



CAPITAL PROJECT ORIENTATION

October/November 2019

Capital Project Orientation



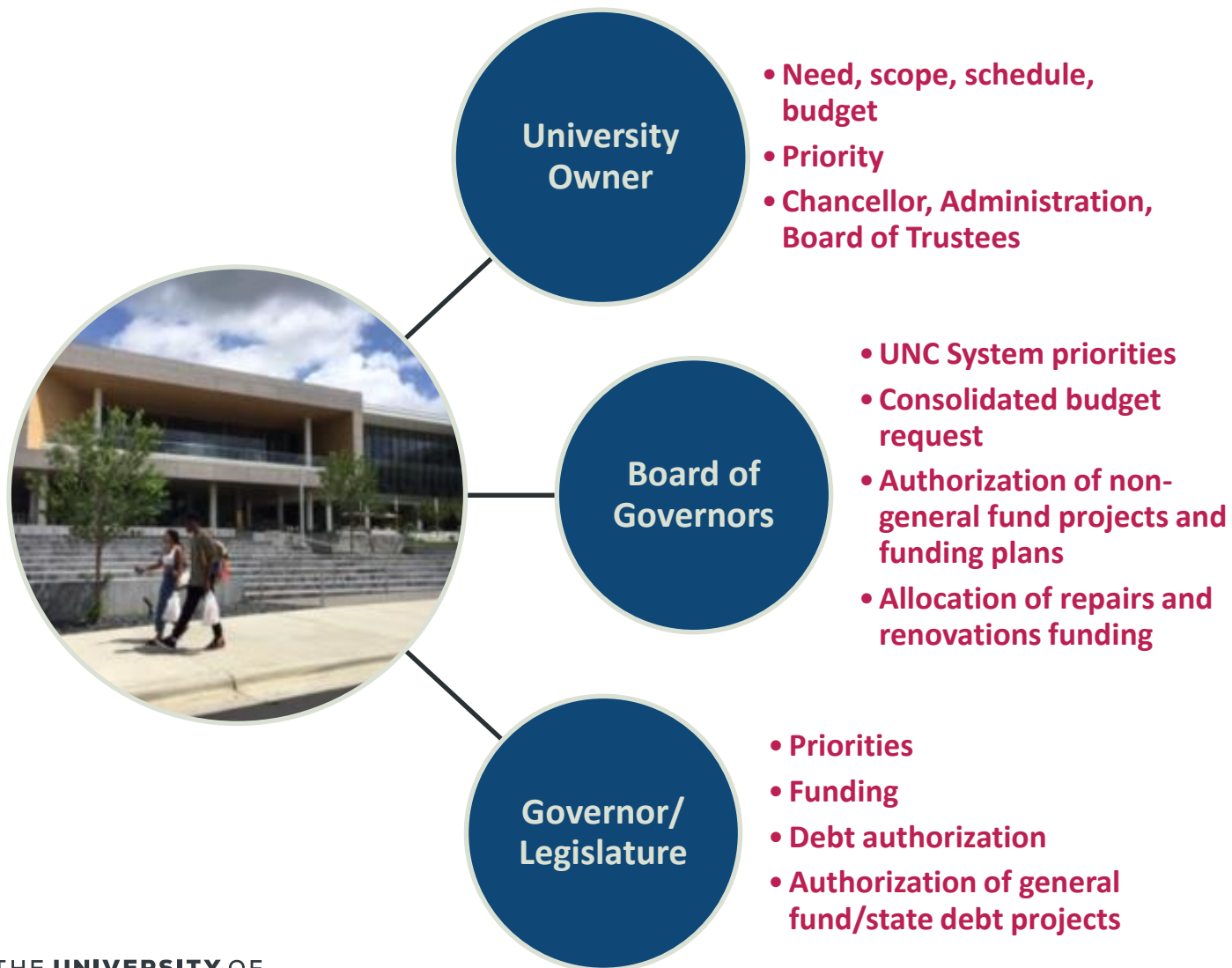
Capital Improvement Definition

“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



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

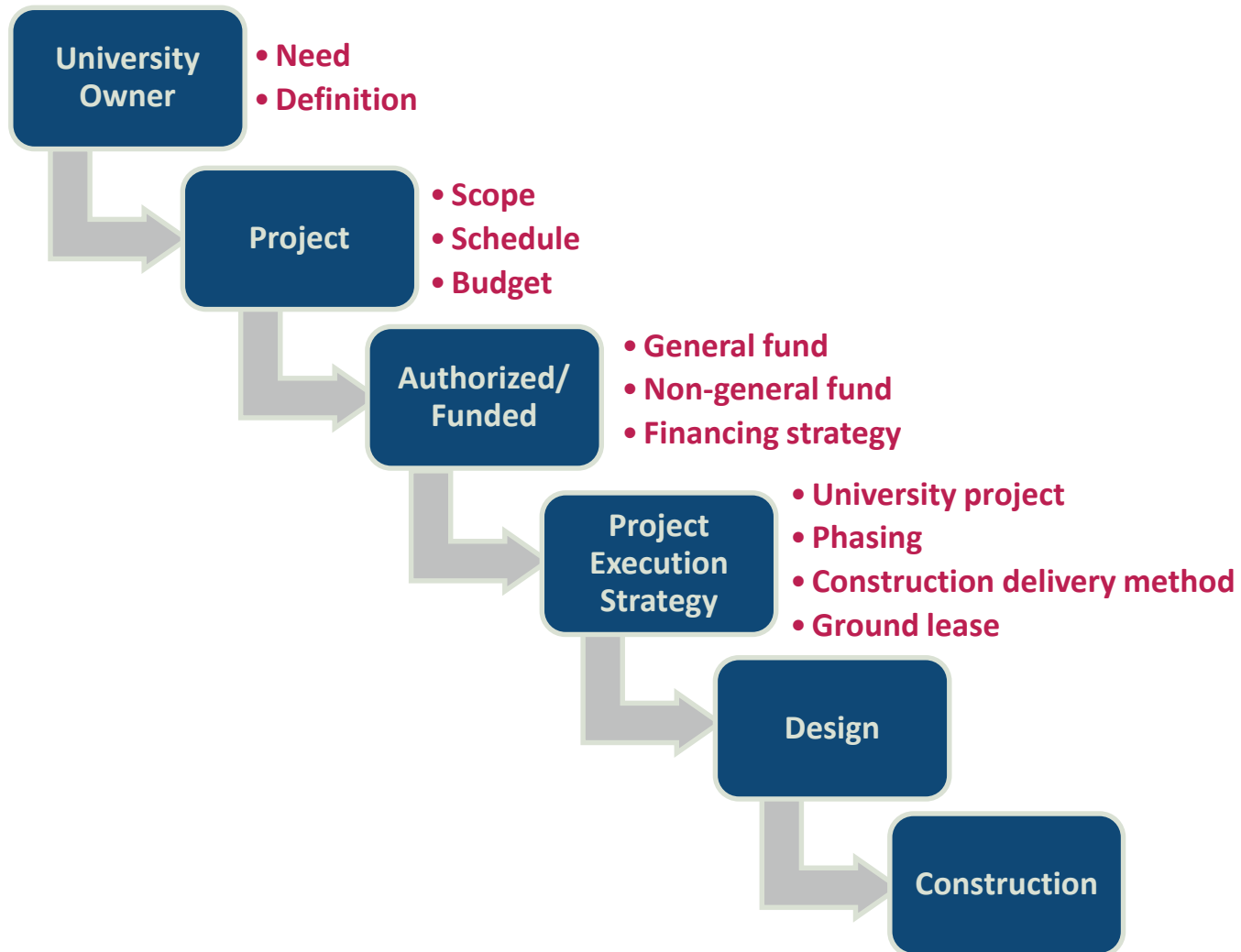
Reference G.S. 116, The Code and UNC Policy Manual – Chapter 600

