A Scope of Work (SOW) describes the type and amount of work to perform under a contract. The SOW must specifically describe the research, analysis and documentation required to ensure the Hazardous Materials Discipline Report is successfully completed. Without clearly defining the SOW, a consultant cannot adequately estimate either cost or time. Lack of proper direction and communication will lead to changing the SOW contract and increased project costs and schedule delays.

Recommended SOW language for an Environmental Consultants to conduct a Hazardous Materials Discipline Report is below. The Hazardous Materials Office recommends that local consultants conduct the investigation, as they will be more familiar with the local resources and have local historical knowledge of the project area. Guidance for completing Hazardous Materials Discipline Reports is contained on the WSDOT website:

LINK TO GUIDANCE

Modification of the SOW language is appropriate to suit individual project needs. WSDOT Hazardous Material Specialists are available to provide assistance in modifying a SOW or reviewing draft reports.
Corridor PC-##.##.# Discipline Report – Hazardous Materials

The Consultant shall conduct an assessment to identify and describe known or possible hazardous materials contamination that may affect the project area, and summarize the findings in a discipline report. The purpose of the discipline report is to document previous hazardous materials studies and serve as input to the NEPA process. The discipline report shall contain an appropriate level of documentation and analysis necessary to allow transportation staff to make informed decisions regarding the selection of alternatives, mitigation measures and/or the necessity of initiating early coordination with relevant regulatory agencies. The discipline report must identify sites that may 1) affect the environment, 2) create significant construction impacts, and 3) incur cleanup liability to the department. The report will also provide information to evaluate whether additional hazardous material investigations are necessary, to support future estimates of site cleanup and construction costs and to assess WSDOT’s liability associated with the project.

Sites that require a degree of consideration during project development include:

- Location within the proposed ROW where contaminants in soil or groundwater could affect design or the cost of construction, including adjacent or hydraulically upgradient properties with a potential to affect construction activity; and

- Properties currently considered for acquisition.

The Consultant shall refer to the WSDOT Environmental Procedures Manual Chapter, Section 447.05 and shall prepare the report in accordance to the WSDOT Guidance and Standard Methodology for WSDOT Hazardous Materials Discipline Reports. The guidance is available at: [LINK TO GUIDANCE](#)

The CONSULTANT shall conduct the tasks below.

**TASK 1. SITE SCREENING REVIEW AND RISK ANALYSIS**

The CONSULTANT shall complete the following items as part of the site screening and risk analysis of sites.

*Geologic and Groundwater Conditions*

The Consultant shall review readily available information regarding geologic and groundwater conditions within the project corridor to assess potential migration of known or suspected contaminants that may affect the project corridor. Existing groundwater information can be obtained from Ecology File Review research (conducted during Screening and Validation as noted below), Geologic and groundwater reports for the area or the WSDOT Project’s Water Quality, Groundwater, Shoreline and/or Floodplain Discipline Reports.

*Regulatory Database Records*

The Consultant shall compile listings of regulatory database records of potential contaminant sources in the vicinity of the project area. The standard regulatory records and required search radius must be in accordance to ASTM E1527 Standards. The Consultant shall coordinate with WSDOT to obtain a regulatory database search in an efficient and cost effective manner. The
regulatory database report results will be saved to a CD, and attached to the draft and final report.

**Historical Review**

The Consultant shall assess historical and current land uses of the project area and adjacent properties. Historical record sources shall be reviewed for indications of past occupants or businesses in the project area that may have had the potential to affect the soil or groundwater within the project corridor. The Consultant shall review Aerial Photographs, Fire Insurance Maps and historical USGS Topographic Maps and Online County Assessor records, historical information obtained from the WSDOT Project’s Historic, Cultural, and Archaeological Resources Discipline Report as available.

**Windshield Survey**

The Consultant shall conduct a windshield survey within and immediately adjacent to the project corridor. The windshield survey shall be limited to features readily observed from public access corridors and shall not include entering or viewing conditions within buildings. The windshield survey will field verify the location of properties identified from the regulatory database and historical records review. The windshield survey also includes a visual survey to identify and record any land uses likely to generate hazardous materials and the presence of environmental conditions, which have the obvious potential to affect the project area.

