

Building Code Official's Handbook

INTRODUCTION

The charge given a Building Official is the same as that given the Architectural Examining Board, the Engineering and Land Surveying Examining Board, and the Landscape Architectural Examining Board, safeguarding the health, safety and welfare of Iowa citizens by assuring the adequacy of buildings and their surroundings constructed in this state.

Although the charge is the same, the approach must differ. Building Officials review construction documents, authorize construction of new buildings, and monitor existing structures for code compliance. The Boards assure the public that design professions have met minimum standards. We rely on you, the Building Official, to assist in compliance with the laws governing the practice of architecture, engineering, and landscape architecture in Iowa. Building Officials may, in turn, rely on the Architectural, Engineering and Land Surveying, or Landscape Architectural Board(s) as a source of information and support.

There exists, however, some confusion among some Building Officials as to the requirements of the laws governing the practice of architecture, engineering, and landscape architecture in Iowa. This reference manual is intended as an aid for contractors, owners, developers and building officials. This handbook does not attempt to address all the questions concerning the practices of architecture, engineering, and landscape architecture.

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*Each inspection department in the State is unique and has its own procedures.
This checklist is solely a guide for those seeking help.*
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6/5/2006

**Iowa Department of Commerce
Professional Licensing and Regulation Division
1920 S.E. Hulsizer
Ankeny IA 50021**

**Iowa Architectural Examining
Board**.....515/281-5910
<http://www.state.ia.us/iarch>

**Iowa Engineering and Land Surveying Examining
Board**..... 515/281-4126
<http://www.state.ia.us/engls>

**Iowa Landscape Architectural Examining
Board**.....515/281-4126
<http://www.state.ia.us/lsarch>

To determine whether or not an individual is licensed/registered in any of the above professions go to <http://www.licensediniowa.gov>

I. EXCERPTS FROM THE IOWA LAW

A. IOWA ARCHITECTURAL LAW:

Some excerpts from Chapter 544A, the Iowa Architectural Law, follow.

544A.1 PRACTICE REGULATED - CREATION OF ARCHITECTURAL EXAMINING BOARD.

The practice of architecture affects the public health, safety, and welfare and is subject to regulation and control in the public interest. Only persons qualified by the laws of the state are authorized to engage in the practice of architecture in the state.

544A.15 UNLAWFUL PRACTICE VIOLATIONS PENALTY- CONSENT AGREEMENT

It is unlawful for a person to engage in or to offer to engage in the practice of architecture in this state or use in connection with the persons name, the title architect, registered architect, or architectural designer, or to imply that the person provides or offers to provide professional architectural services, or to otherwise assume, use or advertise any title, word, figure, sign, card, advertisement, or other symbol or description tending to convey the impression that the person is an architect or is engaged in the practice of architecture unless the person is qualified by registration as provided in this chapter.

A person who violates this section is guilty of a serious misdemeanor.

544A.16 DEFINITIONS

As used in this chapter, unless the context otherwise requires:

“Architect” means a person qualified to engage in the practice of architecture who holds a current valid registration under the laws of this state.

“Direct supervision and responsible charge” means an architect's personal supervisory control of work as to which the architect has detailed professional knowledge. In respect to preparing technical submissions, direct supervision and responsible charge means that the architect has the exercising, directing, guiding, and restraining power over the design of the building or structure and the preparation of the documents, and exercises professional judgment in all architectural matters embodied in the documents. Merely reviewing the work prepared by another person does not constitute direct supervision and responsible charge unless the reviewer actually exercises supervision and control and is in responsible charge of the work.

“Practice of architecture” means performing, or offering to perform, professional architectural services in connection with the design, preparation of construction documents, or construction of one or more buildings, structures, or related projects, and

the space within and surrounding the buildings or structures, or the addition to or alteration of one or more buildings or structures, which buildings or structures have as their principal purpose human occupancy or habitation, if the safeguarding of life, health, or property is concerned or involved, unless the buildings or structures are excepted from the requirements of this chapter of section 544A.18.

“Professional architectural services” means consultation, investigation, evaluation, programming, planning, preliminary design and feasibility studies, designs, drawings, specifications and other technical submissions, administration of construction contracts, observation of construction site progress, or other services and instruments of service related to architecture. A person is performing or offering to perform professional architectural services within the meaning of this chapter, if the person, by verbal claim, sign, advertisement, letterhead, card, or in any other way represents the person to be an architect or through the use of a title implies that the person is an architect.

“Technical submissions” means the designs, drawings, sketches, specifications, details, studies, and other technical reports, including construction documents, prepared in the course of the practice of architecture.

The Iowa Architectural Law does provide that certain building types do not require the services of a registered architect. These are spelled out in section 544A.18 of the Code of Iowa.

544A.18 EXCEPTIONS

Notwithstanding the other provisions of this chapter, persons who are not registered architects may perform planning and design services in connection with any of the following:

1. Detached residential buildings containing twelve or fewer family dwelling units of not more than three stories and outbuildings in connection with the buildings.
2. Buildings used primarily for agricultural purposes including grain elevators and feed mills.
3. Nonstructural alterations to existing buildings which do not change the use of the building:
 - a) From any other use to a place of assembly of people or public gathering.
 - b) From any other use to a place of residence not exempted by subsection 1.
 - c) From an industrial or warehouse use to a commercial or office use not exempted by subsection 4.
4. Warehouses and commercial buildings not more than one story in height, and not exceeding ten thousand square feet in gross floor area; commercial buildings not more than two stories in height and not exceeding six thousand square feet in gross floor area and light industrial buildings.

5. Factory built buildings which are not more than two stories in height and not exceeding twenty thousand square feet in gross floor area or which are certified by a professional engineer registered under chapter 542B.

6. Churches and accessory buildings, whether attached or separate, not more than two stories in height and not exceeding two thousand square feet in gross floor area.

Appendixes "A" and "B" contain a matrix describing by building type and use when the services of a registered architect or licensed professional engineer are required or may not be required in connection with new building construction, and alterations to existing buildings.

544A.28 SEAL REQUIRED

An Architect shall procure a seal with which to identify all technical submissions issued by the architect for use in this state. The seal shall be of a design, content, and size designated by the board.