Project Development

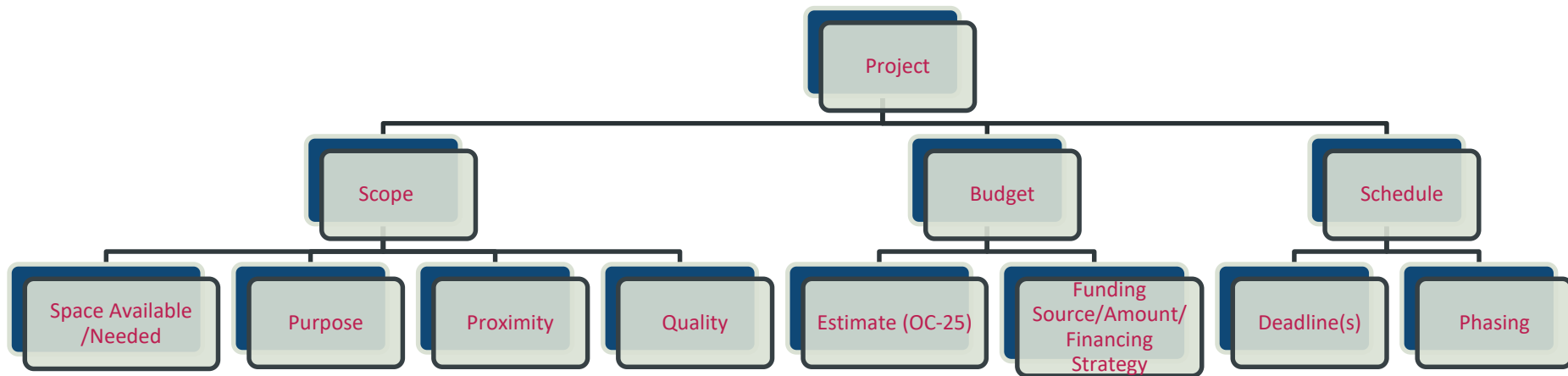
Governor/Legislature Responsibilities

- 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



Project Development



Project Development

■ SCOPE

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

Project Development

■ BUDGET

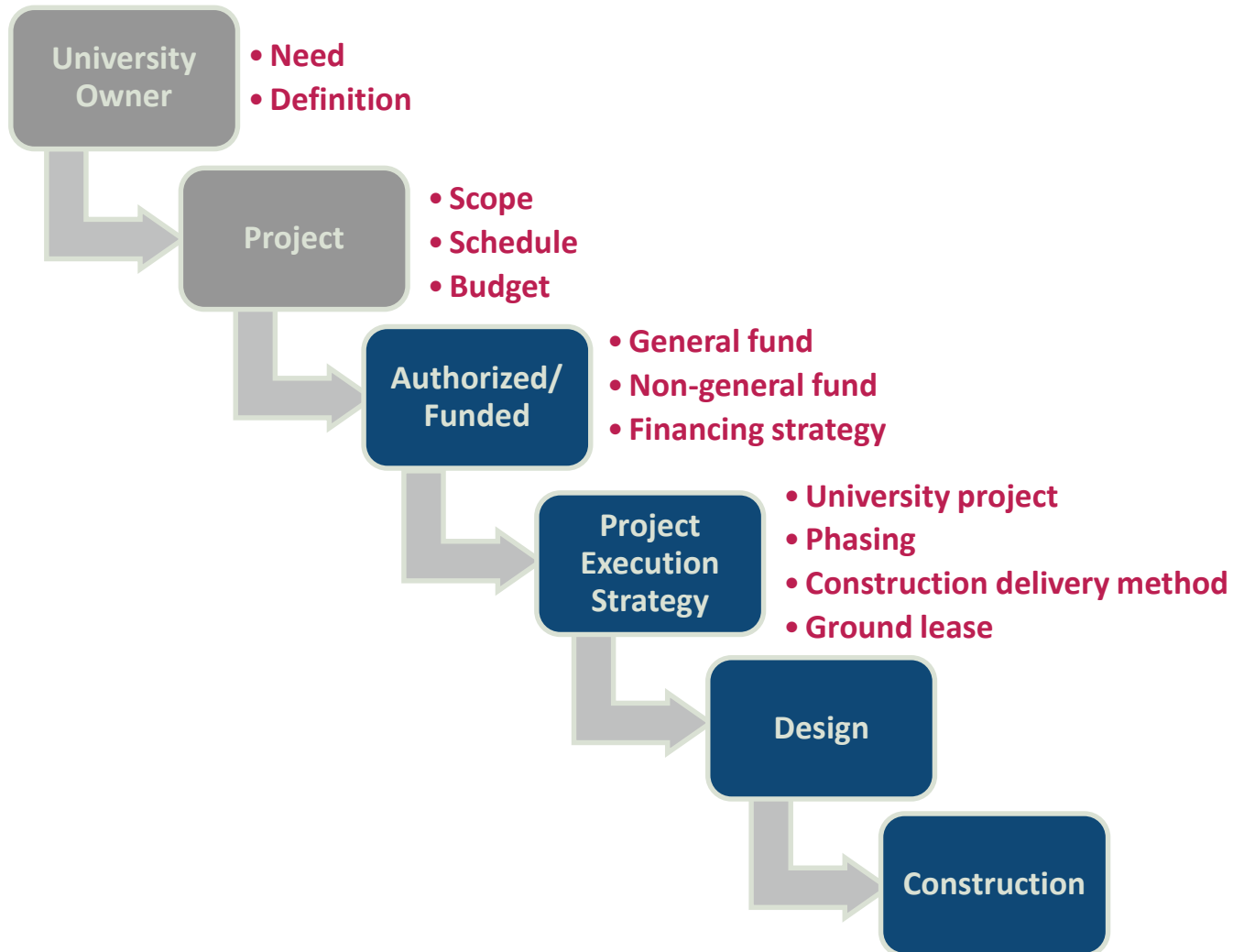
- Size
- Site conditions – interior and/or exterior
- Characteristics – quality/complexity
- Proximity
- Quality
- Special requirements
- Construction characteristics affecting cost – speed, limited access, phasing over an extended time period, liquidated damages
- Cost estimate (OC-25)

Project Development

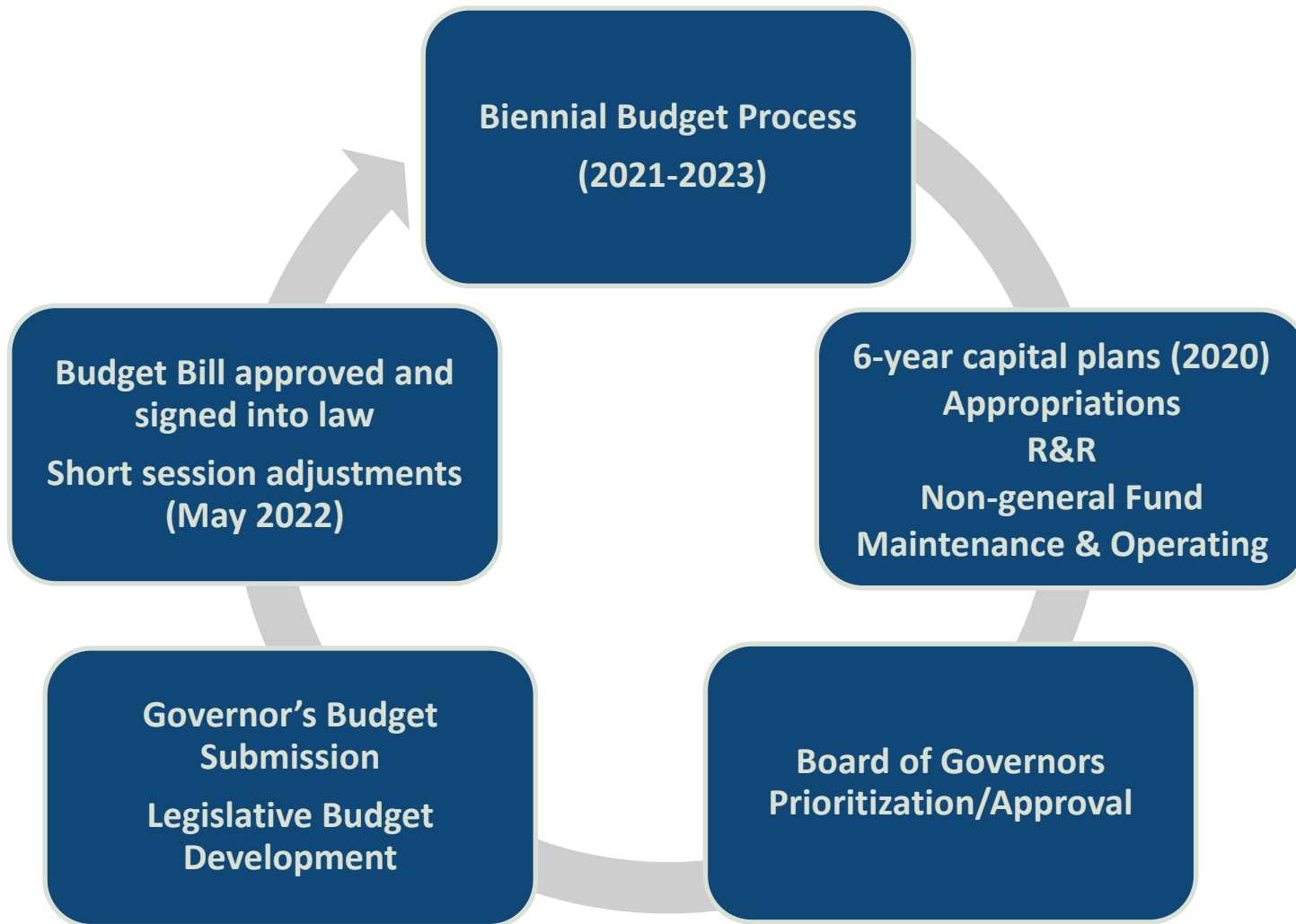
■ SCHEDULE

- Target construction delivery
- Absolute deadlines
- Building commissioning
- AV/IT, move-in
- Alternative plans, being prepared

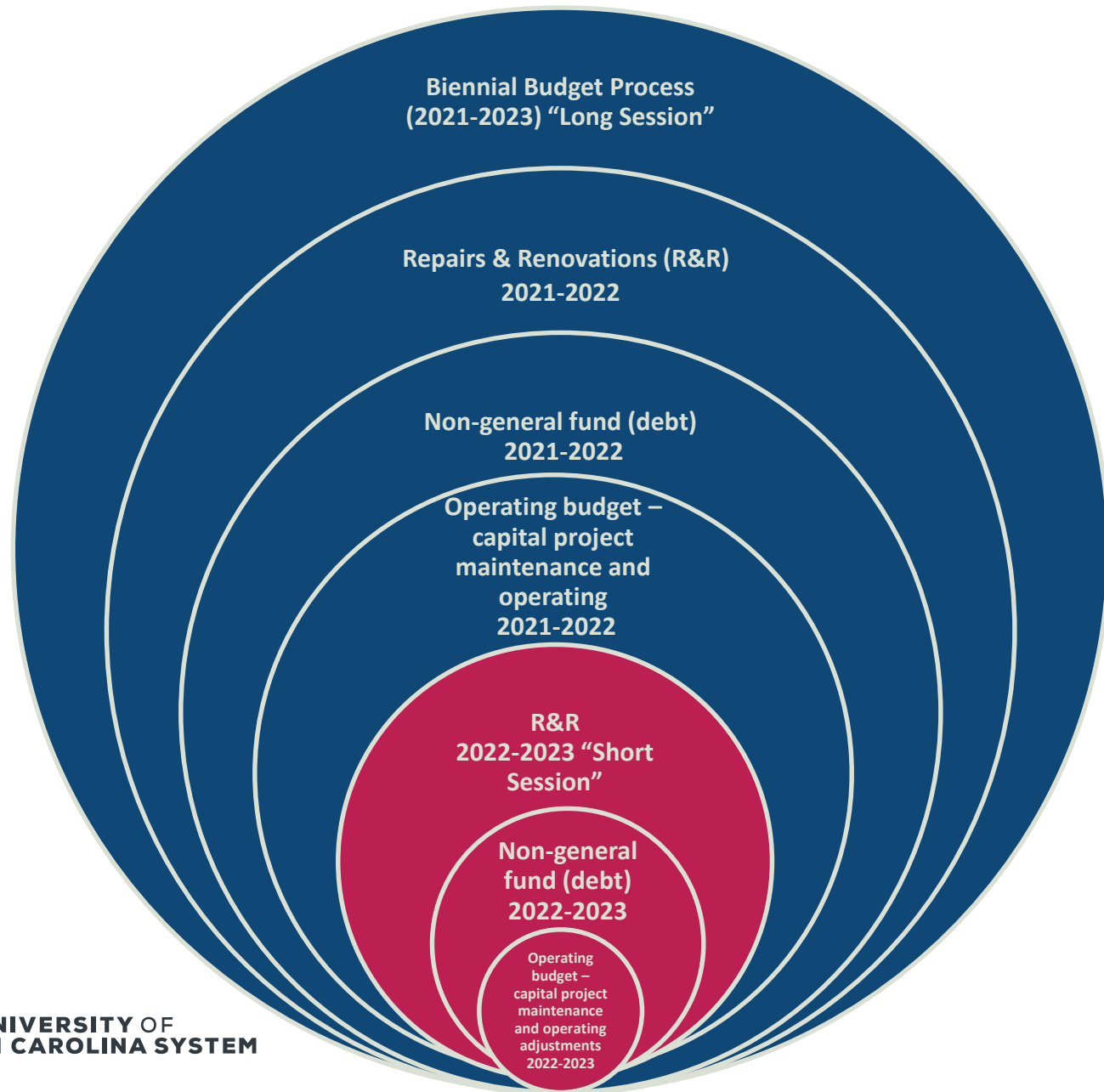
Capital Improvement Project Process Overview



