

**AMENDMENT NO. 1  
TO THE  
PROFESSIONAL SERVICES AGREEMENT  
MASTER ARCHITECT/ENGINEER SERVICES  
FOR  
CAPITOL COMPLEX PROJECTS  
BETWEEN  
THE TEXAS FACILITIES COMMISSION  
AND  
PAGE SOUTHERLAND PAGE, INC.**

**This Amendment No. 1** to the Professional Services Agreement Master Architect/Engineer Services for Capitol Complex Projects (hereinafter referred to as “Amendment No. 1”) is entered into by and between the Texas Facilities Commission (hereinafter referred to as “TFC”), a state agency located at 1711 San Jacinto Boulevard, Austin, Texas 78701, as Owner (as defined in UGC, Section 1.28), and Page Southerland Page, Inc. (hereinafter referred to as “Master Architect/Engineer” or “Master A/E”), located at 400 East West Cesar Chavez Street, 5<sup>th</sup> Floor, Austin, Texas 78701 (hereinafter referred to collectively as the “parties”), to amend the original Professional Services Agreement between the Parties.

**RECITALS**

WHEREAS, on July 21, 2016, the parties entered into that one certain *Professional Services Agreement Master Architect/Engineer Services for Capitol Complex Projects Between the Texas Facilities Commission and Page Southerland Page, Inc.* (hereinafter referred to as the “Agreement”); and

WHEREAS, the parties desire to amend the Agreement to provide for Additional Services and Fees as more particularly described below;

NOW THEREFORE, the Parties hereby agree as follows:

1. Unless clearly provided otherwise herein, all terms and phrases in initial caps herein shall have the same meaning as the terms and phrases with initial caps in the Agreement.
2. The parties agree to modify ARTICLE II – DESCRIPTION OF PROJECTS AND SCOPE OF SERVICES by adding Section 2.2.9, which shall read in its entirety as follows:

“2.2.9. Part Two Services for Capitol Complex Projects. Master A/E agrees to provide the Professional Services described below and more particularly set forth in “Exhibit A-1,” Master A/E’s Detailed Scope and Fee Schedule for Amendment No. 1, attached hereto and incorporated herein for all purposes.

2.2.9.1. Project engagement, as described in Exhibit A-1 including, but not limited to presentation to governmental officials and stakeholders.

2.2.9.2. Public and Private Utility Infrastructure Improvements coordination and approvals. Develop analyses, protocols and plans for relocation and improvement of roadways and utilities, and assist in obtaining approvals and permits from the City of Austin and other utility companies as further described in Exhibit A-1.

2.2.9.3. Conceptual (Schematic) design as follows:

2.2.9.3.1. develop Conceptual design for excavation, utilities, central utility plant expansion, utility tunnel, MLK Building and associated structured parking, Congress Building and associated structured parking, Texas Mall and underground parking garage; and

2.2.9.3.2. develop Phasing Plan for each Conceptual Design Package (hereinafter CDP).

2.2.9.4. Architect of Record (“AOR”) Design Phase Services – Compliance reviews and related activities.

2.2.9.5. Construction Phase Services – Assist TFC during the Construction Phase as described in Exhibit A-1.

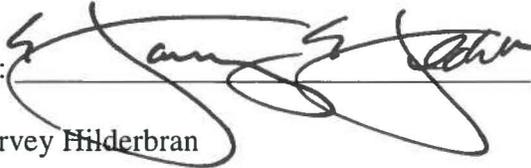
3. The parties agree to modify ARTICLE IV – CONSIDERATION; PAYMENT CONDITIONS, SECTION 4.1 – CONTRACT LIMIT – FEES AND EXPENSES, SUBSECTION 4.1.1 – FIXED FEE, by reflecting additional compensation to the Master A/E for services provided under this Amendment No. 1 in the amount of Six Million One Hundred Thirty Three Thousand One Hundred Fifty and No/100 Dollars (\$6,133,150.00), thus increasing the total amount of the Agreement from One Million Five Hundred Ninety One Thousand Seven Hundred Fifty and No/100 Dollars (\$1,591,750.00), to a total not to exceed amount of Seven Million Seven Hundred Twenty Four Thousand Nine Hundred and No/100 Dollars (\$7,724,900.00) .

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4. All other terms and conditions of the Agreement not expressly amended herein shall remain in full force and effect.

