41st Annual State Construction Conference









March 3, 2022







Designer Responsibilities Examined

(or Oh my! – Public sector projects have different legal requirements than Private Sector)



Designer Responsibilities Examined

- General Statutes for the design professionals
- Mini-Brooks Act (GS 143-64.31) QBS selection
- Rules provided by NCBELS and NCBA/ID regarding plans
- NC Building Code Administrative Code and Policies
- Standard Design Contract used by SCO
- Seals, plans specs and NC GS 133
- Bid openings and the Recommendation to Award
- Monthly meetings and designer inspections
- The FINAL and the Certifications



General Statutes - design professionals

- NC GS Chapter 83A Architecture
 - GS 83A-12 "The purpose of this chapter is to safeguard the life, health and property...."
 - Establishes the NC Board of Architecture (now the NC Board of Architecture and Registered Interior Designers)
 - Board can create rules, bylaws and standards of professional conduct





General Statutes - design professionals

- NC GS Chapter 89C Engineering
 - GS 89C-2 "In order to safeguard the life, health and property...."
 - Coordination and agreements between the board: scope of practice
 - Contact Boards for determination





Mini-Brooks Act - QBS

- History of Qualifications Based Selection
- NC Statute GS 143-64.31
 - Law and Exemptions
 - 2014 Legislative Changes most recent
- NC Administrative Code Board Rules require Architects, Engineers and Surveyors to comply
- NCBELS Mini-Brooks Guidelines
- NCBELS Board Newsletter article, Fall 2011



Federal Brooks Act 40 U.S. Code 1101 et seq. (formerly 541)

Introduced by **Congressman Jack Brooks** of Texas in 1972 to codify selection of architects and engineers (and surveyors) based on qualifications rather than solely on lowest price. President Nixon signed into law on October 27, 1972.





North Carolina "Mini-Brooks"

Became law in 1987 for the procurement of architectural, engineering and land surveying services based on qualifications. Construction management at risk services added in 2001. Design-build services, and public-private partnership construction services were added in 2013.

Applies to the State and its public subdivisions and Local Governmental Units.



Relating Regulations to Procuring Professional Services

- What are the laws, rules, opinions and interpretations that apply?
- When is it architectural, engineering, land surveying or construction management at risk services?
- Where can you seek advice?
- How can you assure that you comply?
- **How** do you handle Design/Build?



NCGS 143-64.31

(a) It is the public policy of this State and all public subdivisions and Local Governmental Units thereof, except in cases of special emergency involving the health and safety of the people or their property, to announce all requirements for architectural, engineering, surveying, construction management at risk services, design-build services, and public-private partnership construction services to select firms qualified to provide such services on the basis of demonstrated competence and qualification for the type of professional services required without regard to fee other than unit price information at this stage, and thereafter to **negotiate a contract** for those services at a fair and reasonable fee with the best qualified firm.

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NCGS 143-64.31(a) (cont'd)

Selection of a firm under this Article shall include the use of good faith efforts by the public entity to notify minority firms of the opportunity to submit qualifications for consideration by the public entity.



Board Newsletter Spring 2001 Selected Questions & Answers

What is considered a fee bid?

The submission of any information that would allow the public entity to determine a total project fee would be considered a "fee bid."



NCGS 143-64.33. Advice in selecting consultants or negotiating consultant contracts.

On architectural, engineering, or surveying contracts, the Department of Transportation or the Department of Administration may provide, upon request by a county, city, town or other subdivision of the State, advice in the process of selecting consultants or in negotiating consultant contracts with architects, engineers, or surveyors or any or all.



Rules provided by NCBELS and the NCBA/ID

- Websites: <u>www.ncbels.org</u> <u>www.ncbarch.org</u>
- All licensed design professionals are responsible for understanding and adhering to rules

21 NCAC 02 .0203 RULES OF PROFESSIONAL CONDUCT

In order to safeguard the life, health, property and welfare of the public and to establish and maintain a high standard of integrity, skills, and practice in the practice of architecture and registered interior design, the Rules of Professional Conduct in this Rule are adopted in accordance with G.S. 83A and are binding upon every person holding a license to practice architecture (licensee) or registered interior designer (registrant), and on all firms authorized to offer or render architectural or registered interior design services in this state. All persons licensed or registered under the provisions of G.S. 83A are charged with having knowledge of the Board Rules and are deemed to be familiar with their provisions and to understand them. Each licensed or registered person and entity shall affirm in their renewals that they have read and understand the current laws and rules.