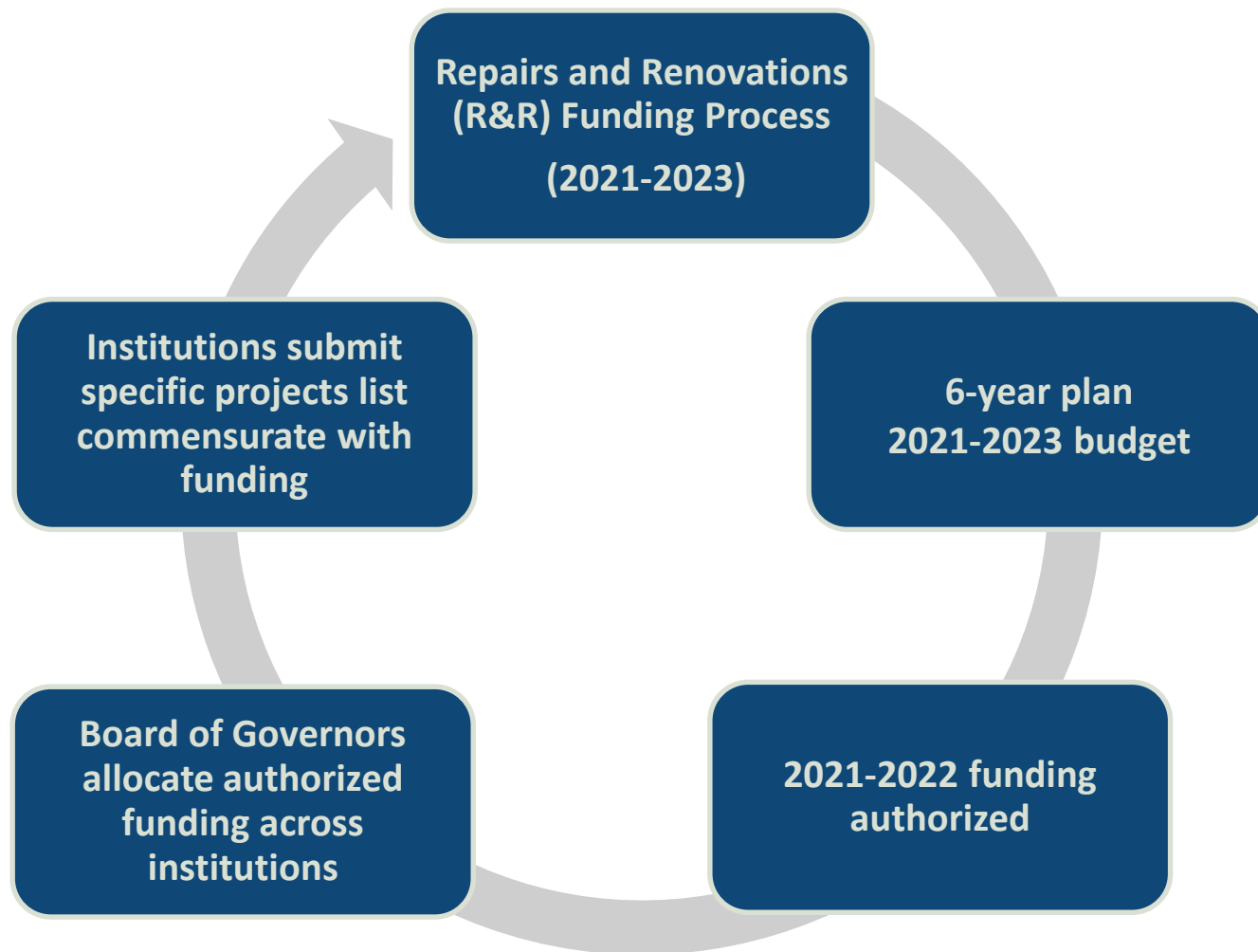
Biennial Budget Cycle



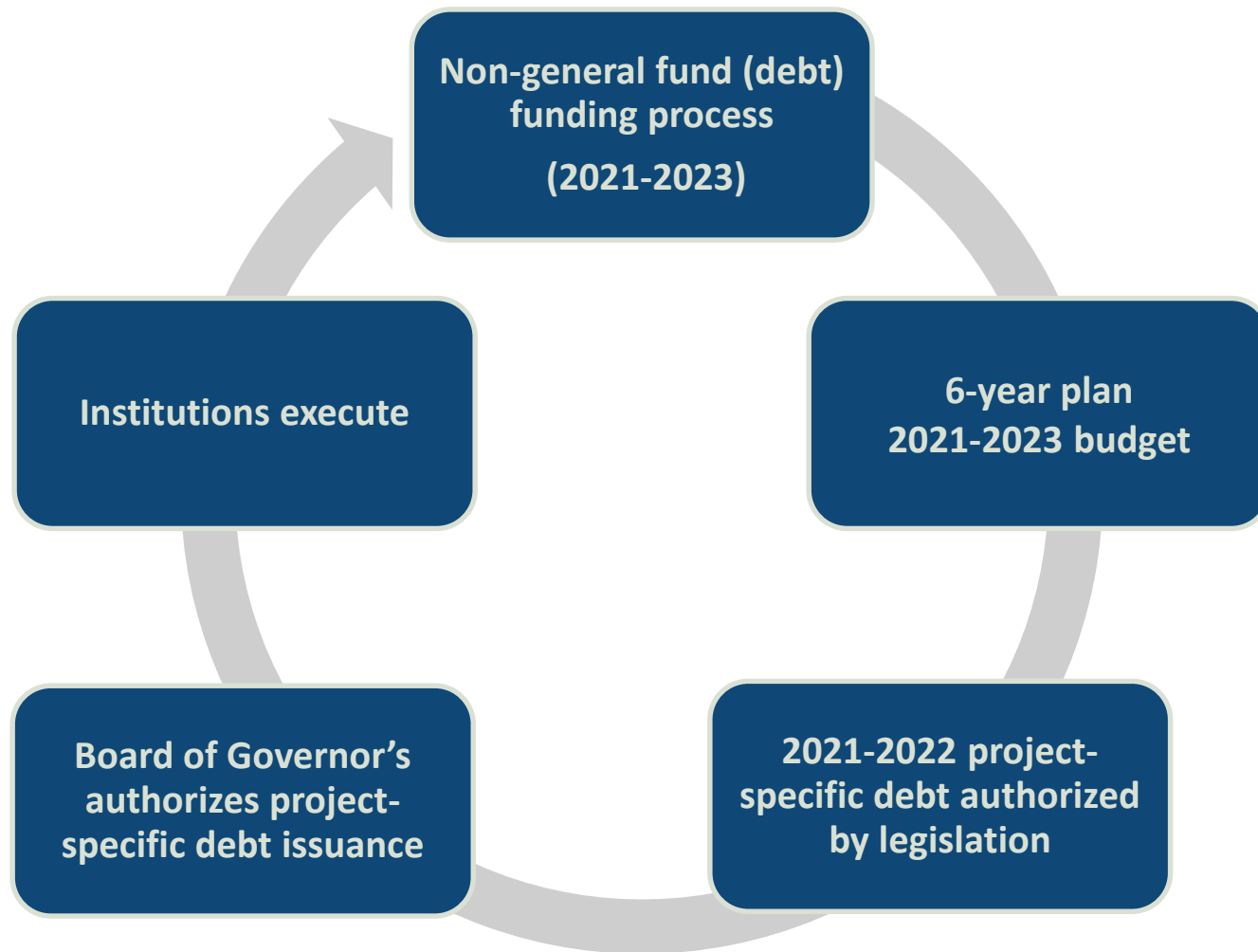
Biennial Budget Cycle



R&R Budget Cycles



Non-General Fund (Debt) Budget Cycles



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

Project Execution

Other Strategies

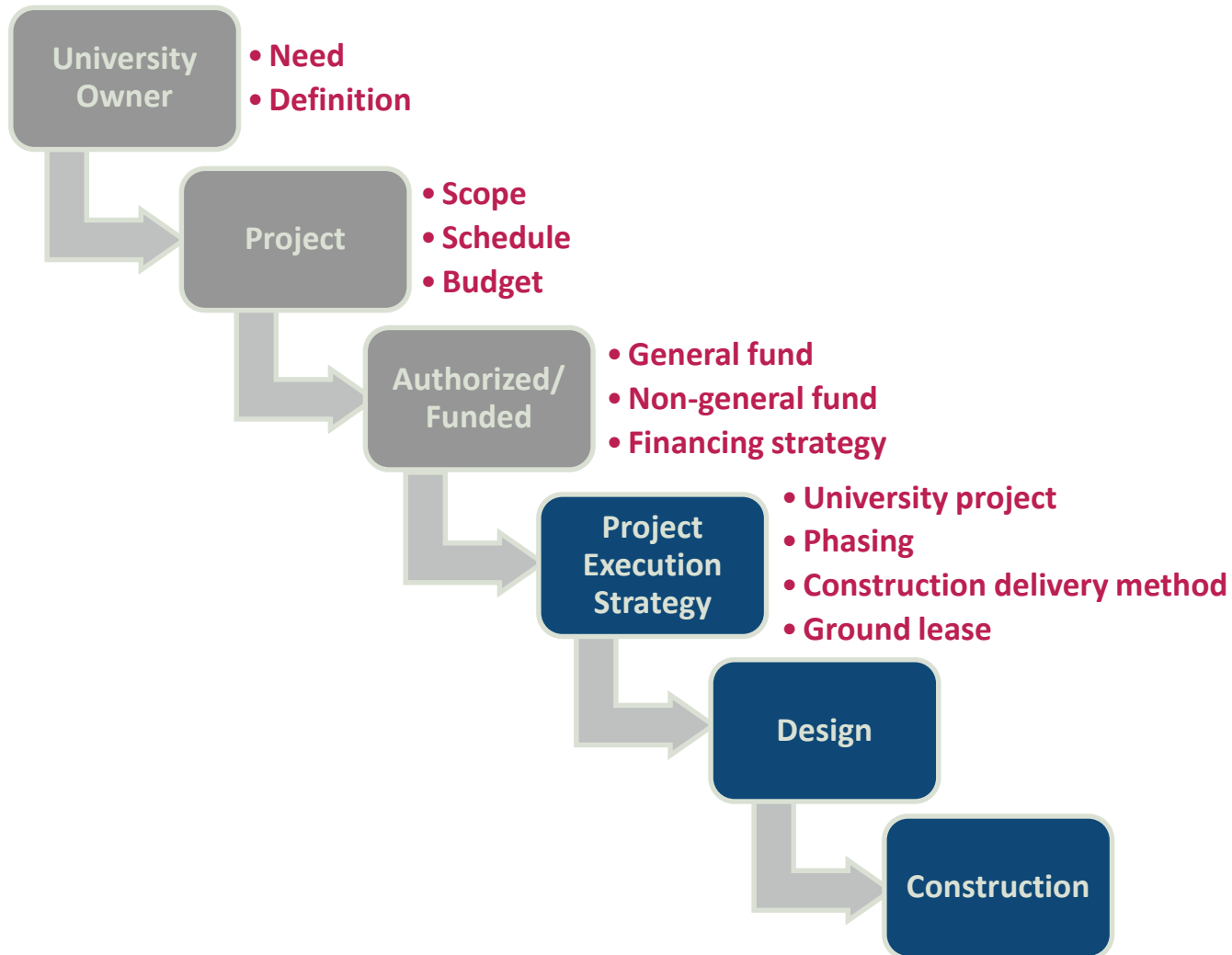
■ Foundation Projects:

- 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



Capital Improvement Project Process Overview



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

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.”