Technical submissions prepared by an architect, or under an architect's direct supervision and responsible charge, shall be stamped with the impression of the architect's seal. The board shall designate by rule the location, frequency, and other requirements for use of the seal. An architect shall not impress the architect's seal on technical submissions if the architect was not the author of the technical submissions or if they were not prepared under the architect's direct supervision and responsible charge. An architect who merely reviews standardized construction documents for preengineered or prototype buildings, is not the author of the technical submissions and the technical submissions were not prepared under a reviewing architect's responsible charge.

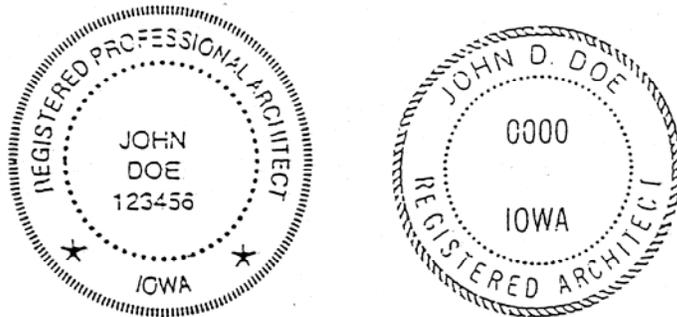
An architect shall cause those portions of technical submissions prepared by a professional consultant to be stamped with the impression of the seal of the professional consultant, with a clear identification of the consultant's areas of responsibility, signature, and date of issuance.

A public official charged with the enforcement of the state building code, or a municipal or county building code, shall not accept or approve any technical submissions involving the practice of architecture unless the technical submissions have been stamped with the architect's seal (or engineer's certification and seal) as required by this section or unless the applicant has certified on the technical submission to the applicability of a specific exception under section 544A.18 permitting the preparation of technical submissions by a person not registered under this chapter. A building permit issued with respect to technical submissions which do not conform to the requirements of this section is invalid.

SEAL AND CERTIFICATE OF RESPONSIBILITY:

A legible rubber stamp or other facsimile (electronic or digital) of the seal may be used. Every registered architect is required by Iowa law to obtain a seal (or stamp) which shall have his or her name, REGISTERED ARCHITECT, IOWA, and registration number on it.

The seal and certification may be applied electronically or by legible rubber stamp. Information requested in each information block must be typed or legibly printed. THE SIGNATURE MUST BE APPLIED IN PERMANENT CONTRASTING INK OR BY DIGITAL SIGNATURE AS DEFINED AND GOVERNED BY IOWA CODE 554D.



Following is a sample of the wording of the architect information block which should be used on each technical submission:

S E A L	<p>I hereby certify that the portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly registered architect under the laws of the state of Iowa.</p> <hr/> <p>Printed or typed name</p> <hr/> <p>Signature Date</p> <hr/> <p>Registration expires Date issued</p> <p>Pages or sheets covered by this seal: _____</p> <p>_____</p> <p>_____</p> <p>_____</p>
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Each technical submission submitted to a building official (the official copy) shall contain an information block on its first page or on an attached cover sheet for application of a seal by the architect in responsible charge and an information block for application of a seal by each professional consultant contributing to the technical submission. The seal and original signature shall be applied only to a final technical submission. Each official copy of a technical submission shall be stapled, bound or otherwise attached together so as to clearly establish the complete extent of the technical

submission. Each information block shall display the seal of the individual responsible for that portion of the technical submission. The area of responsibility for each sealing professional shall be designated in the area provided in the information block, so that responsibility for the entire technical submission is clearly established by the combination of the stated seal responsibilities.

The information requested in each information block must be typed or legibly printed in permanent ink or a secure electronic signature. An electronic signature as defined in or governed by Iowa Code chapter [554D](#) meets the signature requirements of this rule if it is protected by a security procedure, as defined in Iowa Code section [554D.103](#)(14), such as digital signature technology. It is the licensee's responsibility to ensure, prior to affixing an electronic signature to a technical submission, that security procedures are adequate to (1) verify that the signature is that of a specific person and (2) detect any changes that may be made or attempted after the signature of the specific person is affixed. The seal implies responsibility for the entire technical submission unless the area of responsibility is clearly identified in the information accompanying the seal.

B. IOWA ENGINEERING AND LAND SURVEYING LAW:

Some excerpts from Chapter 542B, the Iowa Engineering Law, follow.

542B.1 LICENSED ENGINEERS AND LAND SURVEYORS

No person shall practice professional engineering in the state unless the person is a licensed professional engineer as provided in this chapter, except as permitted by section 542B.26.

542B.2 TERMS DEFINED.

The term “*professional engineer*” as used in this chapter shall mean a person, who, by reason of the persons knowledge of mathematics, the physical sciences, and the principles of engineering, acquired by professional education or practical experience, is qualified to engage in engineering practice as hereinafter defined.

The practice of “*professional engineering*” within the meaning and intent of this chapter includes any professional service, such as consultation, investigation, evaluation, planning, designing, or responsible supervision of construction in connection with structures, buildings, equipment, processes, works or projects, wherein the public welfare, or the safeguarding of life, health or property is or may be concerned or involved, when such professional service requires the application of engineering principles and data.

The mere execution, as a contractor, of work designed by a professional engineer, or the supervision of the construction of such work as a supervisor or superintendent shall not be deemed to be active practice in engineering work.

The term “*engineer intern*” as used in this chapter shall mean a person who passes an examination in the fundamental engineering subjects, but shall not entitle the person to claim to be a professional engineer.

