January 27, 2020

The following (Q&A and Clarifications) will serve as Amendment #1 to NYSIF's Request for Proposals (RFP) for Real Property Purchase, bid number 2020-01-RE. Material in this Amendment supersedes any contradictory material in the RFP.

The following provision is being added to Section 5, "PREMISES/MEASUREMENT".

> The location of the property shall not be located in zones designated as High or Moderate hazards in accordance with FM Global standards.

Please note that the due date for the submission of bids **remains unchanged**.

All bids are due February 18, 2020, by 5:00 p.m.(eastern).

Sincerely,

Ellen Herman

Real Property Purchase
RFP #2020-01-RE
Amendment 1

Question #	Question	Response
1	Please provide a schedule for expected occupancy	Seller should provide a development schedule with key milestone dates indicating when the building and premises will be substantially complete and ready to turn over to the purchaser for move-in and occupancy.
2	Section 5 Premises / Measurement : If this is a purchase, what is the need to "indicate how purchaser will occupy actual premises and then occupy the expansion premises."	Seller will have 150K sf built to finish on day one. 25K sf will be left in a gray box condition upon sale date.
3	Section 5 Premises / Measurement: BOMA ASNI Z265.1-2010 is referenced but there is a new standard available (BOMA ASNI Z265.1-2017). Please confirm that 2010 is the correct standard and that the measurement of the building will be the "gross area" of the building.	Confirming BOMA ASNI Z265.1-2017 is the correct standard
4	Section 6 Building and Floor Details: (as well as in Section 9, 12, and Exhibit 1) suggest that the RFP is for a "Core and Shell" Building. But Section 10 references "complete interiors fit-out". Please clarify if this RFP is for Core and Shell only or if it also includes the T.I.	Building will be turnkey upon sale with the exception of the IT server environment.
5	Section 8: Basis of Design: Will the Basis of Design Report be used for variances to the RFP?	Yes
6	Section 9: Design/Construction: It is unclear how the "Purchaser" will have input on the selection of the Architect and other professionals. Please clarify this item, as the Design Team will be selected prior to submitting on the RFP.	The seller will use their own architect and other professionals. The purchaser's professionals will work with the seller's.
7	Section 9: Design/Construction: It is noted that the Purchaser has the ability to make changes to the design. Who will be responsible for cost(s) associated to the changes?	The purchaser will be responsible for net cost of changes which result in increased costs. The seller will credit the purchaser the net savings should changes result in decreased costs.
8	Section 9: Design/Construction: 1. Item 1. Will the Purchaser advise their Design Team? 2. Item 4. Please advise how the Purchaser will provide input on the Contractor as they will be selected prior to the submission to this RFP. 3. Item 5. Please provide the "vendor maintenance agreements" that the Purchaser would like to have in place and the duration(s). 4. Item 8. Please provide Testing/Commissioning requirements of the Purchaser.	1. Yes, as needed. 2. Item #4 is replaced in it's entirety with the following: "If applicable, Consult with the Purchaser on contractor selection including the integrity and safety background of contractors" 3. Contractors will providing maintenance on the following systems for 1-year from possession date: HVAC, Elevator, Fire and Burglar alarm, and Building Management System. 4. Purchaser's commissioning agent will confirm seller's commissioning of all equipment to ensure proper operation and energy efficiency, in accordance with NYS Executive Order 88. Testing must conform with applicable code and best practices.