**TEXAS FACILITIES COMMISSION**

**PAGE SOUTHERLAND PAGE, INC.**

By:   
Harvey Hilderbran

By:   
Robert E. Burke

Executive Director

Executive Vice President

Date of execution: 2-2-17

Date of execution: 1/31/17

G.C. \_\_\_\_\_

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D.E.D. an

**TFC CONTRACT NO. 16-106-000**

**AMENDMENT NO. 1**

**MASTER A/E'S DETAILED SCOPE AND FEE SCHEDULE**

**FOR**

**AMENDMENT NO. 1**

**Page/**TEL 512 472 6721  
FAX 512 477 3211**Page Southerland Page, Inc.**  
400 W. Cesar Chavez Street, Suite 500  
Austin, Texas 78701  
pagethink.com

December 10, 2016

Janie Gribble, AIA, LEED AP, CTCM  
Sr. Project Manager  
Facilities Design & Construction  
Texas Facilities Commission  
1711 San Jacinto  
Austin, Texas 78711(512) 463-9456  
janie.gribble@tfc.state.tx.usRe: TFC Contract 16-106-000  
Master Architect/Engineer Services for Capitol Complex Projects - Amendment 1  
Page Project – 116019.01

Dear Janie,

As requested we are submitting a proposal for a contract amendment to provide scope items 4 – 8 described below for the above referenced project. Scope items 1-3 have been provided as part of the initial base contract, ending January 4, 2017. This is clearly noted in Item C. Outline of Professional Services Provided by Phase, below. Please let us know if you have any questions.

**A. Description of Projects**

1. The Projects include all aspects of Phase 1 of the Master Plan, as may be amended by TFC from time to time, for the planning, development, architecture, engineering, design, procurement, demolition, renovation and construction of facilities and improvements on the Sites described in Section 2, below.
  - a. One approximately 605,000 GSF Building at Congress Avenue and Martin Luther King Boulevard.
  - b. One approximately 421,000 GSF Building at Congress Avenue and 17th Street.
  - c. Five levels of underground parking under Congress Avenue from 16th Street to Martin Luther King Boulevard.
  - d. One Capitol Complex Physical Plant Annex at the Sam Houston Building.
  - e. Walkable underground thermal utility tunnels from the Physical Plant Annex to new building at Congress Avenue and 17th Street.
  - f. Landscaped Pedestrian Mall on Congress Avenue from 16th Street to Martin Luther King Boulevard.
2. The Sites planned for development of the Projects are:
  - a. State of Texas Parking Lot #7 (across from the Texas State History Museum): One full block bounded by North Congress Avenue, Martin Luther King, Jr. Boulevard, Brazos Street, and 18th Street.
  - b. State of Texas Parking Lot #2 (directly west of the Lyndon B. Johnson (LBJ) Building): One half block bounded by North Congress Avenue, 17th Street, the LBJ Building, and 16th Street.

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- c. North Congress Avenue Right of Way extending from Martin Luther King, Jr. Boulevard to 15th Street.
- d. Parking lot and service yard west of the Sam Houston Building (SHB): One half block bounded by SHB, 14th Street, San Jacinto Boulevard, and 13th Street.
- e. Additional Street Right of Ways including:
  - i. 14th Street from Brazos Street to San Jacinto Boulevard
  - ii. Brazos Street from 15th Street to 14th Street
  - iii. 15th Street from Congress Avenue to Brazos Street
  - iv. 16th Street from Congress Avenue to Brazos Street

## **B. General Duties for Performance of Professional Services**

1. The Master A/E shall furnish or provide the architectural, engineering, scheduling, and all other Services necessary and/or reasonably inferable from this Agreement (regardless of whether expressly described herein), the Project Analysis (or the equivalent thereof), the Design Program, the Master Plan, and all other relevant data for the successful planning, design and construction of the Projects in accordance with TFC's requirements, as outlined in the TFC's relevant data defining the Projects. The Professional Services shall include Basic Services, plus Additional Services as may be authorized by TFC.
2. Master A/E shall, in accordance with its Standard of Care, verify the accuracy and suitability of any drawings, plans, sketches, instructions, information, requirements, procedures, requests for action, and other data supplied by TFC and other members of the Project Team to the Master A/E prior to being used by Master A/E in the performance of the Services.
3. Develop all documents in accordance with A/E Guidelines and the Owner's Project Requirements ("OPR").
4. Assist the Owner, as and when requested, in project presentations.
5. Advise and assist Owner in connection with the architecture and engineering for the Projects. Direct all communications of the Master A/E with respect to the Services to the CMA and the TFC Project Manager(s), who shall jointly serve as the Master A/E's points of contact to the Owner.
6. Design Transition Between Master A/E and Architect/Engineers. Promptly after conclusion of the Schematic Design Phase for any Project and prior to commencement of any Project's Design Development Document Phase, the Master A/E and its design team members involved in the development of the Schematic Design Packages for the Projects shall meet with each Architect/Engineer and its design team members to ensure an efficient, coordinated and comprehensive transition of design responsibilities between the Master A/E and each Architect/Engineer in an effort to minimize duplication of design-related activities between them. It is agreed, acknowledged, and understood by the Master A/E that the Program requires the Architect/Engineer for each Project to assume, at or prior to commencement of each Project's Schematic Design Phase, full responsibility for the development of the Design Development Phase documents, and the Construction Documents for each respective Project.

