Legislation passed by the 82<sup>nd</sup> legislature has modified the Texas Engineering Practice Act and the Texas Architect Practice Act. In order to give the public a clearer understanding of these changes, the following has been developed as a guideline for practitioners to understand the new requirements

### COMMON FOR ARCHITECTS AND ENGINEERS Excerpts from HB 2284, 82<sup>nd</sup> R

# The preparation of the following Plans and Specifications may be performed by either an engineer or an architect:

- 1 Site plans depicting the location and orientation of a building on the site based on:
  - A determination of the relationship of the intended use with the environment, topography, vegetation, climate, and geographic aspects; and
  - The legal aspects of site development, including setback requirements, zoning and other legal restrictions, and surface drainage;
- 2 The depiction of the building systems, including structural, mechanical, electrical, and plumbing systems, in:
  - Plan views:
  - Cross-sections depicting building components from a hypothetical cut line through a building; and
  - The design of details of components and assemblies, including any part of a building exposed to water infiltration or fire-spread considerations;
- 3 Life safety plans and sheets, including accessibility ramps and related code analyses; and
- 4 Roof plans and details depicting the design of roof system materials, components, drainage, slopes, and directions and location of roof accessories and equipment not involving structural engineering calculations.

#### The following activities may be performed by either an engineer or an architect:

- 1 Programming for construction projects, including:
  - Identification of economic, legal, and natural constraints; and
  - Determination of the scope of functional elements;
- 2 Recommending and overseeing appropriate construction project delivery systems;
- 3 Consulting with regard to, investigating, and analyzing the design, form, materials, and construction technology used for the construction, enlargement, or alteration of a building or its environment; and
- 4 Providing expert opinion and testimony with respect to issues within the responsibility of the engineer or architect.

### ENGINEERING PLANS AND SPECIFICATIONS Excerpts from HB 2284, 82<sup>nd</sup> R

- 1 Plans for a structural, mechanical, electrical, electronic, fire suppression, or geotechnical system in a building;
- 2 Specifications of structural elements and connections of a building;
- 3 Foundation design;
- 4 Hydrologic management calculations and design of surface water control and detention necessary for compliance with ordinances and regulations;
- 5 Design of building drain and waste system plumbing, fresh water plumbing, graywater systems, and mechanical aspects of moving water in and out of a structure, other than simple roof drainage;
- 6 Evaluation of structural framing members before the addition of roof-mounted equipment or a heavier roof covering;
- 7 Design of changes in roof pitch by the addition of structural framing members;
- 8 Evaluation and repair of damaged roof structural framing;
- 9 Design of electrical and signal and control systems;
- 10 Shop drawings by manufacturers or fabricators of materials and products to be used in the building features designed by the engineer; and
- 11 Specifications listing the nature and quality of materials and products for construction of features of the building elements or systems designed by an engineer.

## ARCHITECTURAL PLANS AND SPECIFICATIONS Excerpts from HB 2284, 82<sup>nd</sup> R

1 - Floor plans and details:

Depicting the design of:

- internal and external walls and floors, including simple foundations;
- internal spaces of a building; and
- vertical circulation systems, including accessibility ramps, stair systems, elevators, and escalators; and

Implementing programming, regulatory, and accessibility requirements for a building;

- 2 General cross-sections and detailed wall sections depicting building components from a hypothetical cut line through a building to include the building's mechanical, electrical, plumbing, or structural systems;
- 3 Reflected ceiling plans and details depicting:
  - The design of the location, materials, and connections of the ceiling to the structure; and
  - The integration of the ceiling with electrical, mechanical, lighting, sprinkler, and other building systems;
- 4 Finish plans or schedules depicting surface materials on the interior and exterior of the building;
- 5 Interior and exterior elevations depicting the design of materials, locations, and relationships of components and surfaces;
- 6 Partition, door, window, lighting, hardware, and fixture schedules;
- 7 Manufacturer or fabricator drawings that are integrated into the construction documents; and
- 8 Specifications describing the nature, quality, and execution of materials for construction of the elements of the building depicted in the plans prepared by the architect.

## **BUILDING EXEMPTIONS**Excerpts from the Texas Engineering Practice Act (1001.

A person, sole proprietorship, firm, partnership, joint stock association, or private corporation is exempt from the licensing requirements of this chapter if: a representation that engineering services have been or will be offered to the public is not made or implied; and the person or entity is erecting, constructing, enlarging, altering, or repairing or is drawing plans or specifications for:

- A private dwelling;
- Apartments not exceeding eight units for each building in the case of one-story buildings;
- Apartments not exceeding four units for each building and having a maximum height of two stories;
- A garage or other structure pertinent to a building described by Paragraph (A), (B), or (C):
- A private building to be used exclusively for:
  - o farm, ranch, or agricultural purposes; or
  - o storage of raw agricultural commodities
- A building having no more than one story that:
  - o Is not a building exempt from the licensing requirements of this chapter under Section 1001.053 or subject to Section 1001.407;
  - o Has a total floor area of not more than 5,000 square feet; and
  - o Does not contain a clear span between supporting structures greater than 24 feet on the narrow side.
  - If a structure described above contains unsupported spans greater than 24 feet, only the trusses, beams, or other roof supporting members must be engineered or pre-engineered.

The exemption provided by this section does not apply to a person or entity that is:

- Providing engineering design or inspection services necessary to comply with windstorm certification standards for a residential dwelling under Subchapter F, Chapter 2210, Insurance Code; or
- Providing engineering design relating to constructing, enlarging, altering, or repairing, or drawing plans or specifications for, a residential dwelling slab located on expansive soil that meets the expansive soil classification provisions of the International Residential Code as applied in the jurisdiction in which the residential dwelling is located, unless the construction, enlargement, alteration, repair, or drawing of plans or specifications meets the International Residential Code requirements as applied in the jurisdiction in which the residential dwelling is located.

#### **Excerpts from the Texas Architect Practice Act**

This chapter does not apply to a person who does not represent that the person is an architect or architectural designer, or use another business or professional title that uses a form of the word "architect" and who:

Prepares the architectural plans and specifications for or observes or supervises the construction, enlargement, or alteration of a privately owned building that is:

- A building used primarily for:
  - o farm, ranch, or agricultural purposes; or
  - o storage of raw agricultural commodities;
- A single-family or dual-family dwelling or a building or appurtenance associated with the dwelling;
- A multifamily dwelling not exceeding a height of two stories and not exceeding 16 units per building;
- A commercial building that does not exceed a height of two stories or a square footage of 20,000 square feet; or
- A warehouse that has limited public access.

Activities of a Licensed Engineer are not prohibited, including:

• A structure incidental to a construction project primarily intended for engineering use, including a railroad, hydroelectric work or industrial plant.

This document is derived from Texas legislative statutes. For a full and complete list of applicable laws, please visit the following websites:

Texas Board of Professional Engineers: <a href="www.tbpe.state.tx.us">www.tbpe.state.tx.us</a>
Texas Board of Architectural Examiners: <a href="www.tbae.state.tx.us">www.tbae.state.tx.us</a>

Texas Legislature Online: www.tlo.state.tx.us