

STATE OF MAINE
COUNTY OF PENOBSCOT
COURT OF COUNTY COMMISSIONERS



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REQUEST FOR PROPOSAL (RFP)

PROJECT: Comprehensive Roof & Drain Heat Trace System Inspection, Diagnostic Testing, and Repair Scope Planning

ISSUING AGENCY: County Facilities Management

DATE OF ISSUANCE: October 22, 2026

1. Purpose & Objective

The County is issuing this Request for Proposal (RFP) to solicit competitive proposals from qualified electrical contractors to perform comprehensive pre-winter inspections, diagnostic testing, and repair scoping for electric heat trace systems installed on four (4) government office buildings.

The primary objectives of this project are to:

- Identify all failed, degraded, or missing heat trace cabling and controls across roof surfaces, eaves, gutters, downspouts, and roof drain lines prior to winter freeze conditions.
- Determine where existing heat trace must be repaired, replaced, repositioned, or newly installed (where missing) to eliminate hazards associated with falling ice/icicles and frozen roof drain piping.
- Provide line-item budget estimates and technical recommendations for post-inspection repair and new heat trace installation work.

2. Scope of Facilities

The scope encompasses four (4) county office facilities:

Facility Identifier	Building Description	Building Height
Facility 1	Emergency Management & Post Office	Two (2) Stories
Facility 2	Correctional Facility	Four (4) Stories
Facility 3	Annex Building	Two (2) Stories
Facility 4	County Services Building	Four (4) Stories

3. Scope of Work & Testing Requirements

The selected contractor shall furnish all labor, supervision, specialized tools, diagnostic equipment, and safety apparatus necessary to complete the inspection prior to winter freeze conditions.

3.1 Diagnostic & Inspection Methodology

The contractor must execute the following testing and survey procedures across all roof sections and roof drains:

- **Missing Heat Trace Cable Identification & Gap Analysis:**
 - Perform a comprehensive visual and spatial survey of all roof valleys, eaves, gutters, downspouts, drain sumps, and exposed piping to identify vulnerable freeze zones currently lacking heat trace cabling.
 - Identify areas where missing heat trace creates ice damming, icicle formation over pedestrian walkways/entrances, or drain line freeze-up risks.
- **Electrical Continuity & Insulation Resistance (Megger) Testing:**
 - Perform insulation resistance (Megger) testing on all existing heat trace circuits to detect internal cable degradation, jacket damage, or moisture ingress.
 - Conduct continuity checks and verify line voltage and total wattage/amperage draw against original equipment manufacturer (OEM) ratings.
- **Infrared (IR) / Thermal Imaging Inspection:**
 - Perform high-resolution thermal imaging across all heat-traced roof areas, valleys, gutters, downspouts, eaves, and exposed drain lines while circuits are energized.
 - Identify cold spots, dead runs, unbalanced heating, open splices, and unheated gaps in existing cable runs.
- **Physical Water Flow Testing of Roof Drains:**
 - Perform water testing on all roof drains and associated internal piping to verify unobstructed drainage paths.
 - Pinpoint standing water low-points/bellies in piping or sump areas where ice accumulation occurs and new/repositioned heat trace cabling is required.

3.2 Repair & Installation Scope Planning

Based on diagnostic findings and gap analysis, the contractor shall develop a detailed repair and installation proposal outlining:

- Exact linear footage of heat trace requiring replacement, repositioning, or new installation in unheated/missing locations.
- Specific locations requiring new heat trace cable additions or repositioning to mitigate falling ice hazards and drain freezing.
- Itemized budgetary cost estimates (labor, materials, electrical panel capacity additions, equipment) required to execute all recommended repairs and additions.

4. Pricing Structure & Deliverable Options

Bidders must submit base pricing along with separate option pricing for final report deliverables as indicated below.

4.1 Base Services (Inspection, Gap Survey & Testing)

- Complete diagnostic testing (Megger, continuity, thermal scan, water flow testing, and missing cable identification gap analysis) across all 4 facilities.

- Itemized budget recommendations for repairs, repositioning, and new missing cable installations.

