



State of Utah

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GREGORY S. BELL  
Lieutenant Governor

Department of Administrative Services

KIMBERLY K. HOOD  
Executive Director

Division of Facilities Construction and Management

DAVID G. BUXTON  
Director

## ADDENDUM #1

Date: December 16, 2009

To: Contractors

From: Jeff Reddoor, Project Manager, DFCM

Reference: Fire Sprinkler Piping and Alarm Systems Upgrade  
Southern Utah University – Cedar City, Utah  
Project No. 09114730

Subject: **Addendum No. 1**

Pages	Addendum	1 page
	<u>Engineering Addendum</u>	<u>11 pages</u>
	Total	12 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** – Spectrum Engineering, Inc., Please see Attached

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Where ideas connect



**Job:** Southern Utah University – Fire Alarm and Fire Sprinkler  
Upgrades  
Addendum #1  
**Job Number:** DFCM Project #09114730  
**Date:** December 16, 2009

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## FIRE ALARM

### GENERAL

1. The Fire Alarm Network sheet FE003 has been modified.
2. Several sheets have been revised to show fire alarm devices as existing devices to be replaced in same location or new devices that will require new wiring, conduit, etc. for installation. The contractor is reminded that they are responsible for verifying all these device designations in the field prior to bid.
3. This project is a tax exempt project.

### REVISED DRAWINGS

#### SHEET - FE003

1. The existing fiber hub in the Sharwan Smith Center has been relocated to better represent its' physical location.
2. The existing fiber termination in the old Sharwan Smith Center has been located in room 173. The contractor shall provide new fiber in conduit from this location to the fire alarm panel.
3. The existing fiber termination in the Multipurpose Building has been located in room 103. The contractor shall provide new fiber in conduit from this location to the existing fire alarm panel.
4. The existing fiber termination in the Hunter Conference Center has been located in room 103. The contractor shall provide new fiber in conduit from this location to the fire alarm panel.
5. The new fiber from the Sharwan Center hub to the Facilities hub has been shown. This will be installed by the university.

#### SHEET - HC-FA1

1. Notification and initiation devices have been designated as replace in place or new requiring wiring, conduit, etc.

#### SHEET - HC-FA2

1. Notification and initiation devices have been designated as replace in place or new requiring wiring, conduit, etc.

#### SHEET - HC-FA3

1. Notification and initiation devices have been designated as replace in place or new requiring wiring, conduit, etc.

#### SHEET - MB-FA1



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1. Notification and initiation devices have been designated as replace in place or new requiring wiring, conduit, etc.

SHEET - MB-FA2

1. Notification and initiation devices have been designated as replace in place or new requiring wiring, conduit, etc.

SHEET - MB-FA3

1. Notification and initiation devices have been designated as replace in place or new requiring wiring, conduit, etc.

SHEET - SS-FA1

1. Notification and initiation devices have been designated as replace in place or new requiring wiring, conduit, etc.

SHEET - SS-FA2

1. Notification and initiation devices have been designated as replace in place or new requiring wiring, conduit, etc.

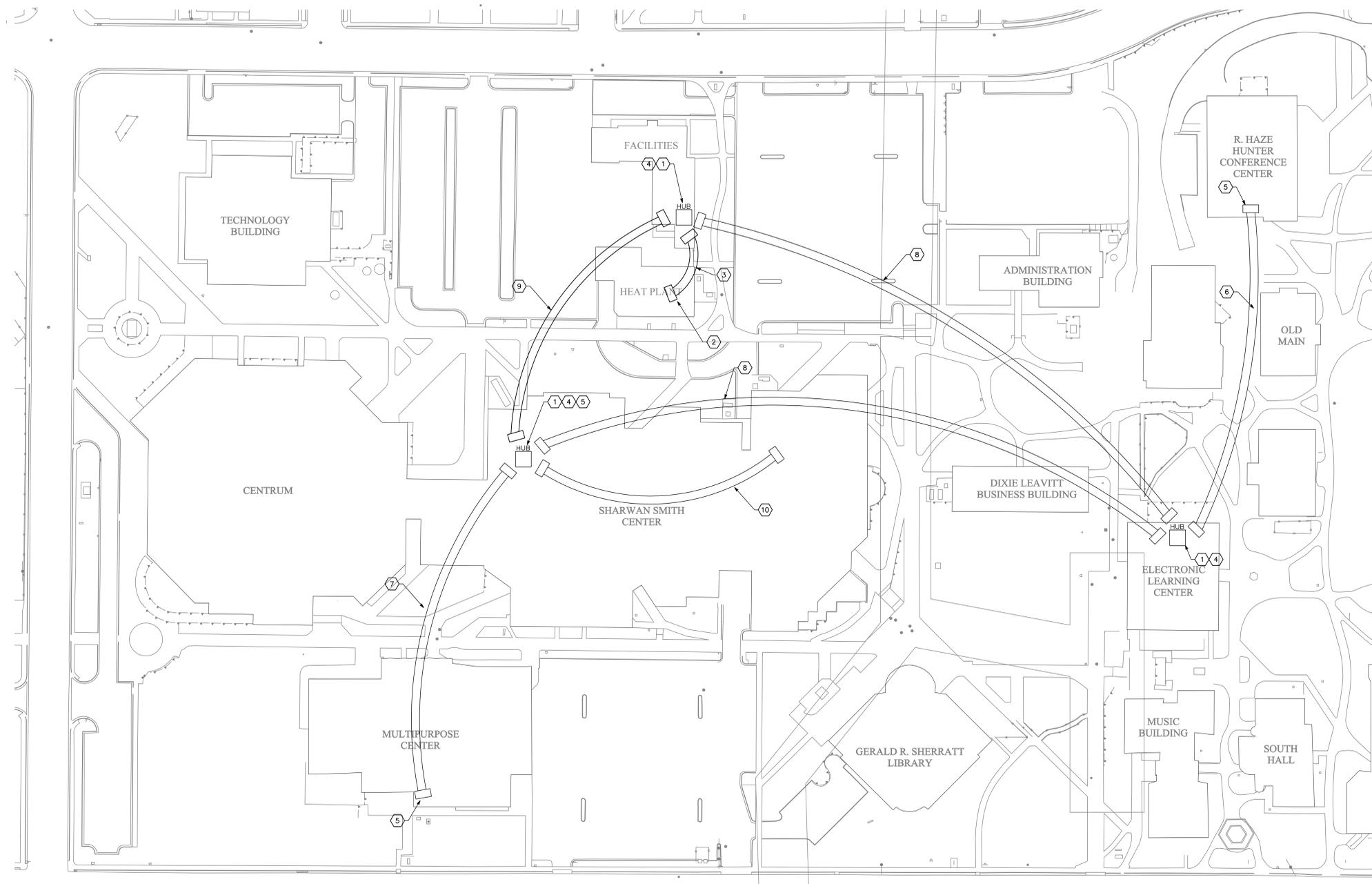
**BID ALTERNATE #1**

**GENERAL SHEET NOTES**

- BID ALTERNATE #1: PROVIDE A NEW FIRE ALARM NETWORK FOR CENTRAL MONITORING OF FIRE ALARM PANELS ON CAMPUS. PROVIDE NEW NETWORK HEAD-END WITH ALL EQUIPMENT AND SOFTWARE INCLUDING WORK STATION WITH DISPLAY UNIT IN HEAT PLANT LOCATION DICTATED BY OWNER.
- CAMPUS HAS AN EXISTING MULTI-MODE FIBER BACKBONE THAT SHALL BE USED AS MUCH AS POSSIBLE. FIBER HUBS ARE LOCATED IN FACILITIES BUILDING, ELECTRONIC LEARNING CENTER (ELC), AND SHARWAN SMITH CENTER. CONTRACTOR SHALL PROVIDE NECESSARY FIBER PAIRS FROM FACILITIES BUILDING HUB TO HEAT PLANT HEAD-END. FIBER PAIRS ARE EXISTING FROM HUNTER CONFERENCE CENTER TO ELC HUB AND FROM MULTIPURPOSE CENTER TO SHARWAN SMITH HUB. CONTRACTOR SHALL PROVIDE FIBER CONNECTIONS AT EACH HUB AS NECESSARY AND FIBER CONNECTIONS TO FIRE ALARM PANELS IN HUNTER CONFERENCE CENTER, SHARWAN SMITH CENTER AND MULTIPURPOSE CENTER.
- NEW FIBER SHALL BE INSTALLED IN CONDUIT (RIGID OR EMT) UNLESS APPROVED OTHERWISE BY OWNER AND ENGINEER. A THOROUGH INVESTIGATION BY CONTRACTOR SHALL BE MADE OF ALL EXISTING AND FIBER EQUIPMENT PRIOR TO BID.
- PROVIDE NETWORK CONNECTION HARDWARE FOR FIRE ALARM PANELS SPECIFIED IN THIS PROJECT (R. HAZE HUNTER CONFERENCE CENTER, SHARWAN SMITH CENTER, AND MULTIPURPOSE CENTER). COORDINATE INSTALLATION WITH FACILITY PERSONNEL TO MINIMIZE FIRE ALARM SYSTEM AND NETWORK HEAD-END DOWNTIME.
- EXISTING MULTI-MODE FIBER IS 62.5 MICRON TYPE. ALL CONNECTIONS AND NEW FIBER SHALL MATCH EXISTING OR NEW EQUIPMENT SHALL BE COMPATIBLE WITH EXISTING EQUIPMENT.

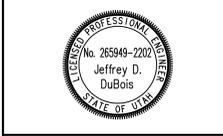
**SHEET KEYNOTES**

- EXISTING FIBER OPTIC BACKBONE HUB.
- NEW NETWORK INTERFACE EQUIPMENT IN HEAT PLANT. VERIFY EXACT LOCATION WITH FACILITIES.
- NEW FIBER OPTIC CABLING, TERMINATIONS, AND CONNECTIONS BETWEEN FACILITIES AND HEAT PLANT.
- PROVIDE PATCH CABLES, CONNECTIONS, AND TERMINATIONS BETWEEN FIBER AND HUB.
- PROVIDE FIBER OPTIC CABLE, CONNECTIONS, TERMINATIONS, CONDUIT AND ALL OTHER EQUIPMENT NECESSARY FROM BUILDING FIBER TERMINAL BOARD TO NEW FIRE ALARM PANEL.
- EXISTING FIBER FROM ELC TO HUNTER CONFERENCE CENTER ROOM 103-E MECHANICAL. CONTRACTOR SHALL RUN NEW, COMPATIBLE FIBER IN CONDUIT FROM THIS ROOM TO FIRE ALARM PANEL.
- EXISTING FIBER FROM SHARWAN SMITH CENTER HUB TO MULTIPURPOSE CENTER ROOM 103 UTILITY. CONTRACTOR SHALL RUN NEW, COMPATIBLE FIBER IN CONDUIT FROM THIS ROOM TO FIRE ALARM PANEL.
- EXISTING SINGLE-MODE FIBER BACKBONE.
- NEW MULTI-MODE FIBER TO BE RUN BY OWNER FROM SHARWAN SMITH CENTER HUB TO FACILITIES HUB PRIOR TO FIRE ALARM NETWORK COMPLETION.
- EXISTING FIBER FROM SHARWAN SMITH CENTER HUB TO OLD SHARWAN SMITH BUILDING ROOM 173 MECHANICAL. CONTRACTOR SHALL RUN NEW, COMPATIBLE FIBER IN CONDUIT FROM THIS ROOM TO FIRE ALARM PANEL.



