



City of Kingston Finance and Audit Committee
Meeting Agenda
Wednesday, January 24, 2018

NEW BUSINESS

Authorizing funding in the first instance and appropriating funds for the Broadway Streetscape Project

Suggested Action: Pass a resolution to fund project costs in the first instance for Right-of-Way Acquisition

[2017-12-30 Letter to Common Council for NYSDOT Resolutions for Broadway.pdf](#)

[Committee Report-FIN ROW Broadway DOT Authorization.docx](#)

[Draft Resolution for Broadway ROW Acquisition Phase Appropriation.doc](#)

Ralph Swenson Re: NYS EFC WIIA Grant Application Authorization

Suggested Action: Authorize the submission of a WIIA Grant Application and commensurate funding for the WWTP Process Upgrades required by the October 25, 2016 SPDES Modification.

[WIIA Grant Application Authorization_112917.pdf](#)

[General Location Map.jpg](#)

[EFC_IMG Application for 2018.pdf](#)

[WIIA-IMG Clean Water Application Instructions \(2\).pdf](#)

[WIIA Short Environmental Assessment Form_062217.pdf](#)

[WIIA Grant Application_062217.pdf](#)

[Smart Growth Assessment Form Revised-2017.pdf](#)

[Res 118 of 2017 MARKUP.pdf](#)

Twaalfskill Creek Drainage Analysis

Suggested Action: Authorize funding in the amount of \$48,900.00.

Authorized the Mayor to enter into contract and administer the work.

[Noble_Twaalfskill Creek Drainage Funding Authorization_122117.pdf](#)

[Final Interview Document.pdf](#)

[Price Proposal.pdf](#)

[Twaalfskill Creek Stormwater Analysis Proposal.pdf](#)

J. Hansen, Superintendent KWD Re: Bond Request for Water Line Replacement at 587 Roundabout

[Bond Request for water line replacement 587 roundabout.pdf](#)

J. Hansen, Superintendent KWD Re: Bond Authorization for Cooper Lake Engineering

[Bond request for Cooper Lake Engineering.pdf](#)

J. DeCicco, Exec Secretary, Civil Service Re: Budget Modification Request

[20180104160658.pdf](#)

A. Winchell, Sr Operator, WWTF Re: Budget Modification Request

[20180104160725.pdf](#)

Hurley Avenue Paving and Complete Streets Project

PIN 8761.94

Suggested Action: Authorized a higher level of funding for the Design Phase

Authorize Engineering Agreement with Barton & Loguidice

[2018-1-4 Letter to Common Council for Additional Bonding Authority.pdf](#)

[Preliminary Cost Estimates.pdf](#)

[UCTC_Request for TIP Amendment_010418.pdf](#)

[Hurley Avenue Paving and Complete Streets Agreement BL Rev1 1 4 2018.pdf](#)

OLD BUSINESS

Finance and Audit Committee Agenda Item Report

Agenda Item No. 429

Submitted by: Carly Winnie

Submitting Department: Community and Economic Development

Meeting Date: January 24, 2018

SUBJECT

Authorizing funding in the first instance and appropriating funds for the Broadway Streetscape Project

Recommendation:

Pass a resolution to fund project costs in the first instance for Right-of-Way Acquisition

ATTACHMENTS

- [2017-12-30 Letter to Common Council for NYSDOT Resolutions for Broadway.pdf](#)
- [Committee Report-FIN ROW Broadway DOT Authorization.docx](#)
- [Draft Resolution for Broadway ROW Acquisition Phase Appropriation.doc](#)



CITY OF KINGSTON
OFFICE OF ECONOMIC AND COMMUNITY DEVELOPMENT

Steven T. Noble, Mayor

Brenna L. Robinson, Director

December 21, 2017

Honorable James L. Noble, Jr.
President/Alderman-at-Large
Kingston Common Council
420 Broadway
Kingston, NY 12401

Re: Authorizing funding in the first instance and appropriating funds for the Broadway Streetscape Project

Dear President Noble,

The City of Kingston is entering a new phase for the Broadway Streetscape Project. I am requesting placement on the Finance Committee agenda in January to discuss an action needed by the Council for this funding.

To access funds for the Right-of-Way acquisition from the NYSDOT TEP grant, the City must pass a resolution to fund the project costs in the first instance. The attached resolution, originally drafted by NYSDOT, will allow the City to request reimbursements from the NYSDOT for the first \$62,700.00 for costs of the Right-Of-Way acquisition phase. As we advance the project construction costs are more defined, NYSDOT can make more funds from this source available for reimbursement.

The City has already bonded for the total anticipated cost of the Broadway Streetscape Project.

Please feel free to contact me with any questions regarding the project. Thank you for your consideration.

Sincerely,

Brenna L. Robinson

THE CITY OF KINGSTON COMMON COUNCIL

FINANCE AND AUDIT
COMMITTEE REPORT

REQUEST DESCRIPTION

INTERNAL TRANSFER _____
AUTHORIZATION X _____
CLAIMS _____

CONTINGENCY TRANSFER _____
BUDGET MODIFICATION _____
ZONING _____

TRANSFER _____
BONDING REQUEST _____
OTHER _____

DEPARTMENT Office of Economic and Community Development DATE _____

RESOLUTION OF THE COMMON COUNCIL OF THE CITY OF KINGSTON, NEW YORK
AUTHORIZING THE IMPLEMENTATION AND FUNDING IN THE FIRST INSTANCE 100% OF
THE FEDERAL-AID (AND STATE "MARCHISELLI" PROGRAM-AID) ELIGIBLE COSTS FOR
THE BROADWAY STREETScape TRANSPORTATION FEDERAL-AID PROJECT, AND
APPROPRIATING FUNDS THEREFORE.

Estimated Financial Impact _____ Signature _____

Motion by _____

Seconded by _____

Action Required:

SEQRA Decision:

Type I Action _____

Type II Action _____

Unlisted Action _____

Negative Declaration of Environmental Significance: _____

Conditioned Negative Declaration: _____

Seek Lead Agency Status: _____

Positive Declaration of Environmental Significance: _____

<u>Committee Vote</u>	<u>YES</u>	<u>NO</u>
Douglas Koop, Chairman		
Reynolds Scott-Childress Ward 3		
Anthony Davis, Ward 6		
Steven Schabot, Ward 8		
Deborah Brown, Ward 9		

RESOLUTION OF THE COMMON COUNCIL OF THE CITY OF KINGSTON, NEW YORK AUTHORIZING THE IMPLEMENTATION AND FUNDING IN THE FIRST INSTANCE 100% OF THE FEDERAL-AID (AND STATE "MARCHISELLI" PROGRAM-AID) ELIGIBLE COSTS FOR THE BROADWAY STREETScape TRANSPORTATION FEDERAL-AID PROJECT, AND APPROPRIATING FUNDS THEREFORE.

Sponsored by: Finance Committee
Aldermen Koop, Scott-Childress, Schabot, Brown, Davis

Authorizing the implementation, and funding in the first instance 100% of the federal-aid and State "Marchiselli" Program-aid eligible costs, of a federal-aid transportation project, and appropriating funds therefore.

WHEREAS, a Project for the **Kingston Connectivity – Broadway: Foxhall Avenue to St. James Street in the City of Kingston, Ulster County, PIN 8780.49** (the "Project") is eligible for funding under Title 23 U.S. Code, as amended, that calls for the apportionment of the costs such program to be borne at the ratio of **80%** Federal funds and **20%** non-federal funds; and

WHEREAS, the City of Kingston desires to advance the Project by making a commitment of 100% of the non-federal share of the costs of right-of-way incidental work.

NOW, THEREFORE, BE IT RESOLVED BY THE COMMON COUNCIL OF THE CITY OF KINGSTON, NEW YORK, AS FOLLOWS:

RESOLVE, that the Common Council of the City of Kingston hereby approves the above-subject project; and it is hereby further

RESOLVED, that the Common Council of the City of Kingston hereby authorizes the City of Kingston to pay in the first instance 100% of the federal and non-federal share of the cost of right-of-way acquisition work for the Project or portions thereof; and it is further

RESOLVED, that the sum of **\$62,700** is hereby appropriated from bonding and made available to cover the cost of participation in the above phase of the Project; and it is further

RESOLVED, that in the event the full federal and non-federal share costs of the project exceeds the amount appropriated above, the Common Council of the City of Kingston shall convene as soon as possible to appropriate said excess amount immediately upon the notification by the Mayor thereof, and it is further

RESOLVED, that the Mayor of the City of Kingston be and is hereby authorized to execute all necessary Agreements, certifications or reimbursement requests for Federal Aid and/or applicable Marchiselli Aid on behalf of the City of Kingston with the New York

State Department of Transportation in connection with the advancement or approval of the Project and providing for the administration of the Project and the municipality's first instance funding of project costs and permanent funding of the local share of federal-aid and state-aid eligible Project costs and all Project costs within appropriations therefore that are not so eligible, and it is further

RESOLVED, that in addition to the Mayor, the following municipal titles: Superintendent of Public Works, City Engineer, City Comptroller, and Director of the Office of Economic & Community Development are also hereby authorized to execute any necessary Agreements or certifications on behalf of the Municipality/Sponsor, with NYSDOT in connection with the advancement or approval of the project identified in the State/Local Agreement;

RESOLVED, that a certified copy of this resolution be filed with the New York State Commissioner of Transportation by attaching it to any necessary Agreement in connection with the Project, and it is further

RESOLVED, this Resolution shall take effect immediately.

Submitted to the Mayor this ____ day of _____, 2017

Approved by the Mayor this ____ day of _____, 2017

Carly Winnie, City Clerk

Steven T. Noble, Mayor

Adopted by Council on _____

PIN 8780.49
03/09/2017dh

Finance and Audit Committee Agenda Item Report

Agenda Item No. 430
Submitted by: Carly Winnie
Submitting Department: Engineering
Meeting Date: January 24, 2018

SUBJECT

Ralph Swenson Re: NYS EFC WIIA Grant Application Authorization

Recommendation:

Authorize the submission of a WIIA Grant Application and commensurate funding for the WWTP Process Upgrades required by the October 25, 2016 SPDES Modification.

ATTACHMENTS

- [WIIA Grant Application Authorization_112917.pdf](#)
- [General Location Map.jpg](#)
- [EFC_IMG Application for 2018.pdf](#)
- [WIIA-IMG Clean Water Application Instructions \(2\).pdf](#)
- [WIIA Short Environmental Assessment Form_062217.pdf](#)
- [WIIA Grant Application_062217.pdf](#)
- [Smart Growth Assessment Form Revised-2017.pdf](#)
- [Res 118 of 2017 MARKUP.pdf](#)

CITY OF KINGSTON
Office of the City Engineer
rswenson@kingston-ny.gov

Ralph E. Swenson, P.E., City Engineer



Steven T. Noble, Mayor

November 29, 2017

Mr. James L. Noble, Jr.
Alderman-At-Large
President of the Common Council
Kingston City Hall
420 Broadway
Kingston, New York 12401

RE: NYS EFC WIIA Grant Application Authorization
Unlisted SEQRA Determination

Dear President Noble:

On October 25, 2016 the City of Kingston received a modified SPDES Permit for the Kingston WWTP. The new SPDES Permit discharge parameters slated to go into effect in approximately three and a half years require more stringent nitrogen effluent limitations of 5.9 and 9.0 mg/L (seasonally – summer and winter); these new parameters require major upgrades to plant processes.

Under the NYS Water Infrastructure Improvement Act (WIIA) & the NYS Intermunicipal Water Infrastructure Grant Program (IMG) \$150M is available over the next three years through IMG / WIIA Grants for water quality infrastructure improvements. Under the WIIA Grant Program project funding is limited to the lesser of \$5M or 25% of net eligible costs, under the IMG Grant Program project funding is limited to the lesser of \$10M or 40% of net eligible costs.

Previously the Council authorized the submission of a grant application under the IMG Grant Program, see Resolution 118 of 2017, for the anticipated upgrades to WWTP plant processes in the amount of \$7,900,000, including engineering fees and construction costs identified in the Arcadis Preliminary Report dated May 31, 2017. We now also request authorization to apply for grant funding under the WIIA Grant Program with similar stipulations as those enumerated within Resolution 118 of 2017.

In addition, I am also attaching a completed Short Environmental Assessment Form, and a project area map. In accordance with 6 NYCRR, Part 617, the proposed project is Unlisted. Please identify the City of Kingston as Lead Agent, and affirm my Unlisted SEQR determination.

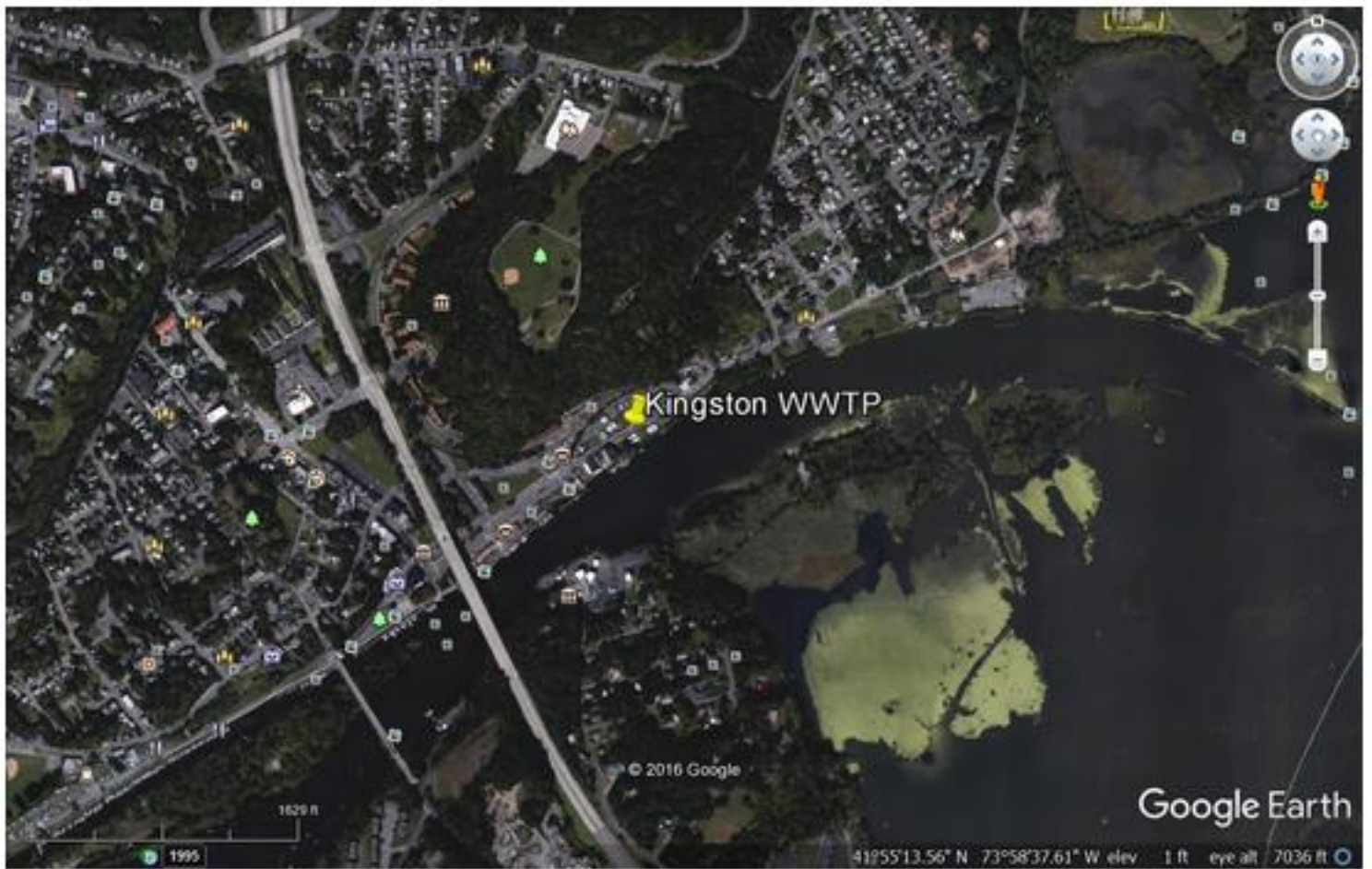
Please forward this communication to the next regularly scheduled Finance Committee for further discussion.

Should you have any questions, do not hesitate to contact me.

Respectfully,

Ralph Swenson
City Engineer

Cc: Steven T. Noble, Mayor
John Tuey, Comptroller
Douglas Koop, Chair, Finance Committee





Environmental Facilities Corporation

ANDREW M. CUOMO
Governor

SABRINA M. TY
President and CEO

October 27, 2017

The Honorable Steven Noble
Mayor
City of Kingston
420 Broadway
Kingston, NY 12401

Re: Project No. C3-5374-08-00
WWTP Denitrification
City of Kingston
Ulster County

Dear Mayor Noble:

Thank you for your application to the NYS Water Infrastructure Improvement Act (WIIA) and Intermunicipal Water Infrastructure Grants Program (IMG) grant programs. Your community's project could not be considered during this round because the applications were incomplete. Your applications may be held for consideration only if the following item, which is required for an acceptable application in both programs, is received by the next grant application due date.

- Board Resolution Outlining Plan of Finance

Please complete and return the enclosed acknowledgement form to the NYS Environmental Facilities Corporation (EFC) no later than **November 10, 2017**.

We appreciate your interest in the WIIA and IMG programs.

Sincerely,

A handwritten signature in black ink, appearing to read "Timothy P. Burns".

Timothy P. Burns, P.E.
Director

Division of Engineering & Program Management

cc.: Arcadis – Mr. A.J. Brooks

ACKNOWLEDGMENT FORM

Please sign below and return to nyswatergrants@efc.ny.gov no later than **November 10, 2017**.

ACKNOWLEDGED:

City of Kingston

Project No. C3-5374-08-00

The City would like their application to be held and to be considered for the next round of WIIA grant.

☐ Yes

☐ No

The City would like their application to be held and to be considered for the next round of IMG grant.

☒ Yes

☐ No



(Signature of Authorized Representative)

RALPH SWANSON

(Print Name)

CITY ENGINEER

(Title)

11-15-17

(Date)

Short Environmental Assessment Form

Part 1 - Project Information

Instructions for Completing

Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 - Project and Sponsor Information							
Name of Action or Project: City of Kingston WWTP Upgrade							
Project Location (describe, and attach a location map): City of Kingston, Garraghan Drive/Murray Street, Kingston, NY 12401							
Brief Description of Proposed Action: Kingston WWTP Process Upgrades for the purpose of compliance with the October 25, 2016 Modified SPDES Permit; nitrogen limitations of 5.9 and 9.0 mg/L (seasonally – summer and winter).							
Name of Applicant or Sponsor: City of Kingston		Telephone: 845-334-3967 E-Mail: SNoble@kingston-ny.gov					
Address: 420 Broadway							
City/PO: Kingston		State: NY	Zip Code: 12401				
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.			<table border="1" style="width: 100%; text-align: center;"> <tr> <td>NO</td> <td>YES</td> </tr> <tr> <td>☒</td> <td>☐</td> </tr> </table>	NO	YES	☒	☐
NO	YES						
☒	☐						
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: New York State Department of Environmental Conservation New York State Environmental Facilities Corporation			<table border="1" style="width: 100%; text-align: center;"> <tr> <td>NO</td> <td>YES</td> </tr> <tr> <td>☐</td> <td>☒</td> </tr> </table>	NO	YES	☐	☒
NO	YES						
☐	☒						
3.a. Total acreage of the site of the proposed action?		2.0 acres					
b. Total acreage to be physically disturbed?		0.5 acres					
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?		2.0 acres					
4. Check all land uses that occur on, adjoining and near the proposed action. ☐ Urban ☐ Rural (non-agriculture) ☒ Industrial ☒ Commercial ☐ Residential (suburban) ☐ Forest ☐ Agriculture ☐ Aquatic ☒ Other (specify): <u>Municipal</u> ☐ Parkland							

5. Is the proposed action, a. A permitted use under the zoning regulations?	NO ☐	YES ☒	N/A ☐
b. Consistent with the adopted comprehensive plan?	☐	☒	☐
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO ☐	YES ☒	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	NO ☒	YES ☐	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO ☒	YES ☐	
b. Are public transportation service(s) available at or near the site of the proposed action?	☐	☒	
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	☐	☒	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: Not applicable	NO ☒	YES ☐	
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____ Not Applicable	NO ☒	YES ☐	
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____ WWTP Process Upgrades on the site of the existing treatment plant.	NO ☐	YES ☒	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	NO ☒	YES ☐	
b. Is the proposed action located in an archeological sensitive area?	☒	☐	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	NO ☒	YES ☐	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____	☒	☐	
14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: ☐ Shoreline ☐ Forest ☐ Agricultural/grasslands ☐ Early mid-successional ☐ Wetland ☐ Urban ☐ Suburban			
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO ☒	YES ☐	
16. Is the project site located in the 100 year flood plain?	NO ☐	YES ☒	
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? ☐ NO ☐ YES b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: ☐ NO ☐ YES	NO ☒	YES ☐	

18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size: _____	NO	YES
_____	☒	☐
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____	NO	YES
_____	☒	☐
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____	NO	YES
_____	☒	☐
I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE Applicant/sponsor name: <u>City of Kingston / Steve Noble, Mayor</u> Date: <u>June 1, 2017</u> Signature: 		



GRANT APPLICATION
NYS WATER INFRASTRUCTURE IMPROVEMENT ACT (WIIA)
&
NYS INTERMUNICIPAL WATER INFRASTRUCTURE GRANTS PROGRAM (IMG)
CLEAN WATER

A. APPLICANT

Name of Applicant: City of Kingston County: Ulster
Federal I.D. Number: 14-6002267 DUNS Number: 020673166

Authorized Representative: Steve Noble Phone: 845-334-3902
Title: Mayor Email: mayor@kingston-ny.gov
Mailing Address: 420 Broadway
Kingston, NY 12401

Daily Contact Name: Ralph Swenson Phone: 845-334-3967
Title: City Engineer Email: rswenson@kingston-ny.gov
Company: _____

Engineering Consultant: A.J. Brooks Phone: 1-518-250-7374
Title: Staff Water Engineer Email: a.j.brooks@arcadis.com
Company: Arcadis of NY

B. GENERAL INFORMATION

Project Name: City of Kingston WWTP DENITRIFICATION
Project Location: City of Kingston Wastewater Treatment Plant
41.9201 Latitude -73.9773 Longitude
Service Area: City of Kingston
Population of Project Area: 24,000
SPDES Permit Number: NY0029351
Waterbody affected by project: Rondout

Legislative Districts (you may include two districts)		
US	NY	NY
Congress	Senate	Assembly
<u>NY-19</u>	<u>46</u>	<u>103</u>

Estimated Total Project Cost: \$ 7,900,000 Design Start Date: 9/1/17 (☒T / ☐A)
Construction Start Date: 5/1/18 (☒T / ☐A) Construction End Date: 5/1/19 (☒T / ☐A)

Check "T" for a target date and "A" for an actual date



C. GRANT CATEGORY

Identify the grant program(s) for which you are applying by checking the appropriate box or boxes below.

- ☒ New York Water Infrastructure Improvement Act (WIIA) grant
- ☒ Intermunicipal Water Infrastructure Grants Program (IMG) grant

D. PROJECT INFORMATION

1. Provide a brief description of your project.

In October 2016 the NYS DEC renewed the City of Kingston's SPDES Permit. The SPDES Permit was modified to include seasonal nitrogen discharge limits of 5.9 and 9.4 mg/L, as opposed to an ultimate oxygen demand (UOD) limit that was previously required. In order to meet the discharge limitations set forth in the City's SPDES Permit, the conventional activated sludge process is required to be upgraded for biological nutrient removal. The existing wastewater treatment plant does not have significant available land for additional tankage and the City has determined the most cost effective solution to meet seasonal nitrogen discharge limits is to convert the existing conventional activated sludge process to a ballasted floc activated sludge process to raise SRTs and maintain settleability of secondary sludge. Construction at the wastewater treatment plant includes replacement of the fine bubble aeration system with jet aeration/mixing, new turbo blowers and aeration controls, modification of in-tank baffles and gates, construction of a new +/-1,000 square foot structure to enclose new equipment for the ballasted floc activated sludge process, a 30 foot tall storage silo, and miscellaneous site improvements. The results of this Project will be significant reduced loadings for BOD and total Nitrogen for the Rondout Creek.

2. If applying for an IMG grant, describe how the project involves more than one municipality and is the best solution for an identified water quality problem.

The City of Kingston has two intermunicipal agreements in place with neighboring communities. Per each agreement, City is required to treat up to 646,000 gpd from the Town of Esopus and 75,000 gallons per day from the Town of Ulster. Jointly, wastewater from these three communities is treated at the City's wastewater treatment plant and the Town's of Esopus and Ulster comprise about 10 percent of the total flow. If they were required to construct and operate two smaller wastewater treatment plants, there would be a significant increase in costs from the two communities for BNR for nitrogen control. The use of the City's wastewater treatment plant offers significant savings.



3. Is the project required to be undertaken by an executed enforcement instrument or a SPDES permit (e.g., notice of violation, consent order, judicial order, compliance schedule, DEC-approved Long Term Control Plan)?

☐ No ☒ Yes

If yes, indicate the type, date of execution and reason for the enforcement action as it relates to the project. Please submit a copy of the executed enforcement instrument to EFC with the grant application.

The NYS DEC renewed the City's SPDES Permit in October 2016 to include seasonal effluent nitrogen limits of 5.9 and 9.4 mg/L as ammonia. The wastewater treatment plant currently cannot meet this effluent nitrogen limit. In order to meet this limit the NYS DEC has provided a 30 month schedule of compliance. An approvable engineering report is required to be submitted to the NYS DEC within 18 months or before April 2018. The City completed the engineering report nearly one year prior to the this date. Approvable plans, specifications, and construction schedule are to be submitted to the NYS DEC within 12 months of securing approval of the engineering report.

While a ballasted floc activated sludge process is not required by the City's LTCP for CSOs, the process will improve effluent quality during wet weather the the magnetite addition with a specific gravity of 5.1. The high specific gravity greatly increases the settleability of the sludge.

4. Describe the project's community impacts, including but not limited to public support for the project, critical community resources served by this project, or economic development impacts.

The discharge of the City's wastewater treatment plant is to the Rondout Creek, a tributary of the Hudson River. The Rondout is a popular for recreation (boating, fishing, kayaking, etc.) for the City of Kingston and the Town of Esopus. This reach of the Rondout is a location that the City has been promoting redevelopment and many cultural activities. There are a significant number of restaurants in this vicinity. By reducing the nitrogen discharged from the City's wastewater treatment plant the nutrient loading in the Rondout will decrease and reduce the chance for algal blooms that seem to be more prevalent with climate change. This project will also create new jobs at the wastewater treatment plant for both temporary construction and skilled operations staff, thus having a positive impact on the economy.

5. Is the project identified in any regional planning initiatives (e.g. a Comprehensive Plan, Regional Planning document, Waterfront Revitalization Plan, Watershed Plan or Estuary Plan)?

☒ No ☐ Yes

If yes, describe below and attach applicable documents:

Not applicable



6. Does the project require easements or land acquisition?

☐ No ☒ Yes

If yes, describe the status of obtaining the easements and/or land:

The City Council has approved the purchase of the property adjacent to the WWTP contingent upon completion of a due diligence process.

7. Does the project require debt exclusion approval from the Office of the State Comptroller (OSC)?

☒ No ☐ Yes

If yes, describe the status:

Not applicable



8. Check the applicable box(es) to indicate the financing plan for the balance of the project following a grant award.

☐ Municipal Contributions Amount: \$ _____

☐ Interfund Borrowing Amount: \$ _____

☐ CWSRF Financial Assistance

☐ The project is currently listed on the 2017 Intended Use Plan (IUP)

CWSRF Project Number: _____

☐ A project listing for the 2018 IUP will be submitted

Note: If awarded an IMG grant, the project will not be eligible for subsidized financing through EFC and will only be eligible to apply for short-term market rate financing.

☒ Non-EFC Debt/Grants

Type (BAN*, Bonds, Grants, other)	Amount	Status (provide dates)		
		Applied	Approved	Received
Municipal Bond	\$4,740,000	9/1/2017	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

*Please indicate if the BAN is callable, and if so, provide call date.

☐ Other Funding, please describe

9. Has the Applicant submitted timely annual financial reports to OSC for each of the last three years?

☐ No ☒ Yes If no, please explain:

Not applicable



E. TOTAL PROJECT BUDGET

Please add line items to the budget as needed. If you have additional questions, please call EFC or refer to the Intended Use Plan.

Category	Estimated Costs
1. Construction Costs	
Contract 1	\$ 5,530,000
Contract 2	\$ 380,000
Contract 3	\$ 90,000
Contract 4	\$
2. Engineering Costs	
a. Planning	\$ 35,000
b. Design	\$ 250,000
c. Construction	\$ 365,000
d. Other	\$
3. Other Expenses	
a. Local Counsel	\$ 12,500
b. Bond Counsel	\$ 12,500
c. Work Force	
- Technical	\$ 12,500
- Administrative	\$ 12,500
d. Fiscal Services	\$
e. Net Interest	\$
f. Miscellaneous (please describe)	\$
	\$
	\$
	\$
4. Equipment	\$
5. Land Acquisition	\$ 250,000
6. Contingencies	\$ 1,025,000
7. Total Project Costs (sum lines 1-6)	\$ 7,900,000
8. Less: Other Sources of Funding	\$
9. Total Financial Assistance Requested (line 7 minus line 8)	\$
10. SRF Issuance Costs ¹ . Percentages should be applied to line 9.	
a. Direct Expenses (1.0%)	\$
b. State Bond Issuance Charge (.84%)	\$
11. TOTAL (sum of lines 9,10a, and 10b)	\$

¹ Applicable to long-term non-hardship financings.



F. REQUIRED DOCUMENTS

- For All Applications: The following documents are **required and must be submitted with the application** if not previously submitted to EFC. If any of these items are unavailable, do not continue with the application at this time.

Enclosed	Previously Submitted to EFC	
☒	☐	Engineering Report
☒	☐	Smart Growth Assessment Form
☒	☐	Environmental Review Determination
☒	☐	SHPO Project Review Determination Letter
☒	☐	Bond Resolution (Certified) and/or Board Resolution (Certified)

- As Applicable: the following documents are **required and must be submitted with the application** if not previously submitted to EFC. If any of these items apply to your project and are unavailable, do not continue with the application at this time.

Enclosed	Previously Submitted to EFC	Not Applicable	
☒	☐	☐	Intermunicipal Agreement (Executed and Current) <i>(Required if applying for IMG)</i>
☐	☐	☒	CWSRF Financing Application <i>(Required if applying for WIIA or IMG grants with CWSRF Financing)</i>
☐	☐	☒	Sewer District, District Extension Formation or Other OSC Approvals

G. SUPPORTING DOCUMENTS

Submit any documents that demonstrate support for and/or readiness to proceed with the project.



H. ACKNOWLEDGEMENTS

1. Upon submission of this application, you acknowledge your responsibility to comply with New York State Executive Law, Article 15-A with respect to Minority and Women's Business Enterprise – Equal Employment Opportunity requirements, and to the State Smart Growth Public Infrastructure Policy Act. By checking this box, you acknowledge that you are aware of these obligations and that you are authorized to make this acknowledgement on behalf of the applicant.

