

TASK ORDER NO. 6 TO
MASTER SERVICES AGREEMENT
BETWEEN
OWNER AND ENGINEER

This is Task Order No. 6, dated July 10, 2026 attached to and made part of the Master Services Agreement for 2025 Drainage Projects dated, 10/28/2024 between the City of Mt. Juliet (City) and CDM Smith Inc (Engineer). Through this Task Order, the Engineer will develop designs for an additional neighborhood drainage improvement project site within the City.

Background

In May 2025, the Engineer began design of the Phase I neighborhood drainage improvement project sites within the City, under Task Order #1, which developed designs for the Belinda, Clearview-Barrett, and Weston site locations. Task Order #2 was developed in June 2025 to accommodate additional survey, easements and construction management services for the Phase I projects. Task Order #3 covered the design, permitting, easement exhibit development, Level A subsurface utility engineering (SUE) survey and construction-related assistance for the Springdale and Sunnymede site locations, as well as remaining easements and geotechnical services for Clearview and Belinda. This Task Order will involve design and permitting for stormwater drainage improvements along the West Division Street site. Three milestones for design deliverables (10/60/100-percent) are described in the following sections and will include plan and profile storm sewer design drawings, an identification of potential utility conflicts and construction challenges, and an opinion of probable construction cost (OPCC).

This Task Order describes the Scope of Services, Time Schedule, Charges, and Payment Conditions for the Task Order known as: West Division Street Stormwater Drainage Project.

1. Scope of Services

Engineer shall provide for City the following specific Services:

The following Tasks 1 through 8 describe the scope of work. To advance the stormwater improvements to a 100-percent design level, additional evaluations and design efforts are required due to the unique site conditions at the Mount Juliet Elementary School property and its proximity to existing water features. A Subsurface Utility Engineering (SUE) investigation will be required to identify and evaluate existing underground utilities and potential conflicts affecting the proposed drainage improvements. A topographic and site survey will also be necessary to support design and permitting activities and to prepare easement exhibits and legal descriptions needed for property acquisition.

Given the anticipated subsurface conditions, including the likely presence of rock, geotechnical exploration and geotechnical engineering evaluations will be required to support design of stormwater infrastructure and any associated storage facilities.

The project will require hydrologic and hydraulic (H&H) analyses, including flood routing and possible storage evaluation, to reduce localized flooding impacts and manage discharges to the downstream creek system. The design may incorporate approximately up to 5 acre-feet of stormwater storage, potentially through detention, retention, swales, or other stormwater management features, in addition to storm sewer conveyance improvements.

Due to the proximity of regulated water resources and other site characteristics, environmental permitting will be required and may necessitate supporting environmental surveys and coordination with regulatory agencies.

These efforts represent additional civil engineering and permitting scope beyond prior task orders focused primarily on stormwater conveyance improvements and are necessary to deliver a complete, constructible stormwater solution for this site.

Task 1—Topographic Survey

- Field survey will be conducted at one (1) project location, located near Mt. Juliet Elementary School, limited to the north by the railroad tracks along West Division Street. Survey limited to fifteen (15) acres. Additional survey limitations are listed in the Assumptions section, herein. If actual requirements exceed this level of effort, the Engineer will notify the City and request an amendment to add scope and fees.

Task 2—Data Gathering, Analysis, and H&H (Hydrologic and Hydraulic) Model Updates

- The data required to compile the design drawings will be collected as needed. Publicly available datasets such as LiDAR, wetland extents, and aerials will be analyzed as needed. Datasets such as parcels, drainage lines, and utility/transportation data will be provided by the City.
- Hydrologic and hydraulic modeling completed during the prior master planning effort will be updated with the field survey data to validate previous assumptions about the system.

