DIVISION OF FACILITIES & TRANSIT
ENVIRONMENTAL COMPLIANCE SECTION

ON-CALL ASBESTOS, LEAD, AIR QUALITY AND STRUCTURE DEMOLITION COMPLIANCE SCOPES

2018

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TASK 710 – INVESTIGATIVE SURVEY
A – ASBESTOS CONTAINING MATERIALS

OBJECTIVE:

The objective of a Task 710A is to conduct a visual inspection and to collect and review bulk sample data in order to identify the presence and types, assess the condition, and quantify the amount of asbestos containing materials (ACM) located at a building site.

TASK SCOPE:

Preliminary Site Review

The Consultant shall review the following data provided by ConnDOT:

- Name of building(s)
- Address of property
- Contact names and phone numbers
- Number of buildings
- Age of building(s)
- Size of building(s)
- Number of floors
- Site layout
- Method of building access
- Building occupancy status
- Description of planned activity to occur at the site (such as demolition, reconstruction, occupancy)
- Planned disposition of property and buildings (such as lease or transfer of ownership)
- Site information regarding oil tanks, oil-water separators, wastewater discharges (septic or sewer connection), and potable water supply (private well or public water connection),
- Site information regarding status of public utilities
- Any existing ACM survey data

The Consultant shall schedule field inspection activities with ConnDOT and building occupants.

Historical Significance Determination

The Consultant shall determine the sites historical significance through coordination with the ConnDOT Office of Environmental Planning and the CT Historical Commission State Historic Preservation Office (SHPO) should the property be >50 years old and scheduled for demolition in accordance with CGS Section 4b-64, including requesting written determination from the SHPO, publishing notices of intent to demolish in local newspapers and posting the building structure with notices of intent to demolish.

Site Inspection and Sampling

The Consultant, utilizing CTDPH-certified asbestos inspectors, shall conduct an investigative survey for ACM according to the Asbestos Hazard Emergency Response Act (AHERA) sampling protocol. After studying the preliminary site review data, the inspector(s) shall physically walk through the facility, reviewing the building from the basement to the top floor, checking all spaces within the building including, but not limited to, all floors, walls, ceilings, air plenums, ventilation ducts, electrical rooms, boiler rooms, crawlspaces and pipe chases as well as the exterior of the building including the roof, siding and buried materials.

Bulk samples shall be collected by the Consultant that are representative of each of the suspect materials identified during the walk through in accordance with AHERA sampling protocol. Suspect materials include, but are not limited to, boiler and tank insulation, boiler breeching, pipe insulation, mudded pipe fitting insulation, plaster (base & skim coats), wallboard/joint compound, ceiling tile, floor covering, window glazing/caulking, mastics, base cove, fireproofing, fire doors, siding and roofing materials. Generally, these samples shall be collected in locations that reduce the potential for exposure to building occupants and shall follow procedures that would prevent the emission of asbestos fibers into the air.

The Consultant shall submit the collected samples to a laboratory accredited by the CTDPH and National Voluntary Laboratory Accreditation Program (NVLAP) for analysis for asbestos content. Analytical services shall be procured by the based on competitive pricing.

Laboratory analysis shall be performed on all samples using polarized light microscopy (PLM) with visual area estimate (VAE) quantification. Multi-layered materials such as plaster, sheetrock, joint compound, floor tile, and mastic shall be analyzed separately by layer. Plaster layers, sheetrock, joint compounds and similar materials with asbestos detected in quantities less than 5% using visual area estimate (vae) techniques, shall be further quantified via EPA 400 point counting (pc) techniques to obtain a more accurate quantification of asbestos content. Gravimetric reduction (gr) preparation techniques shall be utilized on non-friable organically bound (NOB) samples as appropriate, with negative results on NOB samples confirmed through the use of transmission electron microscopy (TEM).

Should the Consultant note any other environmental concerns (such as storage tanks, spills, lead based paint, Polychlorinated Biphenyls (PCBs fluorescent lights, mercury thermostats, “household hazardous waste”, and mold), the Consultant shall notify ConnDOT of the presence of such concerns.

Report Preparation

Upon completion of the Site Inspection and Sampling, the Consultant shall prepare a report of their findings and conclusions as described below. Separate from the report of finding and conclusions, the Consultant shall prepare an itemized cost estimate for abatement.

TASK PRODUCTS:

The Consultant shall provide the task products in electronic format by coordinating the upload with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee into ProjectWise in accordance with the ConnDOT Digital Project Development Manual. The Consultant shall provide hard copies upon request of ConnDOT.

Inspection Report and Cost Estimate

At the conclusion of the inspection, the Consultant shall prepare an investigative survey report that includes, but is not limited to:

- Project outline page with: site location, DOT assignment #, DOT project #, DOT project manager, Inspector/Project Monitors' names and licenses, dates of survey, notation of whether ACM was identified, cost estimate for abatement, site historic significance, additional environmental concerns noted
- Tables of survey results (samples, ACM, non-ACM)
- Site photos
- Field site sketches indicating sampling locations and identified ACM
- Correspondence on historical status
- Copies of Inspector/Project Monitors' licenses and accreditations
- Laboratory licenses and accreditations
- Laboratory analytical reports with Chain of custody sheets.

The Consultant shall prepare an itemized cost estimate for abatement and submit under a separate cover.

BASIS OF PAYMENT:

A 710A assignment shall include all work required to prepare the report required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Review of existing information
- Field investigation & sampling
- Laboratory analysis
- QA/QC
- Report preparation

The base budget for this task shall depend upon the size of the structure to be investigated. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 710A assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments

included. This basis of payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 720 – PROJECT DESIGN AND SPECIFICATION DEVELOPMENT
A – ASBESTOS CONTAINING MATERIALS

OBJECTIVE:

The objective of a Task 720A is to develop plans, specifications and cost estimates for abatement of asbestos containing material (ACM), either as stand-alone documents or for inclusion in contract bid documents.

TASK SCOPE:

When abatement of ACM is required, the Consultant, utilizing a CTDPH certified asbestos project designer, shall prepare design documents consisting of engineering drawings and technical specifications for the abatement project. The design documents shall include, but not be limited to, the following:

- Description of work required
- ACM abatement procedures
- Regulatory references
- Contractor bid qualifications
- Contractor submittals
- Worker protection and decontamination procedures
- Exposure assessments
- Contractor workers' licensing, training and medical surveillance requirements
- Clearance criteria
- Waste transport and disposal requirements
- Alternative work practices (AWPs)
- Project designer certifications
- Reference to investigative survey(s)
- Field site sketches or CAD drawings

The design shall include a list of all applicable regulations and permits that shall be required for the project. The list shall include applicable state, federal and local regulations, and permits, with names, addresses and telephone numbers of regulation personnel. Typically the United States Environmental Protection Agency (USEPA) Region I, Occupational Safety and Health Administration (OSHA), CTDPH and State of Connecticut Department of Energy and Environmental Protection (CTDEEP) regulations and notifications are to be followed. Additionally, the Consultant shall determine if local regulations apply and if local permits may are required including, but not limited to, building permits and notification to the health and fire departments.

The Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee shall provide the Consultant the list of facilities that have been pre-approved to accept ConnDOT ACM waste. The Consultant shall list the pre-approved disposal facilities in

the specifications after having contacted the facilities to determine the facilities' acceptance criteria and to confirm the anticipated waste is eligible for disposal at the facilities. The Consultant shall review the investigative survey to verify that the anticipated wastes will meet the disposal facilities' criteria.

The Consultant shall coordinate the design and set up project meetings as required with all interested parties to discuss preliminary design requirements and resolve all outstanding items regarding the project.

The format of the specifications shall be submitted in Construction Specifications Institute (CSI), Standard Specifications for Road Bridges and Incidental Construction 817, or as directed by the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee, with engineering drawings formatted according to ConnDOT standards.

Cost Estimates

The Consultant shall prepare a budget estimated costs for the Contractor's asbestos abatement work and the Consultant's project compliance and project surveillance work. The budget estimated costs shall be prepared using a format prescribed by ConnDOT.

Prebid Meeting and Walkthrough

The Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee shall advise the Consultant as to whether as the designs are intended to serve as standalone documents or are to be included in contract bid documents.

If the design was prepared as a standalone package, after completion of the final designs the Consultant either shall solicit bids for the asbestos abatement utilizing those Contractors selected from among existing State contracts such as effective contracts under the Department of Administrative Services (DAS Contracts), or the Consultant shall solicit competitive open bidding. The Consultant shall coordinate and attend the prebid meeting, explain the design specification and conduct a walkthrough. If bidders require information that cannot be clarified at the prebid meeting, Consultant shall develop an addendum and shall send to all bidders and the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee.

In cases where the Consultant's designs are included as part of a contractor bid package, the Consultant shall attend the prebid meetings and explain the Consultant's design specifications. If bidders require information on the Consultant's designs that cannot be clarified at the prebid meetings, Consultant shall develop addendums and submit to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee.

Funding Requests

For standalone projects where abatement is to be conducted by Contractors utilizing a DAS

Contract, or where abatement is to be conducted by Contractors under subcontract agreement directly with the Consultant, the Consultant shall prepare funding requests. The funding requests shall be for the Contractor's asbestos abatement as well as the Consultant's project compliance and project surveillance (Task 730 and Task 740 request for assignment). Requests for Contractor funding shall be accompanied by the bid provided by the Contractor, or, in the event that the Contractor's bid is unavailable, by the cost estimate prepared by the Consultant. The Consultant shall email the funding requests to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee.

TASK PRODUCTS:

Unless otherwise noted, the Consultant shall provide the task products in electronic format by coordinating the upload with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee into ProjectWise in accordance with the ConnDOT Digital Project Development Manual. The Consultant shall provide hard copies upon request of ConnDOT.

Draft Abatement Plans for Review

The Consultant shall prepare and submit a draft abatement design package as described above.

Final Design (100%)

Based on input from the review of the draft submittal design plan, the Consultant shall prepare and submit a final abatement design package, Notice to Contractor, including the technical specifications, notice to contractor, and engineering drawings.

Cost Estimate for Abatement

Separate from the design plan task product and prior to bid solicitation, the Consultant shall also prepare budget estimated costs for the Contractor's asbestos abatement and the Consultant's project compliance and project surveillance. The budget estimated costs shall be prepared in a format prescribed by ConnDOT.

BASIS OF PAYMENT:

A 720A assignment shall include all work required to prepare the report required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Review of existing information
- QA/QC
- Report preparation
- CADD

The base budget for this task shall depend upon the size of the structure involved. The base

budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 720A assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This basis of payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 725 – OPERATIONS & MAINTENANCE PLAN DEVELOPMENT
A – ASBESTOS CONTAINING MATERIALS

OBJECTIVE:

The objective of a Task 725A is to develop an Operations and Maintenance (O&M) Plan to allow for proper in-house management and hazard communication of asbestos containing materials (ACM) to remain in place.

TASK SCOPE:

When ACM or presumed asbestos containing material (PACM) is to remain in place, the Consultant, utilizing a CTDPH-certified asbestos management planner, shall prepare an O&M Plan to properly manage the ACM in place. Key provisions of the O&M Plan shall include, but not be limited to, the following:

- Introduction
- Site description
- Types and locations of known and presumed ACM and PACM
- Hazard communication: A program to inform workers, tenants, building occupants and contractors where ACM is located, and how and why to avoid disturbing the ACM, including OSHA signs and labels
- Surveillance: A schedule for periodic inspections of the ACM to record, assess, and document any changes in the condition of the ACM, provide recommended response actions, and collect additional samples of suspect materials as deemed necessary by the inspector
- Work practices: A program to implement O&M work practices to avoid or minimize fiber release during activities which might potentially disturb ACM
- Emergency response: A program to provide emergency response in response to a fiber release episode
- Training: An asbestos awareness training program, which includes the requirements of an asbestos coordinator, for the custodial and maintenance staff.

TASK PRODUCTS:

The Consultant shall provide the task products in electronic format by coordinating the upload with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee into ProjectWise in accordance with the ConnDOT Digital Project Development Manual. The Consultant shall provide hard copies upon request of ConnDOT.

Draft O&M Plan for Review

The Consultant shall prepare a draft O&M Plan and submit to ConnDOT for review and comments prior to finalizing.

Final O&M Plan (100%)

Based on ConnDOT's input from the review of the draft O&M Plan, Consultant shall prepare a final O&M Plan, which shall be submitted in both hardcopy and electronic formats.

BASIS OF PAYMENT:

A 725A assignment shall include all work required to prepare the report required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Review of existing information
- QA/QC
- Report preparation
- CADD

The base budget for this task shall depend upon the size of the structure involved. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 725A assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This basis of payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 726 – PERIODIC SURVEILLANCE
A – ASBESTOS CONTAINING MATERIALS

OBJECTIVE:

The objective of a Task 726A is to provide periodic on-site surveillance of asbestos containing materials under in-house management, assess the condition of materials, provide recommended response actions, and update an existing Operation and Maintenance (O&M) Plan.

TASK SCOPE:

Site Inspection and Sampling

When ACM or presumed asbestos containing material (PACM) is to remain in place, the Consultant, utilizing a CTDPH-certified asbestos inspector, shall perform a periodic inspection of these areas and materials identified in the O&M Plan. This inspection shall include a visual survey of the condition of the identified areas and materials and documentation of the findings.

The Consultant shall also collect samples of additional suspect materials, as deemed necessary by the inspector, to determine asbestos content.

Report Preparation

Upon completion of the Site Inspection and Sampling, the Consultant shall prepare a report of their findings and conclusions. The report shall be prepared as described below.

TASK PRODUCTS:

Unless otherwise noted, the Consultant shall provide the task products in electronic format by coordinating the upload with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee into ProjectWise in accordance with the ConnDOT Digital Project Development Manual. The Consultant shall provide hard copies upon request of ConnDOT.

The Consultant shall prepare a report for each periodic survey conducted which summarizes the findings, recommends response actions, summarizes changes required in the management plan, and includes results of all new sampling.

The Consultant shall formally update the site's O&M Plan as the results of periodic inspections dictate and after any abatement activities found to be necessary are completed. The Consultant shall reissue the updated O&M Plan to ConnDOT and the affected building occupants.

BASIS OF PAYMENT:

A 726A assignment shall include all work required to prepare the report required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Review of existing information
- Field investigation and sampling
- Laboratory analysis
- QA/QC
- Report preparation

The base budget for this task shall depend upon the size of the structure involved. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 726A assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This basis of payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 730 – PROJECT COMPLIANCE
A – ASBESTOS CONTAINING MATERIALS

OBJECTIVE:

The objective of a Task 730A is to provide project compliance administrative and technical services related to on-site asbestos abatement activities.

TASK SCOPE:

Contractor Qualification Review

The Consultant shall review the bid qualifications provided by the abatement contractor(s). The Consultant either shall notify the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee whether the Contractor qualification meets the minimum criteria identified in the specification or shall prepare a summary of the qualification criteria the Contractor(s) failed to meet.

Contractor Abatement Award

The Consultant shall review the bids and make recommendations for contract award prior tothe Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee awarding the contract.

Pre-Construction Meeting

The Consultant shall attend the preconstruction meeting, explain the design specification, explain the required submittals, explain the role of the Consultant during project compliance and project surveillance and answer any questions from the Contractor.

Review and Approval of Contractor Submittals

Prior to starting the asbestos abatement project, the Consultant shall review all materials submitted by the asbestos abatement contractor as required in the specification. The submittals shall include, but are not limited to:

- Notifications to CTDPH and EPA
- Any written request for a variance or alternative work practice from the CTDPH, OSHA or EPA standards
- All licenses, certifications, training, medical data and respiratory fit test data for each supervisor and worker
- All licenses, certifications for the abatement contractor firm, waste hauler and waste disposal facility
- Negative exposure assessment data
- Work plan, including schedule and manpower, for addressing the ACM abatement.

Upon completing the submittal review, the Consultant either shall make a recommendation that the submittals are acceptable and can be approved or shall prepare a summary of any deficient submittals prior to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee approval of the submittals. The Consultant shall review any materials re-submitted by the Contractor until all submittals have been approved.

Laboratory Coordination

The Consultant shall: assist in the selection of the laboratory and coordination for services; review and recommend approval of laboratory invoices for payment; and evaluate and tabulate laboratory results and provide QA/QC on all laboratory involvement.

Technical Support of Field Personnel

The Consultant shall: answer questions that arise in the field; interpret contract documents; resolve disputes between owner and Contractor; and provide support to field personnel.

Periodic Visits to the Site

The Consultant shall make visits to the work site to address critical work issues. All visits to the site will require documentation regarding the reasons for the visit and the activities that occurred. If a Task 740 Project Surveillance has been assigned for the same project, site visit documentation shall be made in a site's daily surveillance logs.

Invoice Review

The Consultant shall review contractor invoices for payment for concurrence with field records, contract rates, and backup documentation. The Consultant shall resolve any invoice discrepancies with the contractor and prepare and submit necessary ConnDOT payment forms to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee for further processing and payment.

Report Preparation

Upon completion of the project activity, the Consultant shall prepare a project compliance report based on their oversight. The report shall be prepared as described below.