IMG MWBE goals with CWSRF financial assistance - 24%

WIIA MWBE goals with CWSRF financial assistance - 23%

MWBE goals for WIIA or IMG Grant-Only applicants - 30%

EEO goals for all applicants - % varies by County (<http://www.efc.ny.gov/mwbe>)

☒ Acknowledged

2. In order to receive financing assistance through the CWSRF, you will need to meet various other New York State and federal requirements. These requirements include, but are not limited to, Davis-Bacon Federal Prevailing Wage and related acts, and American Iron and Steel requirement. Recipients of SRF financial assistance will be required to perform certain actions to verify compliance and ensure certain provisions are contained in all contracts and subcontracts. By checking this box, you acknowledge that you are aware of this requirement and that you are authorized to make this acknowledgement on behalf of the Applicant.

☒ Acknowledged

Please refer to the current IUP for your responsibilities under these programs.



I. SIGNATURE FOR GRANT APPLICATION

CERTIFICATION: On behalf of the Applicant, and in accordance with the board resolution by

Common Council of the City of Kingston

(governing body of municipal applicant)

authorizing me to do so, I apply for a WIIA grant or IMG grant for the project described in this application. By signing this application, I certify and agree on behalf of the Applicant and its governing body that all of the information contained in this application, in other statements and exhibits attached hereto or referenced herein, and in all statements, data and supporting documents which have been made or furnished for the purpose of receiving a WIIA grant or IMG grant for the project(s) described herein, are true, correct and complete to the best of my knowledge and belief.

I further agree on behalf of the Applicant that, if CWSRF Assistance is provided for the project described in this application, the Applicant shall comply with all applicable provisions of the Federal Water Pollution Control Act, 33 U.S.C. §§ 1251 et. Seq. Chapter 565 of the Laws of New York of 1989, 6 NYCRR Part 649 and 21 NYCRR Part 2602, as amended, regarding CWSRF Assistance.

I further agree that the Applicant will comply with the provisions of the Minority and Women's Business Enterprise – Equal Employment Opportunity requirements of Article 15-A of the New York State Executive Law, and will maintain such records and take such actions necessary to demonstrate such compliance throughout the construction of the project.

Further, I acknowledge that offering a written instrument knowing that the written instrument contains a false statement or false information, with the intent to defraud the State or any political subdivision, public authority or public benefit corporation of the State, with the knowledge or belief that it will be filed with or recorded by the State or any political subdivision, public authority or public benefit corporation of the State, constitutes a crime under New York State Law.

(Signature of Authorized Representative)

Steve Noble, Mayor

(Name and Title)

City of Kingston

(Applicant)

6/22/17

(Date)



Smart Growth Assessment Form

New York State Revolving Funds (CWSRF & DWSRF)

This form should be completed by the applicant's project engineer or other design professional.¹ Please refer to EFC's "Smart Growth Guidance".²

Applicant Information

SRF Applicant: _____

SRF No.: _____

Project Name: _____

Is project construction complete? Yes, date: _____ No

Project Summary: (provide a short project summary in plain language including the location of the area the project serves)

Section 1- Screening Questions

1. Prior Approvals

1A. Has the project been previously approved for SRF financing? Yes No

1B. If so, what was the SRF project number(s) for the prior approval(s)? SRF No.: _____

Is the scope of the project substantially the same as that which was approved? Yes No

IF THE PROJECT WAS PREVIOUSLY APPROVED BY EFC'S BOARD AND THE SCOPE OF THE PROJECT HAS NOT MATERIALLY CHANGED, THE PROJECT IS **NOT** SUBJECT TO SMART GROWTH REVIEW. SKIP TO SIGNATURE BLOCK.

2. New or Expanded Infrastructure

2A. Does the project add new wastewater collection/new water mains or a new wastewater treatment system/water treatment plant? Yes No

Note: A new infrastructure project adds wastewater collection/water mains or a wastewater treatment/water treatment plant where none existed previously

2B. Will the project result in either: Yes No

An increase of the State Pollution Discharge Elimination System (SPDES) permitted flow capacity for an existing treatment system;

OR

An increase such that a NYSDEC water withdrawal permit will need to be obtained or modified, or result in the NYSDOH approving an increase in the capacity of the water treatment plant?

Note: An expanded infrastructure project results in an increase of the SPDES permitted flow capacity for the wastewater treatment system, or an increase of the permitted water withdrawal or the permitted flow capacity for the water treatment system.

¹ If project construction is complete and the project was not previously financed through the SRF, an authorized municipal representative may complete and sign this assessment.

² Available at the [Smart Growth Website](#)

IF THE ANSWER IS "NO" TO BOTH "2A" AND "2B" ON THE PREVIOUS PAGE, THE PROJECT IS NOT SUBJECT TO FURTHER SMART GROWTH REVIEW. SKIP TO SIGNATURE BLOCK.

3. Court or Administrative Consent Orders

- | | | |
|---|-----|----|
| 3A. Is the project expressly required by a court or administrative consent order? | Yes | No |
| 3B. If so, have you previously submitted the order to NYS EFC or DOH?
If not, please attach. | Yes | No |

Section 2- Additional Information Needed for Relevant Smart Growth Criteria

EFC has determined that the following smart growth criteria are relevant for SRF projects and that projects must meet each of these criteria to the extent practicable:

1. Uses or Improves Existing Infrastructure

- | | | |
|---|-----|----|
| 1A. Does the project use or improve existing infrastructure?
<u>Please Describe:</u> | Yes | No |
|---|-----|----|

2. Serves a Municipal Center

Projects must serve an area in either 2A, 2B or 2C to the extent practicable.

2A. Does the project serve an area **limited** to one or more of the following municipal centers?

- | | | |
|---|-----|----|
| i. A city or incorporated village | Yes | No |
| ii. A central business district | Yes | No |
| iii. A main street | Yes | No |
| iv. A downtown area | Yes | No |
| v. A Brownfield Opportunity Area
(for more information, go to the Department of State Website & search "Brownfield") | Yes | No |
| vi. A downtown area of a Local Waterfront Revitalization Program Area
(for more information, go to the Department of State Website & search "Waterfront Revitalization") | Yes | No |
| vii. An area of transit-oriented development | Yes | No |
| viii. An Environmental Justice Area
(for more information, go to DEC'S Page of County Environmental Justice Area Maps) | Yes | No |
| ix. A Hardship/Poverty Area | Yes | No |

Please Describe All Selections:

2B. If the project serves an area located outside of a municipal center, does it serve an area located adjacent to a municipal center which has clearly defined borders, designated for concentrated development in a municipal or regional comprehensive plan and exhibit strong land use, transportation, infrastructure and economic connections to an existing municipal center?

Yes

No

Please Describe:

2C. If the project is not located in a municipal center as defined above, is the area designated by a comprehensive plan and identified in zoning ordinance as a future municipal center?

Yes

No

Please describe and reference applicable plans:

3. Resiliency Criteria

3A. Was there consideration of future physical climate risk due to sea-level rise, storm surge, and/or flooding during the planning of this project?

Yes

No

Please Describe:

Signature Block: By entering your name in the box below, you agree that you are authorized to act on behalf of the applicant and that the information contained in this Smart Growth Assessment is true, correct and complete to the best of your knowledge and belief.

Applicant Name: _____

Phone Number: (____) _____

Name & Title of Project Engineer or Design Professional or Authorized Municipal Representative:

Signature: _____

Date: _____

NYS WATER INFRASTRUCTURE IMPROVEMENT
ACT (WEIA) GRANT

RESOLUTION 118 of 2017

\$5,000,000

RESOLUTION OF THE COMMON COUNCIL OF THE CITY OF KINGSTON, NEW YORK,
AUTHORIZING THE MAYOR TO SUBMIT AN APPLICATION TO THE NEW YORK STATE
ENVIRONMENTAL FACILITIES CORPORATION (EFC) FOR AN ~~INTERMUNICIPAL
GRANT (IMG) PROGRAM~~ GRANT IN THE AMOUNT OF ~~\$7,900,000~~ FOR THE WWTP
UPGRADES NECESSARY TO MAINTAIN COMPLIANCE WITH THE OCTOBER 25, 2016
MODIFIED SPDES DISCHARGE PERMIT, AND TO EXECUTE ANY AND ALL RELATED
DOCUMENTS.

Sponsored by: Finance and Audit Committee

\$5,000,000

NYS WEIA GRANT PROGRAM

WHEREAS, the City of Kingston is eligible to apply to the EFC under the ~~Intermunicipal Grant
Program (IMG)~~ for funds in an amount of ~~\$7,900,000~~ for the purpose of making upgrades to the
WWTP to meet new SPDES Permit discharge parameters slated to go into effect in approximately four
years which require more stringent nitrogen limitations of 5.9 and 9.0 mg/L (seasonally – summer and
winter); and

\$3,750,000

75%

WHEREAS, this application, should the grant be awarded, requires a ~~60%~~ match in the amount of
~~\$4,740,000~~ to be provided by in-kind, force account funds, additional grants, donations and, if necessary,
bonding to be requested; and

WHEREAS, there are specific requirements and regulations governing the expenditure of these funds;
and

WHEREAS, the action is categorized under 6 NYCRR, Part 617.4 as Unlisted.

NOW, THEREFORE, BE IT RESOLVED BY THE COMMON COUNCIL OF THE CITY OF
KINGSTON, NEW YORK, AS FOLLOWS:

SECTION 1. Administration of all funds under this grant will be in accordance with all terms and
conditions contained in guidelines provided by NYS EFC under the Clean Water Infrastructure Act of
2017.

WEIA

\$5,000,000

SECTION 2. The Mayor of the City of Kingston is hereby authorized and directed to file an
application for funds from NYS EFC for an ~~IMG~~ Grant in the amount of ~~\$7,900,000~~; and upon
approval of said request to enter into and execute an agreement, and any and all related documents.

SECTION 3. The Common Council of the City of Kingston hereby determines that the
Proposed WWTP Upgrades is an Unlisted action in accordance with 6 NYCRR
Section 617.4, the City of Kingston Common Council is hereby designated Lead Agent for the purpose
of environmental significance, and herein determines no significant environmental impact.

SECTION 4. This resolution shall take effect immediately.

Submitted to the Mayor this 7th day

Approved by the Mayor this 8th day

of

June

2018
2017

of

June

2018
2017

Deedra M. Steele

Carly Williams, City Clerk

Steven T. Noble

Steven T. Noble, Mayor

Adopted by Council on

June 10

2018
2017

Finance and Audit Committee Agenda Item Report

Agenda Item No. 431

Submitted by: Carly Winnie

Submitting Department: Engineering

Meeting Date: January 24, 2018

SUBJECT

Twaalfskill Creek Drainage Analysis

Recommendation:

Authorize funding in the amount of \$48,900.00.

Authorized the Mayor to enter into contract and administer the work.

ATTACHMENTS

- [Noble_Twaalfskill Creek Drainage Funding Authorization_122117.pdf](#)
- [Final Interview Document.pdf](#)
- [Price Proposal.pdf](#)
- [Twaalfskill Creek Stormwater Analysis Proposal.pdf](#)

CITY OF KINGSTON
Office of the City Engineer
rswenson@kingston-ny.gov

Ralph E. Swenson, P.E., City Engineer



Steven T. Noble, Mayor

December 21, 2017

Mr. James L. Noble, Jr.
Alderman-At-Large
President of the Common Council
Kingston City Hall
420 Broadway
Kingston, New York 12401

RE: Twaalfskill Creek Drainage Analysis Proposals

Dear President Noble:

The Twaalfskill Creek Drainage Analysis Selection Committee has reviewed six (6) Expressions of Interest and interviewed three (3) eligible firms for the proposed work. The work will include:

- Delineation of contributing watersheds;
- Documentation of Existing Conditions;
- Calculation of stormwater runoff and resulting flood routing, and the capacity analysis of the stream channel and control structures;
- Recommendation of Improvements; and
- Final Report summarizing individual tasks.

The Committee recommends the firm Tighe & Bond in the amount of \$48,900.00.

As previously stated, this work will identify the flow capacity boundary conditions for future repairs/replacements of the Chapel Street Culvert, the Brook Street Culvert, the South Wall Street Culvert, and the uncontrolled channel meandering along Wilbur Avenue identified on our Capital Projects List.

Please forward to the appropriate Common Council Committee for further discussion and recommendation.

Respectfully Submitted,

Ralph Swenson
City Engineer

Cc: Steven T. Noble, Mayor
Douglas Koop, Chair, Finance Committee
John Tuey, Comptroller

Interview Documents

Twaalfskill Creek Stormwater Analysis



December 19, 2017

GENERAL FIRM OVERVIEW



Engineering History

Our company was founded in 1911 by James Tighe, well-respected for his role in developing the water supply, distribution and treatment system for the rapidly growing city of Holyoke, Massachusetts, called the finest system in New England. In 1926, he formed a partnership with Philip Bond, who added expertise in municipal engineering.

Over the years, Tighe & Bond has evolved to specialize in environmental engineering and consulting, focusing on water, wastewater, solid waste and hazardous waste, while continuing to provide expert civil engineering services. We have further enhanced our service offerings to include Geographic Information Systems (GIS), geotechnical, structural and electrical engineering. Known for designing innovative strategies for water systems, residuals management and remediation, the firm has provided consulting services to a wide variety of government, institutional and industrial clients across the region.

One of the oldest continuously operating engineering firms in the Northeast, Tighe & Bond has built a reputation upon the technical knowledge, experience and capabilities we bring to each project we undertake, as well as the service we provide. Seasoned project managers, supported by project directors (principals of the firm) and experienced engineers and scientists on each and every project assure continuity, accountability, and high quality service.

Water Resources

Tighe & Bond provides many communities with comprehensive engineering services to ensure residents an adequate supply of quality drinking water, in compliance with federal and state regulations. We assess existing supplies with hydrogeologic or hydrologic studies and water rate and cost of service studies. We plan, permit and design treatment, storage and distribution systems. Conducting pilot plant treatability studies, we determine system effectiveness for new supplies and existing supplies that can be improved through the use of new water treatment technologies. Tighe & Bond also assists cities and towns by negotiating water treatment or purchase agreements with other communities, assisting with permitting, researching and accessing all available funding opportunities.



For the city of Holyoke, MA, Tighe & Bond planned and designed comprehensive water system improvements, including a 6-mile, 42-inch diameter raw water transmission main, 15 million gallon per day treatment plant, 10 million gallon storage facility and several pumping stations.

GENERAL FIRM OVERVIEW

MISSION

To provide sound, creative, and sustainable solutions to diverse civil engineering and environmental problems, emphasizing personal service to our clients, while bringing financial and professional rewards to our employees.

Wastewater

Tighe & Bond designs efficient, cost-effective wastewater treatment systems to achieve compliance with federal, state and local regulations. Our projects range from small industrial pretreatment systems to large municipal treatment facilities. For many cities and towns, we have prepared detailed facilities plans and permit applications, assisted in obtaining funding, completed detailed design of collection, pumping and treatment facilities, and provided construction oversight and startup services. The firm designs and builds turnkey systems, and provides consulting services which include plans and specifications, bidding and construction supervision, startup oversight, operator training and permitting.



Tighe and Bond designed and supervised construction of the two largest wastewater residuals drying facilities in the world, the 240 dry ton per day facility for the Massachusetts Water Resources Authority in Quincy, MA, and the 300 dry ton per day facility for the New York Organic Fertilizer Company, Bronx, NY.

Solid Waste

Well-engineered solid waste management plans are necessary for communities to deal with rising disposal costs and increasing environmental regulation. Tighe & Bond develops comprehensive, innovative strategies to help communities plan for current and future solid waste disposal needs, including transfer stations and procurement of transportation and disposal contracts. Volume reduction tactics, such as post-consumer recycling and composting, are an integral part of our plans. We engineer new landfills and expansions of existing landfills from initial surveys and hydrogeologic studies through construction, and provide operation assistance. Closure plans include cap design and landfill gas venting and treatment systems, as well as environmental monitoring systems. Our team of experts handles permitting, oversees construction and any ongoing monitoring required.



Tighe & Bond designed a comprehensive site assessment and closure of a 44-acre landfill in Westfield, MA, incorporating an innovative active gas collection system for power generation and reclamation of costs.

GENERAL FIRM OVERVIEW

Environmental, Health and Safety Services

Tighe & Bond's environmental expertise spans many disciplines, and allows us to deliver invaluable services to our clients. With environmental engineers and scientists, we provide expert advice to help organizations and communities comply with complex, changing federal and state regulations and avoid costly penalties and fines. We conduct audits to evaluate current compliance status and work with clients to develop comprehensive environmental management systems tailored to minimize regulatory risk. We also address our clients' remediation needs, assessing sites for potential contamination and designing innovative, cost-effective solutions for remediation of groundwater and soil. The firm provides emergency response and due diligence, and consults on projects from Brownfields to underground storage tanks. We also design and build turnkey remediation systems, and are often called upon to provide expert testimony and litigation support.



At Malden Mills, the worst fire-related disaster in Massachusetts' history, Tighe & Bond supervised a fast-tracked remediation strategy that incorporated recycling for cost minimization. We continue to advise Malden Mills on environmental, health and safety compliance issues, and provide additional services that include toxics use reduction planning and training.

Parking

Tighe & Bond has consulted on parking needs for a long list of public and private clients, including major airports, hospitals, universities and shopping centers. Our designs for multilevel parking structures and surface lots ensure good access and circulation for cars and pedestrians. We also conduct parking demand analyses and financial feasibility studies, evaluate and design revenue control systems, and develop management, operation and regulation procedures.



For the Massachusetts Bay Transportation Authority's Alewife Station Tighe & Bond provided functional design services for a 2,000-space park and ride garage which included spiral access, bus terminal, subway station interface and highway connection. The project was the recipient of a Presidential Design Award from the National Endowment for the Arts and an Award for Excellence from the International Parking Institute.

Traffic

The firm provides experienced traffic engineering services to corporate, institutional and municipal clients as well as commercial developers. Our traffic impact studies include estimates of traffic generation, approach distribution and street assignment, selection of entrance and exit locations and traffic operations requirements. We deliver traffic signal designs with plans and specifications. We serve as public agency liaisons, and are frequently called upon to provide expert testimony.

GENERAL FIRM OVERVIEW



For Yale University and the city of New Haven, CT, the firm provided functional design for Broadway, including lane arrangements and signal system phasing and timing. This traffic, pedestrian, parking and street beautification project won an AIA award for Architecture in the Community.

Site Development and Civil Engineering

For close to a hundred years, Tighe & Bond has engineered the infrastructure of countless cities and towns throughout New England. We've designed roads, bridges, and drainage management systems, dams, industrial parks and academic facilities and all the utilities they require. We provide site planning services, cost-effective design, bid supervision and construction oversight. Regulatory experts on staff help ensure that permitting is achieved as smoothly and swiftly as possible with federal, state and local authorities.



Tighe & Bond provided engineering services for street beautification, roadway reconstruction and infrastructure improvements including water, sewer and drainage for the town of Erving, MA.

Geographic Information Systems (GIS)

Tighe & Bond provides GIS services to a wide range of clients including municipalities, water and sewer utilities, state and federal government agencies, and private businesses. Our staff has experience in a wide variety of vendor applications such as ESRI, AutoDesk, Intergraph, and Bentley. We have expertise in performing Needs Assessment studies, customized application development including desktop, server, and web applications, data conversion, and analysis. Tighe & Bond is an ESRI Business Partner that provides a close working relationship with one of the most popular GIS software vendors.



For the Town of New Canaan, Tighe & Bond converted the Town's sewer system map from an overall schematic plan of the system. The overall plan showed flow direction and pipe size as well as pump stations and notes on the pressurized parts of the system. The overall schematic was scanned and georeferenced to orthophotography and sewer main features were traced down the center of roadways. All data was captured in an ArcGIS geodatabase. Sewer customers were identified from Assessor records and placed on the map. Identification of the customers yielded the newly defined sewer district.

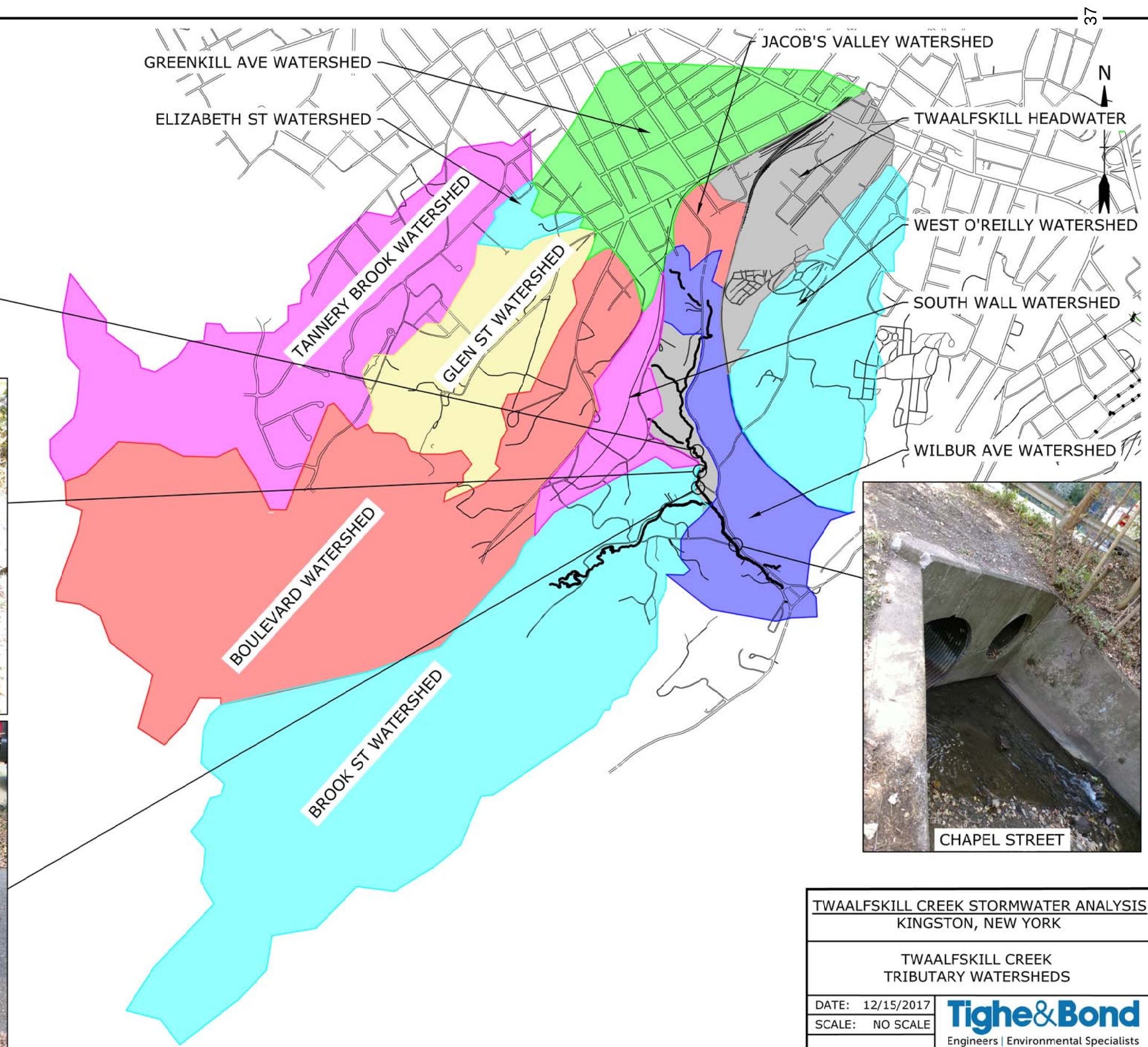
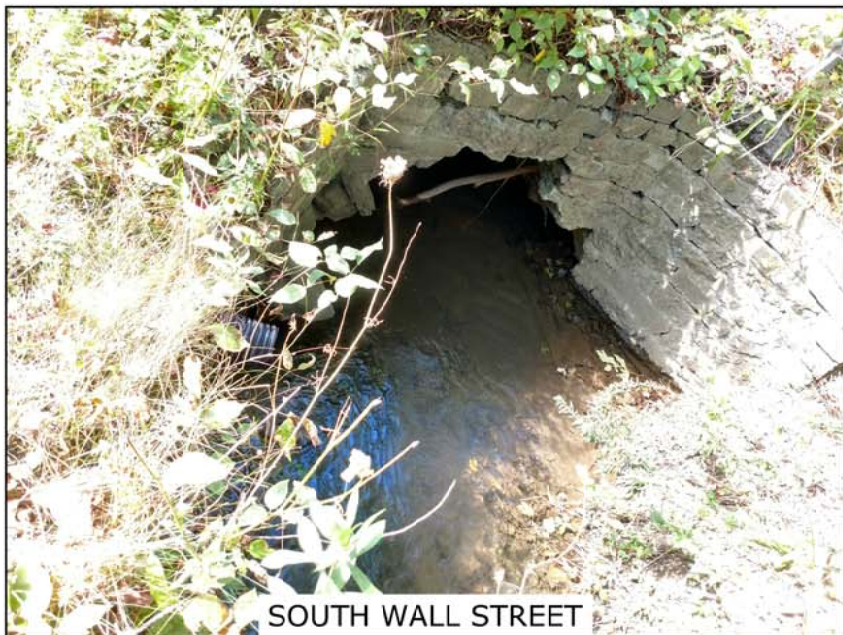
GENERAL FIRM OVERVIEW

Current Expertise

Tighe & Bond is staffed with over 320+ seasoned professionals, including professional engineers, environmental scientists and hydrogeologists. Working in teams, they share diverse expertise to benefit our clients. Professional registrations cover a wide range of disciplines; personnel specialize in the following areas:

- Civil Engineering
- Coastal Engineering
- Demolition Specifications
- Electrical Engineering
- Environmental Engineering
- Geographic Information Systems (GIS)
- Geotechnical Engineering
- Health & Safety
- Instrumentation & Control
- Mechanical/HVAC
- Parking Consultancy
- Regulatory Compliance & Permitting
- Remediation
- Site Assessment
- Site Development
- Solid Waste Management
- Structural Engineering
- Traffic Engineering
- Transportation Planning
- Wastewater Management
- Water Resources Engineering

Dec 15, 2017 2:59pm Plotted By: Disecche
Tighe & Bond, Inc. C:\Users\DTSeche\Desktop\Loose files\Kingston Twaalfskill Tributary Watersheds.dwg



TWAALFSKILL CREEK STORMWATER ANALYSIS KINGSTON, NEW YORK	
TWAALFSKILL CREEK TRIBUTARY WATERSHEDS	
DATE: 12/15/2017	Tighe & Bond Engineers Environmental Specialists SERVICES PROVIDED IN NEW YORK BY T&B ENGINEERING, P.C.
SCALE: NO SCALE	

Saw Mill Brook – Manchester-by-the-Sea, MA



Project Name: Sawmill Brook Watershed Analysis
Project Number: M-1476-3-4
Project Location: Manchester-by-the-Sea, MA
Description: Existing Conditions CN & Tc Calculations
Prepared By: CRD Date: September 8, 2015

Designation: Area 1
Location:

Cover Type	Area, ac	CN	A x CN
Commercial - Soil Type A	0.000000	89	0.0000
Commercial - Soil Type B	0.4813295	92	44.2823
Commercial - Soil Type C	0.2013695	94	18.9287
Commercial - Soil Type D	0.7687470	95	73.0310
Forest - Soil Type A	0.0000000	25	0.0000
Forest - Soil Type B	59.7666670	55	3287.1667
Forest - Soil Type C	4.5745470	70	320.2183
Forest - Soil Type D	22.3574500	77	1721.5237
Industrial - Soil Type A	0.0000000	81	0.0000
Industrial - Soil Type B	3.3827060	88	297.6781
Industrial - Soil Type C	1.5265560	91	138.9166
Industrial - Soil Type D	0.1003350	93	9.3312
Open Space - Soil Type A	0.0000000	39	0.0000
Open Space - Soil Type B	0.1823675	61	11.1244
Open Space - Soil Type C	0.1823675	74	13.4952
Open Space - Soil Type D	0.0000000	80	0.0000
Open Water	0.7380440	98	72.3283
Residential - Soil Type A	0.0000000	51	0.0000
Residential - Soil Type B	21.2265220	68	1443.4035
Residential - Soil Type C	3.0271120	79	239.1418
Residential - Soil Type D	5.8960520	84	495.2684
	124.4121720		8185.8382

Weighted CN: 66

Time of Concentration

(computed in accordance with ConnDOT Drainage Manual, Sec. 6C)

Overland				
Segment	Surface "n"	Flow Length (ft.)	Slope (ft./ft.)	Time (min.)
Segment A - B	0.4	300	0.16	22.2

Shallow Concentrated Flow				
Segment	Slope (ft./ft.)	V (ft./s)	Length (ft.)	Time (min.)
Segment B - C - unpaved	0.11	5.35	610	1.9
Segment C - D - unpaved	0.02	2.28	230	1.7
Segment D - E - unpaved	0.15	6.25	210	0.6
Segment E - F - unpaved	0.01	1.61	620	6.4

Total Tc = 32.7 Min.

