

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

SCOPE OF SERVICES

DESIGN, RIGHT OF WAY & CONSTRUCTION SERVICES

SOUTH ALBANY ROAD (CR 53) OVER

ONESQUETHAW CREEK BRIDGE REPLACEMENT

PIN 1763.04

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

Section 1 - General

1.01 Project Description and Location

The project is to replace the South Albany Road (CR 53) Bridge over the Onesquethaw Creek. This structure has a prestressed beam superstructure supporting a concrete deck. The beams have widespread cracking throughout and will continue to deteriorate over time leading to a restricted load posting or eventual closure. The substructures are showing signs of deterioration as well. Most notable for this structure is the significant amount of channel scour that exists exposing portions of the footing. This structure was founded on spread footings and there was no scour protection to prevent additional scour. Eventual undermining of the footing was a potential risk, categorizing the bridge as scour critical and in need of replacement. The project need was identified by Albany County as part of their ongoing engineering efforts to monitor the condition of their bridges. In a 1996 Hydraulic Vulnerability Assessment, it was noted that the stream bed has historical evidence as being unstable. The stream alignment to the bridge is now directed towards the southern (begin) abutment and the pier nose. Recent inspection reports note the begin abutment and pier footings are exposed the entire length of the structure. Due to the changing alignment, the majority of the flow is directed through the first span and there is a gravel bar (stream aggregation) under the second span. This bridge was identified in the 2021 CDTC Local Bridge Study noting the prestressed beams rated poorly and recommended rehabilitation to address structural needs. However, there are not any cost-effective remedial details for short span prestressed beams and continued deterioration of this structure will result in further load reductions and eventually closure. Due to the severe deterioration of the superstructure and substructure as well as the scour critical nature of the foundations, a full replacement was warranted.

The proposed bridge replacement structure includes installing new steel H-piles, reinforced concrete abutments, galvanized steel beams, composite concrete deck and approach slabs, new steel bridge rail as well as transition and approach railing. GPI will conduct a hydraulic analysis to ensure the hydraulic opening will still meet the requirements of a minimum 2' of freeboard for the Q₅₀ storm event and pass the Q₁₀₀ storm event. We believe removing the center pier, a single-span structure will provide a significant hydraulic improvement and reduce the potential for debris catchment. The beams will be placed on conventional non-integral abutments due to the approximately 45° skew between the roadway and waterway. The new structure will be founded on H-pile supported footings driven to rock. Properly sized stone fill will be placed in the stream bed according to the NYSDOT Standards. Other improvements include an increased span length to improve hydraulic opening, jointless deck details and an increased width to provide two 11'-0" travel lanes and two 5'-0" shoulders. Based on the existing span lengths and waterway opening, it is anticipated the new bridge will be a 100'-120' simple span maintaining the existing 45° skew. Construction is assumed to be performed under a complete closure with a signed detour route. There are overhead utilities in proximity to the bridge that will be relocated prior to construction commencing.

Anticipated Milestones (based on October 2024 State-Local Agreement & County Resolution)

- ***County and GPI Execute Contract:..... November 2024***
- ***Data Collection and Field Reconnaissance:..... April 2025***
- ***Develop Draft IPP/FDR:.....June 2025***
- ***Submit Final IPP/FDR:..... September 2025***
- ***Obtain Design Authorization..... November 2025***
- ***Final Plan Submission..... May 2026***
- ***Obtain Construction Authorization.....June 2026***
- ***Project Letting.....August 2026***
- ***Project Construction..... October 2026-November 2027***

Active on-site construction begins April 2027 with construction fabrication during Winter 2026-2027

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

Project Name: **South Albany Road (CR 53) over Onesquethaw Creek Bridge Replacement**
PIN: **1763.04**

Project Limits: **The limits of the project are within 50' both sides off the centerline of South Albany Road (CR 53), from 300' south of the existing south approach sleeper slab to 300' north of the existing north approach sleeper slab.**

Sponsor: **Albany County Department of Public Works**

Town: **Bethlehem**

County: **Albany**

The anticipated design costs (From BridgeNY 2023 Application):

\$550,000 Design, \$74,200 ROW

The anticipated construction costs (From BridgeNY 2023 Application):

\$4,054,800 Construction, \$371,000 Construction Inspection

1.02 Project Manager

The **Sponsor's** Project Manager for this project is **Lisa Ramundo, Commissioner**, who can be reached at **Lisa.Ramundo@albanycountyny.gov** or **(518) 765-2055**

All correspondence to the **Sponsor** should be addressed to **449 New Salem Road, Voorheesville, NY 12186**

The Project Manager should receive copies of all project correspondence directed other than to the **Sponsor**.

1.03 Project Classification

This project is assumed to be a Class II action under USDOT Regulations, 23 CFR 771. **Classification under the New York State Environmental Quality Review Act (SEQRA) Part 617, Title 6 of the Official Compilation of Codes, Rules, and Regulations of New York State (6 NYCRR Part 617) is assumed to be Type II.**

1.04 Categorization of Work

Project work is generally divided into the following sections:

Section 1	General
Section 2	Data Collection & Analysis
Section 3	Preliminary Design
Section 4	Environmental
Section 5	Right-of-Way
Section 6	Detailed Design
Section 7	Advertising, Bid Opening, and Award
Section 8	Construction Support
Section 9	Construction Inspection
Section 10	Estimating & Technical Assumptions

When specifically authorized in writing to begin work the **Consultant** will render all services and furnish all materials and equipment necessary to provide the **Sponsor** with reports, plans, estimates, and other data specifically described in Sections 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

1.05 Project Familiarization

The **Sponsor** will provide the **Consultant** with the following information:

- Transportation needs.
- Plans for future related transportation improvements or development in the area of the project.
- Traffic data.
- Accident records and history.
- Most recent bridge inspection and condition report, NYSDOT weighted-average bridge condition rating, FHWA sufficiency rating, and NYSDOT Bridge Management System rating.
- Record as-built plans.
- Pavement history.
- Other relevant documents pertaining to the project.

The **Consultant** will become familiar with the project before starting any work. This includes a thorough review of all supplied project information and a site visit to become familiar with field conditions.

The **Consultant** will review aspects of the required right of way and associated scope of work. The Consultant will inspect the properties and become familiar with the engineering features and gain information on the properties that will be impacted.

The **Consultant** will undertake an ongoing review and analysis of the right of way requirements for the project.

The review may include:

- Preliminary engineering design.
- Preliminary right of way plans and acquisition maps.
- County tax maps.
- Municipal zoning regulations and maps.
- Aerial photography.
- Other pertinent project information.

The analysis may include:

- The number of affected parcels.
- The zoning classification for each parcel.
- Estimated size and type (i.e., fee, permanent easement, temporary easement) of the acquisitions.
- Potential impacts on the remainder properties.

1.06 Meetings

The **Consultant** will prepare for and attend all meetings as directed by the **Sponsor's Project Manager**. Meetings may be held to:

- Present, discuss and receive direction on the progress and scheduling of work in this contract.
- Present, discuss, and receive direction on project specifics.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

- Discuss and resolve comments resulting from the review of project documents, advisory agency review, and coordination with other agencies.
- Discuss and resolve comments resulting from review of right of way project documents.
- Preview visual aids for public meetings.
- Manage subconsultants and subcontractors.

The **Consultant** will be responsible for the preparation of all meeting minutes; the minutes will be submitted to meeting attendees within one (1) week of the meeting date.

