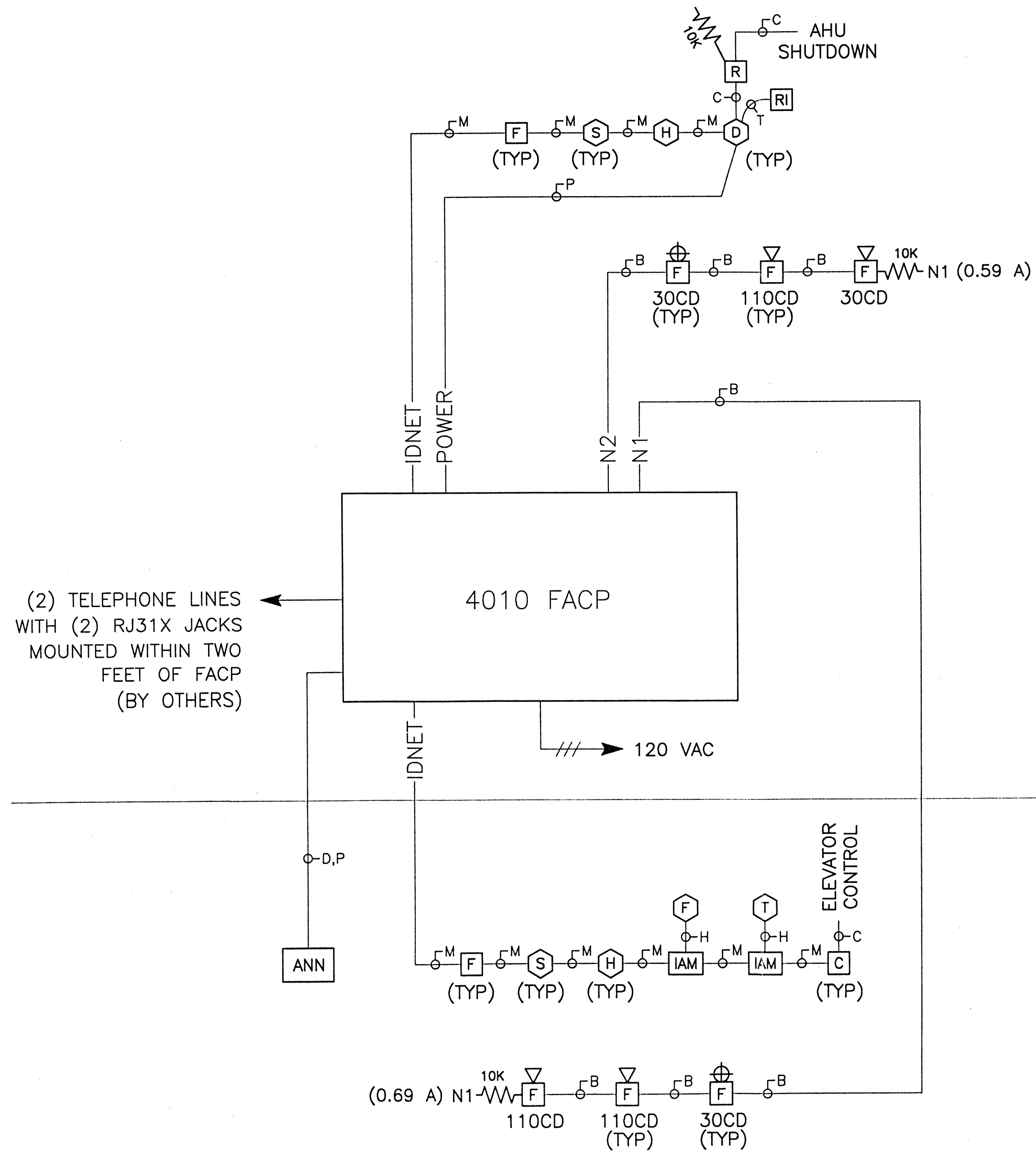


### GENERAL FIRE ALARM NOTES:

- ALL STROBES AND COMBINATION HORN/STROBES SHALL BE INSTALLED SUCH THAT THE BOTTOM OF THE DEVICE BOX IS 80" ABOVE THE FINISHED FLOOR (AFF). ALL MANUAL PULL STATIONS SHALL BE INSTALLED SUCH THAT THE CENTERLINE OF THE DEVICE IS 48" ABOVE THE FINISHED FLOOR (AFF).
- ALL CONTROL RELAYS OR ZAMS, EXCLUDING ONES CONTROLLING DOOR HOLDERS, MUST BE MOUNTED WITHIN 3'-0" OF THE CONTROLLED DEVICE.
- DO NOT RUN AC VOLTAGE WIRING WITH FIRE ALARM WIRING.
- ALL SMOKE DETECTORS SHALL BE PROTECTED FROM JOBSITE ELEMENTS UNTIL FINAL CHECK-OUT.
- CONTRACTOR SHALL PROVIDE A FIVE WORKING DAY NOTICE PRIOR TO SYSTEM CHECK-OUT.
- DO NOT INSTALL SMOKE DETECTORS WITHIN 3'-0" OF VENTILATION OUTLET OR INLETS.
- HEAT DETECTORS IN ELEVATOR HOISTWAY & ELEVATOR EQUIP. ROOM MUST BE INSTALLED WITHIN 12" OF SPRINKLER HEAD(S).
- SHUNT TRIP DELAY IAM MUST BE INSTALLED WITHIN 3'-0" OF SHUNT TRIP BREAKER.

### WIRE LEGEND

CODE	FUNCTION	DESCRIPTION
B	NOTIFICATION APPLIANCE CIRCUIT	2 - #14 AWG
C	CONTROL CIRCUIT	2 - #14 AWG
D	DATA CIRCUIT	1 - #18 TW/SHLD PAIR
H	HARDWIRED ZONE CIRCUIT	2 - #14 AWG
M	ADDRESSABLE IDNET CIRCUIT	1 - #18 TW/SHLD PAIR
P	24VDC POWER CIRCUIT	2 - #14 AWG
T	REMOTE TEST CIRCUIT	4 - #14 AWG



(2) TELEPHONE LINES WITH (2) RJ31X JACKS MOUNTED WITHIN TWO FEET OF FACP (BY OTHERS)

SECOND FLOOR  
FIRST FLOOR

### NOTIFICATION CKT. SCHEDULE

CKT.	TAG	DESCRIPTION
1	N1	FIRST FLOOR AUDIO/VISUAL CKT.
2	N2	SECOND FLOOR AUDIO/VISUAL CKT.
3	N3	SPARE
4	N4	SPARE

Module	Qty	Description	Standby Current	Total Standby	Alarm Current	Total Alarm
<b>Panel Equipment</b>						
4010-9101	1	FACP 250PT 4NAC 4A 120V BEIGE	0.195000	0.195000	0.295000	0.295000
