1. GENERAL

1.1 SUMMARY

.1 Section includes: Lightning Protection System.

.2 Related Requirements:

.1 Division 00 – Contracting Requirements and Division 01 – General Requirements apply to this section.

.2 Coordinate with Sections affected by installation of lightning protection, including but not limited to:

.1 26 00 10 – Electrical General Requirements
.2 26 05 01 – Common Work Results – Electrical
.3 26 05 28 – Grounding and Bonding

1.2 REFERENCE DOCUMENTS


.3 NFPA 780 (2020), Standard for the Installation of Lightning Protection Systems.

.4 ANSI/CAN/UL 96, Product Standard for Lightning Protection Components.

.5 UL 96A, Installation Requirements for Lightning Protection Systems.

1.3 SUBMITTALS

.1 Comply with Division 01 submittal requirements.

.2 Delegated Design submittals: Submit for [Architect] [Engineer] approval:
.1 Submit installation drawings, details, product data, and other information sufficient to describe lightning protection system and coordination with related work.

.2 Submittal shall be signed by System Designer and state that design complies with Quality Assurance standards.

.3 Qualifications Statements: Submit for [Architect] [Engineer] approval:

   .1 System designer qualifications
   .2 Component manufacturer CUL listing.
   .3 Installer qualifications.

.4 Closeout Submittals: Provide Field Quality Control documentation.

1.4 ADMINISTRATIVE REQUIREMENTS

.1 Comply with Division 01 project meeting requirements.

1.5 QUALITY ASSURANCE

.1 System Designer: Individual certified as Designer/Inspector, Master Installer, or Master Installer/Designer by Lightning Protection Institute.

.2 Comply with latest edition of CSA B72, NFPA 780, UL 96A, and LPI 175.

1.6 DELIVERY, STORAGE, AND HANDLING

.1 Store in secure, dry location.

2. PRODUCTS

2.1 EXISTING PRODUCTS

.1 Existing Components: Components of existing lightning protection equipment may be reused if UL-labeled, equal to currently UL-listed products, and are acceptable to System Designer.
2.2 MANUFACTURER

.1 Manufacturer shall be CUL-listed, regularly engaged in production of lightning protection equipment, and a member of the Lightning Protection Institute (https://lightning.org/member-directory/ filter by Membership/Manufacturer).

2.3 COMPONENTS

.1 No combinations of materials that form a corrosion-accelerating electrolytic couple shall be used.

.2 Material: Copper or copper alloy, Aluminum, Tin-coated copper or copper alloy, or stainless steel. Lead-sheathed copper shall be used on top 7.6 m of industrial chimneys.

.3 Air Terminals: Blunt-tipped.

2.4 ACCESSORIES

.1 Fasteners and Adhesives: Types suitable for conditions of use.

.2 Ground Test Wells: [Schedule 80 PVC] [Steel] [Concrete] with cast iron lid. [Provide traffic-bearing types where applicable.].

.3 Decorative Features: [__________________________].

.4 Surge Protective Devices: Comply with UL 96A, UL 497, and UL 1449 as applicable.

3. EXECUTION

3.1 INSTALLER

.1 Acceptable Installer:

.1 Dobbyn Lightning Protection, Calgary, AB

.2 Substitutions: Firms with following qualifications will be considered in accordance with Division 00 and 01 requirements:
.1 Regularly engaged in installation of lightning protection systems.

.2 Five years of experience on work of this size and type.

.3 Lightning Protection Institute-listed firm.

.4 Employee certified as Master Installer by Lightning Protection Institute.

3.2 EXAMINATION

.1 Verify that conditions are acceptable for work of this Section. Do not proceed until detrimental conditions are remediated.

3.3 PREPARATION

.1 Existing Components to be Reused: Protect against damage or remove and store until reinstallation.

3.4 INSTALLATION

.1 Scope

.1 Install lightning protection system on structure [and __________].

.2 [Comply with requirements for [flammable vapor, flammable gases, or liquids that give off flammable vapors] [explosive materials] [___________] [in areas indicated].]

.3 Comply with Quality Assurance requirements.

.4 To extent practical, locate components with sensitivity to architectural design.

.5 Down Conductors: Locate [on building exterior] [on building interior]. Protect against damage in areas subject to disruption.

3.5 FIELD QUALITY CONTROL
.1 Inspection Certificate: Provide either of following:

.1 Lightning Protection Institute Inspection Program certificate.

.2 Underwriters Laboratories certificate.

.2 Installing contractor on certificate shall be same as name of Installer approved to perform work of this Section.

.3 Provide as-built drawing.

.4 [Test lightning protection grounding system to verify resistance reading of less than 50 Ω. Provide test results as part of close-out documentation.]

3.6 PROTECTION

.1 Protect against damage by following construction activities.

END OF SECTION