EXHIBIT E Minimum Building Specifications

PROPOSED DEMOLITION AND NEW DEVELOPMENT NEW STATE OFFICE BUILDING (Replacement of Capital Plaza Complex)

Minimum Building Standards FOR

FINANCE AND ADMINISTRATION CABINET DEPARTMENT FOR FACILITIES MANAGEMENT AND SUPPORT SERVICES THE COMMONWEALTH OF KENTUCKY

PURPOSE

The purpose of these design standards is to outline the minimum requirements by this Request for Proposals relating to demolition of a portion of the existing Capital Plaza Complex and the construction of a New State Office Building, Parking Structure(s), and related new development with associated amenities as outlined further in this Request for Proposals.

<u>Adherence to these specific standards is mandatory</u>; however, any equal or improved concepts, methods, or products are encouraged and will be given full consideration by the Commonwealth during the selection process.

The Project Site:

Site Owned by the Commonwealth of Kentucky

The proposed demolition project and new development project is to be accomplished on existing land owned by the Commonwealth of Kentucky known as the "Capital Plaza Complex" that is within the legal boundaries of the City of Frankfort, Kentucky.

The Project site area is comprised of approximately 17 acres and is bounded by Clinton Street (to the South), Wilkinson Blvd. (To the West, excepting the privately owned Capital Plaza Hotel), Fort Hill (to the North), and St. Clair Street (to the East), (sketch depicting the Project site area below).

Available to Offerors, as an electronic EXHIBIT to this RFP, are the original construction "Record Drawings" for the Capital Plaza Area from 1967-1970. These drawings are offered in TIF format. These drawings contain information about the existing construction, geotechnical investigations and site boundaries of the area.

Zoning of the property. The current project site is zoned SG (Special Government) and will not convert to a different Zoning Classification at the time of conveyance to the Developer; under the provisions of KRS 100.361 this property is not under the jurisdiction of the Frankfort/ Franklin County Planning and Zoning Commission since the work of this RFP is for the sole benefit of the Commonwealth of Kentucky. However, the Commonwealth has agreed to present the Development Plan to the Frankfort/ Franklin County Planning and Zoning Commission as a curtesy for cursory review only. The Commonwealth has also agreed to

present the Building Design to the Frankfort/ Franklin County Architectural Review Board as a curtesy for cursory review only. The Developer will provide information to the Commonwealth for this curtesy submission and shall participate with the Commonwealth in these presentations, at the option of the Commonwealth.

Transportation Access. Access to the "Capital Plaza Area" site is provided by an existing four lane roadway called "Wilkinson Boulevard (US 127)" and an existing four land roadway called "West Frankfort Connector (US 127)". The "Capital Plaza Area" is traversed or bounded by several city streets: "Clinton Street"; "Mero Street"; and "St. Clare Street".

Traffic Study: A preliminary analysis by the Kentucky Transportation Cabinet (See EXHIBITS) has indicated that the existing traffic infrastructure is most likely capable of servicing the 1500 employee office building and related infrastructure, with only minor anticipated improvement. The Commonwealth has developed and stands by this preliminary traffic analysis. However, should the Offeror's design of the new development of this project modify the existing access points to the project site (specifically the 8 acres being allocated for the New Office Building and New Parking Garage), the Commonwealth (FAC) or the Kentucky Transportation Cabinet reserves the right to determine that an additional independent study be necessary to analyze the new access point configuration. Should this determination be made, the Offeror is responsible for accomplishing any traffic pattern modifications indicated by this independent traffic study and as required by the Commonwealth and/or Kentucky Transportation Cabinet.

As part of the New Development of this project, the Offeror will be responsible for accomplishing any required reasonable modifications to the traffic patterns and capacities identified as necessary by the final traffic study. The Offeror shall include in the Costs of the Work for Construction an **ALLOWANCE OF \$80,000.00** that will be utilized to provide any permanent traffic pattern or capacity modifications. It is the desire and intent of the Commonwealth that should such a modification be required that this modification will include an extension of "Washington Street" as indicated in the New Development Requirements description. Should such a modification not be required, the funds of this ALLOWANCE will be returned to the use of the Commonwealth to be used in the project new development at the determination of the Commonwealth for its best use.

Utilities: There exists major utilities and services in the general area of the project site that formerly services the Capital Plaza Tower, Capital Plaza Parking Garage, Capital Plaza Hotel (privately owned), Frankfort Convention Center, Fountain Place Shops, Hotel Parking Garage, and the YMCA Building. These include, but are not necessarily limited to: municipal water main by the Frankfort Plant Board which can be extended onto the property for domestic and fire protection service; City Owned sanitary sewers which flow by gravity to municipal sewers are available for connection; Natural gas supplied by Columbia Gas of Kentucky Company's system; Electrical service provided by the Frankfort Plant Board which can be extended onto the site through underground distribution; Internet service is available by the Frankfort Plant Board maintained "State Hub Ring" and is to be provided through underground distribution; and Telephone service provided by AT&T.

The Commonwealth Office of Technology and the Frankfort Plant Board are in the process of relocation and rerouting of the "State Hub Ring" of the internet services in the area. This work is not required by the Offeror and is anticipated to be completed prior to or concurrent with the conveyance of the property to the Developer for execution of the Work of this Request for Proposals.

Environmental: There is no evidence of any hazardous materials being encountered on site other than those indicated in (See EXHIBITS). The Commonwealth completed a major study

of the project area, which included an Environmental Study Phase 1 assessment in 2011. There were no observed environmental issues, except as indicated above. The Commonwealth does not have a copy of the Phase 1 study.

Geotechnical Information. Included in the electronic EXHIBITS to this RFP is the original Geotechnical Investigations Information used in the original construction of the Capital Plaza Complex in 1967-1969. Additionally, a subsurface study investigation was performed by S&ME of Lexington, Kentucky in 2011-12 when the major study of the project area was undertaken in an effort to begin study of a replacement facility for the failing Capital Plaza Tower. The subsurface investigation study is attached (See EXHIBITS). The study recommended the use of deep foundations for the garage and office building. There are numerous deep foundations options including: drilled shafts, driven piles, auger-cast piles and micro-piles. Each method has advantages and disadvantages. While these options would provide the required structural support for the foundation loads, it is our opinion that the constructibility of a deep foundation system will be one of the main challenges of developing this site. Please see the Geotechnical Report for more information.

Should the Offeror desire to investigate the subsurface conditions of this site beyond the investigation undertaken by this study, they will be granted access to the site for this investigation by the Finance and Administration Cabinet, Department for Facilties and Support Services, Division of Real Properties. The cost of any additional investigation shall be borne by the Offeror without reimbursement by the Commonwealth.

Options for Expansion:

It may be in the Offeror's best interest to plan for future expansion capabilities, since the Commonwealth is often in need of additional leasable space. The Offeror could potentially offer an expansion to the building in the future as a response to the RFP issued by the Commonwealth for lease space. However, make note of the requirements for improvements to the existing traffic patterns and capacity should future expansion be accomplished, the Offeror, in this case, would be responsible for traffic modification costs should the City of Frankfort require such modification due to the new addition to the building within the development. Also, please note that the Offeror cannot, by the terms of the proposed lease that will be entered into by this RFP, lease any portion of the building to an entity other than the Commonwealth.

DOCUMENTS REQUIRED

DURING THE DESIGN, DEMOLITION AND CONSTRUCTION PHASES OF THIS PROJECT

Required Proposal Design and Concept Documents:

At the time of submittal of a response to this Request for Proposals, the Offeror shall provide the following design and concept documents, in addition to the other information required by the Request, exhibiting that all minimum design standards as outlined herein elsewhere will be met or exceeded:

- 1) Narrative of the Planned Demolition Plan to fully define the scope of the demolition work, the anticipated detailed schedule (CPM format) of demolition work, methodologies for removal and disposal of construction debris, plan for coordination of utility services interruptions, traffic routing, and access to adjacent facilities maintenance plan that will be utilized to comply with or exceed the requirements of the RFP. Note: the CPM schedule provided during this phase of the response to the Request for Proposals, if acceptable to the Commonwealth, will become a part of the future lease documents and become a part of the requirements of this Project.
- 2) **Site Demolition Plan** (1"=50' scale or greater, indicating all existing items to be demolished, vehicular and pedestrian traffic patterns, demolition staging, and other items of work related to the demolition project, required or proposed.)
- 3) Site Development Plan (1"=50' scale or greater, indicating all site features required or proposed, vehicular and pedestrian traffic patterns, building and parking garage footprints, surface parking lots, roadway improvements and other features and spaces required or proposed.)
- 4) **Typical Parking Garage Plans** (1"=16' scale or greater, indicating traffic patterns, parking spaces compliant with RFP requirements, all rooms, all exits and entrances, and other features and spaces required or proposed.)
- 5) **Parking Garage Elevations** (1"=16' scale or greater, indicating finishes, overall dimensions and height, vehicular and pedestrian entrances and exits, and other features required or proposed.)
- 6) **Typical Building Floor Plans** (1"=8" scale, indicating all rooms, walls, columns, door swings, plumbing fixtures, built-in millwork, cubicle workstation partitions in proposed layout, and other features and spaces).
- 7) **Building Elevations** (1"=8' scale, indicating finishes, overall dimensions and height, window and door characteristics, and other features required or proposed.)
- 8) YMCA Parking Garage Renovation Elevations along Clinton Street (1"=16' scale or greater, indicating finishes, overall dimensions and height, vehicular and pedestrian entrances and exits, and other features required or proposed.)
- 9) **Capital Plaza Hotel Elevation** (along the plaza area) required by the demolition of the Plaza Shops and associated plaza area (1"=16' scale or greater, indicating finishes, overall dimensions and height, pedestrian entrances and exits, and other features required or proposed.)
- 10) **Pedestrian Bridge Connection Plan** (1"=8" scale, indicating ADA compliance and other characteristics of this connection).
- 11) **Pedestrian Bridge Connection Elevations** (1"=16" scale or greater, indicating ADA compliance and other characteristics of this connection).
- 12) Narrative of Structural Systems, including foundations, footings, structural framing and other necessary information to fully define the structural system that will be used.
- 13) Narrative of Mechanical, Electrical and Plumbing Systems to fully define the systems that will be incorporated in the building and parking structure.
- 14) Narrative of the Security System and other security features to fully define the systems and construction that will be utilized to comply with or exceed the requirements of the RFP. Provide a detailed description of how this proposal complies with the requirements in the Minimum Building Standards and how the overall building security system will function exterior and interior to the building.
- 15) Narrative of the IT Solutions System to fully define the systems and their installation that will be utilized to comply with or exceed the requirements of the RFP.
- 16) Outline Specifications in CSI Format that indicate each building product and system that will be provided in the building. (Must include Civil, Landscaping, Architectural, Structural, Mechanical, Electrical, Security, IT solutions system, Plumbing, Access Controls, and Building Automation.
- 17) Sample LEED scoresheet indicating the approach to achieving the LEED Certification required by the RFP.

18) Critical Path Method Project Schedule, indicating the initial proposed schedule of each critical component of demolition and new construction. (As a minimum this should include each item listed under the demolition project as a line item and each item listed under the new development project as a line item (with the Office Building broken out into each significant trade of work).

Required Design Phases Documents:

Following award of the Lease for the Build-to-suit project, the Lessor shall submit to the Division of Engineering and Contract Administration, Department for Facilities and Support Services, Finance and Administration Cabinet, Commonwealth of Kentucky, (DECA), three (3) sets (Half size scaled sets are acceptable) of complete design documents (All drawings and specifications), for review and acceptance at interval points during the design process when the Lessor desires a review of the design in progress. The following are the minimum Design Phase Document submittals required:

Within 30 Days following Award of Lease and prior to start of Demolition work: All Demolition Plans and Specifications showing complete compliance with the requirements of the Demolition Project.

Include in the submittal a detailed phasing schedule for the demolition Work showing the sequence of demolition. Provide a "detour plan" indicating traffic flows during the demolition, including, but not necessarily limited to how the Developer intends to maintain access to Hotel Parking and entrance into and exit from the existing TCOB parking structure adjacent to St. Claire Street. Allow five working days for the review and acceptance of these documents prior to start of demolition related to the documents submitted. Acceptance of these documents does not waive the Lessor's responsibility to comply with the provisions of the Lease and with all applicable building codes and the requirements for demolition from all governmental authorities with jurisdiction over the project.

<u>Prior to submittal of Documents to the Frankfort/ Franklin County Planning and Zoning Commission for curtesy review:</u> The Developer shall coordinate with DECA the presentations to the Frankfort/ Franklin County Planning and Zoning Commission and Architectural Review Board..

Allow three working days for the review and acceptance of these documents by DECA prior to submission to the City Planning Department. Copy DECA on all communications between the Lessor's team and the City of Frankfort Planning Department. When review meetings are scheduled with the City of Frankfort Planning Department, notify DECA in advance to afford DECA an opportunity to attend these review meetings as an observer.

At such time that the interior space planning is finalized by the Developer, submit to DECA, an AutoCAD formatted set of drawings of the floor plans which show all interior spaces and rooms, and the proposed layout of all workstations, copier locations, and other relevant interior items. Drawings set shall also include the proposed layout of voice/data and electrical outlets serving each office, conference room, collaboration space, and workstation. DECA will review the proposed layout and reserves the right to modify the workstation layouts, locations of copiers and collaboration spaces within 60 calendar days without change in the lease price of the Offeror.

When Design of the New Development has reached 75% Completion (or when a portion of the New Development, in instances where the New Development is being phased, has reached 75% Completion): All New Development Plans and Specifications

showing complete compliance with the requirements of the New Development Project. In instances where the New Development is being phased, each Phase of the New Development shall comply with this submittal requirement.

Allow five working days for the review of acceptance of these documents prior to start of construction related to the documents submitted. Acceptance of these documents does not waive the Lessor's responsibility to comply with the provisions of the Lease and with all applicable building codes. At the completion of the five working day review period for each phase of the New Development, the Lessor's Architectural/Engineering team shall meet with DECA to review the design in detail for that phase. This meeting shall be held at DECA Offices, 403 Wapping Street, Frankfort, Kentucky.

When all floor plans of the new Office building, Parking Garage and site parking lots are complete to the point that no further changes are anticipated, and no later than at the time of the submission of the document submittal below, provide DECA with AutoCAD DWG formatted drawings of these areas. For the New Office Building, the AutoCAD drawings must show sufficient detail, including the Offeror's proposed workstation layout that the Commonwealth may utilize these drawings to finalize their furnishings and equipment procurement for the fit-up of building. At this time, also provide a color board with all finish color and materials selections indicated with samples provided.

The Commonwealth reserves the right, at no expense to the Commonwealth, to modify the locations of electrical devices, data outlets, and other related devices due to minor adjustments the Commonwealth may desire to make to the workstation and furnishings layout. This information directing these changes will be provided to the Offeror within 60 days of the receipt of the information indicated in the paragraph above.

When the Design of the New Development has reached 100% Completion (or when a portion of the New Development, in instances where the New Development is being phased, has reached 100% completion: All New Development Plans and Specifications showing complete compliance with the requirements of the New Development Project In instances where the New Development is being phased, each Phase of the New Development shall comply with this submittal requirement.

Allow five working days for the review of acceptance of these documents prior to start of construction related to the documents submitted. Acceptance of these documents does not waive the Lessor's responsibility to comply with the provisions of the Lease and with all applicable building codes. At the completion of the five working day review period for each phase of the New Development, the Lessor's Architectural/Engineering team shall meet with DECA to review the design in detail for that phase. This meeting shall be held at DECA Offices, 403 Wapping Street, Frankfort, Kentucky.

The Lessor shall provide DECA with a copy of the transmittal of the required Plan Review Submittal to the Department for Housing, Buildings and Construction. The Lessor shall provide DECA with a copy of all communications with the Department for Housing, Buildings and Construction, including, but not necessarily limited to, review comments from the Department and responses to those review comments, a copy of the approval of the Plans by the Department and all field reports issued by the Department during construction of the New Development.

Required Construction Documents:

Prior to the start of construction of the new Development, the Lessor shall submit to the DECA, three (3) sets of complete construction documents (drawings at half scale bound set and specifications by electronic media in PDF format) bearing the seal and signature of a licensed architect and/or engineer in the Commonwealth of Kentucky, as the Construction Document set prior to the start of construction.

Construction documents are to include all architectural, civil, structural, mechanical, electrical, plumbing, and security access system and specifications as required for construction. Construction documents shall include a complete details concerning detouring of traffic patterns and flows.

Where engineering drawings are submitted to the Department for Housing, Buildings and Construction during the shop-drawing phase, provide DECA with three (3) half scale sets of these drawings as submitted to the Department. This includes, but is not necessarily limited to, the following: Fire Suppression, Fire Alarm, Emergency Generator system, etc.

Prepare a Commissioning Plan utilizing appropriate planning and communication tools, design and construction phase forms and checklist, functional performance testing, statistical inspections, and other appropriate methods to assure the Project functional success. Submit a copy of this Commissioning Plan to DECA.

Document Collaboration System to be Used:

The Commonwealth of Kentucky utilizes a document collaboration system, "e-Communications" developed and managed by Lynn Imaging, Inc. 328 Old Vine Street, Lexington, Kentucky. Phone: 859-226-5840. The procurement of these services was by public competitive bidding and is being required for this Project. The Developer shall be responsible for the costs of this system's use for this project. During the course of construction of the demolition project and/or new development project, this document collaboration system shall be used for all official project communications. The Department for Facilities and Support Services, Division of Engineering and Contract Administration (DECA) and Division of Real Properties (DRP) shall be granted access to the documents posted and transmitted through this system. As a minimum, the following documents shall be available for viewing by DECA and DRP: Construction Documents, Project Schedules, Submittals (shop drawings), Construction Meetings, Requests for Information (RFI), Architect's Supplemental Instructions (ASI), Proposal Requests (PR), Construction Change Orders (CO), Contractor Field Reports, AE Observation Reports, Building Code Official Reports/ Inspections/ Certificates, Special Inspector Reports, and Substantial Completion Checklists.

Changes in the Work (whether by Architect's Supplemental Instructions (field orders), Responses to Request for Information or Executed Change Order):

During the course of construction of the demolition project and/or new development project, DECA provided access, via the e-Communications system, for observation (at the time of issuance) all changes in the work issued by Field Order, Architects Supplemental Instructions, Responses to Requests for Information and Change Orders. The Commonwealth reserves the right to question and require revision of any change to the Work that is contrary to the compliance to the requirements of this RFP and Minimum Building Standards. Approval by DECA is not required for the execution of these documents where the change to the Work does not conflict with the requirements of the RFP, these Standards, or the proposal submitted

by the Offeror at the time of response to the RFP or during the design document review phases.

Periodic Review Meetings with the Commonwealth:

The Lessor, Architect/Engineers, and major members of the Construction team shall meet with representatives of the Department for Facilities and Support Services, Division of Real Properties (DRP) and Division of Engineering and Contract Administration (DECA) prior to the commencement of construction for the purposes of reviewing the CPM schedule, to provide copies of all permits, reviews and other necessary documents for the start of construction, to discuss pertinent construction and site issues and to review the overall new development plans. The Lessor shall issue minutes of meetings to all participants within five working days of the meeting.

The Lessor, Architect/Engineers, and major members of the Construction team shall meet with representatives of the DRP and DECA for periodic status/ progress/ construction review meetings on at least a monthly basis. The Lessor shall issue minutes of meetings to all participants within five working days of the meeting.

These meetings will consist of review of the project schedule, review of major construction issues and processes. During these meetings, there will be on-site construction inspections to verify the provisions of the drawings and specifications are being met.

Representatives of the DRP and DECA shall be granted unfettered access to the construction site during the construction period of the demolition project and new development project for the purposes of reviewing the progress of the work, the quality of construction, the adherence to the accepted Construction Documents, and for their own planning purposes.

These representatives will be provided access for review of the current updated project schedule, all shop drawings and other project related documents, all inspection reports of the Architect/ Engineers, Project Superintendent Daily Reports, Inspection reports from the various Governmental Building Code Enforcement Official, etc.

The DRP and DECA will conduct a "punch list" review of the construction as defined in the RFP and provide a written "punch list" of deficiencies that may not prohibit the Occupancy of the building but will be required to be completed within the prescribed time period after Occupancy.

Early Access to Completed Floors for the Purpose of Equipment and Furnishings Installation by the Commonwealth:

The Commonwealth will not occupy nor begin use of the Office Building for its intended use until the entire building has achieved Substantial Completion and a Full Certificate of Occupancy is obtained from the Department for Housing, Buildings and Construction. However, the Commonwealth has a need to be granted early access to completed floors of the building for the purpose of installation of equipment and furnishings by the Commonwealth and/or independent vendor(s). To satisfy this need to be granted early access to complete floors of the building, the Developer shall schedule the Work in such a manner that floors will be completed in succession and that these floors (after issuance of a Temporary Certificate of Occupancy for that specific floor) can be made available to the Commonwealth to accomplish this equipment and furnishings installation.

At the earliest possible time, the Developer shall inform the Commonwealth of the date certain that each specific floor will be made available of the purpose indicated above. The Commonwealth will procure equipment and furniture based upon the Developer's schedule for early access to completed floors. When the specific floor becomes available: the Developer, Architect/ Engineer, the Commonwealth (DECA and DRP), and the equipment/ furniture vendor(s) will conduct a pre-installation meeting and inspection of the floor being made available for early access. Following this pre-installation meeting, the Developer shall cooperate and coordinate with the Commonwealth and equipment/ furnishings vendor(s) to accomplish the equipment/ furnishings installations.

