



CITY COUNCIL AGENDA REQUEST

Meeting Type: Mayor & Council Meeting

Meeting Date: 4/15/2024

Agenda Item: Task Order 11 - Temple Beth El Arcadis Design Services

Department: Public Works

Requested By: Chad Townsend

Reviewed/Approved by City Attorney? -----

Cost: \$218,674.00

Funding Source if Not in Budget -----

Please Provide A Summary of Your Request, Including Background Information to Explain the Request:

This request is to approve the Professional Services Agreement with the engineering consultant Arcadis for design services on the Temple Beth El Project. The scope of work includes development of construction plans a stormwater management facility and commemorative park on the site.

The work is to be completed within 210 calendar days form the date of contract execution.

See attached proposal for additional information about the scope of services.

PROFESSIONAL SERVICES TASK ORDER

Task Order Number: 011
Task Order Date: March 20, 2024

Subject to the Master Services Agreement between *the City of Dalton, Georgia* [Client] and *Arcadis U.S., Inc.* [Arcadis], dated March 1, 2020, Client hereby authorizes Arcadis to perform services as specified in this Task Order and in accordance with the above-mentioned Agreement.

1. Project Description: A description of Client’s Project for which work is requested is provided in Attachment 1, incorporated into this Task Order.

Client's Project Number: _____
Project Name: Temple Beth El Design
Client's Representative: Jackson Sheppard

2. Scope of Work: Arcadis shall perform its services as described in Attachment 1, incorporated into this Task Order.

Arcadis's Job Number: _____
Arcadis's Representative: Richard Greuel, P.E.

3. Time Schedule: Arcadis shall use reasonable efforts to complete its work by: 210 days of Notice to Proceed

4. Compensation: Arcadis's Compensation authorized under this Task Order, which shall not be exceeded without prior written authorization of Client, is:

\$ 218,674 [] This Task Order's Method of Payment is incorporated and attached as Attachment 2.

5. Special Conditions: This Task Order is subject to the special provisions as described in Attachment 3, attached and incorporated into this Task Order:

6. Amendment: []
Previous Task Order Number: ___ Previous Task Order Date: _____

ISSUED AND AUTHORIZED BY:
Client

ACCEPTED AND AGREED TO BY:
Arcadis, INC.