Note: Overland time of concentration computed using "Kinematic Wave" equation
Gutter and pipe time of concentration computed using Manning's equation

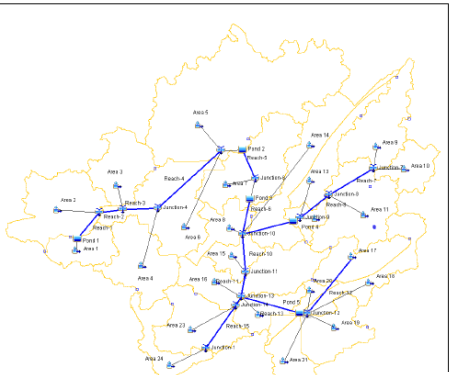
3:\M\1476 Manchester MA Hydro Study\Task 4 Hydraulic Modeling\Calculations\CN & Tc.docx

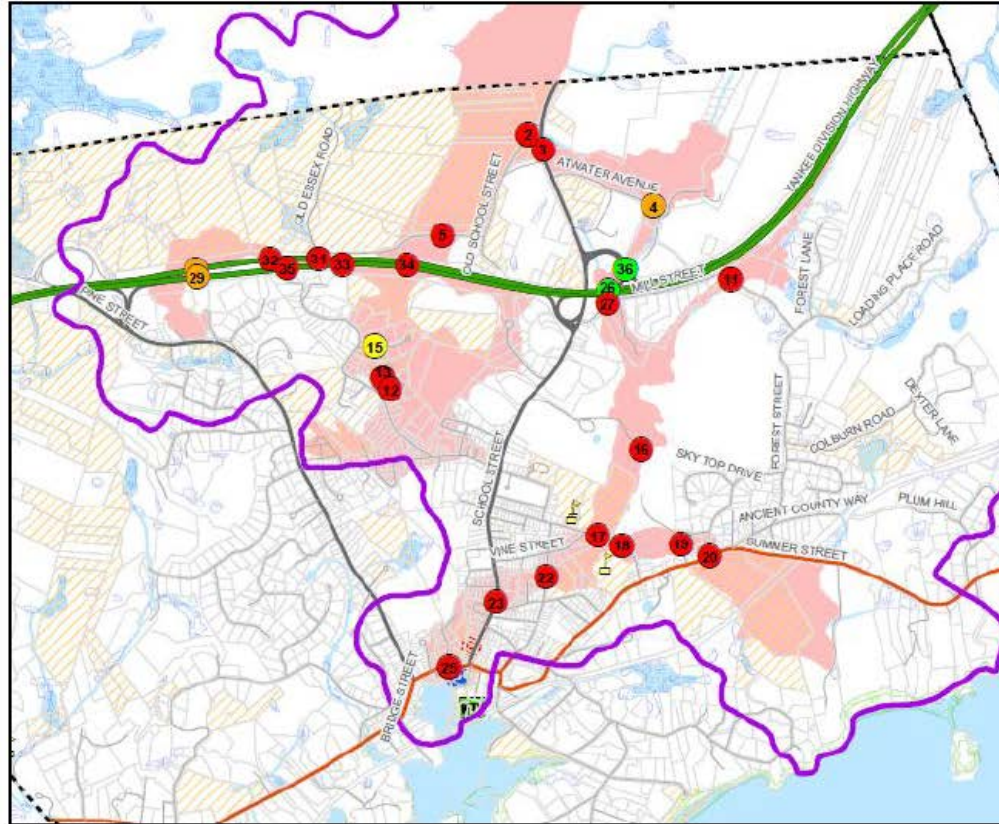
Appendix A-3
Saw Mill Brook Culvert Summary

Culvert #	Stream	Street	Inlet Dimensions (ft)		Inlet Elevation	Doucet Inlet Elevation	Doucet Road Centerline	Top of Road	Outlet Dimensions (ft)		Outlet Elevation	Doucet Outlet Elevation	Top of Road	Length (ft)	# of Crossings	Culvert Type	Culvert	
			Width	Height					Width	Height							Material	Condition
2	Cedar Swamp	School Street	2.67	2.67	40.20	39.20	44.90	45.80	3.33	2.83	39.10	39.30	45.80	45.00	3	box culvert	Dry Stone	old
2a	Cedar Swamp	School Street	1.50	1.50	41.40	40.00	44.70	45.40	1.50	1.50	41.10	40.7	45.40			round culvert	clay pipe	
2b	Cedar Swamp	School Street	3.00	2.58	40.80	39.50	39.10	44.90	3.00	3.33	40.40	39.10	45.00			dry stone culvert box		
3	Sawmill Brook	School Street	15.35	6.58	40.10	38.40	48.10	50.10	15.35	6.58	40.20	38.40	48.90	58.00	1	open bottom arch	Metal	new
4	Sawmill Brook	Atwater Avenue	14.70	8.30		37.70	48.10		14.70	8.30		37.70		42.00	1	open bottom arch	Metal	old
5	Sawmill Brook	Conservation Winchester Drive	9.00	5.58	40.10			47.10	9.00	5.67	39.80		47.10	38.00	1	open bottom arch	Metal	rusted
6	Sawmill Brook	School Street	1.10	1.10	N/A			N/A	1.10	1.10	N/A		N/A	28.00	1	round culvert	Concrete	new
7	Cat Brook	Forrest Road	11.60	2.90	43.60			48.20	11.60	2.90	43.90		48.50	20.20	1	open bottom arch	Stone	old- collapsing
8	Cat Brook	Load Place	2.00	2.00	44.30			47.90	2.00	2.00	44.30		47.30	30.70				
9	Sawmill Brook	Pine Street	2.92	2.92	N/A			N/A	2.92	2.92	N/A		N/A	42.00				
10	Sawmill Brook	Rockwood Heights	1.83	1.58	N/A				1.83	1.25	N/A		N/A	25.00				
11	Cat Brook	Mill Street	12.50	3.70	33.50			40.40	12.00	5.58	31.70		40.50	20.10				
12	Sawmill Brook	Millet Lane	5.00	5.00	46.50			49.30	2.50	2.50	46.30		52.20	35.00				
13	Sawmill Brook	The Plains	5.00	2.00	45.80			51.20	5.00	2.75	45.00		51.80	40.00				
15	Sawmill Brook	Blue Heron Lane	2.50	2.50	N/A			N/A	2.50	2.50	N/A		N/A	28.00				
16	Sawmill Brook	Golf Course	12.00	9.42	11.50			21.60	11.50	9.58	11.40		21.60	20.00				
17	Sawmill Brook	Lincoln Street	12.00	6.00		8.70	17.30		12.00	6.00		8.60		50.00				



Project: MBTS
Basin Model : MBTS Watershed - Normal
Oct 09 13:58:03 EDT 2015





Shown above are culverts that will overtop during specific flood events in the year 2100 with a fossil intensive precipitation scenario and storm surge. Culverts shown in red will overtop during a 25 year storm, orange will overtop during a 50 year storm, yellow will overtop during a 100 year event, and culverts in green will not overtop even with a 100 year storm event. Areas of surficial flooding are shown in pink.

Stream	Culvert Crossing		Balanced Energy Use			Fossil Intense Energy Use		
			2025	2050	2100	2025	2050	2100
Sawmill Brook	Central Street	25						
	School Street	23						
	Norwood Avenue	22						
	Lincoln Street	17						
	Golf Course Driveway	16						
	Mill Street	27						
	Route 128	26						
	Route 128 Ramp	36						
	Atwater Avenue	4						
	School Street	3						
	Old School Street	2						
	Old Essex Road	5						
	Route 128	34						
	Route 128	31, 33						
	Route 128	32, 35						
	Route 128	28, 29						
Causeway Brook	Lincoln Street	18						
	Golf Course Driveway	19						
	Summer Street	20						
Cat Brook	Mill Street	11						
Millet Brook	Millet Lane	12						
	The Plains	13						
	Blue Heron Lane	15						

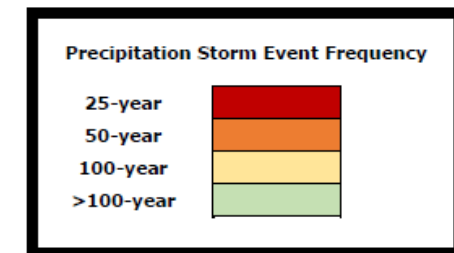


CHART 3-3 FLOOD PROFILE FOR EXISTING CONDITIONS SAWMILL BROOK MAIN STEM 2015 100-YEAR FLOOD

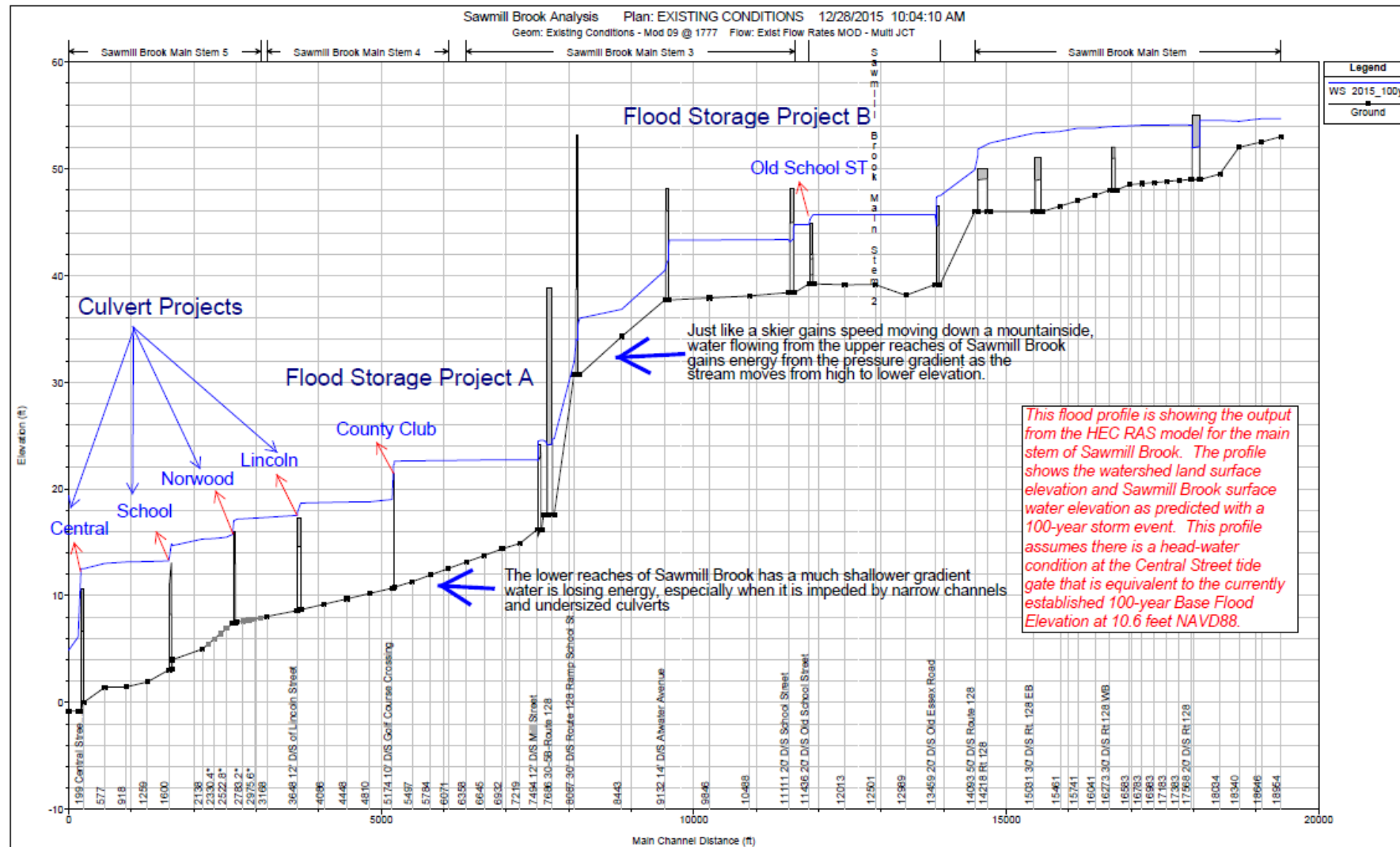


Table 4-5
Summary Table of Combined Flood Mitigation Projects

Project Elements	Modeling Iterations												
	1	2	3	4	5	6	7	8	9	10	11	12	13
Culvert Improvements*													
Central Street	X		X			X	X	X	X	X	X	X	X
School Street	X		X			X	X	X	X	X	X	X	X
Norwood	X		X			X	X	X	X	X	X	X	X
Lincoln						X	X	X	X				
Channel Improvements													
School -Norwood Widen	X		X			X					X	X	X
School-Norwood Widen and Deepen												X	X
Flood Storage													
Essex County Golf Course				X	X								
Old School Street		X	X		X	X		X					

4.4 Green Infrastructure

Tighe & Bond conducted an assessment of the potential benefit of installation of green infrastructure practices also known as Low Impact Development Best Management Practices (LID BMP's). For a complete description of the Green Infrastructure BMP Analysis, please refer to the Tighe & Bond Report, "Opportunities for Flood Mitigation within Sawmill Brook", July 30, 2015. As described in this report, opportunities to install green infrastructure throughout the watershed included the following locations:

- Parking lot abutting the Town Fire Station at 12 School Street;
- Parking lot for the Coach Field Playground;
- High School; and
- Elementary School.

Green infrastructure practices manage small areas of runoff compared to the overall Sawmill Brook watershed. Tighe & Bond evaluated these locations as part of the HEC RAS modeling. For example, for the Elementary School, we assumed that all of the existing pavement would be converted to permeable pavement, approximately 39,000 square feet. The curve number calculation for this location was adjusted for the land use coverage assuming that the area would be converted to permeable pavement. The runoff curve number dropped from 74 to 73, which is not significant. Additional model runs were performed to account for the reduced runoff curve number. We found that, under all modeling conditions, there was only a slight reduction (generally 2 cfs) in the flow rate downstream of the elementary school and that culvert overtopping was not reduced (i.e. the project would not have a significant impact on the water surface elevations).

Of the areas identified as potentially feasible for green infrastructure installation, the Coach Field Parking Area was selected by the Town to further explore the flood benefits from installation of porous pavement or LID BMPs.

4.4.1 Recommended Project - Porous Asphalt for Coach Field Parking

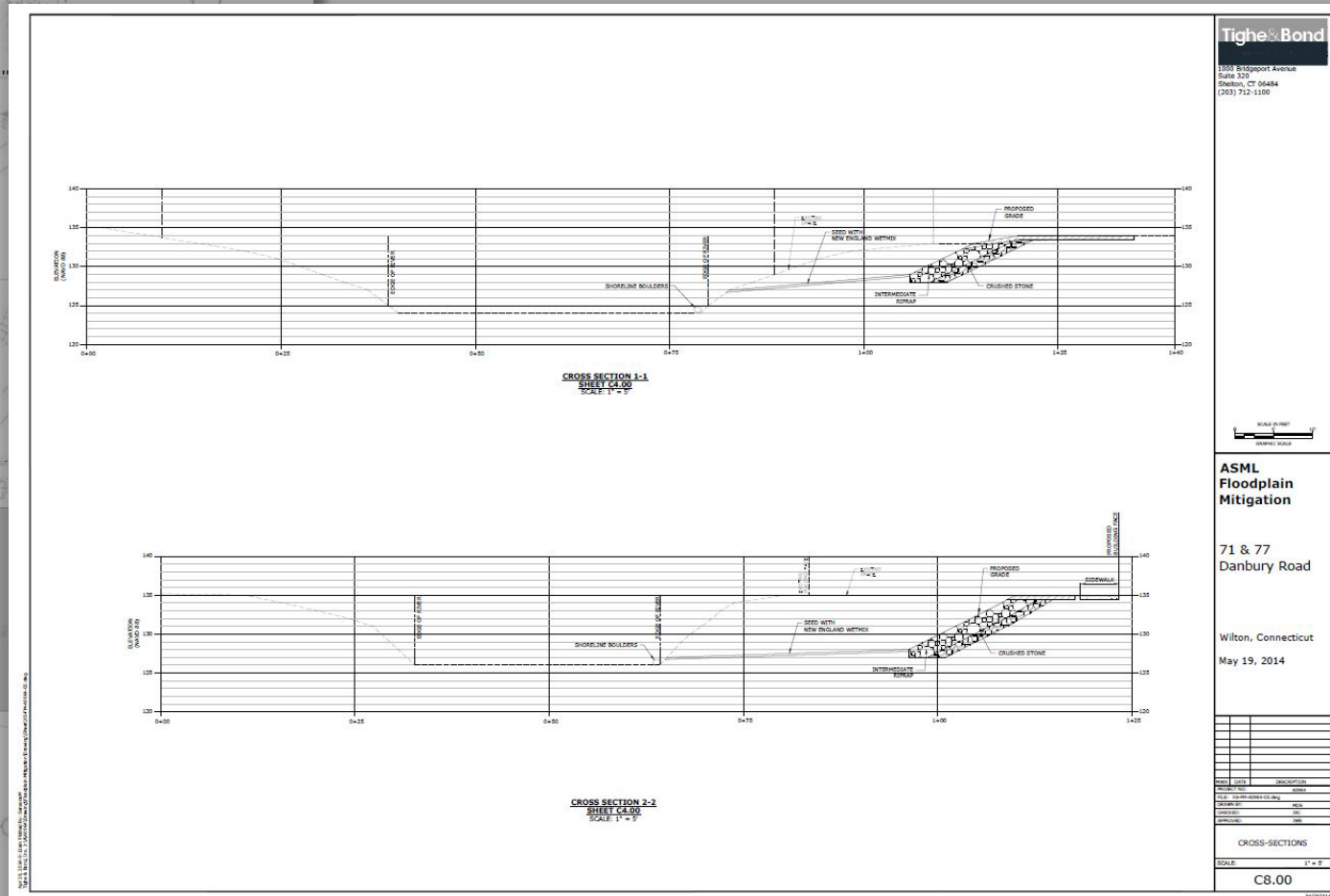
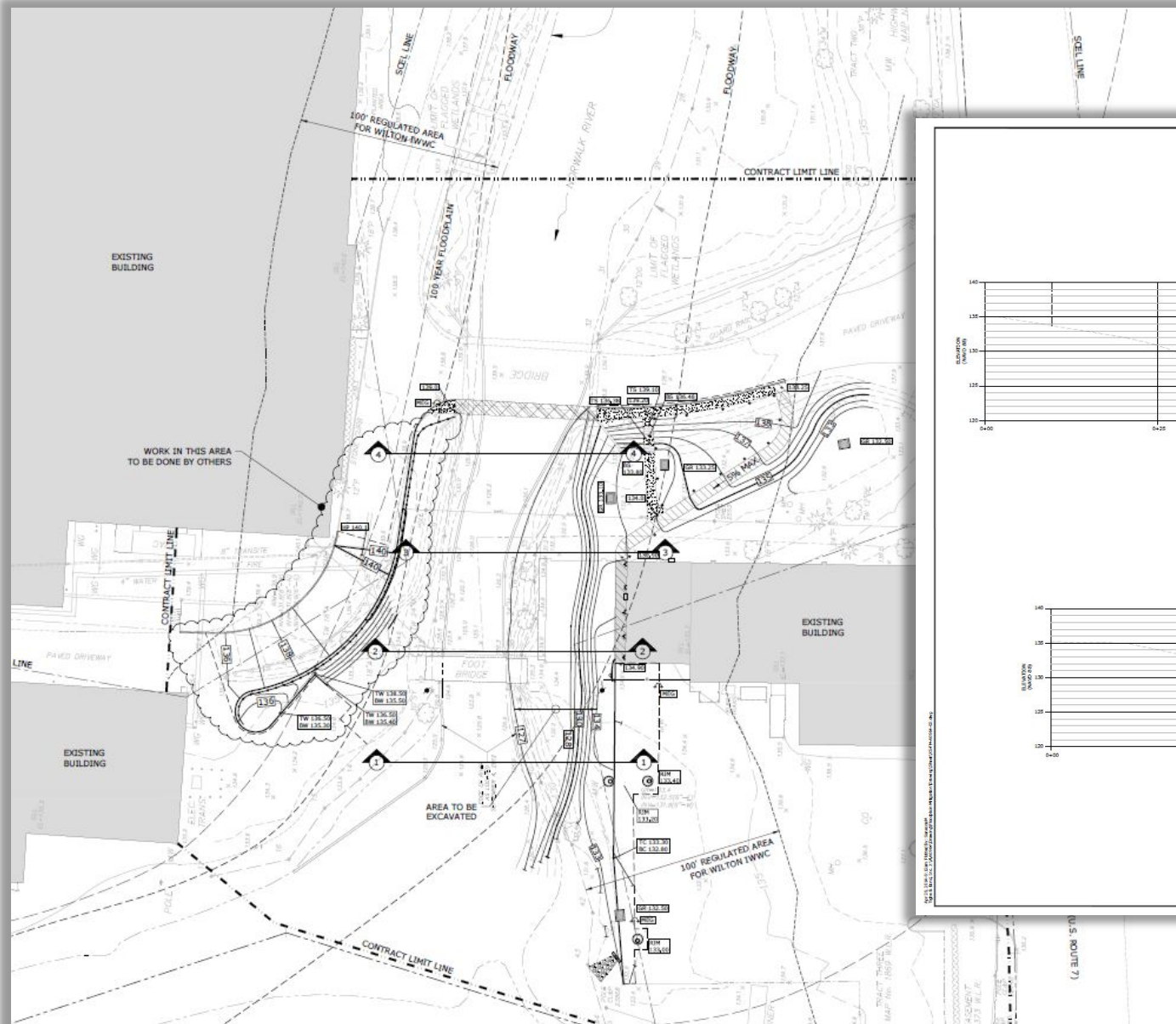
HEC-RAS modeling was evaluated for the potential benefit of installing porous asphalt in the Coach Field parking lot. Because the parking area is small (approximately 0.4 acres) in comparison to the overall watershed (approximately 3,400 acres), this improvement will have limited benefit to reducing flows during larger precipitation events (e.g. the 25, 50, and 100 year storms in 2025, 2050, and 2100 that range from 6.3 inches to almost 11 inches in a 24-hour storm). However, it will have some benefit during small storm events. In addition, installing porous asphalt on the parking area will improve water quality and reduce thermal loading to Sawmill Brook. This project would consist of the following elements:



View of parking area from Norwood Avenue

ASML – Wilton, CT





Tighe & Bond

1000 Bridgeport Avenue
Shelton, CT 06484
(203) 712-1100

**ASML
Floodplain
Mitigation**

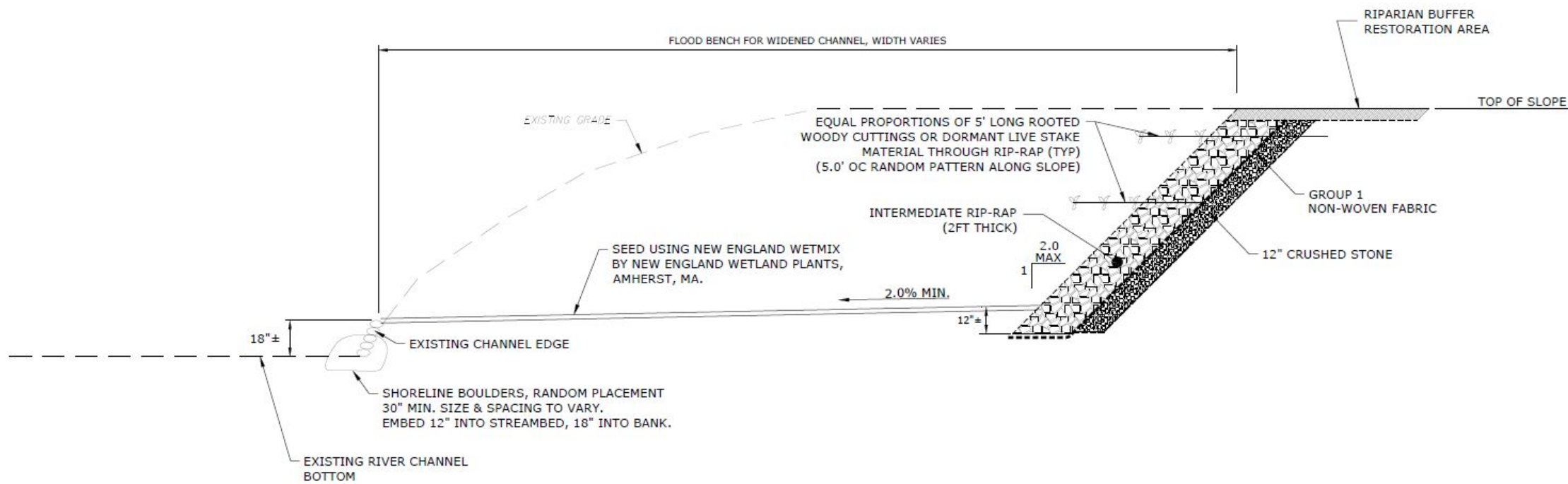
71 & 77
Danbury Road

Wilton, Connecticut
May 19, 2014

CROSS-SECTIONS

SCALE 1" = 5'

C8.00



NOTES:

1. DORMANT LIVE STAKE MATERIAL SHALL BE PLANTED BETWEEN NOVEMBER 15 AND MARCH 15.
2. STAKES SHALL BE PLACED A MINIMUM OF 24" IN TO SOIL SUBSTRATE.
3. SHORELINE PROTECTION BOULDERS SHALL NOT PROTRUDE ABOVE THE BASE OF THE NEW CHANNEL. EMBED BOULDERS INTO CHANNEL BOTTOM.
4. REUSE EXISTING ON-SITE SHORELINE BOULDERS WHERE FEASIBLE.

TYPICAL RIVER CHANNEL WIDENING SECTION

1/4" = 1'-0"







2012

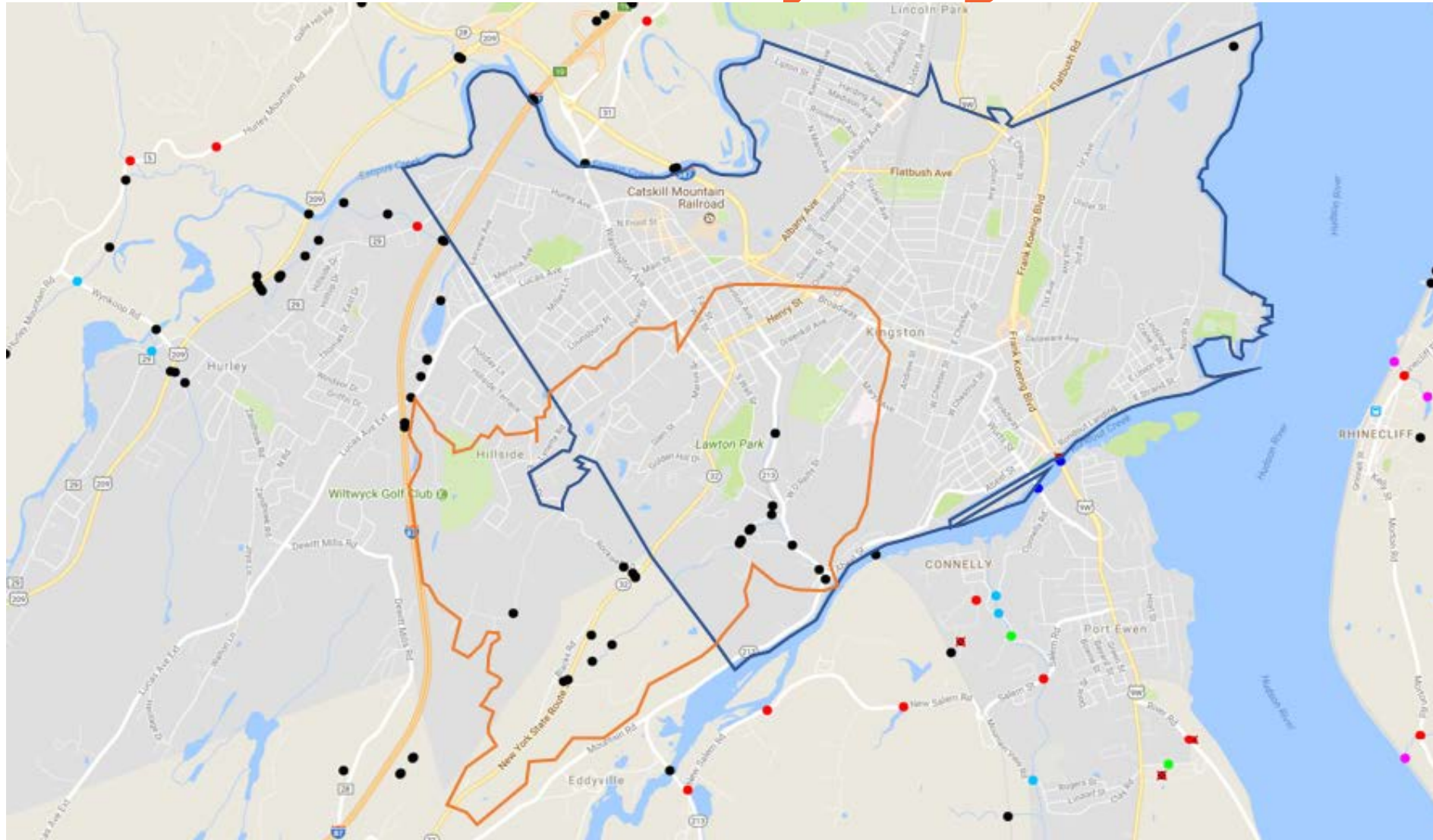


2014



2016

Hudson River Estuary Program Grants



Hudson River Estuary Program (NYSDEC)

Request for Proposals Restoration of Watershed Connectivity February 2017

The New England Interstate Water Pollution Control Commission (NEIWPCC), in cooperation with the New York State Department of Environmental Conservation's (NYS DEC) Hudson River Estuary Program, is inviting proposals for projects that will help restore aquatic habitat connectivity for herring and eel, and reduce localized flood risks and conditions on Hudson River Estuary tributaries. NEIWPCC is accepting proposals for the following three types of projects:

Project Type 1) Produce an inventory of road-stream crossings compiling field assessments of all culverts and bridges where a public road crosses a stream within an area specified by the applicant and using the protocols of the North Atlantic Aquatic Connectivity Collaborative (NAACC).

Project Type 2) Develop a municipal management plan for prioritizing & mitigating documented aquatic barriers (dams, bridges and culverts) to improve fish passage and reduce localized flooding caused by such barriers. The management plan should include conceptual-level barrier mitigation designs and at least one 100% shovel-ready design for mitigation. The management plan should be prepared for municipal adoption.

Project Type 3.) Produce 100% shovel-ready engineering designs for mitigating culverts that are barriers to fish migration at priority road-stream crossings assessed using NAACC protocols.

Each proposal is limited to one of three project types, however applicants may submit more than one proposal.

A total of \$200,000 will be made available for this RFP and we expect to fund multiple projects from each of the three project lists. NEIWPCC reserve the right to shift amounts allocated to project types in order to fund qualified proposals and may partially fund proposals as funding allows. The estimated allocation of funds per category is: \$50,000 for Project Type 1, \$75,000 for Project Type 2 and \$75,000 for Project Type 3.

Database Entry By: Ryan Morrison

Coordinator: Megan Lung

GPS to Crossing Distance (meters): 2

Crossing Code: xy4190651473987440

Date Observed: 07-18-2017

Town/County: Esopus, NY

Road: Millbrook road

GPS: Lat: 41.90661, Long: -73.98776

Location Description: Metal guard rails

Crossing Type: Culvert

Flow Condition: Typical low-flow

Tidal Site: No

Road Fill Height (feet) : 1.8

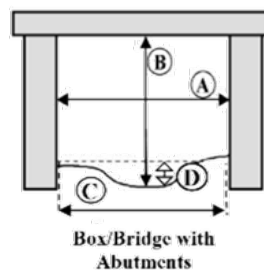
Bankfull Width Confidence: No data

Tailwater Scour Pool: None

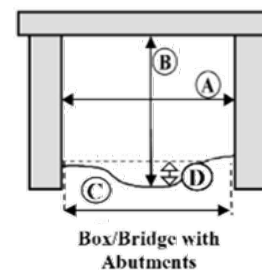
Crossing Comments: Fish spotted at crossing

Evaluation of this stream crossing is estimated as: **INSIGNIFICANT BARRIER**

Inlet Shape:



Outlet Shape:



Crossing Data:

Entry Date: 07-19-2017

Last Updated: 09-05-2017

NHD-HUC8 Watershed: Rondout

Local ID: 49

Lead Observer: Ryan Morrison

Stream/River: Unknown

Type: Paved

Number of Culverts/Bridge Cells: 1

Crossing Condition: OK

Alignment: Skewed (>45°)

Bankfull Width (feet): No data

Constriction: Moderate

Structure Data:

Total Number of

Culverts: 1

This is culvert n

Outlet Openness Ratio: 0.865

Outlet Shape: Box/Bridge with Abutments

Outlet Grade : At Stream Grade

Outlet drop to water surface (feet): 0.0

Structure Length: L = 34.3 Feet

Inlet Openness Ratio: 0.949

Inlet Type: Headwall and Wingwalls

Inlet dimensions (feet): A = 10.5; B = 3.1; C = 10.5; D = 0.50

Slope Percent: 0.4%

Internal Structures: None

Structure Substrate Matches Stream: Comparable

Structure Substrate Coverage: 100%

Severity: Minor

Water velocity matches that of the stream? No-Slower

Height above dry passage: No data

Structure Material: Concrete

Outlet Armoring: None

Outlet dimensions (feet): A = 10.6; B = 2.8; C = 10.6; D = 0.30 ; E =

No data

Outlet drop to stream bottom (feet): 0.0

https://www.streamcontinuity.org/cdb2/naacc_search_crossing.cfm

Organizational Chart





YEARS OF EXPERIENCE

39

SPECIALTIES

Site/Civil Design

Roadway & Traffic Improvements

Roadway Reconstruction

Community Revitalization

Brownfields Redevelopment

Solid Waste

Renewable Energy

LICENSES/REGISTRATIONS

Professional Engineer - CT (#28159)

Professional Engineer – MA (#34729)

Professional Engineer – NH (#13245)

Professional Engineer – NY (#96898)

Professional Engineer – VT (#18-0006285)

EDUCATION

Bachelor of Science

Civil Engineering

Rensselaer Polytechnic Institute

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

Solid Waste Association of North
America, Southern New England
Chapter

American Public Works
Association

Institute of Transportation
Engineers

Dana Huff is vice president and principal on assignments covering a variety of disciplines, with a primary focus on civil engineering projects. Utilizing technical, analytical, and engineering expertise, he has developed innovative and resourceful solutions to complex engineering challenges for municipal, state, commercial, private and international clients. Dana has assisted a number of clients negotiate contracts with more beneficial terms and conditions.

