

DIVISION 01 – GENERAL REQUIREMENTS

Section 01 31 00 – Project General Requirements

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1. PREFACE TO THE GENERAL REQUIREMENTS

- a. The Division 01 General Requirements of the project (this section) shall be considered as project specific requirements that apply the Project in addition to the RFP documents below.
- b. The following two documents are referenced and incorporated in the RFP. The documents are available in the Reference Library on CDB's website.
 - 1) CDB's STANDARD DOCUMENTS FOR DESIGN-BUILD PROJECTS, August 2007, also referred to as the 'SD-DB'.
 - 2) CDB's 'SECTION 01 11 01 SUPPLEMENT TO SD-DB' (attached to the RFP), dated March 2017. Reference to the SD-DB shall also intend reference to this Supplement.
 - 3) This Division 01 section will refer to SD-DB section numbers as a general reference.
- c. If a conflict exists between the RFP and SD-DB, the RFP shall prevail.
 - 1) Certain clauses of the Design and Construction Manual 2009 edition (DCM) are referenced in the RFP and in the SD-DB. Those referenced clauses are incorporated into this document and have

the same force and effect as if they were given in full text. This manual is available in the Reference Library on CDB's website.

- 2) If any provision in the RFP or its attachments conflicts with or is inconsistent with the Quincy Veteran's Home Rehabilitation and Rebuilding Act ("Act")(330 ILCS 21) and/or CDB's administrative rules governing procurement practices at the Quincy Veteran's Home ("administrative rules")(44 Ill. Adm. Code 930), the provisions in the Act and administrative rules shall control.
- d. The Design-Build entity may be referred to within the Bridging Documents as the 'Design-Builder' or alternatively as the 'D-B Entity', the 'D-B' or simply, the 'Contractor.' All these terms shall be considered identical in their meaning and references to the Design-Build entity. Any Work references to multiple primes or specific trade contractors shall refer to the D-B.

2. D-B ARCHITECT-ENGINEER RIGHTS AND RESPONSIBILITIES

- a. In reference to SD-DB 00 72 36, the following PROJECT COORDINATION AND DOCUMENT MILESTONES requirements shall apply:
- b. Coordination with CDB and the Using Agency:
 - 1) Prepare memoranda for distribution to CDB, Using Agency, DOIT and each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.
 - 2) Provide advance notices for coordination with State of Illinois DOIT.
- c. Design Phase coordination and submissions:
 - 1) Drawing reviews and required submissions shall be as below:
 - 2) Submit 35% and 100% complete design document packages to the CDB for review. The D-B team can continue progress on the design and project during such reviews by the CDB and their delegates.
 - 3) In case there are multiple drawing packages to support D-B phasing objectives, coordinate with the CDB to submit the same 35% and 100% complete drawings for every package.
 - 4) Obtain approvals for all major exterior envelope and interior finish materials by the 35% design submission where possible.
 - 5) Submit sealed and stamped 100% construction documents to the CDB along with the project coordinated Architectural/Engineering BIM Model.
 - 6) Per the SD-DB, appropriate professional seals and signatures on drawing sheets, electronic Record Drawings and the specification cover sheets. Record drawing certification and signature with seal shall be transmitted by each licensed design professional.
 - 7) Submit conformed as-built updated drawings from the architect and engineer and a coordinated BIM model to the CDB for record. Follow all other submission requirements per the SD-DB.
- d. Coordination with the US Department of Veterans Affairs ('USDVA')
 - 1) All communication with the USDVA shall be copied to CDB Project Managers and Using Agency project liaison.
 - 2) Submit a 35% document submission for the complete project to the CDB and the Using Agency for their use in submission to the USDVA for progress review and reimbursement processes.

