



State of Utah

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Lieutenant Governor

Department of Administrative Services

KIMBERLY K. HOOD  
Executive Director

Division of Facilities Construction and Management

F. KEITH STEPAN  
Director

## ADDENDUM #1

Date: April 27, 2007

To: Contractors

From: Rick James, Project Manager, DFCM

Reference: Mechanical Remodel - Heber Wells  
DFCM – Salt Lake City, Utah

Subject: **Addendum No. 1**

Pages	Addendum	1	page
	<u>Spectrum Engineering Addendum</u>	<u>8</u>	<u>pages</u>
	<b>Total</b>	<b>9</b>	<b>pages</b>

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**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.**

- 1.1 **SCHEDULE CHANGES** – There are no changes to the Project Schedule.
- 1.2 **GENERAL** – Spectrum Engineers Drawings

**End of Addendum #1**

## ADDENDUM

Heber Wells Cooling Replacement – 2<sup>nd</sup> bid  
Addendum #1

Thursday, April 26, 2007

### ***MECHANICAL – DIV 15***

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#### ***DRAWINGS***

1. A note has been added to drawing MH-101 to call for a new plenum wall between the supply fans and the chiller.
2. The cooling tower schedule has been updated to call for VFD drives. Provide separate VFD for each cooling tower fan motor.
3. A note has been added to drawing MH-101 to call for a duct static pressure sensor.
4. VFDs have been shown on drawing MH-101.

#### ***PRIOR APPROVALS***

Approval of equipment from catalog information indicated brand name and general characteristics are acceptable to the Engineer, but does not relieve the Contractor of the responsibility of providing equipment and accessories as specified unless specific mention of departments from specifications was made in the submittal and acknowledged in writing by the Engineer. Quantities and dimensions are not checked. We are retaining one set of submittal data for our files.

<u>SECTION</u>	<u>ITEM</u>	<u>MANUFACTURER</u>	<u>COMMENT</u>
15761	Coils	Rae Corp	Approved
15181	Auto Air Vents	Watson McDaniel	Approved
15181	Strainers	Titan FCI	Approved
15181	Flex Connectors	API	Approved
15269	Frequency Controllers	Danfoss Graham	Approved
15640	Cooling Towers	RSD	Approved
15761	Air Coils	Precision Coils	Approved
15820	Dampers	Leader	Approved
15836	Fans	PennBarry	Approved

### ***ELECTRICAL – DIV 16***

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#### ***GENERAL ITEMS***

#### ***SPECIFICATIONS***

1. No changes.

#### ***DRAWINGS***

**Sheet EE-001:**

## **ADDENDUM**

Heber Wells Cooling Replacement – 2<sup>nd</sup> bid  
Addendum #1

Thursday, April 26, 2007

1. Equipment Schedule: Refer to attached revised equipment schedule for CT-1A and CT-1B.

### **Sheet EP-102:**

1. Circuit cooling tower fan motors (CT-1A and CT-1B) through variable frequency controllers. Controllers will be located adjacent to supply fan speed controllers in fan room. Refer to attached revised equipment schedule and one-line diagram.