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**SOUTHERN UTAH UNIVERSITY VARIOUS BLDGS**  
 STATE PROPERTY NO:  
**FIRE ALARM & FIRE SPRINKLER SYSTEM UPGRADES**

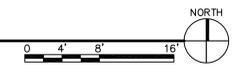
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1	2009-12-16	ADDENDUM #1

ISSUE: \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 DFCM PROJECT NO: 09114730  
 PROJECT NO: 20090345  
 DRAWN BY: TNB  
 CHECKED BY: JDD  
 DESIGNED BY: JDD  
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**SHEET TITLE**  
**FIRE ALARM NETWORK**

**FE003**  
 SHEET 3 OF 16

**(A1) SOUTHERN UTAH UNIVERSITY FIRE ALARM NETWORK PLAN**  
 SCALE: 1/60" = 1'-0"



File Name: P:\2009\20090345\Drawings\3Sheet\FE003.dwg Last Plotted: 2009/12/16 @ 12:49 PM By: tnb

GENERAL SHEET NOTES

- HUNTER CONFERENCE CENTER: THIS PROJECT INCLUDES REPLACING THE EXISTING CONVENTIONAL FIRE ALARM SYSTEM WITH A NEW ADDRESSABLE SYSTEM, A NEW FIRE ALARM PANEL, AND OTHER CONTROL EQUIPMENT, INITIATION AND NOTIFICATION DEVICES, CONDUIT, WIRING, AND ALL OTHER ACCESSORIES OR EQUIPMENT NECESSARY FOR A FULLY FUNCTIONAL SYSTEM ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION SHALL BE INCLUDED. EXISTING WIRING AND CONDUIT MAY BE REUSED TO SUPPORT THE NEW SYSTEM AND EQUIPMENT WHERE POSSIBLE. NEW WIRING IN CONDUIT SHALL BE PROVIDED IN ALL OTHER INSTANCES.
- CODE ANALYSIS:  
2006 INTERNATIONAL BUILDING CODE  
2006 INTERNATIONAL FIRE CODE  
2006 INTERNATIONAL MECHANICAL CODE  
2008 NFPA 70  
2007 NFPA 72  
AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS  
DFCM DESIGN REQUIREMENTS  
  
THIS BUILDING IS CLASSIFIED AS A-2 (ASSEMBLY) AND B (BUSINESS) MIXED USE.
- THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF THE EXISTING FIRE ALARM EQUIPMENT INCLUDING PANELS, CONDUIT, INITIATION DEVICES, NOTIFICATION APPLIANCES, WIRING, ETC. THAT IS NOT REUSED. ALL DEMO EQUIPMENT SHALL BE OFFERED TO UNIVERSITY FOR REUSE/SPARE PARTS PRIOR TO DISPOSAL. DAMAGED SURFACES WHERE EQUIPMENT IS REMOVED SHALL BE PATCHED AND PAINTED TO MATCH EXISTING CONDITIONS.
- PLANS ARE BASED UPON 300 MONITOR AND CONTROL DEVICES PER ADDRESSABLE LOOP (150 DETECTORS, 150 MODULES). OTHER CONFIGURATIONS ARE ACCEPTABLE SUBJECT TO CONTRACTOR ALLOWING FOR INCREASED WIRING REQUIREMENTS AND SUBMITTAL DRAWINGS SHOWING NEW WIRING CONFIGURATION. MAXIMUM INITIAL DEVICES PER LOOP SHALL NOT EXCEED 75% MAXIMUM ALLOWABLE.
- PLANS ARE BASED UPON THE WIRING SCHEDULE SHOWN. WHERE MANUFACTURER'S REQUIREMENTS EXCEED REQUIREMENTS SHOWN, INCLUDE ADDITIONAL ASSOCIATED COSTS AND SUBMITTAL DRAWINGS INDICATING NEW WIRING CONFIGURATION.
- PLANS ARE BASED UPON 1.5 AMPS AT 24 VDC, NOT TO EXCEED 75% (1.125 AMPS AVAILABLE), POWER SUPPLY CAPACITY PER NOTIFICATION CIRCUIT. NOTIFICATION DEVICE LOADS ARE BASED UPON NOTIFICATION DEVICE SCHEDULE SHOWN. INCLUDE ADDITIONAL ASSOCIATED COSTS FOR INCREASED WIRING AND POWER SUPPLY CAPACITY IF LOADS OF ACTUAL DEVICES PROVIDED EXCEED CIRCUIT CAPACITY, OR IF LOAD OUTPUT OF ACTUAL POWER SUPPLIES PROVIDED IS SIZED DIFFERENTLY. PROVIDE SUBMITTAL DRAWINGS SHOWING NEW WIRING CONFIGURATION.
- PROVIDE POWER SUPPLY CAPACITY AS REQUIRED FOR DOOR HOLD OPENS SHOWN.
- BATTERY CAPACITY FOR THE FIRE ALARM PANEL AND REMOTE POWER SUPPLIES SHALL BE ADEQUATE TO OPERATE 15 MINUTES AFTER 24 HOURS PLUS 25% SPARE CAPACITY.
- RUN SPARE LOOPS IN SAME CONDUIT. DO NOT EXCEED 20% AREA FILL OF CONDUITS TO LEAVE ROOM FOR FUTURE EXPANSION.
- ALL WIRING SHALL BE RUN IN CONDUIT OR WIRE MOLD. EXISTING WIRE SHALL BE REMOVED OR INSTALLED IN CONDUIT. NEW CONDUIT SHALL BE MINIMUM 3/4" DIAMETER WITH INSULATED STEEL THROAT FITTINGS.
- REPLACE EXISTING DUCT DETECTORS OR PROVIDE NEW, ADDRESSABLE DEVICES. INSTALL DUCT DETECTORS PER NFPA 72 REQUIREMENTS. DUCT SMOKE DETECTORS SHALL INITIATE A GENERAL BUILDING ALARM AND SHUT DOWN ALL AIR HANDLING EQUIPMENT.
- LOCATE SMOKE AND HEAT DETECTORS MINIMUM 3' FROM AIR SUPPLY AND RETURN LOUVERS. EXISTING DEVICE LOCATIONS SHALL NOT BE REUSED IF NOT MEETING THIS REQUIREMENT.
- PROVIDE SYNCHRONIZED STROBES THROUGHOUT FACILITY. PROVIDE SYNCHRONIZATION MODULES PER MANUFACTURER'S REQUIREMENTS. INCLUDE ADDITIONAL WIRING, IF REQUIRED.
- EXISTING MONITORING CAPABILITIES OF CALL CENTER IN HEAT PLANT SHALL BE MAINTAINED UNLESS A HIGHER LEVEL CAN BE ACHIEVED WITH NEW SYSTEM. TAMPER SWITCHES SHALL SEND A TROUBLE SIGNAL TO CALL CENTER REGARDLESS OF LOCAL PANEL SIGNAL.



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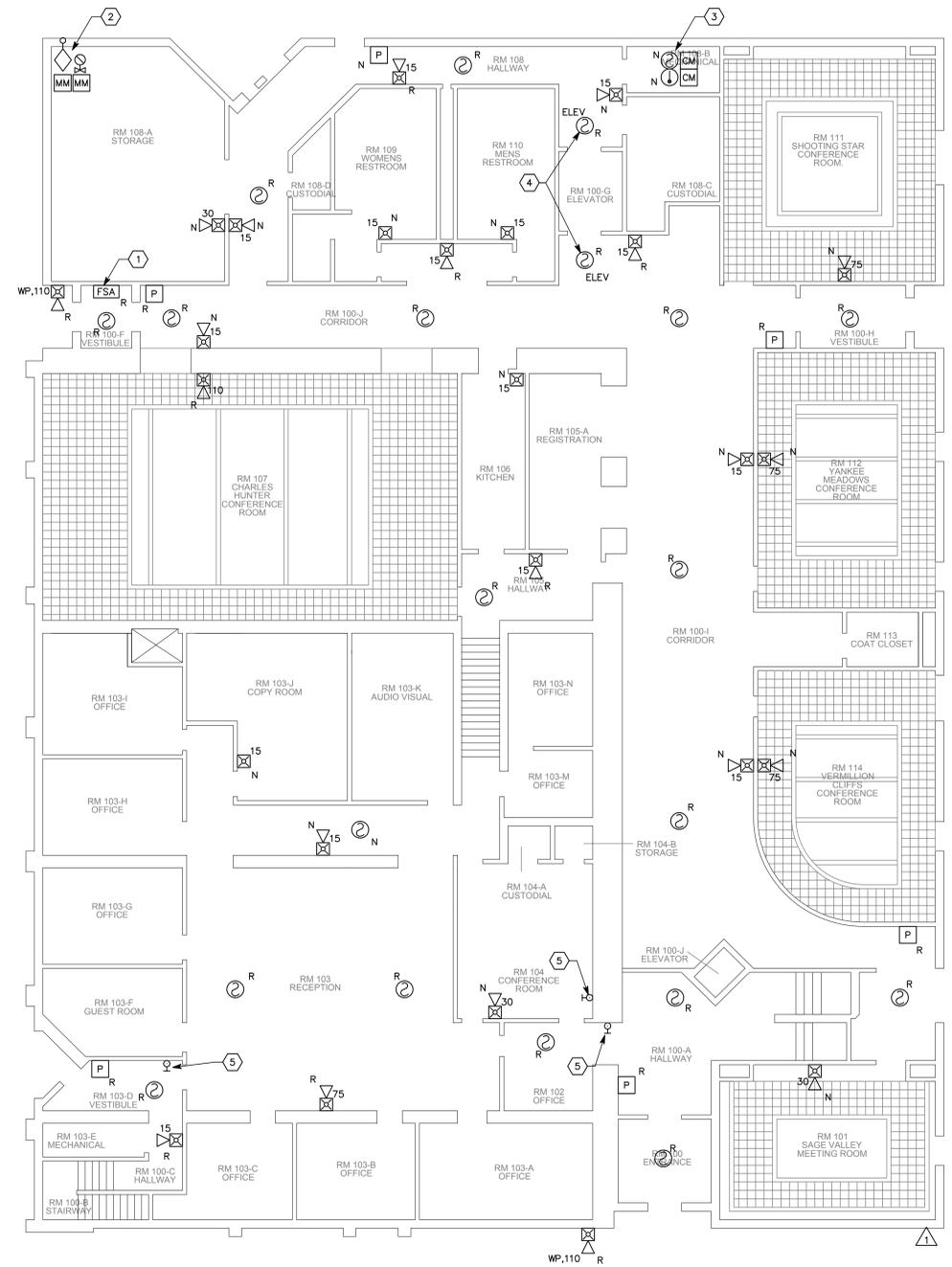
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SOUTHERN UTAH  
UNIVERSITY  
VARIOUS BLDGS

STATE PROPERTY NO:

FIRE ALARM &  
FIRE SPRINKLER  
SYSTEM  
UPGRADES



**ADDITIONAL NOTES**

- DEVICES WITH 'R' DESIGNATION ARE EXISTING DEVICES TO BE REPLACED IN PLACE.
- DEVICES WITH 'N' DESIGNATION ARE NEW DEVICES THAT WILL REQUIRE NEW WIRING, CONDUIT, ETC.
- ALL 'R' AND 'N' DESIGNATED DEVICES ARE AN APPROXIMATE COUNT AND SHALL BE FIELD VERIFIED BY CONTRACTORS PRIOR TO BIDDING.

KEYNOTES

- REPLACE EXISTING ANNUNCIATOR WITH NEW IN SAME LOCATION. REPAIR SURFACE AS NECESSARY.
- CONNECT EXISTING FLOW AND TAMPER SWITCHES TO NEW FIRE ALARM PANEL FOR MONITORING.
- SMOKE AND HEAT DETECTOR IN ELEVATOR EQUIPMENT ROOM. PROGRAM CONTROL MODULES FOR ALTERNATE LEVEL RECALL AND FIRE HAT OPERATION. COORDINATE WITH ELEVATOR CONTROL.
- ELEVATOR LOBBY SMOKE DETECTORS. PROGRAM FOR ALTERNATE LEVEL RECALL UPON ACTIVATION.
- EXISTING DOOR HOLDER TO RELEASE ON FIRE ALARM SIGNAL. PROVIDE NECESSARY RELAYS AND POWER FOR PROPER OPERATION.