Task 3— Subsurface Utility Engineering Survey (SUE) Survey

- The Engineer will perform a Level A, SUE survey. Up to 5 SUE Level A test holes will be excavated to confirm the existence and the vertical and horizontal locations of the utilities. Field activities are assumed to take up to two (2) days to complete.
All utilities identified during the survey will be located with GPS survey equipment and an exhibit will be issued once the Subsurface Utility Engineering Survey is complete.

- Assumptions and Limitations related to the SUE Survey are provided later in this scope.

Task 4—Easement Exhibits

- The Engineer will develop easement exhibits and descriptions for up to five (5) parcels. The City will be responsible for developing, negotiating, and obtaining easement agreements.

Task 5- Geotechnical Evaluation

Geotechnical services to investigate subsurface rock is expected to be necessary for up to five (5) locations at the West Division site. If subsurface rock is considered an issue for other locations, additional investigations may be required.

- Geotechnical Borings: A design report for this project will be prepared to assist in evaluating design feasibility. The scope includes the following:
 - Soil borings will be performed at the location designated by Engineer, or offset as needed for utilities, to a depth ranging from 7 to 13 feet, using hollow-stem augers and rock coring as required. SPT samples will be collected at specified intervals and soil/rock will be logged per USCS and RQD standards.
 - Groundwater depth will be measured, soils will be classified in the field, rock cores will be logged and borings will be backfilled with auger cuttings (sand/bentonite as needed). A boring log will be prepared with location plan, and a summary report for each site group. A data report will be provided and will include procedures, conditions, logs, and plans; laboratory testing is not included. Site access will be coordinated by the City and additional limitations and assumptions are listed later in the scope.
- Geotechnical Analysis
 - To provide clarity for the constructability of designs, the Engineer will perform geotechnical evaluations, develop earthwork specifications, and provide quality reviews for designs.

Task 6 –Design drawing development

Design drawings are to be developed by the Engineer. Deliverables will be provided at the following milestones:

- **10-percent:** The updated SWMM model will be used to evaluate the peak stages, flow, and velocities of the proposed improvements. Preliminary design drawings will be based on sizes and layouts generated from the H&H modeling. Drawings will include conveyance routing and proposed infrastructure sizes with suggested slopes, cross sections, and inverts that will be used for 60/100 design sets. Design scenarios will be developed and modeled to evaluate performance of proposed improvements.
- **60-percent:** Design drawings will be refined based on survey. Inverts, easement requirements, and routing will be determined in this phase. Plan and profile drawings (up to 8 sheets per project) will be produced with estimates for local drainage features and cut/fill requirements. The Engineer will use TDOT and/or local design details and specifications for project elements wherever possible (budget assumes up to 2 detail sheets with references to TDOT standards as appropriate). Required specifications will be identified at the 60-percent design phase. Design

scenarios will be refined and modeled to evaluate performance of proposed improvements. Any additional specifications required for construction of the project will be included on the drawings. Engineer assumes the design will include open-cut installation of the new piped network and that jack and bore installation will not be required.

- **100-percent:** Pre-final drawings and specifications will be produced based on City feedback on the 60 percent deliverable and progressing the design to completion. The plan set delivered at the pre-final stage is assumed to be adequate for construction. An OPCC will also be produced at the pre-final stage. Upon review of the 100-percent design sets by the City, a final design set will be produced and sealed by the Engineer.
- **For Bid Documents:** Bid Documents and Forms, including front-end documents, scope of work, minimum qualifications, construction schedule, sample agreement, and cost schedule will be prepared.
 - The City will provide guidance on specific requirements for bidders, such as required certifications, licenses, bonding and requirements (such as for small and minority businesses). The sample agreement (draft construction contract) will be developed with assistance from the City.

If actual requirements exceed this level of effort, the Engineer will notify the City and request an amendment to add scope and fees.