Professional Experience

Municipal/Public Work

- **Town of Trumbull On-Call:** Served as principal-in-charge for several environmental projects under an on-call engineering contract in Trumbull, CT; some of which include updating Trumbull's new MS4 Stormwater Management Plan, assisting Economic Development on several community revitalization projects, and assisting the Town with grant applications. Prepared two major grant applications for roadway and intersection improvements (including pedestrian access/sidewalks).
- **UConn Farmington/Hartford Campus Traffic Study:** Principal on a traffic circulation/connectivity project for both the Farmington Medical Campus and the new Hartford Campus. The project was awarded to Tighe & Bond through the Capital Region Council of Government (CRCOG)
- **Route 110 Traffic Study:** Served as principal-in-charge for Tighe & Bond's work with the CT METRO Council of Government (METRO COG) and the Town of Stratford, CT to develop a transportation engineering planning study that solves the recurring congestions, safety and mobility issues along Main Street (Route 110). The study included a public outreach initiative to advise affected agencies, local stakeholders, and the public.
- **CTDOT Traffic and Safety On-Call:** Serving as principal-in-charge for a contract with the CTDOT for task-based traffic and safety engineering services throughout CT. Tighe & Bond is calculating yellow and all-red clearance timings for 794 state-owned and maintained traffic control signals in District 1. Additional assignments include evaluation and design of warning and safety signage and pavement markings for approximately 1,500 dangerous non-state owned roadway curves in Districts 2 and 4.
- **Norwalk Street and Streetscape Improvements:** Served as principal-in-charge and worked with the Norwalk Redevelopment Agency to design roadway and streetscape improvements to enhance the "walkability" of the area of North Water Street adjacent to the Aquarium and improve patron access to businesses on North Main Street, Dana is also principal on the Smith Street improvements project in support of the Head of the Harbor development in Norwalk, CT.
- **Thomaston Roadway Improvements:** Served as principal-in-charge to investigate the parking needs for the Reeves Field athletic complex and the drainage and pavement improvements to 12,000 linear feet of roadway in Thomaston, CT.
- **Farmington MS4 Program:** Served as principal for Tighe & Bond's development of an updated MS4 stormwater management plan to comply with Connecticut's newly implemented MS4 General Permit.

- **Fairfield Kings Highway Pedestrian Corridor Improvements:** Serving as principal-in-charge on the Kings Highway roadway project that includes sidewalk replacement, pedestrian safety and ADA compliant accommodations. Also includes bicycle accommodations, as well as streetlight and streetscape improvements to enhance the walkability and safety of residents using the corridor to access the Metro North Rail Station and area businesses.
- **Windsor Locks Roadway:** Authored a successful \$3.5 million grant application for Windsor Locks, CT to reconstruct a heavily traveled street serving residential, commuter, and industrial traffic. Included pedestrian access along both sides of the roadway. Also managed the design and construction through the Connecticut Department of Transportation review/approval process.
- **Gardner Kilby Hammond Bike Path:** Served as principal-in-charge for this project for the City of Worcester, MA. The bike path adds neighborhood benefits to the Gardner, Kilby, Hammond Street area of the City, as well as creating space for Clark University to develop a sports complex immediately adjacent to the new Boys and Girls Club, which will have access to the facility when completed.
- **Putnam Place Renovations:** Served as principal-in-charge for the City of Fitchburg's Putnam Place renovations, which included developing truck accessibility to this industrial/commercial space which is critical to the viability of downtown Fitchburg, MA.
- **Fitchburg Revitalization:** Served as principal-in-charge for this pedestrian/traffic enhancement project in downtown Fitchburg, MA. The goal is to improve traffic circulation on Main Street, increase parking, improve pedestrian safety, and improve the curb appeal with pedestrian friendly streetscaping to make Main Street more of an attraction.
- **North Adams Revitalization:** Served as principal-in-charge for the revitalization of North Adams, MA downtown area and the pedestrian approach to the Massachusetts Museum of Contemporary Art (Mass MoCA), including Main Street, sections of Route 2, and adjoining streets. The project challenges included meeting tight timelines while coordinating the project minimizing disruption to downtown businesses, and managing the review/approval through Massachusetts Department of Transportation.
- **Northampton Redevelopment:** Served as principal-in-charge on the redevelopment of severely blighted commercial property in Northampton, MA adjacent to the Connecticut River flood plain. Included significant storm water management versus parking need challenges combined with unsightly landscape at a major entrance to the City.
- **North Adams Brownfields Redevelopment:** Served as principal-in-charge for a brownfields redevelopment project in North Adams, MA. Assisted the city with converting a contaminated property into a developable property of mixed residential/commercial/retail space.
- **Dalton Roadway Reconstruction:** Served as principal-in-charge on a 2-mile, full-depth roadway reconstruction project in Dalton, MA that has difficult pedestrian/cross walk, street width, alignment, right of way, and stream crossing issues. One focus was to provide pedestrian access along the entire two-mile corridor to enhance and promote walkability. Managed the project through the Massachusetts Department of Transportation review/approval process.
- **North Adams Transfer Station:** Principal-in-Charge on design of a new solid waste transfer facility to increase the volume of solid waste transferred out of the Northern Berkshires. Provide ongoing evaluation of MSW and recyclables transfer station options for the City of North Adams, MA and the Northern Berkshire Solid Waste District. Review and evaluation of existing facilities and haul/disposal options.
- **West Springfield Transfer Station:** Project manager on developing a Request for Proposals for the City of West Springfield, MA to privatize their MSW and recyclable Transfer Station off Agawam Avenue and assisted the City with evaluations of the proposals received.
- **Worcester Streetscape Improvements:** Serving as principal-in-charge for streetscape improvements to Franklin and Plantation Streets. This \$8 million project in Worcester, MA continues the City's downtown streetscape theme into adjacent neighborhoods. It includes pavement rehabilitation, sidewalk replacement with accent strips, pedestrian safety and ADA compliant accommodations, streetlight improvements, and streetscape improvements to the neighborhoods surrounding the expanded CSX freight terminal.



YEARS OF EXPERIENCE

17

SPECIALTIES

Wastewater Facility Evaluation
& Design

Wastewater Collection Systems
Hydraulic Modeling

Water Treatment Facility Design
Stormwater Design
Permitting

LICENSES/REGISTRATIONS

Professional Engineer – NY (#84665)

Professional Engineer - MA (#46640)

Professional Engineer – CT (#28198)

Professional Soil Evaluator – (#13709)

EDUCATION

Bachelor of Science
Environmental Engineering
Wentworth Institute of Technology

Master of Science
Environmental Engineering
Worcester Polytechnic Institute

Professional Certificate
Technical Communications
Wentworth Institute of Technology

PROFESSIONAL AFFILIATIONS

New York Water Environment
Association

New England Water Environment
Association

NYSDEC Water Management
Advisory Committee

Erin Moore is a project manager with experience in municipal water, wastewater and stormwater projects. Her project experience covers a broad range of analysis and design including evaluation phase studies, design development, permit procurement, construction document preparation, and construction phase services. She also has expertise in hydraulic modeling.

Professional Experience

Hydraulic Modeling

- **Darrow School Drainage Improvements:** Completed stormwater drainage area modeling in support of drainage improvements project which provided flood protection for historic Shaker buildings. Aided in obtaining FEMA funding for project construction. Coordinated with wetlands and archeological permitting agencies. Designed stormwater improvements including up to 42" drainage piping, and custom stormwater diversion structures, as well as traditional stormwater infrastructure.
- **Hartford Metropolitan District Commission Granby Street Sewer Separation:** Designed Storm Water Management Model (SWMM) to evaluate existing and proposed conditions for several miles of major sewer interceptor and associated overflow structures for combined system. Utilized data from preliminary design report, as-built drawings, survey, and city-wide model to identify specific concerns and constraints of the Granby Street system. Utilized modeling data to aid in development of sewer separation design and to review system impacts during construction.
- **Chicopee Long Term CSO Control Plan:** Provided modeling and analysis of 15,000 acre sewer shed including CSO regulator structures, interceptors, pump stations and other features of the combined sewer system in Chicopee, MA. Reviewed and prepared CSO control project alternatives. Assisted in completion and implementation of Long Term CSO Control Plan (LTCP). Conducted field investigation of the sewer and storm drain system. Collected extensive structure data by inspection and plan review. Prepared Draft LTCP report, including recommended project determination, and coordination with client, MADEP, and public. Prepared successful SRF loan application for first phase of LTCP.
- **Holyoke Long Term CSO Control Plan:** Provided modeling and analysis of 18,000 acre sewer shed including CSO regulator structures, interceptors, pump stations and other features of the combined sewer system in Holyoke, MA. Reviewed and prepared CSO control project alternatives. Utilized model data in development of LTCP first phase projects.
- **Peabody Lynn Street Sewer Replacement:** Investigated sewer capacity problems in Peabody, MA using as-built data, water use records and previous reports/studies. Developed estimates of sewer flows and inflow/infiltration. Created stormwater management model (SWMM) to determine problem sewer pipe sections and evaluate alternative solutions. Prepared study report with system improvement recommendations and presented study findings at public meeting. Prepared bid documents for replacement sewers in accordance with recommended improvements. Completed construction administration including coordination with client, contractor, and inspectors, review of submittals and information requests, and review of pay requisitions.

- **South Central Connecticut Regional Water Authority:** Evaluated alternative disinfection technologies for use at four wellfields and two surface water treatment plants for the South Central Connecticut Regional Water Authority. Prepared study comparing alternatives and developed layouts and cost estimates for recommended technology. Completed design of five disinfection systems based on study recommendations and prepared bid documents. Completed construction administration including coordination with client, contractor and product vendors, review of submittals and information requests, and review of pay requisitions.
- **New York City DEP Wastewater Cost Analysis:** Provided reproduction cost less new “RCNLD” cost analysis report for three wastewater treatment facilities and collection systems in NYCDEP watershed. Analysis required extensive wastewater system inventory, analysis of current process and equipment usage, and coordination with plant operators and NYCDEP legal department.
- **Chicopee WPCF Secondary Treatment Bypass Upgrade:** Assisted in design and bid document preparation of 15 MGD Chicopee WPCF secondary treatment bypass upgrade in Chicopee, MA Included pump station, chlorine contact chamber, and chemical feed systems.
- **Windsor Locks Infiltration & Inflow Analysis:** Completed infiltration and inflow analysis for Windsor Locks, CT including house-to-house inspections, smoke testing, dye testing, TV inspection, and manhole inspection. Coordinated sub-consultant work. Completed data analysis, improvement recommendations, and report preparation.
- **Amenia Wastewater Feasibility Study:** Prepared wastewater disposal evaluation to determine most appropriate and cost effective solution for the Town of Amenia. Project focused on alternative treatment technologies and was successfully used to obtain \$3 million dollars in interest free project financing.



YEARS OF EXPERIENCE

23

SPECIALTIES

Floodplain Management

Stormwater Management

Civil/Site Engineering

Site Development

LICENSES/REGISTRATIONS

Professional Engineer - CT (#20873)

Professional Engineer - NY (#086159-1)

Leadership in Energy and
Environmental Design Accredited
Professional (LEED AP)

Certified Floodplain Manager
(US-13-0791)

EDUCATION

Bachelor of Science
Civil Engineering
University of Connecticut

PROFESSIONAL AFFILIATIONS

Association of State Floodplain
Managers

Connecticut Association of Flood
Managers, Vice-Chair

Rhode Island Floodplain Manager's
Association

Joseph Canas is a project manager who has expertise in various civil engineering disciplines, including: stormwater collection systems, roadway design, floodplain modeling, construction administration, and subsurface sewage disposal systems. He has been involved in all phases of project execution from planning through design and construction. He is a LEED AP and Certified Floodplain Manager.

Professional Experience

Civil/Site

- **ASML Floodplain Mitigation Evaluation:** Serving as project manager for the ASML Floodplain Mitigation project on the Norwalk River in Wilton, CT. Evaluated a series of measures to reduce floodplain exposure for the ASML facility. The selected alternative involves removing an existing pedestrian bridge, a portion of an existing building, and widening the channel. Preparing USACOE and CTDEEP permit applications. Proposed improvements will lower floodplain elevations through the facility by 2 feet, and improve upstream flooding conditions at Arrowhead Way by one foot. Secured federal, state, and local approvals for work within the Norwalk River, and prepared construction documents for bidding.
- **General Permit for the Discharge of Stormwater from Municipal Separate Storm Sewer Systems (MS4):** Gave three presentations to the Environmental Business Council, as well as a presentation to the Connecticut Conference of Municipalities and the Connecticut Association of Zoning Enforcement Officers on the requirements of the new MS4 permit. Prepared stormwater management plan updates for the reissued permit, effective July 1, 2017 for the communities of Trumbull, Darien, Farmington, Monroe, New Canaan, and Newington. Prepared annual reports for the Town of Trumbull.
- **Letters of Map Revision, Trumbull:** Provided floodplain engineering services to update hydraulic analyses to successfully revise the locations of the floodplain boundary for portions of Tributary A to Horse Tavern Brook and Tributary F to the Pequonoc River. In both cases, the floodboundaries shown in the Flood Insurance Study were inconsistent with local flooding observations, so we modified the existing studies as appropriate to reflect existing conditions. In both cases, an application was made to, and ultimately accepted by, FEMA.
- **CTDEEP General Permit for the Discharge of Stormwater Associated with Industrial Activities:** Provided services for registration under the General Permit for the Southington Water Pollution Control Facility and the Trumbull Department of Public Works Garage. Prepared Stormwater Pollution Control Plans, provided sampling, monthly reporting, training, semi-annual comprehensive site visits, and quarterly visual monitoring as required by the permit.
- **Washington Village, Norwalk:** Serving as project manager for the CTDEEP Floodplain Management Certification for the redevelopment of Washington Village in Norwalk, CT. Prepared a Floodplain Management Certification application for the project documenting that the project would not adversely impact flooding, and also prepared a request for exemption based upon intensity of floodplain development. CTDEEP approved the exemption request, the first of its kind for public housing in the State of Connecticut.

- **Manchester-by-the-Sea Coastal Resiliency Study.** Provided technical support for the modeling of flood risk associated with riverine and coastal flooding in downtown Manchester-by-the-Sea and along Saw Mill Brook. The analysis accounted for the combination of sea level rise along with increased precipitation in the Saw Mill Brook watershed to identify the flood exposure for critical municipal infrastructure, including emergency response facilities, as well as identification of culverts in the watershed at greater risk of overtopping based upon an analysis of mid-range precipitation projections.
- **Metro Green Apartments & Residences:** Serving as project manager for the Metro Green project for Empire State Realty Trust and Jonathan Rose Companies in Stamford, CT. The site development will be one of Connecticut's foremost transit-oriented and premier mixed-income communities. Metro Green involves mixed use of 350,000 square feet of Class A office and 238 units of residential housing, to be located adjacent to existing Intermodal Transportation Center and a 650-space parking garage. 100 residential units in two buildings have already been completed, and have achieved LEED Gold certification
- **Elton Rogers Park Dam Rehabilitation:** Prepared the hydraulic and hydrology analysis of the reconstruction of the existing dam at Elton Rogers Park in Bridgeport as part of the first phase of the six phase Ox Brook Flood control project. In addition to improvements at the dam, the project included an evaluation of downstream flooding conditions along Ox Brook to Lourmel Street. This section of Ox Brook includes segments of open channel flow, and closed-conduit flow through a heavily urbanized area.
- **Stormwater Management Peer Reviews:** Served as project manager for peer reviews of land use applications involving stormwater management in Darien and Canton, CT. The reviews have included small single-family developments to large commercial and institutional developments. Prepared reviews in a timely manner and offered testimony and
- **Trumbull Sanitary Sewers, Contract 3:** Served as the project manager for third party evaluation of construction, including review of payment requisitions, as-built drawings, and video records. Made recommendations for follow-up video inspections and field investigations. Compiled report to present before the Trumbull WPCA.
- **City of Norwalk Fire Department Headquarters:** Served as project manager for the demolition and construction of a new headquarters building and fire station for the City of Norwalk. Project included completely new utility connections and a new stormwater management system. The project was located between two CTDOT projects for the widening of adjacent roadways, and required close coordination between the two projects to ensure that the projects would interface appropriately. Due to the unique shape of the site (300 feet long by 60 feet wide), several variances were required and obtained from the City. Designed an enabling project involving a 1,100 square foot addition to Station #4 on Westport Avenue to house one of the crews displaced by the construction of the new headquarters facility.
- **Ridgefield Library:** Managed the civil engineering design of a project involving the demolition of existing additions to the Ridgefield Library, and a new subsequent addition that would add 44,000 square feet to the historic 1903 facility. Designed new utility connections to serve the building and updated the on-site stormwater management system to provide significant water quality improvements, eliminating flow of untreated stormwater to Ridgefield Brook. Due to neighborhood flooding concerns, analyzed Ridgefield Brook to Grove Street to demonstrate the project would have no adverse impact.
- **Darien Stormwater Management Regulations:** Developed new stormwater management regulations for the Town of Darien, CT to address stormwater quality for new development. Recommended documentation guidelines aimed at promoting the Town's stormwater management goals without overwhelming the Town review agencies with additional workload. The Planning and Zoning Commission adopted the regulations, which are also referenced by the Environmental Protection Commission. Reviewed multiple projects on behalf of Town land use boards for compliance with the Town's stormwater management regulations.
- **The Reserve:** Served as a project manager for this planned neighborhood development project in Danbury, CT. Designed stormwater management plans for various commercial and residential developments on the 545-acre site. Coordinated permitting for the developments, including City Site Plan, City Environmental Impact Commission, Dam Construction Permit, Water Diversion Permit for Nonconsumptive Uses and 401 Water Quality Certification with CT DEP, and a Category 2 PGP Permit with the Army Corps of Engineers.



YEARS OF EXPERIENCE

5

SPECIALTIES

Stormwater Management

Water Resources

Civil/Site Design/Land Development

Municipal Engineering

Soil Erosion & Sediment Control

Transportation

Athletic Field Design

LICENSES/REGISTRATIONS

NAACC Coordinator and Observer

Massachusetts Title 5 Soil Evaluator

New York Stated Erosion and
Sediment Control

New York State Building Safety
Inspector

EDUCATION

Bachelor of Science
Civil Engineering

Wentworth Institute of Technology

PROFESSIONAL AFFILIATIONS

American Society of Civil Engineers

Ryan Morrison is a staff engineer with 5 years of experience in the design, permitting, bidding and construction administration of land development projects. His experience includes work on various private and municipal projects. Projects have included parking lot and roadway design, water and sewer main replacement/ rehabilitation projects, commercial development and athletic facility design projects. Ryan is proficient in Auto CAD Civil 3D, HydroCAD modeling.

Professional Experience

Stormwater Management

- **Culver Assessment and Prioritization:** Serving as the lead coordinator and observer for four (4) Town-wide Road and Stream Crossing inventory projects located in Albany, Green, Ulster and Dutchess County. Using the Certification obtained from training provided by NAACC in conjunction with field training provided by New York State Department of Environmental Conservation (NYSDEC) for collecting information regarding road and stream crossings. Worked with the NYSDEC to provide a town-wide road and stream crossing prioritization study for a municipality. The prioritization study included comprehensive collaboration with municipal stakeholders including DPW department and watershed stakeholders.
- **Stormwater Modeling:** Authored numerous stormwater reports in New York and Massachusetts. Has modeled stormwater rain events for project development sites and municipal resiliency analysis including pre- and post run-off conditions using HydroCAD and Storm and Sanitary Analysis.
- **Stormwater Pollution Control:** Performed various stormwater pollution control inspections and reports to verify the contractors' compliance with stormwater pollution control plans.
- **Erosion and Sediment Control Plans:** Provided numerous erosion and sediment control plans for various types of sites. Erosion and Sediment Control Plans were for sites including small commercial development, solar panel arrays, municipal applications and athletic facility sites.

Water Resources

- **Dam Safety Inspection and Engineering Assessment:** Authored hazard and hydraulic assessments for Class B dams for review by the New York State Department of Environmental Conservation. Assessments included hydraulic and Civil 3D modeling of the site necessary to quantify the runoff and determine downstream impacts.
- **New York State Bathing Beach Permit:** Authored and engineering report for the purposes of permitting including watershed modeling, hazard assessment and providing of plans necessary for permitting with the New York State Department of Health.
- **50 year Drought Study:** Provided a 50 year drought study of a supply pond for a community fire department. The report provided analysis of the ponds ability to withstand drought consistent NFPA 1142

Civil/Site

Town Hall Parking Lot Improvements Project: Serving as the design engineer and construction administrator for a Town Hall Parking Lot Improvements Project. Site improvements included lighting, ADA improvements, expansion of the parking lot and stormwater design. During the construction phase of the project he supervised weekly inspections of the site, provided reporting of project progress to the client to document project timeline and phasing and negotiated change orders with the contractor. The project also included management of a grant which required additional coordination between county agencies and the municipality.

- **Spa Facility Rehabilitation Project:** Served as the design engineer for a project to rehabilitate a 90 year old spa facility. Site design considerations included new New York State Department of Transportation compliant entrances, ADA accessibility, underground utilities including special provisions for spa equipment, water (fire and potable), electric and a new sewer connection. Other site considerations included site lighting and emergency access. The project required extensive coordination between the municipality, state and the client.
- **Commercial Site Plan Applications:** Succeeded on various site planning projects for commercial development. Including site plan applications, State Environmental Quality Review Act (SEQRA) permitting and the necessary state permitting to shepherd the various commercial applications and clients through the site plan process. Tasks included presenting the projects to the planning and zoning boards and coordination with municipal engineers and attorneys.
- **Site Cut/Fill Analysis:** Provided cut fill analysis for large commercial trucking facility with extensive site work including a site access road, parking lot and a 300,000sf distribution facility.

Municipal Engineering

- **Pump House Rehabilitation Project:** Served as the design engineer and construction inspector for a pump house rehabilitation project which included the replacement of valves, metering devices and ductile iron pipe within the pump house as well ductile iron pipe outside of the pump house prior to tying into the community water system. The project included coordination of the shutdown of the community's water system while the work was being performed and testing required by Ten States standards to bring the new equipment back online.
- **Municipal Stormwater Rehabilitation Project:** Assisted in the design and performed daily construction inspections for a Town's municipal stormwater system. Project included 1000s of lf of stormwater line replacement, manhole rehabilitation, and structural and non-structural lining of stormwater lines.
- **Roadway Redesign:** Performed an engineering survey and provided a design for two (2) Town Roads for a total length of 2,500 ft. Designs included reconfiguring horizontal and vertical alignments, tying into existing property on either side of the roadways, providing under draining and necessary stormwater management, replacement of necessary utilities and design of pedestrian access and parking.

Transportation

- **Pedestrian Improvement Projects:** Provided initial engineering reports and coordinated with the New York State Department of Transportation for projects which included improvements to pedestrian access and bike lanes within a city.
- **Commercial Parking Lot Assessment:** Authored an engineering report for a commercial complex to include and evaluation of quantity of parking, condition of parking lot and traffic circulation.
- **Bus Stop and Pedestrian Access Project:** Served as a design engineer for a project to formalize and existing bus stop. Tasks included helping put together the application for grant funding and design of the site features include the bus pull off, drainage, sidewalks and site amenities.



YEARS OF EXPERIENCE

2

SPECIALTIES

Wastewater

Odor Control

USDA Rural Development Program

LICENSES/REGISTRATION

Intern Engineer

EDUCATION

Bachelor of Science
Civil Engineering
Cornell University

10-Hour OSHA General Industry
Safety Training

David Seche is a staff engineer with a focus on wastewater and municipal engineering. He is a recent graduate from Cornell University where he earned his Bachelor of Science in Civil Engineering. He has experience in wastewater treatment data analysis and design; inflow and infiltration evaluation and improvement recommendations; hydraulic modeling; odor control technologies; construction document preparation; and USDA Rural Development applications and documents.

Professional Experience

Wastewater

- **Greenfields Wastewater Treatment Facility Rehabilitation:** Served as staff engineer in the evaluation and design of improvements to the wastewater treatment plant. Prepared specifications for the treatment plant rehabilitation.
- **Greenfields Collection System Inflow and Infiltration Evaluation:** Served as staff engineer in the evaluation of I/I within the collection system and development of recommendations to reduce overall flows to the wastewater treatment plant.
- **Kingston, NY Combined Sewer Separation Plan:** Served as staff engineer in the evaluation and design of a combined sewer separation plan to reduce total flow to the wastewater treatment plant and reduce combined sewer overflow activations.
- **Salisbury, CT Collection System Inflow and Infiltration Evaluation:** Served as staff engineer in the evaluation of I/I within the collection system and development of recommendations for reducing I/I, including cured-in-place pipe lining and manhole sealing.
- **South End Road Pump Station Design:** Assisted in the development of design alternatives for the upgrade of the pump station, including determining current and future flows.
- **Chicopee, MA Combined Sewer Overflow Annual Report:** Performed modeling of CSOs and sewer interceptors using the EPA Storm Water Management Model.

Odor Control

- **School Street Pump Station:** Evaluated alternatives for treatment of elevated hydrogen sulfide levels at the pump station. The evaluation included liquid and vapor phase alternatives including potassium permanganate dosing, carbon scrubbing, chemical scrubbing, and biofiltering systems.

USDA Rural Development Program

- **Salisbury, CT Various Wastewater Improvements Project:** Prepared the grant application and developed the preliminary engineering and environmental reports characterizing the engineering effort and environmental impacts related to various improvements for a wastewater treatment plant and pumping station.
- **Lanesborough, MA Water Main Extension:** Prepared the grant application and developed the preliminary engineering and environmental reports characterizing the engineering effort and environmental impacts related to an extension of the municipal water system.

K-0094-0-P002
October 25, 2017

Ralph Swenson, P.E., City Engineer
City of Kingston
420 Broadway
Kingston, NY 12401

**Re: Twaalfskill Creek Stormwater Analysis – Engineering Services
Price Proposal**

Dear Mr. Swenson:

In this price proposal, we have included the engineering hours and fees for the Twaalfskill Creek Stormwater Analysis Engineering Evaluation project.

As described in our proposal we have presented the work in five tasks. While we have presented the hourly rates and estimated hours on the attached table, we recommend that the contract be awarded in a lump sum format billed by percentage complete, under five project tasks identified as:

- | | |
|--------------------------------------|-----------------------------|
| 1. Watershed Delineation | 4. Recommended Improvements |
| 2. Existing Conditions Documentation | 5. Reporting |
| 3. Hydraulic & Hydrologic Analysis | |

We will still provide our hours spent per task, but this format will be much simpler for staff to review and understand project status.

We would like to note that as part of this proposal we have not included use of sub-consultants for survey. For the purposes of modeling and conceptual improvements we feel that the existing topographic data and field measurements are sufficient. Should the City wish to extend the scope of preliminary engineering, survey of areas with recommended improvements could be obtained.

Additionally, we have reviewed the City's required insurance requirements and affirm that we have adequate coverage. We have provided sample insurance certificates for the City's review.

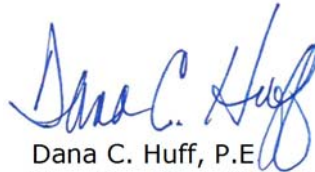
We would be pleased to discuss this price proposal with you or any other component of our proposal.

Very truly yours,

T&B Engineering, P.C.



Erin K. Moore, P.E.
Project Manager
(845) 835-8080
ekmoore@tighebond.com



Dana C. Huff, P.E.
Vice President / Director
(203) 712-1122
dchuff@tighebond.com



Twaalfskill Creek Stormwater Analysis Engineering Services Fee Schedule

	\$235	\$180	\$175	\$120	\$90	\$80	\$78				
Task	Principal	Senior Project Manager	Technical Leader H&H Analysis	Project Engineer	Staff Engineers	GIS Technician	Admin.	Total Hours	Reimbursable	Labor Effort	Total Task Cost
1.0 Watershed Delineation	0	5	10	0	18	6	0	39	\$ 130	\$ 4,270	\$ 4,400
2.0 Existing Conditions Documentation	0	3	4	0	24	0	0	31	\$ -	\$ 3,500	\$ 3,500
3.0 Hydraulic & Hydrologic Analysis	0	2	18	80	26	8	0	134	\$ -	\$ 16,600	\$ 16,600
4.0 Recommended Improvements	0	2	20	72	18	0	0	112	\$ -	\$ 14,500	\$ 14,500
5.0 Reporting	8	10	12	18	8	4	3	63	\$ 410	\$ 9,490	\$ 9,900
Sub- Total	8	22	64	170	94	18	3	379	\$ 540	\$ 48,360	\$ 48,900



CERTIFICATE OF LIABILITY INSURANCE

OP ID: SS

DATE (MM/DD/YYYY)

10/02/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Poole Professional Ltd.-TM 107 Audubon Rd. #2, Ste. 305 Wakefield, MA 01880 Thomas M. Mullard		CONTACT NAME: PHONE (A/C, No, Ext): FAX (A/C, No): E-MAIL ADDRESS: PRODUCER CUSTOMER ID #: TIGHE-1	
INSURED Tighe & Bond, Inc. Engineering Services in NY Provided by: T&B Engineering, P.C. 53 Southampton Road Westfield, MA 01085		INSURER(S) AFFORDING COVERAGE INSURER A: Continental Casualty Company INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:	
		NAIC # 20443	

COVERAGES**CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	☒ GENERAL LIABILITY			6045349069	10/01/2017	10/01/2018	EACH OCCURRENCE \$ 1,000,000
	☒ COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 1,000,000
	☐ CLAIMS-MADE ☒ OCCUR						MED EXP (Any one person) \$ 10,000
	☒ Business Owners						PERSONAL & ADV INJURY \$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE \$ 2,000,000
	☐ POLICY ☒ PRO-JECT ☐ LOC						PRODUCTS - COMPI/OP AGG \$ 2,000,000
							\$
A	☐ AUTOMOBILE LIABILITY			6045349024 MA, CT	10/01/2017	10/01/2018	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000
	☐ ANY AUTO						BODILY INJURY (Per person) \$
	☐ ALL OWNED AUTOS						BODILY INJURY (Per accident) \$
	☒ SCHEDULED AUTOS						PROPERTY DAMAGE (PER ACCIDENT) \$
	☒ HIRED AUTOS						\$
	☒ NON-OWNED AUTOS						\$
							\$
A	☒ UMBRELLA LIAB ☒ OCCUR			6045339223	10/01/2017	10/01/2018	EACH OCCURRENCE \$ 5,000,000
	☐ EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE \$ 5,000,000
	☐ DEDUCTIBLE						Follow \$
	☒ RETENTION \$ 10,000						Form \$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY			6049563571 MA, CT, NH	05/01/2017	05/01/2018	☒ WC STATUTORY LIMITS ☐ OTHER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	Y/N ☒ N	N/A				E.L. EACH ACCIDENT \$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE \$ 1,000,000
							E.L. DISEASE - POLICY LIMIT \$ 1,000,000
A	Business Owners			6045349069	10/01/2017	10/01/2018	Valuable Papers 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER**CANCELLATION**

PROPO-1 For Proposal Use Only	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE 63

© 1988-2009 ACORD CORPORATION. All rights reserved.



