CAPITAL PROJECT ORIENTATION

October/November 2019
Capital Project Orientation

Is this legal?

Can we reject a bid?

How do I advertise?

What form do I use?

What if nobody bids?
Capital Improvement Definition

“Capital improvement – A term that includes real property acquisition, new construction or rehabilitation of existing facilities, and repairs and renovations over one hundred thousand dollars ($100,000) in value.”

G.S. 143C-1-1. (d) (5)
Capital Improvement Project Development

University Owner
- Need, scope, schedule, budget
- Priority
- Chancellor, Administration, Board of Trustees

Board of Governors
- UNC System priorities
- Consolidated budget request
- Authorization of non-general fund projects and funding plans
- Allocation of repairs and renovations funding

Governor/Legislature
- Priorities
- Funding
- Debt authorization
- Authorization of general fund/state debt projects
Project Development
University Owner Responsibilities

- Defined scope, budget, and schedule (CI-1, OC-25)
- Authorization of projects <$300,000
- Chancellor/Administration
  - Prioritization
  - Resource allocation
- Trustees
  - Authorization of projects $300,000 – $750,000
  - Approve designer, CMR, ESCO selections
  - Approve building sites, plans, and specifications
  - Master plans (five-year cycle)
  - Final project acceptance

Reference The Code and UNC Policy Manual 100.1.99, 600.1.1, 600.1.1.1[G]
Project Development
Board of Governors Responsibilities

- UNC System priorities/consolidated budget
- Authorization of non-general fund projects >$750,000
- Authorization of debt for university projects and timing of debt issuance
- Repairs and renovations funding allocations and projects lists
- Delegated administration of projects <$2M

Project Development
Governor/Legislature Responsibilities

- Authorization and funding of general fund projects
- Authorization of repairs and renovations funding
- Authorization of debt issuance by the university
- Authorization of maintenance and operating funding
Capital Improvement Project Process Overview

University Owner
- Need
- Definition

Project
- Scope
- Schedule
- Budget

Authorized/Funded
- General fund
- Non-general fund
- Financing strategy

Project Execution Strategy
- University project
- Phasing
- Construction delivery method
- Ground lease

Design

Construction
Project Development

- Project
  - Scope
    - Space Available / Needed
    - Purpose
    - Proximity
    - Quality
  - Budget
    - Estimate (OC-25)
    - Funding Source/Amount/ Financing Strategy
  - Schedule
    - Deadline(s)
    - Phasing
Project Development

- SCOPE
  - Need
  - Scale/magnitude
  - Existing or new
  - Proximity
  - Quality
  - Special requirements
  - Programming
  - Final description
Project Development

BUDGET

- Size
- Site conditions – interior and/or exterior
- Characteristics – quality/complexity
- Proximity
- Quality
- Special requirements
- Construction characteristics affecting cost – speed, limited access, phasing over an extended time period, liquidated damages
- Cost estimate (OC-25)
Project Development

- **SCHEDULE**
  - Target construction delivery
  - Absolute deadlines
  - Building commissioning
  - AV/IT, move-in
  - Alternative plans, being prepared
Capital Improvement Project Process Overview

- University Owner
  - Need
  - Definition

- Project
  - Scope
  - Schedule
  - Budget

- Authorized/Funded
  - General fund
  - Non-general fund
  - Financing strategy

- Project Execution Strategy
  - University project
  - Phasing
  - Construction delivery method
  - Ground lease

- Design

- Construction
Biennial Budget Cycle

Biennial Budget Process (2021-2023)

Budget Bill approved and signed into law
Short session adjustments (May 2022)

Governor’s Budget Submission
Legislative Budget Development

6-year capital plans (2020)
Appropriations R&R
Non-general Fund Maintenance & Operating

Board of Governors Prioritization/Approval
Repairs and Renovations (R&R) Funding Process (2021-2023)

Institutions submit specific projects list commensurate with funding

6-year plan 2021-2023 budget

Board of Governors allocate authorized funding across institutions

2021-2022 funding authorized
Non-General Fund (Debt) Budget Cycles

Non-general fund (debt) funding process (2021-2023)

Institutions execute

6-year plan 2021-2023 budget

Board of Governor’s authorizes project-specific debt issuance

2021-2022 project-specific debt authorized by legislation
Project Execution
Other Strategies

- Public Private Partnerships
  - Documentation of programming requirements
  - Competitive, public, qualifications-based selection process
  - Developer provides at least 50% of the financing for the total cost

- “Privatized” Projects

Reference G.S. 143-128.1C
Foundation Projects:

- Ground or space lease to a foundation.
- Foundation holds, administers, and manages any/all contracts for the project, as well as necessary insurance specific to the relevant lease.
- University employees are not involved in the project execution (design negotiations, construction bidding, contract administration, etc.) but may review and provide feedback to protect the university’s interests.
- Funding, alone, from an institution’s foundation does not define a “Foundation” project.
Capital Improvement Project Process Overview

University Owner
- Need
- Definition

Project
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Project Execution Strategy
- University project
- Phasing
- Construction delivery method
- Ground lease

Design

Construction
Project Execution
Do I need a designer?