- 3) Assist the Using Agency with their required architect or design team submissions for the USDVA grant reimbursement. (The USDVA submissions 'Checklist of Major Requirements' is attached to the RFP).
- e. Coordination with the Illinois Department of Public Health ('IDPH')
- 1) All communication with the IDPH shall be copied to CDB Project Managers and Using Agency project liaison.
 - 2) Further to the requirements to meet all IDPH codes and standards, the D-B shall pay special attention to the following coordination requirements:
 - 3) Establish a sit-down meeting with the IDPH when 35% Design documents are complete.
 - (1) Communicate with the CDB and IDPH to schedule this date 2 months ahead of the meeting date.
 - 4) Submit 100% complete drawings to the IDPH for plan review to include architecture, engineering and interior design with finish materials identified.
 - (2) Submit in a format required to meet IDPH standards and guidelines.
 - (3) Communicate with the CDB and IDPH to schedule this submission 2 months ahead of the date of submission for planning and coordination purposes.
 - 5) Obtain a No-Objection letter (No-objection to start of construction) prior to starting construction.
 - (4) Allow sufficient time to respond to comments prior to obtaining this letter.
 - 6) Establish a mid-construction milestone where the IDPH Environmental Services and Water Quality program managers would be invited to view the plumbing piping distribution system rough in for the water system across the project.
 - (5) Communicate with the CDB and IDPH to schedule this date 2 months ahead of the meeting date.
 - 7) Inform IDPH of expected substantial completion milestone dates at least 3 months in advance to allow planning and scheduling of final inspections. Make adjustments to dates as necessary to match D-B schedule.
 - (6) Create an electronic and paper binder of all interior finish materials, documenting source manufacturer, rep, contact information and flame and smoke spread ratings to meet IDPH inspection guidelines.
- f. Interior Design coordination:
- 1) As the building is a residential long-term care setting, the achievement of a home-like setting as against an institutional, hospital like setting remains critically important. To this goal, D-B shall coordinate key interior design milestones and deliverables with the CDB and the Using Agency.
 - 2) Obtain CDB and Using Agency approvals for interior design, finish and FF&E selections prior to final milestones. Submit control samples of all approved interior finish samples to the Using Agency for their record.
 - 3) Submit final FF&E packages to the Using Agency for review prior to assisting the CDB with the purchase order backup. Allow 30 working days for feedback, questions and finalization. Follow other submission requirements in the interior design narrative.

3. D-B ENTITY RIGHTS AND RESPONSIBILITIES

- a. In reference to SD-DB 00 72 40, the following COORDINATION requirements shall apply:

- 1) Construction phase coordination
 - 2) Outage coordination: D-B shall provide at least a FIVE working days' notice for any disruption to site and or its systems. Examples include, but are not limited to heating, cooling, life-safety, sprinkler systems; network data systems that assist in staff communication and business processes; utility connections like water and electricity; roads, walks and access and campus Wi-Fi networks.
 - 3) Mock ups – provide one month notice prior to all mock-ups including but not limited to any room finishes mock up, room electric rough in mock up, exterior assembly mock up, and roof inspection mock-up.
- b. Maintenance access
- 1) Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
 - 2) Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.
- c. Responsibilities to supply and install of Work by the Using Agency is specifically noted in the Bridging Documents and in the narrative and spreadsheets for the FF&E – Furniture, Furnishings and Accessories. Any Work references to 'By Other' in the Bridging Documents shall refer to the D-B.

4. CODES AND REGULATIONS

- a. In reference to SD-DB 01 05 00 Design Phase Conditions, applicable Codes and Regulations are listed within the drawings and narratives of each discipline within the Bridging Documents.

5. SURVEY AND LAYOUT DATA

- a. The D-B shall conduct certified surveys and investigations and create the layout data required for their Work.
- b. Prior topographical and surveys conducted shall be made available for reference. They are intended for reference and it is expected that the D-B shall need to allow for complete surveying as is needed for their work.
- c. While the campus has access to some level of mapped underground utilities, it is expected that these are not comprehensive and accurate enough for construction activity. The D-B shall arrange for a utility locating and mapping exercise prior to construction activity and associated environmental requirements.
- d. The D-B's further investigations are expected to be guided by plan design, areas and depths of impact on site for both site-civil, landscape, building, utility, demolition and other related activity like construction material staging, construction traffic activity and such that are needed for a full and complete execution of the Project.
- e. The D-B shall expect that there are buried and unmapped underground utilities, past demolition debris, and old foundations in the area of their Work.
- f. Careful records shall be maintained of all activity and submitted to the State CDB in paper and electronic formats at the end of the process, and prior to billing.

- g. At the conclusion of the work, a comprehensive certified survey shall be provided in paper and electronic formats to the Using Agency showing all new work, existing work and buried underground utilities in the areas of Work. These shall be integrated into the boundary and topographical survey of the site currently available with the CDB.