TASK PRODUCTS:

Unless otherwise noted, the Consultant shall provide the task products in electronic format by coordinating the upload with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee into ProjectWise in accordance with the ConnDOT Digital Project Development Manual. The Consultant shall provide hard copies upon request of ConnDOT.

Letter of Compliance

After the conclusion of project activity, and after the receipt of satisfactory clearance criteria results, the Consultant shall issue a letter of compliance indicating the reasons asbestos abatement was undertaken, the Contractor who performed such services, and the date of completion.

Project Compliance Report

At the completion of the abatement project, the Consultant shall prepare a documentation package that shall provide a complete set of records documenting all activities that took place at the site. This package shall be suitable for use by ConnDOT if future questions arise concerning ACM.

The completed documentation package shall include:

- Executive summary report of all activities
- Daily site logs
- A project outline with: site location, DOT project #, DOT assignment #, DOT project manager, dates of project, Contractor name and license #, Consultant Inspectors/Project Monitors' names and licenses and accreditations, Consultant air sample analysts' names and licenses and accreditations, lists of materials abated, amount of ACM waste generated, ACM waste hauler, ACM waste disposal facility, and locations of remaining asbestos
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- Laboratory analytical reports with chain of custody sheets
- Notifications of asbestos abatement made to CTDPH and EPA
- Copies of alternative work practices
- Sign-in sheets
- Abatement contractor license
- Project monitor's certifications
- Laboratory accreditations
- Abatement contractor workers' medical surveillance records and training records
- Contractor OSHA personal air sample results
- Calibration records for testing equipment used
- Waste shipment records
- All contractor submittals
- Letter of compliance.

BASIS OF PAYMENT:

A 730A assignment shall include all work required to provide administrative and technical support to the project and prepare the reports required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Coordination with field staff, Contractor and laboratories
- Site visits
- QA/QC
- Report preparation.

The base budget for this task shall depend upon the size of the structure involved. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 730A assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This basis of payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 740 – PROJECT SURVEILLANCE
A – ASBESTOS CONTAINING MATERIALS

OBJECTIVE:

The objective of a Task 740A is to provide an on-site "Inspector/Project Monitor" to ensure Contractor compliance with the plans, specifications and regulations when performing asbestos abatement.

TASK SCOPE:

Field Project Management

Consultant shall be the liaison to ConnDOT regarding field activities, coordinating and scheduling with Contractor, laboratories, CTDPH, CTDEEP, OSHA, and EPA.

Consultant shall assign on-site personnel classified as Inspector/Project Monitor to oversee the performance of daily field coordination.

Air Monitoring, Site Inspections and Project Oversight

The Consultant shall assign an Inspector/Project Monitor who is certified by CTDPH- as an Asbestos Project Monitor to provide construction administration, air sampling and inspection services during the asbestos abatement project.

The Inspector/Project Monitor shall remain on site on a daily basis throughout the duration of the project and shall provide daily inspections of the work area to ensure that the contractor is conducting the abatement in strict accordance with the project requirements and all applicable regulations as described in the abatement specifications.

Daily project activities, as well as all observations made during the visual inspections, shall be documented by the Inspector/Project Monitor in a permanent log kept at the site. The Inspector/Project Monitor shall verify that the Contractor maintains a daily sign-in sheet where all personnel performing work in the regulated area shall be required to sign in and out.

In addition to the daily inspection services, the Inspector/Project Monitor shall conduct daily perimeter air sampling on the outside of the containment barriers. The intent of the air sampling is to verify the effectiveness of the engineering controls and to detect possible contamination of non-work areas with airborne asbestos fibers. Additional testing shall be conducted within the containment area in order to evaluate the fiber levels during the asbestos abatement work to ensure safe work practices.

Results of air sample analysis shall be kept in the site log book. These results shall be compared to acceptable standards, based on current regulations and guidelines. The results of samples taken within the containment enclosure shall be used to ascertain that the Contractor is making

acceptable efforts (such as wetting) to keep the airborne concentrations of fibers to a level appropriate to environmental and personal protection regulations. The Contractor nevertheless is responsible to perform OSHA compliance monitoring to determine the appropriate level of personal protection equipment required for his employees.

In addition to inspections and air sampling, the Inspector/Project Monitor shall review the Contractor's personal OSHA air sampling data, and shall verify that the Contractor submits the medical, training and licensing information for any additional personnel brought to the site. The Inspector/Project Monitor shall also document that any removed ACM waste is properly bagged, labeled and handled and shall keep a tally of the total amount of ACM waste removed from the site. Prior to ACM waste leaving the site, the Inspector/Project Monitor shall obtain a copy of the properly completed waste shipment record.

Visual inspection of the work site shall be performed to ensure that the area is free of any and all visible asbestos-containing dust and debris at the conclusion of the asbestos abatement. Once this step is reached, final clearance testing can be performed to determine the cleanliness of the work area. Final clearance air sampling shall be conducted in a manner to comply with RCSA 19a-332a-12 as amended.

Collected air samples shall be analyzed on-site by the Inspector/Project Monitor via phase contrast microscopy (PCM). The on-site Inspector/Project Monitor shall be registered with the AIHA asbestos analysts registry.

Where laboratory analytical services are required (such as TEM air clearance sample analysis) the Consultant shall submit the collected samples to a laboratory accredited by the CTDPH and AIHA for analysis for airborne fiber content. Required laboratory analytical services shall be procured by the Consultant from based on competitive pricing.

BASIS OF PAYMENT:

Task 740A services shall be assigned on a per person-day basis at the billing rate for the category of the Inspector/Project Monitor for each project. The actual payment for services shall be at the maximum billing rate for the category at which the Consulting’s personnel worked during the time period. For the purposes of this Agreement, a person-day field assignment shall consist of 10 hours and a typical project shall require one Inspector/Project Monitor. If project demands require extended workdays, the level of effort will reflect the additional time required.

TASK 710 – INVESTIGATIVE SURVEY
L – LEAD BASED PAINT

OBJECTIVE:

The objective of a Task 710L is to conduct a visual inspection and to collect and review representative field measurements and sample laboratory data in order to identify the presence and concentration, assess the condition, and quantify the amount of lead based paint and hazardous lead waste building debris located at a building site.

TASK SCOPE:

Preliminary Site Review

The Consultant shall review the following data provided by ConnDOT:

- Name of building(s)
- Address of property
- Contact names and phone numbers
- Number of structure(s)
- Age of structure(s)
- Size of structure(s)
- Number of floors
- Site layout
- Method of building access
- Type of building (residence, daycare, child-occupied facility, office, garage, etc.)
- Building occupancy status relative to occupancy
- Detailed description of planned activity to occur at the site (such as demolition, reconstruction, welding, sanding, cutting, repainting, occupancy)
- Planned disposition of property and buildings (such as lease or transfer of ownership)
- Site information regarding oil tanks, wastewater discharge (septic or sewer connection), and potable water supply (private well or public water connection),
- Site information regarding status of public utilities
- Any existing LBP survey data.

The Consultant shall schedule field inspection activities with ConnDOT and building occupants.

Historical Significance Determination

The Consultant shall determine the sites historic significance in coordination with the ConnDOT Office of Environmental Planning and the CT Historical Commission State Historic Preservation Office (SHPO) should the property be >50 years old and scheduled for demolition in accordance with CGS Section 4b-64, including requesting written determination from the SHPO, publishing notices of intent to demolish in local newspapers and posting the building structure with notices of intent to demolish.

Site Inspection and Sampling

The Consultant, utilizing CTDPH-certified lead inspectors, shall conduct a representative investigative survey for lead-based paint (LBP) associated with building components in order to determine if the OSHA Lead Exposure in Construction rule, EPA RCRA hazardous waste regulations, and CT DEEP hazardous waste regulations are applicable to the planned construction, renovation, or demolition activities.

- **Lead Based Paint (LBP)**

    - The Consultant shall utilize an on-site X-Ray fluorescence (XRF) spectrum analyzer operated by a trained inspector in order to inspect for the presence of LBP.
    - The LBP inspection shall follow the XRF manufacturer's protocol and EPA Methodology for XRF Performance Characteristic Sheets (PCS) established for the XRF utilized, with the focus being to determine if any detectable level of LBP is present on representative components.
    - XRF measurements shall be taken on representative testing combinations (painted surfaces of like color, component and substrate) in proportion to the actual quantity of painted surfaces within the building, in order to provide a representative composite of what building components contain detectable levels of lead of any amount.
    - The inspector shall note substrate, color, condition, component and location for each measurement taken.

  If inconclusive measurements cannot be resolved utilizing the XRF, or where specific components scheduled for renovation impact reveal no detectable levels of lead via XRF, the Consultant shall make recommendations to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section as to whether bulk paint chip samples shall be collected and analyzed by atomic absorption spectrophotometry (AAS) to further confirm/ or refute the presence of lead. sampling and analysis.

- **Building Debris Waste Characterization**

    - Representative composite samples of building component materials scheduled for impact shall be collected on a percent by weight basis so as to approximate the projected waste stream at the site in accordance with CTDEEP sampling guidelines. The collected samples shall be analyzed by the Toxicity Characteristic Leaching Procedure (TCLP) for the eight (8) RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver) to characterize the materials for disposal as hazardous or non-hazardous construction waste. The number of parameters for analysis may be reduced based on objective knowledge of the site but must at a minimum include lead and may also include arsenic and chromium should pressure treated lumber be amongst the waste stream. Samples should be collected for the building site as a whole and of any individual components which may undergo

disposal separately for any reason (such as asbestos-containing material)
- For materials to be impacted which would be intended for reuse or recycling as "clean fill" (such as concrete, brick, and stone) rather than disposal, representative samples of those materials shall be collected and shall be analyzed for both Total Metals and Synthetic Precipitation Leaching Procedure (SPLP) methods for the RCRA metals in question for comparison with the CTDEEP Remediation Standard Regulations (RSRs).

- **Other**

  - Should the Consultant note any other environmental concerns (such as storage tanks, spills, asbestos, PCBs, fluorescent lights, mercury thermostats, household hazardous waste, and mold), the Consultant shall notify ConnDOT of the presence of such concerns.

The Consultant shall submit collected samples to the laboratory for analysis. Laboratories must be accredited for the parameter(s) for which the samples are to be analyzed. Laboratory services shall be procured by the Consultant based on competitive pricing.

Report Preparation

Upon completion of the site inspection and sampling, the Consultant shall prepare a report of their findings and conclusions. The report shall be prepared as described below. Separate from the report of finding and conclusions, the Consultant shall prepare an itemized cost estimate for abatement.

TASK PRODUCTS:

The Consultant shall provide the task products in electronic format by coordinating the upload with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee into ProjectWise in accordance with the ConnDOT Digital Project Development Manual. The Consultant shall provide hard copies upon request of ConnDOT.

Inspection Report and Cost Estimate

The inspection report shall include, but not be limited to, the following:

- Project outline page with: site location, DOT assignment #, DOT project #, DOT project manager, inspectors' names and license #s, dates of survey, notification of whether LBP was notification of whether the waste is hazardous, identified, cost estimate for abatement, site historic significance, and additional environmental concerns noted
- Tables of survey results (such as LBP measurements and waste characterizations)
- Site photos
- Field site sketches

- Correspondence of historical status
- Inspector licenses and accreditations
- Laboratory licenses and certifications
- Laboratory analytical reports with chain of custody sheets

The Consultant shall prepare an itemized cost estimate for abatement and submit under a separate cover.

BASIS OF PAYMENT:

A 710L assignment shall include all work required to prepare the report required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Review of existing information
- Field investigation and sampling
- Laboratory analysis
- Report preparation

The base budget for this task shall depend upon the size of the structure to be investigated. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 710L assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This basis of payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 720 – PROJECT DESIGN AND SPECIFICATION DEVELOPMENT
L – LEAD BASED PAINT

OBJECTIVE:

The objective of a Task 720L is to develop plans, specifications and cost estimates for lead abatement, either as stand-alone documents or for inclusion in contract bid documents.

TASK SCOPE:

When abatement of, or activities impacting, lead-based paint (LBP) are required, the Consultant, utilizing a CTDPH certified lead planner-project designer, shall prepare design documents consisting of engineering drawings and technical specifications for the abatement project. The design documents shall include, but not be limited to, the following:

- Description of work required
- LBP abatement procedures
- Regulatory references
- Contractor bid qualifications
- Contractor submittals
- Worker protection and decontamination procedures
- Exposure assessments
- Contractor workers' training and medical surveillance requirements
- Clearance criteria for dust wipe analyses, soil sample analyses, and XRF measurements
- Waste segregation
- Recycling
- Waste stream sampling and characterization (hazardous or non-hazardous)
- Transport and disposal of hazardous and non-hazardous waste
- Procurement of temporary hazardous waste generators EPA I.D. # from the ConnDOT Environmental Compliance Section
- ConnDOT-approved transport and disposal facilities
- Duration of occupant relocation
- Project Designer certifications
- Reference to investigative survey(s)
- Field site sketches or CAD drawings.

The designs shall include a list of all applicable regulations and permits that shall be required for the project. The list shall include applicable state, federal and local regulations and permits with names, addresses and telephone numbers of regulation personnel. Typically the USEPA Region I, OSHA, CTDPH and DEEP regulations and notifications are to be followed. Additionally, the Consultant shall determine if local regulations apply and if local permits are required including, but not limited to, building permits and notification to the health and fire departments.

The Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee shall provide the Consultant the list of facilities that have been pre-approved to accept LBP waste. The Consultant shall list the pre-approved disposal facilities in the specifications after having contacted the facilities to determine the facilities' acceptance criteria and to confirm the anticipated waste is eligible for disposal at the facilities. The Consultant shall review the investigative surveys to verify that the anticipated wastes will meet the disposal facilities' criteria.

The Consultant shall coordinate the design and set up project meetings with all interested parties to discuss preliminary design requirements and resolve all outstanding items regarding the project.

The format of the specifications shall be submitted in Construction Specifications Institute (CSI), Standard Specifications for Road Bridges and Incidental Construction 817, or as directed by the Engineer, with engineering drawings formatted according to ConnDOT standards.

Cost Estimates

The Consultant shall prepare budget estimated costs for the Contractor's abatement work and the Consultant's project compliance and project surveillance work. The budget estimated costs shall be prepared using a format prescribed by ConnDOT.

Prebid Meeting and Walkthrough

The Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee shall advise the Consultant as to whether as the designs are intended to serve as standalone documents or are to be included in contract bid documents.

If the design was prepared as a standalone package and will not be included as part of a contractor bid package, after completion of the design specifications, the Consultant either shall solicit bids for the lead abatement utilizing those Contractors selected from among existing State contracts such as effective contracts under the DAS Contracts, or the Consultant shall solicit competitive open bidding. The Consultant shall coordinate and attend the prebid meeting, explain the design specification and conduct a walkthrough. If bidders require information that cannot be clarified at the prebid meeting, Consultant shall develop an addendum and shall send to all bidders.

In cases where the designs are included as part of a contractor bid package, the Consultant shall attend the prebid meetings and explain the abatement and demolition design specifications. If bidders require information on the abatement and demolition designs that cannot be clarified at the prebid meetings, the Consultant shall develop addendums and submit to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee.

Funding Requests

For projects where abatement is to be conducted by Contractors utilizing a DAS Contract, or where abatement is to be conducted by Contractors under subcontract agreement with the Consultant, the Consultant shall submit to ConnDOT funding requests in a format prescribed by ConnDOT. The funding requests shall be for the Contractor's lead abatement as well as the Consultant's project compliance and project surveillance in a format prescribed by ConnDOT. Requests for Contractor funding shall be accompanied by the bid provided by the Contractor, or, in the event that the Contractor's bid is unavailable, the cost estimate prepared by the Consultant. The Consultant shall submit the funding requests by email to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee.

TASK PRODUCTS:

Unless otherwise noted, the Consultant shall provide the task products in electronic format by coordinating the upload with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee into ProjectWise in accordance with the ConnDOT Digital Project Development Manual. The Consultant shall provide hard copies upon request of ConnDOT.

Draft Abatement Plans for Review

The Consultant shall prepare and submit a draft abatement design package as described above.

Final Design (100%)

Based on the input from the review of the draft abatement design plan, the Consultant shall prepare and submit a final abatement design package, Notice to Contractor, including the technical specifications and engineering drawings.

Cost Estimate for Project Work

Separate from the design plan task product and prior to bid solicitation, the Consultant shall prepare a budget estimated cost for the Contractor's lead abatement and the Consultant's project compliance and project surveillance. The budget estimated costs shall be prepared using a format prescribed by ConnDOT.
Task

BASIS OF PAYMENT:

A 720L assignment shall include all work required to prepare the report required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Review of existing information
- QA/QC
- Report preparation
- CADD

The base budget for this task shall depend upon the size of the structure involved. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 720L assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This basis of payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 725 – OPERATIONS & MAINTENANCE PLAN DEVELOPMENT
L – LEAD BASED PAINT

OBJECTIVE:

The objective of a Task 725L is to develop an operations and maintenance plan to allow for proper in-house management and hazard communication of lead based paint (LBP) to remain in place.