Task 7—Permitting

- TDEC ARAP Permit
 - Due to the proximity to waterbodies, the work could require the Aquatic Resource Alteration Permit (ARAP) from the State. This scope covers the following:
 - Prepare ARAP permit application package, including project description, impact assessment, and required TDEC forms based on final design plans.
 - Conduct one site visit for stream and wetland (if applicable) verification, including photo documentation, Hydrologic Determination Field Data Sheets, and a report of findings.
 - Update previously prepared site survey based on the field delineations of streams and wetlands.
 - Conduct desktop review for mapping and impact calculations.
 - Submit the permit application to TDEC and coordinate with the agency through one round of comments and responses.
 - Provide mapping and narrative updates for minor revisions requested by TDEC, excluding major design changes, mitigation planning, or additional studies.
- USACE 404 Nationwide Permit (NWP)
 - A USACE 404 NWP could be required in addition to the TDEC ARAP Permit. This scope covers the following:
 - Confirm appropriate NWP category, eligibility, and conditions for use.
 - Coordinate and attend up to one in-person coordination meeting with USACE representatives.
 - Prepare and submit the application forms, project plans, impact tables and maps, and documentation of avoidance/minimization measures.
 - Coordinate with TDEC to ensure that applications and corresponding documentation are provided to USACE.

- Address USACE requests for additional information (RAIs).

Task 8— Project Management

This task covers the meetings, quality protocols, and administrative services related to the design and permitting phases of this project. The Engineer will meet with the City project team at key points throughout the project. Attendance at up to nine (9) virtual and three (3) in-person monthly project progress meetings. This task also includes time for project management, project administration and technical review by senior technical specialists. For budgeting purposes, it is assumed that services under the amendment will be completed within eighteen (18) months.

2. Basis of Estimate and Limitations

- Peak stages, flow, and velocities of the proposed improvements will be evaluated for the mean annual, 5, 10, 25, and 100 year 24 hour design storms using an NRCS Type II distribution and NOAA Atlas 14 rainfall.
- At this time, structural requirements for infrastructure and preferences are not yet known. If actual requirements exceed this level of effort, the Engineer will notify the City and request an amendment to add scope and fees.
- The Topographic Survey task assumes the following:
 - A minimum of two (2) project control points in Tennessee State Plane Coordinates referenced to the NAD83(2011) horizontal datum and the NAVD88 vertical datum will be established on-site and tied to the Tennessee GNSS Reference Network at the (1) location.
 - The Engineer will provide an Existing Conditions and Topographic Survey, as specified, in one (1) location.
 - The Engineer will provide topographic data to be collected with sufficient detail to depict one (1) foot contour intervals and will meet the Tennessee Standard of Practice for Topographic Surveys.
 - The horizontal location of any above-grade features, including any visible structures, walls, fences, sidewalks, curb cuts, and driveways with labels.
 - The horizontal location of above-grade utilities, including utility poles, utility lines, guy wires, etc.
 - Evidence of sub-surface utilities such as valve boxes, manholes, pull boxes, meters, cabinets, and vaults along with any painted, flagged, or otherwise marked evidence of buried utility line locations as provided by TN811.
 - The Engineer will submit a One Call ticket before fieldwork. However, the Engineer holds no responsibility for unresponsiveness or incomplete markings provided by the service.
 - For stormwater and wastewater structures, junction boxes, and other subsurface vaults, the top elevation and accessible inverts of all pipes entering and exiting the structure will be located and shown on the drawing, along with sizes and material types if attainable.
 - The Engineer will provide trees with sizes and types unless they are in a dense area of trees, which will just show the outline of the tree line within the project corridor.