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9	Section 10: Price to include “complete interior fit out”. Is the purchaser looking at the Seller to provide an allowance in the base proposal?	Purchaser is seeking a turnkey buildout with the exception of IT server environment. The space program details the interior layout requirements.
10	Section 11: Green Initiative / Sustainability: The RFP notes “new building” but there are several locations that refer to existing. Please advise if an existing building that can be renovated to meet LEED Gold will be acceptable.	There is no requirement on the building itself. New or an existing building is acceptable.
11	Section 12: LEED CERTIFICATION: Are solar carports acceptable for providing renewable energy?	All options which create a renewable energy source is acceptable and will be considered.
12	Section 15: ENERGY: It is noted that renewable energy is desired and that the building operate with a “great dependency”. Please define “greater dependency”.	The desired building will have renewable energy sources including energy supplier’s delivery of same.
13	Section 17: BUILDING SECURITY / SAFETY: This concern would be part of the tenant improvement and addressed by the Purchaser’s Design Team.	The seller will include aspects of the proposed building which speak to safety and security of the occupants.
14	Section 19: BROKERAGE COMMISSION: Please provide the brokerage commission.	1.5% of the sales price
15	Exhibit 1: Base Building Definition / Base Building Shell Conditions. STRUCTURE a) Notes ceiling height of 8’-6” and on Page 6 of 11 it notes 8’-10”. Advise what is the correct ceiling height.	The correct ceiling height is 8'-6".
16	Exhibit 1: Base Building Definition / Base Building Shell Conditions. STRUCTURE c) References “existing”. Please advise if this RFP is for a new building or if a renovated building that meets LEED Gold is acceptable.	The building being purchased is not required to be new or existing.
17	Exhibit 1: Base Building Definition / Base Building Shell Conditions. STRUCTURE f) and g) This also eludes that the RFP is for “Core and Shell” only.	(f) & (g) would be relevant only where applicable.
18	Exhibit 1: Base Building Definition / Base Building Shell Conditions. EXTERIOR WALL - Wall Assembly: a) Notes “existing”. Please clarify.	If seller is proposing an existing building please provide existing condition.

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19	Exhibit 1: Base Building Definition / Base Building Shell Conditions. EXTERIOR WALL - Glass & Glazing: a) References "existing". Please clarify.	If seller is proposing an existing building please provide existing condition.
20	Exhibit 1: Base Building Definition / Base Building Shell Conditions. VERTICAL TRANSPORTATION - Section notes, "if not new" and "upgradable": Please clarify.	If seller is proposing an existing building please provide existing condition.
21	Exhibit 1: Base Building Definition / Base Building Shell Conditions. INTERIOR FINISHES/ELEMENTS 1. Core & Core Corridors: e) "…. Water fill stations compatible for bottle filling". Does the Purchaser want the water coolers "compatible" for fill stations or do they want water coolers with integral fill stations.	Water fill stations shall be hard plumbed to include filtered, chilled water.
22	Exhibit 1: Base Building Definition / Base Building Shell Conditions. 6. Purchaser/Occupier Areas: (Page 6 of 11) c) Please clarify: "Seller to specify work letter for Purchaser/Occupier fit-out of space program provided in solicitation.	Seller to specify work letter for Purchaser/Occupier fit-out of space program only where applicable.
23	Exhibit 1: Base Building Definition / Base Building Shell Conditions. HVAC: 6: DDC: The description eludes that the Seller will be providing Core and Shell only.	Revised Exhibit 1 specification provided.
24	Exhibit 1: Base Building Definition / Base Building Shell Conditions. ELECTRICAL: 6. Generator: - Will the Purchaser be placing the UPS(s) as needed/required?	Building shall have a generator capable to providing 100% of the power required to operate the building as built, plus an additional 1600 amps required for the server environment (not included in seller's requirements.
25	Exhibit 1: Base Building Definition / Base Building Shell Conditions. ELECTRICAL: 6. Generator: - Will a load bank be required to be integral with the generator?	Yes

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26	Exhibit 1: Base Building Definition / Base Building Shell Conditions. ELECTRICAL: 6. Generator: - Should it be assumed that the Purchaser will address load shedding as needed with the BMS system?	Yes
27	The only question we have currently is the 35% common area factor	The common area factor is a way to account for hallways and circulation throughout the building and premises.

Base Building Shell Condition

The following requirements and specifications:

Defines the Building Shell Condition of the proposed building, which shall be provided by the Seller/Developer at its sole cost and expense including but not limited to, architectural and engineering design, permits, labor, material, freight, taxes, insurance, bonds, inspections, and other sundry costs. Except as otherwise expressly noted herein, the Purchaser/Occupier Improvement Allowance(s) shall not be used, allocated, charged against or drawn on for any items or related items contained in the Building Shell Condition.