6. PROJECT MANAGEMENT

- a. PROJECT MEETINGS - In reference to SD-DB 01-31-20, the following general requirements shall apply.
 - 1) D-B shall schedule and conduct meetings and conference at Project site, unless otherwise indicated.
 - 2) Inform participants, attendees and individuals whose presence is required, of date and time of each meeting at least 3 weeks in advance.
 - 3) Typical participant or attendee lists for major project management items include
 - 4) The CDB Project Managers,
 - 5) Using Agency leadership team (Illinois Department of Veterans' Affairs ('IDVA') and Illinois Veterans' Home Quincy ('IVHQ'))
 - 6) DOIT (as required), D-B team's primary architect/engineer, major consultants, major sub-contractors and their superintendents; suppliers; and other concerned parties as needed or requested by the D-B.
 - 7) All D-B team participants at each meeting or conference shall be familiar with Project and authorized to conclude matters relating to the Work discussed at each meeting.
 - 8) Prepare and distribute the meeting agenda to all attendees, as well as record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, and all attendees within three days of the meeting.
 - 9) Clearly inform the attendees of action items relevant to each task and date required for completion to stay on D-B's schedule.
- b. PRE-CONSTRUCTION CONFERENCE - In reference to SD-DB 01 31 22, the following requirements shall apply.
 - 1) Schedule a preconstruction conference before starting construction, no later than 15 days after execution of the Agreement. Hold the conference at Project site. Conduct the meeting to review responsibilities and personnel assignments.
 - 2) Attendees: Typical list as stated above.
 - 3) Agenda: Discuss items of significance that could affect progress, including the following:
 - a) Tentative construction schedule.
 - b) Phasing.
 - c) Critical work sequencing and long-lead items.
 - d) Designation of key personnel and their duties.
 - e) Procedures for processing field decisions and Change Orders.
 - f) Procedures for RFIs.
 - g) Procedures for testing and inspecting.
 - h) Procedures for processing Applications for Payment.
 - i) Procedures for planning and announcements of planned outages.
 - j) Distribution of the Contract Documents.
 - k) Submittal Procedures.

- l) LEED requirements.
 - m) Preparation of Record Documents.
 - n) Use of the premises.
 - o) Work restrictions.
 - p) Using Agency occupancy requirements.
 - q) Responsibility for temporary facilities and controls.
 - r) Construction waste management and recycling.
 - s) Parking availability.
 - t) Office, work, and storage areas.
 - u) Equipment deliveries and priorities.
 - v) First aid.
 - w) Security.
 - x) Progress cleaning.
 - y) Working hours.
- c. PRE-INSTALLATION CONFERENCE - In reference to SD-DB 01 31 22, the following requirements shall apply.
- 1) Conduct a pre-installation conference at Project site before each construction activity that requires coordination with other construction whether required by the actual or narrative specification section or not.
 - 2) Pre-installation conferences are especially important for major trades concerning the envelope, the mechanical-electrical-plumbing and technology systems, and major interior finishes.
 - 3) Attendees: Typical project attendee list, along with installer and representative of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other material and installation that have preceded or will follow, shall attend the meeting. This could be a sub-set of typical meeting attendee list as stated above.
 - 4) Advise attendees of scheduled meeting dates.
 - 5) Agenda: Review progress of other construction activities and preparations for the particular activity under construction, including requirements for the following:
 - a) The Contract Documents.
 - b) Options
 - c) Related RFI's.
 - d) Related Change Orders.
 - e) Purchases
 - f) Deliveries.
 - g) Submittals.
 - h) Review of mockups.
 - i) Possible conflicts.
 - j) Compatibility problems.
 - k) Time schedules.
 - l) Weather limitations
 - m) Manufacturers written recommendations
 - n) Warranty requirements
 - o) Compatibility of materials.
 - p) Acceptability of substrates.
 - q) Temporary facilities and controls.

- r) Space and access limitations
 - s) Regulation of authorities having jurisdiction
 - t) Testing and inspecting requirements.
 - u) Installation procedures.
 - v) Coordination with other work.
 - w) Required performance results.
 - x) Protection of adjacent work.
 - y) Protection of construction and personnel.
- d. PROGRESS MEETINGS - In reference to SD-DB 01 31 23, the following requirements shall apply.
- 1) Conduct progress meetings at bi-weekly intervals. Coordinate dates of meetings monthly with preparation of payment requests.
 - 2) Meetings schedule may be adjusted as discussed with CDB project managers to expedite decisions or resolve issues to enable D-B team to stay on schedule.
 - 3) Attendees: In addition to the typical attendee list stated above, representatives of each entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings as needed or as requested. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 4) Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - 5) Construction Schedule: Review progress since the last meeting. Determine activities on-time, ahead or behind schedule, review plans to expedite where needed and secure commitments as needed. Discuss and issue schedule revisions and updates prior to the next meeting.
 - 6) Review present and future needs of each entity present, including the following:
 - a) Interface requirements.
 - b) Sequence of operations.
 - c) Status of submittals being submitted to CDB for record and general overview purposes.
 - d) Deliveries.
 - e) Off-site fabrication.
 - f) Access.
 - g) Site utilization.
 - h) Temporary facilities and controls.
 - i) **Important: Pending outages – always published at least one week in advance**
 - j) Work hours.
 - k) Hazard and risks.
 - l) Progress cleaning
 - m) Quality and work standards
 - n) Status of correction of deficient times
 - o) Field observations
 - p) RFI's.
 - q) Status of proposal requests.
 - r) Pending changes
 - s) Status of Change Orders.
 - t) Pending claims and disputes.
 - u) Documentation of information for payment requests.