By: _____ By: _____

Title: _____ Title: _____

PROFESSIONAL SERVICES TASK ORDER
Task Order Number: 011

Attachment 1
Description of Project & Scope of Work

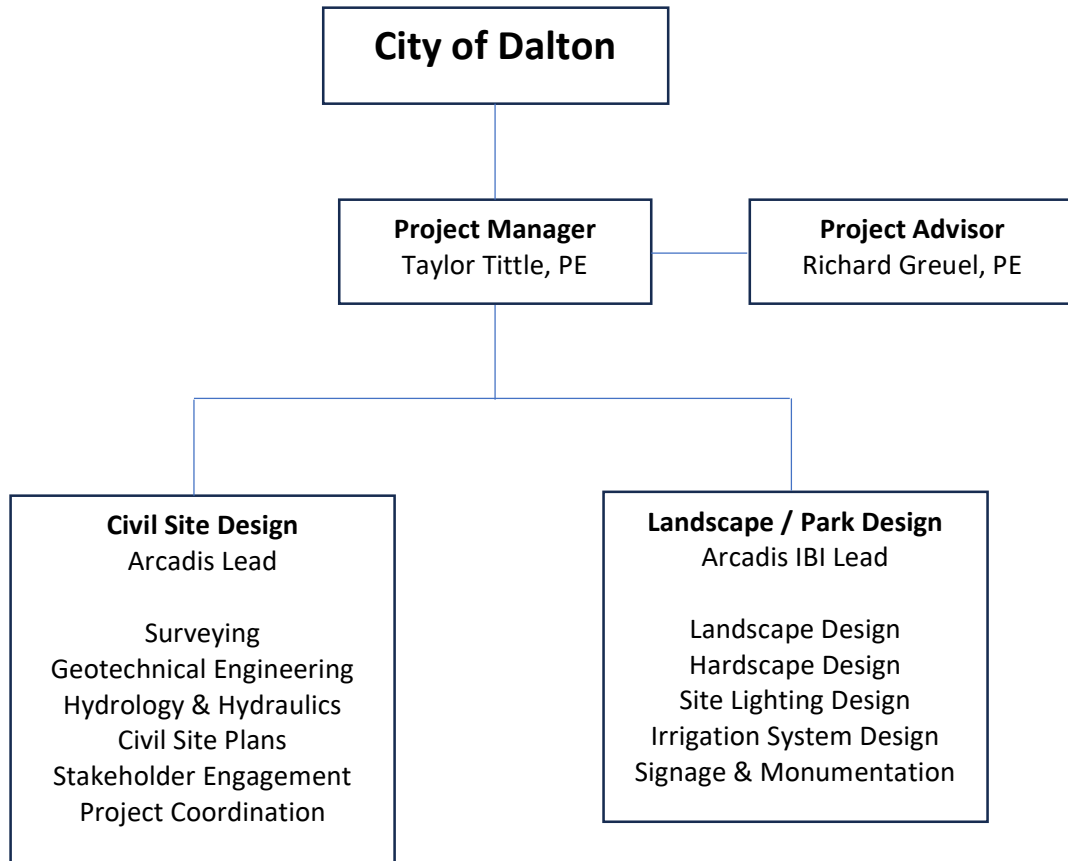
Introduction

The City of Dalton has requested that Arcadis prepare this proposal to provide engineering and design support to develop a stormwater management facility and park for the Walnut North Basin. Specifically, this Task Order will focus on the development of construction plans for a concept developed previously for the Temple Beth El Synagogue at 501 Valley Dr, Dalton, Georgia. Previously, this concept shown below was developed with stakeholders to provide the following:

- Create a stormwater management facility to reduce downstream flooding.
- Create a park for the enjoyment of the community.
- Highlight via Public Education the contributions of the Jewish community of Dalton.



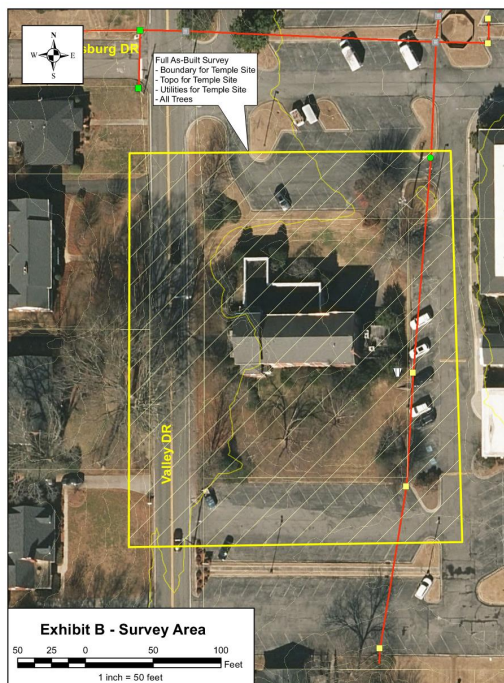
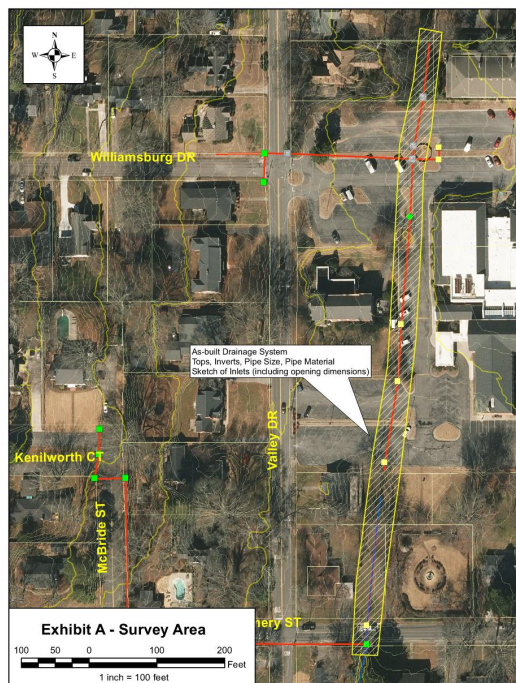
To facilitate the development of this project, Arcadis has assembled a diverse team of professionals that will provide the technical knowledge to provide construction plans for the project. The organizational chart below provides an overview of the primary areas of design and who will provide these services.