With respect to base building and base building systems improvements, if any, Seller/Developer hereby solicits and shall consider design review and commentary from Purchaser/Occupier's architects and engineers. Seller/Developer shall consider Purchaser/Occupier's input for any and all building enhancements or modifications that affect the Purchaser/Occupier's use and occupancy of the building and Purchaser/Occupier's premises, including but not limited to, all wall layout, all finishes, fixtures and equipment for and in the core restrooms, the main lobby, floor elevator lobbies, and exterior improvements, such as the front entrance, canopy and exterior building signage.

Delineates the minimum building performance criteria and design and construction standards required for the building elements and systems, which affect the Purchaser/Occupier's space, use and occupancy.

All construction shall be new and shall at a minimum be designed, performed and constructed in accordance with the then current building codes, regulations and applicable laws including but not limited to, the Americans With Disabilities Act Accessibility Guidelines, and in accordance with the following specifications. In the event that a specification exceeds the minimum requirement by code, regulation or law, the higher and best use specification in the interest of the Purchaser/Occupier shall be constructed.

All materials, finishes, and construction shall be equivalent in quality and application consistent with new 1st class buildings in the primary business districts of the locale. All Seller/Developer work shall include construction rough and final cleaning.

All systems to be commissioned by a commissioning authority (CxA) in accordance with NYS directives (EO88).

DEMOLITION - INTENTIONALLY OMITTED

FOUNDATIONS

1. Foundation system – Seller/Developer to describe

STRUCTURE

Floor Height, Slabs & Reinforcement:

a) Slab-to-slab height adequate to allow at a minimum eight foot six inches (8'6") clear finished ceiling height Above Finished Floor (A.F.F.) on all floors.
b) Floor flatness (FF) and floor levelness (FL) shall meet ACI specifications for the appropriate classification of concrete slabs (i.e., office). Floor leveling and flash patching provided by Seller/Developer to achieve FF and FL.
c) Office area loading capacity minimum: 80 psf live + 20 psf dead = 100 psf total. Seller/Developer shall also provide any and all structural supports for ensuring that the existing and/or improved mechanical rooms and other building systems meet the appropriate floor loading capacity required by code.
d) Structural reinforcement may be included to provide for Purchaser/Occupier's specialty item/use, including but not limited to such items as exterior signage, satellite dishes/antennae, moving file systems, concentrated filing areas, server room, data room, auditorium and interconnecting stairwell(s), as applicable. Provided Purchaser/Occupier provides location information to the Seller/Developer in a timely manner so that Seller/Developer can integrate requirements into the base building design modifications and contractor bidding, Seller/Developer shall consider such installations and necessary structural modifications to accommodate same.
e) Structural reinforcement on floors and/or roof for Purchaser/Occupier supplemental HVAC equipment, including but not limited to dry coolers and fans. Each floor has a 30' x 30' bay adjacent to the core with 150-pound load capacity.
f) Seller/Developer agrees to consider and construct the openings for the interconnecting stair(s) which shall be defined and provided by Purchaser/Occupier to the Seller/Developer in a timely manner so that Seller/Developer can integrate requirements into the base building design modifications and contractor bidding. This modification shall be at Purchaser/Occupier's expense.
g) Seller/Developer will be responsible for routing all mechanical (MEP) elements necessary for placement of the interconnecting stair(s). Purchaser/Occupier shall provide information in a timely manner so that Seller/Developer can integrate requirements into the base building design modifications and contractor bidding. This modification shall be at Purchaser/Occupier's expense.

EXTERIOR WALL

Wall assembly:

a) Exterior finish materials repaired as required, and shall include but not be limited to, caulking/sealants. Seller/Developer shall confirm that existing exterior wall system meets applicable codes (e.g., energy and building).
b) Thermal insulation with R value as required by current ASHRAE and other applicable codes and standards.
c) Waterproofing.
d) Interior side of exterior wall assembly (including sills, column enclosures) shall be insulated, drywalled, taped, spackled and readied (Level 4 finish) for painting to a minimum of 6" above Purchaser/Occupier's finished ceiling line.

