



Finance Department

David P. Schmiedicke, Finance Director

City-County Building, Room 406
210 Martin Luther King, Jr. Boulevard
Madison, Wisconsin 53703
Phone: (608) 266-4521
Fax: (608) 266-5948
finance@cityofmadison.com
www.cityofmadison.com/finance/purchasing

Purchasing Services

**AMENDMENT #1
to the Contract For Purchase of Services (contract #7833)
between the City of Madison and MSA Professional Services, Inc.**

AMENDMENT:

The City of Madison and Contractor listed above agree to amend the Contract for Purchase of Services executed by the City on 10/12/17 (“Original Contract”), as follows:

1. Adding an additional \$56,050.00 to the Not to Exceed amount in Section 23, bringing the total of Section 23 to \$114,950.00.
2. Adding additional work to the scope of services in Section 3 per attached Exhibit A.
3. The term of the contract in Section 4 is extended to December 31, 2020.
4. All other provisions of the Original Contract shall remain unchanged and in full force and effect.

The person signing on behalf of the Contractor represents and warrants that he or she has been duly authorized to bind the Contractor and sign this amendment on the Contractor’s behalf.

IN WITNESS WHEREOF, the parties hereto have set their hands at Madison, Wisconsin.

CONTRACTOR

(Type or Print Name of Contracting Entity)

By: _____
(Signature)

(Print Name and Title of Person Signing)

Date: _____

**CITY OF MADISON, WISCONSIN
a municipal corporation**

By: _____
Paul R. Soglin, Mayor

Date: _____

Approved:

David P. Schmiedicke, Finance Director

Date: _____

Eric T. Veum, Risk Manager

Date: _____

By: _____
Maribeth Witzel-Behl, City Clerk

Date: _____

Approved as to Form:

Michael P. May, City Attorney

Date: _____

Exhibit A

Scope of Work

This scope of work describes additional study and design activities requested by the City of Madison as regards the 'Hawks Landing Hydrology Study' Project. Since the date of execution of the most recent contract amendment, dated October 11, 2017, City of Madison engineering staff have required work from MSA which was outside the scope of the amended contract. These requirements have both resulted in project costs which have exceeded the current contract value limit, while simultaneously leaving certain tasks itemized in the previous scope of work incomplete.

The scope of work described below supersedes and completely replaces all previous scopes of work for this study and design project.

Task 1 – Additional Hydrologic Analysis. MSA will complete additional XP-SWMM modeling to determine the effectiveness of various modifications to the Pond C outlet under different phases of upstream improvements.

1. **Currently Requested Analyses:** MSA will conduct an evaluation of cumulative improvement conditions in the watershed where:
 - a. The Pond C outlet weir box is replaced with a standard flared-end-section and the overflows is raised from its existing elevation of 1043.7 to 1044.0, 1044.5, 1045.0, 1045.5, 1046.0, and 1046.5.
 - b. A floodwall is constructed on the north easement line downstream from Pond C
 - c. Storm sewer serving Hidden Hill Drive is rerouted away from Pond C
 - d. Pond EC-1 is constructed, and
 - e. The farm field pond north of Hill Creek Drive is constructed as currently conceived.Alternative conditions described will be evaluated under 6.66" 100-yr rainfall conditions. Selected conditions at the direction of the City will also be evaluated under 6.00" 100-yr rainfall conditions. Efforts under this activity are based on approximately 36 alternatives being analyzed.
2. **Additional Alternatives.** MSA will conduct analysis of an additional 20 alternatives as requested by the City.
3. **Modeling of Area West of Hidden Hill and Shady Point Intersection.** MSA will conduct additional HydroCAD and XP-SWMM modeling to support drainage improvements to address yard flooding that occurs in the northwest of the intersection of Hidden Hill Dr. and Shady Point Dr. Specific concerns include overflows from Pond C to the east as well as runoff from northern lots.

The estimated cost for these services is **\$10,400**

Task 2 – Pond C Outlet Final Plan Preparation. MSA will prepare final plans for modifications to the Pond C outlet in accordance with direction from Madison engineering staff following completion of the hydrologic modeling alternatives analysis.

1. **Prepare Plans and Specifications.** It is assumed that only limited specifications will be required for this project and that specifications will be included on construction plan sheets. It is further assumed that no formal bidding documents, other than a quantities list will be required.
2. **Bidding Services, Construction Staking, Observation, and Construction Related Services.** Not included.

