Appendix F
Energy

SCHEMATIC DESIGN CRITERIA

AMS Yorktown Multifamily Residential Development

800 East Main St

Yorktown, NY

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Prepared for:

AMS Acquisitions

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1.0 MECHANICAL

- The intent of the heating, ventilating, and air conditioning (HVAC) design is to provide systems that match the usage of the facility and take into account code requirements and best practices concerning ventilation, controls, acoustics, space available, standard components, economies, ease of operation, maintenance, reliability, energy availability, energy usage and conservation, and life cycle costs.

1.1 CODES

- The mechanical design shall comply with the 2020 New York State Mechanical Code, the 2020 New York State Energy Conservation Code, and all other applicable state and local codes.

1.2 DESIGN CONDITIONS

1.2.1 Outdoor Design Conditions

- The outdoor design conditions are based on climate data from the 2021 ASHRAE Handbook - Fundamentals. Summer design is based on ASHRAE 0.4% cooling conditions. Winter design is based on ASHRAE 99.6% heating conditions.

1.2.1.1 Summer

- Dry Bulb: 89.5ºF
- Wet Bulb: 73.4ºF

1.2.1.2 Winter

- Dry Bulb: 8.7ºF

1.2.2 Indoor Design Conditions

- Mechanical ventilation and exhaust airflow rates for all areas of occupancy shall be designed in accordance with the 2020 New York State Mechanical Code.

1.2.2.1 Summer

- Dry Bulb: 75ºF
- Relative Humidity (RH): 50%

1.2.2.2 Winter

- Dry Bulb: 70ºF

- Relative Humidity (RH): N/A

1.3 DESCRIPTION OF SYSTEMS

1.3.1 Apartments – Option A – "Conventional" Split-System Ducted Electric Heat Pump for Each Apartment

1.3.1.1 Apartment Heating and Cooling – North Building, South Building, and Cottages

- Conventional 1-to-1 split-system heat pump, with heating via refrigeration system in mild ambient conditions and supplemental electric heat for low ambient conditions.
- Indoor air handling unit with DX cooling/heating coil and electric resistance reheat coil in an equipment closet, ducted to serve the apartment. The supply fan runs continuously since this unit will also be providing mechanical ventilation.
- Refrigerant piping to outdoor air-cooled condensing unit.
- For conceptual pricing purposes, assume a typical 2-bedroom apartment with (1) 1200 CFM nominal airflow indoor unit and (1) 3-ton nominal cooling capacity outdoor condensing unit. Basis of design Trane.

1.3.1.2 Apartment Ventilation and Exhaust – North Building, South Building, and Cottages

- Outside air for mechanical ventilation ducted from a facade termination to tie-in at the return duct for the indoor air handling unit.
- Bathroom exhaust and kitchen exhaust (area, not range hood) ducted from ceiling registers to a shared in-line exhaust fan, with discharge ducted to a façade termination. The fan operates continuously.
- Range hood assumed to be recirculating type, not ducted to the outdoors.

1.3.2 Apartments – Option B – "Hyper-Heat" Split-System Ducted Electric Heat Pump for Each Apartment

1.3.2.1 Apartment Heating and Cooling – North Building, South Building, and Cottages

- 1-to-1 split-system heat pump, with refrigeration system is capable of providing full heating output at winter design conditions, such that supplemental electric heat for low ambient conditions is not required.
- Indoor air handling unit with DX cooling/heating coil in an equipment closet, ducted to serve the apartment. The supply fan runs continuously since this unit will also be providing mechanical ventilation.

- Refrigerant piping to outdoor air-cooled condensing unit.
- For conceptual pricing purposes, assume a typical 2-bedroom apartment with (1) 1200 CFM nominal airflow indoor unit and (1) 3-ton nominal cooling capacity outdoor condensing unit. Basis of design Mitsubishi model SVZ-KP36NA indoor unit and SUZ-KA36NAHZ.

1.3.2.2 Apartment Ventilation and Exhaust – North Building, South Building, and Cottages

- Outside air for mechanical ventilation ducted from a facade termination to tie-in at the return duct for the indoor air handling unit.
- Bathroom exhaust and kitchen exhaust (area, not range hood) ducted from ceiling registers to a shared in-line exhaust fan, with discharge ducted to a façade termination. The fan operates continuously.
- Range hood assumed to be recirculating type, not ducted to the outdoors.

1.3.3 Apartments – Option C – Split-System Ducted Furnace for Each Apartment

1.3.3.1 Apartment Heating and Cooling – North Building, South Building, and Cottages

- Indoor gas-fired furnace with DX cooling coil in an equipment closet, ducted to serve the apartment. The supply fan runs continuously since this unit will also be providing mechanical ventilation.
- Refrigerant piping to outdoor air-cooled condensing unit.
- Combustion air intake and flue to façade terminations.
- For conceptual pricing purposes, assume a typical 2-bedroom apartment with (1) 1200 CFM nominal airflow furnace with DX coil and (1) 3-ton nominal cooling capacity outdoor condensing unit. Basis of design Trane.

1.3.3.2 Apartment Ventilation and Exhaust – North Building and South Building

- Outside air for mechanical ventilation ducted from a facade termination to tie-in at the return duct for the indoor air handling unit.
- Bathroom exhaust and kitchen exhaust (area, not range hood) ducted from ceiling registers to a shared in-line exhaust fan, with discharge ducted to a façade termination. The fan operates continuously.
- Range hood assumed to be recirculating type, not ducted to the outdoors.

1.3.3.3 Apartment Ventilation and Exhaust – Cottages

- Outside air for mechanical ventilation ducted from a facade termination to tie-in at the return duct for the indoor air handling unit.
- Ceiling exhaust fan for each bathroom, ducted to a façade termination. Each fan is provided with a manual wall switch and operates intermittently.
- Range hood assumed to be ducted to a façade termination. Range hood exhaust airflow assumed to be 400 CFM or less, below the code threshold requiring dedicated makeup air.

1.3.4 Corridors – North Building and South Building

- Heating, air-conditioning, and mechanical ventilation shall be provided by single-zone constant-volume packaged rooftop units, with DX cooling, natural gas heating, refrigerant hot gas reheat for dehumidification, airside economizer, power exhaust, and a standalone digital programmable thermostat. Supply and return ductwork risers in shafts and horizontal branch distribution at each floor shall be provided.

1.3.5 Amenities and Common Areas – North Building and South Building

- Air-cooled variable refrigerant flow (VRF) multizone split-system heat pump systems will provide heating, ventilation, and air-conditioning. Manufacturer will be Mitsubishi, Daikin, or approved equal. VRF indoor fan coil units with associated digital programmable space thermostats will serve each temperature control zone. Configuration will be concealed, above-ceiling type with ducted supply and return, and outside air intake ducted to an exterior termination at the East or West façade. Multiple VRF indoor fan coil units will be connected via refrigerant piping and control wiring to each branch controller. Each branch controller will be connected via refrigerant piping and control wiring to an outdoor air-cooled condensing unit. The VRF systems will be capable of simultaneous heating and cooling by different indoor fan coil units connected to the same branch controller and condensing unit.
- A ceiling-mounted toilet exhaust fan shall be provided for each toilet room, with ductwork to exterior termination at the East or West facade, and on/off wall switch.