Additionally, when early access to a completed floor is available, the Commonwealth Office of Technology (COT) and any independent vendor procured will begin installation of the Commonwealth's technology services systems, data/voice systems and networks. The Developer shall cooperate and coordinate with COT for this purpose.

Project Closeout Requirements:

The Lessor shall notify the Division of Engineering and Contract Administration (DECA), representing the Lessee, when the work will be Substantially Complete. The Lessor, the Architect/Engineering team, DECA, and the DRP, representing the Lessee, shall conduct one final construction punch list. All concerned parties shall attend a final construction punch list meeting. The Architect/ Engineer will prepare the official punch list documents and distribute to all affected and/or concerned parties. All punch list work shall be completed within 30 days from the date of the punch list publication date.

At the time of Final Completion, the Lessor/contractor shall provide (or maintain on site where indicated) the following:

Permit certification including all applicable permits. This may include but it is not limited to Certificate of Occupancy, general building permit, mechanical permit, HVAC permit, electrical permit, site work permit, fire alarm and sprinkler system certifications or any other miscellaneous permits. Provide copies to DECA and maintain the originals at the building.

Keys – maintain any and all keys (provided by the Contractor and provided by the Commonwealth) required to operate the facility at the building in an organized manner. At the end of the term of the lease (with transfer of ownership to the Commonwealth of Kentucky), submit these keys to the Division of Real Properties, representing the Lessee. (An agency sign off is required for transmitted keys.) All remaining specified keys required by the project specifications must be maintained at the project site prior to final project close out and turned over to Division of Real Properties, representing the Lessee, at the end of the term of the lease (with transfer of ownership to the Commonwealth of Kentucky). (Including but not limited to: fire extinguisher cabinets, fire alarm panels, access doors, cabinets or casework, electrical panels, HVAC control panels or security systems.)

Conduct training of the management team that will maintain the building during the term of the lease. Video tape all training sessions, provide the Commonwealth of Kentucky with a DVD or removable hard drive containing the videos of all training sessions. At the end of the term of the lease (with transfer of ownership to the Commonwealth of Kentucky), provide agency training to be completed to the extent required to properly operate the facility upon turn over to the Commonwealth of Kentucky. An agency sign-off is required.

O & M Manuals – a minimum of at least 3 copies of all O & M manuals must be submitted at the end of the term of the lease (with transfer of ownership to the Commonwealth of Kentucky). Until that time, at least one copy of the O & M manuals must be maintained in an orderly fashion at the building. Provide the Division of Engineering and Contract Administration a digital copy of all O&M manual information at the time of Final Completion.

Special Tools and Equipment – any special tools, spare parts, accessories, or equipment required to operate the facility must be *maintained at the building site*. At the end of the term of the Lease (with transfer of ownership to the Commonwealth of Kentucky), turn over to DECA, representing the Lessee. An agency sign-off is required.

Where warranties are provided or specified (including be not limited to the roof warranties including flashing and sheet metal work, windows, including glass seal and manufacture warranties, doors, equipment warranties which extend beyond the normal contract guarantees and including any service agreements for elevators, air conditioning units, specialized equipment, computer systems, or other special equipment). Provide digital copies to DECA and maintain the originals at the building. Submit AS-BUILTS on Mylar with stamps and signatures of design professionals to the Commonwealth of Kentucky at Final Completion.

Provide posted operation instructions for manually operated mechanical systems. They are to consist of simplified instructions and diagrams for equipment, controls and operations of the systems, including boilers, refrigeration equipment, HVAC controls, hot and chilled water distribution and hot and cold water domestic water. Instructions are to be framed and posted adjacent to the major piece of equipment of the system.

PROJECT SCOPE REQUIREMENTS

DEMOLITION AND MODIFICATION TO EXISTING FACILITIES AND UTILITY SYSTEMS

DESCRIPTION OF PROJECT SCOPE:

REQUIRED DEMOLITION AND MODIFICATION TO EXISTING FACILITIES AND UTILITIES:

The Demolition Project area is comprised of approximately 17 acres and is bounded by Clinton Street (to the South), Wilkinson Blvd. (To the West, excepting the privately owned Capital Plaza Hotel), Fort Hill (to the North), and St. Claire Street (to the East), (see sketches depicting the areas included in the Demolition Project line item).

EQUIPMENT AND MATERIALS TO BE SALVAGED FOR REUSE BY THE COMMONWEALTH:

Either prior to or during the course of demolition work the specific items of equipment and materials is to be salvaged by the Commonwealth for reuse at other facilities or in the future. The list of items of equipment and materials to be salvaged and any related Work required of the Offeror will be issued by Addendum to this RFP when the list become available.

Due to specific date requirements of the Commonwealth to accommodate some identified needs of the existing Complex, a specific demolition sequence is required as follows:

** NOTE: As part of the Phase I Response to Requests for proposal there is required a Narrative of the Planned Demolition Plan and a Site Demolition Plan, insure that the submitted plan clearly indicates that the sequences indicated below is followed and that the schedule indicated as critical dates before certain portions of the demolition may begin are accounted for in the plan.

SEQUENCE 1:

Sequence 1 Permitting: Obtain permitting required to close Clinton Street from Wilkinson Blvd. to St. Claire Street. Obtain permitting required to modify Mero Street to two-way traffic from Wilkinson Blvd. to Ann Street. Set in place detour signage to direct traffic are necessary to accommodate these traffic flow modifications. Set in place detour signage to direct Hotel and Fountain Place Shops traffic to ingress and egress the Capital Plaza Hotel Parking Garage from Mero Street.

Sequence 1 Utilities Rerouting: Prior to demolition operations, reroute electrical service for the YMCA Parking Garage (which currently comes from across Clinton Street inside the Overpass) from Broadway in the same manner as the electrical service for the YMCA building is currently routed. During this sequence, rework/ rerouting/ new installation of building utilities and services that will service the Private Owned Hotel may commence. Existing Building utilities and services shall remain in operation for the Plaza Shops during this sequence.

Sequence 1 Demolition: Clinton Street Overpass (See J below), Frankfort Convention Center (See G below) and the Eastern portion of the CPT area (See C below, not including the parking garage or Tower). Once the demolition work is complete, the new work of the YMCA Parking Garage Façade and the new work of construction of the new Parking Garage Structure adjacent to the TCOB Parking Structure may begin.

Sequence 1 Asbestos Demolition: During this sequence, the Developer may begin abatement of any Asbestos Containing Materials, which must be abated prior to demolition of any portion

of the project. (See EXHIBITS). Abatement of Asbestos Containing Materials must be performed in accordance with all applicable laws, regulations and procedure required by such Work.

SEQUENCE 2: (Work of this sequence shall not commence prior to January 12, 2018, coordinate actual schedule for the start of this sequence with the Commonwealth)

Sequence 2 Permitting: Obtain permitting required to reopen Clinton Street from Wilkinson Blvd. to Ann Street as two-way traffic. Obtain permitting required to close Mero Street from Wilkinson Blvd. to Ann Street. Set in place detour signage to direct traffic are necessary to accommodate these traffic flow modifications. Set in place detour signage to direct Hotel and Fountain Place Shops traffic to ingress and egress the Capital Plaza Hotel Parking Garage from Clinton Street. Set in place closure signage of the pedestrian bridge until new work of the east end ADA accessibility work is complete.

Sequence 2 Temporary Utilities Confirmation and Building Systems accommodations: Confirm that the Commonwealth has completed installation of the temporary utilities and building systems required to maintain operation of a portion of the Fountain Place Shops prior to the demolition indicated for this sequence (these temporary utilities and systems are not a part of the work of this RFP). Mechanical work (included in the work of this RFP) required to maintain building systems and utilities for the Capital Plaza Hotel shall be in place and achieved complete start-up prior to the demolition indicated for this sequence.

Sequence 2 Demolition: Mero Street Overpass (See E below), Capital Plaza Tower (See A below), Wilkinson Blvd Offices (See B below), and CPT Parking Garages (See C below). The work of construction of the new parking structure may continue during this sequence. Once the sequence 2 demolition work is complete, the new work of the construction of the new State Office Building may begin. Construction of the ADA accessibility to the east end of the pedestrian bridge is to be accomplished as soon as practical following demolition of the Capital Plaza Parking structure.

Sequence 2 Asbestos Demolition: During this sequence, the Developer may continue abatement of any Asbestos Containing Materials which must be abated prior to demolition of any portion of the project. (See EXHIBITS). Abatement of Asbestos Containing Materials must be performed in accordance with all applicable laws, regulations and procedure required by such Work.

SEQUENCE 3: (Work of this sequence shall not commence prior to April 12, 2018, coordinate actual schedule for the start of this sequence with the Commonwealth).

Sequence 3 Permitting: Obtain permitting required to reopen Clinton Street from Wilkinson Blvd. to Ann Street as one-way traffic. Obtain permitting required to reopen Mero Street from Wilkinson Blvd. to Ann Street as one-way traffic. Set in place detour signage to direct Hotel traffic to ingress and egress the YMCA Parking Garage from Clinton Street. Rework of YMCA Parking Garage to denote reserved spaces for the Capital Plaza Hotel shall be in place prior to the start of the work of this sequence.

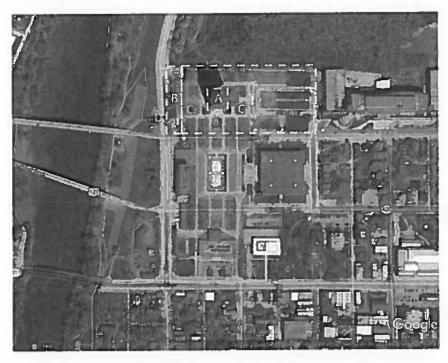
Sequence 3 Demolition: Fountain Place Shops (See H below), Plaza Shops Plaza (see I below) and Hotel Parking Garage (see K below). As demolition occurs: protect areas of the Capital Plaza Hotel façade that are opened up to weather and provide temporary roofing over portion of Plaza Shops to remain as part of the Capital Plaza Hotel. Install new work related to the Capital Plaza Hotel Façade including the installation of a new roof system where required as soon as possible. As demolition occurs, provide modification/ replacement to drainage systems in the existing parking garage to insure that proper storm and sanitary drainage systems remain in operation as necessary.

Sequence 3 new work: As soon as practical, following installing engineered fill in the Capital Plaza Hotel Parking Structure, install the ADA accessible parking near the Hotel. As soon as this parking is installed, allow use of the parking by designated Hotel patrons needing ADA accommodation.

Sequence 3 Asbestos Demolition: During this sequence, the Developer may continue abatement of any Asbestos Containing Materials which must be abated prior to demolition of any portion of the project. (See EXHIBITS). Abatement of Asbestos Containing Materials must be performed in accordance with all applicable laws, regulations and procedure required by such Work.

Demolition Requirements:

The project consists of the following demolition/ alteration of existing site elements (as fully defined in the "New Development Required by the Commonwealth" section of these Minimum Building Standards of the Request for Proposals), including, but not necessarily limited to, the following:



- A. Capital Plaza Tower
- B. Wilkinson Blvd Offices
- C. CPT Parking Garage
- D. Pedestrian Bridge (east connection)

- A. Demolition of the existing 365,700 +/- GSF, 28-story office tower (referenced herein as "Capital Plaza Tower" or "CPT").
 - a. The CPT shall be demolished by the development of this project defined in this RFP in its entirety. However, the Offeror may propose to reuse a portion or portions of the existing subsurface structure of the existing facility but shall be responsible for the determination and certification of the structural integrity of any portion utilized in the new construction. The Offeror shall provide a structural engineering report with analysis indicating that the use of any existing portion of the existing subsurface structure does not have an adverse effect on the performance of the subsurface structural system should this option be proposed.

- b. The CPT is approximately 317' from the plaza lobby to the penthouse. The CPT is comprised of 28 floors, with a combined gross building floor area of approximately 365,700 gross square feet.
- c. The structure uses a precast concrete post-tension ceiling and floor system in the perimeter office area that surrounds a cast-in-place central core that houses service areas, restrooms, mechanical area, and elevator shafts.
- d. The CPT has a ground level entrance with a drive up canopy on the Mero Street side. The ground level entrance was used primarily for state employees and is accessible via escalators and elevators. This level also contains an auditorium, meeting rooms, foyer galleries, restrooms, service areas and the primary mechanical room.
- e. The plaza level was the public entrance and has a large amount of open space with high ceiling and entrances from several sides. (The entrance currently has protective covered wooden porticos due to chunks of concrete falling from the building. The entire perimeter of the plaza is taped off for protection of the same, some 10-15 feet from the building on all sides).
- f. The finish in the Plaza Lobby and lower floor areas are high quality as it serves as the public entry with marble and bronze finishes, terrazzo floors and large perimeter windows. Central Core and Elevator Lobbies on upper floors are similar and the interior finishes in office areas are a modular system of metal partitions.
- g. The ground level primary mechanical room contains equipment and systems that provide heat not only for the tower, but also for the Wilkinson Boulevard offices, Fountain Place Shops, Convention Center, and cooling water for the privately owned Capital Plaza Hotel. Note: The privately owned Capital Plaza Hotel will continue in operation. Therefore, this project shall include providing a new source of cooling water for the hotel's mechanical system. (See New Construction Requirements in these Minimum Building Standards).
- h. The CPT is divided into 2-vertical sets of office floors separated by a mid-level 2-story a two story mechanical room between floors 12 and 14. The mechanical room is designated as Floors 13A and 13B. The CPT is capped with a story-high concrete parapet that hides the roof penthouse.
- i. The interior core of CPT is cast-in-place, and contains the elevators, stairs, restrooms, and other storage and auxiliary spaces. The core is approximately 54' x 48' and is surrounded by concrete walls. Sprinkler systems are found around the interior core perimeter walls pointing outward, so the primary office space on each floor has no direct sprinkler system.
- j. Floors each floor is supported by the core shear walls and at the perimeter by a concrete girder supported by concrete columns spaced at 10 feet. The floor structure is an integrated post-tension, pre-cast concrete floor-ceiling system. The pre-cast areas are tied together by post-tension cables. Previous structural studies identified that some of these post-tension cables are failing.
- k. Mechanical between Ceiling/Floor the interior of the floor-ceiling system contains the air distribution ductwork and return air plenum.
- I. HVAC systems the CPT, Wilkinson Blvd. offices and the other areas of the plaza are heated with boilers and chiller units. These units are located in the mechanical room of the CPT. Cooling towers are located off-site on land leased by the Commonwealth from the City of Frankfort. The HVAC system is old technology and currently needs significant items repaired for which there are no replacement parts available.
- m. The 24th floor has an auxiliary HVAC system for that floor.
- n. Window washing unit this system is on the roof and is non-working.

- o. The Capital Plaza Complex contains suspected asbestos containing materials that shall be abated following the requirements of Federal and State governmental agencies with authority over such hazardous materials, as the requirements relate to the demolition. (A copy of the preliminary asbestos containing materials assessment is attached (see EXHIBITS).
- B. Demolition of the existing 11,500 +/- GSF office space area, fronting Wilkinson Boulevard. (Referenced herein as "Wilkinson Boulevard Offices" or "WBO").
 - a. The WBO are on grade with Wilkinson Boulevard and are constructed of castin-place concrete with typical office finishes, consisting of gypsum drywall and metal stud partitions, acoustical ceilings and carpeting over resilient floor tile.
 - b. The WBO face Wilkinson Blvd. on the west side with aluminum storefront walls.
 - c. The Capital Plaza Complex contains suspected asbestos containing materials that shall be abated following the requirements of Federal and State governmental agencies with authority over such hazardous materials, as the requirements relate to the demolition. (A copy of the preliminary asbestos containing materials assessment is attached (see EXHIBITS).
- C. Demolition of the existing Capital Plaza Parking Garage located east and west of the CPT, consisting of 767 +/- parking spaces. (Referenced herein as "Tower Parking Garage" or "TPG").
 - a. The Tower Parking Garage was built in 1969, along with the other garages on this Plaza Complex site.
 - b. The TPG was a converted cast-in-place concrete waffle slab with 4" nominal slab thickness.
 - c. TPG area: Slab on Grade= approximately 217,000 gsf; supported floor = approximately 132,000q sf; total area = approximately 349,000 qsf.
 - d. The TPG on the west side of the CPT was accessed from Wilkinson Boulevard. The TPG on the east side of the CPT was accessed at the north-west corner of the property from Wilkinson Boulevard, a ramp access at Mero Street, and an access of St. Claire Street on the east.
 - e. Traffic flow in the TPG was one-way with angled parking stalls. The TPG was four (4) different levels on two floors with concrete ramps accessing the levels. There was no security entry system.
 - f. Lighting for the TPG was either fluorescent or halogen depending on the location with the garage.
 - g. The exhaust fans in the TPG have not been working for last 13 years and were abandoned in place.
 - h. Previous garage repairs: 1997 patching and full depth replacement in some areas; 1999 repairs to stairs, sidewalks, and replacement of handrails one in three phases; 2000 300 sf of floor area repairs on mezzanine level. Also included repairs to the roof of the utility tunnel and top of driving surface on ground floor.
 - i. The utility tunnels, similar to the rest of the Capital Plaza Complex, contains suspected asbestos containing materials that shall be abated following the requirements of Federal and State governmental agencies with authority over such hazardous materials, as the requirements relate to the demolition. (A copy of the preliminary asbestos containing materials assessment is attached (see EXHIBITS).
- D. Demolish and reconfigure an eastern connection to a pedestrian bridge traversing Wilkinson Boulevard from the south-west side of the CPT site near Mero Street/ Wilkinson Blvd. Intersection. (The pedestrian bridge is the property of the Kentucky Transportation Cabinet and is to remain).

- a. When the TPG is demolished, the access point for the existing Kentucky Transportation Pedestrian Bridge will be removed. During this demolition, the pedestrian bridge shall be protected from damage.
- b. At the conclusion of the demolition of the TPG and CPT, a new ADA accessible access point from the ground level near the intersection of Mero St. and Wilkinson Blvd. shall be constructed in compliance with KYDOT requirements and guidelines for pedestrian bridge access. (as further defined in the "New Development Required by the Commonwealth" section of these Minimum Building Standards of the Request for Proposals).



- A Capital Plaza Tower
- 8 Wilkinson Blvd Offices
- C. CPT Parking Garage
- D. Pedestrian Bridge (east connection)
- E. Metro Street Overpass
- F. Cooling Tower Lot
- G. Convention Center Area
- 11. Plaza Shops Area
- . Plaza Shops Pl.
- 1 Clinton Street Overnass
- W. Lietal Darbingt, reads
- YMCA Parking Garage

- E. Demolition of a portion of the elevated plaza area that overpasses Mero Street on the southern edge of the CPT-TPG portion of the project site, which is to be demolished as part of the demolition of the CPT and TPG areas. (Referenced as "Mero Street Overpass" or "MSO").
 - a. Mero Street is a public transportation route, which is to remain in operation following any future development of the project site. Any closure of this public transportation site is to be coordinated with the Kentucky Transportation Cabinet. The Offeror shall comply with the requirements of this governmental entity for temporary closure.
 - b. Note that the Mero Street and Clinton Street closures cannot occur simultaneously. The demolition of these two overpasses must be scheduled and coordinated along the critical path of the project.
 - Offeror shall make repairs to the Mero Street surfaces where damaged by the MSO demolition work.
- F. Demolition of existing cooling towers for the building are located on a parcel of land across Wilkinson Boulevard, which is leased from the City of Frankfort.
 - a. The Commonwealth will salvage the existing cooling towers. The Offeror is to disconnect the cooling towers and transport the cooling towers to a location determined by the Commonwealth (within 10 miles of their current location) (see Commonwealth Salvaged Equipment and Materials List).

- b. The Offeror shall demolish and dispose of all associated systems and services to these cooling towers.
- c. The leased site shall be restored to a condition where it can be returned to the City of Frankfort and the lease terminated.



- Carifol Phys Tower
- B. Willenson Blvd Offices
- C. CPI Parking Garage
- D. Podostrian Bridge (east
- E. MetroStreet Overpar
- G. Convention Center Area
- H. Plaza Shops Area
- f. Plaza Shops Plaza
- 1 Clinton Street Overnas
- Hotel Parking Garage
- 1 YMCA Parking Garage

- G. Demolition of the existing Frankfort Convention Center, consisting of approximately 102,100 +/- gross square feet, with a seating capacity of 5,295. (Referenced as "Frankfort Convention Center" or "FCC").
 - a. The Frankfort Convention Center was first occupied in 1971 as an assembly occupancy.
 - b. The FCC consists of a large multipurpose room with fixed seating and concession areas, break out meeting rooms, a commercial kitchen and offices (along the northern side of the building), and restroom facilities (on the western and eastern sides of the building), locker rooms (along the southern side of the building), and storage rooms, cloak rooms, and mechanical rooms scattered throughout.
 - c. Large concrete ramps access the upper level of the multipurpose room at each of the four corners of the building.
 - d. The Capital Plaza Complex contains suspected asbestos containing materials that shall be abated following the requirements of Federal and State governmental agencies with authority over such hazardous materials, as the requirements relate to the demolition. (A copy of the preliminary asbestos containing materials assessment is attached (see EXHIBITS).
 - e. The building is a pre-cast and cast-in-place structure. Some portions of the exterior skin of the building are EIFS on metal studs and framing systems. The ceiling/ roof system are long span metal trusses.
- H. Demolition of the Fountain Place Shops, consisting of approximately 54,000 +/- gross square feet, and elevated plaza area/structure located atop the Fountain Place Shops, comprising approximately 120,180 +/- gross square feet. (Referenced as "Fountain Place Shops" or "FPS").