CERTIFICATE OF LIABILITY INSURANCE

OP ID: LL

DATE (MM/DD/YYYY)

04/10/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Poole Professional Ltd.-TM 107 Audubon Rd. #2, Ste. 305 Wakefield, MA 01880 Thomas M. Mullard		CONTACT NAME: PHONE (A/C, No, Ext): E-MAIL ADDRESS: PRODUCER CUSTOMER ID #: TIGHE-1	
		INSURER(S) AFFORDING COVERAGE	
INSURED Tighe & Bond, Inc. Engineering Services in NY provided by T&B Engineering, P.C. 53 Southampton Road Westfield, MA 01085		INSURER A: XL Specialty Insurance Co. NAIC # 37885	
		INSURER B:	
		INSURER C:	
		INSURER D:	
		INSURER E:	
		INSURER F:	

COVERAGES**CERTIFICATE NUMBER:****REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	GENERAL LIABILITY						EACH OCCURRENCE \$
	☐ COMMERCIAL GENERAL LIABILITY						DAMAGE TO RENTED PREMISES (Ea occurrence) \$
	☐ CLAIMS-MADE ☐ OCCUR						MED EXP (Any one person) \$
							PERSONAL & ADV INJURY \$
							GENERAL AGGREGATE \$
	GEN'L AGGREGATE LIMIT APPLIES PER:						PRODUCTS - COMPI/OP AGG \$
	☐ POLICY ☐ PRO-JECT ☐ LOC						\$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident) \$
	☐ ANY AUTO						BODILY INJURY (Per person) \$
	☐ ALL OWNED AUTOS						BODILY INJURY (Per accident) \$
	☐ SCHEDULED AUTOS						PROPERTY DAMAGE (PER ACCIDENT) \$
	☐ HIRED AUTOS						\$
	☐ NON-OWNED AUTOS						\$
	UMBRELLA LIAB ☐ OCCUR						EACH OCCURRENCE \$
	EXCESS LIAB ☐ CLAIMS-MADE						AGGREGATE \$
	DEDUCTIBLE						\$
	RETENTION \$						\$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						WC STATUTORY LIMITS ☐ OTH-ER
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH)	☐ Y ☐ N	N/A				E.L. EACH ACCIDENT \$
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE \$
							E.L. DISEASE - POLICY LIMIT \$
A	Prof., Environ.			DPR9912946	04/14/2017	04/14/2018	Per Claim 3,000,000
A	& Pollution Liab.						Aggregate 5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (Attach ACORD 101, Additional Remarks Schedule, if more space is required)

CERTIFICATE HOLDER**CANCELLATION**

PROPO-1 For Proposal Use Only	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE 64

© 1988-2009 ACORD CORPORATION. All rights reserved.

Project Understanding and Approach

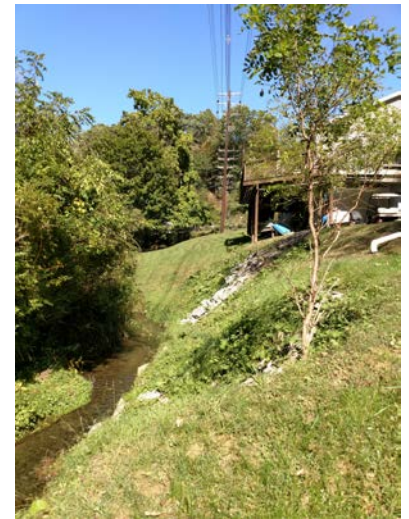
Introduction

Tighe & Bond will provide the City of Kingston with a detailed evaluation of the Twaalfskill watershed that will accomplish the City's Goals:

- Understand which culverts are undersized, and what size is appropriate.
- Identify improvements to eliminate stream bank erosion
- Document construction costs for these improvements

We will do this by:

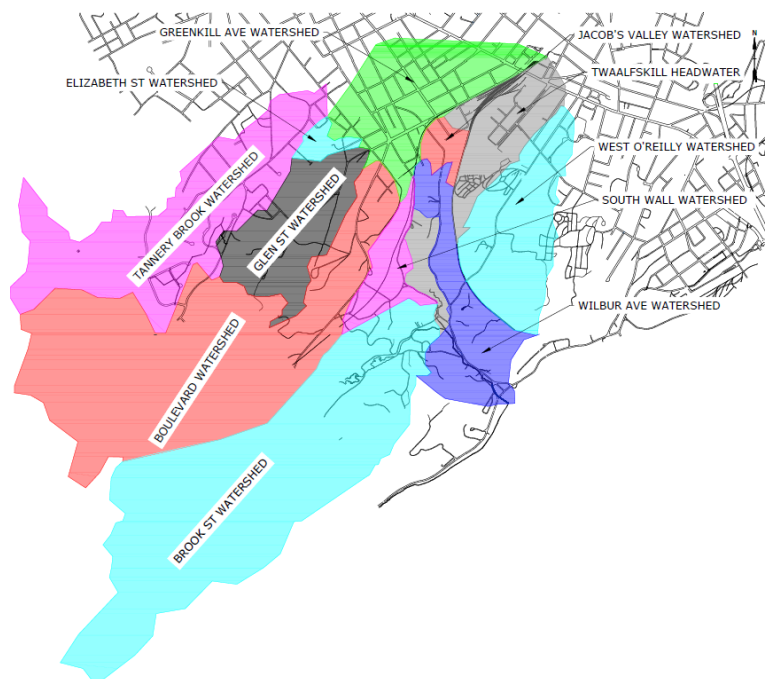
- Leveraging our status as NYSDEC certified North Atlantic Aquatic Connectivity Collaborative (NAACC) protocol Lead Coordinator, and inventorying and performing field assessments of all culverts in the study area that will qualify these crossings for future funding through the Hudson River Estuary Program's Restoration of Watershed Connectivity Grants.
- Utilizing our extensive hydrologic and hydraulic modeling experience with very similar project scopes to provide accurate and efficient results.



Project Understanding

The Twaalfskill watershed carries stormwater from over 1,800 acres that are divided into approximately ten sub-watersheds. At minimum four areas of concern have been identified by City staff, including:

1. Restriction at the Chapel Street culvert for storms greater than a 10-year frequency (as observed)
2. Surcharging at the twin culverts located at Brook Street
3. Deterioration of a stone box culvert at South Wall Street
4. Stream bank erosion at 225 Wilbur Street



Project Requirements & Approach

Hydrologic and hydraulic analysis of the Twaalfskill between the City of Kingston Public Works Yard (at the CSX railroad headwall) and the Chapel Street culvert is necessary to identify where improvements are needed, properly size creek crossings, and prepare accurate construction costs. Tasks include:



Task 1: Delineation of Watershed - Utilizing mapping and documentation available through the City, GIS mapping, and field investigation, delineation of the watershed tributary to the Twaalfskill will be completed.

Task 2: Existing Condition Documentation – Field Investigation will be completed at all crossings in the study area, including completion of NAACC inventory and evaluation. Areas of significant bank erosion, or structural deterioration (in walled sections) will also be identified and documented.

The Hudson River Estuary Watershed Connectivity Grant program has three grant levels. For a project to be qualified for planning, design or construction funding, the crossings must have been previously inventoried and evaluated. As certified lead coordinators, we can complete this initial part of the process for the project area crossings. When future funding phases for crossing improvements become available, the City will be qualified to pursue these opportunities and not have to start at the beginning.

Task 3: Hydraulic & Hydrologic Analysis – Modeling and analysis will be completed for the study area including:

- Calculation of the estimated stormwater runoff from each contributing watershed for storm return periods of 2, 5, 10, 25, 50, and 100 years
- Flood routing along the flow length of the Twaalfskill Creek for the return periods identified
- A capacity analysis for the Twaalfskill Creek stream channel between Chapel Street and its headwaters
- A capacity analysis for each culvert along the length of the Twaalfskill Creek between Chapel Street and its headwaters

We will utilize flow modeling previously completed for the Washington Avenue Tunnel Analysis of the Tannery Brook and Greenkill Avenue subwatersheds.

Task 4: Recommended Improvements – The modeling and analysis will be used to identify structures or channel sections with inadequate capacity for the identified return periods. Each of these items will be identified and recommendations made for improvements including culvert resizing and bank restoration. Opinion of probable construction costs for each of the recommended improvements will be prepared.

Task 5: Reporting – We will prepare a draft report that will include summation of each of the four above tasks. We will incorporate comments from the City into a final report. We anticipate three meetings with the City as part of the reporting process including a kick-off meeting to verify concerns and scope, a draft report review meeting, and a final report review meeting.

Project Area Familiarity & Logistics

Tighe & Bond will be serving the City of Kingston from its Rhinebeck office, just 20 minutes from the Twaalfskill watershed. Tighe & Bond has worked very successfully with the City of Kingston staff previously

on our recent study of the Hasbrouck CSO sewershed and looks forward to working with the City again with another successful result.

Project Team & Experience

Contract Organization

We have assembled the following team of experts based on their knowledge of stormwater projects.



Resumes of Key Personnel

Principal-in-Charge - Dana C. Huff, P.E. (NY PE#96898) Dana is a vice president with over 38 years of experience on assignments covering a variety of disciplines. Utilizing technical, analytical, and engineering expertise, he has developed innovative and resourceful solutions to complex engineering challenges for municipal clients. His experience includes serving as principal-in-charge on multiple stormwater improvement projects including hydraulic and structural assessments of culverts and small span bridges, evaluation of repair/replacement alternatives, and rendering cost effective solutions for numerous communities. A recent example includes evaluating the stormwater collection and conveyance system in a low lying coastal area of Fairfield, Connecticut and developing and recommending a solution that will evacuate both routine storm flow and periodic storm surge to relieve prolonged flooding from within the low lying area. As Principal-in-Charge, Dana will ensure that the appropriate resources are allocated for successful completion of this project and ensuring the project is on time and within budget.

Project Manager - Erin K. Moore, P.E. (NY PE#84665) will manage the project, oversee the day to day execution, manage the project budget, and interface with the City. Erin has 17 years of experience focusing on rehabilitation of aging municipal infrastructure, ongoing operation and maintenance needs and in meeting existing and new regulatory requirements. Erin has helped communities with evaluating and prioritizing needed improvements, cost effective design and obtaining project financing. Erin presented her analysis, design and construction of complex stormwater improvements at the Mt. Lebanon Shaker Village involving a 100-year old stone aqueduct at the Capital District Engineer's Week in Albany NY. As the director of the Tighe & Bond Rhinebeck office, she is familiar with managing all disciplines of municipal projects.

Technical Leader - Joseph A. Canas, P.E., LEED AP, CFM (NY PE #86159), will serve as the technical lead for the hydrologic and hydraulic modeling of the Twaalfskill Creek Stormwater Analysis project. Joe has 23 years of experience in hydraulics and hydrology and has participated in numerous flood studies including the Manchester by the Sea flood resiliency project and Marshfield South River Study. Joe has expertise in many civil engineering disciplines, including stormwater collection systems, floodplain modeling, and construction administration. He has been involved in all phases of project execution from planning through design and construction. Joe is a Certified Floodplain Manager by the Association of State Floodplain Managers, and has actively participated in many of the firm's Connecticut floodplain management projects, both as project manager and primary hydrologic and hydraulic engineer, including the ASML Floodplain Mitigation project, the Norwalk Washington Village Floodplain Management Certification, and numerous Letter of Map Revision applications to FEMA for multiple clients. Joe is a founding member and officer of the newly created Connecticut Association of Flood Managers. Joe's floodplain management and modeling experience will be invaluable to the project.

Field Investigation– Ryan Morrison, E.I.T, and David Seche, E.I.T. will serve as the field observation team for the Twaalfskill project. Within the past year, Ryan Morrison has completed inspection of 290 culverts throughout Ulster, Green, and Dutchess County and is a NAACC certified Lead Coordinator, which allows him to inventory and assess stream crossings for inclusion in the Hudson River Estuary Database. David Seche, a City of Kingston resident, was the lead field investigator for the recent Hasbrouck CSO sewershed evaluation which included field documentation of sewer and stormwater features.

Availability & Verification of Anticipated Schedule

Each of our team members are full-time employees and are fully committed to expedite this project. We have the resources to perform this project on a fast track basis. We acknowledge a project initiation date of December 2017 and a draft report delivery date of June 2018.

Similar Project Experience

Tighe & Bond staff has extensive experience working on all types and sizes of watershed analysis and stormwater management projects including hydrological macro-analysis and hydraulic analysis of streams and rivers. We also are adept at assessing, planning, modeling, and designing both conventional and innovative improvements, including culvert replacements, stormwater drainage improvements, streambank and shoreline restoration, and outfall restorations. We utilize the latest stormwater software programs and have expertise in the planning, modeling, design and construction of all types of stormwater systems.



The understanding of the impact of stormwater and non-point source pollution on the natural environment has come into sharp focus over the last decade driving a shift in focus to a more proactive approach to stormwater management. Unlike the drainage designs of the past, which were based primarily on hydraulics and design standards, today's stormwater environment is complicated and nuanced. While the hydraulics have not gone away, today's stormwater engineering needs to consider a broad range of considerations including public perception, maintenance and funding.

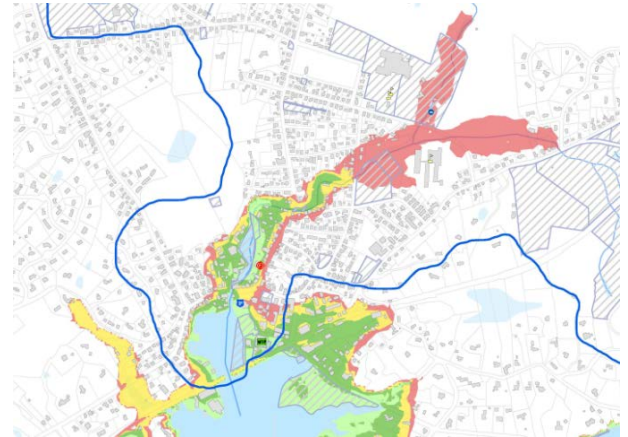
Tighe & Bond staff has been providing wetlands consulting services to our clients for several decades. We take pride in having these capabilities in addition to our already renowned civil and environmental engineering services. Our staff includes nationally recognized Professional Wetland Scientists, Registered Professional Soil Scientists, and Certified Professionals in Sediment & Erosion Control. Services include wetland delineations, environmental permitting, invasive species surveys, rare species surveys, compliance

monitoring, and designing mitigation measures such as erosion control, wetlands replication areas, compensatory flood storage areas and endangered species protection.

Tighe & Bond has a long history of providing floodplain management services throughout the northeast.

Sawmill Brook Culvert Analysis, Manchester-by-the-Sea, MA:

The Town received a CZM Resiliency Grant to analyze the performance of existing culverts within the Saw Mill Brook watershed under various sea level rise and projections for increased inland precipitation. Data for the culverts was collected by Tighe & Bond field reconnaissance, with conditions at each culvert documented. Additional data gaps were filled in by survey and GIS topography. A HEC-RAS model of the watershed was created to model existing culverts in the watershed for a variety of storm frequency and sea level rise scenarios, with 41 evaluated in total. Based upon the results of the analysis, Tighe & Bond identified nine culvert improvements that were required in order to pass the selected design storm.



Unity and Twin Brooks Parks, Trumbull, CT:

Tighe & Bond was retained by the Town of Trumbull to evaluate a series of culverts through two Town parks. As part of this work, Tighe & Bond is identifying existing culverts that cannot pass the Town's current design standards using modeling analysis and field measurement as supported by observed conditions, and will make recommendations for upgrading the culverts where necessary. Probable cost estimates were prepared for the recommended improvements. Also included as part of the overall analysis is the identification of appropriate channel linings to address portions of the watercourses through both parts that have been undercut and eroded.

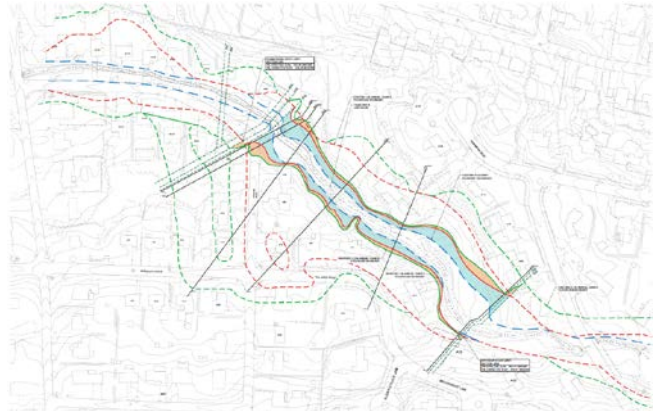


South River Study, Marshfield, MA: The South River is a low-gradient river that travels 15 miles from its source at Round Pond in Duxbury downstream to its tidal estuary at Massachusetts Bay in Marshfield. The evaluation project focused upon the hydrology and hydraulics of the river reach between Main Street (Route 3A) upstream to Chandler's Pond Dam. The river's watershed area at Main Street is 11.4 square miles. MassDER identified releases and riverine structures that impact the hydrology and hydraulics of the South River, including dams, undersized culverts, and releases from cranberry bogs.

The goal of this project was to attain a more comprehensive understanding of the resultant hydrology and hydraulics on the South River if proposed restoration actions are completed. The project evaluated existing hydrology and hydraulics along the study reach under high and low flow conditions, completed an inventory of riverine structures, including dams and culverts, and evaluated future conditions assuming removal of restrictive structures. HEC-RAS and HEC-HMS were utilized for this project.

Horse Tavern Brook Flood Study, Trumbull, CT:

The Town of Trumbull commissioned Tighe & Bond to prepare a study of Tributary A to Horse Tavern Brook. The objective was to restudy an area of the watercourse that was incorrectly mapped by the Federal Emergency Management Agency (FEMA) as being inside a floodplain. As part of the study, Tighe & Bond worked with the Town to obtain new river cross sections along the watercourse, and at each of the eight culverts, and ran a new hydraulic model in HEC-RAS format. The goal of the study was to support a valid request to FEMA for a map revision to the existing flood insurance study. FEMA accepted the results and issued a Letter of Map Revision.



ASML Floodplain Improvements, Wilton, CT:

ASML, a world-wide manufacturer of microchip lithography equipment based in the Netherlands, hired Tighe & Bond to perform an assessment of floodplain risks and potential mitigation measures at its Wilton, CT facility. The facility is located adjacent to the floodplain of the Norwalk River.

Tighe & Bond supplemented the CTDEEP's existing stream channel encroachment line model of the Norwalk River with additional survey cross sections through the site to establish a more accurate and detailed HEC-RAS model of the site. This model was used as the basis to evaluate 11 different floodplain mitigation strategies involving various changes to bridges and channel modifications. The alternative ultimately selected reduced the floodplain elevation of the river by 2.25 feet, and was successfully permitted with the Town, CTDEEP, and USACE.



Organizational & Financial Responsibility

Tighe & Bond provides professional engineering services in New York State as T&B Engineering, P.C (Tighe & Bond). The firm, headquartered in Westfield, MA, is staffed by 325+ professionals in 8 offices, including our local office in Rhinebeck. Our engineers, scientists and planners work together in teams, sharing diverse expertise to benefit our clients.

Continuously operating since 1911, Tighe & Bond is a stable, financially sound firm. As a firm generating over \$54 million in annual revenues, we have the capacity and resources to successfully complete this project.

Tighe&Bond

Engineers | Environmental Specialists

SERVICES PROVIDED IN NEW YORK BY T&B ENGINEERING, P.C.



Finance and Audit Committee Agenda Item Report

Agenda Item No. 434

Submitted by: Carly Winnie

Submitting Department: Kingston Water Department

Meeting Date: January 24, 2018

SUBJECT

J, Hansen, Superintendent KWD Re: Bond Request for Water Line Replacement at 587 Roundabout

Recommendation:

ATTACHMENTS

- [Bond Request for water line replacement 587 roundabout.pdf](#)

Commissioners

Dennis Croswell
President
Robert Nieldsielski
Secretary
Joanne Seche
Margaret Gruner
Harold Bonavita-Goldman



Steve Noble
Mayor

Judith A. Hansen
Superintendent

Kingston Water Department

PO Box 1537
Kingston, N.Y. 12402

December 21, 2017

Hon. James Noble, Jr.
Common Council of the City of Kingston
420 Broadway
Kingston, NY 12401

Re: Request for Approval for Bond for Replacement of Water Infrastructure in NYSDOT's 587 Roundabout Project

Dear President Noble:

At their meeting on December 20, 2017, the Board of Water Commissioners resolved to replace their infrastructure in the referenced project, contingent upon the approval of a bond for this work by the Common Council. It is estimated that this work, including design, construction, project management and administration will cost \$1,500,000.

Therefore, on behalf of the Board of Water Commissioners, I respectfully request the Council's consideration of a bond in an amount not to exceed \$1,500,000.

In advance, I thank you for your consideration of this matter. I look forward to meeting with you and the members of the Council's Finance Committee to answer questions and discuss the project.

Sincerely

Judith A. Hansen
Superintendent

Cc: Dennis Croswell, President
Steve Noble, Mayor
John Tuey, Comptroller

Finance and Audit Committee Agenda Item Report

Agenda Item No. 435

Submitted by: Carly Winnie

Submitting Department: Kingston Water Department

Meeting Date: January 24, 2018

SUBJECT

J. Hansen, Superintendent KWD Re: Bond Authorization for Cooper Lake Engineering

Recommendation:

ATTACHMENTS

- [Bond request for Cooper Lake Engineering.pdf](#)

Commissioners

Dennis Croswell
President
Robert Nieldski
Secretary
Joanne Seche
Margaret Gruner
Harold Bonavita-Goldman



Steve Noble
Mayor

Judith A. Hansen
Superintendent

Kingston Water Department

PO Box 1537
Kingston, N.Y. 12402

December 21, 2017

Hon. James Noble, Jr.
Common Council of the City of Kingston
420 Broadway
Kingston, NY 12401

Re: Request for Approval for Bond for Engineering Design for Cooper Lake Dam Rehabilitation Project

Dear President Noble:

In 2009, the New York State Department of Environmental Conservation promulgated dam safety regulations that requires dam owners to conduct a detailed engineering evaluation of their dam structures and bring them into compliance with current engineering factors of safety. In conformance with these requirements, the Board of Water Commissioners has completed the engineering evaluation and has determined that, while the dam is safe, it needs remediation to bring it into compliance with today's standards. Working with our consultants, the cost of the project has been estimated at about \$6 million dollars and does not include any increase in the capacity of the Reservoir.

The Board has submitted a schedule for this project to the NYS DEC that calls for project design to be done in 2018 so that construction can start in 2019 and be completed by 2020. The cost of design is \$800,000 and includes \$150,000 for pre-design geotechnical explorations and \$650,000 in design fees. At their meeting of December 20, 2017, the Board authorized me to request a bond in the amount of \$800,000 to cover the cost of this work. At a latter date, as the construction costs become refined, we will be requesting a bond for the balance of the project.

In advance, I thank you for your consideration of this matter. I look forward to meeting with you and the members of the Council's Finance Committee to answer questions and discuss the project.

Sincerely

Judith A. Hansen
Superintendent

Cc: Dennis Croswell, President
Steve Noble, Mayor
John Tuey, Comptroller

Finance and Audit Committee Agenda Item Report

Agenda Item No. 437
Submitted by: Carly Winnie
Submitting Department: Civil Service
Meeting Date: January 24, 2018

SUBJECT

J. DeCicco, Exec Secretary, Civil Service Re: Budget Modification Request

Recommendation:

ATTACHMENTS

- [20180104160658.pdf](#)

THE CITY OF KINGSTON COMMON COUCIL

FINANCE AND ECONOMIC DEVELOPMENT
COMMITTEE REPORT

REQUEST DESCRIPTION			
INTERNAL TRANSFER	CONTINGENCY TRANSFER	TRANSFER	X
AUTHORIZATION	BUDGET MODIFICATION	BONDING REQUEST	
CLAIMS	ZONING	OTHER	

DEPARTMENT Civil Service DATE 12/11/2017

Alderman Noble,

I respectfully request the Council to approve a transfer of the 2017 budget.

Decrease the following accounts: A11143014 5401 General Contract by \$850.00

A11143014 5401 Contracted Services \$500.00

Increase the following accounts: A11143011 5101 Regular Pay by \$500.00

A11143014 5461 Travel Reimbursement by \$850.00

Estimated Financial Impact 0

Signature Jacqueline DeCicca

Motion by _____

Seconded by _____

Action Required:

SEQRA Decision

Type I Action _____

Type II Action _____

Unlisted Action _____

Negative Declaration of Environmental Significance: _____

Conditioned Negative Declaration: _____

Seek Lead Agency Status: _____

Positive Declaration of Environmental Significance: _____

Committee Vote	Yes	No
Douglas Koop, Ward 2 Chairman		
Reynolds Scott-Childress, Ward 3		
Steven Schabot, Ward 8		
Deborah Brown, Ward 9		
Tony Davis, Ward 6		

Finance and Audit Committee Agenda Item Report

Agenda Item No. 438

Submitted by: Carly Winnie

Submitting Department: Waste Water Treatment Plant

Meeting Date: January 24, 2018

SUBJECT

A. Winchell, Sr Operator, WWTF Re: Budget Modification Request

Recommendation:

ATTACHMENTS

- [20180104160725.pdf](#)

THE CITY OF KINGSTON COMMON COUNCIL

**FINANCE AND AUDIT
COMMITTEE REPORT**

<u>REQUEST DESCRIPTION</u>		
INTERNAL TRANSFER _____ AUTHORIZATION _____ CLAIMS _____	CONTINGENCY TRANSFER _____ BUDGET MODIFICATION <u>X</u> _____ ZONING _____	TRANSFER _____ BONDING REQUEST <u>X</u> _____ OTHER _____

DEPARTMENT <u>WWTF</u>	DATE <u>12/15/17</u>
Description <u>monies used to payout comp time</u> _____ _____ _____ _____ _____ _____ _____ _____ _____	
Estimated Financial Impact <u>N/A</u>	Signature <u><i>A. W. Lewis</i></u>

Motion by _____

Seconded by _____

Action Required:

SEQRA Decision:
 Type I Action _____
 Type II Action _____
 Unlisted Action _____

Negative Declaration of Environmental Significance: _____

Conditioned Negative Declaration: _____

Seek Lead Agency Status: _____

Positive Declaration of Environmental Significance: _____

<u>Committee Vote</u>	<u>YES</u>	<u>NO</u>
Douglas Koop, Chairman		
Reynolds Scott-Childress, Ward 3		
Anthony Davis, Ward 6		
Steven Schabot, Ward 8		
Deborah Brown, Ward 9		

FROM:

TO:

G1-8130-11-5103 \$2,405.77 G1-8130-11-5108 \$2,405.77

Finance and Audit Committee Agenda Item Report

Agenda Item No. 415
Submitted by: Ralph Swenson
Submitting Department: Engineering
Meeting Date: January 24, 2018

SUBJECT

Hurley Avenue Paving and Complete Streets Project
PIN 8761.94

Recommendation:

Authorized a higher level of funding for the Design Phase
Authorize Engineering Agreement with Barton & Loguidice

ATTACHMENTS

- [2018-1-4 Letter to Common Council for Additional Bonding Authority.pdf](#)
- [Preliminary Cost Estimates.pdf](#)
- [UCTC_Request for TIP Amendment_010418.pdf](#)
- [Hurley Avenue Paving and Complete Streets Agreement BL Rev1 1 4 2018.pdf](#)

CITY OF KINGSTON
Office of the City Engineer
rswenson@kingston-ny.gov

Ralph E. Swenson, P.E., City Engineer



Steven T. Noble, Mayor

January 4, 2018

Mr. James L. Noble, Jr.
Alderman-At-Large
President of the Common Council
420 Broadway
Kingston, NY 12401

Re: Hurley Avenue Paving and Complete Streets
PIN 8761.94
Master Agreement

Dear President Noble,

The City of Kingston is the recipient of Federal Highway Funding through the Ulster County Transportation Council (UCTC) Transportation Improvement Program (TIP) – Block Program Bridge and Paving Program for the Hurley Avenue Paving and Complete Streets Project in the amount of \$451,639, the local match required for the entire project is \$112,910.

During discussions with a number of the consultants under consideration, the budgets for both design and construction were found to be lacking. At this time I request funding authorization for engineering services be expanded from \$26,000 to \$70,580 for the purposes of Design and ROW Incidentals, see attached Draft Engineering Agreement. The Construction Budget will also require additional funding, see attached Preliminary Construction Estimate. We are currently requesting additional monies for both design services and construction through the Ulster County Transportation Council, see attached letter to Dennis Doyle.

Over the past several months a solicitation for engineering services was made, expressions of interest received, proposals evaluated and interviews conducted. The recommended consultant is Barton and Loguidice.

I request authorization for the Mayor to enter into an engineering agreement with Barton and Loguidice at \$70,580.00, and authorization to executing any and all necessary forms and agreements associated with this Federal-Aid Local Project Agreement at this higher funding level.

Please forward this communication to the next regularly scheduled Finance Committee for further discussion.

Should you have any questions, do not hesitate to contact me.

Respectfully,

A handwritten signature in black ink, appearing to read "Ralph Swenson", is written over a horizontal line.

