

SYSTEM INPUTS	SYSTEM OUTPUTS														
	CONTROL UNIT ANNUNCIATION			NOTIFICATION			REQUIRED FIRE SAFETY CONTROL								
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1. MANUAL FIRE ALARM BOXES															
2. SMOKE DETECTORS															
3. SMOKE DETECTOR - ELEV LOBBY															
4. SMOKE DETECTOR - ELEV LOBBY															
5. HEAT DETECTORS															
6. IN-DUCT SMOKE DETECTORS															
7. WATERFLOW															
8. SPRINKLER VALVE CONTROL															
9. FIRE ALARM AC POWER FAILURE															
10. FIRE ALARM SYSTEM LOW BATTERY															
11. OPEN CIRCUIT															
12. GROUND FAULT															
13. NOTIFICATION APPLIANCE CIRCUIT SHORT															

SYSTEM OPERATION MATRIX

**FIRE STOPPING REQUIREMENTS**

SYSTEM NO. C-AJ-1079 (FORMERLY SYSTEM NO. 437)

F-RATING - 3 AND 4 HR (SEE ITEM 3C)  
T-RATING - 2 HR  
L RATING AT AMBIENT - LESS THAN 1 CFM/sq. ft.  
L RATING AT 400° F - LESS THAN 1 CFM/sq. ft.

1 = CONCRETE WALL  
3 = METAL ELECTRIC PIPE  
4 = MINERAL WOOL INSULATION  
5 = INSTALLED A MINIMUM OF 1/2" IN DEPTH, FLUSH WITH TOP OF FLOOR

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SYSTEM NO. C-AJ-1217

F-RATING - 3 AND 4 HR (SEE ITEMS 3D AND 4C)  
T-RATING - 2 HR  
L RATING AT AMBIENT - LESS THAN 1 CFM/sq. ft.  
L RATING AT 400° F - LESS THAN 1 CFM/sq. ft.

1 = CONCRETE WALL  
3 = METAL ELECTRIC PIPE  
4 = MINERAL WOOL INSULATION  
5 = INSTALLED A MINIMUM OF 1/2" IN DEPTH, FLUSH WITH TOP OF FLOOR

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SYSTEM NO. C-AJ-1049 (FORMERLY SYSTEM NO. 635)

F-RATING - 3 AND 4 HR (SEE ITEM 1B)  
T-RATING - 2 HR  
L RATING AT AMBIENT - LESS THAN 1 CFM/sq. ft.  
L RATING AT 400° F - LESS THAN 1 CFM/sq. ft.

1 = CONCRETE WALL  
3 = METAL ELECTRIC PIPE  
4 = MINERAL WOOL INSULATION  
5 = INSTALLED A MINIMUM OF 1/2" IN DEPTH, FLUSH WITH TOP OF FLOOR