- (1) Licensees and registrants shall conduct their practice in order to protect the public health, safety and welfare. The licensee or registrant shall always recognize the primary obligation to protect the public in the performance of the professional duties. The architect or registered interior designer acts as a professional adviser to their client and their advice must be unprejudiced. If the licensee or registrant's professional judgment is overruled under circumstances where the safety, health and welfare of the public are endangered, the licensee or registrant shall inform the employer, the client, the contractor, other affected parties, and any appropriate regulatory agency of the possible consequences of the situation.
- (2) In designing a project, the licensee or registrant shall consider all applicable federal, state and municipal building laws and rules. A licensee or registrant shall undertake to perform professional services only when they, together with those whom the licensee or registrant may engage as consultants, are qualified by education, training and experience in the specific technical areas involved. While a licensee or registrant may rely on the advice of other professionals (e.g., attorneys, engineers and other qualified persons) as to the intent and meaning of such laws and rules, once having obtained such advice, a licensee or registrant shall not design a project in violation of such laws and rules.
- (3) In practicing architecture or interior design, the licensee or registrant shall act with reasonable care and competence and shall apply the technical knowledge and skill which is ordinarily applied by architects or interior designers of good standing, practicing in the same locality.
- (4) Responsible Control. No architect or registered interior designer shall affix their seal and signature to contract documents developed by others not under the architect's or registered interior designer's responsible control. "Responsible control" means that amount of control over and professional knowledge of the content of technical submissions during their preparation as is exercised by an architect or registered interior designer applying the required professional standard of care, including:
 - (a) Dissemination of programmatic requirements;
 - (b) Ongoing coordination and correlation of services with other aspects of the total design of the project;
 - (c) Verification with consultant that owner's requirements are being met;
 - (d) Authority over the services of those who assisted in the preparation of the documents;
 - (e) Assumption of responsibility for the services;
 - Incorporation of services and technical submissions into design documents to be issued for permitting purposes; and
 - (g) Incorporation and integration of information from manufacturers, suppliers, installers, the architect's or registered interior designer's consultants, owners, contractors, or other sources the architect or registered interior designer trusts that is incidental to and intended to be incorporated into the architect's or registered interior designer's technical



Selection & Standard Design Contract - SCO

- The SCO "Blue book"
- SCO Web site "Forms and Documents"
- Standard Contract

| 2022 State | Construction | Conference |
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NC*DOA

| <u>Home Divisions</u> Public ~ | Businesses ∽ | Government ∨ | Advocacy 🗸 | News 🗸 | About DOA 🗸 |
|---|-------------------|-------------------------|-------------------------------|------------------------------|---|
| Administration and Design Contract Design Build Flood Plain Management | | Forms | and Documents | | |
| Design Review Bidding and Contract Construction Manager at Risk (CMR) Forms | | | | Building Commission | |
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| Requirements | | | | Const | ruction Management |
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| <u>Roles & Responsibilities of Priv</u> University Download Review Re | | ects 🛛 | | <u>Hours</u> | & Directions |
| Guidelines | | | <u>Capita</u> | l Project Coordinators | |
| Asbestos Abatement ☑ | | | | <u>Staff I</u> | isting |
| Electrical Guidelines (2020 Ed. | 2 | | | | |
| Masonry Mortar Policy | | | | Vendor R | lesources |
| Metal Building System Design Guidelines ☑ | | | <u>Historica</u> (HUB) | lly Underutilized Businesses | |
| • Modular Buildings Memorandum | | | | | |
| Federal Tax Deduction Program | (179D) for Energy | y Efficient Buildings 🛛 | | Real Esta | ate |
| 2020 Fire Alarm Check List ☑ | | | | Federal | Surplus Property |

Selection & Standard Design Contract - SCO

- The SCO "Blue book"
- SCO Web site "Forms and Documents"
- Standard Contract
- Design professional will be AHJ during construction

| STATE OF NORTH CAROLINA |
|----------------------------|
| STANDARD FORM OF AGREEMENT |
| BETWEEN OWNER AND DESIGNER |

| | made this day of in the yea North Carolina acting through | r hereinafter called the |
|------------------------|---|----------------------------|
| "Owner", and | hereinafter called the "Designer". | 0. |
| WITNESSETH, that v | hereas the Owner intends to construct a project | with a scope consisting of |
| hereinafter called the | "Project" for which the following has been budge | 000 |
| А. т | otal Funding | \$ |
| B. L | ess Owner Reserves | \$ |
| Total A | uthorization | \$ |
| Total Project Constru | ction Cost is not to exceed dollars) |) (\$ |
| Total Contingency Re | serve is (dollars) | (\$ |
| Design Fee is (| dollars) | (\$ |
| NOTE: See Article 1 | orn | |

-1-

NC Building Code – Administrative Code and Policies

- NC Building Code will guide the plans
- Administrative Code is part of Building Code
- Building code cycle
- Duty to protect the public





Sealing your work

- Every submission must be properly noted on the drawings.
 - Architecture 21 NCAC 02.0206
 - Engineering 21 NCAC 56.1103
- There is a list of designations.
- Specific requirements for taking responsibility

REGARDING THE USE OF PROFESSIONAL SEALS AND THE PRACTICE OF ARCHITECTURE AND ENGINEERING IN THE STATE OF NORTH CAROLINA.

