



Scope of Work

Hunter Road Waterline Extension

BACKGROUND

Plummer Associates, Inc. (PLUMMER) understands that the City of San Marcos (CITY) would like to proceed with the project named Hunter Rd Water Main Extension (PROJECT) as part of the FY 2023-2025 3 Year CIP. As part of the project, a 3-inch water main along Village West Drive would be replaced with an 8-inch water main (approximately 3,300 linear feet), and a 12-inch water main on Hunter Road would be extended from Harmons Way to Dead End of Industrial Fork Road (approximately 4,300 linear feet) as shown in Exhibit 1.

The CITY requested the design, permitting, and construction administration phases for the PROJECT; PLUMMER is to assist with this effort.

BASIC SERVICES

PLUMMER shall provide the Services in accordance with the tasks described herein.

Task 1. PROJECT MANAGEMENT SERVICES

The project management services may include the items listed below. PLUMMER shall provide administrative project management services in support of the Design, Bid, and Construction phases. Project Management services shall be limited to coordination, documentation, scheduling support, and quality oversight of PLUMMER's own work. PLUMMER shall not be responsible for directing Contractor means, methods, sequences, safety programs, or guaranteeing construction schedule or cost performance.

Project management services PLUMMER will perform the following:

- 1.1. Project Management:* PLUMMER shall provide Project Management for the Design, Bid, and Construction phases of the PROJECT, including Quality Control and Quality Assurance for PLUMMER's services.
- 1.2. Monthly Progress Reports/Invoices:* PLUMMER will prepare monthly progress reports and invoices to submit to the CITY. It is assumed that the PROJECT timeline will take up to 38-months.



1.3. Project Schedule: PLUMMER shall develop a baseline design schedule for the PROJECT and prepare updated design schedules for the PROJECT on a monthly basis on or before the 15th day of each month for the previous month's effort for the CITY to monitor progress and identify design submittal dates. The schedule shall be submitted electronically, and PLUMMER shall employ Microsoft Project or a similar program to manage the schedule.

Task 1.3 Deliverables:

Baseline Project Schedule

Task 1.3 Meetings:

N/A

1.4. Project Kickoff Meeting: PLUMMER will attend up to one (1) virtual project kickoff meeting for the PROJECT to discuss the PROJECT expectations. It is assumed that one engineer, one EIT and one project principal from PLUMMER will attend. PLUMMER will be responsible for preparing the meeting agenda two (2) days in advance of the meeting. PLUMMER will be responsible for recording meeting notes and will provide finalized meeting notes within five (5) days of the meeting. PLUMMER will manage the scheduling and logistical coordination for the project kickoff meeting.

Task 1.4 Deliverables:

Meeting Agenda within 2 days before meeting

Meeting Notes within 5 days after meeting

Task 1.4 Meetings:

Virtual Project Kickoff Meeting – Up to One (1)

1.5. Monthly Progress Meetings: PLUMMER will attend up to 25 1-hour virtual monthly progress meetings projected for the PROJECT. It is assumed that one engineer, one EIT and one project principal from PLUMMER may attend each progress meeting. PLUMMER will be responsible for preparing the meeting agenda two (2) days in advance of the meeting. PLUMMER will be responsible for recording meeting notes and will provide finalized meeting notes within five (5) days of the meeting. PLUMMER will manage the scheduling and logistical coordination of the coordination meetings.

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Task 1.5 Deliverables:

Meeting Agenda– Up to 25

Meeting Minutes – Up to 25

Task 1.5 Meetings:

Monthly Progress Meetings – Up to 25

1.6. Utility Coordination Meetings: PLUMMER shall attend up to four (4) Utility Coordination meetings during the design and construction phase of the PROJECT. These meetings will be virtual and are expected to last up to 1 hour each. It is assumed that the CITY will coordinate the meeting time with PLUMMER and required utilities. PLUMMER will be responsible for preparing the meeting agenda two (2) days in advance of the meeting. PLUMMER will be responsible for recording meeting notes and will provide finalized meeting notes within five (5) days of the meeting. PLUMMER will manage the scheduling and logistical coordination of the coordination meetings.

Task 1.6 Deliverables:

Meeting Agenda – Up to four (4)

Meeting Minutes – Up to four (4)

Task 1.6 Meetings:

Utility Coordination Meetings – Up to four (4)

1.7. QA/QC: PLUMMER will engage in regular QA/QC practices in preparation of PROJECT deliverables. PLUMMER will QA/QC deliverables such as, but not limited to, Construction Plans, Construction Specifications, Cost Estimates, Technical Memoranda, RFIs, Submittals, Field Order, Change Orders, and permitting deliverables. PLUMMER will also use this task to bring in higher level construction support for complicated construction issues. QA/QC activities do not include independent constructability review, value engineering, or means-and-methods evaluation unless specifically authorized as Additional Services.

Task 1.7 Deliverables:

30% Design Deliverable

60% Design Deliverable

90% Design Deliverable

99% Design Deliverable

100% Design Deliverable



Task 1.7 Meetings:

N/A (See Task 1.9)

1.8. Quality Control Audit Workshop: PLUMMER will attend one 2-hour virtual quality control workshop for each major design deliverable (30%, 60%, 90%, 99% and 100%). It is assumed that one engineer, one Project Principal, One Project QC reviewer and one EIT from PLUMMER may attend the workshop. PLUMMER will be responsible for preparing the workshop agenda two (2) days in advance of the workshop and documenting the workshop. PLUMMER will be responsible for recording workshop notes and will provide finalized workshop notes within five (5) days of the workshop. PLUMMER will manage the scheduling and logistical coordination of the coordination meetings.