TASK SCOPE:

When LBP is to remain in place, the Consultant, utilizing a CTDPH certified lead planner-project designer, shall prepare a preliminary Operations and Maintenance (O&M) program to properly manage the LBP. Key provisions of the O&M program shall include, but not be limited to, the following:

- Introduction
- Site description
- Types and locations of known LBP
- Procedures to be followed to maintain LBP surfaces intact
- Discussions on renovation, demolition, and maintenance activities
- Hazard Communication: A program to inform workers, tenants, building occupants, and contractors where LBP is located, and how and why to avoid disturbing these areas
- Surveillance: A schedule for periodic inspections of the LBP to record, assess and document any changes in condition of the LBP, provide recommended response actions, and collect additional samples and XRF measurements as deemed necessary by the inspector
- Work Practices: A program to implement O&M and lead safe work practices to avoid or minimize lead dust and lead debris releases during activities which potentially disturb LBP.
- Emergency Response: A program to provide emergency response procedures to respond to a release of lead based paint dust and debris.
- Training: A lead awareness training program for the custodial and maintenance staff
- Disclosure: A section on EPA Title X disclosure of lead hazards during real estate transactions and transfer of title regarding the O&M plan.

TASK PRODUCTS:

The Consultant shall provide the task products in electronic format by coordinating the upload with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee into ProjectWise in accordance with the ConnDOT Digital Project Development Manual. The Consultant shall provide hard copies upon request of ConnDOT.

Draft O&M Plan for Review

The Consultant shall prepare a draft O&M Plan with the aforementioned key provisions of the O&M program. The package shall be submitted to ConnDOT for review and comments.

Final O&M Plan

Based on input from ConnDOT's review of the draft submittal O&M plan, a final O&M package shall be prepared and shall be submitted in both hardcopy and electronic formats.

BASIS OF PAYMENT:

A 725L assignment shall include all work required to prepare the report required under this Task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Review of existing information
- QA/QC
- Report preparation
- CADD

The base budget for this task shall depend upon the size of the structure involved. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 725L assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This basis of payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 726 – PERIODIC SURVEILLANCE
L – LEAD BASED PAINT

OBJECTIVE:

The objective of a Task 726L is to provide periodic on-site surveillance of lead based paint (LBP) under in-house management, assess the condition of the coatings, provide recommended response actions, and update the existing Operation and Maintenance (O&M) Plan.

TASK SCOPE:

Site Inspection and Sampling

When LBP is to remain in place, the Consultant, utilizing a CTDPH certified lead inspector or lead inspector risk assessor, shall perform a periodic inspection of these areas and components identified in the O&M Plan. This inspection shall include a visual survey of the condition of the identified areas and components. The Consultant shall also collect additional XRF measurements and other environmental samples from areas deemed necessary by the lead inspector.

Report Preparation

Upon completion of the site inspection and sampling, the Consultant shall prepare a report of their findings and conclusions. The report shall be prepared as described below and shall be submitted in both hardcopy and electronic formats.

TASK PRODUCTS:

The Consultant shall prepare a report for each periodic survey conducted which summarizes the findings, recommends response actions, summarizes changes required in the management plan, and includes results of all new sampling.

The Consultant shall formally update the O&M Plan as the results of periodic inspections dictate and after any abatement activities found to be necessary are completed. The Consultant shall reissue the updated O&M plan to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section (or his/her Designee) and the affected building occupants.

BASIS OF PAYMENT:

A 726L assignment shall include all work required to prepare the report required under this Task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Review of existing information
- Field investigation and sampling

- Laboratory analysis
- QA/QC
- Report preparation

The base budget for this task shall depend upon the size of the structure involved. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 726L assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This basis of payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 730 – PROJECT COMPLIANCE
L – LEAD BASED PAINT

OBJECTIVE:

The objective of a Task 730L is to provide project compliance administrative and technical services related to on-site lead abatement activities.

TASK SCOPE:

Contractor Qualification Review

The Consultant shall review the bid qualifications provided by the abatement contractor(s). The Consultant either shall notify the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section (or his/her Designee) whether the Contractor qualifications meet the minimum criteria identified in the specification or shall prepare a summary of the qualification criteria the Contractor(s) failed to meet.

Contractor Abatement Award

The Consultant shall review the bids and make recommendations for contract award. The Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee may award the contract.

Pre-Construction Meeting

The Consultant shall attend the preconstruction meeting, explain the design specification, explain the required submittals, explain the role of the Consultant during project compliance and project surveillance and answer any questions from the Contractor.

Review and Approval of Contractor Submittal

Prior to starting the lead abatement project, the Consultant shall review all materials submitted by the lead abatement contractor as required in the specifications. The submittals shall include, but are not limited to:

- Plan, including schedule and manpower, for addressing the lead abatement
- Approval permits for transport and disposal of hazardous and non-hazardous waste, including the EPA I.D. number obtained from the ConnDOT Environmental Compliance Section
- Proposed recycling facilities and disposal facilities
- All licenses, certifications, training, medical data, blood test data, and respiratory fit test data for each supervisor and worker
- All licenses, certifications for the abatement contractor firm, waste hauler and waste disposal facility

- Lead Compliance Plan
- Negative exposure assessment data

Upon completing the submittal review, the Consultant shall make recommendations to ConnDOT to approve the submittals or shall prepare a summary of the submittals' deficiencies. The Consultant shall review any materials re-submitted by the Contractor until all submittals have been approved by ConnDOT.

Laboratory Coordination

The Consultant shall assist in the selection of the laboratory and coordination for services. The Consultant shall review laboratory invoices and recommend approval for payment. The Consultant shall evaluate and tabulate laboratory results and provide QA/QC on all laboratory involvement.

Technical Support of Field Personnel

The Consultant shall answer questions that arise in the field; interpret Contract Documents; resolve disputes between owner and Contractor; provide support to field personnel.

Periodic Visits to the Site

The Consultant shall make visits to the work site to address critical work issues. All visits to the site will require documentation regarding the reasons for the site visit and the activities that occurred. Such documentation shall be made in a site's daily surveillance logs if a Task 730 has been assigned for the same project.

Invoice Review

The Consultant shall review contractor invoices for payment for concurrence with field records, contract rates and backup documentation. The Consultant shall resolve any invoice discrepancies with the contractor and prepare and submit necessary ConnDOT payment forms to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee for further processing and payment.

Report Preparation

Upon completion of the project activity, the Consultant shall prepare compliance reports based on their oversight. The report shall be prepared as described below and shall be submitted in both hardcopy and electronic formats. The Consultant shall coordinate the upload of the report with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee into ProjectWise in accordance with the ConnDOT Digital Project Development Manual.

TASK PRODUCTS:

Letter of Compliance

After the conclusion of project activity, and after the receipt of satisfactory re-inspection clearance criteria results, the Consultant shall issue a letter of compliance to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee indicating the reasons lead abatement was undertaken, the Contractor who performed such services, and the date of completion.

Project Compliance Report

At the completion of the abatement project, the Consultant shall prepare a documentation compliance package that shall provide ConnDOT with a complete set of records documenting all activities that took place at the site. This package shall be suitable for use by ConnDOT if future questions arise concerning lead-based paint (LBP).

The completed documentation package shall include:

- Executive summary report of all activities
- Daily site logs
- A project outline with site location, DOT project #, DOT assignment #, DOT project manager, date(s) of the project, Contractor information (name, license, and license #), Consultant information (Inspector/Project Monitors names, licenses, license #s, and accreditations), lists of materials abated, hazardous waste hauler, hazardous waste disposal facility, amount of hazardous waste generated and EPA ID#, amount of non-hazardous waste generated, amount of CT-regulated waste generated, locations of remaining LBP
- Chain of custody sheets and laboratory results for air, dust, soil, paint chip or other waste stream samples
- Table(s) of XRF measurements
- Sign-in sheets
- Abatement Contractor license
- Project Monitor certifications
- Contractor supervisor and worker training records, medical surveillance records, and licenses
- Contractor OSHA personnel air monitoring sample results
- Calibration records for testing equipment used
- Laboratory accreditations
- EPA hazardous waste I.D. #
- Waste disposal and recycling records, including hazardous waste manifests if disposed as hazardous waste
- All Contractor submittals
- Letter of compliance

BASIS OF PAYMENT:

A 730L assignment shall include all work required to provide administrative and technical support to the project and prepare the reports required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Coordination with field staff, Contractor and laboratories
- Site visits
- QA/QC
- Report preparation

The base budget for this task shall depend upon the size of the structure involved. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 730L assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This basis of payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 740 – PROJECT SURVEILLANCE
L – LEAD BASED PAINT

OBJECTIVE:

The objective of a Task 740L is to provide an on-site "Inspector/Project Monitor" to ensure that the Contractor complies with the plans, specifications and regulations when performing lead abatement.

TASK SCOPE:

Field Project Management

The Consultant shall be the liaison to ConnDOT regarding field activities, coordinating and scheduling with Contractor, laboratories, CTDPH, CTDEEP, OSHA, and EPA.

The Consultant shall assign on-site personnel classified as Inspector/Project Monitor to oversee the performance of daily field coordination.

Air Monitoring, Site Inspections and Project Oversight

The Consultant shall assign an Inspector/Project Monitor to provide construction administration, air sampling, dust wipe sampling, soil sampling, XRF testing, waste stream sampling, and inspection services during the lead abatement project.

The Inspector/Project Monitor shall remain on site on a daily basis throughout the duration of the project and shall provide daily inspections of the work area to ensure that the contractor is conducting the abatement in strict accordance with the project requirements and all applicable regulations as described in the abatement specifications.
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Daily project activities, as well as all observations made during the visual inspections, shall be documented by the inspector in a permanent log kept at the site. The Inspector/Project Monitor shall verify that the Contractor maintains a daily sign-in sheet where all personnel performing work in the regulated area shall be required to sign in and out.

In addition to the daily inspection services, the Inspector/Project Monitor shall conduct daily air sampling. The number of samples to be collected shall depend upon what activities are taking place and the size of the project. The intent of the air sampling is to verify compliance with the OSHA Lead in Construction permissible exposure limits.

Dependent upon what activities are taking place and the size of the project, the Consultant shall conduct dust wipe sampling, soil sampling, XRF testing and additional air sampling to ensure that the Contractor complies with the plans, specifications and regulations.

The Inspector/Project Monitor shall collect representative waste stream samples of all waste materials generated during the project. The number of waste stream samples and the parameters for which the samples are to be analyzed shall be based upon the designated disposal facilities' acceptance criteria.

Prior to any waste leaving the site the inspector shall document that the waste is being removed in accordance with all applicable requirements. The inspector shall obtain a copy of all waste manifests from the Contractor and waste hauler and shall ensure that the waste is manifested for the designated disposal facility.

The Inspector/Project Monitor shall have all requisite trainings and qualifications necessary to sign RCRA hazardous waste manifests as a RCRA generator. For hazardous waste leaving the site, the on-site Inspector/Project Monitor shall sign the hazardous waste manifests as an Agent for ConnDOT.

The Consultant shall submit collected samples to the laboratory for analysis. Laboratories must be accredited for the parameter(s) for which the samples are to be analyzed. . Laboratory services shall be procured by the Consultant based on competitive pricing.

All sampling results (air, dust, soil) and XRF testing results shall be logged by the inspector and kept with the permanent log book on site.

Upon completion of the abatement work The inspector shall conduct a re-inspection of each area. Re-inspections shall include, but not be limited to, the following:

- visual confirmation that all areas of work have been conducted following the design specification plan
- visual confirmation that all dust and debris in any abatement work area has been cleaned and removed
- clearance XRF measurements on components which have undergone LBP removal
- dust wipe sampling
- clearance soil sampling

BASIS OF PAYMENT:

Task 740L services shall be assigned on a per person day basis at the billing rates for the categories of the Inspector/Project Monitor for each project. The actual payment for services should be at the maximum billing rate for the category at which the Consultant worked during the time period.

For the purposes of this Agreement, a person-day field assignment shall consist of 10 hours and a typical project shall require one Project Monitor. If project demands require extended workdays, the level of effort will reflect the additional time required.
Task 740L – Project Surveillance

TASK 710 – INVESTIGATIVE SURVEY
B – ASBESTOS/LEAD/OTHER HAZARDOUS MATERIALS & DEMOLITION

OBJECTIVE:

The objective of a Task 710B is to conduct a visual inspection/inventory and to collect and review sample data in order to identify the presence and types, assess the condition, and quantify the amount of asbestos containing materials (ACM), lead-based paint (LBP), other hazardous/regulated materials/wastes, and related site conditions (such as fences, swimming pools, retaining walls, sidewalks, utilities to abandon) located at a project or building site, typically in support of a demolition project or major renovation.

TASK SCOPE:

Preliminary Site Review

The Consultant shall review the following data provided by ConnDOT:

- Name of building
- Address of property
- Contact names and phone numbers
- Number of buildings
- Age of buildings
- Size of buildings
- Number of floors
- Site layout
- Method of building access
- Building occupancy status
- Detailed description of activity to occur at the site (such as demolition, reconstruction, occupancy)
- Planned disposition of property and buildings (such as lease or transfer of ownership)
- Site information regarding oil tanks, oil-water separators, wastewater discharges (septic or sewer connection), potable water supply (private well or public water connection), and natural gas
- Site information regarding presence/status of public utilities (electricity, transformers, natural gas, propane tanks, telephone, cable/data, fiber optic, city water)
- Any existing ACM, LBP or other hazardous material survey data

The Consultant shall schedule field inspection activities with ConnDOT and building occupants.

The Consultant shall determine the sites historical significance in coordination with the ConnDOT Office of Environmental Planning and the CT Historical Commission State Historic Preservation Office (SHPO) should the property be >50 years old and scheduled for demolition in accordance with CGS Section 4b-64, including requesting written determination from the

SHPO, publishing notices of intent to demolish in local newspapers and posting the building structure with notices of intent to demolish.

Site Inspection and Sampling

The Consultant shall submit collected samples to the laboratory for analysis. Laboratories must be accredited for the parameter(s) for which the samples are to be analyzed. Asbestos samples must be submitted to a laboratory that accredited by the CTDPH and National Voluntary Laboratory Accreditation Program (NVLAP) for analysis for asbestos content. Laboratory services shall be procured by the Consultant based on competitive pricing.

- **ASBESTOS:**

  The Consultant, utilizing CTDPH certified asbestos inspectors, shall conduct an investigative survey for asbestos-containing material (ACM) according to the Asbestos Hazard Emergency Response Act (AHERA) sampling protocol. After studying the preliminary site review data, the inspector(s) shall physically walk through the facility, reviewing the building from the basement to the top floor, checking all spaces within the building including, but not limited to, all floors, walls, ceilings, air plenums, ventilation ducts, electrical rooms, boiler rooms, crawlspaces and pipe chases as well as the exterior of the building including the roof, siding and buried materials.

  Bulk samples shall be collected by the Consultant that are representative of each of the suspect materials identified during the walk through in accordance with AHERA sampling protocol. Suspect materials include, but are not limited to, boiler and tank insulation, boiler breeching, pipe insulation, mudded pipe fitting insulation, plaster (base & skim coats), wallboard/joint compound, ceiling tile, floor covering, window glazing/caulking, mastics, base cove, fireproofing, fire doors, siding and roofing materials. Generally, these samples shall be collected in locations that reduce the potential for exposure to building occupants and shall follow procedures that would prevent the emission of asbestos fibers into the air.

  Laboratory analysis shall be performed on all samples using polarized light microscopy (PLM) with visual area estimate (vae) quantification. Multi-layered materials such as plaster, sheetrock/joint compound, and floor tile/mastic shall be analyzed separately by layer. Plaster layers, sheetrock/joint compounds and similar materials with asbestos detected in quantities less than 5% using visual area estimate (vae) techniques, shall be further quantified via EPA 400 point counting techniques to obtain a more accurate quantification of asbestos content. Gravimetric reduction (gr) preparation techniques shall be utilized on non-friable organically bound (NOB) samples as appropriate, with negative results on NOB samples confirmed through the use of transmission electron microscopy (TEM).

- **LEAD PAINT (LBP):**

  The Consultant, utilizing CTDPH certified lead inspectors, shall conduct a representative investigative survey for lead-based paint (LBP) in/on building components in order to determine if the OSHA Lead Exposure in Construction standards, EPA RCRA hazardous waste disposal regulations and CT DEEP hazardous waste disposal regulations are applicable to construction/renovation/demolition activities planned for the site.

  The Consultant shall utilize an on-site X-Ray fluorescence (XRF) spectrum analyzer in order to inspect for the presence of LBP, operated by a trained inspector.

  The LBP inspection shall follow manufacturer's protocol and the EPA Performance Characteristic Sheet (PCS) established for the XRF utilized, with the focus being to determine if <u>any</u> detectable level of LBP is present on representative components.

  XRF measurements shall be taken on representative testing combinations (painted surfaces of like color, component and substrate) in proportion to the actual quantity of painted surfaces within the building, in order to provide a representative composite of what building components contain detectable levels of lead <u>of any amount</u>.

  The inspector shall note substrate, color, condition, component and location for each measurement taken.

  If inconclusive measurements cannot be resolved utilizing the XRF, or where specific components scheduled for renovation impact reveal no detectable levels of lead via XRF, bulk paint chip samples shall be collected and analyzed by atomic absorption spectrophotometry (AAS) to further confirm/refute the presence of lead.

