



**DESIGN AND CONSTRUCTION GROUP
THE GOVERNOR NELSON A. ROCKEFELLER
EMPIRE STATE PLAZA
ALBANY, NY 12242**

ADDENDUM NO. 1 TO PROJECT 45133

**CONSTRUCTION WORK, HVAC WORK, PLUMBING WORK AND ELECTRICAL WORK
REMOVE AND REPLACE COOLING TOWERS
HUGHES STATE OFFICE BUILDING
333 EAST WASHINGTON STREET
SYRACUSE, N.Y**

September 11, 2015

NOTE: This Addendum forms a part of the Contract Documents. Insert it in the Project Manual. Acknowledge receipt of this Addendum in the space provided on the Bid Form.

HVAC WORK DRAWINGS

1. Addendum Drawing:
 - a. Drawing No. M-601, noted "ADDENDUM DRAWING 9/11/2015" accompanies this Addendum and forms part of the Contract Documents

ELECTRIC WORK DRAWINGS

2. Revised Drawing:
 - a. Drawing No. E-601, noted "REVISED DRAWING 9/11/2015" accompanies this Addendum and supersedes the same numbered originally issued drawings.

SPECIFICATION GROUP

ELECTRICAL SPECIFICATIONS

3. Page 230221-1, Article 3.02: Delete this Article in its entirety

END OF ADDENDUM

Margaret F. Larkin
Executive Director
Design and Construction



KEYNOTES:

- VFD FURNISHED BY MECHANICAL CONTRACTOR. INSTALLED BY ELECTRICAL CONTRACTOR ON STEEL SLOTTED SUPPORT SYSTEM.
- COOLING TOWER FAN DISCONNECT WITH AUXILIARY CONTACTS FOR CIRCUITING TO VFD.
- VIBRATION SWITCH MOUNTED AT FAN AND CIRCUITED TO VFD DRIVE TO SHUT DOWN DRIVE IF ACTIVATED.
- EXISTING MCC BUCKETS. REFER TO MCC REMOVALS ELEVATION #3 AND MCC NEW WORK ELEVATION #4 ON DRAWING E-101 FOR DETAILS.
- SEE DETAIL #2 / E-601 FOR ADDITIONAL WIRING FOR IMMERSION HEATERS.
- SEE DETAIL ON M-601 FOR WATER LEVEL CONTROLLER COMPONENTS.

