

## AMENDMENT NUMBER ONE TO AGREEMENT

THIS AMENDMENT ("Amendment") entered into this 27<sup>th</sup> day of April, 2017 between SHELBY COUNTY GOVERNMENT, hereinafter referred to as ("COUNTY") and Sasaki Associates, Inc., hereinafter referred to as "CONSULTANT".

WHEREAS, the parties previously entered into an agreement ("Agreement") dated August 25, 2015 (Shelby County Contract No. CA1619861) whereby Consultant would assist the County in its Phase II Resilience Submittal and develop approaches, based on the County's Phase I framing, of optimal choices to improve disaster recovery and resilience in the most impacted and distressed areas of the County; and

WHEREAS, the parties desire to enter into this Amendment Number One so as to initiate CONSULTANT'S Proposal for the COUNTY's "Cypress Creek National Disaster Resilience Grant Design Project" and provide additional assistance with the "Big Creek-Making Room for the River" Project both presented in the County's Phase 2 Submittal approved by HUD pursuant to said Competition, to provide for the payment of the Fee for said services and provide that the work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3).

NOW THEREFORE, for and in consideration of mutual promises and covenants herein contained, the parties hereto agree as follows:

1. Section II of the Agreement entitled Term and Compensation is hereby amended to include the Fee for the services as outlined within CONSULTANT'S South Cypress Creek- Proposed Scope of Services, SA# 66099.00 and Big Creek-Proposed Scope of Services, SA# 66099.00, both dated August 5, 2016 and attached hereto as Exhibits A and B respectively and incorporated herein by reference as if stated verbatim.
2. The total cost for this Amendment Number One shall not exceed One Million Seven

Hundred Thirty-Nine Thousand and Five Hundred Twenty Five and no/100 (\$1,739,525.00) Dollars payable in accordance with the terms of the Agreement.

3. CONSULTANT shall not be permitted or authorized to incur costs beyond the extent that purchase orders have been issued during the term of the Original Contract, this Amendment and/or subsequent to the termination date of the preceding without prior, expressed written authorization pursuant to County Purchasing Policies and Procedures. The County is not obligated to pay nor shall CONSULTANT be entitled to receive payment for fees and expenses incurred in violation of this provision.

4. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

5. The parties to this contract agree to comply with HUD's regulations in 24 CFR Part 135, which implement Section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the Part 135 regulations.

6. The contractor agrees to send to each labor organizations or representative of workers with which the contractor has a collective bargaining agreement or other understanding. If any, a notice advising the labor organization or workers' representative of the contractor's commitments under this Section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

7. The contractor agrees to include this Section 3 clause in every subcontract subject to compliance with regulations in 24 CFR parts 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.

8. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected but before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 135.

9. Noncompliance with HUD's regulations in 24 CFR Part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

10. With respect to work performed in connection with Section 3 covered Indian housing assistance, Section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (i) preference and opportunities for training and employment shall be given to Indians, and (ii) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of Section 3 and Section 7(b) agree to comply with Section 3 to the maximum extent feasible, but not in derogations of compliance with Section 7(b).

11. The terms and conditions of the original Agreement, except as amended herein, shall remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have set their signatures for the purposes contained herein, on the day and date first above written.

APPROVED AS TO FORM  
AND LEGALITY:

SHELBY COUNTY GOVERNMENT

  
Contract Administrator/  
Assistant County Attorney

for   
Mark H. Luttrell, Jr., Mayor

Sasaki Associates, Inc.

BY: 

TITLE: CEO

CORPORATE ACKNOWLEDGMENT

~~STATE OF TENNESSEE~~ *Commonwealth of Massachusetts*  
~~COUNTY OF SHELBY~~ *Middlesex County*

Before me, the undersigned Notary Public, in and for the State and County aforesaid, personally appeared Steven Roscoe, with whom I am personally acquainted or proved to me on the basis of satisfactory evidence, and who, upon oath, acknowledged himself/herself to be president or other officer authorized by appropriate Corporate action and/or Resolution to execute the preceding instrument of the Sasaki Associates the within named bargainor, a corporation, and that he as such CEO, executed the foregoing instrument for the purpose therein contained, by signing the name of the corporation by himself/herself as Steven Roscoe.

WITNESS my hand and official seal at office this 23rd day of January, 2017.



KATHLEEN A. HUNT  
Notary Public  
Commonwealth of Massachusetts  
My Commission Expires  
May 16, 2019

  
Notary Public

My Commission Expires: 05/16/2019

5 August 2016

Tom Needham  
 Chief Engineer, Shelby County  
 John Zeanah  
 Deputy Director, Memphis & Shelby County Division of Planning and Development  
 160 N. Main  
 Suite 1127  
 Memphis, TN 38103

re: Shelby County – South Cypress Creek – Proposed Scope of Services  
 SA# 66099.00

Tom and John:

Sasaki Associates, Inc (Sasaki) is pleased to provide this proposal, Amendment #1 to our original agreement dated August 19, 2015 to the Shelby County Working Group (Client) for implementation of the South Cypress Creek component of Shelby County's National Disaster Resilience Competition submittal. Per our earlier conversations, we will create a separate scope of work for assisting the Big Creek team on the project design; workshops, review meetings and associated travel will be coordinated with the Big Creek project and will be included in that scope of work.