**CONTRACTOR GENERAL CONDITIONS NOTES**

- RFIS: CONTRACTOR SHALL SUBMIT RFIS WITH HIS PROPOSED SOLUTION IN A TIMELY MANNER. CONTRACTOR RECOGNIZES THE CONSULTANT SHALL REQUIRE UP TO 5 WORKING DAYS TO RESPOND.
- SUBMITTALS AND PRODUCT DATA: CONTRACTOR SHALL PREPARE A SUBMITTAL SCHEDULE FOR APPROVAL BY THE A/E. CONTRACTOR RECOGNIZES THE CONSULTANT SHALL REQUIRE UP TO 10 WORKING DAYS TO REVIEW SUBMITTALS. ALL SUBMITTALS, PRODUCT DATA, SHALL BE CLEARLY STAMPED AND INDICATED APPROVED BY THE CONTRACTOR PRIOR TO SUBMISSION TO THE CONSULTANT.
- SHOP DRAWINGS: CONTRACTOR SHALL PREPARE A SHOP DRAWING SCHEDULE FOR APPROVAL BY THE A/E. CONTRACTOR RECOGNIZES THE CONSULTANT SHALL REQUIRE UP TO 10 WORKING DAYS TO REVIEW SHOP DRAWINGS. ALL SHOP DRAWINGS, SHALL BE CLEARLY STAMPED AND INDICATED APPROVED BY THE CONTRACTOR PRIOR TO SUBMISSION TO THE CONSULTANT.
- LAYOUT AND COORDINATION DRAWINGS: CONTRACTOR SHALL PREPARE SCALED COMPREHENSIVE COORDINATED LAYOUT DRAWINGS, PROVIDE SECTIONS, GENERAL ARRANGEMENTS, ELEVATIONS INCLUDING ALL DISCIPLINES FOR HIS PROPOSED LAYOUT AND ROUTING PRIOR TO FABRICATION. SUBMIT TO OWNER AND A/E FOR REVIEW AND GENERAL PERFORMANCE. PROVIDE DRAWINGS THAT DEMONSTRATE VIA COORDINATED ELEMENTS AND SYSTEMS WITH STRUCTURE THAT CLEARLY INDICATE PROPOSED SYSTEMS WILL FIT, FUNCTION AS INTENDED, BE FREE OF INTERFERENCES AND CONFORM TO REQUIRED CODE AND MANUFACTURER WORKING AND MAINTENANCE CLEARANCES.
- DEVIATIONS FROM BASIS FOR DESIGN SYSTEMS SHALL BE CLEARLY IDENTIFIED ON ALL SUBMISSIONS.
  - CONTRACTOR SHALL PREPARE REQUESTS WITH COMPLETE COORDINATION INFORMATION, INCLUDE ALL CHANGES REQUIRED IN OTHER ELEMENTS OF THE WORK TO ACCOMMODATE THE SUBSTITUTION INCLUDING WORK PERFORMED BY THE OWNER AND THE SEPARATE CONTRACTORS.
  - PROVIDE COMPLETE SUPPORTING DATA QUALIFYING THE SUBSTITUTION COMPARED TO THE BASIS OF DESIGN SYSTEM PROVIDE A DETAILED LIST OF ANY VARIANCES, PHYSICAL OR SPATIAL LAYOUTS, ELEVATIONS, ETC. TO THE BASIS OF DESIGN.
  - PROVIDE A STATEMENT INDICATING THE EFFECT THE SUBSTITUTION WILL HAVE ON THE WORK SCHEDULE IN COMPARISON TO THE SCHEDULE WITHOUT APPROVAL OF THE PROPOSED SUBSTITUTION, INCLUDE INFORMATION REGARDING THE EFFECT OF THE PROPOSED SUBSTITUTION ON THE CONTRACT TIME.
  - PROVIDE CERTIFICATION BY THE CONTRACTOR TO THE EFFECT THAT, IN THE CONTRACTOR'S OPTION, AFTER THOROUGH EVALUATION, THE PROPOSED SUBSTITUTION WILL RESULT IN WORK THAT IN EVERY SIGNIFICANT RESPECT IS EQUAL TO OR BETTER THAN THE WORK REQUIRED BY THE CONTRACTOR DOCUMENTS AND THAT IT WILL PERFORM ADEQUATELY IN THE APPLICATION INDICATED.
- AS-BUILT DRAWINGS: THE CONTRACTOR SHALL MAINTAIN AND PREPARE A COMPLETE AND ACCURATE SET OF AS-BUILTS DURING THE PROJECT AND ISSUE TO THE A/E AND OWNER AT PROJECT CLOSURE. DURING THE COURSE OF THE PROJECT, THE CONTRACTOR SHALL ISSUE SKETCHES OR SCALED DRAWINGS FOR FIELD CHANGES THAT ARE PROPOSED OR MADE WHICH VARY FROM THE BASIS OF DESIGN. CONSULTANT EXPENSES THAT ARE INCURRED DUE TO SERVICES OR REVISIONS REQUIRED BY BUILDING DEPARTMENT, OWNER, CONTRACTOR, AND MANUFACTURER SHALL BE COMPENSABLE TO THE CONSULTANT BY THE CONTRACTOR.
- INSTALLATION, TESTING AND BALANCING, START UP, COMMISSIONING AND PERFORMANCE TROUBLESHOOTING OF SYSTEMS - CONTRACTOR RECOGNIZES HE IS SOLELY RESPONSIBLE FOR PERFORMANCE AND COMPLETION OF THESE SERVICES AS PART OF THE PROJECT REQUIREMENTS, DURING THE COURSE OF THE PROJECT, THE CONTRACTOR SHALL DOCUMENT THE SERVICES COMPLETED TO THE OWNER AND A/E. CONSULTANT EXPENSES THAT ARE INCURRED DUE TO SUPPORTING SERVICES OR REVISIONS REQUIRED BY BUILDING DEPARTMENT, OWNER, CONTRACTOR, AND MANUFACTURER SHALL BE COMPENSABLE TO THE CONSULTANT BY THE CONTRACTOR.

**FIRE ALARM SYSTEM WIRE SCHEDULE:**

THE INSTALLATION OF THE FIRE ALARM SYSTEM WIRING SHOULD TAKE INTO ACCOUNT THE FIRE ALARM SYSTEM MANUFACTURER'S PUBLISHED INSTALLATION INSTRUCTIONS AND THE LIMITATIONS OF THE APPLICABLE PRODUCT LISTING OR APPROVALS.

