US CUSTOMARY UNITS

PIN: 7753.77
D040965
Jefferson County Bid #24-10

FEDERAL AID PROJECT

PROPOSAL

Submitted in accordance with the Highway Law and the Standard Specifications officially finalized and adopted on January 1, 2024 as posted on New York State Department of Transportation's website.

Bridge NY Project
Replacement of Noble Street (B.I.N. 3371810) over West Creek
(Village of Evans Mills, Jefferson County)

Letting Time and Date:
March 29, 2024 at 2:00 PM

Letting Location:
Jefferson County Purchasing Department
195 Arsenal Street
Watertown, NY 13601

2024.03.06
20:51:12
-05'00'

BOOK 1 OF 1

IMPORTANT BIDDER INFORMATION

The pages in this proposal are numbered consecutively. In the event that any pages are missing or are illegible, a replacement copy shall be furnished free of charge upon request. The pages in the plans are also lettered or numbered. In the event that any pages are missing or illegible, a replacement copy shall be furnished free of charge upon request.

This is a federally-aided contract subject to the approval of the New York State Department of Transportation (NYSDOT). Whenever municipal contract terms and requirements differ from federal requirements, the federal requirements will prevail.

1. **Before You Hand in Your Bid, Double Check Your Computations.** Make sure the figures reflect the intent, and check decimal points. Enter a numeric figure for every unit price, and an extension in the total amount bid column.

2. **Make Sure You Have Bid on All Items.** If it is your intent to bid "0", use numeric and written symbols. Leaving blank spaces can render your bid informal. See §102-05 PROPOSAL SUBMISSION, of the Standard Specifications.

3. **Make Sure You Sign the Bid.** See §102-05 PROPOSAL SUBMISSION, of the Standard Specifications.

4. **Eligibility to bid on this contract is not subject to residence or geographic restrictions.**

5. **This contract has no M/WBE goals.**

6. **Amendments to the Bid Documents during the bid period shall be provided to all plan holders of record (plan holders of record are those entities that have obtained at least one copy of the Bid Documents) in accordance with section §102-05 PROPOSAL SUBMISSION of the Standard Specifications.** All plan holders of record shall provide contact information to which amendments are to be sent (contact information shall include contact person's name, firm's name, firm's address, firm's phone number, e-mail address, etc.). Said contact information shall be provided to the engineer and owner, in writing, within 24 hours of receipt of Contract Documents.

7. **If Federal Davis-Bacon wage rates differ from New York State prevailing wage rates, then the higher of the two rates shall be paid.**

8. **Familiarize Yourself with NYSDOT's Standard Specifications.** These may be accessed at https://www.dot.ny.gov/main/business-center/engineering/specifications/busi-e-standards-usc.

9. **Procurement Lobbying Law.** https://www.dot.ny.gov/main/business-center/contractors/contractors-repository/lobbylaw.pdf. NYS Finance Law restricts communication with Sponsor personnel on procurements and contact can only be made with designated persons. Contact with non-designated persons or other involved Agencies will be considered a serious matter and may result in disqualification. Contacts are: for technical questions, the Responsible Local Official (RLO) or his/her designate.

10. **DBE Goals.** https://www.dot.ny.gov/dotapp/ebo. This contract is federally funded and has a DBE goal of 4%. You must document your good faith efforts to obtain DBE participation. Solicitation of DBEs must begin prior to the submission of your bid. For projects with goals, the Pre-Award Utilization Package must be submitted to the RLPL within 7 calendar days after Letting, in accordance with Specifications §102-12

D/M/WBE Utilization, using the current version of NYSDOT's approved Civil Rights reporting software.

11. **Bonds.** Statutes require that a low bidder file both a Performance Bond and a Labor and Material Bond for the full amount of the contract. Arrangements should be made with a Surety prior to submitting a bid. Failure to secure bonding could result in the loss of your bid deposit. See NYSDOT Standard Specifications §103-03 *Contract Bonds*.

12. **Bid Security.** Every bid must be accompanied by a bid bond, certified check or bank cashier's check payable to the Sponsor representing 5% of the total bid.

13. **Business Support Services Available for DBEs.** NYSDOT's Office of Civil Rights (OCR) administers programs that provide technical and business assistance to NYSCUP-certified DBEs. For more information visit https://www.dot.ny.gov/main/business-center/civil-rights/dbe-ojt

14. **Do Not Alter the Bid Proposal Unless Directed to Do So by Amendment.** Unauthorized alterations could lead to your being declared Informal. See NYSDOT Standard Specifications §102-05 *Proposal Submission*.

15. **The Contractor is responsible for ensuring that all Amendments have been incorporated into its bid. Bid on All Items and Sign the Bid. If it is your intent to bid "0", use the numeric symbol. Leaving blank spaces can render your bid informal.** See NYSDOT Standard Specifications §102-05 *Proposal Submission*.

16. **Bids Should Be Submitted to the Sponsor in a Sealed Envelope prominently labeled "BID ENCLOSED" and addressed to the Sponsor with, The Company Name, Street Address, Federal Identification Number, Project Number and Project Description Should Be Clearly Marked.** Your Federal Identification Number on the envelope should be the same number used to obtain plans. Low bidders must have a current NYS Vendor Responsibility Questionnaire For-Profit Construction (CCA-2) on file or submit one within 10 days of receipt of the contract. Questionnaires are available at https://www.dot.ny.gov/bids-and-lettings/construction-contractors/general-info or can be obtained by calling (518) 457-1564. Contact the Responsible Local Official (RLO) if a reasonable accommodation is needed to participate in the Letting.

Notice to Bidders – Advertisement of Bid

Notice is hereby given that Jefferson County will accept sealed bids for:

Replacement of Noble Street (BIN 3371810) over West Creek,
Village of Evans Mills, Jefferson County
PIN 7753.77
D040965
Jefferson County Bid #24-10

The Owner is Jefferson County, and the work site is located in the Village of Evans Mills. The project limits extend from approximately 280 feet southeast of the existing bridge along Noble Street to approximately 350 feet northwest of the existing bridge along Factory Street, including work along Willow Street from the intersection with Noble/Factory Street to approximately 150 feet southwest of the intersection with Noble/Factory Street.

The work includes providing all labor, materials, machinery, tools, equipment and other means of construction necessary and incidental to the completion of the work shown on the plans and described in these specifications including, but not necessarily limited to the following: complete removal of the existing culvert superstructure and substructures and replacement with a new single span, precast concrete 3-sided frame units, construction of strip footings founded on piles, re-alignment of Noble/Factory/Willow Street within the project limits, re-alignment of the intersection of Noble/Factory/Willow Street, installation of new sanitary pump station, relocation of sanitary, water, and drainage systems, installation of SPDES stormwater treatment swale, installation of sidewalks and curbing within project limits, and reconstruction of roadway approaches as required to accommodate bridge replacement efforts.

This is a Federal Aid Project and NYSDOT Standard Specifications, officially finalized and adopted on January 1, 2024 as posted on the New York State Department of Transportation's website must be followed by the successful bidder.

The DBE goal for this project is: 4%
There are no M/WBE goals for this project.
The EEO Employment goals for this project are: 2.5% Minority Employment Goal
6.9% Women Employment Goal

The use of the NYSDOT approved civil rights reporting software, Equitable Business Opportunities (EBO), is required. Access authorization to EBO can be found at https://ebo.dot.ny.gov/.

No residential or geographical restrictions will be in effect for this project. Applicable Federal requirements take precedence over State and local requirements unless state and local requirements are deemed to be more stringent.

Contract Documents, including Invitation to Bidders, Instructions to Bidders, Wage Rates, Bid Documents, Agreement, Special Notes, Specifications, Contract Drawings, and any Addenda, may be examined, at no expense, at the office of: Jefferson County Purchasing Department, 195 Arsenal Street, Watertown, New York. Arrangements for viewing documents must be made in advance by calling the Purchasing Office at (315) 785-3077. An electronic copy of the CONTRACT

DOCUMENTS/DRAWINGS can be made available to the CONTRACTOR upon request from the Consultant tom.butler@stantec.com, or by calling (585) 413-5261.

No questions or inquiries regarding this bid will be accepted within three (3) business days prior to the bid opening.

Contractors that obtain Contract Documents from a source other than the issuing office must notify the issuing office in order to be placed on the official Plan Holder List, to receive Addenda and any other Bid correspondence. Bids received from Contractors other than those on the official Plan Holders List will not be accepted.

Addenda will be emailed from the Consultant to Bidders listed on the official Plan Holders List. An emailed response from the Bidder to the Addendum sent by the Consultant will act as proof that the Bidder received the Addendum. In addition to an emailed response, Bidders must acknowledge receipt of all Addenda by signing and dating each Addendum and the Acknowledgement of Receipt of Addenda, page 92. Failure of any Bidder to receive any such Addendum or interpretation shall not relive such Bidder from any obligation under this Bid submittal. All Addenda so issued shall become part of the Contract Documents.

Questions regarding the Contract Documents should be directed to James Lawrence, Jr., Jefferson County or Thomas R. Butler, Stantec Consulting Services Inc. either through email at: jlawrence@co.jefferson.ny.us, tom.butler@stantec.com or by telephone at (315) 786-3600, (585) 413-5261. Bidders shall promptly notify James/Thomas of any errors, omissions, conflicts, or ambiguity within the Contract Documents within seven (7) calendar days of bid opening.

All bids must include the completed Bid Form, Non-Collusive Bidding and Disbarment Certifications, and Lobbying Certifications. This is a unit price bid as described in the Instructions to Bidders. No bidder may withdraw his/her bid within forty-five (45) calendar days after the actual date of the opening thereof.

Each bid must be accompanied by security in an amount not less than five percent (5%) of the amount of the bid in the form and subject to the conditions provided in the Instructions to Bidders.

Bids to be considered must be received in a sealed envelope at Jefferson County Purchasing Department, 195 Arsenal Street, Watertown, New York 13601 by **2:00 PM**, local time, on **March 29, 2024** at which time they will be publicly opened and read aloud. Bids received after the above noted time will not be accepted. All sealed envelopes should be clearly labeled “BID: BridgeNY Project, Replacement of Noble Street (BIN 3371810) over West Creek, PIN 7753.77”.

The Bidder to whom the Contract is awarded will be required to furnish Performance and Payment Bonds guaranteeing performance of work and prompt payment from an acceptable Surety Company for an amount not less than 100% of the accepted bid. The successful Bidder and all subcontractors must have an approved CCA-2 on file with NYSDOT prior to being awarded a contract. If the successful Bidder does not currently have a CCA-2 on file with NYSDOT, the Bidder may find the CCA-2 forms and instruction for completion online at https://www.osc.state.ny.us/state-vendors/vendrep/vendor-responsibility-forms?redirect=legacy#Construction.

The successful Bidder will be required to comply with all provisions of the Federal Government Equal Employment Opportunity clauses issued by the Secretary of Labor on May 2,1968 and published in the Federal Register (41 CFR Part 60-1, 33 F.2 7804). Successful bidders will be required to pay prevailing wage rates on this contract.

Jefferson County reserves the right to consider the bids for forty-five (45) days after receipt before awarding any Contract, and to waive any minor informalities in, and to reject, any and all bids. All bids are subject to final review and approval by the Jefferson County Board of Directors before any award of contract may be made. Receipt of bids by Jefferson County shall not be construed as authority to bind Jefferson County.

Construction work shall not begin prior to May 1, 2024 and shall be substantially completed and ready for final payment by September 30, 2025. A mandatory winter shutdown will be required between November 1, 2024 and April 30, 2025. Phase I work zone traffic control as indicated in the Contract Plans shall remain in place throughout the winter shutdown period. Work outside of these dates shall not be performed without written approval from Jefferson County.

The New York State Department of Transportation, in accordance with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C 2000d to 2000d-4 and Title 49 Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the Department of Transportation and Title 23 Code of Federal Regulations, Part 200, Title VI Program and Related Statutes, as amended, issued pursuant to such Act, hereby notifies all who respond to the related solicitation, request for proposal or invitation to bid that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin, sex, age, disability/handicap and income status in consideration for an award.

Owner's Contact
James L. Lawrence, Jr.
Superintendent of Highways
Jefferson County Highway Department
21897 County Road 190
Watertown, New York 13601
(315) 786-3600
jlawrence@co.jefferson.ny.us

Engineer's Contact
Thomas R. Butler
Project Manager
Stantec Consulting Services Inc.
61 Commercial Street, Suite
Rochester, New York 14614
(585) 413-5261
tom.butler@stantec.com

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TABLE OF CONTENTS

PROPOSAL SECTION	PAGE NO.
IMPORTANT BIDDER INFORMATION	1
SPONSOR ADVERTISEMENT	3
PROJECT TITLE SHEET (With Uniform Contracting Questionnaire Note)	9
SECTION 1 - CONTRACTOR'S BID PACKAGE CONTENTS	11
• DBE COMMITMENT (Appendix 12-10)	13
• APPENDIX 12-1 and APPENDIX 12-1A	14
○ Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion	14
○ Certification Regarding use of Contract Funds for Lobbying	14
○ False Claims Certification	15
○ Non-Collusive Bidding Certification (SFL/GML)	16
○ Non-Collusive Bidding Certification (2 CFR 1200)	17
○ Non-Collusive Bidding Certification – Bidder Information	18
○ Reporting Violations of Non-Collusive Bidding Procedures	20
○ New York State Office of the Inspector General Hotline	20
○ Goals for Equal Employment Opportunity (EEO) Participation	21
○ Required Contract Provisions Federal-Aid Construction Contract (FHWA-1273 – Revised May 1, 2012)	22
○ Combined Certification Form – By Executing this Document	45
• BID BOND	47
• ESTIMATE OF QUANTITIES	51
• ITEMIZED PROPOSAL	91
SECTION 2 - REQUIRED CONTRACT PROVISIONS	93
• DBE/MBE/WBE/SDVOB GOALS	95
• SUPPLEMENTAL TITLE VI PROVISIONS – Appendix A-1	97
• IRAN DIVESTMENT ACT	98
SECTION 3 - SUPPLEMENTAL INFORMATION	99
• CONR 9 - SUPPLEMENTAL INFORMATION AVAILABLE TO BIDDERS	101
• SIGN FACE LAYOUTS	103
• EARTHWORK SUMMARY SHEETS	115
• SUBSURFACE INVESTIGATION BORING LOGS	117
• NYSDEC PERMIT	143
• USACE PERMIT	161
SECTION 4 - SPECIAL NOTES	225
SECTION 5 - SPECIAL SPECIFICATIONS & REVISIONS TO STANDARD	385

SPECIFICATIONS	
SECTION 6 - PREVAILING WAGE RATES	445
SECTION 7 - SPONSOR CONTRACT AGREEMENT	527

D040965

PROJECT TITLE SHEET

Jefferson County
New York

PIN: 7753.77
D040965
COUNTY: Jefferson
Jefferson County Bid #24-10

FEDERAL AID PROJECT

Proposal Description: Replacement of Noble Street (B.I.N. 3371810) over West Creek, Village of Evans Mills, Jefferson County.

Deposit Required: 5% of total bid (certified check, bank cashier's check, or bid bond).

Completion Date: September 30, 2025

Questions During Bidding: No interpretation of the meaning of the plans, specifications or other contract documents will be made to any bidder orally. Every request for such interpretation shall be in writing addressed to:

James L. Lawrence, Jr.
Superintendent of Highways
Jefferson County Highway Department
21897 County Road 190
Watertown, New York 13601
jlawrence@co.jefferson.ny.us

Or

Thomas R. Butler
Project Manager
Stantec Consulting Services, Inc.
61 Commercial Street, Suite 100
Rochester, NY 14614
tom.butler@stantec.com

Addenda to Bid Documents: Addenda to the Bid Documents will be emailed from the Purchasing Office to Bidders listed on the official Plan Holders List. An emailed response from the Bidder to the Addendum sent by the Purchasing Department will act as proof that the Bidder received the Addendum. In addition to an emailed response, Bidders must acknowledge receipt of all Addenda by signing and dating each Addendum and the Acknowledgement of Receipt of Addenda on page 92 of the Proposal. Failure of any Bidder to receive any such Addendum or interpretation shall not relieve such Bidder from any obligation under this Bid submittal. All Addenda so issued shall become part of the contract documents.

FEDERAL REQUIREMENTS

1. This is a federal-aid contract subject to the approval of the Federal Highway Administration (FHWA) and the New York State Department of Transportation (NYSDOT).
2. Federal Contract Requirements are contained in Section 2.
3. The BUY AMERICA provisions in Section 106-11 of the NYSDOT Standard Specifications apply to this contract.
4. Whenever local and/or New York State requirements differ from Federal requirements, the Federal requirements will prevail.
5. There are no residence, geographical restrictions, or preferences contained in this contract.
6. There are no M/WBE/SDVOB requirements or preferences contained in this contract.

NEW YORK STATE DEPARTMENT OF TRANSPORTATION REQUIREMENTS

1. The NYSDOT Standard Specifications (September 1, 2023), as amended, govern work performed under this contract. This shall include Sections 100 through 799, inclusive.
2. The low bidder must have an approved New York State Uniform Contracting Questionnaire (CCA-2 Form) on file with NYSDOT prior to an award being made. The CCA-2 form is available online at https://www.dot.ny.gov/bids-and-lettings/construction-contractors/general-info or by calling the NYSDOT Office of Contract Management at (518) 457-1564.

RETURN WITH BID DOCUMENTS

DBE COMMITMENT

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

FALSE CLAIMS CERTIFICATION

NON-COLLUSIVE BIDDING CERTIFICATION (SFL/GML)

NON-COLLUSIVE BIDDING CERTIFICATION (2 CFR 1200)

NON-COLLUSIVE BIDDING CERTIFICATION – BIDDER INFORMATION

REPORTING VIOLATIONS OF NON-COLLUSIVE BIDDING PROCEDURES

NEW YORK STATE OFFICE OF THE INSPECTOR GENERAL HOTLINE

GOALS FOR EQUAL EMPLOYMENT OPPORTUNITY (EEO) PARTICIPATION

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACT (FHWA-1273)

NYS STANDARD SPECIFICATIONS – SECTION 106-11 BUY AMERICA

NYS STANDARD SPECIFICATIONS – SECTION 106-04A.4 STATEMENT OF CONFORMANCE

BID BOND

BID DEPOSIT

ITEMIZED PROPOSAL

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Federal DBE Commitment and GFE Bid Requirements

Letting Date:

Proposer Name

Address:

PIN
Contract #
DBE Goal **% as Stated in the Advertisement**

We hereby submit a DBE commitment of % for the above-referenced project.

Identified below are the commitment(s) to certified* DBE's for this contract:

DBE Name:	Work Category*	Description of Work	DBE Credit % (A)	Commitment (B)	DBE Credit (AxB)
Example Company: Drainage R Us Address: 2543 Lexington Street, Troy, NY 12180	Construction	Closed Drainage Installation	100	$1,120,000	$1,120,000
Address:					
Address:					
Address:					
Address:					
Address:					
Address:					

Only submit DBE(s) that you have verified are certified to perform/supply the identified commitments.* **Total Commitment:

You are required to have firm commitments at the time of Letting. Within 5 calendar days of notification as apparent Low Bidder, you shall enter exactly (as shown) all of the DBE commitments identified here, into Equitable Business Opportunity Solution (EBO), NYSDOT's civil rights reporting software. No substitutions or reductions in commitments will be allowed without prior approval by the Sponsor, in accordance with NYSDOT Standard Specification §105-21.D.3.

NOTE: Bids may be submitted below the DBE Goal. If you do not meet the DBE Goal and are identified as apparent Low Bidder, you will be required to submit a Good Faith Effort package to the Sponsor, within 5 calendar days of notification.

*Key:	Work Categories:	DBE Credit %
	Construction	100
	Fabricator	100
	Manufacturer	100
	Material Supplier	60
	Professional Service	100
	Trucking Firm	100

Submitted By:

Enter Proposers Contact Information

Name:

Title:

Company Federal Tax ID XX-XXXXXXX

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSION (FHWA Section 1273 X)

A. The prospective bidder certifies to the best of its knowledge and belief that they and their Principals:

1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

2. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for a commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements or receiving stolen property;

3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with the commission of any of the offenses enumerated in paragraph (A)(2) of this certification; and

4. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State, or local) terminated for cause or default.

B. Where the Bidder is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING (FHWA 1273 Section XI)

A. The prospective bidder certifies, by signing and submitting this bid or proposal, to the best of his/her knowledge and belief, that:

1. 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.

2. If any funds other than federally 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 Standard Form-LLL, "Disclosure Form to Report Lobbying" in accordance with its instructions.

B. 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.

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

THESE MUST BE INCLUDED IN ALL FEDERAL AID CONTRACTS AND MUST BE INCLUDED IN EACH BID PROPOSAL.

REVISED October 2023

FALSE CLAIMS CERTIFICATION (31 USC §3729, NYS Finance Law Article 13)

Under the Federal False Claims Act, 31 U.S. Code §3729, any person or entity who knowingly presents, or causes to be presented to the Federal Government, a false or fraudulent claim for payment or approval is liable to the United States Government for a civil penalty of not less than $5,000 and not more than $10,000, plus three times the amount of damages the Government sustains.

Under the New York State False Claims Act, NYS Finance Law Article 13, any person or entity who knowingly presents or causes to be presented to the State of New York or Local Governments within the State of New York, a false or fraudulent claim for payment or approval is liable to the Government for a civil penalty of not less than $6,000 and not more than $12,000, plus three times the amount of damages the Government sustains.

“Knowingly” is defined as (1) actual knowledge; (2) acting in deliberate ignorance of the truth or falsity of information; or (3) acting in reckless disregard of the truth or falsity of information. No proof of specific intent to defraud is required.

The Contractor to whom the above-identified contract is to be awarded does hereby certify to the New York State Department of Transportation that it understands the prohibitions under the Federal and New York State False Claims acts and that it has not and will not submit or cause to be submitted any fraudulent claims in the submission of this bid or in connection with the above-identified contract. The Contractor further certifies that it understands retaliatory actions against employees and officers who initiate a *qui tam* (public) action on behalf of the government or cooperate in the investigation of a false claim are prohibited and are subject to an assessment of damages and penalties under the provisions of the Federal and New York State False Claims Acts.

THIS MUST BE INCLUDED IN ALL FEDERAL AID CONTRACTS AND MUST BE INCLUDED IN EACH BID PROPOSAL.

REVISED October 2023

NON-COLLUSIVE BIDDING CERTIFICATION
(NYS Finance Law §139-d and General Municipal Law §103-d)

1. By submission of this bid:

(a) Each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid, each party thereto certifies as to its own organization, under penalty of perjury, that to the best of its knowledge and belief:

(1) The prices in this bid have been arrived at independently without collusion, consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor.

(2) Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly, to any other bidder or to any competitor; and

(3) No attempt has been made or will be made by the bidder to induce any other person, partnership, or corporation to submit or not to submit a bid for the purpose of restricting competition.

(b) A bid shall not be considered for award, nor shall any award be made where (a)(1)(2) and (3) above have not been complied with; provided, however, that if in any case, the bidder cannot make the foregoing certification, the bidder shall so state and shall furnish with the bid a signed statement which sets forth in detail the reasons, therefore. Where (a)(1)(2) and (3) above have not been complied with, the bid shall not be considered for award, nor shall any award be made unless the head of the purchasing unit of the state, public department, or agency to which the bid is made, or his designee, determines that such disclosure was not made for the purpose of restricting competition.

The fact that the bidder (a) has published price lists, rates, or tariffs covering items being procured, (b) has informed prospective customers of proposed or pending publication of new or revised pricelists for such items, or (c) has sold the same items to other customers at the same prices being bid, does not constitute, without more, a disclosure within the meaning of subparagraph one (a).

2. Any bid hereafter made to the state or any public department, agency, or official thereof by a corporate bidder for work or services performed or to be performed or goods sold or to be sold, where competitive bidding is required by statute, rule, or regulation, and where such bid contains the certification referred to in subdivision one of this section, shall be deemed to have been authorized by the board of directors of the bidder and such authorization shall be deemed to have included the signing and submission of the bid and the inclusion therein of the certificate as to non-collusion as the act and deed of the corporation."

STATE NON-COLLUSIVE BIDDING CERTIFICATIONS MUST BE INCLUDED IN EVERY BID PROPOSAL REGARDLESS OF WHETHER NYSDOT SPECIFICATIONS OR LOCAL SPECIFICATIONS ARE USED.

NON-COLLUSIVE BIDDING CERTIFICATION (2 CFR 1200)

"By submission of this bid, the Bidder does hereby tender to the Owner this sworn statement pursuant to Section 1128 of Title 23, U. S. Code-Highways and does hereby certify, in conformance with said Section 112 of Title 23, U. S. Code-Highways that the said Contractor has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the above contract."

The signatory to the proposal, being duly sworn, certifies that, EXCEPT AS NOTED BELOW, his/her company and any person associated therewith in the capacity of owner, partner, director, officer, or major stockholder (of five percent or more ownership):

1. Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency,

2. Has not been suspended, debarred, voluntarily excluded, or determined ineligible by any Federal agency within the past three years,

3. Does not have a proposed debarment pending; and

4. 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.

EXCEPTIONS: The Contractor should list any relevant information, attaching additional sheets to the proposal if necessary. (Exceptions will not necessarily result in disapproval but will be considered in determining responsibility. For any exception noted, the Contractor should indicate to whom it applies, the initiating agency, and the dates of actions. Providing false information may result in criminal prosecution or administrative sanctions).

FEDERAL NON-COLLUSIVE BIDDING CERTIFICATION MUST BE INCLUDED IN EVERY BID PROPOSAL REGARDLESS OF WHETHER NYSDOT SPECIFICATIONS OR LOCAL SPECIFICATIONS ARE USED.

REVISED December 2021

NON-COLLUSIVE BIDDING CERTIFICATION
BIDDER INFORMATION

Bidder to provide information listed below:

Bidder Address:
Street or P. O. Box No.

City

State ZIP

Federal Identification No.:

Name of Contact Person:

Phone # of Contact Person:

If Bidder is a Corporation:

President's Name & Address:

Secretary's Name & Address:

Treasurer's Name & Address:

If Bidder is a Partnership:

Partner's Name & Address:

Partner's Name & Address:

If Bidder is a Sole Proprietorship:

Owner's Name & Address:

THIS PAGE MUST BE INCLUDED IN ALL FEDERAL AID CONTRACTS AND MUST BE INCLUDED IN EACH BID PROPOSAL.

REVISED December 2021

Offerer Disclosure of Prior Non-Responsibility Determinations

Name of Individual of Entity Seeking to Enter into the Procurement Contract:

Address:

Name and Title of Person Submitting this Form:

Contract Procurement Number:

Date:

1. Has any Governmental Entity made a finding of non-responsibility regarding the individual or entity seeking to enter into the Procurement Contract in the previous four years?
NO ☐ YES ☐

If yes, please answer the next questions:

2. Was the basis for the finding of non-responsibility due to a violation of State Finance Law § 139-j?
NO ☐ YES ☐

3. Was the basis for the finding of non-responsibility due to the intentional provision of false or incomplete information to a Governmental Entity?
NO ☐ YES ☐

4. If you answered yes to any of the above questions, please provide details regarding the finding of non-responsibility below.
Governmental Entity:
Date of Finding of Non-Responsibility:
Basis of Finding of Non-Responsibility:
(Add additional pages as necessary.)

5. Has any Governmental Entity or other governmental agency terminated or withheld a Procurement Contract with the above-named individual or entity due to the intentional provision of false or incomplete information?
NO ☐ YES ☐

6. If yes, please provide details below.
Governmental Entity:
Date of Termination or Withholding of Contract:
Basis of Termination or Withholding:
(Add additional pages as necessary.)

Offerer certifies that all information provided to the Governmental Entity with respect to State Finance Law §139-k is complete, true and accurate.

By: _____ Date:
Signature

Name:

Title:

REVISED October 2023

REPORTING VIOLATIONS OF NON-COLLUSIVE BIDDING PROCEDURES, MISCONDUCT OR OTHER PROHIBITED CONTRACT ACTIVITIES

US DEPARTMENT OF TRANSPORTATION
OFFICE OF INSPECTOR GENERAL - FRAUD, WASTE & ABUSE HOTLINE

The U.S. Department of Transportation (USDOT) Office of Inspector General (OIG) maintains a Hotline for receiving allegations of fraud, waste, abuse, or mismanagement in USDOT programs or operations. Persons with knowledge of bid collusion (i.e., contractors, suppliers, work persons, etc.), or other questionable contract-related practices (inadequate materials, poor workmanship, theft of materials, etc.), are encouraged to report such activities by calling the Hotline at 1-800-424-9071, emailing hotline@oig.dot.gov, or writing to the USDOT Inspector General, 1200 New Jersey Ave SE, West Bldg. 7th Floor, Washington, DC 20590. Allegations may be reported 24 hours a day, seven days a week by DOT employees, contractors, or the general public.

NEW YORK STATE OFFICE OF THE INSPECTOR GENERAL HOTLINE

The New York State Office of the Inspector General maintains a Hotline for receiving allegations of governmental misconduct. Reports of New York State governmental misconduct may be made in strict confidence to the Toll-Free 24-hour Statewide HOTLINE at 1-800-DO RIGHT (1-800-367-4448), the online complaint form at www.ig.ny.gov or in writing to the New York State Office of the Inspector General, Empire State Plaza, Agency Building 2 - 16th Floor, Albany, New York 12223.

THIS PAGE MUST BE INCLUDED IN ALL FEDERAL AID CONTRACTS AND MUST BE INCLUDED IN EACH BID PROPOSAL.

GOALS FOR EQUAL EMPLOYMENT OPPORTUNITY (EEO) PARTICIPATION

The Contractor shall follow the requirements of NYSDOT Standard Specification §102-11 *Equal Employment Opportunity Requirements*. The goals for minority and female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work in the covered area, which is the county or counties in which the work is located, are as follows:

GOALS FOR PARTICIPATION OF MINORITIES					
COUNTY	**%**	**COUNTY**	**%**	**COUNTY**	**%**
Albany	3.2	Herkimer	2.1	Richmond	Table
Allegany	6.3	Jefferson	2.5	Rockland	22.6
Broome	1.1	Kings	Table	St. Lawrence	2.5
Bronx	Table	Lewis	2.5	Saratoga	3.2
Cattaraugus	6.3	Livingston	5.3	Schenectady	3.2
Cayuga	2.5	Madison	3.8	Schoharie	2.6
Chautauqua	6.3	Monroe	5.3	Schuyler	1.2
Chemung	2.2	Montgomery	3.2	Seneca	5.9
Chenango	1.2	Nassau	5.8	Steuben	1.2
Clinton	2.6	New York	Table	Suffolk	5.8
Columbia	2.6	Niagara	7.7	Sullivan	17.0
Cortland	2.5	Oneida	2.1	Tioga	1.1
Delaware	1.2	Onondaga	3.8	Tompkins	1.2
Dutchess	6.4	Ontario	5.3	Ulster	17.0
Erie	7.7	Orange	17.0	Warren	2.6
Essex	2.6	Orleans	5.3	Washington	2.6
Franklin	2.5	Oswego	3.8	Wayne	5.3
Fulton	2.6	Otsego	1.2	Westchester	22.6
Genesee	5.9	Putnam	22.6	Wyoming	6.3
Greene	2.6	Queens	Table	Yates	5.9
Hamilton	2.6	Rensselaer	3.2		

(45 FR 65976 – 10/3/1980)

GOALS FOR PARTICIPATION OF MINORITIES BRONX, KINGS, NEW YORK, QUEENS, AND RICHMOND COUNTIES			
Electricians	9.0 to 10.2	Bricklayers	13.4 to 15.5
Carpenters	27.6 to 32.0	Asbestos workers	22.8 to 28.0
Steam fitters	12.2 to 13.5	Roofers	6.3 to 7.5
Metal lathers	24.6 to 25.6	Iron workers (ornamental)	22.4 to 23.0
Painters	26.0 to 28.6	Cement masons	23.0 to 27.0
Operating engineers	25.6 to 26.0	Glaziers	16.0 to 20.0
Plumbers	12.0 to 14.5	Plasterers	15.8 to 18.0
Iron workers (structural)	25.9 to 32.0	Teamsters	22.0 to 22.5
Elevator constructors	5.5 to 6.5	Boilermakers	13.0 to 15.5
		All others	16.4 to 17.5

(43 FR 14888 – 4/7/1978)

GOAL FOR PARTICIPATION OF WOMEN

The goal for the participation of women is 6.9%.

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted). If the Contractor performs construction work outside of New York State, it shall apply the goals established for the covered area where the work is actually performed.

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

I. General
II. Nondiscrimination
III. Non-segregated Facilities
IV. Davis-Bacon and Related Act Provisions
V. Contract Work Hours and Safety Standards Act Provisions
VI. Subletting or Assigning the Contract
VII. Safety: Accident Prevention
VIII. False Statements Concerning Highway Projects
IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
XI. Certification Regarding Use of Contract Funds for Lobbying
XII. Use of United States-Flag Vessels:

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e). The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally

classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (*see* 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).
b. The contractor will accept as its operating policy the following statement:

> "It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO

program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification

to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals

(even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.
b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.
b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:
(1) Withholding monthly progress payments;
(2) Assessing sanctions;
(3) Liquidated damages; and/or
(4) Disqualifying the contractor from future bidding as non-responsible.
c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the

contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than $10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred

during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided,* That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH–1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to *DBAconformance@dol.gov*. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to *DBAconformance@dol.gov* , refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an

authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided,* That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

3. Records and certified payrolls (29 CFR 5.5)

a. *Basic record requirements* (1) *Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements* (1) *Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (*e.g.,* the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH–347 or in any other format desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division website at

https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347/.pdf or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH–347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension

of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in

the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist,

harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section. * $31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of

whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring

leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29

CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of $150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may

direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective

participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

* * * * *

3. **Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly

enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

* * * * *

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, 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 Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. 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 31 U.S.C. 1352. 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.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that

all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

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COMBINED CERTIFICATION FORM

BY EXECUTING THIS DOCUMENT, THE CONTRACTOR AGREES TO:

1. Perform all work listed in accordance with the Contract Documents including all amendments, at the prices bid; subject to the Changed Conditions provisions if applicable,

2. Accompany this proposal with a bid bond, certified check or bank cashier's check for the specified amount of deposit required,

3. All the terms and conditions of the non-collusive bidding certifications required by §139-d of the State Finance Law and 2 CFR Part 1200,

4. Certify, under penalty of perjury, as to the current history regarding suspensions, debarments, voluntary exclusions, determinations of ineligibility, indictments, convictions or civil judgments required by FHWA Form 1273 Required Contract Provisions Federal-Aid Construction Contracts-Section X “Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion”,

5. Certify that no Federal appropriated funds have been paid or will be paid, to any person for lobbying a Federal official or employee, or disclosure was made in accordance with 31 USC 1352 required by FHWA Form 1273 Required Contract Provisions Federal-Aid Construction Contracts-Section XI “Certification Regarding Use of Contract Funds for Lobbying”,

6. Attest that its performance of the services outlined in this proposal does not and will not create a conflict of interest with nor position the firm to breach any other contract currently in force with the State of New York,

7. Certify that it understands the prohibitions under the Federal False Claims Act (31 USC §3729) and the New York State False Claims Act (NYS Finance Law Article 13),

8. Certify that all information provided to the Department with respect to the requirements contained in the Procurement Lobbying Law (State Finance Laws §139-j and §139-k) is complete,
true and accurate,

9. Affirm, under penalty of perjury, that all the responses provided to the Department with respect to its submitted Form CCA-2 New York State Vendor Responsibility Questionnaire For-Profit Construction, are complete, true, and accurate, and further affirms and acknowledges that it must remain a responsible Contractor throughout the duration of the contract, in accordance with §105-05 Vendor Responsibility,

10. Provide commitments to meet the established DBE goal(s) prior to award or demonstrate good faith efforts to do so,

11. By submission of this bid, each bidder and each person signing on behalf of any bidder certifies, and in the case of a joint bid each party thereto certifies as to its own organization, under penalty of perjury, that the bidder has and has implemented a written policy addressing sexual harassment prevention in the workplace and provides annual sexual harassment prevention training to all of its employees. Such policy shall, at a minimum, meet the requirements of Section 201-g of the New York State Labor Law.

12. Certify to all other clauses required by this proposal and contained herein.

Dated , 20

_____
Legal Name of person, firm or corporation

By _____
Signature (Title)

(Acknowledgment by **Individual Contractor)**
STATE OF NEW YORK)
COUNTY OF) SS:

On this day of , 20 , before me personally came , to me known and known to me to be described in and who executed the foregoing instrument, and that he/she acknowledged that he/she executed the same.

_____
Notary Public

(Acknowledgment by **Individual Contractor, If a Corporation)**
STATE OF NEW YORK)
COUNTY OF) SS:

On this day of , 20 , before me personally came , to me known and known to me to be the person who executed the above instrument, who being duly sworn by me, did depose and say that he/she resides at , and that he/she is the of the the corporation described in and which executed the above instrument, and that he/she signed his/her name thereto on behalf of said Corporation by order of the Board of Directors of said Corporation.

_____
Notary Public

(Acknowledgment of **Co-Partnership Contractor)**
STATE OF NEW YORK)
COUNTY OF) SS:

On this day of , 20 , before me personally came , to me known and known to me to be the person described in and who executed the above instrument, who, being duly sworn by me, did for himself/herself depose and say that he/she is a member of the firm of , consisting of himself/ herself and , and that he/she executed the foregoing instrument in the firm name of and that he/she had authority to sign same, and did duly acknowledge to me that he/she executed same as the act and deed of said firm of for the uses and purposes mentioned herein.

_____
Notary Public

D040965
BID BOND

KNOW ALL PERSONS BY THESE PRESENTS, That _____
(Name of Contractor)

_____
(Address)

(hereinafter called the "Principal") and the _____ a corporation created and existing under the laws of the State of _____, having its principal office in the City of _____ (hereinafter called the "Surety"), are held and firmly bound unto Jefferson County, in the full just sum of *Five Percent (5%) of Attached Bid*, good and lawful money of the United States of America, for the payment of which said sum of money, well and truly to be made and done, the said Principal binds themselves (himself/herself, itself), their (his/her, its) heirs, executors and administrators, successors and assigns, and the said Surety binds itself, its successors and assigns jointly and severally, firmly by these presents:

WHEREAS, the said Principal has submitted to Jefferson County, a proposal for NOBLE STREET (B.I.N. 3371810) OVER WEST CREEK (Project Description) and,

WHEREAS, under the terms of the Laws of the State of New York as above indicated, the said Principal has filed or intends to file this bond to guarantee that the Principal will execute all required contract proposal documents and furnish such faithful performance or other bonds as may be required by law in accordance with the terms of the Principal's said proposal.

NOW, THEREFORE, the condition of the foregoing obligation is such, that if the said Principal shall promptly execute and submit, and Jefferson County shall accept, all required contract proposal documents including such faithful performance bond or other bonds as may be required by law in accordance with the terms of the Principal's said proposal, then this obligation shall be null and void, otherwise to remain in full force and virtue.

IN TESTIMONY WHEREOF, the said Principal has hereunto set his/her (their, its) hand and the said Surety has caused this instrument to be signed by its authorized officer, the day and year above written.

Signed and delivered this ____ day of _____ 20____ in the presence of:

_____)
(Company)
_____) Principal
(Signature)
_____)
(Title)

_____)
(Company)
By _____) Surety
(Signature)
_____)
(Title of Authorized Officer)

(The Surety Company shall append a single copy of a statement of its financial condition and a copy of the resolution authorizing the execution of Bonds by officers of the Company to the bond(s).)

(Acknowledgment of principal, unless it be a corporation)
STATE OF NEW YORK ss. :
COUNTY OF_____

On this _____ day of _____ 20 ___, before me personally came _____ to me known and known to me to be the person described in and who executed the foregoing instrument and acknowledged that he/she executed the same.

_____
Notary Public

(Acknowledgment of principal, if a corporation)
STATE OF NEW YORK ss. :
COUNTY _____

On this _____ day of _____ 20 ___, before me personally came _____ to me known and known to me to be the person, who being by me duly sworn, did depose and say that he/she resides in _____ that he/she is the _____ of _____ the corporation described in and which executed the foregoing instrument; and that he/she signed his/her name thereto by order of the Board of Directors of said Corporation.

_____
Notary Public

(Acknowledgment of Surety Company)
STATE OF NEW YORK ss. :
COUNTY OF _____

On this _____ day of _____ 20 ___, before me personally came _____ to me known and known to me to be the person, who being by me duly sworn, did depose and say that he/she resides in _____. that he/she is the _____ of _____ the corporation described in the foregoing instrument; and that he/she signed his/her name thereto by order of the Board of Directors of said Corporation.

_____
Notary Public

D040965

BID DEPOSIT

Accompanying this proposal is a bid bond, certified check or bank cashier's check for the specified amount of deposit required. In the event this proposal is accepted and the undersigned shall fail to execute the contract and in all respects comply with the provisions of Section 38 of the Highway Law, as amended, or where applicable, Section 30 of the Canal Law, as amended, the moneys represented by such bid bond, certified check or bank cashier's check shall be regarded as liquidated damages and shall be forfeited and become the property of the owner; otherwise to be returned to the depositor in accordance with the provisions of said Section 38 of the Highway Law, as amended, or where applicable with Section 30 of the Canal Law, as amended.

On acceptance of this proposal for said work the undersigned does or do hereby bind herself/himself or itself/themselves to enter into written contract, within ten days of date of notice of award, with the said owner, and to comply in all respects with §38(6) of the Highway Law, as amended, or where applicable with §30(7) of the Canal Law, as amended, in relation to security for the faithful performance of the terms of said contract.

F.A. Project

Capital Project Identification Number (P.I.N.): 7753.77

Deposit Required: Certified Check, Bank Cashier’s Check, or Bid Bond for 5% of the Total Bid, made payable to “The County of Jefferson”.

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ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
201.06	1 LS	CLEARING AND GRUBBING For: _____ Dollars _____ Cents				
202.120001	1 LS	REMOVING EXISTING SUPERSTRUCTURES For: _____ Dollars _____ Cents				
202.19	84 CY	REMOVAL OF SUBSTRUCTURES For: _____ Dollars _____ Cents				
203.02	1605 CY	UNCLASSIFIED EXCAVATION AND DISPOSAL For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
203.03	3165 CY	EMBANKMENT IN PLACE For: _____ Dollars _____ Cents				
203.07	1170 CY	SELECT GRANULAR FILL For: _____ Dollars _____ Cents				
203.21	539 CY	SELECT STRUCTURE FILL For: _____ Dollars _____ Cents				
203.25	165 CY	SAND BACKFILL For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
204.02	37 CY	CONTROLLED LOW STRENGTH MATERIAL (CLSM) (NO FLY ASH) For: _____ Dollars _____ Cents				
206.01	3250 CY	STRUCTURE EXCAVATION For: _____ Dollars _____ Cents				
206.0201	2065 CY	TRENCH AND CULVERT EXCAVATION For: _____ Dollars _____ Cents				
206.05	17 EACH	TEST PIT EXCAVATION For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
207.22	170 SY	GEOTEXTILE DRAINAGE For: _____ Dollars _____ Cents				
207.24	406 SY	GEOTEXTILE STABILIZATION For: _____ Dollars _____ Cents				
207.26	128 SY	PREFABRICATED COMPOSITE STRUCTURAL DRAIN For: _____ Dollars _____ Cents				
208.01030022	63 CY	BIORETENTION AND DRY SWALE SOIL For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
209.13	1415 LF	SILT FENCE-TEMPORARY For: _____ Dollars _____ Cents				
209.110602	2 EACH	CHECK DAM, (DITCH BOTTOM WIDTH > 3' TO 6') STONE-PERMANENT For: _____ Dollars _____ Cents				
209.190301	1220 SY	ROLLED EROSION CONTROL PRODUCT, CLASS II TYPE C,INTERMEDIATE For: _____ Dollars _____ Cents				
304.12	1325 CY	SUBBASE COURSE, TYPE 2 For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE DOLLARS	UNIT BID PRICE CENTS	AMOUNT OF BID DOLLARS	AMOUNT OF BID CENTS
404.000011	63 QU	PLANT PRODUCTION QUALITY ADJUSTMENT TO HMA ITEMS For: FIXED PRICE: SEE SPECIFICATION AND Dollars SUBSECTION 102-04 Cents	70	00	4410	00
404.098301	245 TON	9.5 F3 TOP COURSE ASPHALT, 80 SERIES COMPACTION For: Dollars Cents				
404.198901	385 TON	19 F9 BINDER COURSE ASPHALT, 80 SERIES COMPACTION For: Dollars Cents				
404.378901	630 TON	37.5 F9 BASE COURSE ASPHALT, 80 SERIES COMPACTION For: Dollars Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
404.438901	256 TON	19 F9 TEMPORARY BINDER COURSE ASPHALT, 80 SERIES COMPACTION For: _____ Dollars _____ Cents				
407.0102	360 GAL	DILUTED TACK COAT For: _____ Dollars _____ Cents				
418.7603	3260 LF	ASPHALT PAVEMENT JOINT ADHESIVE For: _____ Dollars _____ Cents				
490.30	260 SY	MISCELLANEOUS COLD MILLING OF BITUMINOUS CONCRETE For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
520.09000010	455 LF	SAW CUTTING ASPHALT CONCRETE For: _____ Dollars _____ Cents				
520.50000004	47 LF	SAWING CONCRETE For: _____ Dollars _____ Cents				
551.014089	7136 LF	STEEL H-PILES (HP 14X89) For: _____ Dollars _____ Cents				
551.12	64 EACH	SPLICES FOR STEEL H-PILES For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
551.13	1 LS	FURNISHING EQUIPMENT FOR DRIVING PILES For: _____ Dollars _____ Cents				
551.14	4 EACH	DYNAMIC PILE TESTING For: _____ Dollars _____ Cents				
552.13	3901 SF	TEMPORARY STEEL SHEETING For: _____ Dollars _____ Cents				
552.17	22150 SF	SHIELDS AND SHORING For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
553.020001	1 EACH	COFFERDAMS (TYPE 2) For: _____ Dollars _____ Cents				
553.020002	1 EACH	COFFERDAMS (TYPE 2) For: _____ Dollars _____ Cents				
553.020003	1 EACH	COFFERDAMS (TYPE 2) For: _____ Dollars _____ Cents				
553.020004	1 EACH	COFFERDAMS (TYPE 2) For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
553.020005	1 EACH	COFFERDAMS (TYPE 2) For: _____ Dollars _____ Cents				
553.020006	1 EACH	COFFERDAMS (TYPE 2) For: _____ Dollars _____ Cents				
554.3001	460 SF	GEOSYNTHETIC REINFORCED SOIL SYSTEM WALL-WELDED WIRE FORM For: _____ Dollars _____ Cents				
555.0105	23 CY	CONCRETE FOR STRUCTURES, CLASS A For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
555.08	310 CY	FOOTING CONCRETE, CLASS HP For: _____ Dollars _____ Cents				
555.09	36 CY	CONCRETE FOR STRUCTURES, CLASS HP For: _____ Dollars _____ Cents				
555.72940001	240 SF	ARCHTECTURAL TREATMENT - VERTICAL CONCRETE SURFACE For: _____ Dollars _____ Cents				
556.0201	25709 LB	UNCOATED BAR REINFORCEMENT FOR STRUCTURES For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
556.0202	3714 LB	EPOXY-COATED BAR REINFORCEMENT FOR STRUCTURES For: _____ Dollars _____ Cents				
557.30	82 SY	SIDEWALKS AND SAFETY WALKS For: _____ Dollars _____ Cents				
559.02	2156 SF	PROTECTIVE SEALING OF NEW STRUCTURAL CONCRETE For: _____ Dollars _____ Cents				
562.0101	338 SY	REINFORCED CONCRETE SPAN UNITS For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
568.70	136 LF	TRANSITION BRIDGE RAILING For: _____ Dollars _____ Cents				
569.03	81 LF	VERTICAL FACED CONCRETE PARAPET For: _____ Dollars _____ Cents				
570.090001	1 LS	ENVIRONMENTAL GROUND PROTECTION For: _____ Dollars _____ Cents				
570.100001	1 LS	ENVIRONMENTAL WATERWAY PROTECTION For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE DOLLARS	UNIT BID PRICE CENTS	AMOUNT OF BID DOLLARS	AMOUNT OF BID CENTS
595.50000018	2547 SF	SHEET-APPLIED WATERPROOFING MEMBRANE For: _____ Dollars _____ Cents				
595.98200018	2883 SF	SPRAY-APPLIED, WATERPROOFING MEMBRANE For: _____ Dollars _____ Cents				
603.6001	491 LF	REINFORCED CONCRETE PIPE CLASS III, 12 IN DIA. For: _____ Dollars _____ Cents				
603.6002	353 LF	REINFORCED CONCRETE PIPE CLASS III, 15 IN DIA. For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
603.6007	84 LF	REINFORCED CONCRETE PIPE CLASS III, 30 IN DIA. For: _____ Dollars _____ Cents				
603.7302	1 EACH	REINFORCED CONCRETE PIPE SECTIONS 15 INCH DIA. For: _____ Dollars _____ Cents				
603.7307	1 EACH	REINFORCED CONCRETE PIPE END SECTIONS 30 IN DIA. For: _____ Dollars _____ Cents				
603.98060007	80 LF	POLYVINYL CHLORIDE (PVC) SEWER AND FITTINGS, 6 IN For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
603.98080007	16 LF	POLYVINYL CHLORIDE (PVC) SEWER AND FITTINGS, 8 IN For: _____ Dollars _____ Cents				
603.98100007	370 LF	POLYVINYL CHLORIDE (PVC) SEWER AND FITTINGS, 10 IN For: _____ Dollars _____ Cents				
603.98120007	9 LF	POLYVINYL CHLORIDE (PVC) SEWER AND FITTINGS, 12 IN For: _____ Dollars _____ Cents				
604.070701	1 EACH	ALTERING DRAINAGE STRUCTURES, LEACHING BASINS AND MANHOLES For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
604.300211	52 LF	RECTANGULAR DRAINAGE STRUCTURE TYPE B FOR #11 WELDED FRAME For: _____ Dollars _____ Cents				
604.300611	10 LF	RECTANGULAR DRAINAGE STRUCTURE TYPE F FOR #11 WELDED FRAME For: _____ Dollars _____ Cents				
604.301011	5 LF	RECTANGULAR DRAINAGE STRUCTURE TYPE J FOR # 11 WELDED FRAME For: _____ Dollars _____ Cents				
604.301911	41 LF	RECTANGULAR DRAINAGE STRUCTURE TYPE S FOR #11 WELDED FRAME For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
604.4048	21 LF	ROUND PRECAST CONCRETE MANHOLE TYPE 48 For: _____ Dollars _____ Cents				
604.4060	5 LF	ROUND PRECAST CONCRETE MANHOLE TYPE 60 For: _____ Dollars _____ Cents				
604.500701	5 LF	SPECIAL DRAINAGE STRUCTURE For: _____ Dollars _____ Cents				
604.500702	6.4 LF	SPECIAL DRAINAGE STRUCTURE For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
605.1001	102 CY	UNDERDRAIN FILTER TYPE 2 For: _____ Dollars _____ Cents				
605.1501	1373 LF	PERFORATED CORRUGATED POLYETHYLENE UNDERDRAIN TUBING, 4 IN DIA. For: _____ Dollars _____ Cents				
606.1001	18 LF	BOX BEAM GUIDE RAILING WITH EXTRA LONG POSTS For: _____ Dollars _____ Cents				
606.75	101 LF	REMOVING AND DISPOSING CONCRETE BARRIER For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE DOLLARS	UNIT BID PRICE CENTS	AMOUNT OF BID DOLLARS	AMOUNT OF BID CENTS
606.100102	18 LF	BOX BEAM GUIDE RAILING WITH EXTRA LONG POSTS (SHOP BENT OR SHOP MITERED) For: _____ Dollars _____ Cents				
606.120101	4 EACH	BOX BEAM END PIECE For: _____ Dollars _____ Cents				
608.000013	1 QU	PLANT PRODUCTION QUALITY ADJUSTMENT TO HMA SIDEWALK ITEMS For: FIXED PRICE: SEE SPECIFICATION AND Dollars SUBSECTION 102-04 Cents	70	00	70	00
608.0101	92 CY	CONCRETE SIDEWALKS AND DRIVEWAYS For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
608.020102	152 TON	ASPHALT SIDEWALKS, DRIVEWAYS AND BICYCLE PATHS,AND VEGETATION CONTROL STRIPS For: _____ Dollars _____ Cents				
609.0401	1430 LF	CAST-IN-PLACE CONCRETE CURB TYPE VF6 For: _____ Dollars _____ Cents				
610.1401	252 CY	TOPSOIL-REUSE ON-SITE MATERIAL For: _____ Dollars _____ Cents				
610.1402	5 CY	TOPSOIL - ROADSIDE For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
610.1602	2395 SY	TURF ESTABLISHMENT - LAWN For: _____ Dollars _____ Cents				
613.04000001	180 CY	STOCKPILING AND PLACING EXISTING STREAM BED MATERIALS For: _____ Dollars _____ Cents				
614.0701	9 EACH	PRE-EXISTING STUMP REMOVAL UP TO 24 INCH DIAMETER AT 6 INCHES ABOVE GRADE For: _____ Dollars _____ Cents				
615.80010005	37 LF	RAILING, TYPE 01 For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
619.01	1 LS	BASIC WORK ZONE TRAFFIC CONTROL For: _____ Dollars _____ Cents				
619.04	3 EACH	TYPE III CONSTRUCTION BARRICADE For: _____ Dollars _____ Cents				
619.1711	324 LF	TEMPORARY CONCRETE BARRIER - CATEGORY 1 (PINNING PROHIBITED) For: _____ Dollars _____ Cents				
619.1716	120 LF	TEMPORARY POSITIVE BARRIER - CATEGORY 6 (PINNING REQUIRED) For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
620.03	39 CY	STONE FILLING (LIGHT) For: _____ Dollars _____ Cents				
620.05	686 CY	STONE FILLING (HEAVY) For: _____ Dollars _____ Cents				
620.0801	191 CY	BEDDING MATERIAL, TYPE 1 For: _____ Dollars _____ Cents				
625.01	1 LS	SURVEY OPERATIONS For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
634.84000001	1 LS	SANITARY SEWER PUMPING STATION For: _____ Dollars _____ Cents				
634.99010017	1 LS	BUILDING CONDITION SURVEY For: _____ Dollars _____ Cents				
634.99020017	1 LS	VIBRATION MONITORING (NONBLASTING) For: _____ Dollars _____ Cents				
637.03	1 EACH	CONCRETE CYLINDER CURING BOX For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
637.11	9 MNTH	ENGINEER'S FIELD OFFICE - TYPE 1 For: _____ Dollars _____ Cents				
637.34	1200 DC	OFFICE TECHNOLOGY AND SUPPLIES For: FIXED PRICE: SEE SPECIFICATION AND Dollars SUBSECTION 102-04 Cents	1	00	1200	00
637.36	100 DC	CONSTRUCTION TESTING SUPPLIES - CONSUMABLES For: FIXED PRICE: SEE SPECIFICATION AND Dollars SUBSECTION 102-04 Cents	1	00	100	00
645.5102	92.1 SF	GROUND-MOUNTED SIGN PANELS LESS THAN OR EQUAL TO 30 SF, WITH Z-BARS For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
645.81	9 EACH	TYPE A SIGN POSTS For: _____ Dollars _____ Cents				
645.8104	4 EACH	TYPE A SIGN POST WITH EXTRA EMBEDMENT For: _____ Dollars _____ Cents				
645.81090003	4 EACH	RETROREFLECTIVE SIGN POST STRIP For: _____ Dollars _____ Cents				
647.61	5 EACH	REMOVE AND DISPOSE SIGNS, GROUND MOUNTED TYPE A SIGN SUPPORTS AND FOUNDATIONS - SIZE I (UNDER 30 SQUARE FEET) For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE DOLLARS	UNIT BID PRICE CENTS	AMOUNT OF BID DOLLARS	AMOUNT OF BID CENTS
655.1111	22 EACH	WELDED FRAME AND RETICULINE GRATE 11 For: _____ Dollars _____ Cents				
655.05010008	2 EACH	STANDARD SANITARY MANHOLE FRAMES AND COVERS (CASTINGS) For: _____ Dollars _____ Cents				
655.05020008	3 EACH	WATERTIGHT SANITARY MANHOLE FRAMES AND COVERS (CASTINGS) For: _____ Dollars _____ Cents				
655.1202	5 EACH	MANHOLE FRAME AND COVER For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
655.25010005	1 EACH	FURNISH AND/OR INSTALL INLET ASSEMBLY, AS SPECIFIED For: _____ Dollars _____ Cents				
659.70000101	1 EACH	ABANDON MANHOLES For: _____ Dollars _____ Cents				
659.70000201	1 EACH	ABANDON MANHOLES For: _____ Dollars _____ Cents				
659.70000301	1 EACH	ABANDON MANHOLES For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
660.21180008	100 LF	FURNISH AND INSTALL STEEL CASING 18 NPS (OUTSIDE DIAMETER) For: _____ Dollars _____ Cents				
663.0406	25 LF	PLASTIC WATER PIPE, 6-IN For: _____ Dollars _____ Cents				
663.0408	641 LF	PLASTIC WATER PIPE, 8-IN For: _____ Dollars _____ Cents				
663.0703	91 LF	POLYETHYLENE WATER SERVICE PIPE, 3/4-IN For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
663.0704	2 LF	POLYETHYLENE WATER SERVICE PIPE, 1-IN For: _____ Dollars _____ Cents				
663.0707	70 LF	POLYETHYLENE WATER SERVICE PIPE, 2-IN For: _____ Dollars _____ Cents				
663.1006	3 EACH	RESILIENT WEDGE VALVE & VALVE BOX, 6" For: _____ Dollars _____ Cents				
663.1008	3 EACH	RESILIENT WEDGE VALVE & VALVE BOX, 8" For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
663.1301	3 EACH	HYDRANT For: _____ Dollars _____ Cents				
663.1808	3 EACH	BOLTED SLEEVE TYPE COUPLING, 8-IN For: _____ Dollars _____ Cents				
663.2001	2434 LBS	IRON WATER MAIN FITTINGS, 3-IN TO 8-IN For: _____ Dollars _____ Cents				
663.2106	9 EACH	WEDGE TYPE MECHANICAL RESTRAINT GLANDS, 6-IN For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
663.2108	56 EACH	WEDGE TYPE MECHANICAL RESTRAINT GLANDS, 8-IN For: _____ Dollars _____ Cents				
663.2503	4 EACH	WATER SERVICE CONNECTION, 3/4-IN For: _____ Dollars _____ Cents				
663.2504	1 EACH	WATER SERVICE CONNECTION, 1-IN For: _____ Dollars _____ Cents				
663.2507	1 EACH	WATER SERVICE CONNECTION, 2-IN For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
663.2603	3 EACH	CURB STOP & CURB BOX, 3/4-IN For: _____ Dollars _____ Cents				
663.2604	1 EACH	CURB STOP & CURB BOX, 1-IN For: _____ Dollars _____ Cents				
663.2607	1 EACH	CURB STOP & CURB BOX, 2-IN For: _____ Dollars _____ Cents				
663.160808	2 EACH	TEMPORARY TAPPING SLEEVE, VALVE & VALVE BOX ASSEMBLY, 8"X8" For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
663.33	4 EACH	ADJUST EXISTING VALVE BOX ELEVATIONS For: _____ Dollars _____ Cents				
663.35	1 EACH	ADJUST EXISTING CURB BOX ELEVATION For: _____ Dollars _____ Cents				
663.40	3 EACH	DISCONNECT AND CAP EXISTING WATER MAIN For: _____ Dollars _____ Cents				
664.40600006	35 LF	PRECAST SANITARY SEWER MANHOLE, (60-IN DIA.) For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
664.40720006	13 LF	PRECAST SANITARY SEWER MANHOLE, (72-IN DIA.) For: _____ Dollars _____ Cents				
685.1102	1500 LF	WHITE EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS For: _____ Dollars _____ Cents				
685.1202	1900 LF	YELLOW EPOXY REFLECTORIZED PAVEMENT STRIPES - 20 MILS For: _____ Dollars _____ Cents				
685.3104	1720 LF	WHITE EPOXY REFLECTORIZED PAVEMENT SPECIAL STRIPES - 20 MIL PORTABLE/HAND APPLICATION For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
685.3204	320 LF	YELLOW EPOXY REFLECTORIZED PAVEMENT SPECIAL STRIPES - 20 MIL PORTABLE/HAND APPLICATION For: _____ Dollars _____ Cents				
697.03	219000 DC	FIELD CHANGE PAYMENT For: FIXED PRICE: SEE SPECIFICATION AND Dollars SUBSECTION 102-04 Cents	1	00	219000	00
698.04	2085 DC	ASPHALT PRICE ADJUSTMENT For: FIXED PRICE: SEE SPECIFICATION AND Dollars SUBSECTION 102-04 Cents	1	00	2085	00
698.05	1470 DC	FUEL PRICE ADJUSTMENT For: FIXED PRICE: SEE SPECIFICATION AND Dollars SUBSECTION 102-04 Cents	1	00	1210	00

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE		AMOUNT OF BID	
			DOLLARS	CENTS	DOLLARS	CENTS
698.06	100 DC	STEEL/IRON PRICE ADJUSTMENT For: FIXED PRICE: SEE SPECIFICATION AND Dollars SUBSECTION 102-04 Cents	1	00	100	00
XXX.XX	XXX XX	XXXXXXXXXXXXXXXXXXX For: _____ Dollars _____ Cents				
XXX.XX	XXX XX	XXXXXXXXXXXXXXXXXXX For: _____ Dollars _____ Cents				
XXX.XX	XXX XX	XXXXXXXXXXXXXXXXXXX For: _____ Dollars _____ Cents				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEM NUMBER	ESTIMATE OF QUANTITIES	ITEMS WITH UNIT BID PRICE WRITTEN IN WORDS	UNIT BID PRICE DOLLARS	UNIT BID PRICE CENTS	AMOUNT OF BID DOLLARS	AMOUNT OF BID CENTS
		SUBTOTAL	$			
699.040001	1 LS	MOBILIZATION MUST NOT EXCEED 4% OF SUBTOTAL SHOWN ABOVE. SEE SPECIFICATION FOR THIS ITEM. For: _____ Dollars _____ Cents				
			$			
		TOTAL OR GROSS SUM WRITTEN IN WORDS				

The itemized proposal shall be completed by the bidder with the unit prices written in words and numerals and the extensions written in numerals

ITEMIZED PROPOSAL

In submitting this bid the undersigned declares to be the only person or persons interested in the said bid; that it is made without any connection with any person making another bid for the same contract; that the bid is in all respects fair and without collusion, fraud or mental reservation; and that no official of the County of Jefferson (Sponsor), or any person in the employ of the Sponsor is directly or indirectly interested in said bid or in the supplies or work to which it relates, or in any portion of the profits thereof.

The undersigned also hereby declares to have carefully examined the plans, specifications, and form of contract, and to have personally inspected the actual location of the work together with the local sources of supply, to be satisfied as to all the quantities and conditions and understands that in signing this proposal waives all right to plead any misunderstanding regarding the same.

The undersigned further understands and agrees to furnish and provide for the respective item price bid all the necessary material, machinery, implements, tools, labor services and other items of whatever nature, and to do and perform all the work necessary under the aforesaid conditions, to complete the improvement of the aforementioned project in accordance with the plans and specifications for said improvement, which plans and specifications it is agreed are a part of this proposal, and to accept in full compensation therefore the amount of the summation of the products of the approximate quantities multiplied by the unit prices bid. This summation will hereinafter be referred to as the gross sum bid.

The undersigned further agrees to accept the aforesaid unit bid prices as compensations for any additions or deductions caused by variation in quantities due to more accurate measurement, and for use in the computation of the value of the work performed for monthly estimates.

The undersigned further agrees that if at any time during the progress of work the Sponsor adds, alters, or omits portions of the work it shall so perform such work and accept compensation in accordance with the Standard Specifications.

The undersigned further understands and agrees not to start any work until the contract agreement is signed by the Sponsor. In case the undersigned voluntarily undertakes to start work, other than that expressly prohibited in this Subsection, after the contract agreement is signed by the Sponsor the undersigned does so entirely at its own risk and without obligation or responsibility on the part of the Sponsor unless and until the awarded contract becomes effective by approval of the Sponsor, and hereby agrees and warrants that, as a prerequisite to the start of any such voluntary work, accepts, assumes and undertakes all of the provisions of this proposal and of the plans and specifications of the proposed contract, including all of the provisions and responsibilities thereof relative to (1) damage, indemnification and holding the Sponsor harmless as set forth in said contract documents, and (2) actually furnishing in advance of any contract operations, the required insurance policies of each and every kind and amount as called for in said contract documents, particularly with relation to workers' compensation and liability insurance policies as set forth in the related specifications; and also agrees and warrants that all of such policies will be in force and effect on the date of the start of any such contract operations, whether or not the contract documents have been executed and filed as aforesaid. In no event shall the undersigned start any contract work which involves a disturbance of the contract site prior to execution of the contract by the Sponsor.

JURAT

The undersigned further acknowledges receipt of the following addenda to the subject project (if none, state "NONE"):

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

Addendum No. _____ Dated _____

Receipt is hereby acknowledged for all addenda listed above.

Signature of Bidder _____ Date _____

REQUIRED CONTRACT PROVISIONS

DBE/MBE/WBE/SDVOB GOALS

SUPPLEMENTAL TITLE VI PROVISIONS (CIVIL RIGHTS ACT)

IRAN DIVESTMENT ACT

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DBE/MBE/WBE/SDVOB PARTICIPATION GOALS

The following participation goal(s) have been established for this contract, expressed as a percentage of the total contract bid amount.

The DBE program applies to Federal Aid Contracts; the MBE, WBE, and SDVOB programs apply to Non-Federal-Aid Contracts. For more information see NYS Standard Specifications §102-12.

Disadvantaged Business Enterprise (DBE) Goal 4% (Federal-Aid Only)

Minority Business Enterprise (MBE) Goal N/A (Non-Federal-Aid Only)

Women's Business Enterprise (WBE) Goal N/A (Non-Federal-Aid Only)

Service-Disabled Veteran-Owned Business (SDVOB) Goal N/A (Non-Federal-Aid Only)

The NYSUCP DBE Directory is located at: https://nysucp.newnycontracts.com/

The NYS M/WBE Directory is located at: https://ny.newnycontracts.com/

The NYS SDVOB Directory is located at: https://online.ogs.ny.gov/SDVOB/search

EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENTS

[SEE SECTION 102-11 OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS]

APPENDIX A-1 SUPPLEMENTAL TITLE VI PROVISIONS (CIVIL RIGHTS ACT)

(To be included in all contracts)

During the performance of this contract, the contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

(1) Compliance with Regulations: The contractor shall comply with the Regulation relative to nondiscrimination in Federally assisted programs of the Department of Transportation of the United States, Title 49, Code of Federal Regulations, Part 21, and the Federal Highway Administration (hereinafter "FHWA") Title 23, Code of Federal Regulations, Part 200 as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.

(2) Nondiscrimination: The Contractor, with regard to the work performed by it during the contract, shall not discriminate on the grounds of race, religion, age, color, sex or national origin, sex, age, and disability/handicap in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor shall not participate either directly or indirectly in the discrimination prohibited by 49 CFR, section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

(3) Solicitations for Subcontractors, Including Procurements of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin, sex, age, and disability/handicap.

(4) Information and Reports: The contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by NYSDOT or the FHWA to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish this information the contractor shall so certify to NYSDOT's Office of Civil Rights or FHWA, as appropriate, and shall set forth what efforts it has made to obtain the information.

(5) Sanctions for Noncompliance: In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, NYSDOT shall impose such contract sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:

a) Withholding of payments to the contractor under the contract until the contractor complies; and/or
b) Cancellation, termination or suspension of the contract, in whole or in part.

(6) Incorporation of Provisions: The contractor shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

The contractor shall take such action with respect to any subcontractor procurement as NYSDOT or the FHWA may direct as a means of enforcing such provisions including sanctions for non-compliance: Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request NYSDOT to enter into such litigation to protect the interests of NYSDOT, and, in addition, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

IRAN DIVESTMENT ACT

As a result of the Iran Divestment Act of 2012 (Act), Chapter 1 of the 2012 Laws of New York, a new provision has been added to the State Finance Law (SFL), § 165-a, effective April 12, 2012. Under the Act, the Commissioner of the Office of General Services (OGS) will be developing a list (prohibited entities list) of "persons" who are engaged in "investment activities in Iran" (both are defined terms in the law). Pursuant to SFL § I65-a(3)(b), the initial list is expected to be issued no later than 120 days after the Act's effective date, at which time it will be posted on the OGS website.

By entering into this Contract, Contractor (or any assignee) certifies that once the prohibited entities list is posted on the OGS website, it will not utilize on such Contract any subcontractor that is identified on the prohibited entities list. Additionally, Contractor agrees that after the list is posted on the OGS website, should it seek to renew or extend the Contract, it will be required to certify at the time the Contract is renewed or extended that it is not included on the prohibited entities list. Contractor also agrees that any proposed Assignee of the Contract will be required to certify that it is not on the prohibited entities list before the New York State Department of Transportation (NYSDOT) may approve a request for Assignment of Contract

During the term of the Contract, should NYSDOT receive information that a person is in violation of the above referenced certification, NYSDOT will offer the person an opportunity to respond. If the person fails to demonstrate that it has ceased its engagement in the investment which is in violation of the Act within 90 days after the determination of such violation, then NYSDOT shall take such action as may be appropriate including, but not limited to, imposing sanctions, seeking compliance, recovering damages, or declaring the Contractor in default.

The Sponsor reserves the right to reject any request for assignment for an entity that appears on the prohibited entities list prior to the award of a contract, and to pursue a responsibility review with respect to any entity that is awarded a contract and appears on the prohibited entities list after contract award.

Supplemental Information

CONR 9 - SUPPLEMENTAL INFORMATION AVAILABLE TO BIDDERS

SIGN FACE LAYOUTS

EARTHWORK SUMMARY SHEETS

SUBSURFACE INVESTIGATION BORING LOGS

NYSDEC PERMIT

USACE PERMIT

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SUPPLEMENTAL INFORMATION AVAILABLE TO BIDDERS

Project PIN: 7753.77 **Contract Number:** D040965

Project Description: Replacement of Noble Street (BIN 3371810) over West Creek

SUPPLEMENTAL INFORMATION IS AVAILABLE FOR THIS CONTRACT

FILE NAME *(Including File Format)*	DESCRIPTION	DETAILS
1. CADD DRAWINGS [1]		**Not Provided**
2. CADD SURFACES [1]		**Not Provided**
3. CADD ALIGNMENTS [1]		**Not Provided**
4. QUANTITY WORKUPS [2]		**Provided**
Highway Estimate Computation Sheets		Upon Request
Highway Quantity Measurement - CAD File		Upon Request
Bridge Estimate Computation Sheets		Upon Request
Bridge Quantity Measurement - CAD File		Upon Request
5. UNSEALED LAYERED PDF or 3D PDF		**Not Provided**
6. CROSS SECTIONS		**Provided**
Cross Sections		PDF
7. RECORD PLANS		**Not Provided**
8. SIGN FACE LAYOUTS		**Provided**
Sign Face Layouts		PDF
9. SUBSURFACE INFORMATION		**Provided**
	Rock Cores	PDF
	Subsurface Information from Outside Sources	Not Provided
	Subsurface Exploration Logs	PDF
	Undisturbed Sample Logs	Not Provided
	Laboratory Test Data from Soil Samples	PDF
	Tabulated Results of Probing	Not Provided
	Tabulated Depth to Bedrock	Not Provided
	Rock Core Evaluation Logs	Not Provided
	Compression Test Data from Rock Samples	PDF
	Rock Outcrop Maps	Not Provided
	Granular Materials Resource Survey Reports	Not Provided
	Terrain Reconnaissance Reports	Not Provided
10. ANTICIPATED CONSTRUCTION SCHEDULE		**Not Provided**
11. SPECIAL REPORTS OR OTHER INFORMATION		**Not Provided**
12. BRIDGE INFORMATION[3]		**Not Provided**

[1] *Required for all projects 3R and above*

[2] *Required for all projects*

[3] *Required for all new, replacement and superstructure replacement projects*

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D040965

SIGN DETAIL

NTS

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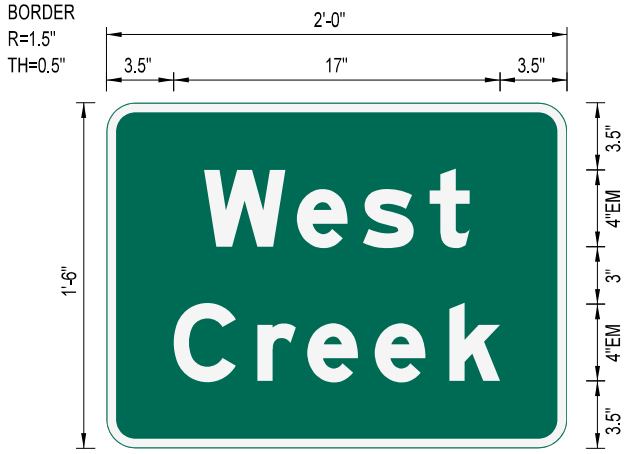
M.U.T.C.D.: 2009 Edition



Stantec

LOCATION NUMBER(S):	1-7, 1-8
MUTCD NUMBER:	I-3
WIDTH X HEIGHT:	2'-0" x 1'-6"
SIGN AREA:	3.0 Sq.Ft.
MOUNTING:	Ground
BACKGROUND COLOR:	Green
LEGEND/BORDER COLOR:	White / White

SYMBOL	ROT	X	Y	WID	HT

Panel Style: Information Sign (I-3) (Green).ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

																				LENGTH	SERIES/SIZE
W	e	s	t																		EM 2000
5.1	9.9	13.4	16.8																	13.8	4/3
C	r	e	e	k																	EM 2000
3.5	7.9	10.5	14	17.9																17	4/3

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D040965

SIGN DETAIL

NTS

Panel Style: Street Name 6in on 12in Panel (Green).ssi
M.U.T.C.D.: 2009 Edition

Stantec	
LOCATION NUMBER(S):	1-9
MUTCD NUMBER:	D3-1
WIDTH X HEIGHT:	3'-6" x 1'-0"
SIGN AREA:	3.5 Sq.Ft.
MOUNTING:	Ground
BACKGROUND COLOR:	Green
LEGEND/BORDER COLOR:	White / White

SYMBOL	ROT	X	Y	WID	HT

Panel Style: Street Name 6in on 12in Panel (Green).ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

W	i	l	l	o	w	S	t													LENGTH	SERIES/SIZE
4.8	11	13.1	15.3	17.2	21.3	32.6	35.6													32.3	D 2000 6/4.5,4/3

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SIGN DETAIL

NTS

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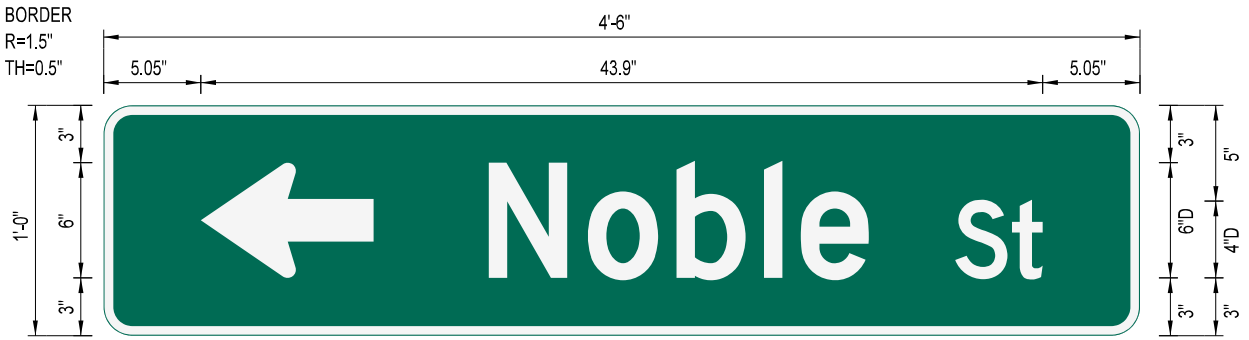
M.U.T.C.D.: 2009 Edition



Stantec	
LOCATION NUMBER(S):	1-9
MUTCD NUMBER:	D3-1
WIDTH X HEIGHT:	4'-6" x 1'-0"
SIGN AREA:	4.5 Sq.Ft.
MOUNTING:	Ground
BACKGROUND COLOR:	Green
LEGEND/BORDER COLOR:	White / White

SYMBOL	ROT	X	Y	WID	HT
AR_Type D	90	5.1	3	6	9

Panel Style: Street Name 6in on 12in Panel (Green).ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

N	o	b	l	e	S	t														LENGTH	SERIES/SIZE
20.1	25.2	29.9	34.4	36.3	44.4	47.3														28.9	D 2000 6/4.5,4/3

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D040965

SIGN DETAIL

NTS

Panel Style: Street Name 6in on 12in Panel (Green).ssi
M.U.T.C.D.: 2009 Edition

Stantec

LOCATION NUMBER(S):	1-9
MUTCD NUMBER:	D3-1
WIDTH X HEIGHT:	4'-6" x 1'-0"
SIGN AREA:	4.5 Sq.Ft.
MOUNTING:	Ground
BACKGROUND COLOR:	Green
LEGEND/BORDER COLOR:	White / White

SYMBOL	ROT	X	Y	WID	HT
AR_Type D	270	39.9	3	6	9

Panel Style: Street Name 6in on 12in Panel (Green).ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

N	o	b	l	e	S	t														LENGTH	SERIES/SIZE
5.1	10.2	14.9	19.4	21.3	29.4	32.3														28.9	D 2000 6/4.5,4/3

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D040965

SIGN DETAIL

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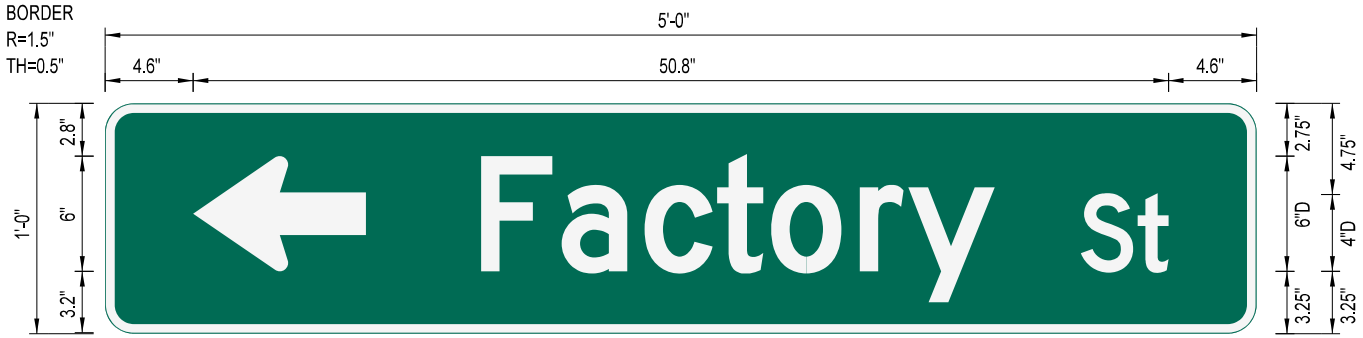
M.U.T.C.D.: 2009 Edition



Stantec	
LOCATION NUMBER(S):	1-9
MUTCD NUMBER:	D3-1
WIDTH X HEIGHT:	5'-0" x 1'-0"
SIGN AREA:	5.0 Sq.Ft.
MOUNTING:	Overhead
BACKGROUND COLOR:	Green
LEGEND/BORDER COLOR:	White / White

SYMBOL	ROT	X	Y	WID	HT
AR_Type D	90	4.6	3.3	6	9

Panel Style: Street Name 6in on 12in Panel (Green).ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

F	a	c	t	o	r	y	S	t												LENGTH	SERIES/SIZE
19.6	23.8	28.1	31.9	34.7	39.3	41.9	50.9	53.8												35.8	D 2000 6/4.5,4/3

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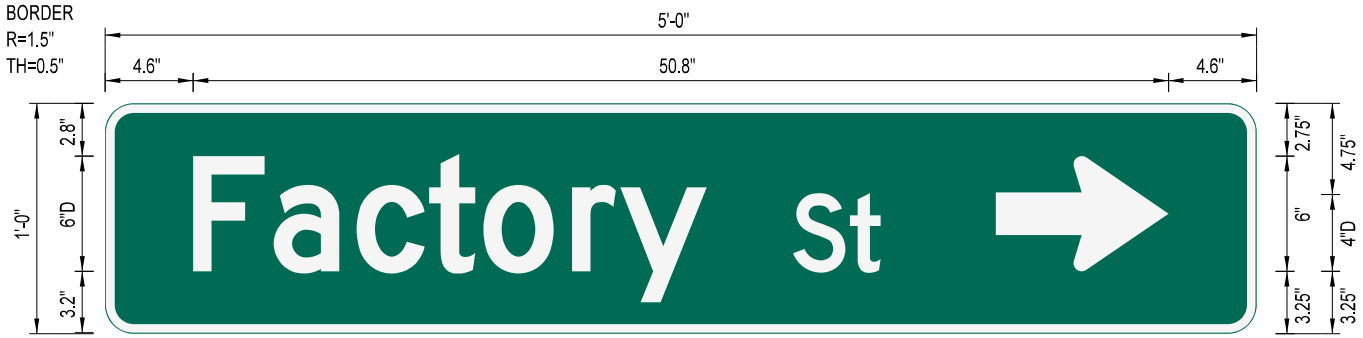
SIGN DETAIL

NTS Panel Style: Street Name 6in on 12in Panel (Green).ssi
M.U.T.C.D.: 2009 Edition



Stantec

LOCATION NUMBER(S):	1-9
MUTCD NUMBER:	D3-1
WIDTH X HEIGHT:	5'-0" x 1'-0"
SIGN AREA:	5.0 Sq.Ft.
MOUNTING:	Overhead
BACKGROUND COLOR:	Green
LEGEND/BORDER COLOR:	White / White

SYMBOL	ROT	X	Y	WID	HT
AR_Type D	270	46.4	3.3	6	9

Panel Style: Street Name 6in on 12in Panel (Green).ssi
Dimensions are in inches.tenths

Letter locations are panel edge to lower left corner

LETTER POSITIONS (X)

F	a	c	t	o	r	y	S	t												LENGTH	SERIES/SIZE
4.6	8.8	13.1	16.9	19.7	24.3	26.8	35.8	38.8												35.8	D 2000 6/4.5,4/3

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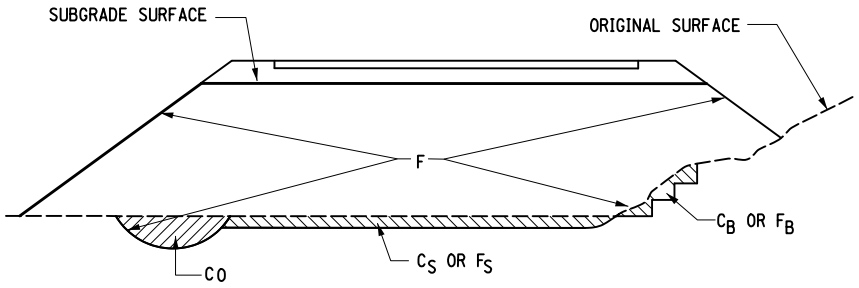
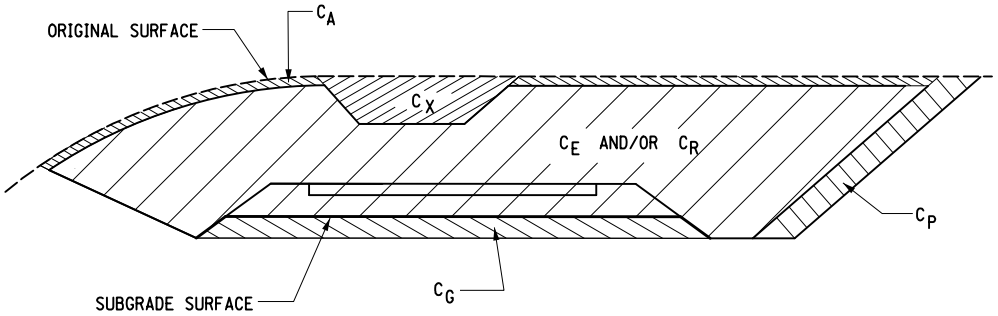
NOBLE STREET OVER WEST CREEK	
VILLAGE OF EVANS MILLS	
BIN 3371810	
COUNTY: JEFFERSON	PIN 7753.77



FILL SECTION



CUT SECTION

DEFINITIONS:

C_B - EXCAVATION FOR REQUIRED BENCHING, (BOTH LONGITUDINAL AND TRANSVERSE).

C_G - EXCAVATION FOR SUBGRADE IMPROVEMENT.

C_P - EXCAVATION FROM CUT SLOPE NECESSARY TO PLACE SLOPE PROTECTION.

C_E - PORTION OF CUT ASSUMED TO BE EARTH SUITABLE FOR EMBANKMENT CONSTRUCTION, EXCLUDING C_G AND C_P.

T_E - $(C_B + C_G + C_P + C_E)$ TOTAL EARTH EXCAVATION ASSUMED SUITABLE FOR EMBANKMENT CONSTRUCTION.

C_A - EXCAVATION OF TOPSOIL (UNSUITABLE MATERIAL) IN CUT.

C_S - EXCAVATION OF TOPSOIL (UNSUITABLE MATERIAL) UNDER EMBANKMENT.

C_X - EXCAVATION OF UNSUITABLE MATERIAL IN CUT: SWAMP OR DUMP

C_O - EXCAVATION OF UNSUITABLE MATERIAL BENEATH EMBANKMENT: SWAMP OR DUMP

T_U - $(C_A + C_S + C_X + C_O)$ TOTAL EXCAVATION ASSUMED UNSUITABLE FOR EMBANKMENT CONSTRUCTION.

C_R - PORTION OF CUT ASSUMED TO BE ROCK, INCLUDING C_G IF APPLICABLE.

C_T - $(T_E + T_U + C_R)$ TOTAL EXCAVATION.

F_B - FILL REQUIRED TO REPLACE BENCHES.

F_S - FILL REQUIRED TO REPLACE TOPSOIL REMOVED BENEATH EMBANKMENTS.

F - FILL REQUIRED TO COMPLETE EMBANKMENT TO SUBGRADE SURFACE AND SIDE-SLOPES AFTER FOUNDATION IS PREPARED.

F_T - $(F_B + F_S + F)$ TOTAL FILL REQUIRED.

T_A - $(T_E \times F_E + C_R \times F_R)$ THE VOLUME WHICH THE SUITABLE EXCAVATED MATERIAL COULD OCCUPY IN EMBANKMENT.

F_E - SHRINKAGE FACTOR FOR EARTH

F_R - SWELL FACTOR FOR ROCK

ALL DIMENSIONS ARE IN yd^3 UNLESS OTHERWISE NOTED

JEFFERSON COUNTY HIGHWAY DEPARTMENT

Stantec

EARTHWORK SUMMARY SHEET DEFINITIONS | REGION 7

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NOBLE STREET OVER WEST CREEK
VILLAGE OF EVANS MILLS
BIN 3371810
COUNTY: JEFFERSON PIN 7753.77

SUMMARY OF EARTHWORK (ITEMS 203.02 AND 203.03 ONLY)

SOURCE	EXCAVATION			ITEM 203.02	ITEM 203.03
	T_E	C_R	T_U	C_T	F_T
FACTORY ST. / NOBLE ST.	623 CY	0 CY	595 CY	1,218 CY	931 CY
WILLOW STREET	182 CY	0 CY	138 CY	320 CY	277 CY
TEMPORARY WORK ZONE	0 CY	0 CY	0 CY	0 CY	110 CY
BIORETENTION SOIL IN SWALE	63 CY	0 CY	0 CY	63 CY	0 CY
DRAINAGE REMOVALS	0 CY	0 CY	0 CY	0 CY	7 CY
DRAINAGE	0 CY	0 CY	0 CY	0 CY	98 CY
SANITARY	0 CY	0 CY	0 CY	0 CY	370 CY
BRIDGE	0 CY	0 CY	0 CY	0 CY	1,350 CY
TOTALS	868 CY	0 CY	733 CY	1,601 CY	3,143 CY

SUMMARY OF TRENCH AND CULVERT EXCAVATION (ITEM 206.0201 ONLY)

SOURCE	EXCAVATION		ITEM 206.0201
	ROCK	NON-ROCK	
UNDERDRAIN	0 CY	102 CY	102 CY
DRAINAGE	0 CY	803 CY	803 CY
SANITARY	0 CY	688 CY	688 CY
WATERMAIN	0 CY	497 CY	497 CY
BRIDGE	0 CY	64 CY	64 CY
TOTALS	0 CY	2,154 CY	2,154 CY

NOTES:

THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT THESE ARE ESTIMATED, AND ARE PROVIDED FOR THE PURPOSE OF PREPARING AN ESTIMATE. THEY ARE NOT TO BE CONSTRUED AS BEING EXACT. THEY ARE INTENDED TO QUANTIFY AND QUALIFY THE NATURE OF THE WORK. SIGNIFICANT DIFFERENCE FROM THIS REPRESENTATION, WHEN ENCOUNTERED DURING THE ACTUAL WORK, WILL BE HANDLED ACCORDING TO THE SPECIFICATIONS GOVERNING THIS PROJECT

203.02 UNCLASSIFIED EXCAVATION AND DISPOSAL

203.03 EMBANKMENT IN PLACE

206.0201 TRENCH AND CULVERT EXCAVATION

ALL QUANTITIES ARE IN yd^3 UNLESS OTHERWISE NOTED

JEFFERSON COUNTY HIGHWAY DEPARTMENT

Stantec

EARTHWORK SUMMARY SHEET | REGION 7

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USER = sromeiser

ATLANTIC TESTING LABORATORIES

Canton
6431 U.S. Highway 11
P.O. Box 29
Canton, NY 13617
315-386-4578 (T)
atlantictesting.com

WBE certified company

February 8, 2021

Stantec
61 Commercial Street, Suite 100
Rochester, New York 14614-1009

Telephone: 585-413-5261

Attn: Mr. Thomas Butler, PMP
Associate, Project Manager, Transportation Infrastructure

Re: Subsurface Investigation Services
Noble Street over West Creek Culvert Realignment
Evans Mills, Jefferson County, New York
ATL No. CD4973D-01-02-21

Ladies and Gentleman:

At the request of Mr. Thomas Butler, PMP, representing Stantec, and in accordance with our proposal (ATL No. CD998-1065X-05-20 dated June 10, 2020), Atlantic Testing Laboratories, Limited (ATL) performed a Subsurface Investigation for the referenced project. The field investigation was performed between the period of December 14 through December 22, 2020.

The boring locations were selected by representatives of Stantec and staked in the field by ATL. A **Boring Location Plan**, prepared by ATL, is included in **Attachment A**. The borings were staked utilizing a Trimble R8 GPS unit. The as-drilled elevations and coordinates are presented on the Subsurface Investigation Logs.

Two (2) soil borings were advanced utilizing HW (4-inch ID) flush joint casing and a split spoon sampler to depths ranging from 115.0 to 118.0 feet below ground surface. Three (3) pavement cores were obtained utilizing a 4-inch diameter thin-wall coring machine to depths ranging from 2.5 to 3.0 feet. Soil sampling and standard penetration testing was performed utilizing 3-inch and 2-inch outside diameter split spoon samplers in accordance with ASTM D 1586. Soil sampling was generally performed continuously to a depth of 20 feet and at 5-foot intervals thereafter throughout each borehole. Bedrock was cored in borings B-1 and B-2 utilizing a double tube NX-size core barrel.

The 3-inch and 2-inch split spoon samplers do not recover material larger than 2⅜-inch and 1⅜-inch in nominal dimension, respectively. Therefore, the recovered samples may not be representative of the entire soil matrix. The visual soil classifications contained in the subsurface investigation logs were performed in the laboratory and are presented on the **Subsurface Investigation Logs** included in **Attachment B**. A **Photographic Log of Pavement Cores** is included in **Attachment C**.

Select soil samples were tested in the laboratory. Fifty-five (55) samples were tested in general accordance with ASTM D 2216, Laboratory Determination of Moisture Content of Soils. Particle Size Analysis with Hydrometer, in general accordance with ASTM D 422, was performed on two (2) soil samples. Two (2) samples were tested in general accordance with ASTM D 4318 Laboratory Determination of Atterberg Limits. One (1) rock sample was tested in general accordance with ASTM D 7012 Method C, Unconfined Compressive Strength of Intact Rock Core Specimens. The **Laboratory Test Results** are included in **Attachment D**.

The boreholes were backfilled with on-site material upon completion. It is important that the backfilled borings be monitored for settlement or subsidence. This will be the responsibility of Stantec and/or their client. ATL assumes no liability for loss or damage resulting from borehole settlement.

The soil samples obtained during this investigation will be retained for a period of 6 months and subsequently discarded, unless otherwise instructed.

Please contact our office if you have any questions or if we may be of further service. We look forward to our continued association to obtain a successful completion of the project.

Sincerely,
ATLANTIC TESTING LABORATORIES, Limited

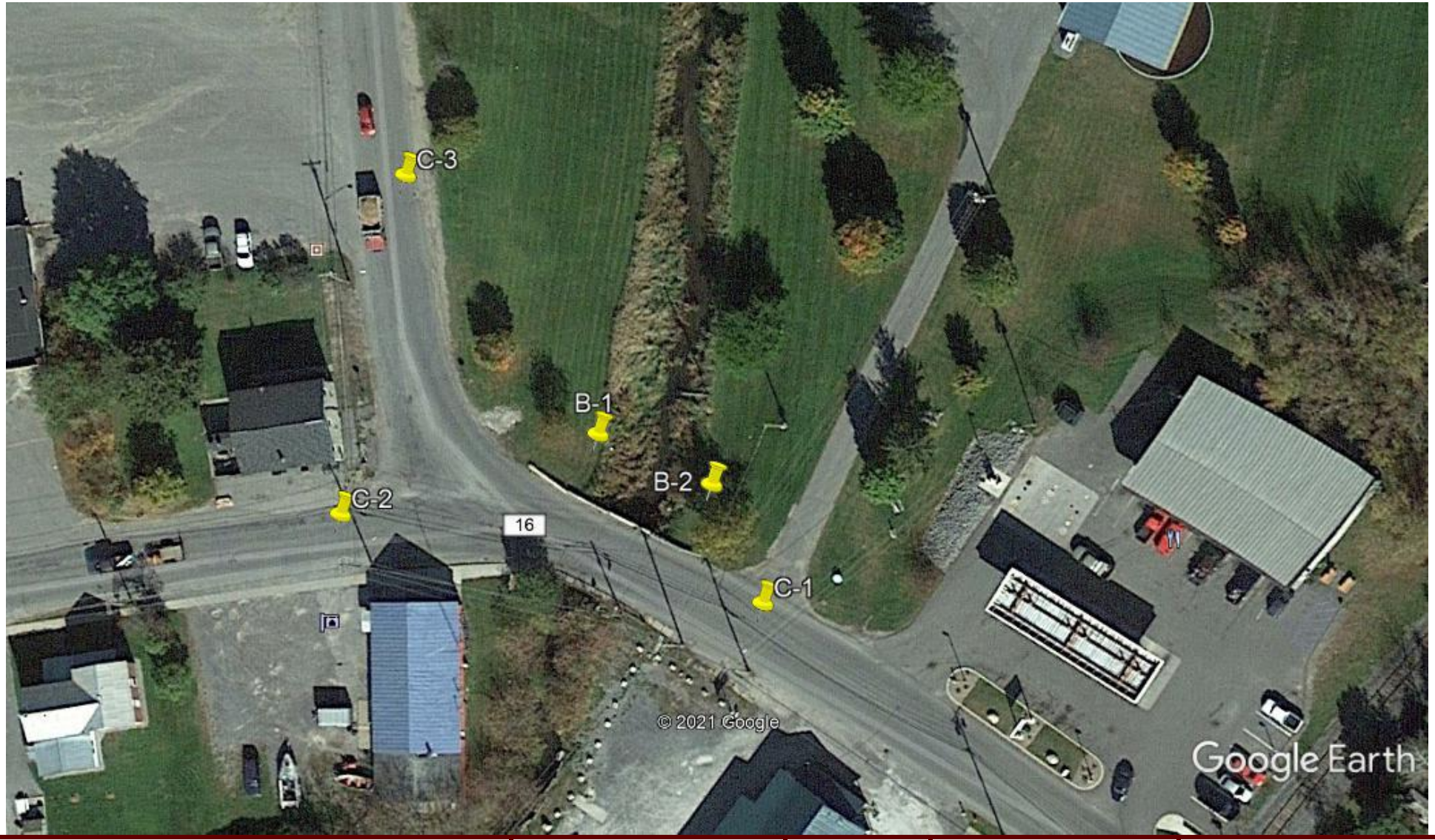
Aaron D. Woods, IE
Senior Project Manager

ADW/AJS/adw

Enclosures

ATTACHMENT A

BORING LOCATION PLAN



Boring Location Plan	Drawn by: ADW	Scale: Not to scale	Project No.: CD4973	Date: February 2021

Culvert Replacement – Noble Street
Evans Mills, New York

***ATLANTIC TESTING LABORATORIES*, Limited**

Albany, NY	Binghamton, NY	Canton, NY	Elmira, NY	Plattsburgh, NY
Poughkeepsie, NY	Syracuse, NY	Rochester, NY	Utica, NY	Watertown, NY

ATTACHMENT B

SUBSURFACE INVESTIGATION LOGS

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Report No.: **CD4973D-01-02-21**

Client: **Stantec Consulting Services, Inc.**

Boring Location: **See Boring Location Plan**

Project: **Subsurface Investigation**
Culvert Replacement - Noble Street
Evans Mills, New York

Start Date: **12/21/2020** Finish Date: **12/22/2020**

Boring No.: **B-1** Sheet **1** of **4**

Groundwater Observations

Date	Time	Depth	Casing

Coordinates
Northing **1917629.455**
Easting **148172.629**

Sampler Hammer
Weight: **140** lbs.
Fall: **30** in.
Hammer Type: **Automatic**

Ground Elev.: **±403'**

Boring Advance By:
HW (4") Casing/3 7/8" Wet Rotary/NX Core

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL (f - fine; m - medium; c - coarse; and - 35-50%; some - 20-35%; little - 10-20%; trace - 0-10%)	Recovery (Inches)
1	CASING	1	0.0	2.0	SS	3 5 4 5		Brown cmf SAND; little SILT; trace ORGANIC MATERIAL (wet, non-plastic) w = 50.3%	7
2		2	2.0	4.0	SS	4 4 4 4		Brown cmf SAND; trace SILT; trace ORGANIC MATERIAL (wet, non-plastic) w = 31.4%	10
4		3	4.0	6.0	SS	4 3 3 4	4.0	Brownish-Grey and Black cmf SAND; and cmf GRAVEL; little SILT; trace CLAY; trace ORGANIC MATERIAL (wet, very slightly plastic) w = 32.5%	5
6		4	6.0	8.0	SS	2 2 3 2		Brownish-Grey cmf SAND; little SILT; trace f GRAVEL; trace CLAY (wet, very slightly plastic) w = 24.5%	6
8		5	8.0	10.0	SS	2 1 1 2		Greyish-Brown mf+ SAND; trace SILT (wet, non-plastic) w = 23.5%	11
10		6	10.0	12.0	SS	2 3 1 1	10.0	Brown f SAND; and SILT; trace CLAY (wet, very slightly plastic) w = 26.5%	12
12		7	12.0	14.0	SS	1 WH 1 1		NO RECOVERY	0
14		8	14.0	16.0	SS	2 WH/18"	14.0	Grey SILT; some CLAY; trace f SAND (wet, moderately plastic) w = 24.7%	24
16		9	16.0	18.0	SS	1 1 WH 1	16.0	Grey CLAY; trace SILT (wet, plastic) w = 49.5% LL = 62, PL = 36, PI = 26	24
18		10	18.0	20.0	SS	1 1 1 1		Grey CLAY; trace SILT; trace f SAND (wet, plastic) w = 52.4%	22
20	WET ROTARY							Advanced casing to 20.0 feet and began advancing 3 7/8" tri-cone roller bit wet rotary open hole within the borehole.	
24		11	24.0	26.0	SS	2 3 2 1		Grey CLAY; little SILT; trace mf+ SAND (wet, plastic)	10

SS Split Spoon Sample
NX Rock Core
SH Undisturbed Sample (Shelby Tube)
Estimated Groundwater

Drillers: **Brad Perry; Jake Crary**

Inspector:

ATL-LOG1 NE CD4973 STANTEC CONSULTING SERVICES, INC. - EVANS MILLS.GPJ ATL4-08.GDT 2/5/21

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Boring No.: **B-1** Report No.: **CD4973D-01-02-21** Sheet **2** of **4**

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL	RECOVERY (inches)
								f - fine; m - medium; c - course; and - 35-50%; some - 20-35%; little - 10-20%; trace - 0-10%	
								w = 57.2%	
26									
27							27.0		
28									
29		12	29.0	31.0	SS	WH/24"		Grey CLAY; little SILT (wet, plastic) w = 49.6%	24
30									
31									
32									
33									
34		13	34.0	36.0	SS	1 WH/18"		Grey CLAY; trace SILT (wet, plastic) w = 47.0%	24
35									
36									
37									
38									
39		14	39.0	41.0	SS	WR/18" WH		Grey CLAY (wet, plastic) w = 49.1%	24
40									
41									
42									
43									
44		15	44.0	46.0	SS	WR WH/18"		Similar Soil (wet, plastic) w = 49.3%	24
45									
46									
47									
48									
49		16	49.0	51.0	SS	WH/24"		Similar Soil (wet, plastic) w = 40.4%	24
50									
51									
52									
53									
54		17	54.0	56.0	SS	WH/24"		Similar Soil (wet, plastic) w = 37.0%	24
55									
56									
57									
58									
59		18	59.0	61.0	SS	WH/24"		Similar Soil (wet, plastic) w = 40.0%	24
60									
61									
62									

ATL-LOG1 NE CD4973 STANTEC CONSULTING SERVICES, INC. - EVANS MILLS.GPJ ATL4-08.GDT 2/5/21

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Boring No.: **B-1** Report No.: **CD4973D-01-02-21** Sheet **3** of **4**

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL	RECOVERY (inches)
								f - fine; m - medium; c - course; and - 35-50%; some - 20-35%; little - 10-20%; trace - 0-10%	
64		19	64.0	66.0	SS	WH/24"		Similar Soil (wet, plastic) w = 41.9%	24
69		20	69.0	71.0	SS	WH/24"		Similar Soil (wet, plastic) w = 37.4%	20
74		21	74.0	76.0	SS	1 WH/18"		Similar Soil (wet, plastic) w = 31.7%	18
79		22	79.0	81.0	SS	WR/24"		Similar Soil (wet, plastic) w = 32.6%	24
84		23	84.0	86.0	SS	WH/24"		Grey CLAY; trace mf SAND; trace SILT (wet, plastic) w = 25.6%	24
89		24	89.0	91.0	SS	WR/12" WH/12"		Grey CLAY; trace f SAND; trace SILT (wet, plastic) w = 29.2%	24
							92.0		
94		25	94.0	96.0	SS	1 3 4 5		Grey CLAY; trace mf SAND; trace SILT (wet, plastic) w = 28.9%	18
99		26	99.0	101.0	SS	9 10 10 11		Grey CLAY; little mf SAND; trace SILT (saturated, plastic)	4

ATL-LOG1 NE CD4973 STANTEC CONSULTING SERVICES, INC. - EVANS MILLS.GPJ ATL4-08.GDT 2/5/21

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Boring No.: **B-1** Report No.: **CD4973D-01-02-21** Sheet **4** of **4**

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL (f - fine, m - medium, c - course; and - 35-50%, some - 20-35%, little - 10-20%, trace - 0-10%)	RECOVERY (inches)
								w = 48.0%	
104		27	104.0	106.0	SS	5 7 13 11		NO RECOVERY	0
106							106.0	Encountered possible WEATHERED ROCK at 106.0 feet.	
109		28	109.0	111.0	SS	12 15 14 17		Grey m GRAVEL; and cmf SAND; trace SILT; trace CLAY (wet, very slightly plastic) Possible WEATHERED ROCK Fragments w = 7.5% Encountered artesian conditions at 109.0 feet.	1
114		29	114.0	114.2	SS	50/2"			2
115	NX CORE (WET)		115.0	120.0	NX	RUN 1	115.0	Red and Grey mf GRAVEL; little cmf SAND; trace SILT (wet, non-plastic) Possible WEATHERED ROCK Fragments w = 2.9% Advanced 3 7/8" tri-cone roller bit wet rotary to 115.0 feet and began coring. Advanced NX core barrel through probable BEDROCK from 115.0 to 120.0 feet.	0
120							120.0	NO RECOVERY - Core barrel broke off within borehole.	
								Boring terminated at 120.0 feet. Notes: 1. Borehole backfilled with on-site soils.	

