The following notes address the requirements of the fire alarm project and the requirements of the 61G15-32 as they pertain to the fire alarm system for the project. Iowa Fire Equipment Company has been selected as the fire alarm system installation contractor for this project, and Shall provide the system in conformance with the following guidelines.

32.003(6) Fire Alarm Shop/Layout Drawing Requirements:

- 1. The fire alarm system contractor (IFEC) Shall be responsible for obtaining a separate permit for all fire alarm systems, and for the installation & acceptance of the system by the local AHJ. Location and quantities of devices are shown in the plans and identified by symbol legend, riser, and fire alarm system notes as to the systems requirements. It is a requirement of the project that the installer of the alarm equipment (IFEC) Shall provide submittals which include:
- A. Equipment shop drawings, including all devices, equipment, Layout, Etc.
- B. Field wiring diagrams which indicate conductor, and cable sizes
- C. Electrical load totals of the system to verify the rating of the required standby batteries in accordance with the N.F.P.A. 72 requirements
- 2. The fire alarm submittals are to be provided to the engineer of record for review prior to submitting for a fire alarm permit. The AHJ Shall not approve any submittals for the fire alarm permit which do not bare the submittal stamp indicating review, and a approval, by the engineer of record.
- 3. These drawings have been prepared in conjunction with (IFEC) and are suitable for use as the project fire alarm drawings.

32.003(8) Additional Information:

1. The engineer feels that the information as provided is adequate to assist the AHJ in understanding the owners intended use and proposed protection of the building or facility, and provide sufficient direction related to the layout of the system.

32.008(2) Codes & Standards:

1. The system Shall comply with N.F.P.A 72 (2016 ED.), N.F.P.A. 70 (Article 760) (2017 ED.), the Florida fire prevention code (7th ED.), N.F.P.A. 101 (2018 ED.), and the state of Florida ADA codes.

32.008(3) Small Systems:

1. The cost of the system is unknown, however the cost is expected to exceed \$5,000.00 in costs. Therefore, engineered fire alarm plans have been prepared.

32.008(4)(A)/ 32.003 (1) Plans & Øccupancy:

1. Refer to other locations in the design documents for the symbols legend, fire alarm riser diagram, and fire rated assemblies.

2. Refer to notes under 32.008(4)(N) for wiring and cable requirements.

3. FFPC building occupancy classification: Low-Hazard Storage Group S-2 / Utility & Misc. Storage Group (U) Private Garages. First floor level entirely Storage / Private Garages, Story Two / Second Level, outlined as follows:

Pursuant to the Florida Fire Prevention Code, Occupant Load Factor tables, the Storage Occupancy area of the building Shall not require an Occupancy Load Calculation (Storage Use NA). For the club house area of the facility, the Occupancy Load Calculation is based upon the use of these areas as follows: Upper and lower lounge area, game room area, kitchen, second floor. (1070 Sq. Ft.) calculated occupancy load, (Assembly use, less concentrated use without fixed seating / Casino and similar gaming areas) 62 persons. Other areas of the second floor club house consist of the elevator lobby, vestibule, exit and entrance stairs, corridor leading to and from the toilet area, and small utility room. As these areas are illustrated on the life safety plan as a possible means of egress they are not being calculated as occupied use areas.

It is the opinion of the engineer of record that the occupancy classes of the individual spaces comprising the project are apparent due to the furniture, equipment, and/or room designations indicated on the plans. This information is taken from the architectural & floor plans, in the case of information discrepancy, the data in the referenced plans Shall supersede the information above.

32.008(4)(B) Devices & Related Systems:

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- 1. Refer to other locations in the plan set for the specific locations of devices.
- 2. Circuit breaker feeding FACP and any other equipment associated with the fire alarm system (power supplies, amplifiers, etc.) Shall have "lock on" previsions, painted red, and labeled fire alarm circuit.
- 3. Location and quantities of all water flow and tamper switches may be unknown at this time: all fire sprinkler systems have these devices, the installing contractor (IFEC) Shall coordinate with the fire sprinkler contractor as to their locations.
- 4. Provide tamper switch connections and wiring for all (PIV) and/or valves, and backflow prevention assemblies.
- 5. Auxiliary control relays Shall be within 3'-0" of the controlled equipment.