MARK	DATE	DESCRIPTION
1	2009-12-16	ADDENDUM #1

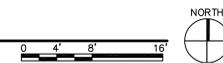
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PROJECT NO: 20090345  
DRAWN BY: TNB  
CHECKED BY: JDD  
DESIGNED BY: JDD  
RECORD DRAWING DATE:  
SIGNATURE:  
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SHEET TITLE  
HUNTER CONFERENCE  
CENTER - FIRST FLOOR  
FIRE ALARM PLAN

**HC-FA1**  
SHEET 4 OF 16

**HUNTER CONFERENCE CENTER  
FIRST LEVEL FIRE ALARM PLAN**

(A1) SCALE: 1/8" = 1'-0"



GENERAL SHEET NOTES

- HUNTER CONFERENCE CENTER: THIS PROJECT INCLUDES REPLACING THE EXISTING CONVENTIONAL FIRE ALARM SYSTEM WITH A NEW ADDRESSABLE SYSTEM. A NEW FIRE ALARM PANEL, AND OTHER CONTROL EQUIPMENT, INITIATION AND NOTIFICATION DEVICES, CONDUIT, WIRING, AND ALL OTHER ACCESSORIES OR EQUIPMENT NECESSARY FOR A FULLY FUNCTIONAL SYSTEM ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION SHALL BE INCLUDED. EXISTING WIRING AND CONDUIT MAY BE REUSED TO SUPPORT THE NEW SYSTEM AND EQUIPMENT WHERE POSSIBLE. NEW WIRING IN CONDUIT SHALL BE PROVIDED IN ALL OTHER INSTANCES.
- CODE ANALYSIS:  
2006 INTERNATIONAL BUILDING CODE  
2006 INTERNATIONAL FIRE CODE  
2006 INTERNATIONAL MECHANICAL CODE  
2008 NFPA 70  
2007 NFPA 72  
AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS  
DFCM DESIGN REQUIREMENTS  
  
THIS BUILDING IS CLASSIFIED AS A-2 (ASSEMBLY) AND B (BUSINESS) MIXED USE.
- THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF THE EXISTING FIRE ALARM EQUIPMENT INCLUDING PANELS, CONDUIT, INITIATION DEVICES, NOTIFICATION APPLIANCES, WIRING, ETC. THAT IS NOT REUSED. ALL DEMO EQUIPMENT SHALL BE OFFERED TO UNIVERSITY FOR REUSE/SPARE PARTS PRIOR TO DISPOSAL. DAMAGED SURFACES WHERE EQUIPMENT IS REMOVED SHALL BE PATCHED AND PAINTED TO MATCH EXISTING CONDITIONS.
- PLANS ARE BASED UPON 300 MONITOR AND CONTROL DEVICES PER ADDRESSABLE LOOP (150 DETECTORS, 150 MODULES). OTHER CONFIGURATIONS ARE ACCEPTABLE SUBJECT TO CONTRACTOR ALLOWING FOR INCREASED WIRING REQUIREMENTS AND SUBMITTAL DRAWINGS SHOWING NEW WIRING CONFIGURATION. MAXIMUM INITIAL DEVICES PER LOOP SHALL NOT EXCEED 75% MAXIMUM ALLOWABLE.
- PLANS ARE BASED UPON THE WIRING SCHEDULE SHOWN. WHERE MANUFACTURER'S REQUIREMENTS EXCEED REQUIREMENTS SHOWN, INCLUDE ADDITIONAL ASSOCIATED COSTS AND SUBMITTAL DRAWINGS INDICATING NEW WIRING CONFIGURATION.
- PLANS ARE BASED UPON 1.5 AMPS AT 24 VDC, NOT TO EXCEED 75% (1.125 AMPS AVAILABLE), POWER SUPPLY CAPACITY PER NOTIFICATION CIRCUIT. NOTIFICATION DEVICE LOADS ARE BASED UPON NOTIFICATION DEVICE SCHEDULE SHOWN. INCLUDE ADDITIONAL ASSOCIATED COSTS FOR INCREASED WIRING AND POWER SUPPLY CAPACITY IF LOADS OF ACTUAL DEVICES PROVIDED EXCEED CIRCUIT CAPACITY, OR IF LOAD OUTPUT OF ACTUAL POWER SUPPLIES PROVIDED IS SIZED DIFFERENTLY. PROVIDE SUBMITTAL DRAWINGS SHOWING NEW WIRING CONFIGURATION.
- PROVIDE POWER SUPPLY CAPACITY AS REQUIRED FOR DOOR HOLD OPENS SHOWN.
- BATTERY CAPACITY FOR THE FIRE ALARM PANEL AND REMOTE POWER SUPPLIES SHALL BE ADEQUATE TO OPERATE 15 MINUTES AFTER 24 HOURS PLUS 25% SPARE CAPACITY.
- RUN SPARE LOOPS IN SAME CONDUIT. DO NOT EXCEED 20% AREA FILL OF CONDUITS TO LEAVE ROOM FOR FUTURE EXPANSION.
- ALL WIRING SHALL BE RUN IN CONDUIT OR WIRE MOLD. EXISTING WIRE SHALL BE REMOVED OR INSTALLED IN CONDUIT. NEW CONDUIT SHALL BE MINIMUM 3/4" DIAMETER WITH INSULATED STEEL THROAT FITTINGS.
- REPLACE EXISTING DUCT DETECTORS OR PROVIDE NEW, ADDRESSABLE DEVICES. INSTALL DUCT DETECTORS PER NFPA 72 REQUIREMENTS. DUCT SMOKE DETECTORS SHALL INITIATE A GENERAL BUILDING ALARM AND SHUT DOWN ALL AIR HANDLING EQUIPMENT.
- LOCATE SMOKE AND HEAT DETECTORS MINIMUM 3' FROM AIR SUPPLY AND RETURN LOUVERS. EXISTING DEVICE LOCATIONS SHALL NOT BE REUSED IF NOT MEETING THIS REQUIREMENT.
- PROVIDE SYNCHRONIZED STROBES THROUGHOUT FACILITY. PROVIDE SYNCHRONIZATION MODULES PER MANUFACTURER'S REQUIREMENTS. INCLUDE ADDITIONAL WIRING, IF REQUIRED.
- EXISTING MONITORING CAPABILITIES OF CALL CENTER IN HEAT PLANT SHALL BE MAINTAINED UNLESS A HIGHER LEVEL CAN BE ACHIEVED WITH NEW SYSTEM. TAMPER SWITCHES SHALL SEND A TROUBLE SIGNAL TO CALL CENTER REGARDLESS OF LOCAL PANEL SIGNAL.



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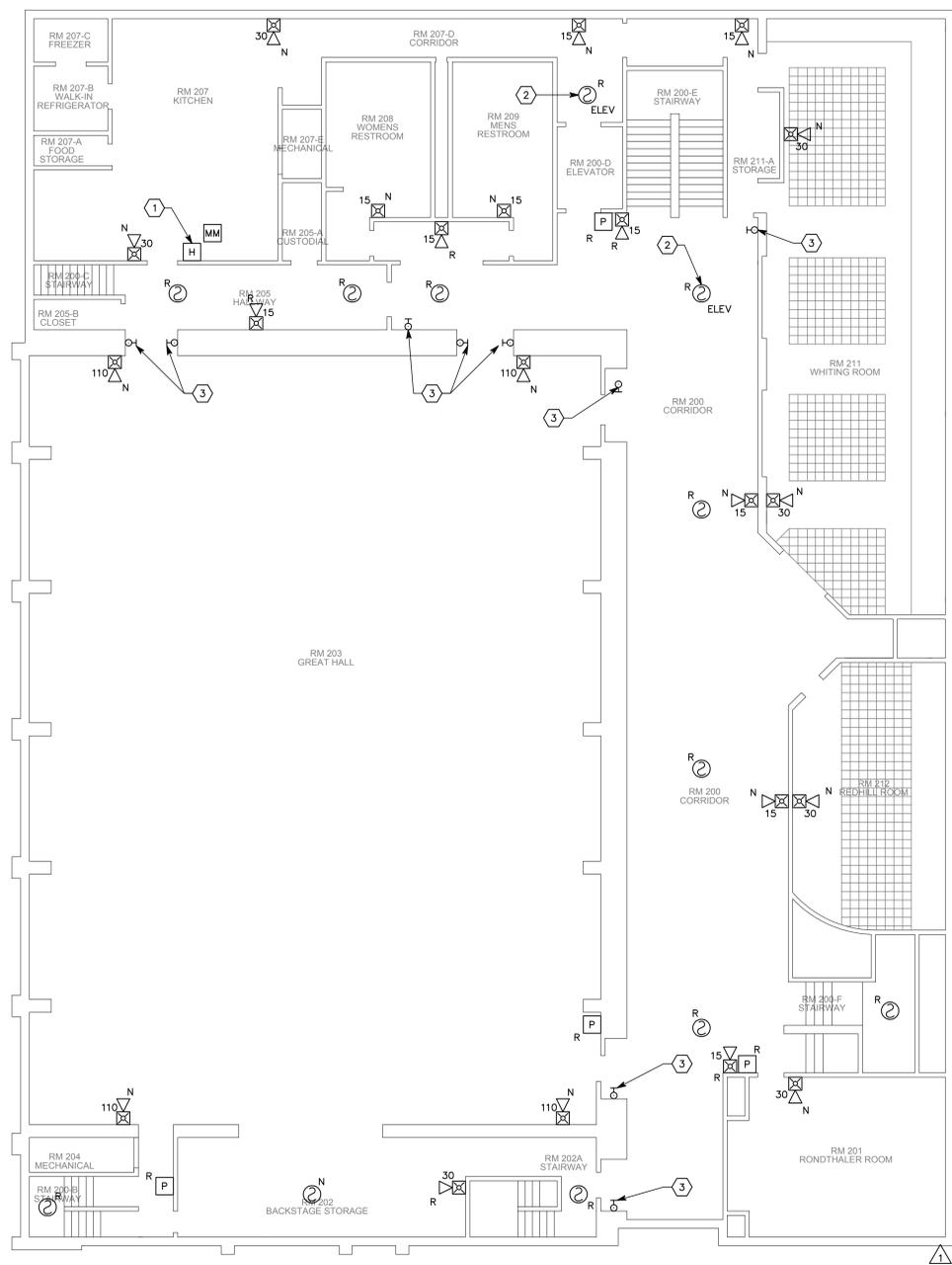
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SOUTHERN UTAH UNIVERSITY  
VARIOUS BLDGS

STATE PROPERTY NO:

FIRE ALARM & FIRE SPRINKLER SYSTEM UPGRADES



**ADDITIONAL NOTES**

- DEVICES WITH 'R' DESIGNATION ARE EXISTING DEVICES TO BE REPLACED IN PLACE.
- DEVICES WITH 'N' DESIGNATION ARE NEW DEVICES THAT WILL REQUIRE NEW WIRING, CONDUIT, ETC.
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KEYNOTES

- PROVIDE MODULE FOR COOKING HOOD RELEASE.
- ELEVATOR LOBBY SMOKE DETECTORS. PROGRAM FOR PRIMARY LEVEL RECALL UPON ACTIVATION.
- EXISTING DOOR HOLDER(S) TO RELEASE ON FIRE ALARM SIGNAL. PROVIDE NECESSARY RELAYS AND POWER FOR PROPER OPERATION.

MARK	DATE	DESCRIPTION
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1	2009-12-16	ADDENDUM #1

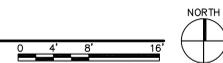
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CHECKED BY: JDD  
DESIGNED BY: JDD  
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SHEET TITLE  
HUNTER CONFERENCE CENTER - SECOND FLOOR FIRE ALARM PLAN

**HC-FA2**  
SHEET 5 OF 16

**HUNTER CONFERENCE CENTER  
SECOND LEVEL FIRE ALARM PLAN**

A1 SCALE: 1/8" = 1'-0"



GENERAL SHEET NOTES

- HUNTER CONFERENCE CENTER: THIS PROJECT INCLUDES REPLACING THE EXISTING CONVENTIONAL FIRE ALARM SYSTEM WITH A NEW ADDRESSABLE SYSTEM. A NEW FIRE ALARM PANEL, AND OTHER CONTROL EQUIPMENT, INITIATION AND NOTIFICATION DEVICES, CONDUIT, WIRING, AND ALL OTHER ACCESSORIES OR EQUIPMENT NECESSARY FOR A FULLY FUNCTIONAL SYSTEM ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION SHALL BE INCLUDED. EXISTING WIRING AND CONDUIT MAY BE REUSED TO SUPPORT THE NEW SYSTEM AND EQUIPMENT WHERE POSSIBLE. NEW WIRING IN CONDUIT SHALL BE PROVIDED IN ALL OTHER INSTANCES.
- CODE ANALYSIS:  
2006 INTERNATIONAL BUILDING CODE  
2006 INTERNATIONAL FIRE CODE  
2006 INTERNATIONAL MECHANICAL CODE  
2008 NFPA 70  
2007 NFPA 72  
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DFCM DESIGN REQUIREMENTS  
  
