SECTION 01500 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes requirements for temporary utilities, support facilities, security and protection facilities.
- 1.2 DEFINITIONS (not used)

1.3 USE CHARGES

- A. General: Cost or use charges for temporary facilities shall be included in the Lump Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, other contractors, testing agencies, and authorities having jurisdiction. Deconstruction Contractor will be responsible for all utility bills related to the Building, from the date of signing of this Contract until Final Completion (i.e. Con Edison, Water, etc.).
- B. Water Service: Pay water service use charges for water used by all entities for deconstruction operations. 2" Water Riser will be installed with a hose bib attachment available at each floor.
- C. Electric Power Service: In conjunction with Specification Section 16001. Electric power from LMDC's existing system is available for use at Contractor's expense. Provide connections and extensions of services as required for deconstruction operations. A minimum 400 Amp service from existing panels is available on each floor. The existing 2' x 4' lights remain in place on many floors and is available to be utilized as temporary lighting. Contractor will be responsible to provide connections and extensions of services reactivation of existing lighting as required for their deconstruction operations. Pay electric power service use charges for electricity used by all entities for deconstruction operations, including Owner's Representative's office trailer(s).

1.4 SUBMITTALS

- A. Deconstruction Contractor's Implementation Plan including but not limited to the following:
 - 1. Site Plan: Show temporary facilities, utility hookups and staging areas.
 - 2. Health & Safety Plan (HASP).
 - 3. Emergency Action Plan (EAP).
 - 4. MTA Influence Line Plan.
 - 5. Truck Traffic Plan.

1.5 QUALITY ASSURANCE

- A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.
- B. Tests and Inspections: Arrange for Governmental Authorities having jurisdiction to test and inspect each temporary utility before use. Obtain required certifications and permits.

1.6 PROJECT CONDITIONS

- A. Maintain and repair all Building systems including exterior netting, exterior fascia and windows, and exterior openings in proper condition throughout duration of Work.
- B. See Scope of Work for more details.

PART 2 - PRODUCTS

2.1 MATERIALS

A. As per requirements of the Building Code of the City of New York, Title 27, Chapter 1 Construction and Maintenance, Subchapter 19 Safety of Public and Property During Construction Operations.

2.2 TEMPORARY FACILITIES

- A. Field Offices, Owner Representative's Office Trailers:
 - 1. Deconstruction Contractor will be required to provide Owner's Representative Field Office Trailer in accordance with Annex 6.
 - 2. Deconstruction Contractor will be required to relocate the existing Owner's Representative's Field Office Trailer from its current location on Washington Street, to Cedar Street between West Street and Washington Street. Final location to be coordinated with LMDC.
 - 3. Install or relocate all utilities for Office Trailers including but not limited to water and electricity. Contractor required obtaining all permits for same.
 - 4. Clean daily, including removal and proper disposal of waste.
 - 5. Wash, when required, and at least once every week, including broom sweep and mopping of floors.
 - 6.
 - 7.
- B. Contractor to furnish and install adequate field trailers, offices, etc. for their personnel and operations. Location to be submitted with Deconstruction Contractor's Implementation Plan and approved by LMDC.
- C. Cranes and Hoists: Properly sized, built and maintained per all applicable regulations.
 - 1. Factory approved Tier II crane to be supplied if Contractor requires crane for the project. No retrofits. Minimum lifting capacity of 20,000 lbs. And 200 Ft. Radius.
 - 2. Maintain and operate hoist (provided by Scaffolding Contractor) for duration of project.

- 3. Foundation Pad (mat) for crane to be provided by LMDC under separate contract. Contractor will be required to review and accept.
- D. Storage and Fabrication Sheds: Provide sheds sized, furnished, and equipped to accommodate materials and equipment for deconstruction operations. Location and size to be shown on contractor's site utilization plan to be approved by LMDC.
- E. Storage of Combustible Materials: All combustible materials not limited to but including fuel and gas cylinders shall be stored outside the Building in accordance with NYC Fire Department requirements. Contractor shall be responsible for all permits and submit in conjunction with their site utilization plan to be approved by LMDC.

2.3 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated, with class and extinguishing agent as required by locations and classes of fire exposures.
- B. Temporary Heat: Provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.
 - 1. Use of gasoline-burning space heaters, or open-flame heaters are prohibited.
 - 2. Heating Units: Listed and labeled for type of fuel being consumed, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work and other Contractors. Relocate and modify facilities as required by progress of the Work.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

A. General: Install temporary service or connect to existing service.

Arrange with utility company, LMDC, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services.