The following scope of work has been developed to outline our proposed approach.

Task 1 – Survey

Arcadis will subcontract Southeastern Engineering, Inc. (SEI) to conduct a survey of the Temple Beth El property.



As-built Survey

An as-built survey of the storm drain system to the east of Valley Drive shown on Exhibit A above will be performed. The surveying effort include Tops, Pipe Inverts, Pipe Sizes, Pipe Material, and a sketch of any inlets (to include opening dimensions).

Temple Boundary, Utility, and Topographic Survey (EXHIBIT B)

A boundary survey will be prepared in accordance with the State of Georgia requirements for land surveys. Boundary resolution pricing is based on a reasonable amount of research and field work in accordance with industry standards. Should the reconstruction of the subject property involve more than what is deemed reasonable, and the need arises for additional tracts to be surveyed (e.g. subject property does not have suitable monumentation or is not properly recorded), additional charges may be needed to complete the survey.

A field run 1-foot contour interval topographic survey will be performed on the areas described above. Horizontal projection will be Georgia State Plane (NAD83-2011 Datum). Elevations will be based on NAVD88 Datum. All main features of the topography will be delineated including but not limited to the following; creeks, streams, ditches, lakes, adjacent property lines, above ground utilities, marked underground utilities, roadway markings, traffic control devices, speed humps, gates, landscape areas, mailboxes, storm and sanitary sewer fixtures with size, type and invert, edge of pavement, curb lines with top and gutter elevation (irregular stone or rock curb lines will only be located at edge of pavement), bridges, walls, stairs, sidewalks, concrete pads, driveways, buildings, signs, benches, bleachers, fences, power poles and overhead lines, guy wires, pedestals, fire hydrants, valves, meters and other above ground features. Contours shown will be based on spot elevations taken at an approximate 50' grid pattern to ensure that not less than 90% of the contours shown will be out of vertical position by more than ½ of the contour interval according to Georgia Technical Standards for Property Surveys. SEI will show the location of all trees 2" DBH and larger.

Underground Utility Locate

A private utility locate service will be contracted to reduce the risk of damage to underground utilities by marking their location on the ground surface. This information is useful for planning, design, or construction.

This proposal:

- This includes locating the area outlined in Exhibit B.
- Includes locating gas, power, water, and communications.
- Does not include Sewer and Drain Piping.
- Includes a digital, color-coded PDF.
- Includes Ground Penetrating Radar (GPR) if required – see section below.
- Non-metallic utilities and utilities without a tracer wire may not be traceable and therefore not be physically marked on the ground.
- Irrigation systems are not part of this service.
- Underground storage tanks (UST's) are not part of this service.
- Entry of structures requiring a Confined Entry permit is not included.
- In the undeveloped area of the site, we will only do a visual observation to see if there are any utilities present. If any are observed, we will locate them.
- Depth information is excluded.

The utility locate service will also utilize Ground Penetrating Radar equipment (GPR). This will allow for additional quality to the work by allowing for discrimination between utilities in congested areas and for locating non-metallic utilities that will not support a radio signal. It should be noted that GPR is not affected by electromagnetic waves, such as, emanating from electrical equipment (transformers, etc.), or energized electrical wiring.

The performance of Ground Penetrating Radar (GPR) is affected by the conductivity of the soil and therefore its success can only be determined after calibration and use at a particular site.