- **Building Debris Waste Characterization**

  Representative composite samples of building component materials scheduled for impact shall be collected on a percent by weight basis so as to approximate the projected waste stream at the site in accordance with CTDEEP sampling guidelines. The collected samples shall be analyzed by the Toxicity Characteristic Leaching Procedure (TCLP) for the eight (8) RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver) to characterize the materials for disposal as hazardous or non-hazardous construction waste. The number of parameters for analysis may be reduced based on objective knowledge of the site but must at a minimum include lead and may also include arsenic and chromium should pressure treated lumber be amongst the waste stream. Samples should be collected for the building site as a whole and of any individual components which may undergo disposal separately for any reason (such as asbestos-containing material)

  For materials to be impacted which would be intended for reuse/recycling as "clean fill" rather than disposal (such as concrete/brick/stone), representative samples of those

materials shall be collected and shall be analyzed for both Total Metals and Synthetic Precipitation Leaching Procedure (SPLP) methods for the RCRA metals in question for comparison with the CTDEEP Remediation Standard Regulations (RSRs).

- **OTHER HAZARDOUS MATERIALS:**

  The Consultant shall visually inventory any other identifiable hazardous, regulated, or contaminated materials (including building materials, unused products, wastes, and items) or other environmental concerns which will require special handling or disposal during renovation or demolition. Items include, but are not limited to: above ground and underground storage tanks (AST/UST), oil-water separators (OWS), spills, fluorescent light fixture lamps/ballasts, mercury thermostat ampules, transformers, "household hazardous waste", tires, air conditioners, microwave ovens, refrigerators, CFC containing devices, used electronics, smoke detectors, mold, and guano, and blood borne pathogens.

  For buildings which were constructed prior to the 1979 EPA ban prohibiting manufacture and unauthorized use of PCBs, the Consultant shall inventory each homogeneous caulk/glaze and identify all adjacent porous building material substrates in contact with each homogeneous caulk/glaze. The Consultant's inventory shall regard these materials as potential suspect caulk/glazes substrates that may contain regulated amounts of PCB. No samples shall be collected for analysis unless separately authorized as a Task 711 assignment by the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee.[1]

The Consultant shall also make note of other related building conditions which would present a construction site issue with respect to the planned renovation or demolition activity at the site, such as septic tanks, sewer service, water wells, electrical lines and meters, water service and meters, natural gas service and meters, propane tanks and service, telecommunication lines fences, swimming pools, out buildings, retaining walls, and sidewalks .

Report Preparation

Upon completion of the Site Inspection and Sampling, the Consultant shall prepare a report of their findings and conclusions as described below.

Separate from the report of finding and conclusions, the Consultant shall prepare an itemized cost estimate for abatement.

1 Under this approach of inventorying without sampling, there is "no knowledge" acquired of the presence of PCB Bulk Product Waste. Therefore, there is no confirmed unauthorized use, and there is no requirement to address any homogeneous materials located in other areas of the building. Further, without confirmed unauthorized use, potential substrate and soil impacts are not required to be investigated or remediated. Should the suspect materials identified through this "no knowledge" approach be disturbed or be part of a planned renovation or demolition, they are required to be managed as though they are PCB containing >50ppm (EPA PCB Bulk Product Waste) unless elective sampling is conducted prior to work and confirms otherwise.

TASK PRODUCTS:

The Consultant shall coordinate the upload of the report with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee into ProjectWise in accordance with the ConnDOT Digital Project Development Manual. The Consultant shall provide hard copies upon request of ConnDOT.

At the conclusion of the inspection, the consultant shall prepare an investigative survey report which includes, but is not limited to:

- Project outline page with site location, DOT assignment #, DOT project #, DOT project manager, inspectors' names and license #s, dates of survey, ACM identified, LBP identified, Suspect PCB containing caulks/glazes identified (as applicable), other hazardous materials identified, waste characterizations, cost estimates for abatement and demolition, site historic significance, additional site and utility concerns
- Tables of survey results (samples, ACM, non-ACM, LBP, Suspect PCB caulk/glazes and associated potential impacts to adjacent porous substrates (as applicable), waste characterizations, other hazardous materials)
- Site photos
- Field site sketches indicating sampling locations and identified concerns
- Correspondence of historical status
- Inspector licenses and accreditations
- Laboratory licenses and accreditations
- Laboratory analytical reports with Chain of custody sheets
- Utility disconnect notices provided to the Consultant by ConnDOT Rights of Way

The Consultant shall prepare an itemized cost estimate for abatement and demolition and shall submit the cost estimate under a separate cover.

BASIS OF PAYMENT:

A 710B assignment shall include all work required to prepare the report required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Review of existing information
- Field investigation and sampling
- Laboratory analysis
- QA/QC
- Report preparation

The base budget for this task shall depend upon the size of the structure to be investigated. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 710B assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This Basis of Payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 711 – PCB SURVEY
B – ASBESTOS/LEAD/PCB/OTHER HAZARDOUS MATERIALS & DEMOLITION

OBJECTIVE:

The objective of a Task 711B is to collect and review sample data in order to identify the presence and types, assess the condition, and quantify the amount of polychlorinated biphenyls (PCB) associated with building materials, in conjunction with a Task 710B, and in support of a demolition project or major renovation.

TASK SCOPE:

Preliminary Site Review

The Consultant shall review the data provided by ConnDOT for the Task 710B assignment.

The Consultant shall schedule field survey and sampling activities with ConnDOT and building occupants.

Site Inspection and Sampling

In conjunction with the investigative walk through to be conducted as part of the assigned Task 710B, the Consultant shall conduct an investigative walk-through survey for PCB in caulk and glazing in areas of the building constructed before the 1979 EPA ban on the manufacture or use of PCBs. After studying the preliminary site review data, the inspector(s) shall physically walk through the facility, reviewing the building from the basement to the roof, checking all spaces for suspect caulks/glazing.

The Consultant shall collect representative quantities of bulk samples that are sufficient to characterize each of the suspect caulks and glazing identified during the walk through in accordance with industry sampling protocols.

When PCBs >1 ppm are identified in caulks/glazing the Consultant shall conduct supplemental sampling of adjacent porous building material substrates and exterior soils and ground cover to identify and assess the magnitude of PCB impact into those porous substrates, soils, and ground cover.

The Consultant shall submit the collected samples of caulk, glazing, porous substrate, soil, and ground cover to a laboratory accredited by the CTDPH for analysis for PCB content using soxhlet extraction methods (EPA Methods 8082/3540C). Analytical services shall be procured by the Consultant based on competitive pricing.

Report Preparation

Upon completion of the Site Inspection and Sampling, the Consultant shall include this data into

the report of their findings and conclusions prepared under Task 710B.

TASK PRODUCTS:

At the conclusion of the Task 711 inspection, the Consultant shall include the data into the documentation package being prepared under the associated Task 710B. Such additional PCB related data shall include, but is not limited to:

- Project outline page: caulks and glazings that are confirmed (through sampling) to contain PCBs and the associated impacts
- Tables of survey results (samples, identified PCB caulks and glazing, PCB-impacted substrate, soil, and groundcover)
- Site photos
- Field site sketches indicating locations of sampling and identified concerns
- Inspector licenses and accreditations
- Laboratory licenses and accreditations
- Laboratory analytical reports with Chain of custody sheets
- Itemized cost estimate for abatement

Data and reporting shall be submitted in both hardcopy and electronic formats. The Consultant shall coordinate the upload of the supplemented Task 710B report with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee into ProjectWise in accordance with the ConnDOT Digital Project Development Manual.

BASIS OF PAYMENT:

A 711B assignment shall include all work required to prepare the report information required under this Task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Review of existing information
- Field investigation and sampling
- Laboratory analysis
- QA/QC
- Report preparation

The base budget for this task shall depend upon the size of the structure to be investigated. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 711B assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This Basis of Payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 720 – PROJECT DESIGN AND SPECIFICATION DEVELOPMENT
B – ASBESTOS/LEAD/OTHER HAZARDOUS MATERIALS & DEMOLITION

OBJECTIVE:

The objective of a Task 720B is to develop plans, specifications and cost estimates for abatement of asbestos containing material (ACM) and lead based paint (LBP), regulated materials management, AST/UST management, and demolition, either as stand-alone documents or for inclusion in contract bid documents.

TASK SCOPE:

Asbestos, Lead, and Hazardous Materials

When abatement of ACM, LBP, or other hazardous materials (hazmat) is dictated, the Consultant, utilizing appropriately certified personnel, shall prepare preliminary designs of the abatement projects. The design documents shall include, but not be limited to the following:

- Description of work required
- ACM/LBP/hazmat abatement procedures
- Hazardous/regulated materials handling/disposal
- AST/UST management
- Regulatory references
- Contractor bid qualifications
- Contractor submittals
- Worker protection and decontamination procedures
- Exposure assessments
- Contractor/worker licensing, training and medical surveillance requirements
- Clearance criteria established for ACM, LBP, or other hazmat abatement and UST management
- Waste transport and disposal requirements, segregation, characterization, and recycling
- Procurement of temporary hazardous waste generators EPA I.D. # from the ConnDOT Environmental Compliance Section
- ConnDOT-approved transport and disposal facilities
- Alternative work practices (AWP's)
- Project designer certification
- Reference to investigative survey(s)Field site sketches or CAD drawings

The designs shall include a list of all applicable regulations and permits that shall be required for the project. The list shall include applicable state, federal and local regulations and permits with names, addresses and telephone numbers of regulation personnel. Typically the USEPA Region I, OSHA, State of Connecticut Department of Public Health (CTDPH) and State of Connecticut

Department of Energy and Environmental Protection (CTDEEP) regulations and notifications are to be followed. Typically the USEPA Region I, OSHA, State of Connecticut Department of Public Health (CTDPH) and State of Connecticut Department of Energy and Environmental Protection (CTDEEP) regulations and notifications are to be followed. Additionally, local regulations may apply and local permits including, but not limited to, building permits and notification to the Health and Fire Departments may be required.

The Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee shall provide the Consultant the list of facilities that have been pre-approved to accept the types of wastes anticipated to be generated. The Consultant shall list the pre-approved disposal facilities in the specifications after having contacted the facilities to determine the facilities' acceptance criteria and to confirm the anticipated wastes are eligible for disposal at the facilities. The Consultant shall review the investigative surveys to verify that the anticipated wastes will meet the disposal facilities' criteria.

The Consultant shall coordinate the design and set up project meetings with all interested parties to discuss preliminary design requirements and resolve all outstanding items regarding the project.

The format of the specifications shall be submitted in Construction Specifications Institute (CSI), Standard Specifications for Road Bridges and Incidental Construction 817817, or as directed by the Engineer, with engineering drawings formatted according to ConnDOT standards.

Demolition

When building demolition is planned, the Consultant, using appropriately certified personnel, shall prepare a design of the demolition project including, but not limited to, procedures for demolition, backfill and site grading, re-use of clean fill on-site, dust suppression, erosion control, septic abandonment, well abandonment, sewer line capping, water line capping, other utility work, waste disposal/recycling, and salvage permits, public utility disconnect coordination, . The design documents shall include, but not be limited to, the following:

- Description of work required
- Procedures to be implemented
- Regulatory references
- Contractor bid qualifications
- Contractor submittals
- Worker protection and decontamination procedures
- Exposure assessments
- Third party inspection (well/sewer/etc.)
- Contractor/worker licensing, training and medical surveillance requirements
- Waste segregation/recycling
- Waste packing, transport and disposal requirements

- ConnDOT-approved transport and disposal facilities
- Utility disconnect notices (if/as provided to the Consultant by ConnDOT) Rights of Way
- Connecticut Historic Commission SHPO/ConnDOT OEP historic status determination
- Reference to investigative survey(s)
- Field site sketches/photos

The Consultant shall coordinate the design and set up project meetings with all interested parties to discuss preliminary design requirements and resolve all outstanding items regarding the project.

The format of the specifications shall be submitted in Construction Specifications Institute (CSI), Standard Specifications for Road Bridges and Incidental Construction 817817, or as directed by the Engineer, with engineering drawings formatted according to ConnDOT standards and may include separate specification items for asbestos, lead, guano, mold, blood borne pathogens, regulated items and/or UST removal.

Cost Estimates

The Consultant shall prepare a budget estimated costs for the Contractor's abatement and demolition work and the Consultant's project compliance and project surveillance work. The budget estimated costs shall be prepared using a format prescribed by ConnDOT.

Prebid Meetings and Walkthroughs

The Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee shall advise the Consultant as to whether as the designs are intended to serve as standalone documents or are to be included in contract bid documents.

If the design was prepared as a standalone package, at completion of the final design, the Consultant either shall solicit separate bids for the asbestos abatement, lead abatement, hazmat abatement, and demolition utilizing Contractors selected from among existing State contracts such as effective contracts under the Department of Administrative Services (DAS Contracts) , or the Consultant may solicit competitive open bidding. The Consultant shall coordinate and attend the prebid meetings, explain the design specifications and conduct walkthroughs. If bidders require information that cannot be clarified at the prebid meetings, Consultant shall develop addendums and shall send to all bidders and the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee.

In cases where the designs are included as part of a contractor bid package, the Consultant shall attend the prebid meetings and explain the abatement and demolition design specifications. If bidders require information on the abatement and demolition designs that cannot be clarified at the prebid meetings, the Consultant shall develop addendums and submit to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee.

Funding Requests

For standalone projects where abatement (with or without associated demolition work) is to be conducted by Contractors utilizing the DAS Contract(s) , or where work is to be conducted by Contractors under subcontract agreement with the Consultant, the Consultant shall submit to ConnDOT funding requests for the Contractors' work as well as the Consultant's project compliance and project surveillance work in a format prescribed by ConnDOT. Requests for Contractor funding shall be accompanied by bids provided by the Contractors, or, in the event that the Contractors' bids are unavailable, by the cost estimates prepared by the Consultant. The Consultant shall submit the funding requests by email to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee.

TASK PRODUCTS:

Unless otherwise noted, the Consultant shall provide the task products in electronic format by coordinating the upload with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee into ProjectWise in accordance with the ConnDOT Digital Project Development Manual. The Consultant shall provide hard copies upon request of ConnDOT.

Draft Submittal Review Plan

The Consultant shall prepare and submit a draft design package as described above.

Final Design (100%)

Based on input from the review of the draft submittal design plans, the Consultant shall prepare and submit final design packages for abatement and demolition, Notice to Contractor, including technical specifications, notice to contractor, and engineering drawings,.

Cost Estimate for Abatement and Demolition

Separate from the design plan task product and prior to bid solicitation, the Consultant shall also prepare budget estimated costs for the Contractors' abatement(s) and demolition and the Consultant's project compliance and project surveillance. The budget estimated costs shall be prepared using a format prescribed by ConnDOT.

BASIS OF PAYMENT:

A 720B assignment shall include all work required to prepare the report required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Review of existing information

- QA/QC
- Report preparation
- CADD

The base budget for this task shall depend upon the size of the structure involved. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 720B assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This basis of payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 721 – PCB DESIGN, SPECIFICATION DEVELOPMENT & COMPLIANCE
B – ASBESTOS/LEAD/PCB/OTHER HAZARDOUS MATERIALS & DEMOLITION

OBJECTIVE:

The objective of a Task 721B is to develop plans, specifications and cost estimates for PCB abatement, either as stand-alone documents or for inclusion in Contract Bid Documents and provide required project compliance services associated with the PCB abatement.

TASK SCOPE:

The Consultant, utilizing appropriately certified personnel, shall prepare a preliminary design of the abatement project. The design documents shall include, but not be limited to the following:

- Description of work required
- PCB abatement procedures
- Regulatory references
- Contractor bid qualifications
- Contractor submittals
- Worker protection and decontamination procedures
- Exposure assessments
- Contractor/worker licensing, training and medical surveillance requirements
- Clearance criteria established for substrate, soil and dust wipe
- Waste transport and disposal requirements, segregation, characterization, and recycling
- Procurement of temporary hazardous waste generators EPA I.D. # from the ConnDOT Environmental Compliance Section
- ConnDOT-approved transport and disposal facilities
- Project designer certification
- Reference to investigative survey(s)
- Field site sketches or CAD drawings

The designs shall include a list of all applicable regulations and permits that shall be required for the project. The list shall include applicable state, federal and local regulations and permits with names, addresses and telephone numbers of regulation personnel. Additionally, the Consultant shall determine if local regulations apply and if local permits are required including, but not limited to, building permits and notification to the health and fire departments.

The Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee shall provide the Consultant the list of facilities that have been pre-approved to accept the types of wastes anticipated to be generated. The Consultant shall list the pre-approved disposal facilities in the specifications after having contacted the facilities to determine the facilities' acceptance criteria and to confirm the anticipated wastes are eligible for disposal at the facilities. The Consultant shall review the investigative surveys to verify that the anticipated

wastes will meet the disposal facilities' criteria.

The consultant shall coordinate the design and set up project meetings with all interested parties to discuss preliminary design requirements and resolve all outstanding items regarding the project.

The format of the specifications shall be submitted in Construction Specifications Institute (CSI), Standard Specifications for Road Bridges and Incidental Construction 817817, or as directed by the Engineer, with engineering drawings formatted according to ConnDOT standards.

Abatement specifications shall be a "performance based" PCB removal design.

Note: Should ConnDOT require the Consultant to prepare a risk-based Self Implementing Cleanup Plan (SIP) for PCB Abatement for submission and review and approval by EPA prior to finalizing design specifications, scope and funding for such services shall be negotiated separately.

