



Legislation Details (With Text)

File #:	48837	Version:	1	Name:	Authorizing the Mayor and the City Clerk to execute an Amendment to the contract between Madison and MSA Professional Services for additional design engineering services for CTH M.
Type:	Resolution	Status:			Passed
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On agenda:	10/3/2017	Final action:			10/3/2017
Enactment date:	10/4/2017	Enactment #:			RES-17-00800
Title:	Authorizing the Mayor and the City Clerk to execute an Amendment to the contract between Madison and MSA Professional Services for additional design engineering services for CTH M. (1st AD)				
Sponsors:	BOARD OF PUBLIC WORKS				
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Date	Ver.	Action By	Action	Result
10/3/2017	1	COMMON COUNCIL	Adopt Under Suspension of Rules 2.04, 2.05, 2.24, and 2.25	Pass
9/20/2017	1	BOARD OF PUBLIC WORKS	RECOMMEND TO COUNCIL TO ADOPT UNDER SUSPENSION OF RULES 2.04, 2.05, 2.24, & 2.25 - REPORT OF OFFICER	Pass
9/13/2017	1	Engineering Division	Refer	

Fiscal Note

The proposed resolution authorizes the contract amendment with MSA Professional services for increased design costs to the City of Madison's portion of the CTH M project in the amount of \$219,000. The contract amendment also reflects an increased cost of \$102,000 for the City of Verona, and \$315,000 for Dane County. The County Highway M reconstruction project is planned in the proposed 2018 capital budget with sufficient budgeted funding for this proposed contract adjustment.

MUNIS:

10232-402-170	\$103,000
10233-402-170	\$105,500
10233-86-179	\$9,000
10233-83-173	\$1,000

Title

Authorizing the Mayor and the City Clerk to execute an Amendment to the contract between Madison and MSA Professional Services for additional design engineering services for CTH M. (1st AD)

Body

PREAMBLE:

The City is proposing to reconstruct County Trunk Highway M (CTH M) from Prairie Hill Road to Cross Country Road in 2016. The City entered into an agreement with MSA Professional Services for design services

(Original: RES-10-00902, Amendment 1: RES-11-00870, Amendment 2: RES-12-00479, Amendment 3: RES-14-00569). The consultant's services includes traffic modeling of current and future traffic volumes, the completion of preliminary plans and the Environmental Assessment report and Final Plans & Specifications. The project also includes the reconstruction of CTH M/Midtown Road and CTH M/CTH PD intersections.

The City Engineer recommends that additional design services be undertaken by MSA Professional Services. They are:

Preliminary Plans & Environmental Document

Efforts needed to finalize and coordinate approval of the Environmental Document including:

- US Fish & Wildlife and WDNR coordination for the Northern Long Eared Bat to fulfill Section 7(a)(2) responsibilities and the final 4(d) rule.
- Additional factor sheets, revise EA, and update Section 4(f) reports with three additional 4(f) related properties including Ice Age Junction Path, City of Verona Unnamed Path, and Hawk's Landing GC.
- Update crash year data and analysis to 2015 as requested by WisDOT, which included two additional years of crash data.

Final Plans (North and South)

- The MANUAL requires documentation of roadside hazards.
- The MANUAL requires project cost estimate documentation efforts in excess of the process at the time of the original contract.
- Prepare additional Right-of-Way Plat sheets and legal descriptions required for the early acquisition parcels.
- The MANUAL and WisDOT require additional design detail for pedestrian curb ramp plans.
- Design sign plates and details for overhead guide signs and supports on the east leg of the CTH PD & CTH M intersection (6 signs, 4 locations). Work assumes WisDOT standard support/base designs. No unique base designs are provided.
- Revise completed roadway geometric plans to include bus stop provisions, including changes curb lines and stormwater facilities already completed.
- Re-design the completed Raymond Road street closure layout from a hammerhead design to a cul-du-sac. Update culvert and drainage layouts, street lighting, curb ramp details, permanent signing and marking.
- Efforts to prepare for, attend, assist with and respond to a Value Engineering Study.
- Final roadway layout has increased the level of roadway design effort and plan production. The selection of an underpass of westbound CTH PD below CTH M requires the following additional efforts which are in excess of the base design assumption of a signalized intersection. The CONTRACTOR shall include final roadway plans, specifications, and estimates for the proposed configuration, which is in excess of the base assumption of a traditional signalized intersection.
- Alignments/Profiles: Additional alignment for the WB underpass roadway (approx. 2,000' of roadway). Complex vertical and horizontal design is required to minimize impacts to Section 4(f) resources, maintain drainage, and minimize cost for retaining wall construction. Two redesigns from the preliminary layout were required for reducing the design speed through the underpass and shifting the design south to accommodate additional underpass clearance requirements.
- Stormwater: Additional storm sewer design and plan sheets are required for the underpass roadway alignment and avoidance of the structural elements.
- Construction staging & Traffic Control Plans: Additional staging design and plan sheets required for consideration of the structural elements of the design. Multiple staging concepts were developed to minimize roadway

