service Desk at 865-1800.*

THE PROJECT TEAM

A capital project has two results, the completed construction project and the permanent record of the project. The FP&C Planners and Project Managers work alongside you throughout project delivery including, planning, executing, monitoring, managing changes, and closing to assure that all University capital project requirements have been met and are documented for the permanent record. FP&C is UNK's liaison with consultants, contractors and other vendors. FP&C represents the University's interests while acknowledging UNK must work cooperatively with vendors to mutually resolve issues. To that end, FP&C endeavors to:

- Function as an efficient and supportive team leader with integrity and professionalism
- Enhance performance with clear communication to all stakeholders
- Diligently balance diverse needs and pursue common goals of the University and the project sponsors
- Approach project challenges with creativity, respecting the ideas of others
- Deliver a process and approach that is rewarding and enjoyable

WHO IS REPRESENTED ON A PROJECT TEAM?

At the beginning of each phase the FP&C staff representative will clearly identify and re-establish the project team members and each member's individual roles and responsibilities so that everyone knows what is expected. Team member's availability to provide input, reviews and approvals can significantly impact project schedule and costs. The FP&C staff representatives provide the following role on the project team:

- ☐ Team Leadership & Project Management (RP 6.2.5.5)
- ☐ Stewardship of University Resources
 - Scope, Budget & Schedule Management
 - Contracting Services, Invoice Review & Approval
 - Change Management
- ☐ Project Communication, Coordination, and Approvals
 - Team & All Stakeholders
 - Service Units
 - Vendors
- ☐ Centralized Project Record-keeping
- ☐ Project Compliance with:
 - UNK & Board of Regents Policies
 - Governmental Regulation
 - Sponsor Funding Requirements

Following is a list of core team members and a full listing of potential team members:

UNK Project Sponsor: The University representative responsible for approving the project scope, budget, schedule and funding plan.

UNK Facility Coordinator: The daily faculty or staff contact in charge of coordinating with the Project Sponsor and other end-user stakeholders. The user group comprises the faculty, staff, and students, and is organized to collectively speak to the Project Team through the Facility Coordinator, Department Head (Dean or Administrative Director), and sometimes an Executive Committee of designated users. The project sponsor and the facility coordinator may be the same person.

UNK FP&C Representatives for Project Management: the FP&C Facilities Planner, in planning, and Project Manager, through design, construction and post-construction, manage and coordinate the project team to plan and implement the project. The FP&C representatives are responsible for leading, communicating and coordinating project processes and reporting project status and risk to assure that communication between all University stakeholders, faculty, staff, administrators, service units, governmental agencies and vendors, is coordinated and that project decision-making and approvals are documented through the life of the project.

FACILITIES PLANNING & CONSTRUCTION

Consultants, Contractors & Other Vendor: Design and construction professionals, and other vendors that have been procured by an FP&C Project Manager. This group provides the goods, services and/or works coordinated, managed and authorized by the FP&C Project Manager.

UNK Service Unit Representative: The technical representatives from various University departments responsible for services such as building maintenance, custodial services, telecommunications, audio/visual, utilities, landscaping etc. , who have developed design and construction general guidelines and standards. This group acts to consult and advise on each individual project to refine the project consistent with overall campus needs.

List of University Core Team & Potential Stakeholders

- ☐ UNK Project Sponsor & Facility Coordinator
- ☐ UNK Student Representative
- ☐ FPC Project Manager
 - Design Guideline Review
 - Room Numbering
- ☐ FPC Specialists
 - Mechanical
 - Electrical
- ☐ FPC Project Team Coordinator
- ☐ FPC Inspector
- ☐ FPC Building Code Review
- ☐ UNK Property Manager
 - Easements
 - Land Purchases
 - Mailing Address
 - Public Streets & Utilities Executive Orders
- ☐ FMP Building Systems Maintenance
 - Systems Controls
 - Card Access
 - Fire Alarm
 - Keying
 - Hazardous Material Abatement
- ☐ FMP Business Operations
- ☐ FMP Custodial
- ☐ FMP Landscape Services
- ☐ FMP Utilities
- ☐ UNK Americans with Disabilities Act (ADA)
- ☐ UNK Business & Finance
- ☐ UNK Campus Identity Standards
- ☐ UNK Environmental Health & Safety (EHS)
 - Hazardous Material Abatement
 - Tank Removal
 - PCB Ballast & Fluorescent Tube Disposal
 - New or Replaced Generators
 - Storm Water Discharge Permit

- ☐ UNK Instructional Technology Support
- ☐ UNK Inventory
- ☐ UNK Moving Services
- ☐ UNK Parking Services
- ☐ UNK Police
- ☐ UNK Purchasing
- ☐ UNK Telecommunications
- ☐ UNK Television (CCTV)
- ☐ UNK Vending Services
- ☐ NU Facilities Management & Planning
- ☐ NU Board of Regents
- ☐ NU Project Review Board

External Groups

- ☐ City of Kearney
 - Public Streets & Utilities
 - Traffic
 - Fire Department Access
- ☐ Independent Cost Estimator
- ☐ State 1% for Art
- ☐ State – Coordinating Commission for Post-secondary Education (CCPE)
- ☐ State Electrical Inspector
- ☐ State Elevator Inspector
- ☐ State Health Department
- ☐ State Historical Society
- ☐ State Fire Marshal (SFM)
- ☐ State - Lower Platte South Resources District
- ☐ State Task Force for Building Renewal (309)
- ☐ Federal Programs

FACILITIES PLANNING & CONSTRUCTION

PROJECT TEAM ORGANIZATION & COMMUNICATION

The project team is led by the Facilities Planning & Construction Project Manager and each representative on the project team provides input, guidance and professional expertise throughout the programming, design, construction and post-construction phases of a project. The following chart represents project communication expectations.

Document	Recipient	Responsibility	Update Frequency
Project Status, Schedule & Issues and Risk Management Report	Project Sponsor Facility Coordinator	Project Manager	Monthly
Change Management Documents	Project Sponsor Facility Coordinator	Project Manager	Within 1 day of change request
Meeting Notes	Project Sponsor Facility Coordinator	Project Manager (or delegee)	Within 2 days of the meeting

FACILITIES PLANNING & CONSTRUCTION STAFF

Facilities Planning and Construction (FP&C) is a professional service office within the Facilities Management and Planning Department. Facilities Planners manage the project initiation and project definition phases of construction projects. Architectural and Engineering Services Project Managers manage the design, specification, bidding, award, construction, warranty and closeout phases of construction projects. All University construction projects must be processed in accordance with the process and tasks outline in this handbook to ensure compliance with University procurement and contracting policies, state and national building and life safety codes, and accessibility codes. Conformance with this guide is also required to ensure that good planning, design, and construction standards appropriate for the long-term interest of the University are maintained.

Requests for additional information or assistance should be directed to the UNK Campus Architect, located at Facilities Management and Planning, 2507 19th Ave, General Services Building, 865-1700.

WHAT ARE PROJECT PHASES?

The life of a capital project includes multiple distinct and occasionally overlapping phases. The number of phases required to complete a project is dependent on many factors including size, funding source, contracting method and project complexity. Each phase is made up of a variety of related sub-phases and tasks that must be completed, resulting in a set of deliverables that define the scope of work to be done in the next phase and serves as the basis for approval to proceed to that phase. The graphics on the following page show several types of projects with standard phases, multiple phases and sub-phases. The graphic also indicates stakeholder approval points and Board of Regents approval points.

Note the importance of the decision-making process and approval points. Changes to decisions made after an approval point can be time consuming and even costly, even though no construction has begun.

❑ Planning & Estimating Phase

Projects begin with the identification of a project concept and goals by a University stakeholder and the identification and support for the proposed concept by the appropriate approval authority. Facilities Planners work from goals defined in the proposed concept; develop the program; and balance the competing objectives of scope, budget, and schedule. Sub-phases in planning include:

- Project Identification & Concept Proposal
- Feasibility – Needs Assessment & Estimating
- Programming

❑ Design Phase

The project then proceeds to Design, during which architects and engineers work from a defined scope and budget to develop the design in stages, verifying the budget at each stage and then producing construction drawings and specifications. The design phase includes the following sub-phases:

- Consultant Selection
- Schematic Design
- Design Development
- Construction Documents

❑ Construction Phase

In Construction a team of contractors work from the instructions contained in documents prepared during design to physically assemble the specified materials and equipment into a complete facility. Construction sub-phases include:

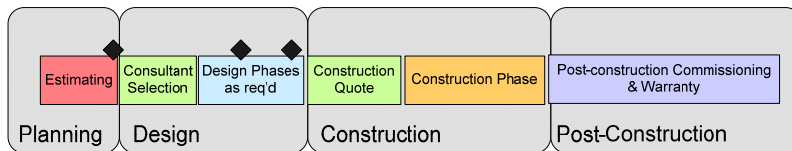
- Bidding/Quoting
- Submittal Phase
- Demolition (if renovation project)
- Utility & Equipment Infrastructure & Framing
- Exterior/Interior Finish & Fixtures
- Landscaping
- Punchlist, Substantial & Final Completion

❑ Post-construction Phase

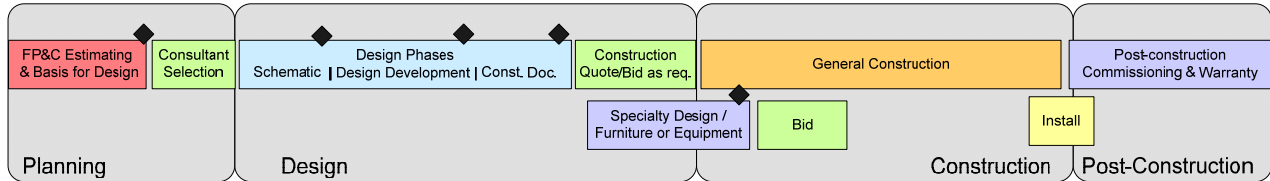
During the post-construction phase the building is commissioned, furniture and equipment are installed, occupants move in, minor unfinished items (the “punch list”) are completed by the contractor, and the project records are reconciled and archived. Post-construction sub-phases include:

- Building Commissioning
- Furniture & Equipment Installation
- Warranty
- Project Closeout