THIS BUILDING IS CLASSIFIED AS A-2 (ASSEMBLY) AND B (BUSINESS) MIXED USE.
- THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF THE EXISTING FIRE ALARM EQUIPMENT INCLUDING PANELS, CONDUIT, INITIATION DEVICES, NOTIFICATION APPLIANCES, WIRING, ETC. THAT IS NOT REUSED. ALL DEMO EQUIPMENT SHALL BE OFFERED TO UNIVERSITY FOR REUSE/SPARE PARTS PRIOR TO DISPOSAL. DAMAGED SURFACES WHERE EQUIPMENT IS REMOVED SHALL BE PATCHED AND PAINTED TO MATCH EXISTING CONDITIONS.
- PLANS ARE BASED UPON 300 MONITOR AND CONTROL DEVICES PER ADDRESSABLE LOOP (150 DETECTORS, 150 MODULES). OTHER CONFIGURATIONS ARE ACCEPTABLE SUBJECT TO CONTRACTOR ALLOWING FOR INCREASED WIRING REQUIREMENTS AND SUBMITTAL DRAWINGS SHOWING NEW WIRING CONFIGURATION. MAXIMUM INITIAL DEVICES PER LOOP SHALL NOT EXCEED 75% MAXIMUM ALLOWABLE.
- PLANS ARE BASED UPON THE WIRING SCHEDULE SHOWN. WHERE MANUFACTURER'S REQUIREMENTS EXCEED REQUIREMENTS SHOWN, INCLUDE ADDITIONAL ASSOCIATED COSTS AND SUBMITTAL DRAWINGS INDICATING NEW WIRING CONFIGURATION.
- PLANS ARE BASED UPON 1.5 AMPS AT 24 VDC, NOT TO EXCEED 75% (1.125 AMPS AVAILABLE), POWER SUPPLY CAPACITY PER NOTIFICATION CIRCUIT. NOTIFICATION DEVICE LOADS ARE BASED UPON NOTIFICATION DEVICE SCHEDULE SHOWN. INCLUDE ADDITIONAL ASSOCIATED COSTS FOR INCREASED WIRING AND POWER SUPPLY CAPACITY IF LOADS OF ACTUAL DEVICES PROVIDED EXCEED CIRCUIT CAPACITY, OR IF LOAD OUTPUT OF ACTUAL POWER SUPPLIES PROVIDED IS SIZED DIFFERENTLY. PROVIDE SUBMITTAL DRAWINGS SHOWING NEW WIRING CONFIGURATION.
- PROVIDE POWER SUPPLY CAPACITY AS REQUIRED FOR DOOR HOLD OPENS SHOWN.
- BATTERY CAPACITY FOR THE FIRE ALARM PANEL AND REMOTE POWER SUPPLIES SHALL BE ADEQUATE TO OPERATE 15 MINUTES AFTER 24 HOURS PLUS 25% SPARE CAPACITY.
- RUN SPARE LOOPS IN SAME CONDUIT. DO NOT EXCEED 20% AREA FILL OF CONDUITS TO LEAVE ROOM FOR FUTURE EXPANSION.
- ALL WIRING SHALL BE RUN IN CONDUIT OR WIRE MOLD. EXISTING WIRE SHALL BE REMOVED OR INSTALLED IN CONDUIT. NEW CONDUIT SHALL BE MINIMUM 3/4" DIAMETER WITH INSULATED STEEL THROAT FITTINGS.
- REPLACE EXISTING DUCT DETECTORS OR PROVIDE NEW, ADDRESSABLE DEVICES. INSTALL DUCT DETECTORS PER NFPA 72 REQUIREMENTS. DUCT SMOKE DETECTORS SHALL INITIATE A GENERAL BUILDING ALARM AND SHUT DOWN ALL AIR HANDLING EQUIPMENT.
- LOCATE SMOKE AND HEAT DETECTORS MINIMUM 3' FROM AIR SUPPLY AND RETURN LOUVERS. EXISTING DEVICE LOCATIONS SHALL NOT BE REUSED IF NOT MEETING THIS REQUIREMENT.
- PROVIDE SYNCHRONIZED STROBES THROUGHOUT FACILITY. PROVIDE SYNCHRONIZATION MODULES PER MANUFACTURER'S REQUIREMENTS. INCLUDE ADDITIONAL WIRING, IF REQUIRED.
- EXISTING MONITORING CAPABILITIES OF CALL CENTER IN HEAT PLANT SHALL BE MAINTAINED UNLESS A HIGHER LEVEL CAN BE ACHIEVED WITH NEW SYSTEM. TAMPER SWITCHES SHALL SEND A TROUBLE SIGNAL TO CALL CENTER REGARDLESS OF LOCAL PANEL SIGNAL.



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SOUTHERN UTAH UNIVERSITY  
VARIOUS BLDGS

STATE PROPERTY NO:

FIRE ALARM & FIRE SPRINKLER SYSTEM UPGRADES

5		
4		
3		
2		
1	2009-12-16	ADDENDUM #1
MARK	DATE	DESCRIPTION

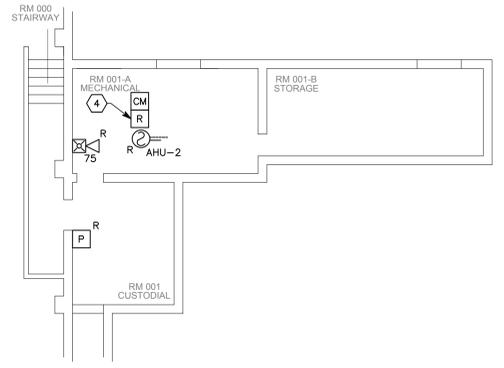
ISSUE:  
DATE:

DFCM PROJECT NO: 09114730  
PROJECT NO: 20090345  
DRAWN BY: TNB  
CHECKED BY: JDD  
DESIGNED BY: JDD  
RECORD DRAWING DATE:

SIGNATURE:  
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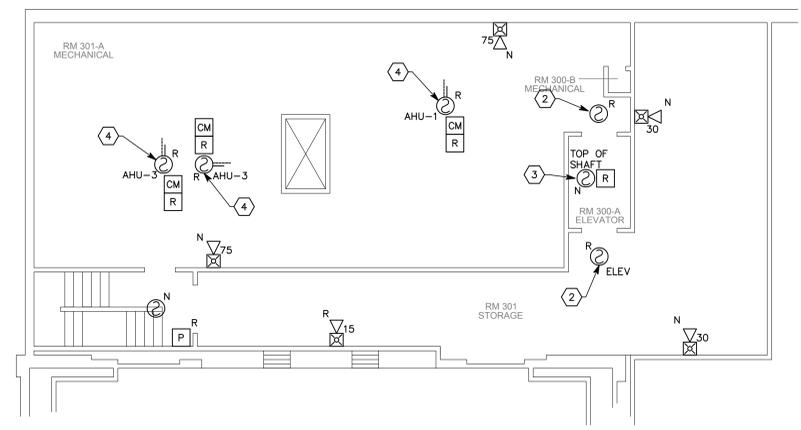
SHEET TITLE  
HUNTER CONFERENCE CENTER - BASEMENT & THIRD FLOOR FIRE ALARM PLAN

HC-FA3  
SHEET 6 OF 16



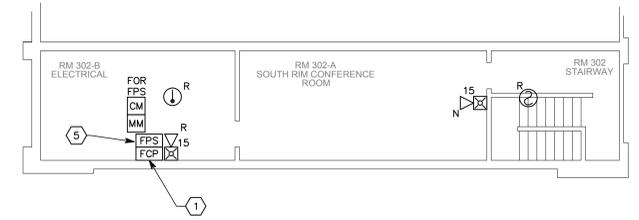
**D1** HUNTER CONFERENCE CENTER  
BASEMENT LEVEL FIRE ALARM PLAN

SCALE: 1/8" = 1'-0"



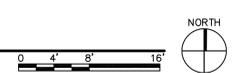
**B1** HUNTER CONFERENCE CENTER  
THIRD LEVEL FIRE ALARM PLAN (NORTH)

SCALE: 1/8" = 1'-0"



**A1** HUNTER CONFERENCE CENTER  
THIRD LEVEL FIRE ALARM PLAN (SOUTH)

SCALE: 1/8" = 1'-0"



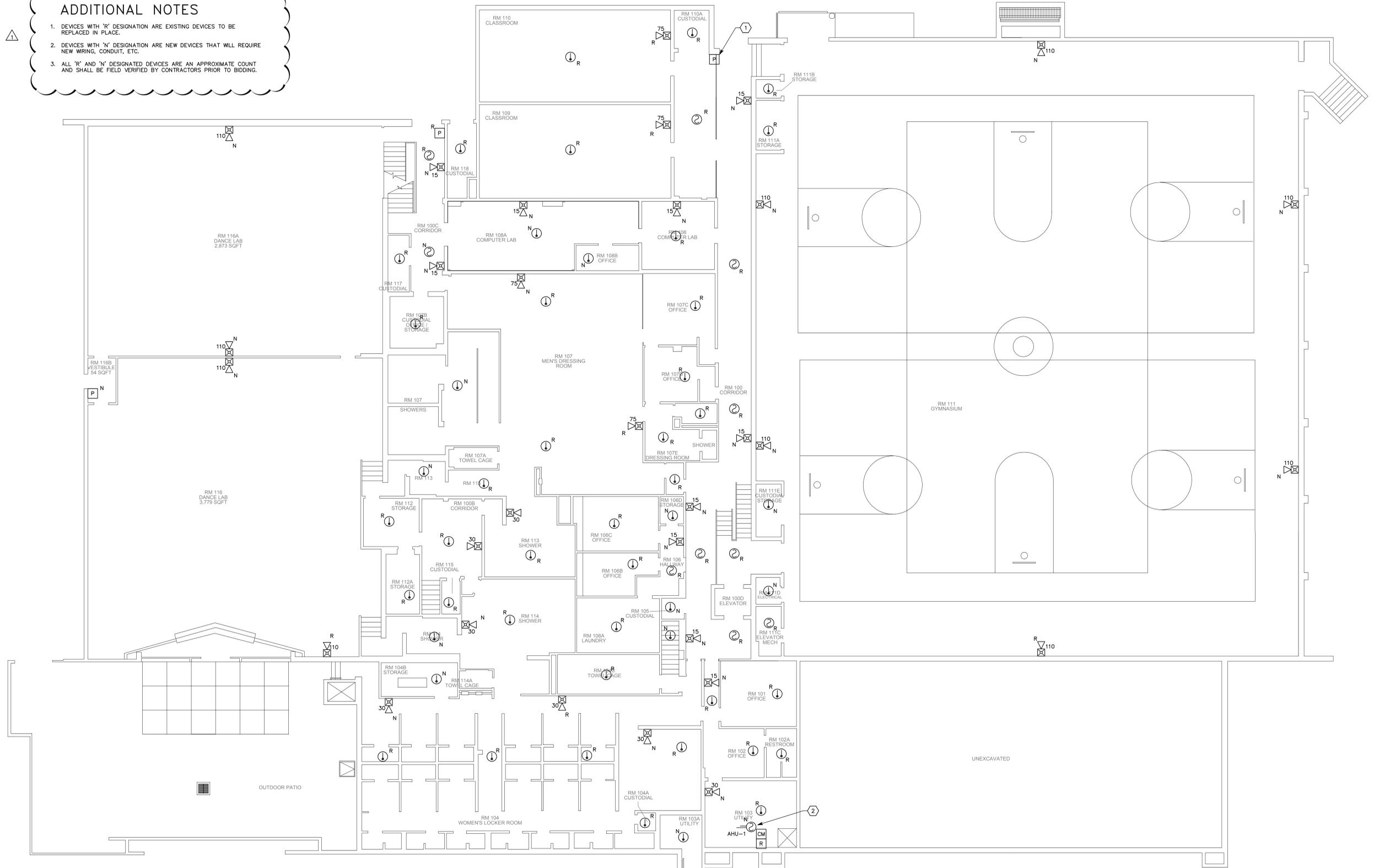
**ADDITIONAL NOTES**

- DEVICES WITH 'R' DESIGNATION ARE EXISTING DEVICES TO BE REPLACED IN PLACE.
- DEVICES WITH 'N' DESIGNATION ARE NEW DEVICES THAT WILL REQUIRE NEW WIRING, CONDUIT, ETC.
- ALL 'R' AND 'N' DESIGNATED DEVICES ARE AN APPROXIMATE COUNT AND SHALL BE FIELD VERIFIED BY CONTRACTORS PRIOR TO BIDDING.

