REQUEST FOR PROPOSALS FOR
CIVIL ENGINEERING SERVICES

Master Campus Plan
Cooper University Health Care – Camden, New Jersey

Your firm is hereby invited to submit a Proposal for civil engineering services for the Master Campus Plan for Cooper University Health Care. This request for proposals is a competitive selection process to engage a firm to provide civil engineering services for this project. The specific requirements for this proposal are set forth below.

A. PROJECT DESCRIPTION

1. Brief Overview

Hammes Company has been engaged by Cooper as program manager for the Master Campus Plan ("Project"). The Project is planned for a multi-year, multi-phased program on the site of the existing academic medical center campus located in Camden, NJ.

Cooper University Health Care ("Cooper") is the leading academic health system in South Jersey. Cooper is comprised of a 635-bed tertiary care hospital, South Jersey's only Level I trauma center, MD Anderson at Cooper, Children's Regional Hospital at Cooper, the only Level II pediatric trauma center in the Delaware Valley, one of the largest physician groups in the region, three urgent care centers, and more than 100 outpatient offices in South Jersey and Pennsylvania. Large multispecialty centers in Camden, Cherry Hill, Voorhees, and Willingboro make it easy to schedule appointments for multiple services in a convenient location.

Cooper University Hospital is an academic, tertiary care medical center affiliated with Cooper Medical School at Rowan University and is located on the Health Sciences Campus in Camden. Cooper has a long history in the city of Camden and is playing a prominent role in its revitalization. Cooper Medical School at Rowan University has approximately 430 students, 1800 faculty members, and since its inception in 2012, graduated over 350 new physicians.

Annually, Cooper has approximately 30,000 hospital admissions, more than 1.7 million patient visits, and 400,000 outpatient hospital encounters. Cooper's primary service area is in Camden, Burlington, and Gloucester Counties and secondary service area is in Atlantic, Cape May, Cumberland, and Salem Counties.

Cooper University Health Care's mission is **To Serve. To Heal. To Educate.**

Our Team Approach: Talented, diverse professionals are central to accomplishing project goals. Their ability to collaborate at a high-level will be key to any project's success. It is Cooper's intent to build a culture of trust among the team, framing constructive attitudes and requiring leadership finesse by all parties. All principal team members will be expected to maintain a balanced focus on forward progress and value creation for the project, while maintaining accountability for every team member to control cost, quality, and schedule.

Cooper and **Program Manager** will have overall responsibility for directing the design and construction efforts, coordinating all team members so they will provide their necessary services in a complete and timely manner. They will drive the rapid and dependable internal decision-making and bi-directional reporting between the design and construction teams and Cooper leadership. They will also assure that sufficient funds are available to complete the project within the current budget estimates.

The **Architect/Engineers of Record** ("AE") will contract directly with Cooper and are to lead the research, program validation, ideation, best practice application, budget adherence, design, design schedule adherence, standard of care execution, documentation, and construction administration for the project to meet the project goals and objectives, regulatory guidelines, and the scope approved by Cooper. Selection of the AE is anticipated to be accomplished in February 2023.

The **Construction Manager** ("CM") will contract directly with Cooper and, during the design phase, will be an advisor on construction methods and costs, through continuous cost modeling. The CM will lead value engineering efforts through a capable in-house source or by having subcontractors' resources. During the construction phase, the CM will lead the construction planning, procurement of labor and materials, installation, and coordinate commissioning. Selection of the CM is anticipated to be accomplished in April 2023.

The **Geotechnical Engineer** ("Geotech") will contract directly with Cooper and will work in collaboration with the AE, Civil Engineer and CM by providing field explorations, soil samplings, field testing, analysis, and geotechnical investigation reports required for the planning, design and contract administration of the Project. Selection of the Geotechnical Engineer is anticipated to be accomplished in March 2023.

The **Civil Engineer** ("Civil") will contract directly with Cooper and will work in collaboration with the AE, Geotech and CM by providing site planning, surveying, environmental planning, utility plans, grading and drainage plans, and sedimentation/erosion control plans for the planning, design and contract administration of the Project.

2. Scope of the Project

Cooper's Master Plan guiding principles have been described within Exhibit A.

To further its mission, Cooper will soon begin the significant, multi-year, multi-phased project on the site of the existing academic medical center campus located in Camden, New Jersey. The Project will be accomplished in two (2) phases, as described within the below bullets. The scope of this engagement will include Phase A as the project scope. Phase B will be accomplished as a future additional engagement.

- Phase A
  - Tower A (264,000 BGSF per Exhibit A) Programming, Conceptual, Schematic, Design Development, Construction Document and Construction Administration Phases. This design will include any of the campus wide infrastructure that will be located inside this Tower or required for occupancy.
  - Towers B (265,800 BGSF per Exhibit A) and C (523,000 BGSF per Exhibit A) Programming, Conceptual, and Schematic Design Phases.
  - Infrastructure design to a Schematic level to support the entire program for Towers A, B, and C as well as the existing hospital buildings to remain
- Phase B (not included in this engagement) will include the design completion of Towers B and C (DD Phase, CD Phase, and Construction Administration Phase), demolition design for the existing Dorrance Building in a two-phase approach, and infrastructure design for components located in the B&C Towers or required for their occupancy.

B. PROJECT SCHEDULE

Program Manager has established the following summary schedule per the Master Program Schedule (Exhibit B). This project schedule is provided solely for the purpose of preparing a proposal for civil engineering services.

1. Summary Schedule

2/6/23 – 6/30/23	Tower A Pre-Design Phase
5/1/23 – 9/29/23	Towers B & C Pre-Design Phase
10/2/23 – 3/31/24	Tower A Early Site Work & Foundation CDs
7/1/24 – 10/30/26	Tower A Construction

2. Civil Engineering Services RFP Timeline

1/25/23	Issue request for proposals
1/27/23	Deadline for RFP acknowledgement of receipt and intent to respond
2/7/23 – 2/9/23	Site Visit (upon request)
2/10/23	Deadline for RFP clarification / questions
2/17/23	Responses to questions received (shared with all)
2/27/23	Deadline for receipt of proposals (3:00pm EST)
3/10/23	Selected firm announcement
Week of 3/13/23	Kick-off meeting

C. SCOPE OF SERVICES

The successful Civil Engineer will provide the services as described below. Please note that this is not intended to be a fully descriptive list of every possible task that needs to be performed. Given the depth of experience represented by the firms being considered, Cooper and the Program Manager expect that each firm is well aware of what goes into providing civil engineering services to support design and construction for a project of this scope and scale and we are seeking the full complement of services from start to finish. The following items are intended to identify the major expectations of the successful firm. If there are questions regarding scope that will have a material impact on this proposal, please request further clarification.

Diversity: Cooper values diversity in its work force, patient population, and with our partner companies. While Minority, Women Owned and Veteran Owned Business Enterprise firm participation is not required, diversity through a company's team members is encouraged. Include in your proposal if your firm is an MWVBE.

Pre-Design Phase: Selected firm will provide the plans to support the AE's conceptual design for Towers A, B and C and campus infrastructure to include, but not limited to:

- Land Use Review Leadership
- Boundary & Topographical Surveying (horizontally and vertically for all building and utilities on Project site)
- General Site Planning (site layout coordination in accordance with zoning regulations)
- Conceptual Site/Removals/Utility/Grading Plans
- Utility Centerline Profiles
- New Roadway & Transportation Coordination Concepts
- Preliminary National Grid Concept Coordination
- Preliminary Topographic/Utility Survey

- Identification of State/City/Local Permit Requirements
- Environmental Planning (Phase 1 due diligence and potentially Phase 2)
- Miscellaneous Details

Schematic Design Phase for Towers A, B and C: Selected firm will continue the development of Pre-Design Phase concepts as well as civil engineering due diligence and investigatory tasks to support preparing issuing a Schematic Design Packages for Tower A and then Towers B and C. These responsibilities are anticipated to include, but are not limited to:

- Pre-Design Phase Concepts Continuation
- Landscape Scheme/Layout
- Coordinate Geotechnical Investigation for Civil Engineering Application
- Coordinate Topographic/Utility Survey

Site Work CDs for Tower A: Selected firm will provide construction documents for AHJ and permit approvals. CD package will include no less than:

- Utility Plans (design to within five-feet of the proposed structures for domestic and fire water lines, natural gas lines, storm and sanitary sewer lines and shall coordinate local electrical, gas and cable companies for utility routing showing exact sizes/capacities and project requirements)
- Grading & Drainage Plans (design for site improvements, including appropriate spot elevations and stormwater detention/retention plan in accordance with governing agency requirements)
- Sedimentation/Erosion Control Plan (in accordance with governing agency requirements)

Construction Administration: Selected firm will provide construction administration services throughout the course of the Tower A Construction Phase. Civil Engineer will generate RFI responses on average within five (5) days upon receipt and submittal responses on average within ten (10) days upon receipt. In addition, site visits will be conducted and documented during the Tower A Construction Phase as appropriate for the construction being accomplished at the time.

Closeout: Selected firm will support closeout activities to enable Cooper to close financial bond requirements in a timely manner and shall include no less than conducting punch list inspections to ensure all site punch list items have been resolved per the contract documents, ensuring all site related permits and inspections are completed as required by relevant governmental agencies, ensuring tall as-builts and other closeout documents are provided to Cooper, Program Manager and governmental agencies as required, and ensure government agency approvals are obtained as needed to close the Project.