Based on the awarded NDRC phase 2 application, we propose a 2-part process with the following tasks to organize the South Cypress Creek/Weaver Park Neighborhood Resilience Plan and Lot Program and Design Implementation of the Project:

- **Part 1 - Develop a Neighborhood Food Resilience and Lot Program Action Plan (NAP)** with engagement from the neighborhood and key stakeholders to develop a plan to guide short and long-term development for the neighborhood to guide the neighborhood lot program.
- **Part 2 – Design and Implementation of the South Cypress Creek Stream Restoration, and Weaver Park Flood, Stormwater and Park Improvements**, including Permitting, Design & Engineering, Bidding, and Construction Phase Services for the project

Our team (Consultant Team – including Stantec, Powers Hill, Memphis Tilth, and the University of Tennessee Agriculture Program) will work with the County team – and other partners as appropriate – to implement disaster recovery and resilience in the South Cypress Creek/Weaver Park neighborhood as described below.

#### **SCOPE OF WORK**

##### **Part 1 - Neighborhood Food Resilience and Lot Program Action Plan (NAP)**

##### **Task 1 – Resilience Approach and Analysis**

There is much to build on from the Phase II application and the Greenprint process, but a need to ground the proposal from the Phase II application, refine projects for implementation, and to

engage the community in defining the NAP as a long-term guide for the neighborhood remains. The goal is to engage the community to analyze alternatives, build support, and guide the Part 2 Implementation. We will start with an initial step to set expectations, review prior plans, and synthesize goals for moving forward. The Consultant Team will meet with the Shelby County NDRC Working Group (the Working Group) to confirm the goals and expectation for the process, key neighborhood stakeholders, and refine the work program. Analysis will be conducted to ensure that all angles are being analyzed and no potential opportunities or challenges are overlooked.

#### **1.1 Scope Confirmation and Site Reconnaissance**

The consultant team, including Memphis Tilth, University of Tennessee Agriculture Program, and United Housing, will conduct a "kick-off" meeting with the Working Group comprised of representatives from Shelby County, key neighborhood stakeholders (schools, churches, and neighborhood leaders), and other appropriate stakeholder groups. This meeting will allow us to review prior work from the Phase 2 application, confirm work scope, schedule, reporting practices, milestone dates, and project management practices. The kick-off will also include a targeted site tour of the neighborhood (referred to as the "study area") and context.

#### **1.2 Data Collection/Review**

Building upon analysis from the Phase II submission and other sources, the Consultant team will further develop base information including existing maps, plans, aerial photographs, reports, survey information, transportation studies, existing zoning and land development regulations and maps, market studies, and other data related to the study area. Information about preliminary projects and other efforts underway in the study area will also be compiled. This task includes a due diligence assessment of existing planning, zoning, and regulatory requirements; contact with local planning officials and government agencies; analysis of site conditions; and assessment of natural features, vegetation, historic resources, land use, and transportation issues. The Consultant team will analyze the existing lots in the land bank, as well as vacant or abandoned lots, to assess their suitability for re-use in the future as part of the Lot Program.

Specific tasks will build off the work previously done for the Phase 2 application and will include:

- **Stakeholder Interviews:** Under the direction of the Working Group, conduct interviews with identified stakeholders including landowners, business owners, faith-based leaders, cultural and institutional leaders, real estate developers and investors, real estate brokers, City and County staff, and others (to be identified by the Working Group) in order to understand the strengths, weaknesses, opportunities and threats of the community, and how this affects the potential vulnerabilities of the community, as well as assess potential project opportunities.
- Site reconnaissance and lot analysis with partner organizations, Memphis Tilth, UT Agricultural Extension, and United Housing, etc
  - Feasibility analysis for various redevelopment uses for vacant lots, including county owned lots and proposed buyout lots.
- Food resilience analysis and data collection (in conjunction with community partners), including analysis of existing food access conditions in the community and community needs

### **1.3 Public Engagement Kick-off Event #1**

The Consultant Team will assist the Client Working Group in developing the Public Engagement Event to launch the NAP process. Primary goals will be to introduce the process, gather feedback on selection criteria, and to receive preliminary feedback. Multiple public engagements will be conducted and materials will be deployed in a digital survey format to gain feedback online.

#### **Meetings/Travel**

Sasaki will participate in regular coordination meetings as required. In addition, Sasaki will make one (1) trip to accomplish the following:

- NAP kick-off meeting with the Client Working Group
- Stakeholder interviews (in-person in conjunction with the kick-off)
- Public Engagement Event #1: Kick-off

#### **Deliverables**

Sasaki will prepare a presentation document with key analysis findings

### **Task 2 – Refine Proposed Project Alternatives**

After completing the Task 1 assessment and positioning, the goal of Task 2 is to develop options for the NAP to maximize community benefits.

The project concepts are strategy-driven, showing conceptual options with ideas for investments that can be made to create a more resilient Shelby County and Weaver Park neighborhood for decades to come. The ultimate goal of this step is to assess and refine multiple possibilities to better address the communities' unmet needs, resonate and align with the goals of the Client Working Group, additional partners, the business community, developers and investors, institutions, and other community stakeholders, while inspiring excitement for the neighborhood's future. The approach for resilience will leverage broad partnerships, draw from and advance existing or ongoing projects from Greenprint or other potential sources to create broad and lasting impacts.

#### **2.1 Resiliency Approach Concept Refinement**

The purpose of this task is to engage the community in refining and grounding the Phase II resiliency approach proposed designs and projects. These may be physical projects, policies or programs that are foundational elements of the NAP. The plan options during Step 2 will be at a conceptual level, and communicated with plans, illustrative renderings, sections, phasing diagrams, and policies suitable to have a conceptual budget developed to become a guiding Plan document for the neighborhood, County, and City, but also suitable to support updates to the NDRC Phase II cost-benefit analysis.

