**DATE**: March 15, 1999

# HOUSE OF REPRESENTATIVES COMMITTEE ON BUSINESS REGULATION AND CONSUMER AFFAIRS ANALYSIS

**BILL #**: HB 861

**RELATING TO**: Fire Safety

**SPONSOR(S)**: Representative Sorensen

COMPANION BILL(S): SB 1090(i)

# ORIGINATING COMMITTEE(S)/COMMITTEE(S) OF REFERENCE:

- (1) BUSINESS RÈGULATION AND CONSUMER AFFAIRS
- (2) BUSINESS DEVELOPMENT AND INTERNATIONAL TRADE
  - GENERAL GOVERNMENT APPROPRIATIONS

(3) (4) (5)

# I. SUMMARY:

Current law prohibits fire protection system contractors from designing fire sprinkler systems which contain 50 or more heads. Such systems must be designed by an engineer. This bill would remove that restriction and allow fire protection contractors to design systems of any size.

The bill has no significant impact on state or local governments. Removing the engineer oversight requirement for large fire sprinkler jobs could have the effect of reducing construction costs. However, engineers argue that such saving would come at the cost of public safety.

**DATE**: March 15, 1999

PAGE 2

# II. SUBSTANTIVE ANALYSIS:

### A. PRESENT SITUATION:

The State Fire Marshal administers the provisions of chapter 633, F.S., designed to protect the public health, safety, and welfare with regard to fire safety. Fire protection contractors, who are licensed under that chapter, design, install, test, and service fire sprinkler and other types of fire protection systems.

Presently, s. 553.79(6)(c), F.S., prohibits fire protection contractors from doing the design (i.e, sealing the plans) for fire protection systems with 50 or more heads. Such plans must be sealed by an engineer. This same limitation appears in s. 633.021(5), F.S.

Prior to 1983, fire protection contractors faced no such limitation, and were allowed to design and seal plans of any size. In 1983, the Florida Legislature passed far-reaching engineer construction oversight laws as a result of the collapse of a building under construction that killed 10 workers.

This 1983 law (s. 553.79, F.S.), known as the Threshold Inspection Law, reached far into the construction area. Engineers are now required to do structural inspection on new construction of buildings over 50 ft. in height. They are required to design or review plans for electrical; plumbing; and heating, ventilation, and air-conditioning work, if the cost for such systems exceeds \$50,000. And, they are required to design or review plans for fire sprinkler systems containing more than 50 sprinkler heads.

Such a review, where one professional reviews the plans of another professional, is called peer review. Peer review, in this instance, is apparently being used as an alternative to simply placing such plans review responsibility on the appropriate governmental authority. Such a regulatory strategy has the positive effect of diminishing the work load of the local fire marshals. However, it also has the adverse effect of requiring the building owner to directly bear the expense of having to employ an engineer for the plans review that many argue should properly be the responsibility of government.

Engineers maintain that it is essential for public safety for engineers to be involved in the design of large fire protection systems. On the other hand, fire protection contractors maintain that national fire codes, and rules developed by the State Fire Marshal, sufficiently set forth the standards that must be followed in designing fire protection systems, even large ones. Therefore, according to the fire protection contractors' reasoning, requiring engineers' participation in the design of fire protection systems is almost always unnecessary, and merely increases the cost of building construction.

See Comments section of this analysis for fire protection contractor assertions regarding the cost to private industry of requiring engineer oversight in the design of fire sprinkler systems.

## B. EFFECT OF PROPOSED CHANGES:

This bill would allow fire protection contractors to design, without engineer oversight, fire protection systems of any size.

# C. APPLICATION OF PRINCIPLES:

## 1. Less Government:

- a. Does the bill create, increase or reduce, either directly or indirectly:
  - (1) any authority to make rules or adjudicate disputes?

No.

**DATE**: March 15, 1999

PAGE 3

(2) any new responsibilities, obligations or work for other governmental or private organizations or individuals?

No.

(3) any entitlement to a government service or benefit?

No.

- b. If an agency or program is eliminated or reduced:
  - (1) what responsibilities, costs and powers are passed on to another program, agency, level of government, or private entity?

N/A

(2) what is the cost of such responsibility at the new level/agency?

N/A

(3) how is the new agency accountable to the people governed?

N/A

# 2. Lower Taxes:

a. Does the bill increase anyone's taxes?

No.

b. Does the bill require or authorize an increase in any fees?

No.

c. Does the bill reduce total taxes, both rates and revenues?

No.

d. Does the bill reduce total fees, both rates and revenues?

No.

e. Does the bill authorize any fee or tax increase by any local government?

No.

# 3. Personal Responsibility:

a. Does the bill reduce or eliminate an entitlement to government services or subsidy?

No.

b. Do the beneficiaries of the legislation directly pay any portion of the cost of implementation and operation?

N/A

**DATE**: March 15, 1999

PAGE 4

# 4. Individual Freedom:

a. Does the bill increase the allowable options of individuals or private organizations/associations to conduct their own affairs?

Yes. The bill gives building owners the choice of employing *either* a fire protection contractor, *or* a fire protection engineer, when it comes to designing plans for large fire protection systems. Under current law, the building owner is legally *required* to employ the engineer, even though, as a practical matter, they will have to employ the fire protection contractor to finish the detailed plans.

b. Does the bill prohibit, or create new government interference with, any presently lawful activity?

No.

# 5. Family Empowerment:

- a. If the bill purports to provide services to families or children:
  - (1) Who evaluates the family's needs?

N/A

(2) Who makes the decisions?