- a. Storefronts of the FPS are aluminum and glass. The exterior walls are concrete. The interior walls are either gypsum drywall on metal studs or concrete masonry depending on their locations. The ceiling systems are acoustical layin or suspended gypsum drywall. The flooring is either carpet over or resilient flooring that is suspect of containing asbestos in the tile and mastic.
- b. A portion of the Fountain Place Shops is currently utilized by the Capital Plaza Hotel for a restaurant and meeting spaces. This portion of the shops area is not to be demolished. When the elevated plaza over these areas is removed, a new roofing system will be required. When the fountain place plaza area is demolished, the exposed portions of the FPS and Capital Plaza Hotel that are to remain will require new facade work. See new development work section of these Standards for more information.
- c. The elevated plaza atop the FPS is a concrete waffle structure with concrete pavers on top and a membrane roof in the cavity between the structure and plaza paver levels. The Roofing was replaced over the years and does not contain asbestos.
- d. Mechanical and plumbing systems in this area, including in pipe tunnels from this area to the CPT, the FCC, the FPS and CPH are insulated with ACM material which must be addressed prior to demolition of the area. (see EXHIBITS).
- I. Demolition of the Fountain Place Plaza, consisting of approximately 54,980 +/- gross square feet (Referenced as "Fountain Place Plaza" or "FPP"), which is atop the Capital Plaza Hotel Parking Garage, (Referenced as "Hotel Parking Garage" or "HPG"). The space to be demolished does not include the space utilized by the Capital Plaza Hotel for a restaurant, meeting space and offices. These areas are to remain. When the plaza is removed from above these spaces, provide a new roof for these spaces as indicated in the New Development section of these Standards.
 - a. The FPP adjacent to the FPS is a concrete waffle structure with concrete pavers on top and a membrane roof in the cavity between the structure and plaza paver levels.
 - b. The Roofing was replaced over the years and does not contain asbestos.
 - c. Certain mechanical and electrical systems that serve the Capital Plaza Hotel are located or pass through areas of the FPP that are to be demolished. Rerouting or relocation of these systems shall be completed prior to demolition.
 - d. In the center of the FPP is a large fountain to be removed. The liner of the fountain and the piping have been replaced a few years ago and do not contain ACM. The walls of the fountain are pre-cast concrete.



- A. Canital Place Tower
- B. Wilkinson Blvd Offices
- C. CPT Parlong Gar
- D. Pedestrian Bridge (exist connection)
- E. MetroStreet Overpass
- 1. Cooling lower list
- G Convention Center A
- H. Plaza Shops Area
- 1 Ding Shoot Dis
- J. Clinton Street Overpass
- K. Hotel Parking Garage
- L. YMCA Parking Garage

- J. Demolition of a portion of the elevated plaza area that overpasses Clinton Street on the southern edge of the FPS portion of the project site, which is to be demolished as part of the demolition of the FPS area. (Referenced as "Clinton Street Overpass" or "CSO").
 - a. Clinton Street is a public transportation route, which is to remain in operation following any future development of the project site. Any closure of this public transportation site is to be coordinated with the City of Frankfort and the Kentucky Transportation Cabinet. The Offeror shall comply with the requirements of these two governmental entities for temporary closure.
 - b. Prior to the start of demolition of the CSO, safety railings/barricades will be required at the edge of the elevated plaza area over the YMCA Parking Garage that is to remain. The Offeror shall be responsible for maintenance of the safety railing/barricade until new work is completed in the area.
 - c. Note that prior to the demolition of the CSO, electrical services to the YPG need to be rerouted to provide electrical power to the lighting and services in the YPG.
 - d. Note that the Mero Street and Clinton Street closures cannot occur simultaneously. The demolition of these two overpasses must be scheduled and coordinated along the critical path of the project.
 - e. Offeror shall make repairs to the Clinton Street surfaces where damaged by the CSO demolition work.
- K. Demolition Hotel Parking Garage, which contains 268 parking spaces. (Referenced as "Hotel Parking Garage" or "HPG").
 - a. The Hotel Parking Garage, located between Mero and Clinton Streets and between the Capital Plaza Hotel (which is to remain), and the site of the Frankfort Convention Center (which is to be demolished), is to be demolished and the recessed portion filled with engineered fill to the street level elevations.
 - b. Note that during the demolition of the HPG, drainage lines that are to remain in service must be revised and/or relocated.

- c. The Capital Plaza Hotel (which is to remain) has an existing below grade entrance from the HPG that requires removal and/or reconfiguration in order to allow for the depression of the parking garage to be filled and restored to street level. The Commonwealth (DECA) with work with the Offeror to coordinate this new work with the Owner of the Capital Plaza Hotel.
- L. Demolition in Preparation for a minor renovation of the YMCA Parking Garage, which contains 368 parking spaces. (Referenced as "YMCA Parking Garage" or "YPG").
 - a. The YMCA Parking Garage, located along the southern edge of Clinton Street and between the YMCA Building (which is to remain) is to be receive a minor renovation of its Clinton Street façade and a railing at the newly formed edge of the elevated plaza to provide the requirements as further defined in the "New Development Required by the Commonwealth" section of these Minimum Building Standards of the Request for Proposals.
 - b. As part of this work, following demolition of the CSO, the northern façade of the YMCA Parking Garage must be reconfigured and enhanced to provide the requirements as further defined in the "New Development Required by the Commonwealth" section of these Minimum Building Standards of the Request for Proposals.
 - c. Existing Electrical systems are to be modified to allow the YPG to continue in operation. In the HPG, existing systems service the YPG parking garage, these are to be reworked, rerouted, relocated and/or replaced to allow for the continued function of the YPG after the removal/ renovation of the HPG.
- M. Demolition, modification and/or re-routing of Domestic water, sanitary sewers, storm sewers, cable TV, broadband internet, and electricity are supplied by a public municipality.
 - a. Offeror shall coordinate and be responsible for costs associated with the various public utility municipality (Frankfort Plant Board, Frankfort Sewer Board, etc.) demolition, modification and/or re-routing of utilities and services indicated above.
 - b. The Commonwealth Office of Technology is currently working with the Frankfort Plant Board to modify, reroute, relocate and reconfigure the existing State internet hub that runs through the Capital Plaza Complex. This work is not a part of the work required by this RFP.
 - c. The Offeror shall plan the work of this demolition requirement so that disruption to the operations of the Capital Plaza Hotel and YMCA, including the YMCA Parking Garage is minimized to the greatest extent possible. When minor disruption is anticipated or planned, the Offeror shall coordinate the timing of the disruption with the Department for Facilities and Support Services, the Owner of the Capital Plaza Hotel, and the YMCA operations manager. When anticipated outages of utilities and services are necessary, the Offeror shall provide a minimum of seven (7) calendar day notice to the parties indicated above and shall keep these outages to a minimum duration.
- N. Demolition, modification, and/or re-routing of Natural gas and telephone services are provided by private utility companies.
 - a. Offeror shall coordinate and be responsible for costs associated with the various private utility companies (Columbia Gas of Kentucky, AT&T, etc.) demolition, modification and/or re-routing of utilities and services indicated above.

b. The Offeror shall plan the work of this demolition requirement so that disruption to the operations of the Capital Plaza Hotel and YMCA, including the YMCA Parking Garage is minimized to the greatest extent possible. When minor disruption is anticipated or planned, the Offeror shall coordinate the timing of the disruption with the Department for Facilities and Support Services, the Owner of the Capital Plaza Hotel, and the YMCA operations manager. When anticipated outages of utilities and services are necessary, the Offeror shall provide a minimum of seven (7) calendar day notice to the parties indicated above and shall keep these outages to a minimum duration.

EXISTING AND ADJACENT FACILITIES TO NOT BE INTERRUPTED BY THIS WORK:

The project does not consist of the following areas and adjacent buildings of the existing Capital Plaza Complex site that are to remain in operation during and following the project development accomplished under this Request for Proposals, including, but not necessarily limited to:

- 1) Vicinity state-owned and Privately-Owned facilities:
 - A. YMCA parking garage (except for the Clinton Street Façade)
 - B. YMCA Building
 - C. Capital Plaza Hotel (except for the Plaza side façade and HVAC work indicated)



Facilities to remain in operation/use

- YMCA parking garage (except for the Clinton Street Façade)
- 3. YMCA Building
- Capital Plaza Hotel (except for the Plaza side façade and HVAC work indicated)

- 2) The facilities indicated above are to remain open, not a part of this project development site, and have existing utility and engineered systems that are shared with the Tower and parking complex that is a part of the project development site.
 - A. Respondents to this Request for Proposals shall indicate in their proposal the methodologies for maintaining adequate access to these facilities during the demolition period and the construction period of the new development.

New work to be accomplished under the new development indicated in this Request for Proposals shall include new utilities services to the existing facilities indicated above. (As further defined in the "New Development Required by the Commonwealth" section of these Minimum Building Standards of the Request for Proposals).

PROJECT SCOPE REQUIREMENTS New Development Required by the Commonwealth

NEW DEVELOPMENT REQUIRED BY THE COMMONWEALTH:

As a minimum, the new development required by this Request for Proposals shall include, building systems design and construction oversight, material and equipment selection and new construction for The Commonwealth of Kentucky lease-to-own new state office building, new parking garage structure, new surface parking, new roadway improvements, new plaza adjacent to the Capital Plaza Hotel (and atop the existing hotel parking garage, new connection to the existing pedestrian bridge, façade improvements to Capital Plaza Hotel where the Plaza Shops are removed, and façade improvements to the YMCA parking garage structure along Clinton Street proposed in the this RRP and complying with the standards indicated herein below.

These standards have been prepared with the intent to provide only specific quality and/or performance issues of primary concern to the Commonwealth of Kentucky for the new development work indicated herein. The Commonwealth expects that the total new development design will provide maximum utility and energy efficiency, requiring a minimum of maintenance and operational expense for the long term. The Commonwealth expects that all new development construction will comply with all requirements of the Kentucky Building Codes, current addition. These standards set specific design minimum standards for the proposed new development work, construction components and systems of specific interest to the Commonwealth, but does not address all building components and systems that should be offered or entertained as proposed.

Aesthetic Design Challenge for New Development requirements of this Request for Proposals.

The Commonwealth is very proud and finds value in our architectural heritage exhibited in the various urban districts of the cities and towns of our state -- and in particular the city of Frankfort. This heritage provides many beneficial opportunities - to allow our citizens and visitors to feel connected to the history and identity of our communities, for economic revitalization and place making, and for strengthening social connections. For these reasons, we believe it is important to infuse new structures through thoughtful design into the existing historical fabric of the built environment. The goal of the desired aesthetics of this new development is to use this project as an opportunity to demonstrate how to construct new significant public-use buildings and structures with sensitivity to the historic fabric of our communities that have become relevant to our quality of life.

This new development should serve as a catalyst in this Historic downtown district to reenergize community development and interest in this economically important city sector. It is expected and desired that this new development will have a lasting value to the Community. The idea of establishing this aesthetic design challenge is supported by national trends showing that downtown and urban settings are becoming more desirable as places to live and work when new development takes note of and applies effort to constructing the new with acknowledgement and reference to the historically significant old.

The functional requirements of this project are of a significant scale that has a series of design considerations inherent in such building use functionality. While the economic and financial requirements of this project are limiting and important; the Commonwealth desires a design solution that enhances the built environment of the district and references and draws its aesthetic considerations from this Historic past in terms of massing, siting, construction and detailing to the optimum extent practical. The Offeror's design team should balance the needs of this new development with the opportunities of this aesthetic design challenge.

The Offeror's design team is challenged to accomplish a balance of each of the following characteristics:

- Historic District respect. The design of the facilities of the new development should consider governmental, public and private facets of the City of Frankfort's Central Business District. Since this is an historic district, it is important to the new development should respect the district's distinctive character by following the existing scale, form, rhythm, proportions and materials so that it is integrated with the existing fabric and scale and should be visually harmonious with buildings and public spaces. The new development should work with the natural ventilation, sunlight and landscaping to maximize energy efficiency and respect the historic character of adjacent buildings.
- Architectural style. The design of the facilities of the new development should be distinguishable in their own time period and should not simply mimic existing details. Do not duplicate the historic architectural styles of the District's traditional buildings or copy an historic appearance --- it should be a contemporary interpretation of traditional buildings. In other words, the design should not accentuate the new building over any others, but it should enhance the overall appearance of the District.
- Mass and scale. The new development construction should be complementary in mass and scale to the buildings to which it is visually connected but also respect the mass and scale of traditional buildings within the District that are or are not immediately visually connected. Since the contemplated facilities of this development are to be larger than the majority of buildings in the District, visually divide façades into smaller bays or vertical sections complementary to the historic fabric patterns. We understand that the floor-to-floor spacing and the overall building height will most likely be different from those in the District's traditional buildings, but the design should work to make the new development complementary thereby diminishing the effect of the differences.
- **Solid-to-void ratio.** Respect the solid-to-void ratio (proportion of wall to window area) of the District's traditional buildings. Solid-to-void ratio is permitted to change to distinguish the upper floors by increasing or decreasing the solid-to-void ratio. Respect the traditional storefront design with a street-level facade that is as transparent as possible.
- Walls and elevations. Create architectural interest in new development facilities by avoiding large spaces of blank wall on building facades. Incorporate architectural detailing that acknowledges the traditional examples on more traditional buildings.
- Roofline. Respect traditional roofline patterns along the street facades of the new
 development buildings. Roof shapes should be comparable with the buildings to which
 they are visually connected. Commercial buildings in the District typically have flat
 roofs embellished with cornices or parapets on the façade. Incorporate modest
 interpretations.
- Building materials. The exterior materials of the new development should be compatible with the predominant materials, textures, and colors of the facades of the traditional buildings in the District but also with the more modern buildings that are visually connected. Other materials may be appropriate if they are visually compatible.

Site Planning and Design

The Lessor is not required to comply with the Frankfort/ Franklin County Planning and Zoning Requirements for site development. However, the Lessor is responsible for any fees or permits required by Frankfort/ Franklin County Government associated with the demolition or new development of this site or the construction of the new state office building, new parking garage structure, new surface parking, new roadway improvements, new plaza adjacent to the Capital Plaza Hotel (and atop the existing hotel parking garage, new connection to the

existing pedestrian bridge, façade improvements to Capital Plaza Hotel where the Plaza Shops are removed, and façade improvements to the YMCA parking garage structure along Clinton Street proposed in the this RRP and complying with the standards indicated herein, including but not limited to a the required local building permits.

Gradients: At turf areas provide positive drainage – between 3:1 and 1 percent (2 percent desirable), steeper than 3:1 requires ground cover or other erosion control, steeper than 2:1 is not acceptable. Terracing is acceptable if access for lawn equipment is provided.

Parking lot drives, roadway developments, and other pavements shall not be crowned but shall have positive drainage. Provide areas for piling of snow in multiple locations adjacent to drives, roadways and parking lots.

Service drives are to be accessed from site circulation drives, properly signed as service only, screened as much as possible, separate from parking access and may be of one-way design. Service drives shall accommodate standard tractor-trailer vehicles.

Both the Parking Garage and the surface parking lot to be constructed in accordance with the requirements of this RFP and applicable State Building Codes. The Design of these structures and paving shall take into consideration the design criteria indicated in the geotechnical report provided as part of this RFP or as produced by a consultant to the Offeror. For the surface parking lot, the Construction of either concrete parking pavement or bituminous parking pavement is at the option of the Offeror. NOTE: twenty-five percent (25%) of the site pavement constructed of a permeable pavement and the Commonwealth desires that the Offeror provides the required permeable pavement in drives and roadways.

Landscaping shall be native plants that do not require irrigation and only routine maintenance. Landscaping shall be provided that "softens" the surface parking lots and drives and that offers aesthetically pleasing site design. (The Offeror shall provide maintenance of landscaping as required in the Building Operations and Maintenance Specifications).

Any mechanical equipment located on the exterior of the building shall be properly screened (either with screening similar in construction to the building facades or landscaping) and isolated from the main entrances and street-visible facades of the building.

Dumpsters, dumpster pad and screening shall be as required by the Frankfort/ Franklin County Zoning Ordinances and therefore acceptable to the anticipated refuse vendor. (The Offeror shall provide dumpsters as required in the Building Operations and Maintenance Specifications.)

Office Building Planning and Design

At the time of this RFP it has not yet been determined the exact agencies/tenants that the building will house. The Commonwealth has several significant needs for this space to accommodate various portions of employees and agencies for the purpose of administering the governmental services necessary to be provided by state government. The current spaces are leased and are in multiple locations throughout the City of Frankfort. The goal of this project is to consolidate Cabinet Agencies into a more centralized and newer facility.



New Development Sketch

- A. New State Office Building
- B. New State Parking Garage
- C. Green Space (Future Development)
- Pedestrian Budge (east connection)
- E. Hotel Façade Upgrade
- F. Relocate Hotel Parking Garage
- G. Green Space (Future Development
- H. YMCA Garage Foçade
- 1 Mero Stree
- 1 Clinton Street
- Y Confinent Destin
- Entrance Drop off and ADA
- A. Within the parcel of land indicated on the site sketch above, the Offeror is to construct a New State Office Building that meets or exceeds the standards and programming indicated herein. (Referenced as "New Office Building" or "NOB").
 - a. The Commonwealth has established a maximum gross square foot per occupant design standard of 257 gsf/person and has successfully constructed office buildings using this maximum standard. The office building to be constructed by this RFP is to house a minimum of 1,500 employees. Therefore, the gross square footage of the NOB required by the Commonwealth must be at least 385,000 gsf. However, it is desirable to the Commonwealth that this minimum gross square footage be exceeded as much as possible while complying with all other requirements of this RFP. The Selection Committee, at its option, may consider favorably a building that exceeds this gross square footage requirement while also complying with all other requirements of this RFP. This excess gross square footage will be considered during Phase II evaluations of "Value Added" items (a total score of 50 points may be awarded for the sum of all "value added items").
 - b. **Main Entrance Identification:** The main entrance to the NOB shall be distinctly visible and identifiable as the main entrance from each major approach point to the building. Other entrances to the NOB shall be distinctly visible and identifiable as an auxiliary entrance to the building from the approach points related to that secondary entrance.

- Note: the naming of the building is the responsibility of the Developer.
 Once a name is determined, the Developer shall include in the New
 Development Work a monumental building sign with the name of the
 building clearly identified and adequately visible from Mero Street.
- c. **Quality of Exterior Building Materials:** When field applied or constructed materials (i.e. brick masonry, synthetic stone, metal building panels or site-cast-tilt-up concrete panels) are proposed for the building exterior, the design narrative shall explicitly describe the quality control techniques and methods that will be used to insure proper placement, construction, and installation.
- d. Space Planning Security Design: Controlled access is required to the entire NOB from the exterior (at all building entrances) and to each individual floor. The Offeror is to provide a card access management system that is compatible with the existing Commonwealth of Kentucky access system. This system will be operated by the Office of Building and Mechanical Services (Hirsch Version 3.5). The access system is to be capable of tracking the issuing and revocation of access cards along with generating reports of all access into the building. Provide card readers at all building entrances; loading docks, stairwell doors at each floor and elevator lobbies (on each floor and from within). The Commonwealth of Kentucky will provide the access badges and activation of these badges. A central data base computer is to connect all access locations, be equipped for stand-alone operation upon power failure and programmed for automatic locking/unlocking of building doors. The failsafe for exterior and interior doors with security is locked from the outside but provide free egress from the inside
- e. It is anticipated by this RFP that the NOB will be a five (5)-story structure. The programming criteria indicated herein is based upon that assumption, should the Offeror develop a proposed building with a different number of floors, the Offeror should make logical adjustments to the program for each floor but shall provide all programmed spaces in accordance with the criteria established for the five (5) story building. The Building Programmed Spaces specifically for each floor are as follows:

Building Program (Generally Required):

Space Planning Support Spaces: Where possible do not locate mechanical equipment on roof. If necessary (with no other option), locate and centralize all mechanical equipment in a penthouse. Avoid scattering miscellaneous condensing units, exhaust fans and equipment on the roof. Locate equipment behind a screen wall and integrate into the building design in a penthouse. Provide roof walkway pads compatible to the roofing system to roof top equipment.

Provide way-finding signage throughout the building in places such as, but not necessarily limited to: at stairways, at elevators, at restrooms, at janitorial closets, and at all other built rooms. Provide signage at conference and training rooms with manually operated "occupied" feature. Provide signage at each office with a removable insert for the occupant's name. Provide signage at mechanical/ electrical/ communications rooms and closets. All signage shall be ADA Compliant. ***Note: The Commonwealth will review the floor plan layouts provided by the Offeror and at the appropriate time (before signage shop drawing acceptance) will provide the room naming and numbering scheme. The Offeror's Architect shall provide revised floor plans with the room naming and numbering scheme indicated by the Commonwealth.

Structural Design for High Density Files: The Commonwealth has determined some special floor loading requirements file room live loads. In response to RFP, assume that design

will require two (2) file rooms for high-density storage systems on each floor with a live load of 300 psf. These rooms shall be enclosed in a one-hour rated enclosure. Doors to these file rooms shall have security access control badge readers. These two file rooms per floor shall be remote to one another and each shall have a minimum of 800 square feet.

Other structural provision: Diagonal structural bracing is not to be located at exterior perimeter walls in conflict with window openings or doorways.

