

## EXHIBIT A

### SYSTEMS TO BE COMMISSIONED:

- | YES                      | NO                       |                            |
|--------------------------|--------------------------|----------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <b>Mechanical (Note 1)</b> |
| <input type="checkbox"/> | <input type="checkbox"/> | <b>Plumbing (Note 2)</b>   |
| <input type="checkbox"/> | <input type="checkbox"/> | <b>Electrical (Note 3)</b> |

### SYSTEMS NOTES

1. Including steam/condensate and/or heating hot water systems, air handling systems, energy recovery devices and other energy-efficient equipment, and related support equipment (drives, pumps, terminal units, etc.)
2. Domestic hot water
3. Including RO/DI water, process vacuum, clean dry air, process cooling water, acid waste neutralization, solvent waste collection, gaseous nitrogen, etc.

### COMMISSIONING SERVICES

The Consultant's responsibility is to review the design concept and design criteria prepared by the professional on the Project and advise Owner of any concerns, it being understood and agreed that the design professional is ultimately responsible to Owner for the same. The Consultant shall specifically provide:

### DESIGN PHASE

- | Yes                      | No                       |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Review and confirmation of the Owner's facilities program and the Professional's (A/E's) Basis of Design as expressed in programming and design submittals produced prior to and following selection of the Commissioning (Cx) Consultant;  |
| <input type="checkbox"/> | <input type="checkbox"/> | Development of a formal "Owner's Project Requirements" (OPR) document that complies with the requirements of LEED using the Owner's facilities program (with draft/template OPR provided), the FSU Design & Construction Standards, and narratives, concepts, and drawings from design submittals produced prior to and following selection of the Cx Consultant.                                     |
| <input type="checkbox"/> | <input type="checkbox"/> | Continuous maintenance of the OPR as required by ASHRAE Guideline 0-2005, throughout the design, construction, acceptance, and warranty phases.   |
| <input type="checkbox"/> | <input type="checkbox"/> | At each phase of design, review of, and written commentary on, all narratives, reports, plans, specifications, and other deliverables related to the systems being commissioned for compliance with the Basis of Design, FSU Design and Construction Standards, industry standard for the facility type, coordination & constructability, and minimum <b>Silver</b> LEED Certification (version 3.0); |
| <input type="checkbox"/> | <input type="checkbox"/> | Review of other A/E work products (such as the Energy Model and/or Life Cycle Cost Analysis) related to the systems being commissioned;   |
| <input type="checkbox"/> | <input type="checkbox"/> | "Value Engineering" suggestions for improved functionality, efficiency, and/or cost savings (or review of such suggestions proposed by others);   |
| <input type="checkbox"/> | <input type="checkbox"/> | Participation in up to (insert #) reconciliation conferences with A/E and Owner as needed during design to clarify & resolve review comments;   |
| <input type="checkbox"/> | <input type="checkbox"/> | Production of the General Commissioning Requirements Specification for inclusion in 60% and 100% Construction Documents, tailored as needed to the project, the design intent, local standards, etc.;   |

- |                          |                          |  |
|--------------------------|--------------------------|--|
| <input type="checkbox"/> | <input type="checkbox"/> | Assistance with Owner's development of a facility management plan, including recommendations on  |
|                          |                          | <ul style="list-style-type: none"> <li>a. Longterm maintenance and life cycle cost strategies,</li> <li>b. Owner participation during construction,</li> <li>c. Owner training,</li> <li>d. O&amp;M information,</li> <li>e. Systems manual as required for LEED-NC,</li> <li>f. Owner stock items, and</li> <li>g. Other closeout/turnover items and procedures to be required by the specifications. Such recommendations shall include discussions as needed with User Group and FSU Physical Plant Division representatives to ensure that such training and deliverables are tailored specifically to the needs of the facility;</li> </ul> |
| <input type="checkbox"/> | <input type="checkbox"/> | Development and coordination of trend parameters with the respective discipline design engineers that shall be incorporated into the construction documents as minimum requirements included by the building automation system contractor;   |
| <input type="checkbox"/> | <input type="checkbox"/> | Coordination and integration of commissioning activities into the project construction schedule with the assistance of the Builder; and  |
| <input type="checkbox"/> | <input type="checkbox"/> | Participation in the pre-bid and bidding process to clarify Cx requirements.   |