Cost Estimates

The Consultant shall prepare a budget estimated costs for the Contractor's work and the Consultant's project compliance and project surveillance work. The budget estimated costs shall be prepared using a format prescribed by ConnDOT

Prebid Meetings and Walkthroughs

The Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee shall advise the Consultant as to whether as the designs are intended to serve as standalone documents or are to be included in contract bid documents.

If the design was prepared as a standalone package, at completion of the design specifications, the Consultant either shall solicit separate bids for the PCB abatement utilizing Contractors selected from among existing State contracts such as effective contracts under the Department of Administrative Services (DAS Contracts) , or the Consultant shall solicit competitive open bidding. The Consultant shall coordinate and attend the prebid meetings, explain the design specifications and conduct walkthroughs. If bidders require information that cannot be clarified at the prebid meetings, Consultant shall develop addendums that shall send to all bidders and the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee.

In cases where the designs are included as part of a Contractor bid package, the Consultant shall attend the prebid meetings and explain the abatement and demolition design specifications. If bidders require information on the abatement and demolition designs that cannot be clarified at the prebid meetings, the Consultant shall develop addendums and submit to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee.

Funding Requests

For standalone projects where abatement is to be conducted by Contractors utilizing a DAS Contract, or where abatement is to be conducted by Contractors under subcontract agreement with the Consultant, the Consultant shall prepare funding requests in a format prescribed by ConnDOT for the Contractor's abatement work and the Consultant's project compliance and project surveillance work . Requests for Contractor funding shall be accompanied by bids provided by the Contractors, or, in the event that the Contractors' bids are unavailable, by the cost estimates prepared by the Consultant. The Consultant shall submit the funding requests by email to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee.

Review and Approval of Contractor Submittals

Prior to starting the abatement project, the Consultant shall review all materials that the Contractor must submit as required in the specification. The submittals shall include, but are not limited to:

- Notifications to CTDPH, EPA and CTDEEP.
- All licenses, certifications, training, medical surveillance data, and respiratory fit test data for each Contractor supervisor and worker.
- All licenses and certifications for each abatement contractor, waste hauler, and disposal facility
- Approval permits for transport and disposal of PCB waste
- Contractor PCB work plan.

Upon completing the submittal review, the Consultant shall make recommendations to ConnDOT to approve the submittals or shall prepare a summary of the submittals' deficiencies. The Consultant shall review any materials re-submitted by the Contractor until all submittals have been approved by ConnDOT.

Invoice Review

The Consultant shall review the abatement contractor's invoices for payment for concurrence with field records, contract rates, and backup documentation. The Consultant shall resolve any invoice discrepancies with the contractor and prepare and submit necessary ConnDOT payment forms to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee for further processing and payment.

Report Preparation

Upon completion of the project activity, the Consultant shall prepare a compliance report based on their oversight. The report shall be prepared as described below and shall be submitted in both hardcopy and electronic formats.

TASK PRODUCTS:

Draft Submittal Review Plan

The Consultant shall prepare and submit the draft design package(s) as described above.

Final Design (100%)

Based on input from the review of the draft submittal design plans, the Consultant shall prepare final specification packages for abatement as required, which include Technical Specifications, Notice to Contractor and Engineering Drawings, and shall be submit in both hardcopy and electronic formats. The Consultant shall coordinate the upload of the design with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section (or his/her Designee) into ProjectWise in accordance with the ConnDOT Digital Project Development Manual.

Cost Estimate for Abatement

Separate from the design plan task product and prior to bid solicitation, the Consultant shall also prepare budget estimated costs for Contractor's abatement work and the Consultant's project compliance and project surveillance work... The budget estimated cost shall be prepared using a format prescribed by ConnDOT.

Abatement Letter of Compliance

After the conclusion of PCBPCB abatement project activity, and the receipt of satisfactory clearance criteria results, the Consultant shall issue a letter(s) of compliance to ConnDOT indicating the reasons abatement was undertaken, the Contractor who performed such services, and the date of completion.

Project Compliance Report

At the completion of the abatement project, the Consultant shall prepare a documentation package that shall include a complete set of records documenting all activities that took place at the site. This package shall be suitable for use by ConnDOT if future questions arise concerning PCB work at the site and shall be suitable for submission to EPA/CTDEEP as required.

The completed documentation package shall include:

- Executive summary report of all activities
- Daily site logs
- A project outline with site location, DOT project #, DOT assignment #, DOT project manager, dates of project, Contractor name and license #, Consultant Inspector/Project Monitor names and licenses/accreditations, lists of materials abated, amount of PCB waste generated, PCB waste hauler, PCB waste disposal facility

- Sign-in Sheets
- Abatement contractor license
- Inspector/Project Monitor certifications
- Laboratory licenses and accreditations
- Laboratory analytical reports with chain of custody sheets
- Abatement contractor workers' medical surveillance records and training records
- Contractor's OSHA personal air sample results
- Calibration records for testing equipment used
- Waste shipment records and hazardous waste manifests
- All contractor submittals
- Letter of compliance

BASIS OF PAYMENT:

A 721B assignment shall include all work required to prepare the report required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Review of existing information
- QA/QC
- Report preparation
- CADD

The base budget for this task shall depend upon the size of the structure involved. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 721B assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This basis of payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet (and those that require preparation of a risk-based SIP PCB abatement design) the fees shall be negotiated separately.

- *Note: Should ConnDOT require the Consultant to prepare a risk-based Self Implementing Cleanup Plan (SIP) for PCB Abatement for submission and review/approval by EPA prior to finalizing design specifications, scope and funding for such services shall be negotiated separately.*

TASK 730 – PROJECT COMPLIANCE
B – ASBESTOS/LEAD/PCB/OTHER HAZARDOUS MATERIALS & DEMOLITION

OBJECTIVE:

The objective of a Task 730B is to provide project compliance administrative and technical services related to on-site abatement and demolition related activities.

TASK SCOPE:

Contractor Qualification Reviews

The Consultant shall review the bid qualifications provided by the abatement contractor(s). The Consultant either shall notify the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section (or his/her Designee) whether the Contractor qualifications meet the minimum criteria identified in the specification or shall prepare a summary of the qualification criteria the Contractor(s) failed to meet.

Contractor Awards

The Consultant shall review the bids and make recommendations for contract award. The Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee may award the contract.

Pre-Construction Meeting

The Consultant shall attend the preconstruction meeting, explain the design specification, explain the required submittals, explain the role of the Consultant during project compliance and project surveillance and answer any questions from the Contractor.

Review and Approval of Contractor Submittals

Prior to starting the abatement or demolition projects, the Consultant shall review all materials submitted by the asbestos/lead/hazmat abatement or demolition Contractor(s) as required in the specification.

The submittals associated with abatement of asbestos containing material (ACM), lead-based paint (LBP), and other hazardous materials (hazmat) shall include, but are not limited to:

- Notifications to CTDPH, EPA, or CTDEEP.
- Any written request for a variance or alternative work practice from the CTDPH, CTDEEP, OSHA or EPA standards.
- All licenses, certifications, training, medical data and respiratory fit test data for each supervisor and worker.
- All licenses, certifications for each abatement contractor firm, waste hauler and disposal

facility
- Negative exposure assessments
- Plan, including schedule and manpower, for addressing the ACM, LBP, HazMat abatement
- Approval permits for transport and disposal of hazardous and non-hazardous waste, including the EPA I.D. number obtained from ConnDOT Environmental Compliance/CTDEEP Section
- Proposed recycling facilities
- Health and Safety Plan (HASP)
- Lead Compliance Plan.
- Waste profiles

The submittals associated with demolition shall include, but are not limited to:

- Plan, including schedule and manpower for performing the work.
- Proposed waste hauler and disposal facility for non-hazardous construction and demolition (C&D) debris and recyclable waste
- Demolition permit
- CTDPH demolition notification
- Demolition Contractor's license
- Well abandonment Contractor's license
- Dust control plan
- Waste management and recycling plan
- Utility disconnect notices (unless provided by ConnDOT)

Upon completing the submittal review, the Consultant shall make recommendations to ConnDOT to approve the submittals or shall prepare a summary of the submittals' deficiencies. The Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee may approve the submittals. The Consultant shall review any materials re-submitted by the Contractor until all submittals have been approved by ConnDOT.

Laboratory Coordination

The Consultant shall assist in the selection and coordination of laboratory services. The Consultant shall review laboratory invoices and recommend approval for payment. The Consultant shall evaluate and tabulate laboratory results and provide QA/QC on all laboratory involvement.

Technical Support of Field Personnel

The Consultant shall answer questions that arise in the field; interpret contract documents; resolve disputes between owner and Contractor; provide support to field personnel.

Periodic Visits to the Site

The Consultant shall make visits to the work site to address critical work issues. All visits to the site will require documentation regarding the reasons for the visits and the activities that occurred. If a Task 740 Project Surveillance has been assigned for the same project, site visit documentation shall be made in a site's daily surveillance logs.

Invoice Review

The Consultant shall review the abatement and demolition Contractor's invoices for payment for concurrence with field records, contract rates, and backup documentation. The Consultant shall resolve any invoice discrepancies with the Contractor and prepare and submit necessary ConnDOT payment forms to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee for further processing and payment.

Report Preparation

Upon completion of the project activity, the Consultant shall prepare compliance reports based on their oversight. The reports shall be prepared as described below and shall be submitted in both hardcopy and electronic formats.

TASK PRODUCTS:

Unless otherwise noted, the Consultant shall provide the task products in electronic format by coordinating upload of the report with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee into ProjectWise in accordance with the ConnDOT Digital Project Development Manual. The Consultant shall provide hard copies upon request of ConnDOT.

Abatement Letter of Compliance

After the conclusion of asbestos, lead, or /hazmat abatement project activity, and after the receipt of satisfactory clearance criteria results, the Consultant shall issue the letter(s) of compliance to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her designee indicating the reasons abatement was undertaken, the Contractor who performed such services, and the date of completion.

Letter of Demolition Completion

After the substantial conclusion of demolition and related site activity, the Consultant shall issue a letter of substantial demolition completion to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her designee indicating the Contractor who performed such services and the date of substantial completion.

Project Compliance Reports

At the completion of the abatement project, the Consultant shall prepare a documentation package that provides ConnDOT with a complete set of records documenting all activities that took place at the site. This package(s) shall be suitable for use by ConnDOT if future questions arise concerning ACM, LBP, hazmat, demolition and related site activities.

The completed documentation package for abatement activities shall include:

- Executive summary report of all activities.
- Daily site logs
- A project outline with site location; DOT project #; DOT assignment #; DOT project manager; dates of project Contractor information (firm name, license, and license #), the names, licenses, and accreditations of the Consultant's assignment personnel (Project Monitor, air sample analyst, and inspector), lists of materials abated; amount of waste ACM, LBP, and hazmat generated; ACM, LBP, and hazardous waste hauler(s); ACM, LBP, and hazardous waste disposal facility(ies)
- Laboratory analytical reports with chain of custody sheets
- Notifications of asbestos abatement made to CTDPH/ and EPA
- Copies of Alternative Work Practice correspondence
- Sign-in Sheets
- Abatement contractor license
- Project Monitor certifications
- Laboratory accreditations
- Abatement contractor workers' medical surveillance and training records
- Contractor OSHA personal air sample results
- Calibration records for testing equipment used
- Waste shipment records/Hazardous Waste Manifests.
- All contractor submittals.
- Letters of compliance

The completed documentation package for demolition activities shall include:

- Executive summary report of all activities
- Daily site logs
- A project outline with site location; DOT project #; DOT assignment #; DOT project manager; dates of project; Contractor name and license #; Consultant Project Monitor's name, licenses and accreditations; Consultant inspectors' names, licenses and accreditations; lists of activities conducted; amount of hazardous waste and regulated waste generated; hazardous and regulated waste hauler(s); hazardous and regulated waste disposal facility(ies), C&D bulky waste disposal facility(ies), recycling facility(ies)
- Laboratory analytical reports with chain of custody sheets
- Demolition permit

- CTDPH demolition notification
- Demolition Contractor's license
- Well abandonment Contractor's license
- Waste manifests, bills of lading, and recycling receipts
- Connecticut Historical Commission historic status determination
- Well abandonment verification form
- Site photos of site activities such as UST removal, sewer line capping, demolition
- Utility disconnect notices provided to the Consultant by ConnDOT Rights of Way
- Letters of abatement compliance and demolition completion

BASIS OF PAYMENT:

A 730B assignment shall include all work required to provide administrative and technical support to the project and prepare the reports required under this task and shall include but not be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Coordination with field staff, Contractor and laboratories
- Site visits
- QA/QC
- Report preparation

The base budget for this task shall depend upon the size of the structure involved. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 730B assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This basis of payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 740 – PROJECT SURVEILLANCE
B – ASBESTOS/LEAD/PCB/OTHER HAZARDOUS MATERIALS & DEMOLITION

OBJECTIVE:

The objective of a Task 740B is to provide an on-site "Inspector/Project Monitor" to support the Engineer to ensure Contractor compliance with the plans, specifications and regulations when performing abatement and/or demolition related activity.

TASK SCOPE:

Field Project Management

The Consultant shall be the liaison to ConnDOT regarding field activities, coordinating and scheduling with Contractor, laboratories, CTDPH, CTDEEP, OSHA, and EPA.

The Consultant shall assign on-site personnel classified as Inspector/Project Monitor to oversee the performance of daily field coordination.

Air Monitoring, Site Inspections and Project Oversight

For any assignments which will involve hazardous waste or regulated waste leaving the site, the Inspector/Project Monitor shall have all requisite trainings and qualifications necessary to sign RCRA hazardous waste manifests as a RCRA generator and shall sign the waste manifests as an "Agent for ConnDOT".

Where laboratory analytical services are required, the Consultant shall submit the collected samples to a laboratory accredited for such analysis. Required laboratory analytical services shall be procured by the Consultant from laboratories based on competitive pricing.

The Inspector/Project Monitor shall remain on site on a daily basis throughout the duration of the project to ensure that the contractor is performing in strict accordance with the project requirements and all applicable regulations as described in the specifications.

- **ABATEMENT OF ASBESTOS, LEAD, PCB, OR OTHER HAZMAT:**

  Project Oversight

  The Consultant shall assign an Inspector/Project Monitor to the project to provide construction administration, sampling, and inspection services.

  For projects involving the abatement of asbestos containing material (ACM), the Inspector/Project Monitor must be a CTDPH-licensed Asbestos Project Monitor and shall be registered as an AIHA asbestos analyst.

For lead-based paint (LBP), PCB or other hazardous material (hazmat) abatement projects, the assigned Inspector/Project Monitor must be have had up-to-date USDOT Hazmat Shipper training and OSHA HAZWOPER training.

The Inspector/Project Monitor shall remain on site on a daily basis throughout the duration of the project to ensure that the contractor is conducting the abatement in strict accordance with the project requirements and all applicable regulations As documented in the abatement specifications.

The Inspector/Project Monitor shall review the Contractor's personal OSHA air sampling data, and shall verify that the contractor submits the medical and licensing information for any additional personnel brought to the site.

Inspections

The Inspector/Project Monitor shall provide daily inspections of the work area to ensure that the abatement contractor is conducting the project in accordance with the project specification and all applicable regulations. Daily project activities, as well as all observations made during the visual inspections shall be documented in a permanent log book kept at the site. The Inspector/Project Monitor shall verify that a Contractor maintains a daily sign-in sheet where all personnel performing work in the regulated area shall be required to sign in and out.

Upon completion of the abatement, the Inspector/Project Monitor shall perform a visual inspection of the work site to ensure that the area is free of any and all visible asbestos-containing dust and debris, lead-contaminated dust and debris, PCB-containing dust and debris and hazardous materials. Once this step is reached, final clearance testing can be performed to determine the cleanliness of the work area.

Air Sampling

In addition to the daily inspection services, the Inspector/Project Monitor shall conduct daily perimeter air sampling beyond the regulated areas. For assignments involving asbestos abatement, the on-site Inspector/Project Monitor and shall analyze the daily asbestos air samples on site via phase contract microscopy (PCM). .

The intent of the air sampling is to verify the effectiveness of the engineering controls and to detect possible contamination of non-work areas with airborne asbestos fibers, airborne lead contamination or airborne PCB contamination.

Additional testing shall be conducted by the Consultant within the regulated area during the abatement work in order to evaluate the contaminant levels to ensure safe work practices, to verify compliance with OSHA permissible exposure limits, and to ensure that the Contractor complies with the plans, specifications and regulations. When authorizing an assignment, the Transportation Principal Engineer of ConnDOT's

Environmental Compliance Section or his/her Designee shall consider whether the Consultant must conduct dust wipe sampling, soil sampling, XRF testing or additional air sampling and, if so, the type and number of additional samples.

Results of all sample analysis shall be recorded in the site log book. These results shall be compared to acceptable standards, based on current regulations and guidelines.

The results of samples taken within the regulated work area shall be used to ascertain that the Contractor is making acceptable efforts (such as wetting) to keep the airborne concentrations of contaminants and residue to a level compliant with environmental and personal protection regulations. The Contractor nevertheless is responsible to perform OSHA compliance monitoring to determine the appropriate level of personal protection equipment required for his employees.