Deliverables:

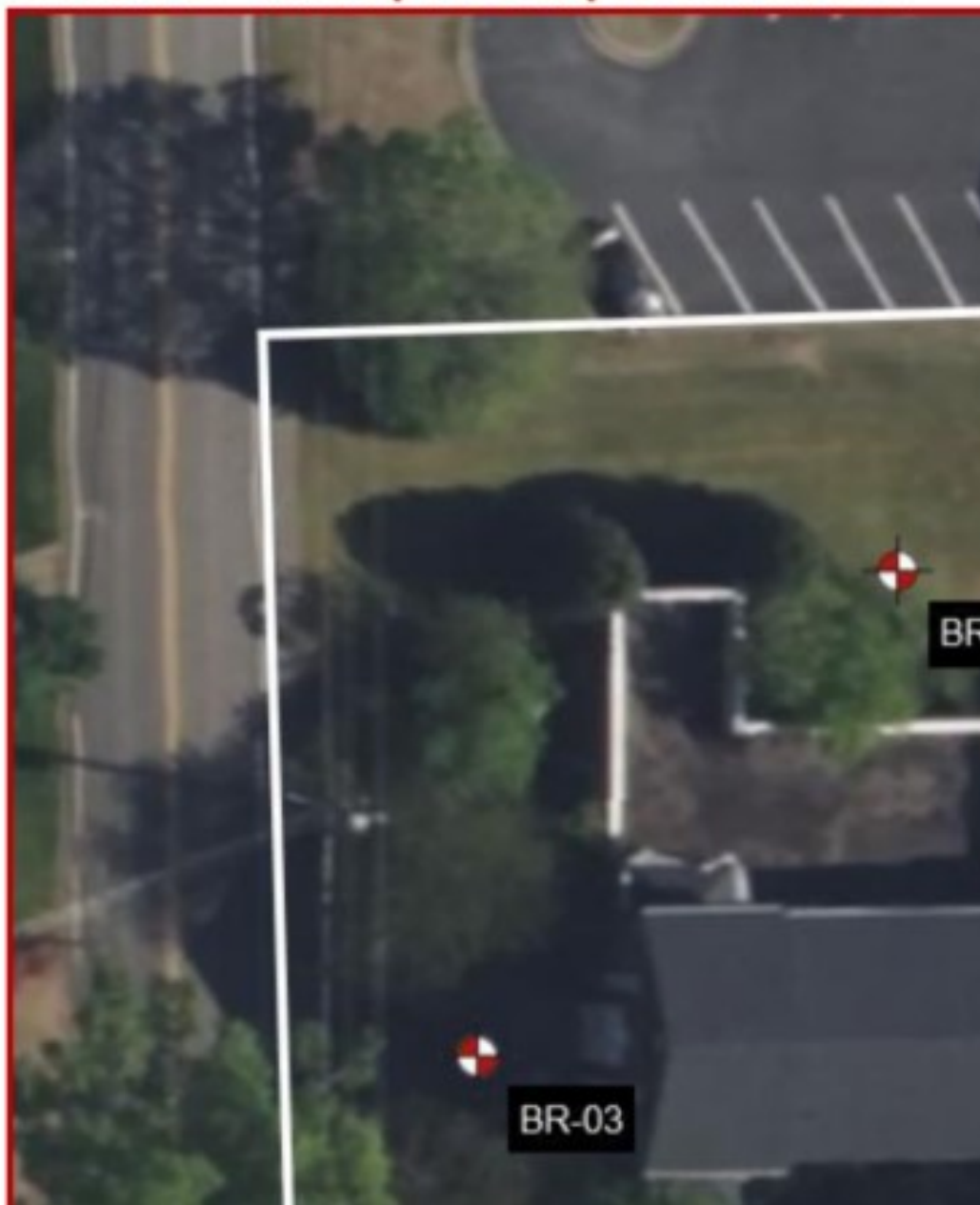
- Signed & Sealed Site Survey (PDF)
- Site Survey (AutoCAD)

Assumptions:

- City will coordinate all on-site access for private property

Task 2 – Geotechnical Investigation

Arcadis will subcontract Terracon to conduct a geotechnical investigation of the Temple Beth El property.

Exhibit E – Anticipated Exploration Plan**Field Exploration (Exhibit E)**

4 subsurface borings will be conducted on the site.

Number of Borings	Planned Boring Depth (feet) ¹	Planned Location ²
4	30-feet or to auger refusal	Distributed throughout site

1. Although not anticipated based on the geology in the vicinity of the project site, borings would be terminated at shallower depths if refusal is encountered.
2. The planned boring locations are shown on the above Anticipated Exploration Plan – Exhibit E.