1	2	3	4	5	6			
<b>GENERAL SHEET NOTES</b> 1. MULTIPURPOSE BUILDING: THIS PROJECT INCLUDES REUSING THE EXISTING, ADDRESSABLE FIRE ALARM PANEL AND ADDRESSABLE DEVICES WITH NEW, ADDRESSABLE DEVICES, NEW CONTROL EQUIPMENT, INITIATION AND NOTIFICATION DEVICES, CONDUIT, WIRING, AND ALL OTHER ACCESSORIES OR EQUIPMENT NECESSARY FOR A FULLY FUNCTIONAL SYSTEM ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION. EXISTING WIRING IN CONDUIT MAY BE REUSED TO SUPPORT THE NEW SYSTEM AND EQUIPMENT WHERE POSSIBLE. NEW WIRING AND CONDUIT SHALL BE PROVIDED IN ALL OTHER INSTANCES. 2. CODE ANALYSIS: 2006 INTERNATIONAL BUILDING CODE 2006 INTERNATIONAL FIRE CODE 2006 INTERNATIONAL MECHANICAL CODE 2008 NFPA 70 2007 NFPA 72 AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS DFCM DESIGN REQUIREMENTS 3. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF THE EXISTING FIRE ALARM EQUIPMENT INCLUDING PANELS, CONDUIT, INITIATION DEVICES, NOTIFICATION APPLIANCES, WIRING, ETC. THAT IS NOT REUSED. ALL DEMO EQUIPMENT SHALL BE OFFERED TO UNIVERSITY		<b>GENERAL SHEET NOTES</b> FOR REUSE/SPARE PARTS PRIOR TO DISPOSAL. DAMAGED SURFACES WHERE EQUIPMENT IS REMOVED SHALL BE PATCHED AND PAINTED TO MATCH EXISTING CONDITIONS. 4. PLANS ARE BASED UPON 300 MONITOR AND CONTROL DEVICES PER ADDRESSABLE LOOP (150 DETECTORS, 150 MODULES). OTHER CONFIGURATIONS ARE ACCEPTABLE SUBJECT TO CONTRACTOR ALLOWING FOR INCREASED WIRING REQUIREMENTS AND SUBMITTAL DRAWINGS SHOWING NEW WIRING CONFIGURATION. MAXIMUM INITIAL DEVICES PER LOOP SHALL NOT EXCEED 75% MAXIMUM ALLOWABLE. 5. PLANS ARE BASED UPON THE WIRING SCHEDULE SHOWN, WHERE MANUFACTURER'S REQUIREMENTS EXCEED REQUIREMENTS SHOWN, INCLUDE ADDITIONAL ASSOCIATED COSTS AND SUBMITTAL DRAWINGS INDICATING NEW WIRING CONFIGURATION. 6. PLANS ARE BASED UPON 1.5 AMPS AT 24 VDC. NOT TO EXCEED 75% (1,125 AMPS AVAILABLE). POWER SUPPLY CAPACITY PER NOTIFICATION CIRCUIT. NOTIFICATION DEVICE LOADS ARE BASED UPON NOTIFICATION DEVICE SCHEDULE SHOWN. INCLUDE ADDITIONAL ASSOCIATED COSTS FOR INCREASED WIRING AND POWER SUPPLY CAPACITY IF LOADS OF ACTUAL DEVICES PROVIDED EXCEED CIRCUIT CAPACITY, OR IF LOAD OUTPUT OF ACTUAL POWER SUPPLIES PROVIDED IS SIZED DIFFERENTLY. PROVIDE SUBMITTAL DRAWINGS SHOWING NEW WIRING		<b>GENERAL SHEET NOTES</b> CONFIGURATION. 7. BATTERY CAPACITY FOR THE FIRE ALARM PANEL AND REMOTE POWER SUPPLIES SHALL BE ADEQUATE TO OPERATE 15 MINUTES AFTER 24 HOURS PLUS 25% SPARE CAPACITY. 8. RUN SPARE LOOPS IN SAME CONDUIT. DO NOT EXCEED 20% AREA FILL OF CONDUITS TO LEAVE ROOM FOR FUTURE EXPANSION. 9. ALL WIRING SHALL BE RUN IN CONDUIT OR WIRE MOLD. EXISTING WIRING SHALL BE REMOVED OR INSTALLED IN CONDUIT. NEW CONDUIT SHALL BE MINIMUM 3/4" DIAMETER WITH INSULATED STEEL THROAT FITTINGS. CONDUIT SHALL BE CONCEALED WHERE POSSIBLE. SURFACE MOUNTING IS ACCEPTABLE IN GYM, MECHANICAL AREAS, AND DANCE LAB. 10. REPLACE EXISTING DUCT DETECTORS OR PROVIDE NEW ADDRESSABLE DEVICES. INSTALL DUCT DETECTORS PER NFPA 72 REQUIREMENTS. DUCT SMOKE DETECTORS SHALL INITIATE A GENERAL BUILDING ALARM AND SHUT DOWN ALL AIR HANDLING EQUIPMENT. 11. LOCATE SMOKE AND HEAT DETECTORS MINIMUM 3' FROM AIR SUPPLY AND RETURN LOUVERS. EXISTING DEVICE LOCATIONS SHALL NOT BE REUSED IF NOT MEETING THIS REQUIREMENT.		<b>GENERAL SHEET NOTES</b> 12. PROVIDE SYNCHRONIZED STROBES THROUGHOUT FACILITY. PROVIDE SYNCHRONIZATION MODULES PER MANUFACTURER'S REQUIREMENTS. INCLUDE ADDITIONAL WIRING, IF REQUIRED. 13. EXISTING MONITORING CAPABILITIES OF CALL CENTER IN HEAT PLANT SHALL BE MAINTAINED UNLESS A HIGHER LEVEL CAN BE ACHIEVED WITH NEW SYSTEM. TAMPER SWITCHES SHALL SEND A TROUBLE SIGNAL TO CALL CENTER REGARDLESS OF LOCAL PANEL SIGNAL. 14. CONTRACTOR SHALL VERIFY ALL PULL STATIONS ARE AT CORRECT HEIGHT AND MODIFY IF NECESSARY.		<b>◇ SHEET KEYNOTES</b> 1. REMOVE EXISTING MANUAL PULL STATION AND REPAIR SURFACE. MOUNT NEW ADDRESSABLE PULL STATION 3.5' TO 4.5' ABOVE FLOOR LEVEL. 2. PROVIDE NEW DUCT SMOKE DETECTOR. CONNECT TO EXISTING FIRE ALARM PANEL.

**ADDITIONAL NOTES**

- DEVICES WITH 'R' DESIGNATION ARE EXISTING DEVICES TO BE REPLACED IN PLACE.
- DEVICES WITH 'N' DESIGNATION ARE NEW DEVICES THAT WILL REQUIRE NEW WIRING, CONDUIT, ETC.
- ALL 'R' AND 'N' DESIGNATED DEVICES ARE AN APPROXIMATE COUNT AND SHALL BE FIELD VERIFIED BY CONTRACTORS PRIOR TO BIDDING.



**(A1) MULTIPURPOSE BUILDING FIRST FLOOR FIRE ALARM PLAN**  
 SCALE: 1/8" = 1'-0"

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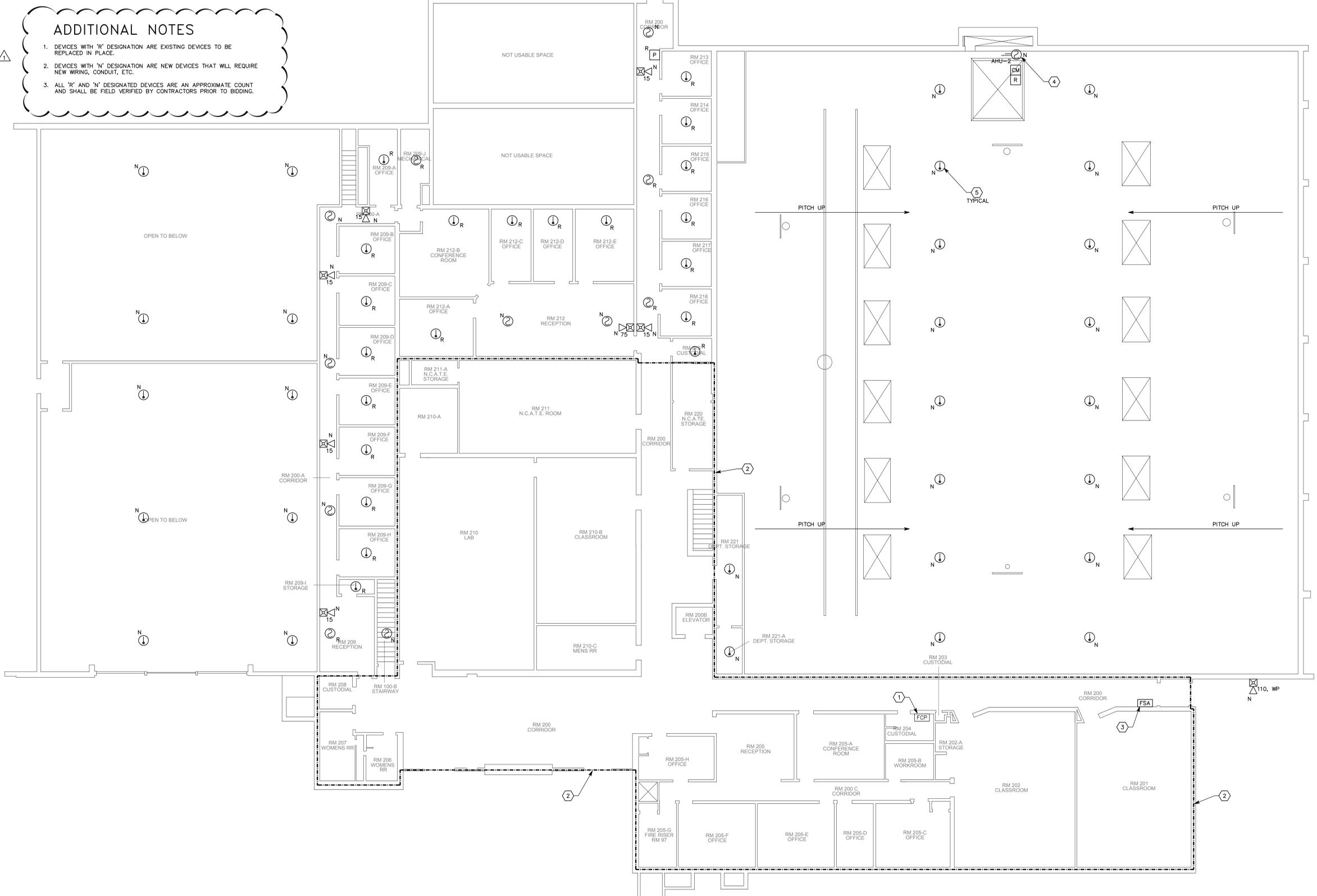
**SOUTHERN UTAH UNIVERSITY VARIOUS BLDGS**  
 STATE PROPERTY NO:  
**FIRE ALARM & FIRE SPRINKLER SYSTEM UPGRADES**

MARK	DATE	DESCRIPTION
2009-12-16	ADDENDUM #1	
ISSUE DATE:		
DFCM PROJECT NO: 09114730		
PROJECT NO: 20090345		
DRAWN BY: TNB		
CHECKED BY: JDD		
DESIGNED BY: JDD		
RECORD DRAWING DATE:		
SIGNATURE:		
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SHEET TITLE		
MULTIPURPOSE BUILDING - FIRST FLOOR FIRE ALARM PLAN		
<b>MB-FA1</b>		
SHEET 8 OF 16		

