

PIN 8780.41
CROTON-ON-HUDSON PARKING FACILITY AND BICYCLE ENHANCEMENTS
VILLAGE OF CROTON-ON-HUDSON
Westchester County

Supplemental Agreement No. 3

Executive Summary

The proposed project includes the construction of pedestrian and bicyclist enhancements along Croton Point Avenue and S. Riverside Avenue, drainage improvements, traffic signal installation, capacity improvements at the Route 9 ramps, and other miscellaneous work. The project limits are along S. Riverside Avenue from its intersection with Benedict Boulevard to Croton Point Avenue and along Croton Point Avenue from its intersection with S. Riverside Avenue to Veterans Plaza including the Route 9 northbound and southbound ramps. The length of the project along Croton Point Avenue is approximately 1,600 ft.

Three new traffic signals with pedestrian accommodations at Veterans Plaza, the Route 9 northbound ramps, and the Route 9 southbound ramps are proposed to be coordinated with the existing signals at the S. Riverside Avenue intersections with Benedict Boulevard and Croton Point Avenue. The Route 9 northbound on-ramp at Croton Point Avenue is proposed to be realigned and the Route 9 southbound off-ramp widened to accommodate separate turn lanes.

This Scope of Services includes previously completed out of scope work items and extra work items identified through approval of the design approval document that were not contained in the Original Agreement and subsequent Supplemental Agreements.

This work involves the scope sections as detailed under Section 1.04 Categorization of Work. The associated work is more fully described in the following sections.

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Scope of Services
CHA Consulting, Inc.

Section 1 - General

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 – Not Included
Section 8	Construction Support - Not Included
Section 9	Construction Inspection - Not Included

When specifically authorized in writing to begin work the **Consultant** will render all services and furnish all materials and equipment necessary to provide the **Municipality** with reports, plans, estimates, and other data specifically described in Sections 1 through 6.

1.06 Meetings

The **Consultant** will prepare for and attend all meetings as directed by the **Municipality's** Contract Administrator.

- present, discuss, and receive direction on the progress and scheduling of work in this agreement.
- present, discuss, and receive direction on project specifics.
- discuss and resolve comments resulting from review of project documents, advisory agency review, and coordination with other agencies.
- preview visual aids for public meetings.
- manage subconsultants and/or 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 agreement, the **Consultant** will prepare and submit to the **Municipality** on a monthly basis a Cost Control Report, a Progress Report, and a Project Schedule in a format approved by the **Municipality**. The beginning and ending dates defining the reporting period will 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 **Municipality**, this task will not be performed during the suspension period.)

1.10 Subconsultants

The **Consultant** will be responsible for coordinating and scheduling work, including work to be performed by subconsultants.

Section 2 - Data Collection & Analysis

2.04 Accident Data and Analysis

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

The Consultant will provide traffic count data for existing conditions, growth factors for forecasting, and forecast data, including:

Existing Conditions & Forecast Data: AADT
DHV (2-way)
DDHV
% Trucks
Turning Volumes

Year: Present
Estimated Time of Construction Completion (ETC)
ETC + 10 years
ETC + 20 years (volume projections for air analysis only)

The Consultant will forecast and provide design year volumes according to the policy in Appendix D of the NYSDOT Scoping Procedure Manual, and will explain the basis for the design year selection.

The Consultant will provide flow diagrams for appropriate peak periods (e.g., am, noon, pm) showing existing and design year volumes on the mainline, on each approach of all intersections, and at major traffic generators.

The **Consultant** will perform a Traffic Signal Warrant Study and submit to NYSDOT based on 100% and 70% warrants to justify that the intersections meet the criteria.

2.06 Capacity Analysis

The **Consultant** will perform capacity analyses using the latest version of the Highway Capacity Manual at mainline and intersection locations within the project limits to determine:

- existing level of service.

- design year level of service.
- estimates of the duration of the poor level of service where it occurs
- during commuter travel periods.

The additional capacity analyses will be performed for the Existing and No-Build conditions. Analysis will be performed for:

- unsignalized traffic control
- signalized traffic control as a means to replicate operations with the use of traffic personnel.

The SimTraffic simulations will be performed and submitted to the NYSDOT for consensus on the installation of traffic signals at the Croton Point Avenue intersections with Veterans Plaza, US Route 9 southbound on/off ramps and the US Route 9 northbound on/off ramps.

