PART 1 - GENERAL

1.1 REFERENCES

.1 American National Standards Institute (ANSI)
.1 ANSI C82.4-92, Ballasts for High-Intensity-Discharge and Low-Pressure Sodium Lamps.

.2 American National Standards Institute/Institute of Electrical and Electronics Project Manager (ANSI/IEEE).
.1 ANSI/IEEE C62.41-1991, Surge Voltages in Low-Voltage AC Power Circuits.

.3 American Society for Testing and Materials (ASTM)
.1 ASTM F 1137-88(1993), Specification for Phosphate/Oil and Phosphate/Organic Corrosion Protective Coatings for Fasteners.

.4 United States of America, Federal Communications Commission (FCC)
.1 FCC (CFR47) EM and RF Interference Suppression.

1.2 SHOP DRAWINGS AND PRODUCT DATA

.1 Submit shop drawings.

.2 Submit complete photometric data prepared by independent testing laboratory for luminaires where specified, for review by Departmental Representative.

PART 2 - PRODUCTS

2.1 LUMINAIRES

.1 Refer to the Lighting Fixture Schedule on the drawings and the floor plans for detailed requirements of luminaries to be supplied and installed under this Contract. The referenced manufacturer is given as a standard of acceptance only. Other manufacturers may be accepted provided they comply with the standard of the noted fixture.

2.2 BALLASTS

.1 High performance T8 fluorescent ballast: CBM and CSA certified, energy efficient type, instant start, electronic type.
.1 Rating: 120 or 347 V, 60 Hz, as indicated, for use with 32W, T8 octron imperial lamps.
.2 RFI/EMI suppression circuit to: FCC (CFR47) Part 18, sub-part C, Class A and Part 15, sub-part B, Class B.
.3 Totally encased and designed for 40 °C ambient temperature.
.4 Power factor: minimum 98 % with 98% of rated lamp lumens.
.5 Crest factor: 1.5 maximum.
.6 Capacitor: thermally protected.
.7 Thermal protection: non-resettable on coil.
.8 Harmonics: 10 % maximum THD.
.9 Operating frequency of electronic ballast: 40 khz minimum.
.10 Total Circuit Power: 55 Watts.
.11 Ballast Factor: greater than 0.99.
.12 Sound rated: Class A.
.13 Mounting: integral with luminaire.
.14 Be warranted by manufacturer for five years.

.2 High Performance T8 fluorescent dimming ballast:
.1 Rating: 120 or 347 V, 60 HZ, as indicated, for use with 32W, T8 lamps.
.2 Totally encased and designed for 40°C ambient temperature.
.3 Power factor: minimum 98%.
.4 Operation: 0-10 V.
.5 Harmonics: 10% maximum.
.6 Total circuit power: 55 watts.
.7 Sound rated: Class A.
.8 Mounting: Integral with luminaire.
.9 Be warranted by manufacturer for five years.

PART 3 - EXECUTION

3.1 INSTALLATION

.1 Locate and install luminaires as indicated.

.2 Special installation:
.1 Luminaire design.

3.2 WIRING

.1 Connect luminaires to lighting circuits:
.1 Directly for luminaire designs.
.2 Through flexible rigid conduit for luminaire designs.
.3 By use of modular wiring system for luminaire design.

3.3 LUMINAIRE SUPPORTS

.1 For suspended ceiling installations support luminaires independently of ceiling support luminaires from ceiling grid in accordance with local inspection requirements.

3.4 LUMINAIRE ALIGNMENT

.1 Align luminaires mounted in continuous rows to form straight uninterrupted line.

.2 Align luminaires mounted individually parallel or perpendicular to building grid lines.

END