Glass & Glazing:

a) "Low E" 1" thick minimum dual pane insulated glass with thermally broken mullion system. Seller/Developer shall confirm that existing exterior window system meets applicable codes (e.g., energy and building).

b) Minimum five (5) foot wide by six (6) foot high vision glass typical (width may be variable subject to Purchaser/Occupier's layout design). Sill height shall not be greater than 33-1/8" inches AFF.
c) Windowsills shall be complete.
a) Storefront with vestibule entries with factory finish mullion or butt glazing system. Main building entry shall be weatherproofed to eliminate drafts and shall include security hardware for controlled entry.

Window blinds: adjustable 1" horizontal metal mini-blinds on all exterior vision glass. Color of the window blinds to be selected by Purchaser/Occupier.

ROOF & WATERPROOFING

1. Roof:
   a) Mechanically adhered or ballasted EPDM or IRMA roofing system with minimum 60 mil thick membrane.
   b) Maximum U factor: maximum ASHRAE recommendations
   c) Minimum 20-year manufacturer's warranty.
   d) Structural reinforcement to support HVAC gear/components, rigging systems for exterior building maintenance (window washing, caulking, etc.) and Purchaser/Occupier specialty items, including but not limited to, satellite dish(es) and antennae(s), if applicable. Purchaser/Occupier to advise of special requirements.
   e) Pitch pockets and other weathertight flashing for all roof penetrations.
   f) New roof coping and flashing.
   g) Weathertight access hatch and ladder, or secure roof top access door, as applicable.
   h) Rain leaders as required with debris guards.

2. Waterproofing – repair as required.

3. Lightning Protection System
   a) New lightning protection system at roof and terraces, if any, in accordance with FM standards.

PARKING

1. All, striping, handicap signage, fire egress as required by code.
2. 800 parking spaces
3. 10 Electric Car charging stations
4. Solar powered energy efficient lighting

VERTICAL TRANSPORTATION

1. If not in new and or first-class condition, Seller/Developer shall renovate, upgrade and modernize the elevator system including but not limited to controls, door opening operations, call buttons/lanterns, ADA, and finishes.

2. Elevators and elevator system – upgraded to comply with the following:

a) Quantity and design for forty-five (45) second maximum interval and 12%-13% population handling capacity. Elevators to have center opening doors.
b) Door restrictors to prevent opening of interior car doors between floors.
c) At least one elevator cab shall be constructed to serve as a freight elevator and be positioned to serve "back of the house" functions.
d) Electric traction type hoist system – minimum 3,500 lb. capacity.
e) Interior finish for cabs shall be at the quality and level for 1st class buildings in the primary business districts of the Albany, NY area. Floor of elevator cabs shall be stone.
f) Micro-processor based control system. Elevator call push buttons and directional lanterns.
g) Individual floor programmable lock-off/controlled access capability with all controls, wiring, connections and devices included.
h) Conditioned elevator machine room.

INTERIOR FINISHES/ELEMENTS

Seller/Developer shall design and provide the construction of the main lobby, the floor elevator lobbies, core, core corridors and restrooms as required by the Purchaser/Occupier, and subject to Purchaser/Occupier and its advisors review and input and approval.
Main Lobby, Elevator Lobbies, Core & Core Corridors, Restrooms, Utility Rooms, Stairwells:
The following elements are common to each of the areas, unless otherwise noted:

a) GWB partitions – slab to slab insulated.
b) Solid core stain grade premium grade wood doors with narrow profile metal frames (fire rated as applicable) for all core doors. Stairwell doors shall have mortise hardware with electrified locksets tied into the building's security system. Restrooms shall have mortise hardware locksets.
c) Emergency exit lighting and signage.
d) Emergency white circuits tied into lights.
e) Light switches and convenience electrical power outlets including but not limited to GFI outlets in wet locations.
f) Fire detection and alarm devices, including but not limited to, heat and smoke detectors, pull stations, audio/visual alarms and strobes, speakers, and smoke/fire dampers, including all interconnections to the building fire alarm and control system.
g) Separate HVAC zone for the main building lobby with all ductwork (including air transfer ducts), dampers, diffusers and controls as required. All other elevator lobbies shall be served from the main building HVAC system with dedicated VAV's and related ductwork, diffusers and controls.
h) Fully sprinklered with recessed heads (concealed/flush mounted with cover plates) located in center of tile or aligned in GWB ceiling systems.
i) Fire extinguishers and cabinets.
j) Fire hose bib & valve cabinets.