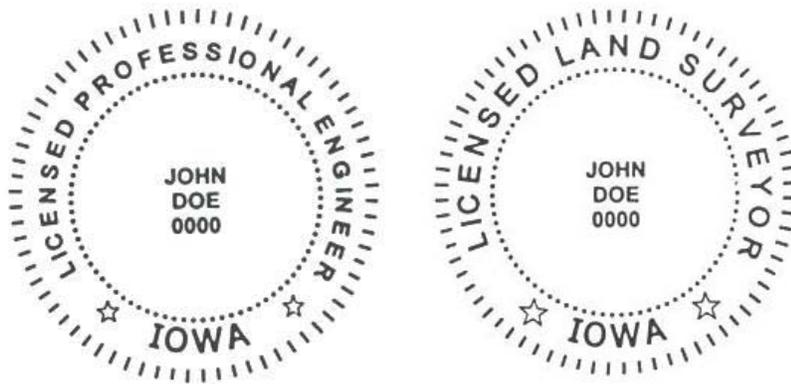
The term in “*responsible charge*” as used in this chapter means having direct control of and personal supervision over any professional engineering work. One or more persons, jointly or separately, may be in responsible charge.

The term engineering documents as used in this chapter includes all plans, specifications, drawings, and reports, if the preparation thereof constitutes or requires the practice of professional engineering.

542B.16 SEAL CERTIFICATE OF RESPONSIBILITY REPRODUCTIONS

1. Each licensee, upon licensure, shall obtain a seal of a design approved by the board, bearing the licensee's name, Iowa license number, and the words professional engineer or land surveyor or both, as the case may be. A legible rubber stamp or other facsimile of the seal, electronic or digital may be used and shall have the same effect as the use of the actual seal.

The seal and certification may be applied electronically or by legible rubber stamp. Information requested in each information block must be typed or legibly printed. THE SIGNATURE MUST BE APPLIED IN PERMANENT CONTRASTING INK OR BY DIGITAL SIGNATURE AS DEFINED AND GOVERNED BY IOWA CODE 554D.



2. All engineering documents and land surveying documents shall be dated and shall contain all of the following:
- a) The signature of the licensee in responsible charge.
 - b) A certification that the work was done by the licensee or under the licensee's direct personal supervision.
 - c) The Iowa legible seal of the licensee.
3. An agency, subdivision, or municipal corporation of this state, or an officer of the state, subdivision, or municipal corporation, shall not file for record or approve any engineering document or land surveying document which does not comply with this section.
4. A licensee shall not place the licensee's signature or seal on any engineering document or land surveying document unless the licensee was in responsible charge of the work, except that the licensee may do so if the licensee contributed to the work and the licensee in responsible charge has signed and certified the work.
5. Violation of this section by a licensee shall be deemed fraud and deceit in the licensee's practice.

542B.26 APPLICABILITY OF CHAPTER

This chapter shall not apply to any fulltime employee of any corporation while doing work for that corporation, except in case of corporations offering their services to the public as professional engineers.

Corporations engaged in designing buildings or works for public or private interests not their own shall be deemed to be engaged in the practice of engineering within the meaning of this chapter. With respect to such corporations, all principal designing or construction engineers shall hold certificates of licensure issued under this chapter. This chapter shall not apply to corporations engaged solely in constructing buildings and works.

This chapter shall not apply to any professional engineer working for the United States government, nor to any professional engineer employed as an assistant to a professional engineer licensed under this chapter if such assistant is not placed in responsible charge of any work involving the practice of engineering, nor to the operation or maintenance of power and mechanical plants or systems.

ENGINEERING CERTIFICATION REQUIREMENTS

Each engineering or land surveying document submitted to a client or any public agency, hereinafter referred to as the official copy (or official copies), shall contain an information block on its first page or an attached cover sheet for application of a seal by the licensee in responsible charge and an information block for application of a seal by each professional consultant contributing to the submission. In lieu of each contributing professional consultant providing an information block on the front page or attached cover sheet for application of a seal, a table shall be provided that identifies the contributing professionals and where their respective information blocks can be found within the document. The seal and original signature shall be applied only to a final submission. Each official copy (or copies) of a submission shall be stapled, bound or otherwise attached together so as to clearly establish the complete extent of submission.

Each certification block shall display the seal of the licensee and shall designate the portion of the submission which that licensee is responsible for, so that responsibility for the entire submission is clearly established by the combination of the stated seal responsibilities. Any nonfinal submission of an engineering document or land surveying document to a client or public agency shall be clearly labeled “preliminary” or “draft.” The engineering certification block shall substantially conform to the wording the sample shown below:

SEAL	I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

	(signature) (date)
	Printed or typed name
	License number _____
	My license renewal date is December 31, _____.
	Pages or sheets covered by this seal: _____ _____ _____

C. IOWA LANDSCAPE ARCHITECTURE LAW:

Some excerpts from Chapter 544BB, the Iowa Landscape Architecture Law, follow.

544B.1 Definitions.

The "*practice of landscape architecture*" means the performance of professional services such as consultations, investigations, reconnaissance, research, planning, design, or responsible supervision in connection with projects involving the arranging of land and the elements thereon for public and private use and enjoyment, including the alignment of roadways and the location of buildings, service areas, parking areas, walkways, steps, ramps, pools and other structures, and the grading of the land, surface and subsoil drainage, erosion control, planting, reforestation, and the preservation of the natural landscape and aesthetic values, in accordance with accepted professional standards of public health, welfare, and safety. This practice shall include the location and arrangement of such tangible objects and features as are incidental and necessary to the purposes outlined in this chapter but shall not include the design of structures or facilities with separate and self-contained purposes for habitation or industry, or the design of public streets and highways, utilities, storm and sanitary sewers, and sewage treatment facilities, such as are ordinarily included in the practice of engineering or architecture; and shall not include the making of land surveys or final land plats for official approval or recording. Nothing contained in this chapter shall be construed as authorizing a professional landscape architect to engage in the practice of architecture, engineering, or land surveying.

"Professional landscape architect" means a person who has obtained a license pursuant to section 544B.2, and who engages in the practice of landscape architecture as defined in this section.

544B.2 License required.

A person shall not engage in the practice of landscape architecture, or use the title "landscape architect", "professional landscape architect", "landscape architecture designer", or use other titles or words, letters, figures, signs, cards, advertisements, symbols, or other devices to represent that the person or a business associated with the person is authorized to practice landscape architecture, without first obtaining a license as a professional landscape architect from the board pursuant to this chapter. Every holder of a license as a professional landscape architect shall display it in a conspicuous place in the holder's principal office.

544B.12 Seal.