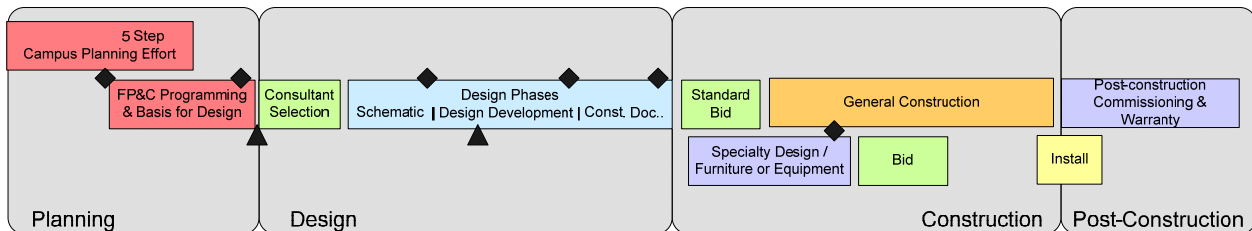
FACILITIES PLANNING & CONSTRUCTION



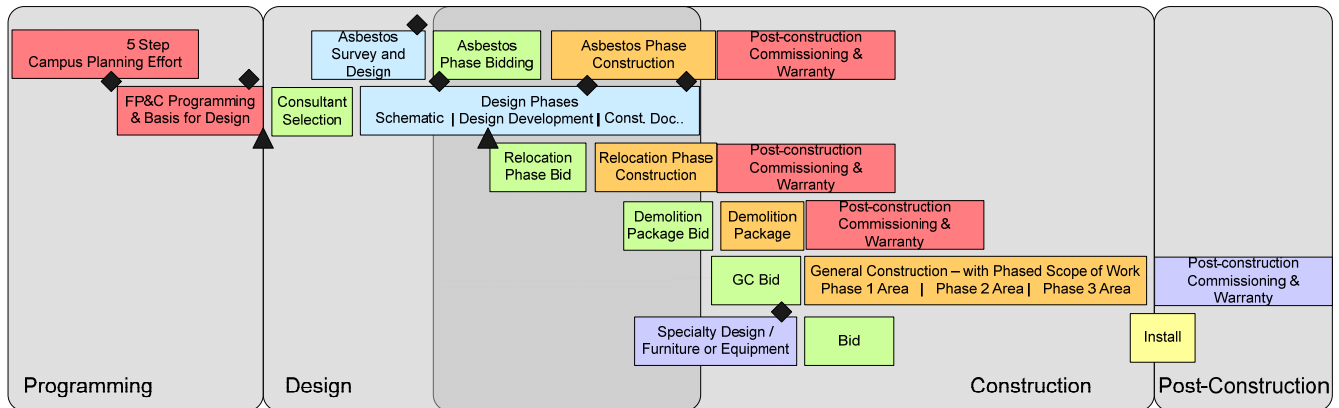
Small Project, Single Construction Phase, Quote from a Pre-selected Vendor for work under \$75,000



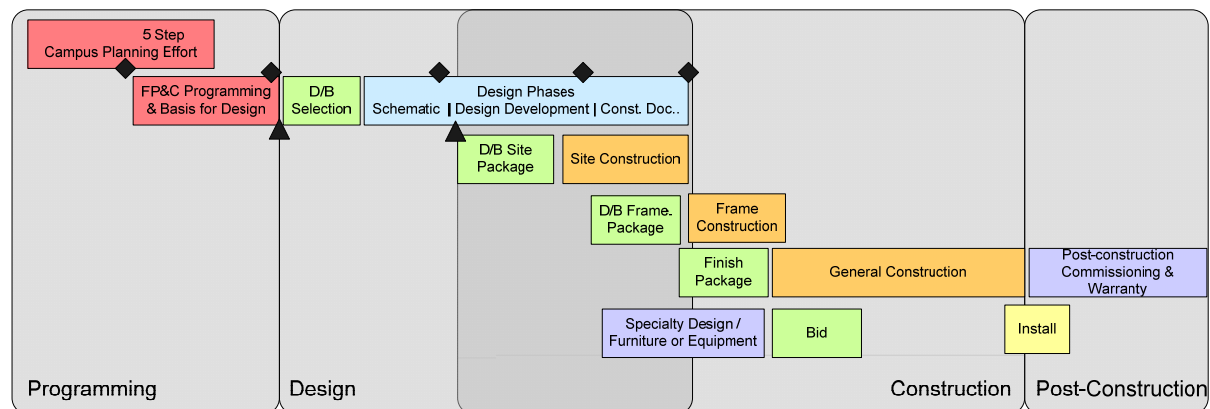
Mid-sized Project, Single Construction Phase, Construction Quotes under \$250k and Standard Bid \$250k and above



Major Project, Single Construction Phase, Conventional Bid



Major Project, Multiple Construction Phases, Conventional Bid with Phased Scope of Work



Major Project, Multiple Construction Phases, Design/Build Construction (DB)

Project Types & Project Phases ◆ Stakeholder Approval ▲ Board of Regents Approval

2. PROJECT MANAGEMENT & CONTROLS

The FP&C representative, Facilities Planner and A&E Services Project Manager, use this handbook as a guide and resource to assure that project objectives and the project management plan are clearly and consistently identified and communicated throughout the project. Clearly identified project controls ensure appropriate authorization, compliance with University policies, reporting, and budget and schedule development. A clear project management plan ensures that changes to approved project objectives, scope of work, budget or schedule are reviewed and approved by the team before change is implemented.

This handbook breaks down the project delivery process into phases and project management controls. The following major phases and controls are presented individually in the following sections with their associated key tasks and primary deliverables and resources.

Project Phases

- ☐ Project Identification & Concept Proposal
- ☐ Feasibility – Needs Assessment & Estimating
- ☐ Programming
- ☐ Schematic Design
- ☐ Design Development
- ☐ Construction Documents
- ☐ Construction
- ☐ Post-construction

Project Management Controls

- ☐ Project Reporting
- ☐ Coordination, Document Reviews & Approvals
- ☐ Schedule Management
- ☐ Funding & Budget Management
- ☐ Vendor Selection & Purchase Order Management
- ☐ Invoice Review & Approvals
- ☐ Change Management
- ☐ Recordkeeping

Project specific interdependencies and inputs – the Project Manager will work with the project team to identify project specific interdependencies and inputs such as related projects, actions or other considerations, assumptions, constraints or risk that may impact the project.

Tasks	Resources
<ul style="list-style-type: none"> <input type="checkbox"/> Identify project team & roles <input type="checkbox"/> Identify Project Approval Authorities <input type="checkbox"/> Identify Primary Objectives <input type="checkbox"/> Identify Primary Deliverables <input type="checkbox"/> Verify communication plan & meeting standards <input type="checkbox"/> Review and confirm change management process 	<ul style="list-style-type: none"> <input type="checkbox"/> Project Management Plan Template <input type="checkbox"/> Budget Template <input type="checkbox"/> Schedule Template
Deliverables	Project Management Controls
<ul style="list-style-type: none"> <input type="checkbox"/> The Project Management Plan <input type="checkbox"/> Scope of Work <input type="checkbox"/> Schedule <input type="checkbox"/> Budget <input type="checkbox"/> Identified Issues & Risks <input type="checkbox"/> Funding Approval <input type="checkbox"/> Contact & Document Distribution Plan 	<ul style="list-style-type: none"> <input type="checkbox"/> Reviews & Approvals, Risk Identification & Quality Control <ul style="list-style-type: none"> • Project Document Reviews & Approvals • Reviews & Approvals of Vendor Work Results <input type="checkbox"/> Schedule Management. <input type="checkbox"/> Funding & Budget Management <input type="checkbox"/> Government Funding Compliance <input type="checkbox"/> Vendor Selection & Purchase Orders <input type="checkbox"/> Contract Selection & Evaluation <ul style="list-style-type: none"> • Consultant Selection • Contractor Selection <input type="checkbox"/> Invoice Review and Approval <ul style="list-style-type: none"> • Schedule of Values • Invoice Review • Reimbursable Expenses • Stored Materials • Invoice Review Form <input type="checkbox"/> Change Management <input type="checkbox"/> Communication, Project Reporting & Closeout
Approvals	
<p>The Project Sponsor and any other individuals or groups identified in the specific project management plan must “sign-off” on the project design, budget and schedule at the completion of the current phase in order to proceed to the next phase.</p>	

3. Project Identification & Concept Proposal Phase

There are two methods to initiate a capital project. Method one for larger projects of \$500k or more are initiated through the Capital Project Planning Procedure and includes five steps prior to Project Setup:

1. Program Concept - Proposal of a project concept by a University faculty, staff, chair, dean or other university stakeholder.
2. Needs Assessment - Feasibility & Conformance with Master Plan managed and coordinated by FP&C
3. Early Estimates - and Approval of a Project Initiation Request
4. Programming - and development of a Basis for Design
5. Formal Program Statement – Develop the Program Statement

The goal of concept proposal is to define a scope of work which translates academic or departmental initiatives into potential facilities needs to determine if a capital construction project is necessary.

The most important objectives to identify in the concept proposal are:

- Identify and define options for meeting the articulated need.
- Align the expectations of all stakeholders by documenting the project parameters and goals.
- Identify funding to begin Planning efforts.

Method two for smaller projects, which do not change space assignments, may be initiated through the Facilities iService Desk website and includes a two step process prior to Project Setup:

1. A University representative completes a space alteration request through the Facilities website or by calling Facilities
2. Needs Assessment, Feasibility and Estimating will be managed and coordinated by FM&P
3. Upon funding approval, Project Setup

Requesting a space assignment change, for the use of a space that is not currently assigned to your department, can be made through the Facilities iServiceDesk website <http://facilities.unk.edu>

Tasks	Resources
<input type="checkbox"/> 5 Step Capital Project Planning Procedure	Facilities iServiceDesk http://facilities.unk.edu
Deliverables <input type="checkbox"/> Project sponsors concept proposal	
Approvals The Project Sponsor and any other individuals or groups identified in the specific project management plan must “sign-off” on the project design, budget and schedule at the completion of the current phase in order to proceed to the next phase.	

4. Feasibility – Needs Assessment & Estimating

The goal of the Feasibility Phase is for the Facilities Planner to coordinate the User Group, Service Unit Group and Consultant Group to develop the scope of work and options outlined in the Project Concept Proposal.