LEED Requirements/ Energy Considerations: A minimum of "LEED Silver" is desired to be accomplished for this building. The Offeror shall work to accomplish this desired LEED level, however, under no circumstances that a minimum of "LEED Certified" is not accomplished. The Design Narrative should include descriptive proof of the Offeror's history and ability to accomplish LEED Certified Design in previously constructed buildings as well as describe the methodologies and goals to be set forth for this specific building. Any proposal that does not meet or exceed this minimum requirement will be deemed non-responsive.

The Energy Considerations of this RFP is that the building shall comply with the Requirements of ASHRAE 90, 2010 edition. The Building shall comply with the "High Performance Building Standards" of the Commonwealth in every respect.

Sound Masking System Requirements:

Provide the entire office building with a centralized sound masking and paging system, incorporating speakers installed above suspended lay-in acoustical ceilings or installed in suspended gypsum drywall ceiling systems. Observe fire rated ceiling requirements were applicable. Systems using "direct field" speakers are not acceptable. The sound masking generators and paging mixers shall be controllable from an attached computer. Windows based software shall be provided. Every speaker must incorporate a rotary control for making per speaker volume adjustments. Every habitable space of the building (including mechanical rooms and other utility type rooms) are provided with sound masking and paging capabilities.

Sound Masking Performance:

The system shall use DSP technology for sound masking generation and equalization of the sound masking signals. All sound masking generators shall incorporate 1/3 octave band equalization from 125 Hz. to 10000 Hz. Each generator shall also incorporate a dedicated high pass and low pass filter with configurable slope.

Each rack mounted, centrally located sound masking generator shall incorporate four non-coherent sound masking generators. The masking volume shall be digitally adjustable in 0.5 dBA increments over a range of 35 dBA to 85 dBA @ 1m.

Paging Performance: The system shall use DSP technology for equalization of the paging signals. The analog page interface shall accept eight (8) balanced line-level audio inputs and provide octave band equalization and compression for each input. The paging volume shall be digitally adjustable in 0.5 dBA increments over a range of 35 dBA to 85 dBA @ 1m.

Automatic Level Control: The system shall provide a timer function allowing audio levels to be automatically controlled according to a calendar-based user defined schedule. The system shall provide automatic daylight saving time adjustments. The system shall provide a transition process that automatically increases the masking volume over a period of time according to a programmed schedule. The system shall allow for up to four independent timer zones per programmable timer. The system shall allow independent timer schedules for each

day of the week. The system shall allow user defined rates of volume adjustment and attenuation levels.

Connection to voice (telephone) network: Connect sound masking system to the Commonwealth's telephone system network to allow occupants to dial into the system for paging. Provide all necessary interface hardware and software to accommodate the Commonwealth's phone system.

Connection to Fire Alarm System: Connect sound masking system to the building fire alarm system so that the sound masking system is automatically muted when the fire alarm system is sounding an audible alarm or being used to make an emergency announcement or to provide emergency information and response directions.

Project Requirements – Applies to All Mechanical/Electrical/Plumbing

Mechanical Systems Requirements:

Provide a building automation system (BAS) to monitor and control lighting, ventilation, heating and air conditioning systems. Lessor shall provide the latest technology and technology integration for building automation systems. The network for connection of the BAS and the systems it controls throughout the building shall be independent and separate from the Commonwealth's IT system entirely. Fire alarm and security system must function as stand-alone systems with an interface to the building automation system. The BAS shall function as a stand-alone system without reliance on the Commonwealth's computer network system.

Protect the HVAC systems during construction from contamination and dirt. If at any time the HVAC systems are used during the construction, provide construction filtering at all diffusers and other openings in the system and in plenum spaces. In all cases, whether the HVAC system is used during construction or not, the air filters are to be changed at the time of Substantial Completion following final cleaning of the building and prior to occupancy.

Each individual office space shall have independent temperature control. Open Areas shall be separate zones for spaces within ten (10) feet of an exterior wall. Otherwise, open spaces may have areas with similar occupancy and orientation controlled as a single zone.

In general, required space temperatures shall be 69 degrees F. (heating) and 72 degrees F. (cooling), maximum relative humidity of 55%. Computer Rooms – Special HVAC equipment required for Computer Rooms shall provide a maximum temperature in the room of 73-degrees F. (Temperature 73°F \pm 4°F, Humidity 30-50%.)

Ventilation requirements: The design of ventilation and make-up air systems shall meet the requirements of the Kentucky Mechanical Code or ASHRAE 62.1 (use the more stringent requirements of either).

Roof Mounted HVAC equipment shall be avoided whenever possible and minimized when necessary. Where roof top equipment is necessary, the equipment shall not be visible and shall be fully accessible for services with screening if needed for line of sight.

Design building envelope and building systems to maximize energy efficiency. Comply with the requirements of ASHRAE 90.1 (2010) standards.

The building heating system shall be connected to the emergency power system and shall be fully operable while running on emergency power. The building cooling system, with the exception of the electronic equipment rooms with dedicated HVAC systems, need not be operable with the emergency generator.

All MEP Design Requirements

Access requirements shall be graphically presented for all maintainable equipment.

Provide access doors to all concealed valves and controls and/or items that require access or maintenance.

Drawings and schedules shall incorporate provisions for the collection of Record Drawing Information

Maintain a minimum four (4) inch clearance below all roof decking to mechanical and electrical system components.

Provide Utility markers for all new utilities and existing utilities.

All MEP Functional Requirements

Incorporate the Systems Basis of Design document into the project Systems Manual. Prepare a Commissioning Plan utilizing appropriate planning and communication tools, design and construction phase forms and checklist, functional performance testing, statistical inspections, and other appropriate methods to assure the Project functional success.

All Equipment, piping, ductwork and conduit shall be protected from damage or the introduction of dirt or debris into the system.

Systems shall be installed in compliance with all current applicable codes and authorities having jurisdiction.

Provide redundant mechanical system provisions for critical elements (pumps, boilers, chillers, etc.).

Utility distribution (including building service-piping systems) shall be zoned to accommodate reasonable service and emergency isolation provisions.

Mechanical, electrical and instrumentation tagging and labeling shall be consistent with record drawings. Room numbers on record documents and automation graphics shall match actual room numbers applied by Owner. Record Drawings shall be complete prior to Owner acceptance of the building. Record Drawings shall reflect manufacturer, model number, serial number and DDC address of all maintainable equipment on the project.

HVAC - Project Requirements

Systems Basis of Design Requirements

Define summer and winter outdoor design conditions. Define summer and winter indoor design conditions by control zone. Define acceptable summer and winter part

load conditions range by control zone. Define basis of HVAC load & energy analysis calculations. Define minimum energy efficiency requirements. 2003 IECC & ASHRAE 90.1 (2010). Define Thermal Environmental Conditions. ASHRAE 55-2004. Define air filtration performance requirements. ASHRAE Std.55.2. Define Building Systems operating set points. Define acceptable HVAC related sound levels. Define special equipment utility requirements.

Design Requirements

Chiller sizing strategy –use two or more chillers to carry full load, plus one chiller for redundancy

Drawings shall show chiller tube pull space within the chiller room. Space must be adequate for both condenser and evaporator tube pulls. If necessary, overhead doors may be provided to allow pulling space.

Chillers shall be located so that initial installation (and future replacement) can be accomplished without undue equipment disassembly or architectural demolition. Ideally, the chiller room shall open to an accessible outdoor area.

Coordinate chiller room requirements with architectural design to make sure adequate openings (e.g. overhead doors) are provided to allow ready chiller installation/replacement access. Verify that column spacing is adequate to allow passage of the largest chiller equipment.

Building service lines shall not be routed on the roof.

Two pipe changeover heating and cooling systems are unacceptable.

For unitary systems (variable-refrigerant, fan coils, heat pumps, etc., outdoor air must be supplied by dedicated outdoor unit(s) that will introduce outdoor air at room-neutral conditions. Do not supply unconditioned outside air directly to a room or room terminal unit.

Comment: Outdoor air systems usually run constantly, even when individual units are not running. Introducing extremely cold or hot/humid air to spaces is unacceptable. In addition, unitary equipment may not be able to handle institutionally required outdoor air requirements.

Building Automation Systems (BAS) shall conform to the latest version of the DECA standards for interfacing with the Commonwealth Energy Management and Control System (CEMCS), a statewide energy reporting and analysis project that became operational in 2012.

Comment: BAS trend data will be collected and transmitted to CEMCS servers for energy tabulation and operational analysis. Adherence to the CEMCS interface standard will simplify the implementation. DECA CEMCS Interface Standards (latest version)

HVAC control sequences shall be written and presented with the Phase A schematic drawings and P&ID diagrams.

Packaged rooftop unitary heating and cooling systems shall not be used as the main HVAC system.

All supply and return ductwork shall be externally insulated where required to be insulated. External ductwork insulation shall be wrapped for protection.

Wireless Controls: The DDC temperature control system shall be provided with wireless temperature sensors for all occupied spaces. VAV boxes and wall-mounted sensors shall communicate wirelessly.

High efficiency MERV 13 filters shall be provided for central air handling units.

Administrative Documents Requirements

Mechanical schedules shall include data, including electrical parameters, for asinstalled equipment in lieu of as-specified equipment.

HVAC control sequences and P&ID diagrams shall be included on the as-built drawings. Placing control sequences in the specifications is unacceptable.

Comment: This information is most vital to operating staff, both initially and in the future, who wish to become familiar with the building's HVAC system. While drawings tend to be kept around somehow, specifications are often lost and are usually unavailable to building staff.

P & ID (Piping & Instrumentation Diagram) Requirements. DECA Procedures Manual 230000-5

System Airflow Diagram and Air Balance Schedule Requirements. DECA Procedures Manual 230000-5

Integrated Automation - Project Requirements

HVAC control sequences shall be written and presented with the Phase A schematic drawings and P&ID diagrams.

Comment: Unfortunately, it is all too common within the design profession to write the control sequences at the last minute and/or let the control vendor write them. The control sequences are the responsibility of the design engineer and can, and indeed MUST be developed during schematic design. One cannot design a system if it is not known how it will be controlled and operated. DECA Procedures Manual 2500000

Systems Basis of Design Tab

Building Automation Systems (BAS) shall fully conform to the current ASHRAE BACnet standard.

Building Automation Systems (BAS) shall conform to the latest version of the DECA standards for interfacing with the Commonwealth Energy Management and Control System (CEMCS), a statewide energy reporting and analysis project that became operational in 2012.

Comment: BAS trend data will be collected and transmitted to CEMCS servers for energy tabulation and operational analysis. Adherence to the CEMCS interface standard will simplify the implementation.

Administrative Requirements

HVAC control sequences and P&ID diagrams shall be included on the as-built drawings. Placing control sequences in the specifications is unacceptable.

Comment: This information is most vital to operating staff, both initially and in the future, who wish to become familiar with the building's HVAC system. While drawings tend to be kept around somehow, specifications are often lost and are usually unavailable to building staff.

HVAC - Integrated Automation

The Commonwealth has under a separate contract the services of Interval Data Systems who acts as the Commonwealth's CEMCS integration consultant. This Consultant will work on behalf of the Commonwealth with the Developer's Design Team to insure that the design documents and BAS installation is compatible with the Commonwealth's CEMCS system. This Consultant will conduct design consultation and design review, by reviewing and recommending changes to the New Developments Mechanical drawings and sequences. This improves the controls system installed in the project by insuring automation requirements are met. This effort insures that the new building will operate at peak energy efficiency and will require minimal maintenance for the duration of the Lease period. The Commonwealth will be responsible for the costs of procuring these services from Interval Data Systems.

Central Energy Management and Control System (CEMCS)
Controls Design Standard and Control Points List Spreadsheet for CEMCS.
CEMCS Requirements with instructions for the A/E/C Community
in the use of the CEMCS Control Points List Spreadsheet.

1. Introduction:

CEMCS is a program being implemented by the Commonwealth of Kentucky to actively reduce the energy consumption of the Commonwealth's facilities. In order to support that effort it is apparent that some standardization of the buildings controls systems must occur. This standardization does not relate to the brand of control systems being used; rather the requirements for (a) communicating with the CEMCS database as to format and rate, (b) the control systems architecture required to meet the CEMCS objectives and (c) control point data required to adequately diagnosis the performance of the building's controlled systems.

Requirements for items (a); the communication format and (b); the control system architecture, are presented within the Spreadsheet Tab: "CEMCS System Requirements" of this spreadsheet. These requirements should be familiar to those, within the A/E/C community, accustomed to specifying controls systems.

The requirements of item (c), the CEMCS control points data collection, are considerably more complicated.

- 1. They require the control system to collect the information needed to diagnose the performance of the building.
- 2. The control system must trend this data in increments and for durations that are valuable for this diagnosis.
- The point information must be in a consistent format such that the CEMCS program and staff can readily identify the location and nature of the point data being collected.

4. Finally, there must be some uniformity as to what points are required for the various building systems being controlled.

1.1. Communication Format and Control System Architecture

In order to facilitate the requirements of CEMCS, the controls system Designer must incorporate the requirements listed under the spreadsheet tab "<u>CEMCS System Requirements</u>". This architecture and communications format must be incorporated into the project control system specifications.

1.2. Control Points List Spreadsheet

The following is a description of how to utilize this CEMCS Control Points List Spreadsheet. This spreadsheet has not been developed as a design tool, although a knowledgeable designer could utilize it as such with some effort and ingenuity. Rather this Design Standard was developed for the purpose of communicating the intent of DECA regarding control system uniformity. As such, its capabilities are limited to this objective and will be an evolving document as new systems become popular or obsolete.

1.3. System Selection

This Control Points List Spreadsheet is subdivided into spreadsheets tabs grouped by system type. These system types are currently classified into the following spreadsheet tabs:

1.3.1 System Selection Subcategories

- Room Units (PTAC, Mini-Splits, Fan Coils, Unit Ventilators, WSHP, etc.)
- CW VAV AHU (Chilled Water, VAV, AHU's)
- · Metering and Monitoring
- Exhaust Fans
- 100% OA Units (Makeup Air Units)
- Air Terminal Units
- CW SZ AHU (Chilled Water, Single Zone, AHU's)
- CW DD AHU (Chilled Water, Double Duct, AHU's)
- DX RFT & SS SZ AH (DX Rooftop & Split System, Single Zone Air Conditioning Equipment)
- DX RFT & SS VAV AH (DX Rooftop & Split System, VAV Air Conditioning Equipment)
- Energy Recovery Vent Units (Energy Recovery Ventilating Units)
- Lighting Systems
- Unitary Heat (Radiation, Unit Heaters, Cabinet Heaters, Reheat, etc.)
- Equipment Monitoring Interface
- WSHP Loop Systems (Water Source Heat Pump Loop Systems; Pumps, Boilers, Towers, etc.)
- Chilled Water Systems (Pumps, Chillers, Towers, etc.)
- Hot Water Systems (Pumps, Boilers, etc.)

Within each of the subcategory tabs is a listing of the most common equipment / sub-component configurations encountered in the Commonwealth's facilities for that subcategory. This listing should be considered as extensive but by no means exhaustive in nature. There will be combinations that cannot realistically be incorporated into this document.

These configurations are presented in Column A of each spreadsheet tab. In most cases, this list is too lengthy to be effectively searched; therefore, each spreadsheet includes an Excel filter provision to simplify the selection process. This filter is also located in Column A within the first 10 rows (typically row 6) and is labeled "Filter List Here". The Designer need only right click on the dropdown arrow to reveal the system sub-components within the current spreadsheet.

For instance under the "Metering and Monitoring" tab the filter drop down allows you to choose among sub-components such as:

- · Analog BTU meter
- Analog Chilled Water Energy
- Pulse Chilled Water Energy
- · Analog Electric Meter
- · Pulse Electric Meter
- · Analog Fuel Oil Meter
- · Pulse Fuel Oil Meter
- · Analog Gas Meter
- Pulse Gas Meter
- Outside Air Conditions / History
- · Outside Air Conditions / Degree Day

Upon selecting the appropriate sub-component, the spreadsheet filters the points list to only those applicable to the sub-component selected in the filtering provision. (As a practical matter, if the project requires the designer to utilize multiple systems within this spreadsheet, it is more expedient to copy and paste each configuration into another spreadsheet organized specifically for that project.)

1.4 Additional Point Information

1.4.1 Agency Point Priority

Column B of each system subcategory contains another filtering provision headed as "Agency Point Priority". The purpose of this Agency Point Priority column is to communicate what priority to apply to various points which might be included in the Designer's point list specification.

CEMCS requires certain points to be trended; yet there are numerous points which although not required for energy diagnostics, do represent information the Using Agency would like to monitor through CEMCS.

The Designer should also note that the points listed may include points not applicable to the equipment / system being considered. For instance, the Gas Heating / Cooling Rooftop points list will include provisions for four stages of heating control which may well be beyond the number of stages available on most packaged rooftop units. It is not intended for the points list to become prescriptive as to accessories or options that might be applied to the referenced item. The Designer is still responsible for the design of the systems and their controls elements.

However, certain information is required to achieve the CEMCS goals and the preferences of the Using Agency. Therefore, the points list spreadsheet includes the "Agency Point Priority" filter provision. Each point has a priority code attached, ranging from 1 to 4. This priority code is to be interpreted as follows:

- Required
- Required where applicable
- Recommended
- Recommended where applicable

Therefore, the Designer is expected to include within the controls specification the points prioritized as #1 and if in fact the point is applicable, those prioritized as #2.

The Designer is expected to work with the Using Agency to determine the Agency's preference as to those points prioritized as #3 and where applicable those prioritized as #4.

So if the Designer wishes to view only the points required by CEMCS, the filter would be configured to only the #1 grouping. The more recent spreadsheet program versions include provisions to include or exclude various combinations of the filter selections.

With these steps complete, the Designer has a base points list by which the control points list specification may be more fully defined as appropriate to the Owner's Project Requirements.

1.4.2 I /O Point Abbreviation

The next step for the Designer is to apply abbreviations the Controls Programmer can utilize to develop unique point identifiers, such that CEMCS can trend each point in the project. These point abbreviations are to be consistent and recognizable to the CEMCS and Agency staff. Therefore, the recommended point abbreviations are included in the spreadsheet. The Designer is strongly encouraged to utilize these abbreviations presented to describe the project points. The abbreviations have for the most part been extracted from ISA (Instrument Society of America) and the National CAD Standard abbreviations. It is important to DECA, the Using Agencies and to the CEMCS effort for this nomenclature to be used not only in the points list but also within the Sequence of Operations descriptions and within the equipment / device schedules. Guidance for undesignated points may be found within ANSI/SA S5.1-1984 (R 1002) standard or on websites such as www.engineeringtoolbox.com referencing ISA Codes for Process Instrumentation.

Previously the tagging of equipment and control points has been left to the discretion of the Designer. However, in support of the CEMCS requirements the Designer will be expected to adopt nomenclature consistent with that presented within this design standard document. The Designer is directed to the CEMCS Spreadsheet subcategory tab "Equipment Tagging Nomenclature" for the MEP equipment nomenclature guidelines presented by this Standard. Deviation from this naming convention on DECA projects requires approval by the Project Manager.

For instance, a high static pressure switch in the supply air duct is designated as "SA_HSP_S". This communicates the point is located in the "SA" supply air, it is sensing "HSP" high static pressure and is a "S" switch which identifies it as a binary device thus the CEMCS or Agency staff knows to look for a Normal/Fail, or 1/0 value being reported by the BAS. The supply air static pressure sensor on the other hand is designated as "SA_SP", again "SA" indicating supply air and "SP" sensing static pressure but without the switch designation, the staff will now look for an analog value to be reported to the CEMCS database.

When this document does not suggest an abbreviation or nomenclature applicable to a point or device required for the project, the Designer is expected to look to the National CAD Standard or the ISA for guidance. The format of such an item should still be consistent with the format presented within this standard.

1.4.3 P&ID Tag Identification

It is intended that the project's controls point list be included with the Sequence of Operations and P&ID's ("Process & Instrumentation Diagrams" or flow schematics and instrumentation diagrams) in the project drawing package. The P&ID Tag column in the Controls Points List Spreadsheet is intended to be incorporated into the project's controls point list. Its purpose is to cross-reference the P&ID instrument tag with the control point identification.

For instance the supply air temperature for a given air handler will have a point abbreviation of SA_T and a unique point identifier developed by the controls programmer; however if it fails, the technician wanting to change it will need to know that it is the temperature transmitter designated as TT-503 on the P&ID and within the materials list, so that he will be able to order a replacement and locate it in the system. For this reason where a point is

directly related to a device, it is intended that the designer include that cross-reference designation in the control points list P&ID Tag column.

1.4.4 Point Location Identifiers

There are a number of additional identifiers the Designer must provide the controls programmer so that the unique point identifiers will indeed be unique. They are as follows:

KY Archibus Building ID #: Each building operated by the Commonwealth of Kentucky is assigned an asset ID # and is tracked within the Commonwealth's Archibus database. The Designer is to include this ID # within the project's Controls Point List. This ID# can be acquired from the DECA Project Manager.

<u>Building Area Served Identifier:</u> It is recommended that the Designer provide the controls Programmer with a Building Area Served identifier that reflects an appropriate sub-division of a larger building. This identifier is at the Designer's discretion but should be consistent with the projects drawing presentation. For instance if the building consist of multiple floors and multiple wings, the Designer might include a designator for the East wing of the Second Floor as "2E". The intent is to assist the Using Agency in responding to specific non-performing points in a more efficient manner. However, correlating a point to a more specific location, such as a room number, is discouraged; as these more specific designations tend to change with time.