D. PROPOSAL REQUIREMENTS

The Proposal(s) for civil engineering services shall provide the information necessary for an evaluation of each firm by Cooper and the Program Manager.

RFP acknowledgement and intent to respond are to be transmitted via email to Aimee Fogarty, VP at Hammes Company Healthcare (afogarty@hammes.com).

Questions are to be electronically submitted by February 10, 2023 (12pm EST) to John Healy, RVP at Hammes Company Healthcare (jhealy@hammes.com).

Proposals shall include all eight (8) sections as described on Pages 7 to 9 (Proposal Format) of this RFP. Proposals shall not exceed ten (10) pages, excluding fee proposal, similar project profiles, and summary team resumes, and are to be electronically submitted by February 27, 2023 (3pm EST) to:

- Faith Orsini, VP of Facilities – orsini-faith@cooperhealth.edu
- Robert Stag, Manager Contracting – stag-robert@cooperhealth.edu
- John Healy, SVP at Hammes Company Healthcare – jhealy@hammes.com
- Aimee Fogarty, VP at Hammes Company Healthcare – afogarty@hammes.com
- Mark Tufaro, VP at Hammes Company Healthcare – mtufaro@hammes.com

There shall be ***no direct communication*** with Cooper senior management, staff or Selection Committee members upon receipt of the RFP through civil engineering firm selection announcement. Any communication could result in firm disqualification. All questions should be directed through the Program Manager noted above.

Proposal Format for Civil Engineering Services

Cover Letter

Table of Contents

Section 1.0 - Executive Summary

Please provide a brief summary which describes and highlights the experience, qualifications and particular expertise for this project for each of the firms being proposed to meet the basic services scope of work.

Section 2.0 - Company Information

2.1 Discuss the Firm's background, ownership and proposed contact office.
2.2 Indicate if the firm is currently licensed in New Jersey.
2.3 A description of any litigation involving the firm in the last five years.
2.4 Has the firm, under its current name or any predecessor names, ever declared bankruptcy?
2.5 Has the firm ever been dismissed from work on a project in the last five years? Describe the circumstances.
2.6 Describe any fiduciary arrangements with manufacturers or distributors.
2.7 Provide Proof of Insurance.

Section 3.0 – Project Planning & Management Team

Please provide a narrative which describes your approach toward management of the Project – recognizing the time constraints set forth in the Project Schedule. The following information shall be provided to highlight the experience and qualifications of each of the key personnel (from each firm) to be assigned to the Project:

3.1 Project Team Organization Chart or matrix indicating staff and structure for each phase of the project.
3.2 How your firm would address turnover of personnel assigned to the Project.
3.3 Your knowledge of the Project location and how that experience will bring value to Cooper and this Project.

Section 4.0 – Tower A & Master Campus Plan Approaches

Please provide a narrative describing your approach for the items listed below.

4.1 Your approach to investigating and securing approvals and adjustments to current entitlements.
4.2 Your approach to coordinating with relevant federal, state, city, and local municipality codes and governing agencies. Describe the anticipated involvement and leadership you would need to provide.

4.3 Your approach to working with Cooper, Program Manager and Architect for land use planning and site planning activities.
4.4 Your approach to working with the Cooper, Program Manager, Architect, and Contractor in supporting a target value design (TVD) approach.
4.5 Your approach to providing design services to support a multiple CD package approach to be accomplished by the Architect.
4.6 Your approach to providing construction phase services / contract administration.
4.7 Your approach to providing closeout phase services and ensuring all federal, state, city, and local municipality approvals and closeout documents are accomplished.
4.8 Describe any additional services your firm provides that may be beneficial to Cooper and the Project's success.

Section 5.0 – Standard Form of Agreement

Provide a sample contract you have executed on similar projects for Cooper review. Confirm the future contract to be executed with Cooper will include the scope of services and deliverables described within Article 2 of the sample modified AIA Document C103-2015 (Exhibit C).

Section 6.0 – Fee Proposal (not included in the 10-page limit)

Exhibit D shall be provided populated and included in your proposal. Additional pages can be added to address additional team members and hourly rates.

Section 7.0 – Project Experience (not included in the 10-page limit)

Please provide descriptions of five (5) projects of similar scope and complexity to the project described earlier in this RFP and which involved your proposed team. Emphasis should be placed on those projects involving the firms and personnel to be assigned to this project. Each project profile shall include a reference for the project to include the reference's name, title, role on the project and contact information.

Section 8.0 – Team Member Resumes (not included in the 10-page limit)

Summary resumes of each proposed team member (no more than 1 page per resume). Resume shall include two individual references per proposed team member.

E. OWNER'S DISCRETION

Owner, at its discretion, may:

1. Choose not to accept any or all proposals submitted in response to this RFP.

2. Use additional selection criteria, at its own discretion, not identified in this document.
3. Make an award, at its own discretion, based on factors other than the fee proposal.
4. Retain all documents submitted in response to this proposal; however, it will not make public any confidential information provided such information is clearly identified.

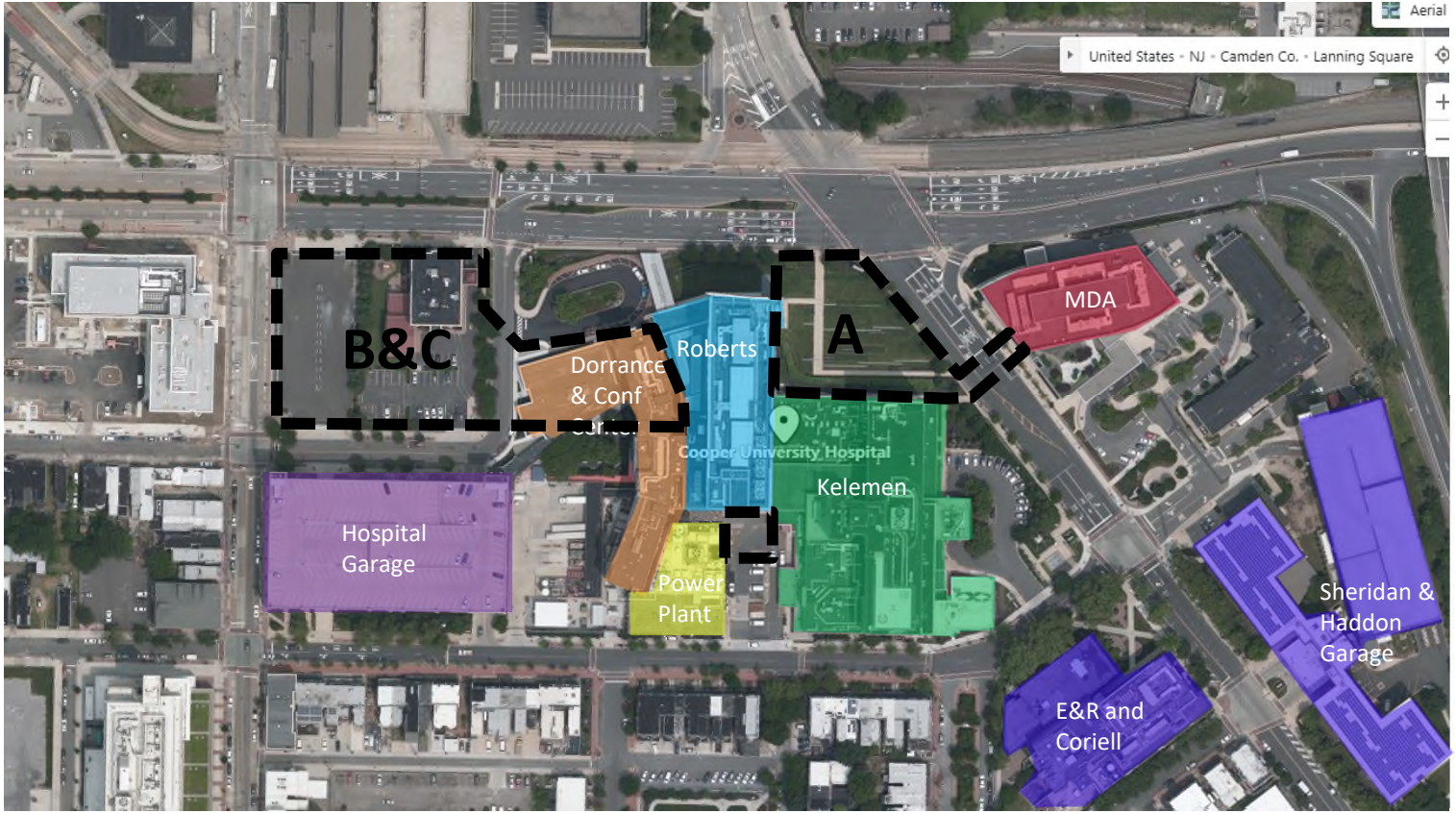
F. EXHIBITS

A. Master Campus Plan dated December 14, 2021
B. Master Program Schedule
C. Sample Modified AIA Document C103-2015, Standard Form of Agreement Between Owner and Consultant
D. Civil Engineer's Proposal Fee, Reimbursable Expenses & Hourly Rates

Master Campus Plan Guiding Principals

- Existing space *insufficient* and *inefficient*
  - Clinical, Ancillary, Support, Education & Research space needs
  - Eliminate the negative impact on patient and staff experience, & operational efficiency
- Address aging plant and infrastructure
- No long-term investment in Kelemen & Dorrance
- Provide for *continued growth* and *future flexibility*