ATL-LOG1 NE CD4973 STANTEC CONSULTING SERVICES, INC. - EVANS MILLS.GPJ ATL4-08.GDT 2/5/21

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Report No.: **CD4973D-01-02-21**

Client: **Stantec Consulting Services, Inc.**

Boring Location: **See Boring Location Plan**

Project: **Subsurface Investigation**
Culvert Replacement - Noble Street
Evans Mills, New York

Start Date: **12/14/2020** Finish Date: **12/17/2020**

Boring No.: **B-2** Sheet **1** of **4**

Groundwater Observations

Date	Time	Depth	Casing
12/14/2020	PM	*11.3'	18.0'
12/15/2020	AM	*9.2'	18.0'
12/15/2020	PM	*2.0' (AG)	18.0'
12/17/2020	PM	*2.0' (AG)	18.0'

Coordinates
Northing **1917607.289**
Easting **148220.716**

Sampler Hammer
Weight: **140** lbs.
Fall: **30** in.
Hammer Type: **Automatic**

Ground Elev.: **±404'**

Boring Advance By: **HW (4") Casing/3 7/8" Wet Rotary/NX Core**

AG = Above Ground (flowing out of casing). *May be affected by water utilized to advance the borehole.

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL (f - fine; m - medium; c - coarse; and - 35-50%; some - 20-35%; little - 10-20%; trace - 0-10%)	Recovery (Inches)
0	CASING	1	0.0	2.0	SS	1 3 4 4	0.5	6" TOPSOIL & ORGANIC MATERIAL	13
1							2.0	Dark Brown cmf SAND; little CLAY; little SILT; trace m GRAVEL (moist, slightly plastic) w = 15.2%	
2		2	2.0	4.0	SS	3 3 3 3		Dark Brownish-Grey CLAY; some cmf+ SAND; little SILT; trace ORGANIC MATERIAL (wood fragments) (wet, plastic) w = 31.5%	15
3									
4		3	4.0	6.0	SS	3 2 3 3			11
5								Similar Soil (wood fragments) (wet, plastic) w = 34.8%	
6		4	6.0	8.0	SS	2 2 3 2	6.0	Dark Grey cmf SAND; some SILT; trace CLAY; trace ORGANIC MATERIAL (moist, very slightly plastic) w = 56.9%	14
7									
8		5	8.0	10.0	SS	4 2 1 3		Brown cmf SAND; little cmf GRAVEL; trace SILT (wet, non-plastic) w = 21.8%	6
9									
10		6	10.0	12.0	SS	4 6 5 4		Brown cmf SAND; little SILT; trace f GRAVEL; trace ORGANIC MATERIAL (wood fragments) (wet, non-plastic) w = 36.4%	
11									
12		7	12.0	14.0	SS	5 4 2 2		Brownish-Grey SILT; some cmf+ SAND; some c+mf GRAVEL; trace CLAY (wet, very slightly plastic) COBBLE Fragments w = 18.5%	12
13							14.0		
14		8	14.0	16.0	SS	2 3 5 4		Grey SILT; little CLAY; trace f SAND; trace ORGANIC MATERIAL (moist, slightly plastic) w = 21.6%	13
15									
16		9	16.0	18.0	SS	2 3 4 2		Grey SILT; some CLAY; little cmf+ SAND; trace f GRAVEL; trace ORGANIC MATERIAL (moist, moderately plastic) w = 23.0%	16
17							18.0		
18	WET ROTARY	10	18.0	20.0	SS	WH/12" 1 1		Grey CLAY; little SILT; trace f SAND (saturated, plastic) w = 38.7%	24
19									
20									
21								Advanced casing to 18.0 feet and began advancing 3 7/8" tri-cone roller bit wet rotary open hole within the borehole.	
22									
23									
24		11	24.0	26.0	SS	WH/24"		Similar Soil (saturated, plastic) w = 39.2%	24
25									

SS Split Spoon Sample
NX Rock Core
SH Undisturbed Sample (Shelby Tube)
Estimated Groundwater

Drillers: **Collin Benton; Tony Jones**

Inspector:

ATL-LOG1 NE CD4973 STANTEC CONSULTING SERVICES, INC. - EVANS MILLS.GPJ ATL4-08.GDT 2/5/21

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Boring No.: **B-2** Report No.: **CD4973D-01-02-21** Sheet **2** of **4**

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL	RECOVERY (inches)
								f - fine; m - medium; c - course; and - 35-50%; some - 20-35%; little - 10-20%; trace - 0-10%	
26									
27									
28									
29		12	29.0	31.0	SS	WR WH/18"		Grey CLAY; trace SILT; trace f SAND (wet, plastic) w = 42.0%	24
30									
31									
32									
33									
34		13	34.0	36.0	SS	WH/24"		Similar Soil (wet, plastic) w = 53.1%	20
35									
36									
37									
38									
39		14	39.0	41.0	SS	WR/18" WH		Similar Soil (wet, plastic) w = 44.1%	24
40									
41									
42									
43									
44		15	44.0	46.0	SS	WR/12" WH WR		Similar Soil (wet, plastic) w = 41.9%	24
45									
46									
47									
48									
49		16	49.0	51.0	SS	WR/24"		Similar Soil (wet, plastic) w = 45.1%	24
50									
51									
52									
53									
54		17	54.0	56.0	SS	WR/18" WH		Similar Soil (wet, plastic) w = 46.2%	24
55									
56									
57									
58									
59		18	59.0	61.0	SS	WR WH/18"		Similar Soil (wet, plastic) w = 40.5%	24
60									
61									
62									

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Boring No.: **B-2** Report No.: **CD4973D-01-02-21** Sheet **3** of **4**

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL	RECOVERY (inches)
63									
64		19	64.0	66.0	SS	WH/24"		Grey CLAY; trace SILT (saturated, plastic) w = 45.8%	24
65									
66									
67									
68									
69		20	69.0	71.0	SS	WH/24"		Grey CLAY; little SILT (wet, plastic) w = 31.8%	24
70									
71									
72									
73									
74		21	74.0	76.0	SS	WR/12" WH/12'		Grey CLAY; little SILT; trace f SAND (wet, plastic) w = 33.9%	24
75									
76									
77									
78									
79		22	79.0	81.0	SS	WR WH/18"		Grey CLAY; trace SILT (wet, plastic) w = 30.4%	24
80									
81									
82									
83									
84		23	84.0	86.0	SS	WH/24"		Similar Soil (wet, plastic) w = 30.0%	23
85									
86									
87									
88									
89		24	89.0	91.0	SS	WH/24"		Similar Soil (wet, plastic) w = 29.4%	24
90									
91									
92									
93									
94		25	94.0	96.0	SS	WH/12" 1 1		Grey CLAY; little SILT (saturated, plastic)	20
95								w = 28.0%, LL = 29, PL = 21, PI = 8	
96									
97									
98									
99		26	99.0	101.0	SS	WH/18" 1		Grey CLAY; trace SILT; trace f SAND (wet, plastic) w = 40.7%	24
100									

f - fine
m - medium
c - course

and - 35-50%
some - 20-35%
little - 10-20%
trace - 0-10%

ATL-LOG1 NE CD4973 STANTEC CONSULTING SERVICES, INC. - EVANS MILLS.GPJ ATL4-08.GDT 2/5/21

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Boring No.: **B-2** Report No.: **CD4973D-01-02-21** Sheet **4** of **4**

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL (f - fine, m - medium, c - course; and - 35-50%, some - 20-35%, little - 10-20%, trace - 0-10%)	RECOVERY (inches)
104		27	104.0	106.0	SS	1 WH/18"		Similar Soil (wet, plastic) w = 32.1%	24
109		28	109.0	111.0	SS	WR WH/18'		Grey CLAY; trace SILT (wet, plastic) w = 38.1%	24
							112.0	Encountered artesian conditions at 109.0 feet.	
114		29	114.0	116.0	SS	WH/24"		Grey SILT; little CLAY (wet, slightly plastic)	20
								Advanced 3 7/8" tri-cone roller bit to 118.0 feet and began coring.	
							118.0		
118	NX CORE (WET)		118.0	123.0	NX	RUN 1		Whitish-Greyish Red SANDSTONE 24" or 40% Recovery 2 Pieces (24") - 0% Chips and Fragments 2 Pieces longer than 4" (24") - RQD = 40%	24
							123.0		
123			123.0	124.0	NX	RUN 2	124.0	Whitish-Greyish Red SANDSTONE 3" or 27% Recovery 1 Piece (3") - 0% Chips and Fragments 0 Pieces longer than 4" (0") - RQD = 0%	3
124			124.0	125.0	NX	RUN 3	125.0		6
125			125.0	130.0	NX	RUN 4			60
								Whitish-Greyish Red SANDSTONE 6" or 50% Recovery 1 Piece (1") - 83% Chips and Fragments 0 Pieces longer than 4" (0") - RQD = 0%	
							130.0	Whitish-Greyish Red SANDSTONE 60" or 100% Recovery 15 Pieces (25") - 58% Chips and Fragments 0 Pieces longer than 4" (0") - RQD = 0%	
								Boring terminated at 130.0 feet.	
								Notes: 1. Borehole backfilled with on-site soils.	

ATL-LOG1 NE CD4973 STANTEC CONSULTING SERVICES, INC. - EVANS MILLS.GPJ ATL4-08.GDT 2/5/21

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Report No.: **CD4973D-01-02-21**

Client: **Stantec Consulting Services, Inc.**

Boring Location: **See Boring Location Plan**

Project: **Subsurface Investigation**
Culvert Replacement - Noble Street
Evans Mills, New York

Start Date: **12/18/2020** Finish Date: **12/18/2020**

Boring No.: **C-1** Sheet **1** of **1**

Groundwater Observations

Date	Time	Depth	Casing

Coordinates
Northing **1917556.166**
Easting **148241.723**

Sampler Hammer
Weight: **140** lbs.
Fall: **30** in.
Hammer Type: **Automatic**

Ground Elev.: **±407'**

Boring Advance By:
4" Thin Wall Core/3" Split Spoon

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL	Recovery (Inches)
			0.0	1.0		THIN WALL CORE	1.0	12" ASPHALT PAVEMENT	8.25
1	SPLIT SPOON	1	1.0	3.0	SS	48 24 18 10		Grey and Brown cmf SAND; some cmf GRAVEL; little SILT; trace CLAY (moist, very slightly plastic)	16
2							3.0		
3								Boring terminated at 3.0 feet.	
4									
5								Notes:	
6								1. Borehole backfilled with on-site soils and patched at the surface with asphalt cold patch.	
7								2. Sample S-1 was collected with a 3" split spoon sampler.	
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									

f - fine
m - medium
c - coarse
and - 35-50%
some - 20-35%
little - 10-20%
trace - 0-10%

SS Split Spoon Sample
NX Rock Core
SH Undisturbed Sample (Shelby Tube)
Estimated Groundwater

Drillers: **Jefferey Donovan, Hayden Bice**

Inspector:

ATL-LOG1 NE CD4973 STANTEC CONSULTING SERVICES, INC. - EVANS MILLS.GPJ ATL4-08.GDT 2/8/21

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Report No.: **CD4973D-01-02-21**

Client: **Stantec Consulting Services, Inc.**

Boring Location: **See Boring Location Plan**

Project: **Subsurface Investigation**
Culvert Replacement - Noble Street
Evans Mills, New York

Start Date: **12/18/2020** Finish Date: **12/18/2020**

Boring No.: **C-2** Sheet **1** of **1**

Groundwater Observations

Date	Time	Depth	Casing

Coordinates
Northing **1917597.014**
Easting **148061.45**

Sampler Hammer
Weight: **140** lbs.
Fall: **30** in.
Hammer Type: **Automatic**

Ground Elev.: **±408'**

Boring Advance By:
4" Thin Wall Core/3" Split Spoon

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL	Recovery (Inches)
			0.0	1.0		THIN WALL CORE	1.0	12" ASPHALT PAVEMENT	8.25
1	SPLIT SPOON	1	1.0	3.0	SS	20 18 19 12		Black cmf SAND; some mf GRAVEL; some SILT (moist, non-plastic)	12
2							3.0		
3								Boring terminated at 3.0 feet.	
4									
5								Notes:	
6								1. Borehole backfilled with on-site soils and patched at the surface with asphalt cold patch.	
7								2. Sample S-1 was collected with a 3" split spoon sampler.	
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									

f - fine, m - medium, c - coarse
and - 35-50%, some - 20-35%, little - 10-20%, trace - 0-10%

SS Split Spoon Sample
NX Rock Core
SH Undisturbed Sample (Shelby Tube)
Estimated Groundwater

Drillers: **Jefferey Donovan, Hayden Bice**

Inspector:

ATL-LOG1 NE CD4973 STANTEC CONSULTING SERVICES, INC. - EVANS MILLS.GPJ ATL4-08.GDT 2/8/21

ATLANTIC TESTING LABORATORIES, Limited

Subsurface Investigation

Report No.: **CD4973D-01-02-21**

Client: **Stantec Consulting Services, Inc.**

Boring Location: **See Boring Location Plan**

Project: **Subsurface Investigation**
Culvert Replacement - Noble Street
Evans Mills, New York

Start Date: **12/18/2020** Finish Date: **12/18/2020**

Boring No.: **C-3** Sheet **1** of **1**

Groundwater Observations

Date	Time	Depth	Casing

Coordinates
Northing **1917741.516**
Easting **148091.489**

Sampler Hammer
Weight: **140** lbs.
Fall: **30** in.
Hammer Type: **Automatic**

Ground Elev.: **±406'**

Boring Advance By:
4" Thin Wall Core/3" Split Spoon

DEPTH	METHOD OF ADVANCE	SAMPLE NO.	DEPTH OF SAMPLE From	DEPTH OF SAMPLE To	SAMPLE TYPE	BLOWS ON SAMPLER PER 6" 2" O.D. SAMPLER	DEPTH OF CHANGE	CLASSIFICATION OF MATERIAL	Recovery (Inches)
								f - fine; m - medium; c - coarse; and - 35-50%; some - 20-35%; little - 10-20%; trace - 0-10%	
1	SPLIT SPOON	1	0.0	0.5	SS	THIN WALL CORE	0.5	6" ASPHALT PAVEMENT	5.75
			0.5	2.5		22 16 19 14			14
2							2.5	Brown cmf SAND; and cmf GRAVEL; trace SILT (moist, non-plastic)	
3								Boring terminated at 2.5 feet.	
4								Notes:	
5								1. Borehole backfilled with on-site soils and patched at the surface with asphalt cold patch.	
6								2. Sample S-1 was collected with a 3" split spoon sampler.	
7									
8									
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SS Split Spoon Sample
NX Rock Core
SH Undisturbed Sample (Shelby Tube)
Estimated Groundwater

Drillers: **Jefferey Donovan, Hayden Bice**

Inspector:

ATL-LOG1 NE CD4973 STANTEC CONSULTING SERVICES, INC. - EVANS MILLS.GPJ ATL4-08.GDT 2/8/21

ATTACHMENT C

PHOTOGRAPHIC LOG OF PAVEMENT CORES

D040965

ATLANTIC TESTING LABORATORIES, LIMITED

Culvert Replacement – Noble Street

Evans Mills, Jefferson County, New York

ATL Report No. CD4973D-01-02-21

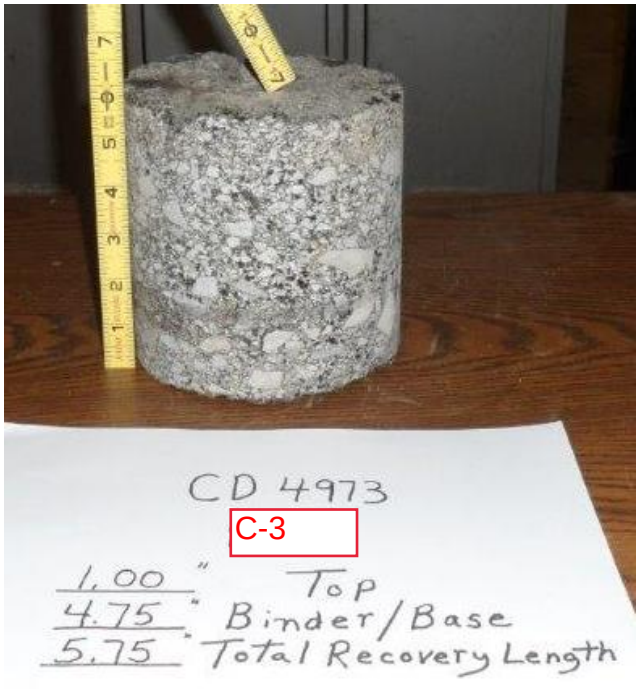
Stantec

PAVEMENT CORE PHOTOGRAPHIC LOG

Boring No.	Photograph
C-1	
C-2	

ATLANTIC TESTING LABORATORIES, LIMITED
Culvert Replacement – Noble Street
Evans Mills, Jefferson County, New York
ATL Report No. CD4973D-01-02-21
Stantec

PAVEMENT CORE PHOTOGRAPHIC LOG

Boring No.	Photograph
C-3	

ATTACHMENT D

LABORATORY TEST RESULTS

ATLANTIC TESTING LABORATORIES

WBE certified company

LABORATORY DETERMINATION OF MOISTURE CONTENT OF SOILS
ASTM D 2216

PROJECT INFORMATION

Client:	Stantec	**ATL Report No.:**	CD4973E-01-02-21
Project:	Culvert Replacement - Noble Street Evans Mills, New York	**Report Date:**	February 4, 2021
		Date Received:	January 28, 2021

TEST DATA

Boring No.	Sample No.	Depth (ft)	Moisture Content (%)
B-1	S-1	0.0-2.0	50.3
	S-2 [1]	2.0-4.0	31.4
	S-3 [1]	4.0-6.0	32.5
	S-4	6.0-8.0	24.5
	S-5	8.0-10.0	23.5
	S-6 [1]	10.0-12.0	26.5
	S-8	14.0-16.0	24.7
	S-9 [1]	16.0-18.0	49.5
	S-10	18.0-20.0	52.4
	S-11	24.0-26.0	57.2
	S-12	29.0-31.0	49.6
	S-13	34.0-36.0	47.0
	S-14	39.0-41.0	49.1
	S-15	44.0-46.0	49.3
	S-16	49.0-51.0	40.4
	S-17	54.0-56.0	37.0
	S-18	59.0-61.0	40.0
	S-19	64.0-66.0	41.9
	S-20	69.0-71.0	37.4
	S-21	74.0-76.0	31.7
	S-22	79.0-81.0	32.6
	S-23	84.0-86.0	25.6
	S-24	89.0-91.0	29.2
	S-25	94.0-96.0	28.9
	S-26	99.0-101.0	48.0
	S-28 [1]	109.0-111.0	7.5
	S-29 [1]	114.0-114.2	2.9

TEST DATA (continued)

Boring No.	Sample No.	Depth (ft)	Moisture Content (%)
B-2	S-1 [1]	0.0-2.0	15.2
	S-2	2.0-4.0	31.5
	S-3	4.0-6.0	34.8
	S-4	6.0-8.0	56.9
	S-5 [1]	8.0-10.0	21.8
	S-6	10.0-12.0	36.4
	S-7	12.0-14.0	18.5
	S-8	14.0-16.0	21.6
	S-9	16.0-18.0	23.0
	S-10	18.0-20.0	38.7
	S-11	24.0-26.0	39.2
	S-12	29.0-31.0	42.0
	S-13	34.0-36.0	53.1
	S-14	39.0-41.0	44.1
	S-15	44.0-46.0	41.9
	S-16	49.0-51.0	45.1
	S-17	54.0-56.0	46.2
	S-18	59.0-61.0	40.5
	S-19	64.0-66.0	45.8
	S-20	69.0-71.0	31.8
	S-21	74.0-76.0	33.9
	S-22	79.0-81.0	30.4
	S-23	84.0-86.0	30.0
	S-24	89.0-91.0	29.4
	S-25	94.0-96.0	28.0
	S-26	99.0-101.0	40.7
	S-27	104.0-106.0	32.1
	S-28	109.0-111.0	38.1

REMARKS

1. Sample mass was less than the minimum mass outlined in the referenced test method.

Reviewed By: Judy Jones Date: 02/04/21

D040965

ATLANTIC TESTING LABORATORIES

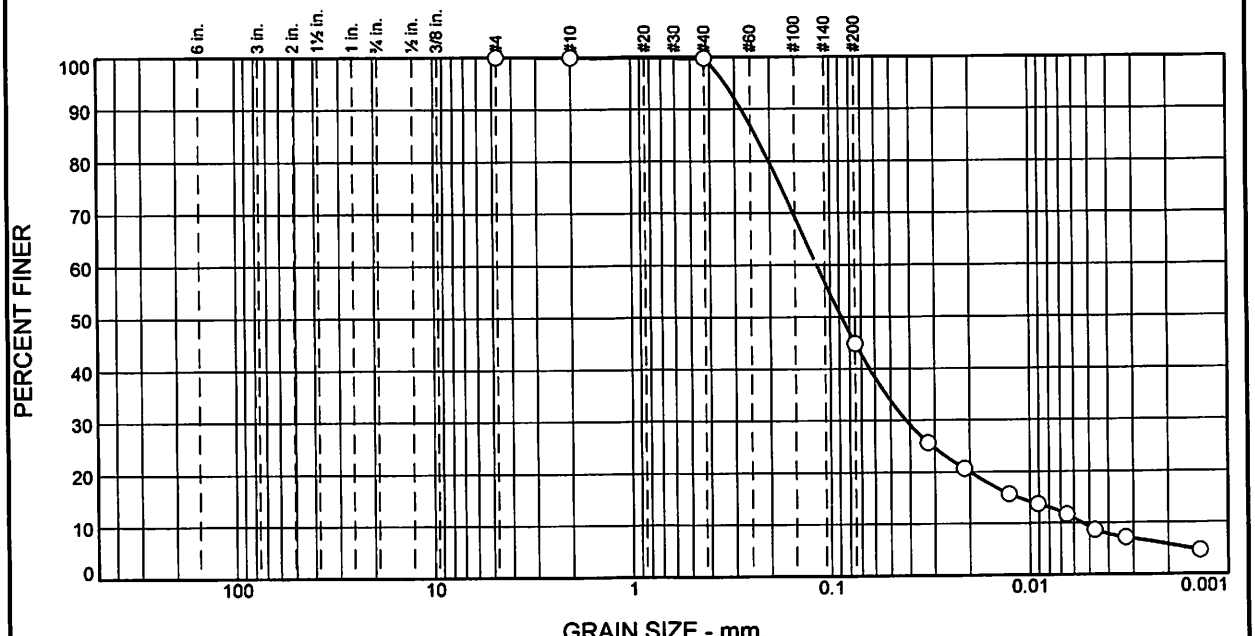
Particle Size Distribution Report

Project: Culvert Replacement - Noble Street, Evans Mill, NY **Report No.:** CD4973E-01-02-21

Client: Stantec **Date:** 02/04/21

Sample No: B-1, S-6 **Source of Sample:** Boring Sample

Location: In-place **Elev./Depth:** 10.0-12.0'



% Cobbles	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	0	0	0	0	55	36	9

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	OUT OF SPEC. (X)
#4	100		
#10	100		
#40	100		
#200	45		

* (no specification provided)

Soil Description

Brown f SAND; and SILT; trace CLAY

Atterberg Limits

PL= -- LL= -- PI= --

Coefficients

D_{85}= 0.2353 D_{60}= 0.1165 D_{50}= 0.0878
D_{30}= 0.0418 D_{15}= 0.0115 D_{10}= 0.0055
C_u= 21.36 C_c= 2.75

Classification

USCS= AASHTO=

Remarks

Moisture Content= 26.5%

Figure

ATLANTIC TESTING LABORATORIES, LIMITED

Reviewed by: Judd Ames Date: 02/04/21

D040965

ATLANTIC TESTING LABORATORIES

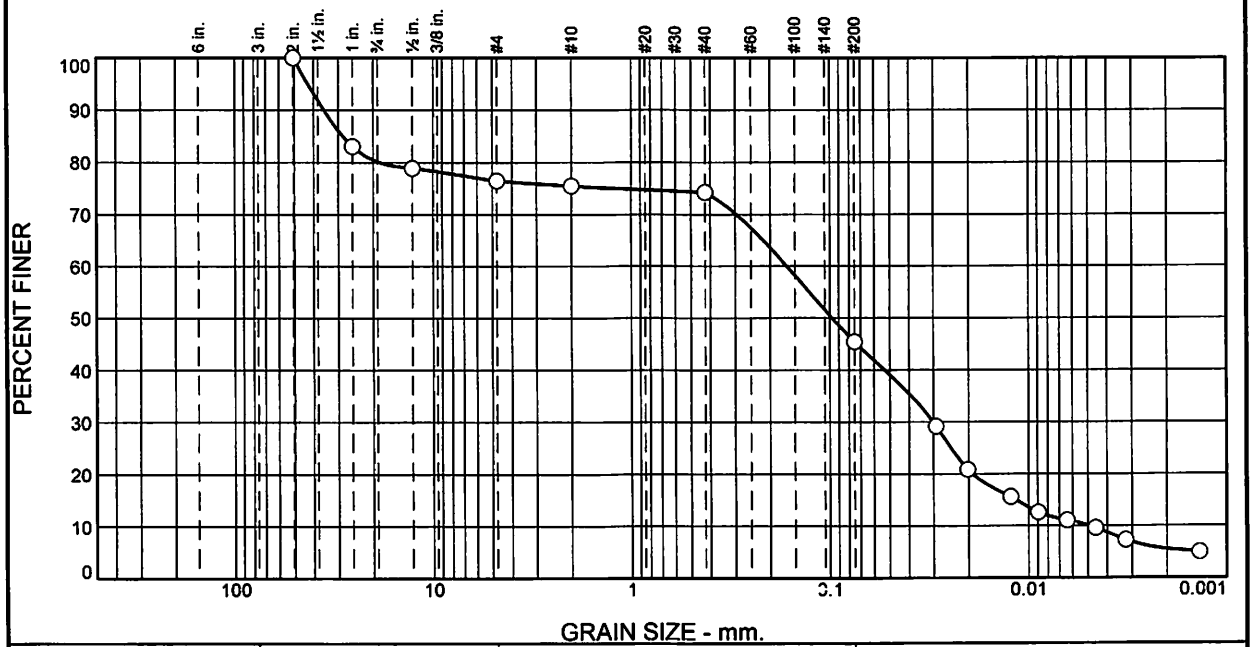
Particle Size Distribution Report

Project: Culvert Replacement - Noble Street, Evans Mill, NY **Report No.:** CD4973E-01-02-21

Client: Stantec **Date:** 02/04/21

Sample No: B-2, S-7 **Source of Sample:** Boring Sample

Location: In-place **Elev./Depth:** 12.0-14.0'



% Cobbles	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0	20	4	1	1	29	35	10

SIEVE SIZE	PERCENT FINER	SPEC.* PERCENT	OUT OF SPEC. (X)
2"	100		
1"	83		
1/2"	79		
#4	76		
#10	75		
#40	74		
#200	45		

* (no specification provided)

Soil Description

Brownish Grey SILT; some cmf+ SAND; some c+mf GRAVEL; trace CLAY

Atterberg Limits

PL= -- LL= -- PI= --

Coefficients

D_{85}= 28.4582 D_{60}= 0.1646 D_{50}= 0.0974
D_{30}= 0.0303 D_{15}= 0.0116 D_{10}= 0.0050
C_u= 33.12 C_c= 1.12

Classification

USCS= AASHTO=

Remarks

Moisture Content= 18.5%

Figure

ATLANTIC TESTING LABORATORIES, LIMITED

Reviewed by: Judy Jones Date: 02/04/21

ATLANTIC TESTING LABORATORIES

WBE certified company

LIQUID LIMIT, PLASTIC LIMIT, AND PLASTICITY INDEX OF SOIL
ASTM D 4318

PROJECT INFORMATION

Client: Stantec
Project: Culvert Replacement - Noble Street
Evans Mills, New York

ATL Report No.: CD4973E-01-02-21
Report Date: February 4, 2021
Date Received: January 28, 2021

TEST DATA

Boring No.	Sample No.	LL	PL	PI
B-1	S-9	62	36	26
B-2	S-25	29	21	8

SAMPLE INFORMATION

Boring No.	Sample No.	Maximum Grain Size (mm)	Estimated Amount of Sample Retained on No. 40 Sieve (%)	As Received Moisture Content (%)
B-1	S-9	0.297	0	49.5
B-2	S-25	4.76	2	28.0

PREPARATION INFORMATION

Boring No.	Sample No.	Preparation	Method of Removing Oversized Material
B-1	S-9	Air Dry	Not Necessary
B-2	S-25	Air Dry	Pulverizing and Screening

EQUIPMENT INFORMATION

Liquid Limit Procedure:	Multipoint - Method A	X	Single Point - Method B	
Liquid Limit Apparatus:	Manual	X	Motor Driven	
Liquid Limit Grooving Tool Material:	Plastic	X	Metal	
Liquid Limit Grooving Tool Shape:	Flat	X	Curved (AASHTO Only)	
Plastic Limit:	Hand Rolled	X	Mechanical Rolling Device	

Reviewed By: Judy Jones Date: 02/04/21

ATLANTIC TESTING LABORATORIES

WBE certified company

PROJECT INFORMATION

Client: Stantec
Project: Culvert Replacement - Noble Street
Evans Mills, New York

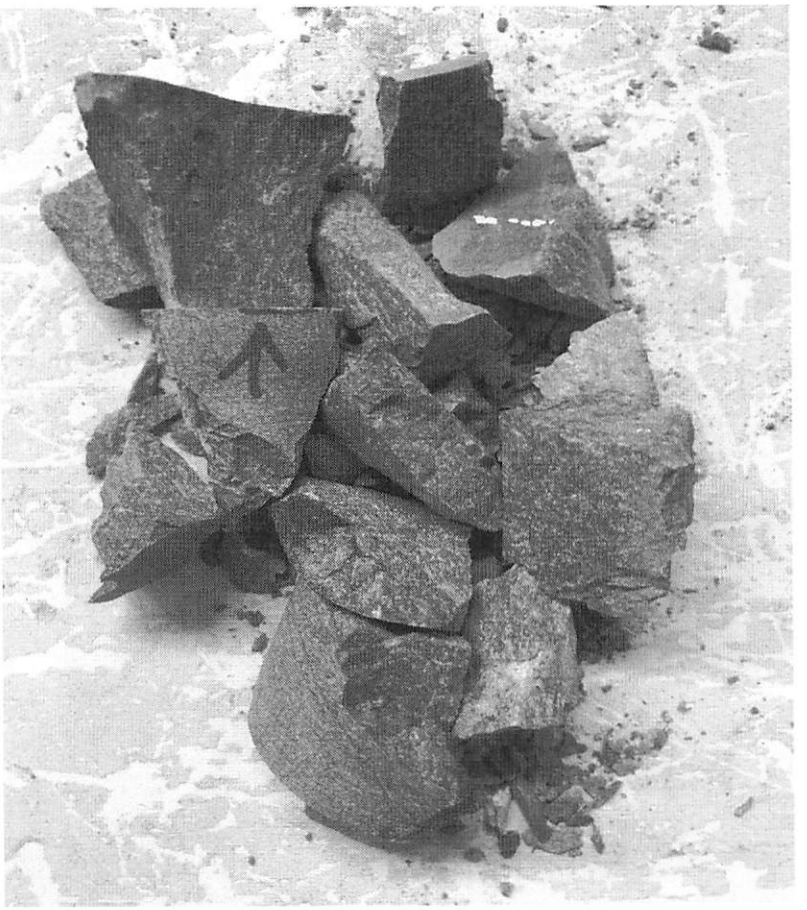
ATL Report No.: CD4973E-01-02-21
Report Date: February 4, 2021
Date Received: January 28, 2021

UNCONFINED COMPRESSIVE STRENGTH OF INTACT ROCK CORE SPECIMENS
ASTM D 7012, Method C

Boring No.	Run No.	Depth (ft)	Calculated Density (pcf)	Diameter (in)	Length (in)	Load Rate (lbs/sec)	Total Load (lbs)	Area (in^2)	Compressive Strength (psi)
B-2	R-1	118.2-118.5	162.3	1.97	4.13	220	159,650	3.05	52,360

Failure Picture

B-2, R-1



Reviewed By: Judy Ames

Date: 02/04/21

NYSDEC PERMIT

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JUNE 1, 2023

JEFFERSON COUNTY
175 ARSENAL STREET
WATERTOWN, NY 13601

RE: DEC PERMIT #6-2240-00115/00005

Dear Permittee:

Enclosed is your permit for construction. It is essential that you give particular attention to the **Notice/Permit Sign** enclosed with your permit and to the **Conditions**. The attached plans are also a part of the permit. You must print the Notice/Permit Sign, post it in a conspicuous location, and protect it from the elements during work on your project.

You may require authorization from the U.S. Army Corps of Engineers. You can reach them at the Buffalo District, 1776 Niagara Street, Buffalo, New York 14207, phone (716) 879-4330. You are also responsible for obtaining any other federal, state, or local authorizations required for this project.

This electronic copy of the permit will be the only copy you will receive. We will not mail a hard copy you. If you have any questions regarding your permit, please contact Molly Farrell by email at molly.farrell@dec.ny.gov.

Sincerely,

Donna Iloff

Donna Iloff
Program Aide
Region 6
Enclosures

ec: Andy Smith (w/attachment)
Kyle Alberts (w/attachment)
Shannon Azzarelli (w/attachment)
Chris Balk (w/attachment)
Steve Sliwinski (w/attachment)
Law Enforcement (w/attachment)

D040965

New York State

Department of Environmental Conservation

NOTICE

The Department of Environmental Conservation (DEC) has issued permit(s) pursuant to the Environmental Conservation Law for work being conducted at this site. For further information regarding the nature and extent of the work approved and any Departmental conditions on it contact the Regional Permit Administrator shown below. Please refer to the permit number shown when contacting the DEC.

Permit Number 6-2240-00115/00005

Regional Permit Administrator

Permit Expiration Date 5/30/2026

Note: This is not a Permit

PERMIT
Under the Environmental Conservation Law (ECL)

Permittee and Facility Information

Permit Issued To:
JEFFERSON COUNTY
175 ARSENAL ST
WATERTOWN, NY 13601
(315) 785-3075

Facility:
NOBLE ST BRIDGE OVER WEST CK
NOBLE ST|SE OF CO RTE 16 & FACTORY ST
EVANS MILLS, NY 13637

Facility Permit Contact:
JEFFERSON COUNTY HIGHWAY DEPT
21897 CO RTE 190
WATERTOWN, NY 13601
(315) 782-9174

Facility Location: in LE RAY in JEFFERSON COUNTY **Village:** Evans Mills
Facility Principal Reference Point: NYTM-E: 435.216 NYTM-N: 4882.077
Latitude: 44°05'20.4" Longitude: 75°48'33.3"
Project Location: Noble Street over West Creek
Authorized Activity: Replace an existing, structurally deficient culvert in West Creek (a Class D stream) with a pre-cast concrete bridge that will be 36' wide, 78' long, and 9' high. A total of 2032 cubic yards of fill will be removed from the stream and 2039 cubic yards of fill will be placed below Ordinary High Water in West Creek during the construction of the bridge.

Permit Authorizations

Excavation & Fill in Navigable Waters - Under Article 15, Title 5
Permit ID 6-2240-00115/00005
New Permit Effective Date: 5/31/2023 Expiration Date: 5/30/2026

NYSDEC Approval

By acceptance of this permit, the permittee agrees that the permit is contingent upon strict compliance with the ECL, all applicable regulations, and all conditions included as part of this permit.

Permit Administrator: JESSICA J HART, Deputy Regional Permit Administrator
Address: NYSDEC Region 6 Headquarters
State Office Building - 317 Washington St
Watertown, NY 13601

Authorized Signature: _____ Date 06 / 01 / 23

Distribution List

JEFFERSON COUNTY HIGHWAY DEPT
Law Enforcement
Bureau of Ecosystem Health
Shannon Azzarelli (USACE)

Permit Components

NATURAL RESOURCE PERMIT CONDITIONS

GENERAL CONDITIONS, APPLY TO ALL AUTHORIZED PERMITS

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

Permit Attachments

Permit Sign

NATURAL RESOURCE PERMIT CONDITIONS - Apply to the Following Permits: EXCAVATION & FILL IN NAVIGABLE WATERS

1. **Notice to Commence Work** Notify our office at least 72 hours before starting your proejct. Include the DEC Identification Number, the permitee's name, project start date, and the address for the project site in an email to dec.sm.region6BEH@dec.ny.gov. If you don't have access to email, please call (315) 785-2263.

2. **Post Permit Sign** The permit sign enclosed with this permit shall be posted in a conspicuous location on the worksite and adequately protected from the weather.

3. **Conformance With Plans** All activities authorized by this permit must be in strict conformance with the approved plans submitted by the applicant or applicant's agent as part of the permit application. Such approved plans were prepared by Stantec Consulting Services Inc and submitted March 27, 2023.

4. **Invasive Species (Non-Native Vegetation)** To prevent the unintentional introduction or spread of invasive species, the permittee must ensure that all construction equipment be cleaned of mud, seeds, vegetation and other debris before entering any approved construction areas within the project site.

5. **Silt Screen** If turbidity may be created as a result of this project, a silt screen curtain (maximum opening of U.S. Sieve No. 70) continually weighted across the bottom and suspended on floats or staked upright must be positioned to surround the work site. The curtain must remain in place for at least 12 hours after completion of the project or longer, if necessary.

6. **Maintain Water Flow During Work** During periods of work activity, flow immediately downstream of the work site shall equal flow immediately upstream of the work site.

7. **No Equipment in the Water** Heavy equipment operation in the water is prohibited. With backhoes and similar heavy equipment, the bucket may enter the water.

8. **Materials Disposed at Upland Site** Any demolition debris, excess construction materials, and/or excess excavated materials shall be immediately and completely disposed of on an approved upland site more than 100 feet from any regulated freshwater wetland. These materials shall be suitably stabilized so as not to re-enter any water body, wetland, or wetland adjacent area.

9. **Installation of Riprap** The stone riprap, revetment installation, shall be placed on a layer of filter material such as gravel, small rock and/or woven filter cloth to provide positive drainage and better stability.

10. **Concrete Leachate** During construction, no wet or fresh concrete or leachate shall be allowed to escape into any wetlands or waters of New York State, nor shall washings from ready-mixed concrete trucks, mixers, or other devices be allowed to enter any wetland or waters. Only watertight or waterproof forms shall be used. Wet concrete shall not be poured to displace water within the forms.

11. **Minimize Bed/Bank Disturbance** Disturbance to the bed and banks of West Creek shall be kept to the minimum necessary to complete the project.

12. **Stabilize Disturbed Areas** All areas of soil disturbance resulting from this project shall be stabilized immediately following project completion or prior to permit expiration, whichever comes first. The approved methodologies are as follows:

    a. Stabilization of the entire disturbed area with appropriate vegetation (grasses, etc.).

    b. Stabilized as per specifications identified on approved plans.

    c. Temporarily stabilized with straw mulch or jute matting or other similar natural fiber matting within 1 week of final grading. Temporary stabilization shall be maintained until a mature vegetative cover is established.

13. **Water Clarity** Stream reaches downstream of construction areas shall always remain as clear (non-turbid) as the reaches upstream of the construction areas.

14. **Precautions Against Contamination of Waters** All necessary precautions shall be taken to preclude contamination of any wetland or waterway by suspended solids, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate or any other environmentally deleterious materials associated with the project.

15. **No Interference With Navigation** There shall be no unreasonable interference with navigation by the work herein authorized.

16. State Not Liable for Damage The State of New York shall in no case be liable for any damage or injury to the structure or work herein authorized which may be caused by or result from future operations undertaken by the State for the conservation or improvement of navigation, or for other purposes, and no claim or right to compensation shall accrue from any such damage.

17. State May Require Site Restoration If upon the expiration or revocation of this permit, the project hereby authorized has not been completed, the applicant shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may lawfully require, remove all or any portion of the uncompleted structure or fill and restore the site to its former condition. No claim shall be made against the State of New York on account of any such removal or alteration.

18. State May Order Removal or Alteration of Work If future operations by the State of New York require an alteration in the position of the structure or work herein authorized, or if, in the opinion of the Department of Environmental Conservation it shall cause unreasonable obstruction to the free navigation of said waters or flood flows or endanger the health, safety or welfare of the people of the State, or cause loss or destruction of the natural resources of the State, the owner may be ordered by the Department to remove or alter the structural work, obstructions, or hazards caused thereby without expense to the State, and if, upon the expiration or revocation of this permit, the structure, fill, excavation, or other modification of the watercourse hereby authorized shall not be completed, the owners, shall, without expense to the State, and to such extent and in such time and manner as the Department of Environmental Conservation may require, remove all or any portion of the uncompleted structure or fill and restore to its former condition the navigable and flood capacity of the watercourse. No claim shall be made against the State of New York on account of any such removal or alteration.

GENERAL CONDITIONS - Apply to ALL Authorized Permits:

1. Facility Inspection by The Department The permitted site or facility, including relevant records, is subject to inspection at reasonable hours and intervals by an authorized representative of the Department of Environmental Conservation (the Department) to determine whether the permittee is complying with this permit and the ECL. Such representative may order the work suspended pursuant to ECL 71- 0301 and SAPA 401(3).

The permittee shall provide a person to accompany the Department's representative during an inspection to the permit area when requested by the Department.

A copy of this permit, including all referenced maps, drawings and special conditions, must be available for inspection by the Department at all times at the project site or facility. Failure to produce a copy of the permit upon request by a Department representative is a violation of this permit.

2. Relationship of this Permit to Other Department Orders and Determinations Unless expressly provided for by the Department, issuance of this permit does not modify, supersede or rescind any order or determination previously issued by the Department or any of the terms, conditions or requirements contained in such order or determination.

3. **Applications For Permit Renewals, Modifications or Transfers** The permittee must submit a separate written application to the Department for permit renewal, modification or transfer of this permit. Such application must include any forms or supplemental information the Department requires. Any renewal, modification or transfer granted by the Department must be in writing. Submission of applications for permit renewal, modification or transfer are to be submitted to:

Regional Permit Administrator
NYSDEC Region 6 Headquarters
State Office Building - 317 Washington St
Watertown, NY13601

4. **Submission of Renewal Application** The permittee must submit a renewal application at least 30 days before permit expiration for the following permit authorizations: Excavation & Fill in Navigable Waters.

5. **Permit Modifications, Suspensions and Revocations by the Department** The Department reserves the right to exercise all available authority to modify, suspend or revoke this permit. The grounds for modification, suspension or revocation include:

a. materially false or inaccurate statements in the permit application or supporting papers;

b. failure by the permittee to comply with any terms or conditions of the permit;

c. exceeding the scope of the project as described in the permit application;

d. newly discovered material information or a material change in environmental conditions, relevant technology or applicable law or regulations since the issuance of the existing permit;

e. noncompliance with previously issued permit conditions, orders of the commissioner, any provisions of the Environmental Conservation Law or regulations of the Department related to the permitted activity.

6. **Permit Transfer** Permits are transferrable unless specifically prohibited by statute, regulation or another permit condition. Applications for permit transfer should be submitted prior to actual transfer of ownership.

NOTIFICATION OF OTHER PERMITTEE OBLIGATIONS

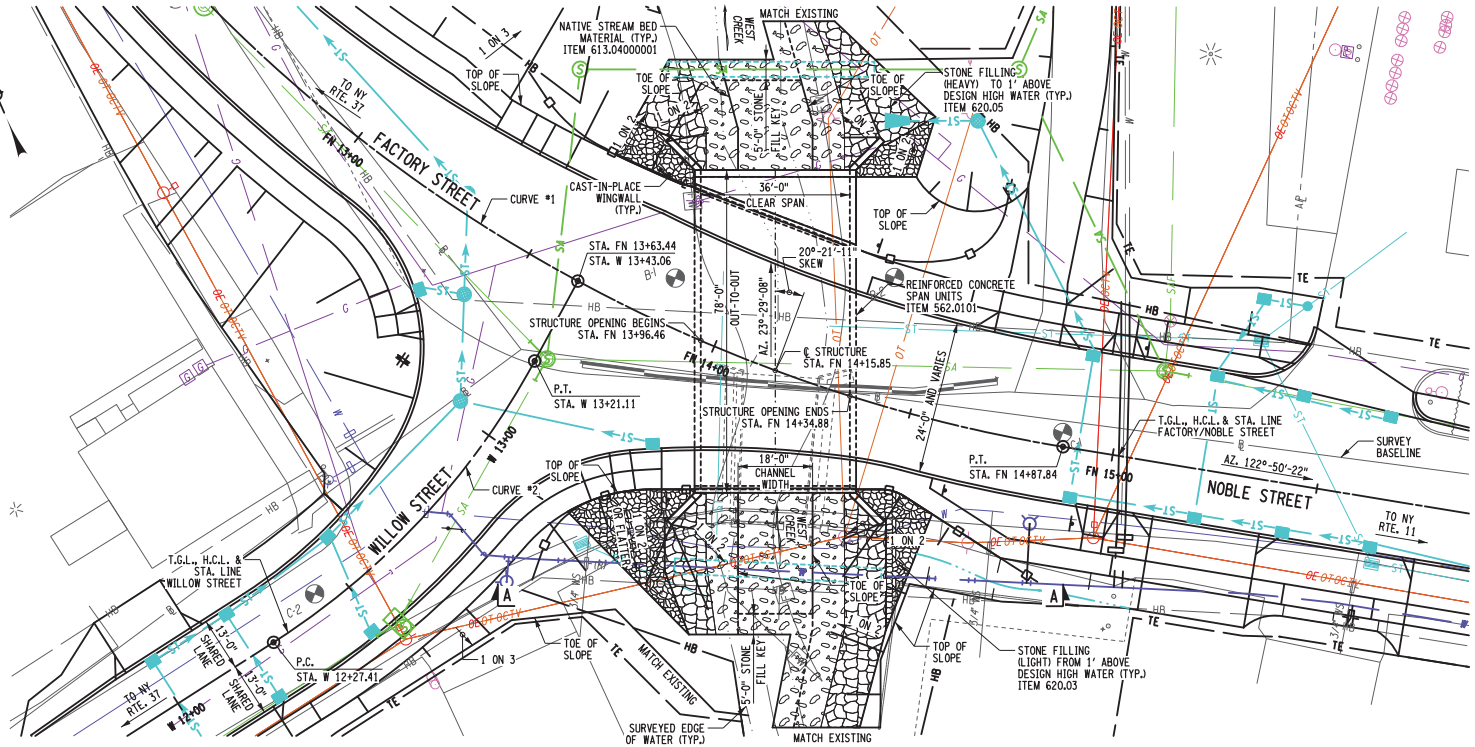
Item A: Permittee Accepts Legal Responsibility and Agrees to Indemnification
The permittee, excepting state or federal agencies, expressly agrees to indemnify and hold harmless the Department of Environmental Conservation of the State of New York, its representatives, employees, and agents ("DEC") for all claims, suits, actions, and damages, to the extent attributable to the permittee's acts or omissions in connection with the permittee's undertaking of activities in connection with, or operation and maintenance of, the facility or facilities authorized by the permit whether in compliance or not in compliance with the terms and conditions of the permit. This indemnification does not extend to any claims, suits, actions, or damages to the extent attributable to DEC's own negligent or

intentional acts or omissions, or to any claims, suits, or actions naming the DEC and arising under Article 78 of the New York Civil Practice Laws and Rules or any citizen suit or civil rights provision under federal or state laws.

Item B: Permittee's Contractors to Comply with Permit
The permittee is responsible for informing its independent contractors, employees, agents and assigns of their responsibility to comply with this permit, including all special conditions while acting as the permittee's agent with respect to the permitted activities, and such persons shall be subject to the same sanctions for violations of the Environmental Conservation Law as those prescribed for the permittee.

Item C: Permittee Responsible for Obtaining Other Required Permits
The permittee is responsible for obtaining any other permits, approvals, lands, easements and rights-of-way that may be required to carry out the activities that are authorized by this permit.

Item D: No Right to Trespass or Interfere with Riparian Rights
This permit does not convey to the permittee any right to trespass upon the lands or interfere with the riparian rights of others in order to perform the permitted work nor does it authorize the impairment of any rights, title, or interest in real or personal property held or vested in a person not a party to the permit.



PLAN

HYDRAULIC DATA			
DRAINAGE AREA 10 SQ. MILES		BASIC FLOOD ✱	DESIGN FLOOD ✱
RECURRENCY INTERVAL (YEARS)		100	50
PEAK DISCHARGE (FT.³/S)		1200	1044
HIGH WATER ELEVATION AT POINT OF MAX. BACKWATER	EXISTING	408.38	408.36
	PROPOSED	406.06	405.75
AVG. VELOCITY THRU STRUCT. @ DESIGN FLOOD		4.88 FT./SEC.	

SCOUR ANALYSIS:	MINIMUM CHANNEL EL. 398.00 FT.			
	Q100 SCOUR DEPTH (FT)	Q100 SCOUR ELEV. (FT)	Q500 SCOUR DEPTH (FT)	Q500 SCOUR ELEV. (FT)
BEGIN ABUTMENT	12.75	385.25	23.44	374.56
END ABUTMENT	12.75	385.25	23.44	374.56
SCOUR DEPTH IS MEASURED FROM MINIMUM CHANNEL ELEVATION				

✱ DESIGN AND BASIC FLOOD DATA ARE BASED ON THE PROJECTED Q50 AND Q100 (20% INCREASE IN FLOWS)

THE PROPOSED STRUCTURE SHALL PROVIDE AT THE UPSTREAM FASCIA, A MINIMUM HYDRAULIC AREA (MEASURED PERPENDICULAR TO THE FLOW) OF 218 SQ. FT. BELOW THE DESIGN HIGH WATER ELEVATION OF 405.75. THE MINIMUM CLEAR SPAN SHALL BE 36 FT. PERPENDICULAR TO FLOW. A CLEAR SPAN EXCEEDING THIS BY MORE THAN 10% SHALL REQUIRE THE CONCURRENCE OF THE REGIONAL HYDRAULICS ENGINEER OR THE OFFICE OF STRUCTURES' HYDRAULIC ENGINEERING UNIT.

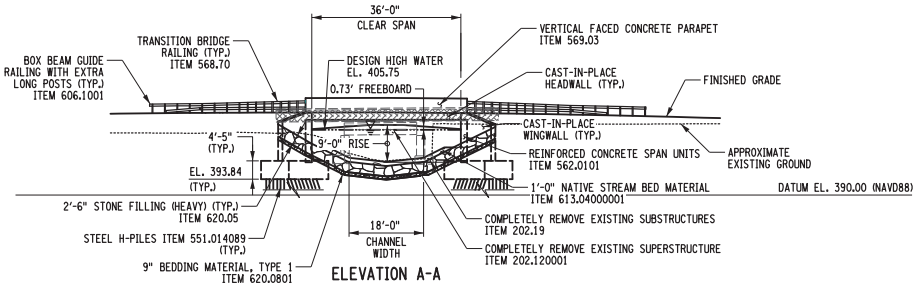
THREE SIDED STRUCTURE DESIGN DATA	
CLEAR SPAN, ft.	36'-0"
FRAME RISE, ft.	9'-0"
✱ MIN. FILL HEIGHT, ft.	1.16'
✱ MAX. FILL HEIGHT, ft.	1.78'
(CSKEW) SKEW ANGLE TO ℄ OF ROADWAY, DEG.	20°-21'-11"
LIVE LOAD	HL93
RAILING/ BARRIER TEST LOAD	TL-2

✱ BASED ON ASSUMED TOP SLAB THICKNESS OF 1'-3". FABRICATOR SHALL ADJUST BASED ON ACTUAL TOP SLAB THICKNESS. MEASURED FROM THE TOP OF THE TOP SLAB TO THE TOP OF THE PAVEMENT.

D040965

CURVE #1
P.C. = STA. FN 11+41.76
P.I. = STA. FN 13+28.23
P.T. = STA. FN 14+87.84
R = 375.00'
L = 346.08'
Δ = 52°-52'-37" LT.
T = 186.47'

CURVE #2
P.C. = STA. W 12+27.41
P.I. = STA. W 12+75.29
P.T. = STA. W 13+21.11
R = 185.00'
L = 93.70'
Δ = 29°-01'-11" LT.
T = 47.88'



ELEVATION A-A

LOAD RATING (LFD)		
INVENTORY	HS	TONS
OPERATING	HS	TONS
LRFR RATING FACTORS		
INVENTORY	HL-93	1.2 MIN.
OPERATING	HL-93	

THE LOAD RATING TABLE SHALL BE FILLED IN BY THE EIC FROM INFORMATION RECEIVED FROM THE CONTRACTOR AFTER REVIEW AND APPROVAL BY THE ENGINEER. THE SUBMITTED LOAD RATING INFORMATION SHALL BE IN ACCORDANCE WITH THE AASHTO "MANUAL FOR BRIDGE EVALUATION" WITH ALL INTERIM PROVISIONS IN EFFECT. THE CONTRACTOR SHALL PROVIDE LOAD RATINGS IN BOTH THE LOAD FACTOR RATING (LFD) AND THE LOAD AND RESISTANCE FACTOR RATING (LRFR) METHOD. THE CONTRACTOR SHALL ALSO PROVIDE ALL LOAD RATING COMPUTATIONS TO THE ENGINEER, STAMPED BY A NEW YORK STATE PROFESSIONAL ENGINEER.

0 10 20 30

AFFIX SEAL:	ALTERED BY:
ON:	ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NOBLE STREET OVER WEST CREEK
VILLAGE OF EVANS MILLS
COUNTY: JEFFERSON REGION: 7

PIN 7753.77
BRIDGES BIN 3371810
CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

GENERAL PLAN AND ELEVATION

CONTRACT NUMBER D036474
DRAWING NO. ST-1
SHEET NO. 40

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

JEFFERSON COUNTY HIGHWAY DEPARTMENT

Stantec

DESIGN SUPERVISOR E. HILLIARD | JOB MANAGER T. BUTLER | DESIGN S. ROMEISER K. ALBERTS | CHECK S. MILLER C. CARTER | DRAFTING S. ROMEISER K. ALBERTS | CHECK T. BUTLER | PROJECT MANAGER T. BUTLER

FILE NAME = U:\1938800186\Transportation\Design - Bridge\Drawing\Plan Set\ST-1 General Plan and Elevation.dgn
DATE/TIME = 11/17/2022 10:27:58 AM
USER = kalbert

WORK ZONE TRAFFIC CONTROL GENERAL NOTES:

SEE NYSDOT STANDARD SHEET 619-10 FOR WORK ZONE TRAFFIC CONTROL GENERAL NOTES, SUPPLEMENTED BY THE FOLLOWING:

GENERAL NOTES:

1. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE, ERECT, AND MAINTAIN NECESSARY TEMPORARY TRAFFIC CONTROL DEVICES, DELINEATOR, SIGNS, AND BARRICADES IN ACCORDANCE WITH THE 2009 EDITION OF THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", THE NEW YORK STATE SUPPLEMENT TO THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", SECTION 619 OF THE NYSDOT STANDARD SPECIFICATIONS AND NYSDOT 619 STANDARD SHEETS.
2. THE WORK ZONE TRAFFIC CONTROL SCHEMES SHOWN IN THESE PLANS DESCRIBE THE RECOMMENDED METHODS AND CONTROL DEVICES NECESSARY. THE ENGINEER MAY ORDER ADDITIONAL DEVICES AND/OR METHODS TO MEET FIELD CONDITIONS.
3. THE CONTRACTOR SHALL TAKE EVERY PRECAUTION TO AVOID DAMAGING EXISTING PAVEMENT, CURBS AND SIDEWALKS WHEN IT IS NECESSARY TO MOVE EQUIPMENT THROUGH LOCAL STREETS. THE CONTRACTOR SHALL OBSERVE ALL OF THE RULES AND REGULATIONS, AND DIRECTIONS OF THE LOCAL MUNICIPALITIES RELATIVE TO SUCH HANDLING OF EQUIPMENT, AND TAKE SUCH PROTECTIVE MEASURES AS HE DEEMS NECESSARY OR A.O.B.E.. LOCAL STREET PAVEMENTS, CURBS, VEGETATION, SIDEWALKS, AND OTHER APPURTENANCES LOCATED WITHIN THE CONTRACT LIMITS THAT ARE NOT SCHEDULED TO BE REPLACED, AND ARE DAMAGED BY THE CONTRACTOR, SHALL BE RESTORED, REPLACED OR REPAIRED (TO THE SATISFACTION OF THE ENGINEER) AT HIS SOLE COST AND EXPENSE.
4. ALL DROP OFFS SHALL BE PROTECTED AS OUTLINED IN SECTION 619 OF THE STANDARD SPECIFICATIONS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS CONSTRUCTION OPERATIONS SO AS TO BE IN CONFORMANCE WITH THE TRAFFIC CONTROL PLANS, AND WITH THAT OF THE AFFECTED UTILITY COMPANIES.
6. IN ORDER TO MAINTAIN EFFECTIVE TRAFFIC CONTROL, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING SURE ALL SIGNS, CONES, DRUMS, BARRICADES, ETC. ARE IN PLACE AND IN GOOD CONDITION PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. THE SOLE JUDGE OF THE EFFECTIVENESS OF THE CONTRACTOR'S EFFORTS TOWARD PROTECTION OF TRAFFIC AND PERSONNEL SHALL BE THE ENGINEER IN CHARGE.
7. PLACEMENT OF HMA BASE AND BINDER COURSES SHALL OCCUR WITHIN TWO (2) WEEKS OF THE START OF THE BOX-OUT OPERATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONDITION OF THE SUBBASE/SUBGRADE. THE CONTRACTOR IS REMINDED THAT HE MAY NEED TO REGRADE, ADD TO, AND/OR RECOMPACT THE SUBBASE COURSE PRIOR TO PLACEMENT OF THE NEW ASPHALT BASE COURSE. COST OF THIS EFFORT TO BE INCLUDED IN BID PRICE FOR ASPHALT ITEMS. IF THE PAVEMENT BASE COURSE IS NOT IN PLACE WITHIN (2) WEEKS, NECESSARY REPAIRS SHALL BE MADE AT NO COST TO THE PROJECT.
8. PROGRESS WITH THE INSTALLATION OF PERMANENT SIGNING AND PAVEMENT MARKINGS AS APPROPRIATE. ALL SIGNS AND MARKINGS MUST BE IN PLACE BEFORE THE OPENING OF ANY PORTIONS OF THE PROJECT. TO ACCOMMODATE FINAL AND/OR DETOUR PATTERNS, CARE MUST BE TAKEN TO ENSURE THAT FINAL SIGNING AND PAVEMENT MARKINGS WILL NOT BE CONTRADICTORY TO PROPOSED OPERATIONS DURING ANY ONE PHASE. FINAL SIGNS IN PLACE BUT NOT IN USE FOR DIRECTING TRAFFIC SHALL BE COVERED.
9. DELINEATION DEVICES CONFORMING TO NYSDOT REQUIREMENTS SHALL BE SPACED AT A DISTANCE OF 30 FEET. THE CONTRACTOR SHALL REDUCE THE SPACING TO 15 FEET THROUGH ALL HORIZONTAL CURVES AND TAPERS WITHIN THE PROJECT. CLOSER SPACING MAY BE REQUIRED IN OTHER AREAS, A.O.B.E.

ACTIVITY AREA:

1. VEHICLES BELONGING TO OR USED BY THE CONTRACTOR OR WORKERS SHALL NOT BE PARKED ON THE PAVEMENT OR SHOULDERS ALONG A ROADWAY BEING USED BY THE GENERAL PUBLIC NOR ON ENVIRONMENTALLY SENSITIVE AREAS. THE CONTRACTOR SHALL NOT PARK EQUIPMENT OR STORE HIS MATERIALS WHERE IT IS DEEMED A HAZARD TO TRAFFIC BY THE ENGINEER.
2. CONSTRUCTION EQUIPMENT SHALL BE REMOVED FROM THE ROADSIDE AREA DURING ALL NON-WORKING HOURS. PROVIDE A 30 FOOT OFFSET FROM THE EDGE OF THE ROADWAY. THE CLEAR ZONE OFFSET MAY BE REDUCED WHERE EXISTING PAVEMENT OBSTRUCTIONS ARE CLOSER TO THE ROADWAY.
3. NO MATERIAL IS TO BE STORED WITHIN 30 FEET FROM THE EDGE OF PAVEMENT, EXCEPT THAT WHICH IS TO BE PLACED THAT DAY.
4. TO FACILITATE SAFE ACCESS, ADEQUATE SIGHT DISTANCE FOR CONSTRUCTION WORKERS, EQUIPMENT, AND SUPPLY/DELIVERY VEHICLES ENTERING OR DEPARTING THE WORKSITE MUST BE PROVIDED AT ALL TIMES.
5. WHEN THERE IS ANY INDICATION THAT WORKSITE ACCESS IS A SAFETY CONCERN, SPECIFIC PROVISIONS MAY BE NECESSARY TO ENSURE THAT SAFE ACCESS IS PROVIDED AND USED.
6. WHEN THE VISIBILITY OF THE TRAVELING PUBLIC IS RESTRICTED DUE TO WEATHER CONDITIONS AND/OR THE WORK OPERATIONS COMMENCE PRIOR TO DAWN OR CONTINUE BEYOND DUSK, FLASHING BEACONS AND STEADY BURNING LIGHTS SHALL BE PROVIDED BY THE CONTRACTOR AND PLACED AS DIRECTED BY THE ENGINEER. IF A FLAGGING OPERATION IS NECESSARY BEYOND DAYLIGHT HOURS, THE FLAGGERS AND WORK ZONE SHALL BE ILLUMINATED BY FLOODLIGHTS.

ACTIVITY AREA (CONTINUED):

7. THE CONTRACTOR SHALL SCHEDULE OPERATIONS SO THAT TRAFFIC WILL BE MAINTAINED ON A PAVED AND/OR GRAVEL SURFACE DURING NON WORKING HOURS OR A.O.B.E.
8. WHENEVER THE TRAFFIC IS LIMITED TO A ONE-WAY OPERATION, FLAGGERS SHALL BE UTILIZED. THE FLAGGERS WILL BE REQUIRED TO USE RADIO OR FIELD TELEPHONE CONTACT WHEN THEY ARE MAINTAINING ONE-WAY TRAFFIC AND ONE FLAGGER IS NOT VISIBLE TO THE OTHER, OR IF IN THE OPINION OF THE ENGINEER, THIS COMMUNICATION IS NECESSARY. THE COST OF ANY RADIO OR FIELD TELEPHONES USED SHALL BE INCLUDED IN THE PRICE BID FOR BASIC WORK ZONE TRAFFIC CONTROL (ITEM 619.01).

SIGNS:

1. DUE TO UNFORESEEN CONDITIONS, ADDITIONAL CONSTRUCTION SIGNS NOT SHOWN ON THE PLANS MAY BE REQUIRED BY THE ENGINEER. THE COST OF ALL CONSTRUCTION SIGNS IS TO BE INCLUDED IN THE PRICE BID FOR ITEM 619.01.
2. THE CONTRACTOR SHALL PATROL THE CONSTRUCTION ZONE AND ITS APPROACHES DAILY TO ENSURE THAT ALL WORK ZONE TRAFFIC CONTROL SIGNS ARE PROPERLY POSITIONED AND LEGIBLE. THE CONTRACTOR SHALL PROVIDE "BUMP" AND "ROUGH ROAD NEXT XX MILES" SIGNS AS NECESSARY. DAMAGED SIGNS SHALL BE REPAIRED OR REPLACED, A.O.B.E.
3. THE TEMPORARY COVERING AND/OR REMOVING, RELOCATING AND REPLACING OF EXISTING SIGN PANELS AND ASSEMBLIES SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. PAYMENT SHALL BE INCLUDED IN THE PRICE BID FOR BASIC WORK ZONE TRAFFIC CONTROL (ITEM 619.01). SIGNS WHICH ARE NOT APPLICABLE DURING WORKING AND/OR NON-WORKING HOURS SHALL BE COVERED OR REMOVED FROM VIEW (A.O.B.E.).
4. CARE SHOULD BE TAKEN SO AS NOT TO DAMAGE THE PERMANENT SIGNS IF THEY ARE COVERED. ANY SIGN SO DAMAGED SHALL BE REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE ENGINEER, AT NO ADDITIONAL COST TO THE COUNTY.

EMERGENCY AND PUBLIC ACCESS:

1. AT ALL TIMES DURING CONSTRUCTION, THE CONTRACTOR MUST PROVIDE SAFE AND CONVENIENT EMERGENCY ACCESS. THE CONTRACTOR IS REQUIRED TO DESIGNATE A CONTACT PERSON WHO WILL MAKE AND MAINTAIN ADEQUATE COMMUNICATION AND COORDINATION WITH LOCAL FIRE AND POLICE AUTHORITIES AND AMBULANCE SERVICES. CONTACT SHALL BE MADE PRIOR TO THE BEGINNING OF CONSTRUCTION AND MAINTAINED ON A CONTINUOUS ONGOING BASIS, AND IN A TIMELY FASHION. AUTHORITIES SHALL BE ADVISED OF THE CONTRACTOR'S PROGRESS AND SCHEDULE SO THAT EMERGENCY SERVICE PERSONNEL CAN PLAN TO MAKE ANY NECESSARY ADJUSTMENTS TO THEIR ROUTES AND METHOD OF OPERATIONS. THE CONTACT PERSON SHALL HAVE THE AUTHORITY TO MAKE AND IMPLEMENT DECISIONS REGARDING THE CONTRACTOR'S OPERATIONS. TIMELY NOTIFICATION SHALL BE TO THE SATISFACTION OF THE ENGINEER.
2. THE CONTRACTOR IS REQUIRED TO MAKE PERSONAL CONTACT WITH APPROPRIATE SCHOOL OFFICIALS IN RESPECT TO THE EFFECT OF ROAD CLOSINGS OR DETOURS ON SCHOOL BUS OPERATION AND PEDESTRIAN (SCHOOL CHILDREN) ROUTES. THIS SHOULD BE DONE SEVERAL WEEKS IN ADVANCE OF ANY CLOSING OR IMPLEMENTATION OF DETOURS SO THAT THERE WILL BE ADEQUATE TIME FOR THE SCHOOL TO MAKE NECESSARY ADJUSTMENTS TO THEIR SCHEDULES AND ROUTES.

DUST CONTROL:

1. DUST CONTROL WILL BE CLOSELY MONITORED BY THE ENGINEER-IN-CHARGE. IF IN THE OPINION OF THE E.I.C., DUSTY CONDITIONS EXIST AS A RESULT OF THE CONTRACTOR'S OPERATIONS, THE CONTRACTOR SHALL CORRECT THE CONDITION BY USE OF CALCIUM CHLORIDE AND WATER AS SPECIFIED IN SECTION 619-03.02A (BASIC WORK ZONE TRAFFIC CONTROL) OF THE STANDARD SPECIFICATIONS (US CUSTOMARY UNITS). THE COST OF ANY DUST CONTROL MEASURES SHALL BE INCLUDED IN THE UNIT PRICE BID FOR BASIC WORK ZONE TRAFFIC CONTROL (ITEM 619.01).

TYPE III BARRICADE:

1. THE CONTRACTOR SHALL PAY ATTENTION TO NYSDOT STANDARD SHEET 619-02 FOR THE INSTALLATION OF TYPE III BARRICADES. THE CONTRACTOR SHALL MOUNT THE WARNING LIGHTS ON THE BACK OF THE TYPE III BARRICADES.

CHANNELIZING DEVICES:

1. REFER TO THE "TAPERS" SECTION IN THE "CONSTRUCTION DETAILS" OF SECTION 619 OF THE STANDARD SPECIFICATIONS FOR AN APPROVED LIST OF CHANNELIZING DEVICES THAT CAN BE USED ON TAPERS IN A WORK ZONE.
2. ALL TEMPORARY PAVEMENT MARKINGS SHALL CONFORM TO THE REQUIREMENTS OUTLINED UNDER "CONSTRUCTION ZONE PAVEMENT MARKINGS" IN SECTION 619 OF THE STANDARD SPECIFICATIONS. ALL TEMPORARY MARKING PATTERNS SHALL BE AS SHOWN ON THE PLANS, OR A.O.B.E. COST OF ANY TEMPORARY PAVEMENT MARKINGS SHALL BE INCLUDED IN THE PRICE BID FOR ITEM 619.01 - BASIC WORK ZONE TRAFFIC CONTROL. NO SEPARATE PAYMENT WILL BE MADE FOR THE INSTALLATION OF TEMPORARY PAVEMENT MARKINGS.
3. AT THE START OF WORK ON THE PROJECT, ALL WORK ZONE TRAFFIC CONTROL DEVICES SHALL APPEAR IN "ACCEPTABLE" CONDITION AS PICTURED IN THE AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA) MANUAL, GUIDELINES FOR THE WORK ZONE TRAFFIC CONTROL DEVICES. THESE DEVICES SHALL NOT BE ALLOWED TO FALL BELOW THE "MARGINAL" CONDITION AT ANY TIME DURING THE DURATION OF THE PROJECT.
4. THE CONTRACTOR SHALL MAINTAIN EXISTING PAVEMENT MARKINGS WITHIN THE CONSTRUCTION LIMITS WHERE ORDERED BY THE ENGINEER. THE COST OF THIS SHALL BE INCLUDED IN THE PRICE BID FOR BASIC WORK ZONE TRAFFIC CONTROL (ITEM 619.01).
5. ANY EXISTING PAVEMENT MARKINGS WHICH CONFLICT WITH THE TRAFFIC CONTROL PLAN SHALL BE REMOVED, AS ORDERED BY THE ENGINEER (A.O.B.E.). THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR BASIC WORK ZONE TRAFFIC CONTROL (ITEM 619.01).
6. PAYMENT FOR DELINEATION DEVICES (CONES, DRUMS) ARE INCLUDED UNDER ITEM 619.01, BASIC WORK ZONE TRAFFIC CONTROL.
7. THE ROADWAY CAN NOT BE OPEN TO THE PUBLIC UNTIL ALL TEMPORARY OR PERMANENT PAVEMENT MARKINGS HAVE BEEN INSTALLED AS INDICATED ON THE WZP OR SPM DWGS.

UTILITIES:

1. THE CONTRACTOR SHALL COORDINATE ALL CONTRACT WORK WITH ANY UTILITY WORK, SUBCONTRACTOR WORK, PUBLIC MAINTENANCE WORK OR OTHER CONSTRUCTION OPERATIONS IN THE AREA, TO ENSURE THAT THERE ARE NO TRAFFIC CONTROL CONFLICTS.

GENERAL CONSTRUCTION STAGING NOTES:

1. THE CONTRACTOR SHALL FOLLOW THE PHASING SHOWN IN THE WZP AND ST DRAWINGS. ADVANCE WARNING SIGNS SHALL BE PLACED PRIOR TO ANY WORK STARTING WITHIN THE PROJECT WORK LIMITS TO FOREWARN TRAFFIC OF FUTURE ROADWAY/BRIDGE CLOSURE.
2. THE CONTRACTOR SHALL MAINTAIN TRAFFIC ON APPROACH ROADWAY FOR LOCAL RESIDENCES AT ALL TIMES DURING CONSTRUCTION. THERE SHALL BE NO DROP-OFFS OR ELEVATION DIFFERENCES THAT WOULD PREVENT LOCAL TRAFFIC TO ACCESS PRIVATE DRIVES LOCATED WITHIN THE PROJECT LIMITS. IF NECESSARY, TEMPORARY DRIVES MUST BE ESTABLISHED AND MAINTAINED.

D040965

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NOBLE STREET OVER WEST CREEK
VILLAGE OF EVANS MILLS
COUNTY: JEFFERSON REGION: 7

PIN 7753.77

BRIDGES 3371810

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

WORK ZONE TRAFFIC CONTROL PLAN
GENERAL NOTES

CONTRACT NUMBER D036474

DRAWING NO. WZP-1

SHEET NO. 7

JEFFERSON COUNTY
HIGHWAY DEPARTMENT

Stantec

DESIGN SUPERVISOR J. HOFMANN | JOB MANAGER T. BUTLER | DESIGN S. MILLER B. OLSEN | DRAFTING S. ROMEISER | CHECK B. WALKER | CHECK B. WALKER | PROJECT MANAGER T. BUTLER

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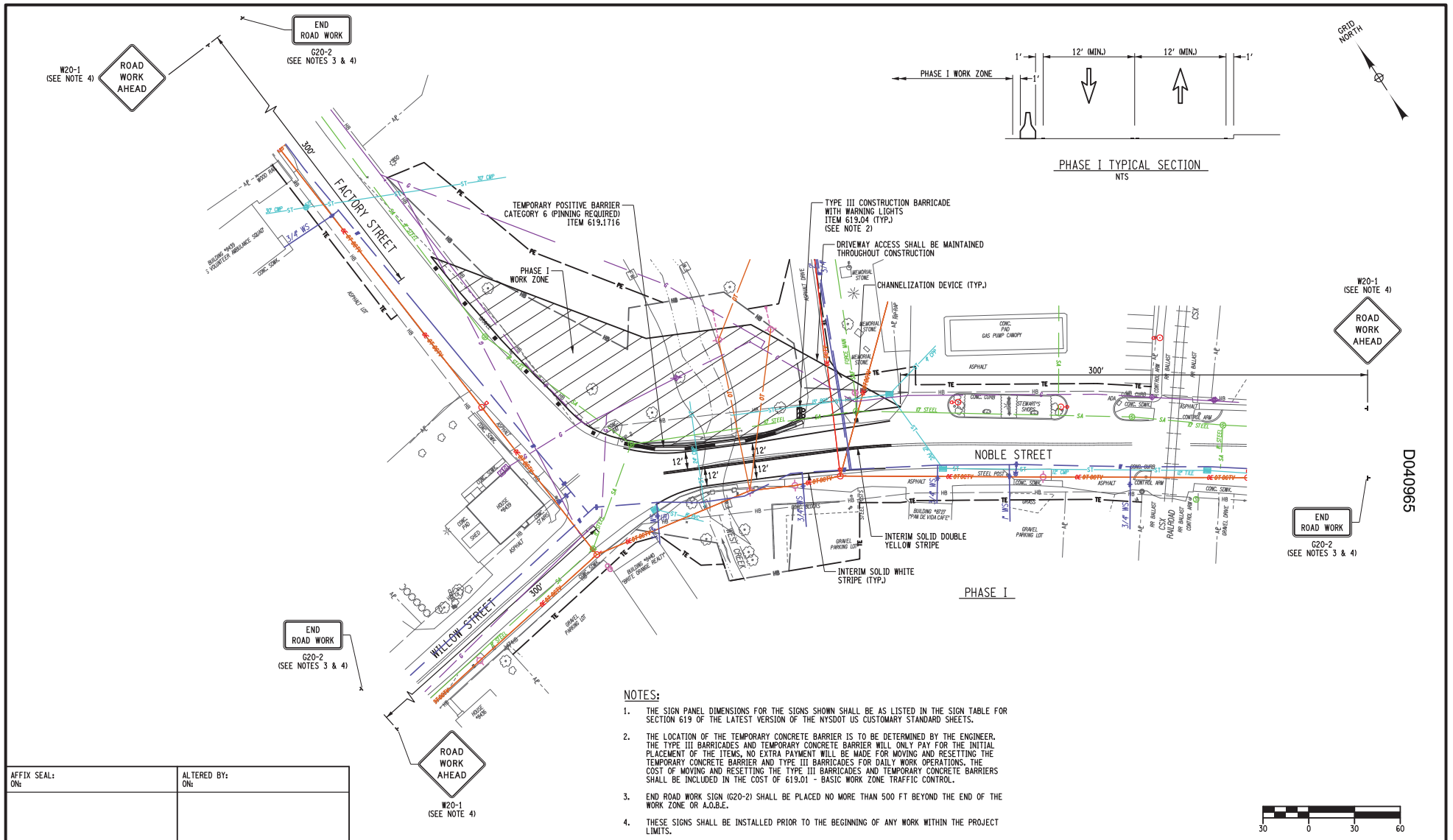

NOTES:

1. THE SIGN PANEL DIMENSIONS FOR THE SIGNS SHOWN SHALL BE AS LISTED IN THE SIGN TABLE FOR SECTION 619 OF THE LATEST VERSION OF THE NYSDOT US CUSTOMARY STANDARD SHEETS.
2. THE LOCATION OF THE TEMPORARY CONCRETE BARRIER IS TO BE DETERMINED BY THE ENGINEER. THE TYPE III BARRICADES AND TEMPORARY CONCRETE BARRIER WILL ONLY PAY FOR THE INITIAL PLACEMENT OF THE ITEMS, NO EXTRA PAYMENT WILL BE MADE FOR MOVING AND RESETTING THE TEMPORARY CONCRETE BARRIER AND TYPE III BARRICADES FOR DAILY WORK OPERATIONS. THE COST OF MOVING AND RESETTING THE TYPE III BARRICADES AND TEMPORARY CONCRETE BARRIERS SHALL BE INCLUDED IN THE COST OF 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.
3. END ROAD WORK SIGN (G20-2) SHALL BE PLACED NO MORE THAN 500 FT BEYOND THE END OF THE WORK ZONE OR A.O.B.E.
4. THESE SIGNS SHALL BE INSTALLED PRIOR TO THE BEGINNING OF ANY WORK WITHIN THE PROJECT LIMITS.

30 0 30 60

AFFIX SEAL:	ALTERED BY:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NOBLE STREET OVER WEST CREEK VILLAGE OF EVANS MILLS COUNTY: JEFFERSON REGION: 7	PIN 7753.77	BRIDGES 3371810	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

CONTRACT NUMBER
D036474

WORK ZONE TRAFFIC CONTROL PLAN
PHASE I

DRAWING NO. WZP-2
SHEET NO. 8

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JEFFERSON COUNTY
HIGHWAY DEPARTMENT

Stantec

DESIGN SUPERVISOR J. HOFMANN | JOB MANAGER T. BUTLER | DESIGN B. OLSEN | CHECK B. WALKER | DRAFTING S. ROMEISER | CHECK B. WALKER | PROJECT MANAGER T. BUTLER

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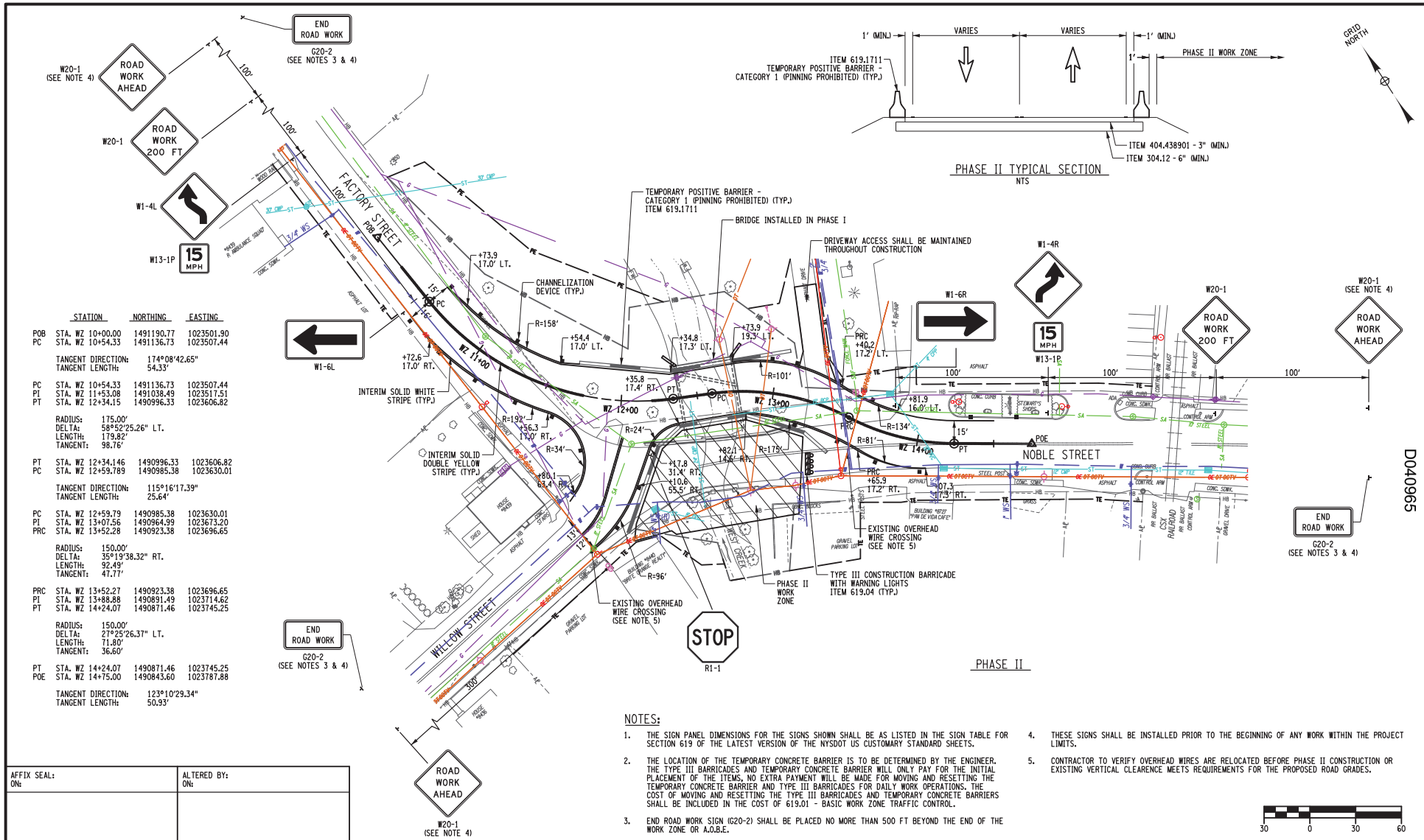

PHASE II TYPICAL SECTION
NTS

PHASE II

	STATION	NORTHING	EASTING
POB	STA. WZ 10+00.00	1491190.77	1023501.90
PC	STA. WZ 10+54.33	1491136.73	1023507.44
	TANGENT DIRECTION:	174°08'42.65"	
	TANGENT LENGTH:	54.33'	
PC	STA. WZ 10+54.33	1491136.73	1023507.44
PI	STA. WZ 11+53.08	1491038.49	1023517.51
PT	STA. WZ 12+34.15	1490996.33	1023606.82
	RADIUS:	175.00'	
	DELTA:	58°52'25.26" LT.	
	LENGTH:	179.82'	
	TANGENT:	98.76'	
PT	STA. WZ 12+34.146	1490996.33	1023606.82
PC	STA. WZ 12+59.789	1490985.38	1023630.01
	TANGENT DIRECTION:	115°16'17.39"	
	TANGENT LENGTH:	25.64'	
PC	STA. WZ 12+59.79	1490985.38	1023630.01
PI	STA. WZ 13+07.56	1490964.99	1023673.20
PRC	STA. WZ 13+52.28	1490923.38	1023696.65
	RADIUS:	150.00'	
	DELTA:	35°19'38.32" RT.	
	LENGTH:	92.49'	
	TANGENT:	47.77'	
PRC	STA. WZ 13+52.27	1490923.38	1023696.65
PI	STA. WZ 13+88.88	1490891.49	1023714.62
PT	STA. WZ 14+24.07	1490871.46	1023745.25
	RADIUS:	150.00'	
	DELTA:	27°25'26.37" LT.	
	LENGTH:	71.80'	
	TANGENT:	36.60'	
PT	STA. WZ 14+24.07	1490871.46	1023745.25
POE	STA. WZ 14+75.00	1490843.60	1023787.88
	TANGENT DIRECTION:	123°10'29.34"	
	TANGENT LENGTH:	50.93'	

NOTES:

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2. THE LOCATION OF THE TEMPORARY CONCRETE BARRIER IS TO BE DETERMINED BY THE ENGINEER. THE TYPE III BARRICADES AND TEMPORARY CONCRETE BARRIER WILL ONLY PAY FOR THE INITIAL PLACEMENT OF THE ITEMS, NO EXTRA PAYMENT WILL BE MADE FOR MOVING AND RESETTING THE TEMPORARY CONCRETE BARRIER AND TYPE III BARRICADES FOR DAILY WORK OPERATIONS. THE COST OF MOVING AND RESETTING THE TYPE III BARRICADES AND TEMPORARY CONCRETE BARRIERS SHALL BE INCLUDED IN THE COST OF 619.01 - BASIC WORK ZONE TRAFFIC CONTROL.
3. END ROAD WORK SIGN (G20-2) SHALL BE PLACED NO MORE THAN 500 FT BEYOND THE END OF THE WORK ZONE OR A.O.B.E.
4. THESE SIGNS SHALL BE INSTALLED PRIOR TO THE BEGINNING OF ANY WORK WITHIN THE PROJECT LIMITS.
5. CONTRACTOR TO VERIFY OVERHEAD WIRES ARE RELOCATED BEFORE PHASE II CONSTRUCTION OR EXISTING VERTICAL CLEARENCE MEETS REQUIREMENTS FOR THE PROPOSED ROAD GRADES.

30 0 30 60

D040965

AFFIX SEAL:	ALTERED BY:
ON:	ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NOBLE STREET OVER WEST CREEK
VILLAGE OF EVANS MILLS
COUNTY: JEFFERSON REGION: 7

PIN 7753.77
BRIDGES 3371810
CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

CONTRACT NUMBER D036474

WORK ZONE TRAFFIC CONTROL PLAN
PHASE II

DRAWING NO. WZP-3
SHEET NO. 9

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

JEFFERSON COUNTY HIGHWAY DEPARTMENT

Stantec

DESIGN SUPERVISOR J. HOFMANN | JOB MANAGER T. BUTLER | DESIGN B. OLSEN | CHECK B. WALKER | DRAFTING S. ROMEISER | CHECK B. WALKER | PROJECT MANAGER T. BUTLER

FILE NAME = U:\1938800186\Transportation\Design - Highway\Drawing\Plan Set\09-WZP-3.dgn
DATE/TIME = 11/17/2022 10:26:26 AM
USER = kalberts

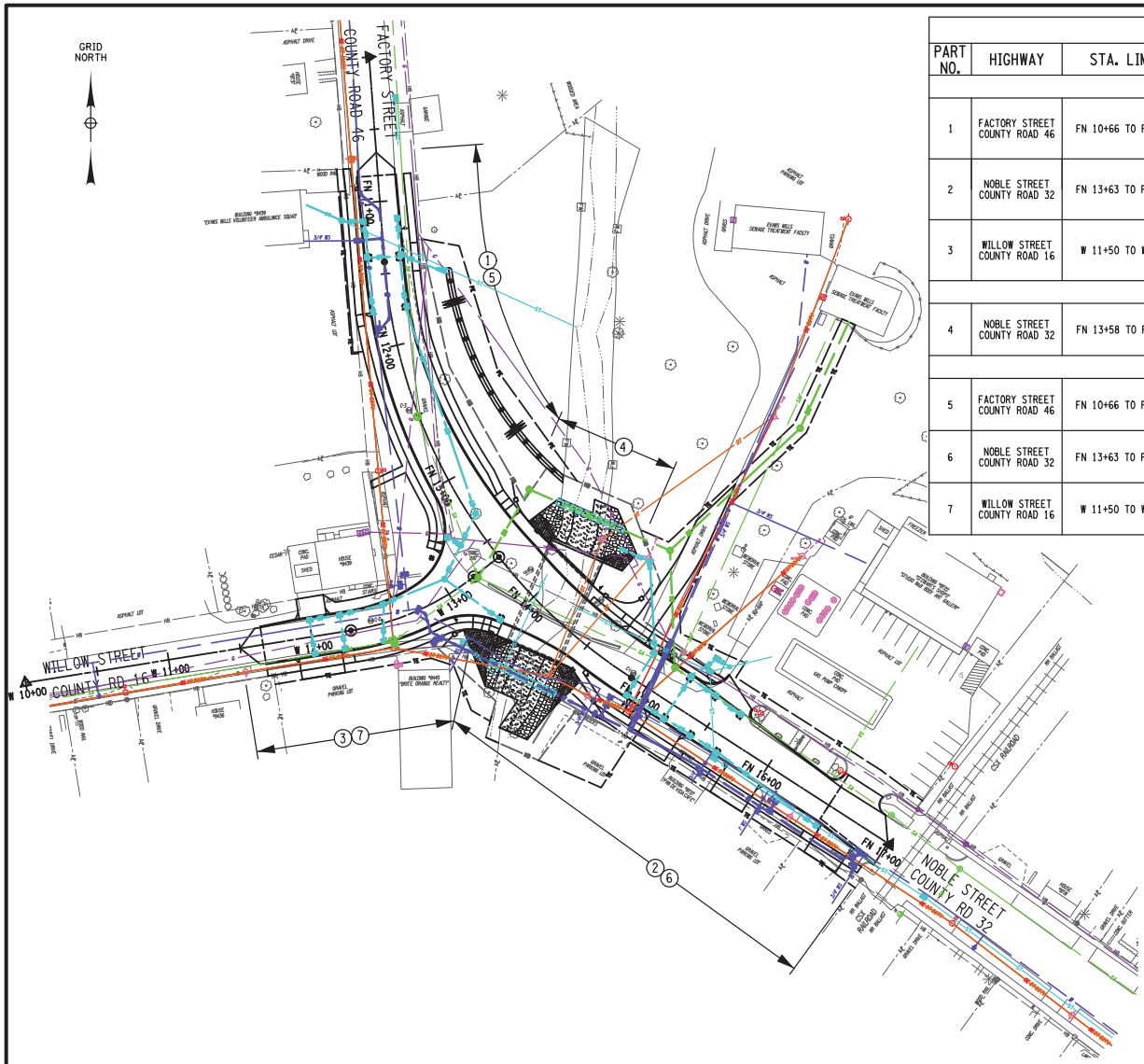


TABLE OF MAINTENANCE JURISDICTION

PART NO.	HIGHWAY	STA. LIMITS	FEATURES TO BE MAINTAINED	℄ MI.	LANE MI.	AGENCY	AUTHORITY FOR MAINTENANCE JURISDICTION
			ROADS				
1	FACTORY STREET COUNTY ROAD 46	FN 10+66 TO FN 13+63	MAINLINE ROADWAY, INCLUDING PAVEMENT, SHOULDERS, CURBS, SIDEWALKS, GUIDERAIL, EMBANKMENTS, DITCHES, CULVERTS, DRAINAGE SYSTEMS, LANDSCAPING, SIGNS, STRIPING AND HIGHWAY APPURTENANCES	0.06	0.16	VILLAGE OF EVANS MILLS	SECTION 81 HIGHWAY LAW
2	NOBLE STREET COUNTY ROAD 32	FN 13+63 TO FN 16+98	MAINLINE ROADWAY, INCLUDING PAVEMENT, SHOULDERS, CURBS, SIDEWALKS, GUIDERAIL, EMBANKMENTS, DITCHES, CULVERTS, DRAINAGE SYSTEMS, LANDSCAPING, SIGNS, STRIPING AND HIGHWAY APPURTENANCES	0.06	0.13	VILLAGE OF EVANS MILLS	SECTION 81 HIGHWAY LAW
3	WILLOW STREET COUNTY ROAD 16	W 11+50 TO W 13+30	MAINLINE ROADWAY, INCLUDING PAVEMENT, SHOULDERS, CURBS, SIDEWALKS, GUIDERAIL, EMBANKMENTS, DITCHES, CULVERTS, DRAINAGE SYSTEMS, LANDSCAPING, SIGNS, STRIPING AND HIGHWAY APPURTENANCES	0.03	0.07	VILLAGE OF EVANS MILLS	SECTION 81 HIGHWAY LAW
			STRUCTURE				
4	NOBLE STREET COUNTY ROAD 32	FN 13+58 TO FN 14+59	ENTIRE STRUCTURE, INCLUDING STRUCTURE EMBANKMENTS & STONE FILL	0.01	0.03	JEFFERSON COUNTY	SECTION 130 HIGHWAY LAW
			SNOW REMOVAL				
5	FACTORY STREET COUNTY ROAD 46	FN 10+66 TO FN 13+63	SNOW REMOVAL, ICE CONTROL, AND PAVEMENT CLEANING	0.06	0.16	VILLAGE OF EVANS MILLS	SECTION 140 HIGHWAY LAW
6	NOBLE STREET COUNTY ROAD 32	FN 13+63 TO FN 16+98	SNOW REMOVAL, ICE CONTROL, AND PAVEMENT CLEANING	0.06	0.13	VILLAGE OF EVANS MILLS	SECTION 140 HIGHWAY LAW
7	WILLOW STREET COUNTY ROAD 16	W 11+50 TO W 13+30	SNOW REMOVAL, ICE CONTROL, AND PAVEMENT CLEANING	0.03	0.07	VILLAGE OF EVANS MILLS	SECTION 140 HIGHWAY LAW

D040965

NOTES:

1. ALL EXISTING SANITARY SEWERS NOT DEEMED TO BE PART OF THE PROJECT BY THE SUPERINTENDENT OF HIGHWAYS, WATER MAINS, HYDRANTS, AND OTHER MUNICIPALLY OR PRIVATELY OWNED FACILITIES WITHIN THE LIMITS OF THE HIGHWAY R.O.W. WHICH REMAIN IN SERVICE UNCHANGED; AND ALL SUCH FACILITIES RELOCATED OR PROTECTED AS PART OF THE WORK PERFORMED UNDER THE PROJECT, WHETHER CROSSING, LOCATED WITHIN, OR ADJACENT TO THE R.O.W. SHALL BE MAINTAINED AS THE CASE MAY BE, BY THE MUNICIPALITY OR BY THE AGENCY OR UNIT OWNING OR HAVING CONTROL AND JURISDICTION THEREOF AT NO COST OR EXPENSE TO THE COUNTY.
2. PART NO. REFERS TO THE CORRESPONDING CIRCLED NO. ON MAINTENANCE JURISDICTION PLAN.
3. THE PORTION OF DRIVEWAY, CONSTRUCTED OR ADJUSTED UNDER THE PROJECT BETWEEN THE EDGE OF PAVEMENT AND THE OUTSIDE EDGE OF SHOULDER SHALL BE MAINTAINED BY THE MUNICIPALITY. THE REMAINING PORTION OF THE ADJUSTED DRIVEWAY BEYOND THE OUTSIDE EDGE OF SHOULDER SHALL BE MAINTAINED BY THE OWNER(S) UNDER SECTION 54-A OF THE HIGHWAY LAW. THIS SHALL INCLUDE SNOW REMOVAL. ALSO, ENTRANCE STAIRS AND WALKWAYS SHALL BE MAINTAINED BY THE OWNER(S) UNDER SECTION 54-A OF THE HIGHWAY LAW.
4. THIS MAINTENANCE JURISDICTION TABLE INDICATES THE DIVISION OF RESPONSIBILITY FOR MAINTENANCE OF THIS PROJECT AFTER THE COMPLETION OF CONSTRUCTION. IT IN NO WAY RELIEVES THE CONTRATOR OF HIS RESPONSIBILITY TO MAINTAIN AND PROTECT TRAFFIC AS PROVIDED BY ITEM 619 DURING CONSTRUCTION.

40 0 40 80

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NOBLE STREET OVER WEST CREEK
VILLAGE OF EVANS MILLS
COUNTY: JEFFERSON REGION: 7

PIN 7753.77

BRIDGES 3371810

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

GENERAL PLAN AND TABLE OF MAINTENANCE JURISDICTION

CONTRACT NUMBER D036474

DRAWING NO. MJP-1

SHEET NO. 11

JEFFERSON COUNTY HIGHWAY DEPARTMENT

Stantec

DESIGN SUPERVISOR J. HOFMANN | JOB MANAGER T. BUTLER | DESIGN B. OLSEN S. MILLER | CHECK B. WALKER | DRAFTING S. ROMEISER | CHECK B. WALKER | PROJECT MANAGER T. BUTLER

FILE NAME = \\A1938080867\Transportation\Design - Highway\Drawing\Plan Set\11-MJP-1.dgn
DATE/TIME = 11/17/2022 10:26:27 AM
USER = kalberts

RIGHT OF WAY NOTES:

1. ALL WORK TO BE PERFORMED UNDER THIS CONTRACT WILL BE WITHIN THE PUBLIC RIGHT-OF-WAY (ROW) IN ACCORDANCE WITH SECTION 105-15 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR IS TO ASSURE HIMSELF THAT ALL WORK IS BEING PERFOMED WITHIN THE ROW, INCLUDING BUT NOT LIMITED TO VEHICLE ACCESS; STORAGE OF EQUIPMENT, MATERIALS, DEBRIS AND WASTE; LANDSCAPING; VEGETATION REMOVAL AND MANAGEMENT; GRADING, SEEDING AND INSTALLATION OF TURF; AND THE INSTALLATION OF ANY FENCES OR PROTECTIVE BARRIER.

2. IF CONTRACTOR IS UNABLE TO IDENTIFY THE LIMITS OF THE RIGHTS-OF-WAY WHEN THE CONTRACT CALLS FOR WORK IN THOSE VICINITIES, THE CONTRACTOR MUST CONTACT THE PROJECT ENGINEER FOR DEFINITIVE BOUNDARY DETERMINATIONS BEFORE ANY WORK MAY BE INITIATED AT THOSE LOCATIONS (STANDARD SPECIFICATIONS SECTIONS 105-10 AND 625).

3. IN ACCORDANCE WITH SECTION 107-13 OF THE STANDARD SPECIFICATIONS, RELEASES FOR ANY NON-ESSENTIAL CONTRACT WORK OUTSIDE OF THE EXISTING RIGHTS-OF-WAY, INCLUDING PLANTINGS, LANDSCAPING OR DRIVEWAY REMOVAL OR ENHANCEMENT, WILL BE PROVIDED BY THE PROJECT ENGINEER AND IN NO INSTANCE ARE TO BE SECURED BY THE CONTRACTOR. THE CONTRACTOR SHALL NOT INVADE UPON PRIVATE PROPERTIES, LANDS OR BUILDINGS OUTSIDE OF THE RIGHTS-OF-WAY FOR ANY REASON WITHOUT FIRST SECURING WRITTEN PERMISSION FROM THE PROPERTY OWNER (STANDARD SPECIFICATIONS SECTION 107-08 AND 107-13).

4. THE CONTRACTOR WILL BE HELD LIABLE FOR ANY DAMAGES DONE. ANY SUCH INJURIES OR DAMAGES SHALL BE SATISFACTORILY REPAIRED OR ITEMS REPLACED AT THE CONTRACTOR'S EXPENSE (STANDARD SPECIFICATIONS SECTION 107-08 AND 107-13).

GENERAL NOTES:

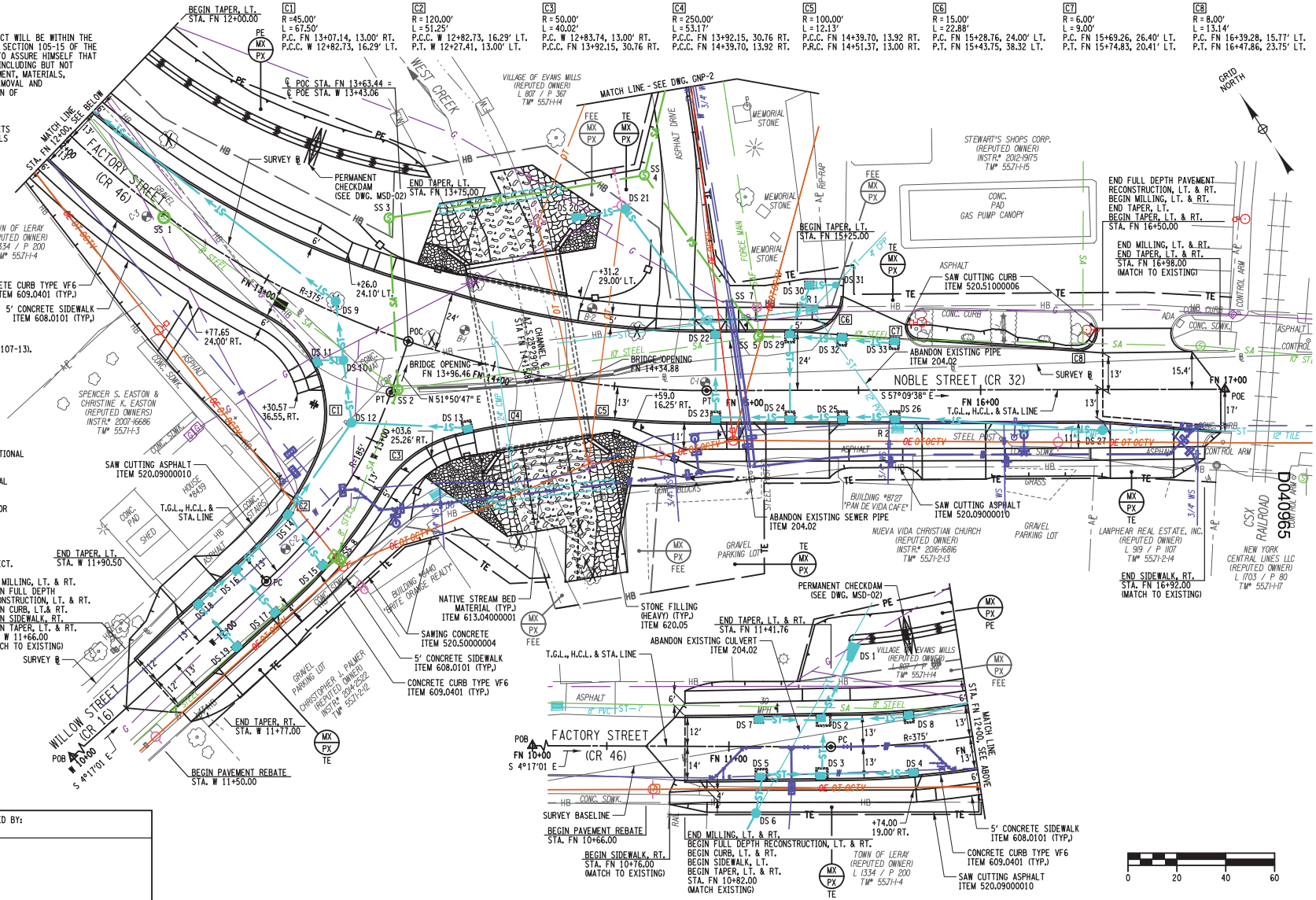
1. SEE GUIDE RAIL TABLE ON DWG. MST-1 FOR ADDITIONAL INFORMATION ON NEW BOX BEAM GUIDE RAILING.

2. SEE THE BRIDGE PLANS (ST DWGS.) FOR ADDITIONAL INFORMATION ON BIN 3371810.

3. SEE THE SURVEY CONTROL SHEET (DWG. SCS-1) FOR ADDITIONAL INFORMATION ON THE HORIZONTAL ALIGNMENT, SURVEY BASELINE, AND BENCHMARKS.

4. SEE THE EROSION AND SEDIMENT CONTROL PLAN (DWG. ECP-1) FOR ADDITIONAL INFORMATION ON EROSION AND SEDIMENT CONTROL FOR THIS PROJECT.