- B. Sewers and Drainage: Provide temporary utilities to remove any or all effluent lawfully. All temporary utilities from the Building or Site or staging facilities including Truck Wash must be disposed of in accordance with all Legal Requirements.
- C. Water Service: Install water service and distribution piping in sizes and pressures adequate for deconstruction.

- D. Sanitary Facilities: Provide temporary toilets, wash facilities, and drinking water for use of deconstruction personnel. Comply with authorities having jurisdiction for type, number, location, operation, and maintenance of fixtures and facilities. Quantities and locations to be submitted with Deconstruction Contractor's Implementation Plan and approved by LMDC.
- E. Electric Power Service: Provide and maintain electric power service and distribution system of sufficient size, capacity, and power characteristics required for deconstruction operations.
 - 1. Contractor is required to maintain emergency power for lighting and elevators at all times either through the use of existing systems or alternate means as required to ensure compliance with all Legal Requirements.
- F. Lighting: Provide temporary lighting in accordance with all Legal Requirements with local switching that provides adequate illumination for deconstruction operations, observations, inspections, and traffic conditions.
 - 1. Install lighting for Project identification sign.
 - 2. At all times, the top floor of the Building to be illuminated at night.
 - 3. Provide scaffold lighting as required to maintain a safe working environment and as safety requirements may demand.
- G. The Deconstruction Contractor shall maintain temporary power for the two active elevators and stairwell and stairwell emergency lighting in accordance with NYC Fire Department requirements.
- H. Truck Wash
 - 1. Deconstruction Contractor shall provide an enclosed truck wash, so that all runoff is collected and disposed of in accordance with Specification Section 02010 and all Legal Requirements.

3.3 SUPPORT FACILITIES INSTALLATION

- A. General: Comply with the following:
 - 1. All temporary structures such as offices, shops, and sheds located within Site or within 30 feet of Building lines shall be constructed of non-combustible materials in comply with NFPA 241.
 - 2. Maintain support facilities until near Final Completion. Remove before Final Completion.
 - 3. Provide dust-control treatment that is nonpolluting and nontracking. Reapply treatment as required to minimize dust see 3.4 "M".
- B. Traffic Controls: Comply with requirements of authorities having jurisdiction.
 - 1. Protect existing Site improvements to remain including curbs, pavement, and utilities.
 - 2. Maintain access for fire-fighting equipment and access to fire hydrants.
 - 3. Provide Maintenance of Traffic (MOT) for all site access; haul routes and any changes to existing traffic patterns or street closings. MOT Plan shall be submitted by a licensed NYS Professional Engineer and submitted for approval to LMDC as a part of

Deconstruction Contractor's Implementation Plan. Contractor is responsible for filing and maintaining all required permits.

- C. Project Identification and Temporary Signs: Provide Project identification and other signs in accordance with the Deconstruction Plan. Install signs to inform public and individuals seeking entrance to Project. Unauthorized signs are not permitted.
 - 1. Provide temporary, directional signs for Contractor's personnel and visitors.
 - 2. Maintain and touchup signs so they are legible at all times.
- D. Waste Disposal Facilities: Comply with requirements specified in Division 1 Section "Deconstruction Waste Management."
- E. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from deconstruction operations. Comply with requirements of authorities having jurisdiction. Comply with Division 1 Section "Execution Requirements" for progress cleaning requirements. Provide and maintain an adequate amount of containers to handle the disposal of non-hazardous waste for the duration of the Deconstruction Contract.
- F. Existing Elevator Use: Use of the existing elevators will be permitted with the understanding that the NYC Fire Department has designated them as a safety feature of the building. Elevators must be cleaned and maintained in accordance with all Legal Requirements. Elevator maintenance is the responsibility of the Deconstruction Contractor. Elevators shall not be loaded beyond their rated weight capacity.
- G. Temporary Stairs: Provide temporary stairs where ladders are not adequate.
- H. Existing Stair Usage: Use of the existing stairs in the building will be permitted, as long as stairs are cleaned and maintained in a condition acceptable to LMDC.
 - 1. Contractor shall be responsible for maintaining of all emergency and normal lighting and provide protective coverings, barriers, devices, signs, or other procedures to protect stairs and to maintain means of egress. If, despite such protection, stairs become damaged contractor will be responsible for restoring damaged areas at no additional cost to the owner.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Environmental Protection: Provide protection, operate temporary facilities, and conduct deconstruction in ways and by methods that comply with Legal Requirements and that minimize possible air, waterway, and subsoil contamination or pollution or other undesirable effects.
- B. Temporary Erosion and Sedimentation Control: Provide measures to prevent soil erosion and discharge of soil-bearing water runoff and airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction. To be submitted with Deconstruction Contractor's Implementation Plan and approved by LMDC.
 - 1. Inspect, repair, and maintain erosion- and sedimentation-control measures during deconstruction until permanent vegetation or other protection has been established.