## **C. Outline of Professional Services Provided by Phase**

Base Contract, concluding January 4, 2017, includes the following activities:

1. Project Start Up and Design Management
  - a. Management Plan
  - b. Communication Plan and Protocols
  - c. Project Schedule
  - d. Project Specific Quality Control Plan
  - e. Develop BIM Execution Plan
2. Coordination Services
3. Programming and Pre-Conceptual Design Analysis

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Contract Amendment 1, beginning January 5, 2017 and ending December 31, 2020, includes the following activities

4. Project Engagement
5. Public and Private Utility Infrastructure Improvements Coordination and Approvals
6. Conceptual (Schematic) Design
  - a. Develop Conceptual Design
  - b. Develop Phasing Plan for each Conceptual Design Package (CDP)
7. AOR Design Phase Services – Compliance reviews and related activities
8. Construction Phase Services – Compliance reviews and related activities

## **D. Detailed Scope of Services**

Base Contract, starting September 6, 2016 and concluding January 4, 2017, includes the following activities:

1. Project Start up and Pre-Design Management Activities
  - a. Management Plan
    - i. Help define and monitor project scope, schedule and budget throughout the project in coordination with the CMA. CMA is primary author. Fees related to this work for later phases is captured in those phases.
    - ii. Coordinate scope within design team
    - iii. Develop and maintain internal design team staffing plan
    - iv. Help monitor and report project progress. Fees related to this work for later phases is captured in those phases.
    - v. Advise TFC and CMA on cost estimating, monitoring and approval regimens
  - b. Communication Plan and Protocols
    - i. Help define lines of authority with CMA.
    - ii. Help define lines of distribution with CMA.
    - iii. Establish initial phase electronic communication platforms. Coordinate final electronic communication platforms with CMA.
    - iv. Communication documentation format – agendas, minutes, owner review checking/tracking, action item/decision tracking, change management
    - v. Project meetings
  - c. Preliminary Project Schedule
    - i. Help identify key project milestones ie... Design presentations to TFC, PAC, 2017 Legislation Session, groundbreaking
    - ii. Help define project packaging and phasing strategies
    - iii. Help develop sub key milestones such as package handoffs, A/EOR selection, CMR selection etc...
    - iv. Help develop high level schedule for review and approval
    - v. Develop task level schedule for all major design activities
    - vi. Help monitor and advise CMA on schedule on regular basis, including weekly review at OAC meeting
  - d. Project Specific Quality Control Plan
    - i. Using Page QC manual develop project specific plan
    - ii. Identify and schedule independent technical review team (ITR)
    - iii. Schedule all QC activities in detail Project Schedule
    - iv. Monitor and provide reports for quality control checks and comment closeout
  - e. Develop BIM Execution Plan

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- i. BIM Standards and Protocols. In coordination with the CMA, the Master A/E shall assist in the implementation of project management information systems, including management, oversight, and facilitation of the development of the Owner's Building Information Model (BIM) and a BIM execution plan to be established based upon the form of the DRAFT ConsensusDOCS 301 BIM Addendum (2015 Edition) which is attached hereto and incorporated by reference herein as "Exhibit K."

## 2. Coordination Services

- a. Sustainability Recommendations: In coordination with the CMA, evaluate and make a joint recommendation for the use of certain sustainable principles and guidelines, and include a cost-benefit analysis of various sustainability and energy-efficiency measures for implementation by the Project Team pursuant to the Owner's Project Requirements. It is a Design Program requirement that all Projects be designed and constructed in accordance with the "green-building" requirements contained in the aforementioned joint recommendation as approved by the TFC.
- b. Program Review; Development of the PMP and PIPs. The Master A/E shall, in collaboration with the CMA, perform a comprehensive review and evaluation of the Project Analysis, the Design Program, the Master Plan, and other relevant information, and make a joint recommendation to Owner on the adaptation and/or use thereof in connection with the development of the CDPs and implementation of the PMP and PIPs. The Master A/E shall further coordinate with the CMA in the development of the PMP and each project-specific PIP.
- c. As requested by the CMA, the Master A/E shall assist the CMA in establishing cost controls for compliance with the Owner's Fixed Limit of Cost.
- d. As requested by the CMA, the Master A/E shall provide input to the CMA regarding the Program Master Schedule, including establishment of durations for Architect/Engineer's Services.