5. SEE THE SIGNING AND PAVEMENT MARKING PLAN (DWG. SPM-1) FOR ADDITIONAL INFORMATION ON ROADWAY SIGNAGE AND PAVEMENT MARKING LAYOUT.



AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NOBLE STREET OVER WEST CREEK VILLAGE OF EVANS MILLS COUNTY: JEFFERSON REGION: 7	PIN 7753.77	BRIDGES 3371810	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

GENERAL PLAN

CONTRACT NUMBER D036474
DRAWING NO. GNP-1
SHEET NO. 30

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

JEFFERSON COUNTY HIGHWAY DEPARTMENT

Stantec

DESIGN SUPERVISOR J. HOFMANN | JOB MANAGER T. BUTLER | DESIGN B. OLSEN S. MILLER | CHECK B. WALKER | DRAFTING S. ROMEISER | CHECK B. WALKER | PROJECT MANAGER T. BUTLER

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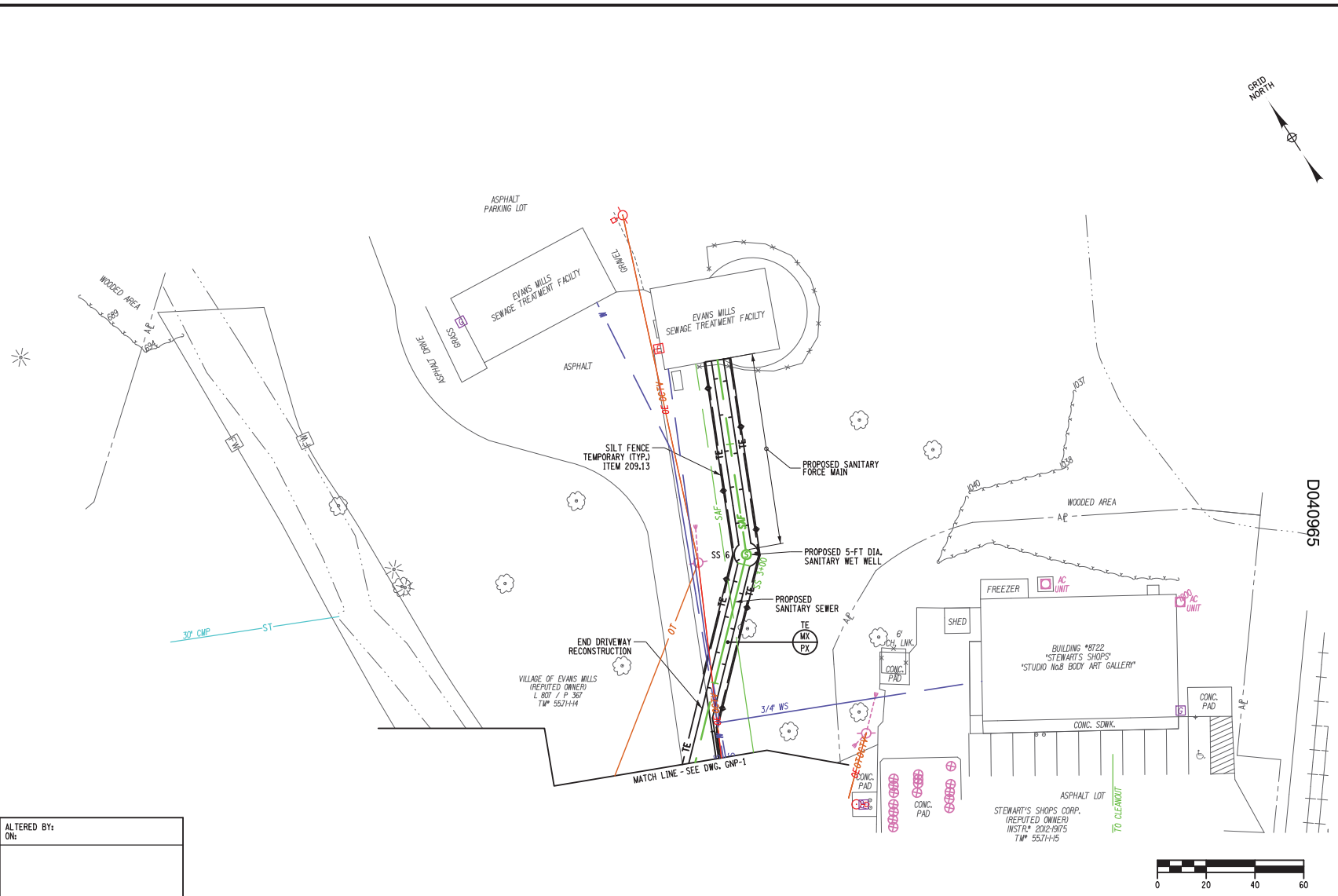

D040965

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NOBLE STREET OVER WEST CREEK
VILLAGE OF EVANS MILLS
COUNTY: JEFFERSON REGION: 7

PIN 7753.77

BRIDGES 3371810

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

GENERAL PLAN

CONTRACT NUMBER D036474

DRAWING NO. GNP-2

SHEET NO. 31

JEFFERSON COUNTY HIGHWAY DEPARTMENT

Stantec

DESIGN SUPERVISOR J. HOFMANN | JOB MANAGER T. BUTLER | DESIGN B. OLSEN S. MILLER | CHECK B. WALKER | DRAFTING S. ROMEISER | CHECK B. WALKER | PROJECT MANAGER T. BUTLER

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USER = kalberts

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USACE PERMIT

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D040965

DEPARTMENT OF THE ARMY

US ARMY CORPS OF ENGINEERS, BUFFALO DISTRICT
478 MAIN STREET
BUFFALO, NEW YORK 14202

September 25, 2023

Regulatory Branch

SUBJECT: Department of the Army No. LRB-2010-00017 Nationwide Permit No. 3 as Published in the Federal Register, Volume 86, No. 8 on Jan. 13, 2021 and No. 245 on Dec. 27, 2021, New York State Department of Environmental Conservation No. 6-2240-00115

Jefferson County Highway Department
21897 County Road 190
Watertown, NY 13601

Dear Applicant:

This pertains to your proposal to conduct the replacement of the existing 16'-6" span culvert with a 36' span, 78' long, 3-sided culvert structure along West Creek, located at the intersection of Noble, Factory and Willow Streets in the Town of Evan Mills, Jefferson County, New York.

I have evaluated the impacts associated with your proposal and have concluded that they are authorized by the enclosed Nationwide Permit (NWP) provided that the attached conditions are satisfied.

Verification of the applicability of this NWP is valid until March 14, 2026 unless the NWP is modified, suspended, revoked, or the activity complies with any subsequent permit modification. Please note in accordance with 33 CFR part 330.6(b), that if you commence or are under contract to commence an activity in reliance of the permit prior to the date this NWP expires, is suspended or revoked, or is modified such that the activity no longer complies with the terms and conditions, you have twelve months from the date of permit modification, expiration, or revocation to complete the activity under the present terms and conditions of the permit, unless the permit has been subject to the provisions of discretionary authority.

It is your responsibility to remain informed of changes to the NWP program. A public notice announcing any changes will be issued when they occur and will be available for viewing at our website: http://www.lrb.usace.army.mil/Missions/Regulatory.aspx. Finally, note that if your activity is not undertaken within the defined period or the project specifications have changed, you must immediately notify this office to determine the need for further approval or reverification.

Your initiation of work as authorized by the enclosed NWP acknowledges your acceptance of the general and special conditions contained therein. This affirmation is limited to the attached NWP and associated WQC and does not obviate the need to obtain any other project specific Federal, state, or local authorization. Specifically, you may need to obtain Article 15

Regulatory Branch

SUBJECT: Application No. LRB-2010-00017 Nationwide Permit No. 3 as Published in the Federal Register, Volume 86, No. 8 on Jan. 13, 2021 and No. 245 on Dec. 27, 2021, New York State Department of Environmental Conservation No. 6-2240-00115

(Protection of Water), Article 24 (Freshwater Wetland), and/or Article 34 (Coastal Erosion Management) authorization from the New York State DEC.

In addition to the general conditions attached to the NWP, your attention is directed to the following Special Conditions which are also appended at the end of the NWP:

1. To reduce the risk of any potential adverse effects on the federally-endangered Indiana bat (Myotis sodalis) and to ensure the project area remains suitable for the continued existence of the bat, the permittee must implement the following measures:
   a. The permittee must not use artificial dyes, coloring, insecticide, or algaecide, such as copper sulfate, in any permanent stormwater control structures. Creation of stormwater detention ponds may provide suitable drinking for bats that may use the project area.
   b. The permittee must install orange construction fencing prior to initiation of any clearing or grading on site. The fencing shall be placed between grading/earthwork activities and the forested areas and remain during construction.
   c. The permittee must not cut any trees (woody stems > 4 inches Diameter at Breast Height) between April 1 and November 15 of any year.

2. To reduce any potential adverse effects on the federally-endangered Northern long-eared bat (Myotis septentrionalis), trees (woody stems > 3 inches Diameter at Breast Height) must not be cut between April 1 and October 31 of any year.

Questions pertaining to this matter should be directed to me at (716) 879-4308 by writing to the following address: U.S. Army Corps of Engineers Regulatory Branch 478 Main St, Buffalo, NY 14202, or by e-mail at: Shannon.N.Azzarelli@usace.army.mil.

Sincerely,

Shannon Azzarelli
Physical Scientist

Enclosures
cc: Andrew Smith, Stantec Consulting Services, Inc.
Jessica Hart, DEC

D040965

COMPLETION FORM / COMPLIANCE CERTIFICATION

Each permittee who receives a Nationwide Permit (NWP) verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and any compensatory mitigation.

APPLICANT:
Jefferson County Highway Department
21897 County Road 190
Watertown, NY 13601

POINT OF CONTACT:
Andrew Smith
Stantec Consulting Services
61 Commercial Street Suite 100
Rochester, NY 14614

File No.: LRB-2010-00017
File Closed: September 25, 2023
NWP No.: 3

Upon completion of the activity authorized by this permit and any required compensatory mitigation sign this certification and return it to the address listed below within 30 days of project completion.

Please note that your permitted activity is subject to a compliance inspection by a U.S. Army Corps of Engineers representative. If you fail to comply with this permit you are subject to permit suspension, modification, revocation, and/or assessment of administrative penalties.

The permittee shall certify the completion of the authorized work and mitigation:

a. The authorized work was done in accordance with the NWP authorization, including any general, regional, or activity specific conditions.

b. The implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, this certification must include the documentation required by 33 CFR 332.3(1)(3) to confirm that the permittee secured the appropriate number and resource type of credits.

_____ _____
Jefferson County Highway Department Representative Date

Permittee Telephone Number: _____

Project location: Intersection of Noble, Factory and Willow Streets

Project Description: Replacement of the existing 16’-6” span culvert with a 36’ span, 78’ long, 3-sided culvert structure

Authorized Impacts (Waters of the U.S. Impacted by Project): 11560 square feet

Waterway and/or Project Setting: West Creek

Return completed form to: **LRB.Regulatory.PermitCompliance@usace.army.mil** (Preferred)
Or Mail to: Mr. David Leput
Regulatory Branch
U.S. Army Corps of Engineers
478 Main St
Buffalo, NY 14202

NATIONWIDE PERMIT SPECIAL CONDITIONS

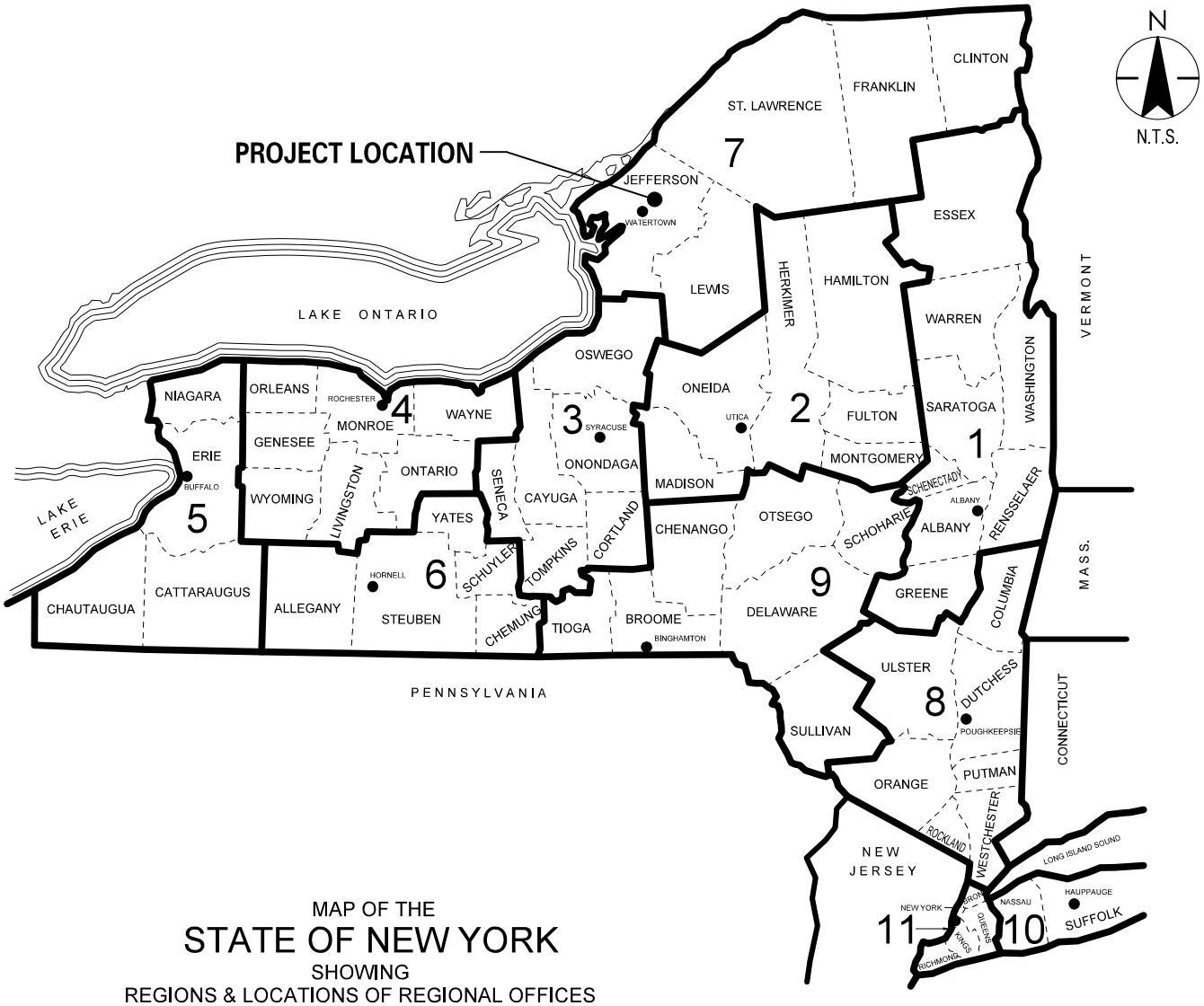
1. To reduce the risk of any potential adverse effects on the federally-endangered Indiana bat (Myotis sodalis) and to ensure the project area remains suitable for the continued existence of the bat, the permittee must implement the following measures:

a. The permittee must not use artificial dyes, coloring, insecticide, or algaecide, such as copper sulfate, in any permanent stormwater control structures. Creation of stormwater detention ponds may provide suitable drinking for bats that may use the project area.

b. The permittee must install orange construction fencing prior to initiation of any clearing or grading on site. The fencing shall be placed between grading/earthwork activities and the forested areas and remain during construction.

c. The permittee must not cut any trees (woody stems > 4 inches Diameter at Breast Height) between April 1 and November 15 of any year.

2. To reduce any potential adverse effects on the federally-endangered Northern long-eared bat (Myotis septentrionalis), trees (woody stems > 3 inches Diameter at Breast Height) must not be cut between April 1 and October 31 of any year.



MAP OF THE
STATE OF NEW YORK
SHOWING
REGIONS & LOCATIONS OF REGIONAL OFFICES
OF THE
STATE DEPARTMENT OF TRANSPORTATION

PROJECT LOCATION

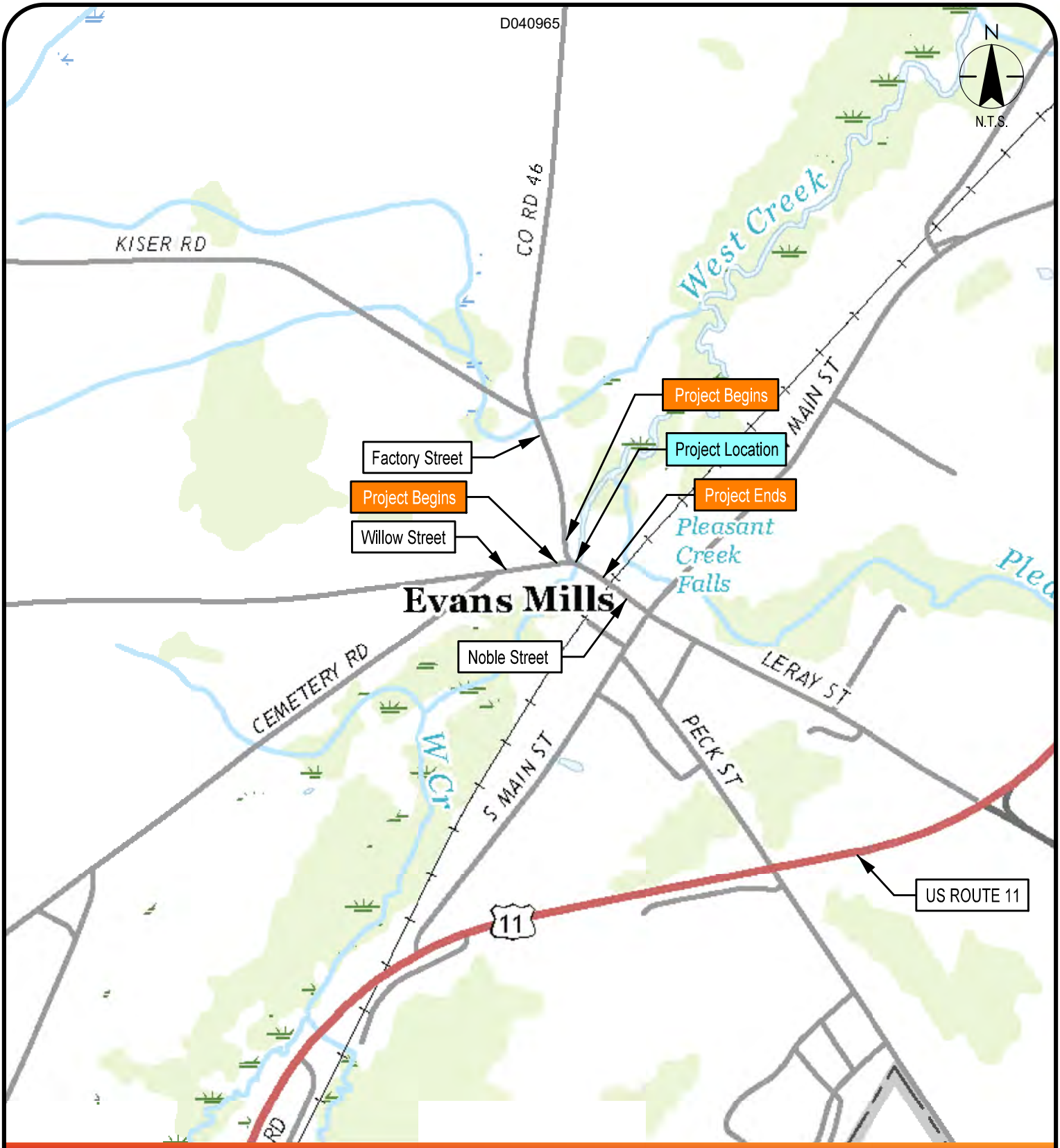
NOBLE STREET OVER WEST CREEK PROJECT IS WITHIN THE VILLAGE OF EVANS MILLS, JEFFERSON COUNTY.

Stantec
61 Commercial Street, Suite 100
Rochester, NY 14614
(585) 475-1440
www.stantec.com

FIGURE 1.2.1A

STATE LOCATION MAP

NOBLE STREET OVER WEST CREEK
VILLAGE OF EVANS MILLS, JEFFERSON COUNTY, NEW YORK
PIN 7753.77



Stantec

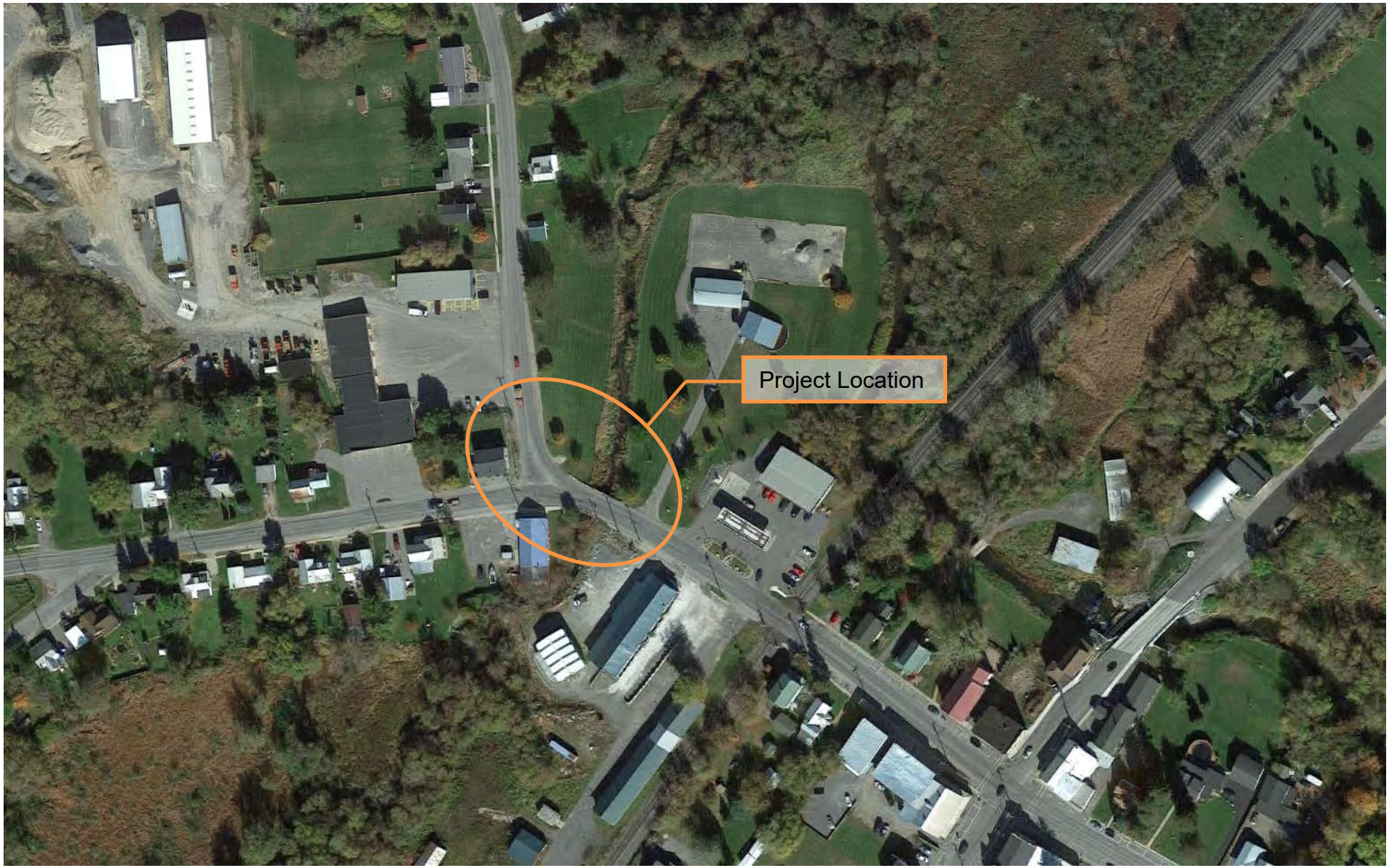
61 Commercial Street, Suite 100
Rochester, NY 14614
(585) 475-1440
www.stantec.com

FIGURE 1.2.1B

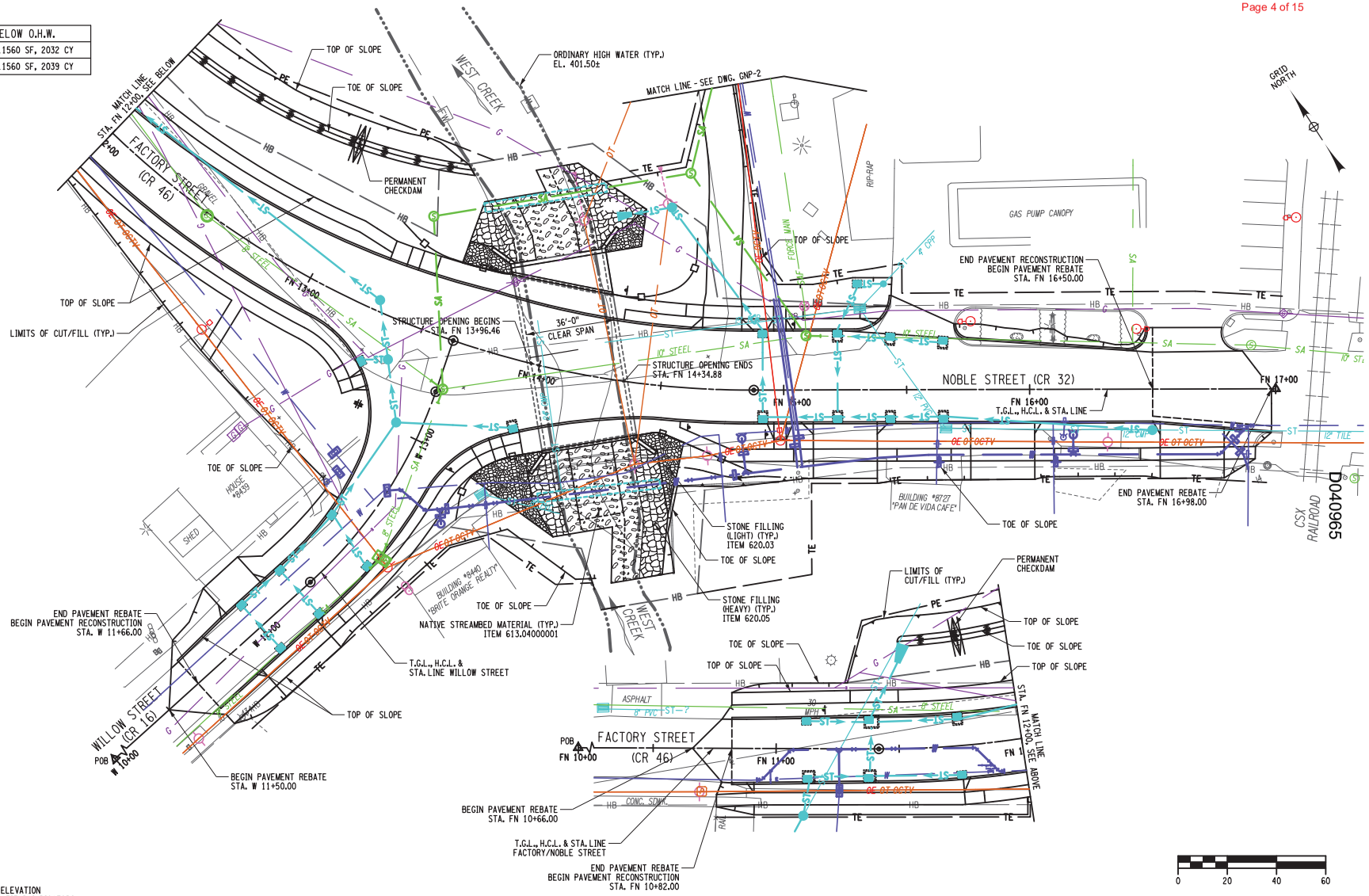
PROJECT LOCATION MAP

NOBLE STREET OVER WEST CREEK
VILLAGE OF EVANS MILLS, JEFFERSON COUNTY, NEW YORK
PIN 7753.77

Project Aerial Photo



EXCAVATION/FILL BELOW O.H.W.	
EXCAVATION	11560 SF, 2032 CY
FILL	11560 SF, 2039 CY



NOTE:

ORDINARY HIGH WATER ELEVATION WAS DETERMINED USING FIELD INDICATORS.

NOBLE STREET OVER WEST CREEK VILLAGE OF EVANS MILLS COUNTY: JEFFERSON REGION: 7	PIN 7753.77	BRIDGES 3371810	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED PERMITTING PLAN (1 OF 2)	CONTRACT NUMBER D036374 DRAWING NO. PERM-1 SHEET NO. 1
				JEFFERSON COUNTY HIGHWAY DEPARTMENT	Stantec

DESIGN SUPERVISOR J. HOFMANN | JOB MANAGER S. MILLER | DESIGN B. OLSEN | CHECK B. WALKER | DRAFTING S. ROMEISER | CHECK B. WALKER | PROJECT MANAGER T. BUTLER

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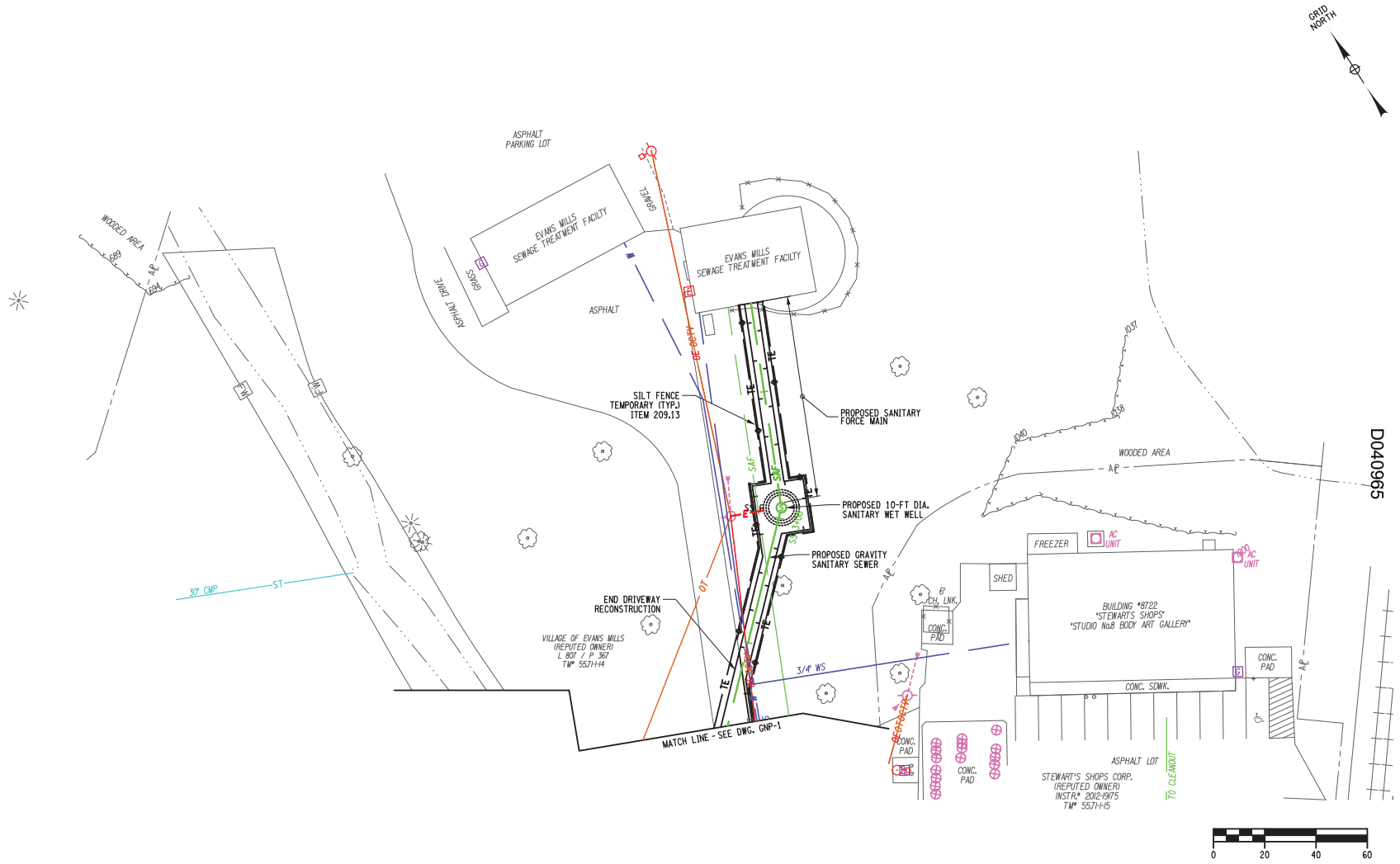

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NOBLE STREET OVER WEST CREEK VILLAGE OF EVANS MILLS COUNTY: JEFFERSON REGION: 7	PIN 7753.77	BRIDGES 3371810	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED PERMITTING PLAN (2 OF 2)	CONTRACT NUMBER D036474 DRAWING NO. PERM-2 SHEET NO. 2
				JEFFERSON COUNTY HIGHWAY DEPARTMENT	Stantec

DESIGN SUPERVISOR J. HOFMANN | JOB MANAGER S. MILLER | DESIGN S. MILLER, B. OLSEN | CHECK B. WALKER | DRAFTING S. ROMEISER | CHECK B. WALKER | PROJECT MANAGER T. BUTLER

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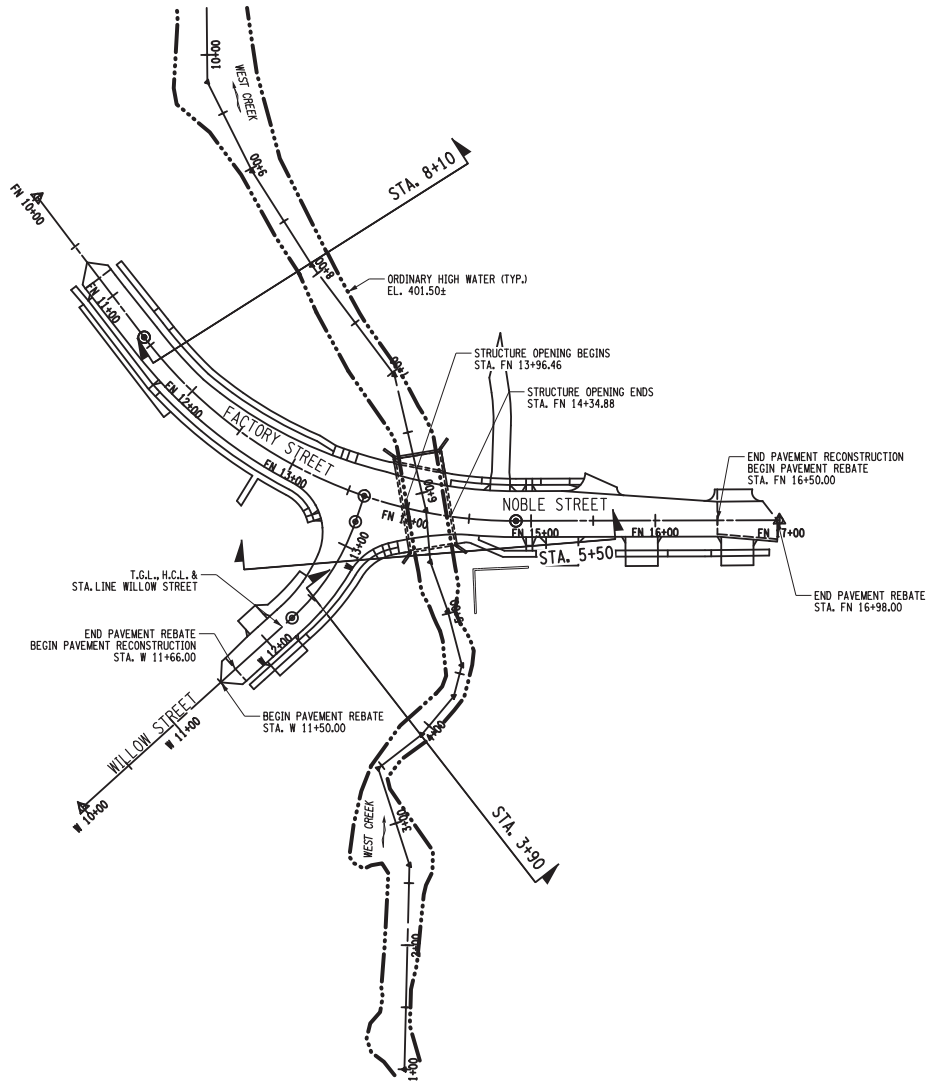

D040965

NOTE:

SEE DRAWINGS NO. PERM-4 FOR CROSS SECTIONS AND BANKFULL WIDTHS.

0 50 100

NOBLE STREET OVER WEST CREEK VILLAGE OF EVANS MILLS COUNTY: JEFFERSON REGION: 7	PIN 7753.77	BRIDGES 3371810	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED **WEST CREEK CROSS SECTION LOCATION PLAN**	CONTRACT NUMBER D036474 DRAWING NO. PERM-3 SHEET NO. 3
				JEFFERSON COUNTY HIGHWAY DEPARTMENT	Stantec

DESIGN SUPERVISOR J. HOFMANN | JOB MANAGER S. MILLER | DESIGN B. OLSEN | S. MILLER | CHECK B. WALKER | DRAFTING S. ROMEISER | CHECK B. WALKER | PROJECT MANAGER T. BUTLER

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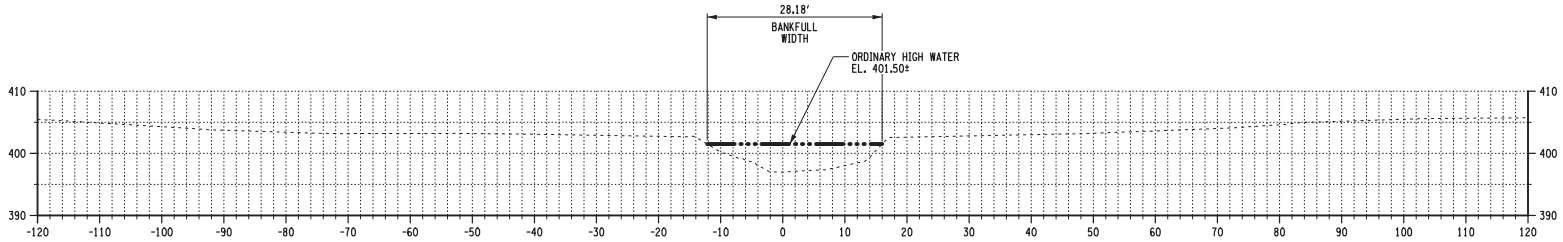
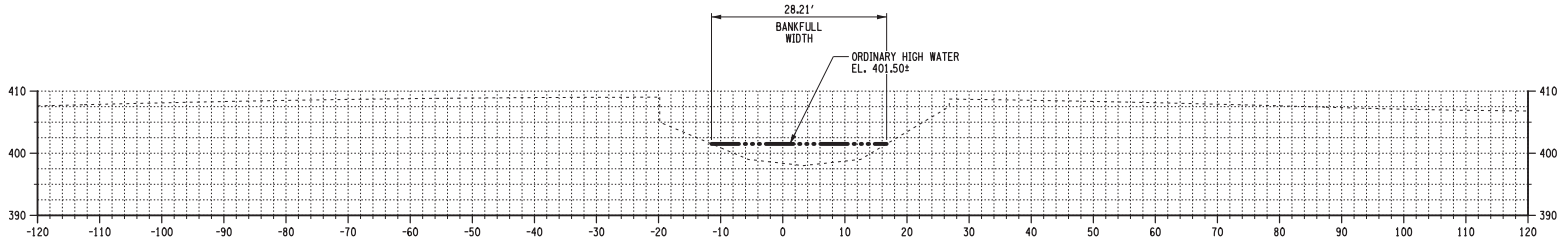
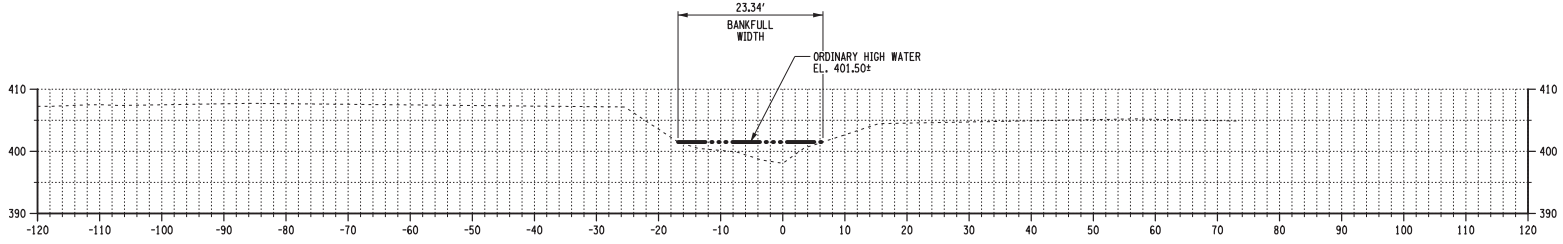


8+10



5+50



3+90

D040965

NOBLE STREET OVER WEST CREEK VILLAGE OF EVANS MILLS COUNTY: JEFFERSON REGION: 7	PIN 7753.77	BRIDGES 3371810	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED WEST CREEK CROSS SECTIONS JEFFERSON COUNTY HIGHWAY DEPARTMENT	CONTRACT NUMBER D036474 DRAWING NO. PERM-4 SHEET NO. 4 Stantec

DESIGN SUPERVISOR J. HOFMANN | JOB MANAGER S. MILLER | DESIGN S. MILLER, B. OLSEN | CHECK B. WALKER | DRAFTING S. ROMEISER | CHECK B. WALKER | PROJECT MANAGER T. BUTLER

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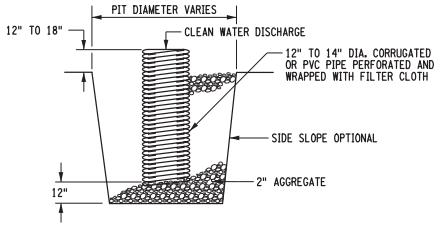
GENERAL EROSION AND SEDIMENT CONTROL NOTES:

1. THE CONTRACTOR IS ADVISED THAT ALL THEIR WORK SHALL CONFORM TO USACE SECTION 404, NWP NO. 3 (MAINTENANCE) AND NO. 14 (TRANSPORTATION) AND NYSDEC SECTION 401 WATER QUALITY CERTIFICATION TO ENSURE WATER QUALITY IS MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
2. THE ELEMENTS ON THIS DRAWING KNOWN AS "EROSION AND SEDIMENT CONTROL PLAN" SHALL BE USED DURING CONSTRUCTION IN ANY AREA WHERE FINE MATERIALS MAY ENTER THE WATERS OF THE STATE OF NEW YORK.
3. THE CONTRACTOR SHALL COMPLY WITH ALL PROVISIONS OF ANY APPLICABLE N.Y.S. DEPARTMENT OF ENVIRONMENTAL CONSERVATION WATER QUALITY CERTIFICATION AND/OR FRESHWATER WETLANDS PERMIT INCLUDED BUT NOT LIMITED TO ARMY CORPS OF ENGINEERS.
4. ALL METHODS AND EQUIPMENT PROPOSED BY THE CONTRACTOR TO ACCOMPLISH THE WORK SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER IN CHARGE.
5. AT THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE ENGINEER IN CHARGE HIS WRITTEN SCHEDULE AND PROPOSED MEASURES FOR TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL WORK AND SCHEDULE OF OPERATIONS AS REQUIRED BY SECTION 209 OF THE NYSDOT STANDARD SPECIFICATIONS.
6. ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO PREVENT CONTAMINATION OF ANY STREAM OR WATERWAY BY SILT, SEDIMENT, FUELS, SOLVENTS, LUBRICANTS, EPOXY COATINGS, CONCRETE LEACHATE OR ANY OTHER POLLUTANT ASSOCIATED WITH CONSTRUCTION AND CONSTRUCTION PROCEDURES.
7. THE TEMPORARY SOIL EROSION AND SEDIMENT CONTROL DEVICES SPECIFIED IN THIS CONTRACT SHALL BE CHECKED AND REPAIRED AS NECESSARY, ON A WEEKLY BASIS AND AFTER EACH STORM EVENT. PERIODIC CLEANING OF THE SOIL EROSION AND SEDIMENT CONTROL DEVICES WILL BE NECESSARY, A.O.B.E.
8. ALL STORM DRAINAGE OUTLETS SHALL BE STABILIZED, AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
9. CONTRACTOR SHALL PROVIDE CONCRETE TRUCK WASHOUT SITES, A.O.B.E. THESE SITES SHALL BE LOCATED AWAY FROM ANY STREAMS OR WETLANDS. THE AREA SHALL BE RINGED BY SILT FENCE AND ALL CONCRETE MATERIAL SHALL BE CLEANED OUT ON A REGULAR BASIS.
10. ANY DEBRIS OR EXCESS MATERIALS FROM CONSTRUCTION SHALL BE IMMEDIATELY AND COMPLETELY REMOVED FROM THE BED AND BANKS OF ALL WATER AREAS TO APPROVED UPLAND AREAS FOR DISPOSAL.
11. THE COST OF INSTALLING, CLEANING AND REMOVING TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL DEVICES SHALL BE PAID FOR UNDER THE ITEMS SHOWN.
12. ALL CONTROL MEASURES SHALL BE PLACED PRIOR TO STARTING EARTH WORK OPERATIONS AND SHALL REMAIN IN PLACE UNTIL THE NEW SLOPES ARE STABILIZED WITH SEED AND/OR SLOPE PROTECTION MATERIALS, A.O.B.E.
13. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORM WATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES. STORM WATER FROM DISTURBED AREAS MUST PASS THROUGH SILTATION FENCE BEFORE DISCHARGE BEYOND DISTURBED AREAS OR INTO INLETS OF OTHER DRAINAGE SYSTEMS.
14. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES OR WATER COURSES.
15. ALL AREAS OF SOIL DISTURBANCES RESULTING FROM THIS PROJECT SHALL BE SEEDED WITH AN APPROVED PERENNIAL GRASS SEED AND MULCHED WITH STRAW WITHIN ONE WEEK OF FINAL GRADING. IF CONSTRUCTION ACTIVITIES ARE DISCONTINUED IN AREAS OF SOIL DISTURBANCES BEFORE FINAL GRADING IS COMPLETE, TEMPORARY GRADING SHALL ALSO BE SEEDED AND MULCHED A.O.B.E. MULCH SHALL BE MAINTAINED UNTIL A SUITABLE COVER IS ESTABLISHED.
16. OTHER EROSION CONTROL MEASURES MAY BE REQUIRED A.O.B.E. IN ADDITION TO SCHEMES SHOWN. PAYMENT FOR ADDITIONAL WORK SHALL BE PAID UNDER THE APPROPRIATE ITEM IN THE CONTRACT.
17. ENCLOSE ANY TEMPORARY STOCKPILES OF TOPSOIL OR FILL WITH SILT FENCE TO PREVENT EROSION OF THE PILE. ALL SILT FENCE SHALL BE INSTALLED ON THE CONTOUR WITH A GRADE OF 2½ OR LESS. STOCKPILES EXPOSED FOR LONGER THAN TWO WEEKS SHALL BE STABILIZED WITH A TEMPORARY SEEDING OR GROUND COVER.
18. THE LOCATIONS OF EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED IN THE CONTRACT DOCUMENTS MAY REQUIRE FIELD ADJUSTMENT DEPENDING ON THE SEQUENCE OF CONSTRUCTION ACTIVITIES, CONSTRUCTION METHODS, AND/OR ACTUAL FIELD CONDITIONS. THE ENGINEER SHALL BE NOTIFIED OF ANY SIGNIFICANT FIELD CHANGES TO THE EROSION AND SEDIMENT CONTROL MEASURES INDICATED IN THE CONTRACT DOCUMENTS.
19. TYPICALLY, THE SILT FENCE SHALL BE INSTALLED ALONG EXISTING/PROPOSED CONTOUR LINES.
20. THE CONTRACTOR SHALL COMPLY WITH THE NYSDOT STANDARD SHEET, DETAIL WITHIN THE CONTRACT DOCUMENTS, AND MANUFACTURER INSTALLTATION GUIDE WHEN INSTALLING EROSION, AND SEDIMENT CONTROL MEASURES OR A.O.B.E.
21. IT IS ANTICIPATED THAT THE FLOW VELOCITIES WILL EXCEED 5 FT/SEC. AND THAT REDIRECTION BARRIERS WILL BE REQUIRED IN ACCORDANCE WITH SPECIFICATION 209.1501.
22. OPEN CUT OPERATIONS WITHIN THE STREAM BED FOR THE PURPOSE OF INSTALLING THE PROPOSED WATER AND SANITARY SEWER CROSSINGS BELOW WEST CREEK SHALL BE CONDUCTED IN THE DRY. TYPE II COFFERDAMS SHALL BE PLACED UPSTREAM AND DOWN STREAM OF THE PROPOSED WORK LOCATION. STREAM FLOW SHALL BE PUMPED AROUND THE WORK LOCATION.



WATER DISCHARGE CONTROL
NOT TO SCALE

DETAIL NOTES:

1. THIS DETAIL IS OFFERED AS A SUGGESTION TO THE CONTRACTOR. THE CONTRACTOR SHALL SUBMIT DETAILS ON PROPOSED WATER DISCHARGE CONTROL TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCING WITH WORK.
2. PIT DIMENSIONS ARE OPTIONAL.
3. A BASE OF 2" AGGREGATE SHOULD BE PLACED IN THE PIT TO A DEPTH OF 12". AFTER INSTALLING THE STANDPIPE, THE PIT SURROUNDING THE STANDPIPE SHOULD BE BACKFILLED WITH 2" AGGREGATE.
4. THE STANDPIPE SHOULD EXTEND 12" TO 18" ABOVE THE LIP OF THE PIT.
5. THE STANDPIPE SHOULD BE WRAPPED WITH FILTERCLOTH BEFORE INSTALLATION. IF DESIRED 1/4" TO 1/2" HARDWARE CLOTH MAY BE PLACED AROUND THE STANDPIPE PRIOR TO ATTACHING THE FILTERCLOTH. THIS WILL INCREASE THE RATE OF WATER SEEPAGE INTO THE PIPE.
6. THE COST FOR THE APPROVED WATER DISCHARGE CONTROL MEASURES SHOULD BE INCLUDED IN THE COST OF THE PRECAST CULVERT AND WINGWALL ITEMS.
7. IF DISCHARGE IS NOT CLEAN, THE CONTRACTOR WILL HAVE TO PROVIDE A SEDIMENTATION BASIN. SEDIMENTATION DETAILS WILL HAVE TO BE APPROVED BY THE ENGINEER PRIOR TO USE.

D040965

NOBLE STREET OVER WEST CREEK VILLAGE OF EVANS MILLS COUNTY: JEFFERSON REGION: 7	PIN 7753.77	BRIDGES 3371810	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED EROSION & SEDIMENT CONTROL PLAN	CONTRACT NUMBER D036474 DRAWING NO. PERM-5 SHEET NO. 5
				JEFFERSON COUNTY HIGHWAY DEPARTMENT	Stantec

DESIGN SUPERVISOR J. HOFMANN | JOB MANAGER S. MILLER | DESIGN S. MILLER, B. OLSEN | CHECK B. WALKER | DRAFTING S. ROMEISER | CHECK B. WALKER | PROJECT MANAGER T. BUTLER

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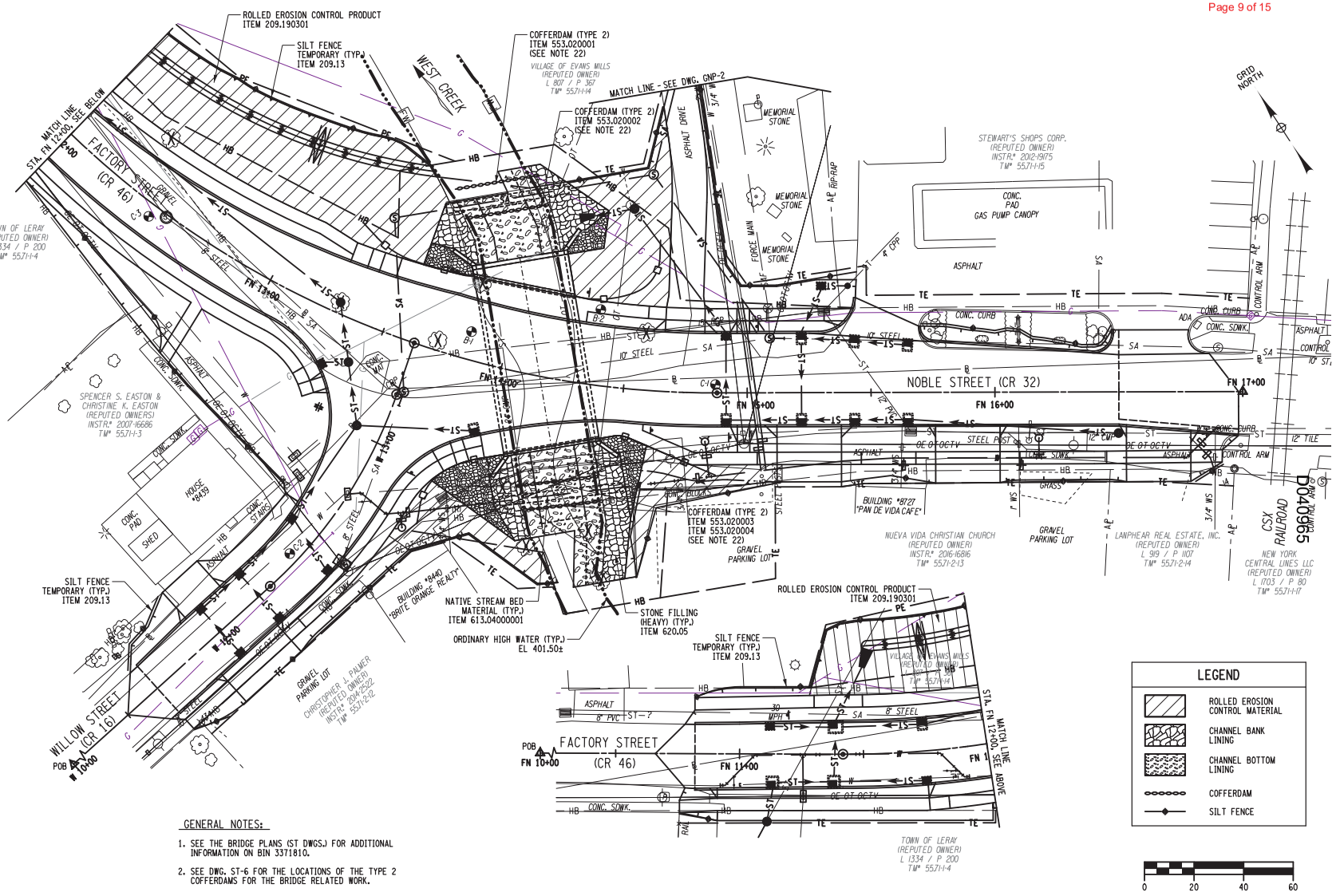

GENERAL NOTES:

1. SEE THE BRIDGE PLANS (ST DWGS.) FOR ADDITIONAL INFORMATION ON BIN 3371810.
2. SEE DWG. ST-6 FOR THE LOCATIONS OF THE TYPE 2 COFFERDAMS FOR THE BRIDGE RELATED WORK.

NOBLE STREET OVER WEST CREEK VILLAGE OF EVANS MILLS COUNTY: JEFFERSON REGION: 7	PIN 7753.77	BRIDGES 3371810	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED EROSION & SEDIMENT CONTROL PLAN	CONTRACT NUMBER D036474 DRAWING NO. PERM-6 SHEET NO. 6
				JEFFERSON COUNTY HIGHWAY DEPARTMENT	Stantec

DESIGN SUPERVISOR J. HOFMANN | JOB MANAGER S. MILLER | DESIGN B. OLSEN | S. MILLER | CHECK B. WALKER | DRAFTING S. ROMEISER | CHECK B. WALKER | PROJECT MANAGER T. BUTLER

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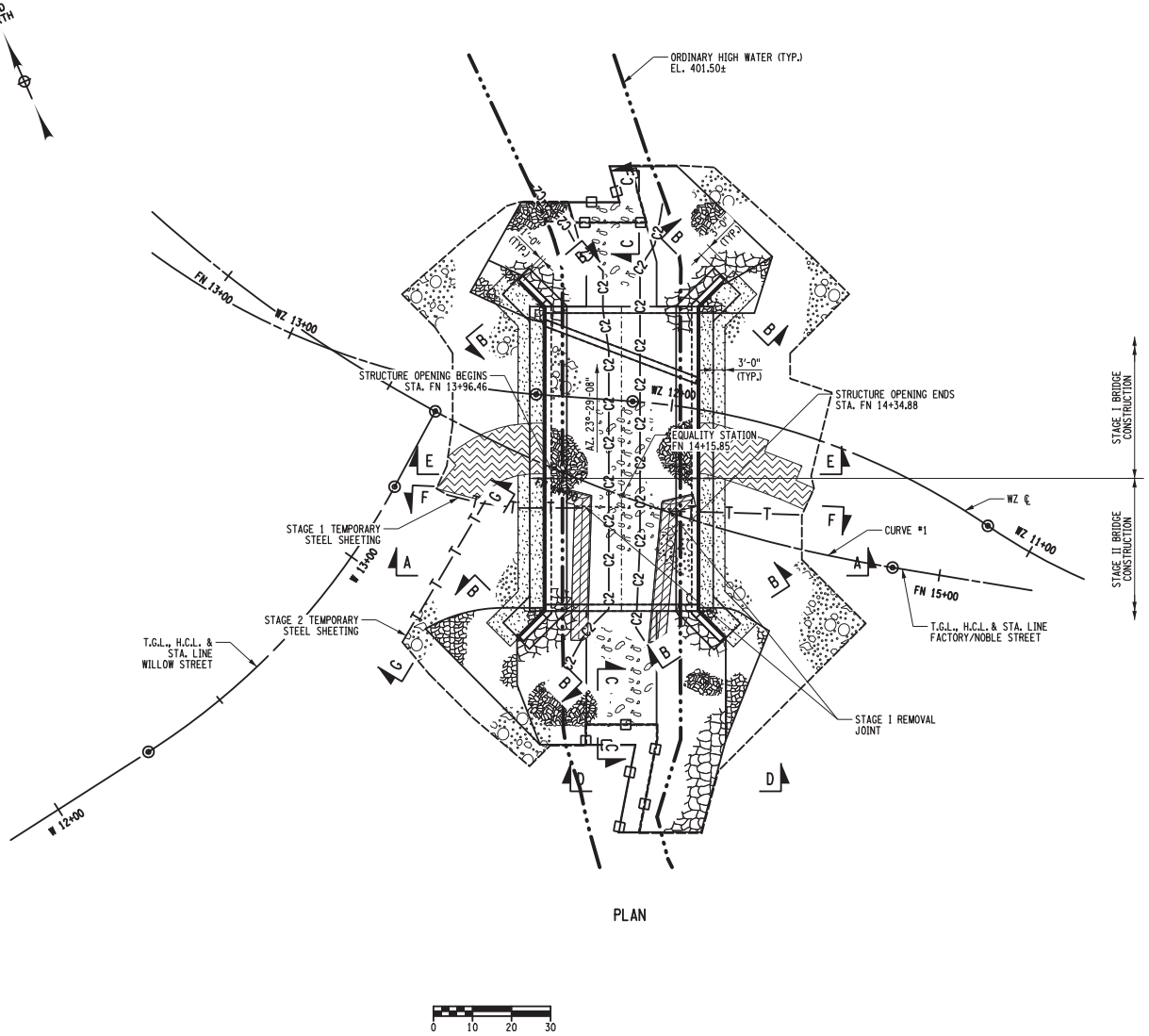

PLAN

NOTES:

1. EXISTING STRUCTURE TO BE COMPLETELY REMOVED
2. THE CONTRACTOR SHALL MAINTAIN CREEK FLOW THROUGHOUT THE DURATION OF THE PROJECT. MEANS AND METHODS OF MAINTAINING FLOW SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, COST SHALL BE INCLUDED UNDER ITEM 553.02000X, COFFERDAM (TYPE 2).
3. THE COST OF SAWCUTTING EXISTING CONCRETE DURING STAGE 1 REMOVALS SHALL BE INCLUDED UNDER ITEM 202.120001 AND ITEM 202.19
4. FOR SECTIONS, SEE DRAWING NO. ST-7 AND ST-8.
5. DRAINS WITH AN IMPERMEABLE CORE SHALL HAVE THE IMPERMEABLE PORTION REMOVED AT WEEPHOLE LOCATIONS WITHOUT DAMAGING THE GEOTEXTILE IN ACCORDANCE WITH SECTION 207-3.03 OF THE NYSDOT STANDARD SPECIFICATIONS. ALL WEEPHOLE LOCATIONS SHALL BE REINFORCED BY PLACING AN ADDITIONAL 2'x2' SECTION OF GEOTEXTILE SECURED BY A METHOD APPROVED BY THE ENGINEER. COST SHALL BE INCLUDED UNDER ITEM 207.26.

LEGEND

- EXISTING GROUND SURFACE
- SELECT STRUCTURE FILL (ITEM 203.21), COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY
- EMBANKMENT IN PLACE (ITEM 203.03)
- STONE FILLING (LIGHT) (ITEM 620.03)
- STONE FILLING (HEAVY) (ITEM 620.05)
- BEDDING MATERIAL, TYPE 1 (ITEM 620.0801)
- REMOVAL OF SUBSTRUCTURES (ITEM 202.19)
- NATIVE STREAMBED MATERIAL (ITEM 613.04000001, SEE DESIGNER NOTE)
- PREFABRICATED COMPOSITE STRUCTURAL DRAIN (ITEM 207.26)
- AREA ENCLOSED WITHIN THESE LINES DESIGNATES PAYMENT LINES FOR STRUCTURE EXCAVATION (ITEM 206.01)
- —T— TEMPORARY STEEL SHEETING (ITEM 552.13)
- —C2— COFFERDAM (TYPE 2) (ITEM 553.020007 - BEGIN) (ITEM 553.020008 - END)
- GEOSYNTHETIC REINFORCED SOIL SYSTEM WALL - WELDED WIRE FORM (ITEM 554.3001)
- AREA ENCLOSED WITHIN THESE LINES DESIGNATES PAYMENT LINES FOR TRENCH & CULVERT EXCAVATION (ITEM 206.0201).

D040965

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NOBLE STREET OVER WEST CREEK VILLAGE OF EVANS MILLS COUNTY: JEFFERSON REGION: 7	PIN 7753.77	BRIDGES BIN 3371810	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED DEMOLITION, EXCAVATION AND EMBANKMENT PLAN	CONTRACT NUMBER D036474 DRAWING NO. PERM-7 SHEET NO. 7

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

JEFFERSON COUNTY HIGHWAY DEPARTMENT

Stantec

DESIGN SUPERVISOR J. HOFMANN | JOB MANAGER T. BUTLER | DESIGN K. BONAURA E. TURBERG | CHECK S. MILLER C. CARTER | DRAFTING K. BONAURA E. TURBERG | CHECK T. BUTLER | PROJECT MANAGER T. BUTLER

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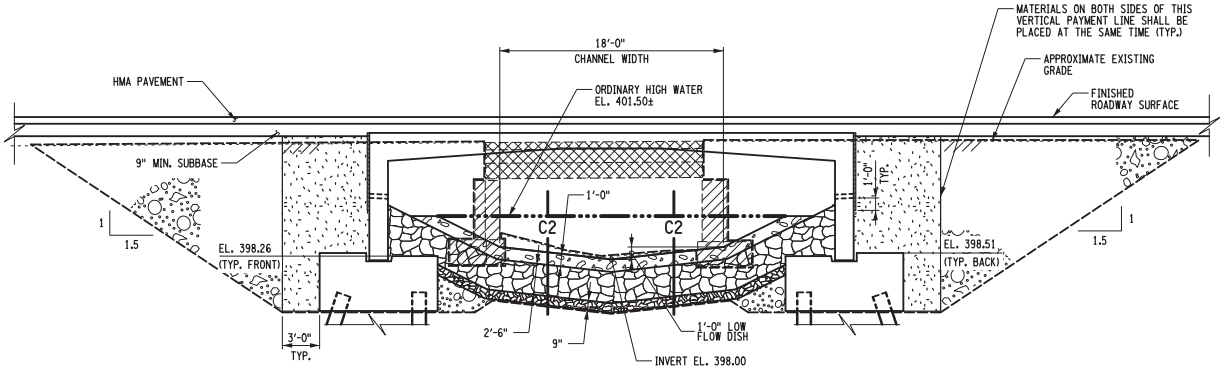
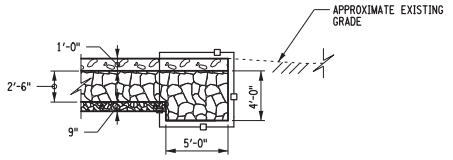
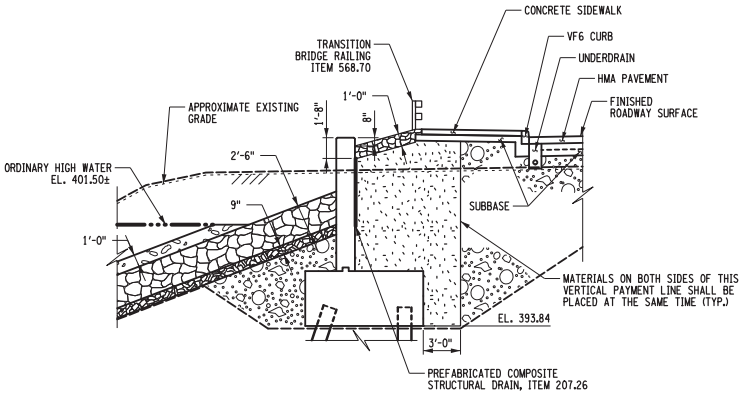


SECTION A-A

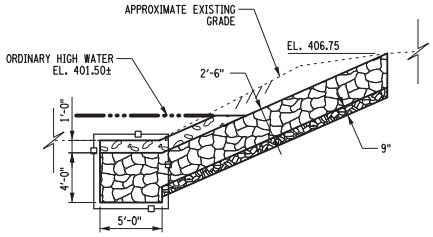


SECTION C-C



SECTION B-B

END RIGHT WINGWALL SHOWN
ALL OTHERS SIMILAR



SECTION D-D

LEGEND

- REMOVE EXISTING SUPERSTRUCTURES (ITEM 202.120001)
- EXISTING GROUND SURFACE
- SELECT STRUCTURE FILL (ITEM 203.21), COMPACTED TO 95% OF STANDARD PROCTOR MAXIMUM DENSITY
- EMBANKMENT IN PLACE (ITEM 203.03)
- STONE FILLING (LIGHT) (ITEM 620.03)
- STONE FILLING (HEAVY) (ITEM 620.05)
- BEDDING MATERIAL, TYPE 1 (ITEM 620.0801)
- REMOVAL OF SUBSTRUCTURES (ITEM 202.19)
- NATIVE STREAMBED MATERIAL (ITEM 613.04000001)
- PREFABRICATED COMPOSITE STRUCTURAL DRAIN (ITEM 207.26)
- AREA ENCLOSED WITHIN THESE LINES DESIGNATES PAYMENT LINES FOR STRUCTURE EXCAVATION (ITEM 206.01)
- —T— DESIGNATES PAYMENT LINES FOR TEMPORARY STEEL SHEETING (ITEM 552.13)
- —C2— DESIGNATES COFFERDAM (TYPE 2) (ITEM 553.020007 - BEGIN), (ITEM 553.020008 - END)
- AREA ENCLOSED WITHIN THESE LINES DESIGNATES PAYMENT LINES FOR TRENCH & CULVERT EXCAVATION (ITEM 206.0201).

D040965

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NOBLE STREET OVER WEST CREEK VILLAGE OF EVANS MILLS COUNTY: JEFFERSON REGION: 7	PIN 7753.77	BRIDGES BIN 3371810	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED DEMOLITION, EXCAVATION AND EMBANKMENT SECTIONS (1 OF 2)	CONTRACT NUMBER D036474 DRAWING NO. PERM-8 SHEET NO. 8

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR, TO ALTER AN ITEM IN ANY WAY. IF AN ITEM BEARING THE STAMP OF A LICENSED PROFESSIONAL IS ALTERED, THE ALTERING ENGINEER, ARCHITECT, LANDSCAPE ARCHITECT, OR LAND SURVEYOR SHALL STAMP THE DOCUMENT AND INCLUDE THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

JEFFERSON COUNTY HIGHWAY DEPARTMENT

Stantec

DESIGN SUPERVISOR J. HOFMANN | JOB MANAGER T. BUTLER | DESIGN K. BONAGURA E. TURBERG | CHECK S. MILLER C. CARTER | DRAFTING K. BONAGURA E. TURBERG | CHECK T. BUTLER | PROJECT MANAGER T. BUTLER

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PROPOSED IMPROVEMENTS

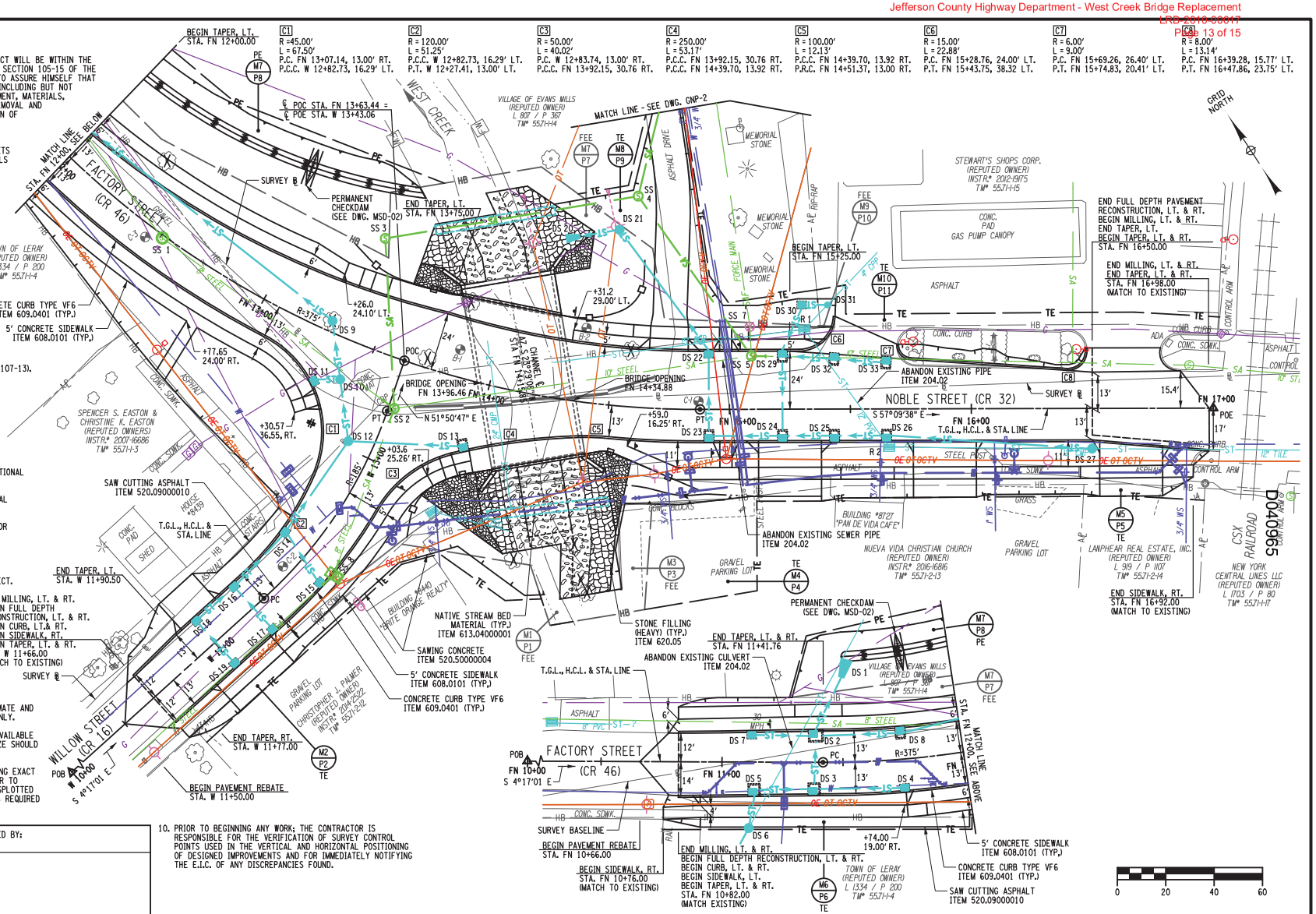
PERTINENT CONTRACT DRAWINGS

RIGHT OF WAY NOTES:

1. ALL WORK TO BE PERFORMED UNDER THIS CONTRACT WILL BE WITHIN THE PUBLIC RIGHT-OF-WAY (ROW) IN ACCORDANCE WITH SECTION 105-15 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR IS TO ASSURE HIMSELF THAT ALL WORK IS BEING PERFOMED WITHIN THE ROW, INCLUDING BUT NOT LIMITED TO VEHICLE ACCESS; STORAGE OF EQUIPMENT, MATERIALS, DEBRIS AND WASTE; LANDSCAPING; VEGETATION REMOVAL AND MANAGEMENT; GRADING, SEEDING AND INSTALLATION OF TURF; AND THE INSTALLATION OF ANY FENCES OR PROTECTIVE BARRIER.
2. IF CONTRACTOR IS UNABLE TO IDENTIFY THE LIMITS OF THE RIGHTS-OF-WAY WHEN THE CONTRACT CALLS FOR WORK IN THOSE VICINITIES, THE CONTRACTOR MUST CONTACT THE PROJECT ENGINEER FOR DEFINITIVE BOUNDARY DETERMINATIONS BEFORE ANY WORK MAY BE INITIATED AT THOSE LOCATIONS (STANDARD SPECIFICATIONS SECTIONS 105-10 AND 625).
3. IN ACCORDANCE WITH SECTION 107-13 OF THE STANDARD SPECIFICATIONS, RELEASES FOR ANY NON-ESSENTIAL CONTRACT WORK OUTSIDE OF THE EXISTING RIGHTS-OF-WAY, INCLUDING PLANTINGS, LANDSCAPING OR DRIVEWAY REMOVAL OR ENHANCEMENT, WILL BE PROVIDED BY THE PROJECT ENGINEER AND IN NO INSTANCE ARE TO BE SECURED BY THE CONTRACTOR. THE CONTRACTOR SHALL NOT INVADE UPON PRIVATE PROPERTIES, LANDS OR BUILDINGS OUTSIDE OF THE RIGHTS-OF-WAY FOR ANY REASON WITHOUT FIRST SECURING WRITTEN PERMISSION FROM THE PROPERTY OWNER (STANDARD SPECIFICATIONS SECTION 107-08 AND 107-13).
4. THE CONTRACTOR WILL BE HELD LIABLE FOR ANY DAMAGES DONE. ANY SUCH INJURIES OR DAMAGES SHALL BE SATISFACTORILY REPAIRED OR ITEMS REPLACED AT THE CONTRACTOR'S EXPENSE (STANDARD SPECIFICATIONS SECTION 107-08 AND 107-13).

GENERAL NOTES:

1. SEE GUIDE RAIL TABLE ON DWG. MST-1 FOR ADDITIONAL INFORMATION ON NEW BOX BEAM GUIDE RAILING.
2. SEE THE BRIDGE PLANS (ST DWGS.) FOR ADDITIONAL INFORMATION ON BIN 3371810.
3. SEE THE SURVEY CONTROL SHEET (DWG. SCS-1) FOR ADDITIONAL INFORMATION ON THE HORIZONTAL ALIGNMENT, SURVEY BASELINE, AND BENCHMARKS.
4. SEE THE EROSION AND SEDIMENT CONTROL PLAN (DWG. ECP-2) FOR ADDITIONAL INFORMATION ON EROSION AND SEDIMENT CONTROL FOR THIS PROJECT.
5. SEE THE SIGNING AND PAVEMENT MARKING PLAN (DWG. SPM-1) FOR ADDITIONAL INFORMATION ON ROADWAY SIGNAGE AND PAVEMENT MARKING LAYOUT.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY DIG SAFELY - NEW YORK FOR ALL UNDERGROUND UTILITY LOCATIONS PRIOR TO ANY EXCAVATION.
7. ALL SUBSURFACE LOCATIONS SHOWN ARE APPROXIMATE AND SHALL BE USED FOR PRELIMINARY ENGINEERING ONLY.
8. UTILITY INFORMATION HAS BEEN PLOTTED FROM AVAILABLE SOURCES AND THEIR PURPOSE, LOCATIONS AND SIZE SHOULD BE CONSIDERED APPROXIMATE ONLY.
9. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING EXACT UTILITY LOCATIONS, SIZES, AND ELEVATIONS PRIOR TO COMMENCING CONSTRUCTION. IF UNCHARTED OR MISPLOTTED UTILITIES ARE ENCOUNTERED, THE CONTRACTOR IS REQUIRED TO NOTIFY THE OWNER IMMEDIATELY.
10. PRIOR TO BEGINNING ANY WORK; THE CONTRACTOR IS RESPONSIBLE FOR THE VERIFICATION OF SURVEY CONTROL POINTS USED IN THE VERTICAL AND HORIZONTAL POSITIONING OF DESIGNED IMPROVEMENTS AND FOR IMMEDIATELY NOTIFYING THE E.I.C. OF ANY DISCREPANCIES FOUND.



AFFIX SEAL:	ALTERED BY:
ON:	ON:

AS-BUILT REVISIONS DESCRIPTION OF ALTERATIONS:	NOBLE STREET OVER WEST CREEK VILLAGE OF EVANS MILLS COUNTY: JEFFERSON REGION: 7	PIN 7753.77 UTILITY QUALITY LEVEL 'D'	BRIDGES 3371810	CULVERTS	ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED GENERAL PLAN	CONTRACT NUMBER D036474 DRAWING NO. GNP-1 SHEET NO. 32

JEFFERSON COUNTY HIGHWAY DEPARTMENT

Stantec

D040695

DESIGN SUPERVISOR J. HOFMANN | JOB MANAGER T. BUTLER | DESIGN B. OLSEN | CHECK B. WALKER | DRAFTING S. ROMEISER | CHECK B. WALKER | PROJECT MANAGER T. BUTLER

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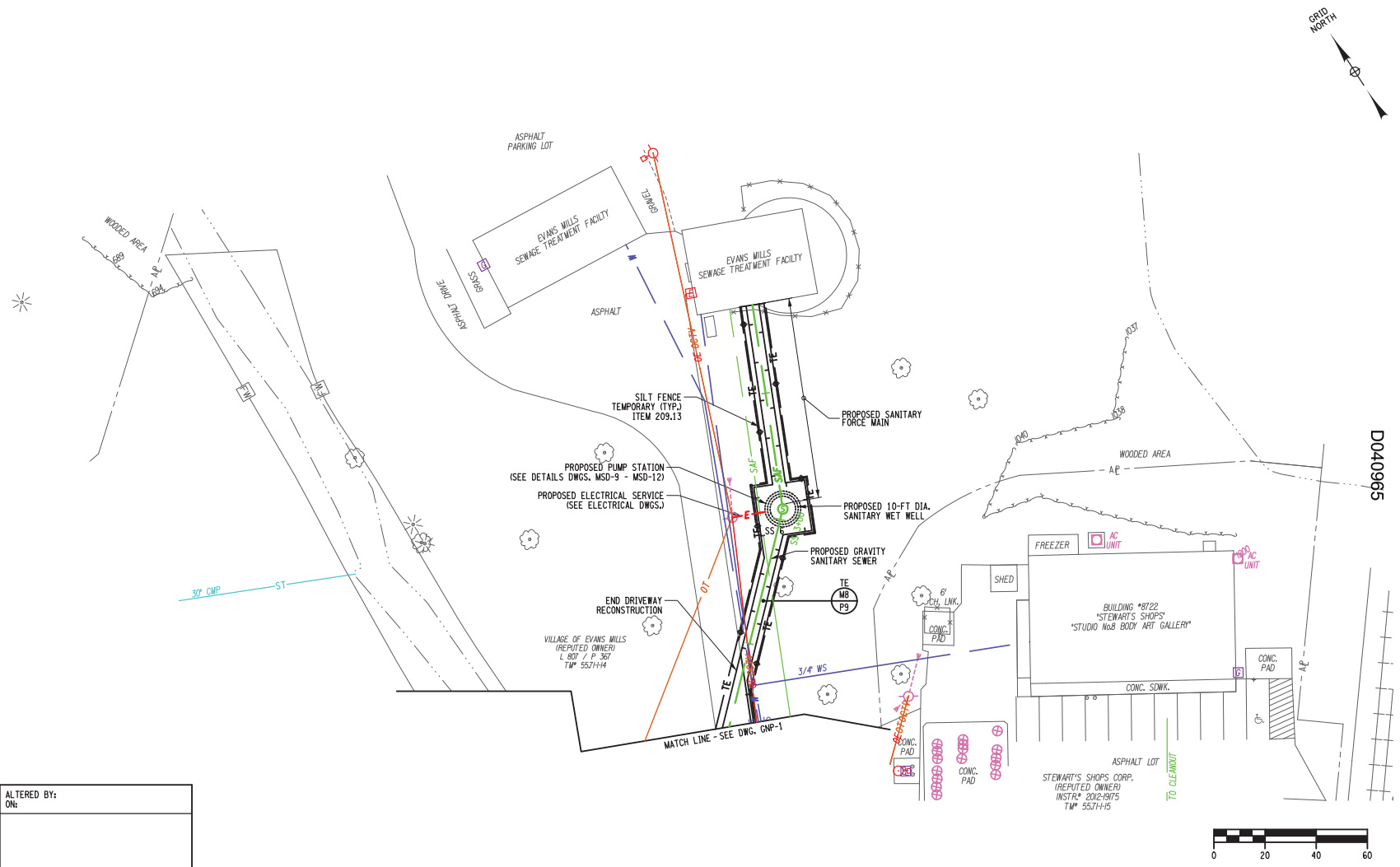

D040965

AFFIX SEAL: ON:	ALTERED BY: ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NOBLE STREET OVER WEST CREEK
VILLAGE OF EVANS MILLS
COUNTY: JEFFERSON REGION: 7

PIN 7753.77
UTILITY QUALITY LEVEL 'D'

BRIDGES 3371810

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

GENERAL PLAN

CONTRACT NUMBER D036474

DRAWING NO. GNP-2
SHEET NO. 33

JEFFERSON COUNTY HIGHWAY DEPARTMENT

Stantec

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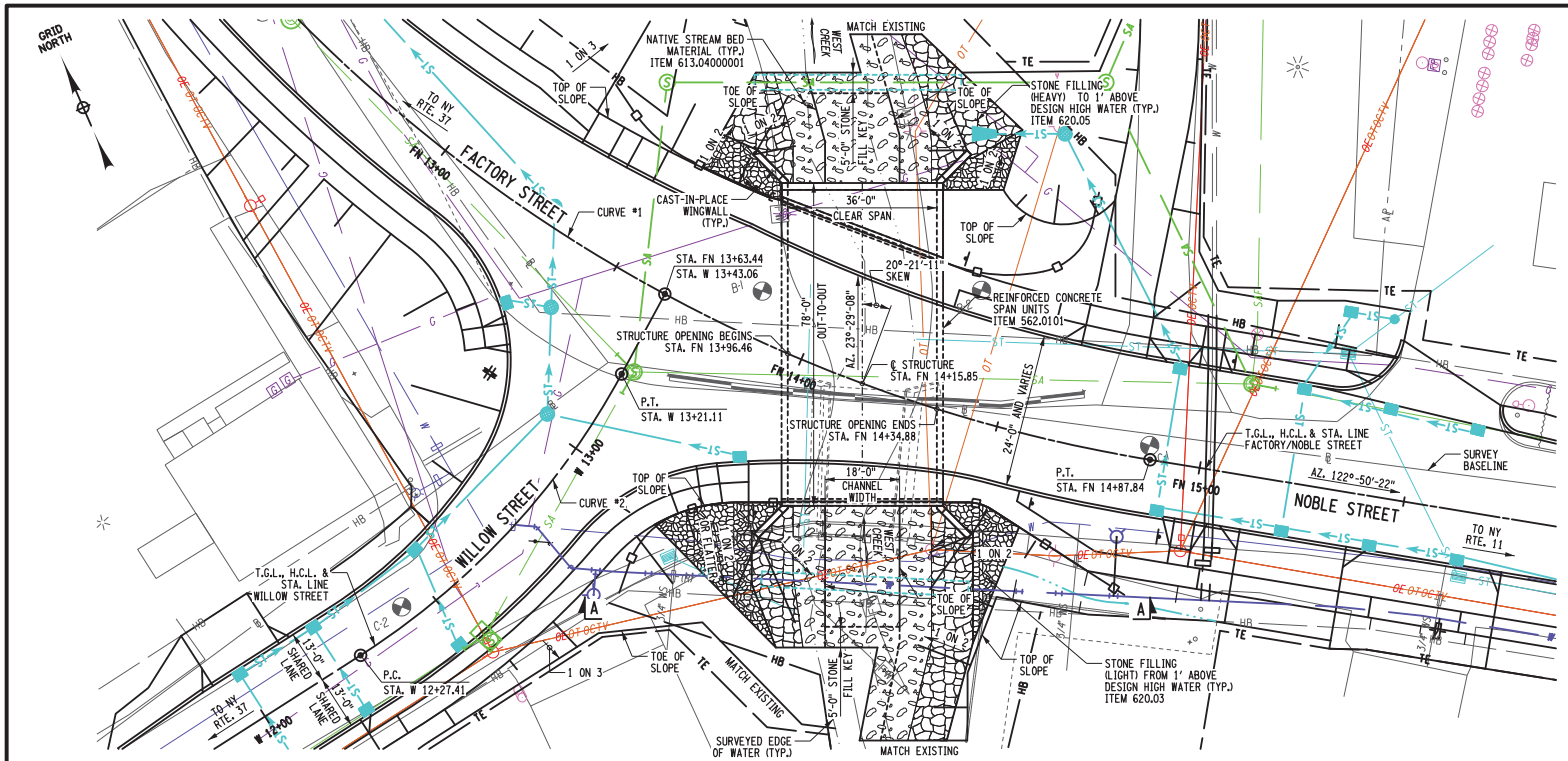


PLAN

HYDRAULIC DATA			
DRAINAGE AREA 10 SQ. MILES		BASIC FLOOD*	DESIGN FLOOD*
RECURRENCY INTERVAL (YEARS)		100	50
PEAK DISCHARGE (FT.³/S)		1200	1044
HIGH WATER ELEVATION AT POINT OF MAX. BACKWATER	EXISTING	408.38	408.36
	PROPOSED	406.06	405.75
AVG. VELOCITY THRU STRUCT. @ DESIGN FLOOD		4.88 FT./SEC.	

SCOUR ANALYSIS:	MINIMUM CHANNEL EL. 398.00 FT.			
	Q100 SCOUR DEPTH (FT)	Q100 SCOUR ELEV. (FT)	Q500 SCOUR DEPTH (FT)	Q500 SCOUR ELEV. (FT)
BEGIN ABUTMENT	12.75	385.25	23.44	374.56
END ABUTMENT	12.75	385.25	23.44	374.56
SCOUR DEPTH IS MEASURED FROM MINIMUM CHANNEL ELEVATION				

* DESIGN AND BASIC FLOOD DATA ARE BASED ON THE PROJECTED Q50 AND Q100 (20% INCREASE IN FLOWS)

THE PROPOSED STRUCTURE SHALL PROVIDE AT THE UPSTREAM FASCIA, A MINIMUM HYDRAULIC AREA (MEASURED PERPENDICULAR TO THE FLOW) OF 218 SQ. FT. BELOW THE DESIGN HIGH WATER ELEVATION OF 405.75. THE MINIMUM CLEAR SPAN SHALL BE 36 FT. PERPENDICULAR TO FLOW. A CLEAR SPAN EXCEEDING THIS BY MORE THAN 10% SHALL REQUIRE THE CONCURRENCE OF THE REGIONAL HYDRAULICS ENGINEER OR THE OFFICE OF STRUCTURES' HYDRAULIC ENGINEERING UNIT.

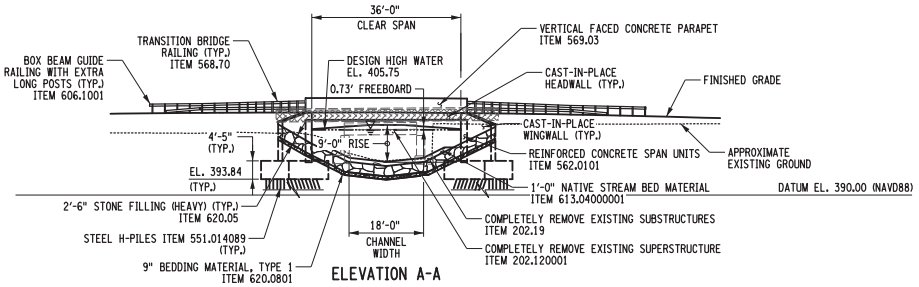
THREE SIDED STRUCTURE DESIGN DATA	
CLEAR SPAN, ft.	36'-0"
FRAME RISE, ft.	9'-0"
* MIN. FILL HEIGHT, ft.	1.16'
* MAX. FILL HEIGHT, ft.	1.78'
(CSKEW) SKEW ANGLE TO ℄ OF ROADWAY, DEG.	20°-21'-11"
LIVE LOAD	HL93
RAILING/ BARRIER TEST LOAD	TL-2

* BASED ON ASSUMED TOP SLAB THICKNESS OF 1'-3". FABRICATOR SHALL ADJUST BASED ON ACTUAL TOP SLAB THICKNESS. MEASURED FROM THE TOP OF THE TOP SLAB TO THE TOP OF THE PAVEMENT.

D040965

CURVE #1
P.C. = STA. FN 11+41.76
P.I. = STA. FN 13+28.23
P.T. = STA. FN 14+87.84
R = 375.00'
L = 346.08'
Δ = 52°-52'-37" LT.
T = 186.47'

CURVE #2
P.C. = STA. W 12+27.41
P.I. = STA. W 12+75.29
P.T. = STA. W 13+21.11
R = 185.00'
L = 93.70'
Δ = 29°-01'-11" LT.
T = 47.88'



ELEVATION A-A

LOAD RATING (LFD)		
INVENTORY	HS	TONS
OPERATING	HS	TONS
LRFR RATING FACTORS		
INVENTORY	HL-93	1.2 MIN.
OPERATING	HL-93	

THE LOAD RATING TABLE SHALL BE FILLED IN BY THE EIC FROM INFORMATION RECEIVED FROM THE CONTRACTOR AFTER REVIEW AND APPROVAL BY THE ENGINEER. THE SUBMITTED LOAD RATING INFORMATION SHALL BE IN ACCORDANCE WITH THE AASHTO "MANUAL FOR BRIDGE EVALUATION" WITH ALL INTERIM PROVISIONS IN EFFECT. THE CONTRACTOR SHALL PROVIDE LOAD RATINGS IN BOTH THE LOAD FACTOR RATING (LFD) AND THE LOAD AND RESISTANCE FACTOR RATING (LRFR) METHOD. THE CONTRACTOR SHALL ALSO PROVIDE ALL LOAD RATING COMPUTATIONS TO THE ENGINEER, STAMPED BY A NEW YORK STATE PROFESSIONAL ENGINEER.

0 10 20 30

AFFIX SEAL:	ALTERED BY:
ON:	ON:

AS-BUILT REVISIONS
DESCRIPTION OF ALTERATIONS:

NOBLE STREET OVER WEST CREEK
VILLAGE OF EVANS MILLS
COUNTY: JEFFERSON REGION: 7

PIN 7753.77
UTILITY QUALITY LEVEL 'D'

BRIDGES BIN 3371810

CULVERTS

ALL DIMENSIONS IN ft UNLESS OTHERWISE NOTED

GENERAL PLAN AND ELEVATION

CONTRACT NUMBER D036474

DRAWING NO. ST-1

SHEET NO. 43

JEFFERSON COUNTY HIGHWAY DEPARTMENT

Stantec

DESIGN SUPERVISOR E. HILLIARD | JOB MANAGER C. CARTER | DESIGN S. ROMEISER K. ALBERTS | CHECK S. MILLER C. CARTER | DRAFTING S. ROMEISER K. ALBERTS | CHECK T. BUTLER | PROJECT MANAGER T. BUTLER

FILE NAME = U:\193800186\Transportation\Design - Bridge\Drawing\Plan Set\ST-1 General Plan and Elevation.dgn
DATE/TIME = 3/10/2023 2:28:14 PM
USER = kalberts

Nationwide Permit 3

Maintenance

Table of Contents:

A. Nationwide Permits Index

B. Nationwide Permit 3 – Maintenance
- **Specific NW terms and notification requirements**
- **Buffalo & New York Districts Specific NWP Regional Conditions**
- **Specific NWP Water Quality Certification**
- **NYSDOS Specific NWP Coastal Zone Consistency Determination**

C. Nationwide Permit General Conditions 1-32

D. District Engineer's Decision

E. Further Information

F. Definitions

G. Buffalo and New York District Regional General Conditions A-F (applicable to all NWPs)

H. NYSDEC General Water Quality Conditions (applicable to all NWPs for which Water Quality Certification has been provided)

I. NYSDOS Coastal Zone Management Consistency Additional Information (applicable to all projects located within the NYS Coastal Zone)

J. Information on Nationwide Permit Verification

K. Agency Contact Information

ENCLOSURE 1: New York State Regulatory District Boundary Map

ENCLOSURE 2: NYC Water Supply – East of Hudson Watershed (for NY District Regional Conditions)

ENCLOSURE 3: Commercial Mooring Buoy Application Additional Information (for NY District Regional Conditions – not applicable within Buffalo District)

ENCLOSURE 4: Incident Report of Sea Turtle Take (for NY District Regional Conditions – not applicable within Buffalo District)

A. NATIONWIDE PERMITS INDEX:

1. Aids to Navigation
2. Structures in Artificial Canals
3. Maintenance
4. Fish and Wildlife Harvesting, Enhancement and Attraction Devices and Activities
5. Scientific Measurement Devices
6. Survey Activities
7. Outfall Structures and Associated Intake Structures
8. Oil and Gas Structures on the Outer Continental Shelf
9. Structures in Fleeting and Anchorage Areas
10. Mooring Buoys
11. Temporary Recreational Structures
13. Bank Stabilization
14. Linear Transportation Projects
15. U.S. Coast Guard Approved Bridges
16. Return Water From Upland Contained Disposal Areas
17. Hydropower Projects
18. Minor Discharges
19. Minor Dredging
20. Response Operations for Oil or Hazardous Substances
22. Removal of Vessels
23. Approved Categorical Exclusions
24. Indian Tribe or State Administered Section 404 Programs
25. Structural Discharges
26. [Reserved]
27. Aquatic Habitat Restoration, Enhancement, and Establishment Activities
28. Modification of Existing Marinas
30. Moist Soil Management for Wildlife
31. Maintenance of Existing Flood Control Facilities
32. Completed Enforcement Actions
33. Temporary Construction, Access and Dewatering
34. Cranberry Production Activities
35. Maintenance Dredging of Existing Basins
36. Boat Ramps
37. Emergency Watershed Protection and Rehabilitation
38. Cleanup of Hazardous and Toxic Waste
41. Reshaping Existing Drainage and Irrigation Ditches
45. Repair of Uplands Damaged by Discrete Events
46. Discharges in Ditches
47. [Reserved]
49. Coal Mining Activities
53. Removal of Low-Head Dams
54. Living Shorelines
59. Water Reclamation and Reuse Facilities

B. NATIONWIDE PERMITS

3. Maintenance. (a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. This NWP also authorizes the removal of previously authorized structures or fills. Any stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill; such modifications, including the removal of material from the stream channel, must be immediately adjacent to the project. This NWP also authorizes the removal of accumulated sediment and debris within, and in the immediate vicinity of, the structure or fill. This NWP also authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

(b) This NWP also authorizes the removal of accumulated sediments and debris outside the immediate vicinity of existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.). The removal of sediment is limited to the minimum necessary to restore the waterway in the vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend farther than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an area that has no waters of the United States unless otherwise specifically approved by the district engineer under separate authorization.

(c) This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After conducting the maintenance activity, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

(d) This NWP does not authorize maintenance dredging for the primary purpose of navigation. This NWP does not authorize beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

Notification: For activities authorized by paragraph (b) of this NWP, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 32). The pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Authorities: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (Sections 10 and 404))

Note: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act Section 404(f) exemption for maintenance.

Permit-specific Regional Conditions (Buffalo and New York Districts):

a. The Nationwide General Permit Condition No. 32 – Pre-Construction Notification (PCN) for activities

proposed under NWP 3.b. involving the removal of accumulated sediments and debris in the vicinity of existing structures to restore the waterway to previously existing depths, must include evidence of such depths. Such evidence may include but is not limited to construction drawings of the original structure; or project drawings of past excavation activities in the vicinity. If this information is not available, the PCN must include evidence of the existing depths immediately outside the proposed work area.

b. Every effort should be made to prevent additional encroachment into the beds of New York waterbodies. All repair or rehabilitation activities should focus on using the area immediately landward of the existing structure. Bulkhead replacement shall be completed in-place or landward of the existing structure where practicable. When that is not practicable, a PCN shall be required for any encroachment proposed within tidal waters of the U.S. or any extensions, excluding the placement of toe stone protection recommended/required by state/federal resource agencies (i.e. NYSDEC, NYSDOS, USFWS & USEPA), which exceed 18 inches waterward of the existing bulkhead within non-tidal waters. The PCN must include justification for a waterward extension of the bulkhead (e.g. geologic conditions, engineering requirements, etc.).

New York District Only Permit-specific Regional Conditions:

c. As discussed in Section G-E.8. below, if any work is proposed within Essential Fish Habitat (EFH) or within areas supporting anadromous fish migration and spawning, sediment removal and pile and sheet pile/cofferdam installation and removal shall be avoided from March 1 to June 30 of any year. Work within cofferdams can proceed any time during the year provided that the cofferdams are installed or removed outside of the seasonal work restriction. A PCN is required if a variance of this seasonal work window is requested.

d. Within Essential Fish Habitat (EFH), if any work is proposed within areas identified as EFH for winter flounder eggs and larvae, in-water work shall be avoided from January 15 to May 31 of any year. A PCN is required if a variance of this seasonal work window is requested.

e. Within EFH, as discussed in Section G-E.8. below, if any work is proposed within 50 feet of submerged aquatic vegetation (SAV), a map generated from the SAV data tools in Note 5 or a current SAV survey of the area shall be included with a PCN to USACE for coordination with National Marine Fisheries Service (NMFS).

f. If tide gate replacement or maintenance is proposed, tide gates shall be replaced with self-regulating tide gates that allow tidal flow and fish passage but can be set to close at a specified water level, unless it can be demonstrated that a self-regulating tide gate would not be practicable due to ecological or public safety reasons. A PCN is required for all tide gate replacements and maintenance in which a one-way gate is proposed. The PCN shall describe fully the existing conditions of the tide gate and the habitat upstream of the gate and include documentation of its condition, function and maintenance over the previous decade.

<u>REMINDER TO APPLICANT</u>: For projects involving culvert maintenance or replacement, please take particular note of the requirements of General Regional Conditions B.1 and B.2. below. For projects involving aerial transmission lines, note clearance requirements as outlined in 33 CFR 322.5(i) (See NWP #57).

Section 401 Water Quality Certification (WQC):
The WQC has been denied for this NWP by the following certifying authorities:

i. New York State Department of Public Services (NYSDPS) for activities that relate to the construction and operation of major natural gas or electric transmission facilities undertaken pursuant to New York State Public Service Law (PSL) Article VII.

ii. New York State Office of Renewable Energy Siting (NYSORES) for activities that relate to the construction and operation of major renewable electric generating facilities undertaken pursuant to New York State Executive Law Article 6, Section 94-C.

iii. New York State Board on Electric Generation Siting and the Environment (Siting Board) for activities that relate to new and repowered or modified major electric generating facilities of 25 megawatts or more undertaken pursuant to PSL Article 10.

iv. U.S. Environmental Protection Agency (USEPA), as the certifying agency for the seven federally recognized Indian Nations in New York (Cayuga Nation, Onondaga Nation, Oneida Nation of Indians, Seneca Nation of Indians, Shinnecock Indian Nation, Tonawanda Seneca Nation, and Tuscarora Nation) for all activities occurring on these tribal lands.

v. Saint Regis Mohawk Tribe for all activities occurring on Saint Regis Mohawk Tribal land.

The New York State Department of Environmental Conservation (NYSDEC) has granted blanket WQC, for those activities not outlined above, provided that the project complies with **all** the General Conditions listed below in Section H. Where the Special Conditions differ from the General Conditions, the Special Conditions shall prevail.

Any party conducting proposing to conduct the activities authorized by this NWP where the WQC has been denied or that cannot comply with all of the NYSDEC WQC conditions must apply for and obtain an individual WQC or waiver thereof from the appropriate certifying authority. Refer to Section K below for agency contact information.

New York State Department of State Coastal Zone Management Consistency Determination:
Pursuant to 15 CFR Part 930.41 and 930.43, the New York State Department of State (NYSDOS) concurs with the USACE' consistency determination for this NWP with which all general and all Buffalo and New York District regional conditions are complied and with the additional condition(s), as follows:

- The NYSDOS concurs with the USACE' consistency determination for projects outside of Marine and Coastal District Waters (all tidal waters south of the Governor Mario M. Cuomo Bridge) within or affecting the NYS Coastal Area where the activities to be authorized primarily involve the repair/replacement in-place or landward of a lawful structure or fill, with no waterward expansion or increase in footprint;

- The NYSDOS concurs with the USACE' consistency determination for projects authorized by New York State Department of Environmental Conservation (DEC) under General Permit GP-0-20-004 Great Lakes Erosion Control General Permit;

- The NYSDOS concurs with the USACE' consistency determination for projects proposed solely within the artificial canals identified by NYSDOS at: https://www.dos.ny.gov/opd/atlas/.

For activities that do not comply with the above conditions, the NYSDOS objects to the USACE' consistency determination and therefore, an individual consistency determination from NYSDOS is required for this NWP to be valid in the New York coastal area. Activities authorized pursuant to this Nationwide Permit shall be submitted to NYSDOS for review by the applicant. NYSDOS will review the proposed activities pursuant to 15 CFR Part 930 Subpart D. NYSDOS concurrence with an applicant's consistency certification shall not be presumed unless NYSDOS fails to concur with or object to an applicant's consistency certification within six (6) months of commencement of NYSDOS' review of an applicant's consistency certification and all necessary data and information in accordance with 15 CFR § 930.62 or § 930.63. See Section I below for further information.

C. NATIONWIDE PERMIT GENERAL CONDITIONS

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation. (a) No activity may cause more than a minimal adverse effect on navigation.

(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.

(c) The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Structures and Fills. Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers. (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.

(b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

(c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species. (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which "may affect" a listed species or critical habitat unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."

(b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity "may affect" or will have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps' determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(d) As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWPs.

(e) Authorization of an activity by an NWP does not authorize the "take" of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where "take" means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or

degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.

(f) If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether additional ESA section 7 consultation is required.

(g) Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at http://www.fws.gov/ or http://www.fws.gov/ipac and http://www.nmfs.noaa.gov/pr/species/esa/ respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties. (a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.

(b) Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.

(c) Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing pre-construction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district

engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: no historic properties affected, no adverse effect, or adverse effect.

(d) Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete pre-construction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

(e) Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer

may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

(a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

(b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.

(c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.

(d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).

(e) Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

(f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.

(1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee-responsible mitigation.

(2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)

(3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.

(4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.

(5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).

(6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).

(g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.

(h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

(i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality. (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.

(b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.