1.3.6 Stairs and Entrances – North Building and South Building

- Electric heaters shall be provided.

1.3.7 Elevators – North Building and South Building

- Supplemental air conditioning shall be provided for elevator machinery and control spaces.

1.4 AUTOMATIC TEMPERATURE CONTROLS

- All new HVAC equipment shall be provided with new standalone digital controls.

- The VRF equipment shall be provided with VRF manufacturer's proprietary central controller with a touchscreen interface.
- A central direct digital control (DDC) building management system (BMS) is not anticipated.
- The entire automatic temperature control system will be complete with all necessary control devices, thermostats, sensors, valves, actuators, relays, switches, dampers, panels, and electric wiring.

1.5 DUCTWORK

- Ductwork shall be galvanized steel unless otherwise noted, and shall be fabricated, installed, and supported in accordance with the latest addition of SMACNA: HVAC Duct Construction Standards - Metal and Flexible.
- All supply, return, outside air intake, and exhaust ductwork shall be 2-inch pressure class.
- Ductwork located within 20 feet of a fan, or 10 feet downstream of a fan-powered box or variable-air-volume box, shall be provided with 1 in thick fiber-free internal acoustical lining.
- Supply ductwork shall be provided with R-6 insulation. Outside air and exhaust/spill air ductwork (after the backdraft damper) shall be provided with R-8 insulation. Return air ductwork in conditioned spaces or ceiling return plenums shall not be insulated.
- Supply ductwork exposed to view in finished spaces shall be spiral round or flat oval with solid outer wall, perforated inner wall, and 1" thick interstitial acoustical lining, but no external insulation.
- Fire dampers shall be provided at all duct penetrations through fire rated walls and floors, and shall be type "B" with shutter out of airstream, UL listed and labeled, rated for dynamic airflow conditions 2,000 ft/min and 4.0 in-wc. Provide duct access doors.
- Combination fire/smoke dampers shall be provided at all duct penetrations through fire and smoke rated walls and floors, and shall be UL listed and labeled, rated for dynamic airflow conditions 2,000 ft/min and 4.0 in-wc. Provide duct access doors.
- In areas with hard ceilings, supply air outlets and return air inlets shall be Linear slot diffuser type with concealed tape and spackle border (Titus flowbar or equal).
- In areas with ACT ceilings, supply air outlets shall be 2'x2' lay-in ceiling diffusers, Titus OMNI or equal. Return air inlets shall be 2'x2' lay-in ceiling registers, Titus 355RL or equal. Exhaust air inlets shall be 2'x2' lay-in ceiling registers, Titus 355FL or equal.
- In areas without ceilings, supply air outlets shall be double-deflection registers, Titus 300RL or equal. Return air inlets shall be fixed-deflection registers, Titus 355RL or equal. Exhaust air inlets shall be fixed-deflection registers, Titus 355FL or equal.

1.6 PIPING

- Refrigerant piping shall be ASTM B280 brazed or soldered type ACR copper or ASTM A88 brazed or soldered Type L hard copper, with 1.5” thick fiberglass or closed cell elastomer insulation.
- Hot water shall be ASTM A88 brazed Type L hard copper, with 1.5” thick fiberglass insulation.
- Condensate drain piping shall be ASTM A88 brazed Type L hard copper, with 1” thick fiberglass insulation.

1.7 ELECTRICAL AND FIRE ALARM COORDINATION

- Motor starters and variable frequency drives (VFD) shall be furnished by the mechanical contractor and installed by the electrical contractor.
- ECM (electrically commutate motor) motors, if shipped standalone, shall be provided and installed by the mechanical contractor (including control wiring). Power wiring from the motor starter to the ECM motor by the electrical contractor.
- Duct mounted smoke detectors, where required by code, shall be provided by and wired by the electrical contractor, and mounted by the HVAC contractor.
- Fire smoke dampers, smoke dampers, and fire dampers shall be provided and installed by the mechanical contractor. Fire smoke dampers shall be powered and connected to the building fire alarm system by the electrical contractor.
- Unless factory-mounted on the equipment, standalone disconnect switches shall be provided, installed and wired to the HVAC equipment by the electrical contractor.
- All control wiring from mechanical equipment to the BMS system shall be performed by the automatic temperature controls contractor.

2.0 ELECTRICAL

2.1 CODES

- The entire installation shall comply with the 2017 National Electrical Code – NFPA 70, 2020 New York State Building Code, and 2020 New York State Energy Code, as well as all applicable local Codes.

2.2 ELECTRICAL SERVICE AGREEMENT

- Con Edison will provide utility electrical service for the project site. Primary utility electrical service will enter the site underground from overhead utility distribution on East Main Street and feed multiple utility pad-mounted transformers to serve each building.

- Separate electrical services will be provided for each of the following:
    - North Building
    - South Building
    - Cottages x (6)

- Building loads will require the following main electrical services:
    - North Building
        - (1) 4,000A, 120/208V, 3-Phase, 4-Wire electrical service for house and fire pump.
        - (1) 3,000A, 120/208V, 3-Phase, 4-Wire electrical service for residential apartments.
    - South Building
        - (1) 4,000A, 120/208V, 3-Phase, 4-Wire electrical service for house.
        - (1) 3,000A, 120/208V, 3-Phase, 4-Wire electrical service for residential apartments.
    - Cottages x (6)
        - (1) 2,000A, 120/208V, 3-Phase, 4-Wire electrical service.
            - (1) 400A, 120/208V, 1-Phase, 3-Wire secondary feed to each of the six (6) Cottages.
    - It is anticipated that the available fault current will be less than 100kA.

- North & South Buildings: The main electrical service rooms will be on the ground floor or basement level and will contain separate service switches for house, residential apartments, and fire pump. Multi-meter bank assemblies will be located in metering closets up on the residential floors.

- Cottages: Each cottage will have a multi-meter bank assembly on the exterior façade.

2.3 EMERGENCY POWER SYSTEM

- There will be a 150kW natural gas generator for each North and South Building to provide emergency and standby power and will be installed in accordance with NFPA 110. It is anticipated that the generators will be installed outside the building on grade within a weatherproof acoustical steel enclosure and mounted on a concrete pad.

- Automatic transfer switches will be provided for each the following:

    - Emergency/life-safety including emergency lighting and fire alarm.
    - Legally required loads including such as elevators.
    - Optional standby loads domestic booster pump and select convenience receptacles and general lighting in the amenity and lobby areas.
    - Fire pump (furnished by the sprinkler contractor as part of the fire pump controller).

- Emergency/standby power will not be provided for the Cottage buildings.