For asbestos abatement assignments, final clearance air sampling shall be conducted in a manner to comply with current CTDPH regulation section 19a-332a-12. For LBP or other hazmat abatement assignments, final clearance dust wipe, soil sample or XRF measurements shall be performed as specified in the design documents. For PCB abatement assignments, final clearance verification substrate/soil testing and re-occupancy dust wipe sampling shall be conducted as detailed in the PCB abatement plan or Self Implementing Plan.

Waste Management

The Inspector/Project Monitor shall collect representative waste stream samples of all waste materials generated during the project. The number of waste stream samples and the parameters for which the samples are to be analyzed shall be based upon the designated disposal facilities' acceptance criteria.

The Inspector/Project Monitor shall also document that any removed ACM, LBP, PCB, or other hazardous materials managed as waste are properly contained, labeled and handled. The Inspector/Project Monitor shall keep a tally of the total amount of waste removed from the site. Prior to waste leaving the site, the Inspector/Project Monitor shall obtain a copy of the properly completed waste shipment, disposal record, or manifest from the Contractor and waste hauler.

The Inspector/Project Monitor shall provide oversight and confirmation that all "household hazardous waste" items are properly gathered, packed and removed from site for disposal or recycling utilizing proper record keeping and manifesting. "Household hazardous waste" includes PCB fluorescent light ballasts, mercury (Hg) fluorescent lamps, Hg thermostat ampules, lead flashing, paints, oils, solvents, gasoline, corrosives, poisons, flammables, gas cylinders, ammunition, PCB microwave capacitors, PCB air conditioner capacitors, refrigerants/CFCs, used electronics, and lead acid batteries, BBPs, .

- **PETROLEUM STORAGE TANK REMOVAL**

  The Inspector/Project Monitor shall provide oversight and confirmation of oil aboveground storage tank (AST) clean-out and removal, including manifesting of the oil for recycling.

  The Inspector/Project Monitor shall provide oversight and sampling of oil underground storage tank (UST) excavation, clean-out and removal, including coordination with the local Fire Marshall sign off, confirmation clearance soil sampling from the excavation site for CT extractable total petroleum hydrocarbon (ETPH), semi-volatile organics via EPA 8270 and aromatic volatile organics and MTBE via EPA 8021 or 8260 (with volatile sampling conducted using collection method EPA 5035), following the CTDEEP Sampling & Analytical Methods for UST Closure guidelines dated 10/27/99, and ambient volatile organic air sampling through the use of an organic vapor analyzer.

  The Inspector/Project Monitor shall provide oversight and confirmation for the clean-out and removal of other oil storage or treatment units, such as oil-water separators and hydraulic pistons.

  Unless characterized as hazardous, any petroleum removed from the tank shall be designated for off-site recycling or reuse and the Inspector/Project Monitor shall review and sign the shipping manifest as an Agent of ConnDOT.
  .

- **DEMOLITION:**

  For building demolition oversight, Consultant shall assign appropriately trained (OSHA HAZWOPER and OSHA 10-hr Construction Safety) on-site personnel to oversee the demolition Contractors' activities and provide industrial hygiene services, as follows:

  - Oversight and confirmation of sewer & water pipe disconnection and capping, coordinated with the local authority's sign off.

  - Oversight of septic tank cleaning, crushing and filling in accordance with the Public Health Code requirements.

  - Oversight of well abandonment in accordance with the CT Department of Consumer Protection Well Drilling Code.

  - Oversight of building demolition, salvage, dust suppression, backfill, clean fill reuse and grading activity to ensure Contractor is conducting project in accordance with the specifications and applicable regulations.

  - Record all activity and observations in a permanent log book.

- Conduct daily air sampling on projects that involve demolition of a) materials with LBP, b) silica-based materials (such as concrete), or c) other materials that will create potential airborne dust exposures. . The intent of the air sampling is to verify compliance with the OSHA Lead and Crystalline Silica permissible exposure limits, the NAAQS standards for total dust, and other OSHA permissible exposure limits. When authorizing an assignment, the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee shall consider the contaminants of concern and the magnitude of the demolition in determining the type and the number of samples the Consultant shall collect in order to meet the intent.

Collect representative waste stream samples of all waste materials generated during the project, and coordinate the laboratory analysis for all parameters necessary based upon the designated disposal facilities' acceptance criteria. Prior to any waste leaving the site the inspector shall document that the waste is being removed in accordance with all applicable requirements, including obtaining a copy of all waste manifests from the Contractor and waste hauler and ensuring that the waste is manifested for the designated disposal facility .

BASIS OF PAYMENT:

Task 740B services shall be assigned on a per person-day basis at the billing rate for the respective category of the Inspector/Project Monitor for each project. The actual payment for services shall be at the maximum billing rate for the category at which the Consultant's personnel worked during the time period. For the purposes of this Agreement, a person-day field assignment shall consist of 10 hours and a typical project shall require one Inspector/Project Monitor. If project demands require extended workdays, the level of effort will reflect the additional time required.

TASK 710 – INVESTIGATIVE SURVEY
D – LEAD BASED PAINT HAZARDS AT RESIDENTIAL DWELLINGS

OBJECTIVE:

The objective of a Task 710D is to conduct a visual inspection and to collect and review field measurements and sample laboratory data in order to identify the presence and concentration, assess the condition, and quantify the lead based paint (LBP) hazards (paint, dust and soil) located at a residential dwelling/, daycare/, or other child-occupied facility, such that childhood lead poisoning can be prevented.

TASK SCOPE:

Preliminary Site Review

The Consultant shall review the following data provided by ConnDOT:

- Address of property
- Type of building
- Contact names and phone numbers
- Number, Age & Size of structures
- Number of floors
- Number of dwelling units and rooms per unit
- Method of building access
- Occupancy status, number of occupants and ages
- Any existing LBP survey data.

The Consultant shall schedule field inspection activities with ConnDOT and building residents/ or occupants.

The Consultant shall attempt to ascertain if any child residing/ at or visiting the premise has an elevated blood lead level.

The Consultant shall determine the site's historic significance in coordination with the ConnDOT Office of Environmental Planning and the CT Historical Commission State Historic Preservation Office (SHPO) should the property be >50 years old.

Site Inspection and Sampling

The Consultant, utilizing a lead inspector or lead inspector risk assessor licensed by the Connecticut Department of Public Health (CTDPH), shall conduct an investigative survey for LBP and associated hazards (soil and dust) in accordance with the CTDPH Lead Poisoning Prevention and Control (LPP&C) regulations.

Painted Surfaces

- The Consultant shall utilize an on-site X-Ray fluorescence (XRF) spectrum analyzer operated by a trained inspector.
- The LBP inspection shall be performed in accordance with the CTDPH LPP&C regulation as well as the EPA Performance Characteristic Sheet (PCS) and XRF manufacture protocol established for the specific XRF utilized.
- XRF measurements shall be taken on representative testing combinations (painted surfaces of like room, component, and substrate) following the CTDPH inspection protocols to identify those components with toxic levels of lead based paint.
- The inspector shall note substrate, color, condition, component and location for each measurement taken.
- If inconclusive measurements cannot be resolved utilizing the XRF, bulk paint chip samples shall be collected and analyzed by atomic absorption spectrophotometry (AAS).

Dust

- Dust samples shall be collected from areas of potential lead dust contamination in accordance with EPA Title X/HUD Risk Assessment sampling protocols and analyzed by AAS for total lead. Dust wipe media shall meet the ASTM standard for sampling media.

Soil

- Soil samples shall be collected from each side of the dwelling structures in accordance with the CTDPH Draft Guidance Document for the Assessment and Abatement of Lead Contaminated Soil and the USEPA Title X/HUD Risk Assessment sampling protocols and analyzed by AAS for total lead.

Other

- Should the Consultant note any other environmental hazards concerns, (such as storage tanks, spills, asbestos, PCBs, fluorescent lights, mercury thermostats, household hazardous waste, and mold), the Consultant shall notify ConnDOT of the presence of such concerns.

Where laboratory analytical services are required, the Consultant shall submit the collected samples to a laboratory accredited for such analysis. Required laboratory analytical services shall be procured by the Consultant from laboratories based on competitive pricing.

Notifications

The Consultant shall make the following notifications in accordance with the time requirements outlined the CTDPH LPP&C regulations should lead hazards be identified at a premise with children under the age of six (6):

- Prepare the CTDPH Lead Inspection Report Form and submit to the CTDPH and local director of health
- Post notice of toxic levels of lead at the premise in accordance with the CTDPH LPP&C regulations.
- Notify the occupants of the premise of the survey findings and include a summary report and information concerning lead prescribed by the CTDPH
- Notify the State of Connecticut Historical Commission of the need to abate lead hazards if the facility is greater than 50 years old
- Notify ConnDOT.

REPORT PREPARATION

Upon completion of the site inspection and sampling, the Consultant shall prepare a report of their findings and conclusions as described below. Separate from the report of finding and conclusions, the Consultant shall prepare an itemized cost estimate for abatement.

TASK PRODUCTS:

The Consultant shall coordinate the upload of the report with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section (or his/her Designee) into ProjectWise in accordance with the ConnDOT Digital Project Development Manual. The Consultant shall provide hard copies upon request of ConnDOT.

Inspection Report and Cost Estimate

The inspection report shall include, but not be limited to, the following:

- Project outline page with , building type, site location, building type, DOT assignment #, DOT project #, DOT project manager, inspectors' names and licenses #s, dates of survey, hazards identified, site historic significance, children under the age of six years, abatement Required, Cost Estimate, Additional Environmental Concern noted
- Tables of survey results (LBP measurements, dust and soil sample results)
- Site photos
- Field site sketches
- Correspondence of historical status
- Inspector licenses and accreditation
- Laboratory licenses and accreditations
- Laboratory analytical reports with chain of custody sheets
- Related Notification Correspondence

The Consultant shall prepare an itemized cost estimate for abatement and submit under a separate cover.

BASIS OF PAYMENT:

A 710D assignment shall include all work required to prepare the report required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Review of existing information
- Field investigation and sampling
- Laboratory analysis
- QA/QC
- Notifications
- Report preparation

The base budget for this task shall depend upon the size of the structure to be investigated. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 710D assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This basis of payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 720 – PROJECT DESIGN AND SPECIFICATION DEVELOPMENT
D – LEAD BASED PAINT HAZARDS AT RESIDENTIAL DWELLINGS

OBJECTIVE:

The objective of a Task 720D is to develop plans, specifications and cost estimates for lead hazard abatement, either as stand-alone documents or for inclusion in contract bid documents, to reduce childhood lead poisoning.

TASK SCOPE:

When lead hazards exist at a premise (such as a dwelling/day care/, daycare or other child-occupied facility) where children under the age of six (6) years reside/ or visit, the Consultant, utilizing a CTDPH certified lead planner-project designer, shall prepare a lead abatement plan to address the identified toxic defective lead based paint (LBP) and associated hazards (dust and soil) in accordance with the CTDPH Lead Poisoning Prevention and Control (LPP&C) and/or EPA Renovation, Repair, and Painting (RRP) regulations. The design document shall include, but not be limited to, the following:

- Description of lead abatement work
- LBP abatement procedures
- Regulatory references
- Contractor bid qualifications
- Contractor submittals
- Worker protection and decontamination procedures
- Contractor worker training and medical surveillance requirements
- Re-occupancy clearance criteria (dust wipe/soil/XRF)
- Waste stream sampling and classification (hazardous or non-hazardous)
- Transport and disposal of hazardous and non-hazardous waste
- Procurement of temporary hazardous waste generators EPA ID # from the ConnDOT Environmental Compliance/CTDEEP Section
- ConnDOT approved transport and disposal facilities
- Duration of /occupant relocation
- Lead Planner Project Designer certifications
- Reference to investigative survey(s)Dust and soil sample results
- Field site sketches or CAD drawings

The Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee shall provide the Consultant the list of facilities that have been pre-approved to accept the types of wastes anticipated to be generated. The Consultant shall list the pre-approved disposal facilities in the specifications after having contacted the facilities to determine the facilities' acceptance criteria and to confirm the anticipated wastes are eligible for disposal at the facilities. The Consultant shall review the investigative surveys to verify that the anticipated wastes will meet the disposal facilities' criteria.

The Consultant shall coordinate the design and set up project meetings with all interested parties to discuss preliminary design requirements and resolve all outstanding items regarding the project.

The format for the lead abatement plan shall be submitted in Construction Standards Institute (CSI), Standard Specifications for Road Bridges and Incidental Construction 817817, or as directed by the Engineer, with engineering drawings formatted according to ConnDOT standards.

Cost Estimates

The Consultant shall prepare a budget estimated costs for the Contractor's abatement work and the Consultant's project compliance and project surveillance work. The budget estimated costs shall be prepared using a format prescribed by ConnDOT.

Prebid Meeting and Walkthrough

The Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee shall advise the Consultant as to whether as the designs are intended to serve as standalone documents or are to be included in contract bid documents.

If the design was prepared as a standalone package, after completion of the abatement plan specifications, the Consultant either shall solicit bids for the lead hazard abatement utilizing those Contractors selected from among existing State contracts such as effective contracts under the Department of Administrative Services (DAS Contracts), or the Consultant shall solicit competitive open bidding. The Consultant shall coordinate and attend the prebid meeting, explain the design specification and conduct a walkthrough. If bidders require information that cannot be clarified at the prebid meeting, Consultant shall develop an addendum and shall send to all bidders.

In cases where the designs are included as part of a contractor bid package, the Consultant shall attend the prebid meetings and explain the abatement design specifications. If bidders require information on the abatement designs that cannot be clarified at the prebid meetings, Consultant shall develop addendums and submit to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee.

Funding Requests

For projects where abatement is to be conducted by Contractors utilizing a DAS Contract, or is to be conducted by a Contractor under subcontract agreement with the Consultant, the Consultant shall submit to ConnDOT funding requests for the Contractor's lead abatement work as well as the Consultant's project compliance and project surveillance work in a format prescribed by ConnDOT. Requests for Contractor funding shall be accompanied by the bid provided by the

Contractor, or, in the event that the Contractor's bid is unavailable, the cost estimate developed by the Consultant. . The Consultant shall email the funding requests to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee.

TASK PRODUCTS:

Unless otherwise noted, the Consultant shall provide the task products in electronic format by coordinating the upload with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee into ProjectWise in accordance with the ConnDOT Digital Project Development Manual. The Consultant shall provide hard copies upon request of ConnDOT.

Draft Abatement Review Plans

The Consultant shall prepare and submit a draft abatement design package as described above, and the Consult shall provide copies to the local Director of Health and, if the dwelling is over 50 years old, to CT SHPO for review and comments prior to finalizing.

Final Design (100%)

Based on the input from the review of the draft submittal design plan, a final abatement plan specification package shall be prepared which includes the technical specifications, notice to contractor, and engineering. Formal written approval of the abatement plan must be secured from the local Director of Health prior to the project start.

Cost Estimate for Lead Abatement

Separate from the design plan task product and prior to bid solicitation, the Consultant shall prepare budget estimated costs for the Contractor's lead hazard abatement and the Consultant's project compliance and project surveillance. The budget estimated cost shall be prepared in a format prescribed by ConnDOT.

BASIS OF PAYMENT:

A 720D assignment shall include all work required to prepare the report required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Review of existing information
- QA/QC
- Report preparation
- CADD.

The base budget for this task shall depend upon the size of the structure involved. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 720D assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This basis of payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 725 – OPERATIONS & MAINTENANCE (O&M) PLAN DEVELOPMENT
D – LEAD BASED PAINT HAZARDS AT RESIDENTIAL DWELLINGS

OBJECTIVE:

The objective of a Task 725D is to develop a lead hazard management plan for proper in-house management and hazard communication of lead based paint (LBP) to remain in dwelling/day care/place at a child-occupied premise (such as a dwelling, daycare, or other facility) and prevent childhood lead poisoning.

TASK SCOPE:

When intact, enclosed or encapsulated LBP and adequately covered lead-contaminated soil is/are to remain in place, the Consultant, utilizing a CTDPH certified lead planner-project designer, shall prepare a lead management plan in accordance with the CTDPH LPP&C and/or EPA Title X regulations. Key provisions of the lead management plan shall include, but not be limited to, the following:

- An introduction with discussions of the initial investigations and any periodic surveillance
- A site description
- Procedures to be followed to maintain LBP surfaces and covered contaminated soil
- Discussions on renovation, demolition, and maintenance activities
- Discussions on further abatement of new lead hazards
- A notification program to inform tenants and building occupants where the lead is located and how to avoid disturbing these areas
- A schedule for periodic inspections to record, assess and document any changes in condition to the intact LBP and/or adequately covered soil, as well as to collect additional dust wipes, soil samples and XRF measurements as deemed necessary by the inspector
- Tables to document any noted changes in conditions or additional sampling conducted
- A section on EPA Title X disclosure of lead hazards during real estate transactions and transfer of title
- Attachments of LBP, soil and dust measurements taken, Field Site Sketches and the EPA Pamphlet on Protecting Tenants from Lead in Home

TASK PRODUCTS:

Draft Lead Management Plan Review

The Consultant shall prepare a draft Lead Management Plan with the aforementioned key provisions. The package shall be submitted to ConnDOT for review and comments.