### **Sheet EP-602:**

1. Refer to attached revised partial one-line diagram.

**END OF ADDENDUM**

# ⬡ SHEET KEYNOTES

20. REMOVE EXISTING WALL.

21. PROVIDE NEW GALVANIZED PLENUM WALL AND DOOR. PROVIDE 2" DOUBLEWALL CONSTRUCTION.



# GENERAL SHEET NOTE

1. PROVIDE DUCT STATIC PRESSURE SENSOR APPROXIMATELY 2/3 DOWN SUPPLY DUCTWORK. COORDINATE EXACT LOCATION WITH OWNER.



**SPECTRUM ENGINEERS**

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REFERENCE: MH-101

ISSUE: ADDENDUM 1

DATE: 2006-04-26

PROJ NO: 20060295

DRAWN BY: ARA

CHECKED BY: JTJ

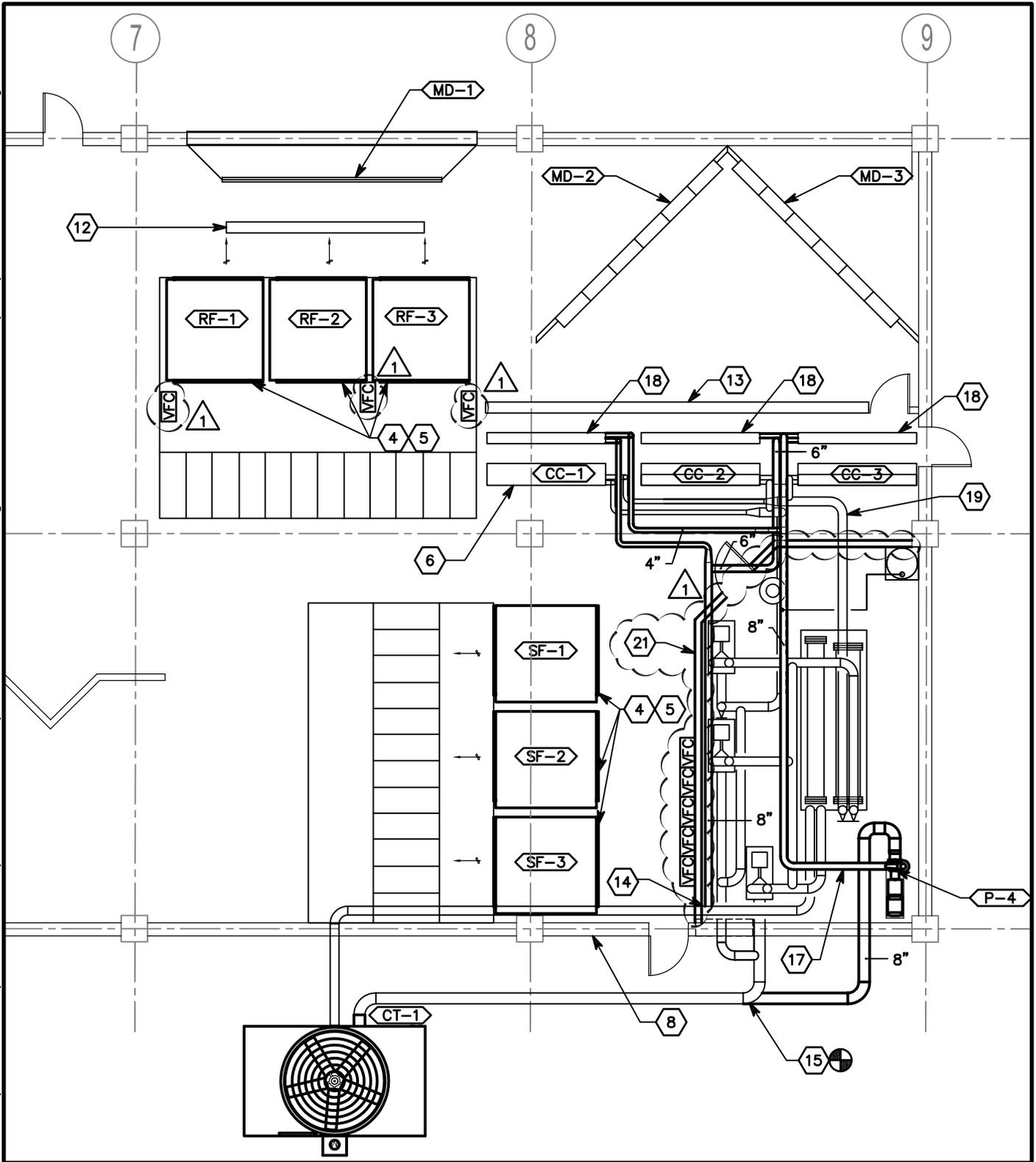
PROJECT  
**HEBER M. WELLS BUILDING  
 COOLING REPLACEMENT**

SHEET TITLE  
**PENTHOUSE MECHANICAL  
 AND DEMOLITION HVAC PLANS**

SCALE  
 NO SCALE

**MH-101-R1-1**

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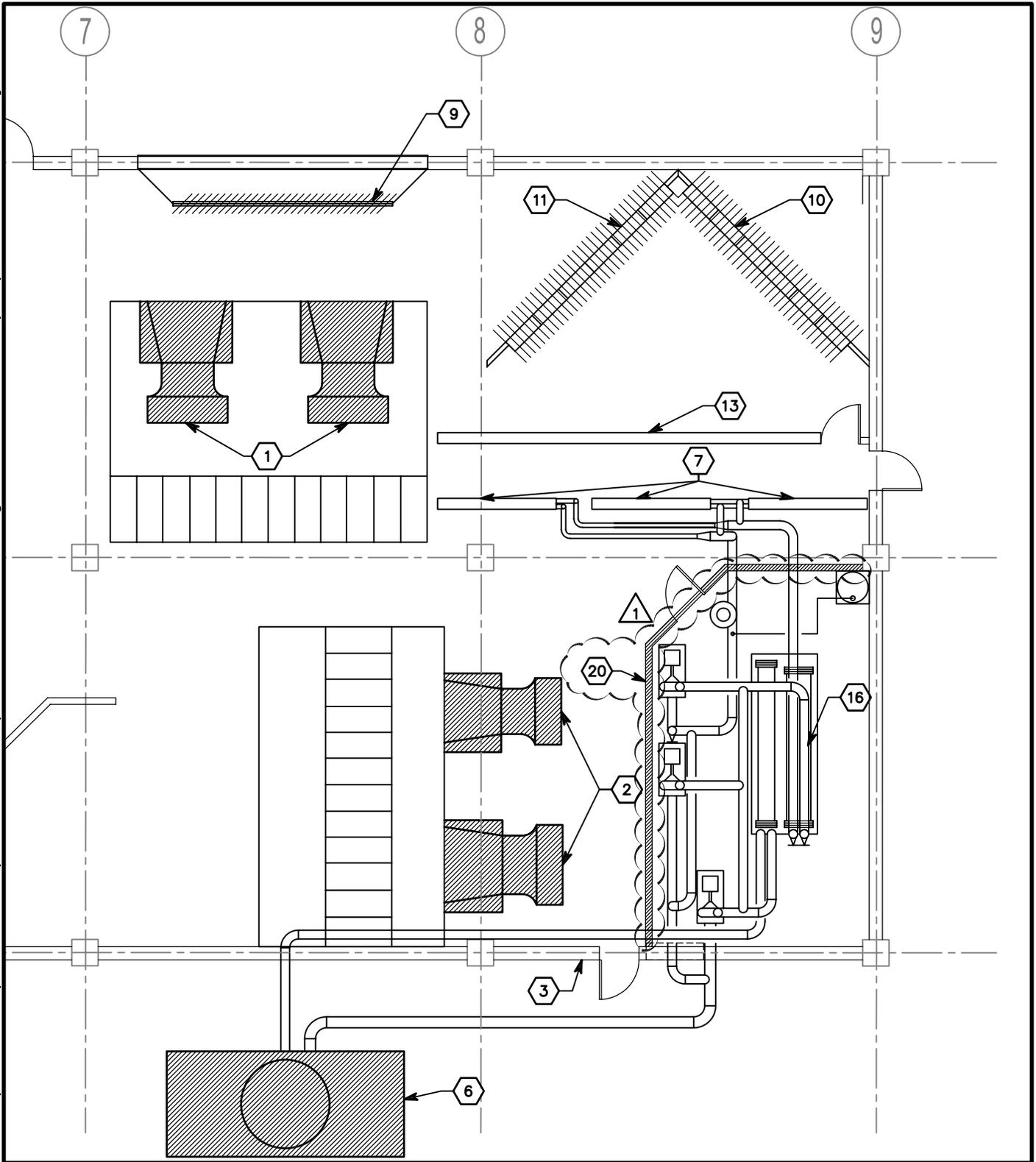
PROJECT  
**HEBER M. WELLS BUILDING  
 COOLING REPLACEMENT**