(c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

(a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.

(b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their

respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

"When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below."

_____
(Transferee)

_____
(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

(a) A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;

(b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the appropriate number and resource type of credits; and

(c) The signature of the permittee certifying the completion of the activity and mitigation.

The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification.

(a) Timing. Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:

(1) He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or

(2) 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

(b) Contents of Pre-Construction Notification: The PCN must be in writing and include the following information:

(1) Name, address and telephone numbers of the prospective permittee;

(2) Location of the proposed activity;

(3) Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

(4) (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

(ii) For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

(iii) Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);

(5) The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;

(6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.

(7) For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;

(8) For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

(9) For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the “study river” (see general condition 16); and

(10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.

(c) Form of Pre-Construction Notification: The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be

used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.

(d) Agency Coordination:

(1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.

(2) Agency coordination is required for: (i) all NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States; (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and (iii) NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

(3) When agency coordination is required, the district engineer will immediately provide (e.g., via e-mail, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or e-mail that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the pre-construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

(4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.

(5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

D. DISTRICT ENGINEER'S DECISION

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the single and complete crossings of waters of the United States that require PCNs to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings of waters of the United States authorized by an NWP. If an applicant requests a waiver of an

applicable limit, as provided for in NWPs 13, 36, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by an NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.

3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters. The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure that the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) that the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a

specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

E. FURTHER INFORMATION

1. District engineers have authority to determine if an activity complies with the terms and conditions of an NWP.

2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.

3. NWPs do not grant any property rights or exclusive privileges.

4. NWPs do not authorize any injury to the property or rights of others.

5. NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

F. DEFINITIONS

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term “discharge” means any discharge of dredged or fill material into waters of the United States.

Ecological reference: A model used to plan and design an aquatic habitat and riparian area restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on the structure, functions, and dynamics of an aquatic habitat type or a riparian area type that currently exists in the region where the proposed NWP 27 activity is located. Alternatively, an ecological reference may be based on a conceptual model for the aquatic habitat type or riparian area type to be restored, enhanced, or established as a result of the proposed NWP 27 activity. An ecological reference takes into account the range of variation of the aquatic habitat type or riparian area type in the region.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water’s surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line

of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. The loss of stream bed includes the acres of stream bed that are permanently adversely affected by filling or excavation because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters or wetlands for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

Navigable waters: Waters subject to section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR part 329.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Non-tidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation,

the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Perennial stream: A perennial stream has surface water flowing continuously year-round during a typical year.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a course substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands next to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term “single and complete

project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent utility (see definition of "independent utility"). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized jurisdictional stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

Tribal lands: Any lands title to which is either: 1) held in trust by the United States for the benefit of any Indian tribe or individual; or 2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

Tribal rights: Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NWPs, a waterbody is a "water of the United States." If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)).

G. BUFFALO & NEW YORK DISTRICT GENERAL REGIONAL CONDITIONS

These conditions apply to ALL Nationwide Permits.

G-A. Construction Best Management Practices (BMP's): Unless specifically approved otherwise through issuance of a variance by the District Engineer, the following BMP's must be implemented to the maximum degree practicable, to minimize erosion, migration of sediments, and adverse environmental impacts. Note that at a minimum, all erosion and sediment control and stormwater management practices must be designed, installed and maintained throughout the entire construction project in accordance with the latest version of the *New York Standards and Specifications for Erosion and Sediment Control* and the *New York State Stormwater Management Design Manual*. These documents are available at: http://www.dec.ny.gov/chemical/29066.html and http://www.dec.ny.gov/chemical/29072.html, respectively. Prior to the discharge of any dredged or fill material into waters of the United States, including wetlands, authorized by NWP, the permittee must install and maintain erosion and sedimentation controls in and/or adjacent to wetlands or other waters of the United States.

1. All synthetic erosion control features (e.g., silt fencing, netting, mats), which are intended for temporary use during construction, shall be completely removed and properly disposed of after their initial purpose has been served. Only natural fiber materials, which will degrade over time, may be abandoned in place.

2. Materials resulting from trench excavation for utility line installation or ditch reshaping activities which are temporarily sidecast or stockpiled into waters of the United States must be backfilled or removed to an upland area within 30 days of the date of deposition. Note: Upland options shall be utilized prior to temporary placement within waters of the U.S., unless it can be demonstrated that it would not be practicable or if the impacts of complying with this upland option requirement would result in more adverse impacts to the aquatic environment.

3. For trenching activities in wetlands the applicant shall install impermeable trench dams or trench breakers at the wetland boundaries and every 100 feet within wetland areas to prevent inadvertent drainage of wetlands or other waters of the United States.

4. Dry stream crossing methods (e.g., diversion, dam and pump, flume, bore) shall be utilized for culvert or other pipe, or utility installations to reduce downstream impacts from turbidity and sedimentation. This may require piping or pumping the stream flow around the work area and the use of cofferdams.

5. No in-stream work shall occur during periods of high flow, except for work that occurs in dewatered areas behind temporary diversions, cofferdams or causeways.

6. Construction access and staging areas shall be by means that avoid or minimize impacts to aquatic sites (e.g. use of upland areas for access & staging, floating barges, mats, etc.). Discharges of fill material associated with the construction of temporary access roads, staging areas and work pads in wetlands shall be placed on filter fabric. All temporary fills shall be removed upon completion of the work and the disturbed area restored to pre-construction contours, elevations and wetland conditions, including cover type. All vegetation utilized in the restoration activity shall consist of native species.

7. All return flow from dredged material disposal areas shall not result in an increase in turbidity in the receiving water body that will cause a substantial visible contrast to natural conditions. (See NWP #16)

8. For activities involving the placement of concrete into waters of the U.S., the permittee must employ watertight forms. The forms shall be dewatered prior to the placement of the concrete. The use of

tremie concrete is allowed, provided that it complies with New York State water quality standards.

9. New stormwater management facilities shall be located outside of waters of the U.S. A variance of this requirement may be requested with the submission of a PCN. The PCN must include justification which demonstrates that avoidance and minimization efforts have been met.

10. To the maximum extent practicable, the placement of fill in wetlands must be designed to maintain pre-construction surface water flows/conditions between remaining on or off-site waters and to prevent draining of the wetland or permanent hydrologic alteration. This may require the use of culverts and/or other measures. Furthermore, the activity must not restrict or impede the passage of normal or expected high flows (unless the primary purpose of the fill is to impound waters). The activity may alter the pre-construction flows/conditions if it can be shown that it benefits the aquatic environment (i.e. wetland restoration and/or enhancement).

11. Stone aprons and scour protection placed in streams shall not extend higher than the stream bed in order to create a uniform grade and shall be filled with native stream bed material and supplemented with similarly sized material, if needed, to fill interstitial spaces to maintain water flow on the surface of the stream bed.

G-B. CULVERTS

1. **ALL NEW OR REPLACEMENT CULVERTS IN STREAMS**, to the extent they are regulated, shall be constructed/installed in accordance with the following, in order to ensure compliance with NWP General Condition #2 – Aquatic Life Movement and #9 – Management of Water Flows:

a. Size: Bank-full flows shall be accommodated through maintenance of the existing bank-full channel cross sectional dimensions within a single culvert. Bank-full width is generally considered to be the top width at the stage where a stream begins to overtop its banks and spread into the floodplain. A bottomless culvert or bridge must be used to span the stream channel where practicable. If the stream cannot be spanned, the culvert width shall be minimum of 1.25 times width of the stream channel at the ordinary high water, which is generally equivalent to the width of the channel during the 2-year design storm.

b. Depth: To maintain low flow and aquatic life movement within culverts with a bottom, the culvert invert, including end sections, must be embedded. Specifically, the culvert must be installed with its bottom buried below the grade of the stream bed, as measured at the average low point, to a depth of a minimum of 20 percent of the culvert vertical rise (height) throughout the length of the culvert. (Note: When not practicable to do so due to small culvert size, it is acceptable to allow natural deposition to cover the interior of the culvert bed following placement of the culvert invert to the 20% depth.)

c. The dimension, pattern, and profile of the stream above and below the stream crossing shall not be permanently modified by changing the width or depth of the stream channel.

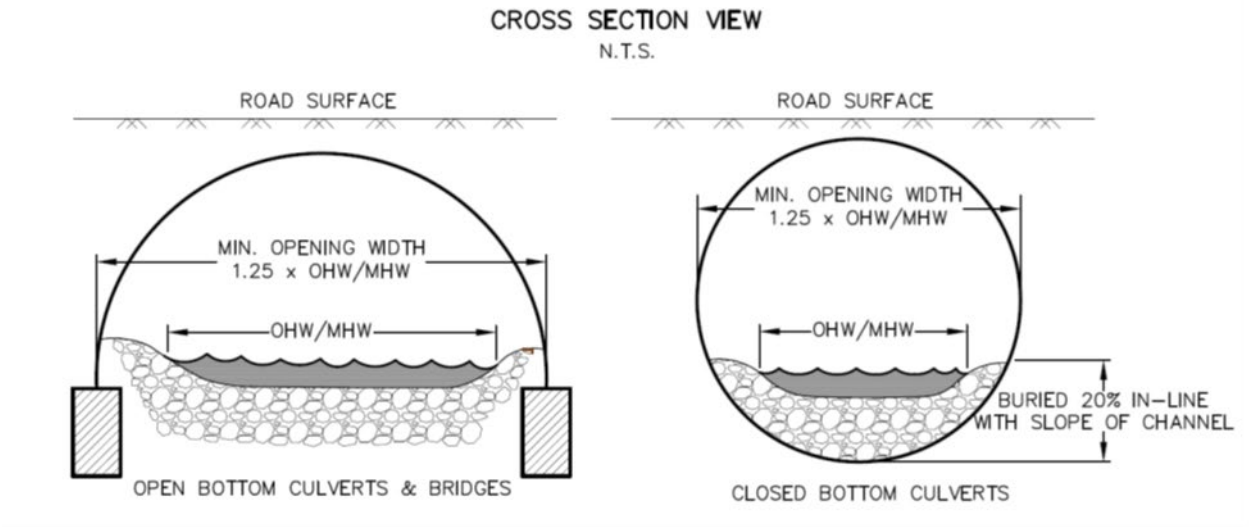
d. The culvert bed slope shall remain consistent with the slope of the adjacent stream channel.

Note 1: Use of the requirements alone will not satisfy the need for proper engineering and design. In particular, appropriate engineering is required to ensure structures are sized and designed to provide adequate capacity (to pass various flood flows) and stability (bed, bed forms, footings and abutments, both upstream and downstream). It is the permittee's responsibility to ensure the structure is appropriately designed.

Note 2: This condition does not apply to temporary culverts used for construction access that are in place for less than one construction season. However, compliance with General Conditions #2 and #9 still applies.

Note 3: For further guidance on identification of the Ordinary High Water mark, please see Regulatory

Guidance Letter 05-05 available at: https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/Guidance-Letters/



Preconstruction Notification (PCN) Requirements:
A PCN is required for projects that do not meet all of the above requirements. In addition to the PCN requirements of General Condition #32, the PCN must include the following information:

i. A statement indicating which of the above requirements will not be met by the proposed project;

ii. Information as to why the use of such structures or measures would not be practicable;

iii. A brief description of the stream discussing:

- Site specific information (i.e. stream bed slope, type and size of stream bed material, stream type, existing natural or manmade barriers, etc.) assessed to determine appropriate culvert design and to ensure management of water flows and aquatic life movement.

- Evaluation of the replacement for its impacts on: downstream flooding, upstream and downstream habitat (in-stream habitat, wetlands), potential for erosion and headcutting, and stream stability.

- Flow/storm event the proposed culvert is designed to pass (2 year, 50 year, etc.)

iv. Cross sections of the stream used to calculate the stream bed low point and ordinary high water width, consisting of:

- Stream channel cross sections shall be taken at proximal locations to the crossing location to determine the average of the lowest points in elevation of the stream bed and the average width at ordinary high water.

    - For new crossing locations, the average values from at least three measurements (project location and straight sections of the stream upstream and downstream) shall be used.

    - For replacement of an existing structure, the average values from at least two cross sections (straight sections of the stream upstream and downstream from the existing structure representative of the natural channel) shall be used. Note: sections should

not be taken in the immediate vicinity of the structure as the channel width may be affected by the structure and not provide an accurate representation of the natural channel.

- This average low point shall be used to ensure low flow is maintained through the culvert and from which all embedment depths are measured.

- If the above cross section method was not practicable to use, an alternative method may be utilized. The PCN shall include justification for the method used including the data used and an explanation as to how it provides an equivalent measure.

v. An evaluation of the effects the crossing would have on aquatic life movement and/or water flows; and

vi. Mitigation measures that will be employed to minimize these effects. Mitigation measures may include, but are not limited to baffles, weirs, roughened channels, and grade control structures

A variance of the requirement(s) will be issued by the Corps if it can be demonstrated that the proposal would meet General Conditions #2 & #9 and would result in a less environmentally damaging practicable alternative (e.g. If compliance with any of the requirement(s) would result in detrimental impacts to the aquatic system then an alternate design should be proposed and a variance request submitted which outlines how compliance with the general conditions will be met.).

2. **ALL CULVERT REHABILITATION PROJECTS IN STREAMS**, to the extent they are regulated, not including culvert replacement projects (See 1 above), shall be constructed in accordance with the following, in order to ensure compliance with NWP General Condition #2 – Aquatic Life Movement and #9 – Management of Water Flows:

a. An evaluation of the existing culvert shall be conducted prior to the proposed culvert rehabilitation to determine if the existing culvert is in compliance with NWP GC #2 and #9. Specifically, the culvert shall be evaluated regarding its effect upon aquatic life movements and low/ high water flow. If the above requirements in General Regional Condition B. 1 (a)-(e) are met, then the culvert is considered in compliance with NWP General Conditions #2 & # 9. (Potential evaluation methods to consider include: North Atlantic Aquatic Connectivity Collaborative (NAACC) (Note: Projects should not result in a reduction of the NAACC passability score by reducing passage or creating a barrier), US Forest Service Aquatic Organism Passage FishXing, etc.)

b. A PCN is not required for projects that utilize cured-in-place pipe lining or other repair activities that do not raise the existing invert elevation such that it causes an impediment to the passage of either aquatic life movement or water flow, unless there is an existing impediment which will not be corrected by the proposed repair.

c. A PCN is required for any culvert rehabilitation project that includes a culvert which is not in compliance with GC #2 and/or #9 (i.e. impedes aquatic life movement or water flow) and which will not be corrected by the proposed repair.

d. A PCN is required for culvert rehabilitation projects which will involve pipe slip lining or other activities, including concrete invert paving and concrete lining that raise the existing invert elevation such that it causes an impediment to the passage of low flow or aquatic life movement. Slip lining is defined as the insertion of a smaller diameter pipe into an existing pipe by pulling pushing, or spiral winding.

Preconstruction Notification (PCN) Requirements:
In addition to the PCN requirements of General Condition #32, the PCN must include the following information:

i. A summary of the evaluation required in Item a. above including average ordinary high water channel width and a discussion of the impediment(s) to aquatic life movement and/or water flow.

ii. Information as to how the proposal will mitigate for the impediment. Mitigation measures may include, but are not limited to baffles, weirs, roughened channels, and grade control structures.

G-C. No regulated activity authorized by a Nationwide Permit can cause the loss of areas classified as a bog or fen in the State of New York, as determined by the Buffalo or the New York District Corps of Engineers, due to the scarcity of this habitat in New York State and the difficulty with in-kind mitigation. The Districts will utilize the following document in the classification:

> Edinger, G. J., D. J. Evans, S. Gebauer, T. G. Howard, D. M. Hunt, and A. M. Olivero (editors). 2014. *Ecological Communities of New York State*. Second Edition. A revised and expanded edition of Carol Reschke's Ecological Communities of New York State. New York Natural Heritage Program, New York State Department of Environmental Conservation, Albany, NY. This document is available at the following location: https://www.nynhp.org/ecological-communities/

G-D. National Wild and Scenic Rivers (NWSR): The Upper Delaware River has been designated as a National Wild and Scenic River from the confluence of the East and West Branches below Hancock, New York, to the existing railroad bridge immediately downstream of Cherry Island in the vicinity of Sparrow Bush, New York. Also, the portion of the Genesee River located within Letchworth Gorge State Park, beginning at the southern boundary of the park and extending downstream to the Mt. Morris Dam, was designated by Congress as a permanent Study River in the Genesee River Protection Act of 1989. In accordance with General Condition #16, no activity may occur within a NWSR, including Study Rivers, unless the National Park Service (NPS) has determined in writing that the proposed work will not adversely affect the NWSR designation or study status**.** Therefore, a PCN is required for any NWP which would impact the designated portions of the Genesee River or the Upper Delaware River, unless NPS has previously indicated the project will not adversely affect the waterway. (Note: the applicant may not commence work under any NWP until the NPS determines in writing that the project will not adversely affect the NWSR even if 45-days have passed since receipt of the PCN package.) Information regarding NWSR may be found at**:** https://www.rivers.gov/new-york.php

G-E. For all proposals requiring a pre-construction notification (PCN), in addition to the requirements in General Condition 32, the applicant shall also include: (Note: the application will not be considered complete until all of the applicable information is received).

1. New York State/USACE Joint Application Form: The application form shall be completed and signed and shall clearly indicate that the submission is a PCN.
Buffalo District: http://www.lrb.usace.army.mil/Missions/Regulatory/Application-Forms/
New York District: https://www.nan.usace.army.mil/Missions/Regulatory/Obtaining-a-Permit/

2. Drawings: The PCN must include legible, project drawings on 8.5" x 11" paper. Full size drawings may be submitted in addition to the 8.5" x 11" plans to aid in the application review. Three types of illustrations are needed to properly depict the work to be undertaken. These illustrations or drawings are a Vicinity Map (i.e. a location map such as a USGS topographical map), a Plan View and a Cross-Section Map. Each illustration should identify the project, the applicant, and the type of illustration (vicinity map, plan view or cross section). The Vicinity Map shall provide the location of the entire project site. In addition, each illustration should be identified with a figure or attachment number. The location map shall include the Latitude and Longitude or UTM coordinates of the project. For linear projects, the PCN shall include a map of the entire project including a delineation of all waters of the U.S. within the corridor. Aquatic resource information shall be submitted using the Cowardin Classification System mapping conventions (e.g. PFO, PEM, etc.).

3. Color photographs: The photos should be sufficient to accurately portray the project site, keyed to a location map and not taken when snow cover is present.

4. Avoidance and Minimization: The PCN should include a written narrative explaining how avoidance and minimization of temporary impacts and permanent losses of waters of the U.S. were achieved on the project site (i.e. site redesign, reduction in scope, alternate methods, etc.). It should include a description of the proposed construction practices that would be implemented to perform the proposed work and a description of the reasonably foreseeable direct and indirect effects to waters of the U.S. from the proposed construction practices.

5. Mitigation (See General Conditions 23 & 32(b)(6)): The PCN should include at least a conceptual compensatory mitigation plan for all projects resulting in the loss of greater than 1/10th of an acre of wetlands and/or 3/100 th of an acre of stream. Mitigation conceptual plans submitted with the PCN must include the following information at a minimum: proposed compensation type (bank or in-lieu fee credit, restoration, creation, preservation, etc.), location and brief discussion on factors considered for site selection (i.e. soils, water source, potential for invasive species, etc.), amount proposed per resource type and a discussion of how the proposal will compensate for aquatic resource functions and services lost as a result of the project.

Note 1: All mitigation projects must comply with the Federal Regulations on compensatory mitigation (33 CFR 332) entitled "Compensatory Mitigation for Losses of Aquatic Resources: Final Rule", dated April 10, 2008, which is available at: https://www.usace.army.mil/Missions/Civil-Works/Regulatory-Program-and-Permits/mitig_info/ and any applicable District Guidelines.

Note 2: Although a conceptual mitigation plan may be sufficient for the purposes of a PCN submission, a detailed mitigation plan must be approved by the Corps before any jurisdictional work may occur on the project site.

Note 3: If more than 0.10 acres of designated EFH habitat (as discussed in Section G-E.8. below) would be impacted such that habitat would be lost, compensatory mitigation at a minimum ratio of 1:1 is required. A ratio of more than 1:1 may be required depending upon the ecological value of the habitat to be lost or degraded and the form of compensatory mitigation proposed to be provided.

Note 4: For additional information regarding natural stream channel design, please refer to https://www.epa.gov/cwa-404/natural-stream-channel-design-techniques-and-review for the Natural Stream Channel Design Techniques and Review Checklist as developed by U.S. EPA and U.S. Fish and Wildlife Service.

6. Nationwide Rivers Inventory: The PCN shall indicate if a river segment listed within the National Park Service Nationwide Rivers Inventory (NRI) is located within the proposed project area. NRI river segments are potential candidates for inclusion in the National Wild and Scenic River System (See General Condition #16). For project areas containing a listed NRI segment, the PCN shall also include a statement as to how adverse effects to the river have been avoided or mitigated. The list is available at: http://www.nps.gov/ncrc/programs/rtca/nri/states/ny.html.

7. Historic or Cultural Resources: In accordance with General Condition 20, a PCN is required for any non-federal activity which may have the potential to cause effects to any historic properties* listed, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places (NR). Please refer to General Condition 20 for submission requirements. In addition, all PCNs should include:

a) A written statement indicating if any such properties may be affected by the proposed project.
b) A copy of any completed archaeology or building/structure survey reports. If a survey has not been performed, the statement shall include a list of resources checked in the determination.
c) Copies of any available correspondence from the New York State Office of Parks, Recreation, and Historic Preservation State Historic Preservation Officer (SHPO) regarding historic properties.
d) Copies of any available correspondence from federally recognized Indian Nations regarding historic properties that may be affected by the project.

e) Projects with ground disturbance may have the potential to cause effects to buried historic properties, regardless of occurring outside SHPO designated archaeological sensitive areas. Therefore, the PCN shall indicate if the ground disturbance will occur in any areas of previously undisturbed soil. For areas with prior disturbance, the PCN shall include a brief narrative describing the disturbance and its limit (i.e. type of disturbance, size of area with current undisturbed soil, size of area with existing disturbed soils, when the disturbance occurred, an estimate on how deep the soil disturbance extends, etc.) as well as photos of the existing ground disturbance.

f) Above ground buildings/structures that are over 50 years old and potentially affected by the project will need to be assessed to determine if they are eligible for the NR. The PCN shall: identify any structures present in the project area, which have not already been subject to SHPO review, include photos of the structures, and describe how the project would/would not affect them.

* - see NWP definition section for further clarification

Note 1**:** Information regarding historic properties may be found at: https://cris.parks.ny.gov. In addition, assistance regarding the determination of the presence of historic or cultural resources at or near the project site should be directed to SHPO.

Note 2**:** As stated in General Condition 20, if any listed, eligible or potentially eligible properties are present, the applicant shall not begin the activity until notified by the district engineer in writing either that the activity has no potential to cause effects or that consultation under Section 106 of the NHPA has been completed.

8. Endangered Species and Essential Fish Habitat (EFH): In accordance with General Condition #18, non-federal applicants must submit a PCN if any listed species or designated critical habitat might be affected or is in the vicinity of the activity (See Note 2 below), or if the activity is located in designated critical habitat. Please refer to General Condition #18 for submission requirements. In addition, all PCNs must include:

1. a written statement and documentation concerning any Essential Fish Habitat (EFH) and any federally listed or proposed Threatened or Endangered (T&E) species or designated and/or proposed critical habitat that might be affected or located in the vicinity of the project (See Note 2 below).

2. an official T&E species list printed within 90 days of the PCN submission, and a copy of any correspondence from the U.S. Fish and Wildlife Service (USFWS) and/or National Oceanic and Atmospheric Administration Fisheries Service (NOAA-Fisheries), regarding the potential presence of T&E species on the project site. An applicant should use the USFWS Information for Planning and Consultation (IPAC) website (https://ecos.fws.gov/ipac) as the primary resource to determine if there may be listed Threatened or Endangered species. Information on NOAA-Fisheries (NMFS) species (both T&E and EFH) can be found at: https://www.greateratlantic.fisheries.noaa.gov/. Region-specific information on NMFS species (both T&E and EFH) can we found at: https://www.fisheries.noaa.gov/new-england-mid-atlantic/habitat-conservation/essential-fish-habitat-consultations-greater-atlantic-region. Region-specific ESA information can be found at: https://www.fisheries.noaa.gov/topic/consultations#endangered-species-act-consultations.

3. For projects where T&E species are listed, a discussion of potential T&E species habitat within the project site (See USFWS T&E website for species habitat information). https://www.fws.gov/northeast/nyfo/es/section7.htm

4. If there is potential habitat for any T&E species within the project site the following, as applicable, shall be submitted:

i. The results of any habitat surveys and presence/absence surveys. Note: all surveys should be coordinated with the USFWS and/or NOAA-Fisheries (NMFS) prior to initiation.

ii. A detailed description of the proposed project, including secondary impacts and approximate proposed project construction schedule of project activities (e.g. land clearing, utilities, stormwater management).

iii. A description of the natural characteristics of the property and surrounding area (e.g. forested areas, freshwater wetlands, open waters, and soils) and a description of surrounding land use (residential, agricultural, or commercial).

iv. A description of the area to be impacted by the proposed project (including the species, typical sizes (d.b.h.) and number or acres of trees to be removed, substrate of stream, etc.).

v. The location of the above referenced property and extent of any project related activities or discharges clearly indicated on a copy of a USGS 7.5-minute topographic quadrangle (quad) with the name of the quad(s) and latitude/longitude clearly labeled.

vi. A description of conservation measures to avoid, minimize and/or mitigate impacts to listed species.

Note 1**:** There are no known T&E species or EFH species under the jurisdiction of the NOAA-Fisheries (NMFS) within the Buffalo District. Therefore, all Buffalo District requests for information regarding the presence of T&E species should be directed to the USFWS. In addition, no EFH review is necessary within the following New York District counties: Clinton, Essex, Franklin, Fulton, Hamilton, Montgomery, Otsego, Schenectady, Schoharie and Warren.

Note 2**:** Please refer to the following websites for further guidance and information relating to regulatory permits & T&E species in New York, including protocols for defining 'vicinity' for the Indiana and Northern long-eared bats:

Buffalo District: http://www.lrb.usace.army.mil/Missions/Regulatory/Endangered-Species/Endangered-Species-New-York/

New York District: https://www.nan.usace.army.mil/Missions/Regulatory/Nationwide-Permits/

Note 3**:** General Condition #18 is emphasized, … "For activities where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species or critical habitat, or until ESA section 7 consultation has been completed. **If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps."**

Note 4: Where a PCN is required for Essential Fish Habitat consultation, refer to the following links for the Essential Fish Habitat Assessment Worksheet and Mapper utilized to inform the preparation of the worksheet:

- EFH Assessment Worksheet: https://www.fisheries.noaa.gov/new-england-mid-atlantic/habitat-conservation/essential-fish-habitat-assessment-consultations
- EFH Mapper: https://www.habitat.noaa.gov/protection/efh/efhmapper/

Note 5: Where information is required for submerged aquatic vegetation (SAV) in the permit area

or within 50 feet of the proposed work, please utilize the following map data:

- NYS Department of State SAV data: http://opdgig.dos.ny.gov/#/search/SAV
- NYS GIS Clearinghouse (for SAV data in the Hudson River): http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1209 and http://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1350

9. PCNs should be submitted electronically, if possible, in accordance with the instructions provided on the Districts' websites. When submitted by hard copy, without an electronic submission, then multiple copies of the PCN must be provided as follows:

a) One (1) additional copy of the PCN package shall be provided to USACE for coordination with Department of Defense Siting Clearinghouse (See NWP # 39, 51, 52 & 57 Notes) for:
   i. overhead utility lines proposed under NWP #57 and
   ii. any activity that involves the construction of a wind energy generating structure, solar tower, or overhead transmission lines proposed under NWP #39, 51 or 52

b) Two (2) additional copies of the PCN package shall be provided to USACE when the project is located within the New York City Watershed, for coordination with the New York City Department of Environmental Protection.

c) Five (5) additional copies of the PCN package shall be submitted to USACE for agency coordination in accordance with General Condition # 32(d)(2) for:
   i. All NWP activities that result in the loss of greater than 1/2-acre of waters of the United States,
   ii. NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites;
   iii. NWP 54 activities in excess of 500 linear feet or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.

G-F. CRITICAL RESOURCE WATERS

In accordance with NWP General Condition (GC) #22, certain activities in Critical Resource Waters cannot be authorized under the NWP program or would require a PCN (see GC #22 for a list of the NWP activities that are either excluded or require a PCN).

Critical Resource Waters in New York State include the following:

1. **East-of-Hudson portion of the New York City Water Supply:** This area includes portions of Dutchess, Putnam and Westchester Counties as delineated on Enclosure 2.

2. **Hudson River National Estuarine Research Reserves (NERR):** The Hudson River NERR consists of four components: Piermont Marsh, Iona Island, Tivoli Bay, and Stockport Flats.

H. NYSDEC GENERAL WATER QUALITY CERTIFICATION (WQC) CONDITIONS APPLICABLE TO ALL NWPS FOR WHICH WQC HAS BEEN PROVIDED ARE AS FOLLOWS:

1. **Non-contamination of Waters** - All necessary precautions shall be taken to preclude contamination of any waters of the United States by suspended solids, resins, sediments, fuels, solvents, lubricants, epoxy coatings, paints, concrete, leachate, inadvertent returns of drilling muds ("frac-outs") or any other environmentally deleterious materials associated with the project.

2. **Installation and Replacement of Culverts** - To be covered under this blanket Water Quality Certification, all the following criteria must be met for culvert installations and replacements:

a. Culverts shall be designed to pass a storm event with an annual chance of 2% or less (i.e., 50-year storm event or greater) such that the water surface remains below the top of the inlet opening.
b. All culverts with closed bottoms and culvert pipes must be appropriately embedded. Round culverts must be installed so that at least 20% of the culvert's vertical height is embedded below the existing stream bed at the outlet end of the culvert.
c. Width of the structure must be a minimum of 1.25 times (1.25X) width of the Mean High-Water Channel.
d. The slope of the stream bed within or under the culvert shall remain consistent with the slope of the adjacent stream channel. For slopes greater than 3%, an open bottom culvert must be used.
e. This culvert must not be located under a roadway that provide sole access to "Critical Facilities"[2].
f. This certification does not authorize culvert rehabilitation projects that involve slip lining, invert paving, or similar treatments.
g. This certification does authorize the rehabilitation of culverts utilizing Cure in Place Pipe Lining (CIPP) or concrete spray lining for culverts which currently meet Nationwide Permit General Condition # 2 - Aquatic Life Movements.

[2] Critical Facilities are defined as facilities designed for bulk storage of chemicals, petrochemicals, hazardous or toxic substances or floatable materials; hospitals, rest homes, correctional facilities, dormitories, patient care facilities; major power generation, transmission or substation facilities, except for hydroelectric facilities; major communications centers, such as civil defense centers; or major emergency service facilities, such as central fire and police stations. (See 6 NYCRR Part 502.4(a)(17).)

3. **Discharges and Disturbances Limits** - The following discharge and disturbance limits apply to this certification:
    a. For NWPs 5, 7, 13, 14, 15, 18, 19, 23, 25, 32, 34, 36, 37, 45, and 46, the following discharge limits apply:
        i. Temporary or permanent discharges of dredged or fill material into wetlands and other waters of the United States must not exceed ¼ acre;
        ii. Temporary or permanent impacts (i.e., loss) to stream beds, lake shorelines, and ocean shorelines must not exceed 300 linear feet; and
        iii. The discharge area limit under paragraph (a) plus the equivalent stream, lake, or ocean impact area limit under paragraph (b) must not exceed ¼ acre total.
    b. For NWPs 3, 4, 6, 20, 22, 27, 30, 31, 33, and 41, this certification authorizes discharges and disturbances up to the limit of the respective Nationwide Permit or regional conditions, whichever is most restrictive.
    c. If a project requiring coverage under two or more Nationwide Permits results in a temporary or permanent discharge or disturbance, the most restrictive threshold applies to the project.

4. **Bulkheads** - Activities involving bulkheads are restricted as follows:
    a. This certification does not authorize the construction of new bulkheads or vertical walls.
    b. This certification does not authorize the waterward extension of existing bulkheads, except where minimally necessary to reface the bulkhead when in-place replacement is not feasible.
    c. New toe-stone protection may not extend more than 36 inches waterward from the existing bulkhead face.

5. **Maintenance of Water Levels** - This certification does not authorize any activity that results in a permanent water level alteration in waterbodies, such as draining or impounding, except for activities authorized by NWP 27.

6. **Dewatering** - Dewatering activities must be conducted in the following manner:
    a. Authorized dewatering is limited to immediate work areas that are within coffer dams or otherwise isolated from the larger waterbody or waters of the United States.

b. Dewatering must be localized and must not drain extensive areas of a waterbody or reduce the water level such that fish and other aquatic organisms are killed, or their eggs and nests are exposed to desiccation, freezing or depredation in areas outside of the immediate work site.
c. Cofferdams or diversions shall not be constructed in a manner that causes or exacerbates erosion of the bed or banks of a waterbody.
d. All dewatering structures must be permanently removed, and disturbed areas must be graded and stabilized immediately following completion of work. Return flows from the dewatering structure shall be as visibly clear as the receiving waterbody.

7. **Horizontal and Directional Drilling** - For projects that involve horizontal or directional drilling, the permittee must prepare and implement a plan that addresses prevention, containment and cleanup of inadvertent drilling fluid returns or “frac-outs”.

8. **Endangered or Threatened Species** - This certification does not authorize discharges likely to result in the take or taking of any species listed as endangered or threatened in 6 NYCRR Part 182.5 (a) or (b) or discharges likely to destroy or adversely modify the habitat of such listed species. To be eligible for coverage under this certification, applicants must either verify that the activity is outside of the occupied habitat of such species or, if located within the habitat of such species, obtain a determination from the NYS Department of Conservation Regional Office that the proposed activity is not likely to result in the take or taking of any species listed as endangered or threatened species listed in 6 NYCRR Part 182. Information on New York State endangered or threatened species may be obtained from the NYS Department of Environmental regional offices, the New York Natural Heritage Program in Albany, New York or on the NYSDEC website at https://www.dec.ny.gov/animals/38801.html.

9. **Rare Mollusks** - This certification does not authorize disturbances or discharges to waters of the United States that support mollusks listed as S-1 or S-2 on the New York State Natural Heritage database, unless NYSDEC staff have determined that the project location does not contain mussels listed as S-1 or S-2 on the Natural Heritage database.

10. **Prohibition Period for In-water Work** - In-water work is prohibited in cold water trout fisheries (waterbodies classified under Article 15 of New York State Environmental Conservation Law with a "t" or "ts" designation), beginning October 1 and ending May 31.

    Water classification values can be found on the NYSDEC’s Environmental Resource Mapper available on the Department’s website at https://gisservices.dec.ny.gov/gis/erm/. Applicants may also contact the Regional Fisheries Manager in the appropriate New York State Department of Environmental Conservation regional office to determine the classification of the water body and whether the prohibition period applies.

11. **Significant Coastal Fish and Wildlife Habitats** - This certification does not authorize any discharge occurring in a designated Significant Coastal Fish and Wildlife Habitat area pursuant to 19 NYCRR Part 602 (NYCRR, Title 19, Chapter XIII, Waterfront Revitalization of Coastal Areas and Inland Waterways). https://www.dos.ny.gov/opd/programs/consistency/scfwhabitats.html

12. **Coastal Erosion Hazard Areas** - This certification does not authorize projects that disturb greater than ¼ acre or 300 linear feet of waters of the United States within mapped Coastal Erosion Hazard Areas, as identified in New York State Environmental Conservation Law Article 34, and its implementing regulations, 6 NYCRR Part 505. https://www.dec.ny.gov/lands/86541.html

13. **Federal Energy Regulatory Commission** - This certification does not authorize activities regulated by the United States Federal Energy Regulatory Commission (FERC). An individual Section 401 Water Quality Certification from NYSDEC is required for all projects regulated by FERC.

14. **Preventing the Spread of Aquatic Invasive Species** - To prevent the unintentional introduction or spread of invasive species, the permittee must ensure that all construction equipment be cleaned of mud, seeds, vegetation, and other debris before entering any approved construction areas within

waters of the United States. When using construction equipment, projects authorized under this Certification shall take reasonable precautions to prevent the spread of aquatic invasive species as required under the provisions in ECL § 9-1710.

15. **Utility Projects** - The following restrictions and conditions apply to activities involving utility projects:
    a. This certification does not authorize maintenance or other activities associated with hydroelectric power generation projects.
    b. This certification does not authorize the construction of substation facilities or permanent access roads in wetlands or within the Federal Emergency Management Agency mapped 100-year floodplain.
    c. Excess materials resulting from trench excavation must be permanently removed from the waters of the United States and contained so that they do not re-enter any waters of the United States.

16. **NYSDEC Emergency Authorizations** – This certification also applies to any regulated discharges to Waters of the U.S. covered under an NWP where NYSDEC makes a finding of emergency pursuant to New York States Uniform Procedures Act regulations at 6 NYCRR § 621.12. Such a finding may also, but is not required to, include NYSDEC emergency authorizations under ECL Article 15, Title 5 (Protection of Waters), Article 15, Title 27 (Wild, Scenic, and Recreational Rivers),Article 24 (Freshwater Wetlands), Article 25 (Tidal Wetlands) or Article 34 (Coastal Erosion Management). Where such certification Is granted, only NYSDEC General WQC Conditions 1, 4, 5, and 6 shall apply.

17. **NYSDEC General Permits** – This certification also applies to any regulated discharges to Waters of the U.S. covered under an NWP where NYSDEC issues project authorization under a general permit pursuant to ECL Article 15, Title 5 (Protection of Waters), Article 15, Title 27 (Wild, Scenic, and Recreational Rivers), Article 24 (Freshwater Wetlands), Article 25 (Tidal Wetlands), or Article 34 (Coastal Erosion Management). Where such certification is granted, all other NYSDEC General WQC Conditions shall not apply.

18. **NYSDEC Individual Permits** – This certification also applies to any regulated discharges to Waters of the U.S. covered under an NWP where NYSDEC issues individual project authorization pursuant to ECL Article 15, Title 5 (Protection of Waters), Article 15, Title 27 (Wild, Scenic, and Recreational Rivers), Article 24 (Freshwater Wetlands), Article 25 (Tidal Wetlands), or Article 34 (Coastal Erosion Management). Where such certification is granted, all other NYSDEC General WQC Conditions shall not apply.

I. NEW YORK STATE DEPARTMENT OF STATE (NYSDOS) COASTAL ZONE MANAGEMENT CONSISTENCY DETERMINATION ADDITIONAL INFORMATION (APPLICABLE TO ALL NWPS LOCATED WITHIN OR AFFECTING THE NYS COASTAL ZONE):

Where NYSDOS has objected to the USACE consistency determination, as outlined in the specific NWP listing in Section B above, the applicant must submit a request for an individual consistency determination to NYSDOS.

Further Information:

- Unless NYSDOS issues consistency concurrence or USACE has determined that NYSDOS concurrence is presumed, NWPs are not valid within the Coastal Zone.

- All consistency concurrence determination requests must be submitted directly to NYSDOS with a copy provided to USACE with any required Preconstruction Notification submissions.

- Limits of the coastal zone and details regarding NYSDOS submission requirements, including application forms can be obtained at:

https://www.dos.ny.gov/opd/programs/consistency/index.html.

- For additional information regarding the NYSDOS Coastal Zone Management program, their application forms, and requirements, please contact NYSDOS. See Section K for NYSDOS contact information.

J. INFORMATION ON NATIONWIDE PERMIT VERIFICATION

Verification of the applicability of these Nationwide Permits is valid until March 14, 2026, unless the Nationwide Permit is modified, suspended, revoked, or the activity complies with any subsequent permit modification.

It is the applicant's responsibility to remain informed of changes to the Nationwide Permit program. A public notice announcing any changes will be issued when they occur and will be available for viewing at our website: http://www.lrb.usace.army.mil/Missions/Regulatory.aspx.

Please note in accordance with 33 CFR part 330.6(b), that if you commence or are under contract to commence an activity in reliance of the permit prior to the date this Nationwide permit expires, is suspended or revoked, or is modified such that the activity no longer complies with the terms and conditions, you have twelve months from the date of permit modification, expiration, or revocation to complete the activity under the present terms and conditions of the permit, unless the permit has been subject to the provisions of discretionary authority.

Possession of this permit does not obviate you of the need to contact all appropriate state and/or local governmental officials to ensure that the project complies with their requirements.

K. AGENCY CONTACT INFORMATION

NYS Board on Electric Generation Siting and the Environment (Siting Board)
Three Empire State Plaza
Albany, NY 12223-1350
(518) 949-0798
Email: Houtan.Moaveni@dps.ny.gov
www.dps.ny.gov/SitingBoard

NYS Department of Environmental Conservation
www.dec.ny.gov

NYS DEC REGION 1
Regional Permit Administrator
SUNY @ Stony Brook
50 Circle Road
Stony Brook, NY 11790-3409
(631) 444-0365

NYS DEC REGION 2
Regional Permit Administrator
1 Hunter's Point Plaza
47-40 21st Street
Long Island City, NY 11101-5407
(718) 482-4997

NYS DEC REGION 3
Regional Permit Administrator
21 South Putt Corners Road
New Paltz, NY 12561-1620
(845) 256-3054

NYS DEC REGION 4
Regional Permit Administrator
1130 North Westcott Road
Schenectady, NY 12306-2014
(518) 357-2069

NYS DEC REGION 4 Sub-Office
Deputy Regional Permit Administrator
65561 State Hwy 10
Stamford, NY 12167-9503
(607) 652-7741

NYS DEC REGION 5
Regional Permit Administrator
PO Box 296
1115 Route 86
Ray Brook, NY 12977-0296
(518) 897-1234

NYS DEC REGION 5 Sub-Office
Deputy Regional Permit Administrator
PO Box 220
232 Golf Course Rd
Warrensburg, NY 12885-0220
(518) 623-1281

NYS DEC REGION 6
Regional Permit Administrator
317 Washington Street
Watertown, NY 13601-3787
(315) 785-2245

NYS DEC REGION 6 Sub-Office
Deputy Regional Permit Administrator
207 Genesee Street, Room 1404
Utica, NY 13501-2885
(315) 793-2555

NYS DEC REGION 7
Regional Permit Administrator
615 Erie Blvd. West, Room 206
Syracuse, NY 13204-2400
(315)426-7438

NYS DEC REGION 8
Regional Permit Administrator
6274 E. Avon - Lima Road
Avon, NY 14414-9519
(585) 226-5400

NYS DEC REGION 9
Regional Permit Administrator
270 Michigan Avenue
Buffalo, NY 14203-2915
(716) 851-7165

NYS DEC REGION 9 Sub-Office
Deputy Regional Permit Administrator
182 East Union Street, Suite 3
Allegany, NY 14706-1328
(716) 372-0645

NYS Department of Public Service (NYS DPS)
Three Empire State Plaza
Albany, NY 12223-1350
(518) 949-0798
Email: Houtan.Moaveni@dps.ny.gov
www.dps.ny.gov

NYS Department of State (NYSDOS)
Office of Planning, Development
And Community Infrastructure
Consistency Review Unit
One Commerce Plaza
99 Washington Avenue, Suite 1010
Albany, NY 12231-00001
(518) 474-6000
Email: cr@dos.ny.gov
https://www.dos.ny.gov/opd/programs/consistency/index.html

NYS Office of Renewable Energy Siting (ORES)
Empire State Plaza
240 State Street
P-1 South, J Dock
Albany, NY 12242
(518) 949-0798
Email: Houtan.Moaveni@ores.ny.gov
www.ores.ny.gov

Saint Regis Mohawk Tribe
Water Resources Program
449 Frogtown Road
Akwesasne, NY 13655
www.srmt-nsn.gov

Seneca Nation
Environmental Protection Department
84 Iroquois Drive
Irving, NY 14081
(716) 532-2546

US Army Corps of Engineers

(For DEC Regions 1, 2 and 3)
US Army Corps of Engineers, NY District (NAN)
ATTN: Regulatory Branch, Room 16-406
26 Federal Plaza
New York, NY 10278-0090
For DEC Regions 1 & 2 - (917) 790-8511
For DEC Region 3 - (917) 790-8411
Email: CENAN-PublicNotice@usace.army.mil

(For DEC Regions 4, 5)
US Army Corps of Engineers, NY District (NAN)
Upstate Regulatory Field Office
ATTN: CENAN-OP-RU, Bldg. 10, 3rd Floor North
1 Buffington Street, Watervliet Arsenal
Watervliet, NY 12189-4000
(518) 266-6350 - Permits Processing Team
(518) 266-6360 - Compliance & Enforcement Team
Email: cenan.rfo@usace.army.mil

NAN Electronic Application Email:
CENAN-R-Permit-App@usace.army.mil

NAN website:
http://www.nan.usace.army.mil/Missions/Regulatory/

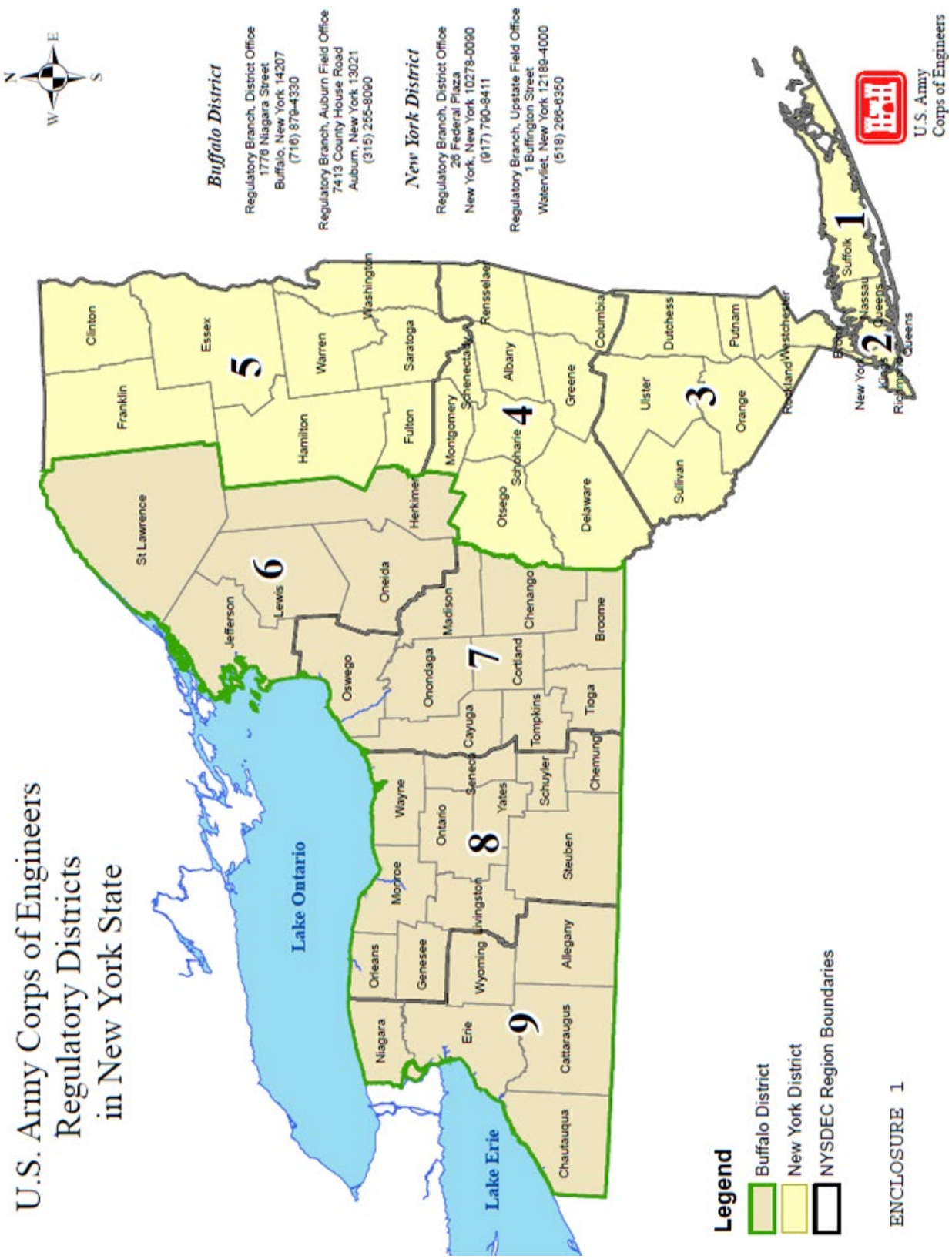
(For DEC Regions 6, 7, 8, 9)
US Army Corps of Engineers,
Buffalo District (LRB)
ATTN: Regulatory Branch
478 Main St
Buffalo, NY 14202
(716) 879-4330

LRB Electronic Application Email:
LRB.NewYork.RegActions@usace.army.mil

LRB website**:**
www.lrb.usace.army.mil/Missions/Regulatory/

US Environmental Protection Agency Region 2
Wetlands Protection Section
290 Broadway, 24th Floor
New York, NY 10007
212-637-3838
Email: Region2_CWA404@epa.gov

ENCLOSURE 1


U.S. Army Corps of Engineers
Regulatory Districts
in New York State
Buffalo District
Regulatory Branch, District Office
1776 Niagara Street
Buffalo, New York 14207
(716) 879-4330
Regulatory Branch, Auburn Field Office
7413 County House Road
Auburn, New York 13021
(315) 255-8060
New York District
Regulatory Branch, District Office
26 Federal Plaza
New York, New York 10278-0090
(917) 790-8411
Regulatory Branch, Upstate Field Office
1 Buffington Street
Watervliet, New York 12189-4000
(518) 266-6350
U.S. Army
Corps of Engineers
Lake Ontario
Lake Erie
Clinton
Essex
Franklin
Hamilton
Warren
Washington
Saratoga
Fulton
Montgomery
Schenectady
Rensselaer
Albany
Columbia
Greene
Delaware
Otsego
Schoharie
Herkimer
St Lawrence
Jefferson
Lewis
Oneida
Madison
Chenango
Broome
Oswego
Onondaga
Cortland
Tioga
Cayuga
Tompkins
Seneca
Schuyler
Chemung
Wayne
Ontario
Yates
Steuben
Monroe
Livingston
Orleans
Genesee
Wyoming
Allegany
Niagara
Erie
Cattaraugus
Chautauqua
Dutchess
Putnam
Ulster
Orange
Sullivan
Rockland
Westchester
Suffolk
Nassau
Queens
Kings
Richmond
Bronx
New York
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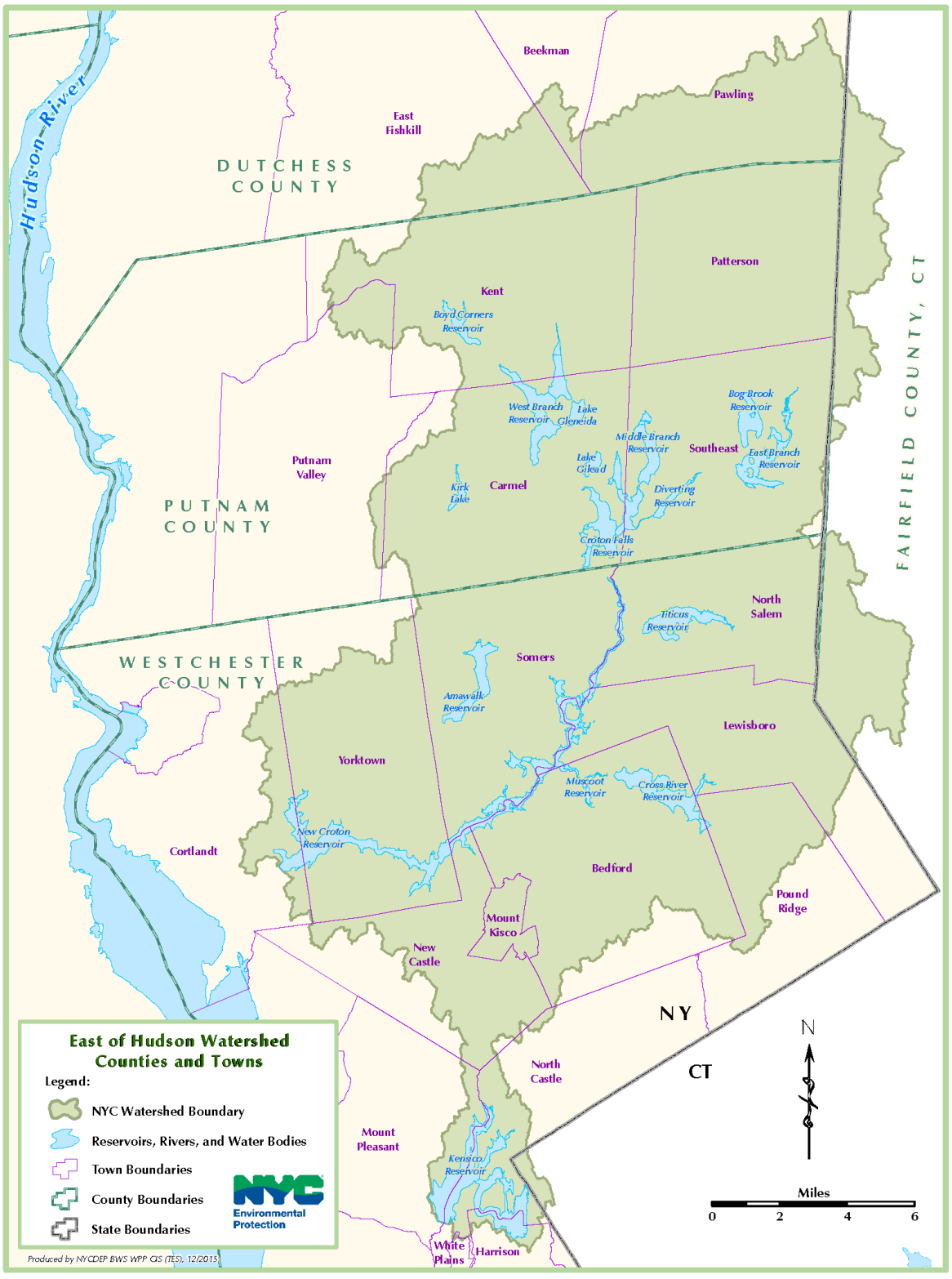
Legend
Buffalo District
New York District
NYSDEC Region Boundaries
ENCLOSURE 1

ENCLOSURE 2


Hudson River
DUTCHESS COUNTY
PUTNAM COUNTY
WESTCHESTER COUNTY
FAIRFIELD COUNTY, CT
NY
CT
Beekman
Pawling
East Fishkill
Patterson
Kent
Bord Corners Reservoir
West Branch Reservoir
Lake Gleneida
Bog Brook Reservoir
Middle Branch Reservoir
Southeast
East Branch Reservoir
Putnam Valley
Lake Gilead
Kirk Lake
Carmel
Diverting Reservoir
Croton Falls Reservoir
North Salem
Titicus Reservoir
Somers
Amawalk Reservoir
Lewisboro
Yorktown
Muscoot Reservoir
Cross River Reservoir
New Croton Reservoir
Cortlandt
Bedford
Pound Ridge
Mount Kisco
New Castle
North Castle
Mount Pleasant
Kensico Reservoir
White Plains
Harrison
East of Hudson Watershed
Counties and Towns
Legend:
NYC Watershed Boundary
Reservoirs, Rivers, and Water Bodies
Town Boundaries
County Boundaries
State Boundaries
NYC Environmental Protection
Produced by NYCDEP BWS WPP GIS (TES), 12/2015
N
Miles
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6

ENCLOSURE 3

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS, NEW YORK DISTRICT
JACOB K. JAVITS FEDERAL BUILDING
26 FEDERAL PLAZA
NEW YORK NEW YORK 10278-0090

REPLY TO
ATTENTION OF

REGULATORY BRANCH Attn:_____

Commercial Mooring Buoy Application Additional Information

Permit Application Number NAN-_____

Company Name: _____ Phone: _____
Attn: _____
Address: _____

Initial☐Renewal☐
If Renewal, USCG Permit No._____

Purpose: _____

LOCATION OF MOORING:

Anchorage: _____ Chart: _____ On Scene Depth (ft.):_____

Position*:_____ N _____ W

MOORING BUOY DATA:

No. of anchors: _____ Lbs. per anchor: _____ Type: _____

Chain size (in.):_____ Scope (yds.):_____

Pennant length (yds.):_____ Circ. /dia. (in.):_____ Type: _____

VESSEL/BARGE DATA:

Max size (LxBxD):_____x_____x_____ Max No. of barges: _____

Configuration (# abreast x # astern):____x____ Watch circle** (yds.):_____

Swing Radius (yards):_____

* Please provide a copy of the NOAA chart showing your proposed mooring buoy location and the swing radius; also identify the Anchorage Ground, if applicable

** Watch Circle =$\sqrt{(length\ of\ scope)^2 - (water\ depth)^2}$
Swing Radius =$(Watch\ circle) + (Barge(s)\ length\ astern) + \left(Pendant\ length(s)\right) + (10\%\ of\ swing\ radius)$. You must maintain an additional 10% of your Swing Radius from any adjacent mooring buoy Swing Radius for safety and maneuvering.

ENCLOSURE 4

Incident Report of Sea Turtle Take
U.S. Army Corps of Engineers, New York District

Date _____ Time (specimen found) _____

Species Taken: Loggerhead Kemp's ridley Leatherback
Green Unknown turtle Other
(*please circle and describe how specimen was identified in Comments*)

Animal: Alive / Dead (*please circle*)
Specimen Decomposition: FRESH SLIGHTLY MODERATELY SEVERELY
Approximate length _____ Approximate width _____
(*please designate cm/m or inches*)

Condition of specimen/description of animal
_____
_____
_____

Animal tagged: YES / NO (*please circle and record all tag numbers*)
Tag # _____

Photograph attached: YES / NO (*please circle*)
(*please label species, date, geographic site and name on photo back*)

Fate of animal _____

Geographic Site _____
Location: Lat/Long _____
Approx. depth of gear _____

Location where animal found (*leader, anchor line, buoy line, etc.*)
_____
_____

Thickness and type of line (*if applicable*) _____
Mesh size and type of net (*if applicable*) _____
Debris in gear? _____

Weather conditions _____
_____
Water temp: Surface _____ Below midwater (*if known*)_____
Tide state (Ebb or Flood) _____
Entanglement on downcurrent or upcurrent side of net? _____

Comments/other (*include justification on how species was identified*)
_____
_____
_____

Observer's Name _____ Permit # _____
Notwithstanding any other provision of the law, no person is required to respond to, nor shall any person by subject to a penalty for failure to comply with, a collection of information subject to the requirements of the Paperwork Reduction Act, unless that collection of information displays a currently valid Office of Management and Budget Control Number.

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SPECIAL NOTES

The following notes are to supplement the NYSDOT Standard Specifications. If any of the Notes are in conflict with the NYSDOT Standard Specifications, the NYSDOT Standard Specifications shall prevail and take precedence and be of force over and against any said conflicting Notes.

INSURANCE REQUIREMENTS

COORDINATION WITH THE UTILITY SCHEDULE

ASSIGNMENT OF AUTHORITY

SAFETY AND HEALTH REQUIREMENTS – WORKER SILICA PROTECTION

QUALIFICATION OF APPARENT LOW BIDDER

RETURN OF PROPOSAL GUARANTY

BONDS

FAILURE TO EXECUTE CONTRACT

AUTHORITY OF ENGINEER

CONTRACTOR'S PERSONNEL

MATERIAL CERTIFICATES OF ACCEPTABILITY

SUBCONTRACTORS, MATERIALMEN AND LABORERS

RESPONSIBILITY FOR DAMAGE CLAIMS

NO WAIVER OF LEGAL RIGHTS

SPECIAL NOTES CONT'D

The following notes are to supplement the NYSDOT Standard Specifications. If any of the Notes are in conflict with the NYSDOT Standard Specifications, the NYSDOT Standard Specifications shall prevail and take precedence and be of force over and against any said conflicting Notes.

NOTICE TO PROCEED

OPERATIONAL DAMAGES

CONTRACT TIME AND DATE OF COMPLETION

EXCAVATION

SITE SAFETY

PRECONSTRUCTION CONFERENCE AND PROJECT SCHEDULE

REQUIRED NOTICES

ENVIRONMENTAL CONCERNS

PERFORMANCE GRADED (PG) BINDER AND MIX DESIGN LEVEL

SHOP DRAWINGS

ASBESTOS

REMOVAL OF COUNTY, TOWN OR VILLAGE-OWNED FACILITIES

EXISTING CONDITIONS

SPECIAL NOTES – CONT'D

The following notes are to supplement the NYSDOT Standard Specifications. If any of the Notes are in conflict with the NYSDOT Standard Specifications, the NYSDOT Standard Specifications shall prevail and take precedence and be of force over and against any said conflicting Notes.

US CUSTOMARY ASPHALT PRICE ADJUSTMENT

US CUSTOMARY FUEL PRICE ADJUSTMENT

STEEL PRICE ADJUSTMENT

OWNER REQUIREMENTS FOR WATER MAINS AND APPURTENANCES

OWNER REQUIREMENTS FOR SEWER MAINS AND APPURTENANCES

OWNER REQUIREMENTS FOR ELECTRICAL WORK

ENGINEER'S FIELD OFFICE – INTERNET SERVICE

OFFICE TECHNOLOGY AND SUPPLIES

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INSURANCE REQUIREMENTS

Additional Insured Parties:

State of New York/New York State Department of Transportation
Jefferson County
Village of Evans Mills
Stantec Consulting Services Inc.

The above listing supplements Section 107-06 INSURANCE of the Standard Specifications.

Failure to list a firm, organization, or municipality, etc. does not eliminate the requirement to provide such coverage.

COORDINATION WITH THE UTILITY SCHEDULE

The contractor must coordinate its schedule of operations with the various utility owners involved with the project and shall verify utility information found in the contract documents.

All known public and private utility installations within the Contract limits and their disposition are shown in their approximate locations on the Contract plans.

The Contractor is, however, cautioned that these locations are not guaranteed, nor is there any guarantee that all such facilities within the Contract limits have been shown on the plans. In this regard the Contractor's attention is called to Subsections 102-02 Paragraph C and 105-04 of the Standard Specifications.

Utilities encountered during the work shall be maintained and protected in their existing locations until otherwise provided for. If services or utility lines not shown on the plans are encountered, then excavation and grading shall be done with caution in order that these services not be disturbed until proper disposition of such is made by their owners. Damage by the Contractor to privately owned utilities shall be in all cases the responsibility of the Contractor. Relocation of public utilities and accessories is a responsibility of the servicing agency. Every reasonable attempt will be made by the agents of the Sponsor not to inconvenience or additionally cost the Contractor due to such locationing relating to time and/or place; however, no extra compensation will be made to the Contractor by the Sponsor for extra work or loss of time due to such utilities or the removal or relocation of such utilities.

The Contractor shall notify the Engineer, in writing, at least fourteen (14) days in advance of any work which may affect any utility or cause an interruption or disruption of utility service.

It shall be the Contractor's duty to notify all utility companies or other parties affected within a time frame as not to affect the schedule prior to all necessary adjustment of the public or private utility fixtures and other appurtenances within or adjacent to the limits of construction. The Contractor shall notify the Engineer in writing describing the need for, and extent of, utility adjustments and the anticipated schedule.

It is understood and agreed upon that the Contractor has considered in his/her bid all of the permanent and temporary utility appurtenances in their present or relocated positions as shown in the Contract Documents and that no additional compensation will be allowed for any delays, inconveniences, or damage sustained by him/her due to any interference from the utility appurtenances or the operation of moving them by the utility owners. The Contractor will be responsible for any fees required by the utility owners for temporary locations.

The contractor shall coordinate his schedule of operations with the various utility owners involved with the project and shall verify information found in the contract documents.

Village of Evans Mills – The Village of Evans Mills owns and maintains water and sewer main utilities within the project corridor to be replaced by the Contractor as indicated in the project plans and specifications, and in accordance with the special notes titled OWNER REQUIREMENTS FOR WATER MAINS AND APPURTENANCES" and "OWNER REQUIREMENTS FOR SEWER MAINS AND APPURTENANCES".

Other revisions may become necessary during the construction stage as a result of more precise location data or other changes that might develop. These revisions are to be performed by the utility owners in coordination with the contractor. Suitable time frames for these additions shall also be coordinated between the Contractor and the affected Utility.

Suitable time frames for these additions shall be coordinated between the Contractor and the Utility Companies. Such time frames are not to be included within previously established time frames.

The contractor is governed by and must adhere to the provisions of 16 NYCRR Part 753 (Protection of Underground Facilities).

ASSIGNMENT OF AUTHORITY

The Contract Documents reference the New York State Department of Transportation Standard Specifications as a supporting document. The New York State Department of Transportation (NYSDOT) Standard Specifications refer to NYSDOT employees and functional units within NYSDOT, to provide for approval or to perform functions specified in the Contract Documents. For this contract, the Local Project Sponsor will have full responsibility for the administration of the contract documents. For the purpose of this contract the Local Project Sponsor will designate a Responsible Local Official (RLO). If the RLO is not a Licensed Professional, he/she may still retain approval authority, if he/she is acting on a certification provided by a Licensed Professional.

Wherever the NYSDOT Standard Specifications refer to a NYSDOT employee for approval authority or to perform a contract function, the RLO or his/her designee will perform these duties. The RLO will have full approval Authority to award the Contract and administer the work under the Contract Documents, supported by a Licensed Professional certification where required.

SAFETY AND HEALTH REQUIREMENTS – WORKER SILICA PROTECTION

Where the project requires the contractor to perform saw cutting, the Contractor is alerted to the fact that Concrete dust contains Crystalline Silica.

Crystalline Silica is a common substance, which is the basic component of many types of sands, quarts, and granite rock. Occupational exposure to Crystalline Silica can produce Silicosis.

The Contractor is alerted to the New York State Standard Specifications Section 107-05-L-4 and to OSHA requirements for Worker Silica Protection, included in 29 CFR 1926.55.

The Contractor Shall be in compliance with the New York State Standard Specifications Section 107-05, (Safety and Health Requirements).

QUALIFICATION OF APPARENT LOW BIDDER

The apparent low bidder will be required to submit an itemized financial statement covering the

previous twelve (12) calendar months of actual operations within three working days of bid opening. The statement shall include financial resources, liabilities, equipment, and experience of such a nature as to be acceptable to the Sponsor. Experience on projects of a similar nature may be taken into consideration in determining the lowest responsible bidder.

The Sponsor reserves the right to reject any bid if the evidence submitted by, or investigation of, such bidder fails to satisfy the Sponsor that such bidder is properly qualified to carry out the obligations of the contract and to complete the work contemplated therein. Conditional bids will not be accepted.

RETURN OF PROPOSAL GUARANTY

All proposal guaranties, except those of the three lowest bidders, will be returned immediately following the opening and checking of the proposals. That of the successful bidder will be returned after a satisfactory bond has been furnished and the Contract has been executed. The remaining two guaranties will be returned within ten (10) calendar days following the award of the Contract.

BONDS

The successful bidder shall at the time of the execution of the Contract, furnish a Faithful Performance Bond and a Labor and Materials Bond each in an amount equal to the full amount of the Contract. The purpose of such bonds is to assure the faithful performance of this Contract as well as the payment of all persons performing labor and furnishing materials in connection with this Contract. The form of the bonds and the security shall be acceptable to the Sponsor.

Negotiable securities, satisfactory to the Sponsor, in an amount equal to that specified for the Contract bond, may be deposited with the Sponsor in lieu of such Contract bond and shall be subject to all the conditions of such bond and to such agreements as may be required by the Sponsor.

FAILURE TO EXECUTE CONTRACT

Failure of the Contractor to execute the Contract and file acceptable bonds within ten (10) calendar days after he/she has received the Contract form shall be just cause for the annulment of the award, and for the forfeiture of the proposal guaranty. The proposal guaranty shall become the property of the Sponsor, not as a penalty, but in liquidation of damages sustained. Award may then be made to the next lowest responsible bidder, or the work may be readvertised and constructed under a new Contract or otherwise as the Sponsor may decide.

AUTHORITY OF ENGINEER

The Superintendent of Highways will be represented by an Engineer-In-Charge who will observe the work done under the Contract on a full-time basis throughout construction.

The Engineer-In-Charge shall inspect work performed, review materials to be used, and stop and reject work and materials found to be not in accordance with the plans and specifications. His/Her authority shall cover all phases of the work. In the event that questions should arise concerning the interpretation or changes of plans and specifications or to the acceptability of the work, the Contractor shall submit his/her questions, in writing, to the Engineer-In-Charge. These questions shall be forwarded to the Superintendent of Highways along with the Engineer-In-Charge's recommendations.

The Engineer-In-Charge may place on the job other personnel who shall observe the work as his/her direct representatives. Their authority shall consist of observing the work under the Contract, rejecting any defective material used and temporarily suspending any work improperly performed. They will not have any authority to make changes or alterations in the plans and specifications, nor be permitted to act as foremen for the Contractor.

Any work done or materials used without scheduling suitable observation by the Engineer-In-Charge or his/her authorized representative may be ordered removed and replaced at the Contractor's expense.

CONTRACTOR'S PERSONNEL

The Contractor shall place in charge of the work a competent and reliable English speaking superintendent, who shall have the authority to act for the Contractor and who shall be acceptable to the Engineer. This superintendent must be present at all times during the working day to receive directions and orders given by the Engineer or his/her representatives. All workers must have sufficient skill and experience to properly perform the work assigned to them. Any person employed by the Contractor who the Engineer may deem incompetent or unfit to perform the work shall at once be discharged and shall not again be employed on projects for the Sponsor at that specific task.

MATERIAL CERTIFICATES OF ACCEPTABILITY

All certificates of acceptability of materials required by the specifications shall be supplied by the Contractor at no expense to the Sponsor. The Engineer shall have the right to approve of the laboratories or fabricators which will issue the certificates.

SUBCONTRACTORS, MATERIALMEN AND LABORERS

The Contractor shall furnish the Engineer, before final payment is authorized, an affidavit that all labor and material associated with the work in any way is paid for in full. The Contractor shall indemnify and hold the Sponsor and the Engineer harmless from any lien or claim which may be made or filed after such payment by any subcontractor, materialman or laborer in connection with work performed hereunder.

RESPONSIBILITY FOR DAMAGE CLAIMS

The Contractor shall indemnify and save harmless the Sponsor, its officers, and employees and Stantec, from all suits, actions, or claims of any character brought because of any injuries or damage received or sustained by any person, persons, or property on account of the operations of the said Contractor; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or misconduct of the Contractor; or because of any claims or amounts recovered from any infringements of patent, trademark, or copyright; or from any claims on amounts arising or recovered under the Workers' Compensation Act, or any other law, ordinance, order, or decree; and so much of the money due the Contractor under and by virtue of his/her Contract as shall be considered necessary by the Sponsor for such purpose, may be retained for the use of the Sponsor; or, in case no money is due, his/her surety may be held until such suit or suits, action or actions, claim or claims for injuries or damages as aforesaid shall have been settled and suitable evidence to that effect furnished to the Sponsor; except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that he/she is adequately protected by public liability and property damage insurance.

The Contractor agrees to make no claim for damages for delay in the performance of this contract occasioned by any act or omission to act of the Sponsor or the Engineer, or any of its representatives, and the Contractor agrees that any such claim shall be fully compensated for by an extension of time to complete the performance of work as provided herein.

NO WAIVER OF LEGAL RIGHTS

The Sponsor shall not be precluded or stopped by a measurement, estimate or certificate made either before or after the completion and acceptance of the work and payment therefore, from

PRECONSTRUCTION CONFERENCE AND PROJECT SCHEDULE

The Contractor will be represented at the preconstruction conference by those staff to be in responsible charge of the work, including the site superintendent.

REQUIRED NOTICES

a. Fire and Police Officials
Local fire and police authorities shall be notified by the Contractor in advance of the beginning of the progress of the work in order to coordinate and maintain sufficient fire and police protection.

b. School Officials and Ambulance Companies
The Contractor shall closely coordinate all work impacting school pedestrian and bus traffic with the Engineer. Safe School Route Maintenance Plans shall be submitted by the Contractor and approved by the Engineer prior to construction. The cost of any additional signage, flag persons or other requirements to maintain school routes throughout the duration of the project shall be included in the Bid price for Item 619.01.

The Contractor is required to make personal contact with appropriate ambulance companies in respect to the effect of road closing on their operations. This should be done several weeks in advance of changes so that there will be adequate time for them to make necessary adjustments to their schedules and routes.

ENVIRONMENTAL CONCERNS

The Sponsor has filed a joint application to the New York State Department of Environmental Conservation and the United States Army Corps of Engineers for a Protection of Waters, Article 15, Section 404 and Water Quality Certification, Section 401 Nationwide Permit.

The Contractor shall incorporate best management practices to control sediment and erosion, as defined in Section 107-12 – Water Quality Protection and Section 209 – Soil Erosion and Sediment Control of the Standard Specifications.

West Creek is classified by NYSDEC as a Class D watercourse. There are no date restrictions on in-stream work.

At any given time during construction when the Engineer feels the work is adversely impacting water quality and/or adjacent properties, he/she may order such operations be suspended until such time when the Contractor can provide the necessary mitigation.

PERFORMANCE GRADED (PG) BINDER AND MIX DESIGN LEVEL

Requirements of this note apply to all Section 404 Asphalt Pavement items in this contract, except for shim, permeable base, temporary pavements, and miscellaneous, which may use non-modified PG binders such as PG 64S-22 and PG 64H-22.

PG BINDER

Use polymer or Terminal Blend Crumb Rubber modified **PG 64V-22** (Very High) meeting the requirements of AASHTO M 332, *Standard Specification for Performance Graded Asphalt Binder using Multiple Stress Creep Recovery (MSCR),* for the production of asphalt mixtures for this project. In addition, the binder grade must also meet the **elastomeric** properties as indicated by one of the following equations for $\%R_{3.2}$:

1. **For $J_{nr3.2} \geq 0.1$, $\%R_{3.2} > 29.371 * J_{nr3.2}^{-0.2633}$**
2. **For $J_{nr3.2} < 0.1$, $\%R_{3.2} > 55$**

Where:
$R_{3.2}$ is % recovery at 3.2 kPa
$J_{nr\,3.2}$ is the average non-recoverable creep compliance at 3.2 kPa

When terminal blend CRM PG binder is used, the following shall apply:

- Crumb rubber particles shall be finer than #30 sieve size.
- The CRM PG binder shall be storage-stable and homogeneous.
- The Dynamic Shear Rheometer (DSR) shall be set at 2-mm gap.
- The CRM PG binder shall be 99% free of particles retained on the 600 µm sieve as tested in accordance with Section 5.4 of M 332.

Use of polyphosphoric acid (PPA) to modify the PG binder properties is prohibited for mixtures under this contract. This prohibition also applies to the use of PPA as a cross-linking agent for polymer modification.

MIX DESIGN

The mixture designs must be developed in accordance with the criteria specified in the asphalt pavement items that are appropriate for the Mixture Design Level of **75 Gyrations**.

Note: The PG binder for this project will be modified with polymer or CRM additives to meet the requirements stated above. Handling of the asphalt mixtures shall be discussed at pre-construction and pre-paving meetings.

RAP PG BINDER CONTRIBUTION

When greater than 10% of Recycled Asphalt Pavement (RAP) is utilized in the production of Asphalt Mixture 9.5 and 12.5 Top Course, the mixture design will be formulated such that all volumetric properties are within the criteria specified in the latest Material Method 5.16 and meeting the minimum asphalt content specified in Material Method 5.16 Table 10 – PG Binder Content Design (>10% RAP).

SHOP DRAWINGS

The Contractor will be required to submit shop drawings for the following items:

- Precast Span Units
- Cofferdams
- Transition Bridge Rail
- Drainage Structures

ASBESTOS

There are to be NO asbestos materials used in any work being done for the Sponsor. If it is found that products with asbestos materials have been used, the vendor using them will be held responsible for all cost of clean-up, removal and any other cost that may occur because of it.

REMOVAL OF COUNTY, TOWN OR VILLAGE-OWNED FACILITIES

The Contractor shall give sufficient notice to the Engineer, for removal by Departmental Forces, of such County, Town or Village-owned facilities as signs and delineators.

EXISTING CONDITIONS

All dimensions affected by the geometrics and/or location of existing facilities are to be checked in the field by the Contractor, before ordering or fabricating any materials, and before any construction begins. It shall be the responsibility of the Contractor to supply the Engineer with all field dimensions required to check shop drawings.

D040965

US CUSTOMARY FUEL PRICE ADJUSTMENT

FUEL PRICE ADJUSTMENT[1] CONVERSION FACTORS		
MATERIAL DESCRIPTION	**CONVERSION FACTOR**	**ITEM NUMBER[2,7]**
Unclassified Excavation	0.35 gal/yd^3	203.02
Embankment	0.10 gal/yd^3	203.03, 620.XX
Fill	0.45 gal/yd^3	203.05, 203.06, 203.07, 203.08XX, 203.20, 203.21, 203.25
Controlled Low Strength Material	1.00 gal/yd^3	204.01, 204.02, 204.03, 204.04
Trench / Culvert / Structure Excavation	0.50 gal/yd^3	206.01, 206.0201
Bituminous Stabilized Course	1.40 gal/yd^3	302.01, 307.01
Subbase Course	1.00 gal/yd^3	304 Items
Asphalt Mixtures	2.50 gal/ton	404 Items[3], 405.01, 406 Items, 421 Items[3], 608.020102[3], 619.0601[4], 624.02XXXX[3,4], 633.14[3,4], 633.15[3,4], 633.16[3,4]
Diamond Grinding	0.13 gal/yd^2	505 Items[3]
Milling	0.10 gal/yd^2	490 Items
Cold Recycling Asphalt Concrete	0.08 gal/yd^2	416.XXXXXXRR
Portland Cement Concrete Pavement	1.00 gal/yd^3	502 Item[3], 503.1010, 603.1011, 503.1012
Fill Type Retaining Walls	0.45 gal/yd^3	554.30XX[5], 554.31[5], 554.4X[5]
Footing Concrete & Concrete for Structures – All classes	1.00 gal/yd^3	555 Items, 582.05
Approach Slabs	0.33 gal/yd^2	557.2001, 557.2002, 557.2003, 557.2009, 557.22
Structural Slabs with bottom formwork	0.25 gal/yd^2	557.01XX, 557.07, 557.30, 557.41XX
Structural Slabs - no bottom formwork	0.15 gal/yd^2	557.05XX, 557.09, 557.43XX
Class D and Overlay Concrete	0.05 gal/yd^2	557.13, 584 Items
Concrete Barrier, Type A	0.16 gal/ft	606.3001, 606.3021, 606.3031
Concrete Barrier, Type B	0.19 gal/ft	569.01, 606.3002, 606.3022, 606.3032
Concrete Barrier, Type C	0.22 gal/ft	606.3003, 606.3023, 606.3033
Concrete Barrier, Half Section	0.11 gal/ft	569.02, 569.06, 606.3004, 606.3024, 606.3034
Concrete Barrier, Single Slope	0.23 gal/ft	569.05, 569.07, 606.3041, 606.3043, 606.3044
Concrete Barrier Texas & Wide, Single Slope	0.28 gal/ft	569.08, 606.3051, 606.3053, 606.3054
Concrete Barrier Half Section, Single Slope	0.17 gal/ft	569.04, 606.3061, 606.3063, 606.3064
Vertical Faced Concrete Parapet	0.10 gal/ft	569.03
Gravel, Stone, Slag	1.00 gal/yd^3	411.01, 411.02, 411.03, 623.1X
Concrete Sidewalks and Driveways	1.00 gal/yd^3	608.01XX
Topsoil	0.45 gal/yd^3	610.10, 610.11XX, 610.14XX
Turf Establishment - Performance	0.05 gal/yd^3	610.16010020

US CUSTOMARY FUEL PRICE ADJUSTMENT

FUEL PRICE ADJUSTMENT[1] CONVERSION FACTORS

Notes:

1. In accordance with Standard Specification §698-3.02, the index value for the fuel price adjustment is the posted price for the month of bid letting.
2. Item Number - This is the contract pay item number under which these materials are most frequently paid. Unless indicated otherwise, materials similar to those indicated under the column entitled “Material Description” are also eligible for adjustment using the factor listed for a similar material with the same pay units regardless of the actual contract pay item number.
3. Quality Adjustment Items (404/406/502/505/608/624) are not eligible for fuel price adjustment.
4. Fuel Price Adjustment Conversion Factor based on units of TONS of asphalt placed, not the pay units of this item.
5. Fuel Price Adjustment Conversion Factor based on units of CY of backfill paid under this item, not the pay units of this item.
6. A two-digit suffix (RR) at the end of a contract pay item indicates a special specification.
7. Item numbers shown as a series (e.g., 304 Items) are in reference to a specific section in the Standard Specifications and do not include Special Specifications unless explicitly referenced

US CUSTOMARY ASPHALT PRICE ADJUSTMENT

ASPHALT PRICE ADJUSTMENT[1] CONVERSION FACTORS		
MATERIAL DESCRIPTION	**CONVERSION FACTOR**	**ITEM NUMBER[2]**
Bituminous Stabilized Course	0.065 t PGB/yd^3	302.01
Asphalt Treated Permeable Base, Type 2	0.035 t PGB/t	404.011901
Shim Course	0.0825 t PGB/t	404.058901
6.3 Top Course	0.067 t PGB/t	404.068X01, 406.06XXXXRR
9.5 Top Course, T&L, Shoulder Course	0.062 t PGB/t	404.09XX01, 404.418901, 406.09XXXXRR
9.5 Stone Matrix Asphalt	0.067 t PGB/t	421.095Z01RR
12.5 Top Course, T&L, Shoulder Course, Binder Course	0.055 t PGB/t	404.12XX01, 404.428901, 406.12XXXXRR
12.5 Stone Matrix Asphalt	0.060 t PGB/t	421.125Z01RR
19 Binder Course	0.049 t PGB/t	404.19X901, 404.438901, 406.19XXXXRR
19 Stone Matrix Asphalt	0.054 t PGB/t	421.195Z01RR
25 Binder Course	0.045 t PGB/t	404.25X901, 404.448901, 406.25XXXXRR
37.5 Base Course, Binder Course	0.040 t PGB/t	404.37X901, 404.458901, 406.37XXXXRR
Paver Placed Surface Treatment, Types A, B, and C	0.064 t PGB/t	415.0X0F0118
Micro-Surfacing, Quick-Set Slurry	0.078 t PGB/t	413.0X0F0118, 414.0X0F0118
Straight Tack Coat	0.0026 t PGB/gal	407.0103
Asphaltic Sealants (ASTM 6690)	0.0027 t PGB/gal	402.75XXXX18, 402.76XX0018
Chip Seal	0.0027 t PGB/gal	410.30, 410.02030006
Asphalt Emulsion for Cold Recycling	0.0027 t PGB/gal	416.02XX00RR, 416.20XX00RR, 416.2X, 416.21XX00RR
Fog Seal and Dilute Tack Coat	0.0016 t PGB/gal	407.0102, 407.01XXXXRR, 410.40, 416.30, 416.040000RR, 416.300000RR
PG Binder for Cold Recycling	0.0043 t PGB/gal	416.22, 416.030000RR, 416.22000018
Asphaltic Sealant – Clean & Seal	0.00004 t PGB/LF 0.225 t PGB/LNMI	402.76XX0008, 412.76XX0001
Asphaltic Sealant – Treating Cracks	0.240 t PGB/LNMI	412.76040001
Asphaltic Sealant – Rout & Seal	0.00005 t PGB/LF 0.270 t PGB/LNMI	402.760100RR, 412.760100RR, 412.760300RR
Repair of Asphalt Pavement, Temporary Asphalt	See Note 4	633.14, 633.15, 633.16, 619.06XX
Truing and Leveling, Asphalt Sidewalks, Driveways, Bike Paths, Gutters	See Note 5	404.017901, 404.018901, 406.01XXXXRR, 608.020102, 624.02XXXX
Waterproof Bridge Deck Overlay	0.0725 t PGB/t	402.907X0X18

US CUSTOMARY ASPHALT PRICE ADJUSTMENT

ASPHALT PRICE ADJUSTMENT[1] CONVERSION FACTORS

Notes:

1. In accordance with Standard Specification §698-3.01, the index value for the asphalt price adjustment is the average posted price of Performance Graded Binder (PGB) for the month of bid letting.
2. Item Number - This is the contract pay item number under which these materials are most frequently paid. Unless indicated otherwise, materials similar to those indicated under the column entitled “Material Description” are also eligible for adjustment using the factor listed for a similar material with the same pay unit regardless of the actual contract pay item number.
3. Quality Adjustment Items (404/406/608/624) are not eligible for asphalt price adjustment.
4. Asphalt Price Adjustment Conversion Factor based on unit of TON of asphalt placed, not the pay unit of this item. The conversion factor for Asphalt Pavement Repair and Temporary Asphalt will be based on the actual asphalt mixture used.
5. The conversion factor for Truing and Leveling, Driveways, and other items that allow asphalt mix options, will be based on the actual asphalt mixtures used.
6. A two-digit suffix (RR) at the end of a contract pay item indicates a special specification.
7. The conversion factors for Asphalt Mixtures with slag shall be increased by 25%.
8. t = ton; LF = linear feet; LNMI = lane miles

STEEL PRICE ADJUSTMENT

The following items/materials permanently incorporated into the work are eligible for steel and iron price adjustment:

Structural Steel
Reinforcing Steel (in superstructures or substructures)
Shear Studs
Open Steel Bridge Floor
Tension Strands
Dowel Bars
Load Transfer Devices
Steel in Precast or Prestressed Concrete Items, Including:
- Drainage Structures and Manholes
- Box Culverts
- Prefabricated Bridge and Wall Elements
- Concrete Barrier
Bridge, Culvert and Guide Railing
Sheet Piling and Cofferdams
Piling
Utility Frames, Grates & Covers
Overhead Sign Structures
Ductile Iron Water Main and Ductile Iron Appurtenances
Steel Water Main
Poles (Signal, Power, etc.)

Steel and iron price adjustments will be calculated in accordance with Section 698 Price Adjustments. Eligible materials include major components of items for which the weight of the steel and/or iron can be simply determined from manufacturer's/supplier's data or shipping weights, and exclude minor appurtenances individually weighing less than 2 kg (i.e. nuts, bolts, washers, etc.). Eligible precast or prestressed concrete items shall have total reinforcing steel weight listed on the approved shop drawings. The Engineer will determine the mass of eligible materials from the following sources, in declining order of precedence; approved shop drawings, contract documents, industry standards (i.e. Steel Manual, AWWA Standards, etc.) and manufacturer's data.

The following are the requirements of the owner of the water system for this contract. All manufacturer or proprietary material designations are the requirement of the Owner. Approval of an equal item other than that specified must be granted by the Owner.

Owner:	**Village of Evans Mills**		
Address:	**8706 Noble Street, P.O. BOX 176**		
City, State, Zip:	**Evans Mills, NY 13637**		
Contract:	**David Edwards**	Phone #**:**	**(315) 783-6584**

The Owner does require review and approval of materials and details. The estimated time required for approval by the Owner of materials and details during construction is Seven (7) days.

PIPE:

Type of Material: **Polyvinyl Chloride (PVC)** Pressure/Thickness Class: **DR 14**

Manufacturer: **IPEX** / **JM Eagle** / **National Pipe & Plastics Inc.**

Gaskets: **Nitrile Gaskets** (to be used in potential petroleum contaminated soils)

RESTRAINED JOINT PIPE:

Type of Material: **Polyvinyl Chloride (PVC)** Pressure/Thickness Class: **DR 14**

Manufacturer: **IPEX** / **JM Eagle**

Gaskets: **Nitrile Gaskets** (to be used in potential petroleum contaminated soils)

FITTINGS: (Compact Ductile Iron (C153) required unless otherwise noted)
AWWA C110 Full body required for size **n/a** NPS to **n/a** NPS

Special Requirements: **Stainless Steel Hardware**

TRACING WIRE:

Type: **#12 AWG Solid, 30 mil Blue HDPE insulation**

Tracer wire shall be installed in conformance with details in contract documents.

NUTS AND BOLTS:

Material: **High Strength Low Alloy, Blue Fluoropolymer or Polytetrafluoroethylene.**

Type: **"T" Head Bolts** For Joint Type: **Mechanical Joints**

CASING PIPE:

Material: **0.375 inch wall thickness new steel pipe with beveled ends**

Joints: **Continuous butt weld**

Coating: **1 coat (interior and exterior) of Carboline Bitumastic 300M, Tnemec Series 46 – 465 H.H.**

Carrier Pipe: **Restrained-joint Polyvinyl Chloride Water Main (extend min. 5' from ends of casing)**

Casing spacers: **14 gauge carbon steel (with thermoplastic powder coating) or stainless steel with PVC or EPDM Liner or HDPE; minimum of 4 – 1 ½" wide UHMW polymer, glass-reinforced plastic or HDPE runners, equally spaced around the circumference to maintain bell clearance on all sides, and equal length so that water main is centered and restrained in casing; Grade 5 steel bolts, nuts and washers; minimum 3 per pipe length.**

THRUST RESTRAINT TYPE:

Horizontal Bends	- **Thrust Blocks***
Vertical Bends	- **Thrust Blocks***
Tees & Crosses	- **Thrust Blocks***
Reducers	- **Thrust Blocks***
Plugs & Caps	- **Thrust Blocks***
Valves	- **Thrust Blocks***
Solid Sleeves	- **Thrust Blocks***
Hydrants	- **Thrust Blocks***

***Thrust block concrete shall be 2500 psi strength transit mix with no fly ash or pozzolans.**

TIE RODS:

Type: **Stainless Steel** Size: **3/4 inch**

TAPPING SLEEVES:

Joint: **ANSI / AWWA CIII Mechanical w/ ASME B16.1, Class 56.7 kg (125 LB) / / Class A Tapping Flange**

Sleeve: **ANSI / AWWA C110**

Abbreviations: **CIP = Cast Iron Pipe DIP = Ductile Iron Pipe ACP = Asbestos Cement Pipe PVC = Polyvinyl Chloride Pipe**

Bolts: **High Strength Low Alloy, Blue Fluoropolymer or Polytetrafluoroethylene Coating**

Stainless Steel Sleeves
Material: **Type 304 Stainless Steel (18-8), CF8 Cast Stainless Steel Flange, Type 304 Bolts and Nuts**

PIPE COUPLINGS:

Coating: **Epoxy**

Coating Thickness: **High Strength Low Alloy, Blue Fluoropolymer or Polytetrafluoroethylene**

Material: **All Ductile Iron (DI) or Steel (ANSI / AWWA CIII, ANSI / AWWA C219)**

VALVES:

Type: **Resilient Seat Gate w/304 Stainless Steel Body & Bonnet Bolts, Nuts & Washers 4" – 12": ANSI / AWWA C509, 14" – 30": ANSI / AWWA C515, Valves 16" and above shall be horizontal with bevel gearing depending on depth of existing main**

Open: **Right (CW)**

Working Pressure: **1,724 kPa (250 psi)**

Coating: **Fusion Bonded Epoxy, Interior and Exterior Surfaces**

Certification: **Passed Pressure Test at 2,068.4 kPa (300 psi) in Both Directions, atmospheric**

Joints: **Mechanical Joint by Mechanical Joint (MJ x MJ) or**
Tapping Flange by Mechanical Joint (Tapping x MJ) w/ Type 304 Flange Bolts

Stem: **Non-Rising (Includes Bevel Gears for Valve Sizes > 12 NPS**

Packing: **"O" Ring**

Operating Nut: **2 NPS (inch) Square**

Note: Existing valves may not be operated by personnel other than System Operator's staff.

VALVE BOXES:

Size: **133.4 mm (5-1/4 NPS (inch)) Diameter** Type: **Screw Type, lock into base section**

Coating: **Petroleum-Asphaltic Material** Lid: **Word "WATER" Cast into Top**

VALVE STEM EXTENSIONS: (Required when any project grade changes result in the depth from finished grade to valve operating nut to exceed eight (8) feet.)

Size: **As required to result in 3' – 5.5' depth from finished grade to top of extension stem.**

Type: **2" square fiberglass tubing, PVC top nut w/ centering device & metal bottom housing w/ 2 set screws each end; or 1" solid steel shaft w/ 2" heavy square socket & 2" heavy square nut (type as determined by Owner)**

HYDRANTS:

Manufacturer: **Mueller**
Kennedy

Model: **Super Centurion w/ Storz Connection**
Guardian K81A w/ "Storz" Outlet

Pumper Nozzle: Qty **1** Thread **4 NPT (National Standard Thread)**

Size **(4-1/2 NPS (inch)) I.D. Male/ 146.3 mm (5.76 NPS (inch)) O.D.**

Hose Nozzle: Qty **2** . Thread **7.5 NPT (National Standard Thread)**
Size **(2-1/2 NPS (inch)) I.D. Male/ 77.9 mm (3.0686 NPS (inch)) O.D.**

Valve Opening: **5-1/4 NPS (inch)** Packing: **"O" Ring** Seat Rings: **Bronze to Bronze**

Operating Nut: **Match Exist. Hydrants within Village**

Open: **Left** (Counter-Clockwise) Nozzles: **Mechanically Attached**

Standard Bury Depth: **(5-1/2 feet)**

Color: **Red** Inlet: **6 NPS (inch) MJ**

Extensions: **Only 1 extension allowed (maximum allowable extension height = 24 inches); break flange shall be no more than 6 inches, and no less than 2 inches, above finished grade.**

Bolts: **High Strength Low Alloy, Blue Fluoropolymer or Polytetrafluoroethylene**

Paint: **1 Coat Primer & 2 Finish Coats Safety Red (Conforming to Federal Lead Standards)**

SERVICE CONNECTION MATERIALS:

Corporation Stop - Ball Valve, Working Pressure: 300psi

Material: **No Lead Brass, UNS Copper Alloy C89520and C89833**

Inlet Threads: **AWWA x PE** Outlet Threads: **Compression for Polyethylene Tubing**

Curb Stop

Material: **No Lead Brass, UNS Copper Alloy C89520 and C89833**

Connection: **Compression for Polyethylene Tubing** Type: **Ball Valve, working Pressure 300 psi**

Curb Box

Size: **2½" Service Box** Type: **Sliding Extension** Length: **66 inches (Max. Extended)**

Lid: **Cast Iron w/ "Water" Cast in Cover**

Service Pipe

Material: **Polyethylene PE 4710**

Pressure: **SDR-9, 250 PSI**

Service Taps

Shutting down a main that is in service for a service tap is not allowed.

Service Saddles

Standard brass NSF 61 certified for all sizes. Service saddles required for all taps on PVC pipe.

PRESSURE TESTS:

Method: **Per System Operator Requirements** Test Pressure: **(200 psi) Min.**

Duration: **One (1) Hour Min.**

Leakage: **Zero Leakage Allowed (Any drop in test pressure = failed test)**

Test Gauge: **Use 300 psi Gauge for all Pressure Tests**

Witness: **System Operator's Engineer MUST witness the test before it can be accepted as Passed**

Further Work: **Pressure Test MUST pass before continuing w/ Chlorination & Sampling**

The following are the requirements of the sanitary sewer system for this contract. All manufacturer or proprietary material designations are the requirement of the Owner. Approval of an equal item other than that specified must be granted by the Owner.

Owner:	**Village of Evans Mills**		
Address:	**8706 Noble Street, P.O. BOX 176**		
City, State, Zip:	**Evans Mills, NY 13637**		
Contract:	**David Edwards**	Phone #**:**	**(315) 783-6584**

The Owner does require review and approval of materials and details. The estimated time required for approval by the Owner of materials and details during construction is Seven (7) days.

GRAVITY PIPE:

Type of Material: **Polyvinyl Chloride (PVC)** Pressure/Thickness Class: **SDR 35**

Manufacturer: **IPEX** / **JM Eagle** / **National Pipe & Plastics Inc.**

Gaskets: **Nitrile Gaskets** (to be used in potential petroleum contaminated soils)

RESTRAINED JOINT PIPE:

Type of Material: **Polyvinyl Chloride (PVC)** Pressure/Thickness Class: **DR 32.5**

Manufacturer: **IPEX** / **JM Eagle**

Gaskets: **Nitrile Gaskets** (to be used in potential petroleum contaminated soils)

FITTINGS: Injection-moulded gasketed PVC fittings shall meet the requirements of ASTM D3034 and ASTM F1336 and shall be certified to CSA B182.1 or CSA B182.2. Fabricated fittings must conform to ASTM F1336 and CSA B182.2.

OWNER REQUIREMENTS FOR ELECTRICAL WORK

SECTION 260500 - GENERAL REQUIREMENTS FOR ELECTRICAL WORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division-1 Specification Sections, apply to Work of this Section.

1.2 WORK INCLUDED

A. Include all labor, materials and appliances required for the furnishing, installing, and testing, complete and ready for operation, in a manner satisfactory to the Architect, all the Work shown on the Drawings and specified herein, as indicated in the following Sections:

SECTION	TITLE
260500	General Requirements for Electrical Work
260519	Low-Voltage Electrical Power Conductors and Cables
260526	Grounding and Bonding For Electrical Systems
260532	Junction Boxes for Electrical Systems
260533	Raceway and Boxes for Electrical Systems
260553	Identification for Electrical Systems
260572	Overcurrent Protective Device Short-Circuit Study
260573	Overcurrent Protective Device Coordination Study
260574	Overcurrent Protective Device Arc-Flash Study
260950	Empty Conduit Systems
262416	Panelboards
262726	Wiring Devices
263113.13	Diesel Generator
263600	Transfer Switch

1.3 SEPARATION OF WORK BY RELATED TRADES

A. The specifications for the overall construction delineate various items of work under separate trade headings. The list below sets forth this delineation to the extent that it affects the electric work.

B. In the absence of more detailed information, the list shall be taken as a specific instruction to the electrical trade to include the work assigned to it.

C. Indications that any trade is to perform an item of work means that it is to perform the work for its own accommodation only, except as specifically noted otherwise.

D. Abbreviations are as follows:

Oth	=	Other than Electrical or Mechanical
Plb	=	Plumbing
FP	=	Fire Protection
Htg	=	Heating, Ventilating and Air Conditioning
Elec	=	Electrical

f = Furnished
i = Installed
p = Provided (Furnished and Installed)

E.

Item	Oth	Plb	Htg	Elec	Notes
1. Motors for equipment Specifications	X				
2. Motor controllers for mechanical equipment			X	X	Specifications and drawings delineate exceptions
3. Power wiring for mechanical equipment motors and controls				X	
4. Control wiring			X		Specifications and drawings delineate exceptions
5. Temporary light and power to accommodate all trades				X	Electric work to also include responsibility for any "one time" utility company charges for the introduction of temporary electric service
6. Hoisting, rigging, bracing and dunnage for safe rigging	X				
7. Cutting, chasing and patching					Cost where due to late installation or improper coordination of work is the responsibility of the Electrical Contractor
8. Framed slots and openings in walls, decks and slabs	X				Coordination of locations is part of electrical work
9. Sleeves in fieldcast concrete	X				
10. Sleeves through waterproof slabs, decks and walls				X	Includes drilling of holes for other than field poured concrete

Item	_Oth	Plb	Htg	Elec	Notes
11. Waterproof and fireproof sealing of excess openings in slabs, decks and firerated walls	X				
12. Excavation and Backfill	X				Beyond 5 feet from building line
13. Fastenings	X				
14. Supports	X				
15. Concrete encasement of conduits	X				Beyond 5 feet from building
16. Flashing of electric conduits through roof (pitch pockets)	X				
17. Concrete foundations, pads and bases, inside building	X				Furnishing of anchors and vibration mounts included in the electric
18. Field touchup painting of damaged shop coats	X				
19. Field rustproof painting of supporting steel members, frames and racks				X	
20. Finished wall and ceiling access doors, panels and supporting frames				X	
21. Lighting fixtures and lamps for lighting fixtures				X	Except as noted
22. Ceiling opening frames for recessed lighting fixtures and other				X	

Item	Oth	Plb	Htg	Elec	Notes
electrical items					
23. Electric heaters with integral fans (cabinet heaters) and the like				X	Line and control connections and control devices mounting included in electric
24. Electric power consumption items and controls for same as covered elsewhere				X	Line connections to control equipment included in electric. Specifications and drawings delineate exceptions
25. Rubbish removal				X	Removal of the shipping and packing materials of electrical items to designated location is included in the electric regardless of by whom the items are furnished

F. Include in the electrical work all necessary supervision and the issuing of all coordination information to any other trades who are supplying work to accommodate the electrical installations.

G. For items that are to be installed but not purchased as part of the electrical work, the electrical work shall include:

1. The coordination of delivery.
2. Unloading from delivery trucks driven into any point on the property line at grade level.
3. Careful examination upon delivery to the project. Claims that any of these items have been received in such condition that installation will require procedures beyond the

reasonable scope of the electrical work will be considered only if presented in writing within one week of the date of delivery to the project of the items in question. The electric work includes all procedures, regardless of how extensive, necessary to put into satisfactory operation, all items for which no claims have been submitted as outlined above.

4. Safe handling and field storage up to the time of permanent placement in the project.
5. Protection from any damage, defacement or corrosion after permanent placement.
6. Field make-up and internal wiring as may be necessary for proper operation in accordance with wiring diagrams provided by the furnishing contractor.
7. Mounting in place including the purchase and installation of all dunnage, supporting members and fastenings necessary to adapt to architectural and structural conditions.
8. Connection to building wiring including the purchase and installation of all termination junction boxes necessary to adapt and connect to this wiring. Included also, shall be the purchase and installation of any connectors, cable reducers or other wiring terminations as may be necessary to adapt terminals to the building wiring as called for and to the connection methods set forth in these specifications.

1.4 HARMONY OF WORK

A. The work called for under this Contract shall be carried on simultaneously with the work of other trades in a manner such as not to delay the overall progress of the work. The Electrical Contractor shall be prepared to furnish promptly to other trades involved at the project all information and measurements relating to this work which they may require. He shall cooperate with them in order to secure the harmony necessary in the interest of the project as a whole.

1.5 QUALITY ASSURANCE

A. In order to define requirements for quality, function, sizes, gauges, grades, etc., documents designate Manufacturer's Brands, and other pertinent data describing products that conform to this Project's requirements.

B. Equivalent or better products of other unnamed manufacturers may be proposed for consideration, if submitted at the time of bid with adequate documentation to determine equivalence.

1.6 INTERPRETATION OF DOCUMENTS

A. As used in the drawings and specifications for electrical work, certain non-technical words shall be understood to have specific meanings as follows regardless of indications to the contrary in the General Conditions of other documents governing the electrical work.

1. "Electrical Contractor," "This Contractor," "This (The) Subcontractor" - The party or parties who have been duly awarded the contract for and are thereby made responsible for the electrical work as described herein.
2. "This Contract," "The Contract" - The agreement covering the work to be performed by "This Contractor."
3. "Equal," "Satisfactory," "Accepted," "Acceptable" "Equivalent" - Acceptable for use on the project, as determined by the Engineer based on documents presented for such determination.
4. "These Specifications," "This Section, Part, Division" (of the Specification) - The document specifying the work to be performed by "This Contractor."

5. "The Electrical Work," "This Work" - All labor, materials, equipment apparatus, controls, accessories, and other items required for a proper and complete installation by the Electrical Contractor.
6. "Architect," "Engineer," "Owner," "Owner's Representative" - The party or parties responsible for interpreting, accepting and otherwise ruling on the performance under this Contract.
7. "Furnish" - Purchase and deliver to the project site complete with every necessary appurtenance and support, all as part of the electrical work.
8. "Install" - Unload at the delivery point at the site and perform every operation necessary to establish secure mounting and correct operation at the proper location in the project, all as part of the electrical work.
9. "Provide" - "Furnish" and "Install."
10. "New" - Manufactured within the past two years and never before used.

B. Items and installation methods as described in the drawings and specifications for electrical work are to be used only under normal electric work conditions as hereinafter described unless there are specific notations to the contrary.

C. Items and installation methods as described in the drawings and specifications for electrical work are to be used only at less than 600 volts unless there are specific notations the contrary.

