



Task Order Summary

Date: July 11, 2013

Task Order Summary	Budget Estimate
	(\$)
HMG Task Order No. 2, Amendment 2 - CR-31/CR-4 Bridge	20,000
<ul style="list-style-type: none">Amendment to add scope and budget for additional CR-4 road and Ditch 29 alignment work	
HMG Task Order No. 3, Amendment 2 - I-29/CR-81 Bridges	115,000
<ul style="list-style-type: none">Amendment to add scope and budget for additional I-29 alignment evaluation, construction staging work, and increase in reach length	
HMG Task Order No. 4, Amendment 2 - CR-32/CR-22 Bridges	145,000
<ul style="list-style-type: none">Amendment to add scope and budget for bridge detour road design work and EMB additional design work	
HMG Task Order No. 9, Amendment 7 - Hydrology and Hydraulic Modeling	210,000
<ul style="list-style-type: none">Amendment to add Phase 7.1 model update scope and budgetAmendment to add PMF model evaluation scope and budget	
Total of Task Orders	\$ 490,000

TASK ORDER SUMMARY

HMG – Task Order No. 2 – Amendment 2 Work Package 2, CR-31 Bridge

**Increase \$ 20,000
Schedule Extension**

Description:

Defines additional scope for Drain 29 under Final Roadway Design and Plan Preparation:

Coordinate Drain 29 temporary and permanent outlets with USACE’s Outlet and Reach 1 design team. A permanent drain outlet is to be incorporated into the Diversion Outlet. Provide a temporary Drain 29 outlet into the Red River outside of the construction limits for the Outlet and Reach 1.

Background:

The Drain 29 design modification relocates the drain prior to construction of Reach 1 for improved constructability. The above described work is creditable as part of the Owner’s Lands, Easements, Rights of Way, Relocations, and Disposal (LERRDs) work.

Recommendation:

PMC recommends authorization for Task Order No. 2, Amendment 2 for \$20,000.

HMG – Task Order No. 3 – Amendment 2 Work Package 4 - CR-81 Bridge, I-29 N & S Bridges

**Increase \$ 115,000
Schedule Extension**

Description:

Defines additional scope:

1. Provide channel design for additional 2,500-ft of channel.
2. Develop a comprehensive construction staging plan for all four bridges in Reach 3 and provide analysis and budgetary cost estimates. Conduct a realignment analysis of I-29 to avoid construction staging issues and costs.

Background:

The additional channel length is needed to provide adequate fill for bridge approach raises. The staging plan and realignment analysis are needed to determine the optimal bridge configuration with respect to constructability. The above described work is creditable work-in-kind assistance.

Recommendation:

PMC recommends authorization for Task Order No. 3, Amendment 2 for \$115,000.

HMG – Task Order No. 4 – Amendment 2 Work Package 7 - CR-32 & 22 Bridges

**Increase \$ 145,000
Schedule Extension**

Description:

Defines additional scope:

1. Provide field survey services to upgrade 5.0 miles of minimum maintenance roadway, to Cass County roadway standards, for use as by-pass route.
2. Provide by-pass roadway design improvements to upgrade 5.0 miles of minimum maintenance roadway, to Cass County roadway standards.

3. Provide hydraulic analysis and designs for by-pass crossings of the Rush and Lower Rush Rivers. Coordinate design of Excavated Material Berms (EMB) with adjacent USACE diversion channel reach EMBs. Revise EMB layouts as needed to match USACE final EMB layouts.

Background:

The surveys, design improvements, and hydraulic analyses for the by-pass roadways are needed to accommodate anticipated traffic. Additional coordination and EMB layout revisions are needed to match adjacent EMB designs. The above described work is creditable as part of the Owner’s Lands, Easements, Rights of Way, Relocations, and Disposal (LERRDs) work.

Recommendation:

PMC recommends authorization for Task Order No. 4, Amendment 2 for \$145,000.

**HMG – Task Order No. 9 – Amendment 7
Hydrology and Hydraulic Modeling**

**Increase - \$ 210,000
Schedule Extension**

Description – Subtask 2.I:

Phase 7.1 Model Update:

Update the Red River peak flow model geometry. Complete modeling for the Red River peak flood events, including the 10-, 2-, 1-, 0.2-percent chance events and the 103kcfs and PMF flood events for both existing conditions and with-project conditions. Update tributary peak flow models with geometry developed in Task 1. Complete modeling- for the 10-, 2-, 1-, 0.2-percent chance flood events for both existing conditions and with-project conditions. Conduct a higher volume sensitivity analysis using the Red River peak flow geometry from Task 1 and the high volume hydrology developed as part of the Phase 5 unsteady modeling effort. Conduct QA/QC of Phase 7.1 modeling. Complete additional modeling and mapping tasks as part of the Phase 7.0 modeling effort.

Background

USACE continues to request additional assistance from the Diversion Authority for hydrology and hydraulic modeling. The above described work is creditable work-in-kind assistance.

Cost = \$130,000

Description – Subtask 2.J:

Update PMF Study with Revised Distribution of Snowmelt Runoff:

- a. Update the USACA-provided HMS model runs in conjunction with the GIS/HMS-based runoff-determination effort. Determine the order of HMS model simulations and account for the breakout flows between the various models. Coordinate between the HMS model simulations and RES-SIM with USACE. Save Reservoir inflows for Traverse and Orwell in DSS and submit to USACE for simulation. Forward the regulated flow DSS records for inclusion into the RAS Model.
- b. Upon completion of the update to the Wild Rice River basin HMS model by USACE, perform final model runs. Perform work that can be accomplished in advance to prepare for the final HMS models runs.
- c. Use the HMS results as input for an updated unsteady HEC-RAS model run for each storm centering. Complete the existing scope of work for the PMF study using the updated unsteady HEC-RAS model runs.

- d. Prepare a report section documenting the GIS/HMS-based runoff-determination effort and comparing the 1985 PMF study to this current study, including input assumptions. Incorporate this draft report section into the overall current PMF study report.

Background

USACE continues to request additional assistance from the Diversion Authority for PMF modeling. The above described work is creditable work-in-kind assistance.

Cost = \$80,000

Recommendation:

PMC recommends authorization of Task Order No. 9, Amendment 7 for \$210,000.