Final Lead Management Plan (100%)

Based on input from the review of the draft submittal lead management plan, a final lead management plan shall be prepared and shall be submitted in both hardcopy and electronic formats. A copy of the lead management plan shall be supplied to ConnDOT as well as the affected occupants of the premise.

BASIS OF PAYMENT:

A 725D assignment shall include all work required to prepare the report required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Review of existing information
- QA/QC
- Report preparation
- CADD

The base budget for this task shall depend upon the size of the structure involved. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 725D assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This basis of payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 726 – PERIODIC SURVEILLANCE
D – LEAD BASED PAINT HAZARDS AT RESIDENTIAL DWELLINGS

OBJECTIVE:

The objective of a Task 726D is to provide periodic on-site surveillance of intact lead based paint (LBP) and adequately covered lead contaminated soil under management, assess the condition of the paint and soil, provide recommended response actions and update the existing lead management plan for a child-occupied premise (such as a dwelling, daycare, or other facility).

TASK SCOPE:

Site Inspection and Sampling

The Consultant, utilizing a CTDPH-certified lead inspector or lead inspector risk assessor, shall perform a periodic inspection of the intact LBP and adequately covered lead-contaminated soil identified in the lead management plan. This inspection shall include a visual survey of the condition of the identified areas/components, and shall document the field activities findings on the tables in the lead management plan.

The Consultant shall also perform dust wipe sampling in accordance with USEPA Risk Assessment protocols from within the facility. Dust wipe media shall meet the ASTM standard for sampling media.

The Consultant shall also collect additional XRF measurements, dust wipe and soil samples from areas deemed necessary by the lead inspector (such as new defective surfaces, surfaces not previously tested, and surfaces previously tested with inconclusive results).

Where laboratory analytical services are required, the Consultant shall submit the collected samples to a laboratory accredited for such analysis. Required laboratory analytical services shall be procured by the Consultant from laboratories based on competitive pricing.

Report Preparation

Upon completion of the site inspection and sampling, the Consultant shall prepare a report of their findings and conclusions. The report shall be prepared as described below and shall be submitted in both hardcopy and electronic formats.

TASK PRODUCTS:

In addition to documenting field activity on the tables in the lead management plan, the Consultant shall also prepare a report for each periodic survey conducted which summarizes the findings, recommends response actions, summarizes changes required in the management plan, and includes results of all new sampling.

The Consultant shall perform any and all notification activities necessary based on the periodic inspection findings in a manner similar to the notification requirements of Task 710D.

The Consultant shall formally update the lead management plan based on the results of periodic inspections and after any abatement activities are completed. The Consultant shall reissue the updated lead management plan to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section (or his/her Designee) and the affected /occupants.

BASIS OF PAYMENT:

A 726D assignment shall include all work required to prepare the report required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Review of existing information
- Field investigation and sampling
- Laboratory analysis
- QA/QC
- Report preparation

The base budget for this task shall depend upon the size of the structure involved. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 726D assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This basis of payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 730 – PROJECT COMPLIANCE
D – LEAD BASED PAINT HAZARDS AT RESIDENTIAL DWELLINGS

OBJECTIVE:

The objective of a Task 730D is to provide project compliance administrative and technical services related to on-site lead hazard abatement activities for a child-occupied premise (such as a dwelling, daycare, or other facility)..

TASK SCOPE:

Contractor Qualification Review

The Consultant shall review the bid qualifications provided by the abatement contractor(s). The Consultant either shall notify the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee whether the Contractor qualification meets the minimum criteria identified in the specification or shall prepare a summary of the qualification criteria the Contractor(s) failed to meet.

Contractor Abatement Award

The Consultant shall review the bids and make recommendations for contract award. The Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee may award the contract.

Pre-Construction Meeting

The Consultant shall attend the preconstruction meeting, explain the design specification, explain the required submittals, explain the role of the Consultant during project surveillance and answer any questions from the Contractor.

Review and Approval of Contractor Submittal

Prior to starting the lead abatement project, the Consultant shall review all materials submitted by the lead abatement contractor as required in the specifications. The submittals shall include, but are not limited to:

- Plan including schedule and manpower for addressing the lead hazards
- Approval permits for transport and disposal of hazardous and non-hazardous waste, including the EPA I.D. number obtained from the ConnDOT Environmental Compliance/CTDEEP Section
- All licenses, certifications, training, medical approval, blood test data, and respiratory fit test data for each supervisor and worker
- Contractor's licenses and certifications

Upon completing the submittal review, the Consultant shall make recommendations to ConnDOT to approve the submittals or shall prepare a summary of the submittals' deficiencies. The Consultant shall review any materials re-submitted by the Contractor until all submittals have been approved by ConnDOT.

Laboratory Coordination

The Consultant shall assist in the selection of the laboratory and coordination for services. The Consultant shall review laboratory invoices and recommend approval for payment. The Consultant shall evaluate and tabulate laboratory results and provide QA/QC on all laboratory involvement.

Technical Support of Field Personnel

The Consultant shall answer questions that arise in the field; interpret Contract Documents; resolve disputes between owner and Contractor; provide support to field personnel.

Periodic Visits to the Site

The Consultant shall make visits to the work site to address critical work issues. All visits to the site will require documentation regarding the reasons for the site visit and the activities that occurred. Such documentation shall be made in a site's daily surveillance logs if a Task 730 has been assigned for the same project.

Tenant Relocation and Notification of Abatement Activity

The Consultant shall assist the Project Manager and the design engineer by identifying suitable locations for temporary /occupant relocation during abatement.

The Consultant shall notify, in writing, the /occupants of each affected premise of the intended dates of abatement at least five (5) working days prior to the start of abatement in accordance with the CTDPH LPP&C regulations.

The Consultant shall notify the /occupants of each affected premise upon receiving satisfactory results that meet re-occupancy clearance criteria following the abatement activity.

Invoice Review

The Consultant shall review contractor invoices for payment for concurrence with field records, contract rates and backup documentation. The Consultant shall resolve any invoice discrepancies with the Contractor and prepare and submit necessary ConnDOT payment forms to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee for further processing and payment.

Report Preparation

Upon completion of the project activity, the Consultant shall prepare compliance reports based on their oversight. The report shall be prepared as described below and shall be submitted in both hardcopy and electronic formats. The Consultant shall coordinate the upload of the report with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee into ProjectWise in accordance with the ConnDOT Digital Project Development Manual.

TASK PRODUCTS:

Letter of Compliance

After the conclusion of abatement activity, and the receipt of satisfactory re-inspection re-occupancy clearance criteria results, the Consultant shall issue a letter of compliance in accordance with the CTDPH LPP&C and EPA Title X regulations to CTDPH, local Director of Health, /premise occupants, and the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee. The letter of compliance shall indicate the reasons lead abatement was undertaken, the Contractor who performed such services, the date of completion, and the need for any lead management plans.

Project Compliance Report

At the completion of the abatement project, the consultant shall prepare a documentation compliance package that shall provide ConnDOT with a complete set of records documenting all activities that took place at the site. This package shall be suitable for use by ConnDOT if future questions arise concerning the presence of lead-based paint (LBP) and associated hazards.

The completed documentation package shall include:

- Executive summary report of all activities
- Daily site logs
- A project outline with site location, building type, DOT project #, DOT assignment #, DOT project manager, dates of the project, Contractor name and license #, Consultant Project Monitor's and Inspectors' licenses and accreditations, lists of materials abated, hazardous waste hauler, hazardous waste disposal facility, amount of hazardous waste generated and EPA ID#, amount of non-hazardous waste generated, amount of CT regulated waste generated, locations of remaining LBP
- /Occupant letter of notification
- Health department abatement plan approval letter
- Chain of custody sheets and laboratory results for air, dust, soil, paint chip or waste stream samples
- Tables of any XRF measurements taken
- Sign-in sheets
- Abatement Contractor license
- Project Monitor certifications

- Contractor supervisor and worker training records, medical surveillance records, and licenses
- Contractor OSHA personnel air monitoring sample results
- Calibration records for testing equipment used
- Laboratory accreditations
- EPA hazardous waste I.D. #
- Waste disposal records/manifests
- All Contractor submittals
- Connecticut Historical Commission historic status determination
- Letter of compliance

BASIS OF PAYMENT:

A 730D assignment shall include all work required to provide administrative and technical support to the project and prepare the reports required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Coordination with field staff, occupants, Contractor, and laboratories
- Site visits
- QA/QC
- Report preparation

The base budget for this task shall depend upon the size of the structure involved. The base budget shall be deemed to include all effort as described above for a project that involves a building structure encompassing up to 2,500 square feet. For each additional 2,500 square foot increment, a separate incremental budget shall be established to cover all costs associated with the additional effort. The total budget for a Task 730D assignment shall include the base budget plus the incremental budget times the number of additional 2,500 square foot increments included. This basis of payment shall apply for structures up to 10,000 square feet; for assignments on structures over 10,000 square feet the fees shall be negotiated separately.

TASK 740 – PROJECT SURVEILLANCE
D – LEAD BASED PAINT HAZARDS AT RESIDENTIAL DWELLINGS

OBJECTIVE:

The objective of a Task 740D is to provide an on-site "Inspector/Project Monitor" to ensure Contractor compliance with the plans, specifications and regulations when performing lead abatement.

TASK SCOPE:

Field Project Management

The Consultant shall be the liaison to ConnDOT regarding field activities, coordinating and scheduling with Contractor, laboratories, CTDPH, CTDEEP, OSHA, EPA.

The Consultant shall assign on-site personnel classified as Inspector/Project Monitor to oversee the performance of daily field coordination.

Air Monitoring, Site Inspection and Project Oversight

The Consultant shall assign on-site personnel classified as Inspector/Project Monitor to provide construction administration, air sampling, dust wipe sampling, soil sampling, XRF testing, waste stream sampling and inspection services during the lead abatement project.

The Inspector/Project Monitor shall remain on site on a daily basis throughout the duration of the project and shall provide daily inspections of the work area to ensure that the contractor is conducting the abatement in strict accordance with the project requirements and all applicable regulations as described in the abatement specifications.

Daily project activities, as well as all observations made during the visual inspections shall be documented by the Inspector/Project Monitor in a permanent log kept at the site. The Inspector/Project Monitor shall verify that a contractor maintains a daily sign-in sheet where all personnel performing work in the regulated area shall be required to sign in and out.

In addition to the daily inspection services, the Inspector/Project Monitor shall conduct daily air sampling. The number of samples to be collected shall depend upon what activities are taking place and the size of the project. The intent of the air sampling is to verify compliance with the OSHA Lead in Construction permissible exposure limits. When authorizing an assignment, the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee shall consider the contaminants of concern and the magnitude of the demolition in determining the type and the number of samples the Consultant shall collect in order to meet the intent.

The Inspector/Project Monitor shall collect representative waste stream samples of all waste

materials generated during the abatement project. The number of waste stream samples and the parameters for which the samples are to be analyzed shall be based upon the selected disposal facilities acceptance criteria. Prior to any waste leaving the site the Inspector/Project Monitor shall document that the waste is being removed in accordance with all applicable requirements. Inspector/Project Monitor shall obtain a copy of all manifests from the Contractor and Waste Hauler and shall ensure that the waste is manifested for the designated disposal facility.

The Inspector/Project Monitor shall have all requisite trainings and qualifications necessary to sign RCRA hazardous waste manifests as a RCRA generator. For hazardous waste leaving the site, the on-site Inspector/Project Monitor shall sign the hazardous waste manifests as an Agent for ConnDOT.

The Consultant shall submit collected samples to the laboratory for analyses. Laboratories must be accredited for the parameter(s) for which the samples are to be analyzed. Laboratory services shall be procured by the Consultant from laboratories based on competitive pricing. All sampling results shall be logged by the inspector into the permanent log on site.

Following abatement, a CTDPH-certified lead inspector or lead inspector risk assessor shall conduct a re-inspection of each abatement area, which shall include, but not be limited to, the following:

- Visual confirmation that all areas of abatement have been conducted following the lead abatement plan
- Visual confirmation that all dust and debris in the abatement area has been cleaned and removed
- Clearance re-occupancy dust wipe sampling, in accordance with CTDPH LPP&C and/or EPA RRP regulations
- Clearance soil sampling, in accordance with the CTDPH LPP&C and/or EPA RRP regulations
- Clearance XRF measurements on components which have undergone LBP removal in accordance with the CTDPH LPP&C regulations

BASIS OF PAYMENT:

Task 740D services shall be assigned on a per person-day basis at the billing rate for the respective category of the Inspector/Project Monitor for each project. The actual payment for services shall be at the maximum billing rate for the category at which the Consultant's personnel worked during the time period. For the purposes of this Agreement, a person-day field assignment shall consist of 10 hours and a typical project shall require one Inspector/Project Monitor. If project demands require extended workdays, the level of effort will reflect the additional time required.

TASK 710 – INVESTIGATIVE SURVEY
S – PAINTED STEEL & OTHER STRUCTURES

OBJECTIVE:

The objective of a Task 710S is to conduct a visual inspection and collect and review field measurements and sample laboratory data in order to identify the presence and concentration, assess the condition, and quantify the amount of lead based paint (LBP) along with any other contaminated or hazardous materials (such as asbestos, guano, PCBs, and blood borne pathogens [BBP]) which may be present at the bridge/structure site and require proper handling/disposal. Steel structure types to be surveyed include, but are not limited to, bridges, signs, supports, signal towers, traffic signals (such as span poles, mast arms, pedestals, and controller cabinets), and other structures to be surveyed include wood bridges, culverts, and retaining walls.

TASK SCOPE:

Preliminary Site Review

The Consultant shall review the following data provided by ConnDOT:

- Structure number
- Address and location of structure
- Site/project contact names and phone numbers
- Number of structures
- Age of structures
- Size of structures
- Site layout and any street, highway, river, and railroad crossings
- Method of site access
- Scope of work proposed by ConnDOT at structure locations
- Any existing hazmat survey data.

The Consultant shall coordinate field inspection activities with ConnDOT.

Site Inspection and Sampling

The Consultant, utilizing CTDPH-certified lead inspectors, shall conduct an representative investigative survey for lead-based paint (LBP) on painted structure components scheduled for renovation or demolition in order to determine if the OSHA Lead Exposure in Construction standards, EPA RCRA hazardous waste disposal regulations, or CT DEEP hazardous waste regulations are applicable to the planned construction, renovation, or demolition BBP, activity.

Further, Consultant, using personnel who are appropriately trained and CTDPH certified, shall also conduct an investigative survey for other contaminated or hazardous materials which may be present at the site and which may be impacted from the planned construction, renovation, or

demolition activity. Other contaminated or hazardous materials include, but are not limited to, asbestos, guano, BBP, and miscellaneous hazmat items (such as mercury lamps and PCB ballasts).

Prior to conducting inspection work on any Limited Access Roadway, Consultant shall contact the Highway Operations Center daily to alert ConnDOT of their presence.

Lead Based Paint (LBP)

- The Consultant shall utilize an on-site X-Ray fluorescence (XRF) spectrum analyzer operated by a trained inspector in order to inspect for the presence of LBP.
- The LBP inspection shall follow the XRF manufacturer's protocol and EPA Performance Characteristic Sheet EPA Methodology for XRF Performance Characteristic Sheets (PCS) established for the specific XRF device utilized, with the focus being to determine if any detectable level of LBP is present on representative components.
- XRF measurements shall be taken on representative testing combinations (painted surfaces of like color, component and substrate) in proportion to the actual quantity of painted surfaces at the structure in order to provide a representative composite of what components contain detectable levels of lead of any amount.
- The XRF operator shall note substrate, color, condition, component and location for each measurement taken.
- If inconclusive measurements cannot be resolved utilizing the XRF, or where specific components scheduled for renovation impact reveal no detectable levels of lead via XRF, the Consultant shall make recommendations to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section as to whether bulk paint chip samples should be collected and analyzed by atomic absorption spectrophotometry (AAS) to confirm/ or refute the presence of lead. The Transportation Principal Engineer or his/her Designee may authorize the Consultant to perform bulk paint chip sampling and analysis.

Paint Debris Waste Characterization

- Representative composite samples of lead paint scheduled for impact shall be collected from the steel components so as to approximate the projected waste stream at the site in accordance with CTDEEP sampling guidelines. The collected samples shall be analyzed by the Toxicity Characteristic Leaching Procedure (TCLP) for the eight (8) RCRA metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver) to characterize the paint waste materials for disposal as hazardous waste, CT regulated waste, or non-hazardous, non-regulated construction and demolition debris. The number of parameters for analysis may be reduced based on objective knowledge of the site but must at a minimum include lead.

Other Contaminated or Hazardous Materials

Should the Consultant note other contaminated or hazardous materials (such as asbestos, guano, storage tanks, spills, BBP, and Hg/PCB fluorescent lights), the Consultant shall make recommendations to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section regarding the number and type of samples needed to appropriately characterize the amount of material expected to be impacted.

The Transportation Principal Engineer may authorize the Consultant to a) perform sample collection using appropriately trained and licensed inspectors, b) submit collected samples to the laboratory for analyses, and c) notify ConnDOT if the impacted material is subject to EPA RCRA hazardous waste management regulations, CT DEEP hazardous waste regulations, OSHA exposure limits, or other regulatory requirements.