The scope of work is developed to the extent necessary to identify needs, which may include key site, utility and building relationships; preliminary space requirements; and structural, accessibility, environmental, architectural, building systems, codes, existing conditions and hazardous materials issues. The Project Team identifies project risks and contingencies, establishes a Benchmark Budget and project schedule, and presents a strategy for surge if necessary.

All information for the described scope of work and options is included in the Project Initiation Request (major projects) or the “A” Estimate (mid-size and small projects) which are prepared by FP&C and presented to the appropriate University representatives for approval of project funding.

Tasks	RESOURCES
<ul style="list-style-type: none"> <input type="checkbox"/> Establish a preliminary project management plan <input type="checkbox"/> Collection and analysis of project data <input type="checkbox"/> Review and refinement of concept <input type="checkbox"/> Development of initial costs 	Facilities iServiceDesk http://facilities.unk.edu
Deliverables	Design Guidelines for Facilities Construction
<ul style="list-style-type: none"> <input type="checkbox"/> Preliminary Project Management Plan <input type="checkbox"/> Scope of Work, Schedule <input type="checkbox"/> Order of Magnitude Budget <input type="checkbox"/> Identified Issues & Risks <input type="checkbox"/> Funding Approval <input type="checkbox"/> Planning Progress Meeting Notes <input type="checkbox"/> Document Reviews & Approvals 	
Approvals	
<p>The Project Sponsor and any other individuals or groups identified in the specific project management plan must “sign-off” on the project design, budget and schedule at the completion of the current phase in order to proceed to the next phase.</p>	

5. Programming Phase

The goal of the Programming phase, for major project, is to further develop the concept and objectives approved by the Chancellor and SAT (major projects) or the Project Sponsor (mid-sized and small projects) at the

conclusion of the Feasibility phase. This phase confirms that the objectives for the project meet the program needs of the User Group with a degree of detail that allows the Project Team to obtain Board of Regents approval for the project's **Program Statement**. This includes diagrammatic floor and stacking plans, space plan, a summary schedule and a preliminary budget with comparable project benchmarks. For new construction, this also includes an initial study of site constraints and impacts and site-related design guidelines. Regents Policy 6.3.6 allows up to 1% of the Total Project Cost to complete a **Program Statement**.

At the start of the Programming phase, the Project Manager will schedule a kick-off meeting to review and confirm the project objectives. During this phase the Project Team will reconfirm the planning and design goals from the Feasibility phase, conduct user interviews, and establish and evaluate space data. The team will also develop a benchmark level schedule and cost model to be included in the **Program Statement**, the major deliverable for this phase.

The **Program Statement**, with concept **Schedule, Updated Benchmark Budget**, and an approved **Funding Plan** are summarized into an **Agenda Item** which is presented by the Vice Chancellor of Business & Finance to the Board of Regents (BOR) for Concept Approval. This approval provides conceptual approval of project scope, budget, schedule, and construction delivery method, and allows the campus to commit up to 3% of the Total Project Cost to complete Schematic Design

Mid-sized and small project do not require BOR approval, however the process for developing the program scope of work is the same and is integral with the needs assessment, feasibility and estimating activities.

Tasks

- ☐ Update and confirm the preliminary project management plan
- ☐ Collection and analysis of project type data
- ☐ Review and confirm project objectives
- ☐ Diagram processes and relationships
- ☐ Establish quantitative requirements
- ☐ Synthesize and document the program
- ☐ Procure surveys and testing as needed
- ☐ Project Review Board (major projects)

Deliverables

- ☐ Preliminary Project Management Plan
- ☐ Program Statement, Budget, Schedule & Agenda Item for Board of Regents Concept Approval
- ☐ A Estimate program (mid-sized and small projects)
- ☐ Identified Issues & Risks
- ☐ Funding Approval
- ☐ Programming Phase Meeting Notes
- ☐ Communications
- ☐ Program Reviews, Responses & Approvals
- ☐ CCPE & Legislative Approval of Program Statement (major projects, when applicable)
- ☐ Meeting, Budget, Schedule & Issues Logs

RESOURCES

Facilities iServiceDesk
<http://facilities.unk.edu>

Design Guidelines for Facilities Construction

Regents Policy 6.3.6

Coordinating Commission for Post-secondary Education (CCPE)

Approvals

The Project Sponsor and any other individuals or groups identified in the specific project management plan must “sign-off” on the project design, budget and schedule at the completion of the current phase in order to proceed to the next phase.

6. Schematic Design Phase

The Schematic Design (SD) phase is a critical phase where project objects and program solutions for scope, design and component relationships are explored and confirmed. The budget, schedule and list of identified risks are also updated. The primary objective is to develop a clearly defined design with a comprehensive scope, budget and schedule. Schematic-level drawings (from all disciplines) for a UNK capital project are developed beyond the industry standard so that a true profile of scope, budget and risk can be understood and assessed. The Consultant's project manager leads each meeting, sets the agenda and documents the decisions and outcomes.

For major projects, the Consultant Group develops the project deliverables with input from the Technical Group to provide the Facilities Project Manager with sufficient information to develop a Total Project Budget. The Core Group updates project goals and measurement criteria for the design phase that serve as a road map for the team and defines successful outcomes.

The Facilities Project Manager will create an agenda item for the Board summarizing information from the Schematic Design documents, budget, and schedule. FP&C makes arrangement for the Consultant Group to present the Schematic Design to the Business Affairs Committee (major projects) for approval and an agenda item is reported to the Board. The campus is allowed to commit up to 3% of the Total Project Cost to complete Schematic Design.

At the end of the schematic design the scope, budget, schedule, and construction delivery method is fixed.

Tasks

- ☐ Conduct Kick-off and regular progress meetings
- ☐ Select and contract with a consultant
- ☐ Analysis of design problems
- ☐ Develop a project design concept
- ☐ Refine the concept into a design solution
- ☐ Written and graphic documentation of design solution
- ☐ Procure surveys and testing as needed
- ☐ Conduct UNK reviews as required
- ☐ Project Review Board (major projects)

Deliverables

- ☐ Consultant contract
- ☐ Schematic Design Documents (see SD checklist) including floor plans, major elevations, outline specifications, cost estimate and revised budget and schedule
- ☐ SD Package for NU Business Affairs (major projects)
- ☐ Schematic Design Progress Meeting Notes
- ☐ Communications
- ☐ Identified Issues & Risks
- ☐ Updated and confirmed design schedule
- ☐ SD Funding Approval
- ☐ End-of-Phase Submittal Review Form
- ☐ Documented Review Comments & Responses
- ☐ Approval to Proceed to Design Development
- ☐ Updated project plans and project schedule
- ☐ Meeting, Budget, Schedule & Issues Logs

RESOURCES

Consultant Selection Procedure

Program Statement or Planning Estimate

Design Guidelines for Facilities Construction

Project Review Board

NU Business Affairs Committee

[Campus Design Guidelines](#)

Approvals

The Project Sponsor and any other individuals or groups identified in the specific project management plan must "sign-off" on the project design, budget and schedule at the completion of the current phase in order to proceed to the next phase.

Deliverables

100% Schematic Design drawings and booklet
Schematic Design Construction Estimate
Updated Budget & Schedule
Aesthetic Review Committee Review as required

7. Design Development Phase

The Design Development (DD) phase refines the scope of work previously approved in the schematic design phase. In this phase the project is developed to a level of detail that is necessary to work out a clear, coordinated description of all aspects of the project. Major support systems including equipment, fire protection, mechanical, electrical, structural, telecommunications and plumbing systems are evaluated to resolve any coordination issues.

The Design Development phase is the last opportunity for design input that involves the User Group. Any change to the project's scope or program during this phase will likely incur budget and schedule impacts. If the DD Estimate is not consistent with the previous Budget, then a scope and budget realignment exercise is necessary.

The completed Design Development documents, DD Estimate, Funding Agreement (for renovations) and schedule are summarized in a Write-up and presented by FP&C to the Board of Trustees for Project Approval.

Tasks	RESOURCES
<ul style="list-style-type: none"> <input type="checkbox"/> Conduct regular progress meetings <input type="checkbox"/> Drawings and specifications to document project scope, quality, and design. <input type="checkbox"/> Material and system selections <input type="checkbox"/> Update and confirm cost estimates <input type="checkbox"/> Update and confirm construction schedule <input type="checkbox"/> Conduct end-of-phase reviews 	Design Guidelines for Facilities Construction
Deliverables	
<ul style="list-style-type: none"> <input type="checkbox"/> Plans and specifications (see DD checklist) <input type="checkbox"/> Design Development Progress Meeting Notes <input type="checkbox"/> Communications <input type="checkbox"/> Updated and confirmed design schedule <input type="checkbox"/> Update Issues & Risks <input type="checkbox"/> End-of-Phase Submittal Review Form <input type="checkbox"/> Documented Review Comments & Responses <input type="checkbox"/> Approval to Proceed to Construction Document Phase <input type="checkbox"/> Updated project plans and project schedule <input type="checkbox"/> Meeting, Budget, Schedule & Issues Logs 	
Approvals	
<p>The Project Sponsor and any other individuals or groups identified in the specific project management plan must “sign-off” on the project design, budget and schedule at the completion of the current phase in order to proceed to the next phase.</p>	

8. Construction Document Phase

The Construction Documents (CD) phase is the last stage of the design process. The Consultant Group is focused on finalizing the detailed drawings and specifications for all components and systems of the building producing the Contract Documents. A complete set of Contract Documents provides a comprehensive, fully coordinated set of construction documents and specifications for obtaining construction bids or proposals and necessary code reviews and permits.

During this phase, the Technical Group performs an interim review of the drawings and specifications at 50% CD completion for constructability and advises the Consultant Group of any conflicts from the previously signed-off Design Development drawings. When the construction documents are 95% complete, the Technical Group and Structural Peer Group review the drawings for content and provide final comments. Because the Consultant Group is tasked with delineating the signed-off building design (signed off at the end of the Design Development phase), changes to the scope or program in this phase will incur budget impacts and schedule delays.

Upon completion of this phase, the Contract Documents are issued for bids or quotes.

