



State of Utah

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Department of Administrative Services

KIMBERLY K. HOOD
Executive Director

Division of Facilities Construction and Management

DAVID G. BUXTON
Director

ADDENDUM #1

Date: September 11, 2008

To: Contractors

From: Tim Parkinson, Project Manager, DFCM

Reference: Cosmetology Building Fire Alarm Upgrade
Ogden/Weber ATC – Ogden, Utah
DFCM Project No. 08050240

Subject: **Addendum No. 1**

Pages	Addendum	1 page
	<u>Architects Addendum</u>	<u>4 pages</u>
	Total	5 pages

Note: *This Addendum shall be included as part of the Contract Documents. Items in this Addendum apply to all drawings and specification sections whether referenced or not involving the portion of the work added, deleted, modified, or otherwise addressed in the Addendum. Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to Disqualification.*

While we contend that SB220 should only be potentially applicable to a contract issued after the effective date of said bill, this is to clarify that for purposes of this contract, regardless of the execution or effective dates of this contract, the status of Utah Law and remedies available to the State of Utah and DFCM, as it relates to any matter referred to or affected by said SB220, shall be the Utah law in effect at the time of the issuance of this Addendum.

- 1.1 **SCHEDULE CHANGES** – There are no changes to the project schedule.
- 1.2 **GENERAL** – PCI Consultants – Specifications and drawings, please see attached.

Utah!
Where ideas connect



Date: September 10, 2008

To: Tim Parkinson
State of Utah DFCM

From: Greg Jones
Protection Consultants, Inc.

Project: Ogden/Weber ATC Cosmetology Fire Alarm Upgrade – DFCM 080502240

Subject: Revisions to Fire Alarm Drawings for Addendum 1

Based on conditions observed in the pre-bid walkthrough held Thursday August 28, 2008 at the Cosmetology Building on the Campus of the Ogden Weber Applied Technology Center, several revisions were made to the drawings for the fire alarm system upgrade. A brief description of the revisions made to each drawing sheet is included below. Revisions are clouded on the drawings. The revised drawings and this letter should be issued to each bidding contractor with Addendum 1 to allow bidding contractors to rapidly identify the revisions to the contract documents.

Sheet FA-1:

1. Changed most of the detectors on the sheet from smoke detectors to heat detectors to match the type of existing conventional detectors present in the building.
2. Revised the floor plan at the restrooms and added one smoke detector to coordinate with the recent remodel of the restrooms.
3. Added key note 16 and relocated one heat detector in Media Center 126.
4. Edited key note 3 to indicate that the existing radio alarm transmitter will be retained and connected to the new FACP to relay fire alarm signals to the campus fire alarm panel. It was determined to be cheaper to reuse the existing method of transmission rather than to provide new phone lines and a new monitoring account for the building.
5. Revised the layout of the heat detectors in Shampoo (room 117) and the northwest corner of Lab 2 (room 109) to match the location of the existing detectors eliminating the need to cut in new j-boxes in those areas.
6. Added key note 15 to require installation of heat detectors in Vestibules 103 and 107. Existing smoke detectors in those locations have been subject to false alarm due to frequent cigarette smoking on the exterior of the building at those locations.

Sheet FA-2: No Revisions Made

Sheet FA-3:

7. Updated SLC and device counts to match revisions made to sheet FA-1.

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- SCOPE OF WORK: WORK SHALL INCLUDE REMOVAL OF EXISTING FIRE ALARM SYSTEM INCLUDING ALL CONTROL EQUIPMENT, POWER SUPPLIES, CABINETS, INITIATING CIRCUITS AND DEVICES, NOTIFICATION APPLIANCE CIRCUITS AND DEVICES. INSTALL NEW FIRE ALARM SYSTEM INCLUDING CONTROL PANEL WITH SIGNALING LINE CIRCUITS, INITIATING DEVICES CIRCUITS AND NOTIFICATION APPLIANCE CIRCUITS. NEW FIRE ALARM SYSTEM SHALL BE IN ACCORDANCE WITH NFPA 72, THESE DRAWINGS AND SPECIFICATIONS.
- APPLICABLE CODES/STANDARDS: INTERNATIONAL BUILDING CODE - 2006 EDITION INTERNATIONAL FIRE CODE - 2006 EDITION UTAH STATE FIRE MARSHAL RULE R710-4 NFPA 70 - 2005 EDITION NFPA 72 - 2007 EDITION NFPA 90A - 2002 EDITION
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- SUBMITTALS: FIRE ALARM SYSTEM CONTRACTOR SHALL PREPARE AND SUBMIT SHOP DRAWINGS TO STATE FIRE MARSHAL, OWNER AND ENGINEER FOR REVIEW/APPROVAL PRIOR TO ORDERING OR INSTALLING ANY EQUIPMENT. SUBMITTALS SHALL CONFORM TO THE CONSTRUCTION DOCUMENTS REQUIREMENTS OF IFC 907.1.1.