- v) LEED requirements and procedures
- e. D-B's COORDINATION MEETINGS - In reference to SD-DB 01 31 24, the following requirements shall apply.
 - 1) D-B shall have complete control on the scheduling, conduct and attendees at their own coordination meetings scheduled to meet their needs. These meetings are in addition to specific meetings held for other purposes, such as progress that involve the CDB and the Using Agency.
- f. CLOSEOUT CONFERENCE - In reference to SD-DB 01 31 24 the following requirements shall apply:
 - 1) Arrange a Project closeout conference no later than 90 days prior to the scheduled date of Substantial Completion or hand over of project or each major part thereof.
 - 2) Review requirements and responsibilities related to Project closeout.
 - 3) Agenda: Discuss items of significance that could affect or delay Project closeout.
 - 4) Discuss need for, and arrange follow-up conferences as agreed.
 - 5) Publish milestone dates for owner training and system commissioning at least two months in advance.
 - 6) Publish list of expected close-out documentation and schedule dates for transmission.
 - 7) Detailed requirements per SD-DB 01 77 00 Closeout Procedures shall be discussed in advance.
 - 8) Establish the dates on the team calendar for the NINE MONTH inspections required per SD-DB 01 31 25.

7. CONSTRUCTION PROGRESS SCHEDULE

- a. In reference to SD-DB 01 32 00, the following requirements shall apply:
- b. Construction Schedule
 - 1) The D-B shall prepare and maintain a detailed project critical-path schedule (CPM format). The project schedule shall be the contractor's working schedule; used to execute the work and record and report actual progress. It shall show how the D-B's plan to complete the work within the contract time and meet any intermediate milestone dates established in the Construction Schedule. The original Construction Schedule becomes the basis for determining work progress.
 - 2) The schedule shall provide sufficient detail and clarity so that the D-B can plan and control the work and CDB and the Using Agency can readily monitor and follow the progress of all portions of the work. The critical activities must be clearly shown. The degree of detail must be satisfactory to the CDB.
- c. Milestones:
 - 1) Indicate the completion dates of all major site utilities and LTC and Domiciliary buildings and any tunnel connectors as separate milestones.
 - 2) The workflow of the LTC and DOM buildings shall be easily identified as separate and trackable for progress against critical construction and major trade milestones.
 - 3) Indicate design phase document submission dates, and interior design submission dates as milestones on the Schedule.
 - 4) Indicate mock-up room review dates and FF&E milestone dates on the Schedule when possible.

- d. Utility coordination:
 - 1) Electrical: The early completion of electrical utilities (at least on the East loop) would be considered advantageous to the campus as they are critical to maintain continued operation of the campus.
 - 2) Water Line upgrade project: Coordinate with the CDB to show critical coordination milestones on D-B's master schedule for interface with the independent project related to campus water main upgrade. (Independent engineer PSBA Inc. or Quincy, IL).
- e. Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other D-B team members and others involved to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1) Preparation of Contractor's Construction Schedule.
 - 2) Preparation of the Schedule of Values.
 - 3) Installation and removal of temporary facilities and controls.
 - 4) Review, delivery and processing of submittals.
 - 5) Progress meetings.
 - 6) Pre-installation conferences.
 - 7) Project closeout activities
 - 8) Startup and adjustment of systems
 - 9) Commissioning.
- f. Form of Schedule
 - 1) The project schedule shall be in the CPM – Critical Path Method format. It shall be banded or grouped by building area, building floor, exterior, roofing, site work, systems, and other such elements. The schedule shall be mathematically analyzed initially and at every update, milestone, or revision include:
 - a) Preceding and following event by number.
 - b) Activity description and duration.
 - c) Earliest start and finish dates for each activity.
 - d) Latest start and finish calendar dates for each activity.
 - e) Actual start and finish dates for each activity.
 - f) Total float in work days for each activity.
 - g) Percentage complete for each activity.
 - h) Show activity constraints, precedent activities, logical constraints, restrained starts, and restrained finish dates.
- g. Formats for schedule
 - 1) Submit required submittals in the following format:
 - a) Working electronic copy of schedule file, where indicated.
 - b) PDF electronic file.
 - c) Schedule should be formatted to 11x17 formats.
 - 2) The schedule shall clearly indicate the Critical Path for planning and scheduling design and construction activities, where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
 - 3) Schedule construction operations in sequence required to obtain the best results.