D. Except where modified by a specific notation to the contrary, it shall be understood that the indication and/or description of any electrical item in the drawings or specifications for electrical work carries with it the instruction to furnish, install and connect the item as part of the electrical work, regardless of whether or not this instruction is explicitly stated.

E. It shall be understood that the specifications and drawings for electrical work are complementary and are to be taken together for a complete interpretation of the electrical work, except that indications on the drawings, which refer to an individual element of work, take precedence over the specifications where they conflict with same.

F. To the extent that they govern the basic work, the specifications also govern change order work, if any.

G. No exclusion from, or limitation in, the symbolism used on the drawings for electrical work or the language used in the specifications for electrical work shall be interpreted as a reason for omitting the appurtenances or accessories necessary to complete any required system or item of equipment.

H. The drawings for electrical work utilize symbols and schematic diagrams which have no dimensional significance. The work shall, therefore, be installed to fulfill the diagrammatic intent expressed on the electrical drawings, but in conformity with the dimensions indicated on the final architectural drawings, field layouts and shop drawings of all trades.

I. Certain details appear on the drawings for electrical work which are specific with regard to the dimensioning and positioning of the work. These are intended only for general information purposes. They do not obviate field coordination for individual items of the indicated work.

J. Location of lighting fixtures are diagrammatic. Refer to reflected ceiling plans for exact locations.

K. Information as to general construction and architectural features and finishes shall be derived from structural and architectural drawings and specifications only.

L. The use of words in the singular shall not be considered as limiting where other indications denote that more than one item is required.

M. Ratings of devices, materials and equipment specified without reference to specific performance criteria shall be understood to be nominal or nameplate ratings established by means of industry standard procedures.

N. In addition to their usage in codes or other industry standards, certain words as used in the drawings or specifications for the electrical work shall be understood to have the specific meanings ascribed to them in the following list:

1. "Circuitry," "Circuit," "Wiring" - Any electric work (not limited to light and power distribution) which consists of wire, cables, raceways and/or specialty wiring method assemblies taken all together, complete with associated junction boxes, pull boxes, outlet boxes, joints, couplings, splices and connections except where limited to lesser meaning by specific description.
2. "Motor Circuit" - Any circuit which operates nominally at 100 volts or more, and which carries electrical input energy to a motor.
3. "Control Circuit" (used in conjunction with a motor for which a manual starter is supplied) - Any circuit containing an extension of power circuit wires, other than those constituting the direct connection between source of supply, starter and motor.
4. "Control Circuit" (used in conjunction with a motor for which a magnetic starter is supplied) - Any circuit (other than a motor power circuit), which carries current intended for directing or indicating the performance of a motor starter.
5. "Control Device" - Any device which performs a function in a motor control circuit (pushbutton, automatic contacts, pilot light, solenoid, etc.).
6. "Package Unit" - An item of equipment having one or more motors or other electric energy consuming elements integrally factory mounted on a single base, complete with all associated control devices and interconnecting wiring.
7. "Low Voltage" - Below 50 volts.
8. "Grade Slab" - A building floor slab which is in contact with or directly over grade (earth).
9. "Building" - The extent of a building, as defined by the outside surfaces of its peripheral walls, the top surface of its roof, and the underside surface of is grade slab.
10. "Subject to Mechanical Damage" - Exposed within seven feet of the floor in mechanical rooms, or other spaces where heavy items (over 100 pounds) are moved around or rigged as a common practice or as required for replacement purposes.

1.7 SUBMITTALS

A. Shop drawing requirements shall be as outlined under Division 1 and as herein noted.

B. Prior to purchasing any equipment or materials and within 45 days of contract award a list of their manufacturers shall be submitted for review along with a proposed schedule of shop drawings submission. The contractor shall be responsible for any delay in review of shop drawings caused by failure to submit such data. Prior to assembling or installing the work, the following shall be submitted for review.

1. Catalog information and factory assembly drawings, and data required for a complete explanation and description of all fixtures, devices and equipment, including construction, material, finishes, operating characteristics, physical dimensions and listing or labeling of the appropriate recognized agency or authority.
2. Field installation drawings, as required to explain fully all procedures involved in erecting, mounting and connecting all equipment including wiring diagrams.

3. Layout drawings for the main electrical equipment, such as switchboard rooms, major conduit bank runs, underground services.

C. Documents will not be accepted for review unless:

1. In compliance as to number of copies and type of paper with the requirements of the general conditions.
2. Submitted with complete identification including Project name, applicable Contract Specifications reference with Section, number and Contract Drawing reference.
3. Includes complete information pertaining to appurtenance and accessories.
4. Submitted as a package when pertaining to related items.
5. Properly marked with service or function identification as related to this project when consisting of catalog sheets displaying other items which are not applicable.
6. Properly marked with external connection identification as related to this project when consisting of standard factory assembly or field installation drawings.

1.8 SAMPLES

A. For approval, prepare and submit samples to the Architect and Engineer in accordance with requirements set forth in the Special Sections requiring samples.

B. The samples shall be properly tagged and will remain in the Architect's or Engineer's possession until final acceptance of the Work.

1.9 RECORD DOCUMENTS

A. During construction the Electrical Contractor keep an accurate record on a set of Contract Drawings of all deviations between the work shown and work installed. These shall include changes and addenda of this Division which exist in the completed work, including the markings and location of disconnect devices and final circuit numbers as installed.

B. As part of the required electric work, a complete set of "as-built" or record electric drawings shall be made up and delivered to the Architect and Owner.

C. The drawings shall indicate:

1. All electric work installed exactly in accordance with the original design.
2. All electric work installed as a modification or addition to the original design.
3. The dimensional information necessary to delineate the exact location of all circuitry and wiring runs (other than lighting and appliance branch circuitry and small control, signal and communications circuitry runs) which are so buried or concealed as to be untraceable by inspection through the regular means of access established for inspection and maintenance.
4. The numbering information necessary to correlate all electrical energy consuming items (or outlets for same) to the panel or switchboard circuits from which they are supplied.

D. The Electrical Contractor shall maintain a complete file of all contracts and shop drawings at the site and available for inspection by Owner's representatives. All installation and equipment shop drawings shall be initialed and dated upon installation.

E. The drawings shall be of photo mylar reproducible type or as directed. The design tracings will be made available for copying into reproducibles should it be determined that such reproducible would serve as suitable backgrounds for the "as-built" drawings. The quantity of design

tracings which are made available shall in no way be interpreted as setting a limit to the number of drawings necessary to show the required "as-built" information.

1.10 TRAINING AND OPERATING INSTRUCTIONS

A. On completion and acceptance of the Work, furnish for approval, two copies of written instructions on the proper operation and maintenance of all equipment and apparatus furnished under this Division.

B. This manual shall provide all manufacturer's literature relating to the equipment, all cuts, wiring diagrams, instruction sheets and all other information that would be useful to the Owner in operation and maintenance of the Electrical Systems.

C. This Contractor shall provide a training period of one (1) week for operating personnel assigned to maintain this facility in addition to the training requirements of individual sections.

D. The instructions shall include the submission of the name, address and telephone number of the manufacturer's representative and service company for each item of equipment so that service and spare parts can be readily obtained.

1.11 COMPLIANCE WITH STANDARDS

A. All Work shall conform to these Project Specifications and to applicable requirements of hereinafter listed standards. Referenced standard shall be considered as the minimum acceptable. Project Specifications shall govern where the referenced standards are exceeded.

B. Materials specified by reference to a specific Standard, a trade association Standard, or other similar Standard shall comply with the requirements in the latest revision thereof, in effect at the time of bidding, except as limited by type, class or grade, or modified in such reference.

C. All personnel in charge of site operations will be held to have acquainted themselves with all referenced Standards insofar as they may be termed applicable to this Project.

D. All equipment, materials and installation methods shall be in accordance with the applicable portions of:

1. National Electrical Code (NEC).
2. New York State Building Code
3. Underwriters' Laboratories (UL)
4. National Equipment Manufacturers Association (NEMA).
5. Institute of Electrical and Electronics Engineering (IEEE).
6. National Fire Protection Association (NFPA).
7. American National Standards Institute (ANSI).
8. New York State Energy Conservation Code.
9. New York State Education Department.
10. Any other codes having jurisdiction.

1.12 LAWS AND ORDINANCES

A. All Local Laws and Regulations, governing or relating to any portion of this Work are hereby made a part of these Specifications. Responsibility for compliance to their provisions is included.

B. Inform the Owner, or his Representative, of any Work or Materials which violates any of the applicable Laws and Regulations before proceeding with the Work.

C. Installation procedures, methods and conditions shall comply with the latest requirements of the Federal Occupational Safety and Health Act (OSHA).

1.13 PERMITS AND CERTIFICATES

A. Give necessary notices, and obtain permits or licenses necessary to carry out this Work and pay all fees therefore.

B. Arrange for inspection and tests of any and all parts of the Work if so required by authorities or local service companies having jurisdiction and pay all charges for same.

C. Pay all costs for, and furnish to the Owner, all certificates necessary as evidence that the work installed conforms with all regulations where they apply to this work.

1.14 WARRANTIES AND GUARANTEES

A. Where warranties and special guarantees covering installation, operation or performance of any system or appliances furnished under this Contract are required, the full responsibility for the fulfillment of such warranties and guarantees must be assumed by this Contractor, who shall obtain written Warranties and Guarantees, in triplicate, which shall be filed with the Owner, or his Representative, before final acceptance.

B. All work shall be warranteed to be free from defects. Any defective materials or workmanship, as well as damage to the work of all trades resulting from same, shall be replaced or repaired as directed for the duration of stipulated warrantee periods.

C. The duration of warrantee periods following the date of acceptance of the work shall be, for work not otherwise specified - one year.

D. The date of acceptance shall be the date of the final payment for the work or the date of a formal notice of acceptance, whichever is earlier.

E. Certification shall be submitted attesting to the fact that specified performance and other criteria are met by all items of all electric work installed.

1.15 INSPECTION

A. Examine the areas and conditions where electrical work is to be installed and notify the architect of conditions detrimental to proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected by the contractor in a manner acceptable to the architect.

1.16 INTENT OF SPECIFICATIONS AND DRAWINGS

A. It shall be understood that the drawings show the general runs of piping and the approximate location of apparatus. Do not scale the Drawings to determine the exact positions and clearances. Obtain from the architect any dimensions not shown.

B. Methods of construction and details of workmanship where not specifically described herein or indicated on the Drawings shall be subject to the Owners, or his Representative's approval. It is the intent of these Specifications to provide complete Systems left in good working order,

ready for operation, including necessary labor and materials, whether or not specifically shown on the Drawings or mentioned herein.

C. Obtain from the Owner, or his Representative at the Site, the location of any apparatus not definitely located on the Drawings. Locate equipment and accessories in such a manner as to provide easy access for proper service and maintenance.

1.17 ERRORS AND OMISSIONS

A. If any errors, omissions or discrepancies appear in the drawings, specifications or other documents, the Contractor shall within ten (10) days after receiving such documents notify the Architect in writing of such omissions or errors. In the event of the Contractor's failing to give such notice,he will be held responsible for the results of any such errors or omissions and the cost of rectifying same.

B. The Contractor shall be responsible for total coordination between the different Divisions of the Contract. Items furnished under one Division and requiring work under another Division is part of the Contract and no allowance will be given to Contractor's claims for extra work.

C. Before submitting a proposal, the Contractor shall visit the site of the work and become thoroughly familiar with all conditions and limitations. The submission of a proposal will be construed as evidence that such an examination has been made, and later claims for labor, equipment or materials required or for difficulties encountered which could have been foreseen had such an examination been made, will not be recognized.

1.18 INDEMNIFICATION

A. The Electrical Contractor shall agree to indemnify and save harmless the party contracting for his services against loss or expense by reason of the liability imposed by law upon such party for damages because of bodily injuries, including death at any time resulting therefrom, accidentally sustained by any person or persons or on account of damage to property arising out of, or in consequence of the performance of this contract, whether such injuries to persons or damage to property are due, or claimed to be due, to any negligence of the Electrical Contractor, the party contracting for his services, his or their employees or agents, or any other person.

B. The Electrical Contractor shall carry all the insurance necessary to support the above agreement, and shall submit copies of the insurance certificates attesting to the fact that he is properly covered.

C. The Electrical Contractor shall obtain all necessary allowances, pay any royalties, etc., in connection with the use of any patented devices or systems, and shall render the party contracting for his services harmless from any claims or lawsuits arising from such use.

1.19 STORAGE OF MATERIALS AND EQUIPMENT

A. Store materials and equipment where directed or approved by the Architect. Any damage caused by any overloading of the Structure shall be repaired at no additional cost to the Owner.

B. Do not store where exposed to the weather.

C. Protect all materials from damage from work of other trades.

D. Cover all equipment with a suitable, approved material to prevent damage.

1.20 PROTECTIVE PAINTING

A. Electrical material and equipment shall be furnished primed and painted per manufacturer standard specification and color.

B. After installation of equipment under this Section, clean and repaint all surfaces as required where damages are due to shipment and/or installation. Use manufacturer's standard color.

C. Except as otherwise specified, finished painting will be done under another Section.

1.21 CUTTING AND PATCHING

A. Do all cutting necessary for the installation of Electrical Work. Accurately lay out all work for which cutting is required, so as to avoid unnecessarily large openings. Cutting of beams, joists, floors or walls of the building will not be permitted except after receiving approval of the structural engineer. Rough patching will be done by this Contractor in a manner to accommodate finished patching work.

B. All holes through floors shall be made by power driven coring equipment. Holes shall be of adequate size to accommodate the packing of the space between cored hole and pipe. Sleeves will not be required for core drilled holes providing the drilling produces a solid core and the floor is not waterproofed. If a solid core is not obtained, this Contractor shall provide a sleeve for the pipe and the irregular floor opening will be patched by this Contractor.

C. The Electrical Contractor shall set sleeves for conduits accurately before the concrete floors are poured. Should he neglect to perform this preliminary work, and should cutting be required in order to install his conduits or equipment, the expense of this cutting and restoring of surfaces to their original conditions shall be borne by the Electrical Contractor.

D. Finished patching will be done "Under Another Section of the Specifications."

1.22 RUBBISH REMOVAL AND CLEAN-UP

A. The Electrical Contractor shall, at the conclusion of each day's work, clean up and stockpile on the site, at locations designated, all rubbish, debris and trash, which may have accumulated during the day as a result of work of the Electrical Contractor and of his presence on the job. The General Contractor will then remove stockpiled rubbish.

B. When directed, remove from entire installation of work of this Section all protecting materials, dirt, dust, smears, stains, paint spots, and the like and leave in a clean condition. Clean and remove all smudges, fingerprints, etc., from lighting fixtures, switches, receptacles, etc., after installation.

PART 2 - PRODUCTS AND MATERIALS

Not used.

PART 3 - EXECUTION AND INSTALLATION

Not used.

END OF SECTION 260500

SECTION 260519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Building wires and cables rated 600 V and less.
2. Connectors, splices, and terminations rated 600 V and less.
3. Sleeves and sleeve seals for cables.

B. Related Sections include the following:

1. Division 27 Section "Voice and Data Communication Cabling" for cabling used for voice and data circuits.

1.3 DEFINITIONS

A. EPDM: Ethylene-propylene-diene terpolymer rubber.

B. NBR: Acrylonitrile-butadiene rubber.

1.4 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Qualification Data: For testing agency.

C. Field quality-control test reports.

1.5 QUALITY ASSURANCE

A. Testing Agency Qualifications: An independent agency, with the experience and capability to conduct the testing indicated, that is a member company of the InterNational Electrical Testing Association or is a nationally recognized testing laboratory (NRTL) as defined by OSHA in 29 CFR 1910.7, and that is acceptable to authorities having jurisdiction.

1. Testing Agency's Field Supervisor: Person currently certified by the InterNational Electrical Testing Association or the National Institute for Certification in Engineering Technologies to supervise on-site testing specified in Part 3.

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

C. Comply with NFPA 70.

1.6 COORDINATION

A. Set sleeves in cast-in-place concrete, masonry walls, and other structural components as they are constructed.

PART 2 - PRODUCTS

2.1 CONDUCTORS AND CABLES

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Alcan Products Corporation; Alcan Cable Division.
2. American Insulated Wire Corp.; a Leviton Company.
3. General Cable Corporation.
4. Senator Wire & Cable Company.
5. Southwire Company.

B. Copper Conductors: Comply with NEMA WC 70.

C. Aluminum Conductors: Not permitted.

D. Conductor Insulation: Comply with NEMA WC 70 for Types THW THHN-THWN XHHW UF USE and SO.

E. Multiconductor Cable: Comply with NEMA WC 70 for armored cable, Type AC metal-clad cable, Type MC Type SO and Type USE with ground wire.

2.2 CONNECTORS AND SPLICES

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. AFC Cable Systems, Inc.
2. Hubbell Power Systems, Inc.
3. O-Z/Gedney; EGS Electrical Group LLC.
4. 3M; Electrical Products Division.
5. Tyco Electronics Corp.

C. Description: Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated.

2.3 SLEEVES FOR CABLES

A. Steel Pipe Sleeves: ASTM A 53/A 53M, Type E, Grade B, Schedule 40, galvanized steel, plain ends.

B. Cast-Iron Pipe Sleeves: Cast or fabricated "wall pipe," equivalent to ductile-iron pressure pipe, with plain ends and integral waterstop, unless otherwise indicated.

C. Sleeves for Rectangular Openings: Galvanized sheet steel with minimum 0.052-inch (1.3-mm) thickness as indicated and of length to suit application.

D. Coordinate sleeve selection and application with selection and application of firestopping specified in Division 7 Section "Through-Penetration Firestop Systems."

2.4 SLEEVE SEALS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

B. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

C. Basis-of-Design Product: Subject to compliance with requirements, provide the product indicated on Drawings or a comparable product by one of the following:

1. Advance Products & Systems, Inc.
2. Calpico, Inc.
3. Metraflex Co.
4. Pipeline Seal and Insulator, Inc.

D. Description: Modular sealing device, designed for field assembly, to fill annular space between sleeve and cable.

1. Sealing Elements: interlocking links shaped to fit surface of cable or conduit. Include type and number required for material and size of raceway or cable.
2. Pressure Plates: Stainless steel. Include two for each sealing element.
3. Connecting Bolts and Nuts: Stainless steel of length required to secure pressure plates to sealing elements. Include one for each sealing element.

PART 3 - EXECUTION

3.1 CONDUCTOR MATERIAL APPLICATIONS

A. Feeders: Copper or Aluminum. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.

B. Branch Circuits: Copper. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.

3.2 CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS

A. Exposed Feeders: Type THHN-THWN, single conductors in raceway.

B. Feeders Concealed in Ceilings, Walls, Partitions, and Crawlspaces: Type THHN-THWN, single conductors in raceway.

C. Feeders Concealed in Concrete, below Slabs-on-Grade, and Underground: Type THHN-THWN, single conductors in raceway.

D. Exposed Branch Circuits, Including in Crawlspaces: Type THHN-THWN, single conductors in raceway.

E. Branch Circuits Concealed in Ceilings, Walls, and Partitions: Type THHN-THWN, single conductors in raceway Armored cable, Type AC.

F. Branch Circuits Concealed in Concrete, below Slabs-on-Grade, and Underground: Type THHN-THWN, single conductors in raceway.

G. Class 1 Control Circuits: Type THHN-THWN, in raceway.

H. Class 2 Control Circuits: Type THHN-THWN, in raceway.

3.3 INSTALLATION OF CONDUCTORS AND CABLES

A. Conceal cables in finished walls, ceilings, and floors, unless otherwise indicated.

B. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.

C. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips, that will not damage cables or raceway.

D. Install exposed cables parallel and perpendicular to surfaces of exposed structural members, and follow surface contours where possible.

E. Support cables according to Division 26 Section "Electrical Supports and Seismic Restraints."

F. Identify and color-code conductors and cables according to Division 16 Section "Electrical Identification."

G. Installation of aluminum conductors shall comply with NECA/AA 104-2000.

H. Use oxide inhibitor for all aluminum conductor terminations.

I. Aluminum conductors are permitted for feeders only, not to be used in branch circuits.

3.4 CONNECTIONS

A. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.

B. Make splices and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.

1. Use oxide inhibitor in each splice and tap conductor for aluminum conductors.

C. Wiring at Outlets: Install conductor at each outlet, with at least 6 inches (150 mm) of slack.

3.5 SLEEVE INSTALLATION FOR ELECTRICAL PENETRATIONS

A. Coordinate sleeve selection and application with selection and application of firestopping specified in Division 7 Section "Through-Penetration Firestop Systems."

B. Concrete Slabs and Walls: Install sleeves for penetrations unless core-drilled holes or formed openings are used. Install sleeves during erection of slabs and walls.

C. Use pipe sleeves unless penetration arrangement requires rectangular sleeved opening.

D. Rectangular Sleeve Minimum Metal Thickness:

1. For sleeve rectangle perimeter less than 50 inches (1270 mm) and no side greater than 16 inches (400 mm), thickness shall be 0.052 inch (1.3 mm).
2. For sleeve rectangle perimeter equal to, or greater than, 50 inches (1270 mm) and 1 or more sides equal to, or greater than, 16 inches (400 mm), thickness shall be 0.138 inch (3.5 mm).

E. Fire-Rated Assemblies: Install sleeves for penetrations of fire-rated floor and wall assemblies unless openings compatible with firestop system used are fabricated during construction of floor or wall.

F. Cut sleeves to length for mounting flush with both wall surfaces.

G. Extend sleeves installed in floors 2 inches (50 mm) above finished floor level.

H. Size pipe sleeves to provide 1/4-inch (6.4-mm) annular clear space between sleeve and cable unless sleeve seal is to be installed.

I. Seal space outside of sleeves with grout for penetrations of concrete and masonry.

J. Interior Penetrations of Non-Fire-Rated Walls and Floors: Seal annular space between sleeve and cable, using joint sealant appropriate for size, depth, and location of joint according to Division 7 Section "Joint Sealants."

K. Fire-Rated-Assembly Penetrations: Maintain indicated fire rating of walls, partitions, ceilings, and floors at cable penetrations. Install sleeves and seal with firestop materials according to Division 7 Section "Through-Penetration Firestop Systems."

L. Roof-Penetration Sleeves: Seal penetration of individual cables with flexible boot-type flashing units applied in coordination with roofing work.

M. Aboveground Exterior-Wall Penetrations: Seal penetrations using sleeves and mechanical sleeve seals. Size sleeves to allow for 1-inch (25-mm) annular clear space between pipe and sleeve for installing mechanical sleeve seals.

N. Underground Exterior-Wall Penetrations: Install cast-iron "wall pipes" for sleeves. Size sleeves to allow for 1-inch (25-mm) annular clear space between cable and sleeve for installing mechanical sleeve seals.

3.6 SLEEVE-SEAL INSTALLATION

A. Install to seal underground exterior-wall penetrations.

B. Use type and number of sealing elements recommended by manufacturer for cable material and size. Position cable in center of sleeve. Assemble mechanical sleeve seals and install in annular space between cable and sleeve. Tighten bolts against pressure plates that cause sealing elements to expand and make watertight seal.

3.7 FIRESTOPPING

A. Apply firestopping to electrical penetrations of fire-rated floor and wall assemblies to restore original fire-resistance rating of assembly according to Division 7 Section "Through-Penetration Firestop Systems."

3.8 FIELD QUALITY CONTROL

A. Testing Agency: Engage a qualified testing agency to perform tests and inspections and prepare test reports.

B. Perform tests and inspections and prepare test reports.

C. Tests and Inspections:

1. After installing conductors and cables and before electrical circuitry has been energized, test for compliance with requirements.

2. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
3. Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform an infrared scan of each splice in cables and conductors No. 3 AWG and larger. Remove box and equipment covers so splices are accessible to portable scanner.

    a. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan of each splice 11 months after date of Substantial Completion.
    b. Instrument: Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
    c. Record of Infrared Scanning: Prepare a certified report that identifies splices checked and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

D. Test Reports: Prepare a written report to record the following:

1. Test procedures used.
2. Test results that comply with requirements.
3. Test results that do not comply with requirements and corrective action taken to achieve compliance with requirements.

E. Remove and replace malfunctioning units and retest as specified above.

END OF SECTION 260519

SECTION 260526 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes methods and materials for grounding systems and equipment.
   1. Underground distribution grounding.
   2. Common ground bonding.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Other Informational Submittals: Plans showing dimensioned as-built locations of grounding features specified in Part 3 "Field Quality Control" Article, including the following:

   1. Test wells.
   2. Ground rods.
   3. Ground rings.
   4. Grounding arrangements and connections for separately derived systems.
   5. Grounding for sensitive electronic equipment.

C. Qualification Data: For testing agency and testing agency's field supervisor.

D. Field quality-control test reports.

E. Operation and Maintenance Data: For grounding to include the following in emergency, operation, and maintenance manuals:

1. Instructions for periodic testing and inspection of grounding features at ground rings.

a. Tests shall be to determine if ground resistance or impedance values remain within specified maximums, and instructions shall recommend corrective action if they do not.
b. Include recommended testing intervals.

1.4 QUALITY ASSURANCE

A. Testing Agency Qualifications: An independent agency, with the experience and capability to conduct the testing indicated, that is a member company of the InterNational Electrical Testing Association or is a nationally recognized testing laboratory (NRTL) as defined by OSHA in 29 CFR 1910.7, and that is acceptable to authorities having jurisdiction.

1. Testing Agency's Field Supervisor: Person currently certified by the InterNational Electrical Testing Association to supervise on-site testing specified in Part 3.

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

C. Comply with UL 467 for grounding and bonding materials and equipment.

PART 2 - PRODUCTS

2.1 CONDUCTORS

A. Insulated Conductors: Copper wire or cable insulated for 600 V unless otherwise required by applicable Code or authorities having jurisdiction.

B. Bare Copper Conductors:

1. Solid Conductors: ASTM B 3.
2. Stranded Conductors: ASTM B 8.
3. Tinned Conductors: ASTM B 33.
4. Bonding Cable: 28 kcmil, 14 strands of No. 17 AWG conductor, 1/4 inch (6 mm) in diameter.
5. Bonding Conductor: No. 4 or No. 6 AWG, stranded conductor.
6. Bonding Jumper: Copper tape, braided conductors, terminated with copper ferrules; 1-5/8 inches (41 mm) wide and 1/16 inch (1.6 mm) thick.
7. Tinned Bonding Jumper: Tinned-copper tape, braided conductors, terminated with copper ferrules; 1-5/8 inches (41 mm) wide and 1/16 inch (1.6 mm) thick.

C. Bare Grounding Conductor and Conductor Protector for Wood Poles:

1. No. 4 AWG minimum, soft-drawn copper.
2. Conductor Protector: Half-round PVC or wood molding. If wood, use pressure-treated fir or cypress or cedar.

D. Grounding Bus: Rectangular bars of annealed copper, [1/4 by 2 inches (6 by 50 mm)] in cross section, unless otherwise indicated; with insulators.

2.2 CONNECTORS

A. Listed and labeled by a nationally recognized testing laboratory acceptable to authorities having jurisdiction for applications in which used, and for specific types, sizes, and combinations of conductors and other items connected.

B. Bolted Connectors for Conductors and Pipes: Copper or copper alloy, bolted pressure-type, with at least two bolts.

1. Pipe Connectors: Clamp type, sized for pipe.

C. Welded Connectors: Exothermic-welding kits of types recommended by kit manufacturer for materials being joined and installation conditions.

PART 3 - EXECUTION

3.1 APPLICATIONS

A. Conductors: Install solid conductor for No. 8 AWG and smaller, and stranded conductors for No. 6 AWG and larger, unless otherwise indicated.

B. Underground Grounding Conductors: Install barecopper conductor, No. 2/0 AWG minimum.

1. Bury at least 24 inches (600 mm) below grade.
2. Duct-Bank Grounding Conductor: Bury 12 inches (300 mm) above duct bank when indicated as part of duct-bank installation.

C. Grounding Bus: Install in electrical and telephone equipment rooms, in rooms housing service equipment, and elsewhere as indicated.

1. Install bus on insulated spacers 1 inch (25 mm), minimum, from wall 6 inches (150 mm) above finished floor, unless otherwise indicated.
2. Where indicated on both sides of doorways, route bus up to top of door frame, across top of doorway, down to specified height above floor, and connect to horizontal bus.

D. Conductor Terminations and Connections:

1. Pipe and Equipment Grounding Conductor Terminations: Bolted connectors.
2. Underground Connections: Welded connectors, except at test wells and as otherwise indicated.
3. Connections to Ground Rods at Test Wells: Bolted connectors.
4. Connections to Structural Steel: Welded connectors.

3.2 EQUIPMENT GROUNDING

A. Install insulated equipment grounding conductors with all feeders and branch circuits.

B. Install insulated equipment grounding conductors with the following items, in addition to those required by NFPA 70:

1. Feeders and branch circuits.
2. Lighting circuits.
3. Receptacle circuits.
4. Single-phase motor and appliance branch circuits.
5. Three-phase motor and appliance branch circuits.
6. Flexible raceway runs.
7. Armored and metal-clad cable runs.
8. Busway Supply Circuits: Install insulated equipment grounding conductor from grounding bus in the switchgear, switchboard, or distribution panel to equipment grounding bar terminal on busway.
9. Computer and Rack-Mounted Electronic Equipment Circuits: Install insulated equipment grounding conductor in branch-circuit runs from equipment-area power panels and power-distribution units.

C. Air-Duct Equipment Circuits: Install insulated equipment grounding conductor to duct-mounted electrical devices operating at 120 V and more, including air cleaners, heaters, dampers, humidifiers, and other duct electrical equipment. Bond conductor to each unit and to air duct and connected metallic piping.

D. Signal and Communication Equipment: For telephone, alarm, voice and data, and other communication equipment, provide No. 4 AWG minimum insulated grounding conductor in raceway from grounding electrode system to each service location, terminal cabinet, wiring closet, and central equipment location.

1. Service and Central Equipment Locations and Wiring Closets: Terminate grounding conductor on a 1/4-by-2-by-12-inch (6-by-50-by-300-mm) grounding bus.
2. Terminal Cabinets: Terminate grounding conductor on cabinet grounding terminal.

E. Metal Poles Supporting Outdoor Lighting Fixtures: Install grounding electrode and a separate insulated equipment grounding conductor in addition to grounding conductor installed with branch-circuit conductors.

3.3 INSTALLATION

A. Grounding Conductors: Route along shortest and straightest paths possible, unless otherwise indicated or required by Code. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage.

B. Bonding Straps and Jumpers: Install in locations accessible for inspection and maintenance, except where routed through short lengths of conduit.

1. Bonding to Structure: Bond straps directly to basic structure, taking care not to penetrate any adjacent parts.
2. Bonding to Equipment Mounted on Vibration Isolation Hangers and Supports: Install so vibration is not transmitted to rigidly mounted equipment.

3. Use exothermic-welded connectors for outdoor locations, but if a disconnect-type connection is required, use a bolted clamp.

C. Grounding and Bonding for Piping:

1. Metal Water Service Pipe: Install insulated copper grounding conductors, in conduit, from building's main service equipment, or grounding bus, to main metal water service entrances to building. Connect grounding conductors to main metal water service pipes, using a bolted clamp connector or by bolting a lug-type connector to a pipe flange, using one of the lug bolts of the flange. Where a dielectric main water fitting is installed, connect grounding conductor on street side of fitting. Bond metal grounding conductor conduit or sleeve to conductor at each end.
2. Water Meter Piping: Use braided-type bonding jumpers to electrically bypass water meters. Connect to pipe with a bolted connector.
3. Bond each aboveground portion of gas piping system downstream from equipment shutoff valve.

CI. Bonding Interior Metal Ducts: Bond metal air ducts to equipment grounding conductors of associated fans, blowers, electric heaters, and air cleaners. Install tinned bonding jumper to bond across flexible duct connections to achieve continuity.

CII. Grounding for Steel Building Structure: Install a driven ground rod at base of each corner column and at intermediate exterior columns at distances not more than 60 feet (18 m) apart.

3.4 FIELD QUALITY CONTROL

A. Perform the following tests and inspections and prepare test reports:

1. After installing grounding system but before permanent electrical circuits have been energized, test for compliance with requirements.
2. Test completed grounding system at each location where a maximum ground-resistance level is specified, at service disconnect enclosure grounding terminal. Make tests at ground rods before any conductors are connected.

    a. Measure ground resistance not less than two full days after last trace of precipitation and without soil being moistened by any means other than natural drainage or seepage and without chemical treatment or other artificial means of reducing natural ground resistance.
    b. Perform tests by fall-of-potential method according to IEEE 81.

3. Prepare dimensioned drawings locating each test well, ground rod and ground rod assembly, and other grounding electrodes. Identify each by letter in alphabetical order, and key to the record of tests and observations. Include the number of rods driven and their depth at each location, and include observations of weather and other phenomena that may affect test results. Describe measures taken to improve test results.

B. Report measured ground resistances that exceed the following values:

1. Power and Lighting Equipment or System with Capacity 500 kVA and Less: 10 ohms.
2. Power and Lighting Equipment or System with Capacity 500 to 1000 kVA: 5 ohms.
3. Power and Lighting Equipment or System with Capacity More Than 1000 kVA: 3 ohms.

C. Excessive Ground Resistance: If resistance to ground exceeds specified values, notify Architect promptly and include recommendations to reduce ground resistance.

END OF SECTION 260526

SECTION 260532 - JUNCTION BOXES FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division-1 Specification Sections, apply to Work of this Section.

1.2 WORK DESCRIPTION

A. Work of this section includes all labor, materials, equipment and services necessary to provide complete the boxes, cabinets and enclosures shown on the drawings and specified herein.

1.3 REFERENCE TO OTHER SPECIFICATION SECTIONS

A. Raceways.

B. Wire and Cable.

C. Supports and fastenings.

D. Grounding.

E. Specific equipment sections as applicable.

1.4 SUBMITTALS

A. Manufacturer's product data and catalog cuts.

B. For custom fabricated pull boxes, cabinets and enclosures, dimensioned shop drawings.

C. For boxes, cabinets and enclosures mounted in finished surfaces, samples of finish as requested by the architect.

PART 2 - EQUIPMENT AND PERFORMANCE

2.1 OUTLET BOXES

A. Outlet boxes shall be industry standard metal types.

B. Round or octagon boxes shall not be less than 4" in diameter.

C. Boxes shall be of the size and depth necessary to suit building construction, to allow for easy wiring and installation of working devices and to meet Code minimum volume requirements.

D. Sheet metal boxes shall be of galvanized steel.

E. Cast metal boxes shall be of galvanized ferrous metal or aluminum except exclude aluminum where aluminum conduit is excluded.

F. Galvanizing shall be by the hot dipping method which applies the galvanized plating after the boxes are cut, formed and welded, or cast, drilled and threaded.

G. All sheet metal boxes shall have suitable knockouts.

H. All cast metal boxes shall have properly drilled and tapped holes.

I. Boxes for lighting fixture outlets shall conform to the following:

Fixture Type	Placement of Circuitry	Box Type
1. Ceiling surface or pendent	Exposed	Sheet metal square or round with fixture stud
	Concealed in suspended ceilings	Sheet metal octagon with banger bars and fixture stud
2. Wall bracket	Exposed	Sheet metal square or round with fixture stud
	Concealed in wall construction to which separate finish is applied	Sheet metal square with round opening raised cover and fixture stud
3. Recessed	Concealed in suspended ceiling	Sheet metal square with hanger bars and blank cover
4. Flush in wall	Concealed in wall construction to which separate finish is applied	Sheet metal square or multigang with rectangular opening raised cover
	Concealed in wall construction which is integrally finished or is left unfinished	Sheet metal single or multigang utility or where depth of construction permits
		Sheet metal square or multigang with reac-tangular opening raised cover
5. Exposed on wall	Exposed	Sheet metal single or multigang utlity except cast metal "FS" type where subject to mechanical damage
6. Free standing on circuitry	Concrete embedded or concealed in suspended floor	Sheet metal utility stubbed up from ceiling below

L. GEM boxes are not acceptable.

M. Select outlet boxes for other items on the same basis as for lighting fixtures and wiring devices.

N. Outlet boxes set flush with wall or partition shall have blank plates of the type specified for flush wiring devices. At other locations, use standard blank cover as supplied.

2.2 PULLBOXES AND JUNCTION BOXES

A. Except as noted herein, pull boxes and junction boxes shall be manufactured from galvanized industry standard gauge sheet steel.

B. They shall be sized so that the minimum bending radius criteria specified for the wires and cables they contain are maintained.

C. They shall be supplied in non-standard shapes where necessary for a neat workmanlike application to special building configurations.

2.3 CABINETS AND ENCLOSURES

A. All electrical equipment shall be installed within cabinets or enclosure. Where available from the supplier of any component that supplier's recommended cabinet or enclosure shall be provided.

B. Where not available from a component supplier, provide a cabinet or enclosure of suitable dimension to house and support all components to be installed maintaining the recommended clearances for each component.

2.4 WET AND DAMP LOCATIONS

A. At damp or wet locations and for exterior work outlet boxes and fittings shall be of galvanized cast ferrous metal only.

B. At wet or damp location, junction boxes, pull boxes, cabinets, cabinet trims, and the like, shall be fabricated of galvanized sheet metal, and conform to the following:

1. Shall be constructed with continuously welded joints and seams.
2. Edges and weld spots shall be factory treated with cold galvanizing compound.
3. Connection to circuitry shall be by means of welded threaded hubs.
4. The covers, doors, plates and trims used in conjunction with all enclosures, pull boxes, outlet boxes, junction boxes cabinets shall be equipped with gaskets.
5. All enclosures, cabinets, junction and pull boxes shall be equipped with breather and drain fittings when installed above grade.

2.5 ACCESSORIES

A. Where pull boxes have any single horizontal dimension larger than 36" they shall be fitted with cable support racks consisting of 3/4" diameter steel pipes with flanged ends bolted to the sides or frame of the pull box. Each pipe support shall be fitted with a continuous fiber insulating sleeve. The pipe supports shall be arranged in tiers corresponding to the cables entering and leaving the box. Sufficient pipe support racks will be included within the pull box so that no cable shall remain unsupported for a horizontal distance greater than 36". In no case shall cable support pipe racks be mounted so that they interfere with the removal of screw covers.

B. Exclude unused circuitry openings in outlets, boxes, cabinets and enclosures. Unused openings to be sealed as follows:

1. Unused openings in cast boxes shall be closed with approved cast metal threaded plugs.
2. Unused openings in sheetmetal boxes shall be closed with sheet metal knock-out plugs.
3. In junction and pull boxes, each such opening shall be closed with a galvanized sheet steel plate fastened with a continuous weld all around.

C. All cabinets and enclosures shall be equipped with hinged lockable covers.

2.6 SPECIAL APPLICATIONS

A. Medical Equipment System

1. Coordinate with vendors prior to bid submission. Submit price accordingly.

2.7 ACCEPTABLE MANUFACTURERS

A. Appleton Electric

B. Steel City

C. Hubbell

D. Raceway Components

PART 3 - EXECUTION

3.1 LOCATION

A. Unless noted below or otherwise specifically indicated, include a separate outlet box for each individual wiring device, lighting fixture and signal or communication system outlet component. Outlet boxes supplied attached to lighting fixtures shall not be used as replacements for the boxes specified herein unless they are specifically rated to accept "through circuit" building wires.

B. A continuous row of fixtures of the end-to-end channel type designed for "through wiring" and wired in accordance with the specifications hereinafter pertaining to circuitry through a series of lighting fixtures, may be supplied through a single outlet box.

C. Connection to recessed ceiling fixtures supplied with pig-tails may be arranged so that more than one, but no more than four such fixtures are connected into a single outlet box. When adopting this procedure:

1. Utilize an outlet box no smaller than 4-11/16" square by 2-1/8" deep.
2. Allow no fixture to be supplied from an outlet box in another room.

D. Include all required outlet boxes regardless of indications on the drawings.

E. Exclude surface mounted outlet boxes in conjunction with concealed circuitry.

F. Outlet boxes for switches shall be located at the strike side of doors unless otherwise called for on drawings and directed by Architect. Indicated door swings are subject to field change. Outlet boxes shall be located on the basis of final door swing arrangement.

G. Apply junction and pull boxes in accordance with the following:

1. Include pull boxes in long straight runs of raceway to assure that cables are not damaged when they are pulled in.
2. Include junction and pull boxes to assure a neat and workmanlike installation of raceways.
3. Include junction and pull boxes to fulfill requirements pertaining to the limitations to the number of bends permitted in raceway between cable access points, the accessibility of cable joints and splices, and the application of cable supports.
4. Include all required junction and pull boxes regardless of indications on the drawings (which, due to symbolic methods of notation, may omit to show some of them).

3.2 ACCESSIBILITY

A. Locate all boxes so that their removable covers are accessible without necessitating the removal of parts of permanent building structure, including piping, ductwork and other permanent elements.

B. For a large box on circuitry concealed in a partition, suspended ceiling or wall, arrange for, as part of the electrical work, an opening in the building construction which conceals the circuitry as required to totally hide the box but still introduce the necessary access to its removable cover. Provide also, as part of the electrical work, a door, panel, or plate, of a type approved by the Architect to cover completely the access opening in the building construction called for above.

3.3 SEPARATION OF SERVICES

A. Where the wires and cables following the same routing are indicated as running in separate pull boxes, it shall be understood that a segregation of the wires and cables is required. Separately indicated pull boxes may be incorporated into single boxes on condition that segregation is maintained by barriers, unless otherwise indicated on drawings or schedules.

B. Barriers in junction and pull boxes shall be on non-current carrying material of adequate thickness for mechanical strength. Each barrier shall have an angle iron framing support all around.

3.4 RECORD DRAWINGS

A. Submit as-built drawings indicating the location of all pull boxes, cabinets and enclosures.

END OF SECTION 260532

SECTION 260533 - RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes raceways, fittings, boxes, enclosures, and cabinets for electrical wiring.

B. Related Sections include the following:

1. Division 2 Section "Underground Ducts and Utility Structures" for exterior ductbanks, manholes, and underground utility construction.
2. Division 7 Section "Through-Penetration Firestop Systems" for firestopping materials and installation at penetrations through walls, ceilings, and other fire-rated elements.
3. Division 26 Section "Electrical Supports and Seismic Restraints" for seismic restraints and bracing of raceways, boxes, enclosures, and cabinets.
4. Division 26 Section "Wiring Devices" for devices installed in boxes and for floor-box service fittings.

1.3 DEFINITIONS

A. EMT: Electrical metallic tubing.

B. ENT: Electrical nonmetallic tubing.

C. FMC: Flexible metal conduit.

D. IMC: Intermediate metal conduit.

E. LFMC: Liquidtight flexible metal conduit.

F. LFNC: Liquidtight flexible nonmetallic conduit.

G. RNC: Rigid nonmetallic conduit.

1.4 SUBMITTALS

A. Product Data: For surface raceways, wireways and fittings, floor boxes, hinged-cover enclosures, and cabinets.

B. Shop Drawings: Show fabrication and installation details of components for raceways, fittings, boxes, enclosures, and cabinets.

C. Shop Drawings: Signed and sealed by a qualified professional engineer.

1. Design Calculations: Calculate requirements for selecting seismic restraints.
2. Detail assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.

D. Coordination Drawings: Reflected ceiling plans drawn to scale and coordinating penetrations and ceiling-mounted items. Show the following:

1. Ceiling suspension assembly members.
2. Method of attaching hangers to building structure.
3. Size and location of initial access modules for acoustical tile.
4. Ceiling-mounted items including lighting fixtures, diffusers, grilles, speakers, sprinklers, access panels, and special moldings.

E. Manufacturer Seismic Qualification Certification: Submit certification that enclosures, cabinets, accessories, and components will withstand seismic forces defined in Division 26 Section "Electrical Supports and Seismic Restraints." Include the following:

1. Basis for Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.

a. The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified."

b. The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified and the unit will be fully operational after the seismic event."

2. Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity and locate and describe mounting and anchorage provisions.
3. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.

1.5 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

B. Comply with NFPA 70.

1.6 COORDINATION

A. Coordinate layout and installation of raceways, boxes, enclosures, cabinets, and suspension system with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression system, and partition assemblies.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. In other Part 2 articles where subparagraph titles below introduce lists, the following requirements apply for product selection:

1. Manufacturers: Subject to compliance with requirements, provide products by the manufacturers specified.

2.2 METAL CONDUIT AND TUBING

A. Manufacturers:

1. AFC Cable Systems, Inc.
2. Alflex Inc.
3. Anamet Electrical, Inc.; Anaconda Metal Hose.
4. Electri-Flex Co.
5. Grinnell Co./Tyco International; Allied Tube and Conduit Div.
6. LTV Steel Tubular Products Company.
7. Manhattan/CDT/Cole-Flex.
8. O-Z Gedney; Unit of General Signal.
9. Wheatland Tube Co.

B. Rigid Steel Conduit: ANSI C80.1.

C. Aluminum Rigid Conduit: ANSI C80.5.

D. IMC: ANSI C80.6.

E. Plastic-Coated Steel Conduit and Fittings: NEMA RN 1.

F. Plastic-Coated IMC and Fittings: NEMA RN 1.

G. EMT and Fittings: ANSI C80.3.

1. Fittings: Compression type.

H. FMC: Steel.

I. LFMC: Flexible steel conduit with PVC jacket.

J. Fittings: NEMA FB 1; compatible with conduit and tubing materials.

2.3 METAL WIREWAYS

A. Manufacturers:

1. Hoffman.
2. Square D.

B. Material and Construction: Sheet metal sized and shaped as indicated, NEMA 1 3R.

C. Fittings and Accessories: Include couplings, offsets, elbows, expansion joints, adapters, hold-down straps, end caps, and other fittings to match and mate with wireways as required for complete system.

D. Select features, unless otherwise indicated, as required to complete wiring system and to comply with NFPA 70.

E. Wireway Covers: Screw-cover type.

F. Finish: Manufacturer's standard enamel finish.

2.4 BOXES, ENCLOSURES, AND CABINETS

A. Manufacturers:

1. Cooper Crouse-Hinds; Div. of Cooper Industries, Inc.
2. Emerson/General Signal; Appleton Electric Company.
3. Erickson Electrical Equipment Co.
4. Hoffman.
5. Hubbell, Inc.; Killark Electric Manufacturing Co.
6. O-Z/Gedney; Unit of General Signal.
7. RACO; Division of Hubbell, Inc.
8. Robroy Industries, Inc.; Enclosure Division.
9. Scott Fetzer Co.; Adalet-PLM Division.
10. Spring City Electrical Manufacturing Co.
11. Thomas & Betts Corporation.
12. Walker Systems, Inc.; Wiremold Company (The).
13. Woodhead, Daniel Company; Woodhead Industries, Inc. Subsidiary.

B. Sheet Metal Outlet and Device Boxes: NEMA OS 1.

C. Cast-Metal Outlet and Device Boxes: NEMA FB 1, Type FD, with gasketed cover.

D. Floor Boxes: Cast metal, fully adjustable, rectangular.

E. Floor Boxes: Nonmetallic, nonadjustable, round.

F. Small Sheet Metal Pull and Junction Boxes: NEMA OS 1.

G. Cast-Metal Pull and Junction Boxes: NEMA FB 1, cast aluminum with gasketed cover.

H. Hinged-Cover Enclosures: NEMA 250, Type 1, with continuous hinge cover and flush latch.

1. Metal Enclosures: Steel, finished inside and out with manufacturer's standard enamel.
2. Nonmetallic Enclosures: Plastic, finished inside with radio-frequency-resistant paint.

I. Cabinets: NEMA 250, Type 1, galvanized steel box with removable interior panel and removable front, finished inside and out with manufacturer's standard enamel. Hinged door in front cover with flush latch and concealed hinge. Key latch to match panelboards. Include metal barriers to separate wiring of different systems and voltage and include accessory feet where required for freestanding equipment.

2.5 FACTORY FINISHES

A. Finish: For raceway, enclosure, or cabinet components, provide manufacturer's standard paint applied to factory-assembled surface raceways, enclosures, and cabinets before shipping.

PART 3 - EXECUTION

3.1 RACEWAY APPLICATION

A. Outdoors:

1. Exposed: Rigid steel or IMC.
2. Concealed: Rigid steel or IMC.
3. Underground, Single Run: RNC.
4. Underground, Grouped: RNC.
5. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): LFMC.
6. Boxes and Enclosures: NEMA 250, Type 3R 4.

B. Indoors:

1. Exposed: EMT.
2. Concealed: EMT.
3. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): FMC; except use LFMC in damp or wet locations.
4. Damp or Wet Locations: Rigid steel conduit.
5. Boxes and Enclosures: NEMA 250, Type 1, except as follows:

    a. Damp or Wet Locations: NEMA 250, Type 4,.

C. Minimum Raceway Size: 3/4-inch trade size (DN 21).

D. Raceway Fittings: Compatible with raceways and suitable for use and location.

1. Intermediate Steel Conduit: Use threaded rigid steel conduit fittings, unless otherwise indicated.
2. PVC Externally Coated, Rigid Steel Conduits: Use only fittings approved for use with that material. Patch all nicks and scrapes in PVC coating after installing conduits.

E. Install nonferrous conduit or tubing for circuits operating above 60 Hz. Where aluminum raceways are installed for such circuits and pass through concrete, install in nonmetallic sleeve.

F. Do not install aluminum conduits embedded in or in contact with concrete.

3.2 INSTALLATION

A. Keep raceways at least 6 inches (150 mm) away from parallel runs of flues and steam or hot-water pipes. Install horizontal raceway runs above water and steam piping.

B. Complete raceway installation before starting conductor installation.

C. Support raceways as specified in Division 26 Section "Electrical Supports and Seismic Restraints."

D. Install temporary closures to prevent foreign matter from entering raceways.

E. Protect stub-ups from damage where conduits rise through floor slabs. Arrange so curved portions of bends are not visible above the finished slab.

F. Make bends and offsets so ID is not reduced. Keep legs of bends in the same plane and keep straight legs of offsets parallel, unless otherwise indicated.

G. Conceal conduit and EMT within finished walls, ceilings, and floors, unless otherwise indicated.

1. Install concealed raceways with a minimum of bends in the shortest practical distance, considering type of building construction and obstructions, unless otherwise indicated.

H. Raceways Embedded in Slabs: Install in middle 1/3 of slab thickness where practical and leave at least 2 inches (50 mm) of concrete cover.

1. Secure raceways to reinforcing rods to prevent sagging or shifting during concrete placement.
2. Space raceways laterally to prevent voids in concrete.
3. Run conduit larger than 1-inch trade size (DN 27) parallel or at right angles to main reinforcement. Where at right angles to reinforcement, place conduit close to slab support.

I. Install exposed raceways parallel or at right angles to nearby surfaces or structural members and follow surface contours as much as possible.

1. Run parallel or banked raceways together on common supports.
2. Make parallel bends in parallel or banked runs. Use factory elbows only where elbows can be installed parallel; otherwise, provide field bends for parallel raceways.

J. Join raceways with fittings designed and approved for that purpose and make joints tight.

1. Use insulating bushings to protect conductors.

K. Tighten set screws of threadless fittings with suitable tools.

L. Terminations:

1. Where raceways are terminated with locknuts and bushings, align raceways to enter squarely and install locknuts with dished part against box. Use two locknuts, one inside and one outside box.
2. Where raceways are terminated with threaded hubs, screw raceways or fittings tightly into hub so end bears against wire protection shoulder. Where chase nipples are used, align raceways so coupling is square to box; tighten chase nipple so no threads are exposed.

M. Install pull wires in empty raceways. Use polypropylene or monofilament plastic line with not less than 200-lb (90-kg) tensile strength. Leave at least 12 inches (300 mm) of slack at each end of pull wire.

N. Telephone and Signal System Raceways, 2-Inch Trade Size (DN 53) and Smaller: In addition to above requirements, install raceways in maximum lengths of 150 feet (45 m) and with a maximum of two 90-degree bends or equivalent. Separate lengths with pull or junction boxes where necessary to comply with these requirements.

O. Install raceway sealing fittings at suitable, approved, and accessible locations and fill them with UL-listed sealing compound. For concealed raceways, install each fitting in a flush steel box with a blank cover plate having a finish similar to that of adjacent plates or surfaces. Install raceway sealing fittings at the following points:

1. Where conduits pass from warm to cold locations, such as boundaries of refrigerated spaces.
2. Where otherwise required by NFPA 70.

P. Stub-up Connections: Extend conduits through concrete floor for connection to freestanding equipment. Install with an adjustable top or coupling threaded inside for plugs set flush with finished floor. Extend conductors to equipment with rigid steel conduit; FMC may be used 6 inches (150 mm) above the floor. Install screwdriver-operated, threaded plugs flush with floor for future equipment connections.

Q. Flexible Connections: Use maximum of 72 inches (1830 mm) of flexible conduit for recessed and semirecessed lighting fixtures; for equipment subject to vibration, noise transmission, or movement; and for all motors. Use LFMC in damp or wet locations. Install separate ground conductor across flexible connections.

R. Surface Raceways: Install a separate, green, ground conductor in raceways from junction box supplying raceways to receptacle or fixture ground terminals.

S. Install hinged-cover enclosures and cabinets plumb. Support at each corner.

3.3 PROTECTION

A. Provide final protection and maintain conditions that ensure coatings, finishes, and cabinets are without damage or deterioration at time of Substantial Completion.

1. Repair damage to galvanized finishes with zinc-rich paint recommended by manufacturer.
2. Repair damage to PVC or paint finishes with matching touchup coating recommended by manufacturer.

3.4 CLEANING

A. After completing installation of exposed, factory-finished raceways and boxes, inspect exposed finishes and repair damaged finishes.

END OF SECTION 260533

SECTION 260553 - IDENTIFICATION FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Identification for raceway and metal-clad cable.
2. Identification for conductors and communication and control cable.
3. Underground-line warning tape.
4. Warning labels and signs.
5. Instruction signs.
6. Equipment identification labels.
7. Miscellaneous identification products.

1.3 SUBMITTALS

A. Product Data: For each electrical identification product indicated.

B. Identification Schedule: An index of nomenclature of electrical equipment and system components used in identification signs and labels.

C. Samples: For each type of label and sign to illustrate size, colors, lettering style, mounting provisions, and graphic features of identification products.

1.4 QUALITY ASSURANCE

A. Comply with ANSI A13.1 and ANSI C2.

B. Comply with NFPA 70.

C. Comply with 29 CFR 1910.145.

1.5 COORDINATION

A. Coordinate identification names, abbreviations, colors, and other features with requirements in the Contract Documents, Shop Drawings, manufacturer's wiring diagrams, and the Operation and Maintenance Manual, and with those required by codes, standards, and 29 CFR 1910.145. Use consistent designations throughout Project.

B. Coordinate installation of identifying devices with completion of covering and painting of surfaces where devices are to be applied.

C. Coordinate installation of identifying devices with location of access panels and doors.

D. Install identifying devices before installing acoustical ceilings and similar concealment.

PART 2 - PRODUCTS

2.1 RACEWAY AND METAL-CLAD CABLE IDENTIFICATION MATERIALS

A. Comply with ANSI A13.1 for minimum size of letters for legend and for minimum length of color field for each raceway and cable size.

B. Color for Printed Legend:

1. Power Circuits: Black letters on an orange field.
2. Legend: Indicate system or service and voltage, if applicable.

C. Self-Adhesive Vinyl Labels: Preprinted, flexible label laminated with a clear, weather- and chemical-resistant coating and matching wraparound adhesive tape for securing ends of legend label.

D. Snap-Around Labels: Slit, pretensioned, flexible, preprinted, color-coded acrylic sleeves, with diameter sized to suit diameter of raceway or cable it identifies and to stay in place by gripping action.

E. Snap-Around, Color-Coding Bands: Slit, pretensioned, flexible, solid-colored acrylic sleeves, 2 inches (50 mm) long, with diameter sized to suit diameter of raceway or cable it identifies and to stay in place by gripping action.

F. Self-Adhesive Vinyl Tape: Colored, heavy duty, waterproof, fade resistant; 2 inches (50 mm) wide; compounded for outdoor use.

2.2 CONDUCTOR AND COMMUNICATION- AND CONTROL-CABLE IDENTIFICATION MATERIALS

A. Color-Coding Conductor Tape: Colored, self-adhesive vinyl tape not less than 3 mils (0.08 mm) thick by 1 to 2 inches (25 to 50 mm) wide.

B. Marker Tapes: Vinyl or vinyl-cloth, self-adhesive wraparound type, with circuit identification legend machine printed by thermal transfer or equivalent process.

C. Aluminum Wraparound Marker Labels: Cut from 0.014-inch- (0.35-mm-) thick aluminum sheet, with stamped, embossed, or scribed legend, and fitted with tabs and matching slots for permanently securing around wire or cable jacket or around groups of conductors.

D. Metal Tags: Brass or aluminum, 2 by 2 by 0.05 inch (50 by 50 by 1.3 mm), with stamped legend, punched for use with self-locking nylon tie fastener.

E. Write-On Tags: Polyester tag, 0.015 inch (0.38 mm) thick, with corrosion-resistant grommet and polyester or nylon tie for attachment to conductor or cable.

1. Marker for Tags: Permanent, waterproof, black ink marker recommended by tag manufacturer.

2.3 WARNING LABELS AND SIGNS

A. Comply with NFPA 70 and 29 CFR 1910.145.

B. Self-Adhesive Warning Labels: Factory printed, multicolor, pressure-sensitive adhesive labels, configured for display on front cover, door, or other access to equipment, unless otherwise indicated.

C. Baked-Enamel Warning Signs: Preprinted aluminum signs, punched or drilled for fasteners, with colors, legend, and size required for application. 1/4-inch (6.4-mm) grommets in corners for mounting. Nominal size, 7 by 10 inches (180 by 250 mm).

D. Metal-Backed, Butyrate Warning Signs: Weather-resistant, nonfading, preprinted, cellulose-acetate butyrate signs with 0.0396-inch (1-mm) galvanized-steel backing; and with colors, legend, and size required for application. 1/4-inch (6.4-mm) grommets in corners for mounting. Nominal size, 10 by 14 inches (250 by 360 mm).

E. Warning label and sign shall include, but are not limited to, the following legends:

1. Multiple Power Source Warning: "DANGER - ELECTRICAL SHOCK HAZARD - EQUIPMENT HAS MULTIPLE POWER SOURCES."
2. Workspace Clearance Warning: "WARNING - OSHA REGULATION - AREA IN FRONT OF ELECTRICAL EQUIPMENT MUST BE KEPT CLEAR FOR 36 INCHES (915 MM)."

2.4 INSTRUCTION SIGNS

A. Engraved, laminated acrylic or melamine plastic, minimum 1/16 inch (1.6 mm) thick for signs up to 20 sq. in. (129 sq. cm) and 1/8 inch (3.2 mm) thick for larger sizes.

1. Engraved legend with black letters on white face.
2. Punched or drilled for mechanical fasteners.
3. Framed with mitered acrylic molding and arranged for attachment at applicable equipment.

2.5 EQUIPMENT IDENTIFICATION LABELS

A. Adhesive Film Label: Machine printed, in black, by thermal transfer or equivalent process. Minimum letter height shall be 3/8 inch (10 mm).

B. Adhesive Film Label with Clear Protective Overlay: Machine printed, in black, by thermal transfer or equivalent process. Minimum letter height shall be 3/8 inch (10 mm). Overlay shall provide a weatherproof and ultraviolet-resistant seal for label.

C. Self-Adhesive, Engraved, Laminated Acrylic or Melamine Label: Adhesive backed, with white letters on a dark-gray background. Minimum letter height shall be 3/8 inch (10 mm).

D. Engraved, Laminated Acrylic or Melamine Label: Punched or drilled for screw mounting. White letters on a dark-gray background. Minimum letter height shall be 3/8 inch (10 mm).

E. Stenciled Legend: In nonfading, waterproof, black ink or paint. Minimum letter height shall be 1 inch (25 mm).

2.6 MISCELLANEOUS IDENTIFICATION PRODUCTS

A. Cable Ties: Fungus-inert, self-extinguishing, 1-piece, self-locking, Type 6/6 nylon cable ties.

1. Minimum Width: 3/16 inch (5 mm).
2. Tensile Strength: 50 lb (22.6 kg), minimum.
3. Temperature Range: Minus 40 to plus 185 deg F (Minus 40 to plus 85 deg C).

4. Color: Black, except where used for color-coding.

B. Paint: Paint materials and application requirements are specified in Division 9 painting Sections.

1. Exterior Concrete, Stucco, and Masonry (Other Than Concrete Unit Masonry):

a. Semigloss Acrylic-Enamel Finish: One finish coat(s) over a primer.

1) Primer: Exterior concrete and masonry primer.
2) Finish Coats: Exterior semigloss acrylic enamel.

2. Exterior Concrete Unit Masonry:

a. Semigloss Acrylic-Enamel Finish: One finish coat(s) over a block filler.

1) Block Filler: Concrete unit masonry block filler.
2) Finish Coats: Exterior semigloss acrylic enamel.

3. Exterior Ferrous Metal:

a. Semigloss Alkyd-Enamel Finish: One finish coat(s) over a primer.

1) Primer: Exterior ferrous-metal primer.
2) Finish Coats: Exterior semigloss alkyd enamel.

4. Exterior Zinc-Coated Metal (except Raceways):

a. Semigloss Alkyd-Enamel Finish: One finish coat(s) over a primer.

1) Primer: Exterior zinc-coated metal primer.
2) Finish Coats: Exterior semigloss alkyd enamel.

5. Interior Concrete and Masonry (Other Than Concrete Unit Masonry):

a. Semigloss Alkyd-Enamel Finish: One finish coat(s) over a primer.

1) Primer: Interior concrete and masonry primer.
2) Finish Coats: Interior semigloss alkyd enamel.

6. Interior Concrete Unit Masonry:

a. Semigloss Acrylic-Enamel Finish: One finish coat(s) over a block filler.

1) Block Filler: Concrete unit masonry block filler.
2) Finish Coats: Interior semigloss acrylic enamel.

7. Interior Gypsum Board:

a. Semigloss Acrylic-Enamel Finish: One finish coat(s) over a primer.

1) Primer: Interior gypsum board primer.

2) Finish Coats: Interior semigloss acrylic enamel.

8. Interior Ferrous Metal:

a. Semigloss Acrylic-Enamel Finish: One finish coat(s) over a primer.

1) Primer: Interior ferrous-metal primer.
2) Finish Coats: Interior semigloss acrylic enamel.

9. Interior Zinc-Coated Metal (except Raceways):

a. Semigloss Acrylic-Enamel Finish: One finish coat(s) over a primer.

1) Primer: Interior zinc-coated metal primer.
2) Finish Coats: Interior semigloss acrylic enamel.

C. Fasteners for Labels and Signs: Self-tapping, stainless-steel screws or stainless-steel machine screws with nuts and flat and lock washers.

PART 3 - EXECUTION

3.1 APPLICATION

A. Accessible Raceways and Metal-Clad Cables, 600 V or Less, for Service, Feeder, and Branch Circuits More Than 30 A: Identify with orange self-adhesive vinyl label.

B. Accessible Raceways and Cables of Auxiliary Systems: Identify the following systems with color-coded, self-adhesive vinyl tape applied in bands:

1. Fire Alarm System: Red.
2. Fire-Suppression Supervisory and Control System: Red and yellow.
3. Combined Fire Alarm and Security System: Red and blue.

4. Security System: Blue and yellow.
5. Mechanical and Electrical Supervisory System: Green and blue.
6. Telecommunication System: Green and yellow.
7. Control Wiring: Green and red.

C. Power-Circuit Conductor Identification: For secondary conductors No. 1/0 AWG and larger in vaults, pull and junction boxes, manholes, and handholes use color-coding conductor tape. Identify source and circuit number of each set of conductors. For single conductor cables, identify phase in addition to the above.

D. Branch-Circuit Conductor Identification: Where there are conductors for more than three branch circuits in same junction or pull box, use color-coding conductor tape. Identify each ungrounded conductor according to source and circuit number.

E. Conductors to Be Extended in the Future: Attach write-on tags to conductors and list source and circuit number.

F. Auxiliary Electrical Systems Conductor Identification: Identify field-installed alarm, control, signal, sound, intercommunications, voice, and data connections.

1. Identify conductors, cables, and terminals in enclosures and at junctions, terminals, and pull points. Identify by system and circuit designation.
2. Use system of marker tape designations that is uniform and consistent with system used by manufacturer for factory-installed connections.
3. Coordinate identification with Project Drawings, manufacturer's wiring diagrams, and Operation and Maintenance Manual.

G. Locations of Underground Lines: Identify with underground-line warning tape for power, lighting, communication, and control wiring and optical fiber cable.

H. Warning Labels for Indoor Cabinets, Boxes, and Enclosures for Power and Lighting: Comply with 29 CFR 1910.145 and apply self-adhesive warning labels. Identify system voltage with black letters on an orange background. Apply to exterior of door, cover, or other access.

1. Equipment with Multiple Power or Control Sources: Apply to door or cover of equipment including, but not limited to, the following:

   a. Power transfer switches.
   b. Controls with external control power connections.

2. Equipment Requiring Workspace Clearance According to NFPA 70: Unless otherwise indicated, apply to door or cover of equipment but not on flush panelboards and similar equipment in finished spaces.

I. Instruction Signs:

1. Operating Instructions: Install instruction signs to facilitate proper operation and maintenance of electrical systems and items to which they connect. Install instruction signs with approved legend where instructions are needed for system or equipment operation.

2. Emergency Operating Instructions: Install instruction signs with white legend on a red background with minimum 3/8-inch- (10-mm-) high letters for emergency instructions at equipment used for power transfer.

J. Equipment Identification Labels: On each unit of equipment, install unique designation label that is consistent with wiring diagrams, schedules, and Operation and Maintenance Manual. Apply labels to disconnect switches and protection equipment, central or master units, control panels, control stations, terminal cabinets, and racks of each system. Systems include power, lighting, control, communication, signal, monitoring, and alarm systems unless equipment is provided with its own identification.

1. Labeling Instructions:

a. Indoor Equipment: Adhesive film label with clear protective overlay. Unless otherwise indicated, provide a single line of text with 1/2-inch- (13-mm-) high letters on 1-1/2-inch- (38-mm-) high label; where 2 lines of text are required, use labels 2 inches (50 mm) high.
b. Outdoor Equipment: Engraved, laminated acrylic or melamine label.
c. Elevated Components: Increase sizes of labels and letters to those appropriate for viewing from the floor.

2. Equipment to Be Labeled:

a. Panelboards, electrical cabinets, and enclosures.
b. Access doors and panels for concealed electrical items.
c. Electrical switchgear and switchboards.
d. Transformers.
e. Electrical substations.
f. Emergency system boxes and enclosures.
g. Disconnect switches.
h. Enclosed circuit breakers.
i. Motor starters.
j. Push-button stations.
k. Contactors.
l. Remote-controlled switches, dimmer modules, and control devices.
m. Battery racks.
n. Voice and data cable terminal equipment.
o. Intercommunication and call system master and staff stations.
p. Television/audio components, racks, and controls.
q. Fire-alarm control panel and annunciators.
r. Security and intrusion-detection control stations, control panels, terminal cabinets, and racks.
s. Monitoring and control equipment.
t. Terminals, racks, and patch panels for voice and data communication and for signal and control functions.

3.2 INSTALLATION

A. Verify identity of each item before installing identification products.

B. Location: Install identification materials and devices at locations for most convenient viewing without interference with operation and maintenance of equipment.

C. Apply identification devices to surfaces that require finish after completing finish work.

D. Self-Adhesive Identification Products: Clean surfaces before application, using materials and methods recommended by manufacturer of identification device.

E. Attach nonadhesive signs and plastic labels with screws and auxiliary hardware appropriate to the location and substrate.

F. System Identification Color Banding for Raceways and Cables: Each color band shall completely encircle cable or conduit. Place adjacent bands of two-color markings in contact, side by side. Locate bands at changes in direction, at penetrations of walls and floors, at 50-foot (15-m) maximum intervals in straight runs, and at 25-foot (7.6-m) maximum intervals in congested areas.

G. Color-Coding for Phase Identification, 600 V and Less: Use the colors listed below for ungrounded service feeder conductors.

1. Color shall be factory applied.
2. Colors for 208/120-V Circuits:

    a. Phase A: Black.
    b. Phase B: Red.
    c. Phase C: Blue.

3. Field-Applied, Color-Coding Conductor Tape: Apply in half-lapped turns for a minimum distance of 6 inches (150 mm) from terminal points and in boxes where splices or taps are made. Apply last two turns of tape with no tension to prevent possible unwinding. Locate bands to avoid obscuring factory cable markings.

H. Aluminum Wraparound Marker Labels and Metal Tags: Secure tight to surface of conductor or cable at a location with high visibility and accessibility.

I. Underground-Line Warning Tape: During backfilling of trenches install continuous underground-line warning tape directly above line at 6 to 8 inches (150 to 200 mm) below finished grade. Use multiple tapes where width of multiple lines installed in a common trench or concrete envelope exceeds 16 inches (400 mm) overall.

J. Painted Identification: Prepare surface and apply paint according to Division 9 painting Sections.

END OF SECTION 260553

SECTION 260572- OVERCURRENT PROTECTIVE DEVICE SHORT-CIRCUIT STUDY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes a computer-based, fault-current study to determine the minimum interrupting capacity of circuit protective devices.

1.3 DEFINITIONS

A. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

B. One-Line Diagram: A diagram which shows, by means of single lines and graphic symbols, the course of an electric circuit or system of circuits and the component devices or parts used therein.

C. Protective Device: A device that senses when an abnormal current flow exists and then removes the affected portion from the system.

D. SCCR: Short-circuit current rating.

E. Service: The conductors and equipment for delivering electric energy from the serving utility to the wiring system of the premises served.

1.4 ACTION SUBMITTALS

A. Product Data: For computer software program to be used for studies.

B. Other Action Submittals: Submit the following after the approval of system protective devices submittals. Submittals shall be in digital form.

1. Short-circuit study input data, including completed computer program input data sheets.
2. Short-circuit study and equipment evaluation report; signed, dated, and sealed by a qualified professional engineer.

a. Submit study report for action prior to receiving final approval of the distribution equipment submittals. If formal completion of studies will cause delay in equipment manufacturing, obtain approval from Architect for preliminary submittal of sufficient study data to ensure that the selection of devices and associated characteristics is satisfactory.
b. Revised single-line diagram, reflecting field investigation results and results of short-circuit study.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Short-Circuit Study Specialist and Field Adjusting Agency.

B. Product Certificates: For short-circuit study software, certifying compliance with IEEE 399.

1.6 QUALITY ASSURANCE

A. Studies shall use computer programs that are distributed nationally and are in wide use. Software algorithms shall comply with requirements of standards and guides specified in this Section. Manual calculations are unacceptable.

B. Short-Circuit Study Software Developer Qualifications: An entity that owns and markets computer software used for studies, having performed successful studies of similar magnitude on electrical distribution systems using similar devices.

1. The computer program shall be developed under the charge of a licensed professional engineer who holds IEEE Computer Society's Certified Software Development Professional certification.

C. Short-Circuit Study Specialist Qualifications: Professional engineer in charge of performing the study and documenting recommendations, licensed in the state where Project is located. All elements of the study shall be performed under the direct supervision and control of this professional engineer.

D. Field Adjusting Agency Qualifications: An independent agency, with the experience and capability to adjust overcurrent devices and to conduct the testing indicated, that is a member company of the InterNational Electrical Testing Association or is a nationally recognized testing laboratory (NRTL) as defined by OSHA in 29 CFR 1910.7, and that is acceptable to authorities having jurisdiction.

PART 2 - PRODUCTS

2.1 COMPUTER SOFTWARE

A. Software Developers: Subject to compliance with requirements, provide software by one of the following:

1. ESA Inc. (EasyPower Suite)
2. Operation Technology, Inc. (ETAP)
3. Power Analytics, Corporation. (Paladin Software DesignBase)
4. SKM Systems Analysis, Inc. (SKM Power Tools)

B. Comply with IEEE 399 and IEEE 551.

C. Analytical features of fault-current-study computer software program shall have the capability to calculate "mandatory," "very desirable," and "desirable" features as listed in IEEE 399.

D. Computer software program shall be capable of plotting and diagramming time-current-characteristic curves as part of its output.

2.2 SHORT-CIRCUIT STUDY REPORT CONTENTS

A. Executive summary.

B. Study descriptions, purpose, basis, and scope. Include case descriptions, definition of terms, and guide for interpretation of the computer printout.

C. One-line diagram, showing the following:

1. Protective device designations and ampere ratings.
2. Cable size and lengths.
3. Transformer kilovolt ampere (kVA) and voltage ratings.
4. Motor and generator designations and kVA ratings.

5. Switchgear, switchboard, motor-control center, and panelboard designations.

D. Comments and recommendations for system improvements, where needed.

E. Protective Device Evaluation:

1. Evaluate equipment and protective devices and compare to short-circuit ratings.
2. Tabulations of circuit breaker, fuse, and other protective device ratings versus calculated short-circuit duties.
3. For 600-V overcurrent protective devices, ensure that interrupting ratings are equal to or higher than calculated 1/2-cycle symmetrical fault current.
4. For devices and equipment rated for asymmetrical fault current, apply multiplication factors listed in the standards to 1/2-cycle symmetrical fault current.
5. Verify adequacy of phase conductors at maximum three-phase bolted fault currents; verify adequacy of equipment grounding conductors and grounding electrode conductors at maximum ground-fault currents. Ensure that short-circuit withstand ratings are equal to or higher than calculated 1/2-cycle symmetrical fault current.

F. Short-Circuit Study Input Data: As described in "Power System Data" Article in the Evaluations.

G. Short-Circuit Study Output:

1. Low-Voltage Fault Report: Three-phase and unbalanced fault calculations, showing the following for each overcurrent device location:

a. Voltage.
b. Calculated fault-current magnitude and angle.
c. Fault-point X/R ratio.
d. Equivalent impedance.

2. Momentary Duty Report: Three-phase and unbalanced fault calculations, showing the following for each overcurrent device location:

a. Voltage.
b. Calculated symmetrical fault-current magnitude and angle.
c. Fault-point X/R ratio.
d. Calculated asymmetrical fault currents:

1) Based on fault-point X/R ratio.
2) Based on calculated symmetrical value multiplied by 1.6.
3) Based on calculated symmetrical value multiplied by 2.7.

3. Interrupting Duty Report: Three-phase and unbalanced fault calculations, showing the following for each overcurrent device location:

a. Voltage.
b. Calculated symmetrical fault-current magnitude and angle.
c. Fault-point X/R ratio.
d. No AC Decrement (NACD) ratio.
e. Equivalent impedance.
f. Multiplying factors for 2-, 3-, 5-, and 8-cycle circuit breakers rated on a symmetrical basis.
g. Multiplying factors for 2-, 3-, 5-, and 8-cycle circuit breakers rated on a total basis.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Obtain all data necessary for the conduct of the study.

1. Verify completeness of data supplied on the one-line diagram. Call any discrepancies to the attention of Architect.
2. For equipment provided that is Work of this Project, use characteristics submitted under the provisions of action submittals and information submittals for this Project.

B. Gather and tabulate the following input data to support the short-circuit study. Comply with recommendations in IEEE 551 as to the amount of detail that is required to be acquired in the field. Field data gathering shall be under the direct supervision and control of the engineer in charge of performing the study, and shall be by the engineer or its representative who holds NETA ETT Level III certification or NICET Electrical Power Testing Level III certification.

1. Product Data for Project's overcurrent protective devices involved in overcurrent protective device coordination studies. Use equipment designation tags that are consistent with electrical distribution system diagrams, overcurrent protective device submittals, input and output data, and recommended device settings.
2. Obtain electrical power utility impedance at the service.
3. Power sources and ties.
4. For transformers, include kVA, primary and secondary voltages, connection type, impedance, X/R ratio, taps measured in percent, and phase shift.
5. For reactors, provide manufacturer and model designation, voltage rating, and impedance.
6. For circuit breakers and fuses, provide manufacturer and model designation. List type of breaker, type of trip, SCCR, current rating, and breaker settings.
7. Generator short-circuit current contribution data, including short-circuit reactance, rated kVA, rated voltage, and X/R ratio.
8. Busway manufacturer and model designation, current rating, impedance, lengths, and conductor material.
9. Motor horsepower and NEMA MG 1 code letter designation.
10. Cable sizes, lengths, number, conductor material and conduit material (magnetic or nonmagnetic).

3.2 SHORT-CIRCUIT STUDY

A. Perform study following the general study procedures contained in IEEE 399.

B. Calculate short-circuit currents according to IEEE 551.

C. Base study on the device characteristics supplied by device manufacturer.

D. The extent of the electrical power system to be studied is indicated on Drawings.

E. Begin short-circuit current analysis at the service, extending down to the system overcurrent protective devices as follows:

1. To normal system low-voltage load buses where fault current is 10 kA or less.
2. Exclude equipment rated 240-V ac or less when supplied by a single transformer rated less than 125 kVA.

F. Study electrical distribution system from normal and alternate power sources throughout electrical distribution system for Project. Study all cases of system-switching configurations and alternate operations that could result in maximum fault conditions.

G. The calculations shall include the ac fault-current decay from induction motors, synchronous motors, and asynchronous generators and shall apply to low- and medium-voltage, three-phase ac systems. The calculations shall also account for the fault-current dc decrement, to address the asymmetrical requirements of the interrupting equipment.

1. For grounded systems, provide a bolted line-to-ground fault-current study for areas as defined for the three-phase bolted fault short-circuit study.

H. Calculate short-circuit momentary and interrupting duties for a three-phase bolted fault at each of the following:

1. Electric utility's supply termination point.
2. Incoming switchgear.
3. Unit substation primary and secondary terminals.
4. Low-voltage switchgear.
5. Motor-control centers.
6. Control panels.
7. Standby generators and automatic transfer switches.
8. Branch circuit panelboards.
9. Disconnect switches.

3.3 ADJUSTING

A. Make minor modifications to equipment as required to accomplish compliance with short-circuit study.

3.4 DEMONSTRATION

A. Train Owner's operating and maintenance personnel in the use of study results.

END OF SECTION 260572

SECTION 260573 - OVERCURRENT PROTECTIVE DEVICE COORDINATION STUDY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes computer-based, overcurrent protective device coordination studies to determine overcurrent protective devices and to determine overcurrent protective device settings for selective tripping.
   1. Study results shall be used to determine coordination of series-rated devices.

1.3 DEFINITIONS

A. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

B. One-Line Diagram: A diagram which shows, by means of single lines and graphic symbols, the course of an electric circuit or system of circuits and the component devices or parts used therein.

C. Protective Device: A device that senses when an abnormal current flow exists and then removes the affected portion from the system.

D. SCCR: Short-circuit current rating.

E. Service: The conductors and equipment for delivering electric energy from the serving utility to the wiring system of the premises served.

1.4 ACTION SUBMITTALS

A. Product Data: For computer software program to be used for studies.

B. Other Action Submittals: Submit the following after the approval of system protective devices submittals. Submittals may be in digital form.
1. Coordination-study input data, including completed computer program input data sheets.
2. Study and equipment evaluation reports.
3. Overcurrent protective device coordination study report; signed, dated, and sealed by a qualified professional engineer.
   a. Submit study report for action prior to receiving final approval of the distribution equipment submittals. If formal completion of studies will cause delay in equipment manufacturing, obtain approval from Architect for preliminary submittal of sufficient study data to ensure that the selection of devices and associated characteristics is satisfactory.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Coordination Study Specialist.

B. Product Certificates: For overcurrent protective device coordination study software, certifying compliance with IEEE 399.

1.6 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For the overcurrent protective devices to include in emergency, operation, and maintenance manuals.
1. In addition to items specified in Section 017823 "Operation and Maintenance Data," include the following:
   a. The following parts from the Protective Device Coordination Study Report:
      1) One-line diagram.
      2) Protective device coordination study.
      3) Time-current coordination curves.
   b. Power system data.

1.7 QUALITY ASSURANCE

A. Studies shall use computer programs that are distributed nationally and are in wide use. Software algorithms shall comply with requirements of standards and guides specified in this Section. Manual calculations are unacceptable.

B. Coordination Study Software Developer Qualifications: An entity that owns and markets computer software used for studies, having performed successful studies of similar magnitude on electrical distribution systems using similar devices.
   1. The computer program shall be developed under the charge of a licensed professional engineer who holds IEEE Computer Society's Certified Software Development Professional certification.

C. Coordination Study Specialist Qualifications: Professional engineer in charge of performing the study and documenting recommendations, licensed in the state where Project is located. All elements of the study shall be performed under the direct supervision and control of this professional engineer.

D. Field Adjusting Agency Qualifications: An independent agency, with the experience and capability to adjust overcurrent devices and to conduct the testing indicated, that is a member company of the InterNational Electrical Testing Association or is a nationally recognized testing laboratory (NRTL) as defined by OSHA in 29 CFR 1910.7, and that is acceptable to authorities having jurisdiction.

PART 2 - PRODUCTS

2.1 COMPUTER SOFTWARE DEVELOPERS

A. Software Developers: Subject to compliance with requirements, provide software by the following :
   1. SKM Systems Analysis, Inc.

B. Comply with IEEE 242 and IEEE 399.

C. Analytical features of device coordination study computer software program shall have the capability to calculate "mandatory," "very desirable," and "desirable" features as listed in IEEE 399.

D. Computer software program shall be capable of plotting and diagramming time-current-characteristic curves as part of its output. Computer software program shall report device settings and ratings of all overcurrent protective devices and shall demonstrate selective coordination by computer-generated, time-current coordination plots.

1. Optional Features:
   a. Arcing faults.
   b. Simultaneous faults.
   c. Explicit negative sequence.
   d. Mutual coupling in zero sequence.

2.2 PROTECTIVE DEVICE COORDINATION STUDY REPORT CONTENTS

A. Executive summary.

B. Study descriptions, purpose, basis and scope. Include case descriptions, definition of terms and guide for interpretation of the computer printout.

C. One-line diagram, showing the following:
   1. Protective device designations and ampere ratings.
   2. Cable size and lengths.
   3. Transformer kilovolt ampere (kVA) and voltage ratings.
   4. Motor and generator designations and kVA ratings.
   5. Switchgear, switchboard, motor-control center, and panelboard designations.

D. Study Input Data: As described in "Power System Data" Article.

E. Short-Circuit Study:
   1. Low-Voltage Fault Report: Three-phase and unbalanced fault calculations, showing the following for each overcurrent device location:
      a. Voltage.
      b. Calculated fault-current magnitude and angle.
      c. Fault-point X/R ratio.
      d. Equivalent impedance.
   2. Momentary Duty Report: Three-phase and unbalanced fault calculations, showing the following for each overcurrent device location:
      a. Voltage.
      b. Calculated symmetrical fault-current magnitude and angle.
      c. Fault-point X/R ratio.
      d. Calculated asymmetrical fault currents:
         1) Based on fault-point X/R ratio.
         2) Based on calculated symmetrical value multiplied by 1.6.
         3) Based on calculated symmetrical value multiplied by 2.7.
   3. Interrupting Duty Report: Three-phase and unbalanced fault calculations, showing the following for each overcurrent device location:
      a. Voltage.
      b. Calculated symmetrical fault-current magnitude and angle.
      c. Fault-point X/R ratio.
      d. No AC Decrement (NACD) ratio.
      e. Equivalent impedance.
      f. Multiplying factors for 2-, 3-, 5-, and 8-cycle circuit breakers rated on a symmetrical basis.
      g. Multiplying factors for 2-, 3-, 5-, and 8-cycle circuit breakers rated on a total basis.

F. Protective Device Coordination Study:

1. Report recommended settings of protective devices, ready to be applied in the field. Use manufacturer's data sheets for recording the recommended setting of overcurrent protective devices when available.
   a. Phase and Ground Relays:
      1) Device tag.
      2) Relay current transformer ratio and tap, time dial, and instantaneous pickup value.
      3) Recommendations on improved relaying systems, if applicable.
   b. Circuit Breakers:
      1) Adjustable pickups and time delays (long time, short time, ground).
      2) Adjustable time-current characteristic.
      3) Adjustable instantaneous pickup.
      4) Recommendations on improved trip systems, if applicable.
   c. Fuses: Show current rating, voltage, and class.

G. Time-Current Coordination Curves: Determine settings of overcurrent protective devices to achieve selective coordination. Graphically illustrate that adequate time separation exists between devices installed in series, including power utility company's upstream devices. Prepare separate sets of curves for the switching schemes and for emergency periods where the power source is local generation. Show the following information:
   1. Device tag and title, one-line diagram with legend identifying the portion of the system covered.
   2. Terminate device characteristic curves at a point reflecting maximum symmetrical or asymmetrical fault current to which the device is exposed.
   3. Identify the device associated with each curve by manufacturer type, function, and, if applicable, tap, time delay, and instantaneous settings recommended.
   4. Plot the following listed characteristic curves, as applicable:
      a. Power utility's overcurrent protective device.
      b. Medium-voltage equipment overcurrent relays.
      c. Medium- and low-voltage fuses including manufacturer's minimum melt, total clearing, tolerance, and damage bands.
      d. Low-voltage equipment circuit-breaker trip devices, including manufacturer's tolerance bands.
      e. Transformer full-load current, magnetizing inrush current, and ANSI through-fault protection curves.
      f. Cables and conductors damage curves.
      g. Ground-fault protective devices.
      h. Motor-starting characteristics and motor damage points.
      i. Generator short-circuit decrement curve and generator damage point.
      j. The largest feeder circuit breaker in each motor-control center and panelboard.
   5. Series rating on equipment allows the application of two series interrupting devices for a condition where the available fault current is greater than the interrupting rating of the downstream equipment. Both devices share in the interruption of the fault and selectivity is sacrificed at high fault levels. Maintain selectivity for tripping currents caused by overloads.
   6. Provide adequate time margins between device characteristics such that selective operation is achieved.
   7. Comments and recommendations for system improvements.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine Project overcurrent protective device submittals for compliance with electrical distribution system coordination requirements and other conditions affecting performance. Devices to be coordinated are indicated on Drawings.
   1. Proceed with coordination study only after relevant equipment submittals have been assembled. Overcurrent protective devices that have not been submitted and approved prior to coordination study may not be used in study.

3.2 PROTECTIVE DEVICE COORDINATION STUDY

A. Comply with IEEE 242 for calculating short-circuit currents and determining coordination time intervals.

B. Comply with IEEE 399 for general study procedures.

C. The study shall be based on the device characteristics supplied by device manufacturer.

D. The extent of the electrical power system to be studied is indicated on Drawings.

E. Begin analysis at the service, extending down to the system overcurrent protective devices as follows:
   1. To normal system low-voltage load buses where fault current is 10 kA or less.
   2. Exclude equipment rated 240-V ac or less when supplied by a single transformer rated less than 125 kVA.

F. Study electrical distribution system from normal and alternate power sources throughout electrical distribution system for Project. Study all cases of system-switching configurations and alternate operations that could result in maximum fault conditions.

G. Transformer Primary Overcurrent Protective Devices:
   1. Device shall not operate in response to the following:
      a. Inrush current when first energized.
      b. Self-cooled, full-load current or forced-air-cooled, full-load current, whichever is specified for that transformer.
      c. Permissible transformer overloads according to IEEE C57.96 if required by unusual loading or emergency conditions.
   2. Device settings shall protect transformers according to IEEE C57.12.00, for fault currents.

H. Motor Protection:
   1. Select protection for low-voltage motors according to IEEE 242 and NFPA 70.
   2. Select protection for motors served at voltages more than 600 V according to IEEE 620.

I. Conductor Protection: Protect cables against damage from fault currents according to ICEA P-32-382, ICEA P-45-482, and protection recommendations in IEEE 242. Demonstrate that equipment withstands the maximum short-circuit current for a time equivalent to the tripping time of the primary relay protection or total clearing time of the fuse. To determine temperatures that damage insulation, use curves from cable manufacturers or from listed standards indicating conductor size and short-circuit current.

J. Generator Protection: Select protection according to manufacturer's written recommendations and to IEEE 242.

K. The calculations shall include the ac fault-current decay from induction motors, synchronous motors, and asynchronous generators and shall apply to low- and medium-voltage, three-phase ac systems. The calculations shall also account for the fault-current dc decrement, to address the asymmetrical requirements of the interrupting equipment.
1. For grounded systems, provide a bolted line-to-ground fault-current study for areas as defined for the three-phase bolted fault short-circuit study.

L. Calculate short-circuit momentary and interrupting duties for a three-phase bolted fault and single line-to-ground fault at each of the following:
1. Electric utility's supply termination point.
2. Switchgear.
3. Unit substation primary and secondary terminals.
4. Low-voltage switchgear.
5. Motor-control centers.
6. Standby generators and automatic transfer switches.
7. Branch circuit panelboards.

M. Protective Device Evaluation:
1. Evaluate equipment and protective devices and compare to short-circuit ratings.
2. Adequacy of switchgear, motor-control centers, and panelboard bus bars to withstand short-circuit stresses.
3. Any application of series-rated devices shall be recertified, complying with requirements in NFPA 70.

3.3 LOAD-FLOW AND VOLTAGE-DROP STUDY

A. Perform a load-flow and voltage-drop study to determine the steady-state loading profile of the system. Analyze power system performance two times as follows:
1. Determine load-flow and voltage drop based on full-load currents obtained in "Power System Data" Article.
2. Determine load-flow and voltage drop based on 80 percent of the design capacity of the load buses.
3. Prepare the load-flow and voltage-drop analysis and report to show power system components that are overloaded, or might become overloaded; show bus voltages that are less than as prescribed by NFPA 70.

3.4 POWER SYSTEM DATA

A. Obtain all data necessary for the conduct of the overcurrent protective device study.
   1. Verify completeness of data supplied in the one-line diagram on Drawings. Call discrepancies to the attention of Architect.
   2. For new equipment, use characteristics submitted under the provisions of action submittals and information submittals for this Project.
   3. For existing equipment, whether or not relocated obtain required electrical distribution system data by field investigation and surveys, conducted by qualified technicians and engineers. The qualifications of technicians and engineers shall be qualified as defined by NFPA 70E.

B. Gather and tabulate the following input data to support coordination study. The list below is a guide. Comply with recommendations in IEEE 241 and IEEE 551 for the amount of detail required to be acquired in the field. Field data gathering shall be under the direct supervision and control of the engineer in charge of performing the study, and shall be by the engineer or its representative who holds NETA ETT Level III certification or NICET Electrical Power Testing Level III certification.
   1. Product Data for overcurrent protective devices specified in other Sections and involved in overcurrent protective device coordination studies. Use equipment designation tags that are consistent with electrical distribution system diagrams, overcurrent protective device submittals, input and output data, and recommended device settings.
   2. Electrical power utility impedance at the service.
   3. Power sources and ties.
   4. Short-circuit current at each system bus, three phase and line-to-ground.
   5. Full-load current of all loads.
   6. Voltage level at each bus.
   7. For transformers, include kVA, primary and secondary voltages, connection type, impedance, X/R ratio, taps measured in percent, and phase shift.
   8. For reactors, provide manufacturer and model designation, voltage rating, and impedance.
   9. For circuit breakers and fuses, provide manufacturer and model designation. List type of breaker, type of trip and available range of settings, SCCR, current rating, and breaker settings.
   10. Generator short-circuit current contribution data, including short-circuit reactance, rated kVA, rated voltage, and X/R ratio.
   11. For relays, provide manufacturer and model designation, current transformer ratios, potential transformer ratios, and relay settings.
   12. Maximum demands from service meters.
   13. Busway manufacturer and model designation, current rating, impedance, lengths, and conductor material.
   14. Motor horsepower and NEMA MG 1 code letter designation.
   15. Low-voltage cable sizes, lengths, number, conductor material, and conduit material (magnetic or nonmagnetic).
   16. Medium-voltage cable sizes, lengths, conductor material, and cable construction and metallic shield performance parameters.
   17. Data sheets to supplement electrical distribution system diagram, cross-referenced with tag numbers on diagram, showing the following:
       a. Special load considerations, including starting inrush currents and frequent starting and stopping.
       b. Transformer characteristics, including primary protective device, magnetic inrush current, and overload capability.
       c. Motor full-load current, locked rotor current, service factor, starting time, type of start, and thermal-damage curve.
       d. Generator thermal-damage curve.
       e. Ratings, types, and settings of utility company's overcurrent protective devices.
       f. Special overcurrent protective device settings or types stipulated by utility company.
       g. Time-current-characteristic curves of devices indicated to be coordinated.

h. Manufacturer, frame size, interrupting rating in amperes rms symmetrical, ampere or current sensor rating, long-time adjustment range, short-time adjustment range, and instantaneous adjustment range for circuit breakers.
i. Manufacturer and type, ampere-tap adjustment range, time-delay adjustment range, instantaneous attachment adjustment range, and current transformer ratio for overcurrent relays.
j. Panelboards, switchboards, motor-control center ampacity, and SCCR in amperes rms symmetrical.
k. Identify series-rated interrupting devices for a condition where the available fault current is greater than the interrupting rating of the downstream equipment. Obtain device data details to allow verification that series application of these devices complies with NFPA 70 and UL 489 requirements.

3.5 FIELD ADJUSTING

A. Adjust relay and protective device settings according to the recommended settings provided by the coordination study. Field adjustments shall be completed by the engineering service division of the equipment manufacturer under the Startup and Acceptance Testing contract portion.

B. Make minor modifications to equipment as required to accomplish compliance with short-circuit and protective device coordination studies.

C. Testing and adjusting shall be by a full-time employee of the Field Adjusting Agency, who holds NETA ETT Level III certification or NICET Electrical Power Testing Level III certification.
1. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters. Perform NETA tests and inspections for all adjustable overcurrent protective devices.

3.6 DEMONSTRATION

A. Engage the Coordination Study Specialist to train Owner's maintenance personnel in the following:
1. Acquaint personnel in the fundamentals of operating the power system in normal and emergency modes.
2. Hand-out and explain the objectives of the coordination study, study descriptions, purpose, basis, and scope. Include case descriptions, definition of terms, and guide for interpreting the time-current coordination curves.
3. Adjust, operate, and maintain overcurrent protective device settings.

END OF SECTION 260573

SECTION 260574 - OVERCURRENT PROTECTIVE DEVICE ARC-FLASH STUDY

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes a computer-based, arc-flash study to determine the arc-flash hazard distance and the incident energy to which personnel could be exposed during work on or near electrical equipment.

1.3 DEFINITIONS

A. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

B. One-Line Diagram: A diagram which shows, by means of single lines and graphic symbols, the course of an electric circuit or system of circuits and the component devices or parts used therein.

C. Protective Device: A device that senses when an abnormal current flow exists and then removes the affected portion from the system.

D. SCCR: Short-circuit current rating.

E. Service: The conductors and equipment for delivering electric energy from the serving utility to the wiring system of the premises served.

1.4 ACTION SUBMITTALS

A. Product Data: For computer software program to be used for studies.

B. Other Action Submittals: Submit the following submittals after the approval of system protective devices submittals. Submittals shall be in digital form.
   1. Arc-flash study input data, including completed computer program input data sheets.
   2. Arc-flash study report; signed, dated, and sealed by a qualified professional engineer.
      a. Submit study report for action prior to receiving final approval of the distribution equipment submittals. If formal completion of studies will cause delay in equipment manufacturing, obtain approval from Architect for preliminary submittal of sufficient study data to ensure that the selection of devices and associated characteristics is satisfactory.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Arc-Flash Study Specialist and Field Adjusting Agency.

B. Product Certificates: For arc-flash hazard analysis software, certifying compliance with IEEE 1584 and NFPA 70E.

1.6 CLOSEOUT SUBMITTALS

A. Maintenance procedures according to requirements in NFPA 70E shall be provided in the equipment manuals.

B. Operation and Maintenance Procedures: In addition to items specified in Section 017823 "Operation and Maintenance Data," provide maintenance procedures for use by Owner's personnel that comply with requirements in NFPA 70E.

1.7 QUALITY ASSURANCE

A. Studies shall use computer programs that are distributed nationally and are in wide use. Software algorithms shall comply with requirements of standards and guides specified in this Section. Manual calculations are unacceptable.

B. Arc-Flash Study Software Developer Qualifications: An entity that owns and markets computer software used for studies, having performed successful studies of similar magnitude on electrical distribution systems using similar devices.
   1. The computer program shall be developed under the charge of a licensed professional engineer who holds IEEE Computer Society's Certified Software Development Professional certification.

C. Arc-Flash Study Specialist Qualifications: Professional engineer in charge of performing the study, analyzing the arc flash, and documenting recommendations, licensed in the state where Project is located. All elements of the study shall be performed under the direct supervision and control of this professional engineer.

D. Field Adjusting Agency Qualifications: An independent agency, with the experience and capability to adjust overcurrent devices and to conduct the testing indicated, that is a member company of the InterNational Electrical Testing Association or is a nationally recognized testing laboratory (NRTL) as defined by OSHA in 29 CFR 1910.7, and that is acceptable to authorities having jurisdiction.

PART 2 - PRODUCTS

2.1 COMPUTER SOFTWARE DEVELOPERS

A. Software Developers: Subject to compliance with requirements, provide software by one of the following:
1. ESA Inc.
2. Operation Technology, Inc.
3. Power Analytics, Corporation.
4. SKM Systems Analysis, Inc.

B. Comply with IEEE 1584 and NFPA 70E.

C. Analytical features of device coordination study computer software program shall have the capability to calculate "mandatory," "very desirable," and "desirable" features as listed in IEEE 399.

2.2 SHORT-CIRCUIT STUDY REPORT CONTENT

A. Executive summary.

B. Study descriptions, purpose, basis and scope.

C. One-line diagram, showing the following:
1. Protective device designations and ampere ratings.
2. Cable size and lengths.
3. Transformer kilovolt ampere (kVA) and voltage ratings.

4. Motor and generator designations and kVA ratings.
5. Switchgear, switchboard, motor-control center and panelboard designations.

D. Study Input Data: As described in "Power System Data" Article.

E. Short-Circuit Study Output:
1. Interrupting Duty Report: Three-phase and unbalanced fault calculations, showing the following for each overcurrent device location:
a. Voltage.
b. Calculated symmetrical fault-current magnitude and angle.
c. Fault-point X/R ratio.
d. No AC Decrement (NACD) ratio.
e. Equivalent impedance.
f. Multiplying factors for 2-, 3-, 5-, and 8-cycle circuit breakers rated on a symmetrical basis.
g. Multiplying factors for 2-, 3-, 5-, and 8-cycle circuit breakers rated on a total basis.

F. Incident Energy and Flash Protection Boundary Calculations:
1. Arcing fault magnitude.
2. Protective device clearing time.
3. Duration of arc.
4. Arc-flash boundary.
5. Working distance.
6. Incident energy.
7. Hazard risk category.
8. Recommendations for arc-flash energy reduction.

G. Fault study input data, case descriptions, and fault-current calculations including a definition of terms and guide for interpretation of the computer printout.

2.3 ARC-FLASH WARNING LABELS

A. Comply with requirements in Section 260553 "Identification for Electrical Systems." Produce a 3.5-by-5-inch (76-by-127-mm) thermal transfer label of high-adhesion polyester for each work location included in the analysis.

B. The label shall have an orange header with the wording, "WARNING, ARC-FLASH HAZARD," and shall include the following information taken directly from the arc-flash hazard analysis:
1. Location designation.
2. Nominal voltage.
3. Flash protection boundary.
4. Hazard risk category.
5. Incident energy.
6. Working distance.
7. Engineering report number, revision number, and issue date.

C. Labels shall be machine printed, with no field-applied markings.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine Project overcurrent protective device submittals. Proceed with arc-flash study only after relevant equipment submittals have been assembled. Overcurrent protective devices that have not been submitted and approved prior to arc-flash study may not be used in study.

3.2 SHORT-CIRCUIT STUDY

A. Perform study following the general study procedures contained in IEEE 399.

B. Calculate short-circuit currents according to IEEE 551.

C. Base study on the device characteristics supplied by device manufacturer.

D. The extent of the electrical power system to be studied is indicated on Drawings.

E. Begin analysis at the service, extending down to the system overcurrent protective devices as follows:
   1. To normal system low-voltage load buses where fault current is 10 kA or less.
   2. Exclude equipment rated 240-V ac or less when supplied by a single transformer rated less than 125 kVA.

F. Study electrical distribution system from normal and alternate power sources throughout electrical distribution system for Project. Include studies of system-switching configurations and alternate operations that could result in maximum fault conditions.

G. The calculations shall include the ac fault-current decay from induction motors, synchronous motors, and asynchronous generators and shall apply to low- and medium-voltage, three-phase ac systems.

H. Calculate short-circuit momentary and interrupting duties for a three-phase bolted fault and single line-to-ground fault at each of the following:
   1. Electric utility's supply termination point.
   2. Switchgear.
   3. Unit substation primary and secondary terminals.
   4. Low-voltage switchgear.
   5. Motor-control centers.
   6. Standby generators and automatic transfer switches.

3.3 ARC-FLASH HAZARD ANALYSIS

A. Comply with NFPA 70E and its Annex D for hazard analysis study.

B. Use the short-circuit study output and the field-verified settings of the overcurrent devices.

C. Calculate maximum and minimum contributions of fault-current size.
   1. The minimum calculation shall assume that the utility contribution is at a minimum and shall assume no motor load.
   2. The maximum calculation shall assume a maximum contribution from the utility and shall assume motors to be operating under full-load conditions.

D. Calculate the arc-flash protection boundary and incident energy at locations in the electrical distribution system where personnel could perform work on energized parts.

E. Include medium- and low-voltage equipment locations, except 240-V ac and 208-V ac systems fed from transformers less than 125 kVA.

F. Safe working distances shall be specified for calculated fault locations based on the calculated arc-flash boundary, considering incident energy of 1.2 cal/sq.cm.

G. Incident energy calculations shall consider the accumulation of energy over time when performing arc-flash calculations on buses with multiple sources. Iterative calculations shall take into account the changing current contributions, as the sources are interrupted or decremented with time. Fault contribution from motors and generators shall be decremented as follows:
   1. Fault contribution from induction motors should not be considered beyond three to five cycles.
   2. Fault contribution from synchronous motors and generators should be decayed to match the actual decrement of each as closely as possible (e.g., contributions from permanent magnet generators will typically decay from 10 per unit to three per unit after 10 cycles).

H. Arc-flash computation shall include both line and load side of a circuit breaker as follows:
   1. When the circuit breaker is in a separate enclosure.
   2. When the line terminals of the circuit breaker are separate from the work location.

I. Base arc-flash calculations on actual overcurrent protective device clearing time. Cap maximum clearing time at two seconds based on IEEE 1584, Section B.1.2.

3.4 POWER SYSTEM DATA

A. Obtain all data necessary for the conduct of the arc-flash hazard analysis.
   1. Verify completeness of data supplied on the one-line diagram on Drawings. Call discrepancies to the attention of Architect.
   2. For new equipment, use characteristics submitted under the provisions of action submittals and information submittals for this Project.
   3. For existing equipment, whether or not relocated, obtain required electrical distribution system data by field investigation and surveys, conducted by qualified technicians and engineers.

B. Gather and tabulate the following input data to support coordination study. Comply with recommendations in IEEE 1584 and NFPA 70E as to the amount of detail that is required to be acquired in the field. Field data gathering shall be under the direct supervision and control of the engineer in charge of performing the study, and shall be by the engineer or its representative who holds NETA ETT Level III certification or NICET Electrical Power Testing Level III certification.
   1. Product Data for overcurrent protective devices specified in other Sections and involved in overcurrent protective device coordination studies. Use equipment designation tags that are consistent with electrical distribution system diagrams, overcurrent protective device submittals, input and output data, and recommended device settings.
   2. Obtain electrical power utility impedance at the service.
   3. Power sources and ties.
   4. For transformers, include kVA, primary and secondary voltages, connection type, impedance, X/R ratio, taps measured in per cent, and phase shift.
   5. For reactors, provide manufacturer and model designation, voltage rating and impedance.
   6. For circuit breakers and fuses, provide manufacturer and model designation. List type of breaker, type of trip and available range of settings, SCCR, current rating, and breaker settings.
   7. Generator short-circuit current contribution data, including short-circuit reactance, rated kVA, rated voltage, and X/R ratio.
   8. For relays, provide manufacturer and model designation, current transformer ratios, potential transformer ratios, and relay settings.
   9. Busway manufacturer and model designation, current rating, impedance, lengths, and conductor material.
   10. Motor horsepower and NEMA MG 1 code letter designation.
   11. Low-voltage cable sizes, lengths, number, conductor material and conduit material (magnetic or nonmagnetic).
   12. Medium-voltage cable sizes, lengths, conductor material, and cable construction and metallic shield performance parameters.

