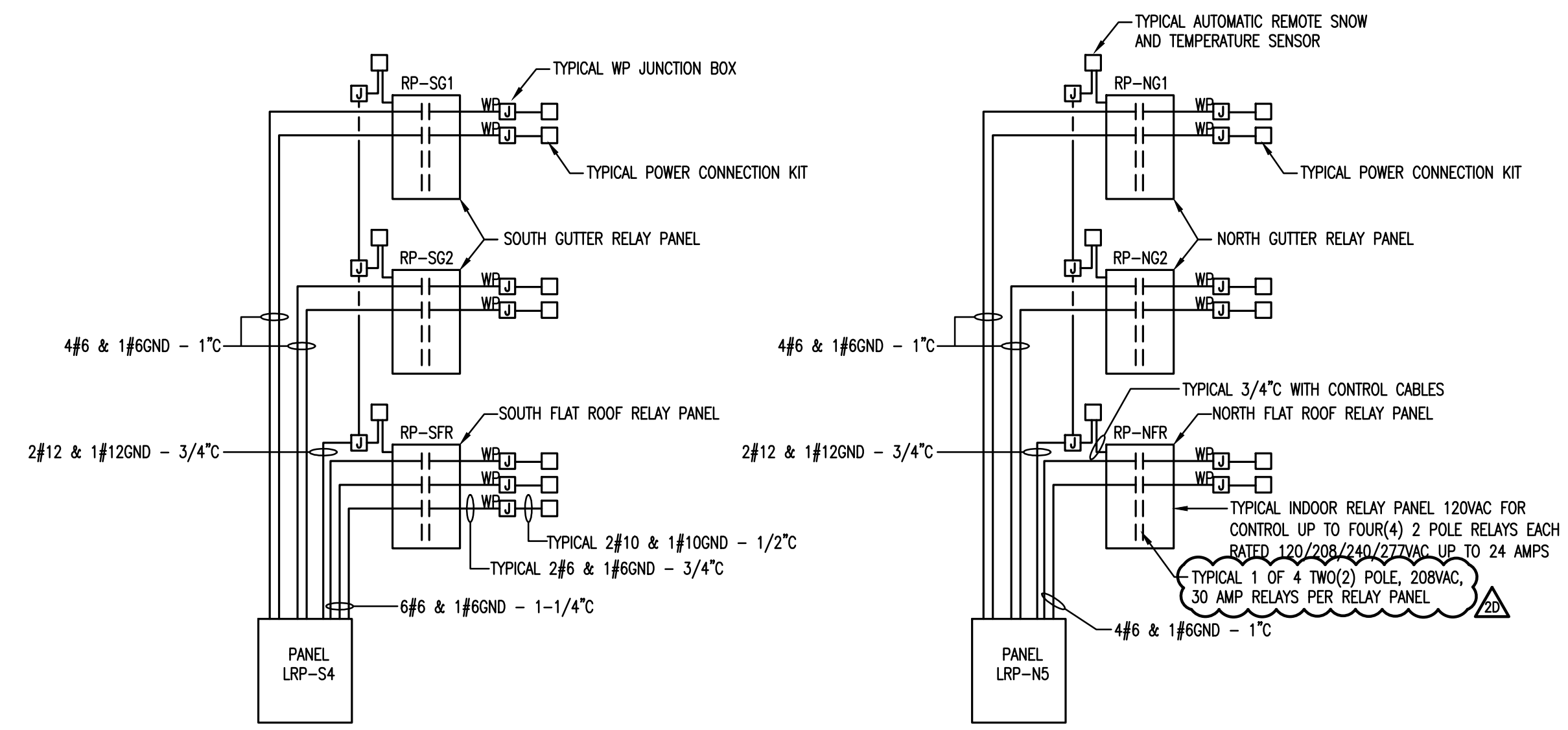


**GENERAL NOTES**

- REFER TO "T" SERIES DRAWINGS FOR TELE/DATA/LOW VOLTAGE DEVICE LOCATION AND QUANTITIES, WIRING, CONDUIT, PATHWAYS, ETC. REQUIREMENTS NOT INDICATED ON THE ELECTRICAL DRAWINGS.
- REFER TO "SE" SERIES DRAWINGS FOR SECURITY DEVICE LOCATION AND QUANTITIES, WIRING, CONDUIT, PATHWAYS, ETC. REQUIREMENTS NOT INDICATED ON THE ELECTRICAL DRAWINGS.
- THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL A COMPLETE GUTTER AND DOWNSPOUT SELF-REGULATING HEAT TRACING SYSTEM AND FLAT ROOF AND ROOF DRAINS SELF-REGULATING HEAT TRACING SYSTEM. SYSTEM SHALL INCLUDE ALL REQUIRED SELF-REGULATING, CONTROL AND SYSTEM INTERCONNECTING CABLING, EQUIPMENT INCLUDING RELAY PANELS, AUTOMATIC REMOTE SNOW AND TEMPERATURE SENSORS WITH ADJUSTABLE AFTER RUN DELAY, POWER CONNECTION KITS, SPIKE KITS, END KITS, DOWN SPOUT HANGER KITS, ROOF CLIPS, APPLICATION TAPE, ETC. AND DESIGN AND PREPARATION OF SHOP DRAWINGS BY A QUALIFIED REPRESENTATIVE OF THE HEAT RACING MANUFACTURER.
- THE FIRE ALARM SYSTEM DESIGN INDICATED ON THESE PLANS ARE "FOR REFERENCE ONLY". RELEASE OF THE FIRE ALARM SYSTEM DESIGN WILL BE CONDITIONAL UPON SUBMITTAL OF SIGNED AND SEALED FIRE ALARM SYSTEM SHOP DRAWINGS. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL TO DCA PRIOR TO SYSTEM INSTALLATION. REFER TO FIRE ALARM RISER DIAGRAM NO. 28 ON DRAWING E-501 FOR MORE INFORMATION.
- THE FIRE ALARM SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH DATA SHEET 5-40, FIRE ALARM SYSTEMS. FM GLOBAL DATA SHEETS ARE AVAILABLE AT [WWW.FMGLOBAL.COM/RESEARCH-AND-RESOURCES/FM-GLOBAL-DATA-SHEETS](http://WWW.FMGLOBAL.COM/RESEARCH-AND-RESOURCES/FM-GLOBAL-DATA-SHEETS). ONLY FIRE DETECTORS (HEAT, SMOKE, RATE OF RISE) LISTED IN THE CURRENT APPROVAL GUIDE, A PUBLICATION OF FM APPROVALS, SHALL BE USED IN THIS INSTALLATION. FM GLOBAL APPROVAL GUIDE IS AVAILABLE AT [WWW.FMAPPROVALS.COM/APPROVAL-GUIDE](http://WWW.FMAPPROVALS.COM/APPROVAL-GUIDE).