Every professional landscape architect shall have a seal, approved by the board, which shall contain the name of the landscape architect and the words "Professional Landscape Architect, State of Iowa", and such other words or figures as the board may deem necessary. All landscape architectural plans and specifications, prepared by such professional landscape architect or under the supervision of such professional landscape architect, shall be dated and bear the legible seal of such professional landscape architect. Nothing contained in this section shall be construed to permit the seal of a professional landscape architect to serve as a substitute for the seal of a licensed architect, a licensed professional engineer or land surveyor whenever the seal of an architect, engineer or land surveyor is required under the laws of this state.

544B.20 Scope of chapter.

Nothing contained in this chapter shall be construed:

1. To apply to a professional engineer duly registered under the laws of this state.
2. To apply to an architect registered under the laws of this state.
3. To prevent a registered architect or professional engineer from doing landscape planning and designing.
4. To affect or prevent the practice of land surveying by a land surveyor registered under the laws of this state.
5. To apply to the business conducted in this state by any planner, agriculturist, soil conservationist, horticulturist, tree expert, arborist, forester, nursery or landscape nursery person, gardener, landscape gardener, landscape contractor, garden or lawn caretaker, tiling contractor, grader or cultivator of land, golf course designer or contractor, or similar business. However, such person shall not use the designation landscape architect or any title or device indicating or representing that such person is a professional landscape architect or is practicing landscape architecture unless such person is licensed under the provisions of section 544B.11.

LANDSCAPE ARCHITECT SEALING REQUIREMENTS

Each professional landscape architect shall procure a seal with which to identify all technical submissions issued by the professional landscape architect for use in Iowa as provided in Iowa Code 544B.12. The seal and certification may be applied electronically or by legible rubber stamp. Information requested in each information block must be typed or legibly printed. THE SIGNATURE MUST BE APPLIED IN PERMANENT CONTRASTING INK OR BY DIGITAL SIGNATURE AS DEFINED AND GOVERNED BY IOWA CODE 554D.



A legible rubber stamp, an electronic image or other facsimile of the seal may be used.

Each technical submission to a building official, hereinafter referred to as the official copy, shall contain an information block on its first page or on its first page or on an attached cover sheet with application of a seal by the professional landscape architect in responsible charge and an information block with application of a seal by each professional consultant contributing to the technical submission. The seal and original signature shall be applied only to a final technical submission. Each official copy of a technical submission shall be stapled, bound or otherwise attached together so as to clearly establish the complete extent of the technical submission. Each information block shall display the seal of the individual responsible for that portion of the technical submission. The area of responsibility for each sealing professional shall be designated in the area provided in the information block, so that the responsibility for the entire technical submission is clearly established by the combination of the stated seal responsibilities. The information block shall substantially conform to the sample shown below:

SEAL	I hereby certify that the portion of this technical submission described below was prepared by me or under my direct supervision and responsible charge. I am a duly licensed professional landscape architect under the laws of the state of Iowa.
	_____ Printed or typed name
	_____ Signature
	_____ Pages or sheets covered by this seal:
License Expires:	_____ _____

The information requested in each information block must be typed or legibly printed in permanent ink or digital signature as defined in or governed by Iowa Code 554D on each official copy. The seal implies responsibility for the entire technical submission unless the area of responsibility is clearly identified in the information accompanying the seal.

It shall be the responsibility of the professional landscape architect who signed the original submission to forward copies of all changes and amendments to the technical submission, which shall become a part of the official copy of the technical submission, to the public official charged with the enforcement of the state, county or municipal building code.

ADDITIONAL INFORMATION

In accordance with Iowa law, all work bearing the stamp and signature of architects/engineers/landscape architects must have been prepared under their direct supervision and responsible personal control which means they have exercised directing, guiding and restraining power over the preparation of the documents and have exercised professional judgment in all architectural/engineering matters embodied within the documents.

To reiterate: All work bearing the stamp and signature must have been prepared under the registrants direct supervision, which means the signer has made the decisions on technical matters of policy in the plans, design specification, or other documents and assures acceptance of responsibility for the contents.

All construction documents issued by an architectural firm, corporation or partnership are required by law to bear the corporate or assumed business name, in addition to the stamp and signature of the responsible architect.

The preparation of construction documents for non-excepted buildings is considered the practice of architecture and may be undertaken only by Iowa registered architects or licensed professional engineers.

Currently, there is no wording in the law that requires construction compliance with professionally prepared documents or even requires a level or standard of quality in construction methods. The only way of guaranteeing compliance with construction documents is through adequate observation during the construction phase by the design professional or building official.

If an architect's or engineer's professional judgment is overruled under circumstances where the life, health and property of the public may be endangered, he or she must inform the employer or client of the possible consequences and notify the appropriate building officials.

Appendix "B" contains a matrix describing by building type and use when the services of a licensed professional engineer are required or may not be required in connection with new building construction and alterations to existing buildings.

II. CHECKLIST FOR ISSUANCE OF BUILDING PERMIT

The words “exempted” and “excepted” or “non-excepted” and “non-exempted” when used in this document are interchangeable and apply to the exceptions outlined in Iowa Code section 544A, IAC193B—Chapter 5 and the guidelines outlined in IAC193C--subrules 1.5(5) and (6).

To assure that construction documents meet the requirement of the laws governing the practice of architecture, engineering, and landscape architecture, it may be helpful to develop a checklist similar to the following:

1. ARE THE PLANS PROPERLY IDENTIFIED?

The title block of all plans and specifications should contain:

- a. The project name and location, and
- b. The name and address of the person(s) responsible for the preparation of the documents.
- c. The seal and certification for each design professional involved with the project. The seal and certification may be applied electronically or by legible rubber stamp. Information requested in each information block must be typed or legibly printed. **THE SIGNATURE MUST BE APPLIED IN PERMANENT CONTRASTING INK OR BY DIGITAL SIGNATURE AS DEFINED AND GOVERNED BY IOWA CODE 554D.**

2. DO THE PLANS AND SPECIFICATIONS REQUIRE PREPARATION BY A REGISTERED PROFESSIONAL ARCHITECT or ENGINEER?

In most instances, plans and specification for EXCEPTED buildings may, under the laws governing the practice of architecture, be prepared by anyone. However, under certain circumstances a Building Official may feel the need for the services of a registered architect or professional engineer even for exempt structures. Buildings that are excepted by the Iowa Architectural Law may still require the services of a licensed professional engineer for certain components of the building that require the application of engineering principles and data.