Tasks	RESOURCES
<ul style="list-style-type: none"> <input type="checkbox"/> Conduct regular progress meetings <input type="checkbox"/> Preparation of drawings and specifications to document complete project scope, quality, and design. <input type="checkbox"/> Material and system selections complete <input type="checkbox"/> Update and confirm cost estimates <input type="checkbox"/> Update and confirm construction schedule <input type="checkbox"/> Conduct 50% and 95% reviews 	Design Guidelines for Facilities Construction
Deliverables	
<ul style="list-style-type: none"> <input type="checkbox"/> Complete plans and specifications at review points and final construction documents (see CD checklist) <input type="checkbox"/> CD Phase Progress Meeting Notes & Communications <input type="checkbox"/> Update and confirm construction schedule <input type="checkbox"/> Update Issues & Risks <input type="checkbox"/> 50% review and 95% Submittal Review Form <input type="checkbox"/> Documented Review Comments & Responses <input type="checkbox"/> Approval to proceed with bidding/quoting <input type="checkbox"/> Updated project plans and project schedule <input type="checkbox"/> Meeting, Budget, Schedule & Issues Logs 	
Approvals	
<p>The Project Sponsor and any other individuals or groups identified in the specific project management plan must “sign-off” on the project design, budget and schedule at the completion of the current phase in order to proceed to the next phase.</p>	

9. Construction

The goal of the Construction phase is to safely build the project as designed, for the time and cost contracted, and delivers the facility ready for occupancy by the requesting department. The primary objective of Construction is to build the project while controlling change orders, use of contingency funds, and the construction schedule. The General Contractor is tasked with completing the buy-out of all components in the construction contract, coordinating their delivery and installation, and facilitating the inspection process to achieve building occupancy.

Throughout the course of construction the project team will meet with the Contractor regularly. The Contractor reports on the progress of construction activities; tracks submittals, changes, and construction schedule; and resolves field conflicts and drawing discrepancies. The Contractor's project manager leads each meeting, sets the agenda and documents the decisions and outcomes. The Contractor's Project Superintendent reports on the project's safety program and site logistical concerns and provides weekly updates to the construction schedule. The attendees of the progress meetings are the Project Manager, Consultants, General Contractor, and Facility Coordinator; the User and Technical groups are copied on meeting minutes and have representation at the progress meetings as needed to assist in resolution of field issues. The diagram on the following page titled Construction Administration Primary Roles & Responsibilities summarizes the roles of the Consultant Group, Contractor, Technical Group, Facility Coordinator and FP&C's Project Manager.

The progress meeting is not a forum for discussion or consideration of changes to the project beyond the contracted scope of work. The purpose of the meeting is to report on the status of the budget and schedule, and discuss the progress of the construction (e.g. completed work, pending work, inspections, safety program, construction management plan, impact mitigation efforts, etc.)

Tasks

- ☐ Contractor selection through bidding or quoting the construction document package
- ☐ Conduct pre-bid/quote and pre-construction meetings
- ☐ Addenda as applicable to clarify discrepancies, errors or omissions
- ☐ Posting addenda and changes to the construction documents
- ☐ Submittal review
- ☐ Progress & Pre-installation meetings
- ☐ Monitor and observe work
- ☐ Conduct pre-punch list meeting
- ☐ Document review of completed work and prepare punch list, when necessary
- ☐ Complete code and life-safety inspections
- ☐ Progress Meeting Notes & Communication

Approvals

- ☐ The Project Sponsor and any other individuals or groups identified in the specific project management plan must "sign-off" on any changes considered during construction prior to requesting design services or contractor proposals.

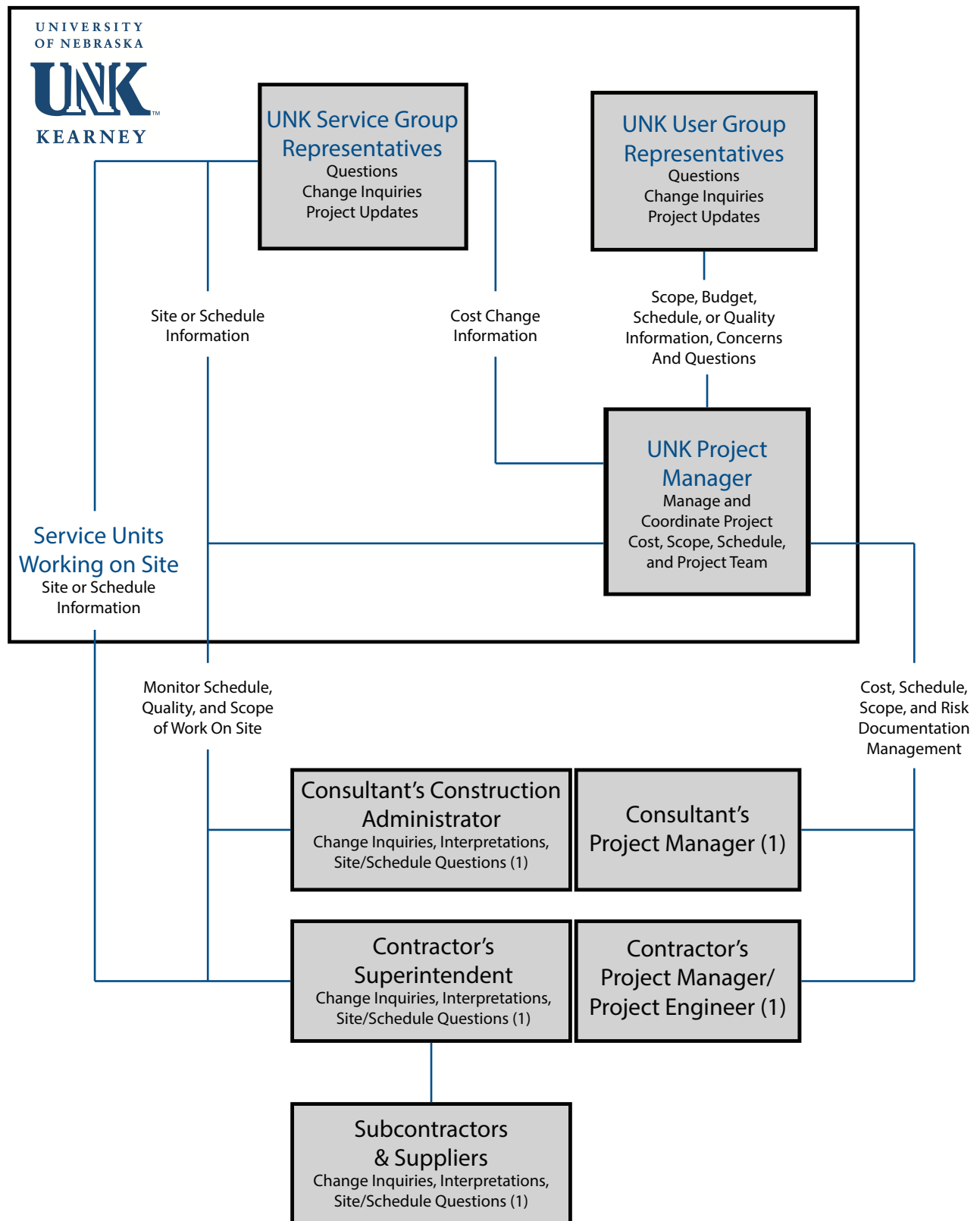
RESOURCES

Design Guidelines for Facilities Construction

Deliverables

- ☐ Construction contract & closeout documents
- ☐ Stored materials backup as applicable
- ☐ Addenda, as applicable
- ☐ Change Orders, as applicable
- ☐ Submittals & Submittal Log
- ☐ Substantial & Final Completion Certificates
- ☐ Occupancy Permit & State Fire Marshal Inspection
- ☐ Photos, Observation Reports & Code Inspection Reports
- ☐ Posted construction documents
- ☐ Pre-bid, pre-construction, pre-installation, pre-punch, and progress meeting notes
- ☐ Construction schedules
- ☐ Updated project plans and project schedule
- ☐ Meeting, Budget, Schedule & Issues Logs
- ☐ Change Management Logs

Normal Information & Communication Flow In Construction



Note: This flow chart represents the normal flow of information and communication during construction. It is not intended to restrict necessary flow of communication or information in unusual or emergency situations.

(1) Refer to consultant and contractor agreements for detailed requirements.

10. Post – Construction

The goal of the post-construction phase is to facilitate the commissioning, occupancy and turnover of the finished project to the User Group and maintenance department.

Upon issuance of the occupancy permit and substantial completion certificate, the facility is commissioned, furniture and equipment are installed, occupants move in, minor unfinished items (the “punch list”) are completed by the contractors, and maintenance responsibilities begin. The Project Manager submits a **Turnover Letter** to the User to notify the user that the facility is ready for occupancy and that oversight of the facility will transfer from FP&C to the Building Representative. Similarly, a Turnover Letter to Maintenance is submitted to notify them that warranties are in effect and maintenance responsibilities have been transferred to their department.

After the Users move-in, it continues to be the responsibility of the Project Team to complete all jurisdictional, legal and contractual obligations; reconcile the project accounting with Business Operations; evaluate and report the outcomes of the project; conduct warranty reviews three months after occupancy for landscape and eleven months after occupancy for equipment; transfer all project records to appropriate departments, and officially close the project.

The Closeout phase lasts through the duration of the project warranties (typically one year), but should be financially closed within four to six months after the Users move in. Financial closure requires that all contract work be completed, As-Built documents received and submitted to Maps & Records, final invoices submitted and paid, project accounting reconciled with the University’s operating statements, funding surpluses returned, and the Plant Account closed.

Tasks	Resources
<ul style="list-style-type: none"> <input type="checkbox"/> Custodial & Maintenance Building Commissioning <input type="checkbox"/> Furniture & Equipment Installation <input type="checkbox"/> Occupant Move In <input type="checkbox"/> Reconcile all final payments <input type="checkbox"/> Confirm receipt of all record documents <input type="checkbox"/> Warranty reporting oversight <input type="checkbox"/> 11 Month Warranty Walk-through <input type="checkbox"/> Project closeout 	
Deliverables	
<ul style="list-style-type: none"> <input type="checkbox"/> Turnover Letter <input type="checkbox"/> All furniture, fixtures and equipment installed & complete <input type="checkbox"/> All landscaping installed & complete <input type="checkbox"/> Record documents prepared for archive <input type="checkbox"/> Project Closeout Report 	

11. Communication & Project Reporting

Project Reporting

Project Management and Team Reporting - the FP&C representative is responsible for regularly providing detailed schedule, scope, budget and issue status updates to the Facility Coordinator and the Project Team.