SHEET TITLE  
**PENTHOUSE  
 MECHANICAL HVAC PLAN**

SCALE  
 3/32"=1'-0"

**MH-101-R1-2**

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PROJECT  
**HEBER M. WELLS BUILDING  
COOLING REPLACEMENT**

SHEET TITLE  
**PENTHOUSE MECHANICAL  
DEMOLITION HVAC PLAN**

SCALE  
3/32"=1'-0"

**MH-101-R1-3**

# EQUI

MARK	QTY	ITEM DESCRIPTION	LOAD DATA						WIRE AND CONDUIT SIZE	OVERCURRENT PROTECTION				
			HP	kW	MCA	FLA	VOLT	PH		Hz	FURN BY	DEVICE	LOCATION	FURN BY
CT-1A		COOLING TOWER	15			21	480	3	60	3 #8, #10 GR 1" CND	E	40A/3P CB	MCC	E
CT-1B		COOLING TOWER	15			21	480	3	60	3 #8, #10 GR 1" CND	E	40A/3P CB	MCC	E
CT-1H	1	COOLING TOWER SUMP HEATER		6		7.2	480	3	60	3 #12, #12 GR 0.75" CND	E	20A/3P CB	MCC	E
P-4		ECONOMIZER PUMP	25			34	480	3	60	3 #6, #10 GR 1" CND	E	60A/3P CB	MCC	Q
RF-1		RETURN FAN	30			40	480	3	60	3 #4, #8 GR 1.25" CND	E	70A/3P CB	MCC	Q
RF-2		RETURN FAN	30			40	480	3	60	3 #4, #8 GR 1.25" CND	E	70A/3P CB	MCC	Q
RF-3		RETURN FAN	30			40	480	3	60	3 #4, #8 GR 1.25" CND	E	70A/3P CB	MCC	Q
SF-1		SUPPLY FAN	100			124	480	3	60	3 #4/0, #4 GR 2.5" CND	E	225A/3P CB	MCC	Q
SF-2		SUPPLY FAN	100			124	480	3	60	3 #4/0, #4 GR 2.5" CND	E	225A/3P CB	MCC	Q
SF-3		SUPPLY FAN	100			124	480	3	60	3 #4/0, #4 GR 2.5" CND	E	225A/3P CB	MCC	Q

## EQUIPMENT SCHEDULE

DISCONNECT			STARTER DATA												
DEVICE	LOCATION	FURN BY	DEVICE	LOCATION	SIZE	SPEED	CTRL VOLT	SELECTOR SWITCH	PUSH BUTTON	PILOT LAMP	NORMALLY OPEN CONTACTS	NORMALLY CLOSED CONTACTS	PHASE FAILURE RELAY	SCHEMATIC REFERENCE	REMARKS
30A/3P NO FUSE	ADJ. TO EQUIP.	Q	VFC	FAN ROOM											
30A/3P NO FUSE	ADJ. TO EQUIP.	Q	VFC	FAN ROOM											
30A/3P NO FUSE	ADJ. TO EQUIP.	E	FVNR	MCC				HOA		R,G	2	2	NO	1	
VFC	ADJ. TO EQUIP.	Q	VFC	ADJ. TO EQUIP.											
VFC	ADJ. TO EQUIP.	Q	VFC	ADJ. TO EQUIP.											
VFC	ADJ. TO EQUIP.	Q	VFC	ADJ. TO EQUIP.											
VFC	ADJ. TO EQUIP.	Q	VFC	ADJ. TO EQUIP.											
VFC	ADJ. TO EQUIP.	Q	VFC	ADJ. TO EQUIP.											
VFC	ADJ. TO EQUIP.	Q	VFC	ADJ. TO EQUIP.											
VFC	ADJ. TO EQUIP.	Q	VFC	ADJ. TO EQUIP.											