The total estimated cost for these services is **\$3,750.**

Task 3 - Retaining Wall Structural Design. MSA will design and prepare construction plans, specifications, and a bidding package for a cast-in-place concrete flood wall on the north side of the Pond C overflow channel. *Note that MSA has completed a preliminary design for this floodwall at a specified height, but that recent hydrologic and hydraulic modeling indicates a taller wall may be required. Ultimately, MSA expect that the height of the wall will be determined by the City of Madison according to a desired flood protection level plus freeboard.*

- 1. Final Plan Preparation.** It is anticipated that design plans will be approximately 4 pages and will include the following sheets; general plan sheet (1), typical section and notes (1), section through wall showing reinforcement (1), aesthetic details (1). The plans will include a list of quantities necessary for the construction project. The anticipated aesthetic treatment includes standard form liner and concrete staining on one or both sides of the wall. A safety railing is not included.

Note that it is anticipated that the retaining walls will be bid by the linear foot, including all concrete and steel reinforcement. A detailed bill of bars will not be included. The plans and bid items will reference the WisDOT Standard Specifications for Highway and Structure Construction where applicable.

- 2. Bidding Services, Construction Staking, Observation, and Construction Related Services.** Not included.

Exclusions

The scope of work includes only those elements identified above. Specifically not included in this scope of work are the following activities:

- Subsurface investigation. Soil borings and geotechnical report will be provided by the City of Madison.
- Land Owner coordination of any kind, whether for survey, design, or construction access.

The estimated cost for these services is **\$16,200**

Task 4 – Farm Field Pond Design. MSA will design and prepare construction plans, specifications, and a bidding package for a new stormwater detention pond in the farm field north of Hill Creek Drive.

- 1. Topographic Survey.** MSA will conduct a topographic survey of the pond site (approximately 11 acres), the storm sewer system serving the intersection of Red Tail Drive and Hill Creek Drive, and the ground surface and drainage features of the approximately 50 foot wide corridor between the Red Tail/Hill Creek intersection and the pond location (approximately 0.5 acres). MSA will call in a Diggers Locate for the survey to have public utilities marked. Survey will consist of collection of pavement surfaces, utilities, and trees over 6-inches in diameter. Existing inverts of storm structures will be obtained. The topography will include all break lines to create a map of 1-foot contours of the site. MSA will identify the property lines adjacent to the survey area (note that this may not be all parcel lines for private properties. All survey and design digital data will be provided on Wisconsin Coordinate Reference Systems – Dane Zone, U.S. Survey foot, NAD83 (201107) datum and NAVD 88 2012, feet, for vertical datum. All digital data will be provided in a form compatible with the City's hardware and software, which is currently AutoCAD/Civil3D 2018.
- 2. Final Design.** MSA will complete computer modeling and hydrologic and hydraulic calculations to size the storm sewer collection system, pond storage volume, and outlet control structure to achieve control of the 100-yr 24-yr rainfall event (6.66" event). MSA will verify that that storm sewer capacity serving Redan Drive is adequate to collect and convey 100-yr peak flows to the

Red Tail/Hill Creek selection, and will complete storm sewer inlet and pipe design calculations for a new storm sewer system from Red Tail/Hill Creek to the proposed stormwater detention pond. *Note that it is anticipated that two (2) geotechnical soil boring investigations will be required at the location of the proposed detention pond for purposes of establishing whether a pond liner and/or high groundwater conditions will need to be accommodated.* It is assumed that the City of Madison will contract for these services directly.

- 3. Preparation of Plans, Specifications, and Construction Cost Estimate.** It is anticipated that design plans will be approximately 14 pages and will include the following sheets; cover (1), erosion control plan (1), erosion control details (2), grading plans (2), storm sewer alignment and profiles plans (5), pond cross-sections (2), and details (1). MSA will write technical specifications for constructing the storm water basin and associated piping, outlet structures, etc. incorporating City-standard requirements, where applicable. MSA will prepare a construction quantity estimate and construction cost estimate. *Note that it is anticipated that the City will provide input on recent unit prices and land and easement acquisition prices from recent similar projects.*
- 3. Permit Applications.** MSA will prepare an application for a stormwater NOI for signature by City of Madison staff and submittal to WDNR. *It is assumed that no other permits will be required for this project. It is also assumed that all permit fees will be paid directly by the City.*
- 4. Bidding Services, Construction Staking, Observation, and Construction Related Services.** Not included.

Exclusions

The scope of work includes only those elements identified above. Specifically not included in this scope of work are the following activities:

- Survey work will be completed after crops have been harvested and during conditions of no snow cover
- Geotechnical Engineering Investigations
- Preparation of Landscaping Plans
- Preparation of any permit application other than a WDNR stormwater NOI
- Payment of permit fees
- Preparation of easement documents
- Attendance at any meetings

The estimated cost for these services is **\$25,700**

The grand total for all services described in this scope of work is \$56,050