Boring Layout and Elevations

Handheld GPS equipment will be used to locate borings with an estimated horizontal accuracy of +/-10 feet. Field measurements from existing site features may be utilized. If available, approximate elevations will be obtained by interpolation from a site specific, surveyed topographic map.

Subsurface Exploration Procedures

Borings will be advanced with a truck-mounted drill rig using continuous flight augers (solid stem and/or hollow stem, as necessary, depending on soil conditions) and/or rotary wash boring techniques. Four samples will be obtained in the upper 10 feet of each boring and at intervals of 5 feet thereafter. Soil sampling is typically performed using thin-wall tube and/or split-barrel sampling procedures. The split-barrel samplers are driven in accordance with the standard penetration test (SPT). The samples will be placed in appropriate containers, taken to a soil laboratory for testing, and classified by a Geotechnical Engineer. In addition, we will observe and record groundwater levels during drilling and sampling.

The exploration team will prepare field boring logs as part of standard drilling operations including sampling depths, penetration distances, and other relevant sampling information. Field logs include visual classifications of materials observed during drilling and our interpretation of subsurface conditions between samples. Final boring logs, prepared from field logs, represent the Geotechnical Engineer's interpretation and include modifications based on observations and laboratory tests.

Property Disturbance

Terracon will take reasonable efforts to reduce damage to the property. However, it should be understood that in the normal course of our work some disturbance could occur including rutting of the ground surface and damage to landscaping. Borings will be backfilled with auger cuttings upon completion. Pavements will be patched with cold-mix asphalt and/or ready-mixed concrete, as appropriate. Our services do not include repair of the site beyond backfilling our boreholes and patching existing pavements. Excess auger cuttings will be dispersed in the general vicinity of the borehole. Because backfill material often settles below the surface after a period, we recommend boreholes to be periodically checked and backfilled, if necessary.

Safety

We are not aware of environmental concerns at this project site that would create health or safety hazards associated with our exploration program; thus, our Scope considers standard OSHA Level D Personal Protection Equipment (PPE) appropriate. Our Scope of Services does not include environmental site assessment services, but identification of unusual or unnatural materials observed while drilling will be noted on our logs.

Laboratory Testing

The project engineer will review field data and assign laboratory tests to understand the engineering properties of various soil strata. Exact types and number of tests cannot be defined until completion of fieldwork, but we anticipate the following laboratory testing may be performed:

- Water content
- Atterberg limits
- Grain size analysis

The laboratory testing program often includes examination of soil samples by an engineer. Based on the results of the field and laboratory programs, Terracon will describe and classify soil samples in accordance with the Unified Soil Classification System (USCS).

Report

The results of our field and laboratory programs will be evaluated, and a geotechnical engineering report will be prepared under the supervision of a licensed professional engineer. The geotechnical engineering report will provide the following:

- Boring logs with field and laboratory data
- Stratification based on visual soil classification
- Groundwater levels observed during and after the completion of drilling
- Site Location and Exploration Plans
- Subsurface exploration procedures
- Description of subsurface conditions
- Recommended foundation options and engineering design parameters
- Estimated settlement of foundations
- Recommendations for design and construction of interior floor slabs
- Earthwork recommendations including site/subgrade preparation

Deliverables:

- Geotechnical Engineering report, including the professional engineer's seal and signature

Assumptions:

- City will coordinate all on-site access for private property

Task 3 – Hydrologic & Hydraulic ModelingExisting Conditions Analysis

The existing conditions analysis will consist of development of appropriate hydraulic computer modeling to quantify the nature of the drainage conditions that currently exist within the Walnut North basin. For the purposes of this scope of work, Arcadis will update the existing SWMM model of Walnut North developed for the Ridge Street Drainage Improvements program based on the data collected for the proposed Temple Beth-El Project. The following 24-hour storms will be modeled; 1-year, 2-year, 5-year, 10-year, 25-year, 50-year, and 100-year. The results will be analyzed and discussed with City staff.

Assumptions:

- Land use will be based on parameters previously completed as part of the Flood Abatement Plan and Walnut North Basin Modeling

Deliverables:

- Limited Technical Memorandum outlining means and methods as well as results of the existing analysis.