1.07 Cost and Progress Reporting

For the duration of this contract, the **Consultant** will prepare and submit to the **Sponsor** on a monthly basis a Progress Report in a format approved by the **Sponsor**. The Progress Report must contain the Cost Control Report. The beginning and ending dates defining the reporting period must correspond to the beginning and ending dates for billing periods so that this reporting process can also serve to explain billing charges. (In cases where all work under this contract is officially suspended by the **Sponsor**, this task will not be performed during the suspension period.)

1.08 Policy and Procedures

- The design of this project will be progressed in accordance with the current version of the NYSDOT Local Projects Manual (LPM) including the latest updates.
- If there are conflicts between local policies and procedures and those listed in the *LPM*, those listed in the *LPM* take precedence.
- This project will partially utilize federal funds. All right of way work will follow federal and state laws and regulations to successfully complete the right of way acquisition process in a fully compliant manner.

1.09 Standards & Specifications

The project will be designed and constructed in accordance with the current edition of NYSDOT Standard Specifications for Construction and Materials, including all applicable revisions.

1.10 Subconsultants

The **Consultant** will be responsible for:

- Coordinating and scheduling work, including work to be performed by subconsultants.
- Technical compatibility of a sub-consultant's work with the prime consultant's and other subconsultants' work.

1.11 Subcontractors

The procurement of subcontractors must be in accordance with the requirements set forth in the *NYSDOT LPM*.

The **Consultant** will hire the services of subcontractors to perform title searches and certifications, appraisal reports and appraisal report reviews, and perform the legal services as required to complete the right-of-way acquisition process.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

Section 2 - Data Collection and Analysis

2.01 Design Survey

A. Ground Survey

The **Consultant** will provide terrain data required for design by means of a topographic field survey. The topographic survey will locate all prominent features. Prominent features include, but are not limited to, above and below ground utilities, drainage and sanitary sewer systems (manholes, water-valves, invert elevations, pipe sizes, etc.) and ROW/Highway Boundary. Any below ground utilities will be located based upon field markings provided in advance by "Dig-Safely NY".

The survey limits shall extend 50' both sides off the centerline of South Albany Road (CR 53), with limits starting 300' south of the existing south approach sleeper slab and ending 300' north of the existing north approach sleeper slab.

All above ground features shall be located within the limits of survey. If utility poles are present within survey limits, the adjacent utility pole outside the survey limits must be located to show the orientation of the overhead wires.

All trees located within survey limits, with a diameter of 2" at breast height or larger shall be located and mapped. Surveyor shall confirm with the **Consultant** whether there are anticipated utility relocations. All trees 20 ft. either side of the existing overhead utility lines shall be located and mapped.

B. Stream Survey

The **Consultant** will perform field survey necessary to provide stream cross-sections for the hydraulic analysis of the Onesquethaw Creek. The location and width of the sections will be sufficient to satisfactorily perform a hydraulic analysis and shall be as follows:

- Upstream 500' plus assumed span length = 600' upstream
- Upstream 200' plus assumed span length = 300' upstream
- Upstream 100' plus assumed span length = 200' upstream
- Upstream of bridge = 100' upstream
- Upstream fascia of bridge = 10' upstream
- Bottom Chord Elevation of Upstream Fascia
- Bottom Chord Elevation of Downstream Fascia
- Downstream fascia of bridge = 10' downstream
- Downstream 100'
- Downstream 200'
- Downstream 300'
- Downstream 400'
- Downstream 500'
- Downstream 1000'
- Downstream 1500'

Additional Cross Sections required:

- At any location along the stream where the terrain changes radically, the channel width changes drastically, or where there is a sharp bend in the stream.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

The sections shall be stationed left to right looking downstream. Cross section lines shall be mapped on the survey, the data shall be plotted in graphical format, and all point data shall be reported and supplied in an ASCII text file. The text file shall provide the stations and elevations of each point per cross section. A PDF is not an acceptable file.

Sections should be at least 7 times the width of the low flow channel or 100' minimum, should be taken in a straight line (as much as possible). In areas with no distinct low flow channel, sections shall extend to 50' beyond edge of water surface.

C. Survey of Wetland and Water Boundaries

The **Consultant** will perform the field survey necessary to accurately locate delineated wetland and water boundaries. This survey should be performed as soon after delineation as possible.

D. Supplemental Survey

The **Consultant** will provide supplemental surveys when needed for design purposes and to keep the survey and mapping current.

E. Standards

The survey will be done in accordance with the standards set forth in the NYSDOT Land Surveying Standards and Procedures Manual and in accordance with local standards described in Section 10 of the SOS.

2.02 Design Mapping

The **Consultant** will provide the following design mapping:

- 1:40 scale mapping with 1-foot contour intervals.

The **Consultant** will provide supplemental mapping when needed for design purposes and keep the mapping current for the duration of the project.

2.03 Determination of Existing Conditions

The **Consultant** will determine, obtain, or provide all information needed to accurately describe in pertinent project documents the existing conditions within and adjacent to the project limits.

2.04 Accident Data and Analysis

The **Sponsor** will provide accident records for the last three years for roads within the project limits plus one-tenth of a mile immediately outside of the project limits. The **Consultant** will prepare collision diagrams and associated summary sheets and note any clusters of accidents or patterns implying inadequate geometrics, or other safety problems, within the project limits.

2.05 Traffic Counts – NOT IN CONTRACT

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

2.06 Capacity Analysis

The **Consultant** will develop project AADT and % Trucks as required for the IPP/FDR for:

- Existing traffic conditions
- Design year traffic (ETC+20, Year 2047)

2.07 Future Plans for Roadway and Coordination with Other Projects

The **Sponsor** will provide a brief written statement specifying whether or not plans exist to reconstruct or widen the highway segments immediately adjacent to the project within the next twenty years.

The **Sponsor** will determine the influence, if any, of other existing or proposed projects or proposed developments in the vicinity of this project (e.g., whether a nearby highway widening would influence this project's design traffic volumes). The **Sponsor** will provide all the necessary information pertaining to the other projects or developments.

2.08 Soil Investigations

The **Consultant** will determine the boring locations, diameters, and sampling intervals; designate soil boring numbers; stake out the locations; hire the **Subcontractor** to conduct the soil borings; document the resulting subsurface information; and survey and map the actual boring locations.

2.09 Hydraulic Analysis

The **Consultant** will perform a hydraulic analysis in accordance with the principles outlined in Section 3.4 of the NYSDOT Bridge Manual.

Section 3 - Preliminary Design

3.01 Design Criteria

The **Consultant** will identify the applicable design standards to be used for this project and will establish project-specific design criteria in accordance with the NYSDOT Project Development Manual.

The **Sponsor** will approve the selected project design criteria and will obtain NYSDOT concurrence (either by written submission or at a meeting). Based on the selected design criteria, the **Consultant** will identify all existing non-standard features that are within and immediately adjacent to the project limits. Non-standard features that correlate with a high accident rate will be noted.

3.02 Development of Alternatives

A. Selection of Design Alternative(s)

The **Consultant** will identify and make rudimentary evaluations of potential design alternative concepts that would meet the **Sponsor's** defined project objectives. These evaluations are not to be carried beyond the point of establishing the feasibility of each concept as a design alternative; only those significant environmental and geometric design constraints that bear on the feasibility should be identified.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

For each concept the **Consultant** will prepare rudimentary sketches of plan, profile, and typical section views which show:

- **On plan:** proposed centerlines; pavement edges; curve radii and termini; and existing ROW limits.
- **On profile:** theoretical grade lines; critical clearances; vertical curve data; grades; and touchdown points.
- **On typical section:** lane, median, and shoulder widths; ditches; gutters; curbs; and side slopes.
- **Where necessary:** important existing features.
- **Where pertaining to feasibility:** significant environmental and geometric design constraints, labeled as such.