Resiliency Project Concepts will be based in several key theme areas, as proposed in the Phase II submission:

- Connectivity through Trail Systems and other infrastructure
  - Mitchell Road bike lane
  - Paved and unpaved multiuse trails through Roosevelt park and along restored South Cypress Creek



- Community building through programming and projects that address unmet community need, for example.
  - Public Safety improvements
    - Improved lighting
    - Brush clearing
    - Crosswalks
    - Neighborhood watch program
  - Park improvements
  - Food resilience projects such as community gardens and a farmers market
  - Housing redevelopment (replacement for flood plain buyouts)
- Protection and Ecological Restoration
  - Main channel enhancement of South Cypress Creek
  - Tributary Enhancement
  - Flood Protection (Berms/Earthwork)
  - Property buyouts of at risk properties

#### **2.2 Vacant Lot Food Resilience Strategy Refinement**

- Create food resilience strategies for the South Cypress Creek Community that support the following values: *(from the Kresge grant application)*
  - Promote Food Equity
  - Social Cohesion
  - Good Food Access and Affordability
  - Collaborative Stewardship of the land
  - Regenerative Agriculture Apprenticeship
- Understand suitability of county owned and proposed buyout lots for various food related uses, including
  - Community gardens
  - Farmers market and event site (potential for agritourism and community fundraising)
  - Urban farming
  - Learning and sensory gardens
  - Urban demonstration gardens
  - Production, Research, and enterprise urban farms
  - Apiary
  - Orchard and Perennial Gardens
  - Agroforestry
  - Urban farms apprenticeship
- Understand cost and operational feasibility of a farmers market in the South Cypress Creek neighborhood, possibly modeled after the successful South Memphis Farmers Market, but also assess simpler options that do not require full time staff, like a weekly farmers market on a flexible covered site that can also be used for other community programming.
- Evaluate food vulnerabilities and cost and feasibility of food resilience strategies, including, educational programs, assistance in creation of resilience plans for small grocery stores and corner stores.
- Based on community need and feedback will assess other food resilience projects.

### **2.3 Lot Program for Blight Removal and Housing Redevelopment**

- The Consultant Team, including partners from United Housing (UHI), will work with the Weaver Park neighborhood as part of the plan development effort and building off the Stage II application. We will explore short and long-term neighborhood investment strategies, including infill housing, side lots, and vacant lot clean-ups, and options to integrate in with the Tennessee Housing Development Agency Blight Elimination Program.
- Explore alternatives and refine target buyouts as proposed in Phase II application, assist County in any further assessment of potential buyout outs, considering locations for key community anchors
- Coordinate with UHI and other potential housing redevelopment partners to assess site suitability for single family and multifamily housing redevelopment projects to identify sites for infill housing

### **2.4 Public Engagement to Share Draft Concepts**

Following review with the Client Working Group and community stakeholders, Sasaki will work with the client to organize a second public engagement that will allow the public to provide input on the early conceptual ideas to create a more resilient Weaver Park neighborhood by addressing the community's unmet needs, future projected challenges, and leverages solutions for additional vulnerabilities toward broader community-wide resiliency. Feedback from the public engagement will be reviewed with the Client Working Group to determine a direction of final implementation projects.

### **2.5 Finalized Recommendations for Design and Implementation**

At the conclusion of Step 2, Sasaki will prepare a set of final concepts based on Client Working Group input and public feedback for the NAP.

#### **Task 2 Meetings/Travel**

Sasaki will participate in regular coordination meetings as required. In addition, Sasaki will make one (1) trip to accomplish the following:

- ~~Working Group #2 meeting to review draft resiliency concept projects~~
- Public Engagement Event #2: Draft Resiliency Concepts
- Additional interface with the NDRC process as needed

#### **Task 2 Deliverables**

This phase will include the following deliverables:

- Summary of priorities and feedback from Client Working Group and the public
- Presentation and other maps, diagrams, site plans and graphics
- Summary of community feedback from second Public Engagement
- Presentation/ memorandum of draft concepts illustrating the Client Working Group's vision as informed by public input

### **Task 3 –Documentation and Final NAP**

In the final step, the team will focus on refining the concepts into the NAP, with detail necessary for approval by the City and County, and metrics to support HUD NDRC requirements and measurement, evaluating the concepts through traditional or innovative methods.

#### **3.1 Final Phase 2 Plan and Application**

A Project Summary will be developed. The Plan will be sufficient to communicate the vision, investment and infrastructure improvements, and policies or programs necessary to address the unmet needs and vulnerabilities of the Weaver Park neighborhood.

- Refined guidelines for the vacant lot program, including Home, Food, Flood, Community, and Natural Lots

#### **3.2 Food Resilience Strategy Implementation**

Working with the Client Working Group, we will conduct a workshop to review plan recommendations and discuss next steps. The goal of this meeting is to jump-start implementation and clarify recommendations and responsibilities. Within this effort, the focus will be developing implementation strategies. We will identify priority projects as part of the Food Resilience Strategy which address critical needs and goals identified in previous phases. Strategies for cultivating and maximizing partnerships will be a key consideration. One product of this phase will be a ten year action plan that addresses the needs identified in the analysis. This document will establish long and short term goals and the action items required to achieve them. This implementation plan will also include a strategy for properties recommended for the food program, including:

1. Community gardens: which properties, and guidance to community stakeholders on the management and operations of this program
2. Farmers market or site, with guidance to community stakeholders for an operating plan, including a potential permanent market and/or event site, or suitable partnerships with existing organizers, such as the South Memphis Farmers Market.
3. Guidance on programs to sustain the urban agriculture programs, including support for education, job development and apprenticeships, as well as production, research and enterprise urban farms.