To safeguard the public life, safety, welfare and property the State of North Carolina requires that individuals who practice architecture and engineering be properly licensed. Answers and illustrations to frequent questions are provided for clarity – detailed reviews of the North Carolina Building Code, the General Statutes and Rules of the State Boards of Architecture and Engineering are necessary.



A publication of the NC Board of Architecture and the NC Board of Examiners for Engineers and Surveyors.

WHICH TYPE OF LICENSEE MUST PREPARE AND SEAL THE PLANS?

Can architects prepare and seal engineering plans?

Architects/Engineers:

Although "incidental" engineering is allowed if it is included in the architectural plans, architects generally should not design electrical, mechanical, plumbing, civil or structural engineering systems.

Can professional engineers prepare and seal architectural plans?

Architects/Engineers:

Although building design is allowed, if within the competency of the professional engineer, professional engineers cannot represent the work as architecture and should not seal drawings labeled as architectural ("A Sheets") or be listed as the "Architectural" Designer on the Appendix B – Building Code Summary.

ARE THERE SPECIAL REQUIREMENTS REGARDING THE SEALS AND SIGNATURES?

Can a licensee use an electronic/digital signature?

Architects: Permitted subject to detailed requirements described in rule 21 NCAC 02 .0206 (e).



.1103(d) Electronically transmitted documents

The scanned digital files of <u>properly certified documents</u> are not subject to the requirements of this paragraph. The electronic transmission of CAD, vector or other files subject to easy editing are subject to the requirements of this paragraph. Easy editing is based on the file consisting of separate elements that can be individually modified or deleted.



Electronically transmitted documents using <u>digital signature</u>

Engineering – 21 NCAC 56.1103(e)

Architecture – 21 NCAC 02.0206(e)(2) (identical as to the 4 items)

The term "digital signature" shall be an electronic authentication process that is attached to or logically associated with an electronic document. The digital signature shall be:

- (1) Unique to the licensee using it;
- (2) Capable of verification;
- (3) Under the sole control of the licensee; and

(4) Linked to a document in such a manner that the digital signature is invalidated if any data in the document is changed.

NC*DOA

Specifications and NC GS 133

- Public Sector work is different GS 133-3
- Free and open competition on public contracts
- Three equal products...or performance specification

§ 133-3. Specifications to carry competitive items; substitution of materials.

All architects, engineers, designers, or draftsmen, when providing design services, or writing specifications, directly or indirectly, for materials to be used in any city, county or State work, shall specify in their plans the required performance and design characteristics of such materials. However, when it is impossible or impractical to specify the required performance and design characteristics for such materials, then the architect, engineer, designer or draftsman may use a brand name specification so long as they cite three or more examples of items of equal design or equivalent design, which would establish an acceptable range for items of equal or equivalent design. The specifications shall state clearly that the cited examples are used only to denote the quality standard of product desired and that they do not restrict bidders to a specific brand, make, manufacturer or specific name; that they are used only to set forth and convey to bidders the general style, type, character and quality of product desired; and that equivalent products will be acceptable. Where it is impossible to specify performance and design characteristics for such materials and impossible to cite three or more items due to the fact that there are not that many items of similar or equivalent design in competition, then as many items as are available shall be cited. On all city, county or State works, the maximum interchangeability and compatibility of cited items shall be required. The brand of product used on a city, county or State work shall not limit competitive bidding on future works. Specifications may list one or more preferred brands as an alternate to the base bid in limited circumstances. Specifications containing a preferred brand alternate under this section must identify the performance standards that support the preference. Performance standards for the preference must be approved in advance by the owner in an open meeting. Any alternate approved by the owner shall be approved only where (i) the preferred alternate will provide cost savings, maintain or improve the functioning of any process or system affected by the preferred item or items, or both, and (ii) a justification identifying these criteria is made available in writing to the public. Substitution of materials, items, or equipment of equal or equivalent design shall be submitted to the architect or engineer for approval or disapproval; such approval or disapproval shall be made by the architect or engineer prior to the opening of bids. The purpose of this statute is to mandate and encourage free and open competition on public contracts. (1933, c. 66, s. 3; 1951, c. 1104, s. 5; 1993, c. 334, s. 7.1; 2002-107, s. 5; 2002-159, s. 64(c).)