1.4.5 Discipline and Drawing Layer Identifiers

It is intended that the Discipline and Drawing Layer Identifiers nomenclature be adopted from the National CAD Standard or the standard designated as the drawing standard adopted for the subject project. Deviation from the National CAD Standard requires approval from the Project Manager.

<u>Discipline Identifier:</u> This discipline identifier should be consistent to the project drawing discipline nomenclature, such that the location of the point may be correlated to the unique point name. For instance if all electrical drawings are referenced with an E prefix, and the corresponding points list applies to an electrical device such as a power monitor, then this identifier should be "E". If on the other hand the electrical drawings are divided into sub-disciplines; for instance power is under an EP discipline designator, then "EP" would be the appropriate Discipline identifier for the power monitoring points list.

<u>Drawing Layer Identifier</u>: The National CAD Standard puts forth certain recommendations for managing drawing layers within the project drawings. It is DECA's recommendation that the control points name be associated with the drawing layer that presents the devices associated with the points. The National CAD Standard also suggests the possibility of Major and Minor Layer groups. For instance, a point associated with a piece of HVAC Equipment could be associated with a HVAC major layer and an EQPM minor layer.

These designations are now becoming important in the management of drawings within BIM project delivery methods. Therefore, the Designer is encouraged to correlate the point devices or equipment with the Drawing Layer Major or Minor Group within the Controls Points List such that the controls Programmer can incorporate this information into the unique point identifier.

1.4.6 System Component Identifier

The system component identifier is an important element of the unique point name. For CEMCS and the Using Agency to gain full benefit from these point identifiers, the system component must be correlated to the point. Typically, the System Component is a piece of

equipment such as air handling unit "AHU-7" or air terminal unit "VAV-35". This project equipment designation is what is intended for the "System Component Identifier" element.

However, it is incumbent upon the Designer to coordinate the project's equipment designators with the existing equipment tagging. There cannot be two AHU-1's within the same Archibus Building.

1.4.7 I / O Point Unique ID

The I / O Point Unique ID# is strictly the domain of the controls Programmer. These numbers require no input from the Designer as to selection. However, the Designer is expected to leave fields within the Controls Point List documentation such that the Programmer will record the Unique ID# assigned to the listed point in the Record Documents. The Designer is likewise responsible to verify this information is captured in those Record Documents.

1.5 Summary

The "Controls Points List Spreadsheet is a tool for control systems Designers and Programmers which communicates DECA's intentions for implementing the provisions of CEMCS and providing more uniformity in the control systems product being provided to the Commonwealth's various Agencies.

A brief recap of the steps required for the Designer to use this tool is as follows:

- 1.Incorporate the Control System Architecture and the CEMCS Communication Format requirements found under tab "CEMCS System Requirements" into the project control system specifications.
- 2. Identify the project Components and Equipment tagging consistent with the nomenclature presented in the "Equipment Tagging Nomenclature" tab or as referenced in the applicable Drawing Standard.
- 3.Locate the system sub-category tab in the spreadsheet that applies to the system, component or equipment points list being selected.
- 4. Within the system sub-category spreadsheet, filter the component / equipment listing in Column A to the points list that best fits your application. If specifying multiple items it is best to copy the current selection to another spreadsheet specific to the project.
- 5. With your working points list, filter and edit the points list to match the application.
- 6. If additional points are required for a component, add an appropriate point abbreviation to the "I/O Point Abbreviation" field consistent with the format of this standard's point abbreviations.
- 7. Where discrete instruments are associated with a point in the project's P&ID or Flow Diagrams, add the instrument's tag identifier into the "P&ID Tag" field. Leave blank if no discrete cross reference applies.
- 8. Enter the KY Archibus ID# into its field.
- 9. Enter an Area location reference to the "Building Area Served" field.
- 10. Enter a Discipline identifier into the "Discipline" field.
- 11. Enter the drawing layer designations into the National CAD Standard Major Group and Minor Group (if applicable) fields.
- 12. Enter the system component /equipment tag designation into the "System Component Identification" field.
- 13. Make provisions in the point list for the controls Programmer to enter the "I/O Point Unique Identifier" into the corresponding field.
- 14. Verify that all the information is appropriately incorporated into the Record Drawings / Documents.

<u>CEMCS Requirements for Project Control Specifications</u> <u>KY / CEMCS Control System Requirements</u>

- 1. **Zone Controls (Level 1)** Data shall be uploaded to Field Cabinets (Level 2) at the more stringent requirement of:
 - No less than every two (2) minutes,
 - · At the frequency specified in contract documents, or
 - At a rate required to successfully implement the specified sequence of operation.

It is preferred that these systems utilize an open protocol.

- Field Cabinets shall be open protocol systems; BACnet is the preferred network protocol, LON
 is acceptable for smaller buildings where authorized by the using agency.
- 3. Front End (Level 3) The Front End Software shall reside on a PC and/or server, capable of running robust high-speed hardware Ethernet data link using open standard TCP/IP connections.
 - BACnet open protocol is a requirement for Level 3
 - Data accumulated from Field Cabinets shall be transferred at 10/100Mbyte/sec unencumbered between the front end and the Commonwealth Office of Technology (COT) database server.
- 4. **CEMCS** Data Transfer Connectivity Link between the Front End (Level 3) and the Commonwealth Office of Technology (COT) database server. Point Data shall be transferred in SQL Tables to a COT database dedicated to each control system provider.

Like the Level 3 BAS network, these connections shall be robust high-speed hardware data links like Ethernet using TCP/IP open standard connections. Data on these networks shall run at PC Speeds with virtually no bandwidth restrictions.

For security reasons, it is best that BAS embedded servers provide or serve up data to COT servers. COT best practices security policies state that when connecting servers to the Central FAC database that the most secure connection is when COT is pulling data. In CEMCS, COT servers will pull data at night when network activity is minimal.

- 5. **CEMCS Point Nomenclature** Each point of control shall be identified with a unique point name consistent with the KY/CEMCS I/O Standard Tag Identification format. This format consist of a multi-component point naming system including:
 - KY Archibus Building ID #
 - Building Area
 - Discipline
 - Drawing Layer Group
 - Drawing Layer Sub-Group
 - System Component ID
 - I/O Point Descriptive Abbreviation
 - I/O Point Unique ID #

Reference Example in Each Component / System Spreadsheet Tab

Plumbing - Project Requirements

Water Tap Fee: The Frankfort Electric and Water Plant Board's standard procedure is to use Frankfort Plant Board (FEWPB) staff to tap the main waterline and run the line to within 18" of the fire/domestic vault. FEWPB costs include the labor and materials to construct the line to the vault, as well as the meter, meter setter, vault lid, and any necessary fire hydrants.

Since this project is a build-to-suit, FEWPB expects each offeror may be requesting various ways the offeror anticipates FEWPB to provide water service. In order to prevent developing a new cost estimate for each offeror, FEWPB has provided the following information for potential Offerors. Note: these are estimated numbers based on past projects. FEWPB will

develop a detailed cost estimate once an offeror is selected, and FEWPB receives the design to be used for the new building.

Waterline extension to the vault: \$35/inch/foot (i.e. a 6" line will cost \$210 per foot.)
Meters (the below costs include the tap fee, meter, meter setter, and vault lid)
2" Compound: \$5,000; 3" Compound: \$5,200; 4" Compound: \$6,100; Fire hydrants (if requested): \$4,000. Frankfort Electric Water Plant Board requires the completion of their Form W-100. FEWPB uses page 1 to side the meter and pages 2-5 are the specifications for the vault.

Sewer Tap Fee: The Frankfort/ Franklin County Sewer Board has specific requirements for connection to the existing sanitary and storm sewer system. The Offeror is responsible for all construction, fees and permits required to make these connections.

Specification Requirements

Water treatment program specifications shall be included for all water systems

All piping systems shall be labeled/identified to the signage requirements of ANSI/ASME A13.1

Systems Basis of Design Requirements

Define peak flow conditions used for design, Define special equipment service requirements, Define operating temperatures used for design

Water softening systems provide where necessary for this building.

Re-circulating Domestic Hot Water system. Provide a domestic hot wall system with a pumped hot water recirculation circuit to accommodate a quick-response hot water delivery at lavatories, janitorial sinks, etc. Operation of the recirculation pump shall be controlled based on the building occupancy schedule.

Low Flow Plumbing Fixtures. Water closets, urinals, lavatories and sink plumbing fixtures shall be low flow fixtures to reduce the potable water consumption of the building.

Design Requirements

Provide space/access for equipment replacement. For example, do not place water heaters or water storage tanks behind other equipment, where removal and replacement would be impaired.

Provide dielectric couplings where dissimilar metals are joined or in contact with metal wall penetrations. Dielectric unions are not acceptable.

Utilize floor sinks in custodial closets. Custodial closets shall be separated from mechanical rooms, public corridors and other similar spaces. Loading docks shall have a custodial closet in close proximity.

Plumbing lines shall not be routed on the roof.

Provide detail showing gas-fired equipment hard piped to point of gas connection.

Backflow preventers at water entry and as required elsewhere shall be located in readily accessible mechanical spaces. Include upstream strainers and adequate drainage provisions.

Flexible water hoses supplying appliances or HVAC equipment shall be protected and reinforced with metal braiding of a material appropriate for the application.

Provide a hose bib at all toilet rooms with multiple fixtures and all shower rooms.

Below grade utility lines shall be clearly and accurately marked with appropriate marker tape.

Modular plumbing equipment systems shall be piped in a manner to facilitate removal of one module without disabling operation of the system.

Sanitary cleanouts shall be furnished with Bronze finish.

Functional Requirements

All piping systems shall include provisions for proper draining and venting.

Provide domestic water service hydrants for grounds maintenance. Utilize agricultural metering where permitted by code and the Local Utility Company.

Domestic hot water to custodial closet fixtures shall be 140° F

Major mechanical equipment shall be located in a restricted access area on the ground level of the building.

Design shall meet the requirements of KRS 58.200

All water systems shall include a detailed flushing and cleaning procedure, which protects the project equipment

Electrical Systems

Planning shall include locations of copiers, microwaves, coffee machines, and vending machines (in the quantities and locations indicated elsewhere in this RFP). Provide as a minimum a separate 20-amp circuit for each device.

Provide as a minimum 20-amp dedicated circuits with isolated grounds to all copy machines. Provide a copper line for fax machine function at each copy machine.

Provide as a minimum isolated ground 20-amp circuits with surge protected receptacles for all main computer hub network equipment and audio-visual equipment. Dedicated isolated-grounded circuits are not required for computer receptacles.

Provide a minimum of a twenty-five (25%) percent spare capacity above maximum demand for future growth of the electrical system.

Planning shall take into consideration the Lessee's electrical power, data systems for each office space. In addition, consideration shall include security system components including card access systems and any other components included in the security system. The Offeror shall provide electrical power and data outlets, conduit and wiring from IT closets to each

office and to each cubicle space as indicated. The Offeror will also provide conduit and wiring from the IT closets to the central point in the Mechanical Room for the electrical service and IT entrances to the building. See elsewhere in this Minimum Building Standards for the security, data, and power requirements to be provided.

Rooms housing electronic infrastructure equipment, including but not limited to VOIP phone data equipment, building automation systems, and security systems shall be on emergency power circuits. Each room is to have a standalone HVAC system that shall provide full heating and cooling, as required, and shall be operable from the emergency generator.

Electrical - Project Requirements

Design Requirements

Adequate electrical space shall be provided for maintenance.

In addition to the power utility's billing metering system, include "smart" sub-meters for significant process loads that may need to be accounted for separately. All meters and sub-meters shall be connected to the Building Automation System.

Power circuits dedicated for computer server equipment use shall be provided in each Communications closet.

Provide power surge protection, as a minimum, in each Communications Closet and elsewhere as necessary for proper building function.

Photocopiers and other significant office equipment loads shall be fed from a dedicated circuit. The Offeror shall provide locations for photocopiers and other significant equipment identified elsewhere in this RFP, either at the location indicated or when not indicated, at centralized locations where no less than three photocopiers serve a maximum of 20,000 gsf of floor space. Exact Location of photocopiers and other significant office equipment loading will be provided by the Commonwealth with its final review and modifications to the workstation layouts.

Provide electronic ballast with reduced current and voltage harmonic distortion characteristics where necessary for proper building use function.

All interior and exterior lighting shall be controlled by a lighting control system that is connected to the building BAS system.

Corridor wall outlets shall be spaced no less than 30 feet and served on individual GFI circuit.

Emergency, isolated ground and other special receptacles shall be identified by specialized cover plates.

All power wiring shall be #12 THWN minimum.

Provide phase loss protection on three-phase equipment.

Present average designed foot-candle level for each room on project electrical drawings.

Functional Requirements

Power and lighting systems shall be designed to limit impact on information and telecommunications systems to levels established in Systems Basis of Design.

Major electrical equipment shall be located in a restricted access area on the ground level of the building.

Critical system elements shall be powered by emergency power service. This includes as a minimum those required by building codes, all Communication Closets, elevator equipment and controls, heating and ventilation equipment of the building, sound masking paging system, emergency lighting and exit lights.

All electrical systems elements shall be accessible for service without unreasonable damage to building or grounds.

Location of electrical equipment shall consider sound levels established in Systems Basis of Design.

Electronic Safety & Security - Project Requirements

Design Requirements

Locate cable routing paths on project drawings and identify acceptable cable retaining methods and details.

By the electronic security system, isolate each floor from persons transferring between floors at each stairway and elevator lobby. Coordinate the badge access security system with the fire alarm system for emergency egress requirements of the Kentucky Building Code and all referenced codes and standards.

Access Badge Readers in the Elevators to achieve the isolation indicated above is not acceptable.

Fire alarm zones should correspond with sprinkler system zones and be identified on drawings showing interface to other building system components.

Fire Suppression - Project Requirements

Design Requirements

Sprinkler freezing and condensation considerations shall be addressed, particularly at intake and relief damper locations and in conjunction with dry storage and walk-in freezers and coolers.

Below grade utility lines shall be clearly and accurately marked with appropriate marker tape.

Building Sprinkler Systems shall be designed using hydraulic calculation procedures. Include fire protection system flow information on project drawings.

Utilization of chemical based fire suppression systems are not permitted without written authorization.

Sprinkler system zones should correspond with fire alarm zones and be identified on drawings with appropriate control valves, alarm switches, etc.

Functional Requirements

Sprinkler systems shall be designed and zoned to facilitate easy testing and maintenance.

Commonwealth Office of Technology IT Infrastructure (applies to all buildings in the **New Development:**

Telecommunications Spaces

Entrance Facility: The entrance facility may be in its own space or share a space inside in the equipment room. OSP cable shall be terminated or transitioned to listed cable as close as practical upon entry to the building.

Redundant, diverse routed wide area network connections are required. Dual entrances for fiber-optic cabling and/or multi-media cabling shall be installed. Conduit duct banks shall enter the building at two different locations and terminate in the entrance facility. Duct banks shall not utilize the same routing and shall run to two different utility manholes or overhead utility pole infrastructure. A dedicated location in the entrance facility shall be provide for termination cabinets and equipment. Location shall have 34" fire rated plywood attached to wall. Mask fire-rating stamp prior to paint. Each duct bank shall have a minimum of (4) 4" conduits

Telecommunications Room Sizing: The following dimensions are quidelines for the minimum size of the telecommunications rooms. Telecommunications Rooms shall be vertically aligned for multiple floor installations.

Minimum critical dimensions for equipment and clearances for rooms to house floorstanding equipment racks:

- 1. Width: 10'-0"
- 2. Depth: 10'-0" for the first rack and UPS, 30" for each additional rack
- 3. Height: 9'-6" from finished floor to the lowest clearance.
- 4. Room dimensions shall also comply with ANSI/TIA-569-D

Up to 100 equipment outlets served... 10ft x 10ft

101 to 200 equipment outlets served... 10ft x 15ft

201 to 800 equipment outlets served... 20ft x 20ft.

If other services such as Fire Alarm panels are located in a telecommunication room, increase the size of the room 20%.

Equipment not related to the support of the telecommunication room (e.g., piping, ductwork, pneumatic tubing, etc.) shall not be installed in, pass through, or enter the telecommunication room.

Doors shall be a minimum of 36" wide and 7'6" tall and shall swing out of room. Floors are to be light in color and be either VCT or treated /painted concrete to prevent dust and enhance lighting.

All walls shall be covered with 34" Fire Rated Plywood. Plywood shall be above electrical outlets (17" above finished floor typical) and extend to above cable tray. Plywood shall be painted a light color. Fire rating stamp shall be masked prior to painting.

Telecommunication Room Equipment: There shall be a minimum of one 19" two-post network rack with 6-inch deep vertical wire management per telecommunication room for equipment cabling outlets. There shall be a minimum of one 19" four-post network rack with 6-inch deep vertical wire management per telecommunication room. Racks shall be bolted and bonded together. One rack is for cabling and the other for equipment. There shall be a minimum of 3 ft. clearance around all sides of the connected racks, measured from equipment mounted on wall, not the wall itself. Install appropriate 48-port patch panels and fiber optic patch panel in the cabling rack. Provide additional racks as required. A minimum of 12" wide basket tray shall be installed around room and to each rack. Basket tray shall be installed to correspond to the top of the racks, approx. 7ft above the finished floor surface. All fiber patch panels are to be mounted in the top of the rack with the equipment.

Equipment Room & Telecommunications Room HVAC

Design for a minimum of 5,000 BTU's from equipment, for up to 144 data outlets, add 1,000 BTU's for every 48 additional outlets served. HVAC shall be provided on a 24 hour-per-day, 365 day-per year basis. HVAC shall be tied into the backup power system to ensure the telecommunication room air is conditioned during a power outage. The HVAC system shall provide continuous operating ranges of 68° F to 77° F with 40% to 55% relative humidity. A minimum of one air change per hour is required.

Telecommunication Room Power Requirements: It is required that the electrical feed to the telecommunication room be backed up by an emergency generator, including all convenience outlets to conform to current NFPA code. Outlets and faceplates with an emergency generator feed shall be red and labeled with the panel designation and breaker position of the servicing electrical panel. A separate 100A 120/240V single-phase supply circuit serving the telecommunication room shall be provided and terminated in its own 20 circuit electrical panel inside the room. A minimum of four dedicated non-switched 20amp duplex electrical outlets for equipment power, each on separate branch circuits. These outlets shall be mounted two each above each rack. Separate quad 120v convenience outlets for tools and test equipment are to be placed at maximum of 8' intervals around perimeter of room and below the plywood.

Telecommunication Room Lighting: Provide a minimum of 50 foot-candles measured 3' above finished floor. Locate light fixture(s) 8.5' above finished floor. Power for lighting should not come from the power panel located inside the room. At least one light fixture shall be powered from the emergency system. Coordinate the lighting layout with equipment layout, including cable trays.

Telecommunications Pathways:

Telecommunications pathways shall be located away from sources of Electromagnetic Interference (EMI), including:

- Electrical power cables and transformers
- · Radio frequency (RF) sources
- Motors and generators
- Induction Heaters
- Photocopy equipment

The pathway capacity shall accommodate a minimum of four cables per every communications outlet.

Conduits and Sleeves: There shall be a minimum of three 4" conduit sleeves between each telecommunication room. Empty conduits over 1" shall have a minimum 3/8" nylon rope pull line rated for 200lb. test. Conduits 1" and less shall have a polyline installed. Conduits in the telecommunication room shall extend at least 3" and no more than 4" from floor, wall or ceiling. All sleeves shall be fire stopped with approved methods.

Cable Trays: All structured cabling shall be installed in a minimum of 18" wide basket tray. Basket tray shall be located a minimum of 6" above ceiling tile and have a minimum of 12" of unobstructed access above telecommunication tray. Building components (e.g., lighting fixtures, structural supports, air ducts) shall not restrict access to the telecommunication tray.

J-Hooks: J-Hooks are only to be used when basket tray installations cannot be used. Follow the manufacturer's specification on sizing J-Hooks. No more than 20 cables allowed in any J-Hook. When there are more than 20 cables, wire basket or multiple J-Hook paths are required. Space J-Hooks 4' to 5' and anchor J-hooks to studs. Vary J-Hook spacing to avoid cable performance degradation.

Backbone Cabling: Copper riser cables (if required). Copper riser cables shall be ARMM cable. The cables shall be bonded. These cables shall terminate on the backboard with 66 blocks beside the entrance protectors in the Entrance Facility. Cables are to terminate on rack mounted 110 panels in the telecommunication room.

Fiber optic horizontal and riser cables: Fiber optic riser cables shall be riser rated single mode and multi-mode manufactured by Corning or approved equal. Fiber strand requirements shall be a minimum of twelve (12) strands of OM4, Clear curve multi-mode and twelve (12) strands of single-mode. Cables shall be ran from the entrance facility to main telecommunication room. Additional fiber-optic cables are to be ran from main telecommunication room to each vertically aligned telecommunications rooms. Cables shall be terminated with MPO connectors and appropriate LC cassettes in rack mounted cabinets. Cables shall be armored to protect from damage. Armor sheath shall be properly grounded.

Horizontal fiber-optic PVC/Plenum cables shall be ran from main telecommunication room on each floor to any additional telecommunications room on that floor. Fiber optic cables shall be single mode and multi-mode manufactured by Corning or equal. Fiber strand requirements shall be a minimum of twelve (12) strands of OM4, Clear curve multi-mode and twelve (12) strands of single-mode. Fiber shall be terminated with MPO connectors and appropriate LC cassettes in rack mounted cabinets. Cables shall be armored to protect from damage. Armor sheath shall be properly grounded.