- YES, when the project involves:
  - $100,000 or more for the repair of public buildings affecting life safety systems
  - $135,000 or more for the repair of public buildings where repair includes major structural change in framing or foundation support systems
  - $135,000 or more for construction of or additions to public buildings or state-owned and operated utilities

Reference G.S. 133-1.1
Project Execution
Do I need a designer?

- NO, when the project involves:
  - Up to $500,000 for the repair of public buildings where repair does NOT include major structural change in framing or foundation support systems (or other “Yes” items already noted)
  - Barns and agricultural buildings not within the limits of a city or incorporated area (directed more toward individuals, not universities)
  - Pre-engineered garages, sheds, and workshops up to 5,000 square feet used exclusively by state employees for purposes related to their employment
  - Temporary buildings used exclusively for construction purposes, not exceeding 20 feet in any direction and not used for living quarters

Reference: G.S. 133-1.1
Project Execution
Can our staff do the work?

YES, when the project involves construction or repair work:

- Using labor on the *permanent* payroll of the university *and* either the total cost of the project including all direct and indirect costs of labor, services, materials, supplies, and equipment, does not exceed $200,000 *or* the total cost of labor on the project does not exceed $100,000

- “Construction or repair work undertaken pursuant to this section shall not be divided for the purposes of evading the provisions of this Article.”

- This is known as “force account.”

NO, otherwise

*Reference G.S. 143-135*
Project Execution
Do we have qualified staff?

- Electrical licensing requirements do not apply “to the installation, construction, maintenance or repair of electrical wiring, devices, appliances or equipment by State institutions and private educational institutions which maintain a private electrical department...”

- Plumbing, heating, licensing required for persons “...who desire to engage in the installation, repair, or replacement of plumbing, heating group number one, heating group number two, or heating group number three solely as an employee of a State or local government agency.”

- “No work can be performed by the State or local government agency in reliance upon the technician license when the licensee is not present.”

Reference G.S. 87-43.1, G.S. 84-21
FORCE ACCOUNT EXAMPLES
Project Execution

Do I need a licensed general contractor?

Yes, for:

- “...the construction of any building, highway, public utilities, grading or any improvement or structure where the cost of the undertaking is thirty thousand dollars ($30,000) or more....”

- “...erection of a labeled manufactured modular building meeting the North Carolina State Building Code...”

Reference G.S. 87-1. (a)
Project Execution
Do I need a licensed general contractor?

- NO, for...
  
  ● “Persons, firms, or corporations furnishing or erecting industrial equipment, power plan equipment, radial brick chimneys, and monuments.”
  
  ● Owner-occupied/owner-constructed or altered building. Must comply with permitting and inspections requirements. Must occupy for at least 12 months after project completion.
  
  ● Farmer owned, constructed/ altered and for his/her own use in the business of farming.

Reference G.S. 87-1. (b)
## Project Execution
### Construction Delivery Method

<table>
<thead>
<tr>
<th>Delivery Method</th>
<th>Details</th>
</tr>
</thead>
</table>
| Single-prime/ Multi-prime     | - Open bidding, lowest responsible, responsive bidder  
- Appropriate for a broad range of project sizes  
- Prequalifying may limit competitive pool  
- Reference G.S. 143-128      |
| (“separate prime”)            |                                                                                                   |
| CM at Risk                    | - Qualifications-based selection process  
- Projects generally $10M or more, but may be effective for somewhat smaller, complex projects  
- Subcontractor work is bid, prequalification of subs  
- Guaranteed maximum price (GMP), Preliminary GMP  
- Early site packages  
- Reference G.S. 143-128, 128.1 |
| Design-Build/ Bridging        | - Qualifications-based selection process  
- Adequate and thorough definition of project requirements  
- Experienced university staff to manage and oversee this project type  
- Written criteria including advantages and disadvantages for use of this delivery method  
- Reference G.S. 143-128, 128.1A, and B |
## Project Execution

### Construction Delivery Method

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<thead>
<tr>
<th>Single-prime/Multi-prime (&quot;separate prime&quot;)</th>
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<td></td>
<td>Reference G.S. 143-128</td>
</tr>
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</table>
Project Execution

Construction Delivery Method

CM at Risk

- Qualifications-based selection process
- Projects generally $10M or more, but may be effective for somewhat smaller, complex projects
- Engaged in design process
- Subcontractor work is bid, prequalification of subs
- Improved HUB participation
- Guaranteed maximum price (GMP), Preliminary GMP
- Early site packages
- Reference G.S. 143-128, 128.1
Project Execution
Construction Delivery Method

Design-Build/Bridging

- Qualifications-based selection process
- Adequate and thorough definition of project requirements
- Experienced university staff to manage and oversee this project type
- Written criteria including advantages and disadvantages for use of this delivery method
- Reference G.S. 143-128, 128.1A, and B
Capital Improvement Project Process Overview

University Owner
- Need
- Definition

Project
- Scope
- Schedule
- Budget

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- General fund
- Non-general fund
- Financing strategy

Project Execution Strategy
- University project
- Phasing
- Construction delivery method
- Ground lease