2.4 ELECTRICAL DISTRIBUTION

2.4.1 House

- Distribution panels will be provided at major distribution points on each floor. Quantities of lighting and small power panels shall be commensurate with the number of circuits required to serve the area and shall include a minimum of 25% spare pole positions for future use.

- As a minimum, (1) 42-pole, 120/208 Volt branch circuit panelboard shall be provided for each 10,000 usable square feet of area unless greater quantities are required to serve the individual room needs as required.

2.4.2 Residential Apartments

- Meter banks will be in meter closets up on the residential floors.

- Each residential apartment will have a 150A, 120/208V, 1-Phase, 3-Wire load center installed flush mounted in each unit.

    - If gas is provided in the apartments for heating and cooking, then apartment unit load centers will be reduced in size to 125A, 120/208V, 1-Phase, 3-Wire.

2.5 WIRING METHOD

- 120 Volt receptacle circuits shall be 20 ampere, maximum loading 1,440 watt, with 8 standard duplex convenience outlets per circuit maximum.

- Concealed wiring in all areas except electric closets and mechanical spaces.

- Motor control centers and/or variable frequency drives to be furnished by the Mechanical Contractor. Provide power wiring required for heating, ventilating, air conditioning, and plumbing work, including installation of all motor control centers and miscellaneous starters. Alarm activating devices will be furnished by other Trades.

- For elevators, furnish and install power circuits and cables for main overcurrent protective devices to the elevator power panels and then to the elevator control panels. Provide additional wiring and outlets in Machine Rooms for lighting, relay, and signal controls, as required by the Elevator Contractor. Provide outlets and lighting in the elevator shafts and pits.

2.6 CONDUIT AND CABLE

- All feeders and sub-feeders as well as lighting and utility branch circuits will be EMT or flexible steel conduits (Type MC) where permitted by Code. All exposed feeders shall be in EMT (indoor) or RGS (outdoor). Emergency and normal circuits to run in separate conduits.

- All conduits to be run concealed in finished areas and exposed in Machine Rooms.

- 600V wire and cable shall be copper with Type THW or THHN insulation for general circuiting and shall be copper with type XHHW insulation for risers or outside feeders. Ampacities should be based on 75°C rating.

2.7 SMOKE, FIRE ALARM AND SPRINKLER ALARM SYSTEM

- The fire alarm system shall comply with the requirements of the State of New York, Town of Yorktown, and NFPA Standard No. 72 for protected premises signaling systems except as modified and supplemented by these Design Guidelines.

- The fire alarm system shall monitor and display the activation of each device in the system, including any heat detector, duct detector, smoke detector, manual break glass unit, sprinkler waterflow switch and sprinkler valve tamper switch or any other input devices which may be required.

- The system shall initiate output functions such as automatic alarm annunciation via paging speakers, activation of strobe lights, fan shutdown, elevator recall, and automatic notification to the Fire Department.

- The fire alarm speakers will need to be of sufficient capacity to maintain 15db of alarm signals above an ambient noise level of 85db.

- The system shall be integrated detection and communication of the analog addressable type, completely supervised, such that a break in any wire will not prevent any device (smoke detector, pull station, etc.) from operating. Transponder cabinets will be installed in appropriate approved locations. The system shall be of the type such that each connected device shall be provided with a unique address and separately identified at the Main Fire Command Center.

- The wiring must be monitored against faults such as opens, shorts, earths or data transmission failure. This system architecture shall be “Style 7” (Class “A”) as defined by NFPA 72.
- The central reporting, microprocessor-controlled fire detection and emergency voice alarm communication system shall be in the fire command station on the Ground Level near the main entrance or in a location approved by the fire department and authorities having jurisdiction.
- An emergency responder radio enhancement system shall be provided in accordance with Section 510 of the 2020 New York State Fire Code and NFPA 1221 2016. A study will be conducted following substantial completion of the building structure, framing, and glazing to assess areas requiring radio amplification.
- A two-way radio communication system shall be provided with call stations located at each elevator lobby above and below the level of egress and base station in the main Fire Command Center.

2.8 MECHANICAL SYSTEMS

- Motor loads such as elevators, fans, pumps, etc., shall operate at 208 volts, phase, 3 wire and shall be derived from multiple local motor starters or power panels.
- All motor starters and variable speed drives will be in self-contained enclosures. Disconnect devices will be provided and located within line of sight of all equipment. Where VFD drives are more than 50 feet away from the motor, reactors will be provided.

2.9 TECHNOLOGY RACEWAY INFRASTRUCTURE

- Infrastructure for a new Main Distribution Frame (MDF) room and Intermediate Distribution Frame (IDF) rooms will be provided. Empty electrical conduits will be provided from the MDF room to the street and from the MDF room to each IDF room. Cable tray will be provided as directed by the technology consultant.

2.10 ELECTRICAL GROUNDING SYSTEM

- All electrical equipment, including service entrance devices, distribution switchboards, uninterruptible power supply equipment, and control equipment, motors, motor control equipment, panelboards, lighting fixtures, appliance and/or equipment terminal devices, and all related metallic equipment shall be effectively grounded in an approved manner, in accordance with all applicable Codes and Authorities having jurisdiction.
- All exposed non-current-carrying metal parts of permanently mounted electrical equipment, all terminal devices and the conduit system shall be effectively grounded and securely bonded to the reference ground point of its separately derived service ground.
- A separate insulated (green) equipment grounding conductor shall be installed in all branch circuits under the following conditions:

- Where the branch circuit uses AC armored cable as the wiring method.
- All branch circuits used for electronic computer/data processing equipment.
- All branch circuits serving loads in hazardous locations.
- All branch circuits in outdoor locations.

2.11 TELECOMMUNICATIONS SIGNAL GROUND SYSTEM

- Each MDF and IDF Room shall be provided with a separate and isolated grounding system for low noise signal grounding of sensitive electronic equipment.
- The system shall be isolated from the electrical equipment ground system and all elements of the structure.
- Provide a 3/0 AWG insulated copper ground conductor in rigid conduit to a system ground bus in all MDF and IDF Rooms. The signal ground bus shall be ¼ in. x 2 in. x 12 in. copper bus drilled with 3/8 in. holes on two-inch centers, for connection to branch ground panels.
- The isolated ground riser shall be grounded to a separate and independent grounding electrode. The maximum resistance to ground shall not exceed 25 ohms as measured by a Biddle 250241 Earth Tester or equivalent device.

2.12 LIGHTING PROTECTION SYSTEM

- No lightning protection system will be provided.