**KEY NOTES**

- FURNISH AND INSTALL NEW EXTERIOR MOUNTED NEMA 3R WEATHERPROOF JUNCTION BOX FOR CONNECTION TO GUTTER AND DOWNSPOUT HEAT TRACING AND FLAT ROOF AND ROOF DRAINS HEAT TRACING SYSTEMS POWER CONNECTION KITS. COORDINATE EXACT LOCATIONS IN THE FIELD WITH HEAT TRACING SYSTEMS. REFER TO CONTRACT SPECIFICATION SECTION 283313 AND GENERAL NOTE NO.3 ON THIS DRAWING FOR ADDITIONAL INFORMATION.



**2 TYPICAL GUTTER/DOWNSPOUT(S) AND FLAT ROOF/ROOF DRAIN(S) HEAT TRACING BLOCK WIRING DIAGRAM**

SCALE: NONE

**NOTES:**

- HEAT TRACING CIRCUITS ARE BASED ON 5WATTS/LF SELF-REGULATING CABLES FOR 208V OPERATION.
- CONDUCTOR SIZE OF 208V BRANCH CIRCUIT MAY BE REDUCED BUT MUST MAINTAIN A MAXIMUM OF 3% VOLTAGE DROP FROM PANEL LRP FOR THE ENTIRE HEAT TRACING CIRCUIT.
- RELAY PANELS TO BE LOCATED IN ELECTRICAL ROOMS WITH LRP PANELS.

**1 ELECTRICAL ROOF POWER AND SYSTEMS PLAN**

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

**Clarke Catton Hintz**  
 Architecture  
 Landscape Architecture  
 100 Barrack Street, Trenton, NJ 08648  
 Tel: (609) 883-9383, Fax: (609) 883-4044  
 www.clarkecattonhintz.com  
 Drawing Copyright ©2016 Clarke Catton Hintz, PC

**OWNER:**  
 WILLIAM PATERSON UNIVERSITY  
 300 POMPTON RD.  
 WAYNE, NJ 07470  
 (973) 729-2000

**SITE / CIVIL / GEOTECHNICAL:**  
 LANGAN  
 300 KIMBALL DRIVE  
 PASSAIC, NJ 07654  
 (973) 560-4900

**STRUCTURAL:**  
 HARRISON & HAMNETT  
 40 KNOWLES STREET  
 PENNINGTON, NJ 08634  
 (609) 818-1808

**MECHANICAL/ELECTRICAL/PLUMBING:**  
**FIRE PROTECTION**  
 PARTNER ENGINEERING AND SCIENCE, INC.  
 611 INDUSTRIAL WAY WEST  
 EATONTOWN, NJ 07724  
 (732) 388-1700

**AVIT & SECURITY**  
 R.S. VANDERVEL ENGINEERS, LLP  
 101 GROVERS MILL ROAD  
 CLAMBERSBORO EXECUTIVE CENTER  
 LAWRENCEVILLE, NJ 08846  
 (609) 609.786.2727

| NO.       | DATE     | DESCRIPTION             |
|-----------|----------|-------------------------|
| 1         | 07/14/17 | CONSTRUCTION DOCUMENTS  |
| 2         | 08/07/17 | FINAL CONSTR. DOCUMENTS |
|           |          |                         |
| REVISIONS |          |                         |
| 1A        | AS NOTED | CONSTR. DOC. REVISIONS  |
| 2A        | AS NOTED | ADDENDUM 1              |
| 2B        | 08/24/17 | ADDENDUM 2              |
| 2D        | 09/08/17 | ADDENDUM 6              |

**WILLIAM PATERSON UNIVERSITY  
 NEW RESIDENCE HALL**  
 WAYNE, NEW JERSEY

**CONSTRUCTION DOCUMENTS**  
 (ISSUED FOR CONSTRUCTION)

DATE: 2017.08.07  
 SCALE:  
 DRAWN BY:  
 CHECKED BY:

**SHEET TITLE:**  
 ELECTRICAL ROOF POWER & SYSTEMS PLAN

DRAWING NO.:  
**E-306**  
 CCH PROJECT NO.: 1932

Project Manager  
 CM

Designed By  
 MIC

Drafted By  
 JDD

Checked By  
 MIC

**PARTNER**  
 Engineering and Science, Inc.  
 (a DBA of Partner Assessment Corp, a NJ Engineering firm)  
 611 Industrial Way West  
 Eatontown, NJ 07724  
 Certificate of Authorization No. 24GA28222600  
 www.PARTNERESI.COM

John C. Morris III  
 Professional Engineer 24GE02659900