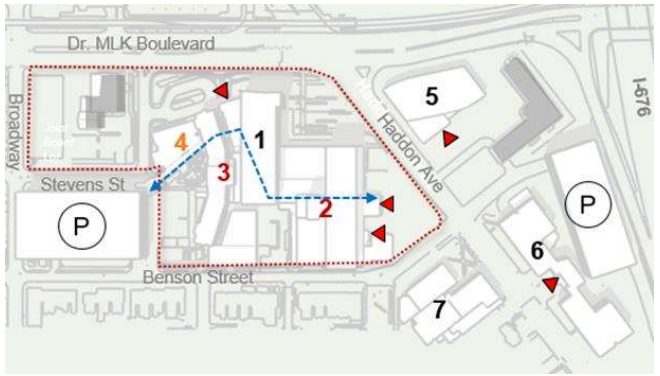
Existing Campus



Campus Opportunities

Hospital:

A. Corner of MLK Blvd / Haddon Ave
B. Dorrance (North) / Conf Addition
C. Ronald McDonald Lot* / Joint Board Lot*
D. Dorrance (South)
E. Kelemen Replacement or Repurpose



Ambulatory:

G. Coriell Institute (Lease up in 2024)
H. MDA Vertical Expansion (4 Stories)
I. Majestic Lot*
J. Rand Development

*Requires site acquisition

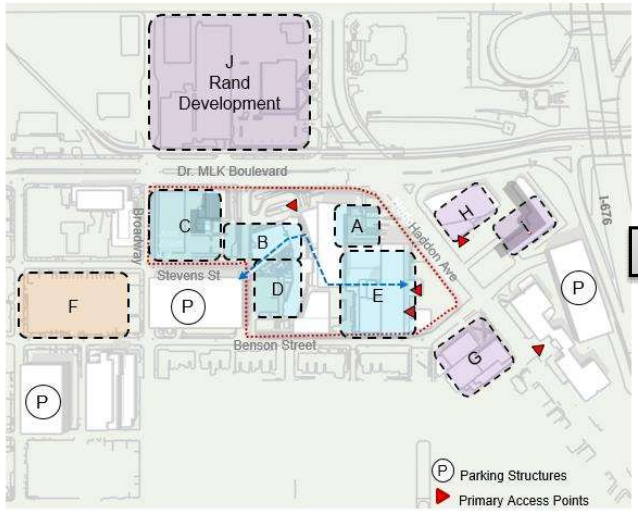


EXHIBIT A
Master Campus Plan

Master Campus Plan Proposal

- *New bed pavilions (A, B & C) accommodates projected 108 bed growth, procedural growth, diagnostic & testing growth*
- *Shell space provides flexibility to fit-out space to meet future strategic needs*
- *Dorrance is fully demolished to provide space for pandemic use*
- *Kelemen vacated floors can be repurposed for non acute care use*
- *$1.3B over 8 years*

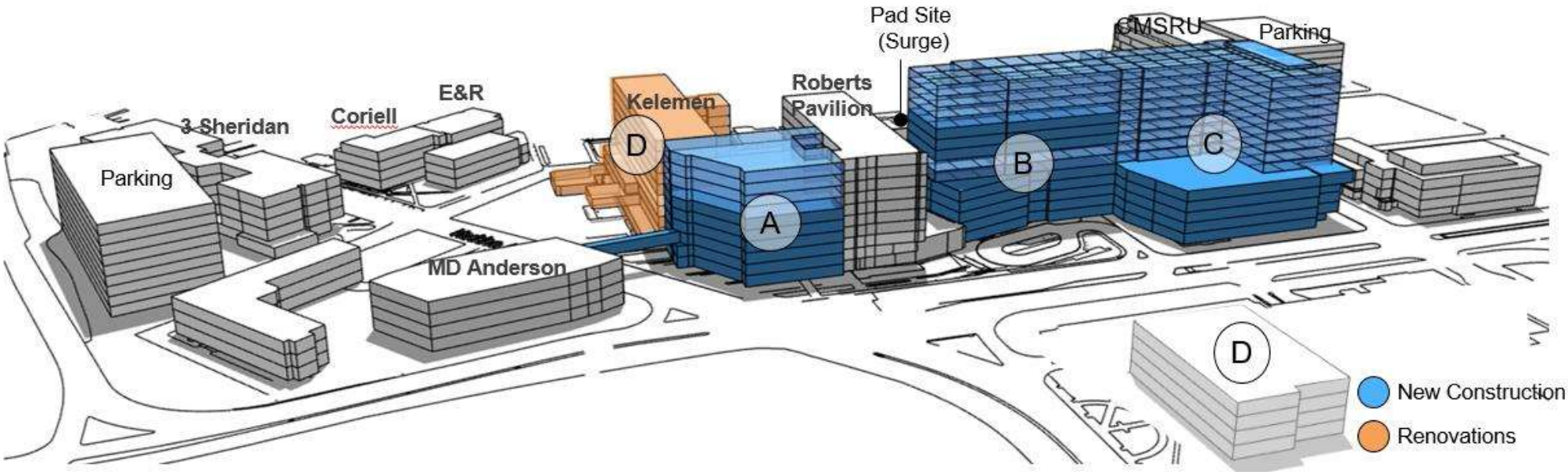


EXHIBIT A
Master Campus Plan

10-Year Campus Vision

- *New bed pavilions (A, B & C) achieves 100% private bed model, accommodates projected 108 bed growth, procedural growth, diagnostic & testing growth and fully replaces Dorrance*
- *Dorrance is fully demolished to provide space for pandemic use*
- *Kelemen is vacated can be demolished or repurposed*
- *~$1.65B*