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|---|--|---|---|--|
| <p><b>GENERAL SHEET NOTES</b></p> <ol style="list-style-type: none"> <li>MULTIPURPOSE BUILDING: THIS PROJECT INCLUDES REUSING THE EXISTING ADDRESSABLE FIRE ALARM PANEL AND ADDRESSABLE DEVICES WITH NEW ADDRESSABLE DEVICES, NEW CONTROL EQUIPMENT, INITIATION AND NOTIFICATION DEVICES, CONDUIT, WIRING, AND ALL OTHER ACCESSORIES OR EQUIPMENT NECESSARY FOR A FULLY FUNCTIONAL SYSTEM ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION. EXISTING WIRING IN CONDUIT MAY BE REUSED TO SUPPORT THE NEW SYSTEM AND EQUIPMENT WHERE POSSIBLE. NEW WIRING AND CONDUIT SHALL BE PROVIDED IN ALL OTHER INSTANCES.</li> <li>CODE ANALYSIS:<br/>2006 INTERNATIONAL BUILDING CODE<br/>2006 INTERNATIONAL FIRE CODE<br/>2006 INTERNATIONAL MECHANICAL CODE<br/>2008 NFPA 70<br/>2007 NFPA 72<br/>AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS<br/>DFCM DESIGN REQUIREMENTS</li> <li>THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF THE EXISTING FIRE ALARM EQUIPMENT INCLUDING PANELS, CONDUIT, INITIATION DEVICES, NOTIFICATION APPLIANCES, WIRING, ETC. THAT IS NOT REUSED. ALL DEMO EQUIPMENT SHALL BE OFFERED TO UNIVERSITY</li> </ol> | <p><b>GENERAL SHEET NOTES</b></p> <ol style="list-style-type: none"> <li>FOR REUSE/SPARE PARTS PRIOR TO DISPOSAL. DAMAGED SURFACES WHERE EQUIPMENT IS REMOVED SHALL BE PATCHED AND PAINTED TO MATCH EXISTING CONDITIONS.</li> <li>PLANS ARE BASED UPON 300 MONITOR AND CONTROL DEVICES PER ADDRESSABLE LOOP (150 DETECTORS, 150 MODULES). OTHER CONFIGURATIONS ARE ACCEPTABLE SUBJECT TO CONTRACTOR ALLOWING FOR INCREASED WIRING REQUIREMENTS AND SUBMITTAL DRAWINGS SHOWING NEW WIRING CONFIGURATION. MAXIMUM INITIAL DEVICES PER LOOP SHALL NOT EXCEED 75% MAXIMUM ALLOWABLE.</li> <li>PLANS ARE BASED UPON THE WIRING SCHEDULE SHOWN, WHERE MANUFACTURER'S REQUIREMENTS EXCEED REQUIREMENTS SHOWN, INCLUDE ADDITIONAL ASSOCIATED COSTS AND SUBMITTAL DRAWINGS INDICATING NEW WIRING CONFIGURATION.</li> <li>PLANS ARE BASED UPON 1.5 AMPS AT 24 VDC. NOT TO EXCEED 75% (1.125 AMPS AVAILABLE). POWER SUPPLY CAPACITY PER NOTIFICATION CIRCUIT. NOTIFICATION DEVICE LOADS ARE BASED UPON NOTIFICATION DEVICE SCHEDULE SHOWN. INCLUDE ADDITIONAL ASSOCIATED COSTS FOR INCREASED WIRING AND POWER SUPPLY CAPACITY IF LOADS OF ACTUAL DEVICES PROVIDED EXCEED CIRCUIT CAPACITY, OR IF LOAD OUTPUT OF ACTUAL POWER SUPPLIES PROVIDED IS SIZED DIFFERENTLY. PROVIDE SUBMITTAL DRAWINGS SHOWING NEW WIRING</li> </ol> | <p><b>GENERAL SHEET NOTES</b></p> <p>CONFIGURATION.</p> <ol style="list-style-type: none"> <li>BATTERY CAPACITY FOR THE FIRE ALARM PANEL AND REMOTE POWER SUPPLIES SHALL BE ADEQUATE TO OPERATE 15 MINUTES AFTER 24 HOURS PLUS 25% SPARE CAPACITY.</li> <li>RUN SPARE LOOPS IN SAME CONDUIT. DO NOT EXCEED 20% AREA FILL OF CONDUITS TO LEAVE ROOM FOR FUTURE EXPANSION.</li> <li>ALL WIRING SHALL BE RUN IN CONDUIT OR WIRE MOLD. EXISTING WIRING SHALL BE REMOVED OR INSTALLED IN CONDUIT. NEW CONDUIT SHALL BE MINIMUM 3/4" DIAMETER WITH INSULATED STEEL THROAT FITTINGS. CONDUIT SHALL BE CONCEALED WHERE POSSIBLE. SURFACE MOUNTING IS ACCEPTABLE IN GYM, MECHANICAL AREAS, AND DANCE LAB.</li> <li>REPLACE EXISTING DUCT DETECTORS OR PROVIDE NEW ADDRESSABLE DEVICES. INSTALL DUCT DETECTORS PER NFPA 72 REQUIREMENTS. DUCT SMOKE DETECTORS SHALL INITIATE A GENERAL BUILDING ALARM AND SHUT DOWN ALL AIR HANDLING EQUIPMENT.</li> <li>LOCATE SMOKE AND HEAT DETECTORS MINIMUM 3' FROM AIR SUPPLY AND RETURN LOUVERS. EXISTING DEVICE LOCATIONS SHALL NOT BE REUSED IF NOT MEETING THIS REQUIREMENT.</li> </ol> | <p><b>GENERAL SHEET NOTES</b></p> <ol style="list-style-type: none"> <li>PROVIDE SYNCHRONIZED STROBES THROUGHOUT FACILITY. PROVIDE SYNCHRONIZATION MODULES PER MANUFACTURER'S REQUIREMENTS. INCLUDE ADDITIONAL WIRING, IF REQUIRED.</li> <li>EXISTING MONITORING CAPABILITIES OF CALL CENTER IN HEAT PLANT SHALL BE MAINTAINED UNLESS A HIGHER LEVEL CAN BE ACHIEVED WITH NEW SYSTEM. TAMPER SWITCHES SHALL SEND A TROUBLE SIGNAL TO CALL CENTER REGARDLESS OF LOCAL PANEL SIGNAL.</li> <li>CONTRACTOR SHALL VERIFY ALL PULL STATIONS ARE AT CORRECT HEIGHT AND MODIFY IF NECESSARY.</li> </ol> | <p><b>SHEET KEYNOTES</b></p> <ol style="list-style-type: none"> <li>EXISTING FIRE ALARM CONTROL PANEL TO REMAIN. EXPAND SIGNALING LINE CIRCUIT(S) AND NOTIFICATION APPLIANCE CIRCUITS FOR REMODEL WORK.</li> <li>OUTLINE OF EXISTING ADDRESSABLE SYSTEM (INITIATION AND NOTIFICATION DEVICES) TO REMAIN.</li> <li>NEW FIRE ALARM ANNUNCIATOR. CONNECT TO EXISTING FIRE ALARM PANEL.</li> <li>NEW DUCT SMOKE DETECTOR ON RETURN PLENUM DUCTWORK ABOVE GYM.</li> <li>HEAT DETECTORS LOCATED IN BEAM POCKETS NEAR PEAK. PROVIDE GUARD TO PREVENT DAMAGE.</li> </ol> |
|---|--|---|---|--|

- ADDITIONAL NOTES**
- DEVICES WITH 'R' DESIGNATION ARE EXISTING DEVICES TO BE REPLACED IN PLACE.
  - DEVICES WITH 'N' DESIGNATION ARE NEW DEVICES THAT WILL REQUIRE NEW WIRING, CONDUIT, ETC.
  - ALL 'R' AND 'N' DESIGNATED DEVICES ARE AN APPROXIMATE COUNT AND SHALL BE FIELD VERIFIED BY CONTRACTORS PRIOR TO BIDDING.



**(A1) MULTIPURPOSE BUILDING SECOND FLOOR FIRE ALARM PLAN**  
SCALE: 1/8" = 1'-0"



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**SOUTHERN UTAH UNIVERSITY VARIOUS BLDGS**  
STATE PROPERTY NO:  
**FIRE ALARM & FIRE SPRINKLER SYSTEM UPGRADES**

5		
4		
3		
2		
1	2009-12-16	ADDENDUM #1
MARK	DATE	DESCRIPTION
ISSUE:		
DATE:		
DFCM PROJECT NO: 09114730		
PROJECT NO: 20090345		
DRAWN BY: TNB		
CHECKED BY: JDD		
DESIGNED BY: JDD		
RECORD DRAWING DATE:		
SIGNATURE:		
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SHEET TITLE		
MULTIPURPOSE BUILDING - SECOND FLOOR FIRE ALARM PLAN		

**MB-FA2**  
SHEET 9 OF 16

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**GENERAL SHEET NOTES**

- MULTIPURPOSE BUILDING: THIS PROJECT INCLUDES REUSING THE EXISTING ADDRESSABLE FIRE ALARM PANEL AND ADDRESSABLE DEVICES WITH NEW ADDRESSABLE DEVICES, NEW CONTROL EQUIPMENT, INITIATION AND NOTIFICATION DEVICES, CONDUIT, WIRING, AND ALL OTHER ACCESSORIES OR EQUIPMENT NECESSARY FOR A FULLY FUNCTIONAL SYSTEM ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION. EXISTING WIRING IN CONDUIT MAY BE REUSED TO SUPPORT THE NEW SYSTEM AND EQUIPMENT WHERE POSSIBLE. NEW WIRING AND CONDUIT SHALL BE PROVIDED IN ALL OTHER INSTANCES.
- CODE ANALYSIS:  
2006 INTERNATIONAL BUILDING CODE  
2006 INTERNATIONAL FIRE CODE  
2006 INTERNATIONAL MECHANICAL CODE  
2008 NFPA 70  
2007 NFPA 72  
AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS  
DFCM DESIGN REQUIREMENTS
- THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF THE EXISTING FIRE ALARM EQUIPMENT INCLUDING PANELS, CONDUIT, INITIATION DEVICES, NOTIFICATION APPLIANCES, WIRING, ETC. THAT IS NOT REUSED. ALL DEMO EQUIPMENT SHALL BE OFFERED TO UNIVERSITY

**GENERAL SHEET NOTES**

FOR REUSE/SPARE PARTS PRIOR TO DISPOSAL. DAMAGED SURFACES WHERE EQUIPMENT IS REMOVED SHALL BE PATCHED AND PAINTED TO MATCH EXISTING CONDITIONS.

- PLANS ARE BASED UPON 300 MONITOR AND CONTROL DEVICES PER ADDRESSABLE LOOP (150 DETECTORS, 150 MODULES). OTHER CONFIGURATIONS ARE ACCEPTABLE SUBJECT TO CONTRACTOR ALLOWING FOR INCREASED WIRING REQUIREMENTS AND SUBMITTAL DRAWINGS SHOWING NEW WIRING CONFIGURATION. MAXIMUM INITIAL DEVICES PER LOOP SHALL NOT EXCEED 75% MAXIMUM ALLOWABLE.
- PLANS ARE BASED UPON THE WIRING SCHEDULE SHOWN, WHERE MANUFACTURER'S REQUIREMENTS EXCEED REQUIREMENTS SHOWN, INCLUDE ADDITIONAL ASSOCIATED COSTS AND SUBMITTAL DRAWINGS INDICATING NEW WIRING CONFIGURATION.
- PLANS ARE BASED UPON 1.5 AMPS AT 24 VDC, NOT TO EXCEED 75% (1.125 AMPS AVAILABLE), POWER SUPPLY CAPACITY PER NOTIFICATION CIRCUIT. NOTIFICATION DEVICE LOADS ARE BASED UPON NOTIFICATION DEVICE SCHEDULE SHOWN. INCLUDE ADDITIONAL ASSOCIATED COSTS FOR INCREASED WIRING AND POWER SUPPLY CAPACITY IF LOADS OF ACTUAL DEVICES PROVIDED EXCEED CIRCUIT CAPACITY, OR IF LOAD OUTPUT OF ACTUAL POWER SUPPLIES PROVIDED IS SIZED DIFFERENTLY. PROVIDE SUBMITTAL DRAWINGS SHOWING NEW WIRING

**GENERAL SHEET NOTES**

CONFIGURATION.

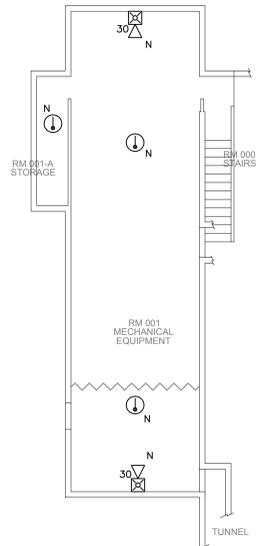
- BATTERY CAPACITY FOR THE FIRE ALARM PANEL AND REMOTE POWER SUPPLIES SHALL BE ADEQUATE TO OPERATE 15 MINUTES AFTER 24 HOURS PLUS 25% SPARE CAPACITY.
- RUN SPARE LOOPS IN SAME CONDUIT. DO NOT EXCEED 20% AREA FILL OF CONDUITS TO LEAVE ROOM FOR FUTURE EXPANSION.
- ALL WIRING SHALL BE RUN IN CONDUIT OR WIRE MOLD. EXISTING WIRING SHALL BE REMOVED OR INSTALLED IN CONDUIT. NEW CONDUIT SHALL BE MINIMUM 3/4" DIAMETER WITH INSULATED STEEL THROAT FITTINGS. CONDUIT SHALL BE CONCEALED WHERE POSSIBLE. SURFACE MOUNTING IS ACCEPTABLE IN GYM, MECHANICAL AREAS, AND DANCE LAB.
- REPLACE EXISTING DUCT DETECTORS OR PROVIDE NEW ADDRESSABLE DEVICES. INSTALL DUCT DETECTORS PER NFPA 72 REQUIREMENTS. DUCT SMOKE DETECTORS SHALL INITIATE A GENERAL BUILDING ALARM AND SHUT DOWN ALL AIR HANDLING EQUIPMENT.
- LOCATE SMOKE AND HEAT DETECTORS MINIMUM 3' FROM AIR SUPPLY AND RETURN LOUVERS. EXISTING DEVICE LOCATIONS SHALL NOT BE REUSED IF NOT MEETING THIS REQUIREMENT.

