

PROFESSIONAL SERVICES TASK ORDER

Task Order Number: 013
Task Order Date: January 9, 2025

Subject to the Master Services Agreement between *the City of Dalton, Georgia* [Client] and *Arcadis U.S., Inc.* [Arcadis], dated March 1st, 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: Moice Drive Drainage Evaluation

Client's Representative: Chad Townsend

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: 90 days from 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:

\$ 19,475 This Task Order's Method of Payment is incorporated and attached as Attachment 2.

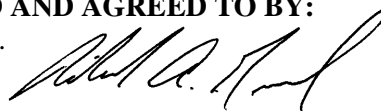
5. Special Conditions: This Task Order is subject to the special provisions as described in Attachment 3, attached, and incorporated into this Task Order:

6. Amendment: [_____] This Task Order amends a previously executed Task Order:

Previous Task Order Number: _____ Previous Task Order Date: _____

ISSUED AND AUTHORIZED BY:
Client

ACCEPTED AND AGREED TO BY:
Arcadis, INC.



By: _____

By: Richard A. Greuel, PE

Title: _____

Title: Principal Engineer

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Attachment 1

Description of Project & Scope of Work

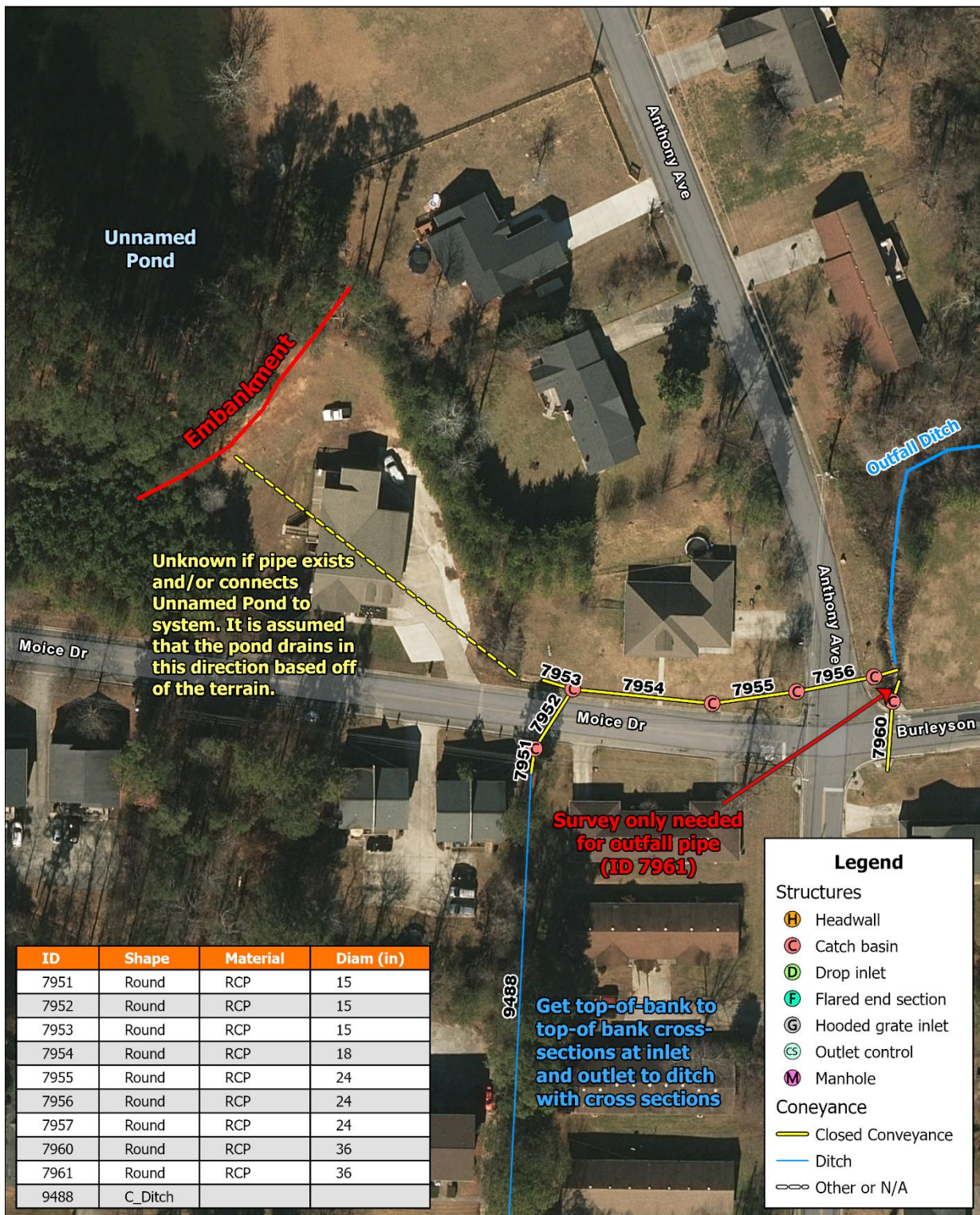
Introduction

The City of Dalton Public Works Department has requested that Arcadis prepare this proposal to provide engineering analysis and support to address known flooding issues at residential properties along Moice Drive at the intersection Moice Drive and Anothony Avenue. It is our understanding that the properties have experienced flooding in the past and that the property owners have requested that the City of Dalton (city) identify potential improvements that could reduce the severity / frequency of flooding on the subject properties. The following scope of work will also include an evaluation of the public and private conveyance system, consisting of piping and open channels. The following scope of work has been developed to assist with the first phase of a potential project to implement drainage improvements within the drainage basin.

Survey

Arcadis will subcontract Southeastern Engineering, Inc. (SEI) to conduct a survey of an estimated approximately 10 conveyance pipes and corresponding structures along with surveyed cross sections of two open channel conveyances at 50 foot internals within the study area located near the intersection of Moice Drive and Watson Drive and any others deemed necessary to conduct an accurate assessment. The surveying effort will be limited to that necessary to create a connection of the drainage system from Windon Drive to the storm system outfall in the northwest corner of Moice Dr. and Watson Drive. The following figure highlights the storm systems and channels to be surveyed.

Survey Map - Moice Drive



Existing Conditions Analysis