Section 3 - Preliminary Design

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 **Municipality'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.

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 **Municipality** 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 **Municipality** 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 Chapter 2, Section 2.8 of 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, and major culverts (limited to establishing basic concepts, accommodating clearances and stream flow, and estimating costs).
- drainage.
- maintenance responsibility.
- maintenance and protection of traffic during construction.
- soil and foundation considerations.
- utilities.
- right-of-way acquisition requirements.
- conceptual landscaping
- accessibility for pedestrians, bicyclists and the disabled.

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

- 1" = 20' 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" = 20' horizontal and 1" = 4' (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.

3.04 Preparation of Draft Design Approval Document

For this project the Design Approval Document (DAD) will be a Design Report.

The **Municipality** 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 Appendix B of the NYSDOT Design Procedure Manual.

The **Consultant** will submit 2 copies of the Draft DAD to the **Municipality** for review. The **Municipality** will review the Draft DAD and provide the Consultant with review comments.

The **Consultant** will revise the Draft DAD to incorporate the comments.

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

A. Public Information Meeting(s)

The **Consultant** will assist the **Municipality** at 1 public information meeting with advisory agencies, local officials, and citizens, at which the Consultant will provide visual aids and present a technical discussion of the alternatives.

The **Municipality** will arrange for the location of public information meeting. The **Consultant** will assist the **Municipality** with appropriate notification.

3.07 Preparation of Final Design Approval Document (DAD)

The **Municipality** 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 Design Procedure 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 2 copies of the Final DAD to the **Municipality** for review. The **Municipality** will review the Final DAD and provide the **Consultant** with review comments. The **Consultant** will revise the Final DAD to incorporate the comments.

The **Municipality** will submit the Final DAD to NYSDOT for a Final Environmental Determination. The 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 **Municipality** will grant or obtain, from or through NYSDOT, Design Approval.

Section 4 - Environmental

4.05 Permits and Approvals

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

- NYSDOT Highway Work Permit

Section 5 - Right-of-Way

5.07 Property Appraisals *(to be performed by sub-consultant R.K. Hite & Co., Inc.)*

For each parcel requiring the acquisition of property rights, the **Sub-Consultant** will conduct a real property appraisal and prepare a real property appraisal report to determine the fair market value of the proposed acquisition.

The **Sub-Consultant** will contact the owner or his/her designated representative in writing prior to completing the appraisal to extend the opportunity to accompany the appraiser during the property inspection.

5.071 Preliminary Property Owner Interview

The **Sub-Consultant** will conduct 1 preliminary interview with each property owner(s) or the property owner's designated representative. Other than absentee property owners, a reasonable attempt will be made to conduct the preliminary contact on a face-to-face basis.

Absentee property owners and those local property owners not able to be interviewed face-to-face may be contacted via telephone and certified mail. The purpose of preliminary contact includes:

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

5.072 Real Property Appraisal Reports

The **Sub-Consultant** will subcontract the services of an appraiser to complete real property appraisals and appraisal reports required for each parcel or ownership indicated on the Right-of-Way Plan.

The **Sub-Consultant** will insure that all real property appraisals and real property appraisal reports are prepared by qualified appraisers who are, as defined by the New York State Department of State, Certified General Real Estate Appraisers.

The **Sub-Consultant** will insure that all real property appraisals and real estate appraisal reports conform to the Uniform Standards of Professional Appraisal Practice, Standard 1, Real Property Appraisal Development, and Standard 2, Real Property Appraisal, Reporting.

The Uniform Standards of Professional Appraisal Practice contains a Certification of Appraiser. In addition, the Sub-Consultant must certify to 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 **Sub-Consultant** will provide 1 original bound real property appraisal report with photo copies of photos for each acquisition.