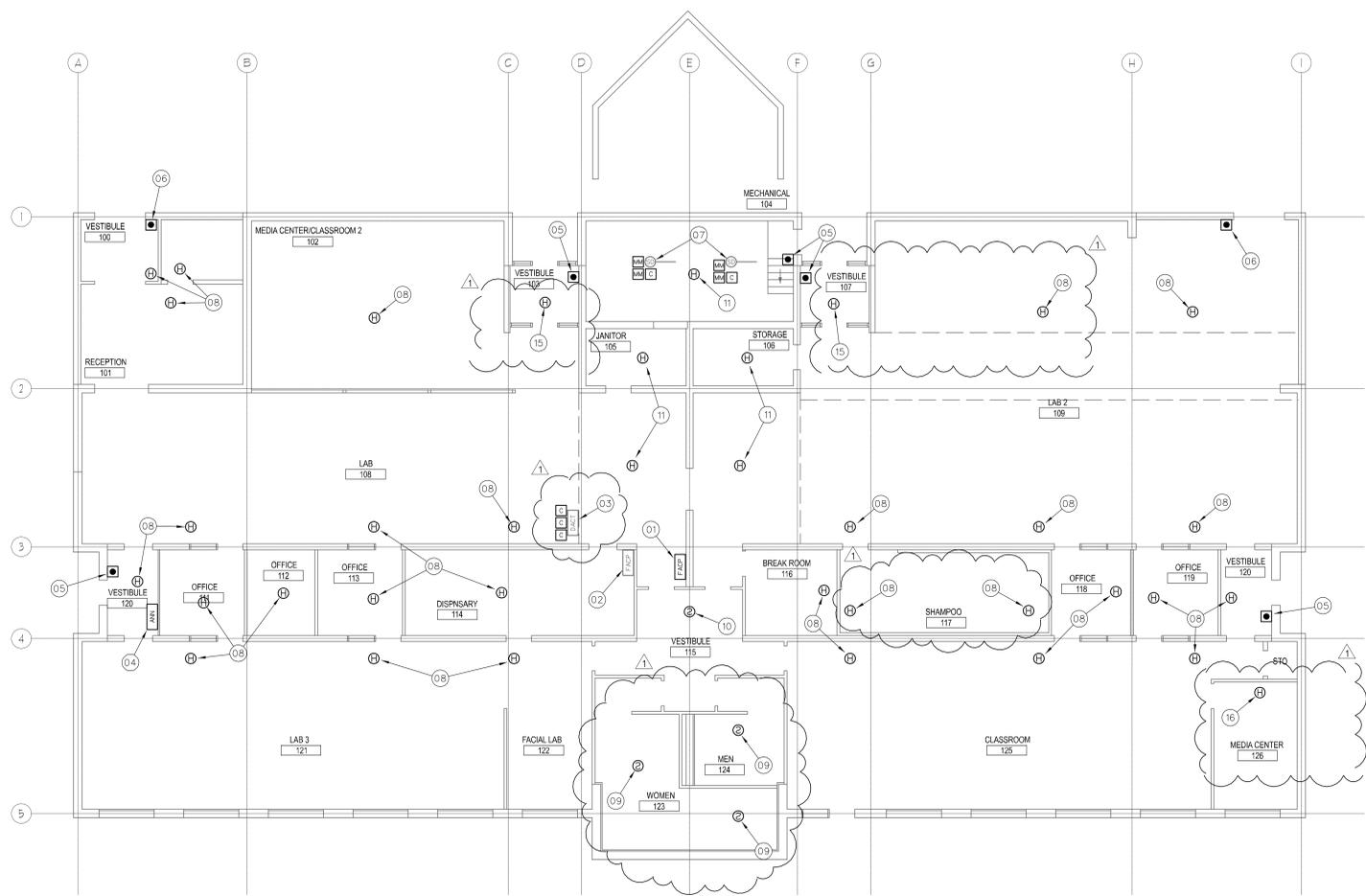
- DEMOLITION: IT IS THE INSTALLER'S RESPONSIBILITY FOR THE DEMOLITION OF THE EXISTING FIRE ALARM SYSTEM. ALL NEW DEVICES AND CIRCUITS WILL REPLACE THE OLD AND GENERALLY REUSE THE EXISTING LOCATIONS. ANY EXISTING DEVICES AND CONDUIT NOT BEING REPLACED AND REUSED THAT ARE VISIBLE, SUCH AS CABINETS, NOTIFICATION APPLIANCES OR SMOKE DETECTORS SHALL BE REMOVED AND REMAINING WALL OR CEILING SURFACE REPAIRED OR REPLACED TO MATCH SURROUNDING AREAS. REMOVE ALL UNUSED WIRE IN ALL REMAINING J-BOXES AND/OR CONDUITS. ANY CEILING OR WALLS TILE DAMAGED BY THE INSTALLER MUST BE REPAIRED TO MATCH SURROUNDINGS.
- SYSTEM TYPE: FIRE ALARM SYSTEM SHALL MEET THE REQUIREMENTS FOR PROTECTED PREMISE FIRE ALARM SYSTEMS. SYSTEM SHALL PROVIDE OFF-PREMISE NOTIFICATION OF STATUS TO CENTRAL STATION DETERMINED BY OWNER.
- OCCUPANT NOTIFICATION: RECEIPT OF ANY FIRE ALARM SIGNAL AT THE FACP SHALL RESULT IN THE ACTIVATION OF ALL NOTIFICATION APPLIANCES IN THE BUILDING (STROBES AND HORN/STROBES), FOR PURPOSES OF FIRE ALARM NOTIFICATION, THE BUILDING SHALL BE CONSIDERED AS A SINGLE ZONE.
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- WIRING STYLES (PER NFPA 72): INITIATING DEVICE CIRCUITS SHALL MEET THE REQUIREMENTS FOR CLASS A STYLE D CIRCUITS. SIGNALING LINE CIRCUITS SHALL MEET THE REQUIREMENTS FOR CLASS A STYLE 6 OR 7 CIRCUITS. NOTIFICATION APPLIANCE CIRCUITS SHALL MEET THE REQUIREMENTS FOR CLASS A STYLE Z.
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- INITIATING DEVICES: SLC CIRCUITS: SLC LOOP ADDRESSING SHALL NOT EXCEED 100 POINTS (DETECTORS, PULL STATIONS, MODULES, RELAYS, ETC.) PER LOOP. AT LEAST 20 ADDRESSES (20%) SHOULD BE LEFT VACANT ON EACH SLC LOOP IN ORDER TO ALLOW SPACE FOR ADJUSTMENTS/EXPANSION. SMOKE DETECTORS: PROVIDE SMOKE DETECTORS WHERE SHOWN ON PLANS. MAXIMUM SPACING OF DETECTORS SHALL BE 30' BETWEEN DETECTORS OR 15' FROM FURTHEST WALL. MANUAL PULL STATIONS: INSTALL NEW PULL STATIONS AT SAME LOCATION AS EXISTING PULL STATIONS USING EXISTING JUNCTION BOXES. ADJUST HEIGHT OF EXISTING J-BOX AS REQUIRED SO THAT NEW PULL STATIONS ARE MOUNTED BETWEEN 44" AND 52" AFF. HEAT DETECTORS: PROVIDE HEAT DETECTORS WHERE SHOWN ON PLANS. ADDRESSABLE MODULES: PROVIDE ADDRESSABLE MODULES TO MONITOR EXISTING CONVENTIONAL DEVICES (DUCT SMOKE DETECTORS) TO REMAIN. LOCATE MONITOR MODULE ADJACENT TO DEVICE MONITORED IN AN ACCESSIBLE LOCATION. LABEL AS PART OF THE FIRE ALARM