Task 1.8 Deliverables:

Meeting Agenda – Up to five (5)

Meeting Minutes – Up to Five (5)

Task 1.8 Meetings:

QA/QC Workshop – 30%

QA/QC Workshop – 60%

QA/QC Workshop – 90%

QA/QC Workshop – 99%

QA/QC Workshop – 100%

1.9. Subconsultant Coordination: PLUMMER will coordinate with PROJECT subconsultants to carry out tasks as outlined in the scope, as necessary.

Task 2. PERMITTING AND PROJECT COORDINATION

PLUMMER acknowledges that effective permitting and coordination among PROJECT stakeholders and reviewing agencies are essential to the successful delivery and construction of the PROJECT. The services described below are intended to support regulatory approvals, agency coordination, and overall PROJECT execution. PLUMMER shall perform the following services:

2.1. Hays County Permitting: PLUMMER shall coordinate and submit plans and specifications to Hays County to receive approval to construct proposed 8" waterline along Village West Drive, a road owned and maintained by Hays County. This task includes the submission of construction plans and specifications, as well as required submission documents for review. Preparation of submittal package assumes up to



two (2) rounds of comments and revisions as required by Hays County. Agency reviews in excess of the stated number of comment rounds, changes in agency requirements after initial submittal, or resubmittals due to factors beyond PLUMMER's control shall be considered Additional Services. PLUMMER will attend up to two (2) virtual meetings to coordinate with the review agency, each expected to last up to 1 hour each. PLUMMER will be responsible for preparing the meeting agenda two (2) days in advance of the meeting. PLUMMER will be responsible for recording meeting notes and will provide finalized meeting notes within five (5) days of the meeting. PLUMMER will manage the scheduling and logistical coordination of the coordination meetings.

Task 2.1 Deliverables:

- Hays County ROW Utility Permitting Construction Plan Submittal Package
 - Up to two (2) rounds of comments and resubmissions.
- Meeting Agenda – Up to Two (2)
- Meeting Notes – Up to Two (2)

Task 2.1 Meetings:

- Coordination Meeting – Up to Two (2)

2.2. *TCEQ Permitting:* PLUMMER shall prepare, coordinate, and submit the required documentation to the Texas Commission on Environmental Quality (TCEQ) to obtain approval for construction of the PROJECT. Services shall include preparation of a TCEQ submittal package, formal submission to TCEQ, coordination with TCEQ staff throughout the review process, and incorporation of regulatory review comments into the plans and specifications. Preparation of submittal package assumes up to two (2) rounds of TCEQ review comments and associated plan and specification revisions, as required to achieve approval. Agency reviews in excess of the stated number of comment rounds, changes in agency requirements after initial submittal, or resubmittals due to factors beyond PLUMMER's control shall be considered Additional Services. The TCEQ submittal package will include, but may not be limited to:

- Cover Letter
- Submittal Form (TCEQ-10233)
- Engineering Report
- Sealed Engineering Plans and Specifications

Creation of all items required for submission, excluding Sealed Engineering Plans and Specifications, shall be included within this task. PLUMMER will attend up to two (2) virtual meetings to coordinate with the review agency, each are expected to



last up to 1 hour each. PLUMMER will be responsible for preparing the meeting agenda two (2) days in advance of the meeting. PLUMMER will be responsible for recording meeting notes and will provide finalized meeting notes within five (5) days of the meeting. PLUMMER will manage the scheduling and logistical coordination of the coordination meetings.

Task 2.2 Deliverables:

TCEQ 290 Submittal Package – as previously defined – Up to two (2) rounds of comments and resubmissions.

Meeting Agenda – Up to Two (2)

Meeting Notes – Up to Two (2)

Task 2.2 Meetings:

Coordination Meeting – Up to Two (2)

2.3. *Union Pacific Railroad Permitting:* PLUMMER shall coordinate and submit plans and specifications to Union Pacific Railroad to receive an easement to cross the UPRR ROW via trenchless installation. This task includes the submission of construction plans and specifications, as well as required submission documents for review. Preparation of submittal package assumes up to two (2) rounds of comments and revisions as required by UPRR. Agency reviews in excess of the stated number of comment rounds, changes in agency requirements after initial submittal, or resubmittals due to factors beyond PLUMMER's control shall be considered Additional Services. PLUMMER will attend up to two (2) virtual meetings to coordinate with the review agency, each are expected to last up to 1 hour each. PLUMMER will be responsible for preparing the meeting agenda two (2) days in advance of the meeting. PLUMMER will be responsible for recording meeting notes and will provide finalized meeting notes within five (5) days of the meeting. PLUMMER will manage the scheduling and logistical coordination of the coordination meetings.

Task 2.3 Deliverables:

UPRR Permitting Submission Package – Up to two (2) rounds of comments and resubmissions.

Meeting Agenda – Up to Two (2)

Meeting Notes – Up to Two (2)

Task 2.3 Meetings:

Coordination Meeting – Up to Two (2)



2.4. TxDOT RULIS Application Coordination: PLUMMER shall prepare a permit application and supporting information for the CITY to submit to TxDOT. The ENGINEER shall respond to one round of comments from the TxDOT. Any additional rounds of comments will be considered additional services. PLUMMER will attend up to two (2) virtual meetings to coordinate with the review agency and are expected to last up to 1 hour each. PLUMMER will be responsible for preparing the meeting agenda two (2) days in advance of the meeting. PLUMMER will be responsible for recording meeting notes and will provide finalized meeting notes within five (5) days of the meeting. PLUMMER will manage the scheduling and logistical coordination of the coordination meetings.

Task 2.4 Deliverables:

TxDOT RULIS Application

Meeting Agenda – Up to Two (2)

Meeting Notes – Up to Two (2)

Task 2.4 Meetings:

Coordination Meeting – Up to Two (2)

2.5. Right of Entry (ROE) Coordination: PLUMMER shall provide right-of-entry (ROE) coordination services to facilitate access to private property required for execution of the PROJECT. These services shall support access by the City, PLUMMER, and authorized subconsultant staff.