32.008(4)(C) Notification Devices:

1. Candela power of the visual devices indicated on the plans are the levels required by N.F.P.A. 72 (and ADA codes) to adequately cover the space, the contractor (IFEC) is responsible for meeting those levels, exceeding those levels, or recalculating quantity & location for complete coverage.

2. All strobes are to be synchronized.

3. The audio output of all audible devices Shall be (80) DB (minimum)

4. Refer to the appropriate design criteria where acoustically distinguishable spaces have been noted.

32.008(4)(D) Circuitry:

1. New circuitry and circuit pathways are to be:

A. SLC's - Class B B. NAC's - Class B

C. Pathway survivability level (0)

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- 32.008(4)(K) Smoke Detection Stratification:
- 1. Smoke detection is not part of the fire alarm design as the building is fully sprinkled, a single smoke detector Shall be installed directly above, or near the FACP, as required by the N.F.P.A. 72 Standard.

necessary.

- 1. Sequence of operation schedule:

- B.A. Any open or short circuit in any NAC or SLC. B.B. Loss of system AC power. B.C. Low battery back up.
- C.A. Activation of any valve tamper switch. C.B. Activation of any duct smoke detectors.
- D. Notify remote supervisory service of any system alarm, system trouble, and/or system supervisory condition.
- - monitoring service.
 - H. Alarm and audible alarm signals may be silenced at the FACP, visual signals are to remain on.

- is to be supervised, and monitored.
- D. Automatic detectors in hoist ways, and machine rooms, shall illuminate their respective "do not use elevator" lights in elevator cab and at the lobbies, (third recall circuit). Note: each elevator Shall have its own third recall circuit. E. All smoke & heat detectors Shall alarm the system and be supervisory monitored.

project).

- C. The system annunciates all initiating devices.
- E. The system is power limited.

- 2. The location of the surge protection devices are generally indicated on the floor plan for permitting purposes. The surge protection devices are to be field located as is practical for the installation with the following guidelines. The specific location of these devices is dependent upon the actual wiring to be installed. As such, the engineer cannot know exactly where the surge protection devices are or will be located. It is hereby noted that the engineer takes no exception to the relocation of the surge protection devices within the the guideline notes. The final location of the surge protection devices Shall be shown on the fire alarm AS-BUILT drawings as presented to the owner upon completion of the project.
- A. For the 120 volt supply to the fire alarm, the surge protection devices are to be installed immediately adjacent to the fire alarm device that is being supplied.
- B. For incoming communication wiring, the surge protection devices are to be installed immediately adjacent to the fire alarm device to be connected
- C. For the wiring entering/leaving the building to serve fire alarm devices, the surge protection devices are to be installed in an accessible location near the point at which the wiring enters the building.

32.008(4) (H) Environmental Factors:

- 1. All alarm system components Shall be Listed as suitable for use in the physical locations actually used. (examples; indoors, damp, wet, hazardous, explosion proof, etc.).
- 32.008(4) (I) Site Plan: PROVIDED AS REQUIRED PER COLLIER COUNTY CORRECTION LETTER DATED 9/9/22.
- . A site plan is not required for this project as no fire alarm devices are required to be installed outside of the building, any required monitoring of exterior horn/strobe devices, (RIV) switches, or backflow prevention devices, Shall be illustrated on the fire alarm shop drawings for the associated fire alarm monitoring device. (monitoring modules).

- 32.008(4)(L) Performance Based Design:

32.008(4)(E) Fire Alarm & Control Functions:

A.A. Cause device alarmed to be annunciated at the (FACP) and remote annunciator (if installed) as an alarm condition. A.B. Notification Shall be provided automatically by an internal audible alarm system in accordance with N.F.P.A. (101). A.C. Shutdown kitchen hood systems if required. Note: hood system must be connected such that if shutdown by a fire alarm condition, activation of the hood suppression systems will restart the exhaust fans, upon system activation. A.D. Water flow conditions are to be distinctly annunciated at the panel, (and remote central station).