4010-9810	1	DACT (COMMON EVENT REPORTING)	0.040000	0.040000	0.040000	0.040000
<b>Total Panel Stby</b>			<b>0.235000</b>		<b>Total Panel Alarm</b>	<b>0.335000</b>
<b>Peripheral Devices</b>						
4098-9101	1	REMOTE LCD ANNUNCIATOR	0.065000	0.065000	0.140000	0.140000
4098-9756	4	TRUEALARM DUCT SMOKE SENSOR W/ RELAY OUTPUT	0.002400	0.009600	0.015000	0.060000
4098-9843	4	ENCAPSULATED RELAY PAM-SD	0.000000	0.000000	0.015000	0.060000
<b>Multi-Candela Strobes (Select Candela Rating)</b>						
4906-9129	1	A/V M-C NON-ADDRESS, WHIT. WALL 30cd	0.000000	0.000000	0.101000	0.101000
4906-9129	5	A/V M-C NON-ADDRESS, WHIT. WALL 110cd	0.000000	0.000000	0.243000	1.215000
4906-9103	4	V/O M-C NON-ADDRESS, WHIT. WALL 30cd	0.000000	0.000000	0.025000	0.340000
<b>Total Periph Stby</b>			<b>0.0746</b>		<b>Total Periph Alarm</b>	<b>1.916</b>
<b>Total Standby Amps</b>			<b>0.310</b>		<b>Total Alarm Amps</b>	<b>2.251</b>

\* Additional Current Draw Included With Device Addresses Used (See additional current draws)  
\* 2-wire detector alarm current is included in the alarm current of the Initiating Device Circuit.

Battery Set #1 (Cabinet/Charger #1)	Qty	Standby Current	Alarm Current
Cabinet #1 Card Power	0.235	0.335	0.000
Current Draw For 100 Watt Or 50 Watt Amplifiers	0	0.000	0.000
Current Draw For Flex 35 and 50 Watt Amplifiers	0	0.000	0.000
Power For External Peripheral Devices	0.07460	1.91600	
<b>Additional Current Draws</b>		<b>0.310</b>	<b>2.251</b>
<b>Additional Battery Capacity Required</b>		<b>0.313</b>	<b>2.255</b>
Standby Time = 24 Hrs	9.009	Standby Ah	0.451
Alarm Time = 5 Mins	0.226	Alarm Ah	
Standby + Alarm =	9.234		
<b>Battery Required 2081-9288 12.7AH</b>		<b>10.854</b>	<b>Total Ah Required (see note below)</b>