Scope of work under this task includes preparation of ROE request correspondence, coordination and communication with affected property owners, tracking and management of property access status, and logistical coordination necessary to obtain and maintain authorized entry. PLUMMER's role under this task is limited to coordination support and tracking. PLUMMER does not provide legal services, negotiate terms, or ensure execution of ROE agreements.

This task assumes ROE coordination for up to thirty (30) privately owned properties and up to three (3) attempts per property owner. Coordination efforts required for properties in excess of thirty (30) or excessive attempts that exceed three coordination attempts per property owner shall be considered additional services. PLUMMER will attend up to three (3) virtual meetings to coordinate with CITY and surveyor and are expected to last up to 1 hour each. PLUMMER will be responsible for preparing the meeting agenda two (2) days in advance of the meeting. PLUMMER will be responsible for recording meeting notes and will provide finalized



meeting notes within five (5) days of the meeting. PLUMMER will manage the scheduling and logistical coordination of the coordination meetings.

Task 2.5 Deliverables:

Executed and Signed ROE Agreements – up to 30

Meeting Agenda – Up to Three (3)

Meeting Notes – Up to Three (3)

Task 2.5 Meetings:

Status Meeting – Up to Three (3)

2.6. Easement Metes and Bounds Coordination: PLUMMER shall coordinate with the PROJECT survey subconsultant to define easement limits and provide boundary information necessary for preparation of easement exhibits and metes-and-bounds legal descriptions. All metes-and-bounds descriptions shall be prepared and sealed by a Texas-licensed RPLS. Coordination for up to 15 easements is assumed in the creation of this PROJECT. Surveying and legal description preparation efforts associated with this task are included under Line Item 3.1 – Survey Services. PLUMMER will attend up to five (5) virtual meetings to coordinate with CITY and surveyor and are expected to last up to 1 hour each. PLUMMER will be responsible for preparing the meeting agenda two (2) days in advance of the meeting. PLUMMER will be responsible for recording meeting notes and will provide finalized meeting notes within five (5) days of the meeting. PLUMMER will manage the scheduling and logistical coordination of the coordination meetings.

Task 2.6 Deliverables:

Approximate easement boundaries – Up to 15 easements

Meeting Agenda – Up to Five (5)

Meeting Notes – Up to Five (5)

Task 2.6 Meetings:

Coordination Meeting – Up to Five (5)

Task 3. SUBCONSULTANT SERVICES

PLUMMER's responsibility for subconsultant services is limited to coordination and integration of deliverables. PLUMMER does not guarantee the conclusions, recommendations, or professional opinions rendered by subconsultants.

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- 3.1. *Survey Services and Metes and Bounds Creation:* A PROJECT subconsultant (Bain Medina Bain) will provide surveying services will use coordinates based on the Texas State Plane Coordinate System NAD83 (2011) and elevations based on the NAVD88 vertical datum. Please refer to the attached subconsultant scope.
- 3.2. *Cultural Resources Services:* A PROJECT subconsultant (AmaTerra ERG) will provide cultural resource-related background review and coordination, field survey and reporting as necessary by the Texas History Commission (THC) requirements. If required, submission to THC shall be included within this task. Please refer to the attached subconsultant scope.
- 3.3. *Geotechnical Services:* A PROJECT subconsultant (Raba Kistner) will provide up to 20 geotechnical bores in support of the PROJECT design. Please refer to the attached subconsultant scope.
- 3.4. *SUE Services:* A PROJECT subconsultant (AG3) will provide subsurface utility engineering (SUE) Level A services for up to 20 test locations in support of the PROJECT design. Please refer to the attached subconsultant scope.

Task 4. DESIGN SERVICES

4.1. *30% Design: PLUMMER shall provide the following deliverables in support of the 30% Design Package:*

- One (1) set of design drawings in PDF format, as well as up to two (2) hard copies to be delivered to the CITY's Engineering Department
- Scale of plan and profile drawings will be 1" =40' H & 1" =10' V.
- Plan Sheets may include:
 - Cover Sheet
 - Index Sheet
 - General Notes Sheet
 - Project Layout
 - Project Control Plan containing standard details.
 - Plan of water line Sheets
 - Standard and Specific/Special Details
 - Requirements as outlined by Engineering/CIP Plan Review Checklist for 30% Design
- AACE Class 4 Cost Estimate
- Geographical Information System (GIS) submittal checklist provided by the CITY, completed to the appropriate deliverable milestone.



- Engineering/CIP Plan Review Checklist provided by the CITY, completed to the appropriate deliverable milestone.

Task 4.1 Deliverables:

30% Deliverable Package to include:

- 30% Design Drawings as specified above
- AACE Class 4 Cost Estimate
- Engineering/CIP Plan Review Checklist

Task 4.1 Meetings:

Internal Coordination Meetings – Assume up to eight (8) 1-hour virtual coordination meetings

4.2. Hydraulic Model: PLUMMER shall perform a hydraulic analysis to evaluate whether the existing 1.5-inch waterline and associated appurtenances (including fittings and meters), as assumed from Crystal Clear Special Utility District (SUD), are adequately pressure-rated for connection to the proposed 12-inch waterline.

The analysis shall include development and execution of a hydraulic model to assess system pressures within the existing 1.5-inch waterline under defined operating conditions. PLUMMER shall expand the CITY's existing hydraulic model to reflect the connection between the proposed 12" waterline and the existing 1.5" waterline. Hydraulic modeling will be based on system data, demands, and assumptions provided by the CITY and/or Crystal Clear SUD. PLUMMER does not warrant the accuracy of third-party data. The hydraulic model is intended for evaluation of the two conditions identified herein only and is not intended for future planning, fire flow determination, or system expansion analysis. Modeling results shall be documented in a technical memorandum summarizing assumptions, methodology, results, and conclusions.