**CONSTRUCTION AND ACCEPTANCE PHASE**

- | <b>Yes</b>               | <b>No</b>                |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Concurrent review of contractor submittals, shop drawings, and coordination drawings and coordination/reconciliation of comments with A/E and Owner prior to dissemination to the Builder;  |
| <input type="checkbox"/> | <input type="checkbox"/> | Development of the Commissioning Plan(s), Pre-Functional Checklists, and Functional Performance Test procedures;  |
| <input type="checkbox"/> | <input type="checkbox"/> | Production of a spreadsheet itemization of all products and equipment that comprise the systems being Commissioned, including governing specification section and location by room number or column lines;  |
| <input type="checkbox"/> | <input type="checkbox"/> | Attendance at one weekly jobsite meeting per month – maximum total of insert # – for discussion of Cx and LEED certification issues;  |
| <input type="checkbox"/> | <input type="checkbox"/> | Participation in coordination meetings during construction to clarify Cx procedures, including such meetings prior to HVAC startup – maximum total of insert #;   |
| <input type="checkbox"/> | <input type="checkbox"/> | Coordinating of efforts with other quality control measures such as IEQ CX, HVAC Test-And-Balance, materials testing, and other;  |
| <input type="checkbox"/> | <input type="checkbox"/> | Field visits, inspections, and oversight of tests to measure discrete operations (Pre-Functional and Functional Testing) and the interoperability of systems and components (Performance Testing) to confirm compliance with the OPR, Basis of Design, plans & specifications, and Cx Plan; NOTE: Re-testing shall incur additional services to be payable directly by the Builder. |
| <input type="checkbox"/> | <input type="checkbox"/> | Recommendations of acceptance or rejection based on Functional Performance Test results;  |
| <input type="checkbox"/> | <input type="checkbox"/> | Documentation of deficiencies and action items stemming from Functional Performance Tests, plus field inspection reports for building envelope observations;  |

- Amendment of the Commissioning Plan to reflect changes made to systems and equipment during construction;
- Troubleshooting and diagnostic assistance to the contractor;
- Confirmation that air-side and water-side systems within variable-controlled HVAC schemes have been optimized;
- Review and confirmation of the Measurement & Verification plan as required for LEED-NC certification;
- Review of final contractor training plans, Operation & Maintenance Manuals, Test-And-Balance reports, IAQ tests, LEED certification documents, as-built drawings, finalized products & equipment spreadsheet, and other "closeout" documents related to the systems being commissioned;
- Production and distribution of Draft Commissioning Report (at Substantial Completion); and
- Consolidation and turnover of Cx documents, including the Basis of Design and final OPR, narrative report(s), itemization of products and equipment comprising the systems being commissioned, checklists and field observation reports, FPT results, deficiency log(s), and training-related documents.
- The consultant shall conduct a half-day Owner training and orientation session prior to Substantial Completion to review with the Owner the OPR, Basis of Design, all "as built" commissioned building systems, general operation & maintenance, troubleshooting guidelines, emergency procedures, energy efficiency measures, Measurement & Verification plan, and lessons learned during the Construction & Acceptance phases of commissioning.

**WARRANTY PHASE**

- | <b>Yes</b>               | <b>No</b>                |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | Quarterly inspections and/or testing of commissioned building systems during the year following Substantial Completion, including but not limited to "off-season" performance tests of the HVAC system; |
| <input type="checkbox"/> | <input type="checkbox"/> | Analysis of building performance parameters – such as HVAC trending data – compared to the OPR, Basis of Design, end of construction state, and energy model baseline and projections;                  |
| <input type="checkbox"/> | <input type="checkbox"/> | Interviews with Owner's operation and maintenance staff to confirm operation & maintenance and discover or fully understand concerns or difficulties with commissioned building systems;                |
| <input type="checkbox"/> | <input type="checkbox"/> | Tracking of warranty issues for all commissioned building systems at the 10-month milestone through resolution; and   |
| <input type="checkbox"/> | <input type="checkbox"/> | Production and distribution of Final Commissioning Report at conclusion of warranty phase to document the results of Commissioning.   |