- 4) Include a Total Float Report with a list of all activities sorted in ascending order of total float.

h. Reports and Submittals

- 1) Within 30 days of the Authorization to Proceed, the contractor shall submit the project schedule to the CDB.
- 2) Five (5) days prior to the pay/progress meeting, the contractor shall submit the current updated schedule. Each sheet shall be clearly titled. Intermediate milestones shall be clearly indicated.
- 3) A monthly management narrative report will accompany the updated schedule. It shall indicate the progress of the work, any revisions since last reporting period, any lost time required to be made up and the contractors' plan to maintain the schedule and meet the milestone dates and contract completion. The report will identify any potential delays and problem areas and their impact on project completion.
- 4) Payment and reduction of retainage may be denied by CDB for failure to submit a proper schedule and maintaining work progress according to the project schedule.

i. Float time: Important

- 1) With Free Float seen as the amount of time an activity can be delayed without adversely affecting the early start of the successor activity, the D-B shall note that Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date

8. SAFETY AND SECURITY

- a. In reference to SD-DB 01 35 00, the following requirements shall apply:
 - 1) The site is an occupied and operational residence for Veterans and all site security protocols currently in place shall be maintained in un-disturbed manner.
 - 2) Necessary outages shall be coordinated with advance notice to the Using Agency as stated earlier.
 - 3) The active construction area shall be clearly identified, and secured and protected against unauthorized entry unless credentialed and or cleared for entry by the D-B site management team.
 - 4) Construction, testing, commissioning phase water use shall be handled with care on campus to ensure that no water is aerosolized, in addition to the requirements stated in the plumbing narrative.

9. QUALITY REQUIREMENTS AND CONTROL

- a. In reference to SD-DB 01 45 10, the following requirements shall apply:
- b. Testing of Exterior Assemblies
 - 1) An exterior wall and window assembly quality assurance program shall be instituted. The number and frequency of tests shall be published and results shared with the CDB Project Managers. Industry standards may be used to establish testing frequencies and the minimum standards established in the 'Field Quality Control' section of each Specification Section shall apply. Where component and cladding test pressures on exterior wall assemblies exceed or conflict with the minimums, the greater of the two shall be used as the standard.

- c. Exterior Wall Pre-Construction Mock Up
 - 1) Prior to commencing work and preceding pre-installation conference, provide exterior wall pre-construction mockup of Work with the following objective:
 - 2) Coordinate required construction of mock-up for testing, observation, and to establish a minimum standard of workmanship and aesthetics for building construction. The mock-up shall demonstrate quality of materials, finish, as well as compliance with performance requirements for the project. The exterior wall pre-construction mock-up provides an opportunity to identify and resolve any potential areas of conflict prior to the commencement of construction.
 - 3) Provide exterior wall pre-construction mock-up shop drawings showing all adjacent construction and related work, including flashings, attachments, interior finishes. Mock-up shall have all details complete and identical to those approved on the coordinated wall system shop drawings. Fabrication and assembly shall be by the same individuals who are responsible for the building construction.
 - 4) Extent and Location: As indicated on D-B drawings
 - 5) Materials: Incorporate complete materials as required for finished Work
 - 6) Setback construction as indicated on Drawings, leave layers of the exterior wall pre-construction mock-up construction exposed for observation of the working relationships of adjacent building components.
- d. Exterior Wall Pre-construction mock-up documentation
 - 1) Document installation of each product of the exterior wall pre-construction mock-up with photographs and video for review by tradespeople to be involved in the building construction represented by the exterior wall preconstruction mock-up.
 - 2) Exterior Wall Pre-construction mock-up testing shall be conducted to the same standards as indicated in the Unit Masonry, Fluid Applied Membrane Air Barriers, Joint Sealants and Aluminum Framed Curtain Walls and windows specification sections.
- e. D_B's Architect's/Engineer's Review:
 - 1) D-B's Architect/Engineer will review exterior wall pre-construction mock-up for approval of visual acceptance of workmanship.
 - 2) Obtain this before proceeding with subsequent Work.
 - 3) Maintain accepted mock-up during construction as standard for subsequent Work. Dismantle mock-up and remove from site. At end of construction dismantle approved mock-up and remove from site.