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 plant 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

Single-prime/ Multi-prime ("separate 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

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

Single-prime/
Multi-prime
("separate
prime")

- Open bidding, lowest responsible, responsive bidder
- Appropriate for a broad range of project sizes
- Prequalifying may limit competitive pool
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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

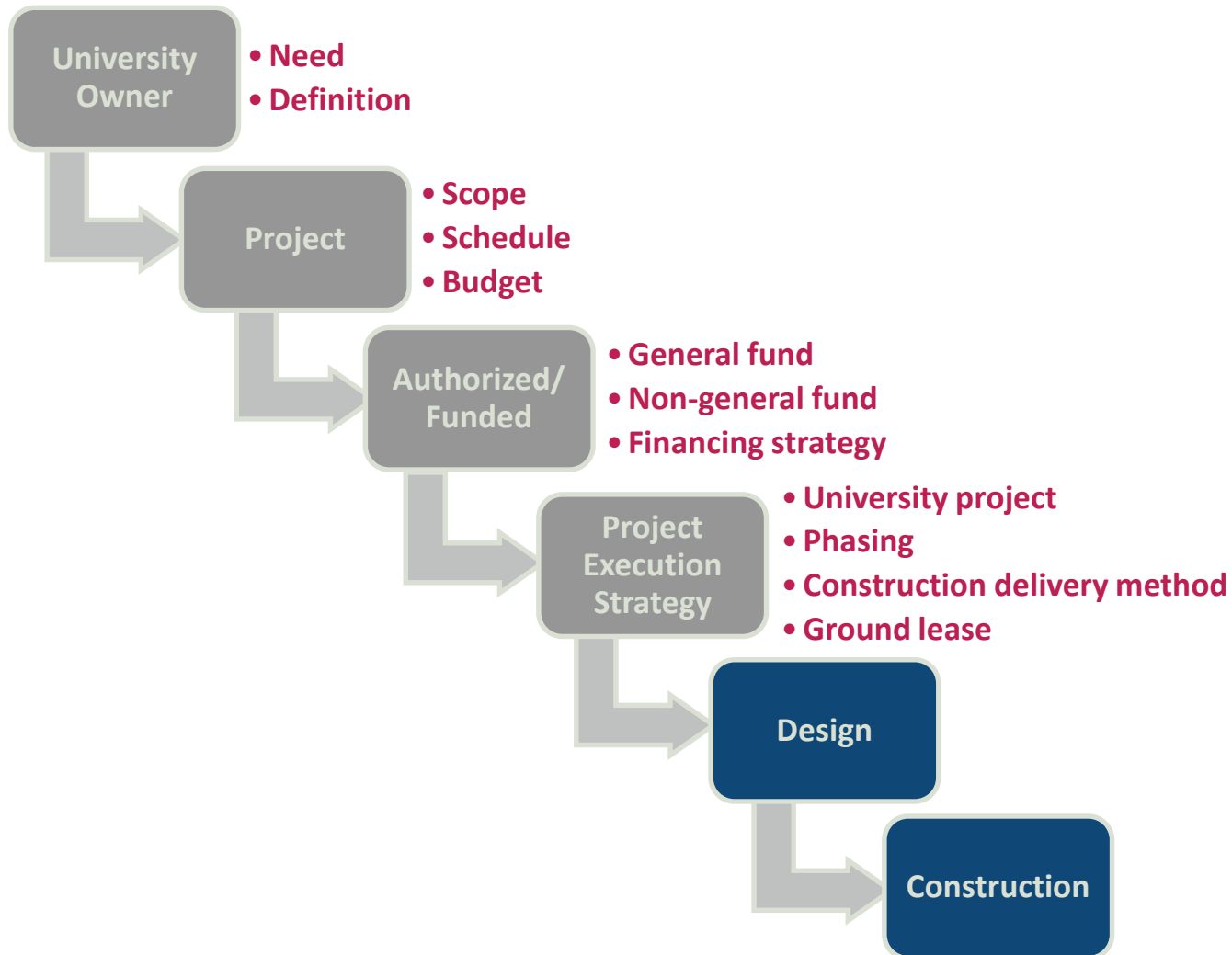
Project Execution

Construction Delivery Method

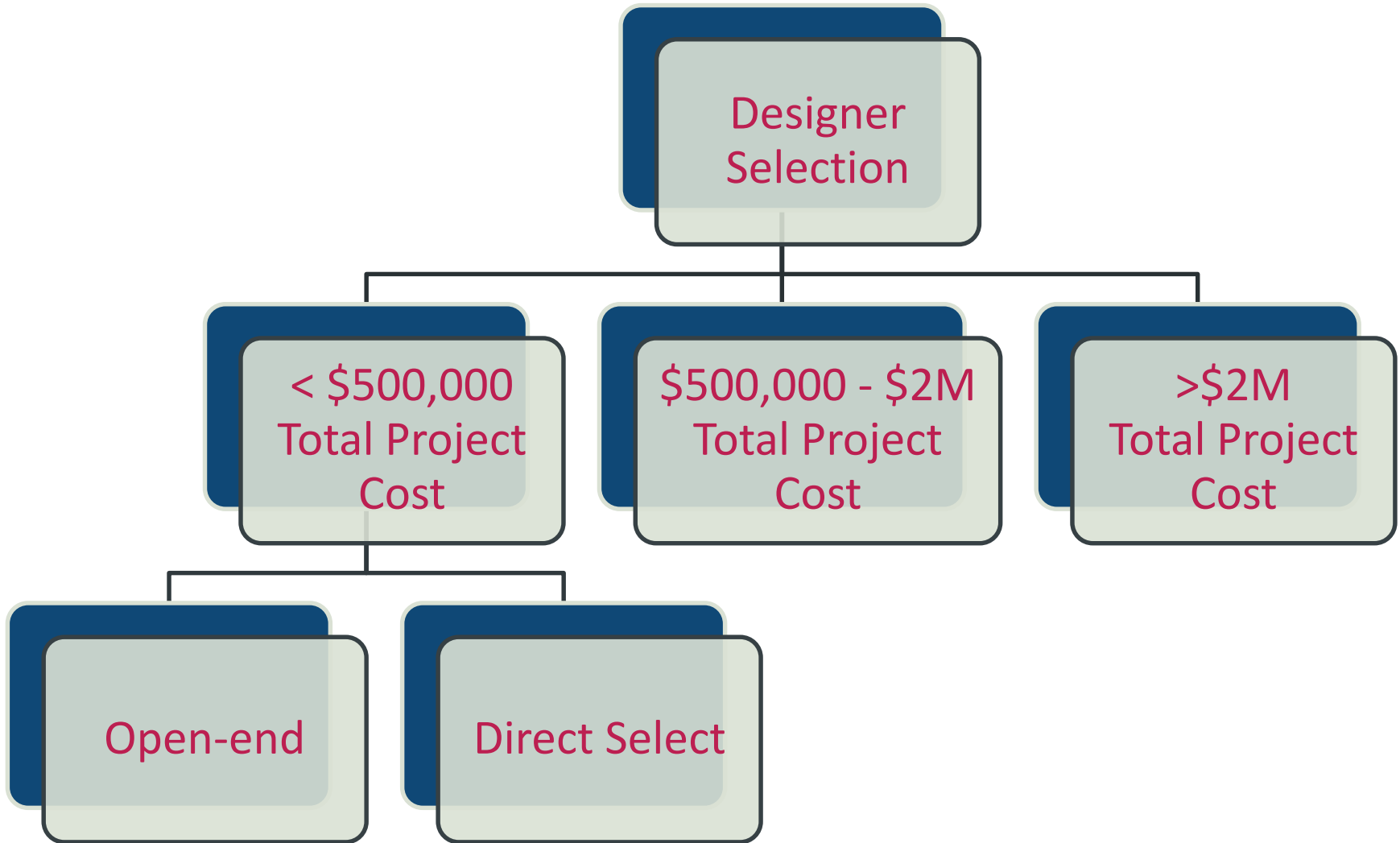
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Capital Improvement Project Process Overview



Project Execution Designer Selection



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

Project Execution

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

Advertisement

- Minimum of 10 days
- UNC and IPS web sites

Project Execution

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

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Project Execution

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

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- Letter form of agreement
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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)

Advertisement

- 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)

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 – \$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

Advertisement

- 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

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 – 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

Advertisement

- 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

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 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