These sketches will include only the minimum information needed to select design alternatives to be studied in further detail.

The **Consultant** will meet with the **Sponsor** to discuss the concepts, using the sketches as discussion aids to describe the relative order-of-magnitude costs, advantages, disadvantages, and problem areas of each. From these concepts, the **Sponsor** will select one or in some cases more, design alternative(s) for further development.

B. Detailed Evaluations of Alternative(s)

The **Consultant** will further evaluate each design alternative and the null alternative with specific engineering analyses and considerations. Analyses will be conceptual and limited to determining the relative suitability of each design alternative, and will include:

- Design geometry, including the identification and comparison of alignment constraints and (where applicable) justification for retaining nonstandard design features, per the NYSDOT Highway Design Manual.
- Environmental constraints and potential environmental impact mitigation measures (identified under Section 4 tasks).
- Traffic flow and safety considerations, including signs, signals, and level of service analysis for intersections.
- Pavement.
- Structures, including bridges, retaining walls, major culverts, and building alterations (limited to establishing basic concepts, accommodating clearances and streamflow, and estimating costs). Bridge investigative work (inspection, deck coring, etc.) is covered under Section 2.
- Drainage.
- Maintenance responsibility.
- Maintenance and protection of traffic during construction.
- Soil and foundation considerations.
- Utilities.
- Right-of-way acquisition requirements.
- Conceptual landscaping (performed by a Registered Landscape Architect).
- Accessibility for pedestrians, bicyclists and the disabled.
- Construction cost factors.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

The **Consultant** will prepare the following drawings for each design alternative analyzed:

- 1:250 plans showing (as a minimum) stationed centerlines; roadway geometrics; major drainage features; construction limits; cut and fill limits; and proposed right-of-way acquisition lines.
- Profiles, at a scale of 1:250 horizontal and 1:50 (maximum) vertical, showing (as a minimum) the vertical datum reference; significant elevations; existing ground line; theoretical grade line; grades; vertical curve data including sight distances; critical clearances at structures; centerline stations and equalities; construction limits; and superelevation data.
- Typical sections showing (as a minimum) lane, median, and shoulder widths; ditches; gutters; curbs; and side slopes.

3.03 Cost Estimates

The **Consultant** will develop, provide and maintain a cost estimate for each design alternative.

The **Consultant** will update the estimate periodically and as necessary to incorporate significant design changes.

3.04 Preparation of Draft Design Approval Document

For this project, the Design Approval Document (DAD) will be a **IPP/FDR** using the latest NYSDOT Report Shell available on the PDM website.

The **Sponsor** will make all determinations not specifically assigned to the **Consultant** which are needed to prepare the Draft DAD.

The **Consultant** will prepare a Draft DAD, which will include the results of analyses and/or studies performed in other Sections of this document. The DAD will be formatted as specified in the NYSDOT Project Development Manual (PDM).

The **Consultant** will submit **electronic-only** copies of the Draft DAD to the **Sponsor** for review. The **Sponsor** will review the Draft DAD and provide the **Consultant** with review comments. The **Consultant** will revise the Draft DAD to incorporate the comments.

The **Consultant** will revise the DAD to reflect NYSDOT and/or FHWA comments. The **Sponsor** will sign the cover sheet and submit 3 copies of the revised report to the NYSDOT for signature by the FHWA.

3.05 Advisory Agency Review

The **Consultant** will provide the **Sponsor** with **electronic-only** copies of the signed Draft DAD for distribution to advisory agencies.

The **Sponsor** will distribute the Draft DAD to the advisory agencies.

The **Consultant** will assist the **Sponsor** in evaluating and preparing individual responses to the review comments received.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

3.06 Public Information Meeting(s) and/or Public Hearing(s)

A Public Information Meeting(s)

The **Consultant** will assist the **Sponsor** at one public information meeting(s) with advisory agencies, local officials, and citizens, at which the **Consultant** will provide visual aids and present a technical discussion of the alternatives.

The **Sponsor** will arrange for the location of public information meeting(s). The **Consultant** will assist the **Sponsor** with appropriate notification.

B. Public Hearing(s) – **NOT IN CONTRACT**

3.07 Preparation of Final Design Approval Document (DAD)

The **Sponsor** will obtain all necessary approvals and concurrences and will publish all applicable legal notices.

The **Consultant** will prepare the Design Recommendation and will modify the DAD to include the Design Recommendation, re-title the DAD in accordance with the *PDM Manual*, and update existing conditions and costs as necessary. The **Consultant** will incorporate changes resulting from the advisory agency review and all public information meetings and public hearings.

The **Consultant** will submit **electronic-only** copies of the Final DAD to the **Sponsor** for review. The **Sponsor** will review the Final DAD and provide the **Consultant** with review comments. The **Consultant** will revise the Final DAD to incorporate the comments.

The **Sponsor** will submit **electronic-only** copies of the Final DAD to NYSDOT for a Final Environmental Determination. NYSDOT will make the determination or obtain FHWA's determination. If necessary, NYSDOT will transmit the Final DAD to FHWA for final review and concurrence. The **Consultant** will again revise the Final DAD to incorporate changes (assumed minor) resulting from the NYSDOT and/or FHWA review.

The **Sponsor** will grant or obtain from or through NYSDOT the Design Approval.

Section 4 – Environmental

The project spans the Onesquethaw Creek which according to the NYSDEC Environmental Resource Mapper (ERM) is a Class C(T) stream segment. The ERM screening showed there are no mapped NYS wetlands or Imperiled Mussels; however, there are potential Federal Riverine Wetlands present. There are no critical habitats in this location; however, the Federal E & T Species: Northern Long-eared Bat, Tricolored Bat, and Monarch Butterfly were identified on the USFWS IPaC Screening. NYSDEC E & T Species screening indicated protected bats possibly occurring in the project vicinity. There are no historic districts or historic properties in this location. All necessary permits from the appropriate agencies will be obtained for the project, including an NYSDEC Article 15 Permit and ACOE Nationwide Permit for work in the streambed and below OHW.

Limited Parts of Section 4 work will be performed by a DBE-listed Subconsultant under contract and the direction of the Consultant as noted.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

4.01 NEPA Classification

The **Consultant** will verify the anticipated NEPA Classification.

If the project is assumed to be a Class II action, then the **Consultant** will complete the NEPA Checklist, and forward the completed checklist to the **Sponsor** for forwarding to NYSDOT (with the Final DAD) for a final NEPA determination. The NEPA Checklist need not be completed for projects assumed to be Class I or III actions.

4.02 SEQRA Classification

It is assumed the project will be a Type II Action, and no further SEQRA processing will be required.

4.03 Smart Growth

The **Consultant** will complete the Smart Growth Checklist developed by NYSDOT to measure whether and to what extent a project conforms to the principles and objectives of Smart Growth and submit the same to the Sponsor for attestation. (New York State's Smart Growth policy was adopted by an amendment, to the State Highway Law and is intended to minimize the "unnecessary cost of sprawl development." It requires public infrastructure projects to undergo a consistency evaluation and attestation using established Smart Growth Infrastructure Criteria. The consistency evaluation is measured with the Smart Growth checklist which can be found in Chapter 7 Appendices on the LPM website.)