10. CONSTRUCTION TESTS

- a. In reference to SD-DB 01 45 23, the following requirements shall apply:
- b. Testing and Laboratory Services
 - 1) The D-B will contract and pay for construction tests. In accordance with the CDB's RFP, and the SD-DB, all inspections and testing shall be a made a part of the D-B contract and shall be conducted by qualified entities and coordinated by the D-B and reports filed for review with design architects and engineers of record.
 - 2) The D-B shall provide, without additional compensation all facilities, labor and material reasonably necessary for such safe and convenient inspection and testing as is required.

- c. Special Inspections:
 - 1) All structurally significant Work, all critical engineering and life-safety significant Work shall need to be inspected in accordance with the requirements for special inspections and tests as described in the IBC 2018 CHAPTER 17 SPECIAL INSPECTIONS AND TESTS. The results of such tests shall be reviewed and approved under seal of licensed professionals on the D-B team.
- d. Systems:
 - 1) In other to narrative and specification requirements, the following shall apply:
 - 2) The water distribution system shall be thoroughly tested and certified free of harmful bacteria and bio-organisms at the conclusion of the project and prior to hand over to the Using Agency.
 - 3) All air distribution systems shall be protected in accordance with the mechanical narratives and tested and certified clear of harmful bacteria and bio-organisms at the conclusion of the project and prior to hand over to the Using Agency.
- e. In addition to the requirements in CDB's SD-DB, the work may be subject to inspection and testing by CDB or the Using Agency at all reasonable times and at all places.

11. TEMPORARY UTILITIES

- a. In reference to SD-DB 01 51 00, the following requirements shall apply:
- b. Charges by a municipality or utility company to provide temporary services to the project will be the sole responsibility of the D-B, noting that temporary services shall be limited to those necessary for construction purposes only, not including those necessary to operate permanent systems, unless specifically stated otherwise. The D-B will arrange for supply, metering and payments for all such utilities.
- c. Identify each of the utilities needed to service the facility. Identify all utility agreements stating what the utility company will provide and what the contractor will need to provide. Verify location and extent of underground utilities.
- d. Plan for installation and removal of temporary utility connections.
- e. Bring any 'Excess Facility Charges' to the attention of the CDB PM. These are charges by a municipality or utility company to provide permanent services to the project service point and will be subject to a utility agreement between that party and CDB. The contractor shall not include these excess facility charges in their bid.
- f. Provide 0.2 micron-absolute filtration for all water required for demolition and new construction work.

12. FIELD OFFICES

- a. In reference to SD-DB 01 52 00, the following requirements shall apply:
- b. In addition to the requirements in CDB's SD-DB which covers requirements for field offices, such office space in the form of a separate trailer or accommodation shall also be provided for CDB's Bridging Team architect.
- c. A secure, uninterrupted, hi-speed Wi-Fi network shall be made available for the CDB and Bridging Team offices for the duration of the Work. This shall be independent of the Using Agency's operational networks.
- d. Field offices are to be cleaned at least weekly. Provide a 36 in. x 24 in. sign on each office structure to identify occupants and function.

- e. The D-B's field office shall be provided with Video-conferencing facilities for use by the CDB and project team as required.

13. ACCESS ROADS AND TRAFFIC CONTROL

- a. In reference to SD-DB 01 55 00, the following requirements shall apply:
- b. MULTI-THERAPY Building
 - 1) Access to the 2nd floor of the building must be maintained throughout construction.
 - 2) Access needs to be provided for residents from occupied buildings to access the Multi-Therapy and other occupied buildings through the construction period.
 - 3) During the construction phase, and prior to final building connections, a code compliant, accessible, partially enclosed, but temporary, construction phase entrance arrangement shall be provided in coordination with the Using Agency.
 - 4) In case the demolition of the KENT building results in loss of accessible entry ways, access options may need to include a temporary elevator conveyance arrangement.
 - 5) Access to THERAPY building's lower level access may be easier to arrange from on grade via ADA/IAC compliant temporary ramp arrangements.
- c. ALL OTHER BUILDINGS IN USE: Maintain access to all other occupied buildings.

14. TREE AND PLANT PROTECTION

- a. In reference to SD-DB 01 56 39, the following requirements shall apply:
- b. General:
 - 1) The site has many stately trees that are an important resource on the campus enhancing the quality of life and the general welfare of the residents and enhancing its unique character and physical, historical, and aesthetic environment.
 - 2) The D-B shall encourage the protection of healthy trees outside demolition and new construction boundaries of buildings and utility lines.
- c. Tree Preservation Plan
 - 1) The D-B shall engage an arborist in the creation of a Tree Preservation Plan shall be filed prior to start of construction, mapping out the trees that will be protected and preserved during construction.
 - 2) The protection plan shall consider all healthy trees outside building footprint and utility areas without regard to diameter at breast height ('DBH'), and any healthy tree that is either: (i) a tree having a DBH of eight inches (8") or greater; or (ii) a multi-stem tree having an aggregate total of fifteen inches (15") DBH or greater.
 - 3) DBH shall be measured at four and one half (4 ½) feet above the ground.
 - 4) The plan shall include the detail necessary as required to assist in trimming or determining protection measures.
 - 5) The protection plan shall respect that tree space is the most critical factor in tree protection throughout the site development process.
 - 6) As the root system within the dripline region is generally considered to be the critical root zone (CRZ), D-B shall minimize disturbance within this zone as it can directly affect a tree's chances