## 3. Programming and Pre-Conceptual Design Analysis

- a. Program
  - i. Conduct vision session with TFC to revalidate overall project vision
  - ii. Conduct vision session with other stakeholders to be defined by TFC
  - iii. Conduct detailed programming sessions to identify all quantitative and qualitative project requirements
  - iv. Perform space analysis based upon project needs to define overall building support, core, public and lobby, circulation, museum, physical fitness, food service, day care and other required spaces
  - v. Perform blocking and stacking analysis to validate program needs
  - vi. Develop a detailed program document with all final space needs including validation diagrams
  - vii. Identify program level overall leasable space (not BOMA), BOMA calcs would need to be done in later phase
- b. Existing Agency Analysis
  - i. Perform analysis and site visits (up to 20), of potential Agency Tenants only for types of space requirements, workstation/closed office ratios, etc. - not for detailed Agency space program
- c. Initial Public and Private Utility/Infrastructure/Roadway Improvements Analysis
  - i. Assemble and review existing utility, storm drainage and management information from City of Austin, utility providers and TFC records

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- ii. Assemble and review existing roadway and transportation information including performing Traffic Impact Analysis (TIA) for the streets and intersections listed in the RFQ, develop initial recommendations for the project
- iii. Review topo and utility survey currently being developed by TFC consultant
- iv. Review geotech information currently being developed by TFC consultant
- v. Review existing system capacities with Utility providers, analyze new and future loading and required upgrades to support the initial and future buildout programs
- d. Initial Pre-Conceptual Design Analysis
  - i. Develop physical design project configuration – massing, ground level and subgrade planning to a pre-conceptual level to determine, in conjunction with CMA and TFC input, specific options for partitioning/packaging project.
  - ii. Assist CMA and TFC in further developing the scope of work, timeline, and packaging of work for subsequent scopes of work past Scope Items 1-3.

Contract Amendment 1, beginning January 5, 2017 and ending December 31, 2020, includes the following activities

- 4. Project engagement
  - a. Preparation for, attendance and presentation at up to (20) meetings to the Texas Facilities Commission, PAC, Governor's Office, and other key State of Texas stakeholders; City of Austin; informational general public outreach; AEOR, CMR and Subcontracting outreach.
  
- 5. Public and Private Utility Infrastructure/Roadway Improvements Coordination and Approvals
  - a. Analysis
    - i. Further develop initial analysis performed under Scope Item 3.c.
  - b. Documentation
    - i. Using utility survey documents, develop comprehensive existing utility plan for utilities affected by the project (it is anticipated that this will not cover the entire Capitol Complex)
    - ii. Develop storm management strategy for the project including concept level for construction phase
    - iii. Develop utility demolition concept level plans
    - iv. Develop concept level roadway, traffic signal demolition plans
    - v. Develop concept level relocated/upgraded/new utility plan
    - vi. Develop concept level thermal utility routing, size, tunnel requirements
    - vii. Develop concept level traffic, circulation and roadway improvements and phasing strategies
    - viii. Develop phasing concepts
    - ix. Coordinate with Owner's Site Services Engineer (SSE) for required street vacations – SSE will be responsible for the actual street vacation services.
  - c. Preliminary Review and Approvals
    - i. Review design options with TFC prior to presentation to City of Austin
    - ii. Preliminary coordination with City of Austin Departments for project scope and phasing based upon schematic plans
    - iii. Preliminary coordination of AULCC (Austin Utility Location Coordination Committee) based upon schematic plans
  
- 6. Conceptual (Schematic) Design – each of the following will be components of 6 overall Conceptual Design Packages (CDP), with timing for deliverables to be determined to coordinate with the CMA's schedule for onboarding AOR/EORs, as it is approved and finalized.

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- a. Overall CDP Packages to include:
  1. Package 1 – Excavation
  2. Package 2 – Utilities
  3. Package 3 – Central Utility Plant Expansion and Tunnel
  4. Package 4 – MLK Building and Associated Structured Parking
  5. Package 5 – Congress Building and Associated Structured Parking
  6. Package 6 – Texas Mall and Underground Parking Garage
- b. Develop Conceptual Design
  1. Site Planning and Landscape Design
    - i. Site Plan, describing:
      1. Site boundaries, topography, existing buildings, setbacks, and easements
      2. Building orientation with respect to path of sun
      3. Building massing and relationship to massing of surrounding buildings
      4. Future building expansion potential
      5. Location of on-site and off-site utilities (see item #5 – Public and Private Utility Infrastructure/Roadway Improvements Coordination and Approvals - above for additional requirements)
      6. Grading and drainage
      7. General landscape design, showing location of major features
      8. Pedestrian and vehicular circulation (include direction of traffic on adjoining streets)
      9. Parking and service areas
      10. Fire protection, water supplies, fire hydrants, and fire apparatus access roads
      11. Interconnection with adjacent underground structures
      12. Site security plan showing physical and electronic security concepts
    - ii. Narrative
      1. Description of site and landscape design final concept
      2. Demolition, if required
      3. Circulation
      4. Parking and parking controls
      5. Security
      6. Paving
      7. Landscape design
      8. Irrigation, if any
      9. Utility distribution and collection systems
      10. Method for storm water detention or retention
      11. Landscape maintenance concept
      12. Fire protection, water supplies, fire hydrants, and fire apparatus access roads
      13. Accessibility path for the physically disabled
  2. Architectural
    - i. Drawings (BIM)
      1. Demolition plans, if required
      2. Floor and ceiling plans, showing at a minimum:
        - a. Work areas, lobbies, corridors, entrances, stairways, elevators, special spaces, and service spaces (with the principal spaces labeled). Dimensions for critical clearances, such as vehicle access, should be indicated.