FIRE ALARM SYSTEM SHALL BE POWER LIMITED:

- INITIATING CIRCUITS: 2 CONDUCTOR, #18 AWG SOLID, SHIELDED TWISTED PAIR FPLP/FPLR
- INDICATING CIRCUITS: 2 CONDUCTOR, #14 AWG SOLID, SHIELDED TWISTED PAIR FPLP/FPLR
- REMOTE ANNUNCIATION CIRCUITS: 4 CONDUCTOR, #18 AWG SOLID, SHIELDED TWISTED PAIR FPLP/FPLR
- ALL CONDUCTORS SHALL BE INSTALLED IN ELECTRICAL TUBING (EMT) UNLESS OTHERWISE NOTED PLENUM.
- PLENUM RATED FIRE ALARM CABLE IS ACCEPTABLE FOR USE WHERE APPROVED BY THE AUTHORITY HAVING JURISDICTION.

**CONTRACTOR TO INTERFACE AND CONNECT HOOD FIRE SUPPRESSION SYSTEM TO THE BUILDING FIRE ALARM SYSTEM**

**FIRE ALARM SHEET INDEX**

SHEET #	DESCRIPTION
FA0.1	FIRE ALARM NOTES, LEGEND & SPECS
FA1.1	FIRST FLOOR FIRE ALARM PLAN
FA1.2	SECOND FLOOR FIRE ALARM PLAN

**SCOPE OF WORK**

THIS PROJECT IS NEW CONSTRUCTION OF A 24,560 SQ FT TWO-LEVEL EARLY CHILDHOOD LEARNING FACILITY INCLUDING A NEW FIRE ALARM SYSTEM.

**FIRE ALARM SYMBOL LEGEND - GE SECURITY/EST**

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	WALL MOUNTED STROBE LIGHT (CD AS INDICATED) GIRF-VM		SMOKE DUCT DETECTOR SIGA-SD (GROUND TEST STATION SD-TRK) (CONTROL MODULE SIGA-CD)
	WALL MOUNTED WEATHER-PROOF STROBE LIGHT (CD AS INDICATED) 405-BA-1 WITH 449 WEATHER-PROOF BACK BOX		PHOTOELECTRIC SMOKE DETECTOR SIGA-PS (STANDARD BASE WITH TRM RING DGA-SBA) (ADDRESSABLE MONITOR MODULE SIGA-CT1)
	WALL MOUNTED HORN/STROBE (CD AS INDICATED) GIRF-VM		ADDRESSABLE HEAT DETECTOR SIGA-HRS (STANDARD BASE WITH TRM RING DGA-SBA) (ADDRESSABLE MONITOR MODULE SIGA-CT1)
	WALL MOUNTED WEATHER-PROOF HORN/STROBE (CD AS INDICATED) 757-BA-1 WITH 757 A-WB WEATHER/PROOF BACK BOX		ADDRESSABLE WEATHER-PROOF HEAT DETECTOR 302AW-135/STANC027 (STANDARD BASE WITH TRM RING DGA-SBA) (ADDRESSABLE MONITOR MODULE SIGA-CT1)
	MINI-HORN (LOW FREQUENCY) HIGH DB GIRF-HD		TAMPER SWITCH (PROVIDED BY SPRINKLER CONTRACTOR) (ADDRESSABLE MONITOR MODULE SIGA-CT1)
	ADDRESSABLE FIRE ALARM CONTROL PANEL D51-R-1		FLOW SWITCH (PROVIDED BY SPRINKLER CONTRACTOR) (ADDRESSABLE MONITOR MODULE SIGA-CT1)
	ANNUNCIATOR PANEL EST-SRA-1		ANSUL INTERFACE STATUS SUPERVISION (KITCHEN HOOD) (ADDRESSABLE MONITOR MODULE SIGA-CT1)
	REMOTE POWER SUPPLY (10 AMPS) BPS-10A		CONTROL MODULE/RELAY SIGA-CR
	SINGLE ADDRESSABLE PULL STATION SIGA-270 WEATHER/PROOF BACK BOX		KNOX BOX (THROUGH FIRE DEPARTMENT)
	SINGLE ADDRESSABLE WEATHER-PROOF PULL STATION MFSR-555W-GE (ADDRESSABLE MONITOR MODULE SIGA-CT1)		