2.13 MAJOR ELECTRICAL EQUIPMENT

2.13.1 Metal-Enclosed Distribution Switchboards

- Shall consist of a completely enclosed, self-supporting metal structure, of required number of formed and welded vertical panel sections and stationary molded case breakers in one integrated structure. The circuit breakers shall be group mounted units; panelboard construction shall not be allowed. All main horizontal buses and bus connections between main bus and protective devices shall consist of insulated copper of sufficient size to limit temperature rise to 55°C over an average air temperature outside the enclosure of 40°C, but not less than one square inch per 700 amperes. Approved barriers shall be placed between adjacent sections of the switchboard and all openings in the barriers for bus bars shall be closed with snug fitting, approved non-hygroscopic arc resisting material. Provide isolation barriers and approved non-hygroscopic fire stops at main buses, between each device and each device and its respective outgoing section, effectively isolating each distribution device.

2.13.2 Panelboards

- Lighting and utility panelboards shall be provided in surface-mounted enclosures having door-in-door covers. All circuit breakers shall be bolt-on type and shall be provided with a minimum of 25% spare devices. All busbars shall be electrical grade hard drawn copper with ampacity sized

on the basis of NEMA standards. All panels shall be provided with 100% ground bus and a neutral bus. Utility panel and 120/208 volt distribution panel neutral bus shall be 100% rated. All other panels shall have a neutral bus of equal ampacity to phase bus.

2.13.3 Motor Control Centers

- Shall be combination circuit breaker and motor starter type, NEMA Class 1A Type C. Circuit breakers shall be Type HMCP molded case. Combination starters shall consist of a 3 pole circuit breaker and 3 pole magnetic contactor with heater elements for overload protection. Motor control centers shall be provided with copper bus. The minimum size starter shall be NEMA 1.

2.13.4 Conductors

- Wire and cable shall be copper and shall have current carrying capacity not less than that necessary to conform to UL standards. Conductor sizes shall be as indicated on the drawings and shall not be less than No. 12 AWG gauge wire and shall be solid copper. Voltage rating of conductors, which operate at 600 volts and below shall be 600 volts. Recessed lighting fixtures in hung ceilings shall be supplied with Type AF insulated wire in flexible metal conduit, in lengths not exceeding 6 feet, from adjacent junction box. Type THWN insulated wire may be used for branch circuit wiring, providing the ampacities at which it is employed are based on the allowable ampacity of 750C wire.

3.0 PLUMBING

3.1 CODES

- The entire installation shall comply with the Building Code of New York State, the Plumbing Code of New York State, the Fuel Gas Code of New York State, and all other applicable local codes.

3.2 SCOPE OF WORK

- Provide all materials, labor, equipment, tools, appliances, services, hoisting, scaffolding, supervision and overhead for the furnishing and complete installation of plumbing and related, including, but not limited to, the following:
    - Domestic water system
    - Domestic hot water system
    - Sanitary sewage system
    - Storm water system
    - Plumbing fixtures
    - Natural gas system

3.3 DESCRIPTION OF SYSTEMS

3.3.1 Domestic Water System

- A 4” domestic water service will be provided from East Main Street, entering the building into a discreet “Water Meter Room”. The domestic water will be distributed to the building from this location through risers and branches to plumbing fixtures and mechanical equipment. A duplex domestic water booster pump system rated for approximately 135 gpm at 45 psi boost each pump with variable frequency drives will be installed for the building to maintain adequate pressure. The building will be provided with 1 domestic water zone.

- The system will be designed to:
    - Maintain a maximum velocity of 8 fps at design flow condition.
    - Prevent water hammer conditions by providing air chambers and/or water hammer arrestors at fixtures as required.
    - Protect the site water system against backflow. Vacuum breakers or other types of backflow prevention devices will be provided.
    - Provide adequate water pressure to the most remote plumbing fixtures (35 to 80 PSIG).
    - Provide valved and capped outlets, as required, with reduced pressure zone backflow preventer for irrigation.
    - Provide valved and capped outlets, as required, with submeter for commercial tenant spaces.
    - Provide valved and capped outlets, as required, with reduced pressure zone backflow preventer for mechanical makeup water.

3.3.2 Domestic Hot Water

Domestic hot water (120°F), for use in residential units will be generated by a 6-kw, 50-gallon, electric (Low Boy) tank type water heater dedicated to each residential unit.

Domestic hot water (120°F), for use at other locations within the building will be generated by point of use electric water heaters. Domestic hot water will be distributed through branches to plumbing fixtures.

3.3.3 Sanitary Sewage System

A complete and fully vented gravity soil and waste system will be provided to drain all plumbing fixtures and equipment rooms throughout the facility and shall discharge by gravity to the municipal sanitary sewer system.

(1) 8" sanitary sewer conveying approximately 1,150dFU's shall be provided for each of the North & South buildings.

(1) 4" sanitary sewer conveying approximately 70dFU's shall be provided for each of the Cottage's A, C, D & F.

(1) 4" sanitary sewer conveying approximately 35dFU's shall be provided for each of the Cottages B & E.

Floor drains will be provided in all mechanical rooms. Plumbing fixtures and floor drains that cannot be directly connected to the gravity system will discharge into an ejector pit drained by duplex ejector pumps. The ejector pump discharge will connect to the building sanitary system, as required by code.

Sump pumps will be provided to drain elevator pits. discharge will connect to the building sanitary system, as required by code.

The system will be designed to maintain a minimum 1/8" per foot slope and a flow of 3 fps.

Vent and soil stacks will be provided as required. The vent lines will be located to complement the architectural development of the building roof. Adequate vent piping will ensure that pressure fluctuations within the system stacks and branch lines are maintained within acceptable limits.

3.3.4 Storm Water System

The storm drainage system and, the secondary drainage will be designed based on a storm of one (1) hour duration and a 100-year return period with a rainfall intensity of 3 in/hr.

Storm water from the roof of the North & South building will be collected in the roof drains with leaders discharging by gravity to the municipal storm sewer system. Two (2) 10" storm sewers shall be provided for the North & South building.

Storm water from the six (6) cottages will be collected in gutters with leaders discharging by gravity to the municipal storm sewer system. Gutters and leaders from the cottages will be indicated on the architectural and civil plans.

The system will be designed to maintain a minimum 1/8" per foot slope.

3.3.5 Plumbing Fixtures

Plumbing fixtures shall be approved type for water conservation and ADA compliance where needed. All fixtures shall be provided with individual stop valves per code. Water closets shall be tank type.

3.3.6 Natural Gas System

3.3.6.1 Option A

- Natural gas service will be provided to the building with meters/pressure reducing assembly at exterior of building in accordance with all utility company requirements. A firm gas distribution system will be provided to feed the following:
    - House/common area domestic water heaters and HVAC equipment throughout the building.
    - Emergency generator.
    - Each apartment unit will also be provided with a gas distribution system with a dedicated utility meter to feed HVAC equipment within the residential unit.
    - Where applicable regulators shall be provided to deliver appropriate pressure to gas fired equipment.

3.3.6.2 Option B

- Natural gas service will be provided to the building as noted above in Option A except that residential apartments will be all electrical and will not utilize natural gas.

4.0 FIRE PROTECTION

4.1 CODES

- The entire installation shall comply with the Building Code of New York State, the Fire Prevention Code of New York State, NFPA, and all other applicable codes.