745 Total Beds (537 New Beds)
100% Private

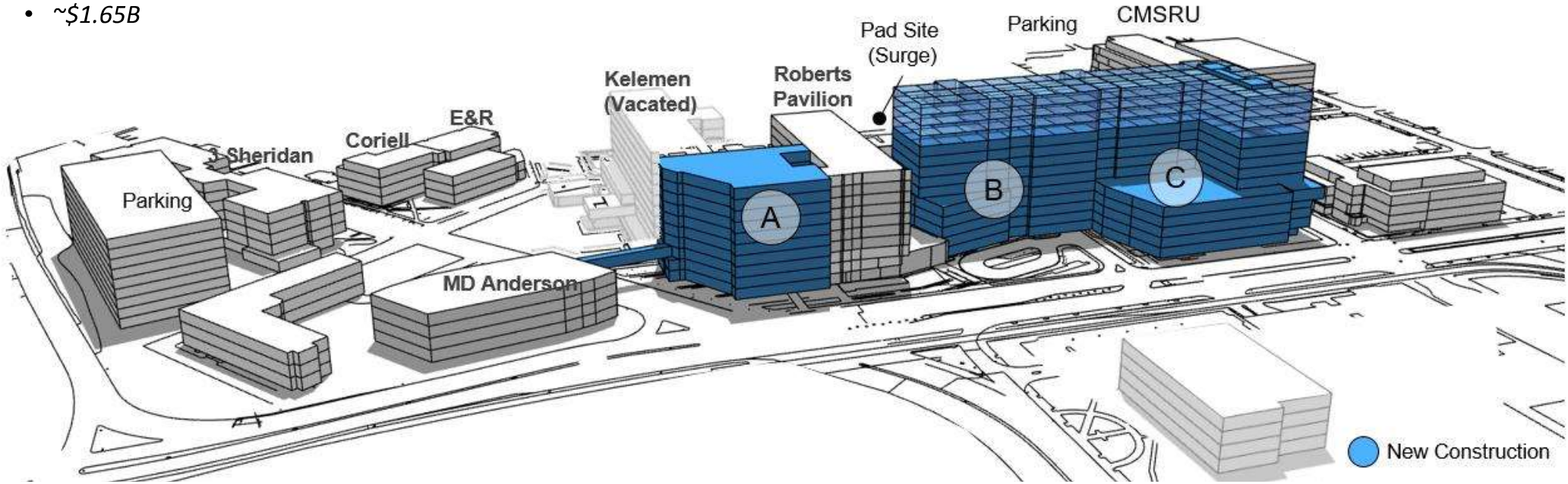


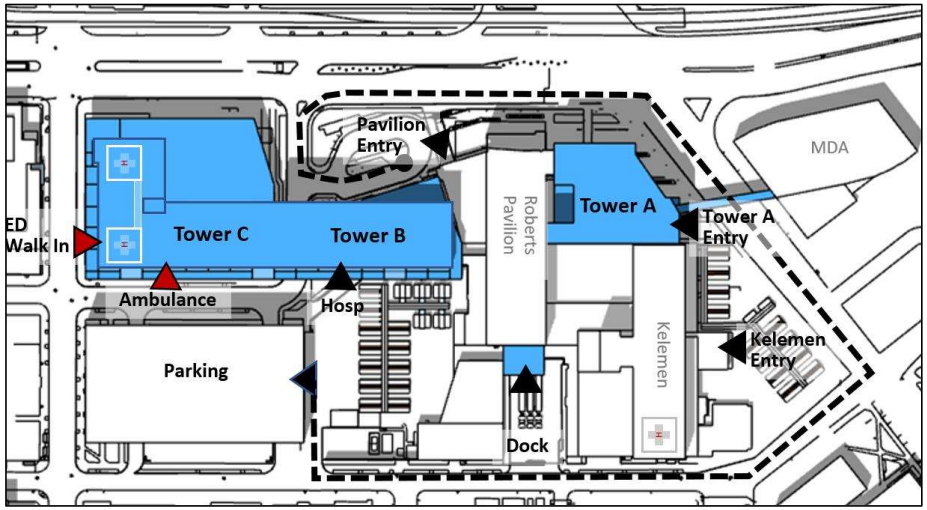
EXHIBIT A
Master Campus Plan

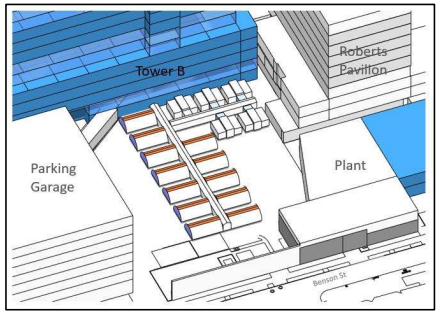
Master Campus Plan Proposal

CRITERIA	MCP PROPOSAL
Projected Costs	**$1.3B (8YR)**
Pavilions	A: 10 Stories(93 beds) B: 14 Stories (112 beds) C: 14 Stories (0 beds) Roberts 10 Stories: (208 Beds) Kelemen 10 Stories: (332 Beds)
Total Bed Capacity	745
Select Private Bed Ratios	745 (70%) 700 (75%) 650 (80%) 600 (86%)
Timing	~8 Years Total Tower A ~2026 93 Beds Tower B & C ~2029 112 Beds
DGSF/Bed (600-750 Industry Standard)	Pavilion A: 720 Roberts: 710 Pavilion B & C: 730 Kelemen 323+

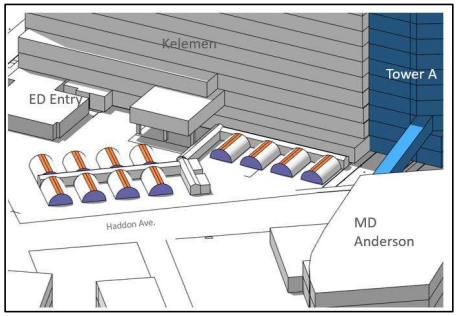
CRITERIA	MCP PROPOSAL
Dorrance	Dorrance: Demolished
OR/ Procedural	Kelemen ORs Replaced + 9 Growth Cath Labs Replaced + 2 Growth
Ancillary/ED	ER Replaced (~2029) +24 Bed Growth Imaging/IR Replaced (~2029) + 3 Growth
Flexible Options	Provides options to accelerate or decelerate beds based on market forces, disrupters, or changes in financial plan
Shell Space	187,500 (Targeted) 250,000 (Discretionary)
Other	(+) Shell easy fit-out in future as $$ becomes available (+) Enables Dorrance demolition & pathway to vacate Kelemen (+) Tower A starts immediately (no enabler) (+) Provides adequate time to acquire & relocate RMDH (+) Includes bridge to MDA (-) Initial beds replace Dorrance not all additional (-) Additional Parking may be required by Camden City

Surge/Emergency Preparedness





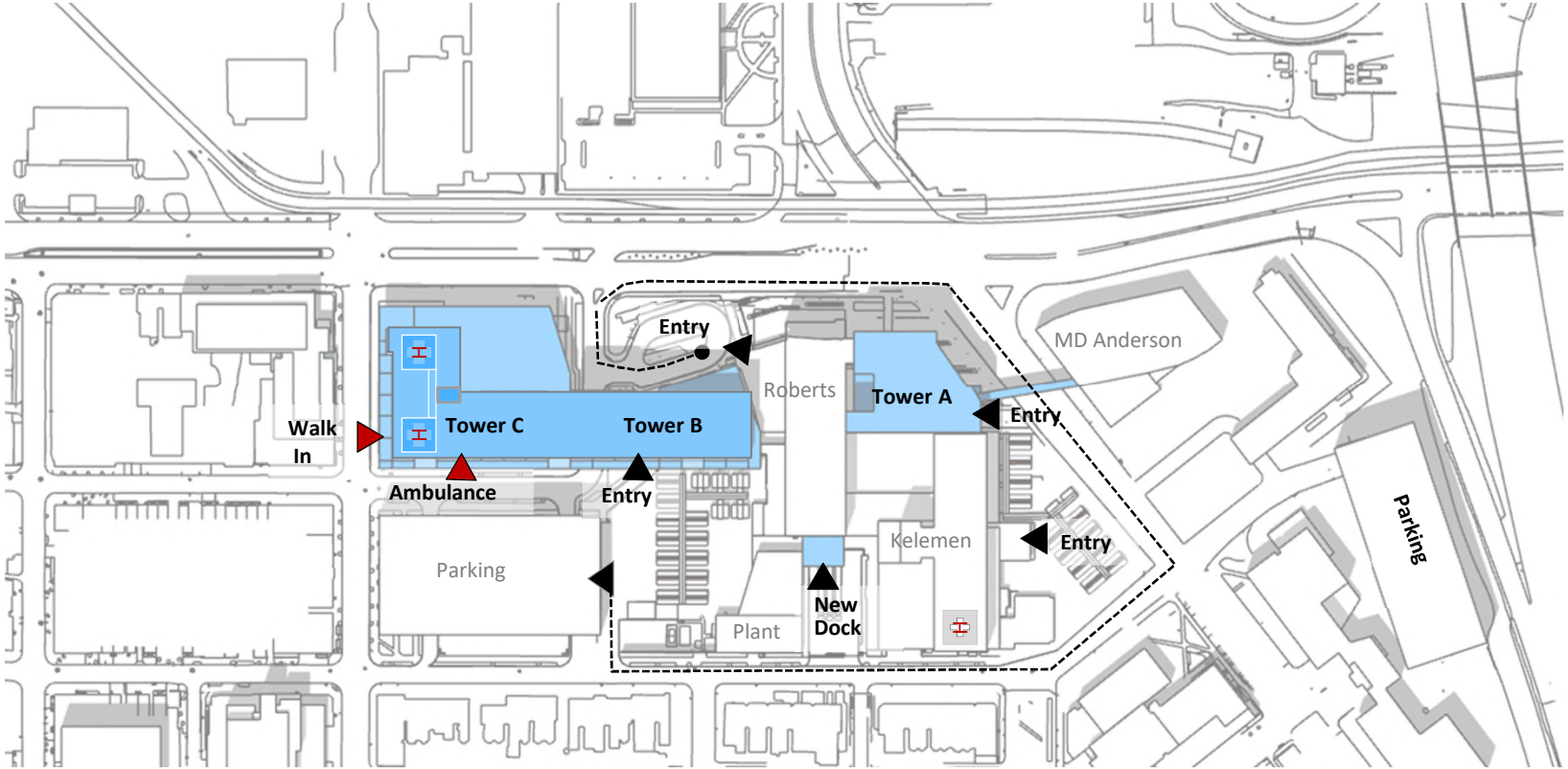
Long-Term Surge Plan



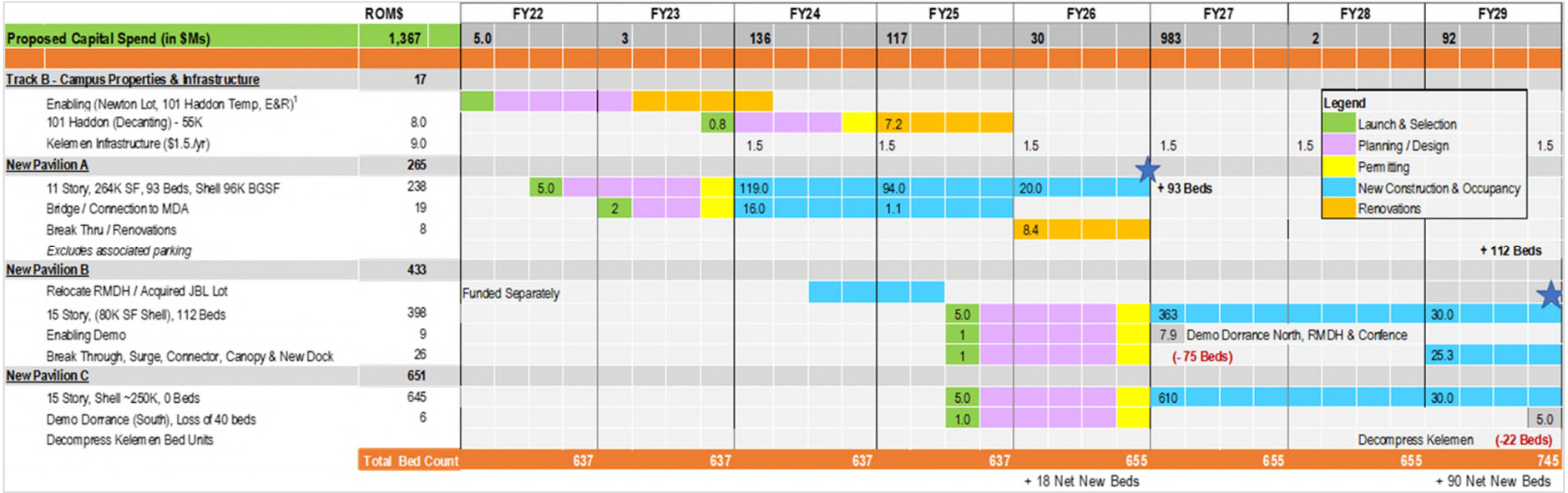
Initial Surge Plan

- Upgraded and expanded Medical Command Center in Tower A adjacent to new conference center
- Alternative Care Pad site
  - Initially within Kelemen Circle
  - Long-term Pad site with utilities
- New bed units with ability to flex up (5-10 beds/unit) utilizing multi-purpose rooms, waiting areas, etc.
- Shell floors to provide temporary alternative care space