The hydraulic model shall evaluate the following two (2) conditions:

- Maximum daily demand condition
- Static head (no-flow) condition

These scenarios are intended to assess anticipated operating and maximum potential pressures within the existing 1.5-inch waterline. Evaluation of additional scenarios beyond the two (2) identified above shall be considered additional services.

Task 4.2 Deliverables



Draft Hydraulic Model technical memorandum - to be submitted with 60% design package.

Final Hydraulic Model technical memorandum – to be submitted with 90% design package.

Task 4.2 Meetings

Internal Coordination Meetings – Assume up to eight (8) 1-hour virtual coordination meetings

4.3. Environmental Evaluation – Basic Services: PLUMMER shall provide the following services and deliverables in support of environmental review:

a) Collect data in support of evaluating two (2) alignment alternatives, and identify requisite permits anticipated to be needed prior to construction of the PROJECT. Potential permits may include but not be limited to, the following:

- Clean Water Act Section 404 with opinion of type of permit (if permit required)
- Clean Water Act Section 401;
- Rivers and Harbors Act Section 10;
- Rivers and Harbors Act Section 14 (also known as Section 408);
- National Environmental Policy Act;
- Endangered Species Act;
- Bald and Golden Eagle Protection Act;
- Migratory Bird Treaty Act;
- Section 106 of the National Historic Preservation Act;
- Texas Antiquities Code;
- Coastal Management Zone;
- Tree Ordinance and Mitigation;
- Urban Forestry;
- Executive Orders; and
- Federal Emergency Management Agency Coordination – or Local Floodplain Administrator;

b) PLUMMER will perform an environmental evaluation of potential impacts to jurisdictional aquatic resources for this PROJECT to include the following tasks:

- Obtain background data including, but not limited to, floodplain maps, national wetlands inventory maps, USGS topographic maps,



- current and historical aerial photography, and other readily available data
 - Conduct field investigation for assessing the proposed alignments
 - Prepare environmental opportunities and constraints map for the proposed alignment
- c) PLUMMER will assess potential impacts to listed threatened and endangered (T/E) species to include the following tasks:
- Obtain background data for task including delineating the Project site in the U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Conservation (IPaC) System, and review the Texas Parks and Wildlife Threatened and Endangered Species list for Hays County.
 - In conjunction with the on-site investigation described in Task 4.3.a., PLUMMER shall conduct an on-site assessment of the proposed Project area for potential presence/absence of T/E species and/or critical habitat species listed for Hays County.
 - PLUMMER shall prepare a summary table documenting the potential impacts to listed threatened or endangered species and/or designated critical habitat for the proposed Project area.
- d) PLUMMER will advise the CITY of additional approvals and related studies, if needed.
- e) PLUMMER will attend up to one (1) coordination meeting with the CITY.
- f) PLUMMER will coordinate with subconsultant for cultural resources review. Through subconsultant, PLUMMER will conduct desktop research to assess the PROJECT's potential to impact significant cultural resources (resources that are listed, or eligible for listing, in the National Register of Historic Places (NRHP) and/or as State Antiquities Landmarks (SALs). The research will include (as needed) reviewing the NRHP database, historical maps and aerial photographs, soils, geology, and records stored in the Texas Archeological Sites Atlas. The findings and interpretations of significant resource impacts will be summarized in archeological and historic regulatory coordination letters for submittal to the Texas Historical Commission (THC). If background research indicates that an archeological and/or architectural history survey will be needed, the coordination letter will include recommendations for the Area of Potential Effect (APE) and field survey methods.



Task 4.3 Deliverables:

Development and Submission of Environmental Permit Submittal Packages on behalf of City, as identified
Potential Impacts Summary Table to Threatened or Endangered Species

Task 4.3 Meetings:

Coordination Meetings – Up to One (1)

4.4. 60% Design: PLUMMER shall provide the following deliverables in support of the 60% Design Package:

- One (1) set of design drawings in PDF format, as well as up to two (2) hard copies to be delivered to the CITY's Engineering Department
- Scale of plan and profile drawings will be 1" =40' H & 1" =10' V.
- Plan Sheets may include:
 - Updated Cover Sheet
 - Updated Index Sheet
 - Updated General Notes Sheet
 - Updated Project Layout
 - Table of Trees to be removed or to be protected.
 - If the number of trees is small, PLUMMER may choose to show the Table of Trees on the General Notes sheets (if applicable)
 - Tree mitigation plan in coordination with City arborist
 - Project Control Plan containing standard details.
 - Plan and profile of water line Sheets.
 - Standard and Specific/Special Details
 - Requirements as outlined by Engineering/CIP Plan Review Checklist for 60% Design
 - Tree protection locations and notes
- AACE Class 3 Cost Estimate
- Updated Project Schedule
- Technical Specifications – Table of Contents
- Geographical Information System (GIS) submittal checklist provided by the CITY, completed to the appropriate deliverable milestone.
- Engineering/CIP Plan Review Checklist provided by the CITY, completed to the appropriate deliverable milestone.
- Response comments to 30% Design Review



Task 4.4 Deliverables:

60% Design Deliverable Package including:

- 60% Design Drawings as specified above
- AACE Class 3 Cost Estimate
- Updated Project Schedule
- Technical Specification – Table of Contents
- GIS Submittal Checklist
- Engineering/CIP Plan Review
- Response to 30% Design Review

Draft Hydraulic Modeling technical memorandum as defined in Task 4.2

Task 4.4 Meetings:

Internal Coordination Meetings – Assume up to eight (8) 1-hour virtual coordination meetings

4.5. 90% Design: PLUMMER shall provide the following deliverables in support of the 90% Design Package:

- One (1) set of design drawings in PDF format, as well as up to two (2) hard copies to be delivered to the CITY's Engineering Department
- Scale of plan and profile drawings will be 1" = 40' H & 1" = 10' V.
- Plan Sheets will include:
 - Updated Cover Sheet
 - Updated Index Sheet
 - Updated General Notes Sheet
 - Table of Trees to be removed or to be protected
 - If the number of trees is small, PLUMMER may choose to show the Table of Trees on the General Notes sheets (if applicable)
 - Tree mitigation plan in coordination with City arborist
 - SWPPP – TxDOT Template (if applicable).
 - EPIC - TxDOT Template (if applicable).
 - Sequence of Construction/Phase.
 - Traffic Control Plan containing standard details.
 - Plan and profile of water line Sheets.
 - Quantity Table.
 - Standard and Specific/Special Details
 - Requirements as outlined by Engineering/CIP Plan Review Checklist for 90% Design

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- AACE Class 2 Cost Estimate
- Updated Project Schedule
- Technical Specifications Package
 - Table of Contents
 - CITY Standard Technical Specifications
 - Special specifications (deviations from CITY standard specifications)
- Bid Form (Excel file)
- Geographical Information System (GIS) submittal checklist provided by the CITY, completed to the appropriate deliverable milestone.
- Engineering/CIP Plan Review Checklist provided by the CITY, completed with the appropriate deliverable milestone
- CIP Engineering Report as defined by CITY's *Water Distribution System Design Criteria Technical Manual*
- Response comments to 60% Design Review

Task 4.5 Deliverables:

90% Design Deliverable Package including:

- 90% Design Drawings as specified above
- AACE Class 2 Cost Estimate
- Updated Project Schedule
- Technical Specifications Package as specified above
- Bid Form (Excel File)
- Engineering/CIP Plan Review Checklist
- Response comments to 60% Design Review

Final Hydraulic Modeling technical memorandum as defined in Task 4.2

Task 4.5 Meetings:

Internal Coordination Meetings – Assume up to eight (8) 1-hour virtual coordination meetings

4.6. 99% Design: PLUMMER shall provide the following deliverables in support of the 99% Design Package:

- One (1) set of design drawings in PDF format, as well as up to two (2) hard copies to be delivered to the CITY's Engineering Department
- Scale of plan and profile drawings will be 1" = 40' H & 1" = 10' V.
- Plan Sheets will include:
 - Updated Cover Sheet.

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- Updated Index Sheet.
- Updated General Notes Sheet.
- Table of Trees to be removed or to be protected.
 - If the number of trees is small, PLUMMER may choose to show the Table of Trees on the General Notes sheets (if applicable)
 - Tree mitigation plan in coordination with City arborist
- SWPPP – TxDOT Template (if applicable).
- EPIC - TxDOT Template (if applicable).
- Sequence of Construction/Phase.
- Traffic Control Plan containing standard details.
- Plan and profile of water line Sheets.
- Quantity Table.
- Standard and Specific/Special Details
- Requirements as outlined by Engineering/CIP Plan Review Checklist for 99% Design
- AACE Class 1 Cost Estimate
- Updated Project Schedule
- Technical Specifications
 - Table of Contents
 - CITY Standard Technical Specifications
 - Special specifications (deviations from CITY standard specifications)
- Bid Form (Excel file).
- Geographical Information System (GIS) submittal checklist provided by the CITY, completed to the appropriate deliverable milestone.
- Engineering/CIP Plan Review Checklist provided by the CITY, completed with the appropriate deliverable milestone
- Response comments to 90% Design Review

Task 4.6 Deliverables:

99% Design Deliverable Package including:

- 99% Design Drawings as specified above
- AACE Class 1 Cost Estimate
- Updated Project Schedule
- Technical Specifications Package as specified above
- Bid Form (Excel)
- Engineering/CIP Plan Review Checklist
- Response to 90% Design Review



Task 4.6 Meetings:

Internal Coordination Meetings – Assume up to two (2) 1-hour virtual coordination meetings

4.7. 100% Design: PLUMMER shall provide the following deliverables in support of the 100% Design Package:

- One (1) PDF and one (1) DWG drawings.
- Sealed Plan Set.
- AACE Class 1 Cost Estimate
- Updated project schedule
- Specifications – Single PDF
- Index of Specs.
 - CITY adopted specs – Project specific.
 - Special provisions
 - Special specifications
- Bid Form (Excel file)
- Geographical Information System (GIS) submittal checklist provided by the CITY, completed to the appropriate deliverable milestone.
- Engineering/CIP Plan Review Checklist provided by the CITY, completed to the appropriate deliverable milestone
- Response comments to 99% Design Review

Task 4.7 Deliverables:

100% Design Deliverable Package as previously defined, signed and sealed, including:

- One (1) PDF and One (1) DWG Drawings.
- Sealed Plan Set
- AACE Class 1 Cost Estimate
- Updated Project Schedule
- Specifications
- Bid Form (Excel File)

Task 4.7 Meetings:

Internal Coordination Meetings – Assume up to two (2) 1-hour virtual coordination meetings

**Task 5. BID PHASE SERVICES**

PLUMMER shall assist the CITY in the issuance of bidding documents in advertisement for the PROJECT as described herein:

5.1. Bid Package Preparation: PLUMMER will finalize and compile necessary bidding documents (plans and contract documents) required to create Issued for Bid (IFB) documents.

5.2. Project Advertisement and Bid Support: PLUMMER will provide a Notice to Bidders for publication. Upload IFB plan and specs to an online bid solicitation platform, either CIVCAST or CITY preferred solicitation website for access to potential bidders. PLUMMER will develop and implement procedures for receiving and answering bidders' questions and requests for additional information. The procedures shall include a log of all significant bidder's questions and requests and the response thereto. The log shall be housed and maintained in the PROJECT'S electronic folder titled Request for Information, regardless of online bid advertisement method. PLUMMER will provide technical interpretation of the contract bid documents and will prepare proposed responses to all bidders' questions and requests, in the form of addenda. PLUMMER team shall upload all approved addenda onto online bid solicitation platform. PLUMMER will prepare and distribute addenda addressing additions, deletions, modifications, or interpretation of the Contract Documents onto online solicitation platform. PLUMMER shall process up to three (3) addenda.