4.2 Report Deliverable Options (Bidders MUST cost each option separately)

- **OPTION A — Standard Photo Log & Written Summary Report:** Comprehensive narrative detailing system condition, test readings, identified failure points, catalog of missing heat trace zones, and photographic logs.
- **OPTION B — CAD/PDF Marked-Up Roof & Floor Layout Drawings:** All items in Option A, PLUS scaled CAD or markup-annotated PDF roof and floor layouts pinpointing exact existing circuit runs, failure locations, missing cable additions, and proposed heat trace repositioning routes.

5. Contractor Qualifications & Safety Requirements

5.1 Minimum Qualifications

- **Licensure:** All personnel performing electrical diagnostic testing must hold valid Licensed Journeyman or Master Electrician credentials in the state of operation.
- **Thermography Certification:** Lead thermographers conducting IR scans must hold a Level I or Level II Thermography Certification (ASNT, Infraspction Institute, ITC, or equivalent recognized certifying body).
- **Experience:** Minimum of three (3) consecutive years of documented experience inspecting, installing, and troubleshooting commercial roof/drain electric heat trace systems.
- **Manufacturer Familiarity:** Demonstrated familiarity with commercial heat trace system manufacturers (e.g., nVent RAYCHEM, Thermon, EasyHeat) and standard OEM insulation resistance test standards.
- **Safety Certifications:** On-site personnel must hold valid OSHA 10-Hour or 30-Hour safety credentials, certified fall protection training, and boom/aerial lift operator certification.
- **References:** Provide a minimum of three (3) professional references for similar commercial or government heat trace inspection projects performed within the last three years.
- **Insurance:** Maintain commercial general liability coverage of at least \$1 million per occurrence and \$2 million aggregate, workers' compensation coverage at statutory limits, and commercial automobile liability coverage with a \$1 million combined single limit.

5.2 Access, Equipment & Safety Compliance

- **Contractor-Provided Equipment:** The contractor is solely responsible for supplying all necessary access equipment (e.g., boom lifts, ladder systems, certified fall protection harness gear and tie-offs).
- **Interior Access Coordination:** All access to interior mechanical spaces, electrical rooms, and attic/ceiling cavities must be scheduled and coordinated directly through designated County Facility Representatives.
- **Safety Protocols:** All work must strictly adhere to OSHA, local safety regulations, and County facility security protocols.

6. Procurement Schedule

Event / Milestone	Date	Details
RFP Release Date	October 22, 2026	RFP issued to prospective contractors.
Contractor Inquiries Due	October 29, 2026	Submissions due by 4:00 PM local time via email.
Formal Addendum Issued	November 2, 2026	Posted on the County Website's RFP page.
Proposal Submission Deadline	November 6, 2026	Bids due by 3:00 PM local time.
Contract Award Completed	November 10, 2026	Selection and contract finalized.
Field Inspection & Testing Window	Nov 12 – Nov 30, 2026	Complete on-site diagnostic inspections and testing prior to freeze.
Draft Report & Repair Budget Due	December 7, 2026	Contractor submits draft inspection report and repair/installation estimates.
Final Deliverables & Sign-Off	December 15, 2026	Final package approval and contract closeout.

Note: There will be no mandatory pre-proposal site walk-through. Contractors are advised to submit any site-specific or technical inquiries prior to October 29, 2026.

7. Submission Instructions & Requirements

- **Inquiries:** All technical and procedural questions must be submitted in writing via email to the County Facilities Management Office cfox@penobscot-county.net by **October 29, 2026**. Official responses will be issued via Addendum on the **County Website's RFP Page** on **November 2, 2026**.
- **Proposal Package Requirements:** Bidders must submit the following items in their proposal package:
 1. Executive Summary & Contractor Overview
 2. Proof of Electrician Licenses, Thermography Certifications, and OSHA/Safety Training
 3. Proof of Insurance Coverage
 4. Three (3) Client References for similar projects
 5. Detailed Inspection Plan & Testing Methodology (including Gap Analysis for Missing Heat Trace)
 6. Itemized Cost Proposal (Base Fee + Option A Fee + Option B Fee)