- C. Stormwater Control: Comply with all New York City, State and Federal requirements for discharging of storm water from the site into the cities store sewer system. Provide required barriers in and around excavations and subgrade construction to prevent flooding by runoff of stormwater from heavy rains. Potential areas exist where oil can be encountered on the Site include, but are not limited to pits, floor trenches; hydraulic lines abandoned-in-place, elevator shafts, and catch basins or traps. All oil areas are to be cleaned prior to deconstruction. However, in the event that oil unexpectedly enters the storm sewer, preventive measures will be provided by the Contractor to minimize oil reaching the NYC system.
- D. Pest & Rodent Control: Engage pest-control service to recommend practices to minimize attraction and harboring of rodents, roaches, and other pests and to perform extermination and control procedures at regular intervals so Project will be free of pests and their residues. Perform control operations lawfully, using environmentally safe materials. Maintain a program to minimize the impact on the adjoining properties.
- E. Site Enclosure Fence: Before deconstruction operations begin, furnish and install Site enclosure fence in a manner that will prevent people and animals from entering Site except by entrance gates. To be submitted with Deconstruction Contractor's Implementation Plan and approved by LMDC.
 - 1. Extent of Fence: As required to enclose entire Project Site or portion determined sufficient to accommodate deconstruction operations.
 - 2. Maintain security by limiting number of keys and restricting distribution to authorized personnel. Provide LMDC with keys as necessary (minimum of 3). All locks to be as manufactured by American Lock 700 Series, and are to be keyed alike. Locks are to be stamped with "LMDC".
- F. Security Service: Provide a minimum of four security personnel 24 hours per day, 7 days per week. The three shall be a security supervisor, 2 guards at building entry, and a guard at Washington and Albany Street.
- G. Security at All Entry Points: Provide security guards at unlocked perimeter entry points to only allow authorized personnel and delivery vehicles into Site.
- H. Provide and use for all employees and visitors a photo ID system, EPI Suite Pro by ImageWare Systems (www.fargo.com) or approved equal.
- I. Barricades, Warning Signs, and Lights: Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.
- J. Covered Walkway: Erect structurally adequate, protective, covered walkway for passage of individuals along adjacent public street(s). Coordinate with entrance gates, other facilities, and obstructions.
 - 1. Construct covered walkways as required by New York City Building Code.
 - 2. Provide barricades, warning signs, lights, safe and well-drained walkways, and similar provisions for protection and safe passage.
 - 3. Paint and maintain in a manner approved by LMDC.

- K. Temporary Enclosures: Provide temporary enclosures for protection of deconstruction, in progress and completed, from exposure, foul weather, other deconstruction operations, and similar activities.
- L. Street Protection: Deconstruction Contractor will be required to inspect and clean on periodic basis the streets surrounding the site at the direction of LMDC. Additionally, contractor will be required as a portion of their close out of the project to restore to their original condition the sidewalks and streets adjoining the Site in accordance with NYC DOT Specifications. Deconstruction Contractor shall use best efforts to protect all other streets and roads utilized for haul roads.
- M. Non-WTC Dust Control: Deconstruction Contractor must use best efforts to minimize dust. Deconstruction Contractor will be required to implement dust control measures for the work tasks to comply with all applicable Legal Requirements including, but not limited to the following:
 - 1. Work shall be performed without causing the concentrations of the particulate matters to exceed the following levels:
 - a. PM (inhale particulates less than 10um in diameter)
 - 1) 24-hour ambient PM: 150ug/m3
 - 2) Annual ambient PM: 50ug/m2
 - b. TSP (Total Suspended Particulates)
 - 1) 24-hour ambient TSP: 250ug/m3
 - 2) Annual ambient TSP: 75ug/m3
 - c. Compliance with the particulate level requirements above the listed levels shall be monitored.
 - d. Additional particulate compliance and control requirements shall be developed in the HASP.
 - e. Trucks transporting any and all materials removed in the Phase II operations shall be covered with tarpaulins when loaded. The cover shall be secured to the truck so that no contents of the bed may be visible when viewed from above.
 - f. Exposed excavated surfaces shall be sprayed with water to suppress dust at a minimum.
 - g. The site limits and streets surrounding the work areas shall be cleaned as needed to prevent the accumulation of soil, dirt or debris from work-related traffic and activities and shall be washed with water to prevent the accumulation of particulates.
 - h. Drilling operations shall be equipped with sprays to suppress dust during drillings.
 - i. Additional measures needed to control objectionable dust caused by deconstruction operations or the moving of vehicles or equipment must be identified in the Deconstruction Contractor's Implementation Plan. The use of chemicals for dust control, including calcium chloride, shall not be permitted.
 - j. Misting of materials during the deconstruction will be required prior to and during all operations.
 - 2. Installation of dust barriers at work areas.
 - 3. Contractor shall poly all entry points (i.e. doors, windows, etc.) to mitigate the amount of dust infiltrating or ex-filtrating the work areas.
 - 4. Dust control shall be maintained where Contractor's Work is occurring including misting and plasticizing.
 - 5. Dust control methods shall include laborers, with water hoses, equipped with fogging nozzles, soakers, to insure that airborne particulates are kept to an absolute minimum.