If a person submits plans/specifications to you that are claimed to be excepted from Iowa Laws 544A and 542B, you should protect yourself and the public by having that person sign a certificate of exception or some document similar to the certificate on page 14.

Plans and specifications for NON-EXCEPTED buildings may be prepared ONLY by Iowa registered architects and/or licensed professional engineers.

Site/Plot plans may be sealed and certified by a landscape architect, registered architect, or licensed professional engineer.

3. IF THE PLANS ARE FOR A NON-EXCEPTED BUILDING, DO THEY BEAR THE SEAL AND SIGNATURE OF AN IOWA REGISTERED ARCHITECT OR LICENSED PROFESSIONAL ENGINEER?

It is common for construction documents to contain drawings prepared by several professionals (i.e., architect, structural engineer, mechanical engineer, etc.) The drawings must be sealed by the professionals responsible for the preparation of the documents. Therefore, one set of construction documents may contain drawings that bear the seal and certification of more than one registered or licensed professional. ALL must be registered or licensed in Iowa.

The cover of all drawings and the title page of all specifications for non-exempted buildings must be stamped and signed by an Iowa architect or professional engineer. A series of drawings do not necessarily make a building. A stamped frame or several window details do not indicate a fire safe, handicapped accessible, or energy efficient building.

4. ARE THE PLANS AND SPECIFICATIONS COMPLETE?

Plans and specifications must meet all the requirements of the state Building Code concerning such matters as fire, life safety, structural, architectural barriers, etc., or any local building codes or ordinances that may be more restrictive than the State Building Code. Minimum construction documents should include:

- a. PLOT/SITE PLAN, showing proposed building and/or additions, dimensioned location of all property lines and any existing building on the property, locations of all street frontages and dimensions of property lines;
- b. FLOOR PLAN of each floor, including basement and foundations, showing use of all rooms or areas and the size and locations of all wall openings and stairs;
- c. EXTERIOR WALL ELEVATIONS of three views, showing all pertinent vertical dimensions;
- d. CROSS SECTIONS, showing covering materials for all surfaces, such as roofing, ceilings, interior and exterior walls and projections, such as eaves; and
- e. SPECIFICATIONS: on the drawings or separate, covering materials and methods of construction, wall finishes and all pertinent equipment.

We are all aware of fast track, design build, etc. At some time it is critical that a complete set of signed/sealed drawings be presented to you if you are to be able to evaluate all the concerns of life safety. There should be one design professional (registered architect or licensed professional engineer) responsible for the project. This should be established early and he/she should be made accountable for the total building performance.

5. ARE THE PLANS DRAWN TO SCALE?

The plans shall be drawn to scale with sufficient clarity to indicate the nature and extent of the work proposed.

III. MOST COMMONLY ASKED QUESTIONS

The following questions are representative of those received from Iowa Building Officials. The responses are based on Board interpretations and Iowa Attorney General Opinions.

1. How do I measure the square footage of the ground area to determine whether the structure is excepted or non-excepted?

When determining whether a structure exceeds the square foot ground area limitation, any projected or suspended occupied areas above ground level in combination with areas in contact with the ground are considered to be the building ground area. Measurements are taken from outside wall to outside wall.

2. How do I figure the ground area footage to determine whether a building is excepted or non-excepted if the building is divided by an open walkway (breezeway), but has one continuous roof?

The common roof creates the structural elements of a single building, and the square footage would be the sum of the two segments of the structure.

3. If a commercial building has a gross area greater than 6,000 square feet, but does not exceed two stories in height, or vice versa, is it an excepted structure?

No. Both limitations apply under the architectural law, and a building may not exceed either the area limitation or the height limitation.

4. If an addition is being proposed to an excepted structure bringing the total ground area to greater than the allowable total square feet, must the plans for the addition be prepared by a registered or licensed professional?

Yes. The total ground area of the completed structure (the addition plus the existing building) must be considered in determining whether the building is excepted or non-excepted.

5. Does separation by a four-hour fire wall make one structure into two separate buildings under the law, and therefore an excepted structure if each section is less than the maximum allowable area?

No. A four-hour fire wall does not make two separate buildings under the laws governing the practice of architecture. As long as the building is one continuous structure, it must be considered one building under the Architect's Law; and, therefore, would be subject to the size limitations.

6. Do shop drawings have to be sealed and certified?

No. Shop drawings are intended as contractor or fabricator details. These are not a part of the Building Department approved design plan. Shop drawings are not acceptable in lieu

of working drawings when applying for a permit. The working drawings must bear the seal and certification of the registered or licensed professional responsible for preparation. Shop drawings should be considered support documents only.

7. May an unregistered or unlicensed individual prepare plans and specifications for interior space planning and/or remodeling of non-exempted buildings?

Exception #3 of 544A.18 excepts non-structural alternations in certain instances. Interior space planning involves mechanical/electrical systems and other areas requiring expertise beyond the capabilities of the average person. Non-structural alterations is defined as that which do not modify means of egress, handicap accessible routes, fire resistivity or other life safety concerns. Plans or specifications which include non-structural alterations involving the use of material and products in a manner which affect life safety must be prepared by a registered architect or licensed professional engineer. Plans or specifications which include those systems requiring the application of engineering principles must be prepared by a licensed professional engineer.

8. If a designer or owner prepares plans for a non-excepted building and applies for a building permit, should you, the building official, suggest they contact an architect or engineer to have the plans and specifications reviewed and sealed?

No. Such action on the part of an architect or engineer would be contrary to law and would put the professional's license in jeopardy. Iowa registered or licensed professionals may seal and certify only that which was prepared under their direct control and supervision.

9. Is an architect required to provide supervision or observation during the construction phase of the proposed building?

No. Neither architects nor engineers are required to provide supervision or observation. It is strongly recommended for the owner and public welfare, but it is not mandatory.