4.2 SCOPE OF WORK

- Provide all materials, labor, equipment, tools, appliances, services, hoisting, scaffolding, supervision and overhead for the furnishing and installing of fire protection and related work to be complete, including, but not limited to, the following:
    - 6” Fire Water service
    - Double Check Detector assembly on the fire service
    - Fire Department/Siamese connections
    - Full Sprinkler System
    - Class I Fire Standpipe System

4.3 DESCRIPTION OF SERVICES

4.3.1 Source of Water

- A 6” fire service will be provided entering the North & South building into a discreet “Water Meter Room”. A double check detector assembly will be provided on the fire service. A horizontal split case fire pump will be designed to meet the sprinkler and fire standpipe system requirements of the North & South building and will be provided with automatic transfer switch and jockey pump. Anticipated pump capacity will be approximately 750 gpm at 65 psi boost.

4.3.2 Sprinklers

- The sprinkler system will be hydraulically calculated to meet the following criteria:

Areas	Occupancy Classification	Sprinkler Density
Residential units, corridors, and common areas.	Light Hazard	0.10gpm over most hydraulically remote 1500ft² area.
Commercial spaces, parking garages, and mechanical rooms.	Ordinary Hazard Group 1	0.15gpm over most hydraulically remote 1500ft² area. (1950 ft²

Areas	Occupancy Classification	Sprinkler Density
		area for dry pipe systems

- Each floor will be a separate sprinkler zone and will be controlled by a sprinkler zone control valve. No zone will exceed 52,000 sq. ft.
- The entire North & South building will be protected by a wet sprinkler system. Dry-pipe sprinkler systems will be provided for garage and other areas subject to temperatures below 40F. Sprinkler density for dry pipe systems shall be 0.15 gpm over 1,950 sq.ft. unless otherwise noted greater by insurance underwriter and/or owner requirements.
- The entire Cottage buildings will be protected by a wet sprinkler system. Dry-pipe sprinkler systems will be provided for areas subject to temperatures below 40F. Sprinkler density for dry systems shall be 0.15 gpm over 1,950 sq.ft. unless otherwise noted greater by insurance underwriter and/or owner requirements.
- Should FM Global insurance cover this project, then its requirements for the Fire Protection systems will be utilized.

4.3.3 Standpipe System

- The North & South building will be provided with a manual-wet Class I fire standpipe system.
- At each floor the combined system will be equipped with a hose station consisting of a 2-½" hose valve, located at the main landing on every required egress stairway.
- Riser control valves will be located at the standpipe feed.
- Roof manifold equipped with three capped 2-½" hose valves will be provided at most remote standpipe location.

4.3.4 Fire Extinguishers

- The building will be provided with fire extinguishers of the dry chemical type located to meet the requirements of NFPA 10. Additional extinguishers will be provided at mechanical rooms, electric closets, elevator machine room, generator room, and communication rooms, and as required by the AHJ. Fire extinguishers will be indicated on the architectural plans.

AMS Acquisitions - AMS Yorktown Multifamily Development - 800 East Main Street, Yorktown, NY							Energy Load Summary		
Building ID	Building Description	Building Area (GSF)	# Floors		Total # Apt. Units	Generator	Electrical Load (kW)		Gas Load (MBH)
			Above Grade	Below Grade			Connected	NEC Demand	
North Building	4-story multifamily residential building with tenant amenities including courtyard pool.	153,612	4	1	79	150kW Gas	8,613.2	2,055.5	16,072
South Building	5-story multifamily residential building.	155,467	5	0	86	150kW Gas	8,311.9	1,842.3	15,442
Cottage Buildings x (6)	Six (6) 1-story cottage buildings with 2- and 3-apartments per building and private garages.	40,020	1	0	20	-	1,199.6	455.8	4,560
Total					**185**		**18,124.7**	**4,353.6**	**36,074**

Stantec Consulting Services Inc
30 Oak Street Suite 401, Stamford, CT 06905-5310

December 18, 2023

Consolidated Edison Company
511 Theodore Fremd Avenue
Rye, NY 10580

To Whom it May Concern,

Reference: AMS Yorktown – 800 East Main Street Yorktown, NY

Stantec Consulting Services has been obtained as MEP Engineers for the above referenced project.

AMS Acquisitions (the Owner) is planning to develop AMS Yorktown, a new multifamily residential development with two (2) 5-story multifamily buildings and six (6) cottage buildings at 800 East Main Street in Yorktown, NY.

The North and South 5-story multifamily buildings will consist of 165-apartment rental units, interior tenant amenities, and common courtyard with pool. There will be two (2) typical configurations for the single-story cottage buildings with a total of 20-apartment rental units.

The project site will also include on grade parking, walking paths, and exterior tennis courts.

The anticipated building areas are as follows:

- North Building – 153,612 sq. ft.
- South Building – 155,467 sq. ft.
- Cottages – 40,020 sq. ft.

Approximate Total Gross Floor Area – 349,099 sq. ft.

Please find the charts below outlining the anticipated connected gas load for the building:

A. Multi-Family Building (North & South) House Meter

Load Component	Unit Gas Load (CFH)	Quantity	Total Gas Load (CFH)
Gas-Fired Roof Top Unit (HVAC)	250	4	1000
Barbecue Grill	160	8	1280
Pool Heater	400	1	400
Total Connected Loads			**2,680 CFH**

B. Typical Multi-Family Building (North & South) Residential Meter

Load Component	Unit Gas Load (CFH)	Quantity	Total Gas Load (CFH)
Gas-Fired Furnace	60	1	60
Range	90	1	90
Total Connected Loads			**150 CFH**

Reference: **AMS Yorktown – 800 East Main Street Yorktown, NY**

C. Emergency Generator Meter

Load Component	Unit Gas Load (CFH)	Quantity	Total Gas Load (CFH)
Gas-Fired Emergency Generator	2,042	2	4,084
Total Connected Loads			**4,084 CFH**

D. Typical Cottage Units C-1

Load Component	Unit Gas Load (CFH)	Quantity	Total Gas Load (CFH)
Gas-Fired Furnace	90	1	90
Range	90	1	90
Total Connected Loads			**180 CFH**

E. Typical Cottage Units C-2

Load Component	Unit Gas Load (CFH)	Quantity	Total Gas Load (CFH)
Gas-Fired Furnace	120	1	120
Range	90	1	90
Fireplace	50	1	50
Total Connected Loads			**260 CFH**

F. Cottage's A, C, D, F

Load Component	Unit Gas Load (CFH)	Quantity	Total Gas Load (CFH)
Unit Type C-1	180	2	360
Unit Type C-2	260	2	520
Total Connected Loads			**880 CFH**

G. Cottage's B, E

Load Component	Unit Gas Load (CFH)	Quantity	Total Gas Load (CFH)
Unit Type C-2	260	2	520
Total Connected Loads			**520 CFH**

H. Total

Load Component	Unit Gas Load (CFH)	Quantity	Total Gas Load (CFH)
House Meter	2680	1	2680
Typical North & South Buildings Residential Meter	150	165	24,750
Typical Cottage Meter Unit C-1	180	8	1440
Typical Cottage Meter Unit C-2	260	12	3120
Emergency Generator Meter	2,042	2	4,084
Total Connected Loads			**36,074 CFH**

To serve the above loads, we are requesting a gas pressure of 2 PSI for the project.

