

Exhibit C: “Durham Parks and Recreation Operations Facility Schedule of Deliverables and Requirements”

The deliverables and requirements provided in Exhibit C shall be included in the Architect’s Basic Services. Some of the descriptions overlap services described in Article 2 of the B141 and in Exhibit D, Project Design Procedures. The descriptions in each of these documents shall not reduce the level of services described in another. Please refer to all contract documents for the full scope of services.

Within one week of notice to proceed, the architect shall submit a project schedule, with the due dates of the deliverables identified. Scheduled due dates will be based upon reasonable timeframes for Owner review, which have been mutually agreed upon with the Architect. The schedule shall also include scheduled dates for permit applications and submittals to authorities having jurisdiction (AHJ). The schedule shall be updated monthly to reflect contract progress over the previous pay period. If completion of a task on the schedule is extended or delayed, the updated schedule shall reflect those changes. If the extended task is on the critical path, then a recovery schedule shall be provided for the Owner’s acceptance. The updated schedule shall be submitted monthly with invoices (invoices may not be paid unless updated project schedule is included).

Meeting minutes in agreed-to format for each meeting with the Owner are to be issued for review within 2 business days of the meeting.

PHASE I – THROUGH SCHEMATIC DESIGN

Please provide all deliverables in printed and digital form—digital drawing files shall be submitted in PDF and AutoCAD LT 2010 compatible format.

50% SD - Two bound sets of 24x36 drawings, two bound sets of all other deliverables, and all digital files saved to a disk.

100% SD - Two bound sets of 24x36 drawings, two bound 8.5x11 sets of outline specs, two bound sets of all other deliverables, and all digital files saved to a disk. Each deliverable submittal shall include quality assurance correspondence, indicating that submittals have been checked and all comments have been resolved.

PHASE II DELIVERABLES – DESIGN DEVELOPMENT THROUGH CLOSE-OUT

Please provide all deliverables in printed and digital form—digital drawing files shall be submitted in PDF and AutoCAD LT 2010 compatible format. Each deliverable submittal shall consist of 24x36 drawing sets, 8.5x11 specifications and 8.5x11 prints of other deliverables. For 50% DD submittals, provide two bound sets of drawings, two bound 8.5x11 sets of specs, two bound sets of all other deliverables, and all digital files saved to a disk. For 100% DD, 50% CD, 99% CD and 100% CD submittals provide four bound sets of drawings, four 8.5x11 sets of specs (three bound and one unbound), four sets of all other deliverables (three bound and one unbound), and all digital files saved to a disk. Each deliverable submittal shall include quality assurance correspondence, indicating that submittals have been checked and all comments have been resolved.

BASIS OF DESIGN

The City of Durham Parks and Recreation Department is seeking to construct an approximately 10,000-11,000 SF Operations Facility at the site of the existing Friendly Rest Home on Archdale Road in Durham. The existing building will be demolished by the City because of its current state of disrepair. Use of the site by DPR maintenance would require a minor special use permit.

The new facility will consist of an entry lobby, approximately four offices, a conference room, kitchen, restrooms and with a large multi-bay garage for storage of material and equipment. A pre-engineered metal building is the preferred system of construction. The facility will have associated parking and a fenced outdoor storage yard. The estimated construction budget is \$1.2 million.

The Project is required to meet Durham's Comprehensive Plan standards, The goal of this plan is to incorporate environmentally responsible building practices through compliance with LEED (Leadership in Energy and Environmental Design) or the Triangle J Council of Governments (TJCOG) High Performance Guidelines. The City currently requires all new City construction to comply with minimum sustainability standards but does not require LEED certification of the facility. Strategies to meet Durham's Comprehensive Plan requirements may include, but are not limited to the following and within budget parameters, the selected consultant should be prepared to offer as many as possible:

Sustainable Sites:

- Conserve the existing natural site by developing a master plan that meets LEED goals for the development of a Greenfield Site.
- Strategies include reducing site disturbance
- Implement a storm water management plan and an erosion control plan
- Incorporate landscaping strategies such as xeriscape, mulching, and silt fencing.
- Provide alternative transportation with bicycle racks and storage for users.

Water Efficiency:

- Use water reduction and conservation strategies including reduced flow fixtures for sinks, toilets, and showers.
- Use water reclamation systems and strategies.
- Use solar hot water heating.
- Use native plantings that require less water eliminating the need for a water irrigation system.