4.04 Screenings and Preliminary Investigations

The **Consultant** will screen and perform preliminary investigations to determine potential impacts resulting from the design alternative(s) for:

- General Ecology and Endangered Species
- Ground Water
- Surface Water
- State Jurisdictional Wetlands
- Federal Jurisdictional Wetlands
- Floodplains
- Navigable Waterways
- Historic Resources – Section 106
- Parks
- Hazardous Waste – *By DBE Subconsultant*
 - The **Subconsultant** will screen for hazardous wastes and contaminated materials within the project site and corridor (existing or proposed right of way, including easements). This preliminary screening is a general review to identify properties within the right of way or in close proximity that could contain or be a source of hazardous wastes or contaminated materials. The screening will include:
 - a review of existing information about past and current land use to identify possible sources of contamination within the project site and corridor, including:
 - NYSDEC records such as: Registry of Inactive Hazardous Waste Sites; Hazardous Substance Waste Disposal Site Study Reports; records of chemical or petroleum storage tanks; waste incident and chemical release reports.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

- County and municipal agency sources such as: local assessor and building permit records; title abstracts; local historical society records.
- Records of discussions with former employees of industries and other businesses located within or near the project area. a site visit to look for observable physical evidence of contamination (e.g., stained soil, seepage, and stressed or dead vegetation).
 - The **Subconsultant** will complete a Hazardous Waste/Contaminated Materials Screening Form and include it in the Appendix of the DAD.
- Asbestos – *By DBE Subconsultant*
 - The **Subconsultant** must maintain a valid asbestos handling license for the duration of this agreement and all **Subconsultant** personnel engaged in asbestos related work must be appropriately certified for the work being performed, as described in Section 56 2.2 of Industrial Code Rule 56 (12 NYCRR Part 56).
 - The **Subconsultant** will perform a preliminary investigation for the presence of asbestos containing materials (ACM's) within the project site and corridor, using the following screening techniques:
 - A review of available as built drawings, record plans, and other construction drawings of all structures and facilities in the project area, including but not limited to pavement, shoulders, subgrade, underground utilities, buildings, and bridges which could potentially require alterations or demolition as part of the project.
 - An on-site visual inspection of all structures and facilities.
- Noise
- Air Quality
- Energy
- Farmlands
- Invasive Species
- Visual Impacts
- Critical Environmental Areas
- Smart Growth
- Environmental Justice

Work will be performed, as summarized in the LPM and detailed in the PDM and the TEM, to determine whether further detailed analysis or study is required. The results of these screenings and preliminary investigations will be summarized in the appropriate sections of the DAD.

4.05 Detailed Studies and Analyses

Based on the work performed in Sections 4.03 and 4.04, the **Consultant** will determine whether detailed analysis or study is required. Prior to commencing such detailed study or analysis, the **Sponsor** must concur with the **Consultant's** determination. Detailed study or analysis work will be performed and documented as detailed in the LPM, as well as in the PDM and the TEM. The results of the detailed study or analysis will be summarized in the appropriate section of the DAD.

Detailed study or analysis will be done for:

- A. General Ecology and Endangered Species
- B. Surface Water
- C. State Wetlands
- D. Federal Wetlands

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

- E. Floodplains
- F. Historic Resources
- G. Parks - Section 4(f) and Section 6(f) Evaluations
- H. Hazardous Waste – *by DBE Subconsultant* - **NOT IN CONTRACT, would be added by Supplemental Agreement based on results of screening**
- I. Asbestos – *by DBE Subconsultant*
 - a. The **Subconsultant** will perform an on-site inspection of all structures, to identify approximate number and specific locations of suspected ACM's for sampling and testing.
 - b. The **Sponsor** will provide the letter of introduction necessary for the Consultant to enter premises for performing the on-site work.
 - c. The **Subconsultant** will prepare a technical memorandum reporting on the findings of this investigation, accompanied by an asbestos sample location plan.
- J. Farmlands
- K. Invasive Species
- L. Visual Impacts
- M. Critical Environmental Areas
- N. Smart Growth

4.06 Permits and Approvals

The **Consultant** will obtain all applicable permit(s) and certification(s), including but not necessarily limited to:

- FHWA Executive Order 11990 Wetlands Finding
- U.S. Army Corps of Engineers Section 10 Permit (Individual or Nationwide)
- U.S. Army Corps of Engineers Section 404 Permit (Individual or Nationwide)
- NYSDEC Section 401 Water Quality Certification (Individual or Blanket)
- NYSDEC Article 15 Protection of Water Permit
- NYSDEC State Pollution Discharge Elimination System (SPDES) Permit
- Migratory Bird Treaty Act

4.07 Public Hearing – NOT IN CONTRACT

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

Section 5 - Right-of-Way

The bridge is located adjacent to 4 private parcels (See attached project location map). Proof of ownership is available in the vicinity of the bridge. The bridge is on a county road with a three-rod (50-foot) wide highway boundary according to NYS Highway Law Section 189. Once the proposed roadway width and bridge limits are established in conjunction with the Highway Boundary it is anticipated up to four (4) Fee Acquisitions for abutment and wingwalls for construction may be possible.

Right-of-Way is divided into two components: Right-of-Way Incidentals and Right-of-Way Acquisition. Right-of-Way Incidentals is Sections 5.01 through 5.08 and is requested during preliminary design authorization with the State-Local Agreement. Right-of-Way Acquisition is Sections 5.09 through 5.11 and the **Sponsor** will request right of way acquisition phase authorization from the NYSDOT. The request will likely occur when the **Sponsor** requests design approval phase authorization. For locally funded projects, it is understood Right-of-Way Incidentals and Acquisition is authorized upon signed agreement between the **Sponsor** and **Consultant** which contains this Scope of Services.

Section 5A – Right-of-Way Incidentals

The **Sponsor** will request right of way incidental phase authorization from the NYSDOT. The request will be made when the **Sponsor** determines that property acquisitions are likely to occur or when the **Sponsor** requests preliminary engineering phase authorization.

The **Consultant** will not proceed with any activities in this section without written authorization from the **Sponsor**.

5.01 Abstract Request Map and/or Title Search

The **Consultant** will engage a qualified title company to complete title searches for properties to be acquired by the **Sponsor**. The title searches will examine public records to determine property title ownerships. The title searches may also ascertain if there are any claims or liens on the property.

A. Title Research

- a. For the acquisition of real property rights up to and including \$10,000, the **Consultant** will engage a qualified title company to perform a Last Owner Title Search. The Last Owner Title Search will be the last recorded deed that conveys a full fee interest to the last owner(s) of record. The Last Owner Title Search will not begin with a deed where the grantor and grantee are in some way related without full consideration having been paid.
- b. For the acquisition of real property rights estimated between \$10,001 and \$40,000, the **Consultant** will engage a qualified title company to perform a Twenty-Year Title Search. The Twenty-Year Title Search will start with a deed that conveys a complete and indefeasible title, which has been executed and of record at least twenty years prior to the title search date. The Twenty-Year Title Search will not begin with a deed where the grantor and grantee are in some way related without full consideration having been paid.
- c. For the acquisition of real property rights estimated at greater than \$40,000, the **Consultant** will engage a qualified title company to perform a Full Title Abstract. The Full Title Abstract will begin with a warranty deed that has been executed and of record at least forty years prior to the title search date.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

B. Title Review and Certification

The **Consultant** will engage an attorney licensed to practice in New York State. The attorney will have experience with real property title certification, the preparation of deeds, easements, and closing documents. The attorney will be knowledgeable about condemnation proceedings under NYS Eminent Domain Procedure Law. The attorney will issue Certificates of Title on all fee and permanent easement property acquisitions. Title insurance will be obtained as required.