Horizontal Cabling: 100 ohm UTP CAT6A. Commscope or approved equal. All cabling, jacks, faceplates, patch panels and patch cords to be part of a tuned system of structured cabling components. Components shall be made by (1) one manufacturer. Cable must have separators between pairs and random twist of pairs throughout the length of the horizontal. The maximum cable length including cable slack from the telecommunication room to the communications outlet is 90m (295'). Cable slack in the Telecommunication room shall be a minimum of 3m (10'). Above communication outlet (in the ceiling), 1m (3.28'), and at the communications outlet for termination 12". All terminations shall be **T-568B** scheme. No tywraps - use Velcro strips.

Standard Faceplate: Four (4) port, office white. All CAT6 data jacks are to be orange. Unused ports shall have blanking inserts. Two (2) CAT6A outlets are required at each

workstation location.

Coaxial Cable: All CATV installations shall comply with FCC Part 76 signal leakage requirements. There shall not be more than two CATV amplifiers in cascade in a building. Design the CATV system to a minimum of 1000MHZ. Design for range of 3dBmV to 10dBmV signal at the CATV outlet. No more than 17dBmV signal on an F-fitting. All CATV drops are to be home run from nearest telecommunication room to outlet.

Multi Media: Multi Media design, installation, materials and methods, shall conform to the standards of ANSI/InfoComm Audiovisual Standards. Multimedia requirements include:

- Power Requirements
- Network Requirements
- Projectors
- Lighting
- Multi Media

Wireless LAN: Each wireless access point location shall be cabled with two data cables. Terminate cables above ceiling to a secured single gang box, with 10' slack coiled in a figure 8. Horizontal cable length and installation guidelines align with CAT6 requirements. Cables to be ran to nearest telecommunications room and terminated on a dedicated patch panel.

Elevator Phones: Elevator phone cable shall be CAT6A and be protected in conduit from elevator control panel to the telecommunication room and terminated in network rack (demarcation point). Installation, testing, and labeling shall be consistent with material and methods found in this standard.

Building Access (CISO Office input required.)

Private Office Space: Each private office space is to have a minimum of two communications outlets, each with 2 CAT6 cables, each fed within a 1" conduit. Conduit stubs to have insulated bushing at the top of the stub and a deep 4" square back box with a single gang plaster ring for the equipment faceplate.

Modular Furniture: Permanent cables shall be installed only in or on permanent walls. All modular furniture shall be fed from a consolidation point. Locate consolidation point in an accessible area free from workstations. Cabling from consolidation point to modular furniture shall be through the wall and through raceways supplied by furniture manufacturer (Furniture is NIC). Cabling to terminate in modular furniture with vendor specific faceplates. No cabling or communications outlets allowed behind modular furniture. Label consolidation point with adhesive label on ceiling grid where the units are installed. Total length for cabling runs to consolidation points shall take into account the additional cable length required for extending cables into modular furniture. CAT6A cable length requirements apply and shall not be exceeded.

Conference/ Hearing / Training Rooms: Each conference room shall have a minimum of two communications outlets on opposite walls each consisting of two CAT6A and one CATV cable (See specific Conference Room requirements that may exceed this minimum standard). Hearing Rooms shall have a minimum of two communications outlets on opposite walls near the Hearing Officer Desk consisting of two CAT6A and one CATV cable (see specific Hearing Room requirements that may exceed this minimum standard). Training rooms shall have wireless access along with required connectivity for training purposes. (See specific Conference Room requirements that may exceed this minimum standard).

Break Rooms, Lobby / Others: Each break room area should have one wall mounted work area outlet (ADA compliant). Lobby and other common rooms have additional requirements where indicated for that specific room.

Communications Installation Standards

Certifications: Installers shall be certified by the manufacturer of the system(s) they are installing and be able to certify the installation for the manufacturer's warranty.

Commissioning and Documentation: The newly installed infrastructure shall be tested and certified. Follow the Standards of ANSI/TIA/EIA-568-C.1,2,3,4 for testing criteria of the permanent link. In addition to the cabling being commissioned and certified, the electrical grounding and bonding systems must also be tested and certified.

Warranties: Installation shall have a minimum 20-year warranty. This warranty shall include telecommunications services such as Power over Ethernet (PoE) Voice over IP (VoIP), Security Cameras, Wireless LAN, fiber applications, and any future services that meet ANSI/TIA/EIA and or IEEE specifications.

Test Results: Follow the manufacturer's warranty submittals and submit a copy of all results (including CATV, Fiber Optics, and Grounding/Bonding) before final certification. All UTP cable test results must be submitted in their original format from tester in electronic format. CATV signal loss and attenuation, length, signal leakage report and document on spreadsheet, Fiber lengths, attenuation, loss, submit in their original format from tester. Tests must pass manufacturer's specifications as well as industry standards. Cables with visible defects and deformations such as, kinks, twists or crushed will fail and need to be replaced regardless of test results.

Administration/Labeling: All communications outlets, patch panels, 110 blocks, conduits, telecommunication rooms, backbone cables, grounding, and racks shall be labeled according to ANSI/TIA/EIA 606-A standard. All labels shall be printed or generatSaled by a mechanical device.

As-Builts: As-built drawings indicating cable routing and communications outlet to be provided after completion of work.

Design and Installation Codes and Standards: It is required that the information technology Infrastructure be designed and installed to the following codes, standards, and practices:

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ANSI/NECA/BICSI - 568-C.0, Standard for Installing Commercial Building Telecommunications Cabling
ANSI/TIA/EIA 569-(Current Edition), Commercial Building Standards for Telecommunications Pathway and Spaces
ANSI/TIA/EIA 568-(Current Edition), Generic Telecommunications Cabling for Customer Premises Standard Series
568-(Current Edition).1 Commercial Building Cabling 568-(Current Edition).
2 Copper Cabling Components 568-(Current Edition).4 Coax Cabling Components
ANSI/TIA/EIA 606-(Current Edition), Administration Standard for Commercial Telecommunications Infrastructure
ANSI J-STD-607-(Current Edition), Commercial Building Grounding and Bonding Requirements for Telecommunications
ANSI/TIA/EIA-56, 7 & 14 (Current Edition), Telecommunications Measurements of Optical Fiber Single and Multi Mode Power Loss
ANSI/EIA 310-(Current Edition), Cabinets, Racks, Panels and associated Equipment
ANSI/SCTE 74 (Current Edition), Specification for braided 75 ohm Flexible Coaxial Cable
ANSI/INFOCOMM 1M-2009, 2M-2010, 3M 2011, Audiovisual
Systems Design
FCC Part 68, Connection of Terminal Equipment to the Telephone Network
FCC Part 76, Cable Television Service
ADA of 1992 and Telecommunications Act of 1996, Physically Impaired and Accessibility
IEEE 802.3.xx (Current Edition), Physical and Data Link layer standards for LAN's, Includes Ethernet, Fast Ethernet, Gigabit Ethernet
IEEE 802.1.xx (Current Edition) (National Electrical Code)
NFPA-70 NEC-(Current Edition), Recommended Practice for Fire Protection of Telecommunications Facilities
NFPA 101(Current Edition), Life Safety Code
BICSI ITSIMM current edition (Information Technology Systems Installation Methods Manual)
BICSI TDMM (Current Edition) (Telecommunications Distribution Methods Manual)
BICSI TDMM (Current Edition) (Telecommunications Distribution Methods Manual)
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Building Roof System - Project Requirements:

Roofs shall be sloped (a minimum of ¼" per foot) to prohibit snow and ice slide off onto entry doors. Do not use tapered insulation to achieve this slope, but utilize a slope in the roof structure. Use cold roof design in heavy snow areas to prevent snow and ice build-up. If sunshading devices are used on the building, provide method to avoid ice and snow build-up on these devices. Flat or level roofs are not permitted.

Provide either a membrane roof system or a metal roofing system (or a combination of the two) as outlined below. At the end of the lease period, with the transfer of ownership to the Commonwealth of Kentucky roof systems shall have a minimum of five years of specified warranty remaining.

Membrane Roof Systems: Provide a two-ply modified bitumen system. The selected roof system must have a 20-year full system no-dollar-limit warranty, which is to include insulation, fasteners, flashings, and roof systems accessories. Roof system manufacturer is to provide a roof inspection and roof report, with copies, to both the Lessor and DECA, as the representative of the Lessee, at project completion. Roof warranty shall commence at the date of Substantial Completion of the entire project. A non-white reflective membrane system is preferred. Roof insulation is to comply with the Kentucky Building Code and be installed in two layers, joints staggered.

<u>Metal roof panels:</u> Manufactured roof panels comprised of polyisocyanurate insulations sandwiched between 24-gage aluminum coated sheet steel with a Kynar 500 finish. Provide continuous snow fencing to prohibit snow slide-off on all sloped metal roof applications. Manufacturer is to provide a 20-year full systems no-dollar-limit warranty. Warranty shall commence at the date of Substantial Completion for the entire project.

Other General - Project Requirements:

Door hardware: Furnish and install door hardware to comply the following: 1) Quality level: Heavy duty commercial. 2) Keying: The Commonwealth is to receive Best 5-pin Cores for each locking door in the building directly from the Contractor and will use its own requirements for keying and key control systems with master and grand master keying. 3) Card operated opening devices are required where indicated elsewhere in this Standard. System to be compatible with Commonwealth's existing card operated system.

Toilet and Bath Accessories: Provide all necessary toilet accessories (except Paper Towel dispensers, Feminine napkin dispensers, soap dispensers and seat cover dispensers are NOT TO BE PROVIDED, these will be provided by an independent vendor working under separate agreement with the Commonwealth of Kentucky). (Provide blocking in wall and mark wall for location to be installed).

Note: Toilet paper dispensers are to be supplied by the Offeror and shall be of size and capacity to accommodate the number of persons being served by the restroom facility.

Window Treatment: Provide commercial grade blinds at all exterior windows. Provide chain for blade rotation and polyester chord for side draw. Horizontal blinds are preferred by the Commonwealth over vertical blinds. (We have had on-going difficulty with some vertical blind systems).

<u>Elevator - Project Requirements:</u>

Passenger Elevators: For typical multi-stop application, provide a traction passenger elevator system, 3,500-pound capacity minimum with a finish clear cab size of not less than 6 feet 8 inches by 4 feet 3 inches with a minimum ceiling height of 7 feet 11 inches. Provide Cab speed of 200-350 feet per minute. Elevator cabs are to have plastic laminate sidewalls, protective bumpers and skid-resistant vinyl composition tile floor surface. Furnish removable protective pads. A minimum of four (4) passenger elevators is required for the building. All elevators in the same elevator lobby shall have their call devices coordinated.

Parking Garage Elevators: Provide typical multi-stop application, traction passenger elevator system, 3.500-pound capacity minimum with a finish clear cab size of not less than 6 feet 8 inches by 4 feet 3 inches with a minimum ceiling height of 7 feet 11 inches. Provide Cab speed of 200-350 feet per minute. Elevator cabs are to have plastic laminate sidewalls, protective bumpers and skid-resistant vinyl composition tile floor surface. Furnish removable protective pads. Where it is not practical that the passenger elevators indicated about can be shared for the parking garage, provide the appropriate number of elevators required for the parking garage per Kentucky Building Codes.

Freight Elevator: A separate freight elevator is required and is to be loaded such that it has access from the loading dock/ service area. As a minimum, freight elevators shall be Class A, traction operated, with a minimum of 4,500-pound load capacity. Provide Cab speed of 200-350 feet per minute. Minimum clear cab size shall be 5 feet 4 inches by 7 feet. Ceiling height shall a minimum of 10 feet. The freight elevator shall have security control badge readers that limit entry and exit from the elevator at each floor, except as prohibited by the Kentucky Building Code.

Building Programmed Spaces (First Floor Required):

Space Planning Main Entrance Lobby: Divide the main entrance lobby into secure/non-secure areas with provisions for card controlled access, for security system controlled employee entrance and security guard controlled access for visitors.

<u>Finishes provided in lobbies, vestibules and other entrances</u> shall be consistent with the finishes found in other buildings owned by the Commonwealth of Kentucky in public entrance areas, durable for high use, and easily maintained. Floor finishes shall be slip resistant or matting is to be provided by the Building Operations and Maintenance.

<u>Security Portal</u>: The security portal into the remainder of the building shall be provided with doors so that when the guards are away from the security desk, access cannot be obtained through the portal without a security badge. Provide remote control for the security portal doors from the security desk.

From the main lobby WITHOUT PASSING THROUGH A SECURITY PORTAL, provide the following spaces:

- 1. Main entrance doors shall have an air lock vestibule with removable (for cleaning) walk-off mats.
- 2. Security Desk: Provide built-in security desk and casework (for two security guards and files) in location where they have control of all main entrance building access points from the lobby. Provide adequate power, two separate voice/ data connections (outlets and cabling and security visitor management equipment provisions. (Security visitor management equipment will be procured by the Commonwealth).

- 3. <u>Health Clinic:</u> A sound proof suite (all exterior and interior walls shall have sound batt insulation and extend to deck) containing a minimum of 720 sf that has its own separate security access badge reader at the main door into the suite; and the following spaces:
 - 1. Waiting Room and Reception 240 sf 2. Storage closet 30 sf
 - 3.Private Toilet room 60 sf (ADA accessible) 4.Laboratory 100 sf with hand sink
 - 5.Office 130 sf 6.Examination Room 150 sf
 - 7. Provide a separate internet service to this suite to a central patch panel located in the space and provide duplex voice/ data outlets and cabling in each primary space indicated above. (Commonwealth will contract with public internet provider for service).
- 4. Public Restrooms (Male and Female): 480 sf minimum
- 5. <u>Public Waiting area:</u> Seating for a minimum of 30 persons that is completely visible from the Security Desk. Provide public TV and required electric and cable TV service wiring that is visible from majority of waiting area and from security desk. (Commonwealth will contract with public cable TV provider for service).
- 6. Mother's Room: 280 sf. To accommodate two users at a time for lactation activities. Provide a hand sink and electrical for two sets of lactation equipment and two small refrigerators. Room shall have its own separate security access badge reader.
- 7. ATM Equipment Space: 40 Sf. A private vendor through the Commonwealth will provide ATM Equipment. Provide a 4-plex electrical outlet 120/20. Location to be visible from main entrance.
- 8. <u>Building Operations/ Maintenance Office:</u> sized accordingly to the needs of the Offeror to perform this function. Provide a public bulletin board outside this door. Provide a mail slot in the door to this office. Developer shall provide its own internet connection, telephone system, and other services required by the Building Operations / Maintenance Office.
- 9. Sundry Shop: 700 sf. To be operated by the Department for the Blind (under agreement with the Commonwealth of Kentucky). Provide generous (a duplex outlet every 5'-0" on each significant wall) electrical outlets throughout the room on perimeter walls and at built-in counter. 120/20 amp. Provide a voice/data duplex outlet at the cash register location. The Department for the Blind will provide all equipment and furnishings (commercial refrigerators, commercial freezers, coffee dispensers, cappuccino maker, soda drink machines with ice-makers, soft serve ice cream machines, and cash register are typical). Provide a built-in counter for cash register and display of merchandise items behind glass. Provide a hand-washing sink behind counter. A final layout of this space will be provided by the Commonwealth within 90 days of Award, Offeror agrees to adjust the location and mounting heights of casework and electrical outlets in this space at no adjustment in cost. This room shall have a separate security access control badge reader. Provide a bulletin board on the exterior of the room for display of advertising.
 - 1. <u>Sundry Shop Office:</u> 120 sf with lockable door. Provide voice/data outlet in the office. Accessed from within Sundry Shop.
 - 2. <u>Sundry Shop Storage</u>: 240 sf with separate security access control badge readers. Accessed from within the Sundry Shop and from the Loading Dock area.

Provide directional way-finding graphics and directories in the main lobby and in each floor's elevator lobby.

Separate the main lobby from the first floor elevator lobby so that visitors that have been processed by the Security guards may proceed through a secure portal into the elevator lobby.

From the main lobby AFTER PASSING THROUGH A SECURITY PORTAL, provide the following spaces:

- 1. A minimum of four (4) Passenger Elevators (See elevator requirements elsewhere in this Standard) synchronized for call button operation. Elevator lobby shall be visible from Security Desk on First Floor. Provide security access limitation to the remainder of the first floor spaces.
- 2. Computer Training Room. Provide a column-less training room that accommodates 24 persons with workshop tables and chairs (NIC). Each seating location shall have a duplex power and duplex voice/data outlet for setup of a training computer. Also provide a trainer desk location at the front of the room with a duplex power and duplex voice/data outlet for setup of a trainer computer. Training Room shall be accessible from secured lobby that can be shared with the passenger elevators. Provide electrical and data connections for an AV display screen on the front and two side walls of the room that can be coordinated for simultaneous display or independent display. Mount electrical and data connections at center of wall and 5'-0" aff. (Run data wiring back to patch panel in Communications Closet). (The Commonwealth will procure AV display screens).
- 3. Hearing Room: Provide a column-less Hearing Room that accommodates approximately 80 persons with chairs only. Hearing Room shall be accessible from secured lobby that can be shared with the passenger elevators. Provide Built in Hearing Bench with seating for up to 10 hearing officers and 2 support staff members on an elevated platform. Each seating location shall have a microphone tied into a sound system that is controlled from a control point in the room, with a microphone activation panel at the chairperson's seat in the center of the hearing bench. Provide two presenters tables in front of the hearing bench, with space for two chairs at each with a microphone at each table.
 - 1.Provide electrical and data connections for two AV display screens that can be coordinated for simultaneous display or independent display. Provide electrical and data connections for two small AV speaker-monitoring displays (so that the hearing bench can see what is displayed on the main AV display screens). (run data wiring back to patch panel in Communications Closet). (The Commonwealth will procure AV display screens).
 - 2.Provide sound control and speaker system throughout the Hearing Room coordinated with the AV display.
 - 3. Provide a central control location for all AV and sound operations.
 - 4. Control sound transference from the Hearing Room to adjacent spaces and the corridor.
 - 5. If the Hearing Room has windows, provide sunshades and blackout shades for any window in this space. Provide two casework locations with sink and faucets at the back of the Hearing Room for coffee and food staging.
 - 6. If the Hearing Room has windows, provide sunshades and blackout shades for any window in this space. Provide two casework locations with sink and faucets at the back of the Hearing Room for coffee and food staging.
 - 7. Provide public restrooms (male and female) in the vicinity (meaning without the need to pass through the Lobby security portal) of the Training Room and Hearing Rooms A and B large enough to accommodate occupants from all three rooms concurrently.
 - 8. Provide two small 150 sf breakout rooms near the entrances of the Hearing Room for council. (total of four (4) breakout rooms).

Space Planning Loading Docks/Loading Areas/ Mail Rooms: Locate loading docks, loading areas and mailroom separate from main entrance and locate convenient to freight elevator and major mechanical area. The access to the Loading Dock area shall be positioned so as not to visible from any street frontage and shall accommodate a tractor-trailer truck (53') and shall have adequate turning and maneuvering radiuses in the site design. Provide the Loading Dock with two overhead doors 12' wide by 10' high (minimum). Loading dock

doors are to be insulated overhead coiling type, with push button controls. Provide an adjacent 3' wide by 7' high man door to the dock door. Provide hydraulic dock levelers, dock bumpers, dock lock, dock seals and edge guards. Provide a call phone at the loading dock that can make calls to the following telephones in the building: Mailroom, Receiving Office, Security Desk, and Building Operations Office. (Commonwealth will procure the telephone and service).

- 1) The Loading Dock area shall have a Receiving Area of at least 600 square feet. Provide an adjacent Receiving Office of 200sf.
- 2) Provide a separate area for trash compactor and recycling area. The ceiling clearance for the trash compactor shall be at least 14'-0". Locate a trash room (minimum of 400 sf) adjacent to dock area and provide space for paper, glass and metal recyclable containers.
- 3) This loading dock is additionally envisioned for receipt of mail and other supplies that will be distributed from a mailroom (minimum of 800 sf) to the occupants of the building. The mailroom shall have an access to the Receiving Area and to the main building interior spaces. Mailroom shall have workstations for 6 persons.
- 4) No long-term storage space is required in this area.
- 5) The Loading dock area (outside) shall provide space for the location of three large size trash dumpsters and a recycling dumpster. (Commonwealth will procure dumpster service). (This dumpster space must be readily accessible from the building but does not need to be adjacent to it).
- 6) Finishes in Loading Docks/ Loading Areas shall be durable, easily maintained and appropriate for high use and prone to abuse areas.

Space Planning defined elsewhere in these Standards: Provide file storage areas, IT Closets, Mechanical and Electrical Closets, and other spaces identified and required elsewhere in these Standards and also as required for a complete and functioning building.

Space Planning: Janitorial Accommodation: Provide a main janitorial room with a minimum of 500 sf for storage of supplies and equipment necessary for cleaning of building. Provide shelving adequate for a two-week supply of supplies including restroom supplies, cleaning supplies, trash bags and towels. Provide a mop sink and mop rack. On the first floor ONLY provide 6 lockable lockers, and electrical/voice/data outlet for a janitorial office within the space. Space should be near freight elevator.

Provide a secondary janitorial closet of a minimum of 200 sf remote from the main janitorial space for storage of supplies and equipment necessary for cleaning of building. Provide shelving adequate for a two-week supply of supplies including restroom supplies, cleaning supplies, trash bags and towels. Provide a mop sink and mop rack.