Design

Construction
Project Execution
Designer Selection

< $500,000 Total Project Cost
Open-end

$500,000 - $2M Total Project Cost
Direct Select

>$2M Total Project Cost
Project Execution
Designer Selection

- Open-end
- $500,000 to $2M
- >$2M
  
  *Competitive, public, qualifications-based selection process*

- Direct Select
  
  *Qualifications-based, but not public, competitive process*

Reference G.S. 143 Article 3D

*NC Administrative Code Title 01, Subchapter 30D, UNC Design and Construction Guidelines, Att. 3*
Project Execution

Designer Selection – Open-end (<$500,000)

Advertisement
- Minimum of 10 days
- UNC and IPS web sites

Interview and Selection
- Qualifications-based, selection criteria
- Preselection committee
- Interview not required, but is an option
- Final selection by Board of Trustees
- Remember to notify unsuccessful firms

Contract
- Select for one year with option to renew for a second year
- Fees negotiated by institution on a project-specific basis
- Letter form of agreement
- Post selections on UNC web site and make contract entries in Interscope as projects are established

Reference NC Administrative Code Title 01, Subchapter 30D
Project Execution
Designer Selection – Open-end (<$500,000)

- Minimum of 10 days
- UNC and IPS web sites
Project Execution
Designer Selection – Open-end (<$500,000)

Interview and Selection

- Qualifications-based, selection criteria
- Preselection committee
- Interview not required, but is an option
- Final selection by Board of Trustees
- Remember to notify unsuccessful firms
Project Execution
Designer Selection – Open-end (<$500,000)

- Select for one year with option to renew for a second year
- Fees negotiated by institution on a project-specific basis
- Letter form of agreement
- Post selections on UNC web site and make contract entries in Interscope as projects are established
**Project Execution**

**Designer Selection – Direct Select (<$500,000)**

**Advertisement**
- None required

**Interview and Selection**
- Qualifications-based, selection criteria
- Preselection committee
- Interview not required, but is an option
- Final selection by Board of Trustees

**Contract**
- Fees negotiated by institution on a project-specific basis
- Standard UNC design contract form or letter form of agreement as appropriate
- Post selections on UNC web site and make contract entries in Interscope as projects are established
Project Execution

Designer Selection – Direct Select (<$500,000)

- None required
Project Execution
Designer Selection – Direct Select (<$500,000)

Interview and Selection

- Qualifications-based, selection criteria
- Preselection committee
- Interview not required, but is an option
- Final selection by Board of Trustees
Project Execution
Designer Selection – Direct Select (<$500,000)

- Fees negotiated by institution on a project-specific basis
- Standard UNC design contract form or letter form of agreement as appropriate
- Post selections on UNC web site and make contract entries in Interscope as projects are established
Project Execution

Designer Selection – $500,000 to $2M

Advertisement

- Minimum of 15 days, maximum of 21
- UNC and IPS web sites
- Specific project description/scope

Interview and Selection

- Qualifications-based, selection criteria
- Preselection committee
- Interview required
- Final selection by Board of Trustees
- Remember to notify unsuccessful firms

Contract

- Fees negotiated by institution for the specific project advertised
- Standard UNC design contract form
- Post selections on UNC web site and make contract entries in Interscope as projects are established
Project Execution
Designer Selection – $500,000 to $2M

- Minimum of 15 days, maximum of 21
- UNC and IPS web sites
- Specific project description/scope
Project Execution
Designer Selection – $500,000 to $2M

Interview and Selection

- Qualifications-based, selection criteria
- Preselection committee
- Interview required
- Final selection by Board of Trustees
- Rank order selection (1-2-3)
- Remember to notify unsuccessful firms
**Project Execution**

**Designer Selection – $500,000 to $2M**

- Fees negotiated by institution for the specific project advertised
- Standard UNC design contract form
- Post selections on UNC web site and make contract entries in Interscope as projects are established
# Project Execution

## Designer Selection – Over $2M

### Advertisement
- Minimum of 15 days, maximum of 21
- UNC and IPS web sites
- Specific project description/scope

### Interview and Selection
- Qualifications-based, selection criteria
- Preselection committee
- Interview required
- Final selection by Board of Trustees
- Remember to notify unsuccessful firms

### Contract
- Fees negotiated by State Construction Office (SCO) for the specific project advertised
- Standard State of North Carolina design contract form
- Post selections on UNC web site
- SCO makes entries in Interscope
Project Execution

Designer Selection – Over $2M

- Minimum of 15 days, maximum of 21
- UNC and IPS web sites
- Specific project description/scope
Project Execution
Designer Selection – Over $2M

Interview and Selection

- Qualifications-based, selection criteria
- Preselection committee
- Interview required
- Final selection by Board of Trustees
- Remember to notify unsuccessful firms
Project Execution

Designer Selection – Over $2M

- Fees negotiated by State Construction Office (SCO) for the specific project advertised
- Standard State of North Carolina design contract form
- Post selections on UNC web site
- SCO makes entries in Interscope
Project Execution
Designer Selection Criteria

- Specialized or appropriate expertise in the type of project
- Past performance on similar projects
- Adequate staff and proposed design or consultant team for the project
- Current workload and State projects awarded
- Proposed design approach for the project including design team and consultants
- Recent experience with project costs and schedules
- Construction administration capabilities
- Proximity to and familiarity with the area where project is located
- Record of successfully completed projects without major legal or technical problems
- Other factors that may be appropriate for the project
- UNC adds HUB participation on the design team/consultants