**GENERAL SHEET NOTES**

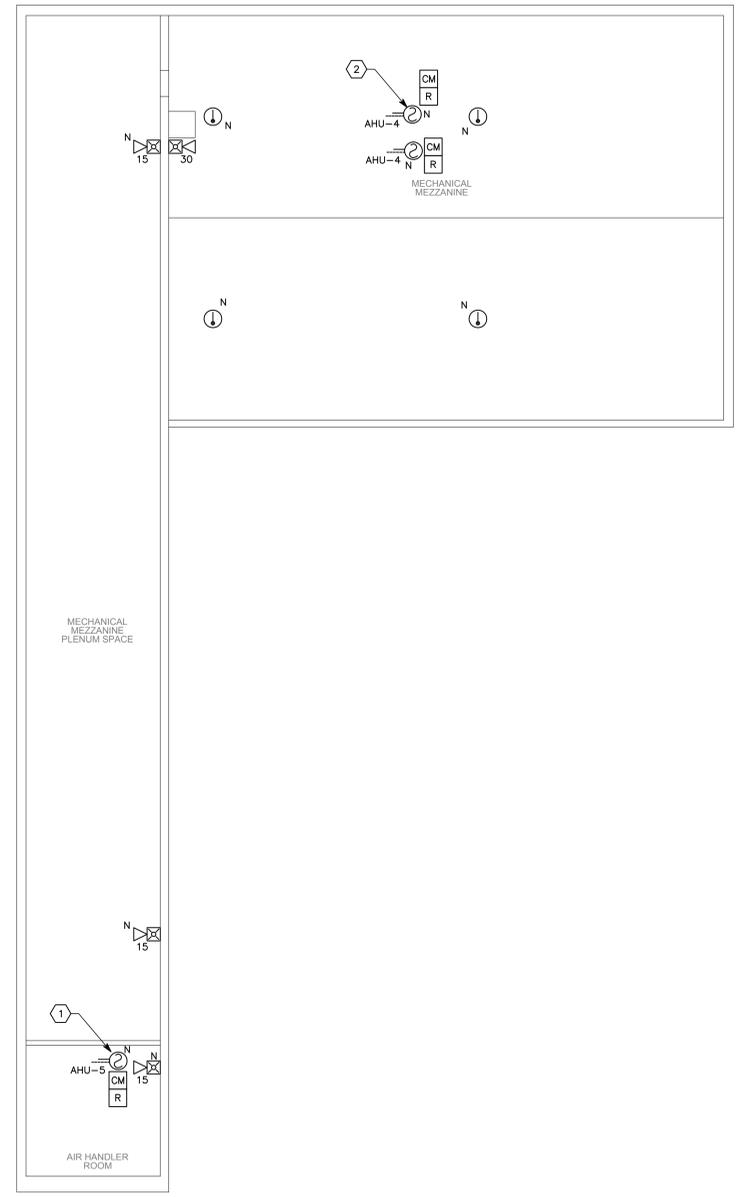
- PROVIDE SYNCHRONIZED STROBES THROUGHOUT FACILITY. PROVIDE SYNCHRONIZATION MODULES PER MANUFACTURER'S REQUIREMENTS. INCLUDE ADDITIONAL WIRING, IF REQUIRED.
- EXISTING MONITORING CAPABILITIES OF CALL CENTER IN HEAT PLANT SHALL BE MAINTAINED UNLESS A HIGHER LEVEL CAN BE ACHIEVED WITH NEW SYSTEM. TAMPER SWITCHES SHALL SEND A TROUBLE SIGNAL TO CALL CENTER REGARDLESS OF LOCAL PANEL SIGNAL.
- CONTRACTOR SHALL VERIFY ALL PULL STATIONS ARE AT CORRECT HEIGHT AND MODIFY IF NECESSARY.

**○SHEET KEYNOTES**

- MOUNT DUCT SMOKE DETECTOR ON SUPPLY DUCTWORK OF AHU-5 IN AIR HANDLER ROOM.
- MOUNT DUCT SMOKE DETECTOR(S) ON RETURN DUCTWORK OF AHU-4.



**(A1) MULTIPURPOSE BUILDING BASEMENT FIRE ALARM PLAN**  
SCALE: 1/8" = 1'-0"  
NORTH



**(A3) MULTIPURPOSE BUILDING MECHANICAL MEZZANINE FIRE ALARM PLAN**  
SCALE: 1/8" = 1'-0"  
NORTH

**ADDITIONAL NOTES**

- DEVICES WITH 'R' DESIGNATION ARE EXISTING DEVICES TO BE REPLACED IN PLACE.
- DEVICES WITH 'N' DESIGNATION ARE NEW DEVICES THAT WILL REQUIRE NEW WIRING, CONDUIT, ETC.
- ALL 'R' AND 'N' DESIGNATED DEVICES ARE AN APPROXIMATE COUNT AND SHALL BE FIELD VERIFIED BY CONTRACTORS PRIOR TO BIDDING.



**SOUTHERN UTAH UNIVERSITY VARIOUS BLDGS**  
STATE PROPERTY NO:  
**FIRE ALARM & FIRE SPRINKLER SYSTEM UPGRADES**

MARK	DATE	DESCRIPTION
1	2009-12-16	ADDENDUM #1

ISSUE:  
DATE:

DFCM PROJECT NO: 09114730  
PROJECT NO: 20090345  
DRAWN BY: TNB  
CHECKED BY: JDD  
DESIGNED BY: JDD  
RECORD DRAWING DATE:

SIGNATURE:  
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SHEET TITLE  
**MULTIPURPOSE BUILDING - BASEMENT & MECHANICAL MEZZANINE FIRE ALARM PLAN**

**MB-FA3**  
SHEET 10 OF 16

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**SHARWAN SMITH CENTER  
BASEMENT - FIRE ALARM PLAN**

SCALE: 1/8" = 1'-0"



**ADDITIONAL NOTES**

1. DEVICES WITH 'R' DESIGNATION ARE EXISTING DEVICES TO BE REPLACED IN PLACE.
2. DEVICES WITH 'N' DESIGNATION ARE NEW DEVICES THAT WILL REQUIRE NEW WIRING, CONDUIT, ETC.
3. ALL 'R' AND 'N' DESIGNATED DEVICES ARE AN APPROXIMATE COUNT AND SHALL BE FIELD VERIFIED BY CONTRACTORS PRIOR TO BIDDING.

**GENERAL SHEET NOTES**

1. SHARWAN SMITH CENTER: THIS PROJECT INCLUDES REPLACING THE EXISTING CONVENTIONAL FIRE ALARM SYSTEM IN THE OLD, EAST PORTION OF THE BUILDING WITH A NEW ADDRESSABLE SYSTEM, A NEW FIRE ALARM PANEL, AND OTHER CONTROL EQUIPMENT, INITIATION AND NOTIFICATION DEVICES, CONDUIT, WIRING, AND ALL OTHER ACCESSORIES OR EQUIPMENT NECESSARY FOR A FULLY FUNCTIONAL SYSTEM ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION SHALL BE INCLUDED. EXISTING WIRING AND CONDUIT MAY BE REUSED TO SUPPORT THE NEW SYSTEM AND EQUIPMENT WHERE POSSIBLE. NEW WIRING AND CONDUIT SHALL BE PROVIDED IN ALL OTHER INSTANCES. ADDITIONALLY, FIRE SPRINKLERS SHALL BE ADDED, REPLACED, AND/OR RELOCATED AS OUTLINED IN THE DRAWINGS AND SPECIFICATIONS.
2. CODE ANALYSIS:  
2006 INTERNATIONAL BUILDING CODE  
2006 INTERNATIONAL FIRE CODE  
2006 INTERNATIONAL MECHANICAL CODE  
2008 NFPA 70  
2007 NFPA 72  
2006 NFPA 101 CHAPTER 23 FOR EXISTING DETENTION AND CORRECTIONAL OCCUPANCIES  
AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS  
DFCM DESIGN REQUIREMENTS  
  
THIS BUILDING IS CLASSIFIED AS BUSINESS GROUP B.
3. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF THE EXISTING FIRE ALARM EQUIPMENT INCLUDING PANELS, CONDUIT, INITIATION DEVICES, NOTIFICATION APPLIANCES, WIRING, ETC. THAT IS NOT REUSED. ALL DEMO EQUIPMENT SHALL BE OFFERED TO UNIVERSITY FOR REUSE/SPARE PARTS PRIOR TO DISPOSAL. DAMAGED SURFACES WHERE EQUIPMENT IS REMOVED SHALL BE PATCHED AND PAINTED TO MATCH EXISTING CONDITIONS.
4. PLANS ARE BASED UPON 300 MONITOR AND CONTROL DEVICES PER ADDRESSABLE LOOP (150 DETECTORS, 150 MODULES). OTHER CONFIGURATIONS ARE ACCEPTABLE SUBJECT TO CONTRACTOR ALLOWING FOR INCREASED WIRING REQUIREMENTS AND SUBMITTAL DRAWINGS SHOWING NEW WIRING CONFIGURATION. MAXIMUM INITIAL DEVICES PER LOOP SHALL NOT EXCEED 75% MAXIMUM ALLOWABLE.
5. PLANS ARE BASED UPON THE WIRING SCHEDULE SHOWN. WHERE MANUFACTURER'S REQUIREMENTS EXCEED REQUIREMENTS SHOWN, INCLUDE ADDITIONAL ASSOCIATED COSTS AND SUBMITTAL DRAWINGS INDICATING NEW WIRING CONFIGURATION.
6. PLANS ARE BASED UPON 1.5 AMPS AT 24 VDC, NOT TO EXCEED 75% (1125 AMPS AVAILABLE). POWER SUPPLY CAPACITY PER NOTIFICATION DEVICE SCHEDULE SHOWN. INCLUDE ADDITIONAL ASSOCIATED COSTS FOR INCREASED WIRING AND POWER SUPPLY CAPACITY IF LOADS OF ACTUAL DEVICES PROVIDED EXCEED CIRCUIT CAPACITY, OR IF LOAD OUTPUT OF ACTUAL POWER SUPPLIES PROVIDED IS SIZED DIFFERENTLY. PROVIDE SUBMITTAL DRAWINGS SHOWING NEW WIRING CONFIGURATION.
7. PROVIDE POWER SUPPLY CAPACITY AS REQUIRED FOR DOOR HOLD OPENS SHOWN.
8. BATTERY CAPACITY FOR THE FIRE ALARM PANEL AND REMOTE POWER SUPPLIES SHALL BE ADEQUATE TO OPERATE 15 MINUTES AFTER 24 HOURS PLUS 25% SPARE CAPACITY.
9. RUN SPARE LOOPS IN SAME CONDUIT. DO NOT EXCEED 20% AREA FILL OF CONDUITS TO LEAVE ROOM FOR FUTURE EXPANSION.
10. ALL WIRING SHALL BE RUN IN CONDUIT OR WIRE MOLD. EXISTING WIRE SHALL BE REMOVED OR INSTALLED IN CONDUIT. NEW CONDUIT SHALL BE MINIMUM 3/4" DIAMETER WITH INSULATED STEEL THROAT FITTINGS.
11. REPLACE EXISTING DUCT DETECTORS OR PROVIDE NEW ADDRESSABLE DEVICES. INSTALL DUCT DETECTORS PER NFPA 72 REQUIREMENTS. DUCT SMOKE DETECTORS SHALL INITIATE A GENERAL BUILDING ALARM AND SHUT DOWN ALL AIR HANDLING EQUIPMENT.
12. LOCATE SMOKE AND HEAT DETECTORS MINIMUM 3' FROM AIR SUPPLY AND RETURN LOUVERS. EXISTING DEVICE LOCATIONS SHALL NOT BE REUSED IF NOT MEETING THIS REQUIREMENT.
13. PROVIDE SYNCHRONIZED STROBES THROUGHOUT FACILITY. PROVIDE SYNCHRONIZATION MODULES PER MANUFACTURER'S REQUIREMENTS. INCLUDE ADDITIONAL WIRING, IF REQUIRED.
14. EXISTING MONITORING CAPABILITIES OF CALL CENTER IN HEAT PLANT SHALL BE MAINTAINED UNLESS A HIGHER LEVEL CAN BE ACHIEVED WITH NEW SYSTEM. TAMPER SWITCHES SHALL SEND A TROUBLE SIGNAL TO CALL CENTER REGARDLESS OF LOCAL PANEL SIGNAL.

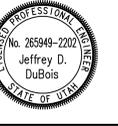
**SHEET KEYNOTES**

1. PROVIDE DUCT SMOKE DETECTOR WITH CONTROL MODULE AND RELAY FOR LOCAL AND GLOBAL FAN SHUTDOWN.
2. EXISTING DOOR HOLDERS TO REMAIN. MAINTAIN EXISTING POWER AND CONTROL. PROVIDE NEW INTERCONNECTION RELAYS AND POWER IF NECESSARY.
3. EXISTING DOOR HOLDERS (2 SHOWN THIS SHEET) BETWEEN FIRE ZONES TO REMAIN. MAINTAIN EXISTING POWER AND CONTROL. DOORS SHALL RELEASE UPON GENERAL ALARM IN EITHER ZONE.
4. SMOKE DETECTORS WITH 'U' DESIGNATION INDICATE DETECTORS IN HIGH CEILING AREA.