Alternatives Analysis

The purpose of the alternatives analysis is to test different proposed pond design alternatives on the Temple Beth-El Project site for downstream flood reduction effectiveness. A target level of service and/or reductions in peak flow values for detention capacity will be determined for the preferred design alternative. The preferred alternative will be discussed and presented to City staff prior to finalizing concept design. Arcadis will compare the results of the preferred alternative with the existing conditions modeling results.

Meetings and Deliverables:

- Up to two virtual meetings to discuss findings prior to finalizing draft report.

Design Report

Arcadis will submit a draft technical memorandum summarizing the methodology utilized to conduct the analysis as well as the results of the preferred alternative outlined in the above task. Following completion of the draft report, Arcadis will schedule a meeting with city staff to discuss the report prior to finalization. A final version of the report will be submitted two weeks after receipt of City comments.

Assumptions:

- Draft and final reports will be electronic format.

Deliverables:

- Draft Report
- Final Report that incorporates appropriate revisions resulting from City comments received.

Task 4 – Civil Site Design & Construction Plans

Tasks 1 through 3 have been completed, Arcadis will work with the City to create civil site development plans of the detention facility and park.

30% Plans

Arcadis will prepare a design submittal at the 30-percent design stage and submit to the City of Dalton Public Works Department for review. The purpose of the 30% plans are to provide an engineering design that identifies all constraints to the design and provide “proof of concept”. The 30-percent design drawings and deliverables will include:

- 30% Submittal Construction Plan Sheets
 - Title Sheet
 - Existing Conditions Plan
 - Demolition Plan
 - Site Plan
 - Grading and Drainage Plan

Arcadis will provide a brief stormwater management memo outlining the hydrologic / hydraulic performance of the proposed improvements. This memo will focus on documenting that the design is expected to meet the performance metrics identified in Task 3.

Deliverables:

- 30% Construction Plans (PDF Format)
- Technical Memo outlining anticipated performance of the detention facility and the impacts to the Walnut North basin

Assumptions:

- No more than 2 Design Iterations for Final Concept.
- Arcadis will address one round of review comments for the 30-percent design.
- The City will provide one set of consolidated review comments for the 30% Design Plan submittal.
- The scale of plan drawings will be 1-inch equals 20-feet.
- This project will be exempt from water quality, channel protection, and detention requirements of the City’s Land Development Ordinance.
- It is anticipated that the disturbed area of the project will be less than 1 acre, as such, no NPDES Construction permit will be required for this project.
- GDOT standard details and specifications will be sufficient for the project for drainage elements.

- The civil site grading design will provide approximate top and bottom of retaining wall elevations for the pond wall. Final wall elevations will be determined by the retaining wall designer.
- The sidewalks around the pond will be concrete or stamped concrete.
- Electrical conduit and the well to recharge pond water levels will be provided by the City. A location will be identified on the drawing for this infrastructure, but size, type and final conduit routing will be provided by the City.

60% Plans

Arcadis will prepare a design submittal at the 60-percent design stage and submit to the city for review. The 60-percent design drawings and deliverables will include:

- 60% Submittal Construction Plan Sheets
 - Title Sheet
 - General Notes
 - Existing Conditions Plan
 - Demolition Plan
 - Tree Protection Plan (if required)
 - Site Plan
 - Grading and Drainage Plan
 - Pipe Profiles
 - Traffic Control Plan (if required)
 - Erosion & Sedimentation Plans
 - Erosion & Sedimentation Details
 - Standard Civil Details

Deliverables:

- 60% Construction Plans (PDF Format and 1 hardcopy)
- Stormwater Management Analysis memo (PDF Format) – If changed from the previous submittal.

Assumptions:

- Arcadis will address one round of review comments for the 60-percent design.
- The City will provide one set of consolidated review comments for the 60% Design Plan submittal prior to the plan review meeting.
- The scale of plan drawings will be 1-inch equals 20-feet
- The civil site grading design will provide approximate top and bottom of retaining wall elevations for the pond wall. Final wall elevations will be determined by the retaining wall designer.
- The sidewalks around the pond will be concrete or stamped concrete.
- Electrical conduit and the well to recharge pond water levels will be provided by the City. A location will be identified on the drawing for this infrastructure, but size, type and final conduit routing will be provided by the City.