- SYSTEM WITH THE NAME OF THE DEVICE MONITORED ON THE COVER OF THE J-BOX/MODULE SHALL MOUNT ON 4-SQUARE BOX AND HAVE EXTERNALLY VISIBLE LED TO INDICATE STATUS OF MONITORED POINT.
- NOTIFICATION APPLIANCES: PROVIDE AUDIBLE AND VISUAL NOTIFICATION APPLIANCES THROUGHOUT BUILDING. DEVICES SHALL BE INSTALLED ON NEW SURFACE MOUNT J-BOXES. VOLUME OF HORNS SHALL BE SUFFICIENT TO PROVIDE A SOUND LEVEL OF 35 DB ABOVE AMBIENT IN ALL OCCUPIED AREAS. VISIBLE ALARMS SHALL BE PROVIDED THROUGHOUT ALL OCCUPIED AREAS OF THE BUILDING INCLUDING PRIVATE OFFICES AND AREAS WITH POSSIBLE OCCUPANCY BY HEARING IMPAIRED PERSONS. STROBES SHALL FLASH IN SYNCHRONIZATION. CONFIGURE NAC CIRCUITS TO ALLOW HORNS TO BE SILENCED INDEPENDENTLY FROM STROBE FLASHES.
- FIRE SAFETY FUNCTIONS: CONTROL MODULES WITH RELAY CONTACTS SHALL BE INSTALLED AND PROGRAMMED TO PROVIDE FAN SHUTDOWN & ACTIVATION OF NOTIFICATION CIRCUIT POWER SUPPLIES (UNLESS PROVIDED BY SEPARATE CIRCUIT FROM FACP). THE CONTROL RELAY MODULES SHALL BE INSTALLED WITHIN 36" OF DEVICE OR CIRCUIT CONTROLLED.
- PHASING: PLAN SEQUENCE OF WORK TO MINIMIZE DOWN TIME OF FIRE ALARM SYSTEM. IT IS THE INSTALLER'S RESPONSIBILITY TO NOTIFY PROPER AUTHORITIES AND PROVIDE A FIRE WATCH DURING INTERRUPTIONS OF FIRE DETECTION AND ALARM SERVICE IN THE BUILDING.
- TESTING: SCHEDULE AND PERFORM ALL ACCEPTANCE TESTS REQUIRED BY NFPA 72. TESTING SHALL BE WITNESSED BY STATE FIRE MARSHAL'S OFFICE, PROJECT ENGINEER, DFCM AND BUILDING MAINTENANCE PERSONNEL. SUBMIT A WRITTEN TESTING PLAN. DETAILING EACH TEST TO BE PERFORMED TO EACH AGENCY AT LEAST ONE WEEK PRIOR TO SCHEDULED TEST.

