

General

The Lansing Board of Water and Light (BWL) requests proposals for surveying, base mapping and water main design services for the replacement of existing water mains as outlined below. The proposed water mains shall be located within the road right-of-way. Installation of valves, fire hydrants, reconnection to existing water mains, water service lines and abandonment of existing water mains shall be included in the overall design plans. It is expected that the water mains will be installed via open-cut, horizontal directional drilling, and/or jack and bore. Hereafter, the overall design plans shall be considered as the “project.”

Street locations for water main and/or water service replacement and estimated quantities:

- **Pierce St Ph 2**
 - **Segment 1 – Pierce St (Lowcroft) – MLK to Beechwood Ave**
 - Approximately 2700 LF of 8-inch ductile iron water main
 - Approximately 5 water main or large service tie-ins
 - Approximately 68 partial water service tie-ins 2-inch diameter and smaller
 - 6 hydrants
- **Post Oak Ln**
 - **Segment 1 – Barritt St – Existing sleeve to 1974 main (2326 Barritt) to Somercroft Dr**
 - Approximately 250 ft of 8-inch ductile iron water main
 - Approximately 2 water main or large service tie-ins
 - Approximately 4 partial water service tie-ins 2-inch diameter and smaller
 - 1 hydrants
 - **Segment 2 – Post Oak Ln. – Somercroft Dr to Tulane Dr**
 - Approximately 1,000 ft of 8-inch ductile iron water main
 - Approximately 5 water main or large service tie-ins
 - Approximately 12 partial water service tie-ins 2-inch diameter and smaller
 - 2 hydrant
- **McKim Ave**
 - **Segment 1 – McKim Ave – Lyons to dead end**
 - Approximately 275 LF of 6-inch ductile iron water main
 - Approximately 2 water main or large service tie-ins
 - Approximately 3-5 partial water service tie-ins 2-inch diameter and smaller
 - 1 hydrant

The consultant shall include in the proposal a statement of qualifications listing a summary of water main design projects completed in the past 5 years, the approximate cost of these projects and the experience of staff members who will be assigned to the project.

Scope of Services:

The scope of services to be performed by the consultant shall be divided into tasks as outlined below.

Task 1 –Survey

The topographic survey for the project shall include:

- Establishing the location of existing curb lines, existing pavement types and thicknesses, sidewalks, drainage structures, manholes, driveways, valves, utility poles, streetlights, fire hydrants, trees, water service curb boxes, location and elevations of underground utilities and structures, property addresses, street right-of-way lines and other work typically required for water main construction.
- The topographic survey is to extend into all street intersections a distance of a least 75 ft. and be based on NAVD 88 datum using City of Lansing High Level Benchmarks.

Task 2 – Base Mapping / Plan Preparation / Design Services

Task 2 shall include, but is not limited to, all items as noted below.

Design Plans for Construction:

- Unless otherwise agreed upon, the consultant shall prepare construction plans at a horizontal scale of 1 inch to 40 feet and a vertical scale of 1 inch to 4 feet in accordance with BWL drawing standards. Plans shall show existing topography, including plan and profile of existing facilities, collected in Task 1. The profile view is to include elevations of existing sewers, utilities, and surface elevation.
- The plan view shall indicate location of proposed water mains, connections to existing water mains and service lines, locations of new gate valves and fire hydrants. Proposed connection details shall be shown at a larger scale where required.
- Profile view shall include stationing, elevations of existing sewers, utility lines, roadways, and proposed water main.
- Project plans shall include title sheet including location map and sheet index, legend, typical water main details, general notes sheet including public utilities and contact with project area, proposed street pavement cross-sections, soil erosion control plan, striping plan (if applicable), environmental control plan, and a traffic control plan in accordance with BWL Construction Drawing Specifications. The traffic control plan shall be in accordance with the current edition of Michigan Manual of Uniform Traffic Control Devices.
- Quantities shall be illustrated by sheet. Additionally, the total project quantities shall be identified within the plan set.
- Discovery of suspected contaminated soils shall be done using readily available sources. This does not include performing analysis of soil samples.
- Provide up to three separate budgetary design scenario estimates for each project area. For example, directional drilling, open-cutting, jack-and-bore, etc.

Correspondence:

- Consultation with public and private utility companies to establish existing utilities and planned future improvements.
- Coordination with the City of Lansing shall include any corresponding work they need done within the project limits, now or in the future, including future CSO work, and including those quantities on the plans if necessary.
- Consultant shall be available should any questions/issues arise during construction.

Design Requirements:

- The overall design shall conform, in so far as practical, to the Ten State Standards, EGLE's Suggested Practice of Water Works Design, the current BWL Water Main Specifications and EGLE water main construction permit requirements.

- A minimum of 18-inch vertical separation and, where feasible, 10 ft horizontal separation between water mains and sewers shall be provided. Typical cover over the water main shall be 5 ft.

Task 3 – Permits

- The consultant shall assist the BWL in acquiring permits for this project. The consultant shall complete and submit all applicable permit applications to the BWL.