G.S. 133-3



Bid openings and the Recommendation to Award

- Bidding
 - HUB office
 - PreBid meeting
 - Bid Guidelines

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Requirements and Guidelines

- Bid Opening Guidelines
- Minority Business Participation Guidelin
- Informal Contract and General Conditio
 Prequalification:
- State of NC Prequalification Policy ☑
- Prime Contractor Pregualification Form
- Prime Contractor Prequalification Rating

Bidding & Contract Forms

- Advertisement for Bids
- Bid Bond Form ☑
- Bid Summary Sheet ☑
- Draft Request for Award Letter ☑
- <u>Construction Contract Forms & Bonds</u>
- <u>Construction Contract Checklist</u>
- County Sales & Use Tax Report Summa
- Minority Business Participation Form
- Notice to Bidders
- Proposal Form 2006 (Revised 10/2013)

BID OPENING AGENDA

STATE CONSTRUCTION OFFICE

- 1. Receive bids until _____, at which time the Designer shall declare "receipt of bids is closed", and shut the door.
- 2. If sufficient bids are available, ask: "Have all bidders present received all addenda that were issued?" If any bidder had not received all <u>addenda</u> then present that bidder with the addenda and give him the opportunity to a) change his bid, b) leave his bid as-is, or c) withdraw his bid.
- 3. If sufficient bids are available, ask: "Was anyone denied the right to bid?"
- 4. If sufficient bids are available, ask: "Are there any objections to proceeding with the bid opening?"
- 5. If there is an objection, the Designer and Owner shall determine the merits of the objection and either:
 - a. attempt to address and satisfy the objection; or
 - b. secure complete info as to the objection and continue bid opening under protest; or
 - c. postpone the bid opening to a later date to adequately address the objection; or
 - d. rule the objection as an informality and proceed with bid opening.
- 6. Once bid opening commences, no bids shall be withdrawn, changed, or returned.
- All bids shall be read <u>allowed</u>, including any addenda. Designer shall state name of bidder, license number, bid security, base bid, and all alternates. Unit prices are not considered in award and thus not read. Irregularities are noted.
- 8. No announcements of low bidder(s) or apparent low bidder(s) are made.
- 9. No decisions on irregularities are made.
- 10. State that bids will be reviewed/validated with decisions to be made at a later time.
- 11. After bid opening, bidder may withdraw his bid from consideration without forfeiture of bid security when provisions of GS143-129 are followed. A written request must be made to the Owner or Designer prior to award but no later than 72 hours after the bid opening. A hearing will be held to determine if 143-129 is applicable and whether bid security may be returned.



Bid openings and the Recommendation to Award

- Bidding
 - HUB office
 - PreBid meeting
 - Bid Guidelines
- Contract Award & Processing
 - Review bids and docs and recommend appropriately
 - Request Award
 - Create Contract for Signature
 - Follow the Check list





Monthly meetings and designer inspections

- Weekly site visits
- Schedule of Values
- Change Orders
- Pay Application Certification
- Monthly meetings



North Carolina State Construction Office

MONTHLY CONSTRUCTION CONFERENCE AGENDA ITEMS

- 1. Review previous minutes of the meeting and resolve any corrections.
- 2. Work performed in the last 30 days.
- 3. Work to be performed in the next 30 days.
- Request for Proposal.

(Rev. 12/4/2000, 1/29/2008)

- 5. Review Pending Change Orders
- 6. Review Request for Information.
- 7. Review Status of Shop Drawings.
- 8. Review Schedule Compliance.
- 9. Percentages Complete to be reported by the Contractor(s) (Actual Work Completed)
- 10. Discuss Construction/Coordination Issues.
- 11. Designer Weekly Inspection Reports Non-Conforming Work
- 12. Special Inspection Reports Deficiency Notices
- 13. Comments from Owner, State Construction Office, Contractor(s), and Designers.

CONSTRUCTION ADMINISTRATION 301 North Wilmington St., Raleigh, North Carolina 27601-919-807-4100-Fax 919-807-4110



The FINAL and the Certificati

Project:

- Final vs BO
- Forms on SCO web site
- Check list of Documents
- Compliant and Complete





The FINAL and the Certifications

As the Design Professional, know what will be required for observation (inspections) during construction and what will be required for a final certification.

Include in contract what is required by State Construction, State reviewing/permitting agencies or local governments.

The end of the project is not the time to find out that you must provide a Certification of completion of project in accordance with the plans and specifications.



Questions



- Contact Information:
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 - Robert Talley robert.talley@doa.nc.gov