Scope of the Project



Schedule



8-Year Plan

- Pavilion A: 93 Beds ~2026 (Enables Dorrance/Conf. Center replacement)
- Pavilion B & C: 112 Beds ~2029 (Replaces K-ORs, Interventional, D&T, ED)

ID	Task Name	Duration	Start	Finish
1	**TEAM SELECTIONS**	**151 days**	**Fri 9/30/22**	**Fri 4/28/23**
2	Program Manager Selection	0 days	Fri 9/30/22	Fri 9/30/22
3	**A/E Design Team Selection**	**81 days**	**Fri 10/14/22**	**Fri 2/3/23**
4	A/E Firm Long List Development	11 days	Fri 10/14/22	Fri 10/28/22
5	A/E Firm Long List Review/Finalization	10 days	Mon 10/31/22	Fri 11/11/22
6	RFP Development	16 days	Fri 10/14/22	Fri 11/4/22
7	RFP Review & Finalization	9 days	Mon 11/7/22	Thu 11/17/22
8	A/E Proposal Submissions	17 days	Fri 11/18/22	Mon 12/12/22
9	Proposal Review & Short List Recommendation	4 days	Tue 12/13/22	Fri 12/16/22
10	Short List Review/Finalization	16 days	Mon 12/19/22	Mon 1/9/23
11	Short List Notifications	0 days	Tue 1/10/23	Tue 1/10/23
12	A/E Interviews	5 days	Mon 1/23/23	Fri 1/27/23
13	A/E Selection	5 days	Mon 1/30/23	Fri 2/3/23
14	**Civil Engineer Selection**	**106 days**	**Fri 10/14/22**	**Fri 3/10/23**
15	Firm Long List Finalization	11 days	Fri 10/14/22	Fri 10/28/22
16	Long List Review/Finalization	10 days	Mon 10/31/22	Fri 11/11/22
17	RFP Development & Issuance	49 days	Fri 11/18/22	Wed 1/25/23
18	Civil Engineer Proposal Submissions	23 days	Thu 1/26/23	Mon 2/27/23
19	Civil Engineer Selection	9 days	Tue 2/28/23	Fri 3/10/23
20	**Contractor Selection**	**130 days**	**Mon 10/31/22**	**Fri 4/28/23**
21	Contractor Long List Development	10 days	Mon 10/31/22	Fri 11/11/22
22	Contractor Long List Review/Finalization	20 days	Mon 11/14/22	Fri 12/9/22
23	RFP Development	31 days	Fri 11/18/22	Fri 12/30/22
24	RFP Review & Finalization	21 days	Mon 1/2/23	Mon 1/30/23
25	Contractor Proposal Submissions	25 days	Tue 1/31/23	Mon 3/6/23
26	Proposal Review & Short List Recommendation	9 days	Tue 3/7/23	Fri 3/17/23
27	Short List Review/Finalization	9 days	Mon 3/20/23	Thu 3/30/23
28	Short List Notifications	1 day	Fri 3/31/23	Fri 3/31/23
29	Contractor Interviews	5 days	Mon 4/10/23	Fri 4/14/23
30	Contractor Selection	10 days	Mon 4/17/23	Fri 4/28/23
31				
32	**TOWER A PRE-DESIGN & DESIGN**	**541 days**	**Mon 2/6/23**	**Mon 3/3/25**
33	**Pre-Design Phase**	**126 days**	**Mon 2/6/23**	**Mon 7/31/23**
34	Develop Space Program for Tower A Only	65 days	Mon 2/6/23	Fri 5/5/23
35	Blocking/Stacking & Module Development	40 days	Mon 5/8/23	Fri 6/30/23
36	Exterior Scheme Approval	10 days	Mon 6/19/23	Fri 6/30/23
37	ROM Total Project Budget & Master Schedule Update	21 days	Mon 7/3/23	Mon 7/31/23
38	**Schematic Design (SD) Phase**	**109 days**	**Mon 7/3/23**	**Thu 11/30/23**
39	SD Package Development	65 days	Mon 7/3/23	Fri 9/29/23
40	Budget Update & Reconciliation	44 days	Mon 10/2/23	Thu 11/30/23
41	SD Package Approval	0 days	Thu 11/30/23	Thu 11/30/23
42	**Interior Buildout / Fit-Out Design Development (DD) Ph**	**195 days**	**Mon 10/2/23**	**Fri 6/28/24**
43	DD Package Development	130 days	Mon 10/2/23	Fri 3/29/24