FIRE ALARM SYSTEM KEY NOTES

- FURNISH AND INSTALL NEW ADDRESSABLE FIRE ALARM CONTROL PANEL (FACP). SURFACE MOUNT FACP ON WALL NEAR ELECTRICAL DISTRIBUTION PANEL. INSTALL FACP WITH KEYPAD AT 60" ABOVE FLOOR LEVEL. FACP SHALL BE SILENT KNIGHT 5820 XL OR FIRE-LITE MS-9600.
- REMOVE EXISTING ADEMCO FACP. REMOVE EXISTING CONDUIT AND WIRING TO FACP. PATCH AND REPAIR WALL TO MATCH SURROUNDINGS.
- EXISTING AES-INTELLINET 7750-F FIRE TRANSEIVER PROVIDES OFF-PREMISE MONITORING FOR EXISTING FIRE ALARM SYSTEM TO REMAIN. PROVIDE 3 CONTROL RELAYS (ALARM SUPERVISORY AND TROUBLE) TO ALLOW RELAY OF SIGNALS FROM FACP TO TRANSMITTER.
- FURNISH AND INSTALL NEW FIRE ALARM ANNUNCIATOR SURFACE MOUNT ANNUNCIATOR ON WALL NEAR EXISTING SECURITY ALARM KEYPAD. INSTALL WITH KEYPAD AT 60" ABOVE FLOOR LEVEL.
- REPLACE EXISTING PULL STATIONS WITH NEW ADDRESSABLE PULL STATIONS LISTED COMPATIBLE WITH FIRE ALARM CONTROL PANEL. WALL MOUNT AT 48" AFF. EXISTING J-BOX MAY BE RE-USED IF IT COMPLIES WITH HEIGHT REQUIREMENT.
- FURNISH AND INSTALL NEW ADDRESSABLE PULL STATION LISTED COMPATIBLE WITH FIRE ALARM CONTROL PANEL. WALL MOUNT AT 48" AFF ON NEW SURFACE MOUNT J-BOX.
- EXISTING DUCT SMOKE DETECTORS TO REMAIN. FURNISH AND INSTALL MONITOR MODULES TO SHUTDOWN FANS UPON FIRE ALARM SIGNAL. TEST FOR PROPER OPERATION AND REPAIR OR REPLACE AS NECESSARY.
- REPLACE EXISTING HEAT DETECTOR WITH NEW HEAT DETECTOR LISTED COMPATIBLE WITH FIRE ALARM CONTROL PANEL. CEILING MOUNT ON EXISTING J-BOX.
- FURNISH AND INSTALL NEW SMOKE DETECTOR LISTED COMPATIBLE WITH FIRE ALARM CONTROL PANEL. CEILING MOUNT J-BOX.
- REPLACE EXISTING SMOKE DETECTOR WITH NEW SMOKE DETECTOR LISTED COMPATIBLE WITH FIRE ALARM CONTROL PANEL. CEILING MOUNT ON NEW SURFACE MOUNT J-BOX.
- FURNISH AND INSTALL NEW HEAT DETECTOR LISTED COMPATIBLE WITH FIRE ALARM CONTROL PANEL. CEILING MOUNT ON NEW SURFACE MOUNT J-BOX.
- FURNISH AND INSTALL NEW EXTERIOR HORN/STROBE. MOUNT ON NEW WEATHER-PROOF J-BOX. CONNECT TO NEW NOTIFICATION APPLIANCE CIRCUIT.
- FURNISH AND INSTALL NEW INTERIOR HORN/STROBE. WALL OR CEILING MOUNT ON NEW SURFACE MOUNT J-BOX. CONNECT TO NEW NOTIFICATION APPLIANCE CIRCUIT. SYNCHRONIZE ALL NOTIFICATION APPLIANCES.
- REMOVE EXISTING HORN. PROVIDE COVER PLATE ON REMAINING J-BOX.
- REPLACE EXISTING SMOKE DETECTOR WITH NEW HEAT DETECTOR LISTED COMPATIBLE WITH FIRE ALARM CONTROL PANEL. CEILING MOUNT ON NEW SURFACE MOUNT J-BOX.
- EXISTING HEAT DETECTOR IS LOCATED TOO CLOSE TO WALL. REMOVE EXISTING DETECTOR AND FURNISH AND INSTALL NEW HEAT DETECTOR MINIMUM 4" FROM WALL.



