

# LUKE GRAY CONSTRUCTION MANAGEMENT OPTION

## PROJECT X

# NEW YORK

**MECHANICAL-** AHU~S RANGING FROM 8650-6300CFM ON EACH FLOOR AND A HYDRONIC SYSTEM CONNECTED TO THE CHP PLANT

**ELECTRICAL-**POWER IS DISTRIBUTED WITH 208Y;120V, 3-PHASE ON EACH FLOORÇ DRY TYPE TRANSFORMER

**LIGHTING-** THERE ARE MANY TYPES LAMPS USED WITHIN THE BUILDING INCLUDING INCANDESCENT, METAL HALIDE, HID. THE EMERGENCY LIGHTING FO THE BUILDING IS SUPPLIEDB BY FLUORESCENT FIXTURES WITH 90 MINUTE BATTERY PACK.

**STRUCTURAL-** FOUNDATION MAT SLAB. 10^TWO-WAY FLAT PLATE FLOOR SLAB. COLUMN LAYOUT 24~x 24~

**ARCHITECTURAL-** THE EXTERIOR WALLS NATURAL BRICK WITH THREE CURTAIN WALL SLOTS TO BREAK UP THE BRICK FACADE THAT BLENDS SEAMLESSLY INTO THE SURROUNDING HISTORICALLY RICH TOWN

### - STRUCTURAL BRACING

Reduce site congestion  
Decreased required shoring  
Increased installation time

### -ELECTRICAL CHP CONNECTION

System cost \$25,000 with 4 year payback

### -MATRIX SCHEDULE

For logistical reasons it is always better to do the u/g utilities before structure  
The crowded construction site of NYC proved to be the ideal selection for creating a matrix schedule.

### -BIM AND FM INTEGRATION:

Both Maximo HVAC controls and Revit can link data to equipment Excel file  
Develop a prototype for one building  
Develop a protocol for flagging changes  
Develop searchable parameters for BIM and FM