Typical Elevator Lobbies:

a) Stone (e.g., granite or marble)
b) Specialty finish on walls and wall base (stone, millwork, fabric panels, reveals, feature panels)
c) Elevator doors and door jambs clad with painted metal (Factory Finished). Elevator openings shall be complete with bronze thresholds.
d) Specialty lighting (wall washers, pendants, sconces, indirect cove, etc.).
e) Gypsum board ceilings (cove, recessed or vaulted) with bulkheads or soffits.

f) Elevator call buttons and directional lanterns.

1. Core & Core Corridors:
   a) LVT flooring
   b) Lay-in acoustical tile ceilings.
   c) Lighting – 2' x 2' LED fixtures, downlights, cove up lights and wallwashers.
   d) Fabric/vinyl wallcovering or specialty paint (Polymix).
   e) Hi/Lo electric water coolers and ADA compliant filtered water fill stations compatible for bottle filling.

2. Restrooms:
   a) Ceramic tile flooring.
   b) Approximately six (6) foot high tile on all wet walls.
   c) Vinyl wallcovering or Polymix on walls above stone tile.
   d) Painted gypsum wallboard ceiling with GWB soffits/bulkheads.
   e) Wall hung toilet fixtures with automatic flush sensors and valves. Manufacturer requires approval by Purchaser.
   f) Underhung lavatories with lever trim in monolithic stone countertops with automatic dispensing (water and soap) fixtures.
   g) Electric water heater(s) as required to provide hot water to restrooms.
   h) All toilet accessories to include but not be limited to, mirrors, dispensers, receptacles, touchless Dyson Blade dryers and handicap accessibility/support mechanisms.
   i) Ceiling mounted toilet partitions, metal with baked enamel finish or epoxy resin and no gaps permitted between partitions or walls.
   j) Supply air ductwork and diffuser (no separate thermostat) provided in addition to exhaust system.
   k) Floor drain with backflow check valve in each toilet room.

3. Mechanical / Telephone / Electrical Rooms:
   a) Sealed concrete floor.
   b) No ceiling.
   c) Painted walls on CMU or drywall walls (properly rated).
   d) Fire rate plywood backboards for telephone equipment as required by Purchaser/Occupier, painted black
   e) Supply air tapped from corridor ductwork with diffuser and exhaust for telephone/electrical rooms.
   f) Floor drains with backflow check valves and overflow curbs in mechanical rooms.

4. Janitor Closets:
   a) Sealed concrete floor or vinyl composition tile flooring.
   b) Acrovyn wall panels or semi-gloss paint on all "wet" walls.
   c) Utility sink/basin.
   d) Open ceiling.
   e) LED lighting.
   f) Floor Drain

5. Stairwells:
   a) CMU or rated drywall assembly (shaftwall).

b) Painted– treads, risers and landings
c) Stairwell railings with painted finish.
d) Painted walls.
e) LED lighting with emergency white and emergency exit lighting.
f) Seller/Developer shall allow Purchaser/Occupier, at Purchaser/Occupier's option, to upgrade finishes and treatments in fire egress stairwells beyond the provisions above.

6. Purchaser/Occupier Areas:
   a) Base Building systems shall be installed to allow for installation of an average finished ceiling height eight foot ten inches (8' 10") A.F.F. throughout with sufficient clearance for installation of supply/return air boots and building standard lighting fixtures at any location.
   b) All interior columns drywalled, taped, spackled and readied for painting to 6" above finished ceiling line. Column depth furred-out to accommodate Purchaser/Occupier's devices, including but not limited to, flush mounted telephone, data and electrical outlets and fire alarm audio/visual devices.
   c) Seller to specify work letter for Purchaser/Occupier fit-out of space program provided in solicitation.