#### **Task 3 Meetings/Travel**

Sasaki will participate in regular coordination meetings as required. In addition, Sasaki will make up to one (1) trip to accomplish the following:

- Working Group meeting #3 to present implementation strategies (potential WebEx) and kick off implementation phase

#### **Task 3 Deliverables**

This phase will include the following deliverables:

- Lot Program Guidelines
- Food Resilience Implementation Plan

**Part 2 – Design and Implementation of the Mitchell Road Bike Lane/Mobility Infrastructure, South Cypress Creek Stream Restoration, and Weaver Park Flood, Stormwater and Park Improvements**

**4.1 Project Initialization and Data Gathering**

- Engage in regular coordination with client and sub-consultants
- Acquire Project Precedents to communicate scale and design intent, as needed.
- Acquire and review available documents and data relative to project and project site history and spatial data to be used in development of field mapping beneficial for planning, coordinating, and conducting field work. Internal meetings and coordination with subcontracting are also included.
- Design Data Collection (Field) - This task is intended for acquisition and processing of field data necessary for the entire design process. Data to be collected under this task include geomorphic assessment information, hydrologic and hydraulic modeling data, detailed topographic data and related infrastructure pertinent to design.
- The Consultant Team will review topographic and planimetric surveying services for this project.
- H&H Modeling - Acquire and duplicate as needed (HEC-HMS, or similar hydrologic modeling tools) the existing InfoSWMM™ data relevant to our study area of interest. Additionally, a FEMA request for the published HEC-RAS model will be acquired and multiple preliminary models developed (duplicate effective and corrected effective, at a minimum)
- Engage with the Tennessee Stream Mitigation Program (TSMP) for potential funding support to further expand the scope, outcomes, and overall success of the project.
- Prepare Base Maps at Appropriate scales to explore design options

**Meetings/Travel**

Upon Completion of the Project Initialization Phase, the Consultant Team will attend a kick-off meeting to present preliminary findings, status reports and to participate in design work-session. ~~The Design team will participate in conference calls as needed to ensure a continuous and active dialogue related to the progress of the design.~~

**Deliverables**

The product of this phase will be the following:

- Summary report with preliminary field data collection findings
- Hydrologic and hydraulic modelling data, detailed topographic infrastructure data to inform the design
- Design work-shop sketches and supporting precedent images
- Provide a NEPA document for the design and construction of proposed improvements for the South Cypress Creek as part of the final Resilient Shelby project.

**4.2 Design Phase - 45%**

Following the Project Initialization Phase, the Consultant Team will develop the project design to 45% completion. The design will respond to a program based on the Client requirements set forth at the beginning of this phase. During this phase, the Consultant Team will complete the following tasks:

- Explore alternative designs to develop the program and budget.
- Develop a conceptual material palette to include site paving, walls, stairs, site elements, planting and lighting recommendations
- Study sections/elevations to understand site components, relationship to existing and proposed grades
- Study precedents to communicate scale and design intent, as needed.
- Multiuse trail preliminary design
- For each of the various design components: 1) stream restoration / enhancement, 2) flood protection (berms), 3) flood protection (blockage removal), 4) wetland expansion, 5) additional stream crossing, 6) stormwater improvements (BMP) and 7) stormwater improvements (open channels), a 45% design will be performed and draft design drawings developed (preliminary grading plan and typical details).
- H&H Modeling - Incorporate 45% design elements into a preliminary proposed conditions hydraulic model to estimate the potential effect of improvements toward preparation of final hydrologic and hydraulic modeling and associated FDP/FEMA permitting requirements.
- Prepare a statement of probable cost
- Present 45% Design documents to the Client, City, project sponsor and stakeholders at a review meeting to be held in Shelby County, Tennessee

#### ***Meetings/Travel***

At the conclusion of the 45% Design Phase, the Consultant team will attend (1) one Design Meeting to present deliverables and participate in a work-session. Design team will participate in conference calls as needed to ensure a continuous and active dialogue related to the progress of the design.

- 45% Design coordination meeting

#### ***Deliverables***

The product of this phase will be a 45% Design Summary including the following:

- Site Plans - describing site pavement materials, Box culvert layout for Mitchell Road, Pedestrian bridge layouts of not to exceed two locations (to be determined), planting areas, other site elements, preliminary grading.
- Preliminary Design Sections
- Typical Details
- Project Precedents to communicate scale and design intent, as needed.
- Palettes for materials selection, including pavement, site elements, special elements, and planting.
- Illustrative Site Plan of Alternatives
- Preliminary Diagrams and Renderings
- A revised technical memorandum describing the engineering and design process, the design drawings will be submitted for internal review.
- Preliminary statement of probable cost

**4.3 Design Phase - 95%**

Upon approval from the Client, the Consultant Team will further refine the site design, incorporating any feedback received at the end of the 45% Design. During this phase the Consultant Team will complete the following tasks:

- Advance overall site plan and enlargement plans as required.
- Advance sections to illustrate site components, their scale, and relationship to each other.
- Work closely with the other project consultants to complete the site design.
- Refine the site design and document the pavements, planting, site elements, site furniture, walls, planting, and other pedestrian-related items.
- Advance multiuse trail design
- Refine the stormwater management system proposed for the site.
- Provide written responses to the Client review comments of the 45% Design submission and make any required changes to the 95% Design documents prior to the commencement of the next phase.
- Update the statement of probable cost

**Meetings/Travel**

Design team will participate in conference calls as needed to ensure a continuous and active dialogue related to the progress of the design. The Consultant team will participate in (1) one Work Session in Memphis during the 95% Design Phase:

- 95% Design coordination meeting

**Deliverables**

This phase will include:

- Project Notes and Legends
- Existing Conditions Plan
- Erosion and Sediment Control Plan
- Demolition and Tree Protection Plan
- Layout Plan
- Materials Plan
- Grading and Drainage Plan
- Enlargement Plans as needed
- Planting Plan and Details
- Site Elevations & Construction Details
- Technical Specification Sections
- Proposed Layouts and Profiles
- Prefabricated Pedestrian Bridge Plan (Structural Design not included)
- TDOT Standard Box Culvert Plan for (1) one crossing
- Statement of probable construction cost

**4.4 Design Phase - 100%**

Upon approval from the Client, the Consultant Team will further coordinate the site design with all trades and incorporate any feedback received at the end of the 95% Design phase. This phase of work shall include the finalization of construction drawings and specifications required to bid the contract documents. During this phase, the Consultant Team will complete the following tasks:

- Complete the site design and documentation for grading and drainage, pavements, planting, curbs, stairs, site elements and other pedestrian-related items.
- Provide plans, sections, elevations and details at appropriate scales for contractor to build from.
- Work closely with the other project consultants to complete the site design.
- Refine the stormwater management system proposed for the site.
- Provide written responses to the Client review comments of the interim Construction Documents submission and make any required changes to the Construction Documents prior to the commencement of the next phase.
- Provide updated statement of probable construction cost

**Meetings/Travel**

Consultant team will participate in conference calls as needed to ensure a continuous and active dialogue related to the progress of the design. The Consultant team will participate in (1) one work session in Memphis during the 100% Design Phase.

- 100% coordination meeting

**Deliverables**

This phase will include drawing coordination submissions as needed, as well as Final Construction Documents, including

**Deliverables**

This phase will include:

- Project Notes and Legends
- Existing Conditions Plan
- Erosion and Sediment Control Plan
- Demolition and Tree Protection Plan
- Layout Plan
- Materials Plan
- Grading and Drainage Plan
- Enlargement Plans as needed
- Planting Plan and Details
- Site Elevations & Construction Details
- Technical Specification Sections
- Proposed Layouts and Profiles
- Prefabricated Pedestrian Bridge Plan (Structural Design not included)
- TDOT Standard Box Culvert Plans
- Statement of probable construction cost

**4.5 Permitting Phase**

A Section 404 Permit from the United States Army Corps of Engineers (USACE) will be required as well as an Aquatic Resource Alteration Permit (ARAP). The anticipated amount of aquatic resource impact will require an Individual Permit from the USACE and an Individual ARAP from TDEC. Stantec will prepare permit application packages and submit to the USACE and TDEC. Stantec will coordinate with the regulatory agencies throughout the permitting process to help address questions and facilitate review of the permit applications. The following items will be included as part of the 404 Permit:

- Alternatives Analysis
- Cumulative Impact Analysis
- Mitigation Analysis
- Aide in Addressing Public Comments
- USFWS/SHPO Coordination

This project consists of providing environmental studies to obtain clearances pursuant to the National Environmental Policy Act (NEPA) and preparing a NEPA document for the design and construction of proposed improvements for the South Cypress Creek as part of the final Resilient Shelby project. The Consultant team will perform the following services based on the assumption that an Environmental assessment will be required:

- Document Determination
- Develop a Purpose and Need Statement
- Develop Project Alternatives
- Perform a Noise Evaluation
- Perform an Air Quality Evaluation
- Conduct Wetland and Stream Delineations
- Conduct Threatened and Endangered Species evaluations
- Perform an All Appropriate Inquiry (AAI) Phase 1 Environmental Site Assessment for ESA for Hazardous Materials
- Perform an Archeological Assessment in compliance with Tennessee SHPO Standards and Guidelines for Archeological Resource Management Studies
- Perform an Architectural/Historical Assessment
- Public Involvement - Make recommendations to Shelby County regarding the level of public involvement required for this project, based on consultation with HUD and a review of past actions on the project.
- Section 4(f) Impacts - Research available data sources as required to determine if Section 4(f) resources will be impacted by the proposed project improvements.
- Section 6(f) Impacts - Research available data sources as required to determine if Section 6(f) resources will be impacted by the proposed project improvements.
- Floodplain Management - Prepare a project-specific FEMA floodplain map, known as a "FIRMette," to document the project's boundaries relative to the current published floodplains. Information regarding proposed changes to the floodplain will be furnished by Stantec, and will be included in the environmental document.
- Environmental Justice - Review United States 2010 Census data to determine if the proposed improvements will disproportionately impact minority or low-income populations. PHD will prepare a brief written summary, including maps or charts as appropriate, to document the results of the Census review.
- Document Preparation and Distribution - Compile the various letters, maps, reports, technical studies and agency responses generated during the course of the process and will prepare a draft environmental document on the forms provided by HUD for review by Shelby County. PHD will revise the document based on comments received from the County and will submit the revised document to HUD for review. PHD will revise the document based on comments received, and will submit a final document to Shelby County and HUD for review and approval.

The aforementioned *technical Studies (Air, Noise, Wetland/Stream Determinations, Threatened*



*& Endangered Species, Archaeological, Architectural and Phase 1 ESA) will be completed concurrent with the surveying phase of the project.*

***Meetings/Travel***

Travel related to the permitting process shall be included in the basic services

***Deliverables***

Preliminary and Final documents to Shelby County for review and approval as required by the project

**4.6 Bidding and Negotiation Phase (Bid)**

The Consultant Team shall assist the Client in preparing for one pre-bid conference with prospective bidders; it is not expected that Sasaki will attend this meeting in person. During this phase the Consultant Team will complete the following tasks as required:

- Assist the Client in responding to questions from contractors during the bid period.
- Evaluate bids as requested by the Client
- Prepare any required addenda to any of the contract documents or bid information

***Meetings/Travel***

Sasaki will participate in conference calls as needed; no travel is anticipated.