Reference NC Administrative Code Title 01, Subchapter 30D
Project Execution
CM at Risk Selection

Advertisement
- Minimum of 21 days
- UNC and IPS web sites
- RFP documents with specific project description and requirements

Interview and Selection
- Qualifications-based, selection criteria
- Preselection committee
- Interview required
- Final selection by Board of Trustees
- Remember to notify unsuccessful firms

Contract
- Fees negotiated by SCO (projects over $2M)
- Standard State of NC CM at Risk contract documents
- SCO makes entries in Interscope

Reference CM at Risk Selection Procedures,
State Building Commission 2/26/02
Project Execution
CM at Risk Selection

- Minimum of 21 days
- UNC and IPS web sites
- RFP documents with specific project description and requirements
Interview and Selection

• Qualifications-based, selection criteria
• Preselection committee
• Interview required
• Final selection by Board of Trustees
• Remember to notify unsuccessful firms
• Fees negotiated by State Construction Office (projects over $2M)
• Standard State of North Carolina CM at Risk contract documents
• SCO makes entries in Interscope
Project Execution
CM at Risk Selection Criteria

- Workload that is fully able to accommodate the addition of this project
- Record of successfully completed projects of similar scope without major legal or technical problems
- Previous experience with the Owner, a good working relationship with Owner representatives, have completed projects in a timely manner and have performed an acceptable quality of work
- Key personnel that have appropriate experience and qualifications
- Relevant and easily understood graphic or tabular presentations
- Completion of CM-at-Risk projects in which there was little difference between the GMP and final cost
- Projects that were completed on or ahead of schedule
- Construction administration capabilities
- Proximity to and familiarity with the area where the project is located
- Quality of compliance plan for minority business participation as required by G.S. 143-128.2
- Other factors that may be appropriate for the project

Reference CM at Risk Selection Procedures, State Building Commission 2/26/02
Design Process Overview

1. **Design Under Contract**
   - Owner guidance
   - Document production
   - Owner review
   - Submission to SCO for review/approval

2. **Schematic Design**
   - Owner guidance
   - Document production
   - Owner review
   - Submission to SCO for review/approval

3. **Design Development**
   - Owner guidance
   - Document production
   - Owner review
   - Submission to SCO for review/approval

4. **Construction Documents**
   - Owner guidance
   - Document production
   - Owner review
   - Submission to SCO for review/approval

5. **Final Documents**
   - Owner guidance
   - Document production
   - Owner review
   - Submission to SCO for review/approval

6. **Approval to bid**
**Design Review Process**

**Is design review required?**

- **YES**, when the project involves:
  - A university project on state land for use by the university
    - Code compliance for projects $\leq 2M$
    - Code, constructability, SCO guidelines for $>2M$
  - Privately funded projects on state land for use by the state, regardless of land, ground, or other lease arrangements
    - Code review
  - Privately funded projects on private land for use by the state or connected to the state’s utilities
    - Energy efficiency review
    - SCO guidelines
NO, when the project involves:

SCO Plan Reviews
Guidance for Small UNC “Download” Projects

SCO is the building code enforcement authority for UNC projects, regardless of project dollar value. At the same time, there are many activities that do not involve building code issues and so may be excluded from SCO review. Examples include, but may not be limited to:

1. Lamp replacement – Changing out lamps and ballasts, such as T12 lamps with magnetic ballasts to T8 lamps with electronic ballasts, while continuing to use the existing light fixture.
2. Like-in-kind replacement – Changing a product out for a new one if the new one is of like kind, such as VFD to VFD, but NOT constant speed drive to VFD motors.
3. Retro-commissioning – Changing controls and programs NOT involving construction.
4. Piping repairs – Repairs to hot water and chilled water piping if NO new routing is involved.
5. Occupancy sensors – Installation of occupancy sensors when NO new switches or wiring is involved.
6. Programmable thermostats – Installation of programmable thermostats replacing existing thermostats.

Design Review Process

Other Reviews

- Department of Labor
  - Elevators, boilers, and pressure vessels
- Division of Health Services
  - Food, water, wastewater, solid waste
- Division of Archives and History
  - Properties on the National Historic Register
- Division of Environmental Management/State Clearinghouse
  - Storm water, sewer systems, FONSI
- Division of Land Resources
  - Land disturbance of more than one acre
- Division of Facility Services
  - Patient care
- Department of Transportation
- Other Local Reviews

Reference State Construction Office Construction Manual Section 400
## Design Review Process

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
</tr>
</thead>
</table>
| Advance Planning/Programming (15 calendar days) | - Establish components of project budget, refine components of OC-25, incorporate FCAP  
- Space program  
- Site evaluation  
- Preliminary project schedule  
- Sustainable energy efficient building requirements |
| Schematic Design (30 calendar days) | - General description narrative, proposed materials and systems  
- Probable cost based on gross area, separate items for work outside the structure such as utilities  
- Site survey, soils investigation  
- Sustainable energy efficient building requirements, preliminary life cycle cost analysis  
- Proposed floor plans single-line drawings, building massing and height |
| Design Development (30 calendar days) | - Probable cost based on CSI format, with appropriate units of measure  
- Analysis of soils, borings, hazardous materials  
- Outline specifications with rationale for systems shown  
- Scaled architectural plans and elevations, structural, mechanical, plumbing, electrical, fire protection, etc. |
| Construction Drawings (60 calendar days)/Final Drawings (15 calendar days) | - Construction cost estimate using quantity take-offs  
- Plans and specifications, detailed  
- Preferred alternates  
- Project manual(s)  
- Instructions to bidders and general conditions |
Design Review Process