Task 4 – Geotechnical

- The consultant is responsible for taking pavement cores at the frequency and location as direct by the BWL. All coring shall include full depth coring of rigid, flexible, and/or composite pavements for determination of pavement thickness.
- At a minimum, each location should include one core. One additional core is required every 500 feet of main installation.
- The consultant is responsible for advancing coring to a depth of 10 feet below the street surface. Determine base, sub-base material and ground water level if encountered.
- The consultant will furnish all services and labor necessary to conduct and complete the requirements for geotechnical services as described herein. The consultant shall furnish all materials, equipment, supplies, and incidentals necessary to perform these services.
- The consultant is responsible for traffic control and maintaining traffic during all operations. The consultant's method of traffic control and maintaining traffic shall be in accordance with City of Lansing guidelines and Michigan Manual of Uniform Traffic Control Devices.
- The consultant is responsible for obtaining any and all permits necessary to work in the right-of-way and setup traffic control.
- The consultant is responsible for contacting MISS DIG, placing MISS DIG utility identification requests, and coordinating with MISS DIG to ensure public and private utilities have been staked and identified prior to starting any work.
- The consultant is responsible for preparing all core and boring reports including the following as a minimum:
 - Date and site of core.
 - The location, including lateral and longitudinal offsets referencing lanes and cross street. Label mainline, curb, shoulder, turn lane etc.
 - Core identification number.
 - Graphic profile indicating depth of each layer in the core, in inches, the type of pavement material and condition, depth of reinforcing steel and coarse aggregate type. The graphic profile should be extended to show the aggregate base (in.), sub-base (in.) and subgrade (ft.) descriptions.
 - Indication of presence of water.
 - Names of the crew members.
 - Latitude and Longitude of each core.
- The consultant is responsible for visually classifying all soils using the Unified Soil Classification System.
- The consultant is responsible for backfilling and compacting all core holes and filling core holes within the pavement surface with bituminous patching material prior to leaving the specific location.
- Consultant may include in proposal any additional geotechnical work required by governing authority for project(s) (e.g. density testing, concrete testing) not outlined in Task 4, with associated cost as separate line item.

Task 5 – Construction Engineering

Consultant Responsibilities

- Provide project engineering staff and services to include engineering supervision, construction inspection, construction surveying and layout, materials testing coordination and traffic control.
- Collect and maintain all project quantities.
- Review invoices and produce pay estimates.
- Review and process change orders.
- Provide a State of Michigan Certified Storm Water Operator to inspect SESC control measures. Produce and maintain all required documentation and identify deficiencies.
- Inspect all aspects of surface restoration.
- Coordinate closed circuit television video (CCTV) of the sanitary sewer facilities within the project limits before and after construction.
- Review CCTV sewer records before and after construction.
- Inspect the repair of sewer facilities damaged during construction.
- Prepare and inspect final walkthrough punch list.

BWL Responsibilities

- Coordinate customer water shut off notifications with the Contractor.
- Coordinate water main isolation with the Contractor.
- Inspect all water facility material.
- Inspect all aspects of water facility installation.
- Collect all water facility as-built information.
- Create final as-built plan.

Submittals:

Project tasks 1, 2, and 3, and 4 for *Locations 1, 2, and 3* must be completed on or before January 15, 2027. Project task 5 is expected to start in Spring 2027.

Deadlines above must be met.

A pre-design meeting shall be held with the consultant, BWL and City of Lansing to discuss the scope of this project. Three additional meetings shall be held with all involved parties during the course of the design to update the BWL on progress of work and to clarify any water main related issues.

The consultant shall submit the following:

Design Engineering

1. Electronic copies of draft plans at 50%, 75%, 95% level for review and approval.
2. Upon completion of final plans, the consultant shall submit
 - a. 3 sets of sealed design plans appropriate for submittal to governmental agencies. Project plans shall be prepared for submittal to EGLE, City of Lansing, and BWL for obtaining necessary construction permits. All submittals shall go through BWL.
 - b. AutoCAD file of base mapping and plan/profile sheets.
 - c. Electronic copy (pdf or dwf) copy of the final construction plan set.
 - d. Set of plans (pdf or dwf) in accordance with BWL Construction Drawing Specifications.
3. Itemized cost estimate of water main and partial service line installation for the applicable project limits.

4. Itemized cost estimate and quantities for restoration for the applicable project limits (above aggregate base). If another party is participating with additional restoration, quantities must be estimated separately per party.
5. Completed permit applications for applicable permits.

Construction Engineering

1. Daily work reports
2. SESC inspection reports
3. Pay estimates
4. Change orders
5. Material testing results
6. Sewer CCTV records
7. Assessment of CCTV
8. Forward copy of CCTV to the City of Lansing Public Service Department

Bid Evaluation:

Bids will be evaluated based on the following criteria:

Category	Rank (1=Low, 9=High)	Percent of Score
Design Experience		20%
Previous Work Satisfactorily Performed with the BWL		10%
Resume, Overall Proposal Quality		13%
Project Cost		50%
Proximity to Project		7%
		100%

Fees:

The consultant shall submit a fee for each project task, based on actual cost plus a percentage for overhead and profit with a not-to-exceed amount. Details of personnel work hours scheduled for the project are to be included in the proposal.

Liability and Errors and Omission's insurance will be required per BWL policy.

Proposals shall be submitted to Ali Abdul-Wahab with the BWL Purchasing Department via ionwave, on or before October 22, 2026 at 2:00 PM. Questions on submitting proposals should be directed to Ali.Abdul-Wahab@LBWL.COM (517-702-6941)

END SCOPE OF WORK