

STATE OF LOUISIANA
Department of Public Safety and Corrections
Office of State Fire Marshal Code Enforcement and Building Safety
8181 Independence Boulevard
Baton Rouge, Louisiana 70806
225-925-4920

H "BUTCH" BROWNING
FIRE MARSHAL

FIRE SUPPRESSION SYSTEM

KEVIN KINCHEN
DAMMON ENGINEERING. INC.
554 OLD SPANISH TRAIL
SLIDELL, LA 70458-0000

RE: P0444603
ST TAMMANY FIRE STATION NO. 14
297 STEELE RD
SLIDELL, LA 70469

NFPA 101, 2012
IBC, 2012 (CHAPTERS 9 & 10)

STORAGE
LODGING/ROOMING

Dear Applicant:

Please be advised that we have made a general review of the drawings, calculations, and equipment data for the proposed Fire Suppression System, based on the submittal package received for the above referenced project. This review is governed by the Official Manual of the Office of State Fire Marshal, which contains the adopted laws, codes, rules, and regulations of this office. This review, in no way, shall permit and/or authorize any omissions or deviations from the specific requirements of the Official Manual. Requirements cited in this review do not relieve the licensed fire suppression system designer and the Professional Of Record, when required by LA RS 37, from complying with all the requirements contained in the Official Manual. Subsequent to our general review of the submittal package, we have determined that the drawings, calculations, and equipment data appear to satisfactorily comply with the adopted laws, codes, rules and regulations of the State Fire Marshal, subject to the following requirements and review qualifications:

NOTE: THE 2009 EDITIONS OF THE NFPA 101 LIFE SAFETY CODE AND THE IBC CHAPTERS 9 & 10 APPLY FOR THIS REVIEW. DISREGARD THE 2012 EDITIONS REFERENCED ABOVE.

1. **THE ARCHITECT / ENGINEER; PROFESSIONAL OF RECORD (POR) SHALL VERIFY CORRECTION AND/OR CONFORMANCE WITH THE STANDARD FOR ALL DEFICIENCIES CITED IN THIS LETTER.**
2. **Scope of Work: This review is for 6,622 sq. ft. 1 story building with mezzanine. Architectural review 432255.**
3. **This review applies to the riser(s), piping lay-out and sprinkler head locations, for compliance with NFPA 13, 2007 Edition as shown on the drawings for the above referenced project.**

NOTE: THE COMMENTS LISTED BELOW IDENTIFY APPARENT DEFICIENCIES DETECTED IN OUR REVIEW OF THE DOCUMENTS SUBMITTED.

4. 13:22.2.1 The following information shall be included :
1. Time.

13:23.2.1.2 The volume and pressure of a public water supply shall be determined from waterflow test data. An adjustment to the waterflow test data to account for daily and seasonal fluctuations, possible interruption by flood or ice conditions, large simultaneous industrial use, future demand on the water supply system, or any other condition that could affect the water supply shall be made as appropriate.

- Deficiency is that the Time the test was conducted is not indicated in the Waterflow Test information. See Item 8 of this review letter.

POR document the Time on the shop drawings stamped as reviewed by the State Fire Marshal's Office prior to the final inspection.

5. 13:22.1.3 Working plans shall show :

(41) Information about backflow preventers (manufacturer, size, type)

- Deficiency is that the backflow preventer is indicated in plan view and cut sheets are not submitted. It appears that the fixed pressure loss is not indicated in the calculations. See Item 9 of this review letter.

- POR provide cut sheets for backflow preventer indicating (manufacturer, size, type and fixed pressure loss) to Inspector at final inspection.

6. 13:22.4.4.7 The calculated system shall not exceed the available volume and pressure of the water supply at the point of connection. Include all friction losses, e.g. private supply piping, fittings, devices such as valves, meters (including detector check valves), strainers, backflow preventers, etc. and calculate elevation changes that affect the sprinkler discharge.

This item is deficient in that compliance is not verifiable and / or has not been documented in the submittal. POR to verify backflow preventer fixed pressure loss complies with 13:22.4.4.7. E.G., See item 9 of this letter.

Professional of Record (POR) verify that the calculations, drawing(s) and placard information are corrected / performed to accurately represent system demands and / or available supply. If system modifications are required (e.g. : to keep the system demand below the available supply), or if there are deviations from the submitted plans, resubmit.

7. 13:8.15.7.3 Sprinklers shall be permitted to be omitted from below the canopy, roof, or porte-cochere of combustible construction, provided the exposed finish material on the roof, canopy, or porte-cochere is noncombustible, limited-combustible, or fire retardant treated wood as defined in NFPA 703, Standard for Fire Retardant-Treated Wood and Fire-Retardant Coatings for Building Materials, and the roof, canopy, or porte-cochere contains only sprinklered concealed spaces or any of the following unsprinklered combustible concealed spaces:
- (1) Combustible concealed spaces filled entirely with noncombustible insulation
 - (2) Light or ordinary hazard occupancies where noncombustible or limited-combustible ceilings are directly attached to the bottom of solid wood joists so as to create enclosed joist spaces 160 ft³ (4.5 m³) or less in volume, including space below insulation that is laid directly on top or within the ceiling joists in an otherwise sprinklered attic [See 11.2.3.1.4(4)(d)].
 - (3) Concealed spaces over isolated small roofs, canopies, or porte-cocheres not exceeding 55 ft² (5.1 m²) in area

- It appears that sprinkler protection is required at Entry 101 and Patio.
- POR document Entry 101 and Patio complies with 13:8.15.7.3.