Advance Planning/Programming (15 calendar days)

- Establish components of project budget, refine components of OC-25, incorporate FCAP
- Space program
- Site evaluation
- Preliminary project schedule
- Sustainable energy efficient building requirements
Design Review Process

Schematic Design
(30 calendar days)

• General description narrative, proposed materials and systems
• Probable cost based on gross area, separate items for work outside the structure such as utilities
• Site survey, soils investigation
• Sustainable energy efficient building requirements, preliminary life cycle cost analysis
• Proposed floor plans single-line drawings, building massing and height
Design Review Process

- Probable cost based on CSI format, with appropriate units of measure
- Analysis of soils, borings, hazardous materials
- Outline specifications with rationale for systems shown
-Scaled architectural plans and elevations, structural, mechanical, plumbing, electrical, fire protection, etc.
Construction Drawings (60 calendar days)/ Final Drawings (15 calendar days)

- Construction cost estimate using quantity take-offs
- Plans and specifications, detailed
- Preferred alternates
- Project manual(s)
- Instructions to bidders and general conditions
Design Review Process
University Owner Responsibilities

- Guide, direct, steer, drive, lead......
- Scope, budget, schedule (CI-1, OC-25)
- Review and input
  - Affordable?
  - Alternates for budget control, preferred alternates, bid packages (under CMR)
  - Meets programmatic needs?
  - Maintainable?
- CMR, if used, is engaged in review processes
- Informed, timely decisions
- Designer accountability
Design Review Process
Designer Responsibilities

- Listen, interpret, apply
- Scope, budget, schedule
- Timely production of complete plans and specifications on design contract’s schedule
- Alternate materials or scopes for budget control
- Respond to university and State Construction Office reviews
- Code-compliant plans within budget, on target, and on schedule
Design Review Process
State Construction Office Responsibilities

- Under $2M:
  - Code-compliance plan reviews and feedback (Authority Having Jurisdiction, AHJ)
  - Administration/enforcement of North Carolina State Building Code

- Over $2M:
  - Code-compliance review and feedback (Authority Having Jurisdiction, AHJ)
  - Administration/enforcement of North Carolina State Building Code
  - Constructability, SCO guidelines review and feedback
Design Process Overview

- **Designer Under Contract**
- **Schematic Design**
  - Owner guidance
  - Document production
  - Owner review
  - Submission to SCO for review/approval
- **Design Development**
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  - Owner guidance
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  - Owner review
  - Submission to SCO for review/approval
- **Final Documents**
  - Owner guidance
  - Document production
  - Owner review
  - Submission to SCO for review/approval
- **Approval to bid**
DESIGNER SELECTION AND CONTRACTING CASE STUDIES
Capital Improvement Project Process Overview

University Owner
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- Definition

Project
- Scope
- Schedule
- Budget

Authorized/Funded
- General fund
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- Financing strategy

Project Execution Strategy
- University project
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Design

Construction
Project Execution

Construction Process Overview

Bidding

Award

Contract

Construction

Completion and Closeout
Construction Bidding & Award Process

Plans approved for bidding

- < $500,000 construction cost
  - <$30,000 construction cost, competition not required, although good practice
  - $30,000 to <$500,000 construction cost, informal solicitation required (not publicly advertised)

- $500,000 – $2M
  - Construction cost $500,000 or more, public advertisement required

- >$2M
  - Construction cost $500,000 or more, public advertisement required
Construction Bidding
$30,000 to <$500,000

Advertisement
- No formal public advertisement
- Informal solicitation, minimum of 10 days to respond

Bidding/bonding requirements
- Minimum of 3 bids should be solicited
- Receipt of 3 bids NOT required, but good practice
- Bonding not required, but may be requested if desired
- HUB standard documentation >$100,000 (guidelines and affidavits)
- HUB good-faith efforts below that level are owner responsibility

Award and Contract
- University is the awarding authority (have a process)
- Designer or institution prepares contract
- Use state standard informal contract
- May include university-specific modifications
- University attorney approves contract as to form
- Make contract and HUB entries in Interscope
Construction Bidding
$30,000 to <$500,000

- No formal public advertisement
- Informal solicitation, minimum of 10 days to respond
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**Construction Bidding**

$30,000 to <$500,000

- University is the awarding authority (have a process)
- Designer or institution prepares contract
- Use state standard informal contract
- May include university-specific modifications
- University attorney approves contract as to form
- Make contract and HUB entries in Interscope
Construction Bidding
$500,000 to $2M

Advertisement
- Formal public advertisement
- Newspaper of statewide circulation & electronic (UNC & IPS web sites)
- Minimum of 15 calendar days to respond (21 or more preferred)
- Minimum of 7 calendar days required on a rebid