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REFERENCE: EE-001

ISSUE: ADDENDUM 1

DATE: 2007-4-26

PROJ NO: 20060295

DRAWN BY: MAP

CHECKED BY: RBK

PROJECT  
**HEBER M. WELL COOLING REPLACEMENT**

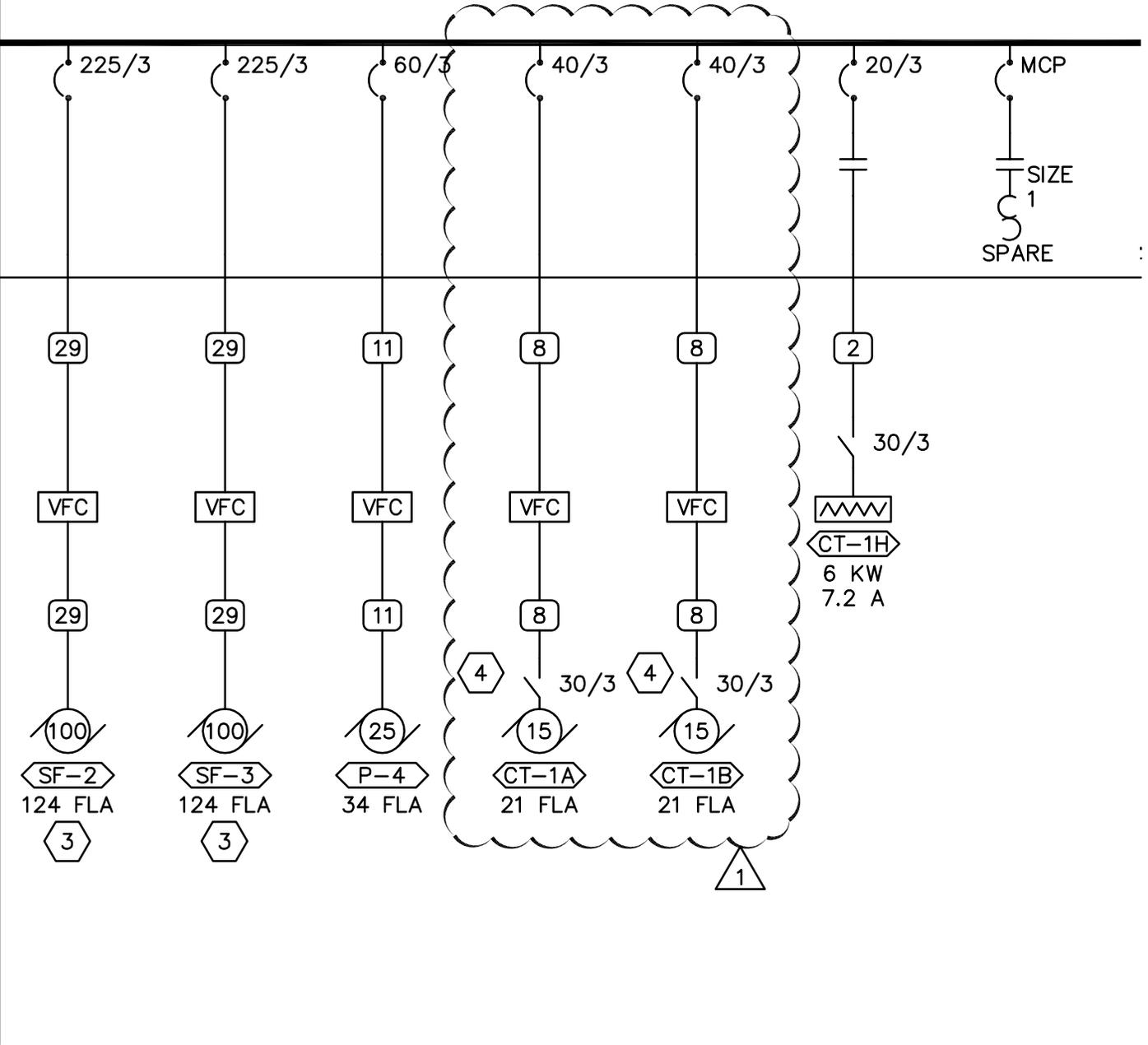
SHEET TITLE  
**EQUIPMENT SCHEDULE**

SCALE  
NTS

**EE-001-R1-1**

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4W, 800A,



 <p><b>SPECTRUM ENGINEERS</b>          175 South Main Street, Suite 300          Salt Lake City, Utah 84111          801-328-5151 800-678-7077          FAX 801-328-5155          www.spectrum-engineers.com          © 2006 Spectrum Engineers, Inc.</p>	PROJECT	HEBER M. WELL COOLING REPLACEMENT	
	REFERENCE: EP-602	SHEET TITLE	
	ISSUE: ADDENDUM 1	POWER ONE-LINE DIAGRAM	
	DATE: 2007-4-26	SCALE	EP-602-R1-1
PROJ NO: 20060295	DRAWN BY: MAP	1/8"=1'-0"	
CHECKED BY: RBK			

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P: \2006\20060295\5Archive\5CONTRAC\95EP-602-R1-2.dwg Last Plotted: 04/26/2007 @ 16:11 By: map

# GENERAL SHEET NOTES

1. PROVIDE NEMA 3R ENCLOSURES FOR EQUIPMENT LOCATED OUTDOORS. REFER TO PLANS FOR EQUIPMENT LOCATIONS.