Energy and Atmosphere:

- Incorporate lighting strategies that contribute to LEED certification, including energy efficient fixtures and controls, solar hot water heating systems, as well as high efficiency HVAC that will achieve energy conservation goals.
- Other strategies may include day-lighting systems within the Apparatus Bay as well as other solar thermal gain strategies to decrease energy use.

Materials and Resources:

- Develop a Construction Waste Management Plan to divert debris into landfills.

- Continue with Durham's recycling and employ other waste management strategies to further enhance waste management.
- Incorporate the use of recycled content, rapidly renewable materials, and use of regional materials into design strategies.

Indoor Environmental Quality:

- Provide an indoor environment that meets LEED goals of contributing the well-being of its occupants.
- Strategies include use of ventilation systems to meet or exceed ASHRAE standards.
- Install monitoring systems to ensure systems are maintaining requirements of air quality and thermal comfort.
- Incorporate the use of low-emitting materials and products into design strategies for further health and well-being of occupants.

Innovation in Design:

- Use Cradle-to-Cradle Certification product selection for flooring, cabinetry, countertops, and fixtures, as well as others that meet LEED goals of renewable materials, as well as environmentally safe and healthy materials.

PROGRAMMING

- Conduct Kick-Off meeting to review scope of work, deficiencies, needs, and priorities with Owner, and prepare and issue meeting minutes for all Programming and Schematic Design Phase meetings.
- Conduct one public workshop to solicit community input, toward the goal of developing three design options with separate cost estimates. Landscape consultant shall be in attendance.
- Prepare and submit a draft design narrative.
- Provide preliminary concept of design options with support data.
- Prepare base map with best available existing conditions.
- Verify accuracy of the base map and identify any site features worthy of consideration in development of the design.
- Conduct one community meeting to solicit community input, presenting digital model renderings of design options. Landscape consultant shall be in attendance.
- Conduct regular, weekly, design meetings.

SITE INVENTORY

- Conduct evaluation of Owner provided survey and preliminary site suitability assessment to verify existing conditions as necessary.
- Site investigations, including survey, subsurface utility investigations (if necessary), geotechnical investigations, and environmental engineering.
- Site Zoning (setbacks, special overlays, development restrictions, floodways, floodplains, and flood zones, etc)
- Easements affecting the site
- Rights-of-Way

- All public and private utility locations within site and along adjacent right-of-ways (vertical and horizontal data). Inverts of all storm sewer, sanitary sewer, and water lines.
- Tie-ins to NC State Plane Coordinates System.
- Vertical and Horizontal Benchmarks
- Based on the findings of the Site Inventory confirmation, meet with GS and DPR Staff to confirm or refine the program to be included at the facility.
- All subsurface utilities, structures, and graves shall be noted and identified on final site survey. Both vertical and horizontal locations shall be provided.

SCHEMATIC DESIGN PHASE

50% Schematic Design Phase Scope and Deliverables

- Architect shall investigate and propose all relevant sustainable building considerations, toward the goal of developing a LEED certified design.
- Prepare minimum of three design concepts for City Staff consideration.
- Prepare schematic design plans on selected alternate.
- SD Phase plans will minimally include: Building placement, sidewalks, parking lots, landscape concept, general site furnishings, lighting areas, utility routing and storm water measure locations.
- Conduct regular design meetings (a minimum of two).
- Prepare, submit and update the design schedule.
- Prepare and submit a site information questionnaire.
- Work in Building Information Modeling (BIM) format. Plumbing, mechanical, electrical and structural shall not be included.

100% Schematic Design Phase Scope and Deliverables (submitted as the Basis of Design Report (BODR). The Architect shall facilitate pre-submittal discussions with the Owner and all State, County and City authorities having jurisdiction over the Project Work so that Project schedule and budget implications are fully understood.)

- Submittal shall include all documentation necessary to describe the full scope of the project, including all Owner-approved meeting minutes.
- Attend owner meetings to coordinate and resolve value engineering, constructability, construction phasing and scheduling issues in the preliminary design.
- Revised floor plans that incorporate revisions as requested by Owner.
- Geotechnical Investigation with recommendations for earthwork, foundations, slab systems, pavement designs for various project components.
- Provide structural design for each design option, including criteria for geotechnical consultant, structural design criteria and structural schematic drawings.