FP&C Internal Reporting

In addition to regular management of the project team, the FP&C representative is responsible for regularly documenting and tracking the overall project schedule, scope, budget and status in the Project Management Facilities Application. The Project Manager updates the project status on a weekly basis. FP&C provides the Project Managers with a team of Project Team Coordinators who are available to support the Project Manager in maintaining accurate project reporting data and project record documents.

Monthly Project Reviews

Internal to FP&C, each Project Manager (PM) has a monthly Project Review to monitor the status of each of the their assigned projects. FP&C participants in the review include the FP&C Director, the A&E Services Manager, the PM's Lead Supervisor, the PM, the Director of Business Operations, the FP&C Administrative Manager, the FP&C Project Team Coordinator (PTC), and a representative from Central Accounting.

The purpose of the review is to discuss the status of each project and assist the manager in resolving any outstanding issues. The review will cover the manager's summary report to include the following items, in the order listed to make efficient use of time for Accounting and Business Operations staff:

- Budget, contingency and accounting review and related issues and risks
 - Business Operations Invoice Aging Report
 - PM's Aged Invoice summary of reason and next action
- Contract Status and related issues
- Scope Status & Issues
- Schedule and approval milestones review related issues and risks
- Other risks and planned mitigation

Business Operations staff will reconcile all commitments and expenditures between the Project management Facilities Application and SAP monthly to ensure proper downloads and uploads. All discrepancies will be investigated and resolved on a timely basis.

TASKS	RESOURCES
DELIVERABLES <ul style="list-style-type: none"> <input type="checkbox"/> Issues Log <input type="checkbox"/> Contract Log <input type="checkbox"/> Project Reports <input type="checkbox"/> Monthly Project Status Report <input type="checkbox"/> Monthly Financial Report for Senior Management <input type="checkbox"/> Quarterly Report to the Board of Regents <input type="checkbox"/> 	<ul style="list-style-type: none"> <input type="checkbox"/> Meeting Notes OA Protocol #10 <input type="checkbox"/> Meeting Notes Procedure <input type="checkbox"/> Project Management Facilities Application OA Protocol #15 <input type="checkbox"/> Project Management Facilities Application Reporting Procedure <input type="checkbox"/> Project Management Plan Reporting Procedure

Project Reporting to the Campus

Once all internal FP&C reviews are completed and project information is updated, the following reports are generated by FP&C administrative support staff and FM&P Business Operations.

- **Monthly Project Status Report** – a monthly report will sort projects by the school or department and will be distributed to the individual College and/or administrative unit representative.
- **Monthly Financial Report for Senior Management** - A comprehensive project status report is compiled and distributed to University senior management monthly.
- **Quarterly Report to the Board of Regents** – quarterly reporting to the Board of Regents is provided by the Director of Business Operations.

12. Project Coordination, Document Reviews & Approvals

Documenting, communicating and managing project reviews and approvals, includes reviews and approvals of scope, budget, schedule, issues, and vendor work results. This work also includes risk management, documenting, communicating and managing uncertain opportunities and challenges. Risk management can significantly impact project decision-making.

SCOPE, BUDGET AND SCHEDULE DOCUMENT REVIEWS - document reviews and the review periods are critical phases in the life of every project. Adequate time in the project schedule should be allocated, at the end of each design phase, for these periods of at least five working days for small projects to at least ten working days for large projects. These periods are the time given for reviewers to check the documents and submit written comments on the Review Comments Forms to the FP&C representative. In the case of the schematic and design development phases, work on the next phase of the project can proceed concurrently with the review period with the understanding that any changes that are required due to the comments will be incorporated in the next phase, at no additional cost to the project. The construction document review period should be scheduled so that consultant's response to the comments can be incorporated into the documents before they are printed for bidding or quoting.

COMMUNICATON – the FP&C representative will include core team members in all meetings and will provide timely information to all applicable project team stakeholders from initial planning through the warranty phase of every project. Project team members and other project stakeholders participation is critical in project planning, design, construction and post-construction meetings as necessary to coordinate and review and document the stakeholder's area of interest. Team members will communicate issues and provide work schedules, where appropriate, to be included on the project manager's coordination and commissioning schedule.

REQUEST FOR INPUT – the FP&C representative will request input regarding, the scope, budget and estimated schedule during the scoping of the project from each applicable team member, assuring that the scope of work is well documented, and that budget and schedule estimates are provided. This documentation provides backup for the complete project scope, budget and schedule.

TEAM MEMBER ACCOUNTABILITY – project team members are responsible to the team to ensure the success of the project, especially in the team member's area of expertise. Such responsibilities include:

- ☐ Reviewing programming, design and construction documents and providing written review comments to assure that their needs are documented during the design phase
- ☐ Providing updated budget and schedule information, when applicable, and timely communication of budget or other concerns
- ☐ Observing construction work and providing timely communication of issues and concerns
- ☐ Coordinating with other team members as appropriate
- ☐ Attending project meetings that are relevant to the team member

RECORD DOCUMENTS - All review comments and consultant responses will be stored in the project file. Well documented review comments and responses to review comments are essential for project success as they prevent misunderstandings and they document unresolved issues that need the attention of the project manager or designer. Review comments and responses also form the basis for proceeding to the next phase and serve as a record of the decision-making.

TASKS

- ☐ Identify the project team
- ☐ Request Written Review Comments & Responses

DELIVERABLES

- ☐ Written Review Comments & Responses & Review Log
- ☐ Issues Documentation & Issues Log

RESOURCES

- ☐ REVIEW COMMENTS FORM
- ☐ DOCUMENT DISTRIBUTION CHECKLIST
- ☐ ISSUES LOG

13. COORDINATION & DOCUMENT REVIEWS CONTINUED

REQUEST WRITTEN REVIEW COMMENTS – the FP&C representative will request written review comments, budget and schedule updates from each applicable reviewer at the end of each phase as follows:

- ☐ **Planning & Estimating** – at the end of scoping, program statement development or draft maintenance agenda item
- ☐ **Schematic Design** – for Board of Regents projects and mid-sized projects only, each applicable group will provide a written review of the schematic design documents, and where applicable provide updated budget and schedule information. A written response to review comments is required from the design consultant. Reviewers should be sufficiently involved in small projects so as not to require a formal review.
- ☐ **Design Development** – each applicable group will provide a written review of the design development documents for all projects, and where applicable provide updated budget and schedule information. A written response to review comments is required from the design consultant.
- ☐ **Construction Documents** – each applicable group will provide a written review of the final construction documents for all projects, and where applicable provide updated budget and schedule information. A written response to review comments is required from the design consultant.
- ☐ **Change Documents** – each applicable group will review all proposed change documents for all projects, and where applicable provide updated budget and schedule information.

REVIEW COMMENTS - the FP&C representative will collect and review comments and will distribute all comments to the project team and to the consultant for their written response. The consultant's written response will be distributed back to the team and all remaining issues will be resolved and documented.

SCOPE, BUDGET & SCHEDULE CHANGES- the FP&C representative will consult with team members regarding scope, schedule and budget line items to gain approval prior to making any changes.

The following is a sample recommended approval graph. An approval plan will be provided for every project as a part of the project management plan.

Project Approval Matrix

		Facility Coordinator	Approval Authority	Administrative Authority	FMP – FPC	FMP – Bus. Op.	Board of Regents	VC/Dean Approval <input checked="" type="checkbox"/> AP#5
1	Scope of Work – Program, Design, Changes	X	X	X	X			
2	Project Schedule or Changes	X	X	X	X			
3	Budget or Changes	X	X	X	X	X		
4.a.	Commitments for Consultant and Construction Contracts & Changes	X	X	X	X	X		
4.b.	Other Project Commitments & Changes	X	X	X	X	X		
5	Invoices	X	X	X	X	X		
9.a.	Urgent changes under \$1,000 will be authorized by FMP and reported within 24 hours			X	X	X		
9.b.	Urgent changes over \$1,000 will require urgent approval by all identified team members	X	X	X	X	X		

13. Schedule Management

Overview

The cornerstone of any well-managed project is the Project Schedule which is a tool that identifies and organizes project tasks into a logical sequence of events. The FP&C representatives document and distribute the Project Schedule throughout the life of the project to communicate progress, to inform budget decisions and to manage risk. The process of building the schedule enables the planner and manager to identify and track goals for the Project Team. Schedule development also facilitates identifying risk points, understanding the proper linkage of tasks, and resource planning.

Control Points

The benefits of a well-constructed schedule are numerous. It is a management tool containing the framework to organize the Project Team to achieve identified objectives, and it provides a means to measure project and team performance. A quality schedule includes planned control points that better ensure the success rate on the project. In addition to the standard schedule control points, the specific control points that must be included are:

- Budget development and cost checks. This includes time to redesign in order to realign the scope and budget
- University of Nebraska - Kearney approvals (User Group, Dean, UNK Approval Groups and the Board of Regents)
- Jurisdictional approval process

Project Duration

The following chart indicates the range of typical project durations depending on the size and complexity of the project:

Range* of duration for projects UNDER \$500,000

Scoping and Estimating	1-6 Weeks
Architect and Engineer Selection (unless designed in-house)	1-4 Weeks
Design and Construction Documentation	1-13 Weeks
Bidding or Quoting and Award	2-8 Weeks
Construction, Occupancy and Closeout	4-23 Weeks

Range* of duration for projects OVER \$500,000

Project Approval & Programming	4-12 Months
Architect and Engineer Selection	1-3 Months
Design and Construction Documentation	3-12 Months
Bidding and Award	2-3 Months
Construction, Occupancy and Closeout	6-24 Months

Management Schedule and Project Schedule

Templates for both a typical large and small project schedule, which should be used as a starting point for all projects at UNK, are shown below. They are structured based on the process phases. The FP&C planner and manager will monitor and update the schedule as the project moves through the project delivery process. The Project Schedule is distinct and separate from the consultant's design schedule and the contractor's construction schedule.

TASKS

RESOURCES

DELIVERABLES

Template Project Management Schedules

Graphic schedule here

14. Funding & Budget Management

Project Funding

A project funding plan is developed in conjunction with the project identification and concept proposal phase and identifies the source of funds and the person identified as the “Project Sponsor.” The Project Sponsor is responsible for approving the project scope, budget, and schedule and all changes through the life of the project. For major projects, the funding plan and funding approval is required prior to requesting Board of Regents approval. For mid-sized and small projects, the funding plan and funding approval is required prior to project setup.