Bidding/bonding requirements
- Receipt of 3 bids required, or must rebid
- Bonding required for construction contract over $500,000 (bid, performance, and payment)
- HUB standard documentation (guidelines and affidavits)
- Formal, public bid opening required

Award and Contract
- UNC System Office is the awarding authority
- Award letter request
- Designer or institution prepares construction contract
- Use university system standard construction contract
- University attorney approves contract as to form
- Make contract and HUB entries in Interscope
Construction Bidding
$500,000 to $2M

- Formal public advertisement
- Newspaper of statewide circulation and electronic (UNC and IPS web sites)
- Minimum of 15 calendar days to respond (21 or more preferred)
- Minimum of 7 calendar days required on a rebid
Construction Bidding
$500,000 to $2M

- Receipt of 3 bids required, or must rebid
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- UNC System Office is the awarding authority
- Award letter request
- Designer or institution prepares construction contract
- Use university system standard construction contract
- University attorney approves contract as to form
- Make contract and HUB entries in Interscope
## Construction Bidding

### Advertisement
- Formal public advertisement
- Newspaper of statewide circulation and electronic (UNC and IPS web sites)
- Minimum of 15 calendar days to respond (21 or more preferred)
- Minimum of 7 calendar days required on a rebid

### Bidding/bonding requirements
- Receipt of 3 bids required, or must rebid
- Bonding required for construction contract over $500,000 (bid, performance, and payment)
- HUB standard documentation (guidelines and affidavits)
- Formal, public bid opening required

### Award and Contract
- State Construction Office (SCO) is the awarding authority
- Award letter request
- Designer or institution prepares construction contract
- Use state SCO standard construction contract
- Attorney General approves contract as to form
- SCO makes contract and initial HUB entries in Interscope
- University maintains HUB data thereafter
Construction Bidding

*>$2M*

- Formal public advertisement
- Newspaper of statewide circulation and electronic (UNC and IPS web sites)
- Minimum of 15 calendar days to respond (21 or more preferred)
- Minimum of 7 calendar days required on a rebid
Construction Bidding

> $2M

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- Use state SCO standard construction contract
- Attorney General approves contract as to form
- SCO makes contract and initial HUB entries in Interscope
- University maintains HUB data thereafter
Construction Bidding Process
Prequalifying

- Single-prime/Multi-prime
  - May be prequalified (may NOT prequalify subcontractors)

- CM at Risk
  - Subcontractors must be prequalified
Construction Bidding Process
Prequalifying

Prequalification:

- State of NC Prequalification Policy
- General Contractor Prequalification Form
- General Contractor Prequalification Matrix

Prequalification for First-Tier Subcontractors under CM at Risk

- State of NC Prequalification Policy
- CMR 1st Tier Prequal Part A-Annual Submittal
- CMR 1st Tier Prequal-Part B
- CMR First Tier-Prequalification Matrix

https://ncadmin.nc.gov/businesses/construction/forms-documents
Construction Bidding Process

Prequalifying

Advertisement

- Public advertisement to prequalify
- Public advertisement to receive bids from prequalified firms
- Advertisement duration consistent with construction bidding requirements
- Listing of prequalified firms to be made available
- Minimum of 7 calendar days required on a rebid

Prequalification

- Criteria and scoring per current State Construction Office forms and matrices
Construction Bidding & Award Process

University Owner Responsibilities

- Schedule oversight, influence, coordination
  - Bid opening date, time, and location logistics
  - Electronic advertisement submissions

- Input
  - Contractor identification and development, including prospective HUB contractors/subcontractors
  - Prequalifying in cooperation with designer under single-prime/multi-prime, with CM under CMR

- Informed, timely decisions
- Designer accountability
- CMR accountability (if one has been engaged)
- HUB certification
- Award request letter
- Contract review and approval as to form by university attorney, contract execution
- Interscope entries for projects <$2M
Construction Bidding & Award Process
Designer and CMR Responsibilities

- **Designer**
  - Contractor and HUB firm identification of prospective bidders
  - Prequalifying contractors for single-prime/multi-prime
  - Bid opening for single-prime/multi-prime
  - Certified bid tabulation for single-prime/multi-prime
  - Draft construction contract
  - Notice-to-proceed

- **CMR (if one has been engaged)**
  - Subcontractor and HUB firm identification of prospective bidders
  - Bid opening (fiduciary responsibility)
Construction Bidding & Award Process
UNC System Office Responsibilities ($500,000 – $2M)

- Review of award request and back-up materials
- Verification of compliance with relevant statues and policies, including HUB certification
- Issue award letter, including Office of State Budget and Management approval
Construction Bidding & Award Process
State Construction Office Responsibilities (Over $2M)

- Review of award request and issue award letter, including obtaining approval of Attorney General and Office of State Budget and Management
- Organize and lead preconstruction conference
- Assign construction monitor
- Complete Interscope entries for contract award and HUB participation at award
Construction Bidding & Award Process

HUB Responsibilities

- Owner, designer, contractor, and the Office for Historically Underutilized Businesses (HUB) of the Department of Administration all have roles.