N/A

(3) Are private alternatives permitted?

N/A

(4) Are families required to participate in a program?

N/A

(5) Are families penalized for not participating in a program?

N/A

b. Does the bill directly affect the legal rights and obligations between family members?

No.

- c. If the bill creates or changes a program providing services to families or children, in which of the following does the bill vest control of the program, either through direct participation or appointment authority:
  - (1) parents and guardians?

N/A

(2) service providers?

N/A

**DATE**: March 15, 1999

PAGE 5

(3) government employees/agencies?

N/A

D. STATUTE(S) AFFECTED:

Section 471.003, 553.79, and 633.021, F.S.

E. SECTION-BY-SECTION ANALYSIS:

<u>Section 1.</u> Amends s. 471.003, F.S., to exempt fire protection contractors from the requirements to be licensed as an engineer in order to prepare planning, design, or layout drawings for fire protection systems.

<u>Sections 2& 3.</u> Amend ss. 553.79, and 633.021, F.S., to eliminate the requirement that an engineer is required to prepare or review all fire sprinkler systems with more than 50 heads.

Section 4. Provides an effective date of July 1, 1999.

# III. FISCAL ANALYSIS & ECONOMIC IMPACT STATEMENT:

- A. FISCAL IMPACT ON STATE AGENCIES/STATE FUNDS:
  - 1. Non-recurring Effects:

None.

2. Recurring Effects:

None.

3. Long Run Effects Other Than Normal Growth:

None.

4. Total Revenues and Expenditures:

None.

- B. FISCAL IMPACT ON LOCAL GOVERNMENTS AS A WHOLE:
  - 1. Non-recurring Effects:

None.

2. Recurring Effects:

None.

3. Long Run Effects Other Than Normal Growth:

None.

C. DIRECT ECONOMIC IMPACT ON PRIVATE SECTOR:

**DATE**: March 15, 1999

PAGE 6

# 1. Direct Private Sector Costs:

None.

### 2. Direct Private Sector Benefits:

Building owners will not be required to employ engineers for fire protection system design, or peer review of the fire protection contractor's final plans, and will save whatever fee the engineer charges.

### 3. Effects on Competition, Private Enterprise and Employment Markets:

None.

### D. FISCAL COMMENTS:

None.

# IV. CONSEQUENCES OF ARTICLE VII, SECTION 18 OF THE FLORIDA CONSTITUTION:

# A. APPLICABILITY OF THE MANDATES PROVISION:

This bill does not reduce the authority that municipalities or counties have to raise revenues in the aggregate.

### B. REDUCTION OF REVENUE RAISING AUTHORITY:

This bill does not reduce the authority that municipalities or counties have to raise revenues in the aggregate.

## C. REDUCTION OF STATE TAX SHARED WITH COUNTIES AND MUNICIPALITIES:

This bill does not reduce the percentage of a state tax shared with counties or municipalities.

# V. <u>COMMENTS</u>:

Fire protection contractor representatives make the following assertions regarding cost to the public of requiring engineer oversight in the design of fire sprinkler systems:

According to Florida Trend Magazine, January 1999, Florida's construction industry figures show \$7.786 billion for non-residential construction and \$12.632 billion for residential during 10 months in 1998. Assuming that the industry average of 75% of non-residential and 30% of residential structures will be constructed with fire sprinklers installed, the total value of new construction in which fire sprinkler are installed is estimated at \$11.559 billion in 1998 (\$7.01 non-residential and \$4.549 billion residential). Fire sprinklers cost an average 2% of total construction costs. Therefore, the Florida fire sprinkler market can be estimated to be \$231 million annually. Engineering fees for mechanical, electrical, plumbing and fire sprinklers range from ½% to 1% of the total construction costs for each discipline - or owners are required by law to pay between \$5.78 and \$11.56 million in direct engineering costs each year for fire sprinkler design fees.

...We [the fire protection contractors] estimate an approximate waste of 10% or \$23.1 million more than what the consumer needs to pay for code complying fire sprinkler installations each year. And in the vast majority of these projects, there are no engineering decisions that need to be made, the engineering decisions have been made by the national fire sprinkler engineering standards committee. The immediate impact of the passage of SB 1090 and HB 861 will be that the Florida fire sprinkler industry will now be a \$207.9 million annual market and the consumer will save \$23.1 million in construction costs next year.

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**DATE**: March 15, 1999

PAGE 7

The Florida Engineers Society disagree with the figures supplied with the fire protection contractors, and gave the following response:

The Florida Fire Sprinkler Association asserts that the annual costs of fire sprinkler is being driven up by \$231 million dollars because of unnecessary engineering involvement. This increase is attributed to the overall annual sprinklered property, constructed at the cost of \$11.6 billion dollars. This amounts to an increase of less than 0.2% in the cost of construction. For the increased level of safety provided by the application of objective engineering standards, this figure is almost immeasurable. The Florida sprinkler industry also estimates the cost of sprinkler installations to be approximately 2% of the total cost of construction. Their industry typically states that it costs about 1-1½%. This inflation of 33%, when removed from the \$23.1 "engineers cost," reduces the figure to \$15.4 million. To put this in perspective, in this state with fifteen million citizens, these supposed "excessive engineering costs" amount to the money needed to build just three typical grocery stores.

VI.	AMENDMENTS OR COMMITTEE SUBSTITUTE CHANGES:
	None.
VII.	SIGNATURES:
	COMMITTEE ON BUSINESS REGULATION AND CONSUMER AFFAIRS: Prepared by: Staff Director:

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