for survival. To protect these critical root zones the following planning considerations shall be applied:

- a) Minimize soil compaction in the critical root zone resulting from heavy equipment;
 - b) Restrict vehicular or excessive pedestrian traffic, or storage of equipment or materials;
 - c) Minimize and plan ahead of root disturbance due to cuts, fills, or trenching;
 - d) Avoid wounds to exposed roots, trunks, or limbs by mechanical equipment;
 - e) Avoid other activities such as chemical storage, cement truck cleaning, fire, etc.
 - f) Install tree protection fencing along the perimeter of the critical root zone located within construction site, which shall remain in place during construction and removed only when construction is complete
- d. Tree replacement
- 1) The D-B shall provide for the replacement and/or replanting of trees within the preservation plan that are damaged during construction.
 - 2) In no case shall the number of replacement trees equal less than (two) caliper inch of replacement tree for each (one) caliper inch of tree removed.
 - 3) All replacement trees will be three (3) inch caliper, unless otherwise authorized by the Using Agency. The trees shall be of equivalent species and prominence location.

15. PROJECT RECORD DOCUMENTS

- a. In reference to SD-DB 01 78 39, the following requirements shall apply in addition to the minimum requirements:
- b. Electronic, digital files versions of Project Record Construction Documents include project BIM files and project BIM coordination files. These requirements are in addition to the requirements for the Design-Build Architect's Record Drawing submittals.
- c. For asbestos abatement projects:
 - 1) The D-B shall complete an Asbestos Abatement Project Summary Report and forward it to the CDB PM on CD. The report format can be found in the Project Manual Workbook for Asbestos, Lead, UST and PCB (Appendix 5 of the DCM or current DCM reference on the website). Reports not on CD will not be accepted. Supplemental Sampling Report shall be submitted on CD for any sampling done as part of the project.
- d. D-B Architect's Digital Data Files for record submission:
 - 1) The following information is required to be coordinated on the BIM models:
 - 2) The Site work and the different buildings shall be submitted as separate files similar to the Bridging Documents. Alternate options will be considered as long as they are discussed and approved by the CDB and Using Agency ahead of time.
 - 3) All site, landscape, architectural, and engineering, technology, food service, interiors and FFE&E and other information as a development of the Bridging Documents.
 - 4) BIM models - Level of Development 400 shall be required at conclusion of the project, with models populated with manufacturers and model numbers for the Using Agency's uses in the future.
 - 5) Survey information: At the conclusion of the work, a comprehensive certified survey shall be provided in paper and electronic formats to the Using Agency showing all new work, existing