- Owner:
  - Attend prebid conference
  - Notify minority businesses of opportunities
  - Document contacts
  - Review bids jointly with designer for HUB compliance prior to recommendation to award
  - Evaluate good-faith effort documentation prior to award
  - Review prime contractor pay applications for compliance with minority participation commitments
  - Document evidence owner has executed responsibilities

https://www.northcarolina.edu/design-and-construction/historically-underutilized-business-hub
CONSTRUCTION CONTRACT
AWARD
CASE STUDIES
“On occasion, emergency design or consultation services may be required for restoration or correction of a facility condition which by its nature poses a hazard to persons or property, or when an emergency exists. Should this situation occur, in all likelihood there will not be sufficient time to follow the normal procedures...” NC Administrative Code Title 01, Chapter 30 Subchapter D.0302

Procedure for letting of public contracts, exceptions: “Cases of special emergency involving the health and safety of the people or their property.” G.S. 143-129.(e)(2)

“Timeliness for obligation of funds or other non-hazardous or non-emergency situations do not constitute sufficient grounds for invoking this special authority.” SCO Construction Manual, Section 203
EMERGENCY!!!!

University of North Carolina
Emergency Project Process

1. The President of the University of North Carolina receives an Emergency Declaration Notice from the Chancellor of the UNC institution declaring the need for an emergency capital project.

2. UNC General Administration forwards an electronic copy of the Emergency Declaration Notice to the North Carolina Office of State Budget and Management (OSBM) to the attention of the capital budget analyst to whom the relevant UNC institution is assigned, with a copy to the Assistant State Budget Officer leading OSBM’s capital section.

3. UNC General Administration establishes a capital project authorization and program in the Interscope system, assigning a code and item number in consultation with the institution, and an initial budget of $0.

4. Concurrently, the institution contacts the appropriate OSBM capital budget analyst and, if necessary, its OSBM operating budget analyst, to identify and agree on the funding plan, including all sources of funds, to be used to pay for the project.

5. Once OSBM has approved the project and the funding plan, the UNC institution initiates any necessary fund change requests within the Interscope system.

https://www.northcarolina.edu/design-and-construction/policies-procedures-and-general-information
CONSTRUCTION CM AT RISK
CASE STUDIES
Project Execution

Construction Process Overview

- Bidding
- Award
- Contract
- Construction
- Completion and Closeout
## Construction Administration, Completion, and Closeout

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>&lt; $500,000</strong></td>
<td></td>
</tr>
</tbody>
</table>
• Change orders (if any) documented by designer/owner/contractor  
• University is approval authority for change orders, spreadsheet entry in Interscope  
• Final inspection by designer, certification required (if a designer is engaged)  
• HUB data finalization in Interscope  
• Designer and contractor evaluations completed in Interscope |
| **$500,000 to $2M** |  
• Change orders documented by designer/owner/contractor  
• University is approval authority for change orders, electronic entry and approval flow in Interscope for construction cost $500,000 or more  
• Final inspection by designer, certification required; notify SCO of final inspection schedule  
• HUB data finalization in Interscope  
• Designer and contractor evaluations completed in Interscope |
| **> $2M** |  
• Change orders documented by designer/owner/contractor  
• SCO is approval authority for change orders, electronic entry and approval flow in Interscope for construction cost $500,000 or more  
• Designer’s certification required  
• Final inspection by SCO  
• HUB data finalization in Interscope  
• Designer and contractor evaluations completed in Interscope |
Construction Administration, Completion, and Closeout

- Change orders (if any) documented by designer/owner/contractor
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- Designer and contractor evaluations completed in Interscope

<$500,000
Construction Administration, Completion, and Closeout

- Change orders documented by designer/owner/contractor
- University is approval authority for change orders, electronic entry and approval flow in Interscope for construction cost $500,000 or more
- Final inspection by designer, certification required; notify SCO of final inspection schedule
- HUB data finalization in Interscope
- Designer and contractor evaluations completed in Interscope

$500,000 to $2M
Change orders documented by designer/owner/contractor

SCO is approval authority for change orders, electronic entry and approval flow in Interscope for construction cost $500,000 or more

Designer’s certification required

Final inspection by SCO

HUB data finalization in Interscope

Designer and contractor evaluations completed in Interscope
- Payment may be withheld for defective, incomplete or disputed work.

- Retainage is NOT withholding payment as described above
  

- Commissioning
  

- Performance Verification of Buildings
  

- Claims

  Reference SCO Construction Manual Section 711
Construction Administration, Completion, and Closeout

- Designer Evaluation
- Contractor Evaluation
- Final Payments
- Project Closeout Documents
  - Final inspection checklist
  - Verification of punchlist completion
  - Unsettled claim verification
  - Record documents
  - Final pay application
  - Certificates of compliance
  - Certificate of completion

Reference SCO Construction Manual Section 712-15

- Department of Insurance
- State Property Office
- UNC System Office Space Inventory
Miscellaneous Odds and Ends

- Designer’s Professional Liability Insurance
- Insurance Certificate Cancellation Notification Provision (add to certificate in the block labeled “Description of Operations, Vehicles, Exclusions added by endorsements/Special Provisions:”)  

   “Not withstanding the preprinted cancellation provisions on this form, coverages afforded under the policies will not be cancelled, reduced in amount nor will any coverages be eliminated until at least thirty (30) days after mailing written notice, by certified mail, return receipt requested, to the insured and the owner, of such alteration or cancellation.”