3.5 LABELING

A. Apply one arc-flash label for 600-V ac, 480-V ac, and applicable 208-V ac panelboards and disconnects and for each of the following locations:
   1. Motor-control center.
   2. Low-voltage switchboard.
   3. Switchgear.
   4. Medium-voltage switch.
   5. Control panel.

3.6 APPLICATION OF WARNING LABELS

A. Install the arc-fault warning labels under the direct supervision and control of the Arc-Flash Study Specialist.

3.7 DEMONSTRATION

A. Engage the Arc-Flash Study Specialist to train Owner's maintenance personnel in the potential arc-flash hazards associated with working on energized equipment and the significance of the arc-flash warning labels.

END OF SECTION 260574

SECTION 260950 - EMPTY CONDUIT SYSTEMS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and General Provisions of Contract, including General and Supplementary Conditions and Division-1 Specification Sections, apply to Work of this Section.

1.2 WORK DESCRIPTION

A. Work of this section includes all labor, materials, equipment and services necessary to complete the installation of electrical work as shown on the drawings and specified herein, including:

1. Work included under this section shall consist of furnishing complete empty conduit, pull box and back box system with nylon pull cord for installation of wire or cables by respective system suppliers.

1.3 REFERENCE TO OTHER SPECIFICATION SECTIONS

A. Raceways

B. Boxes, Cabinets and Enclosures

C. Supports and Fastenings

1.4 SUBMITTALS

A. Submit shop drawings for all special boxes as required by this section of specifications.

PART 2 - EQUIPMENT AND PERFORMANCE

2.1 RACEWAY

A. Provide empty raceway from each outlet to the termination point noted.

B. Where specific termination location is not indicated, stub raceway with a bushing into nearest accessible hung ceiling and elbow toward the area collection point for the system wiring.

C. Raceway shall consist of electrical metallic tubing, 1" minimum size, unless noted otherwise.

2.2 JUNCTION/PULLBOXES

A. Provide junction and pullboxes at all required locations indicated and where more than 270º of bends occurs in a run of raceway.

B. Junction and pullboxes shall be sized to meet the cabling requirements of the system being installed.

C. Covers shall be removable and secured with screws.

2.3 OUTLETS

A. Outlets shall be standard receptacle type outlet boxes.

B. Where multioutlet application is required, provide multigang outlet as required.

C. Unless noted otherwise, provide a device plate with a 1" bushed opening with a finish to match receptacles in the area.

2.4 FISH WIRE

A. Provide a nylon fish wire for all raceway exceeding 10' in length.

PART 3 - EXECUTION

3.1 COORDINATION WITH SYSTEM SUPPLIER

A. Before commencing installation, confirm installation requirements with the supplier of equipment and wiring for respective system.

3.2 INSTALLATION

A. Installation of all components of system shall follow individual section requirement.

B. System installation shall follow successful manufacturers approved shop drawings, wiring schematics and instructions.

3.3 RECORD DRAWINGS

A. Provide as-built drawings showing all outlet locations as installed, major runs of raceways and location of all junction and pullboxes.

END OF SECTION 260950

SECTION 262416 - PANELBOARDS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes the following:

1. Distribution panelboards.
2. Lighting and appliance branch-circuit panelboards.

1.3 DEFINITIONS

A. EMI: Electromagnetic interference.

B. GFCI: Ground-fault circuit interrupter.

C. RFI: Radio-frequency interference.

D. RMS: Root mean square.

E. SPDT: Single pole, double throw.

1.4 SUBMITTALS

A. Product Data: For each type of panelboard, overcurrent protective device, accessory, and component indicated. Include dimensions and manufacturers' technical data on features, performance, electrical characteristics, ratings, and finishes.

B. Shop Drawings: For each panelboard and related equipment.

1. Dimensioned plans, elevations, sections, and details. Show tabulations of installed devices, equipment features, and ratings. Include the following:

    a. Enclosure types and details for types other than NEMA 250, Type 1.
    b. Bus configuration, current, and voltage ratings.
    c. Short-circuit current rating of panelboards and overcurrent protective devices.
    d. UL listing for series rating of installed devices.
    e. Features, characteristics, ratings, and factory settings of individual overcurrent protective devices and auxiliary components.

2. Wiring Diagrams: Power, signal, and control wiring.

C. Manufacturer Seismic Qualification Certification: Submit certification that panelboards, overcurrent protective devices, accessories, and components will withstand seismic forces defined in Division 16 Section "Electrical Supports and Seismic Restraints." Include the following:

1. Basis of Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.

    a. The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified."
    b. The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified and the unit will be fully operational after the seismic event."

2. Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity and locate and describe mounting and anchorage provisions.
3. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.

D. Qualification Data: For testing agency.

E. Field quality-control test reports including the following:

1. Test procedures used.
2. Test results that comply with requirements.
3. Results of failed tests and corrective action taken to achieve test results that comply with requirements.

F. Panelboard Schedules: For installation in panelboards.

G. Operation and Maintenance Data: For panelboards and components to include in emergency, operation, and maintenance manuals. Include the following:

1. Manufacturer's written instructions for testing and adjusting overcurrent protective devices.
2. Time-current curves, including selectable ranges for each type of overcurrent protective device.

1.5 QUALITY ASSURANCE

A. Testing Agency Qualifications: An independent agency, with the experience and capability to conduct the testing indicated, that is a nationally recognized testing laboratory (NRTL) as defined by OSHA in 29 CFR 1910.7.

B. Source Limitations: Obtain panelboards, overcurrent protective devices, components, and accessories through one source from a single manufacturer.

C. Product Options: Drawings indicate size, profiles, and dimensional requirements of panelboards and are based on the specific system indicated. Refer to Division 1 Section "Product Requirements."

D. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

E. Comply with NEMA PB 1.

F. Comply with NFPA 70.

1.6 PROJECT CONDITIONS

A. Environmental Limitations: Rate equipment for continuous operation under the following conditions, unless otherwise indicated:

1. Ambient Temperature: Not exceeding 104 deg F (40 deg C).
2. Altitude: Not exceeding 6600 feet (2000 m).

B. Service Conditions: NEMA PB 1, usual service conditions, as follows:

1. Ambient temperatures within limits specified.
2. Altitude not exceeding 6600 feet (2000 m).

1.7 COORDINATION

A. Coordinate layout and installation of panelboards and components with other construction that penetrates walls or is supported by them, including electrical and other types of equipment, raceways, piping, and encumbrances to workspace clearance requirements.

B. Coordinate size and location of concrete bases. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified in Division 3.

1.8 EXTRA MATERIALS

A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Keys: Six spares for each type of panelboard cabinet lock.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Panelboards, Overcurrent Protective Devices, Controllers, Contactors, and Accessories:

a. Eaton Corporation; Cutler-Hammer Products.
b. General Electric Co.; Electrical Distribution & Protection Div.
c. Siemens Energy & Automation, Inc.
d. Square D.

2.2 MANUFACTURED UNITS

A. Fabricate and test panelboards according to IEEE 344 to withstand seismic forces defined in Division 16 Section "Electrical Supports and Seismic Restraints."

B. Enclosures: Flush- and surface-mounted cabinets. NEMA PB 1, Type 1.

1. Rated for environmental conditions at installed location.

a. Outdoor Locations: NEMA 250, Type 3R.
b. Other Wet or Damp Indoor Locations: NEMA 250, Type 4.

2. Front: Secured to box with concealed trim clamps. For surface-mounted fronts, match box dimensions; for flush-mounted fronts, overlap box.
3. Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover.
4. Gutter Extension and Barrier: Same gage and finish as panelboard enclosure; integral with enclosure body. Arrange to isolate individual panel sections.
5. Finish: Manufacturer's standard enamel finish over corrosion-resistant treatment or primer coat.
6. Directory Card: With transparent protective cover, mounted in metal frame, inside panelboard door.

C. Phase and Ground Buses:

1. Material: Hard-drawn copper, 98 percent conductivity.
2. Equipment Ground Bus: Adequate for feeder and branch-circuit equipment ground conductors; bonded to box.

3. Isolated Equipment Ground Bus: Adequate for branch-circuit equipment ground conductors; insulated from box.
4. Extra-Capacity Neutral Bus: Neutral bus rated 200 percent of phase bus and UL listed as suitable for nonlinear loads.
5. Split Bus: Vertical buses divided into individual vertical sections.

D. Conductor Connectors: Suitable for use with conductor material.

1. Main and Neutral Lugs: Compression type.
2. Ground Lugs and Bus Configured Terminators: Compression type.
3. Feed-Through Lugs: Compression type suitable for use with conductor material. Locate at opposite end of bus from incoming lugs or main device.
4. Extra-Capacity Neutral Lugs: Rated 200 percent of phase lugs mounted on extra-capacity neutral bus.

E. Service Equipment Label: UL labeled for use as service equipment for panelboards with main service disconnect switches.

F. Future Devices: Mounting brackets, bus connections, and necessary appurtenances required for future installation of devices.

2.3 PANELBOARD SHORT-CIRCUIT RATING

A. UL label indicating series-connected rating with integral or remote upstream overcurrent protective devices. Include size and type of upstream device allowable, branch devices allowable, and UL series-connected short-circuit rating.

2.4 LIGHTING AND APPLIANCE BRANCH-CIRCUIT PANELBOARDS

A. Branch Overcurrent Protective Devices: Bolt-on circuit breakers, replaceable without disturbing adjacent units.

B. Doors: Concealed hinges; secured with flush latch with tumbler lock; keyed alike.

2.5 OVERCURRENT PROTECTIVE DEVICES

A. Molded-Case Circuit Breaker: UL 489, with interrupting capacity to meet available fault currents.

1. Thermal-Magnetic Circuit Breakers: Inverse time-current element for low-level overloads, and instantaneous magnetic trip element for short circuits. Adjustable magnetic trip setting for circuit-breaker frame sizes 250 A and larger.
2. Adjustable Instantaneous-Trip Circuit Breakers: Magnetic trip element with front-mounted, field-adjustable trip setting.
3. Electronic trip-unit circuit breakers shall have RMS sensing; field-replaceable rating plug; and with the following field-adjustable settings:

    a. Instantaneous trip.
    b. Long- and short-time pickup levels.
    c. Long- and short-time time adjustments.
    d. Ground-fault pickup level, time delay, and I^2t response.

4. Current-Limiting Circuit Breakers: Frame sizes 400 A and smaller; let-through ratings less than NEMA FU 1, RK-5.
5. Integrally Fused Circuit Breakers: Thermal-magnetic trip element with integral limiter-style fuse listed for use with circuit breaker; trip activation on fuse opening or on opening of fuse compartment door.
6. GFCI Circuit Breakers: Single- and two-pole configurations with [5] [30]-mA trip sensitivity.

B. Molded-Case Circuit-Breaker Features and Accessories: Standard frame sizes, trip ratings, and number of poles.

1. Lugs: Compression style, suitable for number, size, trip ratings, and conductor materials.
2. Application Listing: Appropriate for application; Type SWD for switching fluorescent lighting loads; Type HACR for heating, air-conditioning, and refrigerating equipment.
3. Ground-Fault Protection: Integrally mounted relay and trip unit with adjustable pickup and time-delay settings, push-to-test feature, and ground-fault indicator.
4. Undervoltage Trip: Set to operate at 35 to 75 percent of rated voltage without intentional time delay.
5. Auxiliary Contacts: One SPDT switch with "a" and "b" contacts; "a" contacts mimic circuit-breaker contacts, "b" contacts operate in reverse of circuit-breaker contacts.
6. Key Interlock Kit: Externally mounted to prohibit circuit-breaker operation; key shall be removable only when circuit breaker is in off position.
7. Zone-Selective Interlocking: Integral with electronic trip unit; for interlocking ground-fault protection function.
8. Multipole units enclosed in a single housing or factory-assembled to operate as a single unit.

2.6 CONTROLLERS

A. Motor Controllers: NEMA ICS 2, Class A, combination controller equipped for panelboard mounting and including the following accessories:

1. Individual control-power transformers.
2. Fuses for control-power transformers.
3. Bimetallic-element overload relay.
4. Indicating lights.
5. Seal-in contact.
6. Two convertible auxiliary contacts.

7. Push buttons.
8. Selector switches.

B. Contactors: NEMA ICS 2, Class A, combination controller equipped for panelboard mounting and including the following accessories:

1. Individual control-power transformers.
2. Fuses for control-power transformers.
3. Indicating lights.
4. Seal-in contact.
5. Two convertible auxiliary contacts.
6. Push buttons.
7. Selector switches.

C. Controller Disconnect Switches: Fused switch and interlocked with controller.

1. Auxiliary Contacts: Integral with disconnect switches to de-energize external control-power source.

D. Contactors in Main Bus: NEMA ICS 2, Class A, mechanically held general-purpose controller.

1. Control-Power Source: Control-power transformer, with fused primary and secondary terminals, connected to main bus ahead of contactor connection.
2. Control-Power Source: 120-V branch circuit.

2.7 ACCESSORY COMPONENTS AND FEATURES

A. Furnish accessory set including tools and miscellaneous items required for overcurrent protective device test, inspection, maintenance, and operation.

B. Furnish portable test set to test functions of solid-state trip devices without removal from panelboard.

C. Fungus Proofing: Permanent fungicidal treatment for panelboard interior, including overcurrent protective devices and other components.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install panelboards and accessories according to NEMA PB 1.1.

B. Comply with mounting and anchoring requirements specified in Division 26 Section "Electrical Supports and Seismic Restraints."

C. Mount top of trim 74 inches (1880 mm) above finished floor, unless otherwise indicated.

D. Mount plumb and rigid without distortion of box. Mount recessed panelboards with fronts uniformly flush with wall finish.

E. Install overcurrent protective devices and controllers.

1. Set field-adjustable switches and circuit-breaker trip ranges.

F. Install filler plates in unused spaces.

G. Stub four 1-inch (27-GRC) empty conduits from panelboard into accessible ceiling space or space designated to be ceiling space in the future. Stub four 1-inch (27-GRC) empty conduits into raised floor space or below slab not on grade.

H. Arrange conductors in gutters into groups and bundle and wrap with wire ties.

3.2 IDENTIFICATION

A. Identify field-installed conductors, interconnecting wiring, and components; provide warning signs as specified in Division 26 Section "Electrical Identification."

B. Create a directory to indicate installed circuit loads after balancing panelboard loads. Obtain approval before installing. Use a computer or typewriter to create directory; handwritten directories are not acceptable.

C. Panelboard Nameplates: Label each panelboard with engraved metal or laminated-plastic nameplate mounted with corrosion-resistant screws.

3.3 CONNECTIONS

A. Ground equipment according to Division 26 Section "Grounding and Bonding."

B. Connect wiring according to Division 26 Section "Low Voltage Electrical Power Conductors and Cables."

3.4 FIELD QUALITY CONTROL

A. Prepare for acceptance tests as follows:

1. Test insulation resistance for each panelboard bus, component, connecting supply, feeder, and control circuit.
2. Test continuity of each circuit.

B. Testing Agency: Engage a qualified testing and inspecting agency to perform the following field tests and inspections and prepare test reports:

C. Perform the following field tests and inspections and prepare test reports:

1. Perform each electrical test and visual and mechanical inspection stated in NETA ATS, Section 7.5 for switches and Section 7.6 for molded-case circuit breakers. Certify compliance with test parameters.
2. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.

D. Load Balancing: After Substantial Completion, but not more than 60 days after Final Acceptance, measure load balancing and make circuit changes.

1. Measure as directed during period of normal system loading.
2. Perform load-balancing circuit changes outside normal occupancy/working schedule of the facility and at time directed. Avoid disrupting critical 24-hour services such as fax machines and on-line data processing, computing, transmitting, and receiving equipment.
3. After circuit changes, recheck loads during normal load period. Record all load readings before and after changes and submit test records.
4. Tolerance: Difference exceeding 20 percent between phase loads, within a panelboard, is not acceptable. Rebalance and recheck as necessary to meet this minimum requirement.

E. Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform an infrared scanning of each panelboard. Remove panel fronts so joints and connections are accessible to portable scanner.

1. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan of each panelboard 11 months after date of Substantial Completion.
2. Instrument: Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
3. Record of Infrared Scanning: Prepare a certified report that identifies panelboards checked and describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

3.5 CLEANING

A. On completion of installation, inspect interior and exterior of panelboards. Remove paint splatters and other spots. Vacuum dirt and debris; do not use compressed air to assist in cleaning. Repair exposed surfaces to match original finish.

END OF SECTION 262416

SECTION 262726 - WIRING DEVICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Standard-grade receptacles, 125 V, 20 A.
2. GFCI receptacles, 125 V, 20 A.
3. Pendant cord-connector devices.
4. Decorator-style devices, 20 A.
5. Wall-switch and exterior occupancy sensors.
6. Wall plates.
7. Floor service fittings.

1.3 DEFINITIONS

A. AFCI: Arc-fault circuit interrupter.

B. BAS: Building automation system.

C. EMI: Electromagnetic interference.

D. GFCI: Ground-fault circuit interrupter.

E. Pigtail: Short lead used to connect a device to a branch-circuit conductor.

F. RFI: Radio-frequency interference.

G. SPD: Surge protective device.

1.4 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Samples: One for each type of device and wall plate specified, in each color specified.

1.5 INFORMATIONAL SUBMITTALS

1.6 CLOSEOUT SUBMITTALS

PART 2 - PRODUCTS

1.1 GENERAL WIRING-DEVICE REQUIREMENTS

A. Wiring Devices, Components, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and use.

B. Comply with NFPA 70.

C. RoHS compliant.

D. Comply with NEMA WD 1.

E. Devices that are manufactured for use with modular plug-in connectors may be substituted under the following conditions:

1. Connectors shall comply with UL 2459 and shall be made with stranding building wire.
2. Devices shall comply with requirements in this Section.

F. Devices for Owner-Furnished Equipment:

1. Receptacles: Match plug configurations.
2. Cord and Plug Sets: Match equipment requirements.

G. Device Color:

1. Wiring Devices Connected to Normal Power System: Grey
2. SPD Devices: Blue
3. Isolated-Ground Receptacles: Orange

H. Wall Plate Color: Stainless steal.

I. Source Limitations: Obtain each type of wiring device and associated wall plate from single source from single manufacturer.

2.2 STANDARD-GRADE RECEPTACLES, 125 V, 20 A,

A. Weather-Resistant Duplex Receptacle, 125 V, 20 A:

1. Subject to compliance with requirements, provide products by one of the following:
   a. Leviton Manufacturing Co., Inc.
   b. Pass & Seymour; Legrand North America, LLC.
   c. Wiring Device-Kellems; Hubbell Incorporated, Commercial and Industrial.
2. Description: Two pole, three wire, and self-grounding. Integral shutters that operate only when a plug is inserted in the receptacle. Square face.
3. Configuration: NEMA WD 6, Configuration 5-20R.

4. Standards: Comply with UL 498.
5. Marking: Listed and labeled as complying with NFPA 70, "Receptacles in Damp or Wet Locations" Article.

B. Tamper- and Weather-Resistant Duplex Receptacles, 125 V, 20 A:

1. Subject to compliance with requirements, provide products by one of the following:
   a. Leviton Manufacturing Co., Inc.
   b. Pass & Seymour; Legrand North America, LLC.
   c. Wiring Device-Kellems; Hubbell Incorporated, Commercial and Industrial.
2. Description: Two pole, three wire, and self-grounding. Integral shutters that operate only when a plug is inserted in the receptacle. Square face.
3. Configuration: NEMA WD 6, Configuration 5-20R.
4. Standards: Comply with UL 498.
5. Marking: Listed and labeled as complying with NFPA 70, "Tamper-Resistant Receptacles" and "Receptacles in Damp or Wet Locations" articles.

2.3 GFCI RECEPTACLES, 125 V, 20 A

A. Duplex GFCI Receptacles, 125 V, 20 A:

1. Subject to compliance with requirements, provide products by one of the following:
   a. Leviton Manufacturing Co., Inc.
   b. Pass & Seymour; Legrand North America, LLC.
   c. Wiring Device-Kellems; Hubbell Incorporated, Commercial and Industrial.
2. Description: Integral GFCI with "Test" and "Reset" buttons and LED indicator light. Two pole, three wire, and self-grounding.
3. Configuration: NEMA WD 6, Configuration 5-20R.
4. Type: Feed through.
5. Standards: Comply with UL 498, UL 943 Class A, and FS W-C-596.

B. Tamper- and Weather-Resistant, GFCI Duplex Receptacles, 125 V, 20 A:

1. Subject to compliance with requirements, provide products by one of the following:
   a. Leviton Manufacturing Co., Inc.
   b. Pass & Seymour; Legrand North America, LLC.
   c. Wiring Device-Kellems; Hubbell Incorporated, Commercial and Industrial.
2. Description: Integral GFCI with "Test" and "Reset" buttons and LED indicator light. Two pole, three wire, and self-grounding. Integral shutters that operate only when a plug is inserted in the receptacle. Square face.
3. Configuration: NEMA WD 6, Configuration 5-15R.
4. Type: Non-feed through.
5. Standards: Comply with UL 498 and UL 943 Class A.

6. Marking: Listed and labeled as complying with NFPA 70, "Tamper-Resistant Receptacles" and "Receptacles in Damp or Wet Locations" articles.

2.4 DECORATOR-STYLE DEVICES, 20 A

A. Decorator Tamper-Resistant Duplex Receptacles, 125 V, 20 A:

1. Subject to compliance with requirements, provide products by one of the following:
   a. Leviton Manufacturing Co., Inc.
   b. Pass & Seymour; Legrand North America, LLC.
   c. Wiring Device-Kellems; Hubbell Incorporated, Commercial and Industrial.
2. Description: Two pole, three wire, and self-grounding. Integral shutters that operate only when a plug is inserted in the receptacle. Square face.
3. Configuration: NEMA WD 6, Configuration 5-20R.
4. Standards: Comply with UL 498.
5. Marking: Listed and labeled as complying with NFPA 70, "Tamper-Resistant Receptacles" Article.

2.5 TOGGLE SWITCHES

A. Comply with NEMA WD 1, UL 20, and FS W-S-896.

B. Switches, 125 V, 20 A:

1. Products: Subject to compliance with requirements, provide one of the following:
   a. Single Pole:
      1) Cooper; AH1221.
      2) Hubbell; HBL1221.
      3) Leviton; 1221-2.
      4) Pass & Seymour; CSB20AC1.
   b. Two Pole:
      1) Cooper; AH1222.
      2) Hubbell; HBL1222.
      3) Leviton; 1222-2.
      4) Pass & Seymour; CSB20AC2.
   c. Three Way:
      1) Cooper; AH1223.
      2) Hubbell; HBL1223.
      3) Leviton; 1223-2.
      4) Pass & Seymour; CSB20AC3.
   d. Four Way:
      1) Cooper; AH1224.
      2) Hubbell; HBL1224.
      3) Leviton; 1224-2.
      4) Pass & Seymour; CSB20AC4.

C. Pilot-Light Switches, 20 A:

1. Products: Subject to compliance with requirements, provide one of the following:
   a. Cooper; AH1221PL.
   b. Hubbell; HBL1201PL.
   c. Leviton; 1221-LH1.
   d. Pass & Seymour; PS20AC1RPL for 125 V.
2. Description: Single pole, with neon-lighted handle, illuminated when switch is "off."

D. Key-Operated Switches, 125 V, 20 A:

1. Products: Subject to compliance with requirements, provide one of the following:
   a. Cooper; AH1221L.
   b. Hubbell; HBL1221L.
   c. Leviton; 1221-2L.
   d. Pass & Seymour; PS20AC1-L.
2. Description: Single pole, with factory-supplied key in lieu of switch handle.

E. Single-Pole, Double-Throw, Momentary-Contact, Center-off Switches: 125 V, 20 A; for use with mechanically held lighting contactors.

1. Products: Subject to compliance with requirements, provide one of the following:
   a. Cooper; 1995.
   b. Hubbell; HBL1557.
   c. Leviton; 1257.
   d. Pass & Seymour; 1251.

F. Key-Operated, Single-Pole, Double-Throw, Momentary-Contact, Center-off Switches: 125 V, 20 A; for use with mechanically held lighting contactors, with factory-supplied key in lieu of switch handle.

1. Products: Subject to compliance with requirements, provide one of the following:
   a. Cooper; 1995L.
   b. Hubbell; HBL1557L.
   c. Leviton; 1257L.
   d. Pass & Seymour; 1251L.

2.6 WALL PLATES

A. Single Source: Obtain wall plates from same manufacturer of wiring devices.

B. Single and combination types shall match corresponding wiring devices.

1. Plate-Securing Screws: Metal with head color to match plate finish.
2. Material for Finished Spaces: Smooth, Stainless steal.
3. Material for Unfinished Spaces: Galvanized steel.
4. Material for Damp Locations: Cast aluminum with spring-loaded lift cover, and listed and labeled for use in wet and damp locations.

C. Wet-Location, Weatherproof Cover Plates: NEMA 250, complying with Type 3R, weather-resistant , die-cast aluminum with lockable cover.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Comply with NECA 1, including mounting heights listed in that standard, unless otherwise indicated.

B. Coordination with Other Trades:

1. Protect installed devices and their boxes. Do not place wall finish materials over device boxes, and do not cut holes for boxes with routers that are guided by riding against outside of boxes.
2. Keep outlet boxes free of plaster, drywall joint compound, mortar, cement, concrete, dust, paint, and other material that may contaminate the raceway system, conductors, and cables.
3. Install device boxes in brick or block walls so that the cover plate does not cross a joint unless the joint is troweled flush with the face of the wall.
4. Install wiring devices after all wall preparation, including painting, is complete.

C. Conductors:

1. Do not strip insulation from conductors until right before they are spliced or terminated on devices.
2. Strip insulation evenly around the conductor using tools designed for the purpose. Avoid scoring or nicking of solid wire or cutting strands from stranded wire.
3. The length of free conductors at outlets for devices shall comply with NFPA 70, Article 300, without pigtails.
4. Existing Conductors:
    a. Cut back and pigtail, or replace all damaged conductors.
    b. Straighten conductors that remain and remove corrosion and foreign matter.
    c. Pigtailing existing conductors is permitted, provided the outlet box is large enough.

D. Device Installation:

1. Replace devices that have been in temporary use during construction and that were installed before building finishing operations were complete.
2. Keep each wiring device in its package or otherwise protected until it is time to connect conductors.
3. Do not remove surface protection, such as plastic film and smudge covers, until the last possible moment.
4. Connect devices to branch circuits using pigtails that are not less than 6 inches in length.
5. When there is a choice, use side wiring with binding-head screw terminals. Wrap solid conductor tightly clockwise, two-thirds to three-fourths of the way around terminal screw.
6. Use a torque screwdriver when a torque is recommended or required by manufacturer.
7. When conductors larger than No. 12 AWG are installed on 15- or 20-A circuits, splice No. 12 AWG pigtails for device connections.
8. Tighten unused terminal screws on the device.
9. When mounting into metal boxes, remove the fiber or plastic washers used to hold device-mounting screws in yokes, allowing metal-to-metal contact.

E. Receptacle Orientation:

1. Install ground pin of vertically mounted receptacles down, and on horizontally mounted receptacles to the right.

F. Device Plates: Do not use oversized or extra-deep plates. Repair wall finishes and remount outlet boxes when standard device plates do not fit flush or do not cover rough wall opening.

G. Arrangement of Devices: Unless otherwise indicated, mount flush, with long dimension vertical and with grounding terminal of receptacles on top. Group adjacent switches under single, multigang wall plates.

H. Adjust locations of floor service outlets and service poles to suit arrangement of partitions and furnishings.

3.2 GFCI RECEPTACLES

A. Install non-feed-through GFCI receptacles where protection of downstream receptacles is not required.

3.3 IDENTIFICATION

A. Comply with Section 260553 "Identification for Electrical Systems."

B. Identify each receptacle with panelboard identification and circuit number. Use hot, stamped, or engraved machine printing with black -filled lettering on face of plate, and durable wire markers or tags inside outlet boxes.

C. Essential Electrical System: Mark receptacles supplied from the essential electrical system to allow easy identification using a self-adhesive label.

3.4 FIELD QUALITY CONTROL

A. Tests for Receptacles:

1. Line Voltage: Acceptable range is 105 to 132 V.
2. Percent Voltage Drop under 15-A Load: A value of 6 percent or higher is unacceptable.
3. Ground Impedance: Values of up to 2 ohms are acceptable.
4. GFCI Trip: Test for tripping values specified in UL 1436 and UL 943.
5. Using the test plug, verify that the device and its outlet box are securely mounted.
6. Tests shall be diagnostic, indicating damaged conductors, high resistance at the circuit breaker, poor connections, inadequate fault-current path, defective devices, or similar problems. Correct circuit conditions, remove malfunctioning units and replace with new ones, and retest as specified above.

B. Test straight-blade for the retention force of the grounding blade according to NFPA 99. Retention force shall be not less than 4 oz..

C. Wiring device will be considered defective if it does not pass tests and inspections.

D. Prepare test and inspection reports.

END OF SECTION 262726

SECTION 263213.13 - DIESEL-ENGINE-DRIVEN GENERATOR SETS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Diesel engine.
2. Diesel fuel-oil system.
3. Control and monitoring.
4. Generator overcurrent and fault protection.
5. Generator, exciter, and voltage regulator.
6. Outdoor engine generator enclosure.
7. Vibration isolation devices.

B. Related Requirements:

1. Section 263600 "Transfer Switches" for transfer switches including sensors and relays to initiate automatic-starting and -stopping signals for engine generators.

1.2 DEFINITIONS

A. EPS: Emergency power supply.

B. EPSS: Emergency power supply system.

C. Operational Bandwidth: The total variation from the lowest to highest value of a parameter over the range of conditions indicated, expressed as a percentage of the nominal value of the parameter.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include rated capacities, operating characteristics, electrical characteristics, and furnished specialties and accessories.
2. Include thermal damage curve for generator.
3. Include time-current characteristic curves for generator protective device.
4. Include fuel consumption in gallons per hour at 0.8 power factor at 0.5, 0.75, and 1.0 times generator capacity.
5. Include generator efficiency at 0.8 power factor at 0.5, 0.75, and 1.0 times generator capacity.
6. Include airflow requirements for cooling and combustion air in cubic feet per minute at 0.8 power factorProvide Drawings indicating requirements and limitations for location of air intake and exhausts.
7. Include generator characteristics, including, but not limited to, kilowatt rating, efficiency, reactances, and short-circuit current capability.

B. Shop Drawings:

1. Include plans and elevations for engine generator and other components specified. Indicate access requirements affected by height of subbase fuel tank.
2. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
3. Identify fluid drain ports and clearance requirements for proper fluid drain.
4. Design calculations for selecting vibration isolators and seismic restraints and for designing vibration isolation bases.
5. Vibration Isolation Base Details: Detail fabrication including anchorages and attachments to structure and to supported equipment. Include base weights.
6. Include diagrams for power, signal, and control wiring. Complete schematic, wiring, and interconnection diagrams indicating terminal markings for engine generators and functional relationship between all electrical components.

1.4 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer, manufacturer and testing agency.

B. Seismic Qualification Data: Certificates, for engine generator, accessories, and components, from manufacturer.

1. Basis for Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.

2. Dimensioned Outline Drawings of Equipment Unit: With engine and generator mounted on rails, identify center of gravity and total weight and each piece of equipment not integral to the engine generator, and locate and describe mounting and anchorage provisions.
3. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.

C. Source Quality-Control Reports: Including, but not limited to, the following:

1. Certified summary of prototype-unit test report.
2. Certified Test Reports: For components and accessories that are equivalent, but not identical, to those tested on prototype unit.
3. Report of factory test on units to be shipped for this Project, indicating evidence of compliance with specified requirements.
4. Report of sound generation.
5. Report of exhaust emissions indicating compliance with applicable regulations.
6. Certified Torsional Vibration Compatibility: Comply with NFPA 110.

D. Field quality-control reports.

E. Warranty: For special warranty.

1.5 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For packaged engine generators to include in emergency, operation, and maintenance manuals.

1. In addition to items specified in Section 017823 "Operation and Maintenance Data," include the following:

a. List of tools and replacement items recommended to be stored at Project for ready access. Include part and drawing numbers, current unit prices, and source of supply.
b. Operating instructions laminated and mounted adjacent to generator location.
c. Training plan.

1.6 QUALITY ASSURANCE

A. Manufacturer Qualifications: Current certificate holder for compliance with ISO 9001.

B. Installer Qualifications: An authorized representative who is trained and approved by manufacturer.

C. Testing Agency Qualifications: Accredited by NETA.

1. Testing Agency's Field Supervisor: Certified by NETA to supervise on-site testing.

1.7 WARRANTY

A. Manufacturer's Warranty: Manufacturer agrees to repair or replace components of packaged engine generators and associated auxiliary components that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Five (5) years from date of commissioning. Include parts, labor and travel for the entire 5 year period

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Basis-of-Design Product: Subject to compliance with requirements, provide Generac Power Systems, Inc.; Model SD025T with upsized 35kW Alternator as supplied by Joe Thorne, Huntington Power, joethorne@huntingtonpower.com / 203-929-3203 x220.

1. Generac (Basis of Design)
2. Caterpillar, Inc.; Electric Power Division.
3. MTU Onsite Energy

B. Source Limitations: Obtain packaged engine generators and auxiliary components from single source from single manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. Seismic Performance: Engine generator housing, subbase fuel tank, engine generator, batteries, battery racks, silencers, sound attenuating equipment, accessories, and components to withstand the effects of earthquake motions determined in accordance with local code

B. NFPA Compliance:

1. Comply with NFPA 37.
2. Comply with NFPA 70.
3. Comply with NFPA 99.
4. Comply with NFPA 110 requirements for Level **1** EPSS.

C. UL Compliance: Comply with UL 2200.

D. Engine Exhaust Emissions: Comply with EPA requirements and applicable state and local government requirements.

E. Noise Emission: Comply with applicable state and local government requirements for maximum noise level at adjacent property boundaries due to sound emitted by engine generator

including engine, engine exhaust, engine cooling-air intake and discharge, and other components of installation.

F. Environmental Conditions: Engine generator system shall withstand the following environmental conditions without mechanical or electrical damage or degradation of performance capability:

1. Ambient Temperature: 50 deg C
2. Relative Humidity: Zero to 95 percent.

3. Altitude: Sea level to 1000 ft.

2.3 ENGINE GENERATOR ASSEMBLY DESCRIPTION

A. Factory-assembled and -tested, water-cooled engine, with brushless generator and accessories.

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and use.

C. Power Rating: 25kW

D. EPSS Class: Engine generator shall be classified as a Class 24

E. Power Factor: 0.8, lagging.

F. Frequency: 60 Hz.

G. Voltage: As indicated on drawings

H. Phase: Three-phase, four wire

I. Induction Method: Turbocharged.

J. Governor: Adjustable isochronous, with speed sensing.

K. Mounting Frame: Structural steel framework to maintain alignment of mounted components without depending on concrete foundation. Provide lifting attachments sized and spaced to prevent deflection of base during lifting and moving.

1. Rigging Diagram: Inscribed on metal plate permanently attached to mounting frame to indicate location and lifting capacity of each lifting attachment and engine generator center of gravity.

L. Capacities and Characteristics:

1. Power Output Ratings: Nominal ratings as indicated at 0.8 power factor excluding power required for the continued and repeated operation of the unit and auxiliaries, with capacity as required to operate as a unit as evidenced by records of prototype testing.
2. Nameplates: For each major system component to identify manufacturer's name and address, and model and serial number of component.

M. Engine Generator Performance:

1. Steady-State Voltage Operational Bandwidth: 3 percent of rated output voltage from no load to full load.
2. Transient Voltage Performance: Not more than 20 percent variation for 50 percent step-load increase or decrease. Voltage shall recover and remain within the steady-state operating band within three seconds.
3. Steady-State Frequency Operational Bandwidth: 0.5 percent of rated frequency from no load to full load.
4. Steady-State Frequency Stability: When system is operating at any constant load within the rated load, there shall be no random speed variations outside the steady-state operational band and no hunting or surging of speed.
5. Transient Frequency Performance: Less than 5 percent variation for 50 percent step-load increase or decrease. Frequency shall recover and remain within the steady-state operating band within five seconds.
6. Output Waveform: At no load, harmonic content measured line to line or line to neutral shall not exceed 5 percent total and 3 percent for single harmonics. Telephone influence factor, determined in accordance with NEMA MG 1, shall not exceed 50 percent.
7. Sustained Short-Circuit Current: For a three-phase, bolted short circuit at system output terminals, system shall supply a minimum of 300 percent of rated full-load current for not less than 10 seconds and then clear the fault automatically, without damage to generator system components.
8. Start Time:

a. Comply with NFPA 110, Type 10 system requirements.
b. 10 seconds.

2.4 DIESEL ENGINE

A. Fuel: ASTM D975, diesel fuel oil, Grade 2-D S15.

B. Displacement: 2.2L

C. Rated Engine Speed: 1800 rpm.

D. Lubrication System: Engine or skid-mounted.

1. Filter and Strainer: Rated to remove 90 percent of particles 5 micrometers and smaller while passing full flow.
2. Thermostatic Control Valve: Control flow in system to maintain optimum oil temperature. Unit shall be capable of full flow and is designed to be fail-safe.
3. Crankcase Drain: Arranged for complete gravity drainage to an easily removable container with no disassembly and without use of pumps, siphons, special tools, or appliances.

E. Jacket Coolant Heater: Electric-immersion type, factory installed in coolant jacket system. Comply with UL 499 and with NFPA 110 requirements for Level 1 equipment for heater capacity.

F. Integral Cooling System: Closed loop, liquid cooled, with radiator factory mounted on engine generator set mounting frame and integral engine-driven coolant pump.

1. Coolant: Solution of 50 percent ethylene-glycol-based antifreeze and 50 percent water, with anticorrosion additives as recommended by engine manufacturer.
2. Size of Radiator: Adequate to contain expansion of total system coolant from cold start to 110 percent load condition.
3. Expansion Tank: Constructed of welded steel plate and rated to withstand maximum closed-loop coolant system pressure for engine used. Equip with gauge glass and petcock.
4. Temperature Control: Self-contained, thermostatic-control valve modulates coolant flow automatically to maintain optimum constant coolant temperature as recommended by engine manufacturer.
5. Maximum Ambient Operating Temperature: 122 deg F (50 deg C).
6. Coolant Hose: Flexible assembly with inside surface of nonporous rubber and outer covering of aging-, UV-, and abrasion-resistant fabric.

    a. Rating: 50-psig (345-kPa) maximum working pressure with coolant at 180 deg F (82 deg C), and noncollapsible under vacuum.
    b. End Fittings: Flanges or steel pipe nipples with clamps to suit piping and equipment connections.

G. Muffler/Silencer:

1. Critical type, sized as recommended by engine manufacturer and selected with exhaust piping system to not exceed engine manufacturer's engine backpressure requirements.

    a. Sound level measured at a distance of 23 ft. (7 m) from exhaust discharge after installation is complete shall be 62 dBA or less.

H. Air-Intake Filter: Heavy-duty, engine-mounted air cleaner with replaceable dry-filter element and "blocked filter" indicator.

I. Starting System: 12 or 24-V electric, with negative ground.

1. Components: Sized so they are not damaged during a full engine-cranking cycle with ambient temperature at maximum specified in "Performance Requirements" Article.
2. Cranking Motor: Heavy-duty unit that automatically engages and releases from engine flywheel without binding.
3. Cranking Cycle: As required by NFPA 110 for system level specified.
4. Battery: Lead acid, with capacity within ambient temperature range specified in "Performance Requirements" Article to provide specified cranking cycle at least three times without recharging.
5. Battery Cable: Size as recommended by engine manufacturer for cable length indicated. Include required interconnecting conductors and connection accessories.

6. Battery-Charging Alternator: Factory mounted on engine with solid-state voltage regulation and 35-A minimum continuous rating.
7. Battery Charger: Current-limiting, automatic-equalizing, and float-charging type designed for lead-acid batteries. Unit shall comply with UL 1236 and include the following features:

    a. Operation: Equalizing-charging rate of 10 A shall be initiated automatically after battery has lost charge until an adjustable equalizing voltage is achieved at battery terminals. Unit shall then be automatically switched to a lower float-charging mode and shall continue to operate in that mode until battery is discharged again.
    b. Automatic Temperature Compensation: Adjust float and equalize voltages for variations in ambient temperature from minus 40 to 140 deg F to prevent overcharging at high temperatures and undercharging at low temperatures.
    c. Automatic Voltage Regulation: Maintain constant output voltage regardless of input voltage variations up to plus or minus 10 percent.
    d. Ammeter and Voltmeter: Flush mounted in door. Meters shall indicate charging rates.
    e. Safety Functions: Sense abnormally low battery voltage and close contacts providing low battery voltage indication on control and monitoring panel. Sense high battery voltage and loss of ac input or dc output of battery charger. Either condition shall close contacts that provide a battery-charger malfunction indication at system control and monitoring panel.

    f. Enclosure and Mounting: NEMA 250, Type 1, wall-mounted cabinet.

2.5 DIESEL FUEL-OIL SYSTEM

A. Comply with NFPA 37.

B. Main Fuel Pump: Mounted on engine to provide primary fuel flow under starting and load conditions.

C. Fuel Filtering: Remove water and contaminants larger than 1 micron.

D. Relief-Bypass Valve: Automatically regulates pressure in fuel line and returns excess fuel to source.

E. Subbase-Mounted, Double-Wall, Fuel-Oil Tank: Factory installed and piped, complying with UL 142 fuel-oil tank. Features include the following:

1. Tank level indicator.
2. Fuel-Tank Capacity: 130 Useable gallons for minimum 48hr. runtime @ 100% load
3. Leak detection in interstitial space.
4. Vandal-resistant fill cap.
5. Containment Provisions: Comply with requirements of authorities having jurisdiction.
6. Provide full tank of fuel prior to startup.

2.6 CONTROL AND MONITORING

A. Automatic Starting System Sequence of Operation: When mode-selector switch on the control and monitoring panel is in the automatic position, remote-control contacts in one or more separate automatic transfer switches initiate starting and stopping of engine generator. When mode-selector switch is switched to the on position, engine generator starts. The off position of

same switch initiates engine generator shutdown. When engine generator is running, specified system or equipment failures or derangements automatically shut down engine generator and initiate alarms.

B. Manual Starting System Sequence of Operation: Switching on-off switch on the generator control panel to the on position starts engine generator. The off position of same switch initiates engine generator shutdown. When engine generator is running, specified system or equipment failures or derangements automatically shut down engine generator and initiate alarms.

C. Provide minimum run time control set for 30 minutes with override only by operation of a remote emergency-stop switch.

D. Control panel must comply with UL 6200.

E. Web Browser Interface: All user interaction accomplished via standard web browser interface. Solutions requiring dedicated software for connectivity are not acceptable.

F. Remote Connectivity: User interface available both internally and externally to the user's network, based on network security preferences. All remote connectivity may be disabled at any time by the user.

G. Automated Notification: Controller capable of sending multiple automated e-mail and SMS alerts without intermediate service provider.

H. Notification Customization: User configurable allowing any operational or fault condition to initiate notification to any personnel including (but not limited to) generator service provider.

I. Environmentally Hardened Design: Open circuit boards, edge cards, and PC ribbon cable connections are unacceptable.

J. Circuit boards with surface-mounted components to provide vibration durability. Circuit boards utilizing large capacitors or heat sinks must utilize encapsulation methods to securely support these components.

K. Configuration:

1. Operating and safety indications, protective devices, basic system controls, and engine gauges shall be grouped in a common control and monitoring panel mounted on the engine generator. Mounting method shall isolate the control panel from engine generator vibration. Panel powered from the engine generator battery.

L. Control and Monitoring Panel:

1. Digital engine generator controller with integrated touch screen, controls, and microprocessor, capable of local and remote control, monitoring, and programming, with battery backup.
2. Instruments: Located on the control and monitoring panel and viewable during operation.

a. Engine lubricating-oil pressure gauge.
b. Engine-coolant temperature gauge.

c. DC voltmeter (alternator battery charging).
d. Running-time meter.
e. AC voltmeter, for each phase.

f. AC ammeter, for each phase.
g. AC frequency meter.
h. Generator-voltage adjusting feature.

3. Controls and Protective Devices: Controls, shutdown devices, and common alarm indication, including the following:

a. Cranking control equipment.
b. Run-Off-Auto switch.

c. Control switch not in automatic position alarm.
d. Overcrank alarm.

e. Overcrank shutdown device.
f. Low-water temperature alarm.
g. High engine temperature pre-alarm.

h. High engine temperature.
i. High engine temperature shutdown device.
j. Overspeed alarm.
k. Overspeed shutdown device.
l. Low fuel main tank.
m. Coolant low-level alarm.
n. Coolant low-level shutdown device.
o. Coolant high-temperature prealarm.

p. Coolant high-temperature alarm.
q. Coolant low-temperature alarm.
r. Coolant high-temperature shutdown device.
s. EPS load indicator.
t. Battery high-voltage alarm.

u. Low cranking voltage alarm.
v. Battery-charger malfunction alarm.

w. Battery low-voltage alarm.
x. Lamp test.
y. Contacts for local and remote common alarm.
z. Remote manual stop shutdown device.
aa. Generator overcurrent-protective-device not-closed alarm.

bb. Hours of operation.
cc. Engine generator metering, including voltage, current, hertz, kilowatt, kilovolt ampere, and power factor.

M. Connection to Datalink:

1. A separate terminal block, factory wired to Form C dry contacts, for each alarm and status indication.

N. Common Remote Panel with Common Audible Alarm: Include necessary contacts and terminals in control and monitoring panel. Remote panel shall be powered from the engine generator battery.

O. Remote Alarm Annunciator: An LED indicator light labeled with proper alarm conditions shall identify each alarm event, and a common audible signal shall sound for each alarm condition. Silencing switch in face of panel shall silence signal without altering visual indication. Connect so that after an alarm is silenced, clearing of initiating condition will reactivate alarm until silencing switch is reset. Cabinet and faceplate are surface- or flush-mounting type to suit mounting conditions indicated.

1. Overcrank alarm.
2. Low water-temperature alarm.
3. High engine temperature pre-alarm.
4. High engine temperature alarm.
5. Low lube oil pressure alarm.
6. Overspeed alarm.
7. Low fuel main tank alarm.
8. Low coolant level alarm.
9. Low cranking voltage alarm.
10. Contacts for local and remote common alarm.
11. Audible-alarm silencing switch.
12. Air shutdown damper when used.
13. Run-Off-Auto switch.

14. Control switch not in automatic position alarm.

15. Fuel tank derangement alarm.

16. Fuel tank high-level shutdown of fuel supply alarm.
17. Lamp test.
18. Low-cranking voltage alarm.
19. Generator overcurrent-protective-device not-closed alarm.

P. Remote Emergency-Stop Switch: Flush; wall mounted unless otherwise indicated; and labeled. Push button shall be protected from accidental operation.

2.7 GENERATOR OVERCURRENT AND FAULT PROTECTION

A. Overcurrent protective devices shall be coordinated to optimize selective tripping when a short circuit occurs.

1. Overcurrent protective devices for the entire EPSS shall be coordinated to optimize selective tripping when a short circuit occurs. Coordination of protective devices shall consider both utility and EPSS as the voltage source.

2. Overcurrent protective devices for the EPSS shall be accessible only to authorized personnel.

B. Generator Overcurrent Protective Device:

1. Molded-case circuit breaker, complying with UL 489:

a. Tripping Characteristic: Designed specifically for generator protection.
b. Trip Rating: Matched to generator output rating.
c. Shunt Trip: Connected to trip breaker when engine generator is shut down by other protective devices.
d. Mounting: Adjacent to, or integrated with, control and monitoring panel.

C. Generator Protector: Microprocessor-based unit shall continuously monitor current level in each phase of generator output, integrate generator heating effect over time, and predict when thermal damage of alternator will occur. When signaled by generator protector or other engine generator protective devices, a shunt-trip device in the generator disconnect switch shall open the switch to disconnect the generator from load circuits. Protector performs the following functions:

1. Initiates a generator overload alarm when generator has operated at an overload equivalent to 110 percent of full-rated load for 60 seconds. Indication for this alarm is integrated with other engine generator malfunction alarms. Contacts shall be available for load shed functions.
2. Under single- or three-phase fault conditions, regulates generator to 300 percent of rated full-load current for up to 10 seconds.
3. As overcurrent heating effect on the generator approaches the thermal damage point of the unit, protector switches the excitation system off, opens the generator disconnect device, and shuts down the engine generator.
4. Senses clearing of a fault by other overcurrent devices and controls recovery of rated voltage to avoid overshoot.

D. Ground-Fault Indication: Comply with NFPA 70, "Emergency System" signals for ground fault.

1. Indicate ground fault with other engine generator alarm indications.
2. Trip generator protective device on ground fault.

E. Arc Energy Reduction: Comply with NFPA 70 for arc energy reduction for circuit breakers 1200A and greater.

1. Energy-reducing maintenance switch with local status indicator.
2. Instantaneous override that is less than the available arcing current.

2.8 GENERATOR, EXCITER, AND VOLTAGE REGULATOR

A. Provide 80 Deg C Alternator Rating, minimum 35kW rating

B. Comply with NEMA MG 1.

C. Drive: Generator shaft shall be directly connected to engine shaft. Exciter shall be rotated integrally with generator rotor.

D. Electrical Insulation: Class H.

E. Stator-Winding Leads: Brought out to terminal box to permit future reconnection for other voltages if required.

F. Construction shall prevent mechanical, electrical, and thermal damage due to vibration, overspeed up to 125 percent of rating, and heat during operation at 110 percent of rated capacity.

G. Enclosure: Dripproof.

H. Instrument Transformers: Mounted within generator enclosure.

I. Voltage Regulator: Solid-state type, separate from exciter, providing performance as specified and as required by NFPA 110.

1. Voltage Adjustment on Control and Monitoring Panel: Provide plus or minus 5 percent adjustment of output-voltage operating band.
2. Maintain voltage within 20 percent on one step, full load.

3. Provide anti-hunt provision to stabilize voltage.
4. Maintain frequency within 5 percent and stabilize at rated frequency within 5 seconds.

J. Strip Heater: Thermostatically controlled unit arranged to maintain stator windings above dew point.

K. Windings: Two-thirds pitch stator winding and fully linked amortisseur winding.

L. Subtransient Reactance: 12 percent, based on the rating of the engine generator set.

2.9 OUTDOOR ENGINE GENERATOR ENCLOSURE

A. Generator packaged within sound attenuated, weather-protective enclosure. **Sound level not to exceed 62 dBA @ 23ft.**

B. Sound Insulation: Enclosure and air discharge hood completely lined with 3 inches (76 mm) of fiberglass and perforated aluminum.

C. Enclosure Construction: Minimum 14 gauge steel with hinged, removable doors to allow access to the engine, alternator, and control panel. Adjustable hinges for door alignment. Hinges and all exposed fasteners must be stainless steel. Pop-rivets weaken the paint system and are not allowed on external painted surfaces. Each door equipped with lockable hardware and identical keys.

D. Upward discharging enclosure ventilation exhaust hood.

E. Enclosure Finish: Electrostatic applied powered paint, baked and finished to manufacturer's specifications.

F. Enclosure Color: Equipment Gray

G. Silencer mounted inside enclosure.

H. Engine-Cooling Airflow through Enclosure: Maintain temperature rise of system components within required limits when unit operates at 110 percent of rated load for two hours with ambient temperature at top of range specified in system service conditions.

1. Louvers: Fixed-engine, cooling-air inlet and discharge. Stormproof and drainable louvers prevent entry of rain and snow.

I. Convenience Outlets: Factory-wired, GFCI. Arrange for external electrical connection.

J. Load Center: Provide load factory wired load center for common connection point for all generator accessories.

2.10 VIBRATION ISOLATION DEVICES

A. Elastomeric Isolator Pads: Oil- and water-resistant elastomer or natural rubber, arranged in single or multiple layers, molded with a nonslip pattern and galvanized-steel baseplates of sufficient stiffness for uniform loading over pad area, and factory cut to sizes that match requirements of supported equipment.

1. Material: Standard neoprene separated by steel shims.

B. Comply with requirements in Section 232116 "Hydronic Piping Specialties" for vibration isolation and flexible connector materials for steel piping.

C. Comply with requirements in Section 233113 "Metal Ducts" for vibration isolation and flexible connector materials for exhaust shroud and ductwork.

D. Vibration isolation devices shall not be used to accommodate misalignments or to make bends.

2.11 FINISHES

A. Indoor and Outdoor Enclosures and Components: Manufacturer's standard finish over corrosion-resistant pretreatment and compatible primer.

B. Powder coated paint surfaces:

1. Minimum Paint Thickness: 2.5 mil (0.06 mm) in accordance with ASTM D 1186-87.
2. Material Hardness: ASTM D3363-92a.
3. Resistance to Cracking: ASTM D522-B.
4. Paint Adhesion: ASTM D3359-B.

5. Resistance to Salt Water Corrosion: ASTM B117, ASTM D1654.
6. Resistance to Humidity: ASTM D1735, ASTM D1654.
7. Impact Resistance: ASTM 2784.
8. UV Protection: SAE J1690.

2.12 SOURCE QUALITY CONTROL

A. Prototype Testing: Factory test engine generator using same engine model, constructed of identical or equivalent components and equipped with identical or equivalent accessories.

1. Tests: Comply with IEEE 115 and with NFPA 110, Level 1 Energy Converters.

B. Project-Specific Equipment Tests: Before shipment, factory test engine generator and other system components and accessories manufactured specifically for this Project. Perform tests at rated load and power factor. Include the following tests:

1. Test components and accessories furnished with installed unit that are not identical to those on tested prototype to demonstrate compatibility and reliability.
2. Test generator, exciter, and voltage regulator as a unit.
3. Full load run.
4. Maximum power.
5. Voltage regulation.
6. Transient and steady-state governing.
7. Single-step load pickup.
8. Safety shutdown.
9. Provide 14 days' advance notice of tests and opportunity for observation of tests by Owner's representative.
10. Report factory test results within 10 days of completion of test.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas, equipment bases, and conditions, with Installer present, for compliance with requirements for installation and other conditions affecting packaged engine generator performance.

B. Examine roughing-in for piping systems and electrical connections. Verify actual locations of connections before packaged engine generator installation.

C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Interruption of Existing Electrical Service: Do not interrupt electrical service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary electrical service in accordance with requirements indicated:

1. Notify Architect, Construction Manager and Owner no fewer than two working days in advance of proposed interruption of electrical service.
2. Do not proceed with interruption of electrical service without Architect's, Construction Manager's and Owner's written permission.

3.3 INSTALLATION

A. Comply with NECA 1 and NECA 404.

B. Comply with packaged engine generator manufacturers' written installation and alignment instructions and with NFPA 110.

C. Equipment Mounting:

1. Install packaged engine generators on cast-in-place concrete equipment bases. Comply with requirements for equipment bases and foundations specified in Section 033000 "Cast-in-Place Concrete."
2. Coordinate size and location of concrete bases for packaged engine generators. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified with concrete.

D. Install packaged engine generator to provide access, without removing connections or accessories, for periodic maintenance.

E. Install electrical devices furnished by equipment manufacturers but not specified to be factory mounted.

F. Provide full tank of fuel prior to startup.

3.4 CONNECTIONS

A. Piping installation requirements are specified in other Sections. Drawings indicate general arrangement of piping and specialties.

B. Connect fuel, cooling-system, and exhaust-system piping adjacent to packaged engine generator to allow space for service and maintenance.

C. Connect engine exhaust pipe to engine with flexible connector.

D. Ground equipment in accordance with Section 260526 "Grounding and Bonding for Electrical Systems."

E. Connect wiring in accordance with Section 260519 "Low-Voltage Electrical Power Conductors and Cables." Provide a minimum of one 90-degree bend in flexible conduit routed to the engine generator from a stationary element.

F. Balance single-phase loads to obtain a maximum of 10 percent unbalance between any two phases.

3.5 IDENTIFICATION

A. Identify system components in accordance with Section 230553 "Identification for HVAC Piping and Equipment" and Section 260553 "Identification for Electrical Systems."

B. Install a sign indicating the generator neutral is bonded to the main service neutral at the main service location.

3.6 FIELD QUALITY CONTROL

A. Testing Agency:

1. Owner will engage a qualified testing agency to perform tests and inspections.
2. Engage a qualified testing agency to perform tests and inspections.
3. Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations, including connections.
4. Perform tests and inspections with the assistance of a factory-authorized service representative.

B. Tests and Inspections:

1. Perform tests recommended by manufacturer and each visual and mechanical inspection and electrical and mechanical test listed in first two subparagraphs below, as specified in NETA ATS. Certify compliance with test parameters.

    a. Visual and Mechanical Inspection:

        1) Compare equipment nameplate data with Drawings and the Specifications.
        2) Inspect physical and mechanical condition.
        3) Inspect anchorage, alignment, and grounding.
        4) Verify that the unit is clean.

    b. Electrical and Mechanical Tests:

        1) Test protective relay devices.
        2) Verify phase rotation, phasing, and synchronized operation as required by the application.
        3) Functionally test engine shutdown for low oil pressure, overtemperature, overspeed, and other protection features as applicable.
        4) Perform vibration test for each main bearing cap.
        5) Verify correct functioning of the governor and regulator.

2. NFPA 110 Acceptance Tests: Perform tests required by NFPA 110 that are additional to those specified here, including, but not limited to, single-step full-load pickup test.
3. Battery Tests: Equalize charging of battery cells in accordance with manufacturer's written instructions. Record individual cell voltages.

a. Measure charging voltage and voltages between available battery terminals for full-charging and float-charging conditions. Check electrolyte level and specific gravity under both conditions.
b. Test for contact integrity of all connectors. Perform an integrity load test and a capacity load test for the battery.
c. Verify acceptance of charge for each element of the battery after discharge.
d. Verify that measurements are within manufacturer's specifications.

4. Battery-Charger Tests: Verify specified rates of charge for both equalizing and float-charging conditions.
5. System Integrity Tests: Methodically verify proper installation, connection, and integrity of each element of engine generator system before and during system operation. Check for air, exhaust, and fluid leaks.
6. Exhaust-System Back-Pressure Test (non-enclosed units): Use a manometer with a scale exceeding 40-inch wg (120 kPa). Connect to exhaust line close to engine exhaust manifold. Verify that back pressure at full-rated load is within manufacturer's written allowable limits for the engine.
7. Exhaust Emissions Test: Comply with applicable government test criteria.
8. Voltage and Frequency Transient Stability Tests: Use recording oscilloscope to measure voltage and frequency transients for 50 and 100 percent step-load increases and decreases, and verify that performance is as specified.
9. Harmonic-Content Tests: Measure harmonic content of output voltage at 25 and 100 percent of rated linear load. Verify that harmonic content is within specified limits.
10. Noise Level Tests: Measure A-weighted level of noise emanating from engine generator installation, including engine exhaust and cooling-air intake and discharge, and compare measured levels with required values.

C. Coordinate tests with tests for transfer switches and run them concurrently.

D. Test instruments shall have been calibrated within the past 12 months, traceable to NIST Calibration Services, and adequate for making positive observation of test results. Make calibration records available for examination on request.

E. Leak Test: After installation, charge exhaust, coolant, and fuel systems and test for leaks. Repair leaks and retest until no leaks exist.

F. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation for generator and associated equipment.

G. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

H. Remove and replace malfunctioning units and retest as specified above.

I. Retest: Correct deficiencies identified by tests and observations, and retest until specified requirements are met.

J. Report results of tests and inspections in writing. Record adjustable relay settings and measured insulation resistances, time delays, and other values and observations. Attach a label or tag to each tested component indicating satisfactory completion of tests.

3.7 MAINTENANCE SERVICE

A. Initial Maintenance Service: Beginning at Substantial Completion, maintenance service shall include 12 <twelve> months' full maintenance by skilled employees of manufacturer's authorized service representative. Include quarterly preventive maintenance and exercising to check for proper starting, load transfer, and running under load. Include routine preventive maintenance as recommended by manufacturer and adjusting as required for proper operation. Parts shall be manufacturer's authorized replacement parts and supplies.

3.8 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain packaged engine generators.

END OF SECTION 263213.13

SECTION 263600 – TRANSFER SWITCHES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Contactor-type automatic transfer switches.
2. Transfer switch accessories.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for transfer switches.
2. Include rated capacities, operating characteristics, electrical characteristics, and accessories.

B. Shop Drawings:

1. Include plans, elevations, sections, details indicating minimum clearances, conductor entry provisions, gutter space, and installed features and devices.
2. Include material lists for each switch specified.
3. Single-Line Diagram: Indicate connections between transfer switch, power sources, and load; and indicate interlocking provisions for each combined transfer switch and bypass/isolation switch.
4. Riser Diagram: Indicate interconnection wiring between transfer switches, bypass/isolation switches, annunciators, and control panels.

1.3 INFORMATIONAL SUBMITTALS

A. Qualification Data: For manufacturer-authorized service representative and testing agency.

B. Seismic Qualification Data: Certificates, for transfer switches, accessories, and components, from manufacturer.

1. Basis for Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.
2. Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity and locate and describe mounting and anchorage provisions.
3. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.

C. Field quality-control reports.

1.4 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For each type of product to include in emergency, operation, and maintenance manuals.

1. In addition to items specified in Section 017823 "Operation and Maintenance Data," include the following:

a. Features and operating sequences, both automatic and manual.
b. List of all factory settings of relays; provide relay-setting and calibration instructions, including software, where applicable.

1.5 QUALITY ASSURANCE

A. Testing Agency Qualifications:

1. Member company of NETA.

a. Testing Agency's Field Supervisor: Certified by NETA to supervise on-site testing.

1.6 FIELD CONDITIONS

A. Interruption of Existing Electrical Service: Do not interrupt electrical service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary electrical service:

1. Notify Architect, Construction Manager, Owner no fewer than two weeks in advance of proposed interruption of electrical service.
2. Do not proceed with interruption of electrical service without Architect's, Construction Manager's, Owner's written permission.

1.7 WARRANTY

A. Manufacturer's Warranty: Manufacturer agrees to repair or replace components of transfer switch or transfer switch components that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Five (5) years from date of commissioning. Include parts, labor and travel for the entire 5 year period

PART 2 - PRODUCTS

2.1 SCOPE

A. Furnish and install automatic transfer switch(es) with number of poles, amperage, voltage, and withstand current ratings as indicated on plans. Each automatic transfer must consist of a mechanically held power transfer switch unit and a microprocessor controller, interconnected to provide complete automatic operation. All transfer switches and control panels must be the product of the same manufacturer.

2.2 PERFORMANCE REQUIREMENTS

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. Comply with NEMA ICS 1, ICS 10, MG1, MG250, ICS 6, AB1.

C. Comply with NFPA 99.

D. Comply with NFPA 110.

E. Comply with UL 1008 unless requirements of these Specifications are stricter.

F. Comply with CSA C22.2 No. 178-1978.

G. Comply with IEC 60947-6-1 and IEC 61000-4 (1-6).

H. Indicated Current Ratings: Apply as defined in UL 1008 for continuous loading and total system transfer, including tungsten filament lamp loads not exceeding 30 percent of switch ampere rating, unless otherwise indicated.

I. Tested Fault-Current Closing and Short-Circuit Ratings: Adequate for duty imposed by protective devices at installation locations in Project under the fault conditions indicated, based on testing in accordance with UL 1008.

1. Where transfer switch includes internal fault-current protection, rating of switch and trip unit combination must exceed indicated fault-current value at installation location.
2. Short-time withstand capability for 3 cycles.

J. Repetitive Accuracy of Solid-State Controls: All settings plus or minus 2 percent or better over an operating temperature range of minus 20 to plus 70 deg C.

K. Resistance to Damage by Voltage Transients: Components meet or exceed voltage-surge withstand capability requirements when tested in accordance with IEEE C62.62. Components meet or exceed voltage-impulse withstand test of NEMA ICS 1.

L. Electrical Operation: Accomplish by a nonfused, momentarily energized solenoid or electric-motor-operated mechanism. Switches for emergency or standby purposes must be mechanically and electrically interlocked in both directions to prevent simultaneous connection to both power sources unless closed transition.

M. Neutral Terminal: Solid and fully rated unless otherwise indicated.

N. Heater: Equip switches exposed to outdoor temperatures and humidity, and other units indicated, with an internal heater. Provide thermostat within enclosure to control heater.

O. Annunciation, Control, and Programming Interface Components: Devices at transfer switches for communicating with remote programming devices, annunciators, or annunciator and control panels must have communication capability matched with remote device.

P. Factory Wiring: Train and bundle factory wiring and label, consistent with Shop Drawings, by color-code or by numbered or lettered wire and cable with printed markers at terminations. Color-coding and wire and cable markers are specified in Section 260553 "Identification for Electrical Systems."

1. Designated Terminals: Pressure type, suitable for types and sizes of field wiring indicated.
2. Power-Terminal Arrangement and Field-Wiring Space: Suitable for top, side, or bottom entrance of feeder conductors as indicated.
3. Control Wiring: Equipped with lugs suitable for connection to terminal strips.

Q. Enclosures: General-purpose NEMA 250, Type 1 for indoor locations and Type 3R for outdoor locations complying with NEMA ICS 6 and UL 508, unless otherwise indicated.

1. Provide temperature and humidity controlled anti-condensation strip heater.
2. Switch mechanism and controller must be easily removable from enclosure backplate in field to facilitate easy single-person installation, conduit fitting, and cable pulling while minimizing risk of damage and/or contamination of ATS components during the installation process.

2.3 CONTACTOR-TYPE AUTOMATIC TRANSFER SWITCHES

A. Basis-of-Design Product: Subject to compliance with requirements, provide Generac Power Systems, Inc.; or comparable product by one of the following:
   1. Generac Power Systems
   2. Automatic Switch Company; ASCO.
   3. Russelectric, Inc.

B. Comply with Level 1 equipment in accordance with NFPA 110.

C. Switch Characteristics: Designed for continuous-duty repetitive transfer of full-rated current between active power sources.

   1. Limitation: Switches using molded-case switches or circuit breakers or insulated-case circuit-breaker components are unacceptable.
   2. Switch Action: Double throw; mechanically held in both directions.
   3. Contacts: Silver composition or silver alloy for load-current switching. Contactor-style automatic transfer-switch units, rated 600 A and higher, must have separate arcing contacts.
   4. Conductor Connectors: Suitable for use with conductor material and sizes.
   5. Ground bar.

6. Connectors marked for conductor size and type in accordance with UL 1008.

D. Automatic Open-Transition Transfer Switches: Interlocked to prevent the load from being closed on both sources at the same time.

1. Sources must be mechanically and electrically interlocked to prevent closing both sources on the load at the same time.

E. Manual Switch Operation, Non-Load-Breaking: Unloaded. Control circuit automatically disconnects from electrical operator during manual operation.

F. Signal-Before-Transfer Contacts: A set of normally open/normally closed dry contacts operates in advance of retransfer to normal source. Interval adjustable from 1 to 30 seconds.

G. Digital Communication Interface: Matched to capability of remote annunciator or annunciator and control panel. Controller capable of interfacing, through a standard RS-485 serial communication port with a network of transfer switches.

H. Controller Features:

1. Controller operates through a period of loss of control power. Control logic backed up with a rechargeable, user-replaceable, lithium-ion battery that also maintains control power for up to 60 minutes in event no source power is available.
2. Controller power supply field-configurable to operate on 120 to 480 V ac systems without transformers.
3. Controller capable of single- and three-phase applications for maximum flexibility and minimal spare part requirements. True RMS voltage sensing accurate to 1 percent of nominal voltage. Frequency sensing accurate to 0.1 Hz. Time-delay settings accurate to 0.5 percent of the full-scale value of the time delay.
4. Operating Temperature Range: Minus 4 to plus 158 deg F (minus 20 to plus 70 deg C).

5. Controller connected to transfer switch by an interconnecting wiring harness with keyed disconnect plug to enable controller to be disconnected from transfer switch for routine maintenance.
6. Front Communication Port: User-accessible USB port to facilitate firmware updates, downloading of event history and switch operational statistics.
7. Undervoltage Sensing for Each Phase of Normal[and Alternate Source: Sense low phase-to-ground voltage on each phase. Pickup voltage adjustable from 85 to 100 percent of nominal, and dropout voltage adjustable from 75 to 98 percent of pickup value. Factory set for pickup at 90 percent and dropout at 85 percent.
8. Voltage/Frequency Lockout Relay: Prevent premature transfer to generator. Pickup voltage adjustable from 85 to 100 percent of nominal. Factory set for pickup at 90 percent. Pickup frequency adjustable from 90 to 100 percent of nominal. Factory set for pickup at 95 percent.
9. Time Delay for Retransfer to Normal Source: Adjustable from zero to 30 minutes, and factory set for 10 minutes. Override must automatically defeat delay on loss of voltage or sustained undervoltage of emergency source, provided normal supply has been restored.
10. Test Switch: Simulate normal-source failure.
11. Switch-Position Pilot Lights: Indicate source to which load is connected.
12. Source-Available Indicating Lights: Supervise sources via transfer-switch normal- and emergency-source sensing circuits.

    a. Normal Power Supervision: Green light with nameplate engraved "Normal Source Available."
    b. Emergency Power Supervision: Red light with nameplate engraved "Emergency Source Available."

13. Unassigned Auxiliary Contacts: Two normally open, single-pole, double-throw contacts for each switch position, rated 10 A at 250-V ac.
14. Transfer Override Switch: Overrides automatic retransfer control so transfer switch will remain connected to emergency power source regardless of condition of normal source. Pilot light indicates override status.
15. Electromagnetic Compatibility (EMC) in accordance with:

    a. IEC 60947-6-1 Multiple Function Equipment Transfer Switching Equipment.
    b. IEC 61000-4-1 Testing and Measurement Techniques.
    c. IEC 61000-4-2 Electrostatic Discharge Immunity.
    d. IEC 61000-4-3 Radiated RF Field Immunity.
    e. IEC 61000-4-4 Electrical Fast Transient/Burst Immunity.
    f. IEC 61000-4-5 Surge Immunity.
    g. IEC 61000-4-6 Conducted RF Immunity.
    h. CISPR 11 Conducted RF Emissions and Radiated RF Emissions.

16. Engine Starting Contacts: One isolated and normally closed, and one isolated and normally open; rated 5 A at 30-V dc minimum.
17. Engine Starting Circuit Supervision: Continuous monitoring of the remote start circuit for broken, disconnected, or shorted conditions in accordance with NFPA 70, Article 700.10(D)(4).
18. Engine Shutdown Contacts:

    a. Time delay adjustable from zero to five minutes, and factory set for five minutes. Contacts initiate shutdown at remote engine-generator controls after retransfer of load to normal source.

19. Engine-Generator Exerciser: Solid-state, programmable-time switch starts engine generator and transfers load to it from normal source for a preset time, then retransfers and shuts down engine after a preset cool-down period. Initiates exercise cycle at preset intervals adjustable from 7 to 30 days. Running periods adjustable from 10 to 30 minutes. Factory settings for 7-day exercise cycle, 20-minute running period, and 5-minute cool-down period. Exerciser features include the following:

    a. Exerciser Transfer Selector Switch: Permits selection of exercise with and without load transfer.
    b. Push-button programming control with digital display of settings.
    c. Integral battery operation of time switch when normal control power is unavailable.

20. Data Logging and Diagnostics:

    a. Controllers that require multiple screens to determine system status or display "coded" system status messages, which must be explained by references in operator's manual, are unacceptable.
    b. Self-Diagnostics: Diagnostic screen for detecting system errors, including information on status of input signals that may be preventing load transfer commands from being completed.
    c. Data Logging: Ability to log data and maintain last 99 events, even in event of total power loss. Events time and date stamped and maintained in a non-volatile memory.
    d. Controller must log the following events:

        1) Date, time, and reason for transfer normal to emergency.
        2) Date, time, and reason for transfer emergency to normal.
        3) Date, time, and reason for engine start.
        4) Date and time engine stopped.
        5) Date and time emergency source available.
        6) Date and time emergency source not available.

    e. Controller must retain the following statistical data:

        1) Total number of transfers.
        2) Total number of transfers due to source failure.
        3) Total number of days controller is energized.
        4) Total number of hours both normal and emergency sources are available.
        5) Total time load is connected to normal.

6) Total time load is connected to emergency.
7) Last engine start.
8) Last engine startup time.
9) Input and output status.

I. Large-Motor-Load Power Transfer:

1. In-Phase Monitor: Factory-wired, internal relay controls transfer so contacts close only when the two sources are synchronized in phase and frequency. Relay must compare phase relationship and frequency difference between normal and emergency sources and initiate transfer when both sources are within 15 electrical degrees, and only if transfer can be completed within 60 electrical degrees. Transfer initiated only if both sources are within 2 Hz of nominal frequency and 70 percent or more of nominal voltage.
2. Motor Disconnect and Timing Relay Controls: Designated starters in loss of power scenario must disconnect motors before transfer and reconnect them selectively at an adjustable time interval after transfer. Control connection to motor starters must be through wiring external to automatic transfer switch. Provide adjustable time delay between 1 and 60 seconds for reconnecting individual motor loads. Provide relay contacts rated for motor-control circuit inrush and for actual seal currents to be encountered.

J. Factory Tests: Test and inspect components, assembled switches, and associated equipment in accordance with UL 1008. Ensure proper operation. Check transfer time and voltage, frequency, and time-delay settings for compliance with specified requirements. Perform dielectric strength test complying with NEMA ICS 1.

K. Prepare test and inspection reports.

1. For each of the tests required by UL 1008, performed on representative devices, for emergency systems. Include results of test for the following conditions:

a. Overvoltage.
b. Undervoltage.
c. Loss of supply voltage.
d. Reduction of supply voltage.
e. Alternative supply voltage or frequency is at minimum acceptable values.
f. Temperature rise.
g. Dielectric voltage-withstand; before and after short-circuit test.
h. Overload.
i. Contact opening.
j. Endurance.

k. Short circuit.
l. Short-time current capability.
m. Receptacle withstand capability.
n. Insulating base and supports damage.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Floor-Mounting Switch: Anchor to floor by bolting.

1. Install transfer switches on cast-in-place concrete equipment base(s). Comply with requirements for equipment bases and foundations specified in Section 033000 "Cast-in-Place Concrete."
2. Comply with requirements for seismic control devices specified in Section 260548.16 "Seismic Controls for Electrical Systems."
3. Coordinate size and location of concrete bases. Cast anchor-bolt inserts into bases.
4. Provide workspace and clearances required by NFPA 70.

B. Annunciator and Control Panel Mounting: Flush in wall unless otherwise indicated.

C. Identify components in accordance with Section 260553 "Identification for Electrical Systems."

D. Set field-adjustable intervals and delays, relays, and engine exerciser clock.

E. Comply with NECA 1.

3.2 CONNECTIONS

A. Wiring to Remote Components: Match type and number of cables and conductors to generator sets, control, and communication requirements of transfer switches as recommended by manufacturer. Increase raceway sizes at no additional cost to Owner if necessary to accommodate required wiring.

B. Wiring Method: Install cables in raceways and cable trays except within electrical enclosures. Conceal raceway and cables except in unfinished spaces.

1. Comply with requirements for raceways and boxes specified in Section 260533 "Raceways and Boxes for Electrical Systems."

C. Wiring within Enclosures: Bundle, lace, and train conductors to terminal points with no excess and without exceeding manufacturer's limitations on bending radii.

D. Ground equipment in accordance with Section 260526 "Grounding and Bonding for Electrical Systems."

E. Connect wiring in accordance with Section 260519 "Low-Voltage Electrical Power Conductors and Cables."

F. Connect twisted pair cable in accordance with Section 260523 "Control-Voltage Electrical Power Cables."

G. Connect twisted pair cable in accordance with Section 271513 "Communications Copper Horizontal Cabling."

H. Route and brace conductors in accordance with manufacturer's written instructions and Section 260529 "Hangers and Supports for Electrical Systems". Do not obscure manufacturer's markings and labels.

I. Brace and support equipment in accordance with Section 260548.16 "Seismic Controls for Electrical Systems."

J. Final connections to equipment shall be made with liquidtight, flexible metallic conduit no more than 18 inches (457 mm) in length.

3.3 FIELD QUALITY CONTROL

A. Administrant for Tests and Inspections:

1. Owner will engage qualified testing agency to administer and perform tests and inspections.
2. Engage qualified testing agency to administer and perform tests and inspections.
3. Engage factory-authorized service representative to administer and perform tests and inspections on components, assemblies, and equipment installations, including connections.
4. Administer and perform tests and inspections with assistance of factory-authorized service representative.

B. Tests and Inspections:

1. After installing equipment, test for compliance with requirements in accordance with NETA ATS.
2. Visual and Mechanical Inspection:

    a. Compare equipment nameplate data with Drawings and Specifications.
    b. Inspect physical and mechanical condition.
    c. Inspect anchorage, alignment, grounding, and required clearances.
    d. Verify that the unit is clean.
    e. Verify appropriate lubrication on moving current-carrying parts and on moving and sliding surfaces.
    f. Verify that manual transfer warnings are attached and visible.
    g. Verify tightness of all control connections.
    h. Inspect bolted electrical connections for high resistance using one of the following methods, or both:

        1) Use of low-resistance ohmmeter.
        2) Verify tightness of accessible bolted electrical connections by calibrated torque-wrench method in accordance with manufacturer's published data.

    i. Perform manual transfer operation.
    j. Verify positive mechanical interlocking between normal and alternate sources.
    k. Perform visual and mechanical inspection of surge arresters.
    l. Inspect control power transformers.

        1) Inspect for physical damage, cracked insulation, broken leads, tightness of connections, defective wiring, and overall general condition.
        2) Verify that primary and secondary fuse or circuit-breaker ratings match Drawings.
        3) Verify correct functioning of drawout disconnecting contacts, grounding contacts, and interlocks.

3. Electrical Tests:

    a. Perform insulation-resistance tests on all control wiring with respect to ground.
    b. Perform a contact/pole-resistance test. Compare measured values with manufacturer's acceptable values.
    c. Verify settings and operation of control devices.
    d. Calibrate and set all relays and timers.
    e. Verify phase rotation, phasing, and synchronized operation.
    f. Perform automatic transfer tests.
    g. Verify correct operation and timing of the following functions:

        1) Normal source voltage-sensing and frequency-sensing relays.
        2) Engine start sequence.
        3) Time delay on transfer.
        4) Alternative source voltage-sensing and frequency-sensing relays.
        5) Automatic transfer operation.
        6) Interlocks and limit switch function.
        7) Time delay and retransfer on normal power restoration.

8) Engine cool-down and shutdown feature.

4. Measure insulation resistance phase-to-phase and phase-to-ground with insulation-resistance tester. Include external annunciation and control circuits. Use test voltages and procedure recommended by manufacturer. Comply with manufacturer's specified minimum resistance.

   a. Check for electrical continuity of circuits and for short circuits.
   b. Inspect for physical damage, proper installation and connection, and integrity of barriers, covers, and safety features.
   c. Verify that manual transfer warnings are properly placed.
   d. Perform manual transfer operation.

5. After energizing circuits, perform each electrical test for transfer switches stated in NETA ATS and demonstrate interlocking sequence and operational function for each switch at least three times.

   a. Simulate power failures of normal source to automatic transfer switches and retransfer from emergency source with normal source available.
   b. Simulate loss of phase-to-ground voltage for each phase of normal source.
   c. Verify time-delay settings.
   d. Verify pickup and dropout voltages by data readout or inspection of control settings.
   e. Test bypass/isolation unit functional modes and related automatic transfer-switch operations.
   f. Perform contact-resistance test across main contacts and correct values exceeding 500 microhms and values for one pole deviating by more than 50 percent from other poles.
   g. Verify proper sequence and correct timing of automatic engine starting, transfer time delay, retransfer time delay on restoration of normal power, and engine cool-down and shutdown.

6. Ground-Fault Tests: Coordinate with testing of ground-fault protective devices for power delivery from both sources.

   a. Verify grounding connections and locations and ratings of sensors.

C. Coordinate tests with tests of generator and run them concurrently.

D. Report results of tests and inspections in writing. Record adjustable relay settings and measured insulation and contact resistances and time delays. Attach a label or tag to each tested component indicating satisfactory completion of tests.

E. Transfer switches will be considered defective if they do not pass tests and inspections.

F. Remove and replace malfunctioning units and retest as specified above.

G. Prepare test and inspection reports.

H. Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform an infrared scan of each switch. Remove all access panels so joints and connections are accessible to portable scanner.

1. Instrument: Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
2. Record of Infrared Scanning: Prepare a certified report that identifies switches checked and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.
3. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan of each switch 11 months after date of Substantial Completion.

3.4 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain transfer switches and related equipment.

B. Training shall include testing ground-fault protective devices and instructions to determine when the ground-fault system shall be retested. Include instructions on where ground-fault sensors are located and how to avoid negating the ground-fault protection scheme during testing and circuit modifications.

C. Coordinate this training with that for generator equipment.

END OF SECTION 263600

ENGINEER'S FIELD OFFICE – INTERNET SERVICE

The Contractor shall be responsible for providing a Business Class internet connection with a minimum download speed of 60 Mbps and a minimum upload speed of 5 Mbps. The internet connection shall include a local area network that can either be a wired connection with a minimum of 4 x 10Base-T/100Base-TX – RJ-45 connections with min. Cat5e cables or a wireless connection (min. 802.11n) for at least two (2) people. The cost of providing a Business Class internet connection and all necessary equipment and wiring for the local area network shall be included in the price bid for Item 637.11, Engineer's Field Office – Type 1.

OFFICE TECHNOLOGY AND SUPPLIES

Item 637.34, Office Technologies and Supplies, will be used to pay for any office related supplies such as copy paper, copier toner, etc., not included under Item 637.11, Engineer's Field Office – Type 1. The Contractor shall receive approval from the Engineer in Charge prior to the purchase of **ANY** Office Technology and Supplies and requests for reimbursement.

Section 5

SPECIAL SPECIFICATIONS & REVISIONS TO STANDARD SPECIFICATIONS

208.01030022 – BIORETENTION AND DRY SWALE SOIL
208.01040022 – LABAROATORY TESTING FOR SOIL PHOSPHORUS CONCENTRATION

520.09000010 – SAW CUTTING ASPHALT CONCRETE

520.50000004 – SAWING CONCRETE

555.72940001 – ARCHITECTURAL TREATMENT – VERTICAL CONCRETE SURFACES

595.50000018 – SHEET-APPLIED WATERPROOFING MEMBRANE

595.98200018 – SPRAY-APPLIED WATERPROOFING MEMBRANE

603.98XX0007 – POLYVINYL CHLORIDE (PVC) SEWER PIPE & FITTINGS

613.04000001 – STOCKPILING AND PLACING EXISTING STREAM BED MATERIALS

615.80010005 – RAILING

627.50140008 – CUTTING PAVEMENT

634.84010007 – SANITARY SEWER PUMPING STATION

634.99010017 – BUILDING CONDITION SURVEY
634.99020017 – VIBRATION MONITORING (NONBLASTING)

645.81090003 – RETROREFLECTIVE SIGN POST STRIP

655.05010008 – STANDARD SANITARY MANHOLE FRAMES AND COVERS (CASTINGS)
655.05020008 – WATERTIGHT SANITARY MANHOLE FRAMES AND COVERS (CASTINGS)

655.25010005 – FURNISH AND/OR INSTALL INLET ASSEMBLY, AS SPECIFIED

659.70000101 – ABANDON MANHOLES

660.21XX0008 – FURNISH AND INSTALL STEEL CASING

664.40xx0006 – PRECAST SANITARY SEWER MANHOLE

Current Standard Specifications can be found at:
https://www.dot.ny.gov/main/business-center/engineering/specifications/busi-e-standards-usc

ITEM 208.01030022 BIORETENTION AND DRY SWALE SOIL
ITEM 208.01040022 LABORATORY TESTING FOR SOIL PHOSPHORUS CONCENTRATION

DESCRIPTION

This work shall consist of installing Bioretention and Dry Swale Soil in accordance with the contract documents and as directed by the Engineer.

The work shall also consist of having the Bioretention and Dry Swale Soil tested for total soil phosphorus concentration at a qualified laboratory. A qualified laboratory shall be defined as a laboratory that is certified by the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) to test soil for total soil phosphorous.

MATERIALS

The following sections of the standard specifications apply:

§703-07	Concrete Sand
§713-01	Topsoil, Type A (see exceptions below)

The soil for Bioretention areas and Dry Swales shall be a uniform mix, free of stones, stumps, roots or other objects larger than two inches (2") in diameter. The Bioretention and Dry Swale soil shall be visibly free of noxious weeds.

Bioretention and Dry Swale Soil shall be a well blended mixture of three (3) parts sand and one (1) part topsoil, by volume. The Bioretention and Dry Swale Soil shall have a pH range of 5.2 to 7.6, and an organic content of 3-7%.

Sand shall meet the requirements of §703-07 *Concrete Sand*.

Topsoil shall be in accordance with the requirements of §713-01 *Topsoil* for Topsoil Type A, except as follows:

- All topsoil shall be sampled and tested, regardless of the source.
- Sampling of topsoil, amended topsoil, and the Bioretention and Dry Swale Soil shall be done by the Contractor/Supplier. Sampling protocol shall be in accordance with §713-01 *Topsoil.*

Soil amendments to increase organic content shall be peat moss. Peat moss shall be commercially produced and shall be composed of the partly decomposed stems and leaves of any or several species of sphagnum moss. It shall be free from wood, decomposed colloidal residue, and other foreign matter. It shall have a pH range between 3.5 pH - 5.5 pH as determined in accordance with the Association of Official Agricultural Chemists' testing methods. It's water-absorbing ability shall be a minimum of 1100% by weight on an oven-dry basis.

Acceptance of Bioretention and Dry Swale soil will be based upon a material certification that the

ITEM 208.01030022 BIORETENTION AND DRY SWALE SOIL
ITEM 208.01040022 LABORATORY TESTING FOR SOIL PHOSPHORUS CONCENTRATION

material conforms to the above requirements. The Contractor/Supplier shall provide to the Engineer copies of testing results of the sand gradation, topsoil gradation, organic content percentage of the Bioretention and Dry Swale Soil, and pH of the Bioretention and Dry Swale Soil. These tests are to be paid under the Bioretention and Dry Swale Soil item.

The Contractor shall provide to the Engineer copies of testing results for Soil Phosphorus Concentration. Samples to be submitted to the qualified laboratory shall be obtained in accordance with §713-01 *Topsoil*. Sampling shall be paid under the pay item for Bioretention and Dry Swale Soil. The results of the Soil Phosphorus analysis shall not be used as the basis for material acceptance.

Sampling frequency for total phosphorous shall be one composite sample for the first 100 to 500 cubic yards of soil, and an additional composite sample for each additional 500 cubic yards, or portion thereof. No samples are required for stockpiles of less than 100 cubic yards.

CONSTRUCTION DETAILS

Bioretention and Dry Swale Soil shall be installed at the locations and to the depth(s) as shown in the contract documents. Placement of Bioretention and Dry Swale Soil shall be done in lifts of 12 inches to 18 inches. The soil shall be loosely compacted, such as by tamping lightly with a dozer or backhoe bucket. No other materials or substances shall be mixed or dumped within the Bioretention area and Dry Swale that may be harmful to plant growth, or prove a hindrance to planting or maintenance operations.

METHOD OF MEASUREMENT

Bioretention and Dry Swale Soil

The work will be measured as the number of cubic yards of Bioretention and Dry Swale Soil installed, computed from payment lines shown in the contract documents.

Laboratory Testing for Soil Phosphorus Concentration

The work will be measured by the number of soil samples analyzed for Soil Phosphorus Concentration by a qualified laboratory.

BASIS OF PAYMENT

The unit price bid for a cubic yard of Bioretention and Dry Swale Soil shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work, including costs for testing.

The unit price bid for Laboratory Testing for Soil Phosphorus Concentration, shall include the receipted costs of testing, including the cost of the laboratory test(s) and all labor, materials and equipment required to obtain and deliver soil sample(s) to the qualified laboratory plus 5% for profit

ITEM 208.01030022 BIORETENTION AND DRY SWALE SOIL
ITEM 208.01040022 LABORATORY TESTING FOR SOIL PHOSPHORUS CONCENTRATION

and overhead.

ITEM 520.09000010 - SAW CUTTING ASPHALT CONCRETE

DESCRIPTION. This work shall consist of saw cutting existing asphalt concrete pavement or sidewalk at the locations indicated on the plans or where directed by the Engineer.

MATERIALS. All equipment proposed for this work shall be approved by the Engineer prior to actual use.

CONSTRUCTION DETAILS. Saw cutting shall be along a neat line as indicated on the plans or where directed by the Engineer. Saw cuts shall be made to the depth(s) indicated on the plans.

Any damage to material not indicated for removal, caused by the Contractor's operations shall be repaired by the Contractor. All repair shall be done in a manner satisfactory to the Engineer.

METHOD OF MEASUREMENT. This work will be measured by the number of linear feet of saw cutting done. No allowances will be made for saw cuts of different depths.

No saw cutting will be measured for payment under this item which the Contractor may choose to do for his own convenience.

BASIS OF PAYMENT. The unit price bid per linear foot of saw cutting shall include the cost of all labor, materials, and equipment necessary to complete the work.

Any repairs made necessary by the Contractor's operations shall be done to the satisfaction of the Engineer at no additional cost to the State.

ITEM 520.50000004 - SAWING CONCRETE

DESCRIPTION: Under this item the Contractor shall saw cut portland cement concrete in accordance with the plans and as directed by the Engineer.

MATERIALS: (Non Specified)

CONSTRUCTION DETAILS: Portland cement concrete shall be saw cut along a neat line at the locations and depths specified on the plan or as directed by the Engineer. Care shall be taken not to disturb or damage existing concrete to remain.

METHOD OF MEASUREMENT: The quantity to be paid for will be the number of linear feet of sawing accomplished in accordance with the plans and specifications and as directed by the Engineer

BASIS OF PAYMENT: The unit price bid for this work shall include the cost of all labor, materials and equipment necessary to complete the work.

ITEM 555.72940001 - ARCHITECTURAL TREATMENT - VERTICAL CONCRETE SURFACES

DESCRIPTION:

This work shall consist of architecturally treating the vertical surface(s) of concrete retaining walls, structures, wing walls, or other similar vertical surfaces with a designated pattern(s) and texture(s). All work shall be in accordance with these specifications in and reasonably close conformity to the lines, grades and patterns shown on the plans.

MATERIALS:

Any commercially produced formliner meeting the requirements of this subsection will be acceptable. Polystyrene formliners are for one-time usage only and shall be allowed only if the formwork will not be reused. The formliners shall:

1. Produce the pattern required by the plans.
2. Be composed of a material(s) that will not bond to concrete.
3. Be attachable to standard plywood, or steel, concrete forms, such that no distortion, or stray markings, occur within the concrete surfaces.

Formliners will be acceptable at the work site upon written certification that the requirements of this subsection have been met.

Cast-in-place concrete - Class A or as shown in the contract documents shall meet the requirements of Section 501, Portland Cement Concrete - General.

Releasing Agents. If the formliner manufacturer requires the use of an agent to facilitate the release of the formliner panel from the concrete, or when its use is specified on the plans, such agent shall be non-staining and evenly spread over the entire linear surface. Formwork shall also be treated as needed.

Caulking Compound. When a caulking compound is required to seal any necessary concrete joints in the imprinted surface, such caulking compounds shall meet the material requirements of Subsection 705-06 of the Standard Specifications, Caulking Compound for Structures.

CONSTRUCTION DETAILS:

Special care shall be taken after installation to ensure that all formliner surfaces are thoroughly clean of all stray material of any nature. No concrete shall be placed prior to the Engineer's inspection and approval of formliner surfaces.

Approximately 5/64” of the formliner panel shall overlap on either side of the formwork panel so that when the formwork sections are forced together, the formliners compress at the edges to form a tight joint. Joints between panels shall be sealed, taped or fused to form a watertight seam, according to the manufacturer's instructions. Unless specified on the plans, texturing is not required on surfaces which will be below finished grade. Plastic snap tie cones are to be of the non-leaking type. Metal form ties are not to be placed closer than 1 1/2” to the interior surface.

ITEM 555.72940001 - ARCHITECTURAL TREATMENT - VERTICAL CONCRETE SURFACES

Concrete shall be placed in accordance with Section 555, Structural Concrete

Construction joints shall extend to the full depth of the concrete at the locations shown on the plans. When construction joints are needed but are not shown on the plans, the Contractor and the Engineer shall agree on the proper locations of such joints so as to not distract from the appearance of the imprinted pattern and to minimize the possibilities of cracking.

After formwork removal the Engineer will inspect architecturally patterned concrete surfaces. All such surfaces which do not exhibit the required architectural pattern shall be repaired in a manner satisfactory to the Engineer at no cost to the State. The repair shall match the concrete surface. Concrete repair material, if used, shall meet the requirements of Subsection 701-04, Concrete Repair Material of the Standard Specifications.

METHOD OF MEASUREMENT:

Architecturally treated vertical concrete surfaces shall be measured by the number of square feet of concrete treated to the satisfaction of the Engineer. The quantity shall be as computed from payment lines shown on the plans or as established by the Engineer in writing. Measurement will be taken as the vertical plane projection of the treated location. No measurement will be taken of actual concrete surfaces.

BASIS OF PAYMENT:

The unit price bid per square foot shall include the cost of the formliners, the concrete needed to fill the formliner, releasing agents, caulking compounds, patch mix, and all other materials, equipment and labor necessary to complete the work as specified.

ITEM 595.50000018 – SHEET-APPLIED WATERPROOFING MEMBRANE

DESCRIPTION

Furnish and install a manually or machine-applied sheet waterproofing membrane in accordance with the contract documents. Include all surface preparation.

MATERIALS

Use a sheet-applied waterproofing membrane meeting the requirements of §717-02.

CONSTRUCTION DETAILS

General - On new structural concrete, the provisions of §557-3.11, Curing, shall be met prior to membrane system placement. Work will not be done during wet-weather conditions. No work will be done when the concrete structural slab surface temperature is below 50°F, or ambient temperatures are below 50°F. The concrete structural slab shall be surface dry at the time of application of the membrane. The Engineer will verify that atmospheric conditions are favorable for placement of the system based on the manufacturer's recommendations.

Arrange for the membrane manufacturer to have a competent technical representative at the job site during all phases of preparation and installation.

Supply Material Safety Data Sheets (MSDS) and approved Material Detail Sheets prepared by the membrane manufacturer to the Engineer a minimum of two (2) weeks prior to the scheduled commencement of work. The Material Detail Sheets will contain all material requirements and installation information for each specific waterproofing membrane. The Material Detail Sheets will be accessible at the Department's Approved List website for reference.

(Bridge Decks) – Begin work no less than (7) calendar days after placement of Portland cement concrete, Portland cement mortar, or epoxy mortar for structural concrete repair. The Engineer may waive the seven-day requirement if the areas of repair can sustain loads without damage or deformation. Subject to the concurrence of the Engineer, if an alternate concrete repair material is used, follow the manufacturer's instructions for allowable loading.

(Culverts) - Fill the joints between precast culvert sections flush to the culvert slab and sidewall surfaces with a grout conforming to §701-08 Vertical and Overhead Patching Material. In areas where the joints do not line up evenly, taper the grout with a maximum slope of 2:1, from the high side of the joint to the low side, to provide a smooth transition from one unit to the next.

Place the waterproofing membrane over the joints of precast or cast-in-place units following the guidelines of Chapter 19 of the Highway Design Manual, or as indicated on the contract plans and Material Detail Sheets.

1. On vertical surfaces, the waterproofing membrane will be covered with material conforming to §705-07 Premoulded Resilient Joint Filler.

2. On horizontal surfaces.

ITEM 595.50000018 – SHEET-APPLIED WATERPROOFING MEMBRANE

Membrane Protection (Culverts) – To protect the waterproofing membrane from punctures, the following procedures will be used:

a. If select granular fill is specified over the culvert, a 6 inch thick protective layer of concrete sand, meeting the requirements of §703-07 Concrete Sand, will be placed on the membrane.

Or

b. If asphalt pavement using aggregate larger than 3/8 inch is specified directly above the membrane, or if clearances don't allow for 6 inches of concrete sand, a 1 inch thick (minimum) course of HMA with a maximum nominal aggregate size of 3/8 inch will be placed on top of the membrane. The hot mix asphalt will be thoroughly compacted with mechanical tampers.

METHOD OF MEASUREMENT

This work will be measured as the number of square feet of sheet-applied, waterproofing membrane satisfactorily installed (measured to the nearest 1 sq ft.). No separate measurement of the vertical faces of curbs, joints, concrete barriers, headers, scuppers, or for the inside surfaces of subdrainage outlets, shall be made. No deductions will be made for holes less than 1 square foot in area.

BASIS OF PAYMENT

The unit price bid per square foot for this item shall include the cost of furnishing all labor, materials, and equipment necessary to complete the work.

No additional payments will be made for any re-priming done in conformance with the requirements of the manufacturer's detail sheets.

ITEM 595.98200018 – SPRAY-APPLIED WATERPROOFING MEMBRANE

DESCRIPTION

The contractor shall furnish and install a spray-applied, waterproofing membrane in accordance with the contract documents, approved Material Detail Sheets (MDS), and as directed by the Engineer. All surface preparation and quality-control testing of substrates and the applied membrane are included.

MATERIALS

The spray-applied, waterproofing membrane shall meet the requirements of §717-02 and *ASTM C1305/ C1305M - 16 Crack Bridging Ability of Liquid-Applied Waterproofing Membrane.*

CONSTRUCTION DETAILS

General. The contractor shall arrange for the membrane manufacturer to have a competent technical representative with necessary equipment to perform the quality-control testing at the job site during all phases of preparation and installation. The technical representative shall present all quality-control testing equipment to the Engineer to verify calibration dates and demonstrate their competency to perform quality-control testing.

The contractor shall submit Safety Data Sheets (SDS) and approved MDS prepared by the membrane manufacturer to the Engineer a minimum of two weeks prior to the scheduled commencement of work. The contractor shall protect personnel exposed to primers and membranes in accordance with SDS and store all components of the membrane, including broadcast aggregates, at the job site in accordance with approved MDS.

The contractor shall use tarpaulin or other suitable masking to protect traffic, the surrounding environment and adjacent features from over spraying.

Membrane Application and Quality-Control Testing.

Substrate Preparation. All surfaces that are to receive the membrane shall be prepared in accordance with the approved (MDS). The contractor shall blast clean all surfaces as a minimum and remove residual matter using brooms and oil/moisture-free compressed air.

Substrate Moisture Content and Temperature. The contractor shall measure the surface moisture content (≤5% reading is required using a moisture meter) and temperature before applying the primer and membrane. The surface moisture content and temperature shall be within allowable tolerances as stated in the approved MDS. The contractor shall perform one test for every two thousand square feet of area as specified in the contract documents or a minimum of three tests.

Substrate Cohesion/Primer Adhesion. After the substrate has been prepared, the contractor shall test the cohesion of the substrate and the adhesion of the primer to the substrate in accordance with *ASTM D4541 – Pull-Off Strength of Coatings Using Portable Adhesion Testers.* The contractor shall conduct tests after the primer has sufficiently cured as determined by the technical representative. One test shall be performed for every two thousand square feet of prepared substrate area and at locations where deficient adhesion is suspected by the Engineer or a minimum of three tests. Required minimum adhesion strengths shall be 300 psi for each test on steel or 150 psi on Portland Cement Concrete substrates before applying primer to the remaining surface area.

Primer Application. The contractor shall apply primer to the substrate surface area at a rate specified in the approved MDS.

Membrane Application. The contractor shall apply each course of the membrane at a rate specified in the approved MDS. The membrane shall be applied in one or two coats to a minimum total thickness of 80 mils.

Membrane Thickness. The contractor shall measure the wet-film thickness of each course of membrane using a standard comb-type thickness gauge or measure the dry-film thickness of each course of membrane using a dry-film thickness gauge for nonferrous substrates.

One measurement for every one hundred square feet of membrane shall be done. The measured thickness of each course of the membrane and the entire thickness of the finished membrane shall be greater than or equal to 80 mils.

Membrane Pin Holes. Following the application and cure of the primer and membrane, the membrane shall be visually inspected for pinholes and integrity. Any defects shall be repaired as per the manufacturer recommendation.

Membrane Adhesion. The contractor shall test the adhesion of the membrane to the substrate in accordance with *ASTM D4541 – Pull-Off Strength of Coatings Using Portable Adhesion Testers.* One test shall be conducted for every two thousand square feet of membrane applied, and at locations where deficient adhesion is suspected by the Engineer or a minimum of three tests. The minimum adhesion strengths shall be 300 psi for each test on steel or 150 psi on Portland Cement Concrete substrates.

The contractor shall repair and correct any deficiencies in the membrane and substrate noted during quality-control testing as recommended by the manufacturer's representative at no additional cost to the State.

Binder Aggregate Application. When cold-applied, wearing-surface overlays are specified, or additional shear resistance between the membrane and the wearing surface is desirable, the contractor shall broadcast an aggregate binder onto the membrane in accordance with the approved MDS.

The aggregate binder shall be applied to the membrane before the membrane cures and as specified in the approved MDS. The aggregate and membrane shall be fully integrated after the aggregate has been applied and the membrane has cured. Loose aggregate shall be removed with brooms or oil/moisture-free compressed air before applying the tack coat.

Tack Coat Application. The contractor shall apply a tack coat to the finished membrane as specified in the MDS prior to overlaying the membrane with a wearing surface.

METHOD OF MEASUREMENT

This work will be measured as the number of square feet of spray-applied, waterproofing membrane satisfactorily furnished and installed as shown on the contract plans or ordered by the Engineer.

BASIS OF PAYMENT

The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work.

ITEM 603.98XX0007- POLYVINYL CHLORIDE (PVC) SEWER PIPE & FITTINGS

DESCRIPTION:

Under this item the Contractor shall furnish, install and test (PVC) Sewer Pipe and fittings of the size and at the locations shown on the plans or as ordered by the Engineer.

MATERIALS:

The Contractor shall be responsible for all material furnished under this item and shall replace at his expense all material found defective in manufacture or damaged in handling. Materials shall be as follows:

POLYVINYL CHLORIDE (PVC) SEWER PIPE

All Polyvinyl Chloride (PVC) pipe and fittings shall meet or exceed all of the requirements of ASTM specification D3034, "Type PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings," 4 NPS through 15 NPS, Class SDR-35 and ASTM F679 "(Polyvinyl Chloride) (PVC) Large Diameter Plastic Gravity Sewer Pipe and Fittings" for 18 NPS through 36 NPS. The minimum modules of elasticity shall be 19 lbs/sq. ft. All pipes shall be suitable for use as a gravity sewer conduit. Provisions must be made for contraction and expansion at each joint with a rubber ring. The bell shall consist of an integral wall section which securely locks the solid cross-section rubber ring into position. The gasket shall meet the requirements of ASTM F477-76.

Fittings - All fittings and accessories shall be as manufactured and furnished by the pipe supplier, and have bell and/or spigot configurations identical to that of the pipe to which they are connected. Service connections shall be of the "tee-wye" combination. The PVC pipe shall be cut to the correct length in the field as necessary to allow installation of new service connections or service connections to existing laterals.

Saddles - Where it is impractical to install a PVC "tee-wye" service connection, a saddle may be used to make a service connection for new lateral.

The saddle shall contain a rubber (O) - ring gasket cemented in place in accordance with ASTM D1869 specifications. The saddle shall have a spigot or bell inlet suitable for acceptance of the kind and size of lateral pipe to be connected. If necessary, a flexible coupling or gasket may be used to connect the lateral to this saddle. The saddle shall be installed in accordance with the manufacturer's specifications and shall meet any requirements established by the owners of the sewer system.