Project Execution

CM at Risk Selection

Advertisement

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

Project Execution

CM at Risk Selection

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Project Execution

CM at Risk Selection

Contract

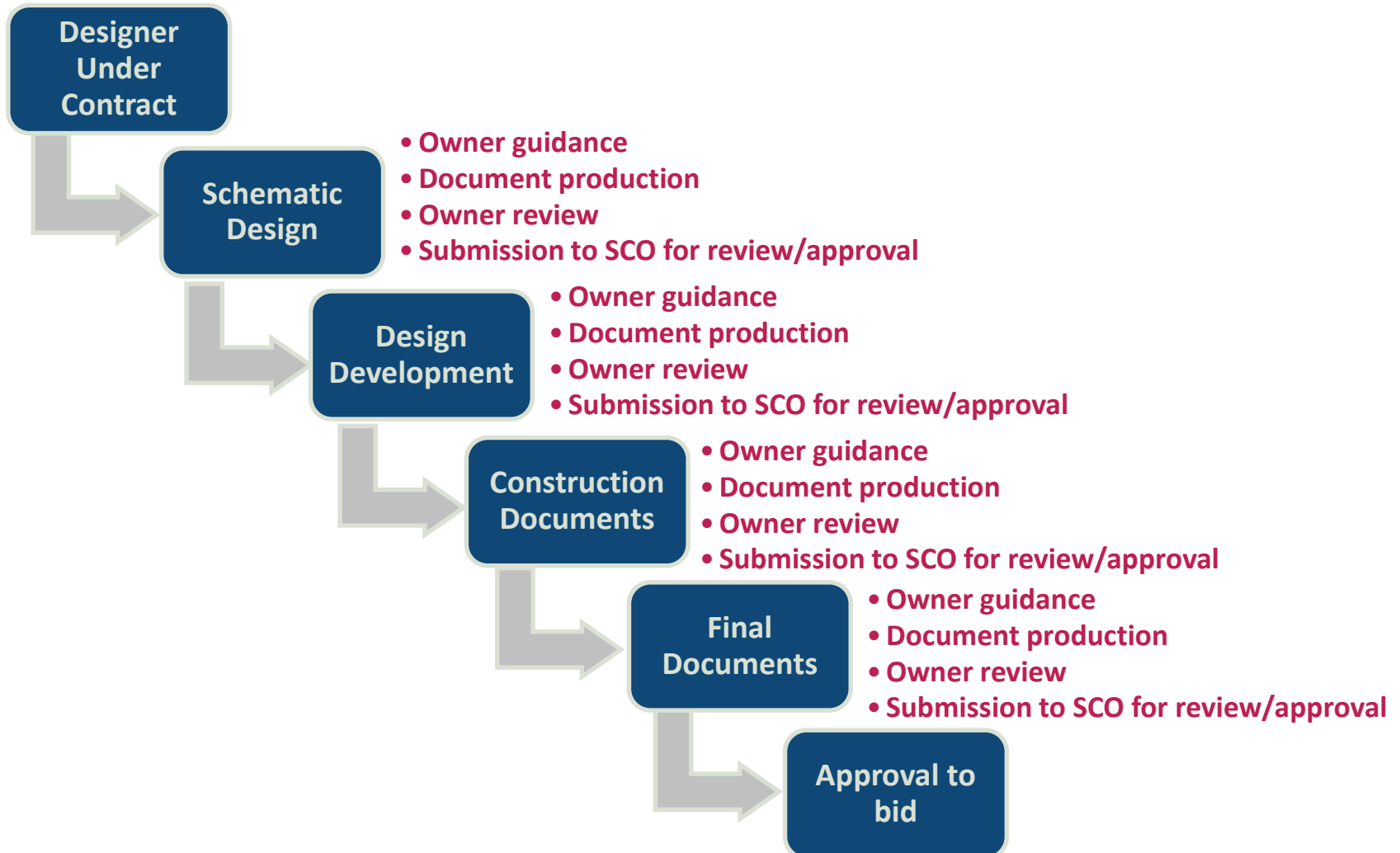
- Fees negotiated by State Construction Office (projects over \$2M)
- Standard State of North Carolina CM at Risk contract documents
- SCO makes entries in Interscope

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

Design Process Overview



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

Design Review Process

Is design review required?

■ 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.

<https://files.nc.gov/ncdoa/documents/files/University%20Download%20Project%20Review%20Requirements.pdf>

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

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
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Development
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Design Review Process

Construction
Drawings

(60 calendar
days)/

Final Drawings
(15 calendar
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- Construction cost estimate using quantity take-offs
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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

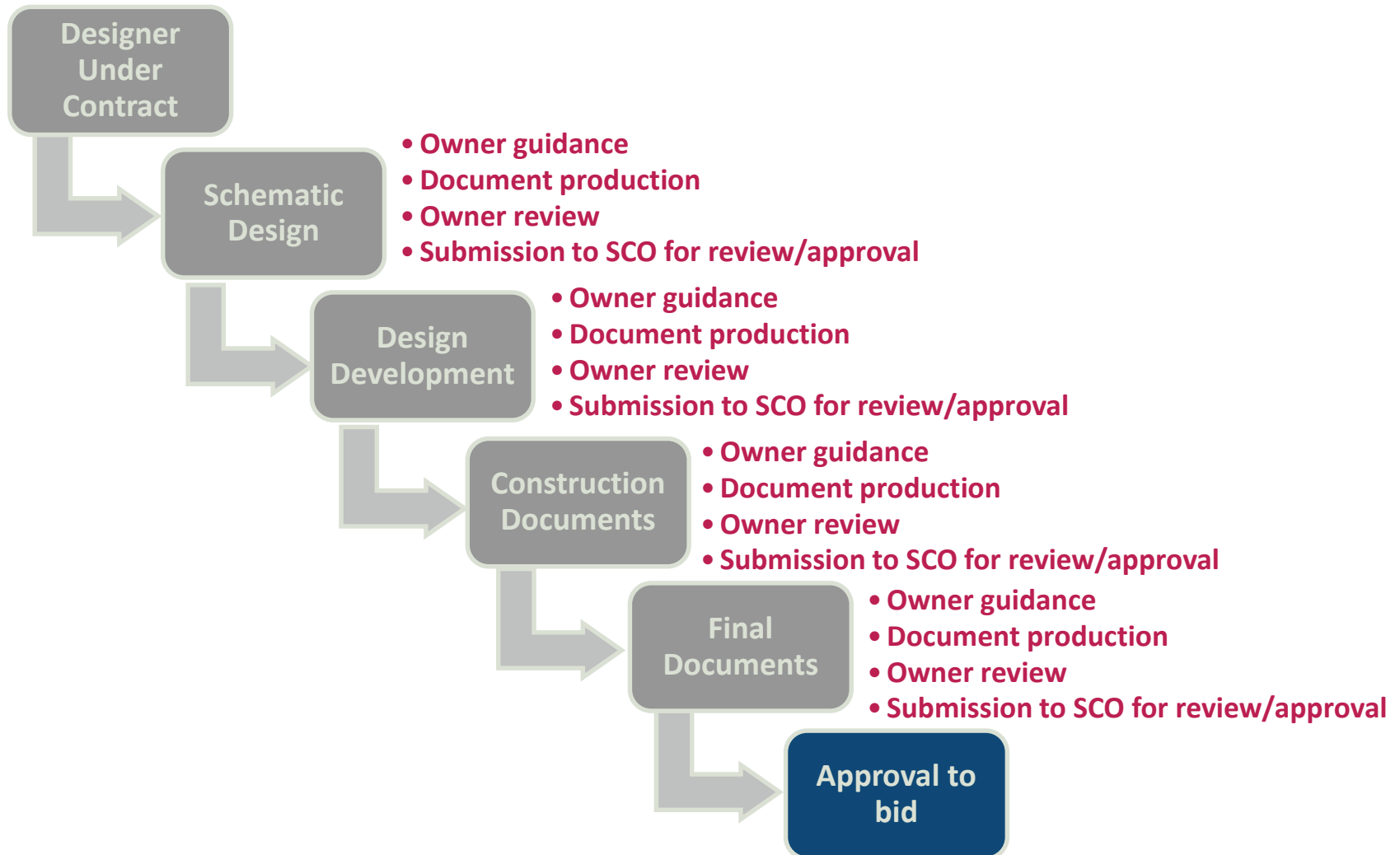
■ Under \$2M:

- 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

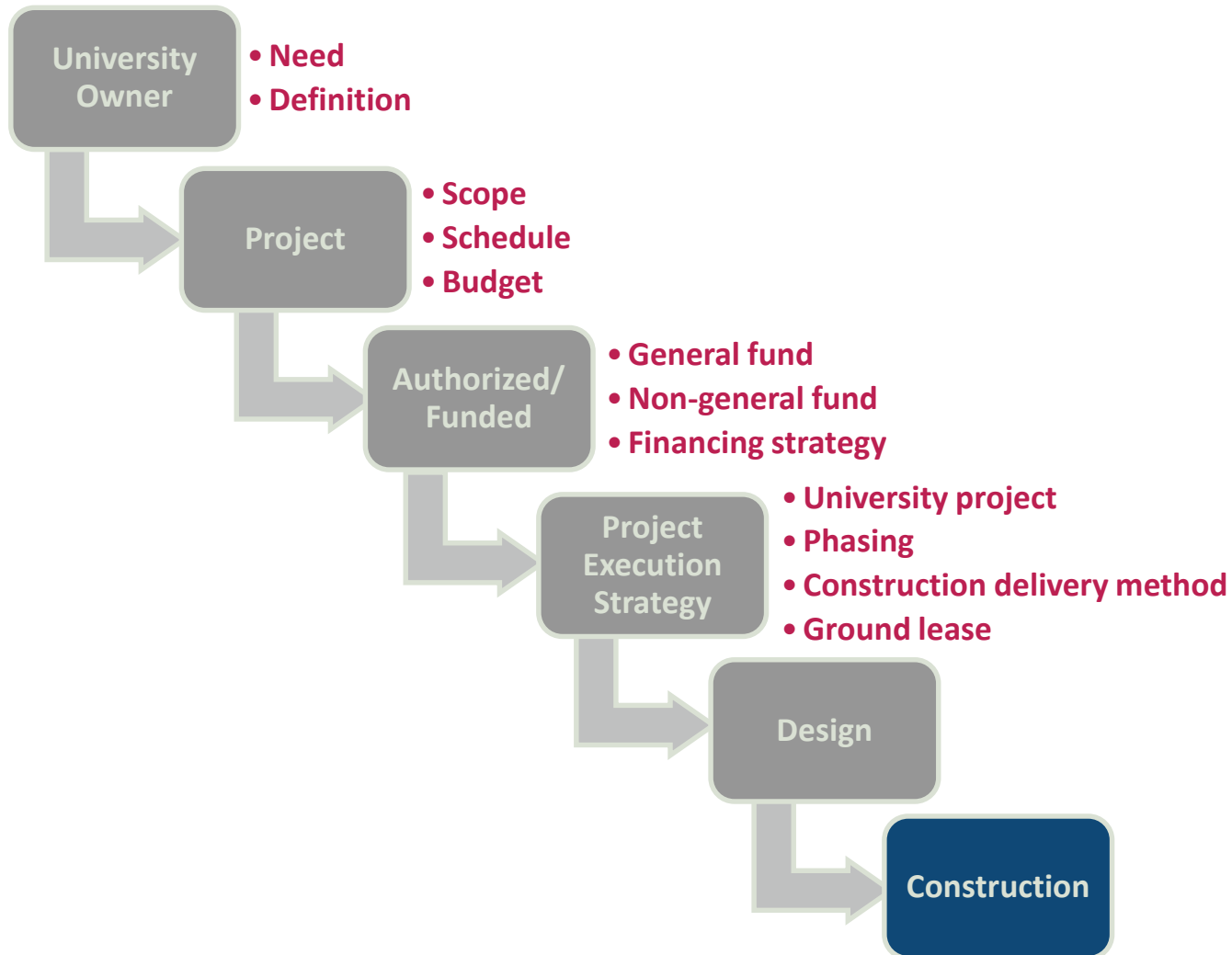
Design Process Overview





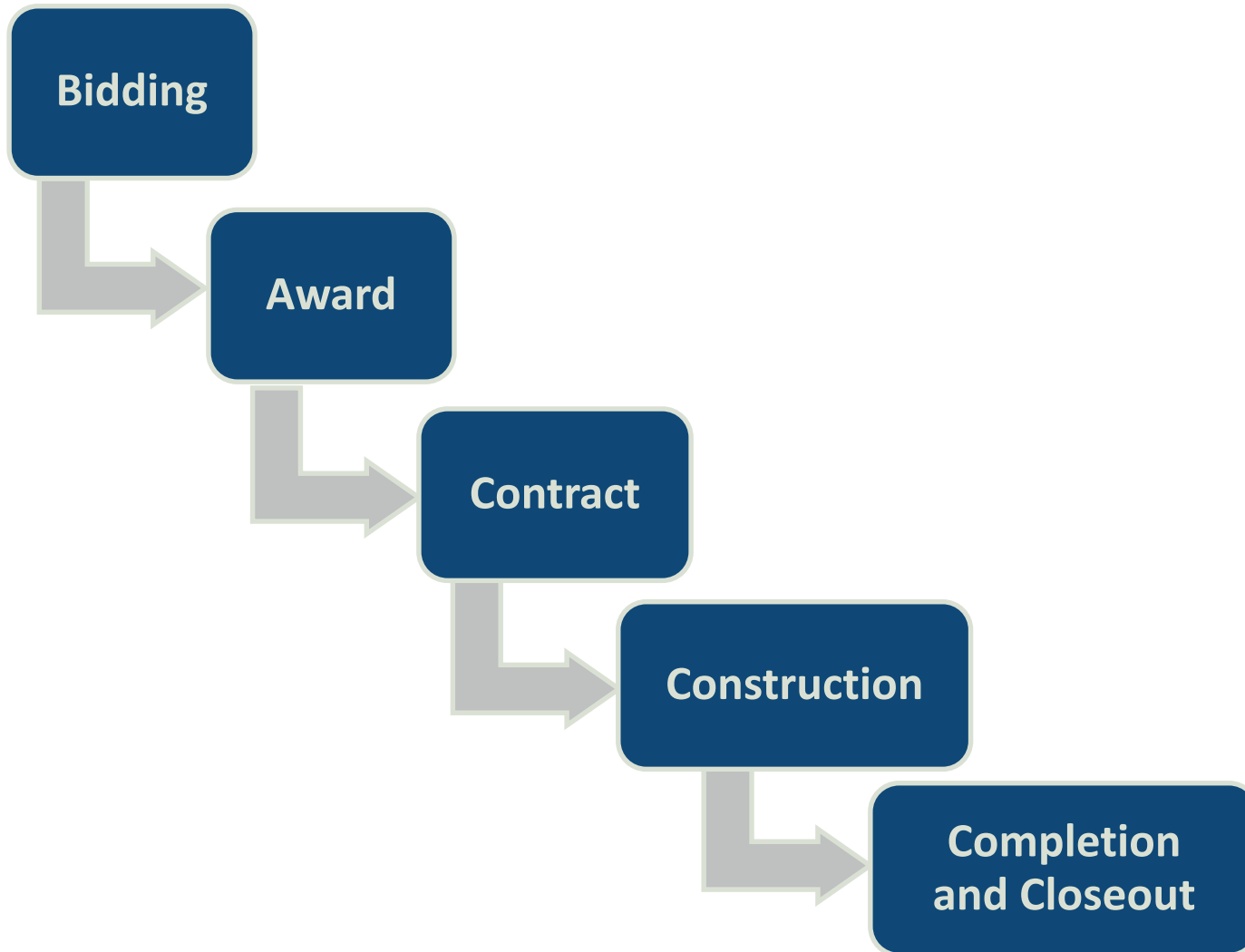
DESIGNER SELECTION AND CONTRACTING CASE STUDIES

Capital Improvement Project Process Overview

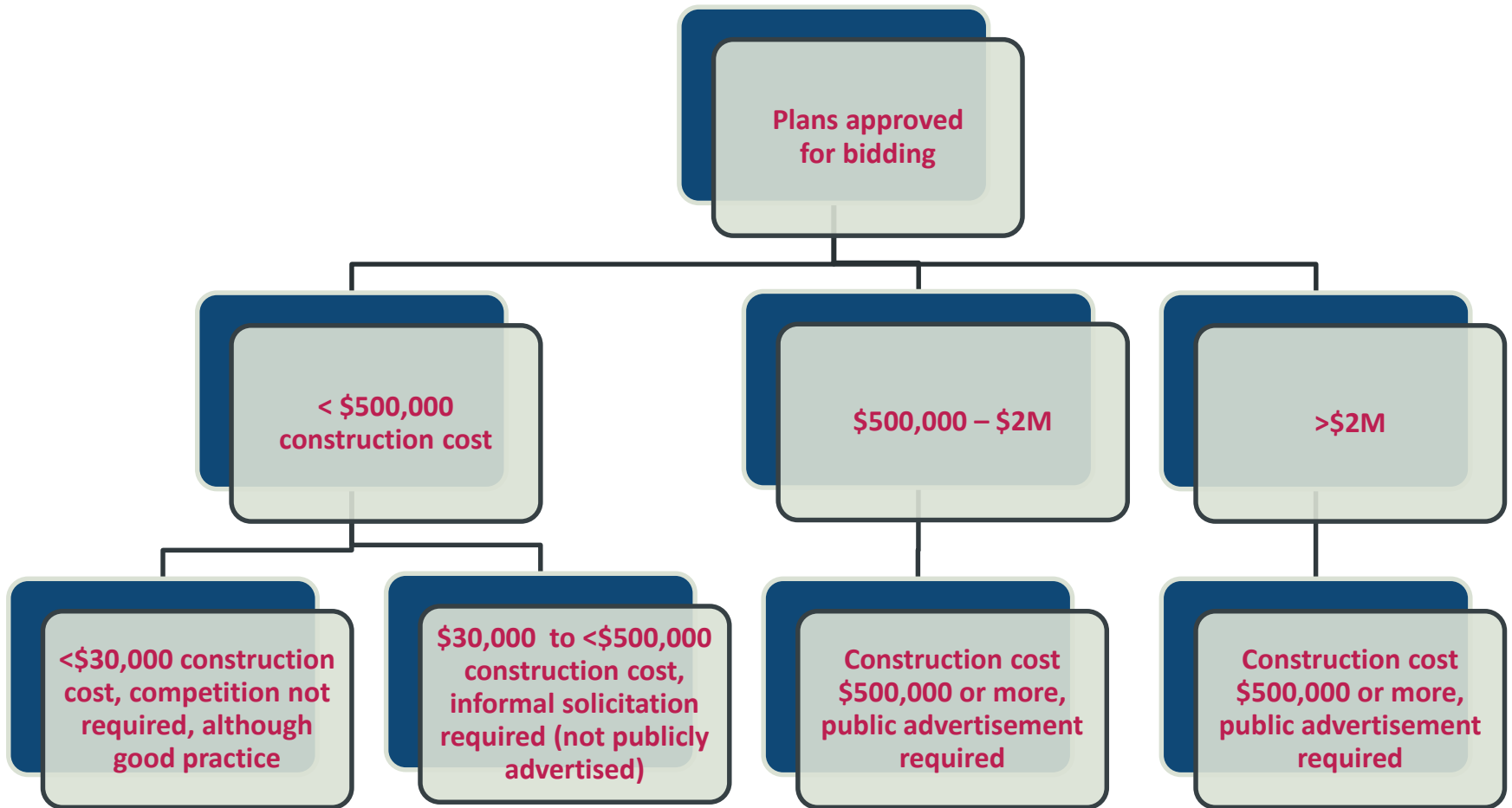


Project Execution

Construction Process Overview



Construction Bidding & Award Process



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

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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

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Construction Bidding >\$2M

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- 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

Advertisement

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- Newspaper of statewide circulation and electronic (UNC and IPS web sites)
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- Minimum of 7 calendar days required on a rebid

Construction Bidding

>\$2M

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

Construction Bidding

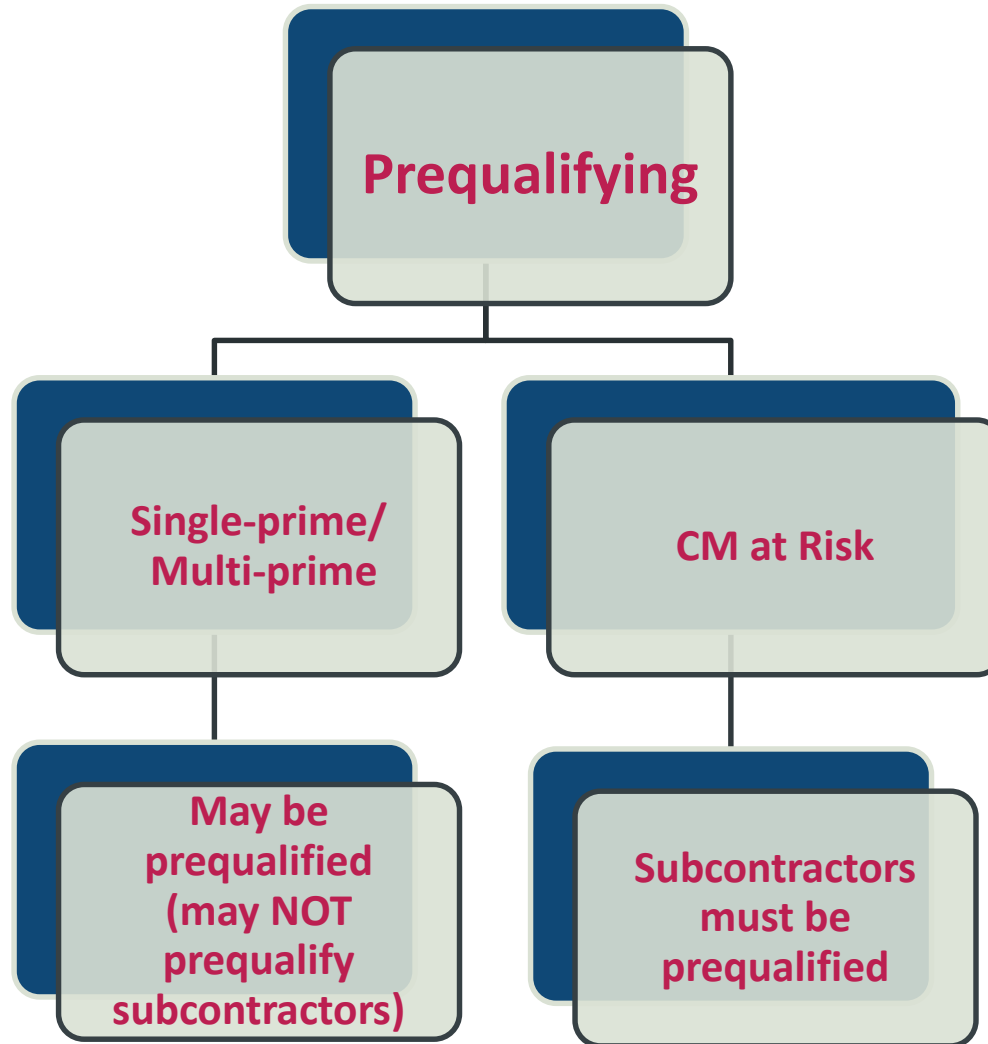
>\$2M

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 Process

Prequalifying






Construction Bidding Process

Prequalifying

Single Prime/ Multi-prime

Prequalification:

- [State of NC Prequalification Policy](#) 
- [General Contractor Prequalification Form](#) 
- [General Contractor Prequalification Matrix](#) 

CMR Subcontractors

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](#)

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 statutes 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 BIDDING CASE STUDIES



CONSTRUCTION CONTRACT AWARD CASE STUDIES

EMERGENCY!!!!