- 5.0721 For uncomplicated acquisitions of real property rights valued at less than \$15,000, the **Sub-Consultant** will prepare a Limited Appraisal Report (LAR). The LAR will consist of a limited appraisal with a restricted use appraisal report as provided for in the Uniform Standards of Professional Appraisal Practice, Standard 1, Real Property Appraisal Development, and Standard 2, Real Property Appraisal.
- 5.0722 For acquisitions of entire real property interests, the **Sub-Consultant** will prepare a Full Take Appraisal Report. The Full Take Appraisal Report will consist of a complete appraisal with a summary appraisal report as provided for in the Uniform Standards of Professional Appraisal Practice, Standard 1, Real Property Appraisal Development, and Standard 2, Real Property Appraisal, Reporting.
- 5.0723 For partial acquisition of real property rights valued at \$15,000 or more with no indirect damages to improvements, the **Sub-Consultant** will prepare a Before and After (land only) Appraisal Report. The land only Before and After Appraisal Report will consist of a limited appraisal with a summary or restricted use appraisal report as provided for in the Uniform Standards of Professional Appraisal Practice, Standard 1, Real Property Appraisal Development, and Standard 2, Real Property Appraisal, Reporting.
- 5.0724 For partial acquisition of real property rights valued at \$15,000 or more with indirect damages to improvements, the **Sub-Consultant** will prepare a Before and After Appraisal Report. The Before and After Appraisal Report will consist of a complete appraisal with a summary appraisal report as provided for in the Uniform Standards of Professional Appraisal Practice, Standard 1, Real Property Appraisal Development, and Standard 2, Real Property Appraisal, Reporting.
- 5.0725 For acquisitions of real property rights valued over \$300,000, the **Sub-Consultant** will prepare two independent appraisal reports. The appraisal report will consist of a complete appraisal with summary appraisal reports as provided for in the Uniform Standards of Professional Appraisal Practice, Standard 1, Real Property Appraisal Development, and Standard 2, Real Property Appraisal, Reporting.

Section 6 - Detailed Design

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 50' intervals.

Advance Detail Plans may include, but are not limited to, the following contract sheet drawings:

- Title Sheet
- Index and legend
- Typical sections
- Traffic Control Plan (including construction sign text data and temporary
- traffic signal plans and details)

- Survey baseline ties
- Miscellaneous tables
- Miscellaneous details
- Erosion and Sediment Control Plan
- General Plans (1" = 20' scale)
- General Profiles (1" = 20' horizontal & 1" = 4' vertical scales)
- Signs
- Pavement marking plans
- Utility plans

The **Consultant** will prepare and submit 5 copies of the ADP's to the **Municipality** 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 Municipality for approval. Upon approval, the Municipality will submit 2 copies of the contract documents to the NYSDOT for information purposes and approval.

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 Municipality in preparing any necessary agreements with utility companies.

Section 10 - Estimating & Technical Assumptions

10.01 Estimating Assumptions

The following assumptions have been made for estimating purposes:

Section 1

1.06 Meetings

Estimate 15 additional meetings occurred than estimated in prior agreements. CHA participated in 25 agency meetings / conference calls (Village, NYSDOT, etc.) from project start through Design Approval received in November 2015.

Estimate 10 additional meetings through bid opening.

Estimate 0 meetings or correspondence from CHA to Metro North. CHA coordinated with Metro North regarding the bicycle/ pedestrian survey, which was beyond the scope in the prior agreements. It is assumed that any additional correspondence with Metro North through bid opening will be completed by the Village.

1.07 Cost and Progress Reporting

Estimate 7 additional cost and progress reporting periods through bid opening. CHA prepared and submitted 25 cost and progress reporting from project start through October 2016, which some were combined as multiple periods.

10.02 Technical Assumptions

Section 2

2.04 Accident Data and Analysis

Assume no additional updated accident analyses will be required for the latest 3-year period for this project. CHA conducted two separate accident analyses and summarized the information in the DAD. The accident analysis was based on a 3-year period between March 2005 and March 2008 (RBA study) and the updated June 2008 to June 2011 period. One (1) accident analysis was beyond the scope in the prior agreements and is included in this supplemental agreement.

2.05 Traffic Counts

Assume proposed traffic operations are based upon the traffic data included in the DAD. No new traffic counts will be obtained, or analyses performed.

2.06 Capacity Analyses

Assume no new traffic data is required to be analyzed, simulated or justified for the traffic signals included in this scope. CHA performed capacity analyses for the original design concept and the final preferred alternative with several iterations based on design plan changes.

The capacity analysis performed for the new signals proposed on Croton Point Avenue at the Veteran's Avenue, the US Route 9 southbound ramps and the US Route 9 northbound ramps and the capacity analysis for the existing signals on S. Riverside Avenue at Croton Point Avenue and Benedict Boulevard were included in the Design Report dated January 2015 that received Design Approval, and separately provided to NYSDOT for their approval.