90% Plans

Arcadis will prepare a design submittal at the 90-percent design stage and submit to the City for review. The 90-percent design drawings and deliverables will include:

- 90% Submittal Construction Plan Sheets
 - Title Sheet
 - General Notes
 - Existing Conditions Plan
 - Demolition Plan

- Tree Protection Plan (if required)
- Site Plan
- Grading and Drainage Plan
- Pipe Profiles
- Traffic Control Plan (if required)
- Erosion & Sedimentation Plans
- Erosion & Sedimentation Details
- Standard Civil Details

It is the intent of the 90% drawings to be sufficient for permitting. Following completion of the effort, Arcadis will provide a 90% set of construction plans marked "For Permitting" signed and sealed by a Georgia Registered Engineer with a Level II Design certification by the Georgia Soil and Water Conservation Commission.

Deliverables:

- 90% Construction Plans (PDF Format and 1 hardcopy)
- Stormwater Management Analysis memo (PDF Format) – If changed from the previous submittal.

Assumptions:

- Arcadis will address one round of review comments for the 90-percent design.
- The City will provide one set of consolidated review comments for the 90% Design Plan submittal prior to the plan review meeting.
- Following completion of this task, the plans will be considered final and sealed / signed drawings will be provided for construction.

Permitting

Based on the proposed project, no significant permitting is expected. The proposed project is not anticipated to impact wetlands, buffers, and other environmentally sensitive areas. As such, this project is only anticipated to require a Land Disturbance Permit.

Task 5 – Landscape Architecture Design & Construction Plans

Arcadis will provide a landscape architectural design through our subsidiary Arcadis IBI.

Schematic Design

Arcadis IBI will prepare a schematic design submittal (equivalent to a 30-percent design stage) and submit to the City of Dalton Public Works Department for review. The purpose of the schematic design is to provide a more detailed design of the proposed park aspects of the project beyond that shown in the concept plan developed previously and build stakeholder acceptance. The 30-percent design drawings and deliverables will include:

- Schematic Design Drawings
 - Hardscape Material Plans
 - Layout Plans
 - Planting Plans
 - Lighting Plans
 - Details

Once the City has accepted the design, Arcadis IBI will develop one (1) Rendering of finalized approved schematic plan for use in stakeholder engagement.

Deliverables:

- Schematic Design Plans (PDF Format)
- Rendering of finalized Approved Schematic Plan

Assumptions:

- No more than 2 Design Iterations for Final Concept.
- Arcadis will address one round of review comments for the schematic design.

Design Development

Arcadis IBI will prepare 60-percent design drawings and submit to the City of Dalton Public Works Department for review. The 60-percent design drawings and deliverables will include:

- Schematic Design Drawings
 - Hardscape Material Plans
 - Layout Plans
 - Planting Plans
 - Lighting Plans
 - Irrigation Plans
 - Hardscape Details
 - Decking Details
 - Railing Details
 - Signage Details
 - Landscape Details
 - Lighting Details
 - Irrigation Details
 - Plant Schedule

Deliverables:

- 60% Construction Plans (PDF Format and 1 hardcopy)

Assumptions:

- Arcadis IBI will address one round of review comments for the 60-percent design.

Construction Documents

Arcadis IBI will prepare 100-percent design drawings and submit to the City of Dalton Public Works Department for review. The 60-percent design drawings and deliverables will include:

- Construction Drawings
 - Hardscape Material Plans
 - Layout Plans
 - Planting Plans
 - Lighting Plans
 - Irrigation Plans
 - Site Sections and Elevations (as needed)
 - Hardscape Details
 - Landscape Details
 - Lighting Details
 - Irrigation Details
 - Plant Schedule

Following completion of the construction drawings, Arcadis will provide final specifications (PDF and Word format) as needed. Once the City has accepted the design, Arcadis IBI will develop one (1) Rendering of finalized approved plan for use in stakeholder engagement.

Deliverables:

- 60% Construction Plans (PDF Format and 1 hardcopy)

Assumptions:

- Arcadis IBI will address one round of review comments for the 100-percent design.