A.E. If initiating device is part of the elevator recall system elevator recall is to be initiated.

- B. The following conditions Shall cause a system trouble condition:
- C. The following conditions Shall cause a system supervisory condition:
- E. The monitoring company or central station Shall be distinctly notified of water flow conditions.
- F. Communication with the monitoring station Shall be cellular DACT, or as approved by the local AHJ. G. Supervisory and trouble signals Shall be annunciated at the FACP and remote annunciator (if installed) and transmitted to the
- I. Duct type smoke detectors Shall shutdown the effected air handling equipment.
- J. Auxiliary fire control systems (kitchen hood, clean agent systems, Halon, FM-200, Novec-1230, C.O.2, Etc.). if installed, Shall be interconnect and cause system alarm if activated.
- 2. Elevator recall function & sequence of operation:
- A. Heat detectors in machine rooms, hoist ways, and pits, are to cause elevator shutdown via shunt trip, power for the shunt trip
- B. Automatic detectors located at the designated lobby Shall recall to the alternate lobby. If the elevator machine room is located on the designated level, it Shall also recall to the alternate lobby, (first recall circuit).
- C. Automatic Detectors at the remaining lobbies, in elevator hoist ways, and in elevator machine rooms, Shall cause recall to designated lobby (second recall circuit).
- Note: The first activated smoke detector Shall have preference regarding elevator recall.
- 3. Each alarm device to be separately annunciated at the main FCAP and auxiliary panel, or annunciator (if required on the
- 32.008(4)(F) Fire Alarm System Type & Zoning:
- 1. The fire alarm system is as follows and contains the following features:
- A. The fire alarm system uses standard horn/strobe & strobe devices as indicated on the shop drawings.
- B. The system is a fully addressable system.
- D. The system uses a remote supervisory central station.
- F. The system is to be an entirely new fire alarm system for the associated occupancy.
- 2. Unless shown otherwise, the fire alarm system Shall be zones, or addressed, by floor or vertical run.
- 32.008(4)(G) Surge Protection Devices:
- 1. All fire alarm wiring entering or leaving the building Shall have surge protection suitably grounded. This includes the wiring to remote (PIV's), backflow prevention devices, and incoming telephone/communication lines, Surge protection devices are required on all 120 volt AC power supply lines.

1. These drawings represent a prescriptive design, as such, references to specific Standards, articles, or requirements, is not

32.008(4)(M) Evacuation Signals:

- 1. The system provides a general evacuation signal.
- 32.008(4)(N) Wiring:
- location.
- Table 760-27 for NPLFA systems (both of N.F.P.A. 70 as listed above.)
- 3. Signal wiring Shall be AWG #16 minimum.
- 4. Alarm initiating device wiring Shall be AWG #18 minimum.
- 5. Power wiring Shall be AWG #14 minimum. 6.Other wiring Shall be AWG #18 minimum.
- 7. Approved Multi-conductor cables are acceptable as substitutes.
- 9. Plenum rated cable Shall be used when run is in environmental air spaces. service.
- A.Conduit containing fire alarm wiring Shall be painted red at five foot intervals. B. All junction boxes containing fire alarm wiring Shall be painted red. C. All device back boxes Shall be painted red.
- 12. All device wiring not in conduit Shall have red sheathing.
- 32.008(4)(O) Documentation:
- A. Operations manuals.
- B. Accurate ASBUILT plans of the system.
- scheduled with the owner at their convenience.
- 3. The required documentation Shall be on-site prior to the final fire inspection.
- 32.008(5) Battery And Voltage Drop Calculations:
- and Shall not be considered specification thereof.
- devices as follows:
- A. Horn and/or strobe load Shall not exceed 80% of the amplifier capacity. B. Speaker load Shall not exceed 80% of Amplifier capacity.
- required standby power as prescribed in the code, or Standard. A. 24 hours of standby plus (5) minutes for alarm notification devices. For systems equipped with voice/communication, or auto-evac systems (15) minutes minimum.
- 32.008(6) Test Requirements:
- 32.008(7) Special Requirements:

1. Øwner

- be provided for the safety and comfort of the owners and quests, and as such one is being provided.
- 2. Insurance underwriter
- A. The engineer is not aware of any special requirements of the insurance underwriter.
- 3. AHJ they approach the building.
- closure) Shall cause supervisory signals only. They Shall not cause system alarm. C. All aboveground valves or (PIV's) that control water exclusively supplying a fire sprinkler system Shall be electrically
- monitored
- writing by the local AHJ.

3. Engineer

- A. Manual pull stations Shall be provided at the locations shown on the plans for protective signal purposes
- www.ccfdin.com.
- C/O device, the fire alarm system Shall render a (Supervisory) signal only, alerting the required occupants, and associated



SPELMAN ENGINEERING, INC 6296 Corporate Court Building A Suite 201 Fort Myers, FL 33919 PHONE 239/770-2930 cspelman@spelmanengineering.com Mail Correspondance: PO Box 3519 North Fort Myers, FL 33918 Florida CA #26955 CHARLES P. SPELMAN, PE Florida License #34925 LICATION OR USE OF THESE PLANS AND SPECIFICATIONS IS RESSLY LIMITED TO THIS PROJECT ONLY. REUSE, REPRODUCTION

1. All wiring to be copper, contractor to use wiring with THHN or THWN insulation as required by the installation type and

2. Wiring to be sized, color coded and in quantities as recommended by the equipment manufacturer, and in accordance with

8. Cables or conductors not installed in conduit Shall be sleeved from the device to an accessible area. 10. All wiring to be supervised. This Shall include the communication lines from the system to the central station, or remote

11. Fire alarm wiring is to be identified as such and this identification Shall be different from other electrical system wiring.

1. Upon completion of the project, the contractor (IFEC) Shall provide the owner the following documentation.

2. The contractor (IFEC) Shall instructed the owner and/or staff in the proper operation of the system. This training Shall be

Revision Note This Page Dated 11-04-22.

1. As allowed by the rule 61G15-32.008(5), the engineer has elected not to specify the wiring and is therefore not required to provide battery, and voltage drop calculations. Any wiring that is shown on the engineering plans is for reference purposes only

2. The actual wiring to be installed Shall be provided by the installing contractor (IFEC) in the required shops drawings attached.

3. For purposes of sizing conductors and performing circuit analysis, the contractor (IFEC) Shall install a maximum quantities of

4. The installing contractor (IFEC) Shall provide battery calculations to provide batteries of sufficient capacity to satisfy the

1. The fire alarm system Shall be inspected, tested, and maintained in accordance with the N.F.P.A. 72 Standard Chapter (14).

A. The engineer is not aware of any special requirements of the owner. The developer/HOA does require a fire alarm system to

A. Sprinkled buildings Shall have a flashing strobe and audible signal at the corner of the building, nearest the fire department connection (FDC), the intent is to provide the responding fire department with an easy means of identifying the (FDC) as

B. Duct smoke detectors which are not part of a smoke control system (used solely for HVAC system shutdown or damper

D. The contractor Shall obtain the fire alarm permit prior to commencement of the fire alarm installation unless approved in

Revision Note This Page Dated 11-04-22.

Revision Note This Page

Dated 11-04-22.

B. These plans are for the construction of a new automobile suites structure with club house amenities. The fire alarm plans are to be developed by the contractor (IFEC) and provided to the local AHJ for permitting and approval.

