

**ENGINEERING SERVICES AGREEMENT  
FOR  
TOWN CENTER SEWER IMPROVEMENTS**

**TOWN OF WINTHROP, MA**



This Engineering Services Agreement between Woodard & Curran Inc. (Engineer) and the Town of Winthrop, MA (Client) shall be completed in accordance with the Scope of Work, Compensation, Schedule, and Standard Terms and Conditions as defined herein.

**I. SCOPE OF SERVICES**

The Engineer will provide the Client with engineering services related to the design of sewer improvements to the existing sewer mains in Jefferson Street, Hagman Road, French Square, Woodside Avenue, Bartlett Road, Williams Street and Somerset Avenue. The scope of services will be provided as outlined below:

- A. Phase 1 – Design:** The Engineer will design sewer main improvements in the areas stated above to replace failing sewer mains and reduce infiltration and inflow into the collection system. Bid documents for the project will be prepared in accordance with M.G.L. Chapter 30, Section 39M to publicly bid the project. The project will replace approximately 2,400 linear feet of sewer mains including new manholes and service laterals. Service laterals shall be replaced to the property line to maximize the removal of infiltration. Design services will include the following:
1. **Task 1 – Site Investigation:** The following work items will be performed by sub-consultants to the Engineer.
    - a. **Survey:** Perform survey to develop 40-scale base plans for the design. Survey will provide 1' elevation contours, planimetric conditions for the surveyed area and rim and invert information for existing sanitary and drainage structures. Property lines will be provided based on Client Assessor's plan. Utility research shall be performed to provide the approximate location of underground water, sewer, gas, electric, telephone and cable television utilities on the base plan.
    - b. **Borings:** Hollow stem auger borings shall be conducted every 250 linear feet where sewer replacement is proposed. Split spoon samples will be taken every five feet or change in strata to provide a general characterization of existing soils and provide information on groundwater elevation. Borings shall be conducted to 150% of the proposed sewer depth or until refusal. If refusal is met prior to reaching proposed boring depth, a confirmatory probe will be performed to confirm refusal.
    - c. **Flow Monitoring:** Up to four (4) flow meters will be installed in the existing sewer mains for a period of four (4) weeks to monitor existing flows. The meter information will be used to establish base line flow and size the proposed sewer mains and bypass pumping systems.
  2. **Task 2 – Design:**
    - a. **MWRA Funding:** Assist the Client in completing the Massachusetts Water Resources Authority (MWRA's) Local Water System Assistance Program (LWSAP) application for funding assistance for the project.



- b. Borings: The Engineer will mark out the location of each boring and provide inspection services to locate borings on the base plans and record general soil characteristics and groundwater elevation.
  - c. Flow Monitoring: The Engineer will evaluate flow monitoring data to size the proposed sewer mains and bypass pumping system requirements. Sewer mains will be sized based on *TR-16 Guides for the Design of Wastewater Treatment Works*.
  - d. Sewer Design: The Engineer will design sewer mains in accordance with *TR-16 Guides for the Design of Wastewater Treatment Works* and Engineer design standards. Sewers shall be designed with SDR 35 polyvinyl chloride (PVC) pipe and bypass pumping systems shall be specified to pump the maximum day peak flow obtained during flow monitoring.
  - e. Preparation of Contract Documents: The completed design will be delivered in two submittals; a 50% submittal of plans and specifications for review and comment by the Client, and Final Design Documents. Design documents include:
    - i. Technical Specifications
    - ii. Contract Drawings depicting the project in forty scale plan format
  - f. Preparation of Bid Documents: The Engineer will prepare a bid document package including:
    - i. Invitation to Bid
    - ii. Instructions to Bidders
    - iii. Form for General Bid
    - iv. Certificate as to Corporate Bidder
    - v. Certificate of Compliance with Tax Laws
    - vi. Non-Collusion Affidavit of Bidder
    - vii. Bid Bond
    - viii. Draft Agreement (*for review by Client's Counsel*)
    - ix. Performance Bond
    - x. Payment Bond
    - xi. Notice of Award
    - xii. Notice to Proceed
    - xiii. General Conditions
    - xiv. Supplementary Conditions
    - xv. Determination of Wage Rates (including submitting to the Department of Labor)
    - xvi. Technical Specifications
  - g. An opinion of probable construction cost will be prepared by the Engineer.
3. Task 3 – Permitting: Engineer will perform the following tasks relative to permitting.
- a. Permitting for the project shall be limited to:
    - i. Preparation and submittal of a Notice of Intent (NOI) to the local Conservation Commission.
    - ii. Attendance of up to two meetings.

## **II. COMPENSATION**

Engineer will provide the scope of services describe above for the lump sum fee of **\$84,500**. This price will not be exceeded without prior written authorization by the Client.



### III. ASSUMPTIONS

The following assumptions have been made during the preparation of the Agreement. Invalidation of assumptions stated herein will directly affect the scope, schedule and budget outlined herein.

1. Police details required to complete work performed by any sub-consultants to the Engineer will be paid directly by the Client. Police detail costs have not been included in the fee for this Agreement.
2. The Engineer is not required to perform any work related to taking of easements required to complete the proposed improvements.
3. The Client will provide clear and open access to all structures needed for access to complete any work performed by sub-consultants to the Engineer.
4. Bidding, Award, Resident Engineering and Construction Administration services have been excluded from the Agreement. These services can be included as an Amendment to this Agreement at the Client's request.
5. The scope of Work does not include the following items:
  - Developing record drawings
  - Preparation of documents or plans for right-of way acquisitions or easements
  - Traffic and/or parking management design and or studies
  - Landscape Design
  - Lighting Design
  - Roadway Improvement Design
  - Preparation and/or filing of any permits and applications other than those specified in this agreement.