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- b. Office areas must show proposed layouts down to the office level of detail verifying the integration between the approved program and the building concept is achievable.
        - c. Proposed interior layouts showing:
          - i. Open office plan
          - ii. Enclosed office plan
          - iii. Indicate how major mechanical and electrical equipment can be removed/replaced
        - d. Comprehensive Life Safety Plans
      3. Elevations of major building facades, showing:
        - i. Fenestration
        - ii. Exterior materials
        - iii. Cast shadows
      4. Elevations of major interior spaces, showing:
        - i. Lobby/atrium
        - ii. Typical public elevator lobby
        - iii. Typical elevations
      5. Concept level details to showing major envelope components
      6. Building sections (as necessary), showing:
        - i. Adequate space for structural, mechanical and electrical, telecommunications, and fire protection systems
        - ii. Mechanical penthouses
        - iii. Floor-to-floor and other critical dimensions
        - iv. Labeling of most important spaces
        - v. Labeling of floor and roof elevations
    - ii. Renderings (Electronic)
      1. Two of each building and Landscaped Mall
      2. Two of each building main lobby
      3. One fly through animation for the two main building public lobbies, one for the cultural venue plaza and one of the landscaped mall.
    - iii. Calculations
      1. Acoustical calculations, including noise transmission through:
        - a. Envelope
        - b. Interior walls, floors (including raised floors), and ceilings
        - c. Mechanical and electrical equipment
      2. Heat transfer through and dew point locations in building envelope
      3. Plumbing fixture count analysis
      4. Illumination, daylighting, and glare analysis
      5. Passenger and freight elevator analysis
      6. Loading dock analysis
      7. Energy code compliance analysis (initial building thermal modeling)
    - iv. Narrative
      1. Architectural program requirements
        - a. Show in tabular form how the final concept meets the program requirements for each critical function.
        - b. A revised description of any deviation from TFC AE Guidelines
        - c. Description of final concept, explaining:
          - i. Expansion potential
          - ii. Building floor efficiency

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2. Location and sizes of mechanical equipment rooms for accessibility, maintenance and replacement of equipment (including cooling towers and emergency generators)
  3. Conveying systems design (passenger and freight elevators, escalators)
  4. Loading docks
  5. Thermal, air leakage, and operational performance and maintainability of the building envelope
  6. Design strategy to attain the assigned energy goal
  7. Treatment of historic zones, if applicable
  8. Operations and maintenance goals (exterior and interior window washing, relamping, etc.)
  9. Sustainable design concepts – describing recommended best practices for sustainable design.
  10. Vertical transportation analysis (passenger and freight elevators and escalators)
  11. Life cycle analysis on major system options such as roofing and exterior envelope construction
  12. Acoustical criteria for all types of spaces
  13. Code analysis
    - a. The Code criteria must be reviewed by each design team discipline member to the degree of detail necessary to assure that tasks accomplished in this phase meet all the Code requirements.
    - b. A Code/Criteria analysis must be prepared by each design team discipline member that documents an investigation of the applicable codes and agency criteria that will govern the design of a specific project. This analysis should alert TFC to any conflicts in the project's design criteria so that they can be resolved early. The analysis should also provide a common perspective for the design and review of the project.
- v. Specifications
1. Outline specifications for all anticipated materials and systems
3. Structural
- i. Drawings (BIM)
    1. Preliminary framing concepts for use in performing life cycle cost analysis and for office option analysis to include quantity analysis of reinforcement and concrete quantities for use in cost estimating of system options
    2. Framing and foundation plans of the proposed structural system showing column locations, bay sizes, shear walls, retention systems for underground structures, slab and underground wall dewatering concepts, miscellaneous structural system concepts, structural concepts at required typical types of major floor openings, and location of expansion and seismic joints
    3. Framing plans to include planned live load capacities for various areas
    4. Framing plans to include concept level column, beam and other major framing component sizing
    5. Concept level structural details for system definition and pricing
  - ii. Calculations