Task 5.2 Deliverables:

Online Bid Solicitation Platform Bid Phase Log upon completion of bidding Phase

Addenda – Up to Three (3)

Task 5.2 Meetings:

N/A

5.3. Pre-Bid Meeting and Contractor Coordination: PLUMMER shall attend a pre-bid meeting and answer questions of prospective or potential bidders and CITY's staff and make necessary clarifications and interpretations of the construction contract documents in the form of addenda, as appropriate. PLUMMER will be responsible for preparing the meeting agenda two (2) days in advance of the meeting. PLUMMER will be responsible for producing a PowerPoint presentation in support of the pre-bid meeting. PLUMMER will be responsible for recording meeting notes and will provide finalized meeting notes within five (5) days of the meeting. The CITY will manage the

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scheduling and logistical coordination for the project kickoff meeting. PLUMMER will be responsible for recording meeting notes and will provide finalized meeting notes within three (3) days of the meeting. Additionally, PLUMMER will manage the scheduling and logistical coordination of the Prebid conference.

Task 5.3 Deliverables:

- Pre-Bid Meeting PowerPoint presentation
- Pre-Bid Meeting Agenda
- Pre-Bid Meeting Minutes

Task 5.4 Meetings:

- Pre-Bid Meeting

5.4. Bid Review: PLUMMER shall assist the CITY in obtaining bids, tabulating bids, and in awarding the contract for construction following the CITY'S approval of the construction contract documents. PLUMMER shall assist the CITY in reviewing the Statement of Bidder's Qualifications, financial statements of bidders, list of bidders' proposed subcontractor, verify references, and other documents required to be submitted with the bids of the top 3 responsible bidders. PLUMMER shall make a written recommendation to the CITY regarding the lowest responsible bidder.

Task 5.4 Deliverables:

- Bid tabulation and evaluation
- Written recommendation for lowest responsible bidder

Task 5.4 Meetings:

- N/A

5.5. Conformed Set: PLUMMER shall provide a conformed set of construction documents, including both drawings and specifications. ENGINEER shall provide 1 PDF and 1 DWG to the CITY.

Task 5.5 Deliverables:

- Conformed Drawings and Specifications, 1 PDF and 1 DWG file

Task 5.5 Meetings:

- N/A



Task 6. CONSTRUCTION PHASE SERVICES

6.1. Construction Kickoff Meetings: PLUMMER will attend one two-hour, in-person pre-construction meeting that is expected to be held at the construction sites. It is expected that the kick-off meeting will be held onsite. PLUMMER will be responsible for preparing the meeting agenda two (2) days in advance of the meeting. PLUMMER will be responsible for recording meeting notes and will provide finalized meeting notes within three (3) days of the meeting.

Task 6.1 Deliverables:

- Meeting Agenda
- Meeting Minutes

Task 6.1 Meetings:

- Construction Kickoff Meeting

6.2. Internet Based Construction Management Project Setup and Training: PLUMMER will set up and maintain Internet Based Construction Management software, Procore for construction coordination. PLUMMER will train CITY staff and construction staff on best uses of ProCore. For the purpose of this scope, assume one 2-hour virtual training meeting.

6.3. Review of Submittals: PLUMMER will review shop drawings/submittals for conformance with the PROJECT plans and specifications and provide responses within 21 calendar days. PLUMMER will propose using construction management software Procore for the submittal and coordination of construction submittals. Review is limited to general conformance with the Contract Documents and does not relieve the Contractor of responsibility for errors, omissions, fabrication details, or coordination. It is assumed that this task will include up to 30 submittals and up to 15 resubmittals. Review of additional submittals beyond the stated amount will be considered Additional Services.

Task 6.3 Deliverables:

- Up to 30 Submittal Responses
- Up to 15 resubmittal responses

Task 6.3 Meetings:

- N/A



6.4. Change Orders (CO): PLUMMER will prepare a description of proposed modifications and issue the RFP form to Contractor. PLUMMER will propose using construction management software Procore for the submittal and coordination of CO's. PLUMMER will review Contractor's RFP and provide recommendations to the CITY's Representative for consideration. PLUMMER will review Change Order prepared by the Contractor and coordinate comments with the CITY and Contractor to get to an agreed upon CO. For the purpose of this scope, assume up to 5 CO's. Review of additional change orders beyond the stated amount will be considered Additional Services. PLUMMER will attend up to five (5) virtual meetings to coordinate with the CITY and are expected to last up to 1 hour each. PLUMMER will be responsible for preparing the meeting agenda two (2) days in advance of the meeting. PLUMMER will be responsible for recording meeting notes and will provide finalized meeting notes within five (5) days of the meeting. PLUMMER will manage the scheduling and logistical coordination of the coordination meetings.

Task 6.4 Deliverables:

- Up to five (5) Change Orders
- Meeting Agenda – Up to Five (5)
- Meeting Notes – Up to Five (5)

Task 6.4 Meetings:

- Coordination Meeting with CITY – Up to Five (5)

6.5. Request for Information (RFI): PLUMMER will review Contractor questions or concerns that may arise during construction and respond within 14 calendar days. PLUMMER will propose using construction management software Procore for the submittal and coordination of RFIs. For the purpose of this scope, assume up to 40 RFIs and no re-submittals. Review of additional RFIs and resubmittals beyond the stated amount will be considered additional services.

Task 6.5 Deliverables:

- Up to 40 RFI Responses

Task 6.5 Meetings:

- N/A

6.6. Review of Third-Party Inspection Reports: PLUMMER will review third-party special inspection reports. For the purpose of this scope, assume up to 60 reports. Reports may include compaction, welding, coating, and concrete strength reports. PLUMMER



will provide feedback to the Contractor and CITY if PLUMMER finds a discrepancy between the reports and the design requirements.