SPECIALTIES AND EQUIPMENT

1. Security System:
   a) Controlled entry system compatible with System Galaxy. base building, elevator, fire egress stairwells and specific floor access shall require the use of a single access control device by the Purchaser/Occupier.
   b) Security access control devices (e.g., proximity readers) for all fire stairwell doors on Purchaser/Occupier's floors – controlled and tied into electrified mortise locksets or magnetic locks as required.
   c) Elevator cabs shall have individual floor lock-off capability – fully installed and operational.
   d) Central computer or dedicated tie to 24-hour service.

2. Signage and placards for all "core" rooms including but not limited to, restrooms, utility rooms, suite numbering, stairwells, and all directional and instructional signs.

3. Directory signage in the main building lobby.

4. All utility connections and fees charged by governmental, quasi-governmental and public utility companies.

5. All utility consumption costs during the course of constructing Purchaser/Occupier improvements.

6. Window washing anchors/devices on roof, as required.

7. Bird anti-roosting system as required.

8. Fall protective tie off rings. These rings shall be located within 4 feet of all rooftop equipment located within 10 feet of the edge of the roof or as required by law.

PLUMBING

1. Piping:
    a) Below grade sanitary and storm: Cast iron with bell and spigot couplings or PVC.
    b) Above grade sanitary and storm: Cast iron with no-hub couplings per CISPI 310.
    c) All domestic water supply piping for base building requirements and taps for Purchaser/Occupier's requirements. Domestic water pressure booster pump, if required.
    d) Piping insulation per ASHRAE 90.1
    e) Loop isolation valves per floor for domestic water supply.

2. Fixtures:
    a) Comply with current Energy Policy Act.
    b) Wall hung water closets and urinals hands-free automatic flush sensors and valves.
    c) Underhung, oval lavatories with hands-free automatic dispensing sensors.
    d) Central Domestic Chilled Water System ~~[PLEASE CLARIFY CHILLED DRINKING WATER SYSTEM]~~ Details to follow.
        a. Water Fountain/Bottle Filling Stations must be Elkay or equivalent.
    e) Meters as required by code or utility authorities.

3. A minimum of three (3) wet stacks per floor, with valves and connections to domestic water supply, waste & vent lines.

FIRE PROTECTION

1. Design:
    a) In accordance with NFPA and local authority; including fire standpipe supply risers and drains, fire pump, and all appropriate sprinkler flow and tamper alarm devices interconnected to the building fire alarm system.

2. Sprinkler Heads:
    a) Sprinkler system shall be sized to meet Ordinary Hazard classification.
    b) Common/Core areas: Fully sprinklered with recessed heads (concealed/flush mounted with cover plates) located in center of tile or aligned in GWB or other ceiling system.
    c) Purchaser/Occupier areas: Fully sprinklered on a ratio of one (1) per 225 square feet. Sprinkler heads shall be installed in a loft condition. Purchaser/Occupier shall provide timely input to the base building sprinkler shop drawings.
    d) Provide separate fire hose bibs, valves, and hoses with enclosures, as required.
    e) Provide external Siamese hose bib connections, as required.

3. Fire Proofing:
    a) Fireproof structural steel supports and vertical penetrations as required by code.

4. Stairwell Pressurization:
    a) Stairwell pressurization system as required by code. Seal stairwells including but not limited to providing seals around stairwell doors.

H.V.A.C.

