

SECTION 01390**CONDITION SURVEYS****PART 1 GENERAL****1.01 SUMMARY**

- A. The Work specified in this Section includes furnishing all labor, material and equipment to conduct pre-construction and post-construction inspections and surveys of the conditions of all properties, including all buildings, roadway, railroad, and structures, located within 100 feet of anticipated excavation, pipeline installation, excavation support installation and dewatering work; within the Limits of Disturbance indicated on the Contract Drawings for all surface occupations, including areas for construction trailers and equipment and materials storage; and within 100 feet as measured in all directions beyond the Limits of Disturbance indicated on the Contract Drawings for all surface occupations, including areas for construction trailers and equipment and materials storage.
- B. The Work also includes certified field surveys to determine the elevations of all properties, including all buildings and structures, in conjunction with, and within the Limits of Disturbance, the pre-construction, and post-construction conditions inspections and surveys.

1.02 RELATED SECTIONS

- A. Section 01300 – Submittals
- B. Section 01380 – Construction Video Recording and Photographs

1.03 CODES AND STANDARDS (NOT USED)**1.04 SUBMITTALS**

- A. Submit the following in accordance with Section 01300 – Submittals:
 - 1. Qualifications of a Registered Professional Engineer licensed in the Commonwealth of Massachusetts to perform condition inspections and surveys.
 - 2. Qualifications of a Registered Professional Land Surveyor licensed in the Commonwealth of Massachusetts to perform field surveys.
- B. Submit Property Conditions Inspection and Survey Reports for all pre-construction and post-construction, surveys in accordance with Section 01300 – Submittals and as specified in this Section.

- C. After addressing the Authority's comments, and following acceptance of the reports by the Authority, prepare four (4) copies of each report: submit two (2) copies, one (1) of which shall be the original, to the Authority; submit one (1) copy to each property owner as directed by the Authority; and retain one (1) copy.

1.05 QUALITY ASSURANCE (NOT USED)

1.06 QUALIFICATIONS

- A. Pre-construction and post-construction condition inspections and surveys shall be performed and narrated by a Registered Professional Engineer licensed in the Commonwealth of Massachusetts and shall be recorded, in both video and photograph format, under the direction of the Professional Engineer by the Construction Photographer in accordance with Section 01380 – Construction Video Recording and Photographs. The Professional Engineer shall have a minimum of five (5) years' professional experience in structural inspections, evaluations and condition surveys of similar type and complexity to the Work of this Contract.

1.07 DELIVERY, STORAGE, AND HANDLING (NOT USED)

1.08 PROJECT/SITE CONDITIONS

- A. Right of entry for property condition inspections and surveys, and right of entry for field surveys.
 - 1. Obtain the right of entry for properties to be inspected and surveyed.
 - 2. Prior to contacting the individual property owners, the Authority will provide a general notice to each property owner describing the Project and the need to obtain access to each property. Do not contact individual property owners until at least two (2) weeks after the Authority has provided notice to the property owners.

1.09 DEFINITIONS (NOT USED)

1.10 TOLERANCE (NOT USED)

1.11 SCHEDULE

- A. Within ten (10) working days of Notice to Proceed, submit the qualifications of the licensed Professional Engineer(s) who will perform the condition inspections and surveys.
- B. Within ten (10) working days of Notice to Proceed, submit the qualifications of the licensed Professional Land Surveyor(s) who will perform the field surveys.
- C. Within sixty (60) days of Notice to Proceed, submit three (3) printed copies of pre-

construction “Property Condition Inspection and Survey” reports and videos (on DVD or USB) of properties, including buildings, railroad, roadways, and structures, to the Authority along with one (1) copy of each report and video to each respective property owner.

- D. Within 30 days after completion of construction at a site, submit three (3) printed copies of post-construction “Property Conditions Inspection and Survey” reports and videos (on DVD or USB) of properties, including buildings and structures, along with one (1) copy of report and video to each respective property owner.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