**Screening, Validation, Agency File Review and Risk Analysis**

The Consultant shall evaluate the compiled information and describe and utilize a logical screening methodology to eliminate sites that pose little to no risk and do not warrant further investigation. After screening out sites, the Consultant shall create a table of validated sites that may affect the environment during construction, create significant construction impacts, and incur cleanup liability to the department. For the subset of sites identified as posing a potential impact, the Consultant shall perform an agency website and file review to obtain site-specific information for regulatory listed sites that may pose a significant impact. The Consultant shall evaluate compiled information and assign a risk level as described in the WSDOT Guidance and Standard Methodology for WSDOT Hazardous Materials Discipline Reports, June 2009. The results of the sites screening process will be summarized as described in the WSDOT Guidance and Standard Methodology for WSDOT Hazardous Materials Discipline Reports.

**TASK 2. EVALUATION OF IMPACTS TO THE PROJECT**

The sites of concern identified during the site screening process will be evaluated for the type of impact (standard or project-specific) to the environment, construction or WSDOT’s liability. The CONSULTANT shall meet with the project office or WSDOT Hazardous Materials Program to discuss the results of the evaluation. If only standard impacts are present, the CONSULTANT shall continue to TASK 3. If project-specific impacts are present, the CONSULTANT shall continue to TASK 4.

**TASK 3. DRAFT AND FINAL REPORT WITH STANDARD IMPACTS AND MITIGATION MEASURES**

The Consultant shall prepare a report to document the findings and conclusions and, if warranted, to provide recommendations and estimated costs for additional assessment for
specific properties that may affect WSDOT in either construction or acquisition. Any additions, deviations from the requirements and significant data gaps should be explained in the report. The report format shall be a standard technical style consistent with the WSDOT Hazardous Materials Discipline Report Template (available at link above).

The CONSULTANT shall respond to WSDOT staff comments and incorporate the comments into the final report.

**TASK 4. EVALUATION OF PROJECT-SPECIFIC IMPACTS AND MITIGATION MEASURES WITH DRAFT AND FINAL REPORT**

The CONSULTANT shall conduct a detailed evaluation of each site with project-specific impacts and mitigation measures. The CONSULTANT should provide an assessment that goes beyond mere repetition of the obvious and provide potential mitigation options to avoid and/or minimize each identified impact.

The Consultant shall prepare a report to document the findings and conclusions and, if warranted, to provide recommendations and estimated costs for additional assessment for specific properties that may affect WSDOT in either construction or acquisition. The CONSULTANT shall also provide an evaluation of cost estimates to implement the recommended project-specific mitigation measures. Any additions, deviations from the requirements and significant data gaps should be explained in the report. The report format shall be a standard technical style consistent with the WSDOT Hazardous Materials Discipline Report Template (available at link above).

The CONSULTANT shall respond to WSDOT staff comments and incorporate the comments into a final report.

**WSDOT Furnished Materials and Support**

WSDOT will be responsible for providing the footprint design for the project. The design elements of the footprint design will include:

- Project descriptions
- Planned ROW acquisitions
- Limits of ROW
- Stormwater facilities, technologies and locations
- Construction staging areas
- XXXXXX (others as needed)

**Assumptions**

- The Consultant shall obtain a regulatory database search report.
Task PC-##.## Deliverables:

**PC-##.##.##** DRAFT HAZARDOUS MATERIALS DISCIPLINE REPORT (IN ELECTRONIC FORMAT) BY (INSERT DATE).

**PC-##.##.##** FINAL HAZARDOUS MATERIALS DISCIPLINE REPORT (WITH THE REGULATORY DATABASE SEARCH REPORT ATTACHED AS A CD) WITH THE BELOW STANDARD APPENDICES BY (INSERT DATE):

- Site Maps & Figures
- Applicable State & Federal Regulations
- Standard Impacts & Mitigation Measures
- Regulatory Database Search Report
- Historical Documentation (if useful), such as relevant Sanborn Fire Insurance Maps, and/or Aerial Photographs
- Field Reconnaissance Photographs *(optional)*
- Copies of Ecology File Review Documents *(if useful)*

**Budget**

The CONSULTANT estimates that the cost to complete Task 1 to 2 of the scope of services described above will be $XXXXX as shown on the spreadsheet included as Attachment B. The CONSULTANT estimates that the cost to complete Task 3 of the scope of services described above will be $XXXXX as shown on the spreadsheet included as Attachment B. The CONSULTANT estimates that the cost to complete Task 4 will be $XXXXX as shown on the spreadsheet included as Attachment B. The decision to continue with Task 3 or 4 is dependent on the results of Task 2. The CONSULTANT will notify WSDOT immediately if the information collected during the course of their work indicates the need to expand or substantially reduce their services.