- The Engineer will perform Level B, Subsurface Utility Engineering (SUE) utility locates along the four (4) project corridors. However, several factors can result in a line being mismarked or left unmarked by our technicians that are beyond the control of the Engineer or its team members. These include, but are not limited to, a lack of adequate prints or available site knowledge, a lack of access to utilities (i.e. vaults, cleanouts, etc.), and a lack of visual indications of the utility's presence.
 - The survey will be prepared using Autodesk Civil3D CAD Software in accordance with the Engineer's engineering standards and templates. The final survey drawing will be delivered in a signed PDF format and a Civil3D dwg.
 - Any traffic control required to complete the survey work will be coordinated by and provided by the City.
- The permitting task assumes the following:
 - Impacts are limited to one stream crossing with no wetlands or ESA-listed species, and no compensatory mitigation plan is required.
 - One site visit for stream verification and photo documentation is included.
 - Only one round of TDEC comments and one round of USACE comments will be addressed, and responses will involve minor narrative or mapping updates—not redesign or new studies.
 - No preparation of mitigation plans, purchase of credits, or biological surveys.
 - Due to the relatively small size of each project, it is assumed that a construction general permit from the State will not be required for any of the individual projects.
 - Mitigation fees or plans for stream and wetland impacts are not included.
 - Species specific surveys for protected species as may be requested by USFWS are not included.
 - Surveys for culturally or historically significant resources as may be requested by NCHPO are not included.
 - It is assumed that no additional field work will be required for the submittal of the USACE NWP on top of that performed to submit the TDEC ARAP permit.
 - It is assumed that TDEC will coordinate with USACE for the submittal of the 404 NWP.
 - The project disturbed area is anticipated to be less than 1 acre. An NPDES Construction permit is not expected to be required, so is not included in the scope
 - Neither a CLOMR nor a LOMR are expected to be required, so are not included in this scope, but if requested by the City, the scope can be amended.
 - It is assumed that wetland and environmental impacts will be considered de minimis and no mitigation measures will be required.
 - It is anticipated that all work activities can occur outside of the 30-foot wide water quality riparian buffer zone.
 - Additional mitigation plans, permits, or other regulatory documentation are not included in this work order. The City will be responsible for notifying the public and property owners.
 - The SUE survey task scope assumes the following:
 - The Engineer and their subconsultant, Athena Engineering, are to be granted access to the Site upon notice to proceed.

- Traffic control is not assumed to be required and is not included in this scope.
 - City will coordinate all public notices and landowner contact.
 - City will supply survey control, or an OPUS solution will be used to establish control.
 - City will coordinate all public notices and landowner contact and provide a location to dump spoils from excavation at no charge to the Engineer or their subconsultant.
 - All locations will be located in grass areas.
 - No pavement or concrete coring is assumed. If large obstructions are encountered that cannot be removed or if no utility is found within a reasonable depth, the location will be abandoned.
- The Geotechnical Borings task scope assumes the following:
 - The City will coordinate access to the site and notify affected property owners. Special training, badges, or escorts will not be required for access to the project site. The drilling can be completed during normal daylight working hours (i.e., 8 a.m. to 5 p.m.) without interruption.
 - The Engineer's Subconsultant, Athena, will contact Tennessee811 to locate utilities. Athena will rely on the City personnel to locate any utilities not located by the Tennessee811 service. A GPR scan of the boring locations is available to help identify underground obstructions that might affect drilling.
 - Overburden materials at the site do not include rubble or shot-rock fill, which can be difficult to penetrate using standard auger drilling techniques.
 - Site restoration services (except backfilling borings with auger cuttings, augmented with sand and/or bentonite chips if needed) is not included. Any ruts or damage to vegetation that occurs during exploration are not scoped to be restored. Surveying of the boring locations is not included in this scope.
 - The boring locations are accessible with track-mounted equipment and pickup trucks without grading or clearing of brush/debris.
 - No traffic control to block lanes of traffic is assumed to be required to perform exploration, so is not included in the scope.
 - Laboratory testing is not included in this scope. Evaluation of the site for the presence or absence of asbestos, lead-based paint, organic growth or toxic mold, radon, wetlands, endangered or threatened species, historic or cultural resources, historic land use, or hazardous or toxic materials in the soil, bedrock, surface water, groundwater, or air is not included in this scope.
 - The City shall be responsible for payment of all permit application fees, review fees, and related charges required by regulatory agencies for the execution of the Project. The Engineer shall assist in preparing and submitting permit applications as outlined in the Scope of Services, but shall not be responsible for payment of any such fees.
 - Engineer shall not be responsible for delays resulting from easement acquisition, permitting approvals, or any other circumstances beyond Engineer's reasonable control. If the Project schedule extends beyond the durations defined herein for reasons outside Engineer's control, Engineer reserves the right to request an Amendment to adjust scope, schedule, and/or

compensation accordingly.