C. Additional Engineering Note as Required by The AHJ, duct detectors that are not part of a smoke-control system and used solely for closing dampers for HVAC systems, Shall not activate the building evacuation alarm. Instead, they Shall initiate a supervisory signal only. Per Collier County Fire Prevention and Protection Code Policy and Procedure, Article FAL 02-2,

D. As required by the local AHJ Carbon Monoxide detection devices Shall be added to all Automotive Suites and associated property assembly areas. These devices Shall function as follows, for all Automotive Suites the adjoining Suite, Shall be activated upon activation of any C/O detector within the Automotive Suites areas. Thus causing notification to the unit in alarm, and those units directly adjacent to the active until in alarm. For the second floor assembly area, upon activation of C/O detectors located within the Automotive Suites area, directly below the club house area, or a C/O detector within the club house area itself. All C/O detectors on the second floor Assembly area, Shall activate as well. Upon activation of any

property designees, and not dispatching the fire department, and or apparatus. Revision Note This Page Dated 12-16-22.

General Notes

1. The application for permit is being requested by Iowa Fire Equipment Company, a licensed fire alarm contractor within the State of Florida, license number (EF-20001668), to complete the fire alarm installation at the new Redline Auto Suites.

The new system will be controlled by a Potter AFC-100 addressable fire alarm panel..

Monitoring of the new fire alarm system is planed to be completed by Iowa Fire Equipment Company using the M2M cellular communicator. monitored by All American Monitoring's central station. In the event the owner chooses to use a radio frequency communicator, direct phone lines, or other means of UL Central Station monitoring, through another vendor. A separate permit is required through Collier County permitting.



:Fire Alarm System: :Submittal Document:

Redline Auto Suites 5705 Taylor Road Naples, Florida



02/04/2022

BJP

CIowa Fire Equipment Company 2800 DELAWARE AVENUE DES MOINES, IOWA 50317

> **327 FIRST STREET** IOWA CITY, IOWA 52240

16461-B OLD US HIGHWAY (41) FORT MYERS, FLORIDA 33912

2945 WEST CHESTNUT EXPRESSWAY UNIT (H) SPRINGFIELD MISSOURI 65802-4649

Sowa Fire Equipment Company



Scale: 3/32" = 1' - 0"

Additional Notes:

1. Additional power supply required for NAC. circuits through the use of the Potter model PSN-1000 (E) NAC power exspander.

2. (4.7 K) resistors are illustrated @ the end of each NAC circuit to maintain supervision.

3. four wire 18AWG, FPLP fire alarm wire ran from (P-Link) buss in control panel to fire alarm annunciater.

4. All NAC circuits on the AFC-100 to be ran in two wire 14 AWG, FPLP fire alarm rated wire. All NAC circuits on the PSN-1000 (E) expander panel to be ran in 12 AWG, FPLP fire alarm rated wire.