6.7. Engineering Progress Site Visits/Observations: Engineers from PLUMMER will take monthly visits to track PROJECT progress. Engineering progress site visits/observations are separate from monthly virtual progress meetings and are separate from the construction inspection. Engineering progress site visits/observations will be limited to spot checking, selective measurement, and similar methods of general observation based on information obtained during site visits. PLUMMER will evaluate whether Contractor's work is generally proceeding in accordance with the Contract Documents, and PLUMMER will keep CITY informed of the general progress of the work. It is assumed that PLUMMER will conduct up to 18 Engineering Progress Site Visits/Observations and each visit will last up to 3 hours to review the two sites. Site visits are observational only and do not constitute continuous inspection or verification of quantities, workmanship, or compliance. PLUMMER shall produce engineering progress site visit reports and distribute them to the CITY within five (5) days of the site visit/observation.

Task 6.7 Deliverables:

Monthly Progress Reports

Task 6.7 Meetings:

N/A

6.8. Review Monthly Contractor Pay Applications: PLUMMER will perform a monthly review of Contractor's pay applications. It is assumed that this effort will include one monthly original submittal. This task includes the review of up to 18 pay applications. Review of more than one monthly pay application and/or resubmittal of a pay application shall be considered additional services.

Task 6.8 Deliverables:

Monthly Pay Application Review – Via ProCore

Task 6.8 Meetings:

N/A

6.9. Review Monthly Construction Schedule: PLUMMER will perform a monthly review of the Contractor's schedule. It is assumed that this effort will include up to 20 schedule submittals review. Review of more than one monthly schedule and/or resubmittal of



a schedule shall be considered additional services. It is assumed that PROJECT schedules will be submitted and reviewed through Procore.

Task 6.9 Deliverables:

Monthly Construction Schedule Review – Via Email Correspondence

Task 6.9 Meetings:

N/A

6.10. Review Alternatives and Substitutions: PLUMMER will review alternatives and substitutions proposed by the Contractor and make recommendations on acceptance or rejection of the requested substitutions to the CITY. PLUMMER will review up to five (5) alternatives/substitution requests. It is assumed that alternatives and substitutions will be submitted and reviewed through Procore.

Task 6.10 Deliverables:

Alternatives Review and Response – Up to five (5)

Task 6.10 Meetings:

Coordination Meeting – Up to five (5)

6.11. Record Drawings: PLUMMER will prepare Contract Record Drawings using the marked up red lines drawings provided by the Contractor during construction. Record drawing information will be based solely on the provided red line drawings and appropriate field documentation received from the contractor team during construction site visits. PLUMMER will produce record drawings of the constructed PROJECT based on change order revisions and as-built information provided by the Contractor. Record drawings will be prepared in PDF format. As-built survey information will be provided to the City following requirements as listed in the City's "GIS Submittal Checklist". PLUMMER will provide the CITY with 1 set of Record Drawings in PDF electronic format.

Task 6.11 Deliverables:

Record Drawings – one (1) set in PDF electronic format

Task 6.11 Meetings:

N/A



6.12. Substantial and Final Completion Walk-Throughs: PLUMMER will coordinate and assist in the preparation of a Punch List. PLUMMER to conduct one (1) substantial completion walk-through. For the purpose of this scope, assume one 4-hour site visit. After considering any objections from CITY 's Representative, PLUMMER considers the work substantially complete, PLUMMER will submit a Substantial Completion list and letter to the CITY 's Representative. PLUMMER will conduct (1) final completion walk-through to determine if the completed work of Contractor is acceptable to both the CITY 's Representative and PLUMMER so that PLUMMER may recommend, in writing, the final payment to the Contractor. For the purpose of this scope, assume one 4-hour site visit.

Task 6.12 Deliverables:

Final Walk-Through Punch List

Task 6.12 Meetings:

Substantial Completion Walk-Through

Final Completion Walk-Through

SUPPLEMENTAL SERVICES

Task 7. ENVIRONMENTAL ANALYSIS – SUPPLEMENT SERVICES

7.1. Environmental Evaluation – Special Services: If proposed impacts to Waters of the U.S. (WOTUS) exceed thresholds authorized by Nationwide Permits such that submittal of a Pre-Construction Notification (PCN) to the U.S. Army Corps of Engineers (USACE) is required, preparation of documentation of the site investigation (e.g., Aquatic Resources Delineation Report) will be required for submittal to the USACE with the PCN. These services, listed below, will be provided as SPECIAL SERVICES.

- Preparation of an Aquatic Resources Delineation Report.
- Preparation of a Section 404 Nationwide permit pre-application notification(e.g., PCN).
- Threatened and Endangered (T/E) Species Letter Report documenting the potential for impacts of the Project to state and federally listed T/E species.
- A tree survey and evaluation of potential protected trees within the Project area is not included as part of BASIC SERVICES and would be considered a SPECIAL SERVICE.



- Archeological Resources Field Survey and Reporting would be provided as a SPECIAL SERVICE if the cultural resources background studies finding indicate a need and THC concurs with the recommendation.