Laboratories must be accredited for the parameter(s) for which the samples are to be analyzed. Laboratory services shall be procured by the Consultant based on competitive pricing.

Report Preparation

Upon completion of the site inspection and sampling, the Consultant shall prepare a report of their findings and conclusions as described below. Separate from the report of finding and conclusions, the Consultant shall prepare an itemized cost estimate for abatement.

TASK PRODUCTS:

Inspection Report and Cost Estimate

The Consultant shall provide the task products in electronic format by coordinating the upload with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee into ProjectWise in accordance with the ConnDOT Digital Project Development Manual. The Consultant shall provide hard copies upon request of ConnDOT.

The inspection report shall be in letter format and include, but not be limited to, the following:

- Site location, structure #s, DOT assignment #, DOT project #, DOT project manager, dates of survey, notification of whether LBP was identified, notification of paint waste characterization, additional environmental concerns noted
- Site photos
- Field site sketches
- Consultant personnel names, licenses, license #s, and accreditations
- Laboratory licenses and accreditations

The Consultant shall prepare an itemized cost estimate for abatement and submit under a separate cover.

BASIS OF PAYMENT:

A 710S assignment shall include all work required to prepare the report required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Review of existing information
- Field investigation and sampling
- Laboratory analysis
- QA/QC
- Report preparation

The budget for this task shall be deemed to include all effort as described above for a project that involves up to 5 bridges or 10 signs/structures.

TASK 720 – PROJECT DESIGN AND SPECIFICATION DEVELOPMENT
S – PAINTED STEEL & OTHER STRUCTURES

OBJECTIVE:

The objective of a Task 720S is to develop plans, specifications, notices to contractor and cost estimates for compliance management and disposal of lead, asbestos, guano, , blood borne pathogens (BBP)and other hazardous or contaminated materials, either as stand-alone documents or typically for inclusion in contract bid documents.

TASK SCOPE:

When renovation or demolition activities are expected to impact hazardous, contaminated, or regulated materials (such as lead-based paint [LBP], asbestos, guano, and blood borne pathogens) or other hazardous items (such as PCB fluorescent light ballasts, mercury (Hg) fluorescent lamps, Hg thermostat ampules), the Consultant shall prepare the design of the compliance and disposal of the impacted material. If the activity impacts LBP or ACM, then the design shall be prepared by a CT DPH-certified lead planner-project designer or a CTDPH-certified asbestos project designer, respectively.

Based on the overall scope of the renovation or demolition activity, the compliance management design shall fall into one of three general categories: 1. Abrasive Blast Cleaning, 2. Renovation and Demolition of Structure, or 3. Miscellaneous Exterior Tasks. The Consultant shall prepare designs as appropriate based on the category of work.

The design documents shall include, but not be limited to, the following:

- Description of work required
- LBP compliance procedures/engineering controls
- Regulatory references
- Contractor bid qualifications
- Contractor submittals
- Worker protection and decontamination procedures
- Exposure assessments
- Contractor worker training and medical surveillance requirements
- Waste segregation
- Recycling
- Waste stream sampling and characterization (hazardous waste, CT regulated waste, or non-hazardous construction and demolition (C&D) debris)
- Transport and disposal of hazardous waste, CT regulated waste, and non-hazardous C&D debris
- Procurement of temporary hazardous waste generator EPA I.D. # from the Environmental Compliance Section

- ConnDOT-approved transport and disposal facilities
- Project Designer certifications
- Reference to investigative survey(s)
- Field site sketches or CAD drawings

The Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee shall provide the Consultant the list of facilities that have been pre-approved to accept the types of wastes anticipated to be generated. The Consultant shall list the pre-approved disposal facilities in the specifications after having contacted the facilities to determine the facilities' acceptance criteria and to confirm the anticipated wastes are eligible for disposal at the facilities. The Consultant shall review the investigative surveys to verify that the anticipated wastes will meet the disposal facilities' criteria.

The Consultant shall coordinate the design and set up project meetings with all interested parties to discuss preliminary design requirements and resolve all outstanding items regarding the project.

The format of the specifications shall be submitted in Construction Specifications Institute (CSI), Standard Specifications for Road Bridges and Incidental Construction 817, or as directed by the Engineer, with engineering drawings formatted according to ConnDOT standards.

Cost Estimates

The Consultant shall prepare a budget estimated costs for the Contractor's compliance management and disposal work and the Consultant's project compliance and project surveillance work. The budget estimated costs shall be prepared using a format prescribed by ConnDOT.

Prebid Meeting and Walkthrough

The Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee shall advise the Consultant as to whether as the designs are intended to serve as standalone documents or are to be included in contract bid documents.

If the design was prepared as a standalone package, after completion of the design specifications, the Consultant either shall solicit bids for the compliance and disposal of lead, asbestos, guano, BBP and other hazardous or contaminated materials utilizing Contractors selected from among existing State contracts such as effective contracts under the Department of Administrative Services (DAS Contracts), or the Consultant shall solicit competitive open bidding. The Consultant shall coordinate and attend the prebid meeting, explain the design specification and conduct a walkthrough. If bidders require information that cannot be clarified at the prebid meeting, Consultant shall develop an addendum and shall send to all bidders and the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee.

In cases where the Consultant's designs are included as part of a contractor bid package, the Consultant shall attend the prebid meetings and explain the abatement design specifications. If bidders require information on the Consultant's designs that cannot be clarified at the prebid meetings, Consultant shall develop addendums and submit to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee.

Funding Requests

For standalone projects where compliance management and disposal of hazardous, contaminated, or BBP, regulated materials is to be conducted by Contractors utilizing DAS Contracts, or is to be conducted by Contractors under subcontract agreement with the Consultant, the Consultant shall submit to ConnDOT funding requests for the Contractors' work as well as the Consultant's project compliance and project surveillance work in a format prescribed by ConnDOT. Requests for Contractor funding shall be accompanied by the bid provided by the Contractor, or, in the event that the Contractor's bid is unavailable, the cost estimate prepared by the Consultant (as part of the investigative survey). The Consultant shall email the funding requests to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee.

TASK PRODUCTS:

Unless otherwise noted, the Consultant shall provide the task products in electronic format by coordinating the upload with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee into ProjectWise in accordance with the ConnDOT Digital Project Development Manual. The Consultant shall provide hard copies upon request of ConnDOT.

Draft Abatement Review Plan

The Consultant shall prepare and submit a draft abatement design package as described above.

Final Design (100%)

Based on the input from the review of the draft submittal design plan, a final abatement design package shall be prepared which includes the technical specifications, notice to contractor, and engineering drawings.

Cost Estimate for Project Work

Separate from the design plan task product and prior to bid solicitation, the Consultant shall also prepare a budget estimated costs for Contractor's compliance management and disposal of hazardous, contaminated, or regulated materials and the Consultant's project compliance and project surveillance work in a format prescribed by ConnDOT.

BASIS OF PAYMENT:

A 720S assignment shall include all work required to prepare the report required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Review of existing information
- QA/QC
- Report preparation
- CADD

The budget for this task shall be deemed to include all effort as described above for a project that involves up to 5 bridges or 10 signs/structures.

TASK 730 – PROJECT COMPLIANCE
S – PAINTED STEEL & OTHER STRUCTURES

OBJECTIVE:

The objective of a Task 730S is to provide project compliance administrative and technical services related to compliance and disposal of lead, asbestos, guano, blood borne pathogen (BBP) and other hazardous or contaminated materials.

TASK SCOPE:

Contractor Qualification Review

The Consultant shall review the bid qualifications provided by the abatement contractor(s). The Consultant either shall notify the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee whether the Contractor qualification meets the minimum criteria identified in the specification or shall prepare a summary of the qualification criteria the Contractor(s) failed to meet. The Consultant shall review the contractor's bid qualifications as identified in the specification.

Contractor Abatement Award

The Consultant shall review the bids and make recommendations for contract award. The Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee may award the contract.

Pre-Construction Meeting

The Consultant shall attend the preconstruction meeting, explain the design specification, explain the required submittals, explain the role of the Consultant during project surveillance and answer any questions from the Contractor.

Review and Approval of Contractor Submittal

Prior to starting compliance and disposal activities, the Consultant shall review all materials submitted by the Contractor as required in the specifications. The submittals shall include, but are not limited to:

- Work plan, including schedule and manpower, for addressing the lead compliance
- Approval permits for transport and disposal of hazardous waste, CT regulated waste, and non-hazardous construction and demolition (C&D) debris
- The EPA I.D. number obtained from the ConnDOT Environmental Compliance Section
- Proposed recycling facilities
- All licenses, certifications, training, medical data, blood test data, and respiratory fit test data

for each supervisor and worker
- All licenses, certifications for the Contractor firm, waste hauler and waste disposal facility
- Lead compliance plan
- Negative exposure assessment data or exposure air monitoring plan
- Control and disposal submittals as noted in the Contractor bid specifications

Upon completing the submittal review, the Consultant shall make recommendations to ConnDOT to approve the submittals or shall prepare a summary of the submittals' deficiencies. The Consultant shall review any materials re-submitted by the Contractor until all submittals have been approved by ConnDOT.

Laboratory Coordination

The Consultant shall assist in the selection of the laboratory and coordination for services. The Consultant shall review and recommend approval of laboratory invoices for payment. The Consultant shall evaluate and tabulate laboratory results and provide QA/QC on all laboratory involvement.

Technical Support of Field Personnel

Answer questions that arise in the field; interpret Contract Documents; resolve disputes between owner and Contractor; and provide support to field personnel.

Periodic Visits to the Site

The Consultant shall make periodic visits to the work site to address critical work issues. All visits to the site will require documentation regarding the reasons/activities that occurred as part of the project monitors daily surveillance logs.

Invoice Review

The Consultant shall review contractor invoices for payment for concurrence with field records, contract rates and backup documentation. The Consultant shall resolve any invoice discrepancies with the contractor and prepare and submit necessary ConnDOT payment forms to the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee for further processing and payment.

Report Preparation

Unless otherwise directed by the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee, upon completion of the project activity the Consultant shall prepare a letter of compliance and a compliance report based on their oversight of the Contractor's activities.

TASK PRODUCTS:

Unless otherwise noted, the Consultant shall provide the task products in electronic format by coordinating the upload with the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee into ProjectWise in accordance with the ConnDOT Digital Project Development Manual. The Consultant shall provide hard copies upon request of ConnDOT.

Letter of Compliance

Unless otherwise directed by the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee, after the conclusion of project activity, and after the receipt of satisfactory re-inspection clearance criteria results, the Consultant shall prepare and submit a letter of compliance indicating the reasons abatement was undertaken, the Contractor who performed such services, and the date of completion.

Project Compliance Report

Unless otherwise directed by the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee,, at the completion of the abatement project, the Consultant shall prepare a documentation compliance package that provides a complete set of records documenting all compliance and disposal activities that took place at the site. This package shall be suitable for use by ConnDOT if future questions arise concerning the work conducted.

The completed documentation package shall include:

- Executive summary report of all activities
- Daily site logs
- A project outline with site location, DOT project #, DOT assignment #, DOT project manager, dates of the project, Consultant information (Inspector/Project Monitors names, licenses, license #s, and accreditations), Contractor information (Contractor name, license, and license #), lists of materials abated, hazardous waste haulers and regulated waste haulers, hazardous waste disposal facilities and regulated waste disposal facilities, recycling facilities, amount of hazardous and regulated wastes generated, EPA ID#, amount of non-hazardous waste generated, amount of materials recycled
- Chain of custody sheets and laboratory results for all samples collected
- Contractor licenses
- Inspector/Project Monitor certifications
- Contractor supervisor and worker training and medical records and licenses
- Contractor OSHA personnel air sample results
- Calibration records for testing equipment used
- Laboratory accreditations
- EPA hazardous waste I.D. #

- Waste disposal and recycling records or manifests
- All Contractor submittals

BASIS OF PAYMENT:

A 730S assignment shall include all work required to provide administrative and technical support to the project and prepare the reports required under this task and shall include but not necessarily be limited to effort required for the following:

- Project management
- Meeting(s) with ConnDOT
- Coordination with field staff, Contractor and laboratories
- Site visits
- QA/QC
- Report preparation

The base budget for this task shall be deemed to include all effort as described above for a project that involves up to 5 bridges or 10 signs/structures.

TASK 740 – PROJECT SURVEILLANCE
S – PAINTED STEEL & OTHER STRUCTURES

OBJECTIVE:

The objective of a Task 740S is to provide an on-site "Inspector/Project Monitor" to ensure Contractor compliance with the plans, specifications and regulations when performing compliance and disposal activities for lead, asbestos, guano, BBP, blood borne pathogens, or other contaminated or hazardous material.

TASK SCOPE:

Field Project Management

Consultant shall be the liaison to ConnDOT regarding field activities, coordinating and scheduling with Contractor, laboratories, CTDPH, CTDEEP, OSHA, EPA.

Consultant shall assign on-site personnel classified as Inspector/Project Monitor to oversee the performance of periodic field coordination with and oversight of the on-site Inspector Project Monitor.

Air Monitoring, Site Inspections and Project Oversight

The Consultant shall assign an Inspector/Project Monitor to provide construction administration, air sampling, dust wipe sampling, soil sampling, XRF testing, waste stream sampling and inspection services during the lead compliance/disposal project.

The Inspector/Project Monitor shall and shall provide periodic inspections of the work area throughout the duration of the project to ensure that the contractor is conducting the abatement in strict accordance with the project requirements and all applicable regulations as described in the abatement specifications.

Project activities, as well as all observations made during the visual inspections shall be documented by the Inspector/Project Monitor in a permanent log kept at the site. The Inspector/Project Monitor shall verify that a contractor maintains a sign-in sheet where all personnel performing work in the regulated area shall be required to sign in and out.

In addition to the periodic inspection services, the Inspector/Project Monitor shall conduct periodic air sampling on projects that involve work on lead containing materials. The intent of the air sampling is to verify compliance with the OSHA Lead in Construction permissible exposure limits and to verify no release of lead debris into unregulated areas. When authorizing an assignment, the Transportation Principal Engineer of ConnDOT's Environmental Compliance Section or his/her Designee shall consider whether the Consultant must conduct dust wipe sampling, soil sampling, XRF testing or additional air sampling, and, if so, the type and number of additional samples.

The Inspector/Project Monitor shall collect representative waste stream samples of all waste materials generated during the project. The number of waste stream samples and the parameters for which the samples are to be analyzed shall be based upon the selected disposal facilities acceptance criteria. Prior to any waste leaving the site the Inspector/Project Monitor shall document that the waste is being removed in accordance with all applicable requirements and shall obtain a copy of all waste manifests from the Contractor and waste hauler to ensure that the waste is manifested for the designated disposal facility.

The Inspector/Project Monitor shall have all requisite trainings and qualifications necessary to sign RCRA hazardous waste manifests as a RCRA generator. For hazardous and regulated waste leaving the site, the on-site project monitor shall sign the hazardous and regulated waste manifests as an Agent for ConnDOT.

The Consultant shall submit collected samples to the laboratory for analysis. Laboratories must be accredited for the parameter(s) for which the samples are to be analyzed. Required laboratory services shall be procured by the Consultant from laboratories based on competitive pricing. All sampling results shall be logged by the inspector into the permanent log on site.

The Inspector/Project Manager shall be on site periodically throughout the project, as directed by ConnDOT, to ensure that the regulations are being strictly adhered to and all required compliance work is completed.

Following work the inspector shall conduct a re-inspection of the work areas, which would include, but not be limited to, the following:

- visual confirmation that all areas of work have been conducted following the design specification plan
- Visual confirmation that all dust and debris in any remediation work area has been cleaned and removed.

BASIS OF PAYMENT:

Task 740S services shall be assigned on a per person-day basis at the billing rate for the respective category of the Inspector/Project Monitor for each project. The actual payment for services shall be at the maximum billing rate for the category at which the Consultant's personnel worked during the time period. A person-day field assignment shall consist of 10 hours and a typical project shall require one Inspector/Project Monitor. If project demands require extended workdays, the level of effort will reflect the additional time required.

TASK 750 – REGULATORY COMPLIANCE
M – MISCELLANEOUS ENVIRONMENTAL HAZARDS

OBJECTIVE:

The objective of a Task 750 assignment is to assist the Department with compliance with various regulations and guidelines, including but not limited to:

- Asbestos containing materials (ACM)
- Lead based paint (LBP)
- Hazardous building materials
- Underground and aboveground storage tanks
- TSCA
- RCRA
- Indoor air quality
- Radon
- Guano
- Vermin and vermin droppings.
- Mold
- Blood Borne Pathogens
- Blood borne pathogens
- Renovations and demolition
- Well and septic system abandonment
- Waste management and recycling
- Green building services, LEED, and High Performance Building regulations

In addition, this task may be assigned to initiate an emergency response until such time as a scope can be developed under another task.

TASK SCOPE:

The services under this task shall include but not be limited to the following:

- Material sampling/testing
- Air quality sampling
- Environmental consultation and advice
- Training
- Expert testimony
- Oversight

TASK PRODUCTS:

Products shall be determined by the Department on an assignment by assignment basis and shall be submitted in both hardcopy and electronic formats.

BASIS OF PAYMENT:

Task 750 Regulatory Compliance Services shall be assigned on a weekly basis for each project.