Ralph Swenson
City Engineer

Cc: Steven T. Noble, Mayor
Kevin Bryant, Corporation Counsel
Douglas Koop, Chair, Kingston Common Council Finance Committee

**PRELIMINARY CONSTRUCTION ESTIMATE
HURLEY AVENUE REPAVING
AND COMPLETE STREETS ACTIVITIES
PIN 8761.94
CITY OF KINGSTON
December 15, 2017
B&L JN 703.3402**

	Option
HIGHWAY CONSTRUCTION ITEMS:	
SIDEWALK CURB RAMPS:	\$ 45,000
PAVEMENT: Milling & Overlay	\$ 444,000
PAVEMENT: Striping & Signage	\$ 84,000
WORK ZONE TRAFFIC CONTROL:	\$ 58,000
HIGHWAY CONSTRUCTION COSTS:	\$ 631,000
INCIDENTALS (USE 10%):	\$ 64,000
SUBTOTAL 1 (2018 DOLLARS)	\$ 695,000
CONTINGENCY (5% @ DESIGN APPROVAL)	\$ 35,000
SUBTOTAL 2 (2018 DOLLARS)	\$ 730,000
FIELD CHANGE ORDER (USE 5%)	\$ 37,000
SUBTOTAL 3 (2018 DOLLARS)	\$ 767,000
MOBILIZATION (USE 4%):	\$ 30,000
SUBTOTAL 4 (2018 DOLLARS)	\$ 797,000
ENGINEERING AND SURVEY	\$ 68,500
RIGHT OF WAY COSTS:	
INCIDENTAL COSTS:	\$ 1,000
ACQUISITION COSTS:	\$ 1,000
SUBTOTAL RIGHT OF WAY COSTS:	\$ 2,000
TOTAL COSTS:	\$ 868,000
CONSTRUCTION INSPECTION	\$ 48,000
TOTAL COSTS:	\$ 916,000

OPTION C-1 - BICYCLE LANE INSTALLATION							
DESCRIPTION OF WORK	ROUNDED	EST. COST	ITEM #	DESCRIPTION	QUANTITY	UNIT	COST
CLEARING & GRUBBING:	\$0	\$0	201.06	CLEARING AND GRUBBING	LS	\$	\$0
SIDEWALK CURB RAMPS:	\$45,000	\$44,840	203.02	UNCLASSIFIED EXCAVATION	50 CY	\$	3,750.00
			304.12	SUBBASE	30 CY	\$	2,250.00
			402.126303	12.5 F3 TOP COURSE HMA, 60 SERIES COMPACTION	1.5 TON	\$	165.00
			608.0101	CONCRETE SIDEWALKS AND DRIVEWAYS	13 CY	\$	12,350.00
			608.21000003	CAST IRON EMBEDDED DETECTABLE WARNING UNITS	20 SY	\$	10,000.00
			609.0201	STONE CURB, GRANITE (TYPE A)	135 LF	\$	10,125.00
			610.1403	TOPSOIL - LAWNS	6 CY	\$	750.00
			610.1602	TURF ESTABLISHMENT - LAWNS	50 SY	\$	1,250.00
			627.50140008	CUTTING PAVEMENT	240 LF	\$	1,200.00
				CLASS C CONCRETE	3 CY	\$	3,000.00
PAVEMENT: Milling & Overlay	\$444,000	\$443,210	407.0102	DILUTED TACK COAT	2750 GAL	\$	13,750.00
			402.016903	TRUE & LEVELING F9, SUPERPAVE HMA, 60 SERIES COMPACTION	1320 TON	\$	-
			402.126303	12.5 F3 TOP COURSE HMA, 60 SERIES COMPACTION	2590 TON	\$	259,000.00
			490.30	MISCELLANEOUS COLD MILLING OF BITUMINOUS CONCRETE	18,940 SY	\$	170,460.00
PAVEMENT: Striping & Signage	\$84,000	\$83,820	645.5102	GROUND-MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 S	20 SF	\$	1,000.00
			645.81	TYPE A SIGN POSTS	8 EA	\$	2,400.00
			647.31	RELOCATE SIGN PANEL, SIGN PANNEL ASSEMBLY SIZE I (UNDER	2 EA	\$	500.00
			647.51	REMOVE AND DISPOSE SIGN PANEL, SIGN PANEL ASSEMBLY (UN	6 EA	\$	150.00
			685.11	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	15540 LF	\$	46,620.00
			685.12	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS	10650 LF	\$	31,950.00
			685.14	WHITE EPOXY REFLECTORIZED PAVEMENT SYMBOLS - 20 MILS	6 EA	\$	1,200.00
DRAINAGE	\$0	\$0					\$ -
							\$ -
							\$ -
							\$ -
							\$ -
							\$ -
							\$ -
							\$0.00
WORK ZONE TRAFFIC CONTROL:	\$58,000	\$57,187		10% of EE based on miscellaneous table			
EROSION CONTROL: Turf Restoration	\$0	\$0					\$0.00
							\$0.00
							\$0.00
							\$0.00
							\$0.00

CITY OF KINGSTON
Office of the City Engineer
rswenson@kingston-ny.gov



Ralph E. Swenson, P.E., City Engineer

Steven T. Noble, Mayor

January 4, 2018

Mr. Dennis Doyle, Director
Ulster County Transportation Council (UCTC)
244 Fair Street
P.O. Box 1800
Kingston, NY 12402

Mr. Brian Slack, AICP
Principal Transportation Planner
Ulster County Transportation Council (UCTC)
244 Fair Street
P.O. Box 1800
Kingston, NY 12402

Re: PIN 8761.94 – Hurley Avenue Paving and Complete Streets Project
Kingston, New York

Subject: TIP Amendment

Dear Mr. Doyle and Mr. Slack:

We are submitting the proposed amendment to the 2017-2020 STIP for consideration by the Transportation Council at its next scheduled meeting.

PIN 8761.94: Hurley Avenue Paving and Complete Streets Project

The project has the same scope as PIN 8761.94 – Hurley Avenue Paving and Complete Streets Project which is projected to be short on funding through Surface Transportation Program. The City and our selected consultant have performed a construction cost estimate that includes the original scope of work items consistent with current bid prices from local projects recently constructed with similar size, scope, and urban setting. In order to retain the project schedule and complete construction of the project with full time inspection we are asking for additional funding under FFY 2018. The design is being completed under the original project (PIN 8761.94). Please refer to the TIP data below.

CITY OF KINGSTON
Office of the City Engineer
rswenson@kingston-ny.gov



Ralph E. Swenson, P.E., City Engineer

Steven T. Noble, Mayor

<u>TIP Project</u>	<u>Current TIP Data</u>					<u>Proposed TIP</u>			
	<u>Amount</u>	<u>Fund Source</u>	<u>Phase</u>	<u>Year</u>		<u>Amount</u>	<u>Fund Source</u>	<u>Phase</u>	<u>Year</u>
Hurley Ave. Paving and Complete Streets Project	\$ 0.015	STP-FLEX	P	17-18		\$ 0.052	STP-FLEX	P	17-18
	\$ 0.010	STP-FLEX	D	17-18		\$ 0.017	STP-FLEX	D	17-18
	\$ 0.001	STP-FLEX	RI	17-18		\$ 0.001	STP-FLEX	RI	17-18
	\$ 0.001	STP-FLEX	RA	17-18		\$ 0.001	STP-FLEX	RA	17-18
	\$ 0.048	STP-FLEX	CI	17-18		\$ 0.048	STP-FLEX	CI	17-18
	\$ 0.490	STP-FLEX	C	17-18		\$ 0.797	STP-FLEX	C	17-18

Construction funding for this project includes Full-Time Construction Oversight and Inspection (supervision):
X yes ___ no ___ NA

An offset is being provided: ___ yes ___ no X NA

Both the City and our consultant are available to provide clarifications, answer questions or provide any additional information you may need for this request. Thank you for your consideration and we look forward to working with you on this project.

Sincerely,

Ralph Swenson, P.E.
City Engineer

Architectural/Engineering Consultant Agreement

PIN (s) 8761.94 Municipal Contract No. _____

Agreement made this _____ day of _____, _____ by and between
City of Kingston (municipal corporation)

Having its principal office at

**420 Broadway
Kingston, New York 12401
(the "Municipality")**

and

BARTON & LOGUIDICE, D.P.C. with its office at **10 Airline Drive, Albany, New York 12205**
(the "***Consultant***")

WITNESSETH:

WHEREAS, in connection with a federal-aid project funded through the New York State Department of Transportation (NYSDOT) identified for the purposes of this agreement as the **Hurley Avenue Paving and Complete Streets Project (PIN 8761.94)** (as described in detail in Attachment A annexed hereto, the "Project"), the Municipality has sought to engage the services of a Consultant Engineer to perform the scope of services described in Attachment B annexed hereto; and

WHEREAS, in accordance with required consultant selection procedures, including applicable requirements of NYSDOT and/or the Federal Highway Administration (FHWA), the Municipality has selected the Consultant to perform such services in accordance with the requirements of this Agreement; and

WHEREAS, the **City Mayor, Honorable Steven T. Noble** is authorized to enter this Agreement on behalf of the Municipality,

NOW, THEREFORE, the parties hereto agree as follows:

ARTICLE 1. DOCUMENTS FORMING THIS AGREEMENT

This agreement consists of the following:

- Agreement Form - this document titled "Architectural/Engineering Consultant Agreement";
- Attachment "A" - Project Description and Funding;
- Attachment "B" – Task List and Technical Assumptions
- Attachment "C" – as applicable, Staffing Rates, Hours, Reimbursables and Fee

ARTICLE 2. SCOPE OF SERVICES/STANDARD PRACTICES AND REQUIREMENTS.

2.1 The CONSULTANT shall render all services and furnish all materials and equipment necessary to provide the Municipality with plans, estimates and other services and deliverables more specifically described in Attachment "B".

2.2 The CONSULTANT shall ascertain the applicable practices of the Municipality, NYSDOT and/or FHWA prior to beginning any of the work of this PROJECT. All work required under this Agreement shall be performed in accordance with these practices, sound engineering standards, practices and criteria, and any special requirements, more particularly described in Attachment "B".

2.3 The CONSULTANT will commence work no later than ten (10) days after receiving notice to proceed from the Municipality.

ARTICLE 3. COMPENSATION METHODS, RATES AND PAYMENT

As full compensation for Consultant's work, services and expenses hereunder the Municipality shall pay to the CONSULTANT, and the CONSULTANT agrees to accept compensation based on the methods designated and described below. Payment of the compensation shall be in accordance with the Interim Payment procedures shown in the table and the final payment procedure in Article 6.

(Continued next page)

■ 3.1 Cost Plus Fixed Fee Method			
ITEM	DESCRIPTION OF ITEMS WITHIN METHOD	APPLICABLE RATE/ AMOUNT OR PERCENTAGE	INTERIM PAYMENTS:
Item I	■Actual Direct Technical Salaries, regular time plus straight time portion of overtime compensation of all employees assigned to this PROJECT on a full-time basis for all or part of the term of this Agreement, plus properly allocable partial salaries of all persons working part-time on this PROJECT. ■The cost of Principals', Officers' and Professional Staffs' salaries (productive time) included in Direct Technical Salaries is eligible for reimbursement if their comparable time is also charged directly to all other projects in the same manner. Otherwise, Principals' salaries are only eligible as an overhead cost, subject to the current limitations, generally established therefore by the Municipality. ■If, within the term of this Agreement, any direct salary rates are paid in excess of the maximums shown in Attachment A, the excess amount shall be borne by the CONSULTANT WITHOUT REIMBURSEMENT either as a direct cost or as part of the overhead allowance.	■Actual costs incurred in the performance of this agreement as identified in Attachment C or otherwise approved in writing by the Municipality or its representative. ■Not to exceed the maximum allowable hourly rates of pay described in Attachment C of this Agreement, all subject to audit. ■Actual overtime premium portion of Direct Technical Salaries, all subject to audit and prior approval by the Municipality.	■The CONSULTANT shall be paid in <u>monthly</u> (fill in timeframe) progress payments based on the maximum salary rates and allowable costs incurred during the period as established in Attachment C. ■Bills are subject to approval of the Municipality and Municipality's Representative.
Item II	Actual Direct Non-Salary Project-related Costs incurred in fulfilling the terms of this Agreement; all subject to audit.	All reimbursement for travel, meals and lodging shall be made at actual cost paid but such reimbursement shall not exceed the per diem rates established by the NY State Comptroller. All reimbursement shall not exceed the prevailing wage rates established by the NYS Department of Labor.	

■ 3.1 Cost Plus Fixed Fee Method			
ITEM	DESCRIPTION OF ITEMS WITHIN METHOD	APPLICABLE RATE/ AMOUNT OR PERCENTAGE	INTERIM PAYMENTS:
Item III	Items required to be purchased for this Project not otherwise encompassed in Direct Non-salary Project-related Costs, which become the property of the Municipality at the completion of the work or at the option of the Municipality.	Salvage value	
Item IV	■Overhead Allowance based on actual allowable expenses incurred during the term of this Agreement, subject to audit. Submitted overhead amounts will be audited based upon the Federal Acquisition Regulations, sub-part 1-31.2 as modified by sub-part 1-31.105 ("FAR"), and applicable policies and guidelines of the Municipality, NYSDOT and FHWA. ■For the purpose of this Agreement, an accounting period shall be the CONSULTANT's fiscal year. An audit of the accounting records of the CONSULTANT shall be made by the Municipality for each accounting period. For monthly billing purposes, the latest available overhead percentage established by such audit shall be applied to the charges made, under Item IA of this subdivision to determine the charge to be made under this Item.	■The overhead allowance shall be established as a percentage of Item IA only (Actual Direct Technical Salaries) of this ARTICLE, and shall be a FAR compliant rate initially established as <u>175%</u>, in all events not to exceed <u>193%</u>, subject to audit.	
Item V	■Negotiated Lump Sum Fixed Fee. ■Payment of the Fixed Fee for the described scope of services is not subject to pre-audit and is not subject to review or modification based on cost information or unless this Agreement is formally amended or supplemented by reason of a substantial change in the scope, complexity or character of the work to be performed.	■A negotiated Lump Sum Fee which in this AGREEMENT shall equal <u>\$5,523</u>	
Item VI	The Maximum Amount Payable under this Agreement including Fixed Fees unless this agreement is formally amended or supplemented by reason of a substantial change in the scope, complexity or character of the work to be performed.	Maximum Amount Payable under this Method shall be <u>\$70,580</u>	

ARTICLE 4. INSPECTION

The duly authorized representatives of the Municipality, and on Federally aided projects, representatives of the NEW YORK STATE DEPARTMENT OF TRANSPORTATION and the FEDERAL HIGHWAY ADMINISTRATION, shall have the right at all times to inspect the work of the CONSULTANT.

ARTICLE 5. AUDITS

5.1 Payment to the Consultant is subject to the following audit rights of the Municipality:

A. For Cost Plus Fixed Fee Method - All costs are subject to audit, i.e. labor, direct non-salary, overhead, and fee.

B. For Specific Hourly Rate Method - Labor hours and direct non-salary costs are subject to audit. If elements subject to audit are less than \$300,000, an audit may be waived by the Municipality.

C. For Lump Sum Cost Plus Reimbursables Method - Only direct non-salary costs are subject to audit. If elements subject to audit are less than \$300,000, an audit may be waived by the Municipality.

5.2 In order to enable the Municipality to process the final payment properly and expeditiously, the CONSULTANT is advised that all of the following documents and submissions, as the same may be appropriate to this contract, are considered to be necessary to enable the commencement of the audit.

A. Records of Direct Non-Salary Costs;

B. Copies of any subcontracts relating to said contract;

C. Location where records may be examined; and

D. Name, address, telephone number of person to contact for production.

The application for final payment is not considered complete until receipt of these documents and information.

ARTICLE 6. FINAL PAYMENT

6.1 The Municipality will make final payment within sixty (60) calendar days after receipt of an invoice which is properly prepared and submitted, and all appropriate documents and records are received.

6.2 The acceptance by the CONSULTANT of the final payment shall operate as and shall be a release to the Municipality from all claims and liability to the CONSULTANT, its representatives and assigns for any and all things done, furnished for or relating to the services rendered by the CONSULTANT under or in connection with this Agreement or for any part thereof except as otherwise provided herein.

ARTICLE 7. EXTRA WORK

7.1 Consultant's performance of this Agreement within the compensation provided shall be continuously reviewed by the CONSULTANT. The CONSULTANT shall notify the Municipality of the results of those reviews in writing by submittal of a Cost Control Report. Such Cost Control Report shall be submitted to the Municipality on a monthly basis or such alternative interval as the Municipality directs in writing.

7.2 If the CONSULTANT is of the opinion that any work the CONSULTANT has been directed to perform is beyond the scope of the PROJECT Agreement and constitutes extra work, the CONSULTANT shall promptly notify the Municipality, in writing, of this fact prior to beginning any of the work. The Municipality shall be the sole judge as to whether or not such work is in fact beyond the scope of this Agreement and constitutes extra work. In the event that the Municipality determines that such work does constitute extra work, the Municipality shall provide extra compensation to the CONSULTANT in a fair and equitable manner. If necessary, an amendment to the PROJECT Agreement, providing the compensation and describing the work authorized, shall be prepared and issued by the Municipality. In this event, a Supplemental Agreement providing the compensation and describing the work authorized shall be issued by the Municipality to the CONSULTANT for execution after approvals have been obtained from necessary Municipality officials, and, if required from the Federal Highway Administration.

7.3 In the event of any claims being made or any actions being brought in connection with the PROJECT, the CONSULTANT agrees to render to the Municipality all assistance required by the Municipality. Compensation for work performed and costs incurred in connection with this requirement shall be made in a fair and equitable manner. In all cases provided for in this Agreement for the additional services above described, the Municipality's directions shall be exercised by the issuance of a separate Agreement, if necessary.

ARTICLE 8. CONSULTING LIABILITY

The CONSULTANT shall be responsible for all damage to life and property due to negligent acts, errors or omissions of the CONSULTANT, his subcontractors, agents or employees in the performance of his service under this Agreement.

Further, it is expressly understood that the CONSULTANT shall indemnify and save harmless the Municipality from claims, suits, actions, damages and costs of every name and description resulting from the negligent performance of the services of the CONSULTANT under this Agreement, and such indemnity shall not be limited by reasons of enumeration of any insurance coverage herein provided. Negligent performance of service, within the meaning of this Article, shall include, in addition to negligence founded upon tort, negligence based upon the CONSULTANT's failure to meet professional standards and resulting in obvious or patent errors in the progression of his work. Nothing in this Article or in this Agreement shall create or give to third parties any claim or right of action against the Municipality beyond such as may legally exist irrespective of this Article or this Agreement.

The CONSULTANT shall procure and maintain for the duration of the work for such project(s), Professional Liability Insurance in the amount of One Million Dollars (\$1,000,000) per project, issued to and covering damage for liability imposed on the CONSULTANT by this Agreement or law arising out of any negligent act, error, or omission in the rendering of or failure to render professional services required by the Agreement. The CONSULTANT shall supply any certificates of insurance required by the Municipality and adhere to any additional requirements concerning insurance.

ARTICLE 9. WORKER'S COMPENSATION AND LIABILITY INSURANCE

This agreement shall be void and of no effect unless the CONSULTANT shall secure Workman's Compensation Insurance for the benefit of, and keep insured during the life of this agreement, such employees as are necessary to be insured in compliance with the provisions of the Workman's Compensation Law of the State of New York.

The CONSULTANT shall secure policies of general and automobile liability insurance, and maintain said policies in force during the life of this agreement. Said policies of insurance shall protect against liability arising from errors and omissions, general liability and automobile liability in the performance of this agreement in the sum of at least \$1,000,000.00 (One Million dollars) each.

The CONSULTANT shall furnish a certified copy of said policies to the Municipality at the time of execution of this agreement.

ARTICLE 10. INTERCHANGE OF DATA

All technical data in regard to the PROJECT existing in the office of the Municipality or existing in the offices of the CONSULTANT shall be made available to the other party to this Agreement without expense to such other party.

ARTICLE 11. RECORDS RETENTION

The CONSULTANT shall establish and maintain complete and accurate books, records, documents, accounts and other evidence directly pertinent to performance under this contract (collectively called the "Records"). The Records must be kept for a minimum of six (6) years or three (3) years after final payment is received, whichever is later. The Municipality, State, Federal Highway Administration, or any authorized representatives of the Federal Government, shall have access to the Records during normal business hours at an office of THE CONSULTANT within the State of New York or, a mutually agreeable reasonable venue within the State, for the term specified above for the purposes of inspection, auditing and copying.

ARTICLE 12. DAMAGES AND DELAYS

The CONSULTANT agrees that no charges or claim for damages shall be made by him for any delays or hindrances from any cause whatsoever during the progress of any portion of the services specified in this Agreement. Such delays or hindrances, if any, shall be compensated for by an extension of time for such reasonable period as the Municipality may decide, it being understood however, that the permitting of the CONSULTANT to proceed to complete any services or any part of them after the date of completion or after the date to which the time of completion may have been extended, shall in no way operate as a waiver on the part of the Municipality of any of its rights herein. Nothing in this ARTICLE will prevent the CONSULTANT from exercising his rights under ARTICLE 7 of this agreement.

ARTICLE 13. TERMINATION

The Municipality shall have the absolute right to terminate this Agreement, and such action shall in no event be deemed a breach of contract:

- A. for convenience of the Municipality - if a termination is brought about for the convenience of the Municipality and not as a result of unsatisfactory performance on the part of the CONSULTANT, final payment shall be made based on the basis of the CONSULTANT'S compensable work delivered or completed prior to and under any continuing directions of such termination.
- B. for cause - if the termination is brought about as a result of the Municipality's determination of unsatisfactory performance or breach of contract on the part of the CONSULTANT, the value of the work performed by the CONSULTANT prior to termination shall be established by the percent of the amount of such work satisfactorily delivered or completed by the CONSULTANT to the point of termination and acceptable to the Municipality, of the total amount of work contemplated by the PROJECT Agreement.

ARTICLE 14. DEATH OR DISABILITY OF THE CONSULTANT

In case of the death or disability of one or more but not all the persons herein referred to as CONSULTANT, the rights and duties of the CONSULTANT shall descend upon the survivor or survivors of them, who shall be obligated to perform the services required under this Agreement, and the Municipality shall make all payments due to him, her or them.

In case of the death or disability of all the persons herein referred to as CONSULTANT, all data and records pertaining to the PROJECT shall be delivered within sixty (60) days to the Municipality or his duly authorized representative. In case of the failure of the CONSULTANT's successors or personal representatives to make such delivery on demand, then in that event the representatives of the CONSULTANT shall be liable to the Municipality for any damages it may sustain by reason thereof. Upon the delivery of all such data to the Municipality, the Municipality will pay to the representatives of the CONSULTANT all amounts due the

CONSULTANT, including retained percentages to the date of the death of the last survivor.

ARTICLE 15. CODE OF ETHICS

The CONSULTANT specifically agrees that this Agreement may be canceled or terminated if any work under this Agreement is in conflict with the provisions of any applicable law establishing a Code of Ethics for Federal, State or Municipal officers and employees.

ARTICLE 16. INDEPENDENT CONTRACTOR

The CONSULTANT, in accordance with his status as an independent contractor, covenants and agrees that he will conduct himself consistent with such status, that he will neither hold himself out as, nor claim to be, an officer or employee of the Municipality by reason hereof, and that he will not, by reason hereof, make any claim, demand or application to or for any right or privilege applicable to an officer or employee of the Municipality, including but not limited to Worker's Compensation coverage, Unemployment Insurance benefits, Social Security coverage or Retirement membership or credit.

ARTICLE 17. COVENANT AGAINST CONTINGENT FEES

The CONSULTANT warrants that he has not employed or retained any company or person, other than a bona fide employee working for the CONSULTANT, to solicit or secure this Agreement, and that he has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift, or any other consideration, contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, the Municipality shall have the right to annul this Agreement without liability, or, in its discretion, to deduct from the Agreement price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee.

ARTICLE 18. TRANSFER OF AGREEMENT

The CONSULTANT specifically agrees, that he is prohibited from assigning, transferring, conveying, subletting or otherwise disposing of the Agreement or of his right, title or interest therein, or his power to execute such Agreement, to any other person, company or corporation, without the previous consent in writing of the Municipality.

If this provision is violated, the Municipality may revoke and annul the Agreement and the Municipality shall be relieved from any and all liability and obligations there under to the person, company or corporation to whom the CONSULTANT shall purport to assign, transfer, convey, sublet or otherwise dispose of the Agreement without such consent in writing of the Municipality.

ARTICLE 19. PROPRIETARY RIGHTS

The CONSULTANT agrees that if patentable discoveries or inventions should result from work described herein, all rights accruing from such discoveries or inventions shall be the sole property of the CONSULTANT. However, the CONSULTANT agrees to and does hereby grant to the United States Government and the State of New York and the Municipality a nonexclusive, nontransferable, paid-up license to make, use, and sell each subject invention throughout the world by and on behalf of the Government of the United States and states and domestic municipal governments, all in accordance with the provisions of 48 CFR 1-27.

ARTICLE 20. SUBCONTRACTORS/ SUBCONSULTANTS

All SUBCONTRACTORS and SUBCONSULTANTS performing work on this project shall be bound by the same required contract provisions as the CONSULTANT. All agreements between the CONSULTANT and a subcontractor or other SUBCONSULTANT shall include all standard required contract provisions, and such agreements shall be subject to review by the Municipality.

ARTICLE 20.1 PROMPT PAYMENT. While federal regulation ([49 CFR 26.29¹](#)) requires payment to subcontractors within 30 days, New York State law is more stringent. NYS General Municipal Law §106-b and NYS Finance Law Article 9, §139-f require prime contractors and prime consultants to pay their vendors within seven (7) calendar days of receipt of payment from the public owner/sponsor, and provides for interest on late payments for all public works contracts. Contract provisions incorporating any other payment schedule will not be allowed. A subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished and documented. When the Sponsor has made an incremental acceptance of a portion of a prime contract, the work of a subcontractor covered by that acceptance is deemed to be satisfactorily completed.

ARTICLE 21. CERTIFICATION REQUIRED BY 49 CFR, PART 29

The signator to this Agreement, being duly sworn, certifies that, EXCEPT AS NOTED BELOW, its company and any person associated therewith in the capacity of owner, partner, director, officer, or major stockholder (five percent or more ownership)

- A. is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any state or federal agency;
- B. has not been suspended, debarred, voluntarily excluded or determined ineligible by any state or federal agency within the past three years;
- C. does not have a proposed debarment pending; and
- D. has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three years.

ARTICLE 22. CERTIFICATION FOR FEDERAL-AID CONTRACTS

The prospective participant certifies, by signing this Agreement to the best of his or her knowledge and belief, that:

- A. No federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- B. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit the standard "Disclosure Form to Report Lobbying," in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

¹ <http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=936406b1c92895795069232a53fb110f&rgn=div8&view=text&node=49:1.0.1.1.20.2.18.5&idno=49>

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be, included in all lower tier subcontracts, which exceed \$100,000 and that all such sub-recipients shall certify and disclose accordingly.

ARTICLE 23. RESPONSIBILITY OF THE CONSULTANT

- A. The CONSULTANT shall be responsible for the professional quality, technical accuracy, and the coordination of all designs, drawings, specifications and other services furnished by the CONSULTANT under this contract. The CONSULTANT shall, without additional compensation, correct or revise any errors or deficiencies in its designs, drawings, specifications, and other services. However, the Municipality may in certain circumstances, provide compensation for such work.
- B. Neither the Municipality's review, approval or acceptance of, nor payment for, the services required under this contract shall be construed to operate as a waiver of any rights under this contract or of any cause of action arising out of the performance of this contract, and the CONSULTANT shall be and remain liable to the Municipality in accordance with applicable law for all damages to the Municipality caused by the CONSULTANT'S negligent performance or breach of contract of any of the services furnished under this contract.
- C. The rights and remedies of the Municipality provided for under this contract are in addition to any other rights and remedies provided by law.
- D. If the CONSULTANT is comprised of more than one legal entity, each such entity shall be jointly and severally liable hereunder.

ARTICLE 24. NON-DISCRIMINATION REQUIREMENTS

The CONSULTANT agrees to comply with all applicable Federal, State and Municipality Civil Rights and Human Rights laws with reference to equal employment opportunities and the provision of services. In accordance with Article 15 of the Executive Law (also known as the Human Rights Law) and all other State and Federal Statutory and constitutional non-discrimination provisions, the CONSULTANT will not discriminate against any employee or applicant for employment because of race, creed, color, sex, national origin, age, disability or marital status. Furthermore, in accordance with Section 220-e of the Labor Law, if this is a contract for the construction, alteration or repair of any public building or public work for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this contract shall be performed within the State of New York, CONSULTANT agrees that neither it nor its SUBCONSULTANTS shall, by reason of race, creed, color, disability, sex or national origin; (a) discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or (b) discriminate against or intimidate any employee hired for the performance of work under this Agreement. CONSULTANT is subject to fines of \$50.00 per person per day for any violation of Section 220-e or Section 239 as well as possible termination of this Agreement and forfeiture of all moneys due hereunder for a second or subsequent violation.

ARTICLE 25. CERTIFICATION REQUIRED BY 40 CFR 111506.5©

If the work of the PROJECT includes the preparation of an Environmental Impact Statement (EIS), the signator to this Agreement, being duly sworn, certifies that its company and any person associated therewith in

the capacity of owner, partner, director, officer, or major stockholder (five percent or more ownership) does not have any financial or other interest in the outcome of the project including:

- a. an existing contract for the PROJECT's ROW incidental work or construction engineering; or
- b. ownership of land, options to buy land, or some business enterprise which would be financially enhanced or diminished by any of the PROJECT alternatives.

This does not preclude the CONSULTANT from being awarded a future contract covering the work described in this Article or being awarded Phases V & VI Final Design after the EIS has been approved.

ARTICLE 26. BIDDING OF DIRECT NON-SALARY ITEMS *(unless more restrictive municipal laws apply)*

For all contracts other than personal services in excess of \$5,000, the consultant shall solicit a number of quotes from qualified subcontractors so that at least three (3) quotes will be received. For all contracts other than personal services in excess of \$20,000 except printing contracts in excess of \$10,000, the consultant shall solicit a number of sealed bids from qualified subcontractors so that at least three (3) bids will be received. The consultant shall then enter into a subcontract with the lowest bidder or entity submitting the lowest quotation who is fully responsive to the invitation to submit a quote/bid.

ARTICLE 27. WAGE AND HOURS PROVISIONS

If this is a public work contract covered by Article 8 of the Labor Law or a building service contract covered by Article 9 thereof, neither Consultant's employees nor the employees of its subcontractors may be required or permitted to work more than the number of hours or days stated in said statutes, except as otherwise provided in the Labor Law and as set forth in prevailing wage and supplement schedules issued by the State Labor Department. Furthermore, Consultant and its sub-consultants must pay at least the prevailing wage rate and pay or provide the prevailing supplements, including the premium rates for overtime pay, as determined by the State Labor Department in accordance with the Labor Law.

ARTICLE 28. INTERNATIONAL BOYCOTT PROHIBITION

In accordance with Section 220-f of the Labor Law and Section 139-h of the State Finance Law, if this contract exceeds \$5,000, the Consultant agrees, as a material condition of the contract, that neither the Consultant nor any substantially owned or affiliated person, firm, partnership or corporation has participated, is participating, or shall participate in an international boycott in violation of the federal Export Administration Act of 1979 (50 USC App. Sections 2401 et seq.) or regulations thereunder. If such Consultant, or any of the aforesaid affiliates of Consultant, is convicted or is otherwise found to have violated said laws or regulations upon the final determination of the United States Commerce Department or any other appropriate agency of the United States subsequent to the contract's execution, such contract, amendment or modification thereto shall be rendered forfeit and void. The Contractor shall so notify the Municipality and the State Comptroller within five (5) business days of such conviction, determination or disposition of appeal (See, 2 NYCRR 105.4).

ARTICLE 29. SERVICE OF PROCESS

In addition to the methods of service allowed by the State Civil Practice Law & Rules ("CPLR"), Consultant hereby consents to service of process upon it by registered or certified mail, return receipt requested. Service hereunder shall be complete upon Consultant's actual receipt of process or upon the Municipality's receipt of the return thereof by the United State Postal Service as refused or undeliverable. Consultant must promptly notify the Municipality, in writing, of each and every change of address to which service of process can be made. Service by the Municipality to the last known address shall be sufficient. Consultant will have thirty (30) calendar days after service hereunder is complete in which to respond.