***Deliverables***

Responses to RFIs and addenda as required.

**4.7 Construction Administration Phase (CA)**

Sasaki shall assist the Client during the Project Construction Phase by performing the following tasks:

- Respond to Contractor Requests for Information (RFIs), including clarification of design intent and resolution of conflicts between construction documents and field conditions.
- Review material submittals and shop drawings for site elements for which Sasaki has design and specification responsibility.
- Review and respond to proposed substitutions or deviations from the contract documents.

***Meetings/Travel***

The Consultant Team will participate in regular construction meetings on a bi-weekly (or as needed) basis by phone. No travel is anticipated.

***Deliverables***

Consultant Team will prepare responses and addenda as required and as described above.

**CLIENT RESPONSIBILITIES**

The Client shall be responsible for:

1. Geotechnical investigation of existing soil materials within the Project boundary to include explorations along planned berm alignments, new stream crossing locations, and at all major site elements. Some drilling may also be proposed for embankments

planned for removal. These explorations are necessary to understand the soil material and properties available for proper foundation stability. Registered Geotechnical Engineer shall complete laboratory testing necessary for determining the soil strength properties and compile a summary report with recommendations to include, but not limited to pavement profiles, recommended foundation depths for structures, slope analysis to determine maximum allowable slopes and recommendations for steep slopes as required for Project construction. It is our understanding that the Geotechnical explorations will occur during the Project Initialization and Data Gathering phase of work.

2. Providing Consultant Team with a complete survey base plan of existing conditions within the Project boundary, including property boundaries, setbacks, easements, topography, structures, culverts, roads and other paving, vegetation, utilities including storm drainage, etc. The survey shall include material, size, and other information critical to project design and quantities estimate. The topographic surface delivered to the Consultant Team shall be as a TIN surface. These surveying services will include gathering topographic profile data for all stream channels identified from the desktop review along with sufficient topographic points collected at top of bank and floodplain to validate and/or correct LIDAR data. The survey shall be prepared by a registered engineer or land surveyor in AutoCad Civil 3D 2014 format. Consultant Team will assist the Client in obtaining the comprehensive survey. It is our understanding that the Survey process will occur during the Project Initialization and Data Gathering phase of work. The Consultant Team shall have the right to rely on the accuracy and completeness of the information provided to Consultant Team by the Client.
3. Preparation of General Conditions of the Contract, any Supplemental General Conditions, and Performance Bond for bid.

#### **ADDITIONAL SERVICES**

Consultant Team shall provide Additional Services if authorized by the Client, including:

- Extended Design and Documentation Schedule
- ~~Permitting or assistance applying for any permits required beyond what is described in the Scope of Services.~~ It is the design teams understanding that the preparation of a Storm Water Pollution Prevention Plan (SWPPP) or Notice of Intent (NOI) is not required for this project
- Graphic Design for Signage, wayfinding, and identity elements
- Traffic analysis, engineering and traffic control plans
- Electrical engineering and Lighting design
- Site Utilities – Sanitary sewer, Water and Gas are not included
- Additional Box culvert layouts beyond the (1) one located at Mitchell Road.
- Irrigation Design
- Attendance at meetings and field observation trips in addition to those included in the Scope of Services described above.
- Project construction cost estimating beyond what is described in the Scope of Services.
- Modification to Construction Documents after final review and acceptance of the 100% Construction Documents deliverable by the Client.
- Processing contractor Requests for Payment and Change Orders during Construction

## Phase.

- Preparation and Documentation of Add or Deduct Alternates during 45% or 95% Design phase and of new Alternates during or after the 100% Design Phase.
- LEED documentation
- Working with an artist to integrate public art
- The results from the Phase I Environmental Site Assessment (ESA) process may result in additional work being required as a Phase II ESA. This service is not included in this scope of work. If appropriate and requested, PHD can provide a separate scope of services for a Phase II ESA.
- This scope includes a Phase I Archaeological Assessment only. Additional investigations, if necessary, such as Phase II determinations of eligibility (i.e., site testing) and Phase III data recovery, are beyond the scope of this proposal.
- If the Architectural Assessment determines that the proposed project will have an adverse effect to any eligible or previously National Register of Historic Places listed properties, any efforts to resolve the adverse effects would be considered additional services.
- Site Visits and Travel during the Bidding and Negotiation and Construction Administration Phases

**SCHEDULE**

Sasaki is prepared to begin the services described herein as soon as authorized. Our current fee is based upon the attached schedule (see attached). We expect a start date of approximately September 12, 2016. Schedule related to permitting items assumes receipt of timely responses from the reviewing agencies (SHPO, USFWS, TWRA, COE, TDEC, etc.). The Consultant Team has no control over this process, and this is typically the source of most delay in completing environmental documents.

**FEES AND EXPENSES**

The Consultant Team will provide the services described above on a Fixed Fee basis in accordance with the provisions set forth in the Master Services Agreement. Fees, including sub-consultants contracted to Sasaki, as described in the Scope of Services, are included in the fee and broken out by Task.