3.01 GENERAL

- A. Include the structures and buildings located completely or partially in the zone of condition survey, in the pre- and post-construction surveys. Propose and submit any exceptions to the Authority for approval.
- B. Conduct pre-construction inspection and survey prior to start of excavation, dewatering, installation of excavation support and demolition work.
- C. Coordinate activities, issue notices, obtain clearances and provide photographic and administrative services necessary to accomplish the survey.
- D. Give notice in writing, to the property owner and any representative of local authorities required to be present at such survey. Notify in writing the planned date and time of all pre-construction and post-construction inspections and surveys at least one (1) week prior to conducting each. Provide copies of notices to the Authority. The Authority shall be present during all inspections and surveys.
- E. Pre-construction and post-construction conditions inspection and survey reports shall be submitted within two (2) working days of completion of each. Excavation in any form shall not begin until all pre-construction condition inspection and survey reports have been reviewed by the Authority and the Authority’s comments have been addressed. Omissions in the reports, as determined by the Authority, shall be addressed at no additional cost to the Authority.
- F. The records shall be retained in file for at least three (3) years after completion of the Contract. In the event of damage claims, prepare and submit a report on the particular structures as requested by the Authority from those notes and photographs. Damage attributed to the Contractor’s activity shall be repaired promptly and completely to the property owner’s satisfaction to restore the conditions of the property to that existing prior to work at no additional cost to the Authority.

3.02 PRE-CONSTRUCTION AND POST-CONSTRUCTION SURVEY

- A. Include the structures and buildings located completely or partially in the zone of condition survey, in the pre- and post-construction surveys and during construction monitoring. Propose and submit any exceptions to the authority for approval.
- B. The pre-construction inspection and survey of the conditions of each existing property, including each existing building and structure, shall include the following:
 - 1. Interviews with each property owner regarding existing conditions and structural faults, if any; and determine the dates and extent of recent repairs.
 - 2. A detailed written report for each property, including each building and structure, inspected and surveyed. The report shall include the location and description of the site and a record of the visual examination of the property, buildings, and structures. It shall contain narrated video coverage and color photographs of the interior and exterior of each building and structure, and of the surface features of each property. Points where deterioration has occurred or where deficiencies, cracks or defects exist shall be noted in the video coverage, photographed, located and recorded in the written report. The absence of deficiencies shall also be recorded. The report shall include sketches and a summary of the interviews. The Authority will examine said reports and may indicate that additional information is required.
- C. The supervisor of the inspection party shall request that the property owner sign the report before submission to the Authority for review. If the property owner refuses to sign the report or refuses access to their property, request that the property owner sign a release form to be supplied by the Authority. If the property owner refuses to cooperate, immediately advise the Authority of the owner's refusal.
- D. Three hundred (300) photographs shall be taken by the Construction Photographer. Photographs shall be color prints, 5 x 7 inches, with a glossy finish. Photographs of the interior and exterior of the buildings and structures, and of the surface features of properties, shall be included. Photographs of surface features shall be from multiple angles, identifying landscaping and architectural features including, but not limited to, driveways, fences, stone walls, walkways, pools and storage sheds.
- E. Report immediately to the Authority any finding that indicates construction operations will adversely affect any property, building or structure.
- F. Condition inspections and surveys, and field surveys, performed on properties, including buildings and structures, beyond the areas specified in Paragraph 1.01.A will be performed at no additional cost to the Authority.
- G. Condition inspection and survey video shall provide complete video coverage, including

audio description, of the entire property, including the interior and exterior conditions of each building and structure, specifically noting and showing the type and location of any cracks, damage, structural problems, or other defects.

- H. Post-construction condition inspections and surveys shall be performed on the same properties, including buildings and structures, and within in the same areas, included in the pre-construction condition inspections and surveys. Any differences in findings between the pre-construction and post-construction inspections and surveys shall be specifically noted and recorded. Omissions in the reports, as determined by the Authority, shall be addressed at no additional cost to the Authority.

3.03 FIELD MEASUREMENTS

- A. Field surveys shall be performed to determine elevations of properties, including elevations of buildings and structures, before construction is started and after construction has been completed. Field surveys shall be performed within the areas specified in Paragraph 1.01.A.
- B. At a minimum, the field surveys shall include:
 - 1. Corners of building and structure foundations on all sides of the building and structure.
 - 2. Intermediate points within the limits stated in (a) above, including doorways, construction and expansion joints, and other visible features.
 - 3. The location of each elevation shall be fully described in words and located and recorded on a Drawing.
 - 4. The field survey shall be performed under the supervision of and certified by a Land Surveyor licensed in the Commonwealth of Massachusetts. The results of each field survey shall be included with the submission of each condition survey.

**** END OF SECTION ****