- a. For the acquisition of real property rights up to and including \$10,000, the **Consultant's** attorney will review the Last Owner Title Searches and issue Limited Last Owner Title Certifications.
- b. For the acquisition of real property rights estimated between \$10,001 and \$40,000, the **Consultant's** attorney will review the Twenty-Year Title Searches and issue Limited Twenty-Year Title Certifications.
- c. For the acquisition of real property rights estimated at greater than \$40,000, the **Consultant's** attorney will review the Full Title Abstracts and issue Title Certifications.

The **Consultant** will submit the Title Certifications to the **Sponsor**.

- d. The **Sponsor** will provide the **Consultant**, on a per parcel basis, a list of the property owners and other compensable property interests. Because time is of the essence, the **Sponsor** will provide a written response to the **Consultant** within (ten) 10 days of the **Sponsor's** receipt of each title certification along with any title curative effort required.

5.02 Right of Way Survey

Right-of-Way Survey shall be conducted in accordance with the New York State Department of Transportation Right of Way Mapping Manual.

5.03 Right of Way Mapping

The **Consultant** will review the acquisition maps. The review will include the description and adequacy of the area and the property rights to be acquired all of which shall be in accordance with the New York State Department of Transportation Right of Way Mapping Manual.

5.04 Right of Way Plan

No services required.

5.05 Right of Way Cost Estimates

The **Consultant** will provide the **Sponsor** with a right of way cost estimate (e.g., 353c form) for both the incidental phase and the acquisition phase.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

5.06 Public Hearings / Meetings

Public Meetings are gatherings where the public receives information about the proposed project and provides input into the project process.

Public Hearings are meetings that comply with prescribed legal requirements for notification, hearing content, public comment and result in formal determinations and findings.

A. Public Meeting

No services required.

B. Eminent Domain Procedure Law Public Hearing

No services required.

C. Preliminary Property Owner Interview

The Consultant will make reasonable efforts to personally contact the property owners or their designated representatives. Property owners not able to be personally contacted may be contacted via telephone, email, and certified mail. The purposes of the preliminary contact include:

- Delivery of notices of intent to acquire, if necessary.
- Delivery of right of way acquisition brochures.
- Explanation of right of way process and construction plans.
- Advise of the right to accompany the appraiser.
- Determine the need for additional action regarding the right of way boundaries, errors, and omissions in plans and/or other documents.
- Prepare the Physical Inspection Report.

D. Title Review and Certification

The **Consultant** will engage an attorney licensed to practice in New York State. The attorney will have experience with real property title certification, the preparation of deeds, easements, and closing documents. The attorney will be knowledgeable about condemnation proceedings under NYS Eminent Domain Procedure Law. The attorney will issue Certificates of Title on all fee and permanent easement property acquisitions. Title insurance will be obtained as required.

- a. For the acquisition of real property rights up to and including \$10,000, the **Consultant's** attorney will review the Last Owner Title Searches and issue Limited Last Owner Title Certifications.
- b. For the acquisition of real property rights estimated between \$10,001 and \$40,000, the **Consultant's** attorney will review the Twenty-Year Title Searches and issue Limited Twenty-Year Title Certifications.
- c. For the acquisition of real property rights estimated at greater than \$40,000, the **Consultant's** attorney will review the Full Title Abstracts and issue Title Certifications. The **Consultant** will submit the Title Certifications to the **Sponsor**.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

- d. The **Sponsor** will provide the **Consultant**, on a per parcel basis, a list of the property owners and other compensable property interests. Because time is of the essence, the **Sponsor** will provide a written response to the **Consultant** within (ten) 10 days of the **Sponsor's** receipt of each title certification along with any title curative effort required.

5.07 Real Property Appraisals

The **Consultant** will engage a NYS Certified General Real Estate Appraiser, as defined by the New York State Department of State. The appraisals and appraisal reports will be completed in compliance with the Uniform Standards of Professional Appraisal Practice, Standard 1, Real Property Appraisal, Development, and Standard 2, Real Property Appraisal, Reporting.

The **Consultant's** appraiser will contact the property owners or their designated representatives in writing prior to completing the appraisal reports to extend the opportunity to accompany the appraiser during the property inspection.

A. Real Property Appraisal Reports

The **Consultant** will obtain separate appraisal reports for each property to determine the fair market value of the proposed acquisitions.

In addition to the Certification in the Uniform Standards of Professional Appraisal Practice, the **Consultant's** appraiser must certify the following:

- "The property owner or his/her designated representative was given an opportunity to accompany the appraiser during the property inspection"
- "Any decrease or increase in the fair market value of the real property prior to the date of valuation caused by the public improvement for which such property is acquired, or by the likelihood that the property would be acquired for such improvement, other than that due to physical deterioration within the reasonable control of the owner, will be disregarded in estimating the compensation for the property."

The **Consultant** will provide the **Sponsor** digital real property appraisal reports.

- a. For uncomplicated partial acquisitions, which are generally valued at \$50,000 and under, the **Consultant's** appraiser will prepare a Value Finding Appraisal (VFA). Sales grids are required for values at \$25,000 and above. The VFA will be either an Appraisal Report or Restricted Appraisal Report, as defined in the Uniform Standards of Professional Appraisal Practice, Standard 2, Real Property Appraisal, Reporting.
- b. For acquisitions of the entire real property interests, the **Consultant's** appraiser will prepare a Full Appraisal. The Full Appraisal will consist of an Appraisal Report, as defined in the Uniform Standards of Professional Appraisal Practice, Standard 2, Real Property Appraisal, Reporting.
- c. For partial acquisitions, which are expected to be valued in excess of \$50,000 and may have indirect damages to the remaining land but will not have indirect damages to improvements, the **Consultant's** appraiser will prepare a Before and After Appraisal (land only). The Before and After Appraisal (land only) will consist of an Appraisal Report, as defined in the Uniform Standards of Professional Appraisal Practice, Standard 2, Real Property Appraisal, Reporting.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

- d. For partial acquisitions when the value is expected to exceed \$50,000 and/or the appraisal problem is complicated, the **Consultant's** appraiser will prepare a Before and After Appraisal, which will consist of two opinions of value; 1. a value of the pre-acquisition scenario, and 2. a value of the post-acquisition scenario. The difference between the two scenarios is the value of the acquisition. The Before and After Appraisal will consist of an Appraisal Report, as defined in the Uniform Standards of Professional Appraisal Practice, Standard 2, Real Property Appraisal, Reporting.
- e. For acquisitions of real property when the value is expected to exceed \$300,000, the **Consultant** will cause the preparation of two independently developed appraisals and appraisal reports. The two independent reports will consist of Appraisal Reports, as defined in the Uniform Standards of Professional Appraisal Practice, Standard 2, Real Property Appraisal, Reporting.

5.08 Appraisal Review

The **Consultant** will engage a separate NYS Certified General Real Estate Appraiser, as defined by the New York State Department of State. The appraisal report reviews will be completed in compliance with the Uniform Standards of Professional Appraisal Practice, Standard 3, Appraisal Review, Development, and Standard 4, Appraisal Review, Reporting.

The **Consultant's** review appraiser will review the appraisal reports for compliance with state, federal, and USPAP standards. The review appraiser will:

- identify and correct mathematical calculations and typographical errors, if necessary,
- assure real property appraisal development and reporting meet the requirements of the appraisal subcontract and the Uniform Standards of Professional Appraisal Practice,
- examine and review the presentation of the market data and analysis in the appraisal report,
- state the basis for the fair market value conclusion
- provide value breakdowns adequate for the New York State Department of Transportation audit, Federal Highway Administration eligibility review, and negotiation,
- prepare a written report identifying the appraisal report reviewed, documenting the findings to be used by the acquiring agency for legally compensable damages,
- identify each appraisal report as recommended (as the basis for the establishment of the amount believed to be just compensation), accepted (meets all requirements, but not selected as recommended or approved), or not accepted,
- develop an amount to serve as the basis for the establishment of just compensation,

The **Consultant** will provide the **Sponsor** with the highest approved (as the basis for the establishment of the amount believed to be just compensation), appraised amount for each property rights acquisition.