<b>Part 1: NAP</b>	Sasaki	Memphis Tilth	UT Ag	<b>TOTAL</b>
Task 1	\$27,000	\$6,000	\$4,000	\$37,000
Task 2	\$34,000	\$12,000	\$6,000	\$52,000
Task 3	\$42,000	\$14,000	\$8,000	\$64,000
Part 1 Sub-total	\$103,000	\$32,000	\$18,000	<b>\$153,000</b>
Expenses				
<b>Part 2: Design &amp; Implementation</b>	Sasaki	Stantec	Powers Hill	<b>TOTAL</b>
PM/Initialization	\$47,700	\$98,000		\$145,700
45% Design	\$156,500	\$136,000		\$292,500
95% Design	\$186,650	\$158,000		\$344,650

100% Design	\$55,500	\$77,000		\$132,500
Task 4.6: Permitting	\$15,000	\$24,000	\$282,250	\$321,250
Task 4.7,4.8: Bid and CA Phase	\$59,925	\$0		\$59,925
Part 2 Sub-total	\$521,275	\$493,000	\$282,250	<b>\$1,296,525</b>
<b>TOTAL FEE</b>				<b>\$1,449,525</b>

Reimbursable expenses for subconsultants are included in their fees. Travel for Sasaki will be coordinated with the Big Creek project and project reimbursables will be included in that scope of work and fee. Typical project-related expenses include air fare, ground travel, lodging, telephone, printing, freight and supplies.

Sasaki will provide all services in accordance with the provisions set forth in the attached Schedule of Terms and Conditions (revised 4/01/07).

#### **AUTHORIZATION**

If you are in agreement with the foregoing proposal, please sign, initial the terms and conditions, and return to my attention to indicate your acceptance and our notice to proceed.

We look forward to collaborating on this important and multifaceted project for Shelby County. If you have any questions related to the proposal, please do not hesitate to contact me.

Sincerely,



Jason Hellendrung  
Principal



5 August 2016

Tom Needham  
Chief Engineer, Shelby County  
John Zeanah  
Deputy Director, Memphis & Shelby County Division of Planning and Development  
160 N. Main  
Suite 1127  
Memphis, TN 38103

*re:* Shelby County – Big Creek – Proposed Scope of Services

Tom and John:

Sasaki Associates, Inc (Sasaki) is pleased to provide this proposal, Amendment #2 to our original agreement dated August 19, 2015 to the Shelby County Working Group (Client) for landscape architectural and design services related to the implementation of the Big Creek Development Wetland and Recreation Areas component of Shelby County's National Disaster Resilience Competition submittal (Project).

The Big Creek Project is a significant undertaking requiring comprehensive expertise that integrates landscape architecture, ecology, engineering, architecture, art, and infrastructure to transform the Big Creek area into a new destination within Shelby County that merges the natural landscape with the built environment. As an interdisciplinary design firm, Sasaki is uniquely qualified to help guide such an integrated approach. We will work collaboratively with the Client, and the Barge Waggoner (BWSC) and Dalhoff Thomas Design Studio (DTDS) teams to develop sustainable solutions that deal with local and regional climates, infrastructure, programming and future resource demands to realize this important project.

Our goal will be to work with the client and consultant teams to help advance the earlier design vision from the Phase 2 NDRC application in a way that seamlessly connects the creek and environs, adjacent neighborhoods, circulation, and public open space together with a focus on flood resilience. We will transform the park in a manner that blends river hydraulics, ecology, social function, and adventure play and recreation.

Allowing nature to inform design, we will work with the team to create a local and regional destination park that accentuates the floodplain environment and park program potentials. Potential program elements include ecological restoration strategies for the creek and floodplain, open recreation fields, destination play facilities, gathering spaces for events, camping, habitat creation and environmental education, food production, and a hierarchy of trails and paths. The network of trails and paths will be used for walking and jogging, and importantly, bicycling, which will all the network to expand the connectivity strategies from the Mid-South Greenprint Plan to connect to the adjacent neighborhoods, and more broadly the county and region. Within the circulation hierarchy, we'll explore other opportunities, such as the potential for horseback riding and/or possibly ATV's (although not mixed together!)

We will organize our work in support of the BWSC and DTDS teams around a series of work sessions that aligns their schedule and milestones with our efforts for Cypress Creek, including work sessions, project reviews, and community meetings. The timelines between the Big Creek project and the Cypress Creek project are generally well-aligned. Our approach will be to organize a work session/coordination meeting between the projects approximately every 2 months, allowing for 7 work sessions and trips between the two projects over a 12-14 month time frame from September, 2016, through the fall of 2017. We will supplement the work sessions with weekly or bi-weekly web-ex conferences and email in between in-person work sessions to coordinate efforts.

## **SCOPE OF WORK**

### **Design of Big Creek Development Wetland and Recreation Area**

#### **1.1 Project Initialization Phase**

Sasaki will provide the following services during the Project Initialization Phase:

- Participate in two work sessions with the Client, BWSC, and DTDS to provide initial design direction and recommendations to the design.
- Prepare a summary document with preliminary design sketches of design options explored for integration in the refined design, along with potential program elements for the Big Creek Area
- Study and prepare site analysis drawings with Opportunities and Constraints
- Compile Precedent Images and Scale Comparisons
- Review Greenprint and Millington Greenways Plan documents
- Review DTDS's design submission at the close of the Project Initialization phase and review next steps with client and design team

#### **Meetings/Travel**

Sasaki will attend (2) two meetings in Shelby County, TN at the beginning and near the end of the Project Initialization Phase. The first meeting will be a kick-off meeting to participate in a design work-session to initiate the project and visit the site. The second meeting will be to participate in a review development and coordinate on deliverables for the Project Initiation submittal. Sasaki will participate in conference calls as needed to ensure a continuous and active dialogue related to the progress of the design.