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1. Preliminary calculations for concept level structural system sizing
    - iii. Narrative
      1. Identification of unusual local code requirements
      2. Code compliance statement
      3. Name of model building code followed
      4. Building classification
      5. Identification of region of seismicity, wind speed, etc.
      6. Identification of special requirements, such as high-rise
      - 7.
    - iv. Specifications
      1. Outline specifications for all anticipated materials and systems
4. Mechanical (BIM)
  - i. Provide a minimum of 3 building system approach concepts at preliminary concept phase with corresponding life cycle cost analysis
  - ii. For the system approved and selected from the 3 concepts, provide the following:
  - iii. Drawings
    1. HVAC Systems
      - a. Floor plan(s):
        - i. Demolition plans if necessary due to Central Plant expansion
        - ii. Identification of equipment spaces for mechanical equipment with preliminary equipment layout
        - iii. Central plant layout concept
        - iv. Location of mechanical equipment, including size, weight, access to loading docks and freight elevators, and clearance requirements for operation, maintenance, and replacement
      - b. Flow diagram(s):
        - i. Air flow riser diagrams representing supply, return, outside air, and exhaust systems
        - ii. Water flow riser diagrams of the main mechanical systems in the mechanical room(s) and throughout the building including central plant and site distribution
    2. Plumbing Systems
      - a. Floor plan(s):
        - i. Proposed building zoning and major piping runs for domestic cold and hot water, storm, sanitary, gas, grease waste, and other required pretreatment if necessary
        - ii. Locations and types of proposed plumbing fixtures and equipment
      - b. Systems schematics and flow diagrams
  - iv. Narrative
    1. HVAC - A written narrative describing the selected mechanical systems and equipment, including:
      - a. Indoor and outdoor design conditions for all spaces under occupied, 24-hour, and unoccupied conditions
      - b. Ventilation rates, dehumidification, and pressurization criteria

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- for all spaces under occupied, 24-hour, and unoccupied conditions
  - c. Acoustical requirements for all equipment and air devices for each typical space
  - d. Equipment capacities, weights, sizes, and power requirements
  - e. Description of heating, cooling, ventilating, and dehumidification systems for each major functional space
  - f. Description of heating, cooling, ventilating, and dehumidification control strategies for each air handling system under occupied, 24-hour, and unoccupied conditions
  - g. Fuel and utility requirements
  - h. A code compliance statement
- 2. Plumbing
  - a. Description of proposed plumbing systems, including domestic cold and hot water, sanitary and storm drainage, and irrigation
  - b. Evaluation of alternate sources for preheating of domestic water (solar or heat recovery)
- 3. Calculations and energy and water analyses
  - a. Building heating and cooling load calculations (concept level)
  - b. Psychrometric calculations for HVAC systems at full load and partial loads. (Partial loads at 50% and 25%, and unoccupied periods)
  - c. Energy consumption calculations and analysis.
  - d. Water consumption calculations and analysis including make-up water for HVAC systems, domestic water consumption, and water consumption for irrigation
  - e. Fuel consumption estimates
- 4. Specifications
  - a. Outline specifications for all anticipated materials and systems
- 5. Fire Protection
  - i. Fire protection and life safety shall be identified as a separate Fire Protection submission
  - ii. Drawings (BIM for systems)
    - 1. Plans showing
      - a. Life safety occupancy types, exit loading, exiting strategies, fire and/or smoke compartmentation
      - b. Equipment spaces for fire protection systems (e.g., fire pump, fire command center, fire alarm and mass notification systems, smoke control equipment, etc.)
      - c. Fire protection water supplies, fire hydrant locations, fire apparatus access roads, and fire lanes
      - d. Fire suppression zoning plans with hazard classification
      - e. Fire alarm and mass notification zoning plans
      - f. Special system requirements for high value areas such as museum, data centers, etc...
    - 2. Diagrams
      - a. Fire suppression concept level flow diagrams
      - b. Fire alarm and mass notification concept level riser diagram

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- c. Smoke control concept diagrams for stair pressurization, atriums, and other required systems
      - d. Special systems such as clean agent
  - iii. Narrative
    - 1. Description of the building's proposed fire protection systems including the egress system
    - 2. Code compliance analysis
      - a. The design team fire protection engineer must prepare an analysis of the applicable codes and agency criteria that will govern the design of the specific project. For example, items such as, but not limited to classification of construction and occupancy group(s), rating of structural components, fire resistance requirements, interior finish, occupant load calculations, exit calculations, identification of areas to receive automatic sprinkler systems and automatic detection systems, smoke control systems, special risk areas such as museum and data protection requirements etc. would be prepared by the design team fire protection engineer as necessary to provide a complete fire protection and life safety analysis for the final concept.
    - 3. Calculations
      - a. Preliminary calculations for water supply availability and adequacy
      - b. Preliminary fire pump and hydraulic calculations
      - c. Preliminary smoke control system calculations
      - d. Occupancy load and exit calculations
  - iii. Specifications
    - a. Outline specifications for all anticipated materials and systems

## 6. Electrical

- i. Provide a minimum of 2 concepts for electrical distribution at preliminary concept phase including preliminary load analysis and concept electrical riser with corresponding life cycle cost analysis
  - ii. Provide a minimum of 2 concepts for lighting schemes for general office areas and parking garages with corresponding life cycle cost analysis.
  - iii. For the system approved and selected, provide the following:
  - iv. Drawings (BIM)
    - 1. Plans showing equipment spaces for all electrical equipment to include: panels; switchboards; transformers; uninterruptible power supply (UPS); and generators
    - 2. Concept electrical one line diagram showing preliminary equipment sizing
    - 3. Concept electrical emergency power one line diagram
  - v. Narrative
    - 1. Description of electrical systems
    - 2. Describe the proposed lighting and lighting control system
    - 3. Proposed special features of electrical system
    - 4. Grounding system
    - 5. Lighting protection
    - 6. Utility provider coordination including service request analysis