- Prepare Outline Specifications for each design.
- Define and prioritize construction scope.
- Prepare Basis of Design Report (BODR) presenting design criteria, agreed upon program elements, alternative schemes, recommended scheme with construction phasing options.
- Develop AACE Class 3 cost model-Budget Authorization, or Control and reconcile cost model with City Staff. List all required permits and approvals and their estimated application fees.
- Conduct regular design meetings (a minimum of two).
- Prepare, submit, update the design schedule.
- Flood Insurance Rate Map (FIRM)
- Wetlands Delineation Map, if necessary
- Zoning/Planning requirements
- Master Utility Plan
- Site Plan including building location, parking areas, proposed site boundaries or property lines, spot elevations and revised site contours
- Refined project design and construction schedule showing the critical path to completion.
- Conduct one presentation for Durham City Council, presenting digital model renderings of each design option.
- Work in Building Information Modeling (BIM) format. Plumbing, mechanical, electrical and structural shall not be included.

DESIGN DEVELOPMENT PHASE

50% Design Development Phase Deliverables (to be submitted after the schematic design phase documents have been reviewed with the architectural sub-consultant and a design has been accepted by the Owner)

- Conduct Phase 1 environmental assessment, subsurface utility investigations, geotechnical investigations, environmental engineering, to verify existing conditions as necessary.
- Based on the approved SD plans, further refine the design to include the following: demolition and clearing plans, grading and drainage plans, sedimentation and erosion control plans, layout and staking plans, elevations and sections, construction details, lighting and signage, planting plans and details.
- If required, recombination plat for the subdivision of the facility from the larger City-owned property parcel. The Architect shall prepare the plat in accordance with the requirements of the City-County Planning Department and City Public Works Department. The Architect shall attain approval of the plat and record it at the Durham County register of deeds.
- Site plan(s) showing all proposed new construction and site elements. Locations of flood zones, stream buffer and sewer easements should be indicated.
- Architectural floor plans.
- Architectural elevations for all building faces.
- Two site sections taken in different directions showing critical site information.

- Narrative for proposed building systems
- Preliminary Code summary
- Preliminary Permit summary
- Life safety plans
- Site plan(s) showing zoning information, easements affecting the site, rights-of-way, all public and private utility locations within the site and along adjacent rights-of-way, inverts of all storm sewer, sanitary sewer and water lines, tie-ins to NC State Plane Coordinates System, vertical and horizontal benchmarks, and all subsurface utilities, structures and graves shall be noted and identified, providing vertical and horizontal locations.
- Landscape plan, preliminary grading plan showing critical grades and compliance with ADA guidelines.
- Architectural drawings including: new construction plans (including room finish schedule identifying materials)
- Lighting plan for all spaces, all building elevations, roof plan, and preliminary reflected ceiling plans.
- Phasing plans (if applicable).
- Preliminary drawings by all engineering trades
- Outline form specifications
- Signage specification and drawings compliant with City of Durham Graphic Standards & Manual Style Guide.
- Updated estimate of project cost in CSI 2004 standard format.
- Studies of various building materials and systems as requested by the owner. Agreed-to list of value management strategies and estimated project cost savings, if necessary as a result of independent cost estimate prepared by the CMAR.
- Conduct regular, biweekly design meetings.
- Conduct community meeting to solicit community input, if required.
- Prepare a Design Development Cost Estimate and updated project schedule;
- Prepare Design Development Level Specifications
- Attend owner meetings to coordinate and resolve value engineering, constructability, construction phasing and scheduling issues in the preliminary design.

100% Design Development Phase Deliverables—in addition to previously submitted materials, the following shall be provided:

- Code summary
- Permit summary
- Developed reflected ceiling plans, typical wall sections, and building sections through all relevant spaces (min. four sections).
- Developed and coordinated engineering drawings
- Refined digital model of final DD design for presentation to city council.
- Updated estimate of project cost in CSI 2004 standard format.
- Agreed-to list of value management strategies and estimated project cost savings, if necessary.

CONSTRUCTION DOCUMENT PHASE

50% Construction Document Phase Deliverables—in addition to previously submitted materials, the following shall be provided:

- Based on the approved DD plans, prepare construction documents and specifications to minimally include: Demolition and clearing plans, grading and drainage plans, sedimentation and erosion control plans, layout and staking plans, elevations and sections, construction details, lighting and signage plans and details, planting plans and details.
- Prepare a construction documents level cost estimate and updated project schedule; reconcile cost estimate.
- Incorporate bid alternates as necessitated by the project budget.
- Conduct regular, monthly design meetings.
- Conduct a final community meeting to present final design, if required.
- Code summary
- Permit summary
- Developed reflected ceiling plans, typical wall sections, and building sections through all relevant spaces (min. four sections).
- Developed and coordinated engineering drawings
- Updated estimate of project cost in CSI 2004 standard format.
- Agreed-to list of value management strategies and estimated project cost savings, if necessary.
- Fully developed architectural drawings, including all wall sections, building details.
- Fully developed engineering drawings.
- Fully developed CSI 2004 specifications defining the contract requirements and level of quality.
- Final documents describing in detail all work to be done, with all necessary revisions made and input from previous submittal included.