ITEM 603.98XX0007- POLYVINYL CHLORIDE (PVC) SEWER PIPE & FITTINGS

CONSTRUCTION DETAILS:

A) EXCAVATION - Excavation shall conform to the requirements of Item 206.02 - Trench and Culvert Excavation or Item 206.04 - Trench and Culvert Excavation - O.G., except as modified herein and the limits are shown in the Contract Plans.

B) BACKFILLING - No trench, pit or other excavation shall be backfilled until the pipe or appurtenant structures contained therein shall have been completely installed and inspected and approved by the Engineer. In backfilling around and over pipes, stone bedding material shall be spread in layers not over 6 inches in depth on both sides of the pipe and thoroughly spaded and tamped around the pipe so that no displacement of the pipe results. Backfill for a minimum distance of 2 ft above the top of the pipe shall be of the same material and shall be spread in layers not to exceed 6 inches in thickness or depth and each layer shall be thoroughly compacted by spading and tamping before further refilling is done. In all cases, the backfill above the top of the pipe shall be placed to a minimum of 18 inches before compaction is begun directly over the pipe.

C) DISPOSAL OF WATER - Except when included in another specification (i.e. work area located in a hazardous or contaminated area), water in excavated trenches or pits shall be removed by pumping, bailing or other satisfactory method before the installation of any pipe or structure. Water so removed shall be conveyed to such places and points that it will not interfere with the progress of the work or be a hazard or damage to public or private property. No water containing mud, grit or substances that would settle and be detrimental to the operation of sanitary sewers shall be permitted to flow into any storm or sanitary sewer or drain. No sewage entering excavated trenches or pits shall be pumped or dumped into any surface drainage course. No water, sewage or other material shall be allowed to enter any water main.

D) LAYING SEWER PIPE - Excavation of trenches for sewer pipe shall be made to the line and grade established or as directed by the Engineer and shall be made straight and true with no deviations from a straight line or grade between manholes.

The sewer pipe shall be bedded on a minimum of 6 inches of stone bedding material.

The trench bottom shall be flat. Holes for bells or couplings shall be dug so that no portion of the bell or coupling will contribute to the support of the pipe. The barrel of the pipe shall be uniformly supported throughout the entire length. Should over digging occur, all loosened material shall be removed and the trench bottom brought back to grade with stone bedding material. Bedding material shall be according to specifications and shall be placed and tamped in a manner satisfactory to the

ITEM 603.98XX0007- POLYVINYL CHLORIDE (PVC) SEWER PIPE & FITTINGS

Engineer. Bedding material in such instances shall be placed at the sole expense of the Contractor.

In areas of rock excavation the pipe shall be bedded on a minimum of 6 inches bedding material.

In areas where unstable trench bottoms are encountered, the trench shall be excavated to an additional depth below the layer of stone bedding material and a layer of stone foundation material placed and graded so as to properly support the bedding material, pipe, and backfill. The depth shall vary according to the actual conditions. Payment for such foundation material shall be as hereinafter specified.

All preformed joints shall be made according to manufacturer's specifications. Where it may be necessary to connect to existing facilities of like or unlike materials, such connection shall be made by use of special manufactured adapters as approved by the Engineer.

The inside of each pipe shall be inspected and all foreign matter, joint material that squeezed through, etc., shall be removed before backfilling. Care shall be taken in placing backfill so that the joints are not loosened or sprung. The backfill shall be packed and tamped into place under the pipe. All loosened or broken joints shall be removed and replaced.

E) LEAKAGE TESTS - Unless otherwise ordered by the Engineer, all sewers, service connections and sewer laterals, shall be tested for leakage and shall satisfactorily meet the test requirements. No connections to existing sewer laterals shall be made until the leakage requirements are met. The Contractor shall furnish all labor, materials and equipment and shall perform the tests. The Contractor shall make all necessary repairs or replacements and shall repeat the final leakage test(s), until the minimum leakage requirements are met.

Leakage tests shall be made only after backfilling is completed. Two types of tests will be acceptable: (a) Exfiltration Test or (b) Low Pressure Air Test. The type of test used will depend upon the extent and type of installation and shall be as directed by the Engineer.

(a) Exfiltration Test

This leakage test consists of an exfiltration test wherein the main sewer, sewer laterals and manholes are filled with clear water to provide a head of at least 5 ft above the top of the pipe or 5 ft above the level of the groundwater table, whichever is higher, at the highest point of the sewer line under test, and measuring the loss of water from the line by the amount which must be added to maintain the original level. In this test the

line must remain filled with water for at least 24 hours prior to taking measurements, and the actual test period shall not be less than two (2) hours.

For purposes of determining the elevation of the top of the groundwater table, the Contractor shall furnish and install an open-end standpipe of perforated pipe. The standpipe shall be installed at least 24 hours before the line is filled with water. One (1) standpipe shall be installed for each section of sewer line tested. A section of sewer is defined as the length of main sewer, including sewer laterals, between two consecutive manholes. Following successful completion of the leakage tests, the standpipe shall be filled with approved material and the top cut off at least 2 ft below finished grade.

Exfiltration shall be measured by the drop of water level in a standpipe or in one of the sewer manholes. When a standpipe and plug arrangement is used in the upper manhole of a line under test, there must be some positive method of releasing entrapped air in the sewer prior to taking measurements. In the case of sewers laid on steep grades, the length of line to be tested at any one time may be limited by the maximum allowable internal pressure on the pipe and joints at the lower end of the line. The recommendations of the pipe manufacturer shall be followed.

When the level of the groundwater table is of such height that the manholes cannot be used for convenient measuring, or if the vertical distance between the top of the pipe and the manhole rim is less than 5 ft, the Contractor shall test the pipe separately from the manholes utilizing the standpipe method including plugs, hoses, etc., to establish the required head of water. Manholes shall then be tested separately.

The total leakage of any section tested shall not exceed the rate of 30 gallons per mile of pipe per 24 hours per 1 inch of nominal pipe diameter. For purposes of determining the maximum allowable leakage, manholes shall be considered as sections of 4 ft or 5 ft diameter pipe, depending on the type manhole included in the test. The equivalent leakage allowance shall be 5 gallons per manhole per 24 hours for 4 ft diameter manholes, and 6 gallons per manhole per 24 hours for 5 ft diameter manholes.

(b) Low Pressure Air Test

This leakage test consists of plugging each section of sewer, pressurizing the line with air, and measuring the pressure drop time relationship.

Each end of the section of line to be tested shall be sealed off with inflatable pneumatic or manual plugs which shall hold against the air pressure without external bracing and without movement. Plugs shall have at least two valved connections opening into the pipe section, one for introducing low pressure air and one for

ITEM 603.98XX0007- POLYVINYL CHLORIDE (PVC) SEWER PIPE & FITTINGS

connecting an approved air gauge calibrated in .25 psi increments.

Air shall be introduced into the test section to a pressure of 4 psi above the average pressure of any ground water that may be over the pipe. In such ground water areas, the Contractor shall install during the original installation a ½ inch capped pipe nipple through the manhole wall at a level of the top of the lowest pipe. The ground water level shall be determined by clearing the nipple with air and connecting a clear plastic hose to the same and measuring the water level in the hose. The height of the water level in feet above the pipe invert divided by 2.3 shall establish the pounds pressure to be added to all readings.

A minimum of two minutes shall be allowed for the pressure to stabilize during which time the pressure shall not drop more than 0.5 psi. The air supply shall then be disconnected and the time in minutes shall be recorded for the pressure to drop no more than 1 psi. Such time shall not be less than the following:

NOMINAL SIZE	MINUTES
4 NPS	2.0
6 NPS	3.0
8 NPS	4.0
10 NPS	5.0
12 NPS	5.5
15 NPS	7.5
18 NPS	8.5
21 NPS	10.0
24 NPS	11.5
27 NPS	13.0
30 NPS	14.5
33 NPS	16.0
36 NPS	17.5

ITEM 603.98XX0007 M-POLYVINYL CHLORIDE (PVC) SEWER PIPE & FITTINGS

METHOD OF MEASUREMENT:

The quantity to be paid for under these items will be the number of feet of new sewer pipe (including all necessary connections and fittings) furnished and installed in accordance with the plans, specifications and as ordered by the Engineer.

BASIS OF PAYMENT:

The unit prices bid per yard for these items shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work including fittings, plugs, connections, and leakage tests.

Excavation, sheeting, and backfill material will be paid for separately under their respective items. Payment will be made under:

ITEM NO.	DESCRIPTION	UNIT OF	PAYMENT
603.98040007	PVC Sewer Pipe & Fittings	4 NPS	Feet
603.98060007	"	6 NPS	Feet
603.98080007	"	8 NPS	Feet
603.98100007	"	10 NPS	Feet
603.98120007	"	12 NPS	Feet
603.98150007	"	15 NPS	Feet
603.98180007	"	18 NPS	Feet
603.98210007	"	21 NPS	Feet
603.98240007	"	24 NPS	Feet
603.98270007	"	27 NPS	Feet
603.98300007	"	30 NPS	Feet
603.98330007	"	33 NPS	Feet
603.98360007	"	36 NPS	Feet

"Progress payments will be made at the unit price bid for 80 percent of the quantity of pipe installed. The remaining 20 percent will be paid for when the testing of the system has been completed."

ITEM 613.04000001 - STOCKPILING AND PLACING EXISTING STREAM BED MATERIALS

DESCRIPTION

This work shall consist of stockpiling and placing existing stream bed materials in conformance with the lines, grades and thickness shown in the Contract Documents or as directed by the Engineer.

MATERIALS

Stream bed materials shall come from the existing stream bed areas within the work limits as shown in the Contract Documents or as determined by the Engineer.

Stream bed materials shall be the surface layer of the native stream bed and shall be free of refuse and debris.

CONSTRUCTION DETAILS

1. Work Plan. The Contractor shall submit a work plan to the Engineer describing the methodology and equipment that will be utilized to complete the stripping, stockpiling, and placing of the stream bed materials. The work plan shall also identify the Contractor's protection of all watercourses from water borne sediment or other pollutants. No work shall commence in the stream bed until the Engineer has reviewed and provided the Contractor with written acceptance of the work plan.

2. Stripping of Existing Stream bed Materials. Stream bed materials shall be stripped from the areas and to the depth designated in the Contract Documents or as directed by the Engineer. The stream bed materials shall be stripped prior to starting the general excavation in the area. After stripping, the stream bed materials shall be immediately placed or stockpiled in a location approved by the Engineer and surrounded with an appropriate erosion control measure.

3. Preparation of Areas to Receive Stream bed Materials. The surface within the areas to be covered by stream bed materials shall be de-watered and graded so that the completed work after the stream bed material is placed, shall conform to the specified lines and grades. The Contractor shall chink the voids in these areas as necessary to the satisfaction of the Engineer, prior to the placement of the stream bed materials.

4. Placing and Spreading of Stream bed Materials. The stream bed materials shall be placed to the thickness and grade lines designated as shown in the contract documents and in a manner consistent with the approved work plan, unless otherwise directed by the Engineer.

5. Restoration. The sites of all stockpiles and areas adjacent thereto which have been disturbed by the Contractor shall be graded as required by the Engineer and put into a condition acceptable for seeding. Surplus stream bed materials shall be disposed of in accordance with the provisions of 203-Disposal of Surplus Excavated Material.

ITEM 613.04000001 - STOCKPILING AND PLACING EXISTING STREAM BED MATERIALS

METHOD OF MEASUREMENT

Stream bed material quantities shall be measured in cubic yards, computed from the final (in place) payment lines shown on the plans except where revised payment lines are established by the Engineer.

BASIS OF PAYMENT

The unit price bid shall include the cost of furnishing all equipment, labor, and materials necessary to complete the work as specified. The stripping (excavation) of the stream bed materials shall be paid for under the appropriate excavation item(s) as noted in the Contract Documents.

ITEM 615.80XX0005 - RAILING

Description

The Contractor shall furnish and install railings as shown in the contract documents or as directed by the Engineer. The Contractor shall verify the type, quantity, location and installation method for each type of railing with the Engineer prior to ordering. Acceptance may include approval by owning or maintaining agencies other than NYSDOT.

Materials

A. Railing - Materials shall be as specified in the contract documents.

B. Connecting Hardware - All hardware shall be as supplied or recommended by the manufacturer, as specified in the contract documents or as approved by the Engineer.

C. The sizes, shapes, finishes and colors of all handrails shall be as specified in the contract documents.

Construction Details

The railings shall be installed in the locations indicated in the contract documents, in accordance with the instructions supplied by the manufacturer or as indicated in the contract documents and as approved by the Engineer.

Method of Measurement

The quantity to be measured for payment under this item will be the number of feet measured along the centerline of railing anchorage, between the extreme outer limits shown on the plans, installed in a manner satisfactory to the Engineer.

Basis of Payment

The unit price bid shall include the cost of all labor, materials and equipment necessary to furnish and install the railings, including both fabrication and installation as per the contract plans, and the removal of any existing railing being replaced.

Payment will be made under:

Item	Description
615.80010005	Railing, Type 01
615.80020005	Railing, Type 02
615.80030005	Railing, Type 03
615.80040005	Railing, Type 04
615.80050005	Railing, Type 05

DESCRIPTION:

The contractor shall cut existing asphalt pavement, concrete pavement, asphalt surface course, or asphalt concrete overlay on concrete pavement at the locations indicated and detailed on the plans and as directed by the Engineer.

MATERIALS:

None specified.

CONSTRUCTION DETAILS:

Existing pavement and overlay shall be cut perpendicular to the roadway surface along neat lines, and to the depth indicated on the plans and typical sections, using appropriate equipment. After the pavement has been cut through, the Contractor may use pry bars, pneumatic tools or other methods, to pry loose the pavement to be removed from the pavement that is to remain. A pavement breaker may be used to break up the pavement to be removed after the pavement has been completely cut through and completely free from the pavement to remain.

When pavement cutting is called for in the Contract documents, if a neat vertical face with minimal shatter is obtained by performing an adjacent operation (such as milling) which eliminates the need to perform a separate pavement cutting operation, payment will be made for both the pavement cutting item and the item for the adjacent operation.

Any existing pavements and curbs not indicated to be removed that are damaged by the contractor's operations, shall be repaired at no additional cost to the State. Pavement cutting that the contractor chooses to do for his/her own convenience shall not receive any additional payment from the State.

METHOD OF MEASUREMENT:

The quantity to be measured will be the number of linear feet of pavement cutting satisfactorily completed.

BASIS OF PAYMENT:

The unit price bid per linear foot of pavement cutting shall include the cost of all labor, materials, and equipment necessary to satisfactorily complete the work.

Payment for prying, breaking, removal and disposal of cut pavement shall be made through other appropriate items.

ITEM 634.84010007 – SANITARY SEWER PUMPING STATION
DESCRIPTION

The work shall consist of providing a sanitary sewer pumping station complete with two (2) vertical, close-coupled, VFD motor driven, vacuum primed, non-clog pumps; valves; internal piping, central control panel with circuit breakers; motor starters and automatic pumping level controls; heater; ventilating blower; priming pumps and appurtenances; all internal wiring, and all appurtenances in accordance with the Plans and Specifications or as directed or as approved by the Engineer.

The Contractor shall provide all labor, materials and equipment, including excavation, backfilling, site grading, concrete, structures, equipment, piping, valves, fittings, electrical, paving, landscaping, other appurtenances, and incidentals as detailed on the drawings to provide a complete and operational pump station site for a complete installation and a ready for operation sanitary sewer pumping station.

MATERIALS

1. General
All materials and appurtenances required for the work shall be new and of a quality matching that specified herein. Where no specific kind or quality of material is given, a first class standard article as accepted by the Engineer shall be furnished. The pre-assembled sanitary pumping station shall be supplied by Smith & Loveless or approved equal as required by the owner.

2. Sanitary Sewer Pump Station Wet Well

a. Bedding Material
Bedding material for the wet well shall be crushed stone meeting the requirements of NYSDOT Material Designation 703-0201 (No. 1 and No. 2 Crushed Stone) and/or as directed or as approved by the Engineer.

b. Structures
The wet well shall be of pre-cast reinforced concrete construction meeting the requirements of Subsection 704-03, except as noted herein. The wet well shall have the interior and exterior surfaces bituminous coated. Precast concrete shall attain a minimum 28-day compression strength of 4,500 psi. The Engineer reserves the right to reject any pre-cast units that show evidence of poor workmanship or subsequent damage. All tie wires, spreaders, conduit openings, etc., shall be cut back at openings, at least 1.5 inches then repaired in accordance with Subsection 704-03. The manufacturer shall comply with all recommendations of the waterproofing company, so as to produce a completely waterproof structure. All joints and penetrations shall have O-ring or flexible wipe seals to prevent infiltration. The Precast Sanitary Pump Station Wet Well shall be:

ITEM 634.84010007 – SANITARY SEWER PUMPING STATION

Precast Sanitary Pump Station Structures, Manufactured By: JEFFERSON CONCRETE CORP. Watertown, New York 13601	Precast Sanitary Pump Station Structures, Manufactured By: BINGHAMTON PRECAST SUPPLY, Binghamton, New York	Precast Sanitary Pump Station Structures, Manufactured By: KISTNER CONCRETE PRODUCTS, East Pembrooke, New York

Or equal, as directed or as approved by the Engineer.

Wall thickness, floor thickness, together with length, width and height of the pump station wet well shall be as shown on the Drawings, and as required by building codes.

If shown on the Drawings, a counter flotation ring of concrete shall be poured in place. The joint between each section of the structure shall be fitted with a 2-inch butyl rope.

c. Access Hatches

Heavy Duty with Safety Grate: Where shown on the Contract Drawings, an access hatch shall be furnished and installed on the wet well chamber structure top slab. The access hatch shall be as indicated on the Drawings, and shall be an integral part of the station head plate. Access hatch and safety grates for the pump station wet well shall be sized per the selected pump system. The access doors shall be single leaf style for both hatch and safety grate. Manufacture, workmanship and certified proof-load tests shall conform to AASHTO M306-89-Standard Specification for Drainage Structure Castings.

1) Material:
    a) 6061-T6 Aluminum
    b) Delivered to site free of any coatings, unless otherwise specified.
2) Grating Frame:
    a) Five sided with a clear opening as indicated on the Drawings.
3) Grates:
    a) Semi-circular
    b) Minimum open area as indicated on the Drawings
    c) Supported by field fit stainless steel support brackets

When closed, the grate shall conform with OSHA 1910.23 for fall protection. The access hatches shall be:

Access Hatch w/Safety Grate Manufactured By: EJ Company 301 Spring Street East Jordan, MI	Access Hatch w/Safety Grate Manufactured By: Smith & Loveless, Inc. Lenexa, KS	Access Hatch w/Safety Grate Manufactured By: HALLIDAY PRODUCTS, Orlando, FL

ITEM 634.84010007 – SANITARY SEWER PUMPING STATION

Or equal, as directed or as approved by the Engineer.

d. Piping, Fittings, Valves and Specials, Etc.

The Contractor shall furnish and install all necessary piping, fittings, valves, and specials, etc. at the pump station, as required and as shown on the Drawings.

1) Plug Valve, 4 Inches and Larger

a) Valves shall be 100% full port, non-lubricated, tapered type.
b) Type: Cast iron body.
c) Plug: Drip-tight, steel with resilient facing bonded to sealing surface and suitable for sewage application.
d) Packing: Nitrile-Butadiene.
e) Bearings: Heavy duty stainless steel.
f) Pressures: Working Pressure: 125 psi CWP.
g) Valve Actuator: Adjustable memory stop with valve position indicator. 2-inch square actuating nut.
h) Flanged Joint: ANSI B16.1; Class 125, 250 psi working pressure minimum.
i) Coatings: All internal surfaces, except finished surfaces, gaskets, or bearing surfaces shall be epoxy coated in accordance with AWWA C550.
j) Eccentric plug valves shall conform to current AWWA standards.

The eccentric plug valves shall be:

Eccentric Plug Valve Manufactured by: KENNEDY VALVE COMPANY Elmira, NY	Eccentric Plug Valve Manufactured by: PRATT Aurora, IL	Eccentric Plug Valve Manufactured by: DEZURIK Sartell, MN

Or equal, as directed or as approved by the Engineer.

2) Check Valves

a) Check valves shall be a non-clog, unobstructed. The valve shall be suitable for 1030 kPa (150 psi) working pressure. Flanges shall be flat faced and drilled to ANSI B16.1, Class 125 cast iron.

b) The cast iron check valve body shall be designed so that the upper portion may be easily removed, without disturbing the end flange seals to adjacent piping, to service the shaft, arm and clapper or to remove

any material which may be causing clogging. One spare body gasket shall be supplied with each valve.

The check valve shall be:

FLYGT HDL Check Valve Manufactured By: ITT FLYGT CORPORATION Rochester, NY	Check Valve Manufactured By: CLOW VALVE COMPANY Oskaloosa, IA 52577	Rapid-Jack Check Valve Manufactured By: Smith & Loveless Lenexa, KS 66215

Or equal, as directed or as approved by the Engineer.

3) Pipe Joints

a) Flanges – Specials, Companion, and Adjustable:

Flange shall conform with ANSI B16.1, Class 125.
Material shall be ductile iron.
Threading shall conform with National Standard Pipe Thread.

b) Adaptor Flanges:

Adaptor flanges for ductile iron or steel pipe shall be manufactured of high strength ductile iron, ASTM A536, Grade 65-45-12. Flange dimensions and drilling shall be in accordance with ANSI B16.1, 125-pound pattern for cast iron, and/or ANSI B16.5, 150-pound pattern for steel. Gaskets shall be BUNAS (SBR) in accordance with ANSI/AWWA C111/A21.11 and shall be included with the flange. Set screws shall be of AISI 4140, high strength, low alloy steel, 190,000 psi minimum tensile strength, heat treated, and zinc plated for corrosion resistance. Set screws shall be of square-head design and coincide with the manufacturers torque installation requirements for all pipe thicknesses.

Adaptor flanges shall be UL listed and FM approved and shall be Uni-Flange TM Series 200/400, as manufactured by Uni-Flange Corporation, or as directed or as approved by the Engineer.

4) Pipe Supports:

All piping, fittings, valves and specials, etc. shall be adequately supported and/or restrained in the wetwell with the use of wall brackets, pipe stands, threaded rod, etc. All hardware shall be constructed of non-corrosive materials and be of a type capable to support and/or restrain the piping, etc. at twice the

normal working pressure. Vertical supports shall be placed under each valve, tee, and bend and/or cross. Anchors shall be 316 stainless steel expansion bolts and hardware. Coat all ferrous surfaces with two coats of coal tar epoxy if applicable. The piping within the package pump station does not require additional supports.

5) Pipe & Fittings:

a) Working Pressure:

All pipe, fittings, and joints shall be rated for a 150-psi minimum working pressure.

b) Ductile Iron:

Ductile iron, AWWA C-151, Thickness Class 52.
Fittings: Ductile iron, AWWA C-110.
Pressure Rating – Class 350.
Joints: Above grade, flanged.

c) Poly Vinyl Chloride (PVC) Pipe Schedule 80 or higher.

PVC, SCH. 80, ASTM D 3350
Pressure Class: 250 psi, unless otherwise noted on the Drawings.
Solvent Weld Fittings: PVC meeting same requirements as pipe. ASTM D2467 or D2464, AWWA C900, a PVC compound meeting requirements of cell class 12454 per ASTM D1784.
Gasketed bells shall conform to ASTM D3139 with gaskets conforming to ASTM F477. All fittings are to be made from NSF-approved material. Gaskets shall be locked-in style.

d) All piping, fittings, valves, and specials, etc. shall be of equal or greater quality than those specified herein. All piping fittings, valves, and specials, etc. shall be compatible with the pumps, pump controls, and liquid level sensor system associated with the pump station.

e) Asphaltic Touch-Up Paint for Pipe Fittings and Bolts

Material shall be a self-priming, heavy-duty, cold-applied, water-resistant coating made from pitch derived from suitable tars, selected solvents, and mineral fillers.

3. Pumps

Pumps shall be as identified as on the Drawings, and shall be an integral part of the factory assembled pumping station as requested by the Owner. The Contractor shall furnish all labor, materials, equipment, and incidentals required for installation of the suction lift sewage

ITEM 634.84010007 – SANITARY SEWER PUMPING STATION

pumping station. The pre-assembled pumping station shall be Smith & Loveless Model 4B2X*1 with solids handling vacuum assist suction pumps, 7.5 HP motors, 208V, 3-phase, or equal, as directed or as approved by the Engineer.

Once the Contractor correctly installs the sewage pumping station and has performed field tests to ensure the station is in operable condition, the Contractor shall connect the new 6-inch force main to the pump station discharge piping at the location noted on the Drawings.

a. General Requirements:

1) The station shall each be constructed in one (1) complete factory-built assembly. They shall be sized to rest on the top of the wet well as detailed in the construction drawings. The supporting floor plate shall be minimum 3/8" thick stainless steel.

2) The equipment chamber shall be completely isolated from the wet well in a gas tight configuration. Wet well access shall be completely separate from the equipment chamber and shall be provided with the access manway exposed only to the atmosphere.

3) The equipment chamber shall be provided with a dual hinged, insulated, fiberglass cover. A bracket shall be provided to support the cover in the open position and to restrain it under load.

4) The wet well manway hatch shall be an integral part of the station head plate and shall provide access into the wet well.

5) Both equipment chamber and wet well access cover shall be provided with hasp and staple arrangement for padlocking.

b. Welding

1) All steel and the station structure shall be jointed by electric arc welding with fillets of adequate section for the joint involved. Where required to exclude ground water, all welded joints on the exterior of the station shall be continuous throughout their length.

c. Protection Against Corrosion

1) After welding, all inside and outside surfaces of the structures, pumps and piping shall be steel shopblasted to a 2-mil minimum profile commercial blast. Immediately after cleaning, a single 6-mil minimum thickness insert coating shall be factory applied to all inside and outside surfaces. The coating shall be Versapox epoxy resin, formulated for abrasion and corrosion resistance. The dry coating shall contain a minimum of 85% epoxy resin with the balance being pigments and Thixotropic agents.

ITEM 634.84010007 – SANITARY SEWER PUMPING STATION

d. Sewage Pumps

1) The pumps shall be Smith & Loveless vertical, non-clog sewage pumps of heavy cast iron construction, especially designed for the use of mechanical seals and vacuum priming. In order to minimize seal wear caused by lineal movement of the shaft, the shaft bearing nearest the pump impeller shall be locked in place so that end play is limited to the clearance within the bearing. To minimize seal wear resulting from shaft deflection caused by the radial thrust of the pump, the shaft from the top of the impeller to the lower bearing supporting the impeller shall have a minimum diameter of 1-7/8". The dimensions from lowest bearing to top of impeller shall not exceed 6 inches.

2) The bearing nearest the impeller shall be designed for the combined thrust and radial load. The upper bearing shall be free to move linearly with a thermal expansion of the shaft and shall carry only radial loads.

3) The shaft shall be solid stainless steel through the pump and bottom bearing to eliminate corrosion with the pump or mechanical seal. Stainless steel shaft sleeves will not be acceptable.

4) The pump impeller shall be of the enclosed type made of close grained cast iron and shall be balanced. The S&L X-Peller is the preferred configuration. The impeller shall be keyed with a stainless steel key and secured to the motor shaft by a stainless steel cap screw equipped with a Nylock or other suitable self-locking device. The pump impeller shall be of the enclosed mono-port type made of close-grained cast-iron and shall be in dynamic balance when pumping wastewater. Two port impellers are specifically disallowed. The dynamic balance shall be obtained without the use of balance weights or liquid filled chambers. The impeller shall be designed to allow for the trimming of the impeller to meet design condition changes without altering the balance. The eye of the impeller as well as the port shall be large enough to permit the passage of a sphere 3” in diameter in accordance with nationally recognized codes. To further prevent clogging, the impeller port shall have a minimum area of 10.6 in2. The impeller shall be keyed with a stainless steel key and secured to the motor shaft by a stainless steel cap screw equipped with a Nylock or other suitable self-locking device. The impeller shall not be screwed or pinned to the motor pump shaft and shall be readily removable without the use of special tools. To prevent the buildup of stringy materials, grit and other foreign particles around the pump shaft, all impellers less than full diameter shall be trimmed inside the impeller shrouds. The shrouds shall remain full diameter so that close minimum clearance from shrouds to volute is maintained. Both the end of the shaft and the bore of the impeller shall be tapered to permit easy removal of the impeller from the shaft. The impeller shall not be screwed or pinned to the motor pump shaft and shall be readily removable without the use of special tools. To prevent the buildup of stringy materials, grit and other

foreign particles around the pump shaft, all impellers less than full diameter shall be trimmed inside the impeller shroud. The shroud shall remain full diameter so that close minimum clearances from shroud to the volute is maintained. Both the end of the shaft and bore of the impeller shall be tapered to permit easy removal of the impeller from the shaft.

5) The pump shall be constructed so as to permit priming from the low pressure area behind the impeller. Priming from the high pressure connections which allow solids to enter and to clog the priming system will not be acceptable. The priming bowl shall be transparent to enable the operator to monitor the priming level.

6) The pump shall be arranged so that the rotating element can easily be removed from the volute without disconnecting the electrical wiring or disassembling the motor, impeller, back head or seal, so that any foreign object may be removed from the pump or suction line.

7) The pump shaft shall be sealed against leakage by a single mechanical seal constructed so as to be automatically drained and primed each time the pump is drained and primed. Water which lubricates the mechanical seal shall be automatically drained from around the seal if the pump loses prime, in order to allow the pump and the seal to be drained, thereby preventing freezing and breakage of the seal during power outages in sub-freezing temperatures. The seal shall be of carbon and ceramic materials with the mating surfaces lapped to a flatness tolerance of one light band. The rotating ceramic shall be held in mating position with the stationary carbon by a stainless steel spring.

e. Motors

1) The pump motors shall be vertical, solid shaft, NEMA P-Base, Squirrel-Cage Induction type suitable for 3 phase, 60 cycle, and shall be inverter duty rated. They shall have Class F insulation, suitable for temperatures up to 115□C, but the motor shall have Class B temperature limits of 90□ C rise by resistance, at 115% of rated load. The motors shall have normal starting torque and low starting current, as specified for NEMA design B characteristics. They shall be open drip-proof design with forced air circulation by integral fan. Openings for ventilation shall be uniformly spaced around the motor frame. Leads shall be terminated in a cast connection box and shall be clearly identified.

2) The motors shall have 1.15 service factor. The service factor shall be reserved for the owner's protection. The motors shall not be overloaded beyond their nameplate rating, at the design condition, nor at any head in the operating range as specified under operating conditions.

3) The motor-pump shaft shall be centered in relation to the motor base, within .005 inches. The shaft run-out shall not exceed .003 inches.

4) The motor shaft shall equal or exceed the diameter as specified above at all points from immediately below the top bearing to the top of the impeller hub.

5) The bearing cap shall be provided to hold the bottom motor bearing in a fixed position. Bearing housings shall be provided with fittings for lubrication as well as purging old lubricant.

6) The motors shall be fitted with heavy lifting eyes, each capable of supporting entire weight of the pump and motor.

4. Pump Control Panel

The motor control panel shall be pre-assembled and tested by a shop meeting U.L. Standard 508 for industrial controls. All motor control panels shall be assembled and tested by the same manufacturer, so as to ensure suitability and assurance of experience in matching controls to motors and to ensure single source responsibility for the equipment. All control panels shall be furnished by the pump supplier as part of the pre-assembled pumping station, and shall be constructed of stainless steel.

a. General Requirements:

1) The Contractor shall furnish, install, and place into operation a duplex pump control center for each station, designed to automatically operate the pumps as described herein. The pumps will operate in a specified sequence in response to variations in the liquid level. The control equipment is to be completely factory assembled, wired and tested prior to shipment. Control, alternation, logic function, alarm and other controls shall be performed by solid-state modules which are standard products manufactured by the control supplier, have long term proven field performance and are catalog items of the control manufacturer.

2) Wiring: All wiring shall have not less than 600-volt insulation and all power wiring and bus shall be in complete conformity with the National Electric Code and state and local and NEMA Electrical Standards. Control wiring shall be installed at the factory during assembly of the package pumping station. All job connections required to conveniently replace control components shall be made at approved typed terminal blocks, and as directed by the pumping station manufacturers representative.

3) Enclosure: The described package pumping station equipment shall be housed in an insulated fiberglass enclosure assembled and installed at the pumping station factory. The enclosure shall be furnished with hinges, a locking mechanism and supports to allow for easy maintenance of the pumping station.

4) Heat and Condensation Protection: Furnish a minimum 1500-watt heater with thermostat in the enclosure to prevent the formation of condensation. Maintain a maximum internal temperature of 104 degrees F.

ITEM 634.84010007 – SANITARY SEWER PUMPING STATION

5) Power Supply: The incoming service shall be as indicated on the Drawings, and shall have not less than 600 volt insulation and all power wiring and bus shall be in complete conformity with the National Electric Code and state and local and NEMA Electrical Standards.

6) Lightning Arrestor: A lightning arrestor shall be supplied in the control and connected to each line of the incoming side of the power input terminals. The arrestor shall protect the control against damage due to lightning strikes on the incoming power line.

7) Motor Starters: A pump circuit breaker and motor starter shall be provided for each of the pumps listed below. The circuit breaker shall be properly sized to protect the motor branch circuit against short circuits. The motor starter shall be NEMA rated and contain overload protection in each leg. Motor starters shall be solid state, soft start type are not needed, since VFD motors are being utilized.

8) Selector Switches: A heavy-duty, 3-position, hand-off-automatic selector switch shall be flush-mounted on the inner door of the control center for the operation of each VFD. This selector switch shall operate the stator when it is in either the “hand” position of the “automatic” position and the automatic control system is calling for the operation of the equipment in the manner as herein described.

9) Control Breaker: The panel shall be supplied with a properly sized control breaker to provide a source of 120-volt control. The breaker shall be mounted on the inner door.

10) Running Time Meter: Running time meters measuring hours and tenths of hours of operation up to 9999.9 hours shall be furnished for each pump. A running time meter shall also be furnished to indicate when the pumps operate simultaneously. Running time meters shall be incorporated on the inner door.

11) Pump Over-Temperature Protection (For self-priming pumps only): Over-temperature protection shall be provided in the control panel to operate in conjunction with the over-temperature switch in each pump motor. The control shall provide pump lock-out of operation upon occurrence of high temperature. The circuitry shall also include a yellow failure indicating light and reset pushbutton on the inner door for each pump for alarm indication and manual reset capability. A power failure condition shall not require manual reset of the over-temperature circuits.

12) Alarm Light: A red top mounted strobe light shall be furnished to alarm an abnormal level alarm condition to alert personnel of a station malfunction.

ITEM 634.84010007 – SANITARY SEWER PUMPING STATION

13) U.L. Approval: The control panel shall be constructed in compliance with Underwriter' Laboratories Industrial Control Panels listing and follow up service, utilizing U.L. listed and recognized components where applicable. The control panel shall bear the Underwriter's Laboratory 508A serialized label.

14) Duplex Receptacle: A 15-amp duplex GFCI receptacle with separate circuit breaker shall be provided.

15) To control the operation of the pumps with variations of sewage level in the wet well, an automatic pump and alarm controller, NE250 with submersible level transducer shall be supplied and installed in the pump station control panel as follows:

    a) Control voltage shall be 120 VAC and shall be accomplished a current transformer to be provided as part of the pump station control panel. A control fuse and on/off switch shall protect and isolate the control voltage from the line.

    b) All ground connections shall be made with ring tongue terminals and star washers to assure proper ground. A dedicated control power transformer shall be provided for the level controller.

    c) The Controller shall have the capability to perform the following functions:

        - Detect failed pumps and take the filled pump out of service until corrected and reset.

        - Store a minimum of 100 alarms/events. All alarms and events shall be time and date stamped.

        - Provide three-level password security protection.

        - Detect unauthorized station access by a door switch input and operator interface security password.

        - Have the ability to calculate flow statistics including total station flow, average daily flow and maximum daily flow.

        - Control and monitor up to four (4) constant and/or variable speed pumps and either pump up or pump down mode.

    d) The submersible transducer shall sense the pressure caused by the height of liquid above its bottom face. The lower unit body shall be SS. The bottom shall be a molded reinforced synthetic rubber diaphragm. The

transducer shall be suspension mounted with a SS pipe and cable 25' long and shall have a sealed breather system. The submersible transducer shall be a Viatran model 593 or approved equal.

e) A time delay relay shall be provided to cause the second stage pump of each set to start and come up to speed before the first set is started to prevent starting a pump with pressure on the seal.

f) Two redundant parallel float switches shall be provided to operate the pumps if the pressure transducer system fails. The displacement switches shall be intrinsically safe.

16) The main disconnect and high water/low water alarm light shall be mounted next to the influent pump station on the control building as shown. Disconnect for the pump station to be provided as specified. Pump station manufacturer to provide the alarm light; electrical contractor to mount and wire.

17) Provisions shall also be made for the pumps to operate in parallel should the level in the wet well continue to rise above the starting level of the low level pump. Should the level continue to rise above the second pump on level, the high water alarm shall be activated. It shall also activate a remote 110V AC red alarm light.

5. Vacuum Priming Systems

a. A separate and independent priming system shall be furnished for each sewage pump, providing complete standby operation. Each priming system shall include a separate vacuum pump. Vacuum pump shall have corrosion resistant internal components. They shall each be capable of priming the sewage pump and suction piping in not greater than 60 seconds, under rated static suction lift conditions of 20 feet at mean sea level.

b. Each priming system shall be complete with vacuum pump, vacuum controls, solenoid valve, prime level sensing probe, and a float operated check valve installed in the system ahead of the vacuum pump to prevent liquid from entering the vacuum pump. The float operated check valve shall have a transparent body for visual inspection of the liquid level and shall be automatically drained when the vacuum pump shuts off.

c. The priming system shall automatically provide positive lubrication of the mechanical seal each time the sewage pump is primed. To prevent excessive stoppage due to grease accumulation, no passageway in the priming system through which sewage must pass, shall be smaller than the equivalent of 2-1/2" opening.

6. Ventilating Blower

A ventilating blower shall be provided capable of delivering (250 CFM) in the equipment chamber. The blower shall be rigidly mounted and shall discharge to atmosphere as shown on the plans. It shall be controlled by a thermostat.

ITEM 634.84010007 – SANITARY SEWER PUMPING STATION

7. Heater

This station shall be provided with a dual wattage forced air heater with built-in thermostat to control operation. The heater wattage shall be 1300/1500, 110V.

8. Wireless Monitoring and Notification System

a. The wireless monitoring and notification system shall be a web-based system designed specifically for water and wastewater applications and be capable of dependable alarm monitoring and detection. The system shall also have customizable notification preferences with around-the-clock status access from any connected device.

b. The system shall be sufficiently robust to permit direct user on demand management of the following functions via the web: administration and configuration of wireless remote terminal unit (WRTU), system preferences, users, reporting parameters and report generation requiring no direct participation by the manufacturer.

c. The system shall be able to operate in real-time mode that allows the WRTU to report in constant stream all sampled measured data that users require reported from the system. The real-time system shall allow users to see in real-time all local conditions at the WRTU. The conditions shall include all I/O states, incoming power conditions, battery charging status and voltage levels.

d. The WRTU shall have the following minimum complement of inputs and outputs:
    1) Input Monitoring Function
    2) Alarm Trip Delay
    3) Eight (8) Digital Inputs
    4) Two (2) Universal Analog/Digital Inputs
    5) Relay Contact Outputs

e. The equipment shall include LED indicators for both performance and diagnostic categories.
    1) Performance:
        a) WRTU on/off
        b) WRTU Armed/Disarmed
        c) Battery Charge State
        d) Transmitting state in real-time operations this LED will be constantly on, this indicates that the WRTU is in constant communication with the central system).
        e) Continuous Signal Strength Indicator: A 10-element bar graph shall provide continuous detailed indication of received radio signal strength without reliance upon counting LED flashes or similar schemes.

    2) Diagnostic:
        a) Input state for each digital input
        b) Primary power input present

c) Output relay(s) activated
d) Radio status
e) Account status
f) Alarm status
g) Violation status (an input is in violation but has not yet tripped into alarm)
h) Suspended status
i) Test button ready status.

f. Data communications for the WRTU shall utilize the data services of most national and regional CDMA cellular carries in North America. Data access shall be vis Mobile IP or packet-switched services. Circuit-switched services and SMS text messages shall not be used for WRTU data payloads.

g. The CommCheck feature shall enable the WRTU to "Check-In" and verify connectivity on a frequency scheduled basis. CommCheck schedule can be configured for 1- or 2-hour reporting intervals. If a unit fails to check-in at the proper time, users are alerted by the watchdog alarm that will be escalated within 10 minutes of the missed report.

h. A test call button shall be included on the WRTU. When a test call phone number has been entered by the user at the website, pressing the Test Call Button shall result in a special phone call being placed to tat phone number. The call shall include indication of the signal strength as received at the local cellular tower.

i. The WRTU shall operate on 12 to 24 VDC power input and shall incorporate a sealed lead-acid battery backup contained within the NEMA 4X enclosure. The battery shall be automatically charged, providing 24 hours nominal back-up time (in real-time operations this normal back-up time is reduced due to operational demands). Upon power failure, the battery shall maintain WRTU operation continuously until it reaches a fixed discharge level or until power is restored. The WRTU shall not power down during power failure, allowing it to be contacted via the website at any time, even during power failures.

j. The WRTU shall automatically generate daily reports of the following pump station performance parameters, presented at the website, in tabular and visual/graphic formats.
1) Run time for each pump, both daily and cumulative
2) Run time ratio between pumps
3) Number of starts for each pump
4) Starts ratio between pumps
5) GPM output for each pump
6) Total station flow without need for flow meters
7) Hours with two pumps running simultaneously (duplex pump stations only)
8) Hours to maintenance based upon cumulative run time (two tracks per pump)

9. Variable Frequency Drives

ITEM 634.84010007 – SANITARY SEWER PUMPING STATION

a. Each of the primary pumps shall be provided with an ABB ACQ580 variable frequency drive. These drives shall be mounted in the control room as shown on the contract drawings.
   1) Each primary pump shall be provided with a new variable frequency drive as specified. Single source supplier of this station shall provide certification of compatibility between the variable frequency drive and the sewage pumps. Pumps shall operate in an on/off mode as specified earlier at an operator selected speed through the VFD's.

   2) The VFD shall produce an output waveform capable of handling maximum motor cable distances of up to 1,000 ft., unshielded without requiring additional filtering devices. Motors selection shall be in accordance with the guidelines of NEMA MG-1, part 31 (Inverter Duty Motors).

   3) The VFD must be capable of sourcing the motor's full load nameplate amperage rating on a continuous basis without any need to de-rate either the VFD or the motor. The VFD shall be capable of running the motor at its nameplate RPM, voltage, current, and slip without having to utilize the service factor of the motor.

   4) The VFD will be capable of running either variable or constant torque loads. In variable torque applications, the VFD shall provide a CT-start feature, with either automatic (AEO) or user-selectable load profile selection (VT-High, Med, or Low). In either CT or VT mode, the VFD shall be able to provide its full rated output current continuously and 110% of rated current for 60 seconds.

   5) An Automatic Energy Optimization (AEO) selection feature shall be provided in the VFD. This feature shall continuously monitor the motor's speed and load and adjust the applied power to maximize energy savings. This feature shall incorporate power factor compensation; output voltage reduction based upon load current alone is not acceptable.

   6) Switching of the input power shall be possible without interlocks or damage to the VFD at least once every 1.5 minutes. Switching of power on the output side shall be possible with no limitation or damage to the VFD and shall require no additional interlocks.

   7) An Automatic Motor Adaptation function shall measure motor stator resistance and reactance to optimize performance and efficiency. It shall not be necessary to run the motor or uncouple the motor from the load to accomplish this optimization. Additionally, the parameters for motor resistance and motor reactance shall be user-programmable.

   8) The VFD shall have temperature controlled cooling fans for quiet operation and minimized internal losses.

ITEM 634.84010007 – SANITARY SEWER PUMPING STATION

9) VFD shall utilize an output switching algorithm which is capable of providing full voltage to the motor and require no motor de-rating at nominal speed nor generate additional temperature rise in the motor.

10) VFD shall provide full torque to the motor given input voltage fluctuations of up to +/- 10% of the rated line voltage.

11) The VFD shall provide a built in DC link reactor to minimize power line harmonics and to provide near unity power factor. VFD's without a DC link reactor shall provide a 3% impedance line side reactor, at a minimum.

12) For applications of less than 75HP, the VFD shall be provided with additional line-side harmonic filtering only as required to meet the guidelines for harmonic voltage distortion as established in IEEE-519, 1992. For the purposes of calculating the VFD's harmonic impact on site electrical distribution system, the PCC shall be defined as the secondary side of the last distribution transformer before the VFD. The harmonic calculations will be accomplished using the Danfoss Harmonics Toolbox II program, or other pre-qualified program, and the results reviewed by the VFD manufacturer and compiled into a comprehensive report before submission.

13) The VFD and accessories, including any harmonic filtering, will be incorporated by the VFD manufacturer into a single, enclosure, with a single input feed and common 65KAIC circuit breaker disconnect. The enclosure shall be available NEMA 1, as required by the specification drawings, and be supplied with thermostatically controlled positive pressure forced ventilation. All enclosures shall be UL Listed, and assembled by the VFD manufacturer in an ISO 9001 registered facility.

14) The integrated VFD and harmonic filter will also incorporate: bypass starter, 120VAC control power transformer with fused primary and secondary, SCR rated input VFD input fuses, Hand/Off/Auto selector switch, speed potentiometer, Local/Remote selector switch, VFD Running indicating light, VFD/Common Fault indicating light, Motor Temperature Fault indicating light, and Control Power On indicating light. All indicating lights shall be 30.5mm, NEMA 4/4X, and push-to-test.

15) Protective Features:
    a) VFD shall display all faults in plain text; fault codes only are not acceptable.
    b) VFD shall catch a rotating motor operating forward or reverse up to full speed.
    c) VFD shall include circuitry to detect phase imbalance and phase loss on the input side of the VFD.

ITEM 634.84010007 – SANITARY SEWER PUMPING STATION

d) VFD shall include current sensors on all three-output phases to detect and report phase loss to the motor. The VFD will identify which of the output phases is low or lost.
e) VFD shall include an automatic accel/decel ramp-time function to prevent nuisance tripping and simplify start-up.
f) VFD shall auto-derate the output voltage and frequency to the motor in the presence of sustained high ambient temperatures, so as not to trip on an inverter temperature fault. The use of this feature shall be user-selectable.
g) VFD shall auto-derate the output voltage and frequency to the motor if an input phase is lost, or if input voltage drops below further than 10% below normal, so as not to trip on a phase loss fault. The use of this feature shall be user selectable.

16) Interface Features:
a) VFD shall provide lockable, alphanumeric backlit display keypad which may be remotely mounted using standard 9-pin cable. VFD may be operated with keypad disconnected or removed entirely. Keypad may be disconnected during normal operation without the need to stop the motor or disconnect power to the VFD.
b) The keypad shall feature a 4-line display, and be capable of displaying up to four separate operational parameters or status values simultaneously (including process values with the appropriate engineering unit).
c) Keypad shall provide an integral H-O-A (Hand-Off-Auto) capability, and manual control of speed in "Hand", without the need for adding selector switches, potentiometers, or other remote control devices.
d) All VFD's shall be of the same series, and shall utilize a common LCP (keypad/display unit) throughout the rating range. The keypads shall be interchangeable.
e) VFD keypad shall be capable of storing drive parameter values uploaded to it from the VFD, and shall be capable of downloading stored values to the VFD to facilitate programming of multiple drives in similar applications, or as a means of backing up the programmed parameters.
f) A red FAULT light, a yellow WARNING light and a green POWER-ON light shall be provided. These indications shall be visible both on the keypad and on the VFD when the keypad is removed.
g) A quick setup menu with factory preset typical parameters shall be provided on the VFD. Use of macros shall not be required.
h) A built-in PID controller shall be able to accept two feedback signals and two set-points (of the same process unit). Response to the set-point/feedback differences must be programmable to allow choices between different calculation methods for the feedback signals.
i) A Sleep Mode function shall be provided for closed loop process control of centrifugal pumping applications to reduce wear and heating of the pump in periods where system demand in minimal. This function will

automatically stop the motor when speed drops below a user-programmed minimum value ("sleep frequency") for a specified time ("sleep mode timer"). The drive restarts the motor once the PID processor has determined that the feedback value requires a theoretical output frequency which is set by the user ("wake up frequency"). A boost function shall be incorporated into this feature for constant pressure application. This function raises system pressure by a programmable fixed percentage above rated setpoint prior to entering sleep mode in order to compensate for anticipated system losses (i.e. leakage, etc.), preventing high pump cycle rates.

j) VFD shall provide full galvanic isolation with suitable potential separation from the power sources (control, signal, and power circuitry within the drive) to ensure compliance with PELV requirements.

10. Miscellaneous

a. Floor Drain and Drain Pipe:

1) Drain pipe shall be HDPE pipe, sloped to drain back to the wet well. Refer to plans for location.

b. Wall Sleeves and Seals:

1) All penetrations shall be provided with a precast sleeve or cored opening. Sleeve size shall be a minimum of 2 inches larger than the piping outside diameter.

2) Penetrations shall be sealed using a mechanical link-seal assembly and waterproof non-shrink grout. Manufactured by Thunderline Link-Seal, Inc., or equal, as directed or as approved by the Engineer.

11. Above Ground Enclosure's for VFD's

a. A separate two (2) door service entrance cabinet above ground enclosure shall be provided to house the variable frequency drives, main disconnect, alarm dialer and associated items as indicated on the drawings and herein, and shall be sized to appropriately house these items.

b. The enclosure shall be a NEMA 4X, low profile with front double-door access and an integral lower junction assembly. The enclosure shall be suitable for installation on a concrete base as shown.

c. The cabinet lighting shall be a single 20-watt fluorescent fixture with low temperature ballast and guard and shall be mounted across the top of the cabinet to illuminate the area within.

ITEM 634.84010007 – SANITARY SEWER PUMPING STATION

d. The cabinet heater shall be a 120 VAC condensation protective heater with high temperature cutouts, 400 watts Design Aire by Hoffman Engineering or equal.

e. The service entrance cabinet shall also include a high/low water alarm light mounted on the exterior of the cabinet.

f. The alarm dialer shall be a wireless monitoring and notification system.

g. The bottom of the enclosure shall be set at least one foot above the top of the wetwell.

CONSTRUCTION DETAILS

1. General Product Delivery, Storage, and Handling

Fittings, valves, pipe, controls, equipment, and other accessories shall be handled in such a manner as to ensure delivery to the site in sound, undamaged condition. Take special care not to injure factory finishes. Replace or make satisfactory repairs to pipe or fittings with damaged coatings or linings. Store pipe, valves, and other accessories in conformance with the manufacturer's recommendations.

2. Shop Drawings

A complete set of shop drawings covering all aspects of the pumping station shall be submitted to the Engineer as a package. Separate submittals of various components will not be accepted.

3. Factory Tests

All components of the pump station shall be given an operational test of all equipment at the factory to check for excessive vibration, for leaks in all piping or seals, for correct operation of vacuum priming and control systems and all auxiliary equipment. Pumps shall take suction from a deep well, simulating actual service conditions. The control panel shall undergo a dry logic test and a full operational test with all systems operating.

4. Manufacturer’s Representative

The Contractor shall arrange for a qualified service representative(s) from the company(ies) manufacturing or supplying the pre-assembled pumping station complete with all controls, dialer, flow meter, and related equipment to perform the duties herein described. Service representative shall be responsible for all start-up and programming functions.

The manufacturer’s representative shall supervise the installation of the pre-assembled pumping station. After installation of the equipment has been completed and the equipment is presumably ready for operation, but before it is operated by others, the manufacturer’s representative shall inspect, operate, pretest and adjust the equipment. The Contractor shall assist in the pretest. The Engineer shall be notified one (1) week in advance so he may attend and make notification to the municipality’s operator or representative to be present for all testing. Engineer will notify three (3) working days prior to pre-test. The inspection shall include, but not be limited to, the following points as applicable:

ITEM 634.84010007 – SANITARY SEWER PUMPING STATION

a. Provide startup and initial testing of system. Coordinate and operate pumps in conjunction with other construction of at the treatment facility.

b. Correct failures during test by repairing or replacing malfunctioning parts or equipment or faulty workmanship, regardless of cause, within 72 hours after notification from Engineer.

c. After correcting failures caused by defective equipment, material, or faulty workmanship, retest until failures are eliminated.

d. Confirm general sequencing of pump and float operations at basin and control panel are in accordance with performance requirements.

e. Document and certify startup results in start up report.

f. The contractor through the supplier shall provide the owner a two-year service contract with the option of extending longer. The cost of the initial two-year service contract shall be included with the contractor's bid.

g. The initial two-year contract shall include two (2) yearly visits to each pump station to perform standard maintenance and confirm proper operation. Supplier shall provide a written report after each service visit to the owner.

h. Two (2) complete replacement pump shaft seal assemblies shall be furnished by the manufacturer. The spare seals shall be packed in a suitable container and shall include complete installation instructions.

5. Manufacturer's Field Service

a. Furnish factory trained representative and field technical assistance during the following periods of pumping station installation and start up.

1) Start-up, testing, and demonstration of station systems-basin, pump, and control panel. Minimum of 1 days, 1 trip.

2) Operator training ½ day.

ITEM 634.84010007 – SANITARY SEWER PUMPING STATION

PUMP SCHEDULE

Influent Pump Station

Pump Model	4B2X*1
Quantity	2
Pump Speed (RPM)	1170
Suction Size	6”
Discharge Size	6”
Solids Size	3”
Seal Type	Mechanical
Impeller Size	10-1/8”
Stainless Steel Shaft (min.)	1-7/8”
Condition #1 (Primary)	108 GPM AT 13.51’ TDH
Condition #2	400 GPM AT 29.7’ TDH
Efficiency (min.)	62%
Max. Motor HP	7.5
Voltage	208
Phase	3

6. Pipe and Fitting Installation

a. Inspect the pipe, fittings, and other materials for damage and other defects. Reject all unsound or damaged material.

1) Cleanliness:

a) Foreign material shall be prevented from entering the pipe and fittings while they are being placed.

2) Cutting of Pipe:

a) Cut pipe in a neat workmanlike manner.

b) Ductile iron pipe may be cut with an abrasive pipe saw, rotary wheel cutter, guillotine pipe saw, or milling wheel saw. Avoid damage to cement mortar lining.

c) Smooth all cut ends and edges by grinding.

3) Joints:

a) Assemble joints in strict accordance with manufacturer's instructions using recommended lubricants, gaskets, and sealing tape.

4) Painting:

a) Paint all piping and accessories as specified or noted on Drawings.

b) Touch Up: Paint any previously uncoated bolts, fittings, tie rods, clamps, or other accessories and touch up any scraped areas of the pipe.

7. Valves

a. Set plumb unless otherwise noted on drawings.

b. Valves and other fittings shall have flanged joints unless otherwise specified.

c. Valve components shall be carefully inspected prior to installation. Valve discs shall be opened and closed to make sure the valve operates properly, that stops and limiting devices are properly set, and that the valve seats properly.

d. Strictly adhere to manufacturer's installation requirements.

8. Drain, Waste, and Vent Piping

a. All drain and vent piping shall be installed as shown on the plans.

b. Install all necessary piping and appurtenances in order to provide a properly functioning drain and vent system.

9. Painting

a. Paint all ductile iron piping, fittings, valves, and applicable accessories.

b. Touch Up: Paint any previously uncoated bolts, fittings, tie rods, clamps, and accessories.

c. Painting includes field painting of exposed bare and covered pipes, hangers, exposed steel and iron work, and primed metal surfaces of mechanical and electrical equipment.

d. Do <u>not</u> paint prefinished items, plastic pipe, concealed surfaces, finished metal surfaces, operating parts, and labels.

e. Follow paint manufacturer’s instructions for storage and application of paint products.

f. Primer: Metal surfaces not factory primed shall receive a field application of a quick drying, rush-inhibitive, alkyd-based or epoxy-metal primer, as recommended by the paint manufacturer. One coat required.

g. Finish Coat: Apply two coats of semi-gloss acrylic-latex enamel (interior or exterior, depending on location). Follow manufacturer's recommendations for application. Color to be selected by system operator.

10. Pump Station Installation

a. Install the pre-assembled pumping station on a bed of mortar on the top of the wetwell as shown on the Contract Drawings and in strict accordance with the manufacturer's recommendations. Operationally test the system for plumbing leaks, operation of valves and controls. Check the pumping rate by timing the cycle time between on-off levels.

b. Electrical work shall conform to all applicable State and Local Codes and the National Electrical Code (N.E.C.).

c. Items of specific manufacturers shall be installed in strict accordance with manufacturer's printed instructions and/or manufacturer's representative's directions.

d. Provide grounding system as per the N.E.C.

e. All power and control panels shall be continuous from, the pump station junction box to the control panel. No splices or junction boxes shall be used in wet well. The wet well shall be considered a Class I, Division 1, Group D, location.

f. All access hatches shall be installed per manufacturer's instructions.

g. Immediately after the placing of one section on another, the exterior portion of the joint shall be filled with Axpandcrete RM, or equivalent. After completing the joint, the entire exterior surface of the station shall be coated with two heavy, troweled bitumastic coatings. The interior of the joint shall be filled with "Anti-Hydro" mortar and give a smooth finish.

11. Field Test

After installation of the unit together with all accessories, it shall be put in first class operating condition; and after inspection, testing, operation and adjustments have been completed by the manufacturer's representative and after the manufacturer's representative has submitted his report to the Engineer, the pumping equipment shall be field tested by the Contractor in the presence of the Engineer to demonstrate the ability of the unit to operate properly without vibration or overheating.

All defects or defective equipment shall be corrected or replaced at the expense of the Contractor and, if necessary, the tests shall be repeated until satisfactory results are obtained. The Contractor shall furnish all labor, piping, equipment, water, power and materials necessary for testing.

12. Operating Instructions and Training

ITEM 634.84010007 – SANITARY SEWER PUMPING STATION

The contractor shall furnish five (5) bound copies of instruction manuals covering operation and maintenance of all equipment furnished. The manuals shall be complete with wiring diagrams, lubrication schedules, drawings, functional descriptions, cuts, troubleshooting recommendations, parts lists and other information required for the proper operation, maintenance, repair and adjustment of the equipment. All parts shall be numbered or otherwise clearly identified to facilitate ordering of replacements.

Upon completion of all work and all tests, the Contractor shall furnish the necessary skilled labor and helpers for operating the system and equipment for a period of eight (8) hours. During this period, he shall instruct the Owner or his representative fully in the operations, adjustment and maintenance of all equipment furnished.

METHOD OF MEASUREMENT

Sanitary Sewer Pumping Station will be measured for payment on a lump sum basis for work satisfactorily completed in accordance with the Contract Documents and as directed by the Engineer.

BASIS OF PAYMENT

The lump sum price bid shall cover all labor, tools, equipment, materials, etc., including all excavation, backfill and replacement of any pavement, sidewalks, curbs, lawns, or other top surfaces as necessary to complete the work.

ITEM 634.99010017 – BUILDING CONDITION SURVEY
ITEM 634.99020017 – VIBRATION MONITORING (NONBLASTING)

DESCRIPTION

A. Building Condition Survey. This work shall consist of performing a building condition survey(s) and preparing permanent records as indicated in the contract documents prior to the commencement of work, after completion of work, and at locations and times during construction as directed by the Engineer.

B. Vibration Monitoring (Nonblasting). This work shall consist of performing vibration monitoring of background and construction activities and preparing daily and summary report(s) of vibration readings.

MATERIALS

A. Building Condition Survey. Provide general photography and video equipment, analog or digital, capable of superimposing the date and time on all images.

B. Vibration Monitoring (Nonblasting). Provide a 3-component seismograph, capable of measuring particle velocity data in three mutually perpendicular directions. Annual factory calibration is required throughout the duration of the work.

CONSTRUCTION DETAILS

A. General. The Contractor shall engage the services of a firm capable of furnishing a New York State licensed Professional Engineer to conduct a condition survey of the existing building(s) indicated in the contract documents in the Special Note entitled Vibration Criteria and an experienced vibration monitoring Consultant to measure peak particle velocities prior to, and during, construction operations. Submit as proof to the Deputy Chief Engineer Technical Services (DCETS) the experience and qualifications of the firm's personnel conducting the work.

B. Building Condition Survey. Provide, as a minimum, the following information:

1. Photographic and videotape documentation of the interior and exterior condition of the building(s).

2. Extent and location of existing signs of building distress such as cracks, spalling, signs of settlement, flooding, leaking, etc.

The Engineer may accompany the Contractor on each building condition survey for verification of the data recorded. Provide two copies of all documentation of each building condition survey to the Engineer.

C. Vibration Monitoring (Nonblasting). The DCETS may waive the requirements of vibration monitoring based on the results of the building condition survey.

Perform continuous vibration monitoring during construction operations when adjacent construction activities make monitoring prudent. The Contractor shall perform contract work in

a manner that will limit construction vibration at the specified locations to within the limits set within the contract documents.

1. Submittal of Written Vibration Monitoring Plan. Prior to performing work adjacent to specified locations, a written Vibration Monitoring Plan prepared by the Contractor shall be submitted to the Engineer a minimum of 10 work days in advance for approval. The Engineer will send a copy of the Vibration Monitoring Plan to the Geotechnical Engineering Bureau, Engineering Geology Section, for review and written comment. The vibration monitoring plan may be returned to the Contractor for revision or clarification.

The vibration monitoring plan shall include the necessary information to outline the recording collection. The vibration monitoring plan shall include, but not be limited to, the following items:

a. Contract Designations

- The name of vibration monitoring specialist(s).
- The scheduled start date and length of construction operations which require vibration monitoring.
- The limits of vibration monitoring work, including sites on or off State-owned right-of-way.
- The location of all structures to be monitored in proximity to the construction operation.
- The location of any underground utilities in proximity to the construction operation.

b. Experience and Equipment

- Submit proof and details, as references, of two projects in the past five years where the vibration monitoring consultant performing the work has satisfactorily monitored construction operations by recording maximum peak particle velocities (PPVs). Include contact information for each reference.
- Submit information on the required 3-component seismograph, capable of measuring particle velocity data in three mutually perpendicular directions, including: the manufacturer's name, model number, and documentation of factory calibration performed within the last 12 months.

c. Methods and Procedures

- The location of adjacent structures to be monitored and maximum allowable PPVs as indicated in the contract documents. If not otherwise specified, a maximum allowable PPV in accordance with the United States Bureau of Mines (USBM) Vibration Criteria (Figure 1) shall be observed at all structures.
- The location of seismograph(s) placements, as directed by the Contractor's Professional Engineer. Recording seismographs may be installed on selected structures.
- Appropriate details for anchoring the geophone(s).

- The procedure for tracking PPV throughout construction operations (e.g., Pile Driving Operations: pile tip vs. vibrations may be correlated through time of day. A record of the time of day at each depth interval, included on the pile driving records, would be required to correlate to a time-based readout of PPV).

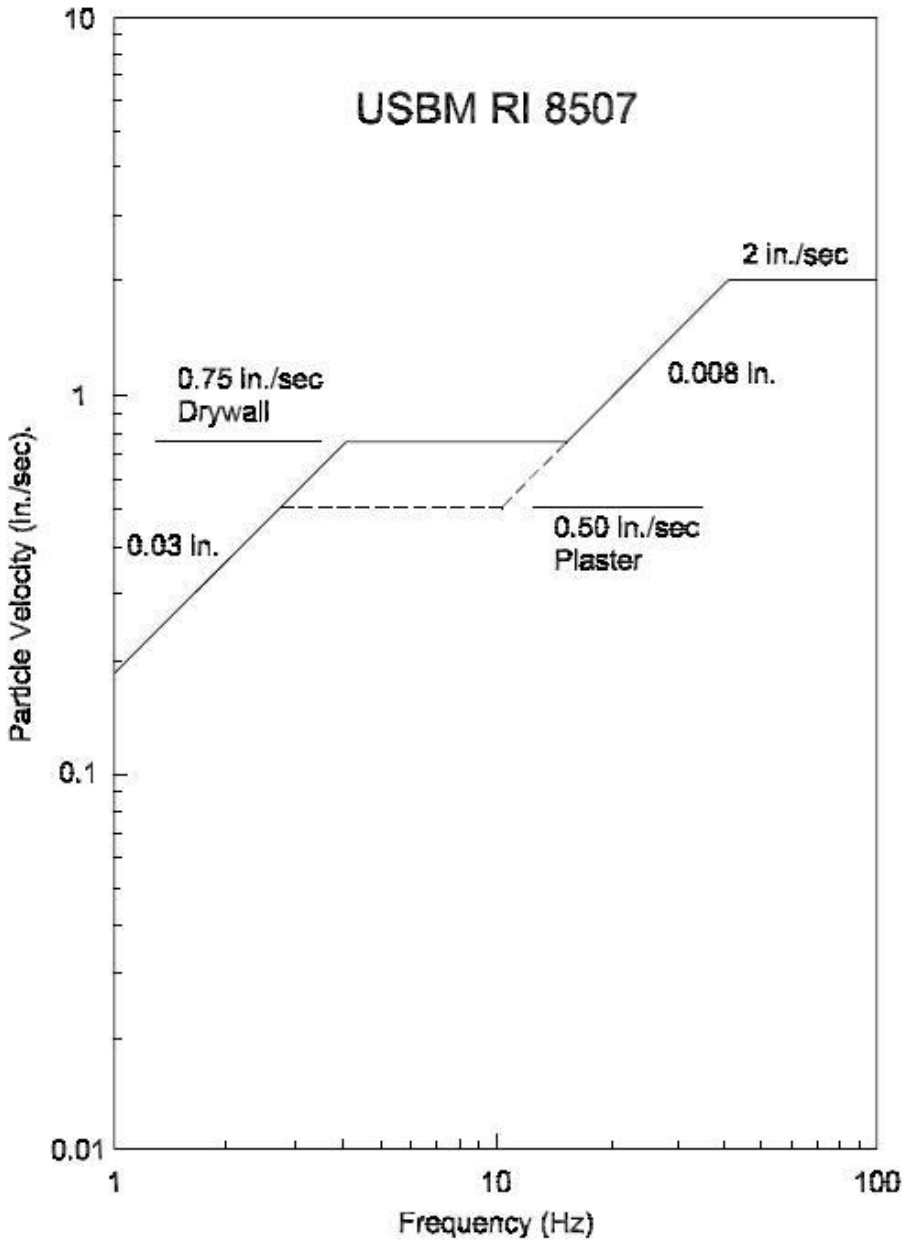

Figure 1—Safe Vibration Limit Recommendations for Residential Structures

Figure 1 – USBM Vibration Criteria (after Siskind et al, 1980)
The figure provides a "threshold damage" limit, defined as cosmetic damage (e.g., cracking) within the structure, categorized by both frequency ranges and particle velocity

2. Measuring Vibrations. The Contractor shall inform the Engineer immediately each time measured particle velocities exceed 85% of the allowable peak particle velocity. The Contractor shall make equipment or procedural modifications as required to avoid exceeding the allowable vibration intensity.

If the measured velocities exceed the maximum allowable PPVs, the Contractor shall stop operations immediately and revise equipment and procedures to reduce vibrations to allowable levels.

The Contractor shall be in communication with his monitoring firm's personnel during vibration monitoring at all locations to verify the data recorded.

The Contractor shall provide the Engineer with the results of daily vibration monitoring, one work day after the readings are taken. Upon completion of the construction operations for those locations requiring vibration monitoring, the daily submittals shall be synthesized into a final report.

If the seismographs show any indication of damage or vandalism, the seismographs shall be immediately recalibrated or replaced.

METHOD OF MEASUREMENT

A. Building Condition Survey. This work will be measured on a lump sum basis.

B. Vibration Monitoring (Nonblasting). This work will be measured on a lump sum basis.

BASIS OF PAYMENT

The unit price bid for building condition survey(s) and vibration monitoring shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work.

Vibration Monitoring (Nonblasting). Progress payments will be made for this item paid proportionally in accordance with the amount of work completed, measured on a workday basis.

Payment will be made under:

Item No.	Item	Pay Unit
634.99010017	Building Condition Survey	Lump Sum
634.99020017	Vibration Monitoring (Nonblasting)	Lump Sum

ITEM 645.81090003 – RETROREFLECTIVE SIGN POST STRIP

DESCRIPTION

This work shall consist of furnishing and installing Retroreflective Sign Post Strips in accordance with the contract documents.

MATERIALS

The retroreflective surface of Retroreflective Sign Post Strip shall conform to §730-05 Retro-Reflective Sign Sheeting - NYSDOT Class A sign sheeting and appear on the Department's Approved List of Materials and Equipment for Reflective Sign Sheeting.

Note: Signs supplied before March 1, 2023, may be fabricated with NYSDOT approved ASTM D4956 Type III/IV and IX retro-reflective sign sheeting. The grade of sheeting shall match the grade of sheeting on the sign panel that the strip supplements.

Nylon or plastic washers shall be installed between fastener bolt heads (or nuts) and the reflective sheeting on the face of the strip.

The color of the retroreflective sheeting on the Retroreflective Sign Post Strip shall match the background color of the sign, except that the color of the strip for the YIELD and DO NOT ENTER signs shall be red.

Retroreflective Sign Post Strips shall be made of durable, UV-stabilized plastics or aluminum panels in accordance with §730-01.

Hardware to mount Retroreflective Sign Post Strips to sign posts shall conform to §715-16 Stainless Steel Connecting Products, or §730-22 Stiffeners, Overhead Brackets, and Miscellaneous Hardware. Hardware to connect Retroreflective Sign Post Strips to sign posts shall be tamper resistant.

CONSTRUCTION DETAILS

Retroreflective Sign Post Strips shall be at least 2 inches in width and shall be in accordance with the contract documents. Retroreflective Sign Post Strips shall be placed for the full length of the support from the sign to 2 feet above the edge of the roadway.

Retroreflective Sign Post Strips shall be attached to the sign posts by mechanical means with standard nuts and bolts, clamps, brackets, or strapping according to the manufacturer's instructions. Retroreflective Sign Post Strips shall not be attached to sign posts with adhesives.

METHOD OF MEASUREMENT

This work will be measured as the number of Retroreflective Sign Post Strips satisfactorily furnished and installed.

BASIS OF PAYMENT

The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to satisfactorily complete the work.

ITEM 655.05010008 - STANDARD SANITARY MANHOLE FRAMES AND COVERS (CASTINGS)
ITEM 655.05020008 - WATERTIGHT SANITARY MANHOLE FRAMES AND COVERS (CASTINGS)

DESCRIPTION:
This work shall consist of furnishing and installing frames and covers for sanitary sewer manholes as shown on the plans or as directed by the Engineer.

MATERIALS:
All of the provisions of Section 655-2.01 Castings shall apply, except the materials shall comply with the Owner Requirements for Sanitary Sewer Mains and Appurtenances special note found in the contract proposal.

CONSTRUCTION DETAILS:
The requirements of Section 655-3 Construction shall apply.

METHOD OF MEASUREMENT:
This work will be measured as the number of frames and covers furnished and placed.

BASIS OF PAYMENT:

The unit price bid for frames and covers shall include the cost of furnishing all labor, materials and equipment necessary to satisfactorily complete the work, including the cost of any field repair work for improperly fitting castings or to render the frame and cover non-rocking.

Payment will be made under:

ITEM NUMBER	ITEM DESCRIPTION	UNIT
655.05010008	Standard Sanitary Manhole Frames and Covers (Casting)	Each
655.05020008	Watertight Sanitary Manhole Frames and Covers (Casting)	Each

9/17/03
USC 12/16/15

ITEM 655.25nn0005 – FURNISH AND/OR INSTALL INLET ASSEMBLY, AS SPECIFIED

DESCRIPTION:

Under this item, the Contractor shall furnish and/or install inlet assemblies as described in the contract documents. The provisions of Standard Specifications Section 655 shall apply, as modified herein.

MATERIALS:

Castings: The provisions of Section 655-2.01 shall apply.

Fabricated articles: The provisions of Section 655-2.02 shall apply.

Other: When other types of inlet assemblies are specified, the materials furnished and/or installed shall meet the requirements in the contract documents.

CONSTRUCTION DETAILS:

The provisions of Section 655-3 shall apply.

METHOD OF MEASUREMENT:

The quantity to be measured for payment will be the number of each type of inlet assembly satisfactorily furnished and/or installed as serialized in the contract documents.

BASIS OF PAYMENT:

The provisions of Section 655-5 shall apply for each type of inlet assembly as serialized in the contract documents.

nn = denotes as described in contract documents

ITEM 659.7000nn01 - ABANDON MANHOLES

DESCRIPTION

This work shall consist of abandoning existing Company manholes as indicated in the contract documents or as directed by the Engineer. The Utility Company (Company) name, address, and contact person can be found in the contract documents under the special note "Coordination with the Utility Schedule."

MATERIALS

Controlled Low Strength Material required for the abandoning of manholes shall meet the requirements of Section 204 of the Standard Specification. Asphalt materials used for pavement repairs shall meet the requirements of Section 402 of the Standard Specification.

CONSTRUCTION DETAILS

The Contractor shall not start the abandonment of any manholes until approval is granted by the Company. The Contractor shall remove all castings from the Company manhole structures that are designated to be abandoned. The castings shall be carefully loaded, transported, and unloaded at a temporary storage area designated by the NYSDOT Engineer. The Contractor shall notify the Company to pickup the castings at the secured storage area. The Contractor shall be responsible for the castings until they are turned over to the Company. Damage to or loss of the salvaged castings caused by the Contractor's operations shall be reimbursable to the Company by the Contractor at no expense to the State.

The abandonment work shall be done according to the details and specifications shown in the contract documents. The work shall include but is not be limited to; demolishing the manhole top slabs, plugging all conduits, filling manhole cavities, backfilling, and restoring the affected area as detailed in the contract documents. The demolished top slabs shall be removed and disposed of in accordance with the provisions of Subsection 203-3.08 of the NYSDOT Standard Specifications. Any pavement courses, sub-courses, curbs, sidewalks, lawns, etc., removed and/or disturbed due to the work of abandoning Company manholes shall be replaced and/or restored in kind as detailed in the contract documents or as directed by the Engineer. This restoration work shall be included in the unit price bid for this item.

METHOD OF MEASUREMENT

This work will be measured as the number of each abandoned Company manholes.

BASIS OF PAYMENT

The unit price bid shall include the cost of furnishing all labor, materials, and equipment necessary to complete the work.

Payment will be made under:

Item No.	Item	Pay Unit
659.7000nn01	Abandon Manholes	Each

Note: nn denotes serialized pay item for each abandoned manhole

ITEM 660.21XX0008 - FURNISH & INSTALL STEEL CASING

DESCRIPTION
Under this item the contractor shall furnish and install steel casing of the sizes indicated and at the locations shown on the plan or as ordered by the Engineer.

The work shall include the installation of the casing pipe, and all extra work involved in the placement of the carrier pipe in the casing including the furnishing and installing of the insulated casing spacers and end seals.

MATERIALS
The casing pipe shall be bar steel casing pipe American Petroleum Institute (API) 5L Grade B seamless, electric welded pipe or approved equal. The pipe wall thickness shall be schedule 40 or as directed by the Engineer. The pipe ends shall be prepared for butt welding and beveled at 37 ½ degrees. Casing spacers shall be as indicated on the plans.

CONSTRUCTION DETAILS
All casing pipe shall be laid true to line and grade and shall have a full, firm and even bearing.

Bedding, filling and backfilling shall be in accordance with the NYS Department of Transportation Specifications - Section 203-3.15, Fill and Backfill at Structures, Culverts, Pipes, Conduits and Direct Burial Cables.

Movement of construction equipment and all other vehicles and loads over and adjacent to any pipe shall be done at the contractor's risk. When determined by the Engineer, any pipe that is damaged or disturbed through any cause, shall be replaced as directed by the Engineer, at the expense of the contractor and at no cost to the State. Welding shall be done by a certified welder. The ends of the casing shall be sealed and made waterproof in a workmanlike manner.

METHOD OF MEASUREMENT
This work will be measured as the number of linear feet of casing measured along its axis in its final position.

BASIS OF PAYMENT
The unit price bid shall include the cost of furnishing all labor, equipment and materials necessary to complete the work to the satisfaction of the Engineer, including welding, installation of casing, installation of casing spacers and any extra work involved in the placement of the carrier pipe in the casing.

Excavation will be paid for under the appropriate Trench and Culvert Excavation Item in Section 206 of the Standard Specifications.

Any special backfill will be paid for under Item 203.07, Selected Granular Fill.

ITEM 660.21XX0008 - FURNISH & INSTALL STEEL CASING

BASIS OF PAYMENT - cont'd

Carrier pipe installed within the casing will be paid for under its respective item.

Payment will be made under:

ITEM NO.	ITEM	PAY UNIT
660.21080008	Furnish & Install Steel Casing 8 NPS (O.D.)	Linear Feet
660.21100008	Furnish & Install Steel Casing 10 NPS (O.D.)	Linear Feet
660.21120008	Furnish & Install Steel Casing 12 NPS (O.D.)	Linear Feet
660.21140008	Furnish & Install Steel Casing 14 NPS (O.D.)	Linear Feet
660.21160008	Furnish & Install Steel Casing 16 NPS (O.D.)	Linear Feet
660.21180008	Furnish & Install Steel Casing 18 NPS (O.D.)	Linear Feet
660.21200008	Furnish & Install Steel Casing 20 NPS (O.D.)	Linear Feet
660.21240008	Furnish & Install Steel Casing 24 NPS (O.D.)	Linear Feet
660.21260008	Furnish & Install Steel Casing 26 NPS (O.D.)	Linear Feet
660.21280008	Furnish & Install Steel Casing 28 NPS (O.D.)	Linear Feet
660.21300008	Furnish & Install Steel Casing 30 NPS (O.D.)	Linear Feet
660.21320008	Furnish & Install Steel Casing 32 NPS (O.D.)	Linear Feet
660.21360008	Furnish & Install Steel Casing 36 NPS (O.D.)	Linear Feet
660.21380008	Furnish & Install Steel Casing 38 NPS (O.D.)	Linear Feet
660.21420008	Furnish & Install Steel Casing 42 NPS (O.D.)	Linear Feet
660.21440008	Furnish & Install Steel Casing 44 NPS (O.D.)	Linear Feet

XX = Outer diameter pipe size in NPS.

ITEM 664.40XX0006 - PRECAST SANITARY SEWER MANHOLE

DESCRIPTION

This specification covers the requirements for furnishing and installing precast sanitary sewer manholes as shown on the plans and in accordance with these specifications. The work shall conform to the requirements of NYSDOT Section 604 – Drainage Structures with the following modifications:

MATERIALS

Under Section 604-2.01 Drainage Structure and Manholes, **ADD** the following:

"Exterior coating for manhole shall be either Mobil Mo-Tar 4, Rust-Oleum 9300 Epoxy System or approved equal.

Precast reinforced concrete top slab and/or precast landing if required shall be manufactured in accordance with the detail shown on the contract plans. The concrete used in the manufacturing of these slabs shall be minimum 4000 psi concrete as specified under Section 706-04, "Precast Concrete Drainage Units" of the NYSDOT Standard Specifications."

Pipe Connections into the Sanitary Sewer Manholes shall be as follows

a. The precast reinforced concrete manhole base shall be provided with circular openings at the locations and elevations for the proper connection of pipes. The pipe connections shall be sealed with flexible manhole seal assemblies.

b. The flexible manhole seal assemblies shall be installed in accordance with the recommendations of the seal assembly manufacturer and shall conform to ASTM C923.

c. Flexible manhole seal assemblies shall permit at least an eight (8) degree deflection from the centerline of the opening in any direction while maintaining a watertight connection.

d. The flexible manhole seal assemblies shall be as manufactured by Interpace Corp. (Lock Joint Flexible Manhole sleeve), National Pollution Control Systems, Inc. (Kor-N-Seal) or Press-Seal Gasket Corp. or approved equal.

A cast-in-place concrete invert shall be formed within the precast concrete manhole base as shown on the contract drawings with Class A concrete.

CONSTRUCTION DETAILS

At the end of Section 604-3.02 Concrete Drainage Structure and Manholes, **ADD** the following:

Manhole Bases

For precast manhole bases, the area underneath the manhole base shall be excavated to the required elevation. The soil below the base shall not be disturbed. The manhole base shall then be lowered into the trench and checked for proper bearing on the subgrade, proper elevation and orientation to receive the incoming and outgoing sewers at the designated invert elevation. If the invert elevation varies by more than plus or minus ½ inch from the designated invert elevation, the base shall be removed and reset.

ITEM 664.40XX0006 - PRECAST SANITARY SEWER MANHOLE

Cast In Place Inverts

The concrete invert fill shall be installed following the connection of all sewer pipes to the manhole. The invert fill shall be true to the sewer pipe invert elevations, with smooth channels of uniform cross section and slope, either straight or with a continuous curve between inlet and outlet of pipes. The concrete invert fill shall be placed in accordance with dimensions and details shown on the Contract Plans.

To eliminate free fall conditions in a manhole resulting from invert elevation differentials between incoming and outgoing pipes, the Contractor shall form and construct suitable channels in the bottom of the manhole connecting the inverts.

The complete exterior, flow channel, and bench shall receive a prime and finish coat of the specified coating. Application shall be in strict conformance with the manufacturer's recommendations.

Masonry Collar

The precast concrete pavers or precast concrete collar be constructed on the Precast Concrete Top Slab to bring the manhole frame and cover to the proper grade in accordance with the detail on the Contract Plans. The minimum height shall be 4 inches and the maximum height shall not exceed 16 inches.

Following the placement of the pavers, a ½ inch layer of Masonry mortar shall be applied to the exterior surface of the brick and trowelled to a smooth finish.

Leakage Tests

For leakage test purposes, a section of sewer line shall be construed as being that portion of a sewer line between two (2) consecutive manholes inclusive of upstream manhole and appurtenances unless otherwise specified.

The Contractor shall be required to notify the Engineer not less than forty-eight (48) hours prior to the time he intends to begin testing at any particular location.

Prior to undertaking any repairs, the Engineer's written approval of method and material to be used in the repair shall be secured. Items which in the opinion of the Engineer cannot be repaired shall be replaced.

a. All gravity and pressure sewer lines, including but not limited to pipe, fittings, manholes, risers, stubs, specials an appurtenances shall be tested for water tightness as hereinafter specified.

b. The Contractor shall furnish all necessary material, equipment, labor and other facilities required to satisfactorily perform the tests and shall make all necessary repairs or replacements and retests as required at his own expense.

c. The Contractor is warned that the Engineer may refuse to allow exfiltration testing, or void those already underway if, in his judgment, heavy rain or rainwater inflow will distort test results. Retests of the affected lines shall be done at no cost to the County, State or other agency having jurisdiction. No claims for delays will be considered by the County, State or other agency having jurisdiction, in the event testing is suspended by the Engineer, as specified above.

d. All sewer pipes and manholes must be clean prior to any work described in this section. They shall be free from dirt, debris, sand, stones, etc. and accumulated water must be removed.

ITEM 664.40XX0006 - PRECAST SANITARY SEWER MANHOLE

e. The testing of new manholes will be performed using the water exfiltration test or air test. Air pressure testing on manholes shall be done in accordance with ASTM C1244. This specification describes the testing process for an exfiltration test.

f. Prior to the exfiltration test, all pipes in the new manhole to be tested shall be plugged. All plugs shall be installed in the presence of the Engineer or his representative. Each new manhole shall be filled with water to a level not less than 4 feet above the exterior crown of the upstream pipe or above the normal groundwater level whichever is higher.

g. A twenty four (24) hour stabilization period will be required prior to taking measurements. Should the water level during the stabilization period drop below the test level as specified above, the Contractor, in the presence of the Engineer or his representative shall add make-up water for water lost during the stabilization period to increase the water level to the required height for the test.

h. The actual test period shall begin following the stabilization period. Addition of make-up water will not be allowed once the test has begun. *Any deviation* from the aforementioned will *void* the test.

i. The test shall be conducted for a period of at least two (2) hours. The Engineer or his representative will take three (3) readings of the water level at the beginning of the test period, and another three (3) readings of the water level at the end of the test period. The average of the readings will be used by the Engineer to calculate the leakage quantity.

j. The maximum allowable quantity of exfiltration from any manhole under test shall not exceed 0.25 gallons per foot diameter of manhole per foot of water depth measured from the invert of the downstream pipe per twenty-four (24) hours.

Prior to making any repairs, the Contractor shall submit to the Engineer, in writing, the proposed method of repair and secure his written approval of methods and material to be incorporated in the repair. The Engineer shall be the sole judge as to whether the pipes or manholes shall be repaired or replaced.

All repairs and retesting must be made in the presence of a representative of the Engineer and to the satisfaction of the Engineer.

Should a section or sections of pipe, or manholes fail to meet the leakage criteria, the Contractor shall at no cost to the County, State, or other agency having jurisdiction, locate the leaks and repair pipe and manholes, as necessary, until the leakage is within the permitted allowance.

Regardless of the results of the infiltration test, it is required that all visible leaks be repaired.

The injection of gel, sealant, or any other product to seal cracks, porous section, or any other structural defect of the pipe or manhole will not be permitted.

All tests and repairs shall be repeated as many times as necessary, at no cost to the County,

ITEM 664.40XX0006 - PRECAST SANITARY SEWER MANHOLE

State or other agency having jurisdiction, until the requirements hereinbefore specified have been met.

METHOD OF MEASUREMENT

The quantity to be measured under this item will be the number of linear feet of height, measured to the nearest ¼ foot, from the bottom of the manhole base to the top of the masonry collar.

BASIS OF PAYMENT

The unit price bid per linear foot shall include the cost of all labor, equipment, and materials necessary to complete the work including flexible gaskets between manhole sections, concrete invert fill, precast top slab and landings, and all necessary testing and any repairs to the manhole required in connection with the sewerage tests on the manhole.

Manhole frames and covers will be paid for under separate items.

Excavation (dewatering included in Excavation), backfill, select fill, geotextile and any necessary sheeting will be paid for under separate items.

Payment will be made under:

Item No.	Description	Pay Unit
664.40480006	Precast Sanitary Sewer Manhole (48 inch DIA.)	Linear Foot
664.40600006	Precast Sanitary Sewer Manhole (60 inch DIA.)	Linear Foot
664.40720006	Precast Sanitary Sewer Manhole (72 inch DIA.)	Linear Foot
664.40840006	Precast Sanitary Sewer Manhole (84 inch DIA.)	Linear Foot
664.40960006	Precast Sanitary Sewer Manhole (96 inch DIA.)	Linear Foot

PREVAILING WAGE RATES

SPECIAL NOTE: STATE PREVAILING WAGE RATES

LETTER WITH PRC NUMBER AND NOTICES FROM NYS DEPARTMENT OF LABOR.

PREVAILING WAGE RATES FROM THE FEDERAL DEPARTMENT OF LABOR WEBSITE

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SPECIAL NOTE
STATE PREVAILING WAGE RATES

The Contractor shall ensure that workers are paid the appropriate wages and supplemental (fringe) benefits. Throughout the contract, the Contractor shall obtain and pay workers in accordance with periodic wage rate schedule updates from the NYS Department of Labor (NYSDOL). Wage rate amendments and supplements are available on the NYSDOL web site at www.labor.ny.gov. All changes line or clarification of labor classification(s) and applicability of prevailing wage rates shall be obtained in writing from the Office of the Director, NYSDOL Bureau of Public Work.

The NYSDOL prevailing wage rate schedule for this contract has been determined and is available on the internet. The prevailing wage rate schedule is accessed by visiting the NYSDOL web site, navigating to the appropriate web page, and entering the Prevailing Rate Case No. (PRC#). The PRC# is provided on NYSDOL Form PW-200 included in this contract proposal.

A copy of the project specific prevailing wage rate schedule will be provided to the successful bidder upon award of the contract. Upon written request, the schedule will be provided by the consultant to prospective bidders without internet access.

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NEW YORK STATE DEPARTMENT OF LABOR (NYSDOL) PREVAILING WAGE RATES

Jefferson County

Kyle Alberts
61 Commercial Street
Suite 100
Rochester NY 14614-1009

Schedule Year	2023 through 2024
Date Requested	02/06/2024
PRC#	2024001515

Location	Evans Mills, New York
Project ID#	PIN 7753.77
Project Type	Replacement of Noble Street (BIN 3371810) over West Creek

PREVAILING WAGE SCHEDULE FOR ARTICLE 8 PUBLIC WORK PROJECT

Attached is the current schedule(s) of the prevailing wage rates and prevailing hourly supplements for the project referenced above. A unique Prevailing Wage Case Number (PRC#) has been assigned to the schedule(s) for your project.

The schedule is effective from July 2023 through June 2024. All updates, corrections, posted on the 1st business day of each month, and future copies of the annual determination are available on the Department's website www.labor.ny.gov. Updated PDF copies of your schedule can be accessed by entering your assigned PRC# at the proper location on the website.

It is the responsibility of the contracting agency or its agent to annex and make part, the attached schedule, to the specifications for this project, when it is advertised for bids and /or to forward said schedules to the successful bidder(s), immediately upon receipt, in order to insure the proper payment of wages.

Please refer to the "General Provisions of Laws Covering Workers on Public Work Contracts" provided with this schedule, for the specific details relating to other responsibilities of the Department of Jurisdiction.

Upon completion or cancellation of this project, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

NOTICE OF COMPLETION / CANCELLATION OF PROJECT

Date Completed: _____ Date Cancelled: _____

Name & Title of Representative: _____

Phone: (518) 457-5589 Fax: (518) 485-1870
W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12226

General Provisions of Laws Covering Workers on Article 8 Public Work Contracts

Introduction

The Labor Law requires public work contractors and subcontractors to pay laborers, workers, or mechanics employed in the performance of a public work contract not less than the prevailing rate of wage and supplements (fringe benefits) in the locality where the work is performed.

Responsibilities of the Department of Jurisdiction

A Department of Jurisdiction (Contracting Agency) includes a state department, agency, board or commission: a county, city, town or village; a school district, board of education or board of cooperative educational services; a sewer, water, fire, improvement and other district corporation; a public benefit corporation; and a public authority awarding a public work contract.

The Department of Jurisdiction (Contracting Agency) awarding a public work contract MUST obtain a Prevailing Rate Schedule listing the hourly rates of wages and supplements due the workers to be employed on a public work project. This schedule may be obtained by completing and forwarding a "Request for wage and Supplement Information" form (PW 39) to the Bureau of Public Work. The Prevailing Rate Schedule MUST be included in the specifications for the contract to be awarded and is deemed part of the public work contract.

Upon the awarding of the contract, the law requires that the Department of Jurisdiction (Contracting Agency) furnish the following information to the Bureau: the name and address of the contractor, the date the contract was let and the approximate dollar value of the contract. To facilitate compliance with this provision of the Labor Law, a copy of the Department's "Notice of Contract Award" form (PW 16) is provided with the original Prevailing Rate Schedule.

The Department of Jurisdiction (Contracting Agency) is required to notify the Bureau of the completion or cancellation of any public work project. The Department's PW 200 form is provided for that purpose.

Both the PW 16 and PW 200 forms are available for completion online.

Hours

No laborer, worker, or mechanic in the employ of a contractor or subcontractor engaged in the performance of any public work project shall be permitted to work more than eight hours in any day or more than five days in any week, except in cases of extraordinary emergency. The contractor and the Department of Jurisdiction (Contracting Agency) may apply to the Bureau of Public Work for a dispensation permitting workers to work additional hours or days per week on a particular public work project.

Wages and Supplements

The wages and supplements to be paid and/or provided to laborers, workers, and mechanics employed on a public work project shall be not less than those listed in the current Prevailing Rate Schedule for the locality where the work is performed. If a prime contractor on a public work project has not been provided with a Prevailing Rate Schedule, the contractor must notify the Department of Jurisdiction (Contracting Agency) who in turn must request an original Prevailing Rate Schedule form the Bureau of Public Work. Requests may be submitted by: mail to NYSDOL, Bureau of Public Work, State Office Bldg. Campus, Bldg. 12, Rm. 130, Albany, NY 12226; Fax to Bureau of Public Work (518) 485-1870; or electronically at the NYSDOL website www.labor.ny.gov.

Upon receiving the original schedule, the Department of Jurisdiction (Contracting Agency) is REQUIRED to provide complete copies to all prime contractors who in turn MUST, by law, provide copies of all applicable county schedules to each subcontractor and obtain from each subcontractor, an affidavit certifying such schedules were received. If the original schedule expired, the contractor may obtain a copy of the new annual determination from the NYSDOL website www.labor.ny.gov.

The Commissioner of Labor makes an annual determination of the prevailing rates. This determination is in effect from July 1st through June 30th of the following year. The annual determination is available on the NYSDOL website www.labor.ny.gov.

Payrolls and Payroll Records

Every contractor and subcontractor MUST keep original payrolls or transcripts subscribed and affirmed as true under penalty of perjury. As per Article 6 of the Labor law, contractors and subcontractors are required to establish, maintain, and preserve for not less than six (6) years, contemperaneous, true, and accurate payroll records. At a minimum, payrolls must show the following information for each person employed on a public work project: Name, Address, Last 4 Digits of Social Security Number, Classification(s) in which the worker was employed, Hourly wage rate(s) paid, Supplements paid or provided, and Daily and weekly number of hours worked in each classification.

The filing of payrolls to the Department of Jurisdiction is a condition of payment.Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury. The Department of Jurisdiction (Contracting Agency) shall collect, review for facial validity, and maintain such payrolls.

In addition, the Commissioner of Labor may require contractors to furnish, with ten (10) days of a request, payroll records sworn to as their validity and accuracy for public work and private work. Payroll records include, but are not limited to time cards, work description sheets, proof that supplements were provided, cancelled payroll checks and payrolls. Failure to provide the requested information within the allotted ten (10) days will result in the withholding of up to 25% of the contract, not to exceed $100,000.00. If the contractor or subcontractor does not maintain a place of business in New York State and the amount of the contract exceeds $25,000.00, payroll records and certifications must be kept on the project worksite.

The prime contractor is responsible for any underpayments of prevailing wages or supplements by any subcontractor.

All contractors or their subcontractors shall provide to their subcontractors a copy of the Prevailing Rate Schedule specified in the public work contract as well as any subsequently issued schedules. A failure to provide these schedules by a contractor or subcontractor is a violation of Article 8, Section 220-a of the Labor Law.

All subcontractors engaged by a public work project contractor or its subcontractor, upon receipt of the original schedule and any subsequently issued schedules, shall provide to such contractor a verified statement attesting that the subcontractor has received the Prevailing Rate Schedule and will pay or provide the applicable rates of wages and supplements specified therein. (See NYS Labor Laws, Article 8 . Section 220-a).

Determination of Prevailing Wage and Supplement Rate Updates Applicable to All Counties

The wages and supplements contained in the annual determination become effective July 1st whether or not the new determination has been received by a given contractor. Care should be taken to review the rates for obvious errors. Any corrections should be brought to the Department's attention immediately. It is the responsibility of the public work contractor to use the proper rates. If there is a question on the proper classification to be used, please call the district office located nearest the project. Any errors in the annual determination will be corrected and posted to the NYSDOL website on the first business day of each month. Contractors are responsible for paying these updated rates as well, retroactive to July 1st.

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. To the extent possible, the Department posts rates in its possession that cover periods of time beyond the July 1st to June 30th time frame covered by a particular annual determination. Rates that extend beyond that instant time period are informational ONLY and may be updated in future annual determinations that actually cover the then appropriate July 1st to June 30th time period.

Withholding of Payments

When a complaint is filed with the Commissioner of Labor alleging the failure of a contractor or subcontractor to pay or provide the prevailing wages or supplements, or when the Commissioner of Labor believes that unpaid wages or supplements may be due, payments on the public work contract shall be withheld from the prime contractor in a sufficient amount to satisfy the alleged unpaid wages and supplements, including interest and civil penalty, pending a final determination.

When the Bureau of Public Work finds that a contractor or subcontractor on a public work project failed to pay or provide the requisite prevailing wages or supplements, the Bureau is authorized by Sections 220-b and 235.2 of the Labor Law to so notify the financial officer of the Department of Jurisdiction (Contracting Agency) that awarded the public work contract. Such officer MUST then withhold or cause to be withheld from any payment due the prime contractor on account of such contract the amount indicated by the Bureau as sufficient to satisfy the unpaid wages and supplements, including interest and any civil penalty that may be assessed by the Commissioner of Labor. The withholding continues until there is a final determination of the underpayment by the Commissioner of Labor or by the court in the event a legal proceeding is instituted for review of the determination of the Commissioner of Labor.

The Department of Jurisdiction (Contracting Agency) shall comply with this order of the Commissioner of Labor or of the court with respect to the release of the funds so withheld.

Summary of Notice Posting Requirements

The current Prevailing Rate Schedule must be posted in a prominent and accessible place on the site of the public work project. The prevailing wage schedule must be encased in, or constructed of, materials capable of withstanding adverse weather conditions and be titled "PREVAILING RATE OF WAGES" in letters no smaller than two (2) inches by two (2) inches.

The "Public Work Project" notice must be posted at the beginning of the performance of every public work contract, on each job site.

Every employer providing workers. compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers. Compensation Board in a conspicuous place on the jobsite.

Every employer subject to the NYS Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers, notices furnished by the State Division of Human Rights.

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the NYS Department of Labor.

Apprentices

Employees cannot be paid apprentice rates unless they are individually registered in a program registered with the NYS Commissioner of Labor. The allowable ratio of apprentices to journeyworkers in any craft classification can be no greater than the statewide building trade ratios promulgated by the Department of Labor and included with the Prevailing Rate Schedule. An employee listed on a payroll as an apprentice who is not registered as above or is performing work outside the classification of work for which the apprentice is indentured, must be paid the prevailing journeyworker's wage rate for the classification of work the employee is actually performing.

NYSDOL Labor Law, Article 8, Section 220-3, require that only apprentices individually registered with the NYS Department of Labor may be paid apprenticeship rates on a public work project. No other Federal or State Agency of office registers apprentices in New York State.

Persons wishing to verify the apprentice registration of any person must do so in writing by mail, to the NYSDOL Office of Employability Development / Apprenticeship Training, State Office Bldg. Campus, Bldg. 12, Albany, NY 12226 or by Fax to NYSDOL Apprenticeship Training (518) 457-7154. All requests for verification must include the name and social security number of the person for whom the information is requested.

The only conclusive proof of individual apprentice registration is written verification from the NYSDOL Apprenticeship Training Albany Central office. Neither Federal nor State Apprenticeship Training offices outside of Albany can provide conclusive registration information.

It should be noted that the existence of a registered apprenticeship program is not conclusive proof that any person is registered in that program. Furthermore, the existence or possession of wallet cards, identification cards, or copies of state forms is not conclusive proof of the registration of any person as an apprentice.

Interest and Penalties

In the event that an underpayment of wages and/or supplements is found:

- Interest shall be assessed at the rate then in effect as prescribed by the Superintendent of Banks pursuant to section 14-a of the Banking Law, per annum from the date of underpayment to the date restitution is made.
- A Civil Penalty may also be assessed, not to exceed 25% of the total of wages, supplements, and interest due.

Debarment

Any contractor or subcontractor and/or its successor shall be ineligible to submit a bid on or be awarded any public work contract or subcontract with any state, municipal corporation or public body for a period of five (5) years when:

- Two (2) willful determinations have been rendered against that contractor or subcontractor and/or its successor within any consecutive six (6) year period.
- There is any willful determination that involves the falsification of payroll records or the kickback of wages or supplements.

Criminal Sanctions

Willful violations of the Prevailing Wage Law (Article 8 of the Labor Law) may be a felony punishable by fine or imprisonment of up to 15 years, or both.

Discrimination

No employee or applicant for employment may be discriminated against on account of age, race, creed, color, national origin, sex, disability or marital status.

No contractor, subcontractor nor any person acting on its behalf, shall by reason of race, creed, color, disability, sex or national origin discriminate against any citizen of the State of New York who is qualified and available to perform the work to which the employment relates (NYS Labor Law, Article 8, Section 220-e(a)).

No contractor, subcontractor, nor any person acting on its behalf, shall in any manner, discriminate against or intimidate any employee on account of race, creed, color, disability, sex, or national origin (NYS Labor Law, Article 8, Section 220-e(b)).

The Human Rights Law also prohibits discrimination in employment because of age, marital status, or religion.

There may be deducted from the amount payable to the contractor under the contract a penalty of $50.00 for each calendar day during which such person was discriminated against or intimidated in violation of the provision of the contract (NYS Labor Law, Article 8, Section 220-e(c)).

The contract may be cancelled or terminated by the State or municipality. All monies due or to become due thereunder may be forfeited for a second or any subsequent violation of the terms or conditions of the anti-discrimination sections of the contract (NYS Labor Law, Article 8, Section 220-e(d)).

Every employer subject to the New York State Human Rights Law must conspicuously post at its offices, places of employment, or employment training centers notices furnished by the State Division of Human Rights.

Workers' Compensation

In accordance with Section 142 of the State Finance Law, the contractor shall maintain coverage during the life of the contract for the benefit of such employees as required by the provisions of the New York State Workers' Compensation Law.

A contractor who is awarded a public work contract must provide proof of workers' compensation coverage prior to being allowed to begin work.

The insurance policy must be issued by a company authorized to provide workers' compensation coverage in New York State. Proof of coverage must be on form C-105.2 (Certificate of Workers' Compensation Insurance) and must name this agency as a certificate holder.

If New York State coverage is added to an existing out-of-state policy, it can only be added to a policy from a company authorized to write workers' compensation coverage in this state. The coverage must be listed under item 3A of the information page.

The contractor must maintain proof that subcontractors doing work covered under this contract secured and maintained a workers' compensation policy for all employees working in New York State.

Every employer providing worker's compensation insurance and disability benefits must post notices of such coverage in the format prescribed by the Workers' Compensation Board in a conspicuous place on the jobsite.

Unemployment Insurance

Employers liable for contributions under the Unemployment Insurance Law must conspicuously post on the jobsite notices furnished by the New York State Department of Labor.

Kathy Hochul, Governor

Roberta Reardon, Commissioner

Jefferson County

Kyle Alberts
61 Commercial Street
Suite 100
Rochester NY 14614-1009

Schedule Year	2023 through 2024
Date Requested	02/06/2024
PRC#	2024001515

Location	Evans Mills, New York
Project ID#	PIN 7753.77
Project Type	Replacement of Noble Street (BIN 3371810) over West Creek

Notice of Contract Award

New York State Labor Law, Article 8, Section 220.3a requires that certain information regarding the awarding of public work contracts, be furnished to the Commissioner of Labor. One "Notice of Contract Award" (PW 16, which may be photocopied), **MUST** be completed for **EACH** prime contractor on the above referenced project.

Upon notifying the successful bidder(s) of this contract, enter the required information and mail **OR** fax this form to the office shown at the bottom of this notice, **OR** fill out the electronic version via the NYSDOL website.

Contractor Information
All information must be supplied

Federal Employer Identification Number: _____

Name: _____

Address: _____

_____

City: _____ State: _____ Zip: _____

Amount of Contract: $_____

Approximate Starting Date: ____/____/____

Approximate Completion Date: ____/____/____

Contract Type:

[ ] (01) General Construction
[ ] (02) Heating/Ventilation
[ ] (03) Electrical
[ ] (04) Plumbing
[ ] (05) Other : _____

Phone: (518) 457-5589 Fax: (518) 485-1870
W. Averell Harriman State Office Campus, Bldg. 12, Room 130, Albany, NY 12226

Social Security Numbers on Certified Payrolls:

The Department of Labor is cognizant of the concerns of the potential for misuse or inadvertent disclosure of social security numbers. Identity theft is a growing problem and we are sympathetic to contractors' concern regarding inclusion of this information on payrolls if another identifier will suffice.

For these reasons, the substitution of the use of the last four digits of the social security number on certified payrolls submitted to contracting agencies on public work projects is now acceptable to the Department of Labor. This change does not affect the Department's ability to request and receive the entire social security number from employers during its public work/ prevailing wage investigations.