For projects funded by the following agencies, follow the agency’s specific policies regarding procurement and approval points, in addition to all other NU and UNK policies and procedures.

- State of Nebraska, Task Force for Building Renewal (309 Task Force)
- Federal Grants
- NU Foundation Donor Funds
- NUCorp

Capital Accounting and Project Numbers

The Project Sponsor will forward the approved funding plan to the FM&P Director of Business Operations and a capital account number (Plant Account number) will be assigned. FP&C will also assign a project manager and set up the project number in the Project Management Facilities Application. The Project Manager will begin to track actual, pending and projected expenditures against the approved budget.

Budget Management

Budget updating and tracking are two of the key tasks and responsibilities for the Project Manager (PM). The Facilities Planner first develops a project budget in the Feasibility and Programming phase and the Project Manager refines and manages the budget through design, construction and post-construction phases .

It is imperative that all the elements of the budget are clearly defined, captured and developed throughout each phase. FP&C project managers monitor project budget through the use of the Project Management Facilities Application. This program is linked to University’s financial accounting systems for tracking actual costs and commitments.

A sample budget with budget line definitions is provided on the following page.

TASKS	RESOURCES
DELIVERABLES	

15. FUNDING & BUDGET MANAGEMENT CONTINUED

Sample Budget outline typical contingency range at each phase

15. FUNDING & BUDGET MANAGEMENT CONTINUED

Budget Development

Identification Phase - the Rough Order-of-Magnitude (ROM) budget generated in the Identification phase is based on historical costs per square foot, thus very little project specific detail is involved in the development of this budget. By themselves placeholders contain high levels of uncertainty, so UNK Facilities Planners perform project cost risk analyses to address uncertainties.

Feasibility Phase - At the end of the Feasibility phase, the risk-adjusted feasibility estimate is compared with the ROM estimate. If the feasibility estimate exceeds the ROM, either the scope must be revised to reduce the estimate, or a request must be made to proceed using a higher budget, or some combination thereof. Increases must be justified and approved.

Programming and Schematic Design Phases - ☒ GP #5 Both the program statement and the schematic design scope of work and schedule must be supported by adequate budgets. Budget analysis work during these phases determine if risk-adjusted estimates from previous phases exceed the current phase estimates, and again, increases in cost must be justified and approved. The Board of Regents approve the budget at the end of both Programming and Schematic design.

Design Development and Construction Document Phases - Budgets and cost estimates continue to be analyzed through the end of design. If the cost estimates during these phases result in a project cost greater than the project budget established during schematic design, then the project will need to be redesigned. Bids or quotes are solicited from contractors at the end of the Design phase, and, again, redesign may be required if the bids result in a project cost that exceeds the budget.

Construction Phase - Once in Construction the construction cost is fixed by contract and can only be adjusted by the change order process. See the Change Management section for information on change orders.

Non-construction Budget Lines – budget lines for furniture, equipment and other non-construction items are managed in a similar way. Design of furniture and equipment must be accomplished within the established budget lines and increases must be justified and approved.

Special Cost Considerations

Contingencies, allowances, unit prices, and alternates are tools used within the project budget and within contracts to manage costs.

Contingencies

☒ GP # 4 ☒ AP#21 Project contingencies are intended to cover unforeseen conditions and errors and omissions, not to expand the scope of the program statement. Contingencies in the project budget represent the degree of risk within the estimate. Each budget carries a Project Contingency which represents risks in the level of detail, or completeness of the design, the degree of unknown site conditions and other potential uncertainties. Contingencies are not intended to pay for scope or program changes requested by the User Group. Use of contingencies must be approved by the project team.

Alternates

An Alternate is an identified optional scope of work that can be excluded from the project, if necessary, in the event the cost of the work is over the approved budget. Identifying a limited number of alternates on a project with a very tight budget is an effective method for managing risk. Alternates can be identified at any point in the planning or design phases. Priorities should be established if multiple competing alternates are identified.

15. FUNDING & BUDGET MANAGEMENT CONTINUED

Unit Prices

Typically used within a construction contract - Unit Prices are cost proposals given by the contractor for discrete scopes of work where the total quantity cannot be estimated with certainty. Unit prices should be justifiable, with a clearly identified scope of work and description of how payment will be applied. The Project Manager should carry enough contingency in the project budget to cover the risk associated with using the unit price.

Allowances

Budget Allowances are similar to contingencies in that they are intended to reserve funds for events that is not clearly defined and are thus more prevalent in the earlier design phases when the project uncertainties are greatest. Unlike contingencies, Allowances are typically identifiable single items or issues and are carried in budgets as individual line items. Allowances specified in the construction documents should be justifiable, with a clearly identified scope of work and description of how payment will be applied.

Government Funding Compliance

The University of Nebraska - Kearney receives a number of governmental grants each year that provide the funds necessary to do specific research, experimentation and pay for laboratory and office facilities. The Office of Research oversees the Office of Sponsored Programs (OSP) department which ensures compliance with Government cost principles concerning projects. The Facilities Planner and Project Manager will work with the Project Sponsor and OSP to ensure project expenses comply with Government regulations.

Service Center

FP&C is a Service Center, which is an organizational unit that provides a specific service or product, or a group of services or products, to users principally within the University of Nebraska - Kearney academic and administrative community. The _____ has primary responsibility for monitoring compliance with University service center policies. Service Centers recover the cost of their operations through rate-basis charges to their customers. Service Centers operate on an annual fiscal year break-even basis with rates based on budgeted projections of operating expenses (such as salaries, benefits, equipment, depreciation, materials, and supplies) and projected levels of activity or demand provided during the budget period

.

15. Vendor Selection & Purchase Order Management

Purchasing Policies - FP&C Planners, Project Managers and Inspectors understand and comply with the Board of Regents and UNK purchasing policy, code of ethics, and terms of purchase including the following key points:

- Accepting gifts from vendors is not allowed – accepting gifts from vendors and potential vendors creates a conflict of interest, and is not allowed.
- Pyramiding is not allowed: The process of authorizing multiple small commitments to a single vendor to avoid a Purchasing Policy dollar threshold and competitive bidding is called pyramiding, and is not allowed.

Procurement - procurement is the process of committing State funds for goods and services including professional services, construction labor, materials and equipments, and other non-construction related goods and services.

Procuring Design Services and Construction Work - see the following section on Contracting for information on selecting consultants for design services and contractors. Public bid proposals requesting a bid price are always received at the Purchasing department.

Procuring Non-construction Products & Services - notify the Purchasing representative of all major potential non-construction project purchases at the beginning of design. Non-construction vendor purchases include fixed, movable, or special and technical equipment, signage, or other items which are not included in the Design or General Construction Contract.

Committing University Funds - commitments on the Project Budget are processed by the Project Manager. Approval of a purchase order is required prior to authorizing any vendor to begin work, provide services or place orders for goods. Except in the case of an emergency or upon documented administrative approval, no verbal commitments may be expressed or implied.

Delivery of Purchases - all purchases using University funds must be delivered directly to the requesting department. No purchases shall be delivered to addresses other than the University.

Insurance - insurance is required for all construction and design work and any other vendors working on campus. UNK Purchasing will monitor insurance for pre-selected, term-limited, “unit price” construction contracts; Facilities Planning & Construction monitors insurance for construction and design contracts.

Bonds - a performance and payment bond is required for construction work \$15,000 and above. Purchasing will advise on the need to require a bond for the installation of furniture or equipment costing \$100,000 or more.

Purchasing Involvement and Dollar Limits

Updated to Regents Policy - effective July 1, 2006 and Director of Purchasing Review October 20, 2008

Personal Property and/or Services - Formal Board of Regents action for purchases of personal property and/or services is not required except in those cases when the purchase price exceeds \$400,000

Purchases Under \$5,000 - Any purchase under \$5,000 requires only one quote.

TASKS

DELIVERABLES

RESOURCES

16. Vendor Selection & Purchase Orders Continued

Purchases \$5,000 - \$24,999

Business and Finance strongly encourages the solicitation and securing of competitive pricing from three (3) prospective bidders, at a minimum, on transactions greater than \$5,000 but less than \$25,000. Purchasing will provide assistance upon request by)1 furnishing a template for securing informal quotes, 2) providing prospective vendor lists (if requested), and 3) providing technical advice on unusual or unique bid/quote situations. All quotes and back-up documents should be attached to the requisition for processing by Business Operations. For those transactions greater than \$5,000 but less than \$25,000, all vendor/supplier challenges or allegations of unfair treatment during the informal bid process conducted by a requesting unit will be sent to the requesting unit head for a response.

Purchases \$25,000 - \$149,999

Purchases greater than \$25,000 and less than \$75,000 will also be processed on a competitive basis, although in an informal manner – by verbal or written requests for quotations. The purchasing solicitations must involve UNK's Purchasing Department to administer/manage the informal verbal or written request for quotation process.

Purchases \$150,000 and Above

Except as otherwise provided in the purchasing policy, any purchase committing the University to an expenditure of \$75,000 or more shall be made to the lowest responsible bidder, taking into consideration the best interests of the University. A formal sealed bid process is used in securing pricing using an "Invitation to Bid" or "Request for Proposal." A minimum of fifteen (15) calendar days shall elapse between the time formal bids are advertised or called for, and the time of their opening; however, the Vice Chancellor for Business and Finance may shorten this time period in cases of an emergency.

Single or Sole-Source Purchase - In the rare event that competitive pricing cannot be solicited for a purchase \$25,000 and over, a written justification for a sole source purchase signed by the unit head, and approved by Purchasing and the Vice Chancellor for Business and Finance is required.

Coordination of Furniture & Equipment Purchases

It is important for Facilities Coordinators working directly with Purchasing for furniture and equipment purchases to maintain close coordination with the Project Manager to assure coordination of funds available and equipment utility needs. The Project Manager will also assist with coordinating the plan review for fixed or assembled systems furniture or other fixed equipment with the Building Code Official for exiting, accessibility, and other related Facilities issues. When installing fixed equipment or furniture, it is important to maintain required access to building controls, electrical panels and other equipment needing maintenance or access.