Kindly review the above gas loads. We would like to meet with you on site at your earliest convenience to discuss the following:

1. Availability of gas at the site, including written confirmation of gas service pressure.
2. Proposed P.O.E. and gas meter locations.

Reference: **AMS Yorktown – 800 East Main Street Yorktown, NY**

Should you require additional information, please do not hesitate to contact me.

Regards,

Stantec Consulting Services Inc

Michael Piccirillo
Senior Plumbing/Fire Protection Designer
Phone: 203.434.2860

Stantec Consulting Services Inc.
30 Oak Street, Suite 400, Stamford, CT 06905

December 15, 2023
Revised: December 28, 2023

Attention: Mr. Michael Matuskovic
Customer Project Manager
Bronx/Westchester Energy Services
Consolidated Edison Company of New York, Inc.

Re: AMS Yorktown
800 East Main Street, Yorktown NY
Multifamily Residential Development
Electrical Load Letter

Dear Mr. Matuskovic:

Stantec Consulting Services has been obtained as MEP Engineers for the above referenced project.

AMS Acquisitions (the Owner) is planning to develop AMS Yorktown, a new multifamily residential development with two (2) 5-story multifamily buildings and six (6) cottage buildings at 800 East Main Street in Yorktown, NY.

The North and South 5-story multifamily buildings will consist of 165-apartment rental units, interior tenant amenities, and common courtyard with pool. There will be two (2) typical configurations for the single-story cottage buildings with a total of 20-apartment rental units.

The project site will also include on grade parking, walking paths, and exterior tennis courts.

The anticipated building areas are as follows:

- North Building – 153,612 sq. ft.
- South Building – 155,467 sq. ft.
- Cottages – 40,020 sq. ft.

Approximate Total Gross Floor Area – 349,099 sq. ft.

The following is a breakdown of the anticipated building electrical loads.

I. North Building

A. Dwelling Unit Loads – (79) Apartment Units

Description	Load
Lighting and Receptacles @ 3W/SF	273.0 kW
Dedicated Small Appliance Circuits (2) @ 1.5kW/EA	237.0 kW
Appliances (Refrigerator, Dishwasher, Garbage Disposal, Microwave, Wine Fridge)	395.0 kW
Hot Water Heating (Electric Tank Type)	474.0 kW
Laundry (Washing Machine & Clothes Dryer)	513.0 kW

Reference: **AMS Yorktown – Multifamily Residential Development – 800 East Main Street, Yorktown, NY**

Electric Range	695.2 kW
Heat/AC (Electric Split Heat Pumps)	910.1 kW
Total Connected Dwelling Unit Load	3497.8 kW
Total Dwelling Unit Demand Load (NEC 220.84)	**804.5 kW**

B. House Loads

Description	Load
HVAC	
Amenity/Lobby HVAC	102.7 kW
Common Corridor HVAC	205.9 kW
Electric Heat, UH/CUH	100.0 kW
Supplemental Split AC	15.0 kW
Plumbing	
Sump Pumps	2.0 kW
Domestic Booster Pump	20.0 kW
Electric Heat Trace	20.0 kW
Instantaneous Electric Water Heaters	68.0 kW
Pool Pumps	6.0 kW
Fire Protection	
Fire Pump	50.0 kW
Jockey Pump	5.0 kW
Dry Sprinkler Compressors	5.0 kW
Electrical	
Lobby/Amenities – Receptacles & Lighting	26.4 kW
Common Corridor – Receptacles & Lighting	35.3 kW
Site Lighting	20.0 kW
Fire Alarm System / Telecom / Security	10.0 kW
Sauna Electric Heater	50.0 kW
Steam Room Generator	100.0 kW
Amenity Kitchen/Cooking Appliances	12.0 kW
Trash Compactors	10.0 kW
Elevators (3 @ 15HP)	45.0 kW
Electric Vehicle Supply Equipment (Level 2 @ 208V-1PH, 32A x 60 Spaces)	399.4 kW
Total House Connected Load	1307.6 kW
Total House Demand Load	**1251.0 kW**

The largest motor starting across the line will be a 50-HP fire pump.

Reference: **AMS Yorktown – Multifamily Residential Development – 800 East Main Street, Yorktown, NY**

II. South Building

A. Dwelling Unit Loads – (86) Apartment Units

Description	Load
Lighting and Receptacles @ 3W/SF	297.2 kW
Dedicated Small Appliance Circuits (2) @ 1.5kW/EA	258.0 kW
Appliances (Refrigerator, Dishwasher, Garbage Disposal, Microwave, Wine Fridge)	430.0 kW
Hot Water Heating (Electric Tank Type)	516.0 kW
Laundry (Washing Machine & Clothes Dryer)	559.0 kW
Electric Range	756.8 kW
Heat/AC (Electric Split Heat Pumps)	990.7 kW
Total Connected Dwelling Unit Load	3807.7 kW
Total Dwelling Unit Demand Load (NEC 220.84)	**875.8 kW**

B. House Loads

Description	Load
HVAC	
Common Corridor HVAC	294.6 kW
Electric Heat, UH/CUH	100.0 kW
Supplemental Split AC	9.0 kW
Plumbing	
Sump Pumps	1.0 kW
Domestic Booster Pump	20.0 kW
Electric Heat Trace	20.0 kW
Instantaneous Electric Water Heaters	17.0 kW
Fire Protection	
~~Fire Pump~~	~~50.0 kW~~
~~Jockey Pump~~	~~5.0 kW~~
~~Dry Sprinkler Compressors~~	~~5.0 kW~~
Electrical	
Common Corridor – Receptacles & Lighting	50.5 kW
Site Lighting	20.0 kW
Fire Alarm System / Telecom / Security	10.0 kW
Trash Compactors	10.0 kW
Elevators (1 @ 15HP)	15.0 kW
Electric Vehicle Supply Equipment (Level 2 @ 208V-1PH, 32A x 66 Spaces)	439.3 kW
Total House Connected Load	1006.4 kW
Total House Demand Load	**966.5 kW**

~~The largest motor starting across the line will be a 50-HP fire pump.~~

Reference: **AMS Yorktown – Multifamily Residential Development – 800 East Main Street, Yorktown, NY**

III. Cottages TOTAL – Includes (6) Buildings

A. Dwelling Unit Loads – (20) Apartment Units

Description	Load
Lighting and Receptacles @ 3W/SF	110.9 kW
Dedicated Small Appliance Circuits (2) @ 1.5kW/EA	60.0 kW
Appliances (Refrigerator, Dishwasher, Garbage Disposal, Microwave, Wine Fridge)	100.0 kW
Electric Vehicle Supply Equipment (Level 2 @ 208V-1PH, 32A x 20 Spaces)	133.1 kW
Hot Water Heating (Electric Tank Type)	120.0 kW
Laundry (Washing Machine & Clothes Dryer)	130.0 kW
Electric Range	176.0 kW
Heat/AC (Electric Split Heat Pumps)	369.6 kW
Total Connected Dwelling Unit Load	1199.6 kW
Total Dwelling Unit Demand Load (NEC 220.84)	**455.8 kW**

To serve the above loads, we are requesting the following:

I. North Building
- a. One (1) 4,000 Amp, 120/208 Volt, 3-Phase, 4-Wire electrical service for the house and fire pump.
- b. One (1) 3,000 Amp, 120/208 Volt, 3-Phase, 4-Wire electrical service for the residential apartments.