Section 3

3.02 Development of Alternatives

Development of Alternatives was assumed in prior agreements to occur on the existing alignment and within the existing right-of-way.

Current alternative shifted the Croton Point Avenue alignment to the south and requires right-of-way for which the Supplemental (No.1) did not include scope and budget for advancing through detailed design. In addition, evaluation of potential feasible overlay options to S. Riverside Avenue without impacting ROW was explored.

Alternative initially to be progressed consisted of a 3-lane section with ground mounted signs for Veteran's Plaza, a 4-lane section for Croton Point Avenue between Veteran's Plaza and the US Route 9 southbound ramps with sidewalks only, 4-lane section with shared bike/pedestrian path on Croton Point Avenue from southbound ramps to S. Riverside Avenue, widen the SB US Route 9 exit ramp but maintain a single lane exit and narrow the US Route 9 northbound on ramp into the signal.

CHA provided 4 design plan changes to arrive at the current proposed alternative as follows:

- Short segment of Veterans Plaza to be widened to 4-lane section with overhead signals for time of day lane designations and 8' shared use path
- 4-lane section on Croton Point Avenue with 5' bike lanes and 4' wide sidewalk between Veterans Plaza and US Route 9 southbound ramps
- 4-lane section on Croton Point Avenue with 5' bike lanes and 5' wide sidewalk between southbound ramps and S. Riverside Avenue
- US Route 9 southbound exit ramp to be widened to consist of a two-lane section for turn lane with new 16' wide pavement section
- Narrow the US Route 9 northbound on ramp into the signal

3.04 Preparation of Draft Design Approval Document

CHA prepared and submitted 8 copies of the Draft Design Approval Document (Draft Design Report) and incorporated comments from 2 revisions to the document from project start through Design Approval received in November 2015, which is 6 more copies and 1 additional revision than included in the prior agreements.

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

Assume no additional public meetings are required.

3.07 Preparation of Final Design Approval Document

CHA prepared and submitted 2 copies of the Final Design Approval Document (Final Design Report) and incorporated comments from 4 revisions to the document from project start through Design Approval received in November 2015, which is 1 more copies and 3 additional revisions than included in the previous agreements.

CHA assumes no other documentation associated with the Design Approval Document will be required through contract documents.

Section 4

4.05 Permits and Approvals

Assume that a SWPPP will be required. Prior agreements assumed that a SPDES permit would not be required (less than 1 Ac disturbance) and that no permanent measures for stormwater quantity or quality treatment would be required.

Section 5

General

Assume no additional ROW acquisitions at Croton Point Realty or any other property to mitigate lost parking.

Assume no ROW acquisitions for the placement or relocation of signal equipment, utilities, driveways, or ramps at intersections.

5.07 Property Appraisals

Assume additional effort regarding the impact of the lost parking and potential options for mitigating the loss.

Section 6

6.02 ADP

Assume no modifications to the 5 non-standard feature justifications will be required.

Assume no significant changes to the existing geometry, topography, operations on Croton Point Avenue and S. Riverside Avenue have occurred since Design Approval that would significantly affect the design as shown on the plans included in the Design Report, January 2015.

Assume that the Village and NYSDOT will provide as-builts within the project area and existing pavement cores. Geotechnical services are not included in this proposal.

Assume the pavement evaluation will be to only confirm that the pavement condition has not further deteriorated to the point where other treatments may be necessary. If further treatments are necessary, then a supplemental agreement will be required.

Assume no full depth reconstruction of the concrete section and only spot repairs will be needed.

Assume that the existing drainage system will remain, and will not require an analysis of the drainage condition or sizing.

Assume no more than 10 new drainage structures are required.

Assume no more than 150 LF of new drainage pipe is required.

Assume no tree removals.

Assume pedestrian signals will only be provided at the S. Riverside Avenue with Croton Point Avenue and with Benedict Boulevard, to the extent possible. Traffic signal upgrade and/or replacement at these intersections is not included in this scope.

Assume that the existing controllers at the S. Riverside Avenue with Croton Point Avenue and with Benedict Boulevard can accept the wiring for the new pedestrian signals and that no new controllers will be required at either of these two locations.

Assume that the Consultant will obtain from the NYSDOT their design preferences for the signals. Revision to the design preferences will be considered out of scope and will be negotiated per a supplemental agreement, as required.