ARTICLE 30. DISPOSITION OF PLANS, ESTIMATES AND OTHER DATA. At the time of completion of the work, the CONSULTANT shall make available to the Sponsor all survey notes, computations, maps, tracings, original aerial film and photo indices if any, and all other documents and data pertaining to the work or to the project which material at all times shall be the property of the Sponsor. Or in the event that this Agreement is terminated for any reason, then, within ten (10) days after such termination, the CONSULTANT shall make available to the Sponsor all the aforementioned engineering data and material. All original tracings of maps and other engineering data furnished to the Sponsor by the CONSULTANT shall bear thereon the endorsement of the CONSULTANT. All plans, estimates and other data prepared in accordance with this Agreement shall be considered confidential and shall be released only to the Sponsor.

ARTICLE 31. MUNICIPAL ADVISOR SERVICES ARE EXCLUDED. The services to be provided by CONSULTANT under this Contract do not include advice or recommendations with respect to the issuance, structure, timing, terms or any other aspect of municipal securities, municipal derivatives, guaranteed investment contracts or investment strategies. Any opinions, advice, information or recommendations provided by CONSULTANT are understood by the parties to this Contract to be strictly *engineering* opinions, advice, information or recommendations. CONSULTANT is not a “municipal advisor” as defined by 15 U.S.C. 78o-4 or the related rules of the Securities and Exchange Commission. The other parties to this Contract should determine independently whether they require the services of a municipal advisor.

IN WITNESS WHEREOF, the parties have duly executed this Agreement effective the day and year first above written.

Reference: Municipality Contract # _____

Municipality (City of Kingston) by: _____ — Date: _____	Consultant by: _____ Date: _____
---	---

STATE OF NEW YORK

ss:

COUNTY OF _____

On this _____ day of _____, 2018, before me, the subscriber, personally appeared to me known, who, being by me duly sworn, did depose and say; that he/she resides in the _____, New York; that he/she is the _____ of _____, New York, the Municipality described in and which executed the foregoing instrument; that he/she is authorized with the execution of the matter herein provided for, and that he/she signed and acknowledged the said instrument in his/her position as a duly authorized representative of Municipality.

Notary Public, _____ County, N.Y.

STATE OF NEW YORK

ss:

COUNTY OF _____

On this _____ day of _____, 2018, before me personally came _____, to me known, who being by me duly sworn, did depose and say that he/she resides in the _____, NY; that he/she is the _____, of the corporation described in and which executed the above instrument; that he/she is the authorized with the execution of the matter herein provided for, and that he/she signed and acknowledged the said instrument in his/her position as a duly authorized representative of the corporation.

Notary Public, _____ County, N.Y.

Attachment A
Project Description and Funding

Attachment A
Architectural/ Engineering Consultant Agreement
Project Description and Funding

PIN: 8761.94

Term of Agreement Ends: 12/31/19

BIN: N/A

■ Main Agreement ■ Amendment to Agreement ■ Supplement to Agreement

Phase of Project Consultant to work on:

■ P.E./Design ■ ROW Incidentals ■ ROW Acquisition □ Construction, C/I, & C/S

Dates or term of Consultant Performance:

Start Date: January 12, 2018

Finish Date: December 31, 2019

PROJECT DESCRIPTION:

Preliminary and Final Design Services for the proposed Hurley Avenue Paving and Complete Streets Project. The proposed project involves repaving of Hurley Avenue, installation of ADA curb ramps, pavement striping, shoulder widening, pedestrian/bicycle improvements, and minor right-of-way investigations between Washington Avenue and ending at the City of Kingston municipal boundary.

Project Location:

City of Kingston, Ulster County, New York

Consultant Work Type(s): See Attachment B for more detailed Task List.

MAXIMUM AMOUNT OF FUNDS FOR ALL COMPENSATION PAYABLE UNDER THIS AGREEMENT FOR THE SCOPE OF WORK DESCRIBED IN ATTACHMENT B FOR THE PROJECT DESCRIBED IN THIS ATTACHMENT A, OTHERWISE IN ACCORDANCE WITH THE CHOSEN METHOD OF COMPENSATION AND OTHER TERMS OF THIS AGREEMENT:

\$70,580

Footnotes:

Attachment B

Task List and Technical Assumptions

EXECUTIVE SUMMARY

PIN 8761.94

Hurley Avenue Paving and Complete Streets
City of Kingston
Ulster County, New York

This Locally Administered Federal Aid Surface Transportation Program (STP) project will include repaving of Hurley Avenue, installation of ADA curb ramps, pavement striping, shoulder widening, and pedestrian/bicycle improvements between Washington Avenue and the City of Kingston municipal boundary.

The project has received Federal STP funding and is 80% reimbursable. The estimated cost of the project is \$565,000 (\$452,000 Federal Share) and an \$113,000 local share from the City.

The **Consultant** shall provide Preliminary and Final Design services as outlined in Sections 1 through 7 of the project scope. Design services will include, but are not limited to, ground survey, mapping, right-of-way screenings, preparation of a design approval document, SEQRA documents, conducting a public informational meeting, assisting the City in obtaining Design Approval and Final design (the development and submission of contract plans, specifications and estimate).

The Consultant fee for Construction support and Construction Inspection will be added as a Supplemental Agreement once the selection of a preferred alternative is made and Final Design services are nearly complete.

The project is assumed to be an Automatic Categorical Exclusion (C List) under NEPA and a Type II Action under SEQRA. It is anticipated that lead agency for SEQRA will be the City of Kingston and the Lead Agency for NEPA will be the Federal Highway Administration (FHWA).

The anticipated letting date for this project is October 2018 with a construction completion in July 2019.

Section 1 - General

1.01 Project Description and Location

This project is known as: **Hurley Avenue Paving and Complete Streets**

PIN: **8761.94**

Sub Pin: **8T0715** (UCTC Block Repaving Program)

Project Description: **The project includes preliminary and final design services, environmental services, and contract and bidding document development. Construction Support and Inspection will be added as a Supplemental Agreement. The proposed work involves pavement milling and overlay, sidewalk ramp reconstruction, high visibility crosswalks and signs, pavement striping and right-of-way screening.**

Project Limits: **Washington Avenue to City of Kingston municipal boundary**

City: **Kingston**

County: **Ulster**

All work performed by the **Consultant** at the **Consultant's** initiative must be within the current project limits specified above.

1.02 Contract Administrator

The **City's** Contract Administrator for this project is **City Engineer, Mr. Ralph Swenson, P.E.** who can be reached at (845) 334-3967.

All correspondence to the **City** should be addressed to:

Mr. Ralph Swenson, P.E.,
City Engineer
City of Kingston
City Hall - City Engineering Office
420 Broadway
Kingston, New York 12401

The Contract Administrator should receive copies of all project correspondence directed other than to the **City**.

1.03 Project Classification

This project is assumed to be a NEPA C List Automatic Categorical Exclusion 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 a Type II Action.

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	<i>Construction Support (By Supplement Agreement)</i>
Section 9	<i>Construction Inspection (By Supplement Agreement)</i>
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 **City** with reports, plans, estimates, and other data specifically described in Sections 1, 2, 3, 4, 6, 7, and 10.

1.05 Project Familiarization

The **City** will provide the **Consultant** with the following information upon availability:

- Transportation needs.
- Plans for future related transportation improvements or development in the area of the project.
- Record as-built plans.
- Pavement history.
- Anticipated **City** permits and approvals (initial determination).
- 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.

1.06 Meetings

The **Consultant** will prepare for and attend all meetings as directed by the **City's** Contract Administrator. Meetings may be held to:

- 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 subcontractors.
- Weekly meetings with Contractors, Consultants, & City.

The **Consultant** will be responsible for the preparation of all meeting minutes; the minutes will be submitted to meeting attendees within ten (10) days of the meeting date.

1.07 Cost and Progress Reporting

For the duration of this agreement, the **Consultant** will prepare and submit to the **City** and NYSDOT on a monthly basis a Progress Report in a format approved by the **City**. The Progress Report must contain the "Progress Report Summary Sheet" (Appendix 6-H of the "Locally Administered Federal Aid Procedures Manual"). 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.

1.08 Policy and Procedures

The design of this project will be progressed in accordance with the current version of the "Locally Administered Federal Aid Procedures Manual," and appropriate sections of the Federal Aid Policy Guide (FAPG) including latest updates.

A. Compliance with Documents

All work must conform to current versions of the following documents, as applicable. Where necessary, the **Consultant** will obtain either the full document or guidance extracted from it.

- Locally Administered Federal Aid Procedures Manual, including latest updates
- A Policy on Geometric Design of Highways and Streets, American Association of State Highway and Transportation Officials (AASHTO)
- A Policy on Design Standards – Interstate System, AASHTO
- Highway Capacity Manual, Special Report 209, Transportation Research Board
- NYS Eminent Domain Procedure Law
- ADA Accessibility Guidelines for Buildings and Facilities
- AASHTO Standard Specifications for Highways and Bridges
- Guide Specifications for Strength Evaluation of Existing Steel and Concrete Bridges, AASHTO
- AASHTO Model Drainage Manual & NYSDOT Model Drainage Manual
- AASHTO Guide for the Design of Bicycle Facilities
- NYSDOT Scoping Procedures Manual, Appendix D (Design Traffic Forecast Policy)
- NYSDOT Highway Design Manual
- National Manual of Uniform Traffic Control Devices
- New York State Supplement to the National Manual of Uniform Traffic Control Devices
- NYSDOT Environmental Procedures Manual

B. Compliance with Environmental Laws, Regulations and Permits

All work must comply with the requirements of all applicable state and federal environmental laws, regulations and policy. Applicable laws, regulations, and policies are specified in Appendix A of the NYSDOT Design Procedures Manual.

1.09 Specifications

The project will be designed and constructed in accordance with the current edition of the 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 subconsultant's work with the prime **Consultant's** and other subconsultants' work.

1.11 Subcontractors

Procurement of subcontractors must be in accordance with the requirements set forth in the "Locally Administered Federal Aid Procedures Manual", or as specified below:

A. For Subcontracts to this consultant contract exceeding \$20,000 (\$10,000 for printing contracts):

1. The **Consultant** will prepare a contract document describing the work, schedule, and method of payment in sufficient detail for obtaining sealed bids for the work. The **Consultant** will provide the work description and will submit to the **City** for review.

The **Consultant** will solicit sealed bids from a sufficient number of prospective qualified subcontractors to ensure that at least three (3) bids are received. Upon receipt of at least three bids, the **Consultant** will submit all bids to the **City** along with a recommended choice. The **City** will either concur with the recommendation or accept one of the other bids. The **City** will then advise the **Consultant** in writing to proceed.

2. Upon receipt of written authorization from the **City** to proceed, the **Consultant** will execute the contract with the subcontractor and oversee the subcontractor's operations/services to the extent of assuring that the work is performed as described in the contract and that the work performed conforms to applicable requirements.

B. For subcontracts to this consultant contract equaling or under \$20,000 (10,000 for printing contracts):

1. The **Consultant** will prepare a contract document describing the work, schedule, and method of payment in sufficient detail for obtaining reliable quotations (non-binding estimates) for the work. The **Consultant** will provide the work description and will submit it to the **City** for review. The **Consultant** will modify the work description as necessary before including it in the contract document.
2. The **Consultant** will obtain quotations from a sufficient number of prospective qualified subcontractors (typically three) to ensure that the work will be performed in the most economical manner. The **Consultant** will maintain and keep for review records of the quote solicitation process to document competition for the service. Upon receipt of quotations, the **Consultant** will submit them to the **City** along with the recommended choice. The **City** will either concur or choose one of the other candidate subcontractors and advise the **Consultant** to proceed.
3. Upon receipt of written authorization from the **City** to proceed, the **Consultant** will execute the contract with the subcontractor and oversee the subcontractor's operations/services to the extent of assuring that the work is performed as described in the contract and that the work performed conforms to the applicable requirements.

Section 2 - Data Collection & Analysis

2.01 Design Survey

Project will conform to the following:

Topographic survey and mapping will be obtained by the **Consultant** in order to perform the design and develop construction documents.

All work is expected to take place within publicly owned Right of Way.

Limits of survey and mapping are as follows:

- Establish a coordinate geometry system of control for the project, tied to the New York State Plane Coordinate System, for future use during construction. The project extends along Hurley Avenue between Washington Avenue and 300 ft. south of Village Court. Approximately 5,150 LF with a bandwidth of 60 ft. and all objects in a 75 ft. radius of the intersections.
- English units of measurement are required; all deliverables will be provided in these units.
- Establish survey baseline, tied to physical features and provide a MicroStation (.DGN) file.
- Establish two (2) new benchmarks in the vicinity of the project for use during construction.
- Show facilities and elevations in DGN files.
- NYSDOT format will be used.
- Identify all existing topography including but not limited to the following features: buildings, roads, streets, lanes, driveways, sidewalks, curb, structures, utility lines, fences, walls, hedgerows and all other physical features with respective sizes and types. Utility information will be taken from record drawings and field locations. The **City** will provide the record drawings.
- All poles (utility or otherwise) must be located in the design mapping by center of the pole with the pole diameter noted for each pole.
- Curb/roadway interface and the top of curb face must be determined.
- Research and obtain deeds and other record information to establish reputed owners properties in and adjacent to the project limits.
- Provide owner names, tax account numbers and book/page of deed and list within each property on the ROW.
- Determine the locations of the existing highway boundary and the individual property lines.

Horizontal and vertical project controls will be established based on NAD 1983 / NAVD 1988 Data.

A. Ground Survey

The **Consultant** will provide terrain data as required for design by means of a topographic field survey in selected locations based on design requirements.

B. Photogrammetric Survey

Not applicable

C. Stream Survey

Not applicable

D. Survey of Wetland Boundaries

Not applicable

E. Supplemental Survey

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

F. Standards

Survey will be done in accordance with the standards set forth in the “Locally Administered Federal Aid Procedures Manual” and in accordance with local standards described in Section 1 of this Task List. The mapping will be developed in MicroStation format.

2.02 Design Mapping

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

- 1”=40’ scale mapping

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

2.03 Determination of Existing Conditions

The **Consultant** will determine, obtain, or provide in order to accurately describe in pertinent project documents, the existing conditions within and adjacent to the project limits:

- The existing highway sections(s) and features within the project limits, including:
 - Number, width, type (through, turning, climbing, etc.) and location of travel lanes.
 - Shoulder widths and types (asphalt, gravel, grass, etc.).
 - Number, width, type, and location of utility strips.
 - Location of curbed sections.
 - Width and type of medians.
 - Width of clear zones.
 - Location and percent of grades.
 - Horizontal curve radii.
 - Intersection geometry and conditions.
 - Parking regulations and conditions within the project limits.
 - Right-of-Way width (may be shown on a plan with references to the plan).
 - Condition and adequacy of guiderail, median barriers, and impact attenuators.
 - Location of traffic control features and their conformity with the latest guidelines for such features.
 - Provisions for pedestrian and bicyclists.
 - Traffic signals
- The existing conditions and roadway sections at all affected intersections.
- Expected future conditions (assuming the null alternative).
- Existing mainline speed limit (and whether the speed limit is posted or not), and existing operating speeds (85th percentile speeds in most cases) at road crossings.
- Land use for the project areas as it now exists and future land development (planned and potential), including development years.
- Existing vehicular access control (full control, partial control, or uncontrolled) and whether existing driveway entrances comply with local standards or policies at road crossings.

- Existing pavement, shoulder, and sidewalk surface conditions with the project limits.
- A general assessment of drainage conditions within the project limits.
- A list of all utilities, and the respective owners that are within the project's existing right-of-way.

(A table format for the above information is recommended; a plan or typical section may be used where appropriate).

2.04 Accident Data and Analysis

Not Applicable

2.05 Traffic Counts and Capacity Analysis

Motor vehicle traffic data collection is assumed to be not required for this project as there is no known need for traffic operational or capacity improvements.

2.06 Future Plans for Roadway and Coordination with Other Projects

The **City** 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 **City** 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 **City** will provide all necessary information pertaining to the other projects or developments.

2.07 Soil Investigations

Not Applicable

2.08 Hydraulic Analysis

Not applicable

2.09 Bridges to be Rehabilitated

Not applicable

2.10 Pavement Evaluation

Not Applicable

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 “Locally Administered Federal Aid Procedures Manual.”

The **City** will approve the selected project design criteria and will obtain NYSDOT concurrence (either by a 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 **City’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. Assume alternatives will utilize and build upon previous options developed in the earlier phases of the project.

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

- On plan: proposed centerlines; pavement edges; sidewalk 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, shoulder width, sidewalk, ditches, curbs, gutters, drainage, and side slopes for existing roads at road crossings.
- Where necessary: important existing features.
- Where pertaining to feasibility: significant environmental and geometric design constraints, labeled as such.
- Historical elements if applicable.

Assume 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 **City** to discuss the concepts (if any), 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 **City** will select one, or in some cases more, design alternative(s) for further development.

B. Detailed Evaluations of Alternative

The **Consultant** will further evaluate the preferred 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 “Locally Administered Federal Aid Procedures Manual.”
- Environmental constraints and potential environmental impact mitigation measures (identified under Section 4 tasks).
- Safety considerations, including signs
- Pavement surface treatment
- Structures, including retaining walls and building alterations
- Drainage.
- Maintenance responsibility.
- Maintenance and protection of traffic during construction.
- Soil and foundation considerations.
- Utilities.
- Right-of-way acquisition needs, if any
- Conceptual landscaping (performed by a Registered Landscape Architect).
- Accessibility for pedestrians, bicyclists and the disabled.
- Lighting.
- Construction cost factors.

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

- 1"=40' plans showing (as a minimum) stationing 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"=40' horizontal and 1"=5' (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; centerline stations and equalities; construction limits; and superelevation data.
- Typical sections showing (as a minimum) lane, median, and shoulder widths; sidewalks, ditches, gutters, curbs, and side slopes.

The **Consultant** shall contact the owners of public and private utilities within the project limits to identify potential conflicts in each alternative. The estimated costs of relocation, if determined to be reimbursable by the project, should be included in the Design Approval Document for each alternative.

3.03 Cost Estimates

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

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) is assumed to be a Project Scoping Report / Final Design Report (PSR/FDR) document.

The **City** 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 **Consultant** will submit **1** electronic copy (PDF format) of the Draft DAD to the **City** for review, plus **2** hard copies for NYSDOT. The **City** will review the Draft DAD and provide the **Consultant** with review comments. The **Consultant** will revise the Draft DAD to incorporate the comments.

3.05 Advisory Agency Review

The **Consultant** will provide the **City** with **4** copies of the signed Draft DAD for distribution to advisory agencies.

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

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

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

A. Public Information Meeting(s)

The **Consultant** will assist the **City** at one **(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 project.

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

B. Public Hearing(s)

Not applicable

3.07 Preparation of Final Design Approval Document

The **City** 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, retitle the DAD in accordance with the "Locally Administered Federal Aid Procedures 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 **City** for review. The **City** will review the Final DAD and provide the **Consultant** with review comments. The **Consultant** will revise the Final DAD to incorporate the comments.

The **City** will submit **2** copies of the Final DAD, supplied by the **Consultant**, to the NYSDOT for a Final Environmental Determination. The NYSDOT will make the determination or obtain FHWA's determination. If necessary, the 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.

It is expected that the **City of Kingston** will grant Design Approval.

Section 4 - Environmental

4.01 NEPA Classification

The **Consultant** will verify the anticipated NEPA Classification that is assumed to be a C List Automatic Categorical Exclusion.

The Lead Agency for NEPA is the Federal Highway Administration (FHWA).

4.02 SEQRA Classification

The **Consultant** will assist the **City** in complying with SEQRA (6 NYCRR Part 617). The project is assumed to be a Type II Action under SEQRA. The **City** is the Lead Agency. **Consultant** tasks include, but are not limited to:

- Drafting letters to involved agencies to determine the lead agency.
- Drafting Short Environmental Assessment Form(s).
- Drafting a Negative Declaration.
- Drafting a Positive Declaration (if required).
- Drafting notices.

The **Consultant** will document the results of SEQRA processing in the body of the Design Approval Document (DAD) and will include documentation of the final SEQRA determination in the Appendix of the DAD.

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 same to the Sponsor for attestation. (New York State's Smart Growth policy was adopted by amendment to the State Highway law and is intended to minimize "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 the Chapter 7 Appendices on the PLAFAP Manual website.)

4.04 Screenings and Preliminary Investigations

The **Consultant** will screen (including previously completed studies) and perform preliminary investigations to determine potential impacts resulting from the design alternative(s). Work will be performed, as detailed below and in accordance with the criteria contained in the NYSDOT Environmental Procedures Manual, 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.

General Ecology and Endangered Species

The **Consultant** will evaluate the nature, extent, and significance of potential impacts (including impacts during construction) for each project alternative on fish, wildlife, and habitat. This analysis will include general determinations of amount and type of vegetation to be disturbed, special habitats that might be damaged, and possible interruption of fish and wildlife movements (e.g. blockage of fish movement through culverts, interruption of deer movement by fences, etc.). The **Consultant** will determine appropriate avoidance, minimization of harm, and mitigation measures to compensate for project impacts.

The **Consultant** will coordinate with involved State and Federal resource agencies (New York State Department of Environmental Conservation (NYSDEC), U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS)). Letters will be obtained from involved agencies to document the likely presence or absence of endangered, threatened, or rare species

in the project area; these letters will be included in the Appendix of the DAD. Based on the results of agency contacts, the **Consultant** will determine the presence or absence of endangered, threatened, or rare species within project boundaries, assess potential impacts of each design alternative on such species and their habitats, and, as necessary, determine measures for avoidance, mitigation, and minimization of harm. The **Consultant** will determine whether an Endangered and Threatened Species Survey is warranted. The **Consultant** shall notify the **City** if a study is warranted and shall not begin the study until receiving authorization from the **City**.

Ground Water

The **Consultant** will determine whether the project is in a Project Review Area of an EPA designated Sole Source Aquifer or in a NYSDEC designated Primary Water Supply or Principal Aquifer Area. The **Consultant** will assess potential impacts on the aquifers and any public or private nearby wells used for drinking water. The **Consultant** will evaluate avoidance, minimization, and mitigation measures regarding ground waters.

Surface Water

The **Consultant** will identify drainage basins existing within or adjacent to the project site and will determine how the existing soils, vegetation, topography, climate, and seasonal nature of the proposed construction may affect the potential for erosion and sedimentation.

The **Consultant** will assess temporary and permanent measures and practices that may be used to avoid or minimize and control soil erosion, sedimentation, and surface water pollution during and after construction.

The **Consultant** will determine if the project requires coverage under the SPDES General Permit for Stormwater Discharges from Construction Activities, NYSDEC Permit No. GP-0-15-002. The **Consultant** will file any required "Notice of Intent" with the NYSDEC, as appropriate.

If the project is in the New York City water supply watershed (NYSDOT Regions 1, 8 & 9), the **Consultant** will review the NYSDOT/NYSDEC Memorandum of Understanding (MOU) and the NYC Final Watershed Regulations to determine whether or not a Stormwater Pollution Prevention Plan (SWPPP) is required. The **Consultant** will determine and describe how the proposed work complies with the substantive requirements of the Watershed Regulations and the MOU. The **Consultant** will assess the need for temporary and permanent stormwater facilities and will assess the need for additional right-of-way for such facilities.

The **Consultant** will assess measures, as appropriate, to capture on-site the first flush 0.5 inch of rainfall from all surfaces made more impervious by the project, attenuate peak flow, and control thermal discharges to cold water fishery streams. The **Consultant** will assess the need for additional right-of-way to accommodate permanent stormwater facilities.

The **Consultant** will assess whether or not project work will affect the special characteristics or qualities of a designated Wild, Scenic, and Recreational River or Study River (e.g., navigation, riparian cover, scenery, etc.).

State Wetlands

The **Consultant** will investigate types, locations, and extent of state-regulated wetlands in the project area, including:

- Reviewing NYSDEC Freshwater Wetlands Maps. Determining if the design alternative(s) will impact the identified State-regulated wetlands and their regulated adjacent areas (usually 100' for freshwater and 300' for tidal).
- Determining if, and which, State permits are needed for activities in wetlands and their regulated adjacent areas, including Article 24 permits for State-regulated freshwater

wetlands and Article 25 permits for State-regulated tidal wetlands.

Assume that there are no wetlands that would be impacted as a result of this project.

Federal Jurisdictional Wetlands

The **Consultant** will use NYSDEC Wetlands Maps, US Fish & Wildlife Services National Wetland Inventory Maps, and Soil Conservation Services County Soil Survey Reports to screen for the presence of freshwater and tidal wetlands.

The **Consultant** will make a site visit to determine if Federal jurisdictional wetlands are present within or adjacent to the proposed project limits, and whether the wetlands could be affected by proposed project activities.

Assume there are no Federal wetlands in the project area or any wetlands that would be impacted as a result of this project.

Floodplains

The **Consultant** will determine if a Flood Plain Evaluation is needed for the project. Assume not required.

Coastal Zone Management

Not Applicable

Navigable Waterways

Not Applicable

Historic Resources

The proposed project is subject to the tenets of Section 106 of the National Historic Preservation Act and the New York State Historic Preservation Act, each administered by the State Historic Preservation Office (SHPO) within the NYS Office of Parks, Recreation, and Historic Preservation (OPRHP).

The **Consultant** will perform a cultural resource screening to determine if a cultural resource study is needed.

The City, through the NYSDOT, will request an Effect Determination from the OPRHP in writing from the SHPO.

Parks

The Consultant will perform a screening to determine if a detailed Section 4(f) or Section 6(f) evaluation is needed.

Hazardous Waste

The **Consultant** 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.
- City 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.
- Sampling of suspect bridge materials for lead.
- A site visit to look for observable physical evidence of contamination (e.g., stained soil, seepage, and stressed or dead vegetation).

The **Consultant** will complete a Hazardous Waste/Contaminated Materials Screening Form and include it in the Appendix of the DAD.

Asbestos

The **Consultant** will make an initial determination on the scope and extent of potential asbestos containing materials, based on the types of facilities impacted.

The **Consultant** must maintain a valid asbestos handling license for the duration of this agreement and all **Consultant** 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 **Consultant** 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 structure and facilities in the project area, including but not limited to pavement, shoulders, subgrade, underground utilities, buildings, and retaining walls which could potentially require alterations or demolition as part of the project.

Noise

The Consultant will perform a screening to determine if a project level noise analysis is needed.

Air Quality

The Consultant will perform a screening to determine if a project level air quality analysis is needed.

Energy

The Consultant will perform a screening to determine if an energy analysis is needed.

Farmlands

Not Applicable.

Visual Impacts

The Consultant will perform a screening to determine if a visual impact assessment is needed.

Work will be performed, as detailed in the NYSDOT "Locally Administered Federal Aid Procedures Manual," 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 Section 4.04, the **Consultant** will determine whether detailed analysis or study is required. Prior to commencing such detailed study or analysis, the **City** must concur with the **Consultant's** determination.

Detailed study or analysis work will be performed and documented as detailed in the NYSDOT "Locally Administered Federal Aid Procedures Manual." Results of the detailed study or analysis will be summarized in the appropriate section of the DAD.

Detailed study or analysis may include:

- A. General Ecology and Endangered Species – Assume a Finding Document will be required.
- B. Ground Water – Assume Not Required
- C. Surface Water – Assume Not Required
- D. State Wetlands – Assume Not Required
- E. Federal Wetlands – Assume Not Required
- F. Floodplains – Assume Not Required
- G. Coastal Zone Management – Assume Not Applicable
- H. Historic Resources – Assume Not Required
- I. Parks - Section 4(f) and Section 6(f) Evaluations – Assume Not Required
- J. Hazardous Waste – Assume Not Required
- K. Asbestos – Assume Not Required
- L. Noise – Assume Not Required
- M. Air Quality – Assume Not Required
- N. Energy – Assume Not Required
- O. Farmlands – Assume Not Required
- P. Visual Impacts – Assume Not Required

4.06 Permits and Approvals

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

- NEPA Categorical Exclusion
- SEQR Negative Declaration
- NYSDEC State Pollution Discharge Elimination System (SPDES) Permit
- Concurrence with City's MS-4 Regulations
- Section 106 Process and Effect Determination project update with NYS Office of Parks, Recreation, and Historic Places through the NYSDOT.

4.07 Environmental Hearing

Not applicable

Section 5 – Right-of-Way

The project is not expected to require right-of-way acquisitions.

Tax maps and property information on file at the City and / or County will be reviewed and be screened as a minor task for this project and is included in this Scope of Work. The results of the screenings will be included in the Design Approval Document.

5.01 Abstract Request Map and/or Title Search

RIGHT OF WAY INCIDENTALS

The **City** will request right of way incidental phase authorization from the New York State Department of Transportation. The request will be made when the **City** determines that property acquisitions are likely to occur or when it requests Preliminary Engineering phase authorization.

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

The **Consultant** will meet with the **City** to review and to discuss the right of way acquisition process.

5.011 Review and Analysis of Right of Way Requirements

The **Consultant** will undertake an on-going review and analysis of 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
- **City** 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 of the acquisition
- Potential impacts to improvements

The **Consultant** will determine the current owner of the affected properties by reviewing public information records at the county tax assessor's office. The ownership will be verified by obtaining and reviewing a copy of the last deed of record at the county clerk's office.

The following Scope of Work would be added by Supplemental Agreement if the need to acquire property for the project is required.

5.012 Title Research

- 5.0121 *For the acquisition of temporary easements, the **Consultant** will determine property title ownership through county tax assessment records and will verify the ownership through examination of the last deed of record.*
- 5.0122 *For the acquisition of real property rights estimated at \$10,000 or less, the **Consultant** will 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 or owners 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.*
- 5.0123 *For the acquisition of real property rights estimated between \$10,001 and \$40,000, the **Consultant** will perform a Twenty-Year Title Search. The Twenty-Year Search will start with a deed that conveys complete and indefeasible title, which has been executed and of record at least twenty years prior to the search date. The Twenty-Year Search will not begin with a deed where the grantor and grantee are in some way related without full consideration having been paid.*
- 5.0124 *For the acquisition of real property rights estimated at greater than \$40,000, the **Consultant** will prepare a Title Abstract. The Title Abstract will start with a warranty deed that has been executed and of record at least forty years prior to the date of the search.*

5.013 Title Review and Certification

*The **Consultant** will subcontract with a qualified, NYS licensed attorney to issue Certificate of Title on all fee property acquisitions and obtain title insurance as required. The **Consultant** will submit the Title Certifications to the **City**.*

- 5.0131 *For the acquisition of real property rights estimated at \$10,000 or less, the **Consultant's** Attorney will review the Last Owner Title Search and issue a Limited Last Owner Title Certification.*
- 5.0132 *For the acquisition of real property rights estimated between \$10,001 and \$40,000, the **Consultant's** Attorney will review the Twenty-Year Title Search and issue a Limited Twenty-Year Title Certification.*
- 5.0133 *For the acquisition of real property rights estimated at greater than \$40,000, the **Consultant's** Attorney will review the Abstract and issue a Title Certification.*
- 5.0134 *The Municipality will acknowledge the receipt of each Title Certification and provide the **Consultant**, on a per parcel basis, a list of the property owners and other compensable property interests. The **City** will respond in writing within ten (10) days of receipt of each Title Certification.*

5.02 Right of Way Survey

Right-of-Way survey and mapping shall be done in accordance with the NYSDOT ROW Mapping Procedures Manual

- *Research and obtain deeds and other record information to establish reputed owners of properties in and adjacent to the project limits.*
- *Provide owner names, tax account numbers and book/page of deed and list within each property on the ROW.*

- Provide DGN file as deliverable.
- Determine the location of the existing highway boundary. In the areas of potential acquisitions, both the highway boundary and the individual property lines will be determined accurately.