- work and buried underground utilities in the areas of Work. These shall be integrated into the boundary and topographical survey of the site currently available with the CDB. Information submitted shall be in 3-D CAD format or integrated into project Revit models.
- 6) Floor Plans and Reflected Ceiling Plans: Show architectural and structural elements, and mechanical, plumbing, fire protection, fire alarm, and electrical Work. Show locations of visible ceiling-mounted devices relative to acoustical ceiling grid. Supplement plan drawings with section drawings where required to adequately represent the Work.
 - 7) Plenum Space: Indicate mechanical and electrical equipment, and related Work.
 - 8) Mechanical Rooms: Provide coordination drawings for mechanical rooms showing plans and elevations of mechanical, plumbing, fire protection, fire alarm, and electrical equipment.
 - 9) Structural Penetrations: Indicate penetrations and openings.
 - 10) Slab Edge and Embedded Items: Indicate slab edge locations and sizes and locations of embedded items for metal fabrications, sleeves, anchor bolts, bearing plates, angles, door floor closers, slab depressions for floor finishes, curbs and housekeeping pads, and similar items.
 - 11) Mechanical and Plumbing Work: Show the following:
 - a) Sizes and bottom elevations of ductwork, piping, and conduit runs, including insulation, bracing, flanges, and support systems.
 - b) Dimensions of major components, such as dampers, valves, diffusers, access doors, cleanouts and electrical distribution equipment.
 - c) Fire-rated enclosures around ductwork.
 - 12) Electrical Work: Show the following:
 - a) Runs of vertical and horizontal conduit 1-1/4 inch diameter and larger.
 - b) Light fixture, exit light, emergency battery pack, smoke detector, and other fire alarm locations.
 - c) Panel board, switch board, switchgear, transformer, busway, generator, and motor control center locations.
 - d) Location of pull boxes and junction boxes, dimensioned from column center lines.
 - 13) Fire Protection System: Show the locations of standpipes, mains piping, branch lines, pipe drops, and sprinkler heads.
 - 14) All technology conduit, wiring, termination information.
- e. Construction Photographs, Video and Web-Cams
- 1) A live construction web-camera arrangement shall be provided from four locations (two per building) that shall be determined in coordination with the Using Agency. These cameras shall be capable of providing real-time and archival time-lapse picture and video access to CDB and Using Agency project managers and the public.
 - 2) The CDB or the Using Agency may reserve the right to share the link with a larger group of stakeholders.
 - 3) Internet connectivity as required for the above arrangement shall be provided by D-B.
 - 4) Regular construction progress photographs inside and outside buildings and site shall document the progress of work with special attention to mechanical, electrical and plumbing rough-in work that will be concealed at completion of work. These shall be maintained and archived in CD/DVDs for Using Agency's use at the conclusion of the project. Photographs shall be generally classified by wing and floor and or room numbers when convenient, for easy identification. Digital submission.

- 5) In addition, drone fly-through photography may be provided at the contractor's option. Coordinate with agencies for required approvals.
- f. Shop Drawings, Product Data and Samples
- 1) D-B shall review in detail, and stamp with approval all submittals from each team member (D-B's primary and sub-contractor teams) and supplier.
 - 2) D-B shall obtain review and approval of shop drawings, product data, and samples from the D-B's Architect/Engineer or licensed professionals on the team.
 - 3) All structural, engineering and life-safety significant submittals shall need to carry the stamp and seal of the architect and engineer of record prior to filing with the CDB. These include but are not limited to items requiring special inspections and tests as described in the IBC 2018 CHAPTER 17 SPECIAL INSPECTIONS AND TESTS.
 - 4) D-B shall prepare and maintain a submittal schedule concurrent and integrated with the Construction Schedule.
 - 5) D-B shall maintain a master list of submittals with submittal dates, review process tracking, and status.
- g. Product Data
- 1) Manufacturer's standard schematic drawings, edited to fit this project.
 - 2) Manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive data.
 - 3) Clearly mark each copy to identify pertinent materials, products or models. Show dimensions and clearances, show wiring diagrams and controls.
 - 4) Samples: Physical samples to illustrate materials, equipment or workmanship. Approved samples establish standards by which complete work is judged. Maintain at site as directed. Protect until no longer needed.
 - 5) Sample Installations and mock-ups: Erect at project site at location. Construct each sample or mock-up complete, including work of all crafts required in finished work. Remove as directed.
 - 6) Submit conformed as-built updated drawings from discipline or trade coordination BIM models to the CDB for record. Follow all other submission requirements per the SD-DB.
 - 7) Survey information: At the conclusion of the work, a comprehensive certified survey shall be provided in paper and electronic formats to the Using Agency showing all new work, existing work and buried underground utilities in the areas of Work. These shall be integrated into the boundary and topographical survey of the site currently available with the CDB. Information submitted shall be in 3-D CAD format or integrated into project Revit models.

16. TRAINING

- a. In reference to 01 79 00, the following requirements shall apply:
- b. Provide formal training in operation and maintenance of all building systems, by a factory certified manufacturer's representative along with installing contractors.
- c. The training shall be held at the Project Site, and shall be arranged with a sign-in sheet and a digital video recording of the session.
- d. Due to the complexity of the whole campus transformation including utilities and new buildings, it shall be required of the D-B to organize and provide a SECOND round of owner training.

- e. This second round of training shall be coordinated and scheduled to coincide with the nine month warranty walk through visits. They shall cover the following items at a minimum:
 - 1) Low voltage and technology systems, Nurse-call, Wander management and security and access control integration and programming. Access control and security programming
 - 2) Nurse staff communication system integration
 - 3) Mechanical systems and BAS controls
 - 4) Food Service equipment operations and controls
 - 5) Interior finish cleaning and maintenance procedures
 - 6) The second round of training meetings shall be coordinated around the nine month mark after substantial completion. The training shall be held at the Project Site, and shall be arranged with a sign-in sheet and a digital video recording of the session.

- End of Division 01 of the Bridging Documents -