- Sales and Use Tax
- Zoning
Project Execution

University Owner

Architects/Engineers

Contractors

State Construction Office
# Capital Project Procedure Guidance

## General Fund Projects

### UNC System Capital Project Procedure Guidance for General Fund Projects

**Effective July 1, 2019**

<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>PROJECT DOLLAR THRESHOLD*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Up to $500,000**</td>
</tr>
<tr>
<td>Capital Project Authority (General Fund Sources Only, Cash or Debt)</td>
<td>Authorized by legislative Action</td>
</tr>
<tr>
<td>Capital Code/Item R</td>
<td><img src="image_url" alt="Image" /></td>
</tr>
<tr>
<td>Prime/Direct Schedule</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Designer Selection (Refer to 4.1.13)</td>
<td>Open-end agreements or direct selection</td>
</tr>
<tr>
<td>Approval of Selection</td>
<td>BOT</td>
</tr>
<tr>
<td>Designer's Contract</td>
<td>University negotiates</td>
</tr>
<tr>
<td>Reporting/Recording</td>
<td>University records in minutes</td>
</tr>
<tr>
<td>Plan Review and Approval</td>
<td>SCH code review, as applicable</td>
</tr>
<tr>
<td>Bidding</td>
<td>University solicits competitive bids</td>
</tr>
<tr>
<td>Forms for Bid Documents</td>
<td>Template SCH internal contract format; notice to bidders, and general conditions, supplemented by institution-specific requirements</td>
</tr>
<tr>
<td>Bonding Requirement</td>
<td>Required if necessary, University may require</td>
</tr>
<tr>
<td>Contracting Authority</td>
<td>University</td>
</tr>
<tr>
<td>Form of Contract</td>
<td>Informal</td>
</tr>
<tr>
<td>Reporting/Recording Contract</td>
<td>University</td>
</tr>
<tr>
<td>HUB Participation Reporting</td>
<td>University</td>
</tr>
<tr>
<td>Change Order (CO) Processing</td>
<td>University authorizes/approves</td>
</tr>
<tr>
<td>Final Inspection</td>
<td>SCH officer required for SCH approved project</td>
</tr>
</tbody>
</table>

*Project authority thresholds are based on the overall project budget, including design, construction, contingencies, etc. Contract awarding authority follows initial project authority level. Construction bidding thresholds are based on project construction cost above.

**All construction contracts over $200,000 must be entered in Inter高等学校 with full project reporting in accordance with 4.1.13-1.13.**
## Capital Project Procedure Guidance

### Non-general Fund Projects

<table>
<thead>
<tr>
<th>Activity</th>
<th>Project Dollar Threshold*</th>
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</thead>
<tbody>
<tr>
<td>Capital Project Authority (Nongeneral Fund Sources Only)</td>
<td>up to $50,000</td>
</tr>
<tr>
<td>Authorization</td>
<td>University</td>
</tr>
</tbody>
</table>

- **Capital Code/Item #**: Not applicable
- **Firm/Prime Schedule**: Not applicable

### Design

<table>
<thead>
<tr>
<th>Activity</th>
<th>Design Submission</th>
<th>Approval of Selection</th>
<th>Design/Architect #</th>
<th>Plan Review and Approval</th>
<th>Bidding</th>
<th>Forms for Bid Documents</th>
<th>Bonding Requirement</th>
<th>Contract Awarding Authority</th>
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### Construction

- **Change Order (CO) Processing**: University authorized/approved; University executes in writing; University requires manual entry
- **Final Inspection**: Final inspection required

---

*University authority thresholds are based on the annual project budget, including design, construction, contingency, etc. General governing authority thresholds apply to project authority review. Construction spending thresholds are based on project construction cost base.

**All construction contracts over $200,000 must be submitted in accordance with the University of North Carolina System (UNC System) policies and procedures.**
## Contacts

<table>
<thead>
<tr>
<th>Name/Title</th>
<th>Email</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Katherine Lynn</strong></td>
<td><a href="mailto:kclynn@northcarolina.edu">kclynn@northcarolina.edu</a></td>
<td>919-962-2790</td>
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<tr>
<td>Senior Associate Vice President for Finance and Capital Planning</td>
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<td></td>
</tr>
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<td><strong>Miriam Tripp</strong></td>
<td><a href="mailto:mdtripp@northcarolina.edu">mdtripp@northcarolina.edu</a></td>
<td>919-962-4600</td>
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<tr>
<td>Director of Capital Planning</td>
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<td></td>
</tr>
<tr>
<td><strong>Gordon Rutherford</strong></td>
<td><a href="mailto:gordonr@northcarolina.edu">gordonr@northcarolina.edu</a></td>
<td>919-962-0462</td>
</tr>
<tr>
<td>University Architect Emeritus</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Jeanine Rose</strong></td>
<td><a href="mailto:jrose@northcarolina.edu">jrose@northcarolina.edu</a></td>
<td>919-962-4608</td>
</tr>
<tr>
<td>Capital Budget &amp; HUB Coordinator</td>
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</table>
QUESTIONS?