- The Engineer shall have the right to rely upon all data, reports, surveys, maps, drawings, specifications, geotechnical information, environmental studies, and other information provided by the City or third parties without independent verification, except to the extent the Engineer identifies obvious errors or inconsistencies. The Engineer shall not be responsible for the accuracy or completeness of such information and shall not be liable for any damages resulting from reliance on inaccurate or incomplete data supplied by others.

3. Time Schedule

The time periods for the performance of ENGINEER's Services are as follows:

Based on the time frame of the proposed tasks, design and permitting is anticipated to be completed in 18 months. Deliverables and reviews will be coordinated with the City staff.

4. Compensation and Invoicing

Budget

See the table below for estimates of total hours and costs for these tasks. The City and Engineer agree that the task budgets shall not constitute upper limits per each individual task.

Task Name	Hours	Cost (\$)
Task 1—Topographic Survey	N/A	\$35,354
Task 2—Data Gathering, Analysis, and H&H (Hydrologic and Hydraulic) Model Updates	79	\$14,316
Task 3— Subsurface Utility Engineering Survey (SUE) Survey	N/A	\$32,198
Task 4—Easement Exhibits	N/A	\$16,489
Task 5- Geotechnical Evaluation	N/A	\$7,854
Task 6 –Design drawing development	726	\$134,698
Task 7—Permitting	132	\$26,582
Task 8— Project Management	151	\$25,822
Total not to exceed:		\$293,313

Project Billing Rates

July 1, 2026, the Engineer will implement updated billing rates to reflect current labor costs. Updated rates will apply to all services performed on or after July 1, 2026, and will remain in effect for the remainder of the project duration.

Task Name	Hours
Officer	\$258
Senior Engineer	\$232
Client Manager	\$216
Project Manager	\$216
Engineer 6	\$191
Engineer 5	\$185
Engineer 4	\$160
Engineer 3	\$144
Engineer 2	\$129
Engineer 1	\$118
Senior Designer/Drafter	\$155
Designer/Drafter	\$139
Senior Cost Estimator	\$165
Junior Cost Estimator	\$103
Project Accounting	\$93

The Engineer will utilize subcontractors to perform portions of the Work and shall invoice such services at the subcontractor's actual cost plus a ten percent (10%) markup. This markup includes administrative, coordination, and overhead expenses related to subcontractor management.

Invoicing

Invoicing will take place on a monthly time and materials basis and will include an itemized list of hours spent by task/subtask featuring the title and rate of Engineer staff performing the work.

A status report that provides updates on deliverables and describes work completed during the invoice period will be submitted with each invoice.

5. Terms and Conditions

The terms and conditions in the Master Services Agreement shall apply to this Task Order except to the extent expressly modified herein. In the event of any such modification, the modification shall be set forth below and the Article of the Agreement to be modified shall be specifically referenced.

Acceptance of the terms of this Task Order is acknowledged by the following authorized signatures of the parties to the Agreement:

OWNER:

BY: James Maness
TITLE: Mayor

ADDRESS FOR GIVING NOTICES:

2425 N Mt. Juliet Road
Mt. Juliet, TN 37122

ENGINEER:



BY: Aaron Rogge, PE
TITLE: Client Service Leader

ADDRESS FOR GIVING NOTICES:

210 25th Ave N Suite 1102
Nashville, TN 37203