2. REFER TO PLANS FOR CONSTRAINTS ON PHYSICAL DIMENSIONS AND CLEARANCE REQUIREMENTS OF EQUIPMENT. PROVIDE EQUIPMENT DIMENSIONS THAT FALL WITHIN THE CONSTRAINTS OF EACH SPECIFIC LOCATION.
3. ALL EQUIPMENT SHALL BE CONSTRUCTED AND BRACED FOR THE SEISMIC CONDITIONS OF THE PROJECT. REFER TO SPECIFICATIONS SECTION 16071 FOR REQUIREMENTS.
4. FIELD VERIFY SIZE OF ALL EXISTING MOTORS PRIOR ORDERING MOTOR CONTROL CENTER.
5. ALL VFC'S ARE FURNISHED BY DIVISION 15 AND INSTALLED AND WIRED BY DIVISION 16.

## ◇ SHEET KEYNOTES

1. EXISTING LOADS TO BE RECONNECTED. EXTEND CIRCUITS AS REQUIRED. RECONNECT ALL CONTROL WIRING AND TEST FOR COMPLETE OPERATION.
2. PROVIDE NEW CIRCUIT BREAKER IN EXISTING SWITCHBOARD, COMPATIBLE WITH ORIGINAL SWITCHBOARD AND RATED AT 65,000 AIC.
3. RECONNECT EXISTING FIRE ALARM FAN SHUTDOWN TO NEW FAN SPEED CONTROLLERS.
4. PROVIDE SLOW-MAKE, QUICK-BREAK AUXILIARY CONTACT IN DISCONNECT AND INTERLOCK WITH VFC.



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PROJECT		<b>HEBER M. WELL COOLING REPLACEMENT</b>	
REFERENCE:	EP-602	SHEET TITLE	
ISSUE:	ADDENDUM 1	<b>POWER ONE-LINE DIAGRAM</b>	
DATE:	2007-4-26	SCALE	<b>EP-602-R1-2</b>
PROJ NO:	20060295	1/8"=1'-0"	
DRAWN BY:	MAP		
CHECKED BY:	RBK		