Flooring and Carpet Purchases

Flooring and carpeting purchases that cost less than \$100,000 which would fall under the pre-selected, term-limited, "Unit Price" contracts guidelines, must be procured as follows:

For projects that cost \$25,000 or less: Vendors who participated in the pre-selected, term-limited, contracts process and were placed on the approved Vendor list must be given first opportunity to do the job.

For projects that cost between \$25,000 and \$100,000: A minimum of two quotes must be received from Vendors on UNK's "Unit Price" (Flooring / Carpet) approved vendor list. In the event only one or no vendors from the approved vendor list can furnish a quote, additional quotes must be solicited from vendors not on the approved unit price vendor list. This quote process must be conducted by UNK Purchasing Department. Vendors who participated in the Unit Price Bid process and were placed on the approved Vendor list must be given first opportunity to do the job.

For projects that cost \$150,000 and over: Must be a formal sealed bid process executed through the UNK Purchasing Department and may require a bond.

16. Contract Selection, Contract Closeout & Vendor Evaluations

Construction Delivery Method - Before selecting a design consultant or a construction contractor, the Project Team must decide which type of construction delivery method is best suited for the project. The methods used at the University of Nebraska are described in this section. The following chart also outlines the various construction and consulting contracts and when the consulting design firm is contracted directly by the University and when the consultant is part of a design – build partnership:

Construction Delivery Method	Consultant Contract Types Based on Fee Range	Construction Contract Types
Conventional Design – Bid – Build Process	Consultant Contract under \$40,000	Unit Price contracts for work under \$250,000
	NU Four Year Consultant Contract - \$40k - \$400k Licensed Professional Services Contract - \$400k and over	Standard Bid contracts for work \$250,000 and above
Design-Build Selection Process	Consulting design team is a part of the Design-Build firm	Design Build Selection Process & Contract
Construction Manager Selection Process	Licensed Professional Services Contract - \$400k and over	CM-GMP Selection Process & Contract

Consultant Contracts

Depending on the size and complexity of the project, contracts for consulting services generally provide for design services including schematic design, design development, construction documentation, and documentation of as-built record drawings. The University of Nebraska – Kearney FP&C department provides construction inspection services and management through construction, therefore the consultant's role by contract during construction administration is limited. Consultant selection is controlled by the Nebraska Consultants' Competitive Negotiation Act, *Neb. Rev. Stat.* §§ 81-1701 through 81-1721.

Conventional Design – Bid – Build Process

In this delivery method a General Contractor (GC) is procured by competitively bidding on a set of construction documents and is placed under fixed sum contract, as the low responsible bidder, to build the facility exactly as shown by the construction documents. Changes for unforeseen conditions, construction document errors or omissions, or scope or schedule changes may result in changes in cost or time to the GC contract. The GC method is effective in obtaining the lowest market price. In this process, the GC is not involved during the design process. The GC is selected through either the pre-selected, term-limited, list of "unit price" construction contracts for work under \$250,000 or through the public bid process for contracts \$250,000 and over.

See Volume Two for detailed procedures for public bidding and selection of unit price vendors.

Tasks	Resources
Deliverables	Regents Policy 6.3
	Nebraska Consultants' Competitive Negotiation Act, <i>Neb. Rev. Stat.</i> §§ 81-1701 through 81-1721

Section 16 Continued

Design-Build Process

In the design-build (D-B) method, a construction contractor partners with design professionals to complete both the design and construction for a fixed price. The fixed price is based on program requirements and performance specifications. The D-B contractor is selected in accordance with Board of Regents policy.

The D-B approach best suits a project where schedule and cost are the key objectives and the program requirements are not overly complex. Changes to the scope of work or schedule after the Planning phase may result in a change in cost or time from the Design-Build firm.

Construction Manager with a Guaranteed Maximum Price (CM-GMP)

An Agency Construction Management (CM) is selected early in the process and acts as a construction consultant throughout the project – estimating costs, advising on construct ability and materials, etc. While project benefits by having a party on the team that has insight and experience with construction, the CM has no contractual responsibility to make any of their advice come true – they remain in the role of a consultant throughout the project.

CM-GMP At-Risk Construction Management

A Construction Manager with Guaranteed Maximum Price (CM-GMP) is selected early in the design process and placed under contract to act as a construction consultant – and as the contractor to actually build the facility – at a guaranteed maximum price when the design is 75% complete. Release of early packages is available to expedite the project, projects are managed by a team of professionals under the pressure of a guaranteed maximum price, and the project received the benefit of competitive bids on contract work under the responsibility of the CM-GMP.

17. Invoices Review & Approval

Overview

It is FP&C's policy to pay all invoices within the terms of the contract. In order to facilitate timely processing of invoices and payment applications, FMP maintains Business Operations staff who code and review pay applications for accounting accuracy and coordination, and the FP&C Project Team Coordinators who provide support to the Project Manager and to report and advise on the receipt of required deliverables.

Point of Delivery

Invoices or payment applications must be mailed or hand-delivered to the attention of FP&C's Business Operations department at 2507 19th Ave. All invoices and payment applications are date-stamped upon receipt and logged for tracking purposed. Business Operations staff will initial their review on the invoice prior to routing the invoice to the Project Team Coordinator. The detailed procedure for invoice review and processing is located in Volume 2.

Supporting Documentation

The invoices are first routed to the FP&C Project Team Coordinator supporting the project. The Project Team Coordinator reviews the invoice package for clerical accuracy, completeness and compliance with the contract (e.g. that all supporting documentation as described in Volume 2 is included). Once the Project Team Coordinator completes the review and follows up on any irregularities, the invoice is forwarded to the Project Manager for review and approval, with any recommendations or comments.

Approval

The Project Manager has sole responsibility for coordinating invoice reviews and reviews the invoice or payment application in accordance with completed work or services and follows up with the vendor on any discrepancies. Once discrepancies are resolved, the Project Manager approves the invoice by signing and dating the approval stamp and routes the invoice to the Administrative Manager for a reasonableness review.

Reasonableness Review

The Administrative Manager provides a reasonableness review of all project invoices and, as required, will provide review comments back to the Project Manager. The Administrative Manager will initial and date the invoice and return the invoice to Business Operation, invoices with review comments will be routed back to the Project Manager.

Payment

Business Operations logs the Project Manager's approval and routes the approved invoice to the Central Accounting Office for payment. Large contract vendors are paid electronically.

TASKS

RESOURCES

DELIVERABLES

Invoice Aging

FMP Business Operation's Account Payable Supervisor produces a monthly invoice aging report sorted by Project Manager. The Invoice Aging Report includes a breakdown of outstanding invoices by Project Manager, invoice receipt date, vendor name etc.

Each Project Manager receives a copy of the Invoice Aging Report related to their projects. Invoice aging status is reviewed at the monthly project review meeting as described in the next Control section. Included in this review the Project Manager will provide a summary of the reason the invoice has not been paid or is on hold, and the action being taken to get the vendor paid.

A summary of all aged invoices is routed to FP&C's Director, Director of Business Operations and the Assistant Vice Chancellor for Facilities Management & Planning.

18. Change Management

The Facilities Planner or Project Manager in charge will review all proposed changes to scope of work, schedule or budget or contemplated commitment changes with the Facility Coordinator and will make all required notifications and obtain all required approvals from applicable approval authorities prior to initiating a request for proposal from a vendor.

Any change to project scope, schedule or budget from previously established and approved objectives must be justified, documented and approved. Project objectives established during planning and confirmed and fixed in schematic design are generally costly and create additional work and delays to the project after schematic design.

Any change to a vendor commitment, whether the change is caused by an unforeseen condition, a vendor error or omission, or is owner-initiated, will be justified, documented and approved prior to acting on the change. Emergency changes, under an identified dollar threshold, will be communicated to the project team within 24 hours.

TASKS	RESOURCES
DELIVERABLES	

19. Recordkeeping

Projects recordkeeping includes the administrative support and management of all project documentation from creation or receipt to project closeout and archive. Permanent project records are maintained for the life of the building until building demolition.

TASKS

- ☐ Project Setup
- ☐ Project Hand-off from Facilities Planning to Architectural & Engineering Services
- ☐ Document Creation, Distribution, Logging & Filing
- ☐ Document reporting
- ☐ Project Closeout

DELIVERABLES

- ☐ Active Project Files
- ☐ Archive Project File & Permanent Building Record

RESOURCES

Univeristy of Nebraska – Kearney

[Records Retention Policy](#)

[University of Nebraska Records Retention Schedules](#)

Project Setup Procedure

Document Filing, Distribution & Reporting Procedure

Project Closeout Procedure

Appendix 1

Index

R.P. 6.2.1.4.h. - Professional Service. Professional service shall mean and include (a) any type of service which requires a license or other legal authorization as a condition precedent to the rendering of the service, or (b) any other type of service commonly recognized as a professional service, including, but not limited to, accounting and auditing, actuarial, legal, personnel, financial, computing, management, marketing, educational program planning or evaluation, facilities planning or evaluation, insurance and risk management, or travel agency services.

ADA: Americans with Disabilities Act, an act of Congress confirming the civil rights of people with disabilities, including accessibility to buildings and programs open to the public.

AIA: American Institute of Architects, a professional association that has, among other things, developed the most widely used standards for construction contracts and associated documents.

AVC: Assistant Vice Chancellor.

Benchmarking: The process of comparing Planning and Design phase cost estimates or contract prices with adjusted unit costs of comparable projects to serve as a check of a project's scope and budget.

CAD: Computer-Aided Drafting, software such as AutoCAD that is used to assist in the design of buildings and facilities.

Capital Budget: The section of the ten-year capital plan that covers the upcoming fiscal year, itemizing major projects and creating allocations for groups of mid-size and small projects, that is approved by the Board of Regents.

Capital Plan, Ten-Year: A list of all capital needs that are anticipated over the next decade.

CD: Construction Documents, and/or the third of three sub-phases of the Design phase.

CM: Construction Manager, a contracting firm selected to provide advice during design and then construct the project based on fully completed drawings and specifications prepared by a separately contracted consultant.

CO: Certificate of Occupancy, issued by the UNK Building Official to permit occupancy of the facility when all or a portion of the construction work is complete. A certificate for an identified portion of the work is called a Temporary Certification of Occupancy.

Constructability: The degree of ease or difficulty with which a detail or design can be constructed using standard materials and techniques.