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**SOUTHERN UTAH  
UNIVERSITY  
VARIOUS BLDGS**

STATE PROPERTY NO.:

**FIRE ALARM &  
FIRE SPRINKLER  
SYSTEM  
UPGRADES**

MARK	DATE	DESCRIPTION
1	2009-12-16	ADDENDUM #1

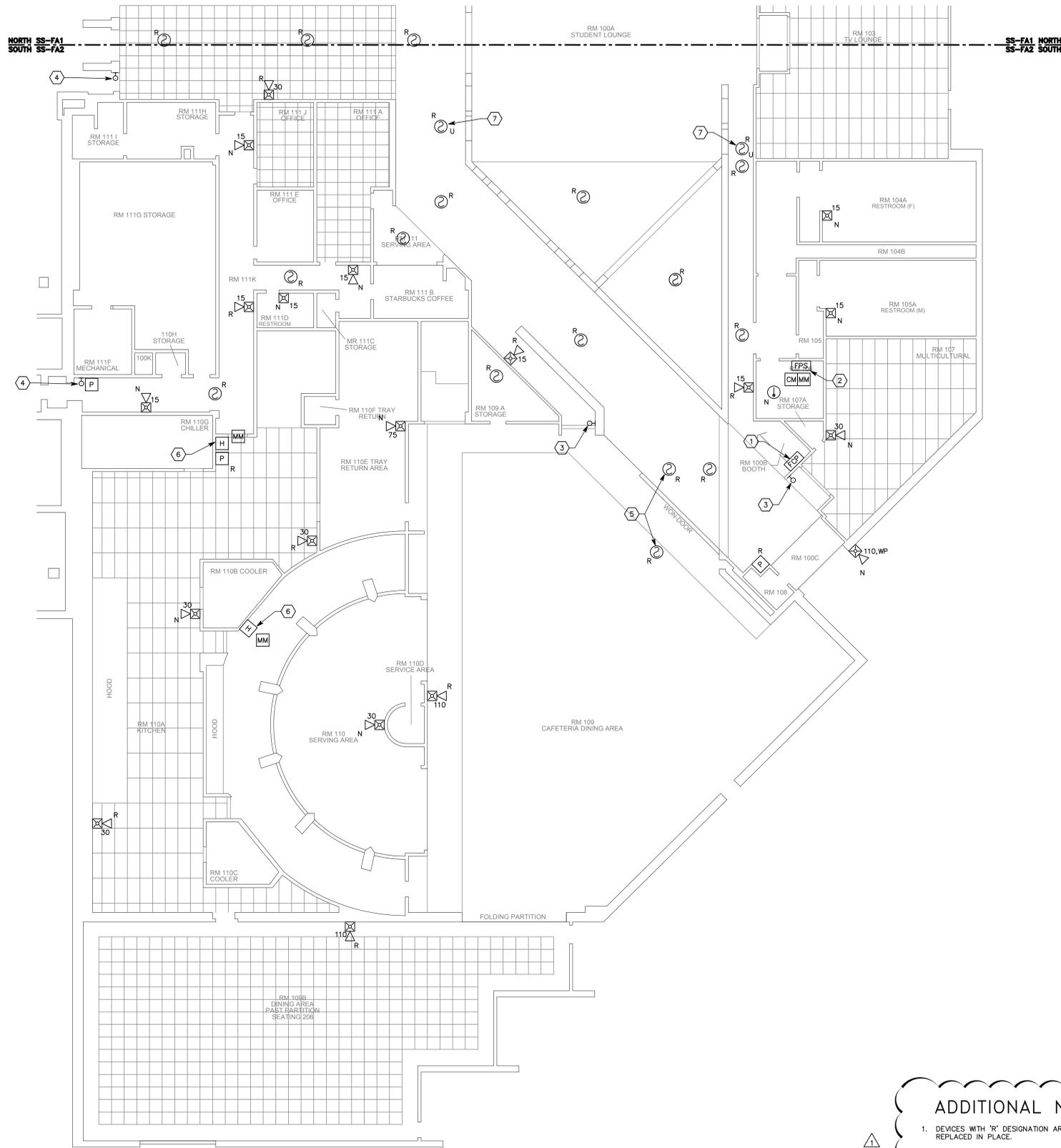
ISSUE:  
DATE:  
DFCM PROJECT NO.: 09114730  
PROJECT NO.: 20090345  
DRAWN BY: TNB  
CHECKED BY: JDD  
DESIGNED BY: JDD  
RECORD DRAWING DATE:  
SIGNATURE:  
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SHEET TITLE  
**SHARWAN SMITH  
CENTER NORTH - FIRE  
ALARM PLAN**

**SS-FA1**  
SHEET 12 OF 16

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File Name: P:\2009\20090345\Drawings\SS-FA2.dwg Last Plotted: 2009/12/16 @ 12:51 PM By: tnb



**ADDITIONAL NOTES**

1. DEVICES WITH 'R' DESIGNATION ARE EXISTING DEVICES TO BE REPLACED IN PLACE.
2. DEVICES WITH 'N' DESIGNATION ARE NEW DEVICES THAT WILL REQUIRE NEW WIRING, CONDUIT, ETC.
3. ALL 'R' AND 'N' DESIGNATED DEVICES ARE AN APPROXIMATE COUNT AND SHALL BE FIELD VERIFIED BY CONTRACTORS PRIOR TO BIDDING.

**GENERAL SHEET NOTES**

1. SHARWAN SMITH CENTER: THIS PROJECT INCLUDES REPLACING THE EXISTING CONVENTIONAL FIRE ALARM SYSTEM IN THE OLD, EAST PORTION OF THE BUILDING WITH A NEW ADDRESSABLE SYSTEM, A NEW FIRE ALARM PANEL, AND OTHER CONTROL EQUIPMENT, INITIATION AND NOTIFICATION DEVICES, CONDUIT, WIRING, AND ALL OTHER ACCESSORIES OR EQUIPMENT NECESSARY FOR A FULLY FUNCTIONAL SYSTEM ACCEPTABLE TO THE AUTHORITY HAVING JURISDICTION SHALL BE INCLUDED. EXISTING WIRING AND CONDUIT MAY BE REUSED TO SUPPORT THE NEW SYSTEM AND EQUIPMENT WHERE POSSIBLE. NEW WIRING AND CONDUIT SHALL BE PROVIDED IN ALL OTHER INSTANCES. ADDITIONALLY, FIRE SPRINKLERS SHALL BE ADDED, REPLACED, AND/OR RELOCATED AS OUTLINED IN THE DRAWINGS AND SPECIFICATIONS.
2. CODE ANALYSIS:  
 2006 INTERNATIONAL BUILDING CODE  
 2006 INTERNATIONAL FIRE CODE  
 2006 INTERNATIONAL MECHANICAL CODE  
 2008 NFPA 70  
 2007 NFPA 72  
 2006 NFPA 101 CHAPTER 23 FOR EXISTING DETENTION AND CORRECTIONAL OCCUPANCIES  
 AMERICANS WITH DISABILITIES ACT (ADA) REQUIREMENTS  
 DFCM DESIGN REQUIREMENTS  
  
 THIS BUILDING IS CLASSIFIED AS BUSINESS GROUP B.
3. THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF THE EXISTING FIRE ALARM EQUIPMENT INCLUDING PANELS, CONDUIT, INITIATION DEVICES, NOTIFICATION APPLIANCES, WIRING, ETC. THAT IS NOT REUSED. ALL DEMO EQUIPMENT SHALL BE OFFERED TO UNIVERSITY FOR REUSE/SPARE PARTS PRIOR TO DISPOSAL. DAMAGED SURFACES WHERE EQUIPMENT IS REMOVED SHALL BE PATCHED AND PAINTED TO MATCH EXISTING CONDITIONS.
4. PLANS ARE BASED UPON 300 MONITOR AND CONTROL DEVICES PER ADDRESSABLE LOOP (150 DETECTORS, 150 MODULES). OTHER CONFIGURATIONS ARE ACCEPTABLE SUBJECT TO CONTRACTOR ALLOWING FOR INCREASED WIRING REQUIREMENTS AND SUBMITTAL DRAWINGS SHOWING NEW WIRING CONFIGURATION. MAXIMUM INITIAL DEVICES PER LOOP SHALL NOT EXCEED 75% MAXIMUM ALLOWABLE.
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6. PLANS ARE BASED UPON 1.5 AMPS AT 24 VDC, NOT TO EXCEED 75% (1,125 AMPS AVAILABLE), POWER SUPPLY CAPACITY PER NOTIFICATION DEVICE SCHEDULE SHOWN. INCLUDE ADDITIONAL ASSOCIATED COSTS FOR INCREASED WIRING AND POWER SUPPLY CAPACITY IF LOADS OF ACTUAL DEVICES PROVIDED EXCEED CIRCUIT CAPACITY, OR IF LOAD OUTPUT OF ACTUAL POWER SUPPLIES PROVIDED IS SIZED DIFFERENTLY. PROVIDE SUBMITTAL DRAWINGS SHOWING NEW WIRING CONFIGURATION.
7. PROVIDE POWER SUPPLY CAPACITY AS REQUIRED FOR DOOR HOLD OPENS SHOWN.
8. BATTERY CAPACITY FOR THE FIRE ALARM PANEL AND REMOTE POWER SUPPLIES SHALL BE ADEQUATE TO OPERATE 15 MINUTES AFTER 24 HOURS PLUS 25% SPARE CAPACITY.
9. RUN SPARE LOOPS IN SAME CONDUIT. DO NOT EXCEED 20% AREA FILL OF CONDUITS TO LEAVE ROOM FOR FUTURE EXPANSION.
10. ALL WIRING SHALL BE RUN IN CONDUIT OR WIRE MOLD. EXISTING WIRE SHALL BE REMOVED OR INSTALLED IN CONDUIT. NEW CONDUIT SHALL BE MINIMUM 3/4" DIAMETER WITH INSULATED STEEL THROAT FITTINGS.
11. REPLACE EXISTING DUCT DETECTORS OR PROVIDE NEW ADDRESSABLE DEVICES. INSTALL DUCT DETECTORS PER NFPA 72 REQUIREMENTS. DUCT SMOKE DETECTORS SHALL INITIATE A GENERAL BUILDING ALARM AND SHUT DOWN ALL AIR HANDLING EQUIPMENT.
12. LOCATE SMOKE AND HEAT DETECTORS MINIMUM 3' FROM AIR SUPPLY AND RETURN LOUVERS. EXISTING DEVICE LOCATIONS SHALL NOT BE REUSED IF NOT MEETING THIS REQUIREMENT.
13. PROVIDE SYNCHRONIZED STROBES THROUGHOUT FACILITY. PROVIDE SYNCHRONIZATION MODULES PER MANUFACTURER'S REQUIREMENTS. INCLUDE ADDITIONAL WIRING, IF REQUIRED.
14. EXISTING MONITORING CAPABILITIES OF CALL CENTER IN HEAT PLANT SHALL BE MAINTAINED UNLESS A HIGHER LEVEL CAN BE ACHIEVED WITH NEW SYSTEM. TAMPER SWITCHES SHALL SEND A TROUBLE SIGNAL TO CALL CENTER REGARDLESS OF LOCAL PANEL SIGNAL.

**SHEET KEYNOTES**

1. NEW FIRE ALARM PANEL TO REPLACE EXISTING PANEL IN SAME LOCATION.
2. PROVIDE REMOTE POWER SUPPLY FOR ADDITIONAL NAC CIRCUITS AND CONTROL AND MONITORING BY FPC.
3. EXISTING DOOR HOLDERS TO REMAIN. MAINTAIN EXISTING POWER AND CONTROL. PROVIDE NEW INTERCONNECTION RELAYS AND POWER IF NECESSARY.
4. EXISTING DOOR HOLDERS (2 SHOWN THIS SHEET) BETWEEN FIRE ZONES TO REMAIN. MAINTAIN EXISTING POWER AND CONTROL. DOORS BETWEEN FIRE ZONES SHALL RELEASE UPON GENERAL ALARM IN EITHER ZONE.
5. SMOKE DETECTORS WITH RELAY FOR WON-DOOR CLOSURE. MAINTAIN PROGRAMMING AND FUNCTION AS EXISTING.
6. MONITOR EXISTING COOKING HOOD SUPPRESSION SYSTEM.
7. SMOKE DETECTORS WITH 'U' DESIGNATION INDICATE DETECTORS IN HIGH CEILING AREA.

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**SOUTHERN UTAH UNIVERSITY VARIOUS BLDGS**  
 STATE PROPERTY NO:  
**FIRE ALARM & FIRE SPRINKLER SYSTEM UPGRADES**

5		
4		
3		
2		
1	2009-12-16	ADDENDUM #1
MARK	DATE	DESCRIPTION
		ISSUE:
		DATE:
		DFCM PROJECT NO: 09114730
		PROJECT NO: 20090345
		DRAWN BY: TNB
		CHECKED BY: JDD
		DESIGNED BY: JDD
		RECORD DRAWING DATE:
		SIGNATURE:
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		SHEET TITLE
		SHARWAN SMITH CENTER SOUTH - FIRE ALARM PLAN
		<b>SS-FA2</b>
		SHEET 13 OF 16

**(A1) SHARWAN SMITH CENTER (SOUTH) - FIRE ALARM PLAN**  
 SCALE: 1/8" = 1'-0"