10. Who may issue change orders and addendum to construction documents for non-excepted structures?

Change orders, additional drawings, and/or addenda that alter construction documents for non-excepted structures must bear the seal and certification, as required, of the registered architect or licensed professional engineer responsible for the modifications.

11. When an unregistered or unlicensed individual prepares construction documents for a non-excepted structure, may the individual obtain a review and written certification of adequacy from a registered architect or licensed professional engineer and thereby obtain a building permit?

The written certification may not be accepted for permit issuance in lieu of construction documents that have been prepared and stamped by an Iowa Registered Architect or Licensed Professional Engineer. The registered or licensed professional must be responsible for the proposed work or face disciplinary action by the licensing board.

12. Does each sheet of construction documents have to be signed/sealed by a professional?

The Architect and Engineer certification block includes a space to designate for which documents the designer is responsible. The certification block should be on the first page or the cover page of the documents. The seal and certification may be applied electronically or by legible rubber stamp. Information requested in each information block must be typed or legibly printed. THE SIGNATURE MUST BE APPLIED IN PERMANENT CONTRASTING INK OR BY DIGITAL SIGNATURE AS DEFINED AND GOVERNED BY IOWA CODE 554D.

13. Is the building official responsible for marking or red-lining design drawings that don't meet code?

If portions of the building do not meet minimum building code standards, the plan reviewer should bring them to the attention of the designer for his or her review, revision or redesign in the form of a checklist citing the deficient item and referencing the applicable code section. The designer, engineer or architect designs and redesigns and the plan reviewer reviews and re-reviews.

14. Is a building official liable if he or she informs the licensing board of a possible violation of law which later turns out to be unfounded and the architect or engineer takes legal action against the building official?

The law grants immunity to individuals who communicate, in good faith, to an official administrative agency concerning a possible violation of law. Further information on this subject should be obtained from the city attorney. Complaints to licensing boards are handled confidentially.

15. What is meant by a factory-built building?

A factory-built building means a building which has been designed, engineered, fabricated and wholly or partly assembled in a manufacturing facility for assembly and installation on a building site. Such factory-built buildings, in order to qualify for the exception established by Iowa Code section 544A.18, must either:

1. Not exceed limitations on size or use established by Iowa Code section 544.18, or
2. The seal applied by a professional engineer or architect shall apply to the entire assembly, not a specific element of the assembly.

A pre-engineered building utilizing standard building components assembled on the building site is not considered a "factory-built" building.

16. What is meant by pre-engineered building?

A building; composed of standardized components, usually with a metal structure, to be assembled on the building site.

Engineering Design pertaining to the structure is done by a licensed professional engineer, employed by the manufacturer.

If the size or use is not exempted under Iowa code section 544A, IAC193B—Chapter 5 or IAC193C--subrules 1.5(5) and (6), the building must be designed by an architect or licensed professional engineer.

17. Are there penalties for practicing or offering to practice architecture, engineering, or land surveying without a valid Iowa registration or license?

YES. Both the Architectural Examining Board and the Engineering and Land Surveying Examining Board are authorized to seek an injunction in district court to stop the unlicensed practice of their professions. Additionally both boards may impose civil penalties for the unlicensed practice of up to \$1,000 per violation following an administrative hearing. Each day of continued violation constitutes a separate violation.

IV. SAMPLE CHECKLIST FOR EXEMPTED BUILDINGS
CERTIFICATION OF EXEMPTION FROM ARCHITECTURAL PRACTICE ACT

Date: _____

I, _____, NOT LICENSED TO PRACTICE
ARCHITECTURE in
the state of Iowa, hereby certify that the technical submission for the project known as:

Located at: _____

has been prepared by me under the exception to the requirement for professional architectural services as set forth in Section 544A.18 of the Code of Iowa and as noted below:

- 1. Detached residential buildings containing twelve or fewer family dwelling units AND of not more than three stories in height, AND/OR an outbuilding in connection with such building.
- 2. Building used primarily for agricultural purposes, including grain elevators and feed mills.
- 3. Nonstructural alterations to an existing building, which do not change the use of a building FROM any other use TO a place of assembly of people or public gathering.
- 4. Nonstructural alterations to an existing building, which do not change the use for the building FROM any other use to a residential use. (Note: Exemption 1 may apply in lieu of this exemption.)
- 5. Nonstructural alterations to an existing building, that do not change the use of the building FROM a industrial or warehouse use TO a commercial or office use. (Note: Exemption 6 may apply in lieu of this exemption.)
- 6. Warehouse AND/OR commercial building, not more than one story in height AND not exceeding ten thousand square feet (10,000 s.f.) in gross floor area.
- 7. Commercial building, not more than two stories in height AND not exceeding six thousand square feet (6,000 s.f.) in gross floor area.
- 8. Light industrial building.
- 9. Factory-built building, not more than two stories in height OR not exceeding twenty thousand square feet (20,000 s.f.) in gross floor area (OR which is certified by an Iowa licensed professional engineer.)
- 10. Church AND/OR attached or separate accessory building, not more than two stories in height OR not exceeding two thousand square feet (2,000 s.f.) in gross floor area.

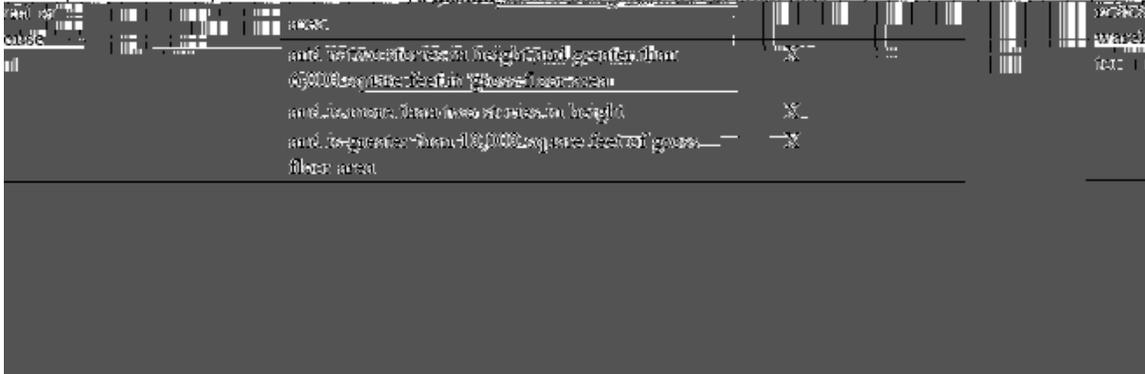
APPENDIX A--ARCHITECTURAL MATRIX

193B—5.4(544A) Exceptions matrix. The following matrix is compiled to illustrate the exceptions outlined in Iowa Code section 544A.18 and rule 193B—5.2(544A). The laws and rules governing the Practice of Engineering are not illustrated herein.