NOTE: THE FOLLOWING COMMENTS IDENTIFY ISSUES FOR INFORMATIONAL AND CAUTIONARY PURPOSES OR ISSUES THAT COULD NOT BE VERIFIED IN THE SUBMITTED DOCUMENTS.

8. This review is based on a project supplied with: A city water supply of 52 psi static and 35 psi residual, flowing 920 g.p.m.
Drawing indicates 12/09/2013 test by Quality Fire Protection, Inc. @ (TIME NOT INDICATED).

Inspector verify static pressure at riser.
9. 13:23.1.8.3 This review is based on the following backflow preventer: 4 inch AMES Colt 200 BFP with (NOT INDICATED) psi fixed pressure loss. If any other manufacturer, model number, or size of backflow preventer is required, or is contemplated for substitution, provide applicable documentation to this office for review, complete with supporting hydraulic calculations, prior to installation. Verify installation of the above referenced backflow preventer.
10. 13: 6.8 and 8.17.2 and/or 14: 4.8 and 6.4 Locations for proposed fire department connection(s) - FDC and fire hydrant(s) - FH within this scope of work, shall be acceptable to the local fire department. The applicant, either the professional of record if required by LA R.S. 37:155 otherwise the owner shall submit to the SFM Inspector, a statement from the local fire department, that the FDC and FH as proposed, are acceptable. The statement shall acknowledge proposed locations, outlet diameters, fitting type and thread type, indicating compatibility with local fire department equipment. In lieu of a signed statement, the local fire department may indicate review of the FDC and FH by stating such on the shop drawings bearing the State Fire Marshal review stamp.
11. 13: 8.3.2.2 Where maximum ceiling temperatures exceed 100 deg. F, sprinklers with temperature ratings in accordance with the maximum ceiling temperatures of Table 6.2.5.1 shall be used.
 - a. 13: 8.3.2.4 Sprinklers of intermediate- and high-temperature classifications shall be installed in specific locations as required by 8.3.2.5.
 - b. 13: 8.3.2.5 The following practices shall be observed to provide sprinklers of other than ordinary-temperature classification unless other temperatures are determined or unless high-temperature sprinklers are used throughout, and temperature selection shall be in accordance with Table 8.3.2.5(a), Table 8.3.2.5(b), and Figure 8.3.2.5:
 - c. 13: Table 8.3.2.5(a) Temperature Ratings of Sprinklers Based on Distance from Heat Sources: (1) Heating ducts - (c) Diffuser - Horizontal discharge:
 - i. Ordinary Degree Rating - Any distance except as shown under Intermediate Degree Rating column
 - ii. Intermediate Degree Rating - Semicylinder with 2 ft 6 in. radius in direction of flow extending 1 ft 0 in. below and 2 ft 6 in. above
 - Verify that temperatures discharged by the ceiling diffusers do not exceed 100 deg. F. or relocate sprinklers away from diffusers having horizontal discharge.
12. 13:8.15.3.1 Protect sprinkler piping from freezing. Provide a method of maintaining permanent heat to all areas containing wet sprinkler piping subject to temperatures below 40 degrees F. Verify method of freeze protection.

13. **13:25:4.1.6** Where changes in the occupancy, hazard, water supply, storage commodity, storage arrangement, building modification, or other condition that affects the installation criteria of the system are identified, the owner or occupant shall promptly take steps, such as contacting a qualified contractor, consultant, or engineer, to evaluate the adequacy of the installed system in order to protect the building or hazard in question.
25:4.1.6.1 Where the evaluation reveals a deficiency causing a threat to life or property, the owner shall make appropriate corrections. All requirements of the authority having jurisdiction shall be followed.
14. **NOTE: Please ENCLOSE A COPY OF THIS LETTER WITH FUTURE SUBMITTALS OR OTHER CORRESPONDENCE pertaining to this project.**

Changes to construction in the field which are not consistent with the reviewed documents are not authorized unless reviewed by this office for compliance with Code. Modifications to reviewed plans must be submitted to this office by the Architect/Civil Engineer for review prior to final inspection. If an Architect or Civil Engineer is not required by RS 37:155, revisions shall be submitted by the Owner. Submittals shall include plans, completed application, a minimum \$55.00 review fee, and a copy of the most current plan review letter.

Occupancy of the project is permitted only upon the receipt of the applicable Contractor's Material & Test Certificate as per NFPA 13, Fire Alarm System Certificate and Description as per NFPA 72, or other certification as required by the applicable codes and a satisfactory inspection of the completed construction had been made by this office.

To arrange for inspection of the project, please contact the District Office at the phone number below two (2) to three (3) weeks in advance. The plans stamped reviewed by this office must be available on job site at time of inspection. Certificate of completion must be provided to the inspecting Deputy for final inspection.

This review is valid for 180 days from the date of this letter. Construction permits must be issued and/or construction must commence within this time period.

REVIEWED BY:
RONALD RICHARD
ARCHITECT

NOTE: Please call the REVIEWER identified above if you have any questions regarding this review.
Do not call the Inspection Office until you are ready for inspection.

CC:
St Tammany Fire Protection District No. 1
Quality Fire Protection, Inc
Property Insurance Association*
St Tammany Fire Protection District No 1*
City Of Slidell*
Baton Rouge District Ofc* 2259253650
City Of Slidell*