The **Consultant** will provide the **Sponsor** digital real property appraisal report reviews.

Section 5B – Right-of-Way Acquisition

5.09 Negotiations and Acquisition of Property

The **Consultant** will not proceed with any activities in this section without written authorization from the **Sponsor**. The **Consultant** will discuss with the Sponsor the right of way acquisition procedures.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

A. Just Compensation

The **Sponsor** will establish just compensation for each property rights acquisition. In no event will the just compensation amount be less than the **Sponsor's** highest approved appraised amount. Because time is of the essence, the **Sponsor** will provide the just compensation amounts in writing to the **Consultant** within (ten) 10 days of the **Sponsor's** receipt of the **Consultant's** recommended just compensation amounts.

B. Written Offer

The **Consultant** will prepare a written offer for each real property acquisition. The amount of the offer will be the amount established by the **Sponsor** as just compensation. The written offer will include the following:

- A statement of the just compensation amount
- Separate indications of the compensation offered for the property acquired and for damages to the remaining property, if applicable (when only a part of the property is acquired)
- A summary statement, which will include:
 - the basis for the just compensation amount.
 - the identification of the location and description of the real property.
 - the interest in the real property being acquired.
 - where appropriate, a statement that identifies any separately held ownership interest in the property (i.e., tenant-owned improvements) and that the interest is not included in the offer.
- Additional information the **Consultant** and/or the **Sponsor** deems appropriate or required.

C. Deliver Offer

The **Consultant** will deliver the written offer, plats, unsigned agreements, and releases to the property owners or their designated representatives.

The **Consultant** will discuss with the property owners or their designated representatives the written offer, plats, and unsigned agreements.

The **Consultant** will conduct additional negotiation sessions with the property owners or their designated representatives in an attempt to negotiate a settlement.

The **Consultant** will make reasonable efforts to contact each property owner or their designated representative. For absentee owners and other unsuccessful personal contacts, the **Consultant** may make contact by certified mail.

The **Consultant** will maintain a detailed diary of each substantial property owner contact. The diary entries will be on a per parcel basis:

- Substantial contacts
- Efforts to achieve amicable settlements
- Responsiveness to the property owner's counterproposals
- Suggestions for changes in plans

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

The records should include the principal activities undertaken by the Consultant, such as:

- Parties contacted
- Date and location of contact
- Offers made [dollar amounts]
- Counteroffers received
- Property owner's comments

D. Purchase Agreements

The **Consultant** will submit real property acquisition documents to the **Sponsor** for:

- Approval of negotiated settlements
- Action on proposed administrative settlements
- Referral for initiation of eminent domain proceedings

Because time is of the essence, the **Sponsor** will provide a written response to the **Consultant** within (ten) 10 days of the **Sponsor's** receipt of the acquisition documents from the **Consultant**.

E. Revisions to Just Compensation

The **Consultant** will consider any presentations made by the property owner which might affect the value of the acquisition. The **Consultant** may make recommendations to the **Sponsor** to adjust the written offer. The **Sponsor** may revise the just compensation based on the information provided by the property owner.

The **Consultant** will document the justification for revising the just compensation.

The **Consultant** will prepare and promptly deliver a revised written offer to the property owner.

F. Administrative Settlements

The **Consultant** and/or the **Sponsor** may recommend administrative settlements. Administrative settlements are settlements in excess of the **Sponsor's** just compensation determination.

The **Sponsor** has final approval to authorize administrative settlements.

The **Consultant** will provide the written justification for the administrative settlement. The written justification will include information necessary to support the settlement, such as:

- The approved offer of just compensation
- A summary of the acquisition agent's record of negotiations
- Reference to all appraisal reports (including the property owner's appraisal report)
- Recent court awards and their relationship to the proposed administrative settlement
- A discussion of diverse valuation issues (e.g., probable range of testimony as to fair market value by both parties)
- The trial cost estimate
- The opinion of legal counsel

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

- The identification of the responsible agency official who has the authority to approve administrative settlements
- The recommendation and signatures of all individuals proposing the settlement

The **Consultant** will prepare and promptly deliver a revised written offer to the property owner.

G. Transfer of Title

The **Sponsor** will not require any property owner to surrender possession of the real property before the **Sponsor** pays the agreed purchase price.

- a. The **Consultant** will conduct necessary title curative work. For real property acquisitions valued at \$10,000 or less, the **Consultant** will clear only the fee title holder's interest. For real property valued at greater than \$10,000, the **Consultant** will clear all property interests. Title curative work may include partial mortgage releases, lien subordination agreements, and lien satisfactions.
- b. The **Consultant** will prorate real property taxes for each fee acquisition.
- c. The **Consultant** will prepare closing documents for each acquisition. The closing documents may include an instrument, real estate transfer tax forms, W-9 tax form, releases or any document deemed necessary by the **Sponsor** and/or the **Sponsor's** attorney.
- d. The **Consultant** will, if required, deliver the title instruments to the title attorney subcontracted by the **Consultant** for review and approval.
- e. The **Consultant** will schedule and hold the closings. Because time is of the essence, the **Sponsor** will pay the just compensation upon receipt of the fully executed documents. The transfer of title to the **Sponsor** may require the payment of incidental expenses incurred by property owners, the **Sponsor**, or the **Consultant**. The **Sponsor** will pay appropriate reimbursable expenses to the property owners and/or the **Consultant**.
- f. The **Consultant** will promptly file deeds or conveyance documents in the County Clerk's Office.

H. Right-of-Way Certification

The **Consultant** will prepare, and the **Sponsor** will sign the Right of Way Certificate on forms prescribed by the New York State Department of Transportation.

5.10 Relocation Assistance

No services required.

5.11 Property Management

No services required.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

Section 6 - Detailed Design

6.01 Preliminary Bridge Plans

A. New and Replacement Bridges

The **Consultant** will prepare and submit to the **Sponsor** a Preliminary Bridge Plan in accordance with the NYSDOT Bridge Manual and the **Consultant** will prepare and submit to the **Sponsor** a Structure Justification Report. The format and content of the Structure Justification Report will be as outlined in the NYSDOT Bridge Manual.

B. Bridge Rehabilitations - NONE

C. Selected Structural Treatment

The **Consultant** will modify the Structure Justification Report, Preliminary Bridge Plan to incorporate **Sponsor** review comments. The **Sponsor** will approve the selected structural treatment and will obtain NYSDOT concurrence (either by a written submission or at a meeting).

6.02 Advance Detail Plans (ADP)

The **Consultant** will develop the approved design alternative to the ADP stage. At this stage, all plans, specifications, estimates and other associated materials will be **90%** complete.

As part of this task, the **Consultant** will prepare templated cross-sections at **25'** intervals.

Advance Detail Plans will be in accordance with Chapter 21 of the NYSDOT Highway Design Manual.

The **Consultant** will prepare and submit **electronic** copies of the ADP's to the **Sponsor** for review. The **Consultant** will modify the design to reflect the review of the ADP package.

