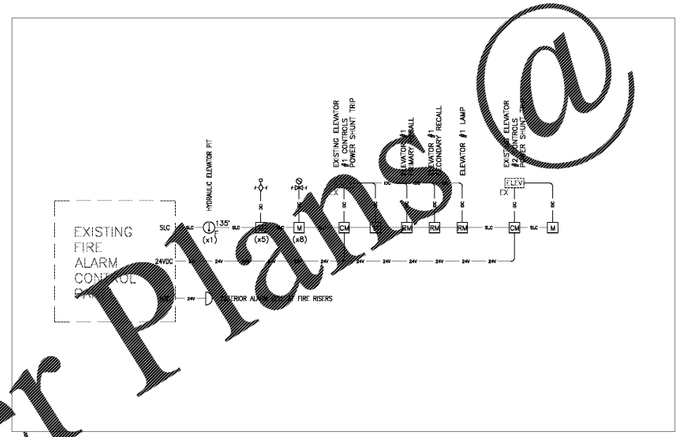
FIRE ALARM LEGEND:

FACP	FIRE ALARM CONTROL PANEL
FAPS	FIRE ALARM POWER SUPPLY
COM	COMMUNICATOR
ELEV	ELEVATOR CONTROLS
	SMOKE DETECTOR (PHOTOELECTRIC)
135° F	HEAT DETECTOR FIXED TEMP.
M	MONITOR MODULE
CM	CONTROL MODULE
RM	RELAY MODULE
	TAMPER SWITCH
	FLOW SWITCH
	ALARM BELL

	LINE TYPE	DESCRIPTION	CLASS	TYPE
A	SLC	SIGNALING LINE CIRCUITS	B	2 #16 AWG FPLP
B	IDC	INITIATING DEVICE CIRCUITS	B	2 #16 AWG FPLP
C	24V	24VDC	N/A	2 #14 AWG FPLP

NOTE: ALL FIRE ALARM SYSTEM WIRING SHALL BE SOLID COPPER AND INSTALLED IN RIGID METAL OR ELECTRICAL METALLIC TUBING, WITH A MINIMUM INSIDE DIAMETER OF 3/4", THAT UTILIZES COMPRESSION TYPE FITTINGS AND COUPLINGS.

WIRE CHART



SCHEMATIC RISER DIAGRAM

NOT TO SCALE

FIRE ALARM DESIGN CRITERIA

PROJECT SCOPE:
THE EXISTING FIRE ALARM AND DETECTION IS TO REMAIN. INITIATION WILL BE ADDED TO MONITOR THE NEW FIRE SPRINKLER SYSTEM FLOW AND TAMPER SWITCHES, ELEVATOR POWER SHUNT TRIP WILL BE ADDED TO DISCONNECT AUTOMATICALLY THE MAIN LINE POWER SUPPLY TO THE AFFECTED ELEVATORS INITIATED BY THE FLOW SWITCH ON THE ELEVATOR EQUIPMENT ROOM FIRE SPRINKLER SYSTEM.

SYSTEM DESCRIPTION:
THE EXISTING SYSTEM IS A FULLY ADDRESSABLE FIRE ALARM SYSTEM. THE EXISTING FIRE ALARM CONTROL PANEL (EDWARDS EST2) IS TO REMAIN. SIGNALING LINE CIRCUITS SHALL BE CLASS B WIRING AND INITIATING DEVICE CIRCUITS SHALL BE CLASS B WIRING. ALL FIRE ALARM SYSTEM WIRING SHALL BE SOLID COPPER AND INSTALLED IN RIGID METAL OR ELECTRICAL METALLIC TUBING, WITH A MINIMUM INSIDE DIAMETER OF 3/4", THAT UTILIZES COMPRESSION TYPE FITTINGS AND COUPLINGS. FIRE ALARM WIRING SHALL TERMINATE ON TERMINAL STRIPS. THE USE OF WIRE NUTS IS NOT ACCEPTABLE ON THE FIRE ALARM SYSTEM.

GOVERNING STANDARDS:
SYSTEM DESIGN AND INSTALLATION SHALL COMPLY WITH THE 2013 EDITION OF NFPA 13, THE 2014 EDITION OF NFPA 70, THE 2013 EDITION OF NFPA 72, 2015 EDITION OF PBS-P100, AS WELL AS THE 2015 INTERNATIONAL BUILDING CODE, AND THE 2015 INTERNATIONAL FIRE CODE.