BUILDINGS NEW CONSTRUCTION			
Building Use Type	Description	Architect Required	Architect May Not Be Required
Agricultural Use	Including grain elevators and feed mills		X
Churches and accessory buildings whether attached or separate	One or two stories in height, up to a maximum of 2,000 square feet in gross floor area		X
	Any number of stories in height, greater than 2,000 square feet in gross floor area	X	
	More than two stories in height	X	
Commercial Use	One story in height, up to a maximum of 10,000 square feet in gross floor area		X
	One story in height, greater than 10,000 square feet in gross floor area	X	
	Two stories in height, up to a maximum of 6,000 square feet in gross floor area		X
	Two stories in height, greater than 6,000 square feet of gross floor area	X	
	More than two stories in height	X	
Detached Residential Use	One, two or three stories in height, containing 12 or fewer family dwelling units		X
	More than 12 family dwelling units	X	

Building Use Type	Description	Architect Required	Architect May Not Be Required	
Industrial Use	Outbuildings in connection with detached residential buildings		X	
	One story in height, up to a maximum of 10,000 square feet in gross floor area		X	
	One story in height, greater than 10,000 square feet in gross floor area	X		
	Two stories in height, up to a maximum of 6,000 square feet in gross floor area		X	
	Two stories in height, greater than 6,000 square feet in gross floor area	X		
	More than two stories in height	X		
	Warehouses	One story in height, up to a maximum of 10,000 square feet in gross floor area		X
	Warehouses	One story in height, greater than 10,000 square feet in gross floor area	X	
	Warehouses	Two stories in height, up to a maximum of 6,000 square feet in gross floor area		X
	Warehouses	Two stories in height, greater than 6,000 square feet in gross floor area	X	
Warehouses	One story in height, up to a maximum of 10,000 square feet in gross floor area		X	
	One story in height, greater than 10,000 square feet in gross floor area	X		

ALTERATIONS TO EXISTING BUILDINGS				
Alteration Type	Description	Architect Required	Architect May Not Be Required	
Structural alterations to exempt buildings	Modifications which change the structural members, means of egress, handicap accessible path, fire resistivity or other life safety concerns		X	
Structural alterations to nonexempt buildings	Modifications which change the structural members, means of egress, handicap accessible path, fire resistivity or other life safety concerns	X		
Nonstructural alteration	Which does not modify means of egress, handicap accessible path, fire resistivity or other life safety concerns		X	
	Which maintains the previous type of use		X	
Nonstructural alteration which changes the use of the building from any other use to:	A place of assembly of people or public gathering	X		
	Governmental use	X		
	Educational use	X		
	Hazardous use	X		
	A place of residence exempted	and is one, two or three stories in height and contains not more than 12 family dwelling units		X
	A place of residence not exempted otherwise	and is more than three stories in height	X	
and containing more than 12 family dwelling units		X		
Nonstructural alterations which change the use of the building from	Commercial or office use	and is one story in height and not greater than a maximum of 10,000 square feet in gross floor area		X
		and is one story in height and greater than 10,000 square feet in gross floor area	X	
		and is two stories in height and not greater than a maximum of 6,000 square feet in gross floor		X



ALTERATIONS TO EXISTING BUILDINGS (CONT.)				
Alteration Type		Description	Architect Required	Architect May Not Be Required
Nonstructural alterations to:	Agricultural Use	Including grain elevators and feed mills		X
	Churches and Accessory Building Uses	One or two stories in height, up to a maximum of 2,000 square feet in gross floor area		X
		Any number of stories in height, greater than 2,000 square feet in gross floor area	X	
		More than two stories in height	X	
	Commercial Use	One story in height, up to a maximum of 10,000 square feet in gross floor area		X
		One story in height, greater than 10,000 square feet in gross floor area	X	
		Two stories in height, up to a maximum of 6,000 square feet in gross floor area		X
		Two stories in height, greater than 6,000 square feet in gross floor area	X	
		More than two stories in height	X	
	Detached Residential Buildings	One, two or three stories in height, containing 12 or fewer family dwelling units		X
		More than 12 family dwelling units	X	
		More than three stories in height	X	
		Outbuildings in connection with detached residential buildings		X
	Educational Use		X	
	Governmental Use		X	
	Industrial Use		X	
	Institutional Use		X	
	Light Industrial Use			X
	Places of Assembly		X	
	Warehouse Use	One story in height, up to a maximum of 10,000 square feet in gross floor area		X
		One story in height, greater than 10,000 square feet in gross floor area	X	
		More than one story in height	X	
	Factory-Built Buildings	Any height and size if entire building is certified by a professional engineer licensed under Iowa Code chapter 542B		X
One or two stories in height, up to a maximum of 20,000 square feet of gross floor area			X	
One or two stories in height, greater than 20,000 square feet in gross floor area		X		
More than two stories in height		X		
More than 20,000 square feet in gross floor area		X		

APPENDIX B---ENGINEERS MATRIX

1.5(5) *Guidelines for new construction.* The following matrix describes by building type and use when the services of a licensed professional engineer are required or may not be required in connection with new building construction:

BUILDINGS NEW CONSTRUCTION			
Building Use Type	Description	Engineer Required	Engineer May Not Be Required
Agricultural Use	Facilities for private use only and individually owned and operated facilities including grain elevators and feed mills		X
	Corporate-owned facilities or publicly owned facilities including grain elevators and feed mills	X	
Churches and accessory buildings whether attached or separate	One or two stories in height, up to a maximum of 2,000 square feet in gross floor area		X
	Any number of stories in height, greater than 2,000 square feet in gross floor area	X	
	More than two stories in height	X	
Commercial Use	One story in height, up to a maximum of 10,000 square feet in gross floor area		X
	One story in height, greater than 10,000 square feet in gross floor area	X	
	Two stories in height, up to a maximum of 6,000 square feet in gross floor area		X
	Two stories in height, greater than 6,000 square feet in gross floor area	X	
	More than two stories in height	X	
Detached Residential Use	One, two or three stories in height, containing 12 or fewer family dwelling units		X
	More than 12 family dwelling units	X	
	More than three stories in height	X	
	Outbuildings in connection with detached residential buildings		X
Educational Use		X	

**BUILDINGS
NEW CONSTRUCTION (CONT.)**

Building Use Type	Description	Engineer Required	Engineer May Not Be Required
Governmental Use	When the occupancy is of another building use type listed herein, those provisions shall apply	X	
Industrial Use		X	
Institutional Use		X	
Light Industrial Use			X
Places of assembly		X	
Warehouse Use	One story in height, up to a maximum of 10,000 square feet in gross floor area		X

10,000 square feet in gross floor area	X		One story in height, greater than 10 feet in gross floor area
	X		More than one story in height
maximum area		X	Factory-Built Buildings
than a	X		One or two stories in height, up to a maximum of 20,000 square feet in gross floor area
	X		One or two stories in height, greater than 20,000 square feet in gross floor area
ss floor	X		More than two stories in height
			More than 20,000 square feet in gross floor area

The following matrix describes by alteration type when the services of a licensed professional engineer are required or may not be required in

1.5(6) Guidelines for alterations to existing buildings. The alteration type when the services of a licensed professional engineer are required in connection with alterations to existing buildings:

ALTERATIONS TO EXISTING BUILDINGS		
	Engineer Required	Engineer May Not Be Required
Members, fire resistivity		X
Members, fire resistivity	X	

ALTERATIONS TO EXISTING BUILDINGS	
Alteration Type	Description
Structural alterations to exempt buildings under Iowa Code section 544A.18	Modifications which change the structural means of egress, handicap accessible path, fire or other life safety concerns
Structural alterations to buildings that are not exempt	Modifications which change the structural means of egress, handicap accessible path, fire or other life safety concerns

**ALTERATIONS
TO EXISTING BUILDINGS (CONT.)**

Alteration Type	Description	Engineer Required	Engineer May Not Be Required
Nonstructural alteration	Which does not modify means of egress, handicap accessible path, fire resistivity or other life safety		X
	which changes the use of the building from any other use to:		X
Industrial use		X	
Commercial use		X	
	and is one, two or three stories in height and contains not more than 12 family dwelling units		X
Residential	and is more than three stories in height	X	
	and containing more than 12 family dwelling units	X	
Industrial or Commercial	and is one story in height and not greater than a maximum of 10,000 square feet in gross floor area		X
	and is one story in height and greater than 10,000 square feet in gross floor area	X	
	and is two stories in height and not greater than a maximum of 6,000 square feet in gross floor area		X
	and is two stories in height and greater than 6,000 square feet in gross floor area	X	
	and is more than two stories in height	X	
	and is greater than 10,000 square feet of gross floor area	X	

ALTERATIONS TO EXISTING BUILDINGS (CONT.)					
Alteration Type		Description	Engineer Required	Engineer May Not Be Required	
Nonstructural alterations to:	Agricultural Use	Including grain elevators and feed mills		X	
	Churches and Accessory Building Uses	One or two stories in height, up to a maximum of 2,000 square feet in gross floor area		X	
		Any number of stories in height, greater than 2,000 square feet in gross floor area	X		
		More than two stories in height	X		
	Commercial Use	One story in height, up to a maximum of 10,000 square feet in gross floor area			X
		One story in height, greater than 10,000 square feet in gross floor area	X		
		Two stories in height, up to a maximum of 6,000 square feet in gross floor area			X
		Two stories in height, greater than 6,000 square feet in gross floor area	X		
		More than two stories in height	X		
	Detached Residential Buildings	One, two or three stories in height, containing 12 or fewer family dwelling units			X
		More than 12 family dwelling units	X		
		More than three stories in height	X		
		Outbuildings in connection with detached residential buildings			X
	Educational Use		X		
	Governmental Use	When the occupancy is of another building use type listed herein, those provisions shall apply	X		
	Industrial Use		X		
	Institutional Use		X		
	Light Industrial Use				X
	Places of Assembly		X		
	Warehouse Use	One story in height, up to a maximum of 10,000 square feet in gross floor area			X
One story in height, greater than 10,000 square feet in gross floor area		X			
More than one story in height		X			

ALTERATIONS TO EXISTING BUILDINGS (CONT.)				
Alteration Type		Description	Engineer Required	Engineer May Not Be Required
	Factory-Built Buildings	One or two stories in height, up to a maximum of 20,000 square feet of gross floor area		X
		One or two stories in height, greater than 20,000 square feet in gross floor area	X	
		More than two stories in height	X	
		More than 20,000 square feet in gross floor area	X	

1.5(7) *Architectural exceptions do not apply.* The statutory exemptions in Iowa Code section 544A.18 do not apply to the practice of engineering. The construction of a building that falls within an exception in Iowa Code section 544A.18 may require the services of an engineer if, for example: (a) there are structural elements which do not fall within building code definitions of conventional light frame construction, (b) the use of certain structural materials, members or components requires special inspections by engineers, or (c) HVAC, plumbing or electrical systems exceed certain building code standards. However, the matrix guidelines in this rule are generally compatible with the exceptions in Iowa Code section 544A.18 because the construction of buildings that fall outside the exceptions in Iowa Code section 544A.18 generally does implicate the practice of professional engineering in such disciplines as structural, electrical or mechanical engineering. The construction of buildings that fall within one of the exceptions described in Iowa Code section 544A.18 would not typically require the services of a licensed professional engineer, but may require those services in specific circumstances.

These rules are intended to implement Iowa Code sections 17A.9A, 542B.2 and 542B.3.