99% Construction Document Phase Deliverables—in addition to previously submitted materials, the following shall be provided:

- Final documents describing in detail all work to be done.
- Updated estimate of project cost in CSI 2004 standard format.

100% Construction Document Phase Deliverables—in addition to previously submitted materials, the following shall be provided:

- Final documents describing in detail all work to be done, with all necessary revisions made and input from previous submittal included.
- Updated estimate of project cost in CSI 2004 standard format.

Permitting, Reviews and Approvals

- Review and / or present design concepts to the City of Durham Planning Department and any other regulatory agencies whose approval is necessary for the development of the site.
- Submit plans and applications to regulatory agencies
- Secure approvals from all other local and state agencies as required for the development of the site.
- Coordinate the construction or relocation of privately owned utilities if necessary.
- Attend meetings as necessary for all approvals. Provide responses and modifications to regulatory comments

BIDDING AND NEGOTIATION PHASE

Bidding and Negotiation Phase Requirements

- Prepare bid documents and project bid manual incorporating all owner requirements. Manage the pre-qualification process as required.
- Conduct Pre-bid and award meetings
- Issue addenda as required.
- Provide document clarifications to bidders as required.
- Assist Owner with receiving bids and bid recommendations.
- Assist owner in review and comparison of cost summary of submitted bid and alternates; Assist owner in negotiations if necessary.

CONSTRUCTION PHASE

Construction Phase Requirements

- Conduct pre-construction conference.
- Provide construction administration and observation associated with the site improvements including a pre-construction conference, weekly site observation and meetings for processing the contractors pay request.
- Provide interpretations of prepared drawings and specifications, shop drawing review and approval as well as preparation of change orders and construction change directives.
- Conduct regular site observations to monitor the progress of the work. Site visits will be held weekly by the architectural and engineering team at the project site or sites as appropriate.
- Attend weekly construction progress meetings, issue meeting minutes within 2 business days of meeting.
- Provide construction phase services in accordance with requirements outlined in the General Conditions to the Construction Contract, including but not limited to: shop drawing review, certifying applications for payment, responding to RFIs, preparing change orders, reviewing monthly Contractor schedule updates, issuing notices of contract non-compliance to the Contractor and monitoring project progress, costs and schedules.
- Conduct final inspections and follow up inspections to determine completion of the work.
- With monthly invoices to Owner, provide updated date log of all RFIs received, resolved and closed.

CLOSEOUT PHASE

Post Construction and Warranty Support

- Prepare as-built documents based on information received from the contractor in AutoCAD LT 2010 compatible format or in such other format as the owner requires.
- Assist in project closeout and assistance in establishment of warranties and guarantees.
- Present to required departments/agencies for review; Responsible for all State, County, and City permit applications and approvals.
- Coordinate and review for compliance contractor closeout documents.
- Certify final application for payment.

GENERAL PROJECT REQUIREMENTS

- Responsible for all State, County, and City approvals. Prior to submittals, review project and submittals requirements with all authorities having jurisdiction over the project. Present plans to required departments/agencies for review / approval. All permit and approval sets shall be submitted to the City project manager for review one week prior to submittal to reviewing entity.
- Participate in all meetings with the Contractor.
- If the Architect's estimate of project costs exceeds the project budget, the Architect will participate in value management until the project budget can be met.
- If available, the Architect will provide project documentation on Prolog or Primavera Website as instructed by the Owner.
- If available, the Architect will utilize standard file-sharing protocol and limit use of email and paper for the transmittal of documents that can be transmitted electronically using such protocol. Invoices and supporting documentation must be submitted to the Owner on paper.

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- Responsible for all State, County, and City approvals. Prior to submittals, review project and submittals requirements with all authorities having jurisdiction over the project. Present plans to required departments / agencies for review / approval. All permit and approval sets shall be submitted to the City project manager for review one week prior to submittal to reviewing entity.
- If the Architect's estimate of project costs exceeds the project budget, the Architect will participate in value management until the project budget can be met.
- If available, the Architect will provide project documentation on Prolog or Primavera Website as instructed by the Owner.
- If available, the Architect will utilize standard file-sharing protocol and limit use of email and paper for the transmittal of documents that can be transmitted electronically using such protocol. Invoices and supporting documentation must be submitted to the Owner on paper.