FIRE SPRINKLER:
THE BUILDING'S SPRINKLER SYSTEM IS A COMPLETE NFPA 13 SYSTEM WITH PROTECTION IN ALL AREAS.

AUTOMATIC FIRE DETECTION:
AUTOMATIC DETECTION WILL BE ADDED IN THE HYDRAULIC ELEVATOR PIT WITHIN 24-INCHES OF THE FIRE SPRINKLER HEAD AND SHALL INITIATE ELEVATOR POWER SHUNT TRIP. FIRE DETECTION IN ELEVATOR #1 EQUIPMENT ROOM SHALL BE REPAIRED OR REPLACED TO MEET ELEVATOR RECALL, ELEVATOR SHUNT TRIP, AND FIRE ALARM FUNCTIONALITY.

PATHWAY SURVIVABILITY:
PATHWAY SURVIVABILITY SHALL MEET THE REQUIREMENTS OF NFPA 72 LEVEL 2 OR LEVEL 3.

MONITORING:
THERE IS AN EXISTING FIRE ALARM COMMUNICATOR WHICH MONITORS THE FIRE ALARM SYSTEM. THE COMMUNICATOR AND FIRE ALARM MONITORING ARRANGEMENT ARE TO REMAIN AS INSTALLED.

FIRE ALARM SYSTEM DOCUMENTATION:
UPON COMPLETION OF SYSTEM INSTALLATION, A DOCUMENT BOX SHALL BE PROVIDED CONTAINING AS-BUILT DRAWINGS, ALL OPERATIONS AND MAINTENANCE PROCEDURES, SYSTEM DOCUMENTATION, RECORD OF COMPLETION, AND THE PANEL PROGRAM ON A DISK OR USB JUMP DRIVE.

REQUIRED MAINTENANCE:
THE FOLLOWING MAINTENANCE RELATED ITEMS ARE REQUIRED BY CODE:
1. ANNUAL INSPECTION, TESTING, AND MAINTENANCE IS REQUIRED FOR THE FIRE ALARM SYSTEM AND MUST BE SCHEDULED BY THE OWNER TO BE PERFORMED ON AN ANNUAL BASIS BY A LICENSED FIRE ALARM CONTRACTOR, IN ACCORDANCE WITH NFPA 72.
2. TESTING SHALL BE COORDINATED BY THE CONTRACTOR TO MINIMIZE INTERRUPTION TO BUILDING OPERATIONS.
3. RECORDS OF INSPECTION, TESTING, AND MAINTENANCE MUST BE MAINTAINED ON-SITE.

OTHER:
CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, CALCULATIONS, AND PRODUCT SUBMITTALS TO NEPTUNE FIRE PROTECTION ENGINEERING FOR REVIEW BEFORE ANY CONSTRUCTION ACTIVITIES BEGIN.

Output Signals

Input Signals

		Fire Alarm Panel Indication						Notification					Safety Control				
		A Actuate fire alarm visual signal on fire alarm control panel	B Actuate fire alarm audible signal at fire alarm control panel	C Actuate supervisory visual signal on fire alarm control panel	D Actuate supervisory audible signal at fire alarm control panel	E Actuate trouble visual signal on fire alarm control panel	F Actuate trouble audible signal at fire alarm control panel	G Activate fire alarm visual and audible notification appliances	H Activate exterior alarm bell by fire riser with waterflow	I Transmit fire alarm signal to monitoring station	J Transmit supervisory signal to monitoring station	K Transmit trouble signal to monitoring station	*Elevator Control Functions*	L Illuminate firemen's hat indicator light	M Recall elevator to primary floor	N Recall elevator to alternate floor	O Shunt trip power to mainline elevator service
	General Fire Detection Initiating Devices																
1	Waterflow switch	●	●					●	●	●							1
2	Valve tamper switch			●	●						●						2
	Elevator Control Initiating Devices (Elevator #1 - Electric Traction)																
3	Primary floor elevator lobby smoke detector (1st Floor)	●	●							●				●		●	3
4	Alternate floor elevator lobby smoke detector (Basement)	●	●							●				●	●		4
5	Smoke detector in elevator equipment room (Basement)	●	●							●				●			5
6	Heat detector in elevator equipment room (Basement)	●	●							●				●			6
7	Elevator equipment room waterflow switch (Basement)	●	●							●				●		●	7
	Elevator Control Initiating Devices (Elevator #2 - Hydraulic)																
8	Elevator equipment room waterflow switch (1st Floor)	●	●							●				●		●	8
9	Heat detector in hydraulic elevator pit	●	●							●				●	●	●	9
	Trouble Conditions																
10	Ground fault					●	●					●					10
11	Notification appliance short circuit					●	●					●					11
12	Open circuit					●	●					●					12
		A	B	C	D	E	F	G	H	I	J	K		L	M	N	O