closure and traffic disruption created by the change in grade and structure construction. The ultimate traffic control plan includes a bypass roadway design alignment, profile, and cross sections and resulting plan sheets.

Stormwater Pump Design

- Work required for a possible storm water pump connecting future City of Verona development to the Raymond Road regional stormwater pond is not needed and removed from the contract.

Structure Plans

- Prepare preliminary and final structure plans, specifications, estimates, and structure survey reports at the following locations. Preliminary structure sizing and hydraulic analysis was included as part of the original contract or in a previous contract amendment.
 - o Box Culvert drainage structure (North Badger Mill Creek crossing of CTH M)
 - o Box Culvert drainage structure (Badger Mill Creek crossing of Mid Town Road)
- Additional structure design and detailing at the CTH M bridge over CTH PD WB (B-13-845) as follows:
 - o The addition of structural approach slabs for CTH PD bridge approaches. Details include continuation of the structural approach slab through the skewed and curved sidewalk on the south approach and box-outs for traffic signal and street lighting equipment on the south approach.
 - o Minor retaining walls were added between the south pier columns to allow the multi-use path to remain elevated relative to CTH PD and minimize the bridge length. Three separate wall details were required due to the varying column spacing. These walls provided a savings of over 10 feet of bridge length.
 - o Tapered deck details were required in the final plan stage due to the proximity to the intersection.
 - o Curved structure sidewalk details were required in the final plan stage due to the proximity to the intersection.
 - o To control temperature forces in the pier caps and footings, a longitudinal expansion joint was required in the pier cap, resulting in the need for two separate pier design models with unique column spacings.
 - o Details and specifications for stamped and colored slope paving.
- Additional design and detailing work related to the following structures. These structures were added to the contract in previous amendments but required additional design and detailing efforts:
 - o Midtown Road Retaining Walls (R-13-296 through R-13-299)
 - o Flagstone Drive Retaining Walls (R-13-292 through R-13-295)
 - o CTH PD Retaining Walls (R-13-300 through R-13-305)
 - o Pedestrian Underpass Structures
- Additional efforts on these structures not included in previous amendments include:
 - o Custom footing designs for structures R-13-293 and R-13-295, which bear directly on structure C-13-2081. These unique designs allowed the culvert ends to be shorted, which reduced right-of-way impacts.
 - o Conduit and lighting layout coordination
 - o Conduit layout and coordination for future security camera installation
 - o Geotech coordination for excavation below subgrade (EBS) design
 - o Aesthetic designs including detail drafting for wheat pattern design on columns and column spacing

Drafting Watermain Plans North of CTH PD

- Draft watermain plans for Meriter Way and Wellness Way.

Drafting Sanitary Sewer Plans North of CTH PD

- Draft sanitary sewer plans for Meriter Way and Wellness Way.

Phase 2 Environmental

- New DNR guidelines for soil contamination levels required an update to the phase 2 haz mat report. The new guidelines eliminate the need for special material handling of soils on the project site.
- An asbestos survey and hazardous materials assessment report is required for the demolition of the house on the southeast corner of CTH M and Mid Town Road

Construction Phase Services

- Provide design engineering services to answer Requests For Information (RFI) submitted by the roadway construction contractor.

The completion time for the contract is extended by four (4) calendar years for a total contract time of 3,285 calendar days.

NOW THEREFORE BE IT RESOLVED that the Mayor and City Clerk are hereby authorized to execute an Amendment to the contract between Madison and MSA Professional Services for additional design engineering services for CTH M

BE IT FURTHER RESOLVED that the Mayor and City Clerk are hereby authorized to execute an agreement (s) with Dane County and the City of Verona for cost sharing on the project.