1. System Performance:
    a) Outdoor Conditions: per ASHRAE guidelines 90 and 62 (1% outdoor criteria).
    b) Indoor Conditions:
        1. Winter: 72 degrees DB
        2. Summer: 75 degrees DB, 50% relative humidity
    c) Internal heat gain based:
        1. 1 person per 150 s.f.
        2. Lighting load at 2 watts / s.f.
        3. Equipment load of 3 watts / s.f.
    d) NC 40 in all office spaces. Provide sound attenuators, soundlining, reduced air velocity as required. Sound attenuate mechanical rooms to NC 40 for Purchaser/Occupier spaces immediately adjacent to mechanical rooms.
    e) Fresh air/ventilation minimum per ASHRAE 62-1989 or more current standard: including but not limited to, 20 cfm/person for office areas, and 50 cfm/person for conference areas. Purchaser/Occupier shall provide conference area/rooms location information to the Seller/Developer in a timely manner so that Seller/Developer can integrate requirements into the base building design modifications and contractor bidding.
    f) Separate, ducted fan exhaust systems (fans, motors, duct, louvers, controls) for parking garage, toilet rooms, and telephone and electrical rooms. Building is equipped with a kitchen exhaust shaft.
    g) Separate cooling loop on each floor (Two (2) 2-1/2" (condenser water as the building design dictates) for Purchaser/Occupier's supplemental air conditioning system requirements. Separate loop shall be capable of providing 24 hours x 7 days per week x 365 days per year operation including all necessary taps, isolation valves, strainers, and drains. Seller/Developer shall consider providing roof or other reasonable space and access for Purchaser/Occupier's added cooling equipment. Supplemental cooling to be installed in data closets, server room and medium and large conference rooms.
    h) Seller/Developer shall provide a complete HVAC system to accommodate the Purchaser/Occupier's requirements and intended use of the Demised Premises.

2. Ductwork:
    a) All ductwork in accordance with SMACNA, latest edition.
    b) All supply ductwork up to and including VAV terminals.
    c) All return ductwork, transfers and grilles as required.
    d) All perimeter HVAC equipment downstream of VAV terminals along exterior of building provided by Purchaser/Occupier.
    e) Minimum 4" static construction for ductwork from air handling equipment to VAV terminals.
    f) Return and exhaust ductwork.
    g) Sound lining/duct insulation for twenty-five (25) feet beyond supply fans. Baffles attached to VAV terminals in sensitive areas, as required by Purchaser/Occupier.
    h) Vibration isolation curbs or dunnage for all roof mounted base building HVAC equipment.
    i) Dampers, plenum boxes, return air transfer ducts, O.A. grilles, fire dampers and smoke duct detectors as required for base building, core, lobby and core corridor construction.
    j) Sound attenuated Z offset return air transfer ducts at core, lobby, and slab to slab walls.

3. Insulation:
    a) 1-1/2" minimum blanket insulation for all supply ductwork up to VAV terminals for floors immediate below a roof.
    b) Flex duct shall be insulated.
    c) No insulation on return or exhaust ductwork except as required to attenuate noise.

4. VAV terminals:
    a) Fan powered series type.
    b) Reheat on perimeter, cooling only interior. All perimeter VAV boxes are equipped with reheat capabilities.
    c) Minimum one fan powered VAV per column bay for perimeter zones in office areas (considered to be within 12 feet of perimeter wall). Minimum one VAV per 1,000 s.f. for interior zones for offices and general office use. Total quantity of VAV terminals shall be no less than 1 per 700 rentable square feet for the Premises.

5. Diffusers/Return Air Grilles:
    a) Included in elevator floor lobbies, core corridors, core areas.
    b) Quantity and type (multi-directional air flow) as required for proper air distribution.
    c) Flex duct shall not be greater than eight foot (8') in length and no stovepipe extensions from branch duct are allowed.

6. Direct Digital Automatic Temperature Control (DDC) / Building Energy Management System, including:
    a) Thermostats/sensors with control wiring for each VAV terminal installed and calibrated in partitions according to Purchaser/Occupier's final approved construction documents.
    b) DDC control and status of all equipment.
    c) Certified air & water balance for entire base building/core HVAC system.
    d) Tie-ins of all Seller/Developer provided devices to the base building BAS/EMS system. ~~For Purchaser/Occupier's supplemental devices (excluding VAV's) Purchaser/Occupier and Seller/Developer shall agree upon a reasonable competitive market unit price for tie-in charges in advance if Purchaser/Occupier is required to use Seller/Developer's contractor for tie-ins.~~