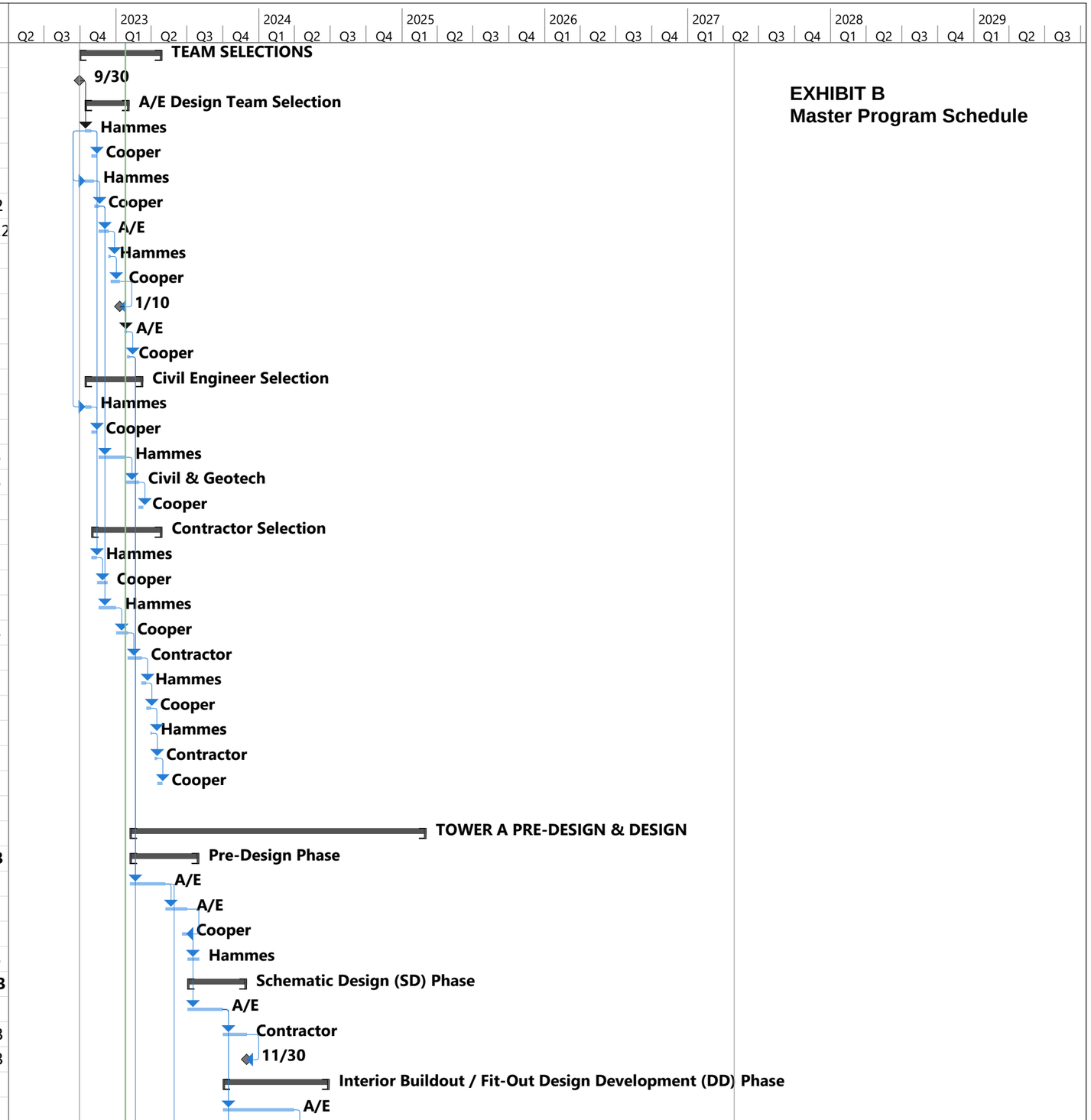
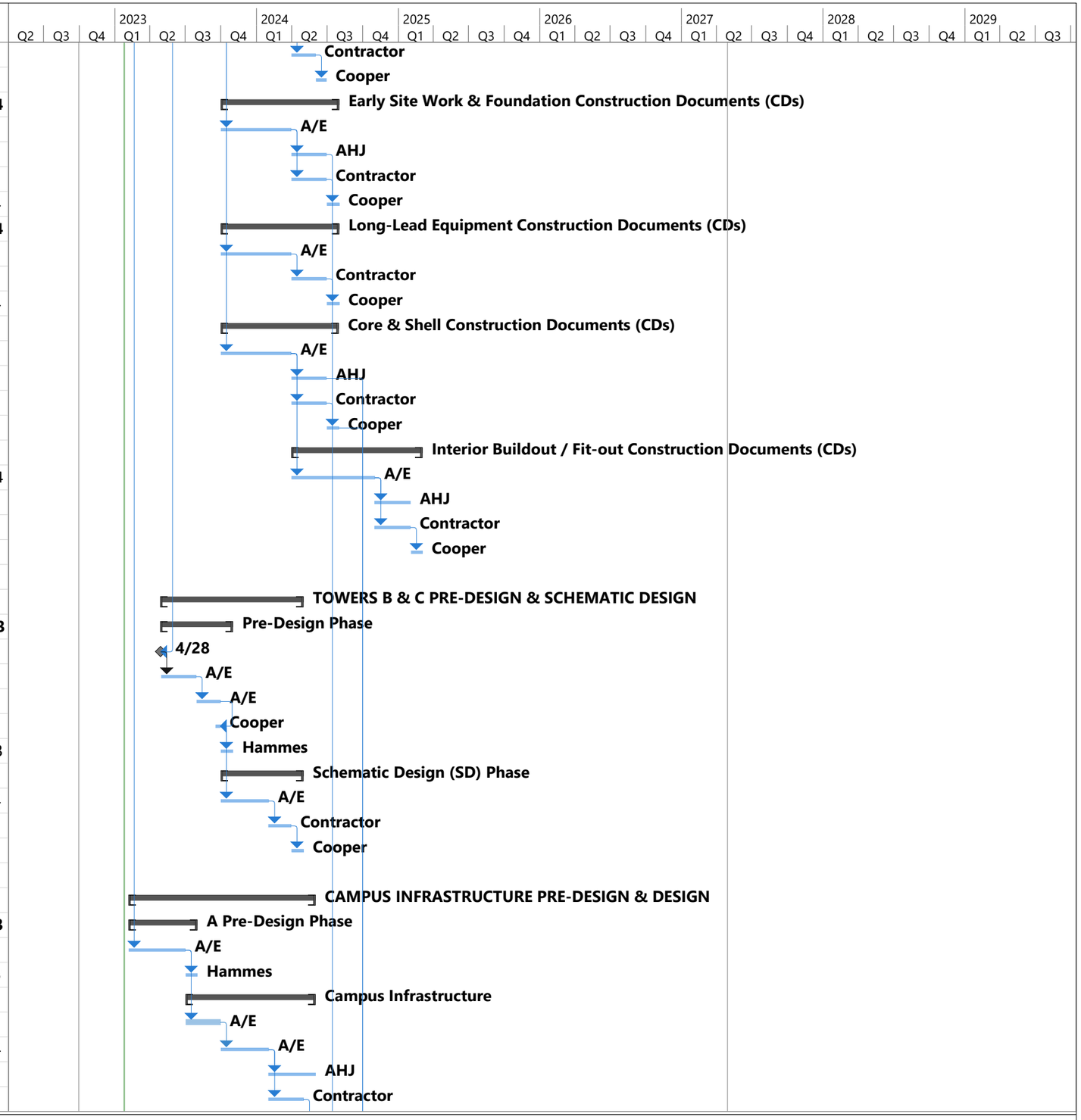
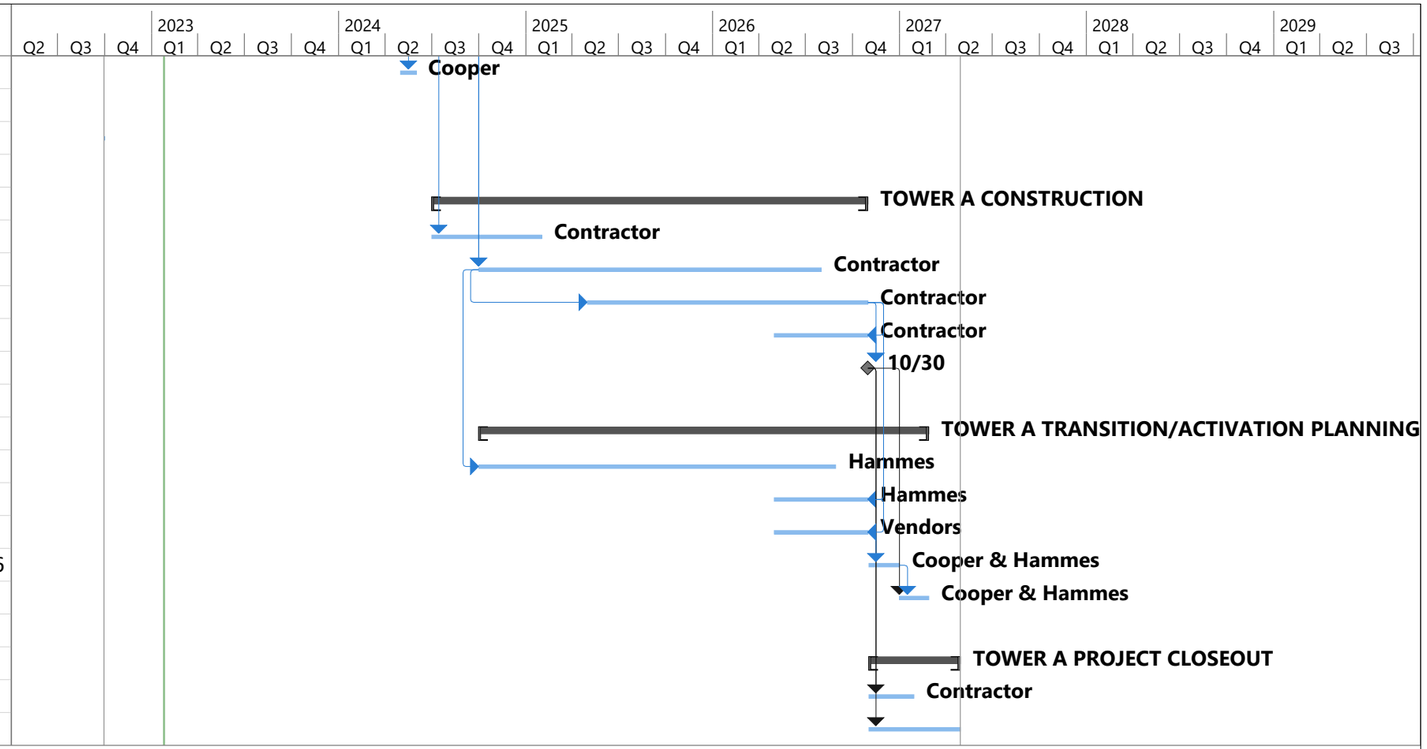


EXHIBIT B
Master Program Schedule

ID	Task Name	Duration	Start	Finish
44	Budget Update & Reconciliation	45 days	Mon 4/1/24	Fri 5/31/24
45	DD Package Approval	20 days	Mon 6/3/24	Fri 6/28/24
46	**Early Site Work & Foundation Construction Documents**	**218 days**	**Mon 10/2/23**	**Wed 7/31/24**
47	CD Package Development	130 days	Mon 10/2/23	Fri 3/29/24
48	DCA/HCPR Review/Approval	65 days	Mon 4/1/24	Fri 6/28/24
49	GMP1 Development	65 days	Mon 4/1/24	Fri 6/28/24
50	GMP1 Approval	23 days	Mon 7/1/24	Wed 7/31/24
51	**Long-Lead Equipment Construction Documents (CDs)**	**218 days**	**Mon 10/2/23**	**Wed 7/31/24**
52	CD Package Development	130 days	Mon 10/2/23	Fri 3/29/24
53	GMP2 Development	65 days	Mon 4/1/24	Fri 6/28/24
54	GMP2 Approval	23 days	Mon 7/1/24	Wed 7/31/24
55	**Core & Shell Construction Documents (CDs)**	**217 days**	**Mon 10/2/23**	**Tue 7/30/24**
56	CD Package Development	130 days	Mon 10/2/23	Fri 3/29/24
57	DCA/HCPR Review/Approval	65 days	Mon 4/1/24	Fri 6/28/24
58	GMP3 Development	65 days	Mon 4/1/24	Fri 6/28/24
59	GMP3 Approval	22 days	Mon 7/1/24	Tue 7/30/24
60	**Interior Buildout / Fit-out Construction Documents (CD**	**241 days**	**Mon 4/1/24**	**Mon 3/3/25**
61	CD Package Development	154 days	Mon 4/1/24	Thu 10/31/24
62	DCA/HCPR Review/Approval	66 days	Fri 11/1/24	Fri 1/31/25
63	GMP4 Development	66 days	Fri 11/1/24	Fri 1/31/25
64	GMP4 Approval	21 days	Mon 2/3/25	Mon 3/3/25
65				
66	**TOWERS B & C PRE-DESIGN & SCHEMATIC DESIGN**	**262 days**	**Fri 4/28/23**	**Tue 4/30/24**
67	**Pre-Design Phase**	**132 days**	**Fri 4/28/23**	**Tue 10/31/23**
68	Chartis Group Strategic Plan Completion	0 days	Fri 4/28/23	Fri 4/28/23
69	Develop Space Program for Towers B & C	65 days	Mon 5/1/23	Fri 7/28/23
70	Blocking/Stacking & Module Development	45 days	Mon 7/31/23	Fri 9/29/23
71	Exterior Scheme Approval	10 days	Mon 9/18/23	Fri 9/29/23
72	ROM Total Project Budget & Master Schedule Update	22 days	Mon 10/2/23	Tue 10/31/23
73	**Schematic Design (SD) Phase**	**152 days**	**Mon 10/2/23**	**Tue 4/30/24**
74	SD Package Development	88 days	Mon 10/2/23	Wed 1/31/24
75	Budget Update & Reconciliation	42 days	Thu 2/1/24	Fri 3/29/24
76	SD Package Approval	22 days	Mon 4/1/24	Tue 4/30/24
77				
78	**CAMPUS INFRASTRUCTURE PRE-DESIGN & DESIGN**	**345 days**	**Mon 2/6/23**	**Fri 5/31/24**
79	**A Pre-Design Phase**	**126 days**	**Mon 2/6/23**	**Mon 7/31/23**
80	Develop MCP Campus Infrastructure Plan	105 days	Mon 2/6/23	Fri 6/30/23
81	ROM Total Project Budget & Master Schedule Update	21 days	Mon 7/3/23	Mon 7/31/23
82	**Campus Infrastructure**	**240 days**	**Mon 7/3/23**	**Fri 5/31/24**
83	Infrastructure Design SDs	65 days	Mon 7/3/23	Fri 9/29/23
84	Infrastructure Design Development & CDs	88 days	Mon 10/2/23	Wed 1/31/24
85	DCA/HCPR Review/Approval	87 days	Thu 2/1/24	Fri 5/31/24
86	Campus Infrastructure GMP Development	64 days	Thu 2/1/24	Tue 4/30/24