II. South Building
- a. One (1) 3,000 Amp, 120/208 Volt, 3-Phase, 4-Wire electrical service for the house. ~~and fire pump.~~
- b. One (1) 3,000 Amp, 120/208 Volt, 3-Phase, 4-Wire electrical service for the residential apartments.

III. Cottages
- a. One (1) 2,000 Amp, 120/208 Volt, 3-Phase, 4-Wire electrical service.
  - i. One (1) 400 Amp, 120/208 Volt, 1-Phase, 3-Wire secondary feed to each of the six (6) Cottages.

Please review the above electrical loads. We would like to meet with you at your earliest convenience to discuss the following:

1. Availability of electric at the site, including written confirmation of service transformer size(s).
2. Possible POE and transformer(s) locations, including requirements for primary switchgear, if applicable.
3. Maximum available short circuit current at the point of service termination.

Reference: **AMS Yorktown – Multifamily Residential Development – 800 East Main Street, Yorktown, NY**

Should you require additional information, please do not hesitate to contact me.

Regards,

Stantec Consulting Services Inc.

Tyler J. Rich, M.B.A., P.E., LEED® AP BD+C
Senior Associate
(203) 536-5489
Tyler.rich@stantec.com

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Consolidated Edison Company of New York, Inc.
Customer's Gas Service Layout (2-80)
Equipment to be installed by the Customer's Contractor

Case ID	MC-736585
Layout/Ticket #	
Customer Service Date 6/6/25	

* See Explanation Below

Service Address	800 E Main Street
Unit/Suite#	
City State Zip	Shrub Oak, NY 10588
Project Name	
Created By/Date	Muldoon, Michael/ January 16, 2024

Customer	Ryan Sutherland	**Contractor**	Joseph Merlino
CompanyName	AMS Acquisitions	**CompanyName**	Stantec
Address	ONEBRIDGE PL	**Address**	30OAK ST
Unit/Suite#		**Unit/Suite#**	Suite 400
City State Zip	FORT LEE NJ 07024	**City State Zip**	STAMFORD CT 06905
E-mail	rsutherland@amsacquisitions.com	**E-mail**	joseph.merlino@stantec.com
Phone	(212)695-7585	**Phone**	(203)328-1894

Con Edison Service Determination
INSTALL/REPLACE SERVICE/MAIN EXTENSION
Install new 2" HPPE gas service from main to property line for loads given. Con Edison recommends customer install 2" HPPE gas service from property line to point of entry. Customer is responsible for the cost of gas service installation from property line to point of entry up to and including head of service valve. Main extension is required. Install approximately 800' of 4" HPPE gas main from E Main St to customer's point of service. Customer is responsible for the cost of gas service installation in excess of 100'. Cost estimate to be provided at later date.

Please Review the following Items
This Service Layout is subject to revision based on field conditions and customer or Con Edison needs.
Modification of this Layout may only be done by an authorized Con Edison representative. Please contact your representative if you need a written revision.
Please review the specifications referenced in this document to ensure any new equipment is compliant with the Gas codes of the local authorities having jurisdiction and Con Edison specifications.
This Layout is good for 6 months. Please check back with your representative for the most recent specifications prior to starting your work.
Final Inspections are completed by Con Edison representatives at no cost to the customer.
Any changes to existing joints, fittings, pipes etc. must be filed with the local authorities having jurisdiction and be authorized for service by said authorities prior to Con Edison inspection and your service being energized.
If you have any questions prior to starting your work, please contact your representative.
Gas services de-energized for any reason may require authorization by the local authorities having jurisdiction prior to service restoration.
All certificates of inspection must be approved by the authorities having jurisdiction prior to energizing services.
If you have any questions prior to starting your work, please contact your representative.
Representatives require 48 hours of notice to schedule Inspections.
Services installations that require permits for working on state roads, generally require more time to coordinate permit issuance with the NY State Department of Transportation.
When the contractor's work is completed, the customer or contractor must arrange for an inspection with a representative and submit a Pressure Test Affidavit
Please follow this link to read and share information on safe excavation practices related to Call Before You Dig

- Any individual (contractor or licensed plumber) who is working on below grade pipelines and service lines must adhere to all federal, state and Con Edison requirements for any new construction work. This includes all requirements for Gas Operator Qualification (OQ).
- Individuals performing below grade gas work must have a Northeast Gas Association (NGA) OQ Certification Card prior to the project start date and readily available throughout to verify OQ task compliance.
- The following work cannot be performed by non-operator qualified plumbers and/or contractors:
  - Installation and/or joining of a plastic pipeline, below grade.
  - Installation and/or joining of a steel pipeline, below grade.
- The following work is restricted and cannot be performed by customer plumbers/contractors, unless they are operator qualified and participating in a Drug & Alcohol program:
  - Any “repair” work on a pipeline.
  - Operation of a valve on a pipeline (i.e. operation of a curb valve and/or head of service valve)
  - Any operations and maintenance (O&M) tasks performed on a pipeline.
- Outdoor Meter Set Assembly work will remain with the plumbers/customer contractors.

If a customer’s contractor or licensed plumber does not have individuals available with the necessary operator qualifications to perform the above described work, the following options will be available:

- A Customer contractor can provide (excavate) the trench, and Con Edison will perform the below grade gas work (Con Edison will charge the customer an accommodation cost for this work).
- Backfill of trench must be supervised by someone Operator Qualified for Covered Task 71.

- Customer licensed plumbers will continue to install associated outdoor gas meter assemblies.

Operator Qualification (OQ) Requirements

When working on buried gas service pipe, a Customers' Licensed Master Plumber is required to be Operator Qualified per Subpart N in 49 CFR Part 192.

Con Edison is advising those customer contractors or licensed plumbers seeking Operator Qualifications to use Northeast Gas Association (NGA) OQ Program.