Space Planning for Workstations and Office Areas (remainder of First Floor):

Workstation Neighborhoods (First Floor): General Office areas on the first floor shall be configured into a minimum of four (4) workstation groupings ("neighborhoods") of various sizes (between 30 - 80 workstations each). Each workstation grouping shall have the following hard offices associated to that neighborhood:

One (1) Private Office (175 sf.) Walls to extend to deck and be insulated with sound batt insulation, doors shall be lockable. Provide for the Office one duplex data outlet and two duplex power outlets at the desk location and duplex power outlets (as required by the electrical code) on every other wall;

Two (2) Private Offices (125 sf.) Walls to extend to deck and be insulated with sound batt insulation, doors shall be lockable) Provide for the Office one duplex

data outlet and two duplex power outlets at the desk location and duplex power outlets (as required by the electrical code) on every other wall.

Additionally, each neighborhood shall be fit-up with an efficient layout of 8'x8' and/or 7'x9' workstation cubicles with systems furniture (desk, under desk files, over compartment and 66" high walls perpendicular to main exterior windows of the building and 44" high walls parallel to main exterior windows. (Workstations will be provided by the Commonwealth <NIC>).

NOTE: The required cubicle spaces shall be initially indicated throughout the building for the purpose of showing that the building configuration is adequate to allow for the number of cubicle spaces required by this proposal, however, with the space planning that will follow the award of this Lease, the exact location of each of the cubicles will be determined by the Division of Real Properties.

Provide for each cubicle space two data outlets and two duplex power outlets. (These will be located specifically in the space plan provide by the Division of Real Properties space planner).

Conference Rooms (First Floor): In addition to the other training, hearing and conference room indicated above for the First Floor, provide the following smaller conference rooms (Note: it is preferred that the Conference Rooms are internal to the building and do not have windows):

One (1) Conference Room (for 20 people) located conveniently to the "neighborhoods". Walls to extend to deck and be insulated with sound batt insulation, doors shall be lockable) Provide duplex power outlets (as required by the electrical code) on every wall; also provide a duplex power outlet, a duplex data outlet, and an HTML duplex out for AV display equipment (NIC) on every wall in center of wall and 5'-0" aff. Door shall have glass and a side light.

Two (2) Conference Rooms (for 12 people) located conveniently to the "neighborhoods". Walls to extend to deck and be insulated with sound batt insulation, doors shall be lockable) Provide duplex power outlets (as required by the electrical code) on every wall; also provide a duplex power outlet, a duplex data outlet, and an HTML duplex out for AV display equipment (NIC) on two opposite facing walls in center of wall and 5'-0" aff. Door shall have glass and a side light.

Restrooms/ Break Areas (First Floor): Provide appropriately sized building code complaint restrooms and break areas on the first floor. (Note: it is preferred that the Restrooms / break areas are internal to the building and do not have windows). Provide these spaces in close proximity to workstation neighborhoods. Provide a separate Restroom/ Break Area location for each grouping of 150 employees (maximum).

Break Area shall contain a base cabinet with two compartment sink of at least 15 linear feet with a wall mounted cabinet above. Each break area shall be sized to accommodate two 21 cubic foot residential refrigerators (36" wide each), two soda vending machines (39" wide each), one snack machine and two commercial size microwaves (all appliances are NIC). Break Area does not need space for tables and chairs if the area is adjacent to a collaboration space. Electrical circuitry for Break Areas shall be separate from the circuitry of any other space.

Collaboration Spaces (First Floor): Provide a multi-use collaboration space of 20 sf per employee in adjacent areas. This space should have natural light and outside views and should be physically separate from the workstation neighborhoods. Provide duplex power outlets (as required by the electrical code) on every wall; also provide a duplex power outlet, a duplex data outlet, and an HTML duplex out for AV display equipment (NIC) on two opposite facing walls in center of wall at 5'-0" aff.

Provide one 40 sf HR enclosed space (with telephone connection) for every 1250 sf of collaboration space. These HR spaces shall be an enclosed room that has walls to deck and insulated with sound batt insulation. The front wall shall be glass/ metal framed and have a sliding door.

Centralized Photocopier/ Printer/ Facsimile Spaces (First Floor) The Offeror shall provide locations for photocopiers/ Printers/ Facsimile equipment, either at the location indicated or when not indicated, at centralized locations where no less than three photocopiers serve a maximum of 20,000 gsf of floor space. Exact Location of photocopiers and other significant office equipment loading will be provided by the Commonwealth with its final review and modifications to the workstation layouts. Provide dedicated electrical circuitry, two voice/data outlets for each device, and a analog telephone line for facsimile at each device.

Building Programmed Spaces (Floors except First Floor Required):

** Note: when the offeror proposes a building of a number of floors other than 5, the same number of spaces are required to be positioned throughout the building in a similar configuration**

Cabinet Secretary Suite: On each floor other than the First Floor provide a Cabinet Secretary Office suite (each of same size, configuration, windows, and similar quality views as much as possible) with:

One (1) Cabinet Secretary Office (250 sf, with door to the administrative assistant area and into the conference room). Walls to extend to deck and be insulated with sound batt insulation, doors shall be lockable) Provide for the Secretary Office one duplex data outlet and two duplex power outlets at the desk location and two duplex data outlets and duplex power outlets (as required by the electrical code) on every other wall;

One (1) Deputy Secretary office (175 sf. Walls to extend to deck and be insulated with sound batt insulation, doors shall be lockable) Provide for the Deputy Secretary Office one duplex data outlet and two duplex power outlets at the desk location and two duplex data outlets and duplex power outlets (as required by the electrical code) on every other wall;

One (1) Legal Council Office (175 sf. Walls to extend to deck and be insulated with sound batt insulation, doors shall be lockable) Provide for the Legal Council Office one duplex data outlet and two duplex power outlets at the desk location and two duplex data outlets and duplex power outlets (as required by the electrical code) on every other wall;

Four (4) Staff Advisor Offices (125 sf. Walls to extend to deck and be insulated with sound batt insulation, doors shall be lockable) *Provide for the Staff Advisor Office one duplex data outlet and two duplex power outlets at the desk location and duplex power outlets (as required by the electrical code) on every other wall;*

One (1) Copy/ Break Room with room for a copier (provide a duplex data outlet and a copper telephone line at this location), and kitchenette with two compartment sink, base and overhead cabinets, space for a microwave and under-counter refrigerator and room on counter for coffee maker (NIC). Walls to extend to deck and be insulated with sound batt insulation. Provide dedicated electrical circuitry, two voice/data outlets for each device, and a analog telephone line for facsimile at each device.

One (1) Administrative Assistant area (with desk and files), include a small waiting area for six persons. Provide for the Administrative Assistant area: one duplex data outlet and two duplex power outlets at the desk location; one duplex data outlets and duplex power outlet high on wall to accommodate a AV display (NIC); and, duplex power outlets (as required by the electrical code) on every other wall. Provide a location for cable TV in the waiting room space with electrical and a duplex voice/data outlet high on the wall at the proposed mounting location of the TV/AV device;

One (1) Conference Room for 20 persons (with door to Cabinet Secretary Office and to administrative assistant area). Walls to extend to deck and be insulated with sound batt insulation, doors shall be lockable) Provide duplex power outlets (as required by the electrical code) on every wall; also provide a duplex power outlet, a duplex data outlet, and an HTML duplex out for AV display equipment (NIC) on two opposite facing walls in center of wall and 5'-0" aff. Door shall have glass and a side light.

Executive Director (Commissioner) Offices: On each floor other than the First Floor provide two of the following office configurations each configuration remote on the floor from the other:

One (1) Executive Director (Commissioner) office (175 sf. Walls to extend to deck and be insulated with sound batt insulation, doors shall be lockable) Provide for the Deputy Secretary Office one duplex data outlet and two duplex power outlets at the desk location and two duplex data outlets and duplex power outlets (as required by the electrical code) on every other wall;

One (1) Deputy Executive Director (Commissioner) office (150 sf. Walls to extend to deck and be insulated with sound batt insulation, doors shall be lockable) Provide for the Deputy Executive Director Office one duplex data outlet and two duplex power outlets at the desk location and one duplex data outlets and duplex power outlets (as required by the electrical code) on every other wall;

These two offices are to be connected by a Conference Room (for 12 people) located between the two offices indicated above. Walls to extend to deck and be insulated with sound batt insulation, doors shall be lockable) Provide duplex power outlets (as required by the electrical code) on every wall; also provide a duplex power outlet, a duplex data outlet, and an HTML duplex out for AV display equipment (NIC) on two opposite facing walls in center of wall at 5'-0" aff. Door shall have glass and a side light.

The Executive Offices are intended to not be part of or associated with a workstation neighborhood area.

Workstation Neighborhoods (All Floors except first floor): General Office areas on the first floor shall be configured into a minimum of Ten (10) workstation groupings

("neighborhoods") of various sizes. (between 30 - 80 workstations each). Each workstation grouping shall have the following hard offices associated to that neighborhood:

One (1) Private Office (175 sf.) Walls to extend to deck and be insulated with sound batt insulation, doors shall be lockable. Provide for the Office one duplex data outlet and two duplex power outlets at the desk location and duplex power outlets (as required by the electrical code) on every other wall;

Two (2) Private Offices (125 sf.) Walls to extend to deck and be insulated with sound batt insulation, doors shall be lockable) Provide for the Office one duplex data outlet and two duplex power outlets at the desk location and duplex power outlets (as required by the electrical code) on every other wall.

Additionally, each neighborhood shall be fit-up with an efficient layout of 8'x8' and/or 7'x9' workstation cubicles with systems furniture (desk, under desk files, over compartment and 66" high walls perpendicular to main exterior windows of the building and 44" high walls parallel to main exterior windows. (Workstations will be provided by the Commonwealth <NIC>).

NOTE: The required cubicle spaces shall be initially indicated throughout the building for the purpose of showing that the building configuration is adequate to allow for the number of cubicle spaces required by this proposal, however, with the space planning that will follow the award of this Lease, the exact location of each of the cubicles will be determined by the Division of Real Properties.

Provide for each cubicle space two data outlets and two duplex power outlets. (These will be located specifically in the space plan provide by the Division of Real Properties space planner).

Conference Rooms (all floors except first floor): Provide the following smaller conference rooms (Note: it is preferred that the Conference Rooms are internal to the building and do not have windows):

Two (2) Conference Room (for 20 people) located conveniently to the "neighborhoods". Walls to extend to deck and be insulated with sound batt insulation, doors shall be lockable) Provide duplex power outlets (as required by the electrical code) on every wall; also provide a duplex power outlet, a duplex data outlet, and an HTML duplex out for AV display equipment (NIC) on every wall in center of wall at 5′-0″ aff. Door shall have glass and a side light.

Four (4) Conference Rooms (for 12 people) located conveniently to the "neighborhoods". Walls to extend to deck and be insulated with sound batt insulation, doors shall be lockable) Provide duplex power outlets (as required by the electrical code) on every wall; also provide a duplex power outlet, a duplex data outlet, and an HTML duplex out for AV display equipment (NIC) on two opposite facing walls in center of wall at 5'-0" aff. Door shall have glass and a side light.

Restrooms/ Break Areas (all floors except first floor): Provide appropriately sized building code complaint restrooms and break areas on each floor. Provide these spaces in close proximity to workstation neighborhoods. Provide a separate Restroom/ Break Area location for each grouping of 180 employees (maximum).

Break Area shall contain a base cabinet with two compartment sink of at least 15 linear feet with a wall mounted cabinet above. Each break area shall be sized to accommodate two 21 cubic foot residential refrigerators (36" wide each), two soda vending machines (39" wide each), one snack machine and two commercial size microwaves (all appliances are NIC). Electrical circuitry for Break Areas shall be separate from the circuitry of any other space. Break Area does not need space for tables and chairs if the area is adjacent to a collaboration space.

Collaboration Spaces (All floors except first floor): Provide a multi-use collaboration space of 20 sf per employee in adjacent areas. This space should have natural light and outside views and should be physically separate from the workstation neighborhoods. Provide duplex power outlets (as required by the electrical code) on every wall; also provide a duplex power outlet, a duplex data outlet, and an HTML duplex out for AV display equipment (NIC) on two opposite facing walls in center of wall at 5'-0" aff.

Provide one 40 sf HR enclosed space (with telephone connection) for every 1250 sf of collaboration space. These HR spaces shall be an enclosed room that has walls to deck and insulated with sound batt insulation. The front wall shall be glass/ metal framed and have a sliding door.

Centralized Photocopier/ Printer/ Facsimile Spaces (all floors except first Floor) The Offeror shall provide locations for photocopiers/ Printers/ Facsimile equipment, either at the location indicated or when not indicated, at centralized locations where no less than three photocopiers serve a maximum of 20,000 gsf of floor space. Exact Location of photocopiers and other significant office equipment loading will be provided by the Commonwealth with its final review and modifications to the workstation layouts. Provide dedicated electrical circuitry, two voice/data outlets for each device, and a analog telephone line for facsimile at each device.

Space Planning defined elsewhere in these Standards: Provide file storage areas, IT Closets, Mechanical and Electrical Closets, and other spaces identified and required elsewhere in these Standards and also as required for a complete and functioning building.

Space Planning: Janitorial Accommodation: Provide a main janitorial space on each floor (other than the first floor) of a minimum of 400 sf for storage of supplies and equipment necessary for cleaning of building. Provide shelving adequate for a two-week supply of supplies including restroom supplies, cleaning supplies, trash bags and towels. Space should be near freight elevator.

Provide a secondary janitorial closet of a minimum of 150 sf remote from the main janitorial space for storage of supplies and equipment necessary for cleaning of building. Provide shelving adequate for a two-week supply of supplies including restroom supplies, cleaning supplies, trash bags and towels. Provide a mop sink and mop rack.

Summary of Employee Programmed Spaces (Total Building):

** Note: The following is based on the standards indicated for all five (5) floors of the building. There are calculations in the standard programmed spaces that indicate "minimums" and when the Offeror provides more than the minimum, the calculations below may change somewhat. However, the following calculations are the MINIMUM counts required for the various employee workspaces required in the building **

"Hard-walled" Offices related to Neighborhoods: First Floor (12); Second - Fifth Floor (120) for a total of 132.

"Hard-walled" Offices related to Secretarial Suites: First Floor (0); Second - Fifth Floor (32) for a total of 32.

"Hard-walled" Offices related to Executive Director Suites: First Floor (0); Second - Fifth Floor (16) for a total of 16.

"Cubical-walled" workstations related to Neighborhoods: All Floors a total of 1314.

"Mail Room Workstations": First Floor (6); for a total of 6.

** Note: avoid layout of workstations with a column in the workstation area that makes the workstation space require special layout or prohibits the intended use of the workstation area as an employee office space.

FINISH SCHEDULE:

Architectural Door, Room and Finish	Lobby/ Commons	Conf Room/ Offices	Open Office Area	Toilet Room/ Janitor	Break Area/ Vending	Ext. Walls (typ)	MEP Rooms/ Mach Rm	File Storage Rooms	
Wall Type	W1	W3	W5	W2	W4	W6	W7	W7	
Door Type	D1	D2	D2	D4		D1 /D3	D4	D2/D4	
Door Hardware	H1/H2	H4	НЗ	H6/H4		H1	H5	H4	
Floor Type	F1	F2	F2	F4	F3	-	F5	F3	
Ceiling Type	C1/C2	C1	C1	C1	C1	-	C2/C3	C1	

***Where the proposed finishes for these areas exceed this minimum requirement, a description of the proposed finishes shall be included in the Design Narrative.

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	Types Legend			
Туре	Construction Description			
W-1	3-5/8" metal studs at 16"oc center with 5/8" gypsum board (painted, primer plus two coats) each face with acoustical insulation. Extend from finish floor to underside of floor or roof deck. Provide deflection track and seal tight to deck above.			
W-2	3-5/8" metal studs at 16" oc with acoustical insulation, 5/8" gypsum board (painted, primer plus two coats) on one face with 5/8" moisture resistant gypsum board and ceramic tile to 48" aff opposite face. Extend wall to roof or floor deck above. Provide deflection track above.			
W-3	3-5/8" metal studs at 16" oc with 5/8" gypsum board (painted, primer plus two coats) on one face with 5/8" gypsum board each face with acoustical insulation. Extend to roof or floor deck above. Provide deflection track above.			
W-4	3-5/8" metal studs at 16" oc with 5/8 " gypsum board (painted, primer plus two coats) each face with acoustical insulation. Clip to ceiling grid and provide 24" acoustical insulation at both sides of partition.			
W-5	3-5/8 inch metal studs at 16 inches on center with 5/8 inch gypsum board (painted, primer plus two coats) each face. Clip to underside of ceiling.			
W-6	3-5/8" metal studs with 5/8" gypsum board (painted, primer plus two coats) with cavity insulation. Extend 12" above ceiling. Extend insulation to underside of floor or roof deck			
W-7	Wall as required to achieve required fire rating. Provide acoustical control to adjoining spaces. Provide finish as appropriate.			
D-1	Aluminum storefront medium stile with side light			
D-2	Hollow metal frame and solid wood door/ side light. (painted, primer plus two coats)			
D-3	Hollow metal frame and hollow metal door/ side light or narrow light glazing (painted, primer plus two coats)			
D-4	Hollow metal frame (painted, primer plus two coats) and wood door (natural, stain)			
H-1	Panic bars, closer, lock, hinges, weather-strip			
H-2	Aluminum push/pulls, closer, hinges, floor bumpers			
H-3	Mortise passage set, hinges, wall bumper			

H-4	Mortise lock set, hinges, wall bumper
H-5	Mortise lock set, hinges, closer, wall bumper
H-6	Push /pulls, closer, hinges, wall bumper
F-1	Terrazzo or Synthetic Terrazzo with Stone Base. Must be slip resistant when wet.
F-2	Carpet with rubber base
F-3	Vinyl composition tile with base
F-4	Ceramic floor tile with sanitary coved base
F-5	No floor finish, provide anti-dusting sealer only
C-1	Metal suspension system with acoustical lay-in ceiling
C-2	Gypsum board on metal suspension system, painted
C-3	Open, no ceiling, no paint

Note: The use of concrete masonry walls in areas other than Loading Dock/ Loading Areas, Elevator shafts and machine rooms, and Mechanical rooms is strictly prohibited.

Interior Components and Finishes Installation standards: Gypsum board shall be installed and finished per United States Gypsum Co. levels of gypsum board finishing as follows:

Level 1 finish: When above finished ceilings and concealed from view.

Level 2 finish: As a substrate for tile.

Level 3 finish: When to receive a heavy or medium textured finish. Level 4 finish: In offices, corridors, and all areas not indicated above

B. Within the parcel of land indicated on the site sketch above, the Offeror is to construct a New Parking Garage Structure that meets or exceeds the standards and programming indicated herein. (Referenced as "New Parking Garage" or "NPG").

General Note about parking required by the New Development: The minimum number of REGULAR parking spaces required by this Standard are three (3) spaces per 1,000 gross square feet of building. REGULAR spaces also includes designated spaces to achieve LEED scoring points such as "Fuel Efficient Vehicles" or "Compact Car" spaces. See the following paragraphs for parking space requirements IN ADDITION to this required minimum. Any proposal that does not meet or exceed this minimum requirement will be deemed non-responsive.

Do not include the ADA Accessible parking within the calculation indicated above for minimum parking spaces necessary, this RFP requires the number of ADA Accessible parking spaces to be in ADDITION to the minimum required by the minimum standard. These spaces shall not be counted in the number of spaces required by the first paragraph above. (ADA Accessible Parking may be provided as surface parking but must be in Area A/B). Any proposal that does not meet or exceed this minimum requirement will be deemed non-responsive.

Provide visitor parking and signage equal to (AND IN ADDITION TO THE MINIMUM REQUIREMENTS OF THE FIRST PARAGRAPH ABOVE) the number of spaces designated for ADA Accessible parking. Indicate a four-hour time limit for parking in these spaces. Visitor parking area(s) shall be visible and convenient to the public entrances to the building. These spaces shall not be counted in the number of

spaces required by the minimum number of spaces required in the first paragraph above. Any proposal that does not meet or exceed this minimum requirement will be deemed non-responsive.

Provide fifty (50) state fleet vehicle parking spaces and signage stating "State Fleet Vehicle Parking Reserved" (AND IN ADDITION TO THE MINIMUM REQUIREMENTS OF THE FIRST PARAGRAPH ABOVE). State fleet vehicle parking area(s) shall be provided as surface parking in Area A/B if desired by the Offeror. These spaces shall not be counted in the number of spaces required by minimum number required in the first paragraph above. Any proposal that does not meet or exceed this minimum requirement will be deemed non-responsive.

- a. The NPG structure(s) shall contain (or exceed) the required number of parking spaces indicated above, less spaces provided as surface parking (as indicated above) and less 120 parking spaces that are currently available in the existing and adjacent TCOB parking structure.
- b. At least one NPG shall be constructed adjacent to the west face of the existing TCOB parking structure (constructed in 2001), extending over the existing St. Claire Street. (Note: The former city street named "St. Claire Street" from Mero Street to Hill Street has been UN dedicated, and is to be abandoned by this Project to allow for the construction of the NPG over the parcel that once was the right of way for this street).
- **c.** This NPG structure shall be connected to the existing TCOB parking structure on at least every other level, providing vehicular and pedestrian access between garages.
- d. Additionally, provide a vehicular access from the new parking garage to a new roadway behind the NOB that provides an ingress/egress point from the NPG to Wilkinson Blvd., which is one of the access points required by the traffic flow study.
- **e.** Locate this NPG approximately fifteen (15) feet from the west face of the existing TCOB parking structure to allow a light/air well to be created between the two parking garages.
- **f.** The ground area between the two parking structures shall be paved/ landscaped with plants that do not require significant amounts of sunlight to thrive.
- **g.** The NPG structure(s) shall connect with the NOB at a stair/elevator tower(s) to provide emergency egress form the NPG structure(s).