5. SLC loop wiring to be ran in two wire 18 AWG, FPLP fire alarm rated wire.

6. All use of hangers, fasteners, and wiring protection to be installed in accordance with N.F.P.A. 72.

Address legend

	1D001	Smoke Above FACP
	1D001 1D002	Pull Station Corr. 204
	1D003	Pull Station Lounge
	1D004	Smoke 2nd Fl. Elevator
	1D005	Heat Top of El. Shaft
	1D006	Smoke 1st. FL. Elevator M.M. Elow Switch
	1D007	M.M. Flow Switch M.M. Tamper $@$ Riser
	1D009	M.M. Backflow Tamp.
	1D010	M.M. Backflow Tamp.
	1D011	CRM Elevator Recall
	1DC01	Carbon Monoxide Det.
	IDCO2	Carbon Monoxide Det.
	1DC03 1DC04	Carbon Monoxide Det.
	1DC01	Carbon Monoxide Det.
	1DCO6	Carbon Monoxide Det.
	1DCO7	Carbon Monoxide Det.
	1DC08	Carbon Monoxide Det.
	1DC09	Carbon Monoxide Det.
	1DC010	Carbon Monoxide Det.
	1DC012	Carbon Monoxide Det.
	1DCO13	Carbon Monoxide Det.
I/S assembly	1DCO14	Carbon Monoxide Det.
/	IDC015	Carbon Monoxide Det.
/	1DC016	Carbon Monoxide Det.
	1DC017	Carbon Monoxide Det.
	IDC019	Carbon Monoxide Det.
	1DCO20	Carbon Monoxide Det.
	1DCO21	Carbon Monoxide Det.
	1DCO22	Carbon Monoxide Det.
	1DC023	Carbon Monoxide Det.
ning fire Line	1DC025	Carbon Monoxide Det.
	1DCO26	Carbon Monoxide Det.
	1DCO27	Carbon Monoxide Det.
_		
		Backflow Device With
FDC		Tamper Switches &
		Potter Bridge Devices
<u> </u>	I	
embly With		
Flow With	Revi	ision Notes This Page
age Devices	Dete	d 11 04 22 Davias
	Date	d 11-04-22, Device
	Cano	dela Changes 110-CD
		Device Legend
	Device Legenu	
	AFF - AB	OVE FINISHED FLOOR
	FACP F	Potter AFC-100 Addressable Panel
	ANN. F	Potter RA-6500 Annunciator Panel
	M. M.	Typ. Monitor Module
	CRM.	Typ. Control Relay Module
	(s) 7	yp. Smoke Detector
	S c.o.	Typ. Carbon-Monoxide Detector
		equipped with Sounder Base
		yp. Ceiling Mounted Strobe Assembly
		Typ. Ceiling Mounted H/S Assembly
		Typ. Wall Mount Strobe Assembly
		Typ. Wall Mount Horn/Strobe Assembly
		Typ. Manual Pull Station Dual Action
		yp. Lamper Switch
	P.B.R. T	yp. Flow Switch Syp. Potter Wireless Bridge Repeater

General Notes

 The application for permit is being requested by Iowa Fire Equipment Company, a licensed fire alarm contractor within the State of Florida, license number (EF-20001668), to complete the fire alarm installation at the new Redline Auto Suites.

The new system will be controlled by a Potter AFC-100 addressable fire alarm panel.

Monitoring of the new fire alarm system is planned to be completed by Iowa Fire Equipment Company using the M2M cellular communicator, monitored by All American Monitoring's central station.

The required CRM control relay, will be located within the elevator equipment area, presumably at the top of the shaft as illustrated. With all control wiring to facilitate elevator recall to be completed by the electrical contractor.



:Fire Alarm System: :Submittal Document: Redline Auto Suites

5705 Taylor Road Naples, Florida



Sowa Fire Equipment Company



Scale: 1/4'' = 1' - 0''

Additional Notes:

1. Additional power supply required for NAC. circuits through the use of the Potter model PSN-1000 (E) NAC power exspander.

2. (4.7 K) resistors are illustrated @ the end of each NAC circuit to maintain supervision.

3. four wire 18AWG, FPLP fire alarm wire ran from (P-Link) buss in control panel to fire alarm annunciater.

4. All NAC circuits on the AFC-100 to be ran in two wire 14 AWG, FPLP fire alarm rated wire. All NAC circuits on the RSN-1000 (E) expander panel to be ran in 12 AWG, FPLP fire alarm rated wire.

5. SLC loop wiring to be ran in two wire 18 AWG, FPLP fire alarm rated wire.

6. All use of hangers, fasteners, and wiring protection to be installed in accordance with N.F.P.A. 72.

 $\langle E \rangle$

NAC-3 up to PSN-1000

CRM.

01

CRM

S

CO26

Additional Notes:

1. Fire alarm monitoring contract with All American Monitoring to be provided @ final field inspection as required.

2. Conductor sizes from the FACU Aux. power, to the M2M Series communicator input power terminals, Shall be ran in protected raceway, using 18 AWG wire, or Listed fire alarm cable.

3. Conductor sizes from the fire alarm panel to the M2M Series Communicator Shall be wired using 18 AWG wire, or listed fire alarm cable, and as required as outlined in manufactures installation manual.

4. All wiring Shall be copper stranded insulated wire.

Document box mounted directly next to FACP PSN-1000 (E) NAC power exspander

mounted near FACP



Sowa Fire Equipment Company