FEEDER / BRANCH CIRCUIT SCHEDULE

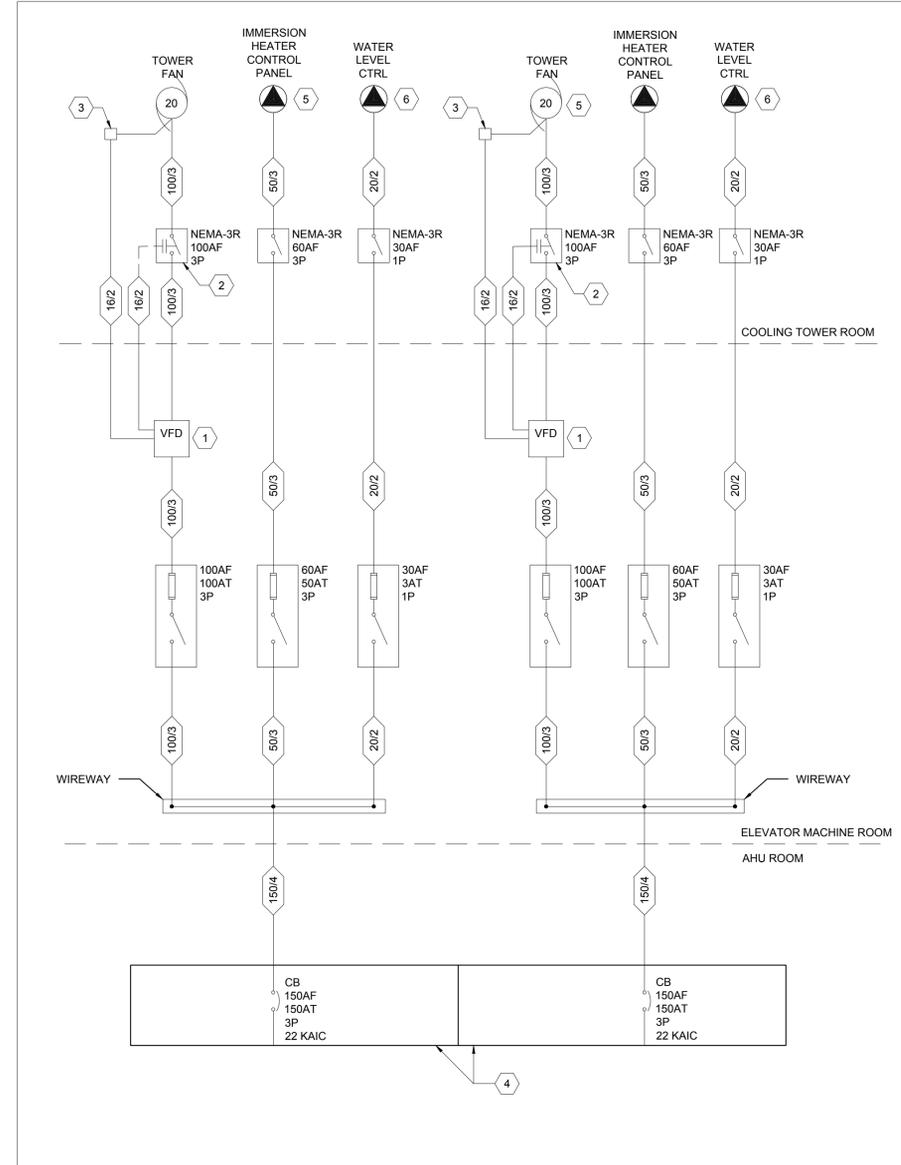
WIRE DESIGNATION (AMP / # WIRES)	CONDUIT SIZE	WIRE SIZE (AWG IF NOT OTHERWISE NOTED)	NEUTRAL WIRE SIZE	GROUND WIRE SIZE	REMARKS
16/2	3/4"	(1) #16 TSP	-	-	
20/2	3/4"	(2) #12	-	(1) #12	NOTE 1
50/3	1"	(3) #6	-	(1) #10	
100/3	1-1/2"	(3) #1	-	(1) #8	
150/4	2"	(3) #1/0	(1) #1/0	(1) #6	

GENERAL NOTES:

- FOR ALL FEEDERS WITH MULTIPLE CONDUITS. PROVIDE THE INDICATED PHASE, NEUTRAL AND GROUND WIRES IN EACH CONDUIT.
- FOR ALL SPARE CONDUITS PROVIDE PULL WIRE.
- NOT ALL FEEDERS ARE NECESSARILY USED. REFER TO ONE LINE DIAGRAM, MOTOR AND EQUIPMENT SCHEDULE, PLANS FOR ACTUAL FEEDERS REQUIRED.
- IF NOT OTHERWISE NOTED USE 3/4" CONDUIT WITH (2)#12, (1)#12 G. FOR 2-WIRE FEEDER/BRANCH CIRCUIT AND 3/4" CONDUIT WITH (3)#12, (1)#12 G. FOR 3-WIRE FEEDER/BRANCH CIRCUIT.

NOTES:

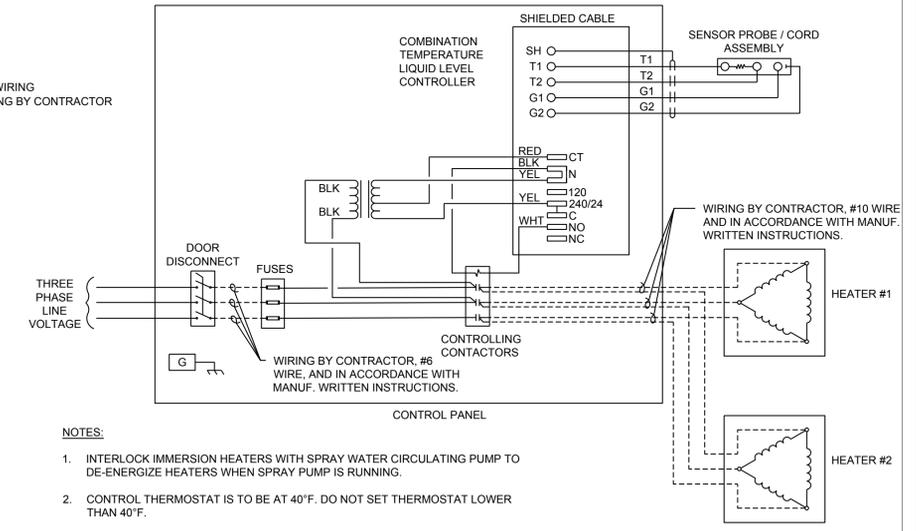
- FEEDER SHOWN CONSISTS OF TWO PHASE WIRES. THE SAME DESIGNATION IS ALSO APPLICABLE FOR FEEDER WITH ONE PHASE WIRE AND A NEUTRAL WIRE.
- FOR ALL FEEDERS UPSIZED DUE TO VOLTAGE DROP PROVIDE TERMINAL BLOCKS OR OTHER APPROVED MEANS TO TERMINATE WIRES.
- DO NOT PROVIDE GROUNDING WIRE WITH SERVICE CONDUCTORS.