- “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

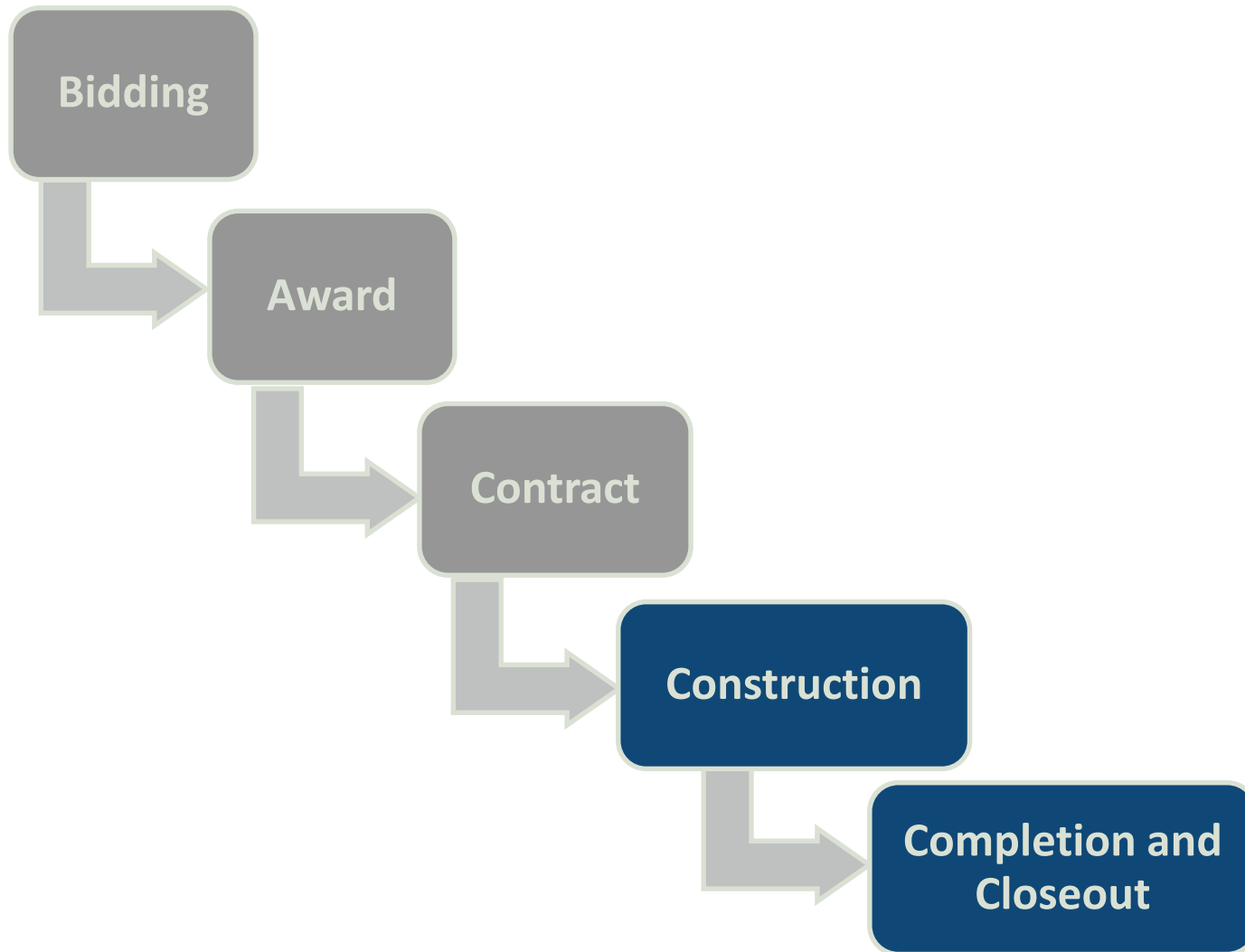
<https://www.northcarolina.edu/design-and-construction/policies-procedures-and-general-information>



CONSTRUCTION CM AT RISK CASE STUDIES

Project Execution

Construction Process Overview



Construction

Administration, Completion, and Closeout

<\$500,000

- 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

<\$500,000

- 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

Construction

Administration, Completion, and Closeout

\$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

Construction

Administration, Completion, and Closeout

>\$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

- Payment may be withheld for defective, incomplete or disputed work.
- Retainage is NOT withholding payment as described above
<https://www.northcarolina.edu/sites/default/files/documents/retainage.pdf>
- Commissioning
https://files.nc.gov/ncdoa/documents/files/BLDG_COMMISSIONING.pdf
- Performance Verification of Buildings
https://files.nc.gov/ncdoa/documents/files/Bldg_Perf_Verification.pdf
- 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

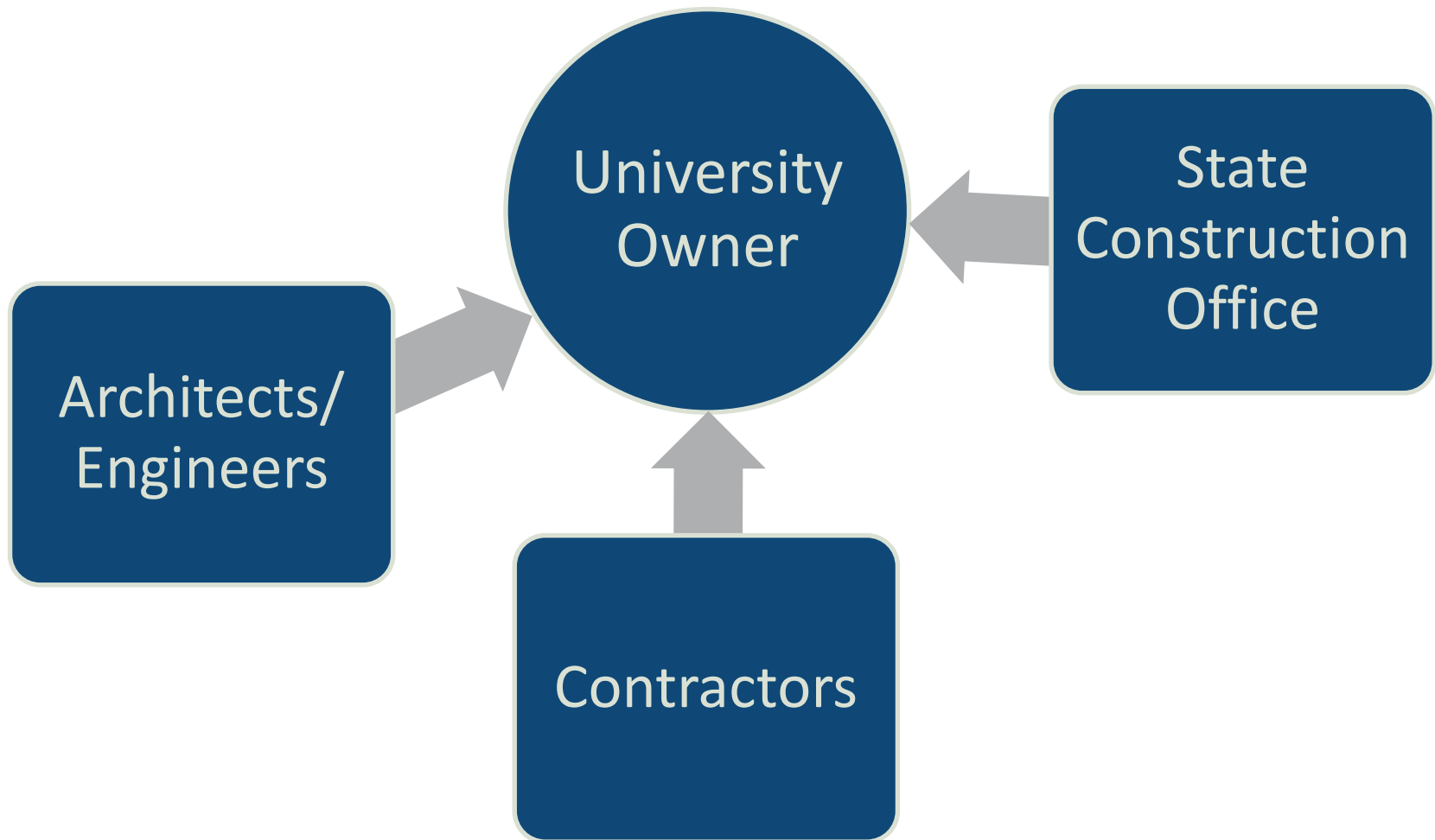
Miscellaneous Odds and Ends

- 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:")