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7. UPS requirements
8. Emergency power requirements, sizing and description
9. Code compliance statement
10. Calculations
  - a. Preliminary electrical load calculations
  - b. Preliminary emergency power system sizing calculations
- iv. Specifications
  1. Outline specifications for all anticipated materials and systems
7. Security
  - i. Provide an analysis of site and building physical security measures and access and recommend physical protection requirements
  - ii. Provide an analysis of required site and building electronic security measures and recommend proposed protection
  - iii. Show location of all required security spaces and major equipment requiring floor space
  - iv. Narrative
    1. Provide a risk analysis of the proposed buildings, garages and site improvements
    2. Provide a comprehensive security narrative describing all strategies and solutions
  - v. Specifications
    1. Outline specifications for all anticipated materials and systems
8. (Special Systems) IT/Telecom/AV/Parking Controls
  - i. Provide a minimum of 2 concepts for site and building distribution for each special system at preliminary concept phase with corresponding life cycle cost analysis
  - ii. Perform analysis on officing schemes to be analyzed by Architecture described above and impact on IT/Telecom/AV system infrastructure capacity.
  - iii. Drawings (BIM)
    1. Plans showing equipment spaces for all equipment and distribution
    2. Concept level diagram showing preliminary building entrances and vertical distribution
    3. Concept electrical emergency power one line diagram
  - iv. Narrative
    1. Description of system and configuration
    2. Dry utility provider coordination
    3. Special power requirements and reliability requirements
  - v. Specifications
    - a. Outline specifications for all anticipated materials and systems
9. Certification Requirements
  - i. The architect/engineer must certify that the concept design complies with the State of Texas Capitol Complex Master Plan, program requirements, State

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Energy Conservation Office (SECO) energy goals, and local regulatory agencies where applicable

- ii. In bullet form, identify how proposed design features will support performance expectations of the project. Expectations are identified in the project's design program and the Owner's Project Requirements.
- iii. Final concept energy analysis.

## 10. Building Information Model

- i. A BIM for each final concept is required to a minimum Level 200 development (in accordance with AIA E202 Standards). The contents of the BIM shall be such that the BIM shall be the source for 2D drawings and SDM requirements to the greatest extent possible.
- ii. When 2D deliverables require a finer level of detail, the BIM shall be the central source for 2D details and/or be modeled in greater detail to accommodate the specific requirements. The BIM Execution Plan shall also be reviewed and a VDC Scorecard analysis shall be conducted to ensure all parties are in compliance.

## 7. AOR Design Phase Services.

- a. The Master A/E shall assist in the selection and evaluation of the Architect/Engineers of Record for each of the six major Projects.
- b. At benchmark issue milestones in the six major Projects, during the Design Development and Construction Documents Phases, the Master A/E shall review the Architect/Engineers' Drawings and Specifications for compliance to the CDPs.
- c. The Master A/E shall assist the CMA in causing the Architect/Engineer for each Project to provide a design that allows for the construction of each Project within the applicable Construction Cost Limitation.
- d. The Master A/E shall assist the CMA and Architects/Engineers of Record to determine the compliance with the CDPs of major submittals, change requests and major substitute or "or-equivalent" materials and equipment proposed by other service providers.
- e. As requested by the CMA, the Master A/E shall assist the CMA in evaluating any service providers' value engineering proposals.
- f. The Master A/E shall assist the Owner as necessary in project presentations and periodic progress updates.
- g. The Master A/E shall monitor each Architect/Engineer's compliance with the PMP and applicable PIP, and submit a report to CMA and Owner on a monthly basis regarding same. Master A/E shall promptly advise CMA and Owner of Architects/Engineer's deviation from the PMP and applicable PIP, and Cause appropriate corrective actions to be implemented by the Architect/Engineer to bring its Services into conformance with the PMP, and applicable PIP.

## 8. Construction Phase Services.

- a. The Master A/E shall attend pre-construction conferences and partnering meetings between the Owner, CMA, Construction Managers, Architect/Engineers, Site Services Engineer, and other Service Providers to discuss general and specific requirements of the construction contracts and communication protocols.
- b. The Master A/E shall determine the compliance with the CDPs of a limited number of major submittals, major change requests and any major substitute or "or-equivalent" materials and equipment proposed by other service providers.
- c. As requested by the CMA, the Master A/E shall assist the CMA and Owner in evaluating a limited number of service providers' value engineering proposals.