For information on becoming Operator Qualified please visit the Northeast Gas Association web site located at: http://www.northeastgas.org/tql-operator.php .The NGA can also be contacted via the following email: oq@northeastgas.org to request new Operator Qualification, to schedule changes, cancellations or when scheduling a "hands on" evaluator for Operator Qualification. Please note that all cancellations require 72 business hours.

Welding and assembly of new "outdoor" above –ground meter-sets and/or new inside piping between the foundation wall and the gas meter outlet will require the Customer's Licensed Master Plumber to be operator qualified

Equipment&Specifications			
Equipment Type	**Qty**	**Equipment Description**	**Specification**
Metering Equipment		Installation of Meter Piping for class 500 TC to 1000TC Diaphragm gas Meters-Outdoors	506175
Customer Piping		Trenching, BackFilling, Welding, Restoring after Repairs, Elect	Customer Piping
Metering Equipment		Installation of Meter Piping for Class 250TC Diaphragm Gas Meters Outdoors	EO-16585
Regulator Equipment		Regulator Peck Vent Installation	EO-17118
Metering Equipment		Installation of Class 500TC to Class 1000TC Diaphragm Gas Meters – Indoors	G-316
Metering Equipment		Installation of Meter for Class 3000R to 38,000R Rotary Gas Met	G-641
Lock Valves		Method of Securing Lock-Wing Valves	G-690
Supports		Supporting Gas Service Meters and Regulators	G-695
Service Installations		Sealing the Annular Space Between the Gas Service Pipe/Tubing a	G-8096
Service Installations		Qualification of Installers Performing Heat Fusion or Electrofu	G-8121-15-IG
Service Installations		Heat Fusion Joining of Polyethylene (PE) Plastic Pipe/Tubing an	G-8123-16
Service Installations		Qualification of Installers who join Plastic Pipe/Tubing with M	G-8199-7-IG
Approved Head Valves		Plug Valves for Head of Service Installations	Head Valves
Service Installations		Installation of Mechanical Fittings for Plastic Pipe and Tubing	IP-20-6
Service Installations		Installation of Electrofusion Fittings on PE Plastic Pipe/Tubin	IP-27-5

Prerequisites for Construction	
The Customer's/Contractor's responsibilities prior to service construction are to:	Customer to complete by:

Prerequisites for Final Inspection	
The Customer's/Contractor's responsibilities prior to requesting a Final Inspection are to:	Customer to complete by:

* Inability to meet the deadlines outlined above will jeopardize Con Edison's ability to meet the Customer Service Date.

Consolidated Edison Company of New York, Inc.
Customer's Electric Service Layout (2-80)
Equipment to be installed by the Customer's Contractor

Case ID	MC-734287
Layout/Ticket #	S-2024-60050-WTY
Customer Service Date	

Service Address	800 Main Street
Unit/Suite#	
City State Zip	Shrub Oak, NY 10588
Project Name	
Created By/Date	Muldoon, Michael/ April 15, 2024

Customer	Ryan Sutherland	**Contractor**	Tyler Rich
CompanyName	AMS Acquisitions	**CompanyName**	Stantec
Address	1BRIDGE ST	**Address**	30OAK ST
Unit/Suite#		**Unit/Suite#**	
City State Zip	FORT LEE NJ 07024	**City State Zip**	STAMFORD CT 06905
E-mail	rsutherland@amsacquisitions.com	**E-mail**	tyler.rich@stantec.com
Phone	(401)787-0763	**Phone**	(203)536-5489

Con Edison Service Determination
PAD MOUNTED TRANSFORMER INSTALLATION
FURNISH AND DELIVER (5) 100 KVA (LINE ITEM 300) 7.6/2.4KV 120/240V MINI-PADMOUNT TRANSFORMER. FURNISH AND DELIVER 5 FIBERGLASS URD TRANSFORMER BASE PAD. FURNISH AND DELIVER FOUR WAY-THREE PHASE T-TAP BOX.

Please Review the following Items
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Final Inspections are completed by Con Edison representatives at no cost to the customer.
If you have any questions prior to starting your work, please notify a representative at the number provided in this email.
Services installations that require permits for working on state roads, generally require more time to coordinate permit issuance with the NY State Department of Transportation.
Approved certificates of inspection must be provided by the authorities having jurisdiction prior to energizing services.
Representatives require 48 hours of notice to schedule inspections.
Please follow this link to read and share information on safe excavation practices related to Call Before You Dig

Equipment&Specifications

Equipment Type	Qty	Equipment Description	Specification
Meter Pan		Outdoor Watthour Socket Meters	MES-394

Prerequisites for Construction	
The Customer's/Contractor's responsibilities prior to service construction are to:	Customer to complete by:

Prerequisites for Final Inspection	
The Customer's/Contractor's responsibilities prior to requesting a Final Inspection are to:	Customer to complete by:

* Inability to meet the deadlines outlined above will jeopardize Con Edison's ability to meet the Customer Service Date.

Consolidated Edison Company of New York, Inc.
Customer's Electric Service Layout (2-80) Revision 1
Equipment to be installed by the Customer's Contractor

Case ID	MC-734287
Layout/Ticket #	S-2024-60050-WTY
Customer Service Date 5/1/25	

* See Explanation Below

Service Address	800 Main Street
Unit/Suite#	
City State Zip	Shrub Oak, NY 10588
Project Name	
Created By/Date	Muldoon, Michael/ April 15, 2024

Customer	Ryan Sutherland	**Contractor**	Tyler Rich
CompanyName	AMS Acquisitions	**CompanyName**	Stantec
Address	1BRIDGE ST	**Address**	30OAK ST
Unit/Suite#		**Unit/Suite#**	
City State Zip	FORT LEE NJ 07024	**City State Zip**	STAMFORD CT 06905
E-mail	rsutherland@amsacquisitions.com	**E-mail**	tyler.rich@stantec.com
Phone	(401)787-0763	**Phone**	(203)536-5489

Con Edison Service Determination
PAD MOUNTED TRANSFORMER INSTALLATION
FURNISH AND DELIVER TWO (2)1000KVA 13/4KV 120/208V 3 PHASE RADIAL PADMOUNT TRANSFORMER (LINE ITEM 97) TO CUSTOMER PROPERTY LINE. CUSTOMER CAN CONNECT TO TT19127 POSITION 104 TO FEED NEW PAD MOUNT TRANSFORMERS. REPLACE 40A FUSES WITH 100A FUSES ON POLE 380 NEW ROUTE 6 AND POLE 379B ON EAST MAIN ST. PICK UP V6769 AND V18983 TWO (2) 300KVA 13/4KV 120/208V PADMOUNT TRANSFORMERS AT CUSTOMER PROPERTY LINE.

Please Review the following Items
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Equipment&Specifications			
Equipment Type	**Qty**	**Equipment Description**	**Specification**
Meter Pan		Outdoor Watthour Socket Meters	MES-394

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Prerequisites for Final Inspection	
The Customer's/Contractor's responsibilities prior to requesting a Final Inspection are to:	Customer to complete by:

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