1
E-601 **ONE-LINE DIAGRAM** NTS

LEGEND

- FACTORY WIRING
- - - - - FIELD WIRING BY CONTRACTOR



NOTES:

- INTERLOCK IMMERSION HEATERS WITH SPRAY WATER CIRCULATING PUMP TO DE-ENERGIZE HEATERS WHEN SPRAY PUMP IS RUNNING.
- CONTROL THERMOSTAT IS TO BE AT 40°F. DO NOT SET THERMOSTAT LOWER THAN 40°F.
- FUSE PROTECTION AND POWER SUPPLY WIRING ARE TO BE SIZED TO MATCH HEATER REQUIREMENTS. WIRING MUST COMPLY WITH APPLICABLE CODES AND ORDINANCES.

2
E-601 **IMMERSION HEATER WIRING DIAGRAM** NTS

WARNING:
THE ALTERATION OF THIS MATERIAL IN ANY WAY, UNLESS DONE UNDER THE DIRECTION OF A COMPARABLE PROFESSIONAL, I.E. ARCHITECT FOR AN ARCHITECT, ENGINEER FOR AN ENGINEER OR LANDSCAPE ARCHITECT FOR A LANDSCAPE ARCHITECT, IS A VIOLATION OF THE NEW YORK STATE EDUCATION LAW AND/OR REGULATIONS AND IS A CLASS "A" MISDEMEANOR.



CONTRACT: **ELECTRICAL**
TITLE: REMOVE/REPLACE COOLING TOWER
LOCATION: SENATOR JOHN HUGHES OFFICE BUILDING SYRACUSE, NEW YORK
CLIENT: NEW YORK STATE OFFICE OF GENERAL SERVICES

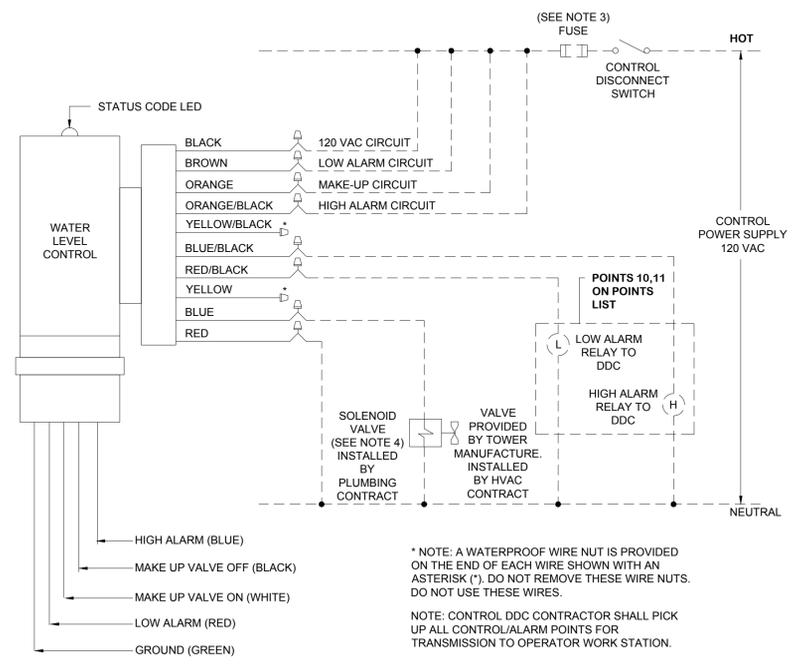
ADDENDUM #1

MARK	DATE	DESCRIPTION
	09/11/2015	ADDENDUM DRAWING
	07/20/2015	BID DOCUMENTS

PROJECT NUMBER: **45133** - E
DESIGNED BY: EGR
DRAWN BY: TLC
FIELD CHECK:
APPROVED:
SHEET TITLE: **ELECTRICAL ONE-LINE DIAGRAM & WIRING DIAGRAMS**
DRAWING NUMBER: **E-601**
SHEET 24 of 24