Task 7.1 Deliverables:

Potential environmental reports or permit applications as identified

Task 7.1 Meetings:

N/A

ASSUMPTIONS

- PROJECT alignment(s) are assumed to follow the design intent shown in Exhibit 1, as provided by the CITY. Evaluation or selection of alternative alignments is excluded from the Project scope.
- Any substantive deviation requiring rework of deliverables or additional effort by PLUMMER or remobilization and additional effort of subconsultants shall be considered Additional Services, including but not limited to changes arising from unforeseen site conditions, utility conflicts, environmental constraints, right-of-way or easement acquisition limitations, agency or third-party comments, geotechnical findings, permitting requirements, constructability concerns, or CITY-directed modifications. Minor refinements that do not materially affect the overall alignment are excluded.
- Valves, appurtenances and hydrant locations are assumed to follow CITY's *Water Distribution System Design Criteria Technical Manual*.
- The proposed 12" waterline is assumed to be a transmission line and assumed to not contain service taps and/or service laterals.
- The proposed 8" waterline is assumed to be distribution and will require reconnection to existing service taps. Replacement of service lateral shall be made to the existing water meter.
- It is assumed that the CITY does not require tree permitting for utility projects. Development of information for submission of acquiring tree permitting will be considered additional services.
- A tree mitigation plan will be developed in coordination with CITY arborist.
- PLUMMER shall perform services consistent with the professional standard of care exercised by similar professionals under similar circumstances at the time services are provided.
- PLUMMER does not have control over or responsibility for construction means, methods, sequences, safety programs, or the acts or omissions of the Contractor.

Scope of Work

Hunter Rd Waterline Extension – V1.2



- This scope and fee are estimated to be **38 months**. Monthly tasks noted follow the PROJECT schedule.
- Pipeline alignment is generally assumed to follow the exhibit provided by the CITY during the proposal stage (Exhibit 1). The proposed alignment for the 12-inch waterline is anticipated to be located on the south side of Hunter Road within a 20-foot-wide waterline easement. The 8-inch waterline is assumed to replace the existing 3-inch waterline within the Village W Drive right-of-way and is not expected to require additional easement acquisition. Any easements required beyond those described herein shall be considered Additional Services.
- Utility work is assumed to be approximately 8,000 linear feet of waterline construction within Village West Drive, Hunter Road, and Dorado Bluffs Right-of-ways. Waterline construction will require vehicular lane closures in Village West Drive but there will not be vehicular lane closures on either Hunter Road or Dorado Bluffs. Any changes to the overall scope of waterline construction may result in additional services.
- Utility work requiring a crossing of TxDOT right-of-way (ROW) is assumed to be constructed using trenchless installation techniques originating from project-required easements located outside the TxDOT ROW. The PROJECT does not include the design or installation of utility facilities within TxDOT ROW, beyond the trenchless crossing limits.
- All meetings will be held remotely unless otherwise noted.
- CITY will prepare all front-end contract documents.
- PLUMMER will use the CITY technical specifications and select sections required for PROJECT.
- Deliverables shall be electronic deliverables in PDF, unless noted.
- All meetings will be held virtually, unless otherwise noted herein.
- PLUMMER will not provide quality assurance tasks associated with geotechnical, special inspections and additional survey services.
- Plan scale shall be horizontal 1" = 40' and vertical 1" = 10'
- CITY shall provide easement acquisitions services, if required.
- Condemnation will be provided by CITY, if required.
- Fees associated with the title commitments, title reports and title insurance are not included in the scope or fee, and it is assumed that the CITY will provide the efforts for executing the aforementioned. Any fees associated with title commitments, title reports and title insurance will be paid by the CITY.
- Easement meetings, preparation of contract documents, contract negotiations and execution of signed easement agreements are assumed to be executed by the CITY.
- For easement acquisition, recording fees or fees charged by financial institutions

Scope of Work

Hunter Rd Waterline Extension – V1.2



to process subordinations or lien releases will be paid by the CITY.

- PLUMMER will not be responsible for schedule delays related to Easement Acquisition scope performed by CITY, such as, but not limited to, on-going easement agreement execution.
- CITY will review plans and return comments in 10 business days. CITY shall provide comments to deliverables in accordance with the accepted project schedule.
- The contract drawings will include only the information necessary to illustrate the intended trenchless application. PLUMMER will not provide full or detailed trenchless design. Responsibility for detailed trenchless design, means and methods, and all trenchless-related submittals required by the CITY's Technical Specifications rests solely with the Contractor.

ADDITIONAL SERVICES

- Participation in additional meetings with CITY and PROJECT Team
- Preparation of request for approved jurisdictional determination (AJD) for submittal to the USACE;
- Providing/conducting local or global stability analyses for retaining walls, shoring systems, or slopes
- Additional geotechnical borings.
- Additional easement parcel and legal descriptions.
- Any revisions to previously approved right-of-entry forms or easement documents required due to changes in PROJECT alignment, acquisition limits, or City-directed modifications beyond those shown in Figure 1 shall be considered Additional Services. Effort will be evaluated based on the quantity and complexity of documents requiring revision, re-execution, or additional coordination.
- Floodplain permitting and mitigation.
- Full or detailed trenchless design.
- Coordination for additional geological investigation of karst related resources identified along the preferred pipeline alignment.
- Design of selected odor control.
- Trench Safety Plan.
- Section 404 Compensatory Plan Mitigation Plan.
- Tier II Section 401 Water Quality Certification (Clean Water Act) authorization from Texas Commission on Environmental Quality – in coordination with Section 404 permitting;
- Construction meeting agenda preparation, recordation and distribution of meeting minutes to CITY and the contractor.

Scope of Work

Hunter Rd Waterline Extension – V1.2



- Preparation of applications and supporting documents (in addition to those furnished under Basic Services) for private or governmental grants, loans, or advances in connection with the PROJECT.
- Preparing to serve or serving as a consultant or witness for the CITY in any litigation, arbitration, or other dispute resolution process related to the PROJECT.
- Site visits beyond those described in Basic Services.
- Meetings beyond those described in Basic Services.
- RFIs beyond the number allowed for in Basic Services.
- COs beyond the number allowed for in Basic Services.
- Reports beyond those described in Basic Services.
- Additional review of submittals or resubmittals beyond the stated amount will be considered Additional Services.
- Additional bidding document addenda beyond three (3) during the bidding phase of the PROJECT.
- Additional Engineering Progress Site Visits/Observations shall be considered Additional Services.

If requested, Geotechnical Engineer may provide site visits to observe excavations and provide comments on in situ condition compared to geotechnical testing results.