FIRE ALARM PLAN (INITIATING DEVICES)

1/8" = 1'-0"
0 8' 16' 32'



FIRE ALARM EQUIPMENT LEGEND

DEVICE	DESCRIPTION	MOUNTING	REMARKS
FACP	ADDRESSABLE FIRE ALARM CONTROL PANEL	SURFACE MOUNT ON WALL WITH KEYPAD AT 60" AFF	SILENT KNIGHT MODEL 5820XL OR FIRE-LITE MS-9600
FACP	EXISTING FIRE ALARM CONTROL PANEL	EXISTING	TO BE REMOVED
DACT	EXISTING RADIO ALARM TRANSMITTER	EXISTING	CONNECT TO NEW FIRE ALARM CONTROL PANEL.
ANN	NEW FIRE ALARM ANNUNCIATOR	SURFACE MOUNT ON WALL WITH KEYPAD AT 54" AFF	TO DISPLAY STATUS OF FIRE ALARM SYSTEM. ANNUNCIATOR SHALL HAVE ALPHA-NUMERIC READOUT AND KEYPAD TO ALLOW SYSTEM SILENCE AND RESET.
⊙	EXISTING SMOKE DETECTOR	EXISTING	REMOVE EXISTING SMOKE DETECTORS AND REPLACE WITH NEW ADDRESSABLE DETECTORS COMPATIBLE WITH NEW FACP.
⊙	ADDRESSABLE HEAT DETECTOR (FIXED TEMP.)	CEILING MOUNTED ON SURFACE MOUNT J-BOX.	REPLACE EXISTING OR INSTALL NEW HEAT DETECTOR IN AS INDICATED ON PLAN.
⊙	DUCT SMOKE DETECTOR	EXISTING	EXISTING TO REMAIN. CONNECT TO NEW FACP TO PROVIDE MONITORING OF DETECTOR TROUBLE AND ALARM SIGNALS.
■	ADDRESSABLE MANUAL PULL STATION	WALL MOUNT WITH OPERATING ELEMENT AT 48" AFF ON SURFACE MOUNT J-BOX.	REPLACE EXISTING PULL STATIONS WITH NEW FACP.
□	ADDRESSABLE CONTROL RELAY	MOUNT ON J-BOX WITHIN 3' OF DEVICE OR CIRCUIT CONTROLLED.	TO PROVIDE FAN SHUTDOWN.
■	ADDRESSABLE MONITOR RELAY	MOUNT ON J-BOX WITHIN 3' OF DEVICE OR CIRCUIT CONTROLLED.	TO MONITOR DUCT SMOKE DETECTORS.
⊙	FIRE ALARM HORN/STROBE	CEILING MOUNTED ON SURFACE MOUNT J-BOX	CANDLEA RATING OF STROBE SHALL BE AS INDICATED ON DRAWINGS. STROBES SHALL BE SYNCHRONIZED WITH ALL OTHER STROBES IN VIEW. COLOR SHALL BE RED.
⊙	FIRE ALARM STROBE	CEILING MOUNTED ON SURFACE MOUNT J-BOX	CANDLEA RATING OF STROBE SHALL BE AS INDICATED ON DRAWINGS. STROBES SHALL BE SYNCHRONIZED WITH ALL OTHER STROBES IN VIEW. COLOR SHALL BE RED.
⊙	EXTERIOR FIRE ALARM HORN/STROBE	WALL MOUNTED ON NEW WEATHERPROOF J-BOX AT 15' ABOVE EXTERIOR GRADE	CANDLEA RATING OF STROBE SHALL BE AS INDICATED ON DRAWINGS. STROBES SHALL BE SYNCHRONIZED WITH ALL OTHER STROBES IN VIEW. COLOR SHALL BE RED.
⊙	FIRE ALARM HORN/STROBE	WALL MOUNTED ON SURFACE MOUNT J-BOX BETWEEN 80" AND 96" AFF	CANDLEA RATING OF STROBE SHALL BE AS INDICATED ON DRAWINGS. STROBES SHALL BE SYNCHRONIZED WITH ALL OTHER STROBES IN VIEW. COLOR SHALL BE RED.
⊙	FIRE ALARM HORN	EXISTING	REMOVE EXISTING HORN AND INSTALL COVER PLATE ON REMAINING J-BOX.