6.03 Contract Documents

The **Consultant** will prepare a complete package of bid-ready contract documents. The package will include:

- Instructions to bidders.
- Bid documents.
- Contract language, including applicable federal provisions and prevailing wage rates.
- Special notes.
- Specifications.
- Plans.
- A list of supplemental information available to bidders (i.e., subsurface exploration logs, record as-built plans, etc.).
- Other pertinent information.

The **Consultant** will submit the contract documents to the **Sponsor** for approval. Upon approval, the **Sponsor** will submit **electronic** copies of the contract bid documents to NYSDOT as described in the *LPM*.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

6.04 Cost Estimate

The **Consultant** will develop, provide, and maintain the construction cost estimate for the project. The **Consultant** will update the estimate periodically and as necessary to incorporate significant design changes and will develop and provide the final Engineer's Estimate, including all quantity computations.

6.05 Utilities

The **Consultant** will coordinate with affected utility companies to ensure the timely relocation of utility poles and appurtenances. The **Consultant** will assist the **Sponsor** in preparing any necessary agreements with utility companies. Any agreements containing reimbursable relocations must be approved and signed by the Design Support Section of the NYSDOT Design Quality Assurance Bureau (see LPM Appendix 10-8).

6.06 Railroads – NOT IN CONTRACT

The **Consultant** will coordinate with affected railroads and will assist the **Sponsor** in preparing all necessary Railroad Agreements.

6.07 Bridge Inventory and Load Rating Forms

The **Consultant** will complete and provide the **Sponsor** and NYSDOT with:

- Inventory Update forms, per the current NYSDOT Bridge Inventory Manual for Bridge Inventory and Inspection System, reflecting all proposed physical changes resulting from construction.
- Level 1 Load Rating by the conclusion of the Construction phase.

6.08 Information Transmittal

Upon completion of the contract documents, the **Consultant** will transmit to the **Sponsor** all project information, including electronic files. The electronic information will be in the format requested by the **Sponsor**.

Section 7 - Advertisement, Bid Opening and Award

7.01 Advertisement

The **Consultant** will prepare the advertisement for bids to be placed in the NYS Contract Reporter and any other newspaper or publication identified by the **Sponsor**. The **Consultant** will submit the ad(s) to the **Sponsor** for review and will revise the ad(s) to reflect comments generated by that review. Upon approval by the **Sponsor**, the **Consultant** will place the advertisements.

Advertisements must not be placed until authorization is granted to the **Sponsor** by the NYSDOT.

7.02 Bid Opening (Letting)

The **Sponsor** will hold the public bid opening.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

7.03 Award

The **Consultant** will analyze the bid results. The analysis will include:

- Verifying the low bidder.
- Ensuring receipt of all required bid documents (non-collusive bid certification, debarment history certification, etc.).
- Breaking the low bid into fiscal shares, if necessary.
- Determining whether the low bid is unbalanced.

- For pay items bid more than 25% over the Engineer's Estimate:
 - Checking accuracy of quantity calculations.
 - Determining the appropriateness of price bid for work in the item.
 - Determining whether the low bidder is qualified to perform the work.

The **Consultant** will assist the **Sponsor** in preparing and compiling the package of information to be transmitted to the NYSDOT.

The **Sponsor** will award the contract and will transmit the award package to the NYSDOT as described in the Procedures for Locally Administered Federal Aid Projects (LPM).

Section 8 - Construction Support

8.01 Construction Support

The **Consultant** will provide design response to unanticipated or changed field conditions, analyze and participate in proposed design changes, and interpret design plans.

Work under this section will always be in response to a specific assignment from the **Sponsor** under one of the tasks below:

- In response to unanticipated and/or varying field conditions or changes in construction procedures, the **Consultant** will conduct on-site field reconnaissance and, where required, prepare Field Change Sheets modifying pertinent contract plan sheets.
- The **Consultant** will analyze and make recommendations on the implementation of changes proposed by the **Sponsor** or the construction contractor. This includes the Traffic Control Plan.
- The **Consultant** will interpret and clarify design concepts, plans and specifications.
- The **Consultant** will review and approve shop drawings for construction.

Not reimbursable under this Section are:

- Corrections of design errors and omissions
- Straightforward interpretations of plans and designer intentions

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

Section 9 - Construction Inspection

9.01 Equipment

NOTE: Office, field and field laboratory supplies and equipment to be supplied by the Consultant should be listed in this section or in the Technical Assumptions Section.

The **Contractor** will furnish office space and basic office furnishings for the **Consultant**, as part of the contract.

The **Consultant** will furnish all other office, field and field laboratory supplies and equipment required to properly perform the inspection services listed below.

9.02 Inspection

The **Consultant** must provide, to the satisfaction of the **Sponsor**, contract administration and construction inspection services from such time as directed to proceed until the completion of the final agreement and issuance of final payment for the contract. The **Consultant** must assume responsibility, as appropriate, for the administration of the contract including maintaining complete project records, processing payments, performing detailed inspection work and on-site field tests of all materials and items of work incorporated into the contract consistent with federal policies and the specifications and plans applicable to the project.

9.03 Municipal Project Manager

This Project Manager will be the **Municipality's** official representative on the contract and the **Consultant** must report to and be directly responsible to said Project Manager.

9.04 Ethics

Prior to the start of work, the **Consultant** will submit to the **Sponsor** a statement regarding conflicts of interest.

9.05 Health and Safety Requirements

The **Consultant** must provide all necessary health and safety related training, supervision, equipment and programs for their inspection staff assigned to the project.

9.06 Staff Qualifications and Training

The **Consultant** must provide sufficient trained personnel to adequately and competently perform the requirements of this agreement. The **Consultant** will recommend inspectors to the Sponsor for approval prior to their assignment to the project. Resumes, proof of required certification and the proposed initial salary shall be furnished. The Sponsor may want to interview before approval and reserves the right to disapprove any application. The employment of all consultant personnel is conditional, subject to satisfactory performance, as determined by the Sponsor.

For all construction inspection agreements, it is mandatory that all technician personnel be identified by the National Institute for Certification in Engineering Technologies (NICET) certification levels in the staffing tables. In addition, all Transportation Engineering Technicians-Construction assigned to the project at and above level III, Engineering and Senior Engineering Technicians, must be certified by

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

NICET. Transportation Engineering Technicians-Construction below level III assigned to the project must have successfully completed the General Work Element requirements and at least those Special Work Elements which apply to their specific project assignments at the level of their rating.

In lieu of the NICET certification requirements, the Sponsor may accept evidence that the person proposed for employment (1) has satisfactorily performed similar duties as a former NYS Department of Transportation (NYSDOT) employee or (2) has a combination of education and appropriate experience commensurate with the scope of the position in question.

Technicians employed by the **consultant** that perform field inspection of Portland cement concrete shall possess a current certification from the American Concrete Institute (ACI) as a Concrete field-testing Technician-Grade 1, or have completed all of the following NICET work elements, which are equivalent to the ACI certification:

NICET LEVEL	NICET CODE	NICET WORK ELEMENT
I	82019	Sample Fresh Concrete
II	84068	Air Content, Pressure
II	84069	Air Content, Gravimetric
II	84070	Air Content, Volumetric
II	84076	Field Prepared Test Specimens

Inspectors designated as the responsible person in charge of work zone traffic control must have sufficient classroom training, or a combination of classroom training and experience, to develop needed knowledge and skills. Acceptable training should consist of a formal course presented by a recognized training program which includes at least two full days of classroom training. A minimum of two days classroom training is normally required, although one day of classroom training plus responsible experience may be considered. Recognized training providers include American Traffic Safety Services Association (ATSSA), National Safety Council (NSC), Federal Highway Administration's National Highway Institute (FHWA-NHI), and accredited colleges and universities with advanced degree programs in Civil / Transportation / Traffic Engineering. Former DOT employees may be considered on the basis of at least one day of formal classroom training combined with responsible M&PT experience.