EWLC WIRING HIGH AND LOW ALARM



NOTES:

1. WIRING AND COMPONENTS INDICATED BY DASHED LINES ARE TO BE SUPPLIED BY ELECTRICAL CONTRACTOR. ALL WIRING MUST COMPLY WITH APPLICABLE CODES AND ORDINANCES.
2. THE WATER LEVEL CONTROL BOARD IS WIRED IN THE INVERSE MODE SO THAT THE SOLENOID MAKE-UP VALVE WILL CLOSE IF THERE IS A LOSS OF POWER TO THE CONTROL BOARD. WHEN THE WATER LEVEL RISES TO THE BOTTOM OF THE MAKE-UP VALVE OFF PROBE AND MAINTAINS CONTACT FOR AT LEAST 6 SECONDS, THE CONTROL DE-ENERGIZES THE VALVE. THE VALVE REMAINS DE-ENERGIZED UNTIL THE WATER LEVEL RECEDES BELOW THE BOTTOM OF THE MAKE-UP VALVE ON PROBE AND REMAINS AT THAT LEVEL FOR AT LEAST 6 SECONDS. THE CONTROL THEN ENERGIZES THE VALVE.
3. ANY INCOMING POWER SOURCE MUST HAVE A 3A FUSE FOR COMPONENT PROTECTION. USING A FUSE OVER 3A WILL VOID BAC WARRANTY.
4. THE SOLENOID ACTUATED MAKE-UP VALVE IS RATED AT 6.1 WATTS, 16 VA HOLDING, 30 VA INRUSH.
5. THE NORMALLY CLOSED SOLENOID VALVE HAS A SLOW CLOSING FEATURE WHICH MINIMIZES WATER HAMMER AND IS DESIGNED TO OPERATE AT MAKE-UP WATER LINE PRESSURES OF 10 TO 125 PSIG. TO FURTHER MINIMIZE THE POTENTIAL FOR WATER HAMMER, MAKE-UP WATER LINE PRESSURES AT THE HIGHER END OF THE RANGE SHOULD BE AVOIDED, AND MAKE-UP PIPING SHOULD BE WELL SUPPORTED.
6. CONTROL THERMOSTAT IS TO BE SET FOR 40°F. DO NOT SET THERMOSTAT LOWER THAN 40°F.

LED STATUS CODES:

1. LED ON STEADY: INDICATES NORMAL OPERATION
2. STEADY ONE SECOND FLASHING: DIRTY PROBES - OVERRIDES ALL OTHER STATUS CODES
3. TWO FLASHES AND OFF FOR 5 SECONDS: MAK-UP ONE FOR MORE THAN 1 HOUR
4. THREE FLASHES AND OFF FOR 5 SECONDS: SHORTED OR HIGH CONDUCTIVITY WATER
5. FOUR FLASHES AND OFF FOR 5 SECONDS: SHORT FILL CYCLE - WHITE PROBE IS DIRTY OR NON-FUNCTIONAL
6. LED DOES NOT COME ON AFTER POWER UP OR RESETTING POWER: INDICATES UNIT INOPERATIVE

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CONTRACT: HVAC

TITLE: REMOVE/REPLACE COOLING TOWER

LOCATION: SENATOR JOHN HUGHES OFFICE BUILDING SYRACUSE, NEW YORK

CLIENT: NEW YORK STATE OFFICE OF GENERAL SERVICES

ADDENDUM #1

MARK	DATE	DESCRIPTION
	09/11/2015	ADDENDUM DRAWING
	07/20/2015	BID DOCUMENTS

PROJECT NUMBER: 45133 - H

DESIGNED BY: ACS

DRAWN BY: KA

FIELD CHECK:

APPROVED:

SHEET TITLE: WATER LEVEL CONTROLLER

DRAWING NUMBER: M-601

SHEET OF