Assume that the driveway on the north side of Croton Point Avenue at the Croton Point Avenue & Northbound Route 9 on/off ramps will be provided signal heads with microwave or other detection to allow for exiting traffic to make left turns and access the Route 9 northbound on ramp per the email dated 2/10/2015 from Ed Goff, NYSDOT.

Assume force off detection for the Route 9 southbound off ramp and Veteran's Plaza will be evaluated once and incorporated, if possible.

Assume that the NYSDOT will own and operate the signals at the Route 9 northbound on/off ramps and at the Route 9 southbound off/on ramps per the email dated 2/10/2015 from Ed Goff, NYSDOT. These signals will be coordinated with the Village's owned and maintained Veteran's Plaza signal. Based upon Design Approval and coordination with NYSDOT on the signals, it is assumed that the coordination between the NYSDOT's ramp signals and the Village's Veteran's Plaza intersections is permitted. Agreements necessary for this are to be prepared and coordinated by the Village.

Assume that it is understood that the queues on Croton Point Avenue and the Route 9 ramps will remain with the installation of the signals and the project components as this is not a capacity improvement project. This scope does not include meetings, simulations or other documentation to communicate the operations and traffic flow through the corridor to the public.

Assumed that the proposed signal poles will be able to be placed and meet required overhead electric clearances. If clearances cannot be met, the overhead utilities

may need be to be raised by the utility company. Detailed calculations of the overhead clearances are not included in the scope. The design to raise the overhead utilities and associated utility coordination is not included; only identification of the potential impact.

Assume that while mast arms may be used, the existing constraints of the corridor are such that the mast arms may accommodate multiple approaches to minimize impacts with no more than 11 mast arm structures. All mast arm structures will be based on NYSDOT standard specification section 680 for traffic signal structures, including one mast arm at Veterans Plaza which uses reversible lane signals. There will only be typical details for traffic signal structures as provided in the standard sheets section 680 and no Independent (Method 2) Analyses.

Assume that meetings will be conference calls to review and discuss traffic signal design aspects of the project with the Village and NYSDOT. One in person meeting is included, but no other in person meetings are anticipated or included in this scope.

Assume that the Village will coordinate with the Croton Harmon Station, as necessary, to determine the requirements for time-of-day operation for the overhead sign/signal structure and reversible lane function on Veteran's Plaza. In addition, it is assumed that the Village will own and maintain the signal equipment for the Veteran's Plaza reversible lane function. Any necessary agreements between the Village and Metro North and/or other agencies will be prepared by the Village.

Assume a mast arm will accommodate the Veteran's Plaza overhead signals and reversible lane function and that this equipment can be located within the existing ROW.

Assume that there will only be one combined (Municipality and NYSDOT) round of comments for the submission with only minor revisions.

6.03 Contract Documents

Assume that mast arm design will only be performed in this phase after mast arm and signal locations have been reviewed with the ADP submittal. Design for each mast arm shall only be performed for one location and layout per mast arm. If the mast arm station or offset or signal dimensions, weight, type, amount, or horizontal or vertical dimension relative to the base changes, this will require rework and submission of a supplemental agreement.

Assume that moments at the base of the mast arm will be developed and provided on the plan sheets. The Contractor shall select the foundation type and details from standard sheets section 680 based upon the provided moments with no 5. design of connections for any of the overhead traffic signal structures.

Assume that there will be no comments on the design or on the moments provided on the plans that will require revisions to the design.

Assume that there will only be one combined (Municipality and NYSDOT) round of comments for the submission with only minor revisions.

Assume no bid alternate will be required.

Assume specifications will be based on NYSDOT Standard Specifications and details. Special or non-standard materials or equipment specifications are not anticipated to be required.

6.04 Cost Estimates

Assume that the cost estimates will be prepared with the ADP submittal and with the Contract Documents submittal.

6.05 Utilities

Assume 6 overhead utility poles will need to be relocated.

Assume 1 underground electric relocation at 14+30 RT.

Assume 3 water line relocations to attain separation from proposed drainage.

Assume only sewer manhole frame adjustments are required and no adjustments for sewer pipes needed.

Assume 1 gas relocation based on new drainage.

Assume coordination with 4 utility companies or municipalities and two additional meetings. The utility inventory was completed and updated. Assume that it will be finalized in the APD Phase.