5.03 Right of Way Mapping

The Consultant will meet with the City to discuss the types of right of way acquisitions required and the limits of acquisition lines.

The Consultant will prepare acquisition maps in accordance with the format provided by the City. All right of way mapping will be in English dimensions. The Consultant will prepare all map revisions or additions which are determined necessary during the construction of the project and Produce appropriation maps in accordance with the NYSDOT ROW Mapping Procedures Manual, or as directed.

It is anticipated that NYSDOT Region 8 would be the review agency for the appropriation mapping. It is assumed that one set of revisions would be made.

5.04 INTENTIONALLY LEFT BLANK

5.05 Right of Way Cost Estimates

*If applicable, the **Consultant** will provide cost estimates for the right of way to be acquired by the **City** on all alternatives being considered and will provide updated estimates, as necessary.*

5.06 Public Hearings/Meetings

No services required.

5.07 Property Appraisals

*If required, For each parcel requiring the acquisition of property rights, the **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 **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 **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 **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 **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 **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 **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 **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 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 **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 **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 **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 **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.

5.08 Appraisal Review

The **Consultant** will perform a separate review of each appraisal. The **Consultant** will insure that all real property appraisal reviews are performed by a qualified appraiser who is, as defined by the New York State Department of State, Certified General Real Estate Appraisers. The appraisal review will be completed in conformance with the Uniform Standards of Professional Appraisal Practice, Standard 3, Real Property Appraisal Review, Development, and Reporting.

The **Consultant** will review the appraisal reports for compliance with state and federal standards. The **Consultant** will take corrective actions. The review appraiser will:

- Identify and make corrections to mathematical calculations and typographical errors, if necessary
- Assure real property appraisal development and reporting are in accordance with the appraisal subcontract
- Assure real property appraisal development and reporting are complete and meet the Uniform Standards of Professional Appraisal Practice standards
- State the basis for the fair market value conclusion and provide breakdowns adequate for New York State Department of Transportation audit, Federal Highway Administration eligibility review, and for negotiation purposes.

The **Consultant** will provide the **City** with the highest approved appraised amount for each property rights acquisition.

5.09 Negotiations and Acquisition of Property

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

The **Consultant** will meet with the **City** to review and to discuss the right of way acquisition procedures.

5.091 Just Compensation

The **City** will establish just compensation for each property rights acquisition. In no event shall the Just Compensation amount be less than the **City's** highest approved appraisal. Because time is of the essence, the **City** will provide the just compensation amounts in writing to the **Consultant** within 10 days of its receipt of the preliminary appraisal reviews from the **Consultant**.

5.092 Written Offer

The **Consultant** will prepare a written offer for each acquisition of real property. The amount of the offer will be the amount established by the **City** 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
 - a description and location identification of the real property
 - the interest in the real property being acquired
 - where appropriate, the statement will identify any separately held ownership interest in the property (i.e. tenant-owned improvement) and indicate that the interest is not covered by the offer
- Additional information the **Consultant** and/or the **City** deems appropriate or required

5.093 Deliver Offer

The **Consultant** will deliver the written offer, plats, unsigned agreements and releases to the appropriate property owners or his/her designated representative.

The **Consultant** will meet with the appropriate property owners or his/her designated representative to explain the written offer, plats and unsigned agreements. The Consultant will conduct additional negotiation sessions with the appropriate property owners or his/her designated representative in an attempt to negotiate a settlement.

The **Consultant** will make all reasonable efforts to contact personally each property owner(s) or designated representative. Absentee and unsuccessful personal contacts may be made by certified mail.

The **Consultant** will maintain a detailed diary of each substantial contact with property owner(s). The diary will be signed and dated by the person responsible for the contact. The diary entries will be on a parcel by parcel basis:

- Substantial contacts
- Efforts to achieve amicable settlements
- Responsiveness to owners' counter proposals
- Suggestions for changes in plans

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

- parties contacted
- date and location of contact
- offers made [dollar amounts]
- counteroffers received
- property owner's comments
- reason(s) settlement could not be reached

5.094 Purchase Agreements

The **Consultant** will submit real property acquisition documents to the **City** for recommended action on settlements:

- Approval of negotiated settlements
- Action on proposed administrative settlements
- Referral to the **City** attorney for initiation of eminent domain proceedings

Because time is of the essence, the **City** will provide a written response to the **Consultant** within 10 days of its receipt of the acquisition documents from the **Consultant**.

5.095 Revisions to Just Compensation

The **Consultant** will consider any presentations made by the property owner which might affect the value of the property. The Consultant may make recommendations to the **City** to adjust the written offer. The **City** 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.

5.096 Administrative Settlements

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

The **City** will have final approval to authorize administrative settlements.

The **Consultant** will provide the written justification for the Administrative Settlement. The written justification will include all 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 owner's appraisal report)
- Recent court awards and their relationship to the proposed administrative settlement
- A discussion of diverse valuation issues (i.e. probable range of testimony as to fair market value by both parties)
- The trial cost estimate
- The opinion of legal counsel
- 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.

5.097 Transfer of Title

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

5.0971 The **Consultant** will conduct necessary title curative work. For real property acquisitions valued at \$10,000 or less, the **Consultant** will clear only the possessory interest. For real property valued at greater than \$10,000, the **Consultant** will clear all interests in the property. Title curative work may include partial releases of mortgage, lien subordination agreements, and lien satisfactions.

5.0972 The **Consultant** will perform a calculation to prorate real property taxes for each fee and permanent easement acquisitions. The **City** will pay all tax prorations over \$25.00.

5.0973 The **Consultant** will prepare closing documents for each acquisition. The closing documents will include a closing statement, instrument, real estate transfer tax return, and real property transfer report.

5.0974 The **Consultant** will deliver the title instrument(s) to the title attorney subcontracted by the **Consultant** for review and approval.

5.0975 The **Consultant** will schedule and hold the closing. Because time is of the essence, the **City** will pay the just compensation at the time the property owner(s) signs all required closing documents. The transfer of title to the agency may also require the payment of incidental expenses by the owner, the **City**, or the **Consultant**. The **City** will pay appropriate reimbursable expenses to the property owner(s) and/or the **Consultant**.

5.0976 The **Consultant** will promptly file all deeds or conveyance documents in the County Clerk's Office.

5.098 Right of Way Certification

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

5.10 Relocation Assistance

Assume No services required.

5.11 *Property Management*

Assume No services required.

Section 6 - Detailed Design

6.01 Preliminary Plans

The **Consultant** will develop the approved design alternative to the Preliminary Plan stage. At this stage all plans, specifications, estimates and other associated materials will be **40%** complete.

The anticipated sheets for the 40% submittal are as follows:

- Construction Plan Sheets
- Typical Section(s)
- Proposed Profile(s)
- Drainage Modifications (assumed to be minor)
- Maintenance and Protection of Traffic
- Pertinent Details

Estimated Construction Costs will be at a 40% complete level.

Preliminary Plans will be in accordance with the “Locally Administered Federal Aid Procedures Manual.”

The **Consultant** will prepare and submit **2** copies of the Preliminary Plans to the **City** for review. The **Consultant** will modify the design to reflect the review of the Preliminary package.

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.

The anticipated sheets for the 90% ADP submittal are:

- Title Sheet
- General Notes and Index
- Legends and Abbreviations
- Erosion and Sediment Control Details and Notes
- Typical Sections
- Traffic Control Plans and Details
- General Plans (1:40)
- Miscellaneous Details
- Miscellaneous Tables
- Estimate of Quantities

As part of this task the **Consultant** will prepare templated cross sections at 25 foot intervals, if appropriate, depending on the extent of proposed earthwork.

Advance Detail Plans will be in accordance with the “Locally Administered Federal Aid Procedures Manual.”

The **Consultant** will prepare and submit **2** hard copies and **1** electronic PDF copy of the ADP's to the **City**, plus **1** copy to NYSDOT, 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 (with City supplied information)
- Special notes
- Specifications
- Utility Agreements
- Plans
- A list of supplemental information available to bidders (i.e., subsurface exploration logs, record as-built plans, etc.)
- Other pertinent information including other City supplied information

The **Consultant** will submit the contract documents to the **City** for approval. Upon approval, the **City** will submit 4 copies of the contract documents to the NYSDOT as described in the “Locally Administered Federal Aid Procedures Manual.” The items listed below are to be included in one submission to the NYSDOT at least one (1) month prior to the anticipated placement of advertisement for bids.

- Signed set of plans
- Project proposal
- Engineers estimate of construction cost
- Signed ROW certificate
- Signed utility schedules and agreements
- Construction management plan
- Scope of services for construction inspection
- Estimated cost of construction inspection

The submission will be reviewed and discussed with the **Consultant** if changes are necessary.

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

- A. Utilities Inventory Report – Immediately after receipt of Design Approval, the **Consultant** shall prepare and submit to the **City** and NYSDOT, a preliminary Utilities Inventory Report, indicating ownership and impacts to existing utilities by the proposed work. This report shall be prepared in accordance with Chapter 10 of the LAFAP Manual (see Appendix 10-5 for the form and instructions).
- B. Initial Contact Letter – The **Consultant** shall subsequently prepare and send a letter to each utility impacted by the project, and include copies of the preliminary Utilities Inventory Report, plans, profiles, typical sections, and cross-sections for the project. The letter should clearly request that the utility provide a color-coded set of plans showing the existing facilities, as well as the proposed relocation, schedules, and estimate of costs for the reimbursable work.
- C. Coordination with Utility Schedule – After receipt of the information requested in Task 6.05.B, the **Consultant** shall prepare and submit Coordination with Utility Schedule in accordance with Chapter 10 (see Appendix 10-6 for a sample and instructions). This schedule shall be included in the Utility Work Agreements, as well as the contract documents.
- D. Utility Work Agreements – The **Consultant** shall prepare a Utility Work Agreement for each utility impacted by the project. The agreement shall be prepared in accordance with Chapter 10 of the LAFAP Manual (see Appendix 10-7 thru 9 for samples and instructions), and submitted to NYSDOT for approval and signature, if required. The agreements must be signed by all parties prior to advertising of the contract.

- E. Notice to Utilities – The **Consultant** shall give notice to each utility as to the schedule of letting and award of the project, including the tasks and schedules contained in the “Coordination with Utility Schedule”.

6.06 Railroads

Not applicable

6.07 Bridge Inventory and Load Rating Forms

Not applicable

6.08 Information Transmittal

Upon completion of the contract documents, the **Consultant** will transmit to the **City** all project information, including electronic files. The electronic information will be PDF Format.

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 **City**. The **Consultant** will submit the ad(s) to the **City** for review and will revise the ad(s) to reflect comments generated by that review. Upon approval by the **City**, the **Consultant** will place the advertisements.

Advertisements for Bidding will be placed after "Authorization to Advertise" is granted to the **City** by the FHWA through the NYSDOT.

7.02 Bid Opening (Letting)

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

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 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 **City** in preparing and compiling the package of information to be transmitted to the DOT.

The **City** will award the contract and will transmit the award package to the NYSDOT as described in the "Locally Administered Federal Aid Procedures Manual."

Section 8 - Construction Support

(By Supplemental Agreement)

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.

The Consultant will coordinate, prepare for, and attend a Pre-construction meeting.

Work under this section will always be in response to a specific assignment from the **City** 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 **City** 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 structural shop drawings for construction.
- The **Consultant** will attend construction progress meetings with the City, Resident Engineer, Contractor, and others as necessary throughout the duration of the project.

Not reimbursable under this Section are:

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

Section 9 - Construction Inspection

(By Supplemental Agreement)

9.01 Equipment

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 **City**, 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 Engineer

The **City** will assign a Project Engineer to the contract covered by this agreement. This Project Engineer will be the **City's** official representative on the contract and the **Consultant** must report to and be directly responsible to said Project Engineer.

9.04 Ethics

Prior to the start of work, the **Consultant** will submit to the **City** 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.

9.07 Scope of Services/Performance Requirements

A. Quality

The **Consultant** will enforce the specifications and identify in a timely manner to the **City** 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.

B. Record Keeping & Payments to the Contractor

1. All records must be kept in accordance with the directions of the **City**. 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 **City** should

be returned to the **City** 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 **City** will check, and when acceptable, approve all structural shop drawings.
4. The **Consultant** must submit the final estimate of the contract to the **City** within four (4) weeks after the date of acceptance of the contract. All project records must be cataloged, indexed, packaged, and delivered to the **City** within five (5) weeks after the date of the acceptance of the contract.
5. The **Consultant** shall prepare and submit to the City two (2) copies of completed construction drawings that reflect any changes made during construction.

C. *Health & Safety/Maintenance and Protection of Traffic*

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 **City** 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. The **Consultant**, when monitoring the Contractor's Equal Opportunity and Labor compliance, will utilize the guidance contained in the contract, standard specifications and the **City's** policies.

Section 10 - Estimating & Technical Assumptions

10.01 Estimating Assumptions

The following assumptions have been made for estimating purposes:

Section 1	Estimate 6 meetings during the life of this agreement.
	Estimate 18 cost and progress reporting periods will occur during the life of this agreement.
	Assume 2 subconsultants and 0 subcontractors
Section 2	Assume that survey information will be obtained in the field by the Consultant
	Estimate 1 crew days of supplemental survey will be required
	Estimate 0 accidents will require analysis and 0 traffic counts will be required.
	Estimate 0 capacity analyses will be required.
Section 3	Estimate 2 design alternative(s) will be analyzed in addition to the null alternative.
	Estimate 2 cost estimate(s) plus 1 updates will be required.
	Estimate 1 Public Information Meeting to be held.
Section 4	Estimate 1 permit will be required.
	Estimate 1 finding document will be required for endangered species habitat assessment
	Assume that a Phase 1A/1B Archeological Investigation will NOT be required.
Section 5	Estimate 1 meeting(s) with the City .
	Estimate 0 temporary easement title search
	Estimate 0 last owner title searches
	Estimate 0 20 year title searches
	Estimate 0 full abstracts.
	Estimate 0 last owner title certifications.
	Estimate 0 20 year title certifications.
	Estimate 0 full abstract certifications.
	Estimate 0 acquisition map reviews.
	Estimate 0 right of way cost estimate(s).
	Estimate 0 Informational Meetings

Estimate **0** EDPL Public Hearings

Estimate **0** Preliminary Property Owner Interviews.

Estimate **0** Limited Appraisal Reports.

Estimate **0** Full Take Appraisal Reports.

Estimate **0** Before & After (land only) Appraisal Reports.

Estimate **0** Before & After Appraisal Reports.

Estimate **0** properties requiring two independent appraisal reports.

Estimate **0** appraisal reviews.

Estimate **0** meetings with the City.

Estimate **0** offer packages.

Estimate **0** negotiation contacts per property owner.

Estimate **0** revisions to Just Compensation

Estimate **0** Administrative Settlements.

Estimate **0** partial release(s) of mortgage.

Estimate **0** Lien subordination agreements.

Estimate **0** Lien satisfactions.

Estimate **0** miscellaneous title curative issues.

Estimate **0** property tax proration calculations.

Estimate **0** closing packages.

Estimate **0** right of way certificates.

Section 6	Estimate 1 cost estimate(s) plus 1 updates will be required. Estimate 4 private utility companies and 0 railroad agencies will be affected.
Section 7	Estimate 20 digital PDF copies on CD of the final contract bid documents will be needed for prospective bidders on individual compact discs. Estimate 1 advertisement will be placed in 2 publications in addition to the NYS Contract Reporter, by the City. Assume only 1 letting will be required and will be attended by the Consultant.
Section 8	<i>By Supplemental Agreement</i>
Section 9	<i>By Supplemental Agreement</i>

10.02 Technical Assumptions

1. Aerial mapping will not be required.
2. A survey control report will not be required.
3. Benchmarks will not be established on the site.
4. Access to the site and vicinity will not be limited.
5. Overhead and underground utilities are assumed to be present. Coordination with utility owners will be required.
6. The project will be progressed in English units.
7. Contract plans and cross-sections (if required) will be prepared at ½ size (11"x17") in accordance with NYSDOT requirements.
8. Traffic counts will not be required.
9. Accident reports will not be required.
10. It is assumed that utility relocation agreements will be necessary for above ground and underground utilities. Utility relocation, including utility poles, will be by utility owners.
11. It is assumed that the State Historic Preservation Officer (SHPO) will determine the project to have "no effect."
12. It is assumed that a detailed Section 4(f) or 6(f) analysis/report will not be required.
13. Asbestos investigations will be limited to all facilities and lands within the existing and proposed project limits. It is assumed that no ACM's (Asbestos Containing Materials) will be found. Asbestos removal/abatement, if necessary, would be added by supplemental agreement if necessary.
14. It is assumed that the preliminary hazardous waste assessment will not find conditions or materials that will require remediation or pose a significant threat to health of the environment.
15. One (1) Public Informational Meetings will be held locally. Assume 30 attending. Display boards and brochures will be provided by B&L. The City will coordinate and make arrangements for the location of the meeting.
16. Writing of two (2) special specifications will be required. The remaining project elements will conform to the standard NYSDOT Specifications or existing NYSDOT Special Specifications.
17. With final submission, the **Consultant** will submit two (2) copies of the design calculations and estimate of quantities calculations, and one (1) digital PDF copy of the as-built plans.
18. The project will be constructed in the 2019 construction season.
19. The following project schedule is initially anticipated:

• Notice to Proceed	February 2018
• Design Approval	August 2018
• PS&E	November 2018
• Authorization to Advertise	January 2019
• Letting	February 2019

- Construction Start April 2019
- Construction Completed July 2019

Attachment C

Staffing Rates, Hours, Reimbursable Costs, and Fee

EXHIBIT A-1
Salary Schedule

City of Kingston
Hurley Avenue Paving and Complete Streets
Barton & Loguidice, D.P.C.
PIN # 8761.94

JOB TITLE	ASCE (A) OR NICET (N) GRADE		AVERAGE HOURLY RATES		MAXIMUM HOURLY RATES 2018	OVERTIME CATEGORY
			PRESENT 12/2017	PROJECTED 7/2018		
Principal	IX	(A)	\$110.00	\$ 110.00	\$110.00	A
Senior Vice President	IX	(A)	\$92.30	\$ 93.90	\$99.20	A
Vice President	IX	(A)	\$71.90	\$ 73.15	\$77.00	A
Associate	VIII	(A)	\$60.90	\$ 61.96	\$65.50	A
Associate Vice President	VIII	(A)	\$49.50	\$ 49.50	\$49.50	A
Senior Environmental Consultant	VII	(A)	\$56.00	\$ 56.00	\$56.00	B
Senior Managing Engineer	VII	(A)	\$54.01	\$ 54.95	\$60.00	B
Senior Managing Environmental Scientist	VII	(A)	\$59.80	\$ 59.80	\$59.80	B
Senior Managing Hydrogeologist	VII	(A)	\$54.00	\$ 54.00	\$54.00	B
Senior Managing Hydrogeologist Consultant	VII	(A)	\$59.00	\$ 59.00	\$59.00	B
Senior Project Manager	VII	(A)	\$57.33	\$ 58.32	\$60.00	B
Senior Managing Landscape Architect	VII	(A)	\$50.00	\$ 50.00	\$50.00	B
Senior Project Landscape Architect	V	(A)	\$36.30	\$ 36.30	\$36.30	B
Project Manager	VI	(A)	\$47.25	\$ 48.07	\$53.50	B
Managing Engineer	VI	(A)	\$46.88	\$ 47.69	\$54.00	B
Managing Landscape Architect	VI	(A)	\$42.25	\$ 42.98	\$45.00	B
Managing Hydrogeologist	VI	(A)	\$44.00	\$ 44.00	\$44.00	B
Construction Manager	VI	(A)	\$42.00	\$ 42.00	\$42.00	B
Consultant	VI	(A)	\$50.00	\$ 50.00	\$50.00	B
Senior Water Quality Scientist	V	(A)	\$41.10	\$ 41.81	\$50.00	B
Senior Land Use Planner	V	(A)	\$47.00	\$ 47.82	\$49.00	B
Project Consultant	V	(A)	\$40.00	\$ 40.00	\$40.00	B
Senior Project Engineer	V	(A)	\$38.64	\$ 39.31	\$42.90	B
Senior Project Hydrogeologist	V	(A)	\$42.50	\$ 42.50	\$42.50	B
Managing Environmental Scientist	V	(A)	\$42.08	\$ 42.81	\$43.15	B
Managing Industrial Hygienist	V	(A)	\$40.75	\$ 41.46	\$41.50	B
Senior Engineer	V	(A)	\$35.83	\$ 36.45	\$38.30	B
Senior Project Environmental Scientist	V	(A)	\$37.40	\$ 37.40	\$37.40	B
Project Engineer	IV	(A)	\$34.13	\$ 34.72	\$38.60	B
Project Architect	IV	(A)	\$34.10	\$ 34.10	\$34.10	B
Project Environmental Scientist	IV	(A)	\$31.13	\$ 31.67	\$33.50	B
Engineer III	III	(A)	\$30.00	\$ 30.52	\$32.50	B
Project Landscape Architect	III	(A)	\$27.80	\$ 27.80	\$27.80	B
Environmental Scientist III	III	(A)	\$25.65	\$ 25.65	\$25.65	B
Land Use Planner III	III	(A)	\$26.20	\$ 26.20	\$26.20	B
Industrial Hygienist III	III	(A)	\$26.68	\$ 27.14	\$27.50	B
Assistant Landscape Architect II	II	(A)	\$24.20	\$ 24.20	\$24.20	B
Engineering Designer I	II	(A)	\$36.75	\$ 37.39	\$37.50	B
Industrial Hygienist II	II	(A)	\$23.60	\$ 23.60	\$23.60	B
Intern Architect II	II	(A)	\$26.00	\$ 26.00	\$26.00	B
Engineer II	II	(A)	\$28.17	\$ 28.50	\$28.50	B
Hydrogeologist II	II	(A)	\$22.18	\$ 22.56	\$23.35	B
Engineer I	I	(A)	\$27.10	\$ 27.57	\$28.50	B
Environmental Scientist II	I	(A)	\$20.40	\$ 20.75	\$22.00	B
Resident Engineer	IV	(N)	\$45.00	\$ 45.00	\$45.00	C
Principal Engineering Technician	IV	(N)	\$36.60	\$ 37.23	\$40.00	C
Engineering Technician	IV	(N)	\$32.23	\$ 32.79	\$35.00	C
Senior Engineering Technician	IV	(N)	\$31.70	\$ 31.70	\$31.70	C
Senior Designer	IV	(N)	\$26.50	\$ 26.50	\$26.50	C
Senior GIS Analyst	III	(N)	\$34.50	\$ 34.50	\$34.50	C
Senior Inspector	III	(N)	\$32.70	\$ 33.27	\$41.00	C
Designer	II	(N)	\$24.50	\$ 24.50	\$24.50	C
CAD Technician	II	(N)	\$22.20	\$ 22.20	\$22.20	C
Assistant Landscape Architect I	II	(N)	\$20.70	\$ 20.70	\$20.70	C
Land Use Planner I	II	(N)	\$20.40	\$ 20.40	\$20.40	C
Industrial Hygienist I	II	(N)	\$17.70	\$ 17.70	\$17.70	C
Field Technician	I	(N)	\$17.40	\$ 17.70	\$18.00	C
Engineering Aide	I	(N)	\$29.30	\$ 29.81	\$30.00	C
Project Administrator	N/A		\$25.35	\$ 25.79	\$26.75	C
Senior Group Technical Assistant	N/A		\$21.36	\$ 21.73	\$25.00	C
Group Technical Assistant / Technical Typist	N/A		\$17.50	\$ 17.80	\$18.20	C
Intern	N/A		\$13.50	\$ 13.73	\$15.00	C

OVERTIME POLICY

Category A - No overtime compensation

Category B - Overtime compensated at straight time rate

Category C - Overtime compensated at straight time rate x 1.50

Overtime applies to hours worked in excess of the normal working hours of 40 hours per week.

Exhibit A-2 Staffing Table																										
City of Kingston Hurley Avenue Paving and Complete Streets Barton & Loguidice, D.P.C. PIN # 8761.94																										
JOB TITLE	ASCE (A) OR NICET (N)									Added By Supplemental Agreement			Prelim Sections 1-4	ROW Section 5	Detailed Sections 6,7	DIRECT HOURLY RATE	Preliminary Design	Detailed Design	ROW							
										8761.94.121							8761.94.221	8761.94.321			PIN .121	PIN .121	PIN .221			
										Administration Section	Data Collection Section	Prelim Design Section					Environmental Section	ROW Section	Final Design Section	Bid and Award Section	Const. Support Section	Inspection Section	Inspection Overtime Hours	Sect. 1, 2, 3, 4 DIRECT LABOR COSTS	Sect. 6, 7 DIRECT LABOR COSTS	Sect 5 DIRECT LABOR COSTS
										1	2	3					4	5	6	7	8	9	Hours	Hours	Hours	
Senior Vice President	IX	(A)														\$ 93.90										
Vice President	IX	(A)		4									4			\$ 73.15	\$292.59									
Associate	VIII	(A)		14		14			3		6	2	28	3	8	\$ 61.96	\$1,734.78	\$495.65	\$185.87							
Senior Managing Engineer	VII	(A)														\$ 54.95										
Senior Managing Environmental Scientist	VII	(A)				4							4			\$ 59.80	\$239.20									
Senior Managing Landscape Architect	VII	(A)														\$ 50.00										
Senior Project Landscape Architect	V	(A)														\$ 36.30										
Managing Engineer	VI	(A)						8							8	\$ 47.69		\$381.55								
Managing Landscape Architect	VI	(A)														\$ 42.98										
Managing Hydrogeologist	VI	(A)														\$ 44.00										
Consultant	VI	(A)														\$ 50.00										
Senior Project Engineer	V	(A)		32	10	48	4	10		34	12		94	10	46	\$ 39.31	\$3,695.18	\$1,808.28	\$393.10							
Senior Project Hydrogeologist	V	(A)														\$ 42.50										
Managing Environmental Scientist	V	(A)														\$ 42.81										
Managing Industrial Hygienist	V	(A)														\$ 41.46										
Senior Engineer	V	(A)														\$ 36.45										
Senior Project Environmental Scientist	V	(A)														\$ 37.40										
Engineer III	III	(A)														\$ 30.52										
Project Landscape Architect	III	(A)														\$ 27.80										
Environmental Scientist III	III	(A)														\$ 25.65										
Land Use Planner III	III	(A)														\$ 26.20										
Engineer II	II	(A)						16							16	\$ 28.50		\$456.00								
Hydrogeologist II	II	(A)														\$ 22.56										
Engineer I	I	(A)		4	10	84				40	14		98		54	\$ 27.57	\$2,701.88	\$1,488.79								
Environmental Scientist II	I	(A)			6		16						22			\$ 20.75	\$456.59									
Resident Engineer	IV	(N)														\$ 45.00										
Principal Engineering Technician	IV	(N)			3	8				12			11		12	\$ 37.23	\$409.58	\$446.82								
Senior Group Technical Assistant	N/A					8		3		6	6		8	3	12	\$ 21.73	\$173.84	\$260.77	\$65.19							
TOTALS:				54	29	162	24	16		122	34		269	16	156	.121 Total =	\$9,703.64	\$5,337.85	\$644.17							

Exhibit A-3 (P)
Estimate of Direct Non-Salary Cost

Preliminary Design Phase

City of Kingston
Hurley Avenue Paving and Complete Streets
Barton & Loguidice, D.P.C.
PIN # 8761.94

1. Travel, Lodging and Subsistence

	trips	miles per			
Trips to					
Section 1	6	130 miles/trip	780		
Section 2	1	130 miles/trip	130		
Section 3	1	130 miles/trip	130		
Section 4	1	130 miles/trip	130		

		Total Mileage	1170	@	\$0.545 \$637.65

Tolls	9			\$5.40 per trip	\$48.60

TOTAL TRAVEL, LODGING, & SUBSISTENCE \$686

2. Reproduction, Drawings & Report

	each	sheets/set	sets	
Design Phases I-VI				
Draft Design Document	\$0.09	200	7	\$126.00
Final Design Document	\$0.09	200	4	\$72.00
Draft / Final DAD Color Pgs.	\$0.99	25	10	\$247.50
Informational Brochures (Clr)	\$0.99	2	50	\$99.00
11" x 17" Prints for Reports	\$0.18	15	7	\$18.90

TOTAL DRAWING, REPORT, REPRODUCTION \$563 \$563

3. Owner's Protective Insurance (Estimated) \$1,000

4. Mail, Postage, Shipping \$270

18 months @ \$15.00 per month

PIN . 121 TOTAL DIRECT NON - SALARY COST (DNSC) = \$2,520

5. EDR Report \$650

6 Sub-Surface / Geotechnical \$0

PIN . 121 TOTAL ALL SUBCONTRACTOR COSTS = \$650

Exhibit A-3 (D)
Estimate of Direct Non-Salary Cost

Detailed Design Phase

City of Kingston
Hurley Avenue Paving and Complete Streets
Barton & Loguidice, D.P.C.
PIN # 8761.94

1. Travel, Lodging and Subsistence

Trips to	trips	miles per				
Section 6	2	130 miles/trip	260			
Section 7	2	130 miles/trip	260			

		Total Mileage	520	@	\$0.545	\$283.40

Tolls	2				\$5.40 per trip	\$10.80

TOTAL TRAVEL, LODGING, & SUBSISTENCE \$294

2. Reproduction, Drawings & Report

	each	sheets/set	sets		
Design Phases I-VI					
Preliminary Plans (11 x 17)	\$0.18	20	6		\$21.60
ADP Plans (11 x 17)	\$0.18	35	4		\$25.20
PSE Plans (11 x 17)	\$0.18	35	4		\$25.20
Miscellaneous Copies	\$0.09	100	30		\$270.00
Bid Books	\$0.09	200	5		\$90.00
Bid Plans (11 x 17)	\$0.09	35	8		\$25.20

TOTAL DRAWING, REPORT, REPRODUCTION \$457 \$457

PIN . 121 TOTAL DIRECT NON - SALARY COST (DNSC) = -----
\$751

Exhibit D
Summary

City of Kingston
Hurley Avenue Paving and Complete Streets
Barton & Loguidice, D.P.C.
PIN # 8761.94

		Prelim Design	Detailed Design	Right of Way
		PIN 8761.94.121	PIN 8761.94.121	PIN 8761.94.221
		<u>Total</u>	<u>Total</u>	<u>Total</u>
Item IA, Total Labor				
Costs based on				
Specific Rates		\$9,704	\$5,338	\$644
Item IB, Direct Technical				
Salaries Premium Portion				
of overtime subject to				
audit (estimate)		\$0	\$0	\$0
Item II, Direct Non-				
Salary Cost (estimated)				
subject to audit		\$2,520	\$751	
Item II Direct Non-				
Salary Cost (estimated)				
subject to audit				
(Sub-Contractor Cost)		\$650		
Item II Direct Non-				
Salary Cost (estimated)				
subject to audit	Survey	\$18,000		
(Sub-Consultant Cost)				
Item III, Overhead				
(estimated) subject				
to audit	1.75 Office Staff	\$16,981	\$9,341	\$1,127
	1.28 Field Staff			
Item IV, Fixed Fee		\$3,394	\$1,900	\$229
(negotiated)				
		-----	-----	-----
	Sub Totals (Phase)	\$51,249	\$17,330	\$2,000
	Use Maximum Amount Payable =	\$70,580		