Technicians employed by the **consultant** who perform field inspection of geotechnical construction (earthwork), including, but not limited to embankment construction, subbase placement, structure and culvert backfill placement, and testing of earthwork items for in-place density and/or gradation, shall possess a current certification and/or proof of training from the following organization: North East Transportation Technician Certification Program (NETTCP) Soils and Aggregate Inspector Certification. An alternative to the certification/training listed above would be proof of previous training (within the past 5 years) of the NYSDOT Earthwork Inspectors School, given by the Department's Geotechnical Engineering Bureau.

9.07 Scope of Services/Performance Requirements

A. Quality

The Consultant will enforce the specifications and identify in a timely manner to the **Sponsor** local conditions, methods of construction, errors on the plans or defects in the work or materials which would conflict with the quality of work, and conflict with the successful completion of the project.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

B. Record Keeping & Payments to the Contractor

- 1) All records must be kept in accordance with the directions of the **Sponsor and must be consistent with the requirements of the NYSDOT Manual of Uniform Recordkeeping (MURK)**. The **Consultant** must take all measurements and collect all other pertinent information necessary to prepare daily inspection reports, monthly and final estimates, survey notes, record plans showing all changes from contract plans, photographs of various phases of construction, and other pertinent data, records and reports for proper completion of records of the contract.
- 2) Any record plans, engineering data, survey notes or other data provided by the Sponsor should be returned to the Sponsor at the completion of the contract. Original tracings of record plans, maps, engineering data, the final estimate and any other engineering data produced by the Consultant will bear the endorsement of the Consultant. Any documents that require an appropriate review and approval of a Professional Engineer (P.E.) licensed and registered to practice in New York State must be signed by the P.E.
- 3) Unless otherwise modified by this agreement, the **Sponsor** will check, and when **acceptable**, approve all structural **shop drawings**.
- 4) The **Consultant** must submit the final estimate of the contract to the **Sponsor** within four (4) weeks after the date of acceptance of the contract. All **project records** must be cataloged, indexed, **packaged**, and delivered to the **Sponsor** within five (5) weeks after the date of the acceptance of the contract.

C. Health & Safety/Work Zone Traffic Control

- 1) The **Consultant** must ensure that all inspection staff assigned to the project are knowledgeable concerning the health and safety requirements of the contract per **Sponsor** policy, procedures and specifications and adhere to all standards. Individual inspectors must be instructed relative to the safety concerns for construction operations they are assigned to inspect to protect their personal safety and to ensure they are prepared to recognize and address any contractor oversight or disregard of project safety requirements.
- 2) The **Consultant** is responsible for monitoring the Contractor's and Subcontractor's efforts to maintain traffic and protect the public from damage to person and property within the limits of, and for the duration of the contract.

D. Monitoring Equal Opportunity/Labor Requirements

The **Consultant** must assign to one individual the responsibility of monitoring the Contractor's adherence to Equal Opportunity and Labor requirements contained in the contract. When monitoring the Contractor's Equal Opportunity and Labor compliance, the Consultant, will utilize the guidance contained in the contract, standard specifications, and the **Sponsor's** policies. The Consultant is also to input required disadvantaged business enterprise (DBE) information into the NYSDOT maintained Equitable Business Opportunities (EBO) database.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

Section 10 - Estimating and Technical Assumptions

10.01 Estimating Assumptions

The following assumptions have been made for estimating purposes:

- Section 1 Estimate **32** meetings during the life of this agreement.
- Estimate **40** cost and progress reporting periods will occur during the life of this agreement.
- Section 2 Assume that GPS methods and equipment will be used to establish local control points.
 Estimate **0** accidents will require analysis.
- Estimate **0** capacity analyses will be required.
- Estimate **2** soil borings will be taken.
- Section 3 Estimate **1** concepts will be evaluated.
- Estimate **1** design alternative(s) will be analyzed in addition to the null alternative.
- Estimate **1** cost estimate(s) plus **1** update will be required.
- Estimate **0** bridges will be rehabilitated.
- Section 4 Estimate **2** permits will be required.
- Estimate **does not include fee for Mussel Survey**. If a Mussel Survey is required, the Mussel Survey work will be via Supplemental Agreement.
- Wetlands and Stream Mitigation Design will not be required.
- A Mesoscale Air Quality Analysis will not be required.
- Section 5 Estimate **4** Last Owner Title Searches (\$10,000 or less)
 Estimate **0** Twenty-Year Title Searches (\$10,001 - \$40,000)
 Estimate **0** Full Title Abstracts (greater than \$40,000)
 Estimate **4** title reviews and certifications (\$10,000 or less)
 Estimate **0** title reviews and certifications (\$10,001 - \$40,000)
 Estimate **0** title reviews and certifications (greater than \$40,000)
 Estimate **4** acquisition map reviews
 Estimate **4** right of way cost estimates
 Estimate **0** public meetings

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

Estimate **0** public hearings
Estimate **4** preliminary property owner interviews
Estimate **4** Value Finding Appraisal Reports
Estimate **0** Full Appraisal Reports
Estimate **0** Before and After (land only) Appraisal Reports
Estimate **0** Before and After Appraisal Reports
Estimate **0** two independent Appraisal Reports
Estimate **4** Appraisal Report reviews
Estimate **1** negotiation contacts per property owner
Estimate **0** revisions to just compensation
Estimate **0** administrative settlements
Estimate **0** fee title holder's title clearance
Estimate **0** other title curative actions
Estimate **4** tax prorations
Estimate **4** closing packages
Estimate **4** title closings and county clerk document filings
Estimate **1** statement(s) that the right of way has been acquired
Estimate **1** cost for condemnation

Section 6 Detailed Design or Final Design

Final Design will include but not be limited to:

- Development of highway and bridge plans.
- Highway design.
- Preparation of right-of-way plans and acquisition maps.
- Development and design for public utilities.
- Maintenance and protection of traffic during construction.
- Preparation and submission of final Plans, Specifications, and Estimate (PS&E) for the project.

Estimate **1** cost estimate(s) plus **1** update will be required.

Estimate **1** bridge will be replaced and **0** will be rehabilitated.

Estimate **3** utility companies and **0** railroad agencies will be affected.

**SOUTH ALBANY ROAD (CR 53) OVER ONESQUETHAW CREEK BRIDGE REPLACEMENT
TOWN OF BETHLEHEM, ALBANY COUNTY, NY
PIN 1763.04, BIN 3301020
GPI Project No. ALB-24001 .00**

Section 7 Estimate **electronic-only** copies of the final contract bid documents will be needed for prospective bidders. Estimate advertisements will be placed in **1** publication(s) in addition to the NYS Contract Reporter.

Bid Phase Support will include:

- Providing assistance in construction bid proceedings.
- Analysis of bids.

Section 8 Construction Support will include but not be limited to:

- Providing technical support during construction on questions relating to the design.
- Review of shop drawings.
- Preparation of as-built plans.

Estimate **10** requests that require effort will be made during the construction phase of the project.

Section 9 Construction Inspection will include but not be limited to:

- **One (1) NICET IV Resident Engineer will be on-site full-time during one full construction season assumed as a Six (6) Month active construction and One (1) Month closeout period**
- Providing on-site construction inspection and oversight to ensure the quality of construction and conformity with the final plans and specifications.
- Preparation of as-built plans.

Estimate construction will begin on **April 2027** and will be completed by **November 2027**.