7. Motors/Pumps:
    a) Variable speed/frequency drives on motors, fans and pumps for energy efficiency.

ELECTRICAL

1. Distribution:
    a) Typical floor electrical closets:
        1. A minimum of six (6) watts per square foot available in electrical closet for Purchaser/Occupier lighting (2 watts/psf) and power (4 watts/sf).
        2. A minimum of one (1) electrical closet per floor. 480/277v lighting panelboards, fully populated with circuit breakers (specified circuits and spares).
        3. 120/208v receptacle panelboards, fully populated with circuit breakers (specified circuits and spares).
        4. Separate 120/208v panelboard(s) for isolated ground and computer workstation/peripheral equipment circuits, fully populated with circuit breakers

(specified circuits and spares). Feeder wiring for IG panelboards shall include a 200% neutral conductor**.** Isolated ground panels not standard to base building construction

5. K rated isolation transformers for receptacle loads in each closet**.** K rated transformers not standard to base building construction
6. Emergency power panelboards, circuits, risers and connections for lights, security, and fire alarm system.

b) Mechanical system electrical loads, including VAV's and heaters, separated from lighting and receptacle loads.
c) Feeder upgrades, TVSS or other required over-current protective devices to meet design capacity and as required by code.
d) Underslab insulation for space immediately above non-conditioned space
e) Purchaser's server room requirement shall be addressed at a later date.

2. Emergency white circuits/lighting and emergency exit lights as required in all spaces.

3. All light fixtures shall be LED unless code requires otherwise (functional, decorative) and shall be included for all elevator lobbies, restrooms, core and core corridor areas, and exterior of building as applicable.

4. Lighting in all office areas will be a combination of direct & indirect light. Lighting in work areas and conference rooms will be dimmable. All lighting will meet applicable energy and electrical codes.

5. Fire Alarm Supervision, Detection & Annunciation System.
   a) A complete system as required for type of building construction and in accordance with code. Complete addressable detection and alarm system shall include, but not be limited to, fire alarm control panel, fire annunciator panel, fire alarm terminal cabinets & risers, power boost signal amplification modules, voltage transformers and interconnections to all key devices or equipment, including but not limited to, such items as elevator recall, sprinkler flow and tamper switches, emergency generator, fire pump, HVAC equipment, smoke evacuation system and monitoring devices and service. Fire annunciator panel and graphics to incorporate any zones or graphics required to indicate or annunciate Purchaser/Occupier's use of the Premises, in accordance with code.
   b) Include all required speakers, smoke detectors, duct detectors, heat detectors, pull stations, strobe lights, audible devices and other devices in the parking garage, elevator lobbies, elevator shafts, entrance foyers, common areas, restrooms, core and core corridor areas. System capacity (amplification, inputs, etc.) shall be adequate for addition of Purchaser/Occupier area devices without system supplementation or upgrade.
   c) Tie-ins of all Seller/Developer provided base building fire alarm detection and notification/annunciation devices to the base building fire alarm/control system. For fire alarm devices in Purchaser/Occupier's Demised Premises, Purchaser/Occupier and Seller/Developer shall agree upon a reasonable competitive market unit price for tie-in charges in advance, if Purchaser/Occupier is required to use Seller/Developer's contractor for tie-ins.

6. Emergency generator set for base building emergency systems at a minimum of 1200 KW. Seller/Developer shall also up-size the generator set to allow for Purchaser/Occupier's connection to and interoperability for emergency back-up systems for Purchaser/Occupier's computer

systems, if required. Purchaser/Occupier's connections shall be through an Automatic Transfer Switch. The reasonable cost of up-sizing the generator set and providing Purchaser/Occupier with an ATS shall be paid by the Purchaser/Occupier.

7. Communications/Data By Purchaser/Occupier:
    a) a) Four (4) 4" conduits from rooftop to Purchaser/Occupier's communications room for satellite dishes and antenna. Four (4) 4" conduits from main telephone room (Demarc) to Purchaser/Occupier's main telephone/LAN room.
    b) Four (4) 4" sleeves through each floor of the building in base building core telephone closets.
    c) Backboards as required.