- Kick-off Meeting - Design Work session
- Project Initializations Coordination Meeting

#### **1.2 Preliminary Design Phase**

Following the Project Initialization Phase, Sasaki will engage in the Preliminary Design Phase. This phase of design will respond to a program based on the Client requirements and design direction set forth in the Initialization phase. During this phase, the Consultant Team will complete the following tasks:

- Explore alternative designs to develop the program and advance the project design
- Consider environmental and ecological improvements

- Develop a conceptual material palette to include site paving, walls, stairs, site elements, planting and lighting recommendations
- Work with our in-house sports team to review recreational field layout, solar orientation, and materials.
- Study sections/elevations to understand site components and their relationship to existing and proposed grades
- Study precedents to communicate scale and design intent, as needed.
- Compile successful Scale Comparison Case Studies
- Study Site Pedestrian, Bicycle and Vehicular Circulation
- Study options for park programming, flexibility and circulation
- Provide plan renderings for design options
- Provide additional landscape renderings and diagrams to communicate design intent
- Review and comment on Preliminary Design documents submitted to client DTDS

**Meetings/Travel**

During the Preliminary Design Phase, Sasaki will attend and participate in two (2) design work sessions to present deliverables. Our team will participate in conference calls as needed to ensure a continuous and active dialogue related to the progress of the design.

- Two Preliminary Design Work Sessions

**1.3 Design Development Phase**

Upon approval from the Client, the Consultant Team will further aid in the refinement of the site design, incorporating any feedback received at the end of the Preliminary Design Phase. During this phase the Consultant Team will complete the following tasks:

- Participate in two design work sessions during the Design Development phase
- Advance overall site plan development; collaborate with and communicate additional detail development to DTDS
- Advance sections to illustrate site components, their scale, and relationship to each other.
- Work closely with DTDS to advance site design concepts, planting, site elements, site furniture, walls, planting, and other pedestrian-related items.
- Review the stormwater management system proposed for the site.
- Provide Plan Renderings for preferred option
- Review and comment on Design Development documents submitted to the client by DTDS

**Meetings/Travel**

Sasaki will participate in conference calls as needed to ensure a continuous and active dialogue related to the progress of the design. Sasaki will participate in (2) two work sessions during the Design Development Design Phase:

- Design Development coordination meeting meetings (2)

**4.4 Final Design Phase**

This phase of work shall include coordination and providing review and design feedback related to DTDS submittals. During this phase, the Consultant Team will complete the following tasks:

- Participate in one design work session with the team to review and advance design elements for Final Design

- Provide design feedback and review for grading and drainage, pavements, planting, curbs, stairs, site elements and other pedestrian-related items.
- Provide design detail support for special elements.
- Work with the other project consultants to refine and complete the site design.
- Review and comment on Final Design documents submitted to the client by DTDS

**Meetings/Travel**

Consultant team will participate in conference calls as needed to ensure a continuous and active dialogue related to the progress of the design. The Consultant team will participate in (1) one work session in Shelby County, TN during the Final Design Phase:

- Final Design Phase coordination meeting

**ASSUMPTIONS**

This proposal assumes the following:

- All documentation of the contract documents shall be by the DTDS team.
- Sasaki will not be responsible for professionally signing and sealing drawings related to the Big Creek project
- The majority of travel and work-sessions related to the Big Creek Project shall coincide with meetings for the concurrently running Cypress Creek Project.
- Geotechnical Engineering and investigation are not the responsibility of Sasaki Associates
- Survey base plan of existing conditions will be provided by other team members and is not the responsibility of Sasaki Associates.

**ADDITIONAL SERVICES**

Consultant Team shall provide Additional Services if authorized by the Client, including:

- Graphic Design for Signage, wayfinding, and identity elements
- Extended Design and Documentation Schedule
- Preparation of permitting documents or assistance applying for required permits.
- Attendance at meetings and field observation trips in addition to those included in the Scope of Services described above.
- Project construction cost estimating
- Modification to Construction Documents after final review and acceptance of the 100% Construction Documents deliverable by the Client.
- Bid and Construction administration services
- Working with an artist to integrate public art

**SCHEDULE**

Sasaki is prepared to begin the services described herein as soon as authorized. Our current fee is based upon the below schedule:

<u>Phase</u>	<u>Start Date</u>	<u>End Date</u>
1.1 Project Initialization Phase	9/12/2016	11/31/2016
1.2 Preliminary Design	11/31/2016	3/31/2016
1.3 Design Development	04/1//2017	08/31/2017
1.4 Final Design	08/31/2017	10/31/2017



**FEES AND EXPENSES**

Sasaki shall provide the Scope of Services outlined above for a fixed fee of Two Hundred and Ninety Thousand Dollars (\$290,000). Sasaki proposes the following fee breakdown and shall invoice based on percentage of completion by phase as described below:

PM/Initialization	\$65,000
Preliminary Design	\$135,000
Design Development	\$70,000
Final Design	\$20,000
<b>Total Sasaki fee</b>	<b>\$290,000</b>

All typical project-related expenses including air fare, ground travel, lodging, telephone, printing, freight and supplies shall be included in the above fee.

Sasaki will provide all services in accordance with the provisions set forth in the attached Schedule of Terms and Conditions (revised 4/01/07).

**AUTHORIZATION**

If you are in agreement with the foregoing proposal, please sign, initial the terms and conditions, and return to my attention to indicate your acceptance and our notice to proceed.

Sasaki looks forward to collaborating on this important and multifaceted project for Shelby County. If you have any questions related to the proposal, please do not hesitate to contact me.

Sincerely,



Jason Hellendrung  
Principal