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- d. The Master A/E shall review limited, specific RFIs submitted by the Construction Managers associated with requested design clarifications, workarounds, or substitutions at the request of the CMA. The Master A/E will provide documentation for objective evidence of any non-compliance with the CDPs.
- e. The Master A/E shall visit the site as necessary and appropriate to confirm that the Work proceeds in general accordance with the requirements of the CDP.
- f. In connection with Substantial Completion and Final Completion for each Project, the Master A/E shall assist the CMA as necessary in ensuring major "punch-list items" are completed by the Construction Manager in accordance with each applicable CDP.
- g. The Master A/E shall monitor each Architect/Engineer's compliance with the PMP and applicable PIP, and submit a report to CMA on a monthly basis regarding same. Master A/E shall promptly advise CMA and Owner of Architects/Engineer's deviation from the PMP and applicable PIP, and Cause appropriate corrective actions to be implemented by the Architect/Engineer to bring its Services into conformance with the PMP, and applicable PIP.

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## Fee Schedule

Firm	Discipline	Base Contract	Contract Amendment 1			
		Scope Items 1-3 (First 120 days)	Scope Items 4-6 (Engagement through Conceptual Design)	Scope Item 7 (AOR Design Phase)	Scope Item 8 (Construction Phase)	Subtotal for Contract Amendment 1
Page	Management, Architecture, Interiors, Building MEP/FP, Technology	Refer to Base Contract for Fee for this portion of work	\$2,600,000	\$260,000	\$225,000	\$3,085,000
Lopez Salas Architects	Architectural Support		\$25,000	0	0	\$25,000
HDR	Civil/MEP Engineering		\$780,000	\$100,000	\$43,000	\$923,000
Garza EMC	Civil Eng. Support		\$205,750	\$45,500	\$35,500	\$286,750
Ensignt HaynesWhaley	Structural / Pkg. Consult.		\$734,000	\$76,500	\$45,000	\$855,500
CNG Engineering	MEP Eng. Support		\$65,000	\$12,500	\$6,500	\$84,000
JEAcoustics	Acoustics / Vibration		\$21,000	\$1,700	\$1,300	\$24,000
Altura Solutions	Accessibility Review		\$15,000	\$1,100	0	\$16,100
BEE	Energy Consulting		\$37,500	\$3,500	\$3,000	\$44,000
The Bommarito Group	FFE/Interiors Support		\$15,000	0	0	\$15,000
Sasaki Associates	Landscape Architecture		\$346,500	\$22,500	\$18,000	\$387,000
Ricca	Food Service Consulting		\$6,000	\$1,500	\$500	\$8,000
CPP Consulting	Wind/CFD Analysis		\$27,500	\$1,500	0	\$29,000
Persohn/Hahn Associates	Vertical Transportation		\$27,000	\$2,500	\$1,000	\$30,500
Wiss, Janney, Elstner Assoc.	Exterior Envelope		\$28,000	\$3,000	\$1,900	\$32,900
Sunland Group	Cost Estimate Review		0	0	0	0
Applied Tech Group	Audio Visual Consulting		\$29,000	\$2,500	\$900	\$32,400
<b>Totals</b>				<b>\$4,962,250</b>	<b>\$534,300</b>	<b>\$381,600</b>

E. **Reimbursable Fees:** In addition to the lump sum fees indicated in the schedule above, it is anticipated that the following fees will be reimbursable in accordance with the Texas Facilities Commission AE Contract terms. These costs will be billed in accordance with TFC Contract No. 16-106-000.

1. Out of town travel costs in compliance with State of Texas requirements per contract.
2. Printing and shipping costs

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3. Preparation of three dimensional fly bys or walk throughs in addition to the ones noted in previous scope description
4. Wind tunnel testing beyond analysis
5. Costs associated with construction of or testing of mock-ups

We recommend that the Owner include a budgetary estimate of:

- Scope Items 1 – 3      Refer to Base Contract
- Scope Items 4-6      \$110,000
- Scope Item 7      \$50,000
- Scope Item 8      \$95,000

F. **Schedule for Services:** We anticipate a notice to proceed for our services on or about the first week of July, with the following approximate durations and for our services listed above. We will work closely with your team and the selected CMA to verify exact dates for an initial comprehensive schedule.

- Scope Items 1 through 3: starting September 6, 2016, completion on January 4, 2017, duration of 120 days
- Scope Items 4 through 6: starting on January 5, 2017, ending approximately November 22, 2017, approximately 10 ½ months. CDPs will be delivered on a phased schedule, to be coordinated with CMA's Master Schedule.
- Scope 7: Phased Schedule, Estimate duration approximately 14 months overlapping with Scope Items 4-6, starting approximately March, 2017 and ending approximately May, 2018.
- Scope 8: Phased Schedule, Estimate duration approximately 31 months overlapping with Scope Item 7, starting approximately June, 2017 and ending no later than December 31, 2020.

Peter, please do not hesitate to call me if you have any questions or concerns about this proposal.

Best regards,



Daniel H. Brooks, AIA, LEED AP  
Principal

Cc: Bob Burke, P.E.