



## WIGINTON FIRE PROTECTION ENGINEERING

**61G15-32.003 and 61G15-32.004(2)**

12621 Corporate Lakes Dr.  
Suite 1  
Ft. Myers, FL 33913

January 30, 2025

Collier County Building Dept.  
2800 N. Horseshoe Drive  
Naples, Florida

To whom it may concern:

As the fire protection system Engineer of Record for North Collier Fire Station #49 on Cocohatchee Road Naples Florida 34110, I advise that the following specifications are to be followed for the design of its fire sprinkler system:

### 61G15-32.003:

(1) Scope of work: This is a new one-story 15,307 sq. ft. building, Type II-B construction. The fire sprinkler system shall be new. Fire sprinkler contractor scope starts at spigots 1 ft above grade, all underground by another licensed contractor.

(2) Acceptance test criteria: The acceptance testing of the fire protection system and components shall consist of all applicable items shown on these forms:

(a) NFPA 13, 2019 edition, Figure 28.1, Contractor's Material and Test Certificate for Above Ground Piping. See NFPA 13, 2019 edition, chapter 28, System Acceptance, for details on the applicable tests.

(b) NFPA 24, 2019 edition, Standard for the Installation of Private Fire Service Mains and Their Appurtenances chapter 10 Figure 10.10.1, Contractor's Material and Test Certificate for Under Ground Piping.

(3) Structural support and structural openings: The support systems for this building have the load carrying capacity for the 3.00 psf dead load which is contributed by the fire sprinkler system. There will not be any new structural openings required for this project.

### 61G15-32.004 (2) (a-m):

(a) Point of Service: The Point of Service shall be at a 6" x 10" MJ reducer with gate valve at the end of the existing 10" waterline on the West side of US-41 located approximately 220 ft East of the building.

(b) Applicable NFPA standards to be used:

NFPA 1 2021 Edition, Fire Code

NFPA 13, 2019 Edition, Installation of Sprinkler Systems

NFPA 24, 2019 Edition, Standard for the Installation of Private Fire Service Mains and Their Appurtenances

Florida Fire Prevention Code (8th Edition, 2023).

(c) Classification of hazard occupancy for each room or area:

Apparatus Bay: Ordinary Hazard Group II.

Storage, Decon, Gear cleaning, janitor, kitchen, electrical, and mechanical rooms: Ordinary Hazard Group I.

Office, laundry, bunkers, and assembly areas: Light Hazard.

(d) Design approach: All light hazard areas are to be protected per section 19.3.3.1.1 of NFPA 13 2019 edition with wet automatic sprinkler systems utilizing 175 degree, 5.6K upright or pendant, quick response sprinklers spaced at not more than 225 sq. ft. A density of 0.10 over the most remote 1500 sq. ft. is to be provided plus 100 gpm for hose allowance.



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### 61615-32.003 and 61615-32.004(2)

Ordinary Hazard Group I areas are to be protected using appropriate temperature 5.6K or 8.0K pendant or upright sprinklers per section 19.3.3.1.1 of NFPA 13 2019 edition spaced at not more than 130 sq. ft. A density of 0.15 over the most remote 1500 sq. ft. is to be provided plus 250 gpm for hose allowance.

Ordinary Hazard Group II areas are to be protected using appropriate temperature 5.6K or 8.0K pendant or upright sprinklers per section 19.3.3.1.1 of NFPA 13 2019 edition spaced at not more than 130 sq. ft. A density of 0.20 over the most remote 1500 sq. ft. is to be provided plus 250 gpm for hose allowance.

If applicable, design areas can be reduced as allowed in 19.3.3.2.3.1 for quick response sprinklers. Extended coverage sprinklers can be utilized in ordinary and light hazard areas if installed in accordance with the manufacture's listing and NFPA requirements.

(e) Characteristics of the water supply to be used: The existing municipal supply is a dead end main. The nearest circulating main is located on US-41. The municipal supply meets the required system duration. The proposed 6" underground fire service connects to the existing 10" main that serves this the property area on the west side of US-41.

(f) Flow test data: Flow test information as provided by North Collier Fire Control is as follows: Test performed on 01/22/2025 at 16000 hours, Static 72 psi, Residual 48 psi with a flow of 2122 gpm and an extrapolated flow of 3222 gpm at 20 psi.

(g) Valving and alarm requirements to minimize potential for impairments and unrecognized flow of water: The fire sprinkler riser and all required valving for this building will have the required flow and tamper switches provided with a local audible alarm and off-site monitoring.

(h) Microbial-induced corrosion: There is currently no indication that M.I.C. is present in the water supply for this property.

(i) Backflow prevention: A 6" DDCA will be provided with a loss not exceeding 6 psi, and its loss will be accounted for in the hydraulic calculations.

(j) Quality and performance of all yard and interior fire protection components: All components shall be listed and approved for their use.

(k) Fire Pump Information: Based upon the water flow test, a fire pump will not be needed.

(l) Firewater Storage Tank: Based on the current water flow test report, there is sufficient capacity in the municipal water supply to provide the required flows/pressures needed by the fire sprinkler system. No storage tank shall be required.

(m) Owner's Certificate: The current project has no storage or hazard that would require an Owner's Certificate.

Sincerely,

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