**NOTES:**  
1. ALL DEVICES SHOWN IN SYMBOL LEGEND MAY NOT BE USED FOR THIS PROJECT.

**FAC 61G15 FIRE ALARM NOTE**

FIRE ALARM DEVICES ON THIS PLAN ARE SHOWN FOR DESIGN CRITERIA INTENT ONLY. THEY MAY NOT REPRESENT ALL DEVICES OR A COMPLETE SYSTEM OR FUNCTIONS THAT MAY BE REQUIRED BY THE AHJ/FIRE MARSHAL. CONTRACTOR SHALL DESIGN/BUILD THE FIRE ALARM SYSTEM AND ENGAGE HIS INDEPENDENT DELEGATED FLORIDA LICENSED PE TO PREPARE SIGNED AND SEALED WORKING DRAWINGS IN ACCORDANCE WITH FAC 61G15. THE DESIGN/BUILDER TEAM SHALL ISSUE FIRE ALARM PERMIT DRAWINGS WITH A COMPLETED DESIGN, CALCULATIONS, WIRING DIAGRAMS, PRODUCT DATA CONFORMING TO AGENCY REQUIREMENTS. THE DESIGN/BUILDER SHALL SUBMIT THE SIGNED AND SEALED DRAWINGS AND DATA TO THE PRIME CONTRACTOR ARCHITECT AND ENGINEER AS A SHOP DRAWING SUBMISSION FOR REVIEW. THE DESIGN/BUILDER SHALL MEET WITH AGENCIES, SUBMIT THEIR COMPLETE DRAWINGS AND DATA TO THE AGENCIES REQUIRED TO ACHIEVE A PERMIT AND CERTIFICATE OF OCCUPANCY (C.O.O.).

THE FIRE ALARM SYSTEM DESIGN FOR THIS PROJECT SHALL BE IN FULL ACCORDANCE WITH THE PROVISIONS OF THE FLORIDA ADMINISTRATIVE CODE CHAPTER 61G15-30 AS IT PERTAINS TO "DELEGATED ENGINEER". THE FIRE ALARM CONTRACTOR SHALL PROCURE THE SERVICES OF A FLORIDA REGISTERED ENGINEER WHO WILL ACT AS THE DELEGATED ENGINEER FOR THE FIRE PROTECTION SYSTEM DESIGN BASED ON THE DESIGN INTENT OF THE CONTRACT DOCUMENTS. THE DELEGATED ENGINEER WILL BECOME THE "ENGINEER OF RECORD" FOR THIS PORTION (FIRE ALARM SYSTEM) OF THE ENGINEERING PROJECT. THE DELEGATED ENGINEER SHALL CONFORM TO ALL REQUIREMENTS SET FORTH IN THE FLORIDA ADMINISTRATIVE CODE, 61G15-30.06 "DELEGATED ENGINEER'S RESPONSIBILITY". ALL FINAL DELEGATED ENGINEERING DOCUMENTS REQUIRE THE IMPRESSED SEAL AND SIGNATURE OF THE DELEGATED ENGINEER. DELEGATED ENGINEER SHALL BE THE FIRE ALARM SUCCESSOR ENGINEER OF RECORD FOR THE PROJECT.

**PRIOR TO SUBMITTING THE BID, THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND INFORM THE ARCHITECT AND THE ENGINEER OF ANY DISCREPANCY BETWEEN THESE DOCUMENTS AND THE EXISTING CONDITIONS AND SHALL INCLUDE IN THE BID TO CORRECT THE SAME AS DIRECTED. THE ENGINEER AND THE ARCHITECT, ARE NOT RESPONSIBLE FOR ANY ADDITIONAL COSTS RESULTING FROM VERIFIABLE EXISTING CONDITIONS DISCOVERED AFTER CONTRACT HAS BEEN AWARDED. NO CHANGES SHALL BE MADE TO THESE PLANS WITHOUT PRIOR APPROVAL FROM THE ENGINEER OF RECORD. ALL CHANGES SHALL BE SUBMITTED FOR REVIEW PRIOR TO INSTALLATION. NOT FOR BID UNTIL PERMIT HAS BEEN ISSUED.**

PERMIT / BID SET: 09/07/16

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 Keith M. Spina # AH03419

New Building For:  
**OPPORTUNITY INC.**  
 EARLY LEARNING CENTER  
 4171 Westgate Avenue  
 Palm Beach County, Florida

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Revisions:

Project no: 15435  
Date: 09.09.16  
Drawn by: RB/SK/JUS  
Project Architect: BJ

FIRE ALARM NOTES, LEGEND, & SPECS

**FA0.1**  
 09.09.16 BID/PERMIT