ID	Task Name	Duration	Start	Finish
87	Campus Infrastructure GMP Approval	23 days	Wed 5/1/24	Fri 5/31/24
88				
89	CAMPUS INFRASTRUCTURE & ENABLING CONSTRUCTION	1 day?	Fri 9/30/22	Fri 9/30/22
90				
91	**TOWER A CONSTRUCTION**	**610 days**	**Mon 7/1/24**	**Fri 10/30/26**
92	Early Site Work & Foundation Construction	155 days	Mon 7/1/24	Fri 1/31/25
93	Core & Shell Construction	479 days	Tue 10/1/24	Fri 7/31/26
94	Interior Buildout / Fit-Out Construction	392 days	Thu 5/1/25	Fri 10/30/26
95	Final Site Work & Landscaping	131 days	Fri 5/1/26	Fri 10/30/26
96	Certificate of Occupancy / Substantial Completion	0 days	Fri 10/30/26	Fri 10/30/26
97				
98	**TOWER A TRANSITION/ACTIVATION PLANNING & EXECU**	**629 days**	**Tue 10/1/24**	**Fri 2/26/27**
99	Transition/Activation Planning Work Plan Development	499 days	Tue 10/1/24	Fri 8/28/26
100	Transition Plan Execution	131 days	Fri 5/1/26	Fri 10/30/26
101	Medical Equipment, Furniture & IT Installations	131 days	Fri 5/1/26	Fri 10/30/26
102	Activation "Day in the Life" Events Training	44 days	Mon 11/2/26	Thu 12/31/26
103	Occupancy	41 days	Fri 1/1/27	Fri 2/26/27
104				
105	**TOWER A PROJECT CLOSEOUT**	**129 days**	**Mon 11/2/26**	**Thu 4/29/27**
106	Contractor Closeout	64 days	Mon 11/2/26	Thu 1/28/27
107	Financial Closeout	129 days	Mon 11/2/26	Thu 4/29/27



AIA® Document C202™ – 2015

Standard Form of Consultant's Services: Geotechnical Engineering

for the following **PROJECT**:
(Name and location or address)

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

This document provides the Consultant's scope of services only and should be attached as an exhibit to AIA Document C103™–2015, Standard Form of Agreement Between Owner and Consultant without a Predefined Scope of Consultant's Services.

THE OWNER:
(Name, legal status, and address)

THE GEOTECHNICAL ENGINEER:
(Name, legal status, and address)

THE AGREEMENT
This Standard Form of Consultant's Services is part of the accompanying C103™ -2015, Standard Form of Agreement between Owner and Consultant without a Predefined Scope of Consultant's Services dated the _____ day of _____ in the year _____
(In words, indicate day, month and year of the accompanying C103-2015.)

TABLE OF ARTICLES

ARTICLE 1 INITIAL INFORMATION
§ 1.1 The Geotechnical Engineer's performance of the services set forth in this document is based upon the information contained in this Article 1 and the Initial Information in C103-2015. If this information changes materially, the Owner and Geotechnical Engineer shall appropriately adjust the schedule, the Geotechnical Engineer's services, and the Geotechnical Engineer's compensation.
(List below information, including conditions or assumptions, which will affect the Geotechnical Engineer's performance.)

§ 1.2 Property Information
§ 1.2.1 Legal or other description of the Property upon, or for which, the Geotechnical Engineer's services will be performed.
(Insert legal description of the Property, if known. Otherwise, describe the Property.)

§ 1.2.2 Site access is provided by the arrangement checked below:

☐ The Owner has title to the Property and the right of entry for the Geotechnical Engineer to perform its services.

☐ The Owner has secured permission for entry to the Property for the Geotechnical Engineer to perform its services from the following parties subject to the conditions identified below.

Permission for entry provided by:
(Insert names, addresses, and telephone numbers of the present owner or tenant who has given permission for entry to the Property.)

Conditions:
(Insert conditions pertaining to the Geotechnical Engineer's access to the Property, such as time, noise, and equipment limitations.)

§ 1.2.3 The Geotechnical Engineer shall contact the following person(s) to schedule and make necessary arrangements for access to the Property.
(Insert names, addresses, and telephone numbers.)

§ 1.2.4 The Owner shall provide the Geotechnical Engineer with documents in the Owner's possession, such as geotechnical reports and surveys, that contain relevant information about the existing condition of the Property, including information regarding boundary lines, topography, means of access to the site, utilities, encumbrances, and locations of structures that may be affected by the Project.

§ 1.3 Project Information
The Owner shall provide the following Project information, to the extent known, to the Geotechnical Engineer:

§ 1.3.1 The Owner's objectives for the Project, including a general description and anticipated design loads of the buildings and other improvements being considered.

§ 1.3.2 A site plan showing grades and locations of proposed building or other improvements being considered.

§ 1.3.3 Other: *(Specify)*

ARTICLE 2 GEOTECHNICAL ENGINEER'S SERVICES

§ 2.1.1 The Geotechnical Engineer's services shall be performed by qualified personnel under the supervision of a licensed professional permitted to practice geotechnical engineering in the jurisdiction in which the Project is located.

§ 2.1.2 The Geotechnical Engineer shall review the information furnished by the Owner, and shall review laws, codes, and regulations applicable to the Geotechnical Engineer's services. The requirements of this Agreement shall be in addition to such laws, codes, and regulations. If a conflict exists between the requirements of the jurisdiction in which the Project is located and the requirements of this Agreement, the Geotechnical Engineer shall notify and consult with the Owner prior to proceeding with the services impacted by the conflict.

§ 2.1.3 The Geotechnical Engineer shall identify a benchmark at the site, record it in the Geotechnical Report, and reference field explorations to it as appropriate.

§ 2.2 Explorations and Testing

§ 2.2.1 The Geotechnical Engineer shall perform field explorations, including soils sampling and field testing, necessary for the planning and design of the Project and for preparation of the Geotechnical Report. The Geotechnical Engineer's explorations shall be consistent with the scope of the Project as determined through consultation with the Owner and Architect, and review of the Initial Information and any attached exhibits.

§ 2.2.2 The Geotechnical Engineer shall prepare a detailed plan for the Owner's approval, in consultation with the Owner and Architect, indicating the nature and location of all proposed field explorations. The Geotechnical Engineer's plan shall include, at a minimum, information regarding the type, number, location, and depth of proposed soil borings and other explorations. If the Geotechnical Engineer finds it necessary to change the location or depth of any of these proposed borings, the Geotechnical Engineer shall notify the Owner and Architect and a new location or depth shall be agreed upon between the Owner and Geotechnical Engineer, in consultation with the Architect.

§ 2.2.3 The Geotechnical Engineer shall perform laboratory tests necessary for the planning and design of the Project and for preparation of the Geotechnical Report. The Geotechnical Engineer shall provide a detailed plan, for the Owner's review and approval, of the Geotechnical Engineer's proposed laboratory tests.

§ 2.2.4 If the Geotechnical Engineer encounters unusual and unanticipated conditions, including materials which cannot be penetrated by standard sampling equipment, the Geotechnical Engineer shall immediately consult with the Owner and Architect.

§ 2.2.5 The Geotechnical Engineer shall advise the Owner and Architect as to any additional explorations and tests necessary for the Geotechnical Engineer to assess the conditions at the Property. The Geotechnical Engineer shall perform such additional work only as authorized by the Owner and after consultation with the Architect.

§ 2.2.6 The Geotechnical Engineer shall perform all field explorations and lab tests in accordance with current applicable ASTM International (ASTM) standards or other standards approved in advance by the Owner. The Geotechnical Engineer shall record all data in the field and reference it to the appropriate exploration point numbers. When collecting soil samples, the Geotechnical Engineer shall classify soils in field logs in accordance with applicable ASTM standards or other standards, including ASTM D2488 Standard Practice for Description and Identification of Soils. The classification for final logs shall be based on field information, plus results of tests and further inspection of samples in the laboratory by the Geotechnical Engineer preparing the reports in accordance with ASTM D2487 Standard Practice for Classification of Soils for Engineering Purposes or other Owner-approved standards.

