



HUDSON
Design Group LLC

April 18, 2018

Ms. Kristin Kassner
Planning Director
Town Hall Annex.
Town of Burlington
25 Center Street,
Burlington, MA 01803

RE: Application for a "Minor Engineering Change"
Smithsonian Institution
Chandra Operations Control Center
15 Wayside Road, Burlington, MA

Dear Ms. Kassner,

The Chandra Operations Control Center (OCC) is relocating from their Cambridge location to the 3rd floor of 15 Wayside Road. This facility known as NASA's Chandra X-Ray Observatory is designed to operate a telescope specially designed to detect X-ray emission from very hot regions of the Universe such as exploded stars, clusters of galaxies, and matter around black holes. Because X-rays are absorbed by Earth's atmosphere, Chandra must orbit above it, up to an altitude of 139,000 km (86,500 mi) in space.

The Smithsonian's Astrophysical Observatory hosts the Chandra X-ray Center which operates the satellite, processes the data, and distributes it to scientists around the world for analysis. The Center maintains an extensive public website about the science results and an education program.

The OCC is a mission critical operation that operates 24/7, 365 days a year. As a result of the critical nature of their mission, a stand by generator is required to keep the facility online during possible power outages. The facility also has approximately 60 offices for a total square footage of about 28,000 SF.

Chandra has imaged the spectacular, glowing remains of exploded stars, and taken spectra showing the dispersal of elements. Chandra has observed the region around the supermassive black hole in the center of our Milky Way, and found black holes across the Universe. Chandra has traced the separation of dark matter from normal matter in the collision of galaxies in a cluster and is contributing to both dark matter and dark energy studies. As its mission continues, Chandra will continue to discover startling new science about our high-energy Universe.

The project has a 300 kw natural gas generator and load bank to provide the stand-by power to the mission-critical functions of the project. It is proposed that the generator be placed next to an existing generator. At this location a previous tenant had a generator that was removed.

It is the purpose of this submittal to respectfully request of the Planning Board approval of this minor engineering change. Enclosed with this application are revised site plans provided by VHB. Also enclosed is a check in the amount of \$500.00

Sincerely Yours,

Brian P. O'Donnell, AIA, LEED AP
Director of Architecture
Hudson Design Group