"Notwithstanding 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



Capital Project Procedure Guidance

General Fund Projects

UNC SYSTEM CAPITAL PROJECT PROCEDURE GUIDANCE FOR CAPITAL PROJECTS FROM <u>GENERAL</u> FUND SOURCES Effective July 1, 2019				
	ACTIVITY	PROJECT DOLLAR THRESHOLD*		
		Up to \$500,000**	>\$500,000 to \$2,000,000**	>\$2,000,000**
AUTHORIZATION	Capital Project Authority (General Fund Sources Only, Cash or Debt)	Authorized by Legislative Action	Authorized by Legislative Action	Authorized by Legislative Action
	Capital Code/Item #	<ul style="list-style-type: none"> • UNCISO establishes in Interscope • UNCISO establishes in IBS • University establishes related financial system entries (Fund/Center, etc.) 	<ul style="list-style-type: none"> • UNCISO establishes in Interscope • UNCISO establishes in IBS • University establishes related financial system entries (Fund/Center, etc.) 	<ul style="list-style-type: none"> • UNCISO establishes in Interscope • UNCISO establishes in IBS • University establishes related financial system entries (Fund/Center, etc.)
	Primavera Schedule	Not applicable	Required for projects >\$750,000 prior to advertising for designer selection	Required prior to advertising for designer selection
DESIGN	Designer Selection (Refer to G.S. 133-1.1)	Open-end agreement or Direct selection	Public advertisement	Public advertisement
	Approval of Selection	BOT	BOT	BOT
	Designer's Contract	<ul style="list-style-type: none"> • University negotiates • University executes 	<ul style="list-style-type: none"> • University negotiates • University executes 	<ul style="list-style-type: none"> • SCO negotiates • University executes, copy to SCO
	Reporting/Recording	University records in Interscope	University records in Interscope	SCO records in Interscope
	Plan Review and Approval	<ul style="list-style-type: none"> • SCO code review, as applicable • SCO electrical inspections required 	<ul style="list-style-type: none"> • SCO code review, as applicable • SCO electrical inspections required 	Full SCO oversight
CONSTRUCTION	Bidding	<ul style="list-style-type: none"> • University informally solicits competitive bids • Public bidding not required 	<ul style="list-style-type: none"> • University solicits competitive bids • Informal solicitation for estimated construction cost ≤\$500,000 • Formal solicitation for estimated construction cost >\$500,000 • Public bidding required per G.S. 143-129 	<ul style="list-style-type: none"> • University solicits competitive bids • Formal solicitation for estimated construction cost >\$500,000 • Public bidding required per G.S. 143-129
	Forms for Bid Documents	Template SCO informal contract format, notice to bidders, and general conditions, supplemented w/ institution-specific requirements	UNC System formal contract template, notice to bidders, and general conditions	SCO State of North Carolina formal contract template, notice to bidders, and general conditions
	Bonding Requirement	Not required by law, University can require	Required on formal bid solicitations (>\$500,000)	Required
	Contract Awarding Authority	University	UNCISO	SCO
	Form of Contract	Informal	Informal or UNC System formal according to bid type	SCO State of North Carolina formal
	Reporting/Recording Contract	University	University	<ul style="list-style-type: none"> • SCO awards • University executes, copy to SCO
	HUB Participation Reporting	University	University	<ul style="list-style-type: none"> • SCO makes entries at award • University maintains current entries • University updates at final acceptance
	Change Order (CO) Processing	<ul style="list-style-type: none"> • University authorizes/approves • University executes in writing • University records in Interscope, manual entry 	<ul style="list-style-type: none"> • CO Initiated in Interscope • University authorizes/approves in Interscope • CO documents maintained in Interscope 	<ul style="list-style-type: none"> • CO Initiated in Interscope • University authorizes/approves in Interscope • SCO authorizes/approves in Interscope • CO documents maintained in Interscope
	Final Inspection	If designer is engaged, designer certification is required	<ul style="list-style-type: none"> • Designer's certification required • Notify SCO of scheduled final inspection 	<ul style="list-style-type: none"> • Designer's certification required • SCO final inspection required

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

**All construction contracts over \$30,000 must be entered in Interscope with HUB participation reported in compliance with G.S. 143-131.

ACRONYMS: BOG - Board of Governors

BOT - University Board of Trustees

SCO - State Construction Office

UNCISO - UNC System Office



Capital Project Procedure Guidance

Non-general Fund Projects

UNC SYSTEM CAPITAL PROJECT PROCEDURE GUIDANCE FOR CAPITAL PROJECTS FROM NON-GENERAL FUND SOURCES Effective July 1, 2019									
	ACTIVITY	PROJECT DOLLAR THRESHOLD*							
		Up to \$30,000	>\$30,000 to \$300,000**	>\$300,000 to \$500,000**	>\$500,000 to \$750,000**		>\$750,000 to \$1,000,000**	>\$1,000,000 to \$2,000,000**	>\$2,000,000**
AUTHORIZATION	Capital Project Authority (Non-general Fund Sources Only)	University	University	<ul style="list-style-type: none">BOT authorizationSubmit C-1 and OC-25 to UNCISO	<ul style="list-style-type: none">BOT authorizationSubmit C-1 and OC-25 to UNCISO	THRESHOLD FOR BOARD OF GOVERNORS' APPROVAL	<ul style="list-style-type: none">Submit to UNCISO for BOG authorizationDelegated authority institutions, BOT may authorizeC-1 and OC-25 required	<ul style="list-style-type: none">Submit to UNCISO for BOG authorizationC-1 and OC-25 required	<ul style="list-style-type: none">Submit to UNCISO for BOG authorizationC-1 and OC-25 required
	Capital Code/Item #	Not applicable	Not applicable	<ul style="list-style-type: none">UNCISO establishes in interscopeUniversity establishes related financial system entries (BIS, etc.)	<ul style="list-style-type: none">UNCISO establishes in interscopeUniversity establishes related financial system entries (BIS, etc.)		<ul style="list-style-type: none">UNCISO establishes in interscopeUniversity establishes related financial system entries (BIS, etc.)	<ul style="list-style-type: none">UNCISO establishes in interscope upon BOG approvalUniversity establishes related financial system entries (BIS, etc.)	<ul style="list-style-type: none">UNCISO establishes in interscope upon BOG approvalUniversity establishes related financial system entries (BIS, etc.)
	Primavera Schedule	Not applicable	Not applicable	Not applicable	Not applicable		Required prior to advertising for designer selection	Required prior to advertising for designer selection	Required prior to advertising for designer selection
DESIGN	Designer Selection (Refer to G.S. 133-1.1)	Open-end agreement or Direct selection	Open-end agreement or Direct selection	Open-end agreement or Direct selection	Public advertisement		Public advertisement	Public advertisement	Public advertisement
	Approval of Selection	BOT	BOT	BOT	BOT		BOT	BOT	BOT
	Designer's Contract	<ul style="list-style-type: none">University negotiatesUniversity executes	<ul style="list-style-type: none">University negotiatesUniversity executes	<ul style="list-style-type: none">University negotiatesUniversity executes	<ul style="list-style-type: none">University negotiatesUniversity executes		<ul style="list-style-type: none">University negotiatesUniversity executes	<ul style="list-style-type: none">University negotiatesUniversity executes	<ul style="list-style-type: none">SCO negotiatesUniversity executes, copy to SCO
	Reporting/Recording	Not applicable	University records in interscope	University records in interscope	University records in interscope		University records in interscope	University records in interscope	SCO records in interscope
	Plan Review and Approval	<ul style="list-style-type: none">SCO code review, as applicableSCO electrical inspections required	<ul style="list-style-type: none">SCO code review, as applicableSCO electrical inspections required	<ul style="list-style-type: none">SCO code review, as applicableSCO electrical inspections required	<ul style="list-style-type: none">SCO code review, as applicableSCO electrical inspections required		<ul style="list-style-type: none">SCO code review, as applicableSCO electrical inspections required	<ul style="list-style-type: none">SCO code review, as applicableSCO electrical inspections required	Full SCO oversight
CONSTRUCTION	Bidding	<ul style="list-style-type: none">University may directly select contractorGood practice may include informal competition	<ul style="list-style-type: none">University informally solicits competitive bidsPublic bidding not required	<ul style="list-style-type: none">University informally solicits competitive bidsPublic bidding not required	<ul style="list-style-type: none">University solicits competitive bidsInformal solicitation for estimated construction cost <\$500,000Formal solicitation for estimated construction cost >\$500,000Public bidding required per G.S. 143-129		<ul style="list-style-type: none">University solicits competitive bidsFormal solicitation for estimated construction cost >\$500,000Public bidding required per G.S. 143-129	<ul style="list-style-type: none">University solicits competitive bidsFormal solicitation for estimated construction cost >\$500,000Public bidding required per G.S. 143-129	<ul style="list-style-type: none">University solicits competitive bidsFormal solicitation for estimated construction cost >\$500,000Public bidding required per G.S. 143-129
	Forms for Bid Documents	Not applicable	Template SCO informal contract format, notice to bidders, and general conditions, supplemented w/ institution-specific requirements	Template SCO informal contract format, notice to bidders, and general conditions	UNC System formal contract template, notice to bidders, and general conditions		UNC System formal contract template, notice to bidders, and general conditions	UNC System formal contract template, notice to bidders, and general conditions	SCO State of North Carolina formal contract template, notice to bidders, and general conditions
	Bonding Requirement	Not applicable	Not required by law, University can require	Not required by law, University can require	Required on formal bid solicitations (>\$500,000)		Required on formal bid solicitations (>\$500,000)	Required	Required
	Contract Awarding Authority	University	University	University	UNCISO		UNCISO	UNCISO	SCO
	Form of Contract	Informal	Informal	Informal	Informal or UNC System formal according to bid type		Informal or UNC System formal according to bid type	UNC System formal	SCO State of North Carolina formal
	Reporting/Recording Contract	Not required	University	University	University		University	University	<ul style="list-style-type: none">SCO awardsUniversity executes, copy to SCO
	HUB Participation Reporting	Not required	University	University	University		University	University	<ul style="list-style-type: none">SCO makes entries at awardUniversity maintains current entriesUniversity updates at final acceptance
	Change Order (CO) Processing	<ul style="list-style-type: none">University authorizes/approvesUniversity executes in writingRecording in interscope is not required	<ul style="list-style-type: none">University authorizes/approvesUniversity executes in writingUniversity records in interscope, manual entry	<ul style="list-style-type: none">University authorizes/approvesUniversity executes in writingUniversity records in interscope, manual entry	<ul style="list-style-type: none">CO initiated in interscopeUniversity authorizes/approves in interscopeCO documents maintained in interscope		<ul style="list-style-type: none">CO initiated in interscopeUniversity authorizes/approves in interscopeCO documents maintained in interscope	<ul style="list-style-type: none">CO initiated in interscopeUniversity authorizes/approves in interscopeCO documents maintained in interscope	<ul style="list-style-type: none">CO initiated in interscopeUniversity authorizes/approves in interscopeSCO documents maintained in interscopeCO documents maintained in interscope
	Final Inspection	If designer is engaged, designer certification is required	If designer is engaged, designer certification is required	If designer is engaged, designer certification is required	<ul style="list-style-type: none">Designer's certification requiredNotify SCO of scheduled final inspection		<ul style="list-style-type: none">Designer's certification requiredNotify SCO of scheduled final inspection	<ul style="list-style-type: none">Designer's certification requiredNotify SCO of scheduled final inspection	<ul style="list-style-type: none">Designer's certification requiredSCO final inspection required

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

**All construction contracts over \$30,000 must be entered in interscope with HUB participation reported in compliance with G.S. 143-131.

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SCO - State Construction Office

UNCISO - UNC System Office



THE UNIVERSITY OF
NORTH CAROLINA SYSTEM

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QUESTIONS?

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