§ 2.2.7 All samples collected by the Geotechnical Engineer are the Owner's property and shall be preserved according to Section 2.4. All field logs shall be prepared by the Geotechnical Engineer or by an experienced soils technician or experienced driller acting under the supervision of the Geotechnical Engineer.

§ 2.2.8 The Geotechnical Engineer shall take reasonable precautions to prevent damage to the Property, both visible and concealed, and shall reasonably restore the Property to the condition existing prior to the Geotechnical Engineer's entry. Such restoration includes backfilling of borings, patching of slabs and pavements, and repair of lawns and plantings. Each boring shall be capped pending additional groundwater readings. At the completion of the groundwater readings, the borings shall be permanently plugged, including patching of slabs and pavements.

§ 2.2.9 Prior to starting any field explorations, the Geotechnical Engineer shall contact the Owner and the appropriate public utility location service for information regarding buried utilities and structures. If requested by the Geotechnical Engineer and agreed to by the Owner, the Owner shall provide the services of a utility location firm to locate utilities not identified by a public utility location service.

§ 2.3 Geotechnical Report

§ 2.3.1 The Geotechnical Engineer shall analyze the information gathered from the field explorations and lab tests performed under Section 2.2 and consult with the Owner and Architect regarding the design and engineering requirements of the Project. Based on such analysis, the Geotechnical Engineer shall provide a written Geotechnical Report to the Owner. The Geotechnical Engineer shall provide the Geotechnical Report and any related documents to the Owner in a medium and format determined by the Owner and as required by the jurisdiction in which the Project is located. The Geotechnical Engineer shall sign and seal the Geotechnical Report as required by the jurisdiction in which the Project is located. The Geotechnical Engineer shall consult with the Owner and Architect regarding the information presented in the Geotechnical Report. The Geotechnical Report shall contain the following information:

§ 2.3.2 Background Information
§ 2.3.2.1 General description of the Project.

§ 2.3.2.2 List of all resources used in evaluation of the Property and preparation of the Geotechnical Report, including existing surveys and geotechnical reports.

§ 2.3.2.3 Narrative description of the history, existing features, and geology of the Property.

§ 2.3.3 Exploration and Test Results
§ 2.3.3.1 Record of the date and time of each field exploration.

§ 2.3.3.2 Plan showing dimensioned locations of each field exploration and equipment used.

§ 2.3.3.3 Identification of ASTM standards or other Owner-approved standard sampling and test methods used.

§ 2.3.3.4 All data as required by the ASTM standards or other Owner-approved standard sampling and test methods used.

§ 2.3.3.5 Chart illustrating the soil classification criteria, and defining the terminology and symbols used on the boring logs.

§ 2.3.3.6 Vertical sections for each boring, plotted and graphically presented to show (1) number of borings, (2) sampling method used, (3) date of start and finish, (4) surface elevations, (5) description of soil and thickness of each layer, (6) depth to loss or gain of drilling fluid, and (7) hydraulic pressure required or number of blows per foot (Standard Penetration Test N value for each sample). Where applicable, show depth to wet cave-in, depth to artesian head, groundwater elevation and time when water reading was made, and presence of gases. Note the location of strata containing organic materials, wet materials, or other inconsistencies that might affect engineering conclusions.

§ 2.3.3.7 Description of the existing surface conditions and a summary of the subsurface conditions.

§ 2.3.3.8 Subsurface profiles of rock or other bearing stratum.

§ 2.3.3.9 Estimate of potential variations in elevation and movements of subsurface water due to seasonal influences.

§ 2.3.3.10 Description of laboratory testing performed, and a report of all results, including laboratory determinations of soil properties.

§ 2.3.3.11 Results of any percolation tests performed.

§ 2.3.3.12 Other: *(Specify)*

§ 2.3.4 Foundation Evaluation and Recommendations
As part of the Geotechnical Report, the Geotechnical Engineer shall prepare an evaluation and recommendations for the necessary areas of consideration pertaining to existing or proposed foundations, including the following:

§ 2.3.4.1 Foundation support of the structure and slabs, including bearing pressures, bearing elevations, foundation design recommendations, anticipated settlement, and need for ground improvement to mitigate against settlement, liquefaction, and other conditions encountered on the Property.

§ 2.3.4.2 Anticipation and management of groundwater for design of structures and pavements.

§ 2.3.4.3 Lateral earth pressures and requirements for design of below grade walls and trenches, including backfill, compaction, and subdrainage.

§ 2.3.4.4 Soil material and compaction requirements for the support of structures and pavements, and for site fill, construction backfill, and grading.

§ 2.3.4.5 Subgrade moduli for design of pavements or slabs.

§ 2.3.4.6 Temporary excavation and temporary protection, such as excavation sheeting, underpinning, and temporary dewatering systems.

§ 2.3.4.7 Site stability, including slope stability and settlement.

§ 2.3.4.8 Site seismic activity and seismic design information with references to current applicable building code.

§ 2.3.4.9 Frost penetration depth and effect.

§ 2.3.4.10 Effect of weather or construction equipment or both on soil conditions during construction.

§ 2.3.4.11 Presence of potentially expansive soils; deleterious, chemically active, or corrosive materials or conditions; or the presence of gas. The analysis shall not require the Geotechnical Engineer to provide environmental assessment services for the Project unless otherwise agreed to by the Geotechnical Engineer and Owner.

§ 2.3.4.12 Depth of material requiring rock or other difficult soil excavation and suggested methods of removal.

§ 2.3.4.13 Potential sustainable design elements and low-impact development.

§ 2.3.4.14 Other: *(Specify)*

§ 2.4 Samples

The Geotechnical Engineer shall dispose of samples as indicated below after all laboratory tests have been completed:

- ☐ Discard
- ☐ Retain at the Geotechnical Engineer's office, and remain open to inspection until
  - ☐ the end of the Project's Bidding or Negotiation Phase.
  - ☐ the Project's foundation installation is complete.
  - ☐ Substantial Completion.
- ☐ Other: *(Specify)*

§ 2.5 Design Phase Services

§ 2.5.1 During the design phase of the Project, the Geotechnical Engineer shall consult with the Owner and the Owner's other consultants regarding geotechnical aspects of the Project.

§ 2.5.2 The Geotechnical Engineer shall review, and provide written comments on, geotechnical aspects of drawings, specifications, and other design submittals prepared by the Owner and the Owner's other consultants.

§ 2.6 Construction Phase Services

During construction of the Project, the Geotechnical Engineer shall consult with the Owner and the Owner's other consultants regarding geotechnical aspects of the Project. If required, site visits shall be performed as an Additional Service in accordance with Article 3.

ARTICLE 3 ADDITIONAL SERVICES

§ 3.1 Additional Services listed below are not included in Basic Services but may be required for the Project. The Geotechnical Engineer shall provide the listed Additional Services only if specifically designated in the table below as the Geotechnical Engineer's responsibility.

(Designate the Additional Services the Geotechnical Engineer shall provide in the second column of the table below. In the third column indicate whether the service description is located in Section 3.2 or in an attached exhibit. If in an exhibit, identify the exhibit.)

Services	**Responsibility** *(Geotechnical Engineer, Owner or Not Provided)*	**Location of Service Description** *(Section 3.2 below or an exhibit attached to this document and identified below)*
§ 3.1.1 Ground Motion Studies		
§ 3.1.2 Bidding or Negotiation related Services		
§ 3.1.3 Ground Water Control		
§ 3.1.4 Earth Structures and Retention Systems		
§ 3.1.5 Preparation of Specifications		
§ 3.1.6 Geologic Mapping		
§ 3.1.7 Site Visits during Construction		
§ 3.1.8 Construction Phase Testing and Inspections		
§ 3.1.9 Ground Improvement		
§ 3.1.10 Other:		

§ 3.2 Insert a description of each Additional Service designated in Section 3.1 as the Geotechnical Engineer's responsibility, if not further described in an exhibit attached to this document.

Exhibit D
Civil Engineer's Compensation & Schedule of Values

CIVIL ENGINEER FEES & REIMBURSABLE EXPENSES CAP

	Fixed Fee
TOTAL CIVIL ENGINEER'S FEES (Pre-Design + SDs + Sitework CDs + Construction Phase + Additional Consultants)	$ _____
TOTAL CIVIL ENGINEER'S REIMBURSABLE EXPENSES	$ _____
PERCENT REDUCTION IF AWARDED GEOTECHNICAL & CIVIL ENGINEERING PROFESSIONAL SERVICES	_____ %

Civil Engineer Schedule of Values	Fixed Fee
Tower A Pre-Design Phase	$ _____
Towers B & C Pre-Design Phase	$ _____
Tower A Schematic Design Phase	$ _____
Towers B & C Schematic Design Phase	$ _____
Tower A Site Work Construction Documents Phase	$ _____
Tower A Construction Phase & Closeout	$ _____

Additional Consultants Supporting Pre-Design and Tower A Early Site Work Foundation CDs Schedule of Value Description	Fixed Fee
Consultant 1: _____	$ _____
Consultant 2: _____	$ _____
Consultant 3: _____	$ _____

HOURLY BILLING RATES FOR ALL COMPANIES INCLUDED IN PROPOSAL

Rates, inclusive of DPE, to be provided for all Civil Engineering Team members/roles