CSI: Construction Specifications Institute, a professional association that has developed the most widely used standards for specification formats; these formats are also widely used in construction cost estimating.

D-B: Design-Build, a delivery method in which a contractor partners with design professionals to complete both design and construction for a fixed price, based on a program description and performance specification.

DD: Design Development, the second of three sub-phases of the Design phase.

FM&P – Facilities Management & Planning

FP&C – Facilities Planning & Construction, the unit responsible for delivering capital projects.

Funding Authority: The individual responsible for administering a funding source and approving project funding.

GC: General Contractor, a contracting firm procured to construct a project based on fully completed drawings and specifications prepared by a consultant contracted by the University.

GMP: Guaranteed Maximum Price, a figure, based on competitive subcontract bids, that can be provided by a CM in which the firm guarantees that the cost of the work will not exceed a specified amount.

HVAC: Heating, ventilating, and air conditioning.

Major Projects: The largest and most complex capital projects, usually with budgets above \$2 million.

Massing: The spatial forms created by the major volumes that make up a building, and the relationship of those forms to the building's appearance, proportioning, internal organization, and context.

MEP: Mechanical, electrical, and plumbing.

Mid-Size Projects: Capital projects of moderate size and complexity, usually having budgets above \$250,000 up to \$2 million.

Placeholder: An estimate developed prior to any study of the project, based on unit costs derived from databases of comparable projects completed at UNK and at peer institutions.

PM: Project Manager, a professional assigned by FP&C to manage a project from the beginning of design through project closeout and to coordinate the project, maintain the schedule and budget, direct the services performed by architects and contractors, resolve conflicts, and maintain proper communication among all stakeholders and team members.

PRB: Project Review Board, the review authority for all major projects.

Project Budget: Sum of money allocated for a project, including the cost of the contractor plus other costs such as design consultant fees, FP&C management fees, furnishings and equipment, testing, and project contingency.

Punch list: A list of minor deficiencies remaining when construction is determined to be substantially complete and the area or work is returned back to the control of the University.

RFP: Request for Proposal, a document requesting a proposal for services and associated fees from the respondent that will assist in narrowing down a group of potential service providers to a short list of finalists who may then be invited to interviews.

RFQ: Request for Qualifications, a document requesting a description of the respondent's qualifications that will assist in narrowing down a large group of potential service providers to a smaller list from whom proposals will be solicited via an RFP.

SD: Schematic Design, the first of three sub-phases of the Design phase.

Small Projects: The smallest and least complex capital projects, with budgets under \$250,000.

Stakeholders: All UNK entities having a significant stake in the project, including the requesting department, funding authority, and FMP. Other stakeholders may be identified for specific project needs.

Unifomat: A classification standard for building systems that arranges elements of cost estimates by building function.

VE: Value Engineering -a process of reviewing all aspects of a design to re-examine all

assumptions and minimize the life-cycle costs of the project.

Construction project: Construction is defined as new buildings, additions, or alterations to an existing building which add new components or systems that previously did not exist. This includes new walls, doors, windows, ceilings, electrical, lighting, HVAC, or plumbing systems or components. Demolition or removal of existing systems or components is also considered as construction. (Source - Unit Price Contracts 10/2006-9/2008, Section 01010 Summary of Work, 1.2.C.) A construction project is defined as any new building, building renovation, building addition, building remodel, major building repair, exterior site work, or infrastructure project.

Remodel project : See the definition for Construction project

Repair project: See the definition for Maintenance project . For major building repair, see the definition for Construction project

Maintenance project: Maintenance is defined as the repair or replacement of existing building systems. However if an architect or engineer is required to specify and/or design the repair or replacement of these systems then an FPC Project Manager will be assigned and a project will be set up in FPC. (Source Unit Price Contracts 10/2006-9/2008, Section 01010 Summary of Work, 1.2.C.). Maintenance projects under \$15,000 that involve only the replacement or repair of components of existing facilities and that do not require design and specification by architects or engineers may be directed to the Facilities Service Desk at 865-1800.

Construction	Construction is the work to construction new buildings, additions, or modifications to an existing building, exterior site, or infrastructure which adds new components or systems that previously did not exist, or modify, remove or demolish existing components. The components include, but are not limited to, walls, doors and door hardware, ceilings, electrical lighting and wiring requiring new circuits (minor work may be performed by licensed UNK staff electricians), HVAC, plumbing fire suppression and alarms
--------------	---

	systems, etc. (7/29/03 H. Parker email and ARDC Letter 8/26/98)		
		Notice to Proceed/Start Construction	the life of the project. Date official Notice to Proceed is issued to contractor which authorizes the contractor to begin work.
		O&M and Warranties Received	Date at which Operations & Maintenance (O&M) manuals, warranties, training, and all specified stock materials, tools and supplies are received from the contractor.
		PRB Project Assigned	Board of Regents - Project Review Board Date AES Manager assigns a project manager and forwards project for setup
Agenda Report for Design to BOR 309	"Report only" agenda item for design will be submitted to this BOR meeting date Nebraska State Agency - Task Force for Building Renewal "309 Task Force"	Project Closeout:	Date at which FPC closes the project. Project issues after close out appear on "Building Issues Log"
"A" Estimate 11-Month Warranty Review Date	Planning Estimate from FPC Planner Date set for the 11-month warranty review at which the 11-Month warranty walk-through of the work occurs.	Project Requested	(Building Name)(Room Numbers)(Description "Renovation," "Replacement," "Addition," "Installation") Date department sponsor requests that FPC proceed with project setup
Design Report to the Board of Regents	"Report only" agenda item for design will be submitted to this BOR meeting date	Project Review Board (PRB) Design Review	Date when the PRB will review either SD or DD documents. SD is generally preferred.
		PS Punch List	Program Statement from Planning List of construction work that needs to be corrected by the contractor, or otherwise addressed and resolved prior to final completion. A copy of the completed punch list is attached to the Certificate of Substantial Completion.
Bid/Quote/GMP Date	Date for receipt of bid, Unit Price quote or CM-GMP guaranteed maximum price (GMP) document.	Record Drawings Received	Date at which record drawings are received from the consultants.
BOR Approves Consultant	Board of Regents Date the BOR approves the agenda item. Agenda item is prepared for consultant selections contracts and sent to BOR for approval (not 4-year or short form contracts)	Schematic Design (SD) Documents Due	Date that schematic design documents are due from the consultant for review by UNK
BOR Approves Program Statement Building Issues Log	Planning function Log of building issues maintained by the Lead Inspector of building issues that occur after warranty and/or project close out.	Substantial Completion	Date at which the work is ready for it's intended use, an occupancy certificate has been issued, and the work is ready for commissioning by UNK staff.
Construction Documents Due	Date that final, complete construction documents (signed and sealed plans and specifications) are due to be received from the consultant ready to send to printer. Or date internal documents are ready to send out for quotes.	Warranty Log	Log of warranty items maintained after final completion of the construction work through the end of the warranty period. Log is tracked and maintained until all warranty items are corrected.
Design Development Document (DD) Due	Date that design development documents are due from the consultant for review by UNK	Punch List Log	Log of punch list items maintained from substantial completion through final completion of the construction work.
Final Completion	Date at which all construction work is complete in accordance with the contract documents, including all punch list and change order work.	Assigned Date	Date that Manager assigns PM and forwards for project setup Notice to proceed date for design - AE executed agreement and returned to AE with notice to proceed. AE schedule needed. Or when the internal designer starts the design work.
IANR	Institute of Agriculture & Natural Resources	Start Design/Kick-off meeting	
Initial Contact Issues Log	Date department sponsor contacts FPC Log of project issues maintained through	CD Final Review Set "95% Review set"	CD's are 100% complete for review by the University.

Construction documents due	Date that the documents are 100% complete and ready to go to the printer	LEED-NC	Professionals and to building structures. LEED-New Construction
Quote/bid date	Date that quote or bid is received	NPDES	National Pollutant Discharge Elimination System
NTP "Start of Construction"	Notice to proceed for construction - construction agreement sent to contractor	PDL	Price Determined Later form
Substantial completion	Work is complete sufficiently for it's intended purposes. Certificate sent out at this date, occupancy is approved, permit is pulled and filed	PDQ	Price Declaration Quotation
	All work, including punch list, included in the contract is complete. In the ideal world - Move in can begin after final completion. 100% payment application can be made - all contract commitments are complete	PA Number	FP&C Planning Project Number
Final Completion "Complete construction phase"		PIN	Project Initiation Notice
		PRB	Project Review Board
		Programming Project Budget/Accounting	
		PTC	Project Team Coordinator - Administrative support to Project Management Teams. Under the AES Management Unit of the FPC Division of the FMP Department
Close out ASI	Date that all final documents are accounted for, finance is complete - all budget items expended. Architects Supplemental Instruction - used by Architect to provide additional information not found in specs and may be done in response to a query from Contractor. This is used for minor changes which do not affect contract sum or time.	RFI	
		RFP	
		SAT	Request for information -
		Schedule and schedule dates	
AVCAA		VAV	Request for Proposal Senior Administrative Team - the VCs who report directly to the Chancellor A list of tasks with associated start dates, durations and completion dates. Project schedules are created by Project Managers. Vendor Schedules are created by vendors. Schedule dates may be either planning dates or actual dates, which in some cases may differ. A contract completion date may show three different schedule dates, planned, contractual and actual Variable Air Volume
CA	Central Administration		
CCPE	Coordinating Commission for Post-secondary Education (we never contact. They deal with Becky Koller only.		
CM	Construction Manager (contractor as a construction manager)		
CO	Change Order - the instrument used to change the scope and/or price of a Contract or Purchase Order		
Construction Orientation Conference	A pre-construction meeting.	VAVRHT	
CPR	Change Proposal Request	VCBF	Vice Chancellor for Business and Finance
EHS	Environmental Health and Safety	Basis for Design	Guiding document for defining the scope of the project and project requirements.
EMCS	Energy Management Control System		
FMP	Facilities Management & Planning - the big umbrella under which we work A&E svcs & FPC are part of FMP		
FPC	Facilities Planning and Construction.		
GMP	Guaranteed Maximum Price		
IANR	Institute of Agricultural & Natural Resources		
LEED	Leadership in Energy and Environmental Design - a certification done by the U.S. Green Building Council to Building		