Task 6 – Signage & Monuments

A key goal in the project will be to highlight via public education the contributions of the Jewish community of Dalton. To achieve this, the concept design envisions signage and monuments located throughout the park that will highlight the Jewish families that worshiped at the Temple Beth El and their contributions that helped to establish the textile industry in Dalton area. Arcadis will provide the design of these signs and monuments through our subsidiary Arcadis IBI.

Monument Design & Character

Our team will meet with the City to establish the messaging and nature of the monuments. It is anticipated that these meetings will include project representatives and graphic designers that will vision the memorial exhibits.

Monument Construction Drawings

Once the design of the monuments have been established, the project team develop construction drawings that will guide the construction of the monuments and signage.

Deliverables:

- Monument Designs
- Signage & Monument Construction Drawings

Assumptions:

- No more than 2 Design Iterations for Final Concept.
- Arcadis will address one round of review comments for the schematic design.

Task 7 – Public Meetings

It is our understanding that the City will likely schedule one to two public meetings to present the status of the project to city officials and general public. Arcadis will prepare a Power Point presentation outlining the project status and present at City Hall.

Deliverables:

- Power Point Presentation

Assumptions:

- Arcadis will present at up to two Public Meetings.
- All coordination for time, location, and notifications to the public will be handled by the City.

Task 8 – Project Setup, Management & Coordination

Arcadis understands that the City desires to have this project under construction in 2024. To achieve this goal, it is anticipated that significant project coordination will be required to ensure efficient service delivery. To facilitate this, Arcadis will provide a dedicated project manager for the project. It is anticipated that this role will be filled by Taylor Tittle, PE from our Chattanooga office.

Deliverables:

- Client Progress Meeting Minutes
- Schedule Updates

Assumptions:

- Weekly internal team coordination meetings (virtual meetings)
- Biweekly client status / progress meetings (1 per month in person / 1 per month virtual)

PROFESSIONAL SERVICES TASK ORDER

Task Order Number: 011

Attachment 2

Task Order Payment Terms

All work will be completed on a time and materials basis for a fee not to exceed the amount listed in this Task Order based on the 2023 rate table below. The task budgets below are an estimate of the level of effort for each phase of the scope of work.

Task 1 – Survey	\$22,170
Task 2 – Geotech	\$11,190
Task 3 – H&H Design	\$34,440
Task 4 – Civil Site Design	\$69,855
Task 5 – Landscape Architecture Design	\$33,550
Task 6 – Signage/Monuments	\$21,450
Task 7 – Public Meetings	\$3,072
Task 8 – Project Setup, Management & Coordination	
City Progress Meetings	<u>\$22,947</u>
	\$218,674

2023 Rate Schedule

Title	Rate \$/hr
Project Administrative Assistant	\$70
Project Assistant	\$90
Sr Project Assistant	\$120
Project Manager	\$215
Engineering Technician I	\$90
Engineering Technician II	\$110
Staff Engineer/Scientist/Architect I	\$90
Staff Engineer/Scientist/Architect II	\$100
Staff Engineer/Scientist/Architect III	\$110
Project Engineer/Scientist/Architect I	\$120
Project Engineer/Scientist/Architect II	\$135
Project Engineer/Scientist/Architect III	\$150
Senior Engineer/Scientist/Architect I	\$165
Senior Engineer/Scientist/Architect II	\$180
Senior Engineer/Scientist/Architect III	\$195
Principal Engineer/Scientist/Architect I	\$240
Principal Engineer/Scientist/Architect II	\$265
Principal Engineer/Scientist/ Architect III	\$290
Registered Land Surveyor	\$150
2-man Survey Crew	\$150
3-man Survey Crew	\$225

* A rate schedule will be provided with each Task Order proposal based on the specific services that will be provided and the rates effective at that time.

*All direct expenses will be billed at cost plus 10%

*Mileage will be billed at the current federal mileage rate

* Additional Services requested by the City beyond those in Scope of Work will be billed on an hourly basis in accordance with this rate schedule

PROFESSIONAL SERVICES TASK ORDER
Task Order Number: 007

Attachment 3
Special Conditions

None.