New Development Sketch

- A New State Office Building
- C. Green Space (Future Development)
- D. Pedestrian Bridge (east connection)
- E. Hotel Façade Upgrade
- F. Relocate Hotel Parking Garage
- G. Green Space (Future Development
- H.: YMCA Garage Façade Upgrade
- 1. Mero Street
- 1 Clinton Street
- K. Surface Parking
- Entrance Drop off and ADI
- C. Within the parcel of land indicated on the site sketch above as Area C, the Offeror shall prepare the subsurface and finished grade following the demolition of the Frankfort Convention Center ("FCC") to be suitable for future development. (Referenced as "Convention Center Site" or "CCS").
 - a. The demolition of the FCC shall include the removal of all structures and pavements associated with the FCC, including but not limited to the building, surrounding pavements, landscaping, and foundations.
 - b. It is anticipated that the Kentucky Tourism Cabinet will salvage some significant items in the building, including, but not necessarily limited to the basketball flooring, fixed seating, score boards, etc. By Addendum in July, the Commonwealth will provide a specific list of the items to be salvaged by the Commonwealth for reuse elsewhere.
 - c. The Offeror shall prepare the site by bringing the site up to grade with engineered fill suitable for future development of the site by the Commonwealth. Provide Geotechnical compaction testing information indicating the bearing capacity of the engineered soils after installation.
 - d. Work shall include new street curbing along Mero Street, Clinton Street, and St. Claire Street where sidewalks and curbing related to the Convention Center are demolished. Sidewalks are not required for this side of Mero Street, Clinton Street, or St. Claire Street.
 - e. The New Development shall complete this space as grass-only green space for use by the Commonwealth at some undetermined date in the future. See the main body of the RFP for indication of the lease arrangements for this Area.
- D. Construct a west end connection for the pedestrian bridge near the intersection of Mero Street and Wilkinson Boulevard. (Referenced as "Existing Pedestrian Bridge" or "EPB").
 - a. The EPB is in the right-of-way and owned by the Kentucky Transportation Cabinet. Any modifications to this pedestrian bridge will require approval of the Kentucky Transportation Cabinet. Coordinate this approval through DECA.
 - b. The current EPB bridge west end terminates on the elevated plaza atop the plaza parking garage "PPG" that is being demolished as part of this project.

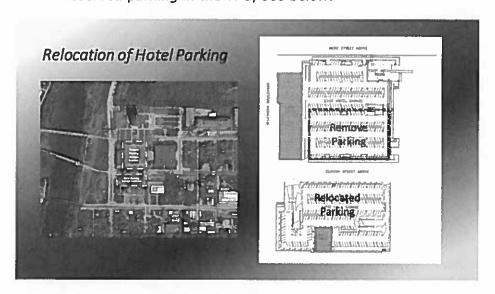
- With this demolition, the west end of the EPB is exposed without an ADA accessible termination to the ground. Prior to demolition of the PPG, the EPB needs to be barricade off to not allow persons to cross Wilkinson Blvd using this bridge.
- c. The New Development of this project includes construction of a new ADA accessible connection of the west end of the EPB to the ground near the intersection of Mero Street and Wilkinson Blvd.
- d. This connection is anticipated to be by ADA accessible ramping. However, should the Offeror propose the use of an elevator for this purpose, a stair tower shall also be provided at this location.
- e. Connection from the base of the ADA accessible connection shall be connected by paved surface to the appropriate corner of Mero Street and Wilkinson Boulevard intersection.
- E. Construct an upgrade to the lower portion of the east facing façade of existing privately owned Capital Plaza Hotel where the Fountain Place Shops "PFS" and Fountain Place Plaza "FFP" are removed. Also provide a new roof over the portion of the FPS that is to remain. (Referenced as Hotel Façade Upgrade or "HFU").
 - a. Portions of the lower portion of the east facing façade of the privately owned Capital Plaza Hotel will be exposed and require upgrading due to the removal of a portion of the FPS and FPP adjacent to the Hotel. Additionally, the existing façade of the portion of the FPS that is being utilized by the existing hotel should be upgraded to blend in with the other upgrades to the hotel façade.
 - b. The existing portion of the FPS that is to remain will require a new roof structure and roofing system following the demolition of the FPS elevated plaza. Provide for this roof structure and roofing system as part of the new development work of this RFP. The roofing system installed on this portion of the FPS shall have a minimum of a 10-year NDL warranty.
 - c. As part of the demolition of the existing utilities infrastructure and of the HPG, rerouting, reworking, and accommodation of the existing utilities and systems (currently housed in the HPG mechanical room which is to be demolished) will be required.
 - i. A new water chiller (417 tons), four new natural gas fired high temperature (270 Deg. F.) boilers (2800 MBH each), sized so any three boilers can carry the load and water pumps for the Hotel will be located in a new mechanical room in the existing Tenant Space (existing Sector B-4) adjacent to the Hotel. A new cooling tower for the new Hotel chiller will be located on the roof over the new mechanical room.
 - ii. Hot water and chilled water to the existing air handling units serving Sectors B-4 and B-5 will be disconnected from the Fountain Place and Civic Center piping and reconnected to piping from the Hotel.
 - iii. The existing Phase 2 is supplied with power from the Capitol Plaza Office Building. The electrical service is primary metered is the Office Building. The demolition of the Office Tower will require a new primary electrical service will to be constructed. The new service is planned to feed from Wilkinson Blvd. underground in Mero Street. The medium voltage feeder will consist of underground raceways and manholes. The Frankfort Electric Plant Board will supply the new service conductors. The new feed will be connected the new primary switchboard, with metering, in the Phase 2 Mechanical Room. In addition to the new service there will also have to be a new medium voltage distribution installed in Phase 2 and new Substation Transformers. There will also be new low voltage electrical services distribution required to feed the new Mechanical

Equipment. The new equipment to serve the Hotel will be added to the Hotel electrical service.

- d. The Offeror shall prepare the site by bringing the site up to grade with engineered fill suitable for future development of the site by the Commonwealth. Provide Geotechnical compaction testing information indicating the bearing capacity of the engineered soils after installation.
- e. Work shall include include new street curbing along Mero Street and Clinton Street where sidewalks and curbing related to the Fountain Place Shops are demolished. Sidewalks are not required for this side of Mero Street and Clinton Street.
- f. The New Development shall complete this space as grass-only green space for use by the Commonwealth at some undetermined date in the future. See the main body of the RFP for indication of the lease arrangements for this Area.

F. Prior to demolition of the FPS, FPP, and HPG the Offeror is to provide for the relocation of the hotel parking lot from the HPG to the YMCA Parking Garage (YPG).

- a. Relocation of hotel parking will require adequate directional signage, restripping of a portion of the YPG and reserved for Hotel Parking signage on individual parking spaces either painting on the floor of the YPG at each of the parking spaces. The total number of spaces to be reserved for the hotel is 150, including 10% designated as ADA accessible parking.
- b. Relocation of the hotel parking will require the painting of a new crosswalk across Clinton Street to the Hotel and directional signage to the entrances to the hotel.
- c. Coordinate the work of relocation of these parking spaces with the demolition and new work of this project. This relocation shall be in place and completed prior to demolition work of the HPG. When the Developer has determined the schedule for completion of this relocation work, provide the Commonwealth this schedule so that coordination with the Private Hotel Owner can be made to permit them to notify their future guests of this change in parking location.
- d. In general, the following layout of parking will be the location of the hotel reserved parking in the YPG, see below:



G. Following the demotion of the FPS, FPP, and HPG: The new development of this project is to fill in the HPG area with engineered fill to street level. (Referenced as Mero-Clinton Green Space or "MGS").

- a. The current HPG is recessed below street level by approximately six (6) feet. Following demolition of the HPG, this depression is to be filled with structural fill to street level and in areas as required to accommodate the existing entrances to the hotel (which are to remain). Provide Geotechnical compaction testing information indicating the bearing capacity of the engineered soils after installation.
- b. Provide a minimum of eighteen (18) ADA accessible parking spaces and associated drive along the Capital Plaza Hotel from Mero Street to Clinton Street. Provide ADA signage for each space with an additional indication for nine (9) of the signs that these spaces are reserved for Hotel Condo Residents. Also provide a baggage drop off point at the location of the entrance into the Hotel.
- c. This area will be topped with soil and top soil, with seeding and/or sodding.
- d. The new development of this area shall provide concrete walkway access to the existing hotel entrances from both Mero and Clinton Streets. Walkways shall be ADA accessible.
- e. All grassed areas shall comply with the slope limitations indicated for the entire project earlier in this Standard.
- H. Following demolition of the Clinton Street Overpass (CSO), upgrade the north facing façade of existing YMCA Parking Garage where exposed by the demolition. (Referenced as YMCA Parking Garage Facade or "YPF").
 - a. Following demolition of the CSO, portions of the elevated plaza atop the YMCA parking grade (which is to remain) is to receive an upgrade of the north facing façade to enclose exposed portions of the elevated plaza structure that must be weather-tight. This enclosure shall be consistent and complementary to the façade of the parking garage and should have a life expectancy exceeding 10 years.
 - b. Provide a new Guardrail system along the exposed edge of the YMCA Parking Garage on the upper level that is compliant with the Kentucky Building Code and consistent with other guardrail systems, which are to remain. Guardrail and façade design should incorporate a standoff so that the railing is not immediate to the plaza edge.



New Development Sketch

- A New State Office Building
- B. New State Parking Garage
- C. Green Space (Future Development)
- D. Pedestrian Bridge (east
- E. Histel Encode Unito ide
- F. Relocate Hotel Forking Garage
- G. Green Space (Future Development
- H. YMCA Galage Façade
- Mero Street
- J. Clinton Street
- K. Surface Parking
- L. Entrance Drop off and ADA parking

- I. Following demolition of the Mero Street Overpass (MSO), repair the street surface and install new concrete sidewalks on the Office Building side of the street. (Referenced as Mero Street Surfaces or "MSS").
 - a. Following demolition of the MSO, repair the street surfaces and stripping damaged by the demolition. Comply with the requirements of the Kentucky Department of Transportation.
 - b. Following demolition of the MSO, repair/ rework the curbs damaged by the demolition and as required to make the proper transition to the green space area.
 - c. Following demolition of the MSO, provide encroachments to the new surface parking lot "SPL" indicated in item C of the new development requirements. Comply with the requirements of the Kentucky Department of Transportation.
- J. Following demolition of the Clinton Street Overpass (CSO), repair the street surface and concrete sidewalks (on the YPG side of the street) damaged by the demolition. (Referenced as Clinton Street Surfaces or "CSS").
 - a. Following demolition of the GSO, repair the street surfaces and stripping damaged by the demolition. Comply with the requirements of the Kentucky Department of Transportation.
 - b. Following demolition of the CSO, repair/ rework the concrete curbs damaged by the demolition and as required to make the proper transition to the green space area.
- K. As part of the New Development indicated in item A of the new development requirements, provide surface parking space for specific uses indicated below (THESE PARKING SPACES ARE IN ADDITION TO THE SPACES INDICATED IN ITEM B OF THE NEW DEVELOPMENT REQUIREMENTS). At the developer's option, additional surface parking may be provided around the building as part of the overall parking requirements. Also, provide an outdoor break area on a paved surface with fixed tables and seating for a minimum of 30 persons. (Referenced as Building Surface Parking or "BSP").
 - a. In front of the building and with easy access to the main entrance, provide the following surface parking with appropriate signage and markings:

i. ADA Visitor Parking (4 Hour limited)
ii. Security Staff Reserved Parking
iii. 15-minute limited Parking
6 spaces

b. At the Loading Dock Area provide the following surface parking with appropriate signage and markings:

i. Loading Dock vehicular parkingii. Delivery Van Parkingiii. Building Management Parking3 spacesiii. Building Management Parking

- c. This surface parking shall have appropriate paving including concrete curbs and gutters, sidewalks and curb cuts where required.
- d. Provide an outdoor break area on a suitable paved surface with fixed tables and seating for a minimum of 30 persons. This area shall be in a portion of the site that provides an appropriate environment for such activity.
- L. As part of the New Development indicated in item A of the new development requirements, provide an entrance drop off and surface parking spaces for immediate access Parking. (Referenced as Building Entrance Drop-off and Surface Parking or "BED").
 - a. In front of the building and adjacent to the main entrance to the building, provide an entrance drop-off and the following surface parking (THESE PARKING SPACES ARE IN ADDITION TO THE SPACES INDICATED IN ITEM B OF

THE NEW DEVELOPMENT REQUIREMENTS). with appropriate signage and markings:

i. ADA Visitor Parking (2 Hour limited)

6 spaces

ii. Messenger Reserved Parking

3 spaces

- b. In front of the building and adjacent to the main entrance to the building, provide two flagpoles as a feature element of the building entrance to display the United States Flag and the Commonwealth of Kentucky Flag. These poles shall be a minimum of 30'-0" tall with the pole to the left as one faces the building (which is to be used to display the US Flag) shall be visibly taller. Provide the appropriate size flags with the US Flag being visibly larger than the Commonwealth of Kentucky flag. Provide lighting of the flags. The flags shall have a hoisting mechanism as required for the raising and lowering of the flags including lowering of one or more of the flags to half-staff when ordered by the President of the United States or by the Governor of Kentucky. This entire installation shall comply with the requirements of the United States Flag Code.
- c. In front of the building, visible from main arrival points to the property provide an appropriately sized and lighted freestanding monumental sign for the building to identify the building. Note: The appropriate naming of the building is required, and is at the discretion of the Offeror with the approval of the Commonwealth of Kentucky.

BUILDING MANAGEMENT AND OPERATIONS REQUIREMENTS

Building Management and Operations Maintenance and Repair:

Lessor will be responsible for operations, daily and preventative maintenance of all building systems, insurance of the building and site, snow removal, pest control, lawn care, etc. for the full term of the Lease to the Commonwealth.

Leasee will be responsible for utilities, janitorial services, and movable fixtures/furnishings and non-building systems equipment, insurance of contents of the building (renter's insurance), etc. for the full term of the Lease to the Commonwealth.

Maintenance and Repair Requirements shall include, but not necessarily be limited to, the following:

The Lessor shall maintain the Property, including the building, the parking garage, the building site, building systems, and all fixed equipment, fixtures, and appurtenances furnished by the Lessor under this Lease, in good repair and tenantable condition so that they are suitable in appearance and capable of supplying such heat, air conditioning, light, ventilation, safety systems, access and other things to the premises, without reasonably preventable or recurring disruption, as is required for the Commonwealth of Kentucky's access to, occupancy, possession, use and enjoyment of the premises as provided in this lease.

Lessor shall be responsible for and shall bear all of the risk and expense of all maintenance, repairs and replacements relating to the Land, Building and Leased Premises. Without limiting the generality of foregoing, Landlord shall at its own expense:

- keep all sidewalks, curbs, parking structure(s), entrances, passageways, lobbies, hallways, stairways, parking lot and areas adjoining the Building, free from snow, ice, rubbish and obstructions;
- (ii) maintain and make routine and other necessary repairs and replacements to the interior and exterior of Building, parking structures, parking lots and the Leased Premises
- (iii) make plate glass replacements on the building when replacement is required:
- (iv) be responsible for landscaping the Land, trimming shrubs, leaf removal and lawn cutting;
- repair, maintain and replace as necessary all Building systems including without limitation all plumbing, electrical, HVAC, security systems, fire alarm systems, and elevators; and
- (vi) make any structural repairs of or replacements to the foundation, walls and roof of the Building and repairs or replacements to any building system, the parking lot and mechanical and utility systems on the Building or Leased Premises.

Lessor shall be responsible for preventative maintenance of mechanical, electrical, security and plumbing systems to insure proper function, energy efficiency and operation, including, but not limited to changing filters, lubricating equipment, cleaning coils, replacing lamps in light fixtures, and performing all tests required by Authorities with Jurisdiction. The manufacturer's printed minimum preventative maintenance requirements shall be met on each piece of equipment, including the schedule for the performance of preventative maintenance work.

For the purpose of so maintaining the premises, the Lessor may enter the premises during normal business hours of the Commonwealth. Should the Lessor require access to the building for maintenance purposes outside the normal business hours of the Commonwealth, the

Lessor shall obtain approval from the Division of Real Properties in advance of the required access so that the Division of Real Properties can have an opportunity to coordinate the access with the Tenants of the building.

The Lessor shall maintain the Premises in a safe and healthful condition according to applicable OSHA standards and all other requirements of this Lease, including standards governing indoor air quality, existence of mold and other biological hazards, presence of hazardous materials, etc.

The Landlord shall provide response to maintenance issues by the following schedule of response times:

Emergency: Maintenance required to prevent additional damage to the

> premises, to mitigate a life-safety issue within the building, or to restore proper operation of a building system that is required for use of the premises. (Significant plumbing or fire suppression leak, failure of life-safety equipment, significant roof leak that is causing significant damage, major outage of a critical building

> system, etc.) ** Response shall be within two hours (2) of the

notice of need for maintenance.

Non-Emergency (Critical):

Maintenance required to restore proper operation of a building

component or non-critical system. (Plumbing malfunction of a fixture, issues with controlling environmental comfort that is not life threatening, etc.). ** Response shall be within twenty-four

(24) hours of the notice of need for maintenance.

Non-critical: Maintenance required to a building component to mitigate and

> inconvenience to building occupants (i.e. door not latching properly, lamp replacement in light fixtures, roof leak of a noncritical nature, etc.). ** Response to be within three (3) business

days of the notice of need for maintenance.

Routine: Maintenance required to a building element that has been

> damaged or has deteriorated to a degree of unsightliness or a minor hazard. (I.e. damage to drywall wall, carpet tear or rip, etc.). ** Response to be within seven (7) business days of the

notice of need for maintenance.

The Commonwealth of Kentucky shall have the right, at any time after the Lease Award Date and during the term of the Lease, to inspect all areas of the Property to which access is necessary for the purpose of determining the Lessor's compliance with this clause.

The Commonwealth of Kentucky shall have the right during the existence of this lease to make alterations, attach fixtures, and erect structures or signs in or upon the premises hereby leased, which fixtures, additions or structures so placed in, on, upon, or attached to the said premises shall be and remain the property of the Commonwealth of Kentucky and may be removed or otherwise disposed of by the Commonwealth of Kentucky. For the purposes of this clause, the leased premises include the land on which the building is sited and the building and parking structure(s) themselves. The Commonwealth of Kentucky shall have the right to tie into or make any physical connection with any structure located on the property as is reasonably necessary for appropriate utilization of the leased space.

Building Operations and Management Staffing:

The Lessor shall staff the building with adequate work force and staffing to properly manage, operate and maintain the building, parking structure and its premises.

The minimum requirements for on-site daily staffing of the building, starting at the time of occupancy, is as follows:

- Building Superintendent serving to manage the building and its operations; coordinating and managing the maintenance staffing of the building; acting as liaison between the Commonwealth and the Lessor; contracting for services of professionals and licensed workmen to maintain and repair the building and its premises.
- 2) Building Mechanical and Electrical Services technician serving to operate, maintain, repair and facilitate tenant minor improvement requests, and facilitate emergency responses to the buildings mechanical, electrical, fire alarm, security system, plumbing and other similar building systems.
- 3) Building construction technician serving to maintain, repair and facilitate tenant improvement requests related to the general building construction and minor tenant functions of the building.

The Lessor shall be responsible for contracting, procuring and paying for the services of skilled workers to accomplish operation, maintenance, repair (routine and emergency) and significant tenant requested improvements of the building, which cannot be accomplished by on-site staffing.

Tennant Improvement Request Fulfillments:

When the tenants of the Lessee have specific needs for improvement to the building that are not categorized as operations, maintenance, repair or emergency responses required as building operations and management, the Department for Real Properties of the Commonwealth will make formal and written requests of the Lessor for the specific Tennant Improvement.

The Lessor shall review the Tennant Improvement Request and become familiar with the work required to accomplish the request.

The Lessor shall provide a pricing proposal to the Division of Real Properties when the work can be accomplished by the on-site staffing or employees of the management company of the Lessor that are reasonable and expected with a maximum markup for Overhead and Profit of five (5) percent of the total cost of the work.

The Lessor shall provide a pricing proposal to the Division of Real Properties when the work must be accomplished by contracted companies due to the technical requirements of the request that are reasonable and expected (two independent price proposals quotes are required for each element of the work from outside companies) with a maximum markup for Overhead and Profit of seven (7) percent of the total cost of the work. The Lessor shall insure that the pricing received from outside companies are appropriate and complete for the work required and that the markup for Overhead and Profit of the outside company does not exceed ten (10) percent of the total cost of the work.

Should the Division of Real Properties be unable to accept a pricing proposal from the Lessor as reasonable and expected, the Commonwealth may obtain a pricing proposal from one or more sources to accomplish the work. The Lessor shall contract with and

coordinate the work of these sources with a markup for Overhead and Profit of five (5) percent of the total cost of the work.

Once the Division of Real Properties accepts the pricing proposal, obtains any necessary approvals of the request, and notifies the Lessor that the pricing proposal for the Tennant Improvement has been accepted and provides the Lessor with a notice to proceed with the Improvement work, the Lessor shall within seven (7) calendar days provide a reasonable schedule for the work to be commenced. The Lessor shall accomplish the Tennant Improvement work within a reasonable time frame and in accordance with the schedule provided.

END OF STANDARDS