Note: The total Ah required takes into account any physical and chemical properties of battery discharge rates, high alarm current draw of a battery after a long (standby) low current draw, and reflects the manufacturers discharge rates per their recommendations and UL standards.  
\*BATTERIES PROVIDED FOR THIS PROJECT ARE 25 AH

### FIRE ALARM DEVICE LEGEND

SYMBOL	DESCRIPTION
[FACP]	FIRE ALARM CONTROL PANEL, BEIGE #4010-9101
[ANN]	FIRE ALARM LCD ANNUNCIATOR #4606-9101
[F]	ADDRESSABLE SINGLE ACTION PULL STATION #4099-9001
[S]	SSD SENSOR BASE #4098-9792; WITH PHOTO. SMOKE SENSOR #4098-9714
[H]	SSD SENSOR BASE #4098-9792; WITH SSD HEAT SENSOR #4098-9733
[D]	4-WIRE DUCT SMOKE DETECTOR HOUSING #4098-9756; AND 49" SAMPLING TUBE #2098-9797
[RI]	REMOTE ALARM TEST STATION WITH RED LED & KEY SWITCH #2098-9806 (FOR USE WITH DUCT SMOKE DETECTORS)
[R]	ENCAPSULATED RELAY PAM-SD #4098-9843 (FOR USE WITH DUCT SMOKE DET. FOR AHU SHUTDOWN)
[C]	ADDRESSABLE CONTROL ZAM (IAM RELAY) #4090-9002
[IAM]	INDIVIDUAL ADDRESSABLE MODULE (IAM) #4090-9001
[F]	SPRINKLER SYSTEM WATERFLOW SWITCH (SUPPLIED BY OTHER)
[T]	SPRINKLER SYSTEM VALVE TAMPER SWITCH (SUPPLIED BY OTHER)
[F]	MULTI-CANDELA STROBE-ONLY, NON-ADDRESS, WHITE WALL MT. #4909-9103 (REFER TO FLOOR PLANS FOR CANDELA SETTINGS)
[F]	MULTI-CANDELA HORN/STROBE, NON-ADDRESS, WHITE WALL MT. #4909-9129 (REFER TO FLOOR PLANS FOR CANDELA SETTINGS)
XXX	END-OF-LINE RESISTOR (W/ VALUE OF RESISTANCE IN OHMS INDICATED)
[W]	FIRE ALARM WIRING WITH WIRING CODE INDICATED (SEE WIRE LEGEND)

CHIQATE CONSTRUCTION COMPANY  
SHOP DRAWING REVIEW  
BY: *[Signature]* DATE: 8/15/06

NO EXCEPTION TAKEN  MAKE CORRECTION NOTED  
 AMEND AND RESUBMIT  REJECTED; RESUBMIT

Corrections or comments made on shop drawings during review do not relieve Vendor or Subcontractor from compliance with requirements of drawings and specifications. This check is only for review of drawings with overall concept of project and general compliance with contract documents. Vendor or Subcontractor is responsible for confirming and correlating all quantities and dimensions, selecting materials, processes and techniques of construction; coordinating its work with that of all other trades, and performing its work in a safe and satisfactory manner, in accordance with the Subcontractor or Purchase Order and Contract Documents.

SIMPLEX DRAWINGS ARE PROVIDED FOR THE DEVELOPMENT OF "AS BUILT" BY THE INSTALLING CONTRACTOR. THEY ARE TO BE USED IN CONJUNCTION WITH THE SIMPLEX PROVIDED RISER DIAGRAM, DEVICE INTERCONNECTION DRAWINGS, AND CONSTRUCTION DOCUMENTATION (PLANS AND SPECS) TO AID IN THE COMPLETE INSTALLATION OF THE APPLICABLE SYSTEM.

tyco Fire & Security  
SimplexGrinnell

3888 LEEDS AVENUE  
CHARLESTON, SC 29405  
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SERVICE: 843-747-5266  
FAX: 843-747-5266

NO.	DATE	REVISION DESCRIPTION

FIRE ALARM SYSTEM  
RISER DIAGRAM, NOTES & CALCULATIONS  
BELLE HALL OFFICE BLDG 2  
1671 BELLEVUE AVE  
MT. PLEASANT, SC 29464

DRAWN BY:	DATE:
DESIGNED BY:	DATE:
CED	8-8-06
APPROVED BY:	DATE:
DWP	8-8-06
PROJECT NUMBER:	
SHEET TITLE:	
BHOFR01	
SHEET NUMBER:	
BHOFR01	