This task will consist of development of appropriate hydrologic and hydraulic computer models to quantify the nature of the drainage conditions that currently exist within the study area basin starting from the existing detention pond between Covie Ridge and Windon Drive and extending to the storm system outfall channel in the northwest corner of the Moice Dr. and Watson St. intersection. Arcadis will use PCSWMM to conduct the hydrologic and hydraulic (H&H) modeling needed for both this task and alternatives analysis task. Arcadis will coordinate with the Whitfield County Stormwater Engineer to obtain geographic information systems (GIS) data for the drainage area's pipes and structures. Arcadis will review the survey data collected in the previous survey task along with as-built drawings of the constructed Covie Ridge detention pond provided by the City.

Arcadis will develop an existing conditions model based on the data collected or provided. 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:

- Data transfer from County and City will be via electronic means.
- Pipe and structure survey will be conducted in the survey task.
- Land use will be based on existing conditions.

Meetings

- A remote meeting to discuss findings of the existing conditions analysis.

Deliverables:

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

Alternatives Analysis

The purpose of this task is to test different alternatives' flood reduction effectiveness. Arcadis will evaluate the impacts of upgrading pipes, inlets, and open channels of the existing drainage system in place within the study to provide additional hydraulic capacity for the storm system. This will likely be an iterative process to evaluate whether the additional capacity will result in flooding downstream. A target level of service for the upgraded storm system capacity will be determined before the evaluations are performed based on discussions with City staff. Arcadis will compare the results of the proposed improvement alternative with the existing conditions modeling results.

Please note that this system will need to evaluate the downstream hydrologic impacts to properties immediately downstream of the study area. This downstream analysis will be limited to a point downstream in the existing open channel at the northeast corner of the intersection of Moice Drive. and Watson Drive.

Meetings

- A remote meeting to discuss findings for the proposed alternative.

Deliverables:

Limited Technical Memorandum summarizing the proposed improvement alternative and system performance vs. existing conditions.

PROFESSIONAL SERVICES TASK ORDER**Task Order Number: 013****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 2025 rate table below. The task budgets below are an estimate of the level of effort for each phase of the scope of work.

Survey	\$6,325
Drainage Analysis (Existing / Alternatives Analysis)	<u>\$13,150</u>
	\$19,475

2025 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

*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

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Attachment 3
Special Conditions

None.