- 6. Deconstruction Contractor shall maintain and utilize a mechanical street sweeper/ cleaner to keep all streets adjacent to the Building including Cedar Street, between Washington and West Street, and West through Port Authority Gate 8, Haul Road and onto West Street, free from dust at a minimum two (2) times per day.
- N. Noise Control: Noise level standards shall apply seven days a week during periods of work activities and shall comply with the Building Code of the City of New York, Title 24, Chapter 2, Subchapter 6.
 - 1. 7:00AM to 5:00PM: 65 dBA. or an increase of 3dBA above ambient (baseline), whichever is higher.
 - 2. 5PM to 7AM: 55 dBA. or an increase of 3 dBA. above ambient (baseline), whichever is higher.
 - 3. Provide sound attenuation measures to insure compliance with all noise level standards.
 - 4. The Deconstruction Contractor shall install and operate receptors to measure workrelated noise. The location and operation of these receptors shall be determined in accordance with NYC CEQR Technical Manual Section 3R.
 - 5. Noise measurement results will be sent to LMDC for review and/or comments.
 - 6. Equipment used to remove the debris and all construction equipment powered by an internal combustion engine shall be equipped with a properly maintained exhause muffler. Such equipment shall include, but not be limited to, dump trucks, concrete mixers, excavation equipment, generators, and trucks removing soil, debris or material of any kind from the site, plus delivery vehicles.
 - 7. Air powered equipment shall be fitted with pneumatic exhaust silencers.
 - 8. the Health and Safety Plan (HASP), shall include the control measures employed to ensure compliance with all specified noise requirements.
- O. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241 and New York City Building Code and NYC Office of Emergency Management (OEM) requirements. The following items must be submitted with the Deconstruction Contractor's Implementation Plan and approved by LMDC:
 - 1. Supervise welding operations, combustion-type temporary heating units, and similar sources of fire ignition according to requirements of authorities having jurisdiction.
 - 2. Develop and supervise an overall fire-prevention and -protection program for personnel at Project Site. Review needs with local fire department and establish procedures to be followed. Instruct personnel in methods and procedures. Post warnings and information.
 - 3. A welding and burning permit must be obtained before any burning job is started at the Building. Contractors are responsible to provide fire watch and fire extinguishers on all burning and welding jobs.
 - 4. Fire System It is the responsibility of the Contractor to notify LMDC before turning off any fire systems.
 - 5. All personnel designated as fire watch are required to wear orange hard hats.
 - 6. Fire Protection:
 - a. Maps and Signs. Weatherproof maps indicating emergency egress routes must be posted at all scaffold access/ egress points. Consider the work force to determine whether signs must be posted in languages other than English.
 - b. Fire Extinguishers. Utilize at least 100 lb. size extinguishers to avoid ease of disappearance from Site.

3.5 OPERATION, TERMINATION, AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
- C. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility, or no later than Final Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces, and replace construction that cannot be satisfactorily repaired.
 - 1. Materials and facilities that constitute temporary facilities are property of Contractor. LMDC reserves right to take possession of Project identification signs.
 - 2. Repair or replace fences, gates, street paving, curbs, and sidewalks, as required by LMDC and authorities having jurisdiction.

END OF SECTION 01500