Notes:
Elevator #1 (electric traction) recall functionality to be repaired (elevator controls by others). Provide elevator power shunt trip from elevator equipment room water flow switch.
Elevator #2 (hydraulic) recall functionality to remain. Provide elevator power shunt trip from elevator equipment room water flow switch and heat detector in elevator pit.

SEQUENCE OF OPERATIONS

NOT TO SCALE

MARCH 7, 2018
100% DRAWINGS
APPROVED FOR CONSTRUCTION

Order Plans @ www.DLine.com

GSA
GENERAL SERVICES ADMINISTRATION
PUBLIC BUILDING SERVICE
DESIGN & CONSTRUCTION DIVISION
77 FORSYTH STREET, SUITE G-4
ATLANTA, GA 30303

NEPTUNE
FIRE PROTECTION ENGINEERING, LLC
EDRD: John Ordile, PE CA License PE042593
80 Ocean Boulevard, Ste 6
Atlantic Beach, FL 32233
(904) 655-2200 PHONE

AKEA INC.
3603 NW 98th Street, STE B
Gainesville, FL 32606
Phone: (352) 474-6124
COA: FL #26693

KEY PLAN

CAD FILE INFORMATION

GEORGIA REGISTERED No. PE042593 PROFESSIONAL ENGINEER NATALE JOHN ORDILE

REVISION NUMBER	REVISION DESCRIPTION	REVISION DATE

GRAPHIC SCALE

CONTRACT	A/E	GS-04P-16-EX-C-7070
	CONSTRUCT.	EQ4PC1-16-5002
ARCHITECT / ENGINEER	PRIME A/E	AKEA, INC.
	ADDRESS	STREET 3603 NW 98TH STREET
		CITY GAINESVILLE STATE FL ZIP CODE 32606
	PRIME A/E PROJ. MGR.	JAMEY CLAYTON
	SUB A/E	NEPTUNE FIRE PROTECTION ENG. LLC
	ADDRESS	STREET 80 OCEAN BLVD., STE. 6
		CITY ATLANTIC BEACH STATE FL ZIP CODE 32233
	SUB A/E	
	ADDRESS	STREET
		CITY STATE ZIP CODE
BUILDING	NAME	J. ROY ROWLAND CT
	ADDRESS	STREET 300 NORTH FRANKLIN ST.
		CITY DUBLIN
		STATE GA ZIP CODE 31021
	BLDG NO.	GA00336ZZ
	ADD'L FACILITY	
PROJECT	TITLE	INSTALL FIRE SPRINKLER SYSTEM
	DESCRIPTION	DESIGN-BUILD (DB)
		FIRE SPRINKLER SYSTEM
	SUBMISSION	100% DRAWINGS SUB. DATE 3/07/2018
	PROJ. MGR.	MICHAEL POPE
	QUAL. MGR.	
	TECHN. ENG.	ARNOLD J. HEIDT, III
	PROJ. NO.	VGA00038 / EQ4PC1-16-5002
	DRAWN BY	CEG DATE DRAWN 3/06/2018
	CKD BY	NJO DATE CKD 3/06/2018
	FILE NAME	FP DRAWINGS.DWG
DRAWING	FLOOR NO.	N/A
	TITLE	FIRE ALARM DESIGN CRITERIA
	NUMBER	FA-1
		9 of 20
		DISCIPLINE SHEET TYPE SEQUENCE

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