



July 13, 2022
AVO P35369.001

Jeff Johnson, P.E.
County Engineer
Montgomery County
501 N. Thompson St.
Conroe, Texas 77301

RE: Proposal for Update to Montgomery County Drainage Criteria Manual and Subdivision Regulations

Dear Mr. Johnson,

Halff Associates Inc. (Halff) is pleased to present the attached proposal for updating the Montgomery County Drainage Criteria Manual. The Scope of Work is included in Exhibit A. The Level of Effort is included in Exhibit B. The proposed lump sum fee for the effort is \$302,140. We estimate that the effort will take up to 12 months to complete as shown on the detailed schedule in Exhibit C.

We appreciate the opportunity to work with you. Please feel free to contact me or Tony Sartori if you have any questions or need additional information.

Sincerely,

HALFF ASSOCIATES, INC.

A handwritten signature in black ink that reads "C. Andrew Moore".

C. Andrew Moore, P.E., CFM
Water Resources Team Leader

C: Dan Wilds, PE, CFM
Sam Hinojosa, PE, CFM
Tony Sartori, PE
File



Exhibit A
Scope of Work for Proposal for Update to Montgomery County Drainage Criteria Manual and Subdivision Regulations

The Montgomery County Drainage Criteria was initially established within the late 1980s providing an initial roadmap for development within the County. While the requirements have served the County for over 30 years, the criteria manual needs to be updated to reflect current design and technology standards. These improvements will help standardize drainage submittals to the County which will streamline the review process. This proposal includes coordination with County engineering staff, evaluation of existing manuals, comparisons with neighboring counties, revisions of the criteria, and development of the new documentation.

Halff shall provide the following services:

Task 1 – Project Management and Coordination

Provide project management of the Halff team resources to meet the technical, financial, and schedule requirements of the County. Schedule and participate in meetings (in person or by phone, as appropriate) with the County, Halff's sub-consultants, and stakeholders (as appropriate).

1. Kick off meeting – Participate in one kick-off meeting with the County to discuss project priorities, expectations, objectives, schedule, and deliverables.
2. Project Management – Develop, manage, monitor, update, and coordinate project schedule throughout the life of the project based on changes or necessary updates. Manage and oversee the Halff team. Prepare and submit monthly invoices.
3. Quality Assurance/Quality Control – Provide QA/QC on all information and deliverables.

Task 2 – Data Collection and Review

Collect and review the necessary information from the County and drainage districts to make recommendations to update the Montgomery County Drainage Criteria Manual (DCM).

1. Data Collection and Review – Collect and review development and drainage criteria from County, drainage districts and surrounding counties.
 - a. Review County DCM and identify dated criteria.
 - b. Review County subdivision regulations and identify dated information based on county addendums.
 - c. Review drainage district criteria and identify differences from County DCM
 - d. Review drainage criteria from TxDOT, Harris County, HCFCD, Waller County, Fort Bend County, and Brazoria County. Compare and identify differences in methodology and standards from County DCM. Provide information, as available, for upcoming changes to criteria in adjacent jurisdictions
 - e. Review subdivision regulations for Harris County, Waller County, Fort Bend County, and Walker County. Provide information, as available, for upcoming changes to criteria in adjacent jurisdictions



Task 3 –Drainage Criteria Manual Development

Develop recommendations for changes to the drainage criteria manual based on review of information. Update the criteria and submit both draft and final criteria manuals to County.

1. Develop Draft DCM – Review the existing criteria in DCM and prepare recommendations to be considered for addition, modification, or deletion. Possible criteria include: hydrologic methodology; open channel design frequency and requirements; culvert and bridge design; storm sewer design; detention sizing and outfall design; and floodplain analysis. Identify figures, tables, and nomographs that need revision or deletion. Develop draft DCM as individual chapters upon acceptance of recommendations to County. DCM will be reformatted to a format for easy reference.
2. Stakeholder Workshop – Prepare for and conduct one (1) half-day workshop with County staff representatives to present the recommended DCM updates. Feedback and responses collected at the workshops will be evaluated and summarized.
3. Review Comments – Review and address comments from County and other groups. The County may request review from the ACEC or other entities within the County for input.
4. Final DCM – Prepare and submit the final DCM to the County in MS Word and PDF with all associated figures and graphs.
5. Presentation – Prepare a presentation and present new DCM to Commissioner’s Court at the completion of the study. A draft presentation will be prepared for the County.

EXHIBIT B

7/13/2022

**Halff Associates, Inc. Fee Proposal for Professional Services
Montgomery County Drainage Criteria and Subdivision Regulations**

	\$250	\$200	\$220	\$160	\$130	\$100	\$80			
Task	Principal Engineer	Project Manager	Senior PE	PE	EIT	CADD	Admin	Total Hours	Labor Total	TOTAL
Task 1: Project Management and Coordination										
1.1 Kickoff Meeting	4	4	4					12	\$2,680	\$2,680
1.2 Project Management	2	32					40	74	\$10,100	\$10,100
1.3 QA/QC			60	60				120	\$22,800	\$22,800
Task 1 Total	6	36	64	60	0	0	40	206	\$35,580	\$35,580
Task 2: Data Collection and Review										
2.1 Data Collection and Review	4	16	40	80	80			220	\$36,200	\$36,200
Task 2 Total	4	16	40	80	80	0	0	220	\$36,200	\$36,200
Task 3: Drainage Criteria Manual Development										
3.1 Develop Draft DCM	8	80	160	360	360	160	40	1,168	\$176,800	\$176,800
3.2 Stakeholder Workshop and preparation	4	8	16	16				44	\$8,680	\$8,680
3.3 Review comments	2	8	16	24	24			74	\$12,580	\$12,580
3.4 Final DCM	2	16	24	40	40	16	40	178	\$25,380	\$25,380
3.5 Final Presentation	4	8	8	16				36	\$6,920	\$6,920
Task 3 Total	20	120	224	456	424	176	80	1,500	\$230,360	\$230,360
TOTAL	30	172	328	596	504	176	120	1,926	\$ 302,140	\$ 302,140

