The following standard specification is intended to be edited according to the specifics of the project. Brackets [ ] and areas shaded in gray [e.g. format] indicate requirements that are optional depending upon the type of system being provided or per instructions associated with the [ ] and project requirements. Consult with University's Representative and campus stakeholders.

DOCUMENT UTILIZES TRACK CHANGES TO RECORD YOUR CHANGES AS YOU EDIT. DO NOT CHANGE THE FOOTER OF THE DOCUMENT.

SECTION 28 08 00 COMMISSIONING OF ELECTRONIC SAFETY AND SECURITY

PART 1 - GENERAL

1.1 DESCRIPTION

A. Commission all systems and equipment listed in the table below per the requirements of Section 01 91 00 Commissioning. The Installation/Start-up Verification (ISV) and Functional Performance Test (FPT) forms listed are required [and will be provided by the University]. Refer to the project website for standard commissioning forms.

<table>
<thead>
<tr>
<th>Equipment/System</th>
<th>ISV Form</th>
<th>FPT Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Detection and Alarm</td>
<td>ISV-28 31 00</td>
<td>FPT-28 31 00</td>
</tr>
</tbody>
</table>

1.2 RELATED WORK AND DOCUMENTS

A. Section 01 79 00 Demonstration and Training
B. Section 01 91 00 Commissioning
C. Division 28 Electronic Safety and Security

1.3 COMMISSIONING DEFINITIONS AND ABBREVIATIONS

A. Refer to Section 01 91 00 Commissioning

1.4 REFERENCE STANDARDS

A. A National Electric Code (NEC)
B. American Society for Testing and Materials (ASTM)
C. Electronics Industry Association/Telecommunications Industry Association (EIA/TIA)
D. National Electrical Manufacturers Associates (NEMA)
E. National Fire Protection Association (NFPA)
F. Underwriters Laboratory, Inc. (UL)

1.5 SUBMITTALS

A. Submit commissioning documents for all equipment and systems listed in table above per the requirements of Section 01 91 00 Commissioning.

PART 2 - PRODUCTS

2.1 INSTRUMENTATION

A. Refer to Section 01 91 00 Commissioning.

PART 3 - EXECUTION

3.1 INSTALLATION/START-UP VERIFICATION

A. Perform all checks and tests included in the ISV checklists and complete the checklists as specified in Section 01 91 00 Commissioning.

3.2 FUNCTIONAL PERFORMANCE TESTS
A. Perform all checks and tests included in the FPT checklists and complete the checklists as specified in Section 01 91 00 Commissioning.

3.3 TRAINING OF UNIVERSITY PERSONNEL

B. Provide training of University’s personnel for the number of hours specified in the table below and as specified in Section 01 79 00 Demonstration and Training.

[Edit the table as required by the project. Project Manager to coordinate with DCM Engineering and FM]

<table>
<thead>
<tr>
<th>Equipment/System</th>
<th>Section Number</th>
<th>Orientation Hours</th>
<th>Training Hours</th>
<th>DVD Recording</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Detection and Alarm</td>
<td>28 31 00</td>
<td>2</td>
<td>2</td>
<td>N/A</td>
</tr>
</tbody>
</table>

END OF SECTION 28 08 00