Construction Industry Fair Play Act: Required Posting for Labor Law Article 25-B § 861-d

Construction industry employers must post the "Construction Industry Fair Play Act" notice in a prominent and accessible place on the job site. Failure to post the notice can result in penalties of up to $1,500 for a first offense and up to $5,000 for a second offense. The posting is included as part of this wage schedule. Additional copies may be obtained from the NYS DOL website, https://dol.ny.gov/public-work-and-prevailing-wage
If you have any questions concerning the Fair Play Act, please call the State Labor Department toll-free at 1-866-435-1499 or email us at: dol.misclassified@labor.ny.gov .

Worker Notification: (Labor Law §220, paragraph a of subdivision 3-a)

Effective June 23, 2020

This provision is an addition to the existing wage rate law, Labor Law §220, paragraph a of subdivision 3-a. It requires contractors and subcontractors to provide written notice to all laborers, workers or mechanics of the *prevailing wage and supplement rate* for their particular job classification *on each pay stub**. It also requires contractors and subcontractors to *post a notice* at the beginning of the performance of every public work contract *on each job site* that includes the telephone number and address for the Department of Labor and a statement informing laborers, workers or mechanics of their right to contact the Department of Labor if he/she is not receiving the proper prevailing rate of wages and/or supplements for his/her job classification. The required notification will be provided with each wage schedule, may be downloaded from our website *www.labor.ny.gov* or be made available upon request by contacting the Bureau of Public Work at 518-457-5589. *In the event the required information will not fit on the pay stub, an accompanying sheet or attachment of the information will suffice.

(12.20)

To all State Departments, Agency Heads and Public Benefit Corporations
IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND

Budget Policy & Reporting Manual

B-610

Public Work Enforcement Fund

effective date December 7, 2005

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1. Purpose and Scope:

This Item describes the Public Work Enforcement Fund (the Fund, PWEF) and its relevance to State agencies and public benefit corporations engaged in construction or reconstruction contracts, maintenance and repair, and announces the recently-enacted increase to the percentage of the dollar value of such contracts that must be deposited into the Fund. This item also describes the roles of the following entities with respect to the Fund:

- New York State Department of Labor (DOL),
- The Office of the State of Comptroller (OSC), and
- State agencies and public benefit corporations.

2. Background and Statutory References:

DOL uses the Fund to enforce the State's Labor Law as it relates to contracts for construction or reconstruction, maintenance and repair, as defined in subdivision two of Section 220 of the Labor Law. State agencies and public benefit corporations participating in such contracts are required to make payments to the Fund.

Chapter 511 of the Laws of 1995 (as amended by Chapter 513 of the Laws of 1997, Chapter 655 of the Laws of 1999, Chapter 376 of the Laws of 2003 and Chapter 407 of the Laws of 2005) established the Fund.

3. Procedures and Agency Responsibilities:

The Fund is supported by transfers and deposits based on the value of contracts for construction and reconstruction, maintenance and repair, as defined in subdivision two of Section 220 of the Labor Law, into which all State agencies and public benefit corporations enter.

Chapter 407 of the Laws of 2005 increased the amount required to be provided to this fund to .10 of one-percent of the total cost of each such contract, to be calculated at the time agencies or public benefit corporations enter into a new contract or if a contract is amended. The provisions of this bill became effective August 2, 2005.

To all State Departments, Agency Heads and Public Benefit Corporations
IMPORTANT NOTICE REGARDING PUBLIC WORK ENFORCEMENT FUND

OSC will report to DOL on all construction-related ("D") contracts approved during the month, including contract amendments, and then DOL will bill agencies the appropriate assessment monthly. An agency may then make a determination if any of the billed contracts are exempt and so note on the bill submitted back to DOL. For any instance where an agency is unsure if a contract is or is not exempt, they can call the Bureau of Public Work at the number noted below for a determination. Payment by check or journal voucher is due to DOL within thirty days from the date of the billing. DOL will verify the amounts and forward them to OSC for processing.

For those contracts which are not approved or administered by the Comptroller, monthly reports and payments for deposit into the Public Work Enforcement Fund must be provided to the Administrative Finance Bureau at the DOL within 30 days of the end of each month or on a payment schedule mutually agreed upon with DOL.

Reports should contain the following information:

- Name and billing address of State agency or public benefit corporation;
- State agency or public benefit corporation contact and phone number;
- Name and address of contractor receiving the award;
- Contract number and effective dates;
- Contract amount and PWEF assessment charge (if contract amount has been amended, reflect increase or decrease to original contract and the adjustment in the PWEF charge); and
- Brief description of the work to be performed under each contract.

Checks and Journal Vouchers, payable to the "New York State Department of Labor" should be sent to:

Department of Labor
Administrative Finance Bureau-PWEF Unit
Building 12, Room 464
State Office Campus
Albany, NY 12226

Any questions regarding billing should be directed to NYSDOL's Administrative Finance Bureau-PWEF Unit at (518) 457-3624 and any questions regarding Public Work Contracts should be directed to the Bureau of Public Work at (518) 457-5589.

Required Notice under Article 25-B of the Labor Law

Attention All Employees, Contractors and Subcontractors: You are Covered by the Construction Industry Fair Play Act

The law says that you are an employee unless:

- You are free from direction and control in performing your job, **and**
- You perform work that is not part of the usual work done by the business that hired you, **and**
- You have an independently established business.

Your employer cannot consider you to be an independent contractor unless all three of these facts apply to your work.

It is against the law for an employer to misclassify employees as independent contractors or pay employees off the books.

Employee Rights: If you are an employee, you are entitled to state and federal worker protections. These include:

- Unemployment Insurance benefits, if you are unemployed through no fault of your own, able to work, and otherwise qualified,
- Workers' compensation benefits for on-the-job injuries,
- Payment for wages earned, minimum wage, and overtime (under certain conditions),
- Prevailing wages on public work projects,
- The provisions of the National Labor Relations Act, and
- A safe work environment.

It is a violation of this law for employers to retaliate against anyone who asserts their rights under the law. Retaliation subjects an employer to civil penalties, a private lawsuit or both.

Independent Contractors: If you are an independent contractor**, you must pay all taxes and Unemployment Insurance contributions required by New York State and Federal Law.**

Penalties for paying workers off the books or improperly treating employees as independent contractors:

• **Civil Penalty**	First offense: Up to $2,500 per employee Subsequent offense(s): Up to $5,000 per employee
• **Criminal Penalty**	First offense: Misdemeanor - up to 30 days in jail, up to a $25,000 fine and debarment from performing public work for up to one year. Subsequent offense(s): Misdemeanor - up to 60 days in jail or up to a $50,000 fine and debarment from performing public work for up to 5 years.

If you have questions about your employment status or believe that your employer may have violated your rights and you want to file a complaint, call the Department of Labor at (866) 435-1499 or send an email to dol.misclassified@labor.ny.gov. All complaints of fraud and violations are taken seriously. You can remain anonymous.

Employer Name:

WE ARE YOUR DOL

NEW YORK STATE Department of Labor

New York State Department of Labor
Bureau of Public Work

Attention Employees

THIS IS A:

PUBLIC WORK PROJECT

If you are employed on this project as a **worker, laborer, or mechanic** you are entitled to receive the **prevailing wage and supplements rate** for the classification at which you are working.

Your pay stub and wage notice received upon hire must clearly state your wage rate and supplement rate.

Chapter 629 of the Labor Laws of 2007:

These wages are set by law and must be posted at the work site. They can also be found at: https://dol.ny.gov/bureau-public-work

If you feel that you have not received proper wages or benefits, please call our nearest office.*

Albany	(518) 457-2744	Patchogue	(631) 687-4882
Binghamton	(607) 721-8005	Rochester	(585) 258-4505
Buffalo	(716) 847-7159	Syracuse	(315) 428-4056
Garden City	(516) 228-3915	Utica	(315) 793-2314
New York City	(212) 932-2419	White Plains	(914) 997-9507
Newburgh	(845) 568-5287		

* For New York City government agency construction projects, please contact the Office of the NYC Comptroller at (212) 669-4443, or www.comptroller.nyc.gov – click on Bureau of Labor Law.

Contractor Name: _____

Project Location: _____

Requirements for OSHA 10 Compliance

Article 8 §220-h requires that when the advertised specifications, for every contract for public work, is $250,000.00 or more the contract must contain a provision requiring that every worker employed in the performance of a public work contract shall be certified as having completed an OSHA 10 safety training course. The clear intent of this provision is to require that all employees of public work contractors, required to be paid prevailing rates, receive such training “prior to the performing any work on the project.”

The Bureau will enforce the statute as follows:

All contractors and sub contractors must attach a copy of proof of completion of the OSHA 10 course to the first certified payroll submitted to the contracting agency and on each succeeding payroll where any new or additional employee is first listed.

Proof of completion may include but is not limited to:

- Copies of bona fide course completion card (*Note: Completion cards do not have an expiration date.)*
- Training roster, attendance record of other documentation from the certified trainer pending the issuance of the card.
- Other valid proof

**A certification by the employer attesting that all employees have completed such a course is not sufficient proof that the course has been completed.

Any questions regarding this statute may be directed to the New York State Department of Labor, Bureau of Public Work at 518-457-5589.

WICKS

Public work projects are subject to the Wicks Law requiring separate specifications and bidding for the plumbing, heating and electrical work, when the total project's threshold is $3 million in Bronx, Kings, New York, Queens and, Richmond counties; $1.5 million in Nassau, Suffolk and Westchester counties; and $500,000 in all other counties.

For projects below the monetary threshold, bidders must submit a sealed list naming each subcontractor for the plumbing, HVAC and electrical and the amount to be paid to each. The list may not be changed unless the public owner finds a legitimate construction need, including a change in specifications or costs or the use of a Project Labor Agreement (PLA), and must be open to public inspection.

Allows the state and local agencies and authorities to waive the Wicks Law and use a PLA if it will provide the best work at the lowest possible price. If a PLA is used, all contractors shall participate in apprentice training programs in the trades of work it employs that have been approved by the Department of Labor (DOL) for not less than three years. They shall also have at least one graduate in the last three years and use affirmative efforts to retain minority apprentices. PLA's would be exempt from Wicks, but deemed to be public work subject to prevailing wage enforcement.

The Commissioner of Labor shall have the power to enforce separate specification requirement s on projects, and may issue stop-bid orders against public owners for non-compliance.

Other new monetary thresholds, and similar sealed bidding for non-Wicks projects, would apply to certain public authorities including municipal housing authorities, NYC Construction Fund, Yonkers Educational Construction Fund, NYC Municipal Water Finance Authority, Buffalo Municipal Water Finance Authority, Westchester County Health Care Association, Nassau County Health Care Corp., Clifton-Fine Health Care Corp., Erie County Medical Center Corp., NYC Solid Waste Management Facilities, and the Dormitory Authority.

Contractors must pay subcontractors within a 7 days period.

(07.19)

Introduction to the Prevailing Rate Schedule

Information About Prevailing Rate Schedule

This information is provided to assist you in the interpretation of particular requirements for each classification of worker contained in the attached Schedule of Prevailing Rates.

Classification

It is the duty of the Commissioner of Labor to make the proper classification of workers taking into account whether the work is heavy and highway, building, sewer and water, tunnel work, or residential, and to make a determination of wages and supplements to be paid or provided. It is the responsibility of the public work contractor to use the proper rate. If there is a question on the proper classification to be used, please call the district office located nearest the project. District office locations and phone numbers are listed below.

Prevailing Wage Schedules are issued separately for "General Construction Projects" and "Residential Construction Projects" on a county-by-county basis.

General Construction Rates apply to projects such as: Buildings, Heavy & Highway, and Tunnel and Water & Sewer rates.

Residential Construction Rates generally apply to construction, reconstruction, repair, alteration, or demolition of one family, two family, row housing, or rental type units intended for residential use.

Some rates listed in the Residential Construction Rate Schedule have a very limited applicability listed along with the rate. Rates for occupations or locations not shown on the residential schedule must be obtained from the General Construction Rate Schedule. Please contact the local Bureau of Public Work office before using Residential Rate Schedules, to ensure that the project meets the required criteria.

Payrolls and Payroll Records

Contractors and subcontractors are required to establish, maintain, and preserve for not less that six (6) years, contemporaneous, true, and accurate payroll records.

Every contractor and subcontractor shall submit to the Department of Jurisdiction (Contracting Agency), within thirty (30) days after issuance of its first payroll and every thirty (30) days thereafter, a transcript of the original payrolls, subscribed and affirmed as true under penalty of perjury.

Paid Holidays

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

Overtime

At a minimum, all work performed on a public work project in excess of eight hours in any one day or more than five days in any workweek is overtime. However, the specific overtime requirements for each trade or occupation on a public work project may differ. Specific overtime requirements for each trade or occupation are contained in the prevailing rate schedules.

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays.

The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Supplemental Benefits

Particular attention should be given to the supplemental benefit requirements. Although in most cases the payment or provision of supplements is straight time for all hours worked, some classifications require the payment or provision of supplements, or a portion of the supplements, to be paid or provided at a premium rate for premium hours worked. Supplements may also be required to be paid or provided on paid holidays, regardless of whether the day is worked. The Overtime Codes and Notes listed on the particular wage classification will indicate these conditions as required.

Effective Dates

When you review the schedule for a particular occupation, your attention should be directed to the dates above the column of rates. These are the dates for which a given set of rates is effective. The rate listed is valid until the next effective rate change or until the new annual determination which takes effect on July 1 of each year. All contractors and subcontractors are required to pay the current prevailing rates of wages and supplements. If you have any questions please contact the Bureau of Public Work or visit the New York State Department of Labor website (www.labor.ny.gov) for current wage rate information.

Apprentice Training Ratios

The following are the allowable ratios of registered Apprentices to Journey-workers.

For example, the ratio 1:1,1:3 indicates the allowable initial ratio is one Apprentice to one Journeyworker. The Journeyworker must be in place on the project before an Apprentice is allowed. Then three additional Journeyworkers are needed before a second Apprentice is allowed. The last ratio repeats indefinitely. Therefore, three more Journeyworkers must be present before a third Apprentice can be hired, and so on.

Please call Apprentice Training Central Office at (518) 457-6820 if you have any questions.

Title (Trade)	Ratio
Boilermaker (Construction)	1:1,1:4
Boilermaker (Shop)	1:1,1:3
Carpenter (Bldg.,H&H, Pile Driver/Dockbuilder)	1:1,1:4
Carpenter (Residential)	1:1,1:3
Electrical (Outside) Lineman	1:1,1:2
Electrician (Inside)	1:1,1:3
Elevator/Escalator Construction & Modernizer	1:1,1:2
Glazier	1:1,1:3
Insulation & Asbestos Worker	1:1,1:3
Iron Worker	1:1,1:4
Laborer	1:1,1:3
Mason	1:1,1:4
Millwright	1:1,1:4
Op Engineer	1:1,1:5
Painter	1:1,1:3
Plumber & Steamfitter	1:1,1:3
Roofer	1:1,1:2
Sheet Metal Worker	1:1,1:3
Sprinkler Fitter	1:1,1:2

If you have any questions concerning the attached schedule or would like additional information, please contact the nearest BUREAU of PUBLIC WORK District Office or write to:

New York State Department of Labor
Bureau of Public Work
State Office Campus, Bldg. 12
Albany, NY 12226

District Office Locations:	Telephone #	FAX #
Bureau of Public Work - Albany	518-457-2744	518-485-0240
Bureau of Public Work - Binghamton	607-721-8005	607-721-8004
Bureau of Public Work - Buffalo	716-847-7159	716-847-7650
Bureau of Public Work - Garden City	516-228-3915	516-794-3518
Bureau of Public Work - Newburgh	845-568-5287	845-568-5332
Bureau of Public Work - New York City	212-932-2419	212-775-3579
Bureau of Public Work - Patchogue	631-687-4882	631-687-4902
Bureau of Public Work - Rochester	585-258-4505	585-258-4708
Bureau of Public Work - Syracuse	315-428-4056	315-428-4671
Bureau of Public Work - Utica	315-793-2314	315-793-2514
Bureau of Public Work - White Plains	914-997-9507	914-997-9523
Bureau of Public Work - Central Office	518-457-5589	518-485-1870

Jefferson County General Construction

Boilermaker — 03/01/2024

JOB DESCRIPTION Boilermaker **DISTRICT** 6

ENTIRE COUNTIES
Cayuga, Clinton, Cortland, Franklin, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Seneca, St. Lawrence, Tompkins

WAGES

Per hour:	07/01/2023	01/01/2024
Boilermaker	$ 36.98	$ 37.98

SUPPLEMENTAL BENEFITS

Per hour:		
Journeyman	$ 26.31* + 1.48	$ 26.62* + 1.48

*This portion of the benefits subject to the same premium rate as shown for overtime wages.

OVERTIME PAY
See (B, E, Q) on OVERTIME PAGE

HOLIDAY
Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 15, 25) on HOLIDAY PAGE
NOTE: When a holiday falls on Sunday, the day observed by the State or Nation shall be observed. When Christmas Day and New Year's fall on Saturday, Friday will be observed as the holiday.

REGISTERED APPRENTICES
WAGES per hour: Six month terms at the following percentage of Journeyman's wage.

1st	2nd	3rd	4th	5th	6th	7th	8th
65%	65%	70%	75%	80%	85%	90%	95%

SUPPLEMENTAL BENEFITS per hour:

$ 19.58* + 1.48	$ 19.58* + 1.48	$ 20.54* + 1.48	$ 21.49* + 1.48	$ 22.44* + 1.48	$ 23.42* + 1.48	$24.40* + 1.48	$ 25.35* + 1.48

*This portion of the benefits subject to the same premium rate as shown for overtime wages.

6-175

Carpenter - Building — 03/01/2024

JOB DESCRIPTION Carpenter - Building **DISTRICT** 6

ENTIRE COUNTIES
Jefferson, Lewis, Oswego, St. Lawrence

WAGES

Per hour:	07/01/2023	07/01/2024 Additional	07/01/2025 Additional
Carpenter	$ 30.50	$ 1.00	$ 1.00
Floor Coverer	30.50	1.00	1.00
Carpet Layer	30.50	1.00	1.00
Drywall	30.50	1.00	1.00
Diver - Wet Day	61.25	--	--
Diver - Dry Day	31.50	1.00	1.00
Dive Tender	31.50	1.00	1.00

NOTE ADDITIONAL AMOUNTS PAID FOR THE FOLLOWING WORK LISTED BELOW (per hour worked):
- Pile Drivers/Dock Builders shall receive $0.25 per hour over the Journeyman's rate of pay when performing piledriving/dock building work.
- Certified Welders shall receive $1.00 per hour over the Journeyman's rate of pay when the employee is required to be certified and performs DOT or ABS specified welding work
- When an employee performs work within a contaminated area on a State and/or Federally designated hazardous waste site, and where relevant State and/or Federal regulations require employees to be furnished and use or wear required forms of personal protection, then the employee shall receive his regular hourly rate plus $1.50 per hour.
- Depth pay for Divers based upon deepest depth on the day of the dive:
  0' to 80' no additional fee
  81' to 100' additional $.50 per foot

101' to 150' additional $0.75 per foot
151' and deeper additional $1.25 per foot
- Penetration pay for Divers based upon deepest penetration on the day of the dive:
0' to 50' no additional fee
51' to 100' additional $.75 per foot
101' and deeper additional $1.00 per foot
- Diver rates applies to all hours worked on dive day.

SHIFT WORK
On Agency/Owner mandated shift work, the following rates will be applicable:
1st Shift - Regular Rate
2nd Shift - Premium of 7% of base wage per hour
3rd Shift - Premium of 14% of base wage per hour
Shift work shall be defined as implementing at least two (2) shifts in a twenty-four (24) consecutive hour period. Shift work must be for a minimum of three (3) consecutive days.

NOTE - The "Employer Registration" (30.1) use of a '4 Day/10 Hour Work schedules' will no longer be accepted or processed. All registered projects prior to June 30, 2023 will expire within the granted time frame.

For Pre-Registered Projects Four (4), Ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. Tuesday thru Friday may be worked with no make-up day. For further clarification contact your local Bureau Office.

SUPPLEMENTAL BENEFITS
Per hour:

Journeyman	$ 22.56*

*NOTE: For work performed inside the secure area of Nuclear Power Plants - benefits calculated at same premium as shown for overtime(per hour paid).

OVERTIME PAY
See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY
Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE
NOTE: Any holiday which occurs on Sunday shall be observed the following Monday. If Christmas falls on a Saturday, it shall be observed on the prior Friday.

REGISTERED APPRENTICES
CARPENTER APPRENTICES
Wages per hour (1300 hour terms at the following percentage of Journeyman's base wage):

1st	2nd	3rd	4th
65%	70%	75%	80%

Supplemental Benefits per hour**:

$ 12.55	$ 12.56	$15.16	$ 15.16

PILEDRIVER/DOCK BUILDER APPRENTICES
Wages per hour (1300 hour terms at the following percentage of Journeyman's base wage):

1st	2nd	3rd	4th
65%*	70%*	75%*	80%*

*Pile Driving/Dock Builder apprentices shall receive an additional $0.25 per hour worked when performing piledriving/dock building work.
Supplemental Benefits per hour**:

$ 12.55	$ 12.56	$ 15.16	$ 15.16

LINOLEUM, RESILIENT TILE, AND CARPET LAYER APPRENTICES
Wages per hour (1300 hour terms at the following percentage of Journeyman's base wage):

1st	2nd	3rd	4th
65%	70%	75%	80%

Supplemental Benefits per hour**:

$ 12.55	$ 12.56	$ 15.16	$ 15.16

ADDITIONAL AMOUNTS PAID PER HOUR WORKED TO APPRENTICES FOR SPECIFIC TYPES OF WORK PERFORMED:
- Certified Welders shall receive $1.00 per hour over the apprentices rate of pay when the apprentice is required to be certified and performs DOT or ABS specified welding work
- When an apprentice performs work within a contaminated area on a State and/or Federally designated hazardous waste site, and where relevant State and/or Federal regulations require the apprentice to be furnished and use or wear required forms of personal protection, then the apprentice shall receive his regular hourly rate plus $1.50 per hour.

** For work performed inside the secure area of Nuclear Power Plants - benefits calculated at same premium as shown for overtime(per hour paid).

6-277 JLS

Carpenter - Building / Heavy&Highway — 03/01/2024

JOB DESCRIPTION Carpenter - Building / Heavy&Highway **DISTRICT** 2

ENTIRE COUNTIES
Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

PARTIAL COUNTIES
Orange: The area lying on Northern side of Orange County demarcated by a line drawn from the Bear Mountain Bridge continuing west to the Bear Mountain Circle, continue North on 9W to the town of Cornwall where County Road 107 (also known as Quaker Rd) crosses under 9W, then east on County Road 107 to Route 32, then north on Route 32 to Orrs Mills Rd, then west on Orrs Mills Rd to Route 94, continue west and south on Route 94 to the Town of Chester, to the intersection of Kings Highway, continue south on Kings Highway to Bellvale Rd, west on Bellvale Rd to Bellvale Lakes Rd, then south on Bellvale Lakes Rd to Kain Rd, southeast on Kain Rd to Route 17A, then north and southeast along Route 17A to Route 210, then follow Route 210 to NJ Border.

WAGES

Wages per hour:	07/01/2023	07/01/2024 Additional
Carpenter - ONLY for Artificial Turf/Synthetic Sport Surface	$ 34.48	$ 2.25*

*To be allocated at a later date
Note - Does not include the operation of equipment. Please see Operating Engineers rates.

SUPPLEMENTAL BENEFITS
Per hour:

Journeyman	$ 26.30

OVERTIME PAY
See (B, E, Q, X) on OVERTIME PAGE

HOLIDAY
Paid: See (5) on HOLIDAY PAGE
Overtime: See (5, 6, 16) on HOLIDAY PAGE
Notes:
When a holiday falls upon a Saturday, it shall be observed on the preceding Friday. Whan a holiday falls upon a Sunday, it shall be observed on the following Monday.
An employee taking an unexcused day off the regularly scheduled day before or after a paid Holiday shall not receive Holiday pay.

REGISTERED APPRENTICES
Wages per hour (1300 hour terms at the following percentage of Journeyman's wage):

1st	2nd	3rd	4th
65%	70%	75%	80%

Supplemental Benefits per hour:

1st term	$ 17.56
2nd term	18.04
3rd term	20.06
4th term	20.54

2-42AtSS

Carpenter - Heavy&Highway — 03/01/2024

JOB DESCRIPTION Carpenter - Heavy&Highway **DISTRICT** 2

ENTIRE COUNTIES
Broome, Cayuga, Chemung, Cortland, Delaware, Jefferson, Lewis, Onondaga, Oswego, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Yates

WAGES

Per hour	07/01/2023	05/01/2024 Additional
Carpenter	$ 35.78	$ 2.75*
Piledriver	35.78	2.75*
Diver-Wet Day	60.78	2.75*
Diver-Dry Day	36.78	2.75*

Diver-Tender	36.78	2.75*

*To be allocated at a later date.

NOTE ADDITIONAL AMOUNTS PAID FOR THE FOLLOWING WORK LISTED BELOW (per hour worked):
- When project owner mandates a single irregular work shift, the employee will receive an additional $3.00 per hour. A single irregular work shift can start any time from 5:00 p.m. to 1:00 a.m.
- State or Federal designated hazardous site, requiring protective gear shall be an additional $2.50 per hour.
- Certified welders when required to perform welding work will receive an additional $2.50 per hour.

ADDITIONAL NOTES PERTAINING TO DIVERS/TENDERS:
- Divers and Tenders shall receive one and one half (1 1/2) times their regular diver and tender rate of pay for Effluent and Slurry diving.
- Divers and tenders being paid at the specified rate for Effluent and Slurry diving shall have all overtime rates based on the specified rate plus the appropriate overtime rates (one and one half or two times the specified rate for Slurry and Effluent divers and tenders).
- The pilot of an ADS or submersible will receive one and one-half (1 1/2) times the Diver-Wet Day Rate for time submerged.
- All crew members aboard a submersible shall receive the Diver-Wet Day rate.
- Depth pay for Divers based upon deepest depth on the day of the dive (per diem payment):
  - 0' to 50' no additional fee
  - 51'to 100' additional $.50 per foot
  - 101'to 150' additional $0.75 per foot
  - 151'and deeper additional $1.25 per foot
- Penetration pay for Divers based upon deepest penetration on the day of the dive (per diem payment):
  - 0' to 50' no additional fee
  - 51' to 100' additional $.75 per foot
  - 101' and deeper additional $1.00 per foot
- Diver rates applies to all hours worked on dive day.

NOTE - The 'Employer Registration' (30.1) use of a '4 Day/10 Hour Work schedules' will no longer be accepted or processed. All registered projects prior to June 30,2023 will expire within the granted time frame.

For Pre-Registered Projects Four (4), Ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. Tuesday thru Friday may be worked with no make-up day. For further clarification contact your local Bureau Office.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman	$ 26.30

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

- In the event a Holiday falls on a Saturday, the Friday before will be observed as a Holiday. If a Holiday falls on a Sunday, then Monday will be observed as a Holiday. Employee must work scheduled work day before and after the Holiday.
- The employee must work their scheduled workday before and their scheduled workday after the holiday to receive holiday pay.

REGISTERED APPRENTICES

CAPRENTER APPRENTICES

Wages per hour (1040 hour terms at the following percentage of journeyman's base wage):

1st	2nd	3rd	4th	5th
65%	70%	75%	80%	85%

Supplemental Benefits per hour:

$ 17.56	$ 18.04	$ 20.01	$ 20.49	$ 20.97

PILEDRIVER/DOCKBUILDER APPRENTICES

Wages per hour (1300 hour terms at the following percentage of journeyman's base wage):

1st	2nd	3rd	4th
65%	70%	80%	85%

Supplemental Benefits per hour:

$ 17.56	$ 18.04	$ 20.49	$ 20.97

NOTE ADDITIONAL AMOUNTS PAID PER HOUR WORKED TO APPRENTICES FOR SPECIFIC TYPES OF WORK PERFORMED:
- When project owner mandates a single irregular work shift, the employee will receive an additional $3.00 per hour. A single irregular work shift can start any time from 5:00 p.m. to 1:00 a.m.
- State or Federal designated hazardous site, requiring protective gear shall be an additional $2.50 per hour.
- Certified welders when required to perform welding work will receive an additional $2.50 per hour.

Electrician 03/01/2024

JOB DESCRIPTION Electrician **DISTRICT** 6

ENTIRE COUNTIES
Clinton, Essex, Franklin, Jefferson, Lewis, St. Lawrence

WAGES

Per hour:	07/01/2023	04/01/2024 Additional	04/01/2025 Additional	04/01/2026 Additional
Electrician	$ 40.50	$ 3.00*	$ 2.75*	$ 2.60*
Teledata	40.50	3.00*	2.75*	2.60*
Welder	42.50	3.00*	2.75*	2.60*

* To be allocated at a later date.

NOTE: Additional premiums for the following work listed:
- Additional $1.50 per hour for work performed underground such as tunnels and mine shafts. Excludes manholes and walkway tunnels between buildings.
- Additional $1.50 per hour for working 35 feet or more on scaffolds, ladders, towers, steeples, structural steel, or mechanical lifts over 65 feet.

SHIFT WORK: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED SHIFTS WORKED BETWEEN THE HOURS LISTED BELOW. THE EMPLOYER MAY BE PERMITTED TO ADJUST THE STARTING HOURS OF THE SHIFT BY UP TO TWO (2) HOURS IF REQUIRED BY THE AGENCY. IF A SHIFT BEGINS OUTSIDE OF THE STATED SHIFT HOURS, THE RATE PAID WOULD BE DETERMINED BY WHAT SHIFT THE MAJORITY OF HOURS WERE WORKED.

1st shift:	8:00 AM to 4:30 PM	Regular wage rate
2nd shift:	4:30 PM to 1:00 AM	Regular wage rate plus 17.3%
3rd shift:	12:30 AM to 9:00 AM	Regular wage rate plus 31.4%

NOTE - The "Employer Registration" (30.1) use of a '4 Day/10 Hour Work schedules' will no longer be accepted or processed. All registered projects prior to June 30, 2023 will expire within the granted time frame.

For Pre-Registered Projects Four (4), Ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. Tuesday thru Friday may be worked with no make-up day. For further clarification contact your local Bureau Office.

SUPPLEMENTAL BENEFITS

Per hour:	
Journeyman	$ 23.13 plus 5.75% of hourly wage paid*

* NOTE: THE 5.75% IS BASED ON THE HOURLY WAGE PAID, STRAIGHT TIME RATE OR PREMIUM TIME RATE.

OVERTIME PAY
See (B, E, Q) on OVERTIME PAGE
NOTE: WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked

HOLIDAY

Paid:	See (1) on HOLIDAY PAGE
Overtime:	See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES
WAGES per hour: Hourly terms at the following percentage of Journeyman's wage.

	1-1000 45%	to 2000 50%	to 3500 55%	to 5000 60%	to 6500 70%	to 8000 80%
Electrician	$18.23	$20.25	$22.28	$24.30	$28.35	$32.40
Tunnel	$19.73	$21.75	$23.78	$25.80	$29.85	$33.90

SUPPLEMENTAL BENEFITS per hour:

1st & 2nd term	$ 11.17*
All other terms	$ 23.13*

* PLUS 5.75% OF HOURLY WAGE PAID, STRAIGHT TIME RATE OR PREMIUM TIME RATE.

6-910

Elevator Constructor — 03/01/2024

JOB DESCRIPTION Elevator Constructor **DISTRICT** 6

ENTIRE COUNTIES
Broome, Cayuga, Chenango, Cortland, Franklin, Jefferson, Lewis, Onondaga, Oswego, St. Lawrence, Tioga, Tompkins

PARTIAL COUNTIES
Delaware: Only the towns of: Tompkins, Walton, Masonville, Sidney, Franklin and Deposit.
Madison: Only the towns of: Cazenovia, DeRuyter, Eaton, Fenner, Georgetown, Lebanon, Lenox, Nelson and Sullivan.
Oneida: Only the towns of: Camden, Florence and Vienna.

WAGES

Per hour:	07/01/2023	01/01/2024	01/01/2025	01/01/2026
Elevator Constructor	$ 53.69	$ 56.02	$ 58.455	$ 61.003
Helper	37.58	39.21	40.92	42.70

NOTE - The "Employer Registration" (30.1) use of a '4 Day/10 Hour Work schedules' will no longer be accepted or processed. All registered projects prior to June 30, 2023 will expire within the granted time frame.

For Pre-Registered Projects Four (4), Ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. Tuesday thru Friday may be worked with no make-up day. For further clarification contact your local Bureau Office.

SUPPLEMENTAL BENEFITS

Per hour:				
Journeyman	$ 37.335*	$ 37.885*	$ 38.435*	$ 38.985*

*NOTE - add 6% of regular hourly rate for all hours worked. Add 8% of regular hourly rate if more than 5 years of service.

OVERTIME PAY
See (D, O) on OVERTIME PAGE

HOLIDAY
Paid: See (5, 6, 15, 16) on HOLIDAY PAGE
Overtime: See (5, 6, 15, 16) on HOLIDAY PAGE
NOTE: When a paid holiday falls on a Saturday, it shall be observed on Friday. When a paid holiday falls on Sunday, it shall be observed on Monday.

REGISTERED APPRENTICES
WAGES per hour: 1 year terms at the following percentage of the Elevator Constructor wage.

0-6 months	6-12 months	2nd year	3rd year	4th year
50%	55%	65%	70%	80%

SUPPLEMENTAL BENEFITS per hour:

0-6 months: 6% of the hourly apprentice rate paid, no additional supplemental benefits.

All other terms: Same as Journeyman.

6-62.1

Glazier — 03/01/2024

JOB DESCRIPTION Glazier **DISTRICT** 5

ENTIRE COUNTIES
Jefferson, Lewis, Livingston, Monroe, Ontario, Seneca, St. Lawrence, Wayne, Yates

WAGES

Per hour:	07/01/2023
Glazier	$ 28.05

** NOTE-The "Employer Registration" (30.1) use of a '4 Day/10 Hour Work schedules' will no longer be accepted or processed. All registered projects prior to JUNE 30, 2023 will expire within the granted time frame.

For Pre-Registered Projects Four(4),Ten(10)hour days may be worked at straight time during a week Monday thru Thursday. Friday may be used as a make-up day. Tuesday thru Friday may be worked with no make-up day. For further clarification contact your local Bureau Office.

SUPPLEMENTAL BENEFITS
Per hour:

Journeyman	$ 29.20

OVERTIME PAY
See (B, E, E2*, Q, Note) on OVERTIME PAGE.
*Note - Or circumstances beyond the control of the employer.

HOLIDAY
Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES
1000 hour terms

Appr. 1st term:	$ 17.50
Appr. 2nd term:	18.50
Appr. 3rd term:	19.50
Appr. 4th term:	20.50
Appr. 5th term:	21.50
Appr. 6th term:	22.50
Appr. 7th term:	23.50
Appr. 8th term:	24.50

Supplemental Benefits per hour:

Appr. 1st term	$ 13.90
Appr. 2nd term	13.90
Appr. 3rd term	19.90
Appr. 4th tern	19.90
Appr. 5th term	20.90
Appr. 6th term	20.90
Appr. 7th term	21.90
Appr. 8th term	21.90

5-677.1

Insulator - Heat & Frost — 03/01/2024

JOB DESCRIPTION Insulator - Heat & Frost **DISTRICT** 6

ENTIRE COUNTIES
Broome, Cayuga, Chemung, Chenango, Cortland, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Otsego, Schuyler, Seneca, St. Lawrence, Tioga, Tompkins

WAGES
Per hour: 07/01/2023

Asbestos Installer	$ 38.50
Insulation Installer (On mechanical systems only)	38.50

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED SHIFTS WORKED.

1ST SHIFT	$ 38.50
2ND SHIFT	44.27
3RD SHIFT	46.20

NOTE - The "Employer Registration" (30.1) use of a '4 Day/10 Hour Work schedules' will no longer be accepted or processed. All registered projects prior to June 30, 2023 will expire within the granted time frame.

For Pre-Registered Projects Four (4), Ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. Tuesday thru Friday may be worked with no make-up day. For further clarification contact your local Bureau Office.

SUPPLEMENTAL BENEFITS
Per hour:

Journeyman	$ 25.09

OVERTIME PAY

See (*B1, **K, P) on OVERTIME PAGE
*NOTE: First 10 hours on Saturday.
**NOTE: Holidays that fall on Sunday are subject to double time.

HOLIDAY
Paid: See (1) on HOLIDAY PAGE
Overtime: See (2*,4,6,28) on HOLIDAY PAGE
*Triple time for Labor Day if worked.

REGISTERED APPRENTICES
WAGES per hour: One year terms at the following percentage of Journeyman's wage.

1st	2nd	3rd	4th
60%	70%	80%	90%
$ 23.10	$ 26.95	$ 30.80	$ 34.65

SUPPLEMENTAL BENEFITS per hour:

$ 22.59	$ 22.59	$ 25.09	$ 25.09

6-30-Syracuse

Ironworker — 03/01/2024

JOB DESCRIPTION Ironworker **DISTRICT** 6

ENTIRE COUNTIES
Broome, Cayuga, Cortland, Onondaga, Oswego, Seneca, Tioga, Tompkins

PARTIAL COUNTIES
Chenango: Only the Townships of Lincklaen, Otselic, Pitcher, Pharsalia, German, McDonough, Preston, Norwich, Smithville, Oxford, Guilford, Greene, Coventry, Bainbridge and Afton.
Jefferson: Only the Townships of Alexandria, Theresa, Clayton, Orleans, Cape Vincent, Lyme, Brownville, Pamelia, LeRay, Hounsfield, Watertown, Rutland, Adams, Henderson, Rodman, Ellisburg, Lorraine and Worth.
Madison: Only the Townships of Sullivan, Lenox, Lincoln, Fenner, Smithfield, Cazenovia, Nelson, DeRuyter and Georgetown.
Schuyler: Only the Townships of Cayuta, Catharine, Hector and Montour.
Wayne: Only the Townships of Galen, Savannah, Rose, Butler, Huron and Wolcott

WAGES
Structural, Reinforcing, Re-bar, Machinery Mover & Rigger, Ornamental & Curtain Wall, Window Wall, Pre-Glazed Metal Framed Windows Attached to Steel or Masonry Including Caulking, Fence Erector (Chain Link/Security), Sheeter/Bridge Rail, Pre-Cast Erector, Stone Derrickman, Pre-Engineered Building Erector, Welder

Per hour: 07/01/2023

Ironworker $ 33.00

NOTE: Shift work mandated by the project owner. All shifts will be (8) hours.

1st Shift	$ 33.00
2nd Shift	36.30
3rd Shift	37.95

WHEN A SINGLE IRREGULAR SHIFT IS WORKED, WITH START TIMES BASED ON SECOND AND THIRD SHIFTS, ADD 10 % TO THE WAGE RATE POSTED ABOVE.

SUPPLEMENTAL BENEFITS
Per hour:

Journeyman $ 30.83

OVERTIME PAY
See (B, E, Q) on OVERTIME PAGE

HOLIDAY
Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE
NOTE: Any holiday which occurs on Sunday shall be observed the following Monday.

REGISTERED APPRENTICES
WAGES per hour: One year terms at the following rates.

1st	2nd	3rd	4th
$ 19.50	$ 21.50	$ 23.50	$ 25.50

SUPPLEMENTAL BENEFITS per hour:

1st year	$ 12.03
2nd year	20.26
3rd year	21.43
4th year	22.61

6-60

Ironworker — 03/01/2024

JOB DESCRIPTION Ironworker **DISTRICT** 7

ENTIRE COUNTIES
Franklin, Herkimer, Lewis, Oneida, St. Lawrence

PARTIAL COUNTIES
Chenango: Only the Townships of Columbus, New Berlin, North Norwich, Plymouth, Sherburne and Smyrna.
Fulton: Only the Townships of Caroga, Ephratah, Oppenheim, Stratford.
Hamilton: Only the Townships of Arietta, Indian Lake, Inlet, Lake Pleasant, Long Lake and Morehouse.
Jefferson: Only the Townships of Antwerp, Champion, Philadelphia and Wilna.
Madison: Only the Townships of Brookfield, Eaton, Hamilton, Lebanon, Madison, Oneida and Stockbridge.
Montgomery: Only the Townships of Canajoharie, Minden, Palatine and St. Johnsville.
Otsego: Only the Townships of Burlington, Cherry Valley, Decatur, Edmeston, Exeter, Hartwick, Middlefield, New Lisbon, Otsego, Pittsfield, Plainfield, Richfield, Roseboom, Springfield and Westford, and Village of Cooperstown.

WAGES
Per hour: 07/01/2023

Structural/Reinforcing	$ 32.00
Mach. Mover/Ornamental	32.00
Stone Derrickman	32.00
Chain Link Fence	32.00
Sheeter Ironworker	32.00
Pre-Engineered Building	32.00
Window Erector	32.00
Precast Erector	32.00
Welder	32.00

SUPPLEMENTAL BENEFITS
Per hour:

Journeyman	$ 31.25

OVERTIME PAY
See (B, E, Q) on OVERTIME PAGE

HOLIDAY
Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE
NOTE: Any holiday which occurs on Sunday shall be observed the following Monday.

REGISTERED APPRENTICES
WAGES per hour: 1500 hour terms at the following wage.

1-1500hrs	$ 19.50
1501-3000hrs	21.50
3001-4500hrs	23.50
4501-6000hrs	25.50

SUPPLEMENTAL BENEFITS per hour:

1-1500hrs	$ 13.03
1501-3000hrs	21.30
3001-4500hrs	22.48
4501-6000hrs	23.66

7-440

Laborer - Building — 03/01/2024

JOB DESCRIPTION Laborer - Building **DISTRICT** 7

ENTIRE COUNTIES
Franklin, Jefferson, Lewis, St. Lawrence

WAGES
Group #1: All Laborers (except as otherwise noted below).

Group #2: Hazardous Waste & Asbestos removal.
Group #3: Wind & Solar Worker*.

Wages per hour:

	07/01/2023	07/01/2024
Building Laborer:		Additional
Group # 1	$ 27.03	$ 1.25
Group # 2	28.53	1.25
Group # 3	27.53	1.25

NOTE: Building Laborer rates also apply on any masonry-type construction (block or brick with mortar), and on parking garages.

* Applies when performing delivery handling and site readiness for all solar panels and wind turbines, whether on land or water. Not applicable to the installation /assembly of solar photovoltaic panels or racking.

SUPPLEMENTAL BENEFITS
Per hour:

Journeyman $ 25.75

OVERTIME PAY
See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY
Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES
WAGES per hour:

(1000 Hour) terms at the following percentages of Journeyman's wage:

to 1000	to 2000	to 3000	to 4000
70%	80%	90%	95%

SUPPLEMENTAL BENEFITS per hour:

All Terms: Same as Journeyman.

7-1822

Laborer - Heavy&Highway — 03/01/2024

JOB DESCRIPTION Laborer - Heavy&Highway **DISTRICT** 7

ENTIRE COUNTIES
Franklin, Jefferson, Lewis, St. Lawrence

WAGES
GROUP A: Drill Helper, Flagmen, Outboard and Hand Boats.

GROUP B: BASIC RATE: Bull Float (where used for strike off only), Chain Saw, Concrete Aggregate Bin, Concrete Bootman, Gin Buggy, Hand or Machine Vibrator, Jack Hammer, Mason Tender, Mortar Mixer, Pavement Breaker, Handlers of All Steel Mesh, Small Generators for Laborers' Tools, Installation of Bridge Drainage Pipe, Pipe Layers, Vibrator Type Rollers, Tamper, Drill Doctor, Water Pump Operator (1-1/2" and Single Diaphragm) Nozzle (Asphalt, Gunite, Seeding, and Sand Blasting), Laborers on Chain Link Fence Erection, Rock Splitter & Power Unit, Pusher Type Concrete Saw and All Other Gas, Electric, Oil, and Air Tool Operators, Wrecking Laborer.

GROUP C: Drilling Equipment - only where a separate air compressor unit supplies power, Acetylene Torch Operators, Asphalt Raker, Powder Man, Tail or Screw Operator on Asphalt Paver.

GROUP D: Blasters, Form Setters, Stone or Granite Curb Setters.

GROUP E: Hazardous Waste Removal Work when designated by State/Federal as hazardous waste site and regulations require employees wear required personal protection.

Per hour:	07/01/2023	07/01/2024
		Additional
GROUP A	$ 31.07	$ 2.50
GROUP B	31.27	2.50
GROUP C	31.47	2.50
GROUP D	31.67	2.50
GROUP E	34.27	2.50

NOTE: A single irregular work shift starting any time between 5:00 PM and 1:00 AM on governmental mandated night work shall be paid an additional $3.00 per hour. Night work, when mandated by DOT shall be paid an additional $3.00 per hour.

SUPPLEMENTAL BENEFITS
Per hour:

Journeyman $ 28.05

OVERTIME PAY
See (B, E, Q) on OVERTIME PAGE

HOLIDAY
Paid: See (5, 6) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE
NOTE: If a holiday falls on Saturday, it will be celebrated on Saturday. Employees who work a Saturday holiday shall be paid double time plus the holiday pay. If a holiday falls on Sunday, it will be celebrated on Monday. Employees who work a Sunday holiday shall be paid double time. Employees who work on Monday shall be paid double time plus the holiday pay. Accordingly, the Monday following the Sunday is treated as the holiday.

REGISTERED APPRENTICES
WAGES per hour: 1000 hour terms at the following percentage of Journeyman's GROUP B wage.

1st	2nd	3rd	4th
70%	80%	90%	95%

SUPPLEMENTAL BENEFITS per hour:

All Terms: Same as Journeyman.

7-1822/2h(2)

Laborer - Tunnel 03/01/2024

JOB DESCRIPTION Laborer - Tunnel **DISTRICT** 7

ENTIRE COUNTIES
Franklin, Jefferson, Lewis, St. Lawrence

WAGES
GROUP A: General Laborer.

GROUP B: Change Houseman, Miners and all Machine Men, Safety Miner, all shaft work, Caisson Work, Drilling, Blow Pipe, all Air Tools, Tugger, Scaling, Nipper, Guniting pot to Nozzle, Bit Grinder, Signal Man (top and bottom), Concrete men, Shield-driven tunnels, Mixed face and soft ground, liner plate tunnels in free air.

GROUP C: Hazardous Waste Work on a State and or Federally designated waste site, and where relevant regulations require employees to use personal protection.

Per hour:	07/01/2023	07/01/2024 Additional
GROUP A	$ 34.25	$ 2.50
GROUP B	34.45	2.50
GROUP C	37.25	2.50

NOTE: A single irregular work shift starting any time between 5:00 PM and 1:00 AM on governmental mandated night work shall be paid an additional $3.00 per hour.

SUPPLEMENTAL BENEFITS
Per hour:

Journeyman $ 28.05

OVERTIME PAY
See (B, E, Q) on OVERTIME PAGE

HOLIDAY
Paid: See (5, 6) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE
NOTE: If a holiday falls on Saturday, it will be celebrated on Friday. If a holiday falls on Sunday, it will be celebrated on Monday. In the event that men work on this Sunday holiday, they shall be paid double time. In the event that men work on Monday, they shall be compensated at triple time. Accordingly, the Monday following the Sunday is treated as the holiday.

REGISTERED APPRENTICES
WAGES per hour: 1000 hour terms at the following percentage of Journeyman's GROUP B wage:

1st	2nd	3rd	4th

70% 80% 90% 95%

SUPPLEMENTAL BENEFITS per hour:

All Terms: Same as Journeyman.

7-1822T(2)

Lineman Electrician 03/01/2024

JOB DESCRIPTION Lineman Electrician **DISTRICT** 6

ENTIRE COUNTIES
Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

WAGES
A Lineman/Technician shall perform all overhead aerial work. A Lineman/Technician on the ground will install all electrical panels, connect all grounds, install and connect all electrical conductors, assembly of all electrical materials, conduit, pipe, or raceway; placing of fish wire; pulling of cables, wires or fiber optic cable through such raceways; splicing of conductors; dismantling of such structures, lines or equipment.

A Groundman/Truck Driver shall: Build and set concrete forms, handle steel mesh, set footer cages, transport concrete in a wheelbarrow, hand or machine concrete vibrator, finish concrete footers, mix mortar, grout pole bases, cover and maintain footers while curing in cold weather, operate jack hammer, operate hand pavement breaker, tamper, concrete and other motorized saws, as a drill helper, operate and maintain generators, water pumps, chainsaws, sand blasting, operate mulching and seeding machine, air tools, electric tools, gas tools, load and unload materials, hand shovel and/or broom, prepare and pour mastic and other fillers, assist digger operator/equipment operator in ground excavation and restoration, landscape work and painting. Only when assisting a lineman technician, a groundman/truck driver may assist in installing conduit, pipe, cables and equipment.

NOTE: Includes Teledata Work within ten (10) feet of High Voltage Transmission Lines. Also includes digging of holes for poles, anchors, footer, and foundations for electrical equipment.

Below rates applicable on all overhead and underground distribution and maintenance work, and all overhead and underground transmission line work and the installation of fiber optic cable where no other construction trades are or have been involved. (Ref #14.01.01)

Per hour:	07/01/2023	05/06/2024
Lineman, Technician	$ 57.40	$ 58.90
Crane, Crawler Backhoe	57.40	58.90
Welder, Cable Splicer	57.40	58.90
Digging Mach. Operator	51.66	53.01
Tractor Trailer Driver	48.79	50.07
Groundman, Truck Driver	45.92	47.12
Equipment Mechanic	45.92	47.12
Flagman	34.44	35.34

Additional $1.00 per hour for entire crew when a helicopter is used.

Below rates applicable on all electrical sub-stations, switching structures, fiber optic cable and all other work not defined as "Utility outside electrical work". (Ref #14.02.01-A)

Lineman, Technician	$ 57.40	$ 58.90
Crane, Crawler Backhoe	57.40	58.90
Cable Splicer	63.14	64.79
Certified Welder, Pipe Type Cable	60.27	61.85
Digging Mach. Operator	51.66	53.01
Tractor Trailer Driver	48.79	50.07
Groundman, Truck Driver	45.92	47.12
Equipment Mechanic	45.92	47.12
Flagman	34.44	35.34

Additional $1.00 per hour for entire crew when a helicopter is used.

Below rates apply on switching structures, maintenance projects, railroad catenary install/maintenance third rail installation, bonding of rails and pipe type cable and installation of fiber optic cable. (Ref #14.02.01-B)

Lineman, Tech, Welder	$ 58.72	$ 60.22

Crane, Crawler Backhoe	58.72	60.22
Cable Splicer	64.59	66.24
Certified Welder,		
Pipe Type Cable	61.66	63.23
Digging Mach. Operator	52.85	54.20
Tractor Trailer Driver	49.91	51.19
Groundman, Truck Driver	46.98	48.18
Equipment Mechanic	46.98	48.18
Flagman	35.23	36.13

Additional $1.00 per hour for entire crew when a helicopter is used.

Below rates applicable on all overhead and underground transmission line work & fiber optic cable where other construction trades are or have been involved. This applies to transmission line work only, not other construction. (Ref #14.03.01)

Lineman, Tech, Welder	$ 59.91	$ 61.41
Crane, Crawler Backhoe	59.91	61.41
Cable Splicer	59.91	61.41
Digging Mach. Operator	53.92	55.27
Tractor Trailer Driver	50.92	52.20
Groundman, Truck Driver	47.93	49.13
Equipment Mechanic	47.93	49.13
Flagman	35.95	36.85

Additional $1.00 per hour for entire crew when a helicopter is used.

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED MULTIPLE SHIFTS OF AT LEAST FIVE (5) DAYS DURATION WORKED BETWEEN THE HOURS LISTED BELOW:

1ST SHIFT	8:00 AM to 4:30 PM REGULAR RATE
2ND SHIFT	4:30 PM to 1:00 AM REGULAR RATE PLUS 17.3 %
3RD SHIFT	12:30 AM to 9:00 AM REGULAR RATE PLUS 31.4 %

NOTE - The "Employer Registration" (30.1) use of a '4 Day/10 Hour Work schedules' will no longer be accepted or processed. All registered projects prior to June 30, 2023 will expire within the granted time frame.

For Pre-Registered Projects Four (4), Ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. Tuesday thru Friday may be worked with no make-up day. For further clarification contact your local Bureau Office.

SUPPLEMENTAL BENEFITS

Per hour:

	07/01/2023	05/06/2024
Lineman, Technician, or Equipment Operators with Crane License	$ 29.40 *plus 7% of the hourly wage paid	$ 30.90 *plus 7% of the hourly wage paid
All other Journeyman	$ 26.40 *plus 7% of the hourly wage paid	$ 26.90 *plus 7% of the hourly wage paid

*The 7% is based on the hourly wage paid, straight time or premium time.

OVERTIME PAY

See (B, E, Q, X) on OVERTIME PAGE. *Note* Double time for all emergency work designated by the Dept. of Jurisdiction.
NOTE: WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY

Paid	See (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Governor of NYS Election Day.
Overtime	See (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Governor of NYS Election Day.

NOTE: All paid holidays falling on Saturday shall be observed on the preceding Friday. All paid holidays falling on Sunday shall be observed on the following Monday. Supplements for holidays paid at straight time.

REGISTERED APPRENTICES
WAGES per hour: 1000 hour terms at the following percentage of the applicable Journeyman Lineman wage.

1st	2nd	3rd	4th	5th	6th	7th
60%	65%	70%	75%	80%	85%	90%

SUPPLEMENTAL BENEFITS per hour:

07/01/2023	05/06/2024
$ 26.40 *plus 7% of the hourly wage paid	$ 26.90 *plus 7% of the hourly wage paid

*The 7% is based on the hourly wage paid, straight time or premium time.

6-1249a

Lineman Electrician - Teledata — 03/01/2024

JOB DESCRIPTION Lineman Electrician - Teledata **DISTRICT** 6

ENTIRE COUNTIES
Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES
Per hour:

For outside work, stopping at first point of attachment (demarcation).

	07/01/2023	01/01/2024	01/01/2025
Cable Splicer	$ 37.73	$ 39.24	$ 40.81
Installer, Repairman	$ 35.81	$ 37.24	$ 38.73
Teledata Lineman	$ 35.81	$ 37.24	$ 38.73
Tech., Equip. Operator	$ 35.81	$ 37.24	$ 38.73
Groundman	$ 18.98	$ 19.74	$ 20.53

NOTE: EXCLUDES Teledata work within ten (10) feet of High Voltage (600 volts and over) transmission lines. For this work please see LINEMAN.

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED MULTIPLE SHIFTS OF AT LEAST FIVE (5) DAYS DURATION WORKED:

1ST SHIFT	REGULAR RATE
2ND SHIFT	REGULAR RATE PLUS 10%
3RD SHIFT	REGULAR RATE PLUS 15%

SUPPLEMENTAL BENEFITS

Per hour:	07/01/2023	01/01/2024	01/01/2025
Journeyman	$ 5.70 *plus 3% of the hourly wage paid	$ 5.70 *plus 3% of the hourly wage paid	$ 5.70 *plus 3% of the hourly wage paid

*The 3% is based on the hourly wage paid, straight time rate or premium rate.

OVERTIME PAY
See (B, E, Q) on OVERTIME PAGE
NOTE: WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY
Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 16) on HOLIDAY PAGE

6-1249LT - Teledata

Lineman Electrician - Traffic Signal, Lighting — 03/01/2024

JOB DESCRIPTION Lineman Electrician - Traffic Signal, Lighting **DISTRICT** 6

ENTIRE COUNTIES
Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Warren, Washington, Wayne, Wyoming, Yates

WAGES
Lineman/Technician shall perform all overhead aerial work. A Lineman/Technician on the ground will install all electrical panels, connect all grounds, install and connect all electrical conductors which includes, but is not limited to road loop wires; conduit and plastic or other type pipes that carry conductors, flex cables and connectors, and to oversee the encasement or burial of such conduits or pipes.

A Groundman/Truck Driver shall: Build and set concrete forms, handle steel mesh, set footer cages, transport concrete in a wheelbarrow, hand or machine concrete vibrator, finish concrete footers, mix mortar, grout pole bases, cover and maintain footers while curing in cold weather, operate jack hammer, operate hand pavement breaker, tamper, concrete and other motorized saws, as a drill helper, operate and maintain generators, water pumps, chainsaws, sand blasting, operate mulching and seeding machine, air tools, electric tools, gas tools, load and unload materials, hand shovel and/or broom, prepare and pour mastic and other fillers, assist digger operator/equipment operator in ground excavation and restoration, landscape work and painting. Only when assisting a lineman technician, a groundman/truck driver may assist in installing conduit, pipe, cables and equipment.

A flagger's duties shall consist of traffic control only.
(Ref #14.01.01)

Per hour:	07/01/2023	05/06/2024
Lineman, Technician	$ 49.32	$ 50.54
Crane, Crawler Backhoe	49.32	50.54
Certified Welder	51.79	53.07
Digging Machine	44.39	45.49
Tractor Trailer Driver	41.92	42.96
Groundman, Truck Driver	39.46	40.43
Equipment Mechanic	39.46	40.43
Flagman	29.59	30.32

Above rates are applicable for installation, testing, operation, maintenance and repair on all Traffic Control (Signal) and Illumination (Lighting) projects, Traffic Monitoring Systems, and Road Weather Information Systems. Includes digging of holes for poles, anchors, footer foundations for electrical equipment; assembly of all electrical materials or raceway; placing of fish wire; pulling of cables, wires or fiber optic cable through such raceways; splicing of conductors; dismantling of such structures, lines or equipment.

NOTE: THE FOLLOWING RATES WILL APPLY ON ALL CONTRACTING AGENCY MANDATED MULTIPLE SHIFTS OF AT LEAST FIVE (5) DAYS DURATION WORKED BETWEEN THE HOURS LISTED BELOW:

1ST SHIFT	8:00 AM TO 4:30 PM	REGULAR RATE
2ND SHIFT	4:30 PM TO 1:00 AM	REGULAR RATE PLUS 17.3%
3RD SHIFT	12:30 AM TO 9:00 AM	REGULAR RATE PLUS 31.4%

NOTE - The "Employer Registration" (30.1) use of a '4 Day/10 Hour Work schedules' will no longer be accepted or processed. All registered projects prior to June 30, 2023 will expire within the granted time frame.

For Pre-Registered Projects Four (4), Ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. Tuesday thru Friday may be worked with no make-up day. For further clarification contact your local Bureau Office.

SUPPLEMENTAL BENEFITS
Per hour worked (but also required on non-worked holidays):

	07/01/2023	05/06/2024
Lineman, Technician, or Equipment Operators with Crane License	$ 29.40 *plus 7% of the hourly wage paid	$ 30.90 *plus 7% of the hourly wage paid
All other Journeyman	$ 26.40 *plus 7% of the hourly wage paid	$ 26.90 *plus 7% of the hourly wage paid

*The 7% is based on the hourly wage paid, straight time or premium time.

OVERTIME PAY
See (B, E, Q) on OVERTIME PAGE. *Note* Double time for all emergency work designated by the Dept. of Jurisdiction.
NOTE: WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY
Paid: See (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Governor of NYS Election Day.
Overtime: See (5, 6, 8, 13, 25) on HOLIDAY PAGE plus Governor of NYS Election Day.

NOTE: All paid holidays falling on Saturday shall be observed on the preceding Friday. All paid holidays falling on Sunday shall be observed on the following Monday. Supplements for holidays paid at straight time.

REGISTERED APPRENTICES
WAGES per hour: 1000 hour terms at the following percentage of the applicable Journeyman Lineman wage.

1st	2nd	3rd	4th	5th	6th	7th
60%	65%	70%	75%	80%	85%	90%

SUPPLEMENTAL BENEFITS per hour:

	07/01/2023	05/06/2024
	$ 26.40 *plus 7% of the hourly wage paid	$ 26.90 *plus 7% of the hourly wage paid

*The 7% is based on the hourly wage paid, straight time or premium time.

6-1249a-LT

Lineman Electrician - Tree Trimmer — 03/01/2024

JOB DESCRIPTION Lineman Electrician - Tree Trimmer **DISTRICT** 6

ENTIRE COUNTIES
Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Rensselaer, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

WAGES
Applies to line clearance, tree work and right-of-way preparation on all new or existing energized overhead or underground electrical, telephone and CATV lines. This also would include stump removal near underground energized electrical lines, including telephone and CATV lines.

Per hour:	07/01/2023	12/31/2023
Tree Trimmer	$ 29.80	$ 31.44
Equipment Operator	26.35	27.80
Equipment Mechanic	26.35	27.80
Truck Driver	21.95	23.15
Groundman	18.07	19.07
Flag person	14.20	14.20*

*NOTE- Rate effective on 01/01/2024 - $15.00 due to minimum wage increase

SUPPLEMENTAL BENEFITS
Per hour:

	07/01/2023	12/31/2023
Journeyman	$ 10.48 *plus 4.5% of the hourly wage paid	$ 10.48 *plus 4.5% of the hourly wage paid

* The 4.5% is based on the hourly wage paid, straight time rate or premium rate.

OVERTIME PAY
See (B, E, Q, X) on OVERTIME PAGE
NOTE: WAGE CAP - Double the straight time hourly base wage shall be the maximum hourly wage compensation for any hour worked. Contractor is still responsible to pay the hourly benefit amount for each hour worked.

HOLIDAY
Paid: See (5, 6, 8, 15) on HOLIDAY PAGE
Overtime: See (5, 6, 8, 15, 16, 25) on HOLIDAY PAGE
NOTE: All paid holidays falling on a Saturday shall be observed on the preceding Friday.
All paid holidays falling on a Sunday shall be observed on the following Monday.

6-1249TT

Mason - Building 03/01/2024

JOB DESCRIPTION Mason - Building **DISTRICT** 12

ENTIRE COUNTIES
Herkimer, Jefferson, Lewis, Oneida, St. Lawrence

PARTIAL COUNTIES
Madison: Entire County except the Townships of Sullivan & Cazenovia

WAGES
Per hour 07/01/2023

Tile/Marble/Terrazzo

Setter	$ 34.60
Finisher	27.52

NOTE - The "Employer Registration" (30.1) use of a '4 Day/10 Hour Work schedules' will no longer be accepted or processed. All registered projects prior to June 30,2023 will expire within the granted time frame.

For Pre-Registered Projects Four (4), Ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. Tuesday thru Friday may be worked with no make-up day. For further clarification contact your local Bureau Office.

SUPPLEMENTAL BENEFITS
Per hour worked

Journeyman Setters	$ 19.71
Journeyman Finishers	19.06

OVERTIME PAY
See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY
Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES
Wages per hour

Hour terms at the following percentage of journeyman's wage

Setter:	
1st term 500 hours	60%
2nd term 1000 hours	70%
3rd term 1000 hours	80%
4th term 1000 hours	85%
5th term 1000 hours	90%
6th term 1500 hours	95%

Finsher;	
1st term 500 HOURS	70%
2ND term 1000 HOURS	80%
3RD term 1000 HOURS	90%
4TH term 1200 HOURS	95%

Supplemental Benefits per hour worked

Setter:	
1st & 2nd Term	$ 12.16
3rd & 4th Term	15.93
5th Term	17.82
6th Term	19.71

Finishers:

1st & 2nd Term	$ 11.57
All others	15.31

12-2TS.2

Mason - Building 03/01/2024

JOB DESCRIPTION Mason - Building **DISTRICT** 12

ENTIRE COUNTIES
Jefferson

PARTIAL COUNTIES
Lewis: The townships of Diana, Croghan, Denmark, Pickney, Harrisburg, Lowville, New Breman, Watson, Martinsburg, Montague, Highmarket, & Greig

WAGES
Per hour 07/01/2023

Bricklayer/Blocker	$ 37.89
Cement Mason(Bldg)	37.89
Plasterer/Fireproofing*	37.89
Stone Mason	37.89
Concrete Cutter	37.89
Pointer/Caulker/Cleaner	37.89

Additional $.25 per hr. for work in restricted radiation area of atomic plant.
Additional $5.00 per day more for employees working on a two-point suspension scaffold (Pointer, Caulker, and Cleaner are excluded).

(*)Fireproofer on Structural only.

NOTE - The "Employer Registration" (30.1) use of a '4 Day/10 Hour Work schedules' will no longer be accepted or processed. All registered projects prior to June 30,2023 will expire within the granted time frame.

For Pre-Registered Projects Four (4), Ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. Tuesday thru Friday may be worked with no make-up day. For further clarification contact your local Bureau Office.

SUPPLEMENTAL BENEFITS
Per hour worked

Journeyman	$ 23.15

OVERTIME PAY
See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY
Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES
Wages per hour

750 hour terms at the following percentage of Journey's wage

1st	2nd	3rd	4th	5th	6th	7th	8th
60%	60%	65%	70%	75%	80%	85%	90%

Supplemental Benefits per hour worked

All Terms	$ 23.15

12-2b.5

Mason - Heavy&Highway 03/01/2024

JOB DESCRIPTION Mason - Heavy&Highway **DISTRICT** 12

ENTIRE COUNTIES
Albany, Cayuga, Clinton, Columbia, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Madison, Montgomery, Oneida, Oswego, Rensselaer, Saratoga, Schenectady, Schoharie, St. Lawrence, Warren, Washington

PARTIAL COUNTIES
Onondaga: For Heavy & Highway Cement Mason or Plaster Work in Onondaga County, refer to Mason-Heavy&Highway tag 1-2h/h on.

WAGES
Per hour

	07/01/2023
Mason & Bricklayer	$ 41.46

Additional $1.00 per hour for work on any swing scaffold or staging suspended by means of ropes or cables.

SUPPLEMENTAL BENEFITS
Per hour worked

Journeyman $ 21.98

OVERTIME PAY
See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY
Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE
Note: If a holiday falls on Sunday, the Monday following shall constitute the day of the legal holiday.

REGISTERED APPRENTICES
Wages per hour

750 HR TERMS at the following percent of Journeyman's wage

1st	2nd	3rd	4th	5th	6th	7th	8th
60%	60%	65%	70%	75%	80%	85%	90%

Supplemental Benefits per hour worked

0 to 500 Hours	$ 13.38
All Other	21.98

12-2hh.1

Millwright 03/01/2024

JOB DESCRIPTION Millwright **DISTRICT** 6

ENTIRE COUNTIES
Albany, Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Wyoming, Yates

WAGES
THE FOLLOWING RATE APPLIES TO ANY GAS/STEAM TURBINE AND OR RELATED COMPONENT WORK, INCLUDING NEW INSTALLATIONS OR MAINTENANCE AND ANY/ALL WORK PERFORMED WITHIN THE PROPERTY LIMITS OF A NUCLEAR FACILITY.

Per hour:	07/01/2023	07/01/2024 Additional	07/01/2025 Additional
Millwright - Power Generation	$ 43.05	$ 2.50	$2.50

NOTE: ADDITIONAL PREMIUMS PAID FOR THE FOLLOWING WORK LISTED BELOW (amount subject to any overtime premiums):
- Certified Welders shall receive an additional $1.75 per hour provided he/she is directed to perform certified welding.
- If a work site has been declared a hazardous site by the Owner and the use of protective gear (including, as a minimum, air purifying canister-type chemical respirators) are required, then that employee shall receive an additional $1.50 per hour.
- An employee performing the work of a machinist shall receive an additional $2.00 per hour. For the purposes of this premium to apply, a "machinist" is a person who uses a lathe, Bridgeport, milling machine or similar type of tool to make or modify parts.
- When performing work underground at 500 feet and below, the employee shall receive an additional $1.00 per hour.

SUPPLEMENTAL BENEFITS
Per hour paid:

Journeyman $ 27.40*

*NOTE: Subject to OT premium

OVERTIME PAY
See (B, E, E2, Q, V) on OVERTIME PAGE

HOLIDAY
Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

NOTE: Any holiday that falls on Sunday shall be observed the following Monday. Any holiday that falls on Saturday shall be observed the preceding Friday.

REGISTERED APPRENTICES
WAGES per hour: One year terms at the following percentage of Journeyman's wage:

Appr. 1st year	65 %*
Appr. 2nd year	75 %*
Appr. 3rd year	80 %*
Appr. 4th year	90 %*

*NOTE: Additional premium for the following work listed below:

Certified Welder	$ 1.75
Hazardous Waste Work	1.50
Machinist	2.00
Underground (500' and below)	1.00

SUPPLEMENTAL BENEFITS per hour:

Appr. 1st year	$ 11.89
Appr. 2nd year	22.75
Appr. 3rd year	24.30
Appr. 4th year	25.85

6-1163Power

Millwright — 03/01/2024

JOB DESCRIPTION Millwright **DISTRICT** 2

ENTIRE COUNTIES
Clinton, Essex, Franklin, Hamilton, Jefferson, Lewis, Oneida, Onondaga, Oswego, St. Lawrence, Warren, Washington

WAGES

Per hour:	07/01/2023	07/01/2024 Additional	07/01/2025 Additional
Building	$ 34.32	$ 3.00*	$ 3.00*
Heavy & Highway	37.32	3.50*	3.00

*To be allocated at a later date

NOTE ADDITIONAL PREMIUMS PAID FOR THE FOLLOWING WORK LISTED BELOW (amount subject to any overtime premiums):
- Certified Welders shall receive $1.75 per hour in addition to the current Millwrights rate provided he/she is directed to perform certified welding.
- For Building work if a work site has been declared a hazardous site by the Owner and the use of protective gear (including, as a minimum, air purifying canister-type chemical respirators) are required, then that employee shall receive a $1.50 premium per hour for Building work.
- For Heavy & Highway work if the work is performed at a State or Federally designated hazardous waste site where employees are required to wear protective gear, the employees performing the work shall receive an additional $2.00 per hour over the millwright heavy and highway wage rate for all hours worked on the day protective gear was worn.
- An employee performing the work of a machinist shall receive $2.00 per hour in addition to the current Millwrights rate. For the purposes of this premium to apply, a "machinist" is a person who uses a lathe, Bridgeport, milling machine or similar type of tool to make or modify parts.
- When performing work underground at 500 feet and below, the employee shall receive an additional $1.00.

SUPPLEMENTAL BENEFITS
Per hour:

Journeyman	$ 25.59

OVERTIME PAY
See (B, E, E2, Q) on OVERTIME PAGE

HOLIDAY
Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE
Note: Any holiday that falls on Sunday shall be observed the following Monday. Any holiday that falls on Saturday shall be observed the preceding Friday.

REGISTERED APPRENTICES
Wages per hour:

(1)year terms at the following percentage of Journeyman's rate.

1st	2nd	3rd	4th
65%	75%	80%	90%

Supplemental Benefits per hour:

Apprentices:

1st term	$ 11.74
2nd term	21.44
3rd term	22.82
4th term	24.21

2-1163.2

Operating Engineer - Building 03/01/2024

JOB DESCRIPTION Operating Engineer - Building **DISTRICT** 6

ENTIRE COUNTIES
Cayuga, Cortland, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Seneca, St. Lawrence, Tompkins

WAGES
NOTE:
---If a prime contract is let for site work only, meaning no buildings are involved in their site contract, the Heavy/Highway rates would be applicable. When a prime contract is let for site work and building excavation is part of that contract, the Building rates would be applicable for the Operators classification.
---In the event that equipment listed below is operated by robotic control, the classification covering the operation will be the same as if manually operated.
---If a second employee is required by the employer for operation of any covered machine, they shall be an Engineer Class C.

CLASS A1*: Cranes, All types (A1 Includes Boom Truck, Cableway, Cherry Picker, Derrick, Dragline, Dredge, Overhead Crane, Pile Driver, Tower Crane, Truck Crane, Whirlies)

CLASS A: Air Plako, Asphalt & Blacktop Roller, Automated Concrete Spreader (CMI or equivalent), Automated Fine Grade Machine (CMI), Backhoe, Barrel Shredder, Belt Placer, Blacktop Spreader (such as Barber-Greene & Blaw Knox), Blacktop Plant (automated), Blast or Rotary Drill (Truck or Cat mounted), Burning Plant Operator, Caisson Auger, Central Mix Plant (automated), Concrete Pump, Crusher (Rock), De-watering Press, Diesel Power Unit, Dirt Filter Press with Operation Equipment, Dual Drum Paver, Elevating Grader (self-propelled or towed), Elevator Hoist - Two Cage, Excavator - all purpose hydraulically operated, Fork Lift (Loed/Lull and other rough terrain type), Front End Loader (4 c.y. and over), Gradall, Grader (Power), Head Tower (Saurman or equal), Hoist (2 or 3 Drum), Hydroblaster (Laser Pump), Light Plants - Compressors and Generators, Locomotive, Maintenance Engineer, Maintenance Welder, Mine Hoist, Mucking Machine or Mole, Quarry Master or Equivalent, Refrigeration Equipment (for soil stabilization), Scraper, Sea Mule, Shovel, Side Boom, Slip Form Paver, Straddle Buggy (Ross Carrier, Lumber Carrier), Tractor Drawn Belt Type Loader (Euclid Loader), Trenching Machine (digging capacity of over 4ft. depth), Truck or Trailer Mounted Log Chipper (self-feeder), Tug Operator (Manned, rented equipment excluded), Tunnel Shovel, Vibro or Sonic Hammer Controls (when not mounted in proximity to Rig Operator), Work Boat Operator including LCM's.

CLASS B: "A" Frame Truck, Back Dumps, Blacktop Plant (non-automatic), Boring Machine, Bulldozer, Cage-Hoist, Central Mix Plant (non-automated), Compressor, Pump, Generator or Welding machine (when used in battery of not more than five (5)), Concrete Paver (single drum over 16'), Core boring machine, Drill Rigs - tractor mounted, Elevator - as material hoist, Farm Tractor (with or without accessories), Fork Lift (over 10 ton with or without attachments), Front End Loader (under 4 c.y.), Grout Pump, Gunite Machine, High Pressure Boiler (15 lbs. & over), Hoist (one drum), Hydraulic Breaking Hammer (Drop Hammer), Kolman Plant Loader (screening gravel), Maintenance Grease Man, Mixer for stabilized base - self-propelled (Seaman Mixer), Monorail Machine, Parapet Concrete or Pavement Grinder, Parts Man, Post Driver (truck or tractor mounted), Post Hole Digger (truck or tractor mounted), Power Sweeper (Wayne or similar), Pump-Crete or Squeeze-Crete, Road Widener (front end of Grader or self-propelled), Roller, Self-contained hydraulic bench drill, Shell Winder (motorized), Skid steer (Bobcat type loader), Snorkel (overhead arms), Snowblower control man, Tractor (with or without accessories), Trenching Machine (digging capacity of 4 ft. or less), Tugger Hoist, Vacuum Machine (self-propelled or mounted), Vibro Tamp, Well Drill / Well Point System (Submersible pumps when used in lieu of Well Point System), Winch (Motor driven), Winch Cat, Winch Truck

CLASS C: Compressor (up to 500 cfm), Concrete Paver or Mixer (under 16'), Concrete Pavement Spreaders & Finishers (not automated), Conveyor (over 12 ft), Electric Submersible Pump (4" and over), Fine Grade Machine (not automated), Fireman, Fork Lift ("with or without" attachments, 10 ton and under), Form Tamper, Generator (2,500 watts and over), Hydraulic Pump, Mechanical Heaters (More than two (2) Mechanical Heaters or any Mechanical Heater or Heaters whose combined output exceeds 640,000 BTU per hour (manufacturer's rating) plus one self-contained heating unit - i.e. Sundog or Air Heat type - New Holland Hay Dryer type excluded), Mulching Machine, Oiler, Power Driven Welding Machine (300 amp and over, other than all electric. One Welding Machine under 300 amp will not require an engineer unless in a battery), Power Heaterman (hay dryer), Pumps (water and trash), Revinus Widener (road widener), Single Light Plant, Steam Cleaner or Jenny.

Per hour: Building	07/01/2023	07/01/2024	07/01/2025
Class A1*	$ 45.75	$ 47.62	$ 49.61
Class A	44.25	46.12	48.11
Class B	42.13	44.00	45.99

Class C	37.91	39.78	41.77

Additional $2.50 per hour if work requires Personal Protective Equipment for hazardous waste site activities with a level C or over rating.

(*) TONNAGE PREMIUMS:
All cranes 65 ton to 110 ton capacity - A1 rate plus $ 1.50
All cranes 111 ton to 199 ton capacity - A1 rate plus $ 2.00
All cranes 200 ton to 399 ton capacity - A1 rate plus $ 3.00
All cranes 400 ton to 599 ton capacity - A1 rate plus $ 4.00
All cranes 600 ton to 799 ton capacity - A1 rate plus $ 5.00
All cranes 800 ton to 999 ton capacity - A1 rate plus $ 6.00
All cranes 1000 ton capacity and over - A1 rate plus $ 7.00

SUPPLEMENTAL BENEFITS
Per hour:

Journeyman	$ 29.91	$ 31.02	$ 32.12

OVERTIME PAY
See (B, E, Q) on OVERTIME PAGE

HOLIDAY
Paid: See (5, 6) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE
NOTE: If the holiday falls on Sunday, it will be celebrated on Monday.

REGISTERED APPRENTICES
WAGES per hour: One thousand hour terms at the following percentage of Journeyman's CLASS A wage:

1st year	60%
2nd year	65%
3rd year	70%
4th year	80%

Additional $2.50 per hour if work requires Personal Protective Equipment for hazardous waste site activities with a level C or over rating.

SUPPLEMENTAL BENEFITS per hour:

	07/01/2023	07/01/2024	07/01/2025
All Terms:	$ 29.85	$ 30.95	$ 32.05

6-158-545b.s

Operating Engineer - Heavy&Highway — 03/01/2024

JOB DESCRIPTION Operating Engineer - Heavy&Highway **DISTRICT** 6

ENTIRE COUNTIES
Cayuga, Cortland, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Seneca, St. Lawrence, Tompkins

WAGES
NOTE:
---In the event that equipment listed below is operated by robotic control, the classification covering the operation will be the same as if manually operated.
---If a second employee is required by the employer for operation of any covered machine, they shall be an Engineer Class C

CLASS A1*: Cranes, All types (Boom Truck, Cherry Picker, Derrick, Dragline, Overhead Crane (Gantry or Straddle Type), Pile Driver, Tower Crane (including self erecting), Truck Crane)

CLASS A: Asphalt Curb Machine (self-propelled, slipform); Asphalt Paver; Automated Concrete Spreader (CMI type); Automatic Fine Grader; Backhoe (except tractor mounted, rubber tired); Backhoe Excavator, Full Swing (CAT 212 or similar type); Back Filling Machine; Belt Placer (CMI type); Blacktop Plant (automated);Blacktop Roller; Cableway; Bull Dozer being operated with active GPS; Caisson Auger; Central Mix Concrete Plant (automated); Concrete Curb Machine (self-propelled, slipform); Concrete Pump; Directional Boring/Drilling Machine; Dredge; Dual Drum Paver; Excavator (all purpose-hydraulic, Gradall or similar); Front End Loader (4 cu. yd. & over); Head Tower (Sauerman or equal); Hoist (two or three drum); Holland Loader; Maintenance Engineer; Mine Hoist; Mucking Machine or Mole; Pavement Breaker (SP Wertgen; PB-4 and similar type); Profiler (over 105 h.p.); Power Grader; Quad 9; Quarry Master (or equivalent); Rotating Telehandler; Scraper (including challenger type); Shovel; Slip Form Paver; Tractor Drawn Belt-Type Loader; Truck or Trailer Mounted Chipper (self-feeder); Tug Operator (manned rented equipment excluded); Tunnel Shovel

CLASS B: Backhoe (tractor mounted, rubber tired); Bituminous Recycler Machine; Bituminous Spreader and Mixer; Blacktop Plant (non-automated); Blast or Rotary Drill (truck or tractor mounted); Boring Machine; Bridge Deck Finishing Machine; Brokk; Cage Hoist; Central Mix Plant (non-automated) and All Concrete Batching Plants; Concrete Paver (over 16'); Crawler Drill (self-contained); Crusher; Diesel Power Unit; Drill Rigs (truck or tractor mounted); Front End Loader (under 4 cu. yd.); Greaseman - Lubrication Engineer; HiPressure Boiler (15 lbs & over); Hoist (one drum); Hydro-Axe; Kolman Plant Loader & similar type loaders; Locomotive; Material Handling Knuckle Boom; Mini Excavators (under 18,000 lbs.); Mixer (for stabilized base, self-propelled); Monorail Machine; Profiler (105 h.p. and under); Plant Engineer; Prentice Loader; Pug Mill; Pump Crete; Ready Mix Concrete Plant; Refrigeration Equipment (for soil stabilization); Road Widener; Roller (all above subgrade, See Class A for Blacktop Roller); Sea Mule; Self-contained ride-on Rock Drill (excluding Air-Track type drill); Skidder; Tractor with Dozer and/or Pusher; Trencher; Tugger Hoist; Vacuum Machine (mounted or towed); Vermeer Saws (ride-on, any size or type); Welder; Winch and Winch Cat; Work Boat Operator including L.C.M.'s

CLASS C: "A" Frame Winch Hoist (On Truck); Aggregate Plant; Articulated Heavy Hauler; Asphalt or Concrete Grooving Machine (ride-on); Ballast Regulator (ride-on); Bituminous Heater (self-propelled); Boat (powered); Boiler (used in conjunction with production); Cement & Bin Operator; Compressors**; Concrete Pavement Spreader and Finisher; Concrete Paver or Mixer (16' & under); Concrete Saw (self-propelled); Conveyor; Deck Hand; Directional Boring/Drilling Machine Locator; Drill (Core); Drill (Well); Dust Collectors**; Electric Pump When Used in Conjunction with Well Point System; Farm Tractor with accessories; Fine Grade Machine; Fireman; Fork Lift; Form Tamper; Generators**; Grout Pump; Gunite Machine; Hammers (hydraulic self-propelled); Heaters**; Hydra-Spiker (ride-on); Hydraulic Pump (jacking system); Hydro-Blaster (water); Light Plants**; Mulching Machine; Oiler; Parapet Concrete or Pavement Grinder; Post Hole Digger (excluding hand-held); Post Driver; Power Broom (towed); Power Heaterman; Power Sweeper; Pumps**; Revinius Widener; Roller (subgrade & fill); Scarifier (ride-on); Shell Winder; Skid Steer Loader (Bobcat or similar, including all attachments); Span Saw (ride-on); Steam Cleaner; Tamper (ride-on); Tie Extractor (ride-on); Tie Handlers (ride-on); Tie Inserters (ride-on); Tie Spacers (ride-on); Tire Repair; Track Liner (ride-on); Tractor; Tractor (with towed accessories); Vacuum Machine (self-propelled); Vibratory Compactor; Vibro Tamp; Welding Machines**; Well Point

**CLASS C NOTE: Considered Hands-Off (unmanned). Includes only operation and maintenance of the equipment.

Per hour: H/H	07/01/2023	07/01/2024	07/01/2025
CLASS A1*	$ 54.30	$ 56.51	$ 58.85
CLASS A	51.30	53.51	55.85
CLASS B	50.42	52.63	54.97
CLASS C	47.14	49.35	51.69

(*) TONNAGE PREMIUMS:
All cranes 65 ton to 110 ton capacity - A1 rate plus $ 1.50
All cranes 111 ton to 199 ton capacity- A1 rate plus $ 2.00
All cranes 200 ton to 399 ton capacity - A1 rate plus $ 3.00
All cranes 400 ton to 599 ton capacity - A1 rate plus $ 4.00
All cranes 600 ton to 799 ton capacity - A1 rate plus $ 5.00
All cranes 800 ton to 999 ton capacity - A1 rate plus $ 6.00
All cranes 1000 ton capacity and over - A1 rate plus $ 7.00

- Cranes in Luffer Configuration - A1 rate plus $ 5.00
- Cranes with external ballast (Tray or Wagon) - A1 rate plus $ 5.00

Additional $2.50 per hour for hazardous waste removal work on a State and/or Federally designated waste site which requires employees to wear Level C or above forms of personal protection.

SINGLE IRREGULAR WORK SHIFT: Additional $2.50 per hour for all employees who work a single irregular work shift starting from 5:00 PM to 1:00 AM that is mandated by the Contracting Agency.

NOTE - The "Employer Registration" (30.1) use of a '4 Day/10 Hour Work schedules' will no longer be accepted or processed. All registered projects prior to June 30, 2023 will expire within the granted time frame.

For Pre-Registered Projects Four (4), Ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. Tuesday thru Friday may be worked with no make-up day. For further clarification contact your local Bureau Office.

SUPPLEMENTAL BENEFITS

Per hour:	07/01/2023	07/01/2024	07/01/2025
Journeyman	$ 31.35	$ 32.45	$ 33.55

OVERTIME PAY
See (B, E, Q) on OVERTIME PAGE

HOLIDAY
Paid: See (5, 6) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

NOTE: If a holiday falls on Sunday, it will be celebrated on Monday. If an employee works on this Monday, they shall be compensated at double time plus the holiday pay (triple time). If a holiday falls on a Saturday, employees who work a Saturday Holiday shall be paid double time plus the holiday pay.

REGISTERED APPRENTICES

WAGES per hour: One thousand hour terms at the following percentage of Journeyman's CLASS B wage.

1st term	60%
2nd term	70%
3rd term	80%
4th Term	90%

Additional $2.50 per hour for hazardous waste removal work on a State and/or Federally designated waste site which requires employees to wear Level C or above forms of personal protection.

SUPPLEMENTAL BENEFITS per hour: Same as Journeyman

6-158-545h

Operating Engineer - Marine Dredging — 03/01/2024

JOB DESCRIPTION Operating Engineer - Marine Dredging **DISTRICT** 4

ENTIRE COUNTIES

Albany, Bronx, Cayuga, Clinton, Columbia, Dutchess, Essex, Franklin, Greene, Jefferson, Kings, Monroe, Nassau, New York, Orange, Oswego, Putnam, Queens, Rensselaer, Richmond, Rockland, St. Lawrence, Suffolk, Ulster, Washington, Wayne, Westchester

WAGES

These wages do not apply to Operating Engineers on land based construction projects. For those projects, please see the Operating Engineer Heavy/Highway Rates. The wage rates below for all equipment and operators are only for marine dredging work in navigable waters found in the counties listed above.

Per Hour:	07/01/2023	10/01/2023
CLASS A1 Deck Captain, Leverman Mechanical Dredge Operator Licensed Tug Operator 1000HP or more.	$ 43.94	$ 45.26
CLASS A2 Crane Operator (360 swing)	39.16	40.33
CLASS B Dozer, Front Loader Operator on Land	To conform to Operating Engineer Prevailing Wage in locality where work is being performed including benefits.	
CLASS B1 Derrick Operator (180 swing) Spider/Spill Barge Operator Operator II, Fill Placer, Engineer, Chief Mate, Electrician, Chief Welder, Maintenance Engineer Licensed Boat, Crew Boat Operator	38.00	39.14
CLASS B2 Certified Welder	35.77	36.84
CLASS C1 Drag Barge Operator, Steward, Mate, Assistant Fill Placer	34.79	35.83
CLASS C2 Boat Operator	33.67	34.68
CLASS D Shoreman, Deckhand, Oiler, Rodman, Scowman, Cook, Messman, Porter/Janitor	27.97	28.81

SUPPLEMENTAL BENEFITS
Per Hour:
THE FOLLOWING SUPPLEMENTAL BENEFITS APPLY TO ALL CATEGORIES

All Classes A & B	$ 11.85 plus 6% of straight time wage, Overtime hours add $ 0.63	$ 12.00 plus 6% of straight time wage, Overtime hours add $ 0.63
All Class C	$ 11.60 plus 6% of straight time wage, Overtime hours add $ 0.50	$ 11.75 plus 6% of straight time wage, Overtime hours add $ 0.50
All Class D	$ 11.35 plus 6% of straight time wage, Overtime hours add $ 0.38	$ 11.60 plus 6% of straight time wage, Overtime hours add $ 0.50

OVERTIME PAY
See (B2, F, R) on OVERTIME PAGE

HOLIDAY
Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6, 8, 15, 26) on HOLIDAY PAGE

4-25a-MarDredge

Operating Engineer - Survey Crew — 03/01/2024

JOB DESCRIPTION Operating Engineer - Survey Crew **DISTRICT** 12

ENTIRE COUNTIES
Albany, Allegany, Broome, Cayuga, Chemung, Chenango, Clinton, Columbia, Cortland, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Oneida, Onondaga, Ontario, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Yates

PARTIAL COUNTIES
Dutchess: The northern portion of the county from the northern boundary line of the City of Poughkeepsie, north.
Genesee: Only the portion of the county that lies east of a line down the center of Route 98 to include all area that lies within the City of Batavia.

WAGES
These rates apply to Building, Tunnel and Heavy Highway.

Per hour:
SURVEY CLASSIFICATIONS:

Party Chief - One who directs a survey party.
Instrument Person - One who operates the surveying instruments.
Rod Person - One who holds the rods and assists the Instrument Person.

	07/01/2023
Party Chief	$ 48.97
Instrument Person	44.99
Rod Person	33.37

Additional $3.00/hr. for Tunnel Work
Additional $2.50/hr. for Hazardous Work Site

SUPPLEMENTAL BENEFITS
Per hour worked:

Journeyman	$ 28.90

OVERTIME PAY
See (B, E, P, *X) on OVERTIME PAGE
*Note: $24.60/Hr. Only for "ALL" premium hours paid when worked.

HOLIDAY

Paid: See (5, 6) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES
WAGES: 1000 hour terms based on the Percentage of Rod Persons Wage:

	07/01/2023
0-1000	60%
1001-2000	70%
2001-3000	80%

SUPPLEMENTAL BENEFIT per hour worked:

0-1000	$ 20.68 / PHP $17.53
1001-2000	23.70 / " 19.95
2001-3000	26.73 / " 22.43

NOTE: PHP is premium hours paid when worked.

12-158-545 D.H.H.

Operating Engineer - Survey Crew - Consulting Engineer — 03/01/2024

JOB DESCRIPTION Operating Engineer - Survey Crew - Consulting Engineer **DISTRICT** 12

ENTIRE COUNTIES
Albany, Allegany, Broome, Cayuga, Chemung, Chenango, Clinton, Columbia, Cortland, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Oneida, Onondaga, Ontario, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Yates

PARTIAL COUNTIES
Dutchess: The northern portion of the county from the northern boundary line of the City of Poughkeepsie, north.
Genesee: Only the portion of the county that lies east of a line down the center of Route 98 to include all area that lies within the City of Batavia.

WAGES
These rates apply to feasibility and preliminary design surveying, line and grade surveying for inspection or supervision of construction when performed under a Consulting Engineer Agreement.

Per hour:
SURVEY CLASSIFICATIONS:

Party Chief - One who directs a survey party.
Instrument Person - One who operates the surveying instruments.
Rod Person - One who holds the rods and assists the Instrument Person.

	07/01/2023
Party Chief	$ 48.97
Instrument Person	44.99
Rod Person	33.37

Additional $3.00/hr. for Tunnel Work.
Additional $2.50/hr. for EPA or DEC certified toxic or hazardous waste work.

SUPPLEMENTAL BENEFITS
Per hour worked:

Journeyman	$ 28.90

OVERTIME PAY
See (B, E, Q, *X) on OVERTIME PAGE
*Note: $24.10/Hr. Only for "ALL" premium hours paid when worked.

HOLIDAY
Paid: See (5, 6) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES
WAGES: 1000 hour terms based on percentage of Rod Persons Wage:

	07/01/2023
0-1000	60%
1001-2000	70%

2001-3000	80%

SUPPLEMENTAL BENEFIT per hour worked:

0-1000	$ 20.68 / PHP $17.53
1001-2000	$ 23.70 / " 19.95
2001-3000	$ 26.73 / " 22.43

NOTE: PHP is premium hours paid when worked.

12-158-545 DCE

Operating Engineer - Tunnel — 03/01/2024

JOB DESCRIPTION Operating Engineer - Tunnel **DISTRICT** 7

ENTIRE COUNTIES
Albany, Allegany, Broome, Cayuga, Chemung, Chenango, Clinton, Columbia, Cortland, Essex, Franklin, Fulton, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Oneida, Onondaga, Ontario, Oswego, Otsego, Rensselaer, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Warren, Washington, Wayne, Yates

PARTIAL COUNTIES
Dutchess: Northern part of Dutchess, to the northern boundary line of the City of Poughkeepie, then due east to Route 115 to Bedell Road, then east along Bedell Road to VanWagner Road, then north along VanWagner Road to Bower Road, then east along Bower Road to Rte. 44 east to Rte. 343, then along Rte. 343 east to the northern boundary of the Town of Dover Plains and east along the northern boundary of the Town of Dover Plains, to the borderline of the State of Connecticut.
Genesee: Only that portion of the county that lies east of a line drawn down the center of Route 98 and the entirety of the City of Batavia.

WAGES
CLASS A: Automatic Concrete Spreader (CMI Type); Automatic Fine Grader; Backhoe (except tractor mounted, rubber tired); Belt Placer (CMI Type); Blacktop Plant (automated); Cableway; Caisson Auger; Central Mix Concrete Plant (automated); Concrete Curb Machine (self-propelled slipform); Concrete Pump (8" or over); Dredge; Dual Drum Paver; Excavator; Front End Loader (4 cu. yd & over); Gradall; Head Tower (Sauerman or Equal); Hoist (shaft); Hoist (two or three Drum); Log Chipper/Loader (self-feeder); Maintenance Engineer (shaft and tunnel); any Mechanical Shaft Drill; Mine Hoist; Mining Machine(Mole and similar types); Mucking Machine or Mole; Overhead Crane (Gantry or Straddle Type); Pile Driver; Power Grader; Remote Controlled Mole or Tunnel Machine; Scraper; Shovel; Side Boom; Slip Form Paver (If a second man is needed, they shall be an Oiler); Tripper/Maintenance Engineer (shaft & tunnel); Tractor Drawn Belt-Type Loader; Tug Operator (manned rented equipment excluded); Tunnel Shovel.

CLASS B: Automated Central Mix Concrete Plant; Backhoe (topside); Backhoe (track mounted, rubber tired); Backhoe (topside); Bituminous Spreader and Mixer, Blacktop Plant (non-automated); Blast or Rotary Drill (truck or tractor mounted); Boring Machine; Cage Hoist; Central Mix Plant(non-automated); all Concrete Batching Plants; Compressors (4 or less exceeding 2,000 c.f.m. combined capacity); Concrete Pump; Crusher; Diesel Power Unit; Drill Rigs (tractor mounted); Front End Loader (under 4 cu. yd.); Grayco Epoxy Machine; Hoist (One Drum); Hoist (2 or 3 drum topside); Knuckle Boom material handler; Kolman Plant Loader & similar type Loaders (if employer requires another person to clean the screen or to maintain the equipment, they shall be an Oiler); L.C.M. Work Boat Operator; Locomotive; Maintenance Engineer (topside); Maintenance Grease Man; Mixer (for stabilized base-self-propelled); Monorail Machine; Plant Engineer; Personnel Hoist; Pump Crete; Ready Mix Concrete Plant; Refrigeration Equipment (for soil stabilization); Road Widener; Roller (all above sub-grade); Sea Mule; Shotcrete Machine; Shovel (topside); Tractor with Dozer and/or Pusher; Trencher; Tugger Hoist; Tunnel Locomotive; Vacuum Machine (mounted or towed); Welder; Winch; Winch Cat.

CLASS C: A Frame Truck; All Terrain Telescoping Material Handler; Ballast Regulator (ride-on); Compressors (4 not to exceed 2,000 c.f.m. combined capacity; or 3 or less with more than 1200 c.f.m. but not to exceed 2,000 c.f.m.); Compressors ((any size, but subject to other provisions for compressors), Dust Collectors, Generators, Pumps, Welding Machines, Light Plants (4 or any type combination)); Concrete Pavement Spreaders and Finishers; Conveyor; Drill (core); Drill (well); Electric Pump used in conjunction with Well Point System; Farm Tractor with Accessories; Fine Grade Machine; Fork Lift; Grout Pump (over 5 cu. ft.); Gunite Machine; Hammers (hydraulic-self-propelled); Hydra-Spiker (ride-on); Hydra-Blaster (water); Hydro-Blaster; Motorized Form Carrier; Post Hole Digger and Post Driver; Power Sweeper; Roller grade & fill); Scarifer (ride-on); Span-Saw (ride-on); Submersible Electric Pump (when used in lieu of well points); Tamper (ride-on); Tie-Extractor (ride-on), Tie Handler (ride-on), Tie Inserter (ride-on), Tie Spacer (ride-on); Track Liner (ride-on); Tractor with towed accessories; Vibratory Compactor; Vibro Tamp, Well Point.

CLASS D: Aggregate Plant; Cement & Bin Operator; Compressors (3 or less not to exceed 1,200 c.f.m. combined capacity); Compressors ((any size, but subject to other provisions for compressors), Dust Collectors, Generators, Pumps, Welding Machines, Light Plants (3 or less or any type or combination)); Concrete Saw (self-propelled); Form Tamper; Greaseman; Hydraulic Pump (jacking system); Junior Engineer; Light Plants; Mulching Machine; Oiler; Parapet Concrete or Pavement Grinder; Power Broom (towed); Power Heaterman (when used for production); Revinius Widener; Shell Winder; Steam Cleaner; Tractor.

Per hour:	07/01/2023	07/01/2024	07/01/2025
CLASS A	$ 53.52	$ 55.91	$ 58.44
CLASS B	52.30	54.69	57.22
CLASS C	49.51	51.90	54.43
CLASS D	46.50	48.89	51.42

Additional $5.00 per hour for Hazardous Waste Work on a state or federally designated hazardous waste site where the Operating Engineer is in direct contact with hazardous material and when personal protective equipment is required for respiratory, skin and eye protection. Fringe benefits will be paid at the hourly wage premium.

CRANES:
Crane 1: All cranes, including self-erecting.
Crane 2: All Lattice Boom Cranes and all cranes with a manufacturer's rating of fifty (50) ton and over.
Crane 3: All hydraulic cranes and derricks with a manufacturer's rating of forty nine (49) ton and below, including boom trucks.

Crane 1	$ 57.52	$ 59.91	$ 62.44
Crane 2	56.52	58.91	61.44
Crane 3	55.52	57.91	60.44

SUPPLEMENTAL BENEFITS
Per hour:

$ 24.20	$ 25.05	$ 25.90
+ 9.60*	+ 9.85*	+ 10.10*

* This portion of benefits subject to same premium rate as shown for overtime wages.

OVERTIME PAY
See (B, B2, E, Q, X) on OVERTIME PAGE

HOLIDAY
Paid: See (5, 6) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE
If a holiday falls on Sunday, it shall be observed on Monday.

REGISTERED APPRENTICES
WAGES:(1000) hours terms at the following percentage of Journeyman's Class B wage.

1st term	60%
2nd term	65%
3rd term	70%
4th term	75%

SUPPLEMENTAL BENEFITS per hour: Same as Journeyman.

7-158-832TL.

Painter — 03/01/2024

JOB DESCRIPTION Painter **DISTRICT** 6

ENTIRE COUNTIES
Jefferson, St. Lawrence

PARTIAL COUNTIES
Lewis: Only the townships of Diana, Croghan, New Bremen, Watson, Greig, Martinsburg, Lowville, Denmark, Harrisburg, Montague, and Pinckney.

WAGES

Per hour:	07/01/2023	05/01/2024 Additional
Painter/Decorator**	$ 26.92	$ 1.71*
Taper/Drywall Finisher Paper Hanging/Wallcoverings	$ 27.42	$ 1.96*

*To be allocated at a later date.

NOTE - SEE BRIDGE PAINTER RATES FOR BRIDGES, TANKS, OR TUNNELS.

**Steel, hazardous work, working with picks, bosun chair, window jacks, swing stage, safety belts, spray painting, parking lot and highway striping, steam cleaning, sandblasting, safe-way staging over fifteen (15) feet in height, any chemicals or epoxy applications, hydro water blasting, steeplejack work, two (2) component block filler, encapsulation or abatement of lead or asbestos, and metalizing

NOTE: FOR ANY SHIFT WHICH STARTS PRIOR TO 6:00 AM OR AFTER 12:00 NOON, ALL EMPLOYEES WHO WORK A SINGLE IRREGULAR WORK SHIFT ON GOVERNMENTAL MANDATED WORK SHALL BE PAID AN ADDITIONAL $2.00 PER HOUR ABOVE THE APPLICABLE WAGE SCALE.

NOTE - The "Employer Registration" (30.1) use of a '4 Day/10 Hour Work schedules' will no longer be accepted or processed. All registered projects prior to June 30, 2023 will expire within the granted time frame.

For Pre-Registered Projects Four (4), Ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. Tuesday thru Friday may be worked with no make-up day. For further clarification contact your local Bureau Office.

SUPPLEMENTAL BENEFITS
Per hour:

Journeyman	$ 25.22

OVERTIME PAY
See (B, *F, R) on OVERTIME PAGE
* NOTE - On exterior work only, if work was missed during the week due to inclement weather, Saturday may be worked at straight time.

HOLIDAY
Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

NOTE: A holiday that falls on a Sunday will be celebrated on Monday. A holiday that falls on a Saturday will be celebrated on Friday.

REGISTERED APPRENTICES
WAGES per hour:
Painter/Decorator/Wallcovering: 750 hour terms at the following wage rate:

1st	2nd	3rd	4th	5th	6th	7th	8th
$ 18.00	$ 18.50	$ 19.00	$ 19.50	$ 20.00	$ 21.00	$ 22.00	$ 23.00

Drywall Taper/ Finisher: 750 hour terms at the following wage rate:

1st	2nd	3rd	4th	5th	6th
$ 20.00	$ 20.50	$ 21.00	$ 21.50	$ 22.00	$ 23.00

SUPPLEMENTAL BENEFITS per hour:
Painter/Decorator/Wallcovering:

1st	2nd	3rd	4th	5th	6th	7th	8th
$ 6.50	$ 6.50	$ 7.50	$ 7.50	$ 10.50	$ 10.50	$ 13.00	$ 13.00

Drywall Taper/ Finisher:

1st	2nd	3rd	4th	5th	6th
$ 7.50	$ 7.50	$ 7.50	$ 10.00	$ 10.00	$ 12.00

6-38.W

Painter — 03/01/2024

JOB DESCRIPTION Painter **DISTRICT** 3

ENTIRE COUNTIES
Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Cortland, Delaware, Erie, Genesee, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Wayne, Wyoming, Yates

WAGES
Per hour: 07/01/2023

Bridge	$ 42.06
Tunnel	42.06
Tank*	40.06

For Bridge Painting Contracts, ALL WORKERS on and off the bridge (including Flagmen) are to be paid Painter's Rate; the contract must be ONLY for Bridge Painting.

Tank rate applies to indoor and outdoor tanks, tank towers, standpipes, digesters, waste water treatment tanks, chlorinator tanks, etc. Covers all types of tanks including but not limited to steel tanks, concrete tanks, fiberglass tanks, etc.

Note an additional $1.50 per hour is required when the contracting agency or project specification requires any shift to start prior to 6:00am or after 12:00 noon.

SUPPLEMENTAL BENEFITS
Per hour:
$ 30.89

OVERTIME PAY
Exterior work only See (B, E4, F*, R) on OVERTIME PAGE.
All other work See (B, F*, R) on OVERTIME PAGE.
*Note - Saturday is payable at straight time if the employee misses work, except where a doctor's or hospital verification of illness is produced Monday through Friday when work was available to the employee.

HOLIDAY
Paid: See (1) on HOLIDAY PAGE

Overtime: See (5, 6) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:

750 hour terms at the following percentage of Journeyman's wage rate:

1st	2nd	3rd	4th	5th	6th
$ 24.00	$ 26.00	$ 28.00	$ 30.00	$ 34.00	$ 38.00

Supplemental benefits per hour:

1st	2nd	3rd	4th	5th	6th
$ 6.60	$ 6.95	$ 7.30	$ 7.65	$ 8.00	$ 8.35

3-4-Bridge, Tunnel, Tank

Painter - Metal Polisher — 03/01/2024

JOB DESCRIPTION Painter - Metal Polisher **DISTRICT** 8

ENTIRE COUNTIES

Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES

	07/01/2023
Metal Polisher	$ 38.18
Metal Polisher*	39.28
Metal Polisher**	42.18

*Note: Applies on New Construction & complete renovation
** Note: Applies when working on scaffolds over 34 feet.

SUPPLEMENTAL BENEFITS

Per Hour: 07/01/2