REVISIONS:
ADDENDUM #1
09/10/08

**OGDEN WEBER APPLIED TECH. CENTER
COSMETOLOGY BUILDING
OGDEN, UTAH**

**FIRE ALARM SYSTEM INSTALLATION
DFCM PROJECT #08050240**

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Fire Protection Engineers
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104302
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08/11/08
DRAWING DATE

09/10/08
REVISION DATE

**FIRE ALARM PLAN
(INITIATING DEVICES)
FA-1**

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- FURNISH AND INSTALL NEW INTERIOR HORN/STROBE. WALL OR CEILING MOUNT ON NEW SURFACE MOUNT J-BOX. CONNECT TO NEW NOTIFICATION APPLIANCE CIRCUIT. SYNCHRONIZE ALL NOTIFICATION APPLIANCES.
- REMOVE EXISTING HORN. PROVIDE COVER PLATE ON REMAINING J-BOX.
- REPLACE EXISTING SMOKE DETECTOR WITH NEW HEAT DETECTOR LISTED COMPATIBLE WITH FIRE ALARM CONTROL PANEL. CEILING MOUNT ON NEW SURFACE MOUNT J-BOX.
- EXISTING HEAT DETECTOR IS LOCATED TOO CLOSE TO WALL. REMOVE EXISTING DETECTOR AND FURNISH AND INSTALL NEW HEAT DETECTOR MINIMUM 4" FROM WALL.

1 WIRE SCHEDULE

CIRCUIT	NUMBER OF CONDUCTORS	CIRCUIT CLASS	CIRCUIT STYLE	WIRE GAUGE (MIN)	GRAPHIC DESIGNATION
NOTIFICATION APPLIANCE CIRCUIT (NAC)	2	A	Z	16 AWG	
SIGNALING LINE CIRCUIT (SLC)	2	A	6 OR 7	18 AWG	

2 VOLTAGE DROP CALCULATIONS NAC #1

Physical Parameters									
Source Voltage	16 AWG				20.4 V				
Wire Gauge					2590 cmil				
Wire Resistivity					13.0 Ohm-cmil/ft				
Ref Start No.	Device/Device Distance (feet)	Cumulative Distance (feet)	Light Intensity (Cd/dBA)	Device Current (Amps)	Circuit Current (Amps)	Device Voltage (Vdc)	% Voltage Drop	Ref End No.	
FCPS	20	20	15	0.079	1.283	20.141	1.268	1	
1	20	40	15	0.066	1.204	19.899	1.205	2	
2	20	60	15	0.066	1.138	19.669	1.153	3	
3	20	80	15	0.066	1.072	19.453	1.068	4	
4	30	110	15	0.066	1.006	19.149	1.563	5	
5	45	155	115	0.218	0.84	18.723	2.226	6	
6	30	185	15	0.066	0.722	18.505	1.166	7	
7	20	205	15	0.066	0.656	18.372	0.715	8	
8	30	235	115	0.218	0.59	18.194	0.971	9	
9	50	285	15	0.079	0.372	18.007	1.030	10	
10	40	325	15	0.079	0.293	17.886	0.656	11	
11	35	360	30	0.107	0.214	17.813	0.422	12	
12	50	410	30	0.107	0.107	17.759	0.303	13	
Total Circuit Length 410									
Total Circuit Current 1.283									
Total Circuit Voltage Drop % 13.76									

3 VOLTAGE DROP CALCULATIONS NAC #2

Physical Parameters									
Source Voltage	16 AWG				20.4 V				
Wire Gauge					2590 cmil				
Wire Resistivity					13.0 Ohm-cmil/ft				
Ref Start No.	Device/Device Distance (feet)	Cumulative Distance (feet)	Light Intensity (Cd/dBA)	Device Current (Amps)	Circuit Current (Amps)	Device Voltage (Vdc)	% Voltage Drop	Ref End No.	
FCPS	25	25	15	0.066	1.198	20.098	1.480	1	
1	30	55	15	0.066	1.132	19.756	1.703	2	
2	25	80	115	0.218	1.066	19.487	1.359	3	
3	45	125	15	0.066	0.848	19.103	1.973	4	
4	30	155	15	0.066	0.782	18.966	1.238	5	
5	20	175	15	0.066	0.716	18.722	0.765	6	
6	30	205	115	0.218	0.65	18.526	1.050	7	
7	40	245	115	0.218	0.432	18.351	0.940	8	
8	45	290	30	0.107	0.214	18.254	0.529	9	
9	55	345	30	0.107	0.107	18.195	0.325	10	
Total Circuit Length 345									
Total Circuit Current 1.198									
Total Circuit Voltage Drop % 11.36									

OUTPUT ACTIONS

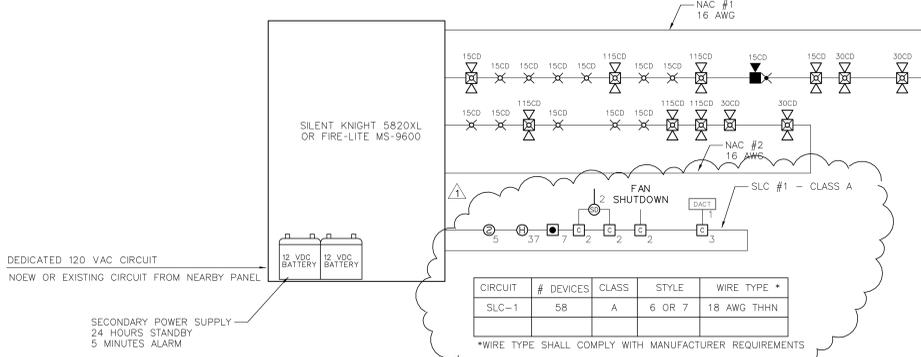
	ACTIVATE LOCAL FIRE ALARM NOTIFICATION APPLIANCES (ALL CIRCUITS)	TRANSMIT FIRE ALARM SIGNAL TO CENTRAL STATION (VIA RADIO TRANSMITTER)	TRANSMIT SUPERVISORY SIGNAL TO CENTRAL STATION (VIA RADIO TRANSMITTER)	TRANSMIT TROUBLE SIGNAL TO CENTRAL STATION (VIA RADIO TRANSMITTER)	SHUT DOWN AIR HANDLER
ACTIVATION OF ANY SMOKE DETECTOR	X	X	X	X	
ACTIVATION OF ANY HEAT DETECTOR	X	X	X	X	
ACTIVATION OF DUCT SMOKE DETECTOR			X	X	
ACTIVATION OF ANY MANUAL PULL STATION	X	X	X	X	
LOSS OF AC POWER/LOW BATTERY VOLTAGE			X	X	
SYSTEM TROUBLE			X	X	

SYSTEM INPUTS

ACTIVATION OF ANY SMOKE DETECTOR	X	X	X	
ACTIVATION OF ANY HEAT DETECTOR	X	X	X	
ACTIVATION OF DUCT SMOKE DETECTOR			X	X
ACTIVATION OF ANY MANUAL PULL STATION	X	X	X	X
LOSS OF AC POWER/LOW BATTERY VOLTAGE			X	X
SYSTEM TROUBLE			X	X

4 SEQUENCE OF OPERATION

5 FIRE ALARM RISER SCHEMATIC



FIRE ALARM EQUIPMENT LEGEND

DEVICE	DESCRIPTION	MOUNTING	REMARKS
FACP	ADDRESSABLE FIRE ALARM CONTROL PANEL	SURFACE MOUNT ON WALL WITH KEYPAD AT 60" AFF	SILENT KNIGHT MODEL 5820XL OR FIRE-LITE MS-9600
FACP	EXISTING FIRE ALARM CONTROL PANEL	EXISTING	TO BE REMOVED
DACT	EXISTING RADIO ALARM TRANSMITTER	EXISTING	CONNECT TO NEW FIRE ALARM CONTROL PANEL
ANN	NEW FIRE ALARM ANNUNCIATOR	SURFACE MOUNT ON WALL WITH KEYPAD AT 54" AFF	TO DISPLAY STATUS OF FIRE ALARM SYSTEM. ANNUNCIATOR SHALL HAVE ALPHA-NUMERIC READOUT AND KEYPAD TO ALLOW SYSTEM SILENCE AND RESET
⊙	EXISTING SMOKE DETECTOR	EXISTING	REMOVE EXISTING SMOKE DETECTORS AND REPLACE WITH NEW ADDRESSABLE DETECTORS COMPATIBLE WITH NEW FACP.
⊙	ADDRESSABLE HEAT DETECTOR (FIXED TEMP.)	CEILING MOUNTED ON SURFACE MOUNT J-BOX	REPLACE EXISTING OR INSTALL NEW HEAT DETECTOR AS INDICATED ON PLAN
⊙	DUCT SMOKE DETECTOR	EXISTING	EXISTING TO REMAIN. CONNECT TO NEW FACP TO PROVIDE MONITORING OF DETECTOR TROUBLE AND ALARM SIGNALS.
■	ADDRESSABLE MANUAL PULL STATION	WALL MOUNT WITH OPERATING ELEMENT AT 48" AFF ON SURFACE MOUNT J-BOX	REPLACE EXISTING PULL STATIONS WITH NEW PULL STATIONS COMPATIBLE WITH NEW FACP
■	ADDRESSABLE CONTROL RELAY	MOUNT ON J-BOX WITHIN 3' OF DEVICE OR CIRCUIT CONTROLLED.	TO PROVIDE FAN SHUTDOWN.
■	ADDRESSABLE MONITOR RELAY	MOUNT ON J-BOX WITHIN 3' OF DEVICE OR CIRCUIT CONTROLLED.	TO MONITOR DUCT SMOKE DETECTORS
⊗	FIRE ALARM HORN/STROBE	CEILING MOUNTED ON SURFACE MOUNT J-BOX	CANDLE RATING OF STROBE SHALL BE AS INDICATED ON DRAWINGS. STROBES SHALL BE SYNCHRONIZED WITH ALL OTHER STROBES IN VIEW. COLOR SHALL BE RED.
⊗	FIRE ALARM STROBE	CEILING MOUNTED ON SURFACE MOUNT J-BOX	CANDLE RATING OF STROBE SHALL BE AS INDICATED ON DRAWINGS. STROBES SHALL BE SYNCHRONIZED WITH ALL OTHER STROBES IN VIEW. COLOR SHALL BE RED.
⊗	EXTERIOR FIRE ALARM HORN/STROBE	WALL MOUNTED ON NEW WEATHERPROOF J-BOX AT 15' ABOVE EXTERIOR GRADE	CANDLE RATING OF STROBE SHALL BE AS INDICATED ON DRAWINGS. STROBES SHALL BE SYNCHRONIZED WITH ALL OTHER STROBES IN VIEW. COLOR SHALL BE RED.
⊗	FIRE ALARM HORN/STROBE	WALL MOUNTED ON SURFACE MOUNT J-BOX BETWEEN 80" AND 96" AFF	CANDLE RATING OF STROBE SHALL BE AS INDICATED ON DRAWINGS. STROBES SHALL BE SYNCHRONIZED WITH ALL OTHER STROBES IN VIEW. COLOR SHALL BE RED.
⊗	FIRE ALARM HORN	EXISTING	REMOVE EXISTING HORN AND INSTALL COVER PLATE ON REMAINING J-BOX

OGDEN WEBER APPLIED TECH. CENTER
COSMETOLOGY BUILDING
 OGDEN, UTAH
FIRE ALARM SYSTEM INSTALLATION
 DFCM PROJECT #08050240

JOB NO. 104302
 DWG ISSUE: ADD #1
 DRAWN BY: BBH
 CHECKED BY: GTJ

REVISIONS:
 ADDENDUM #1
 09/10/08

DRAWING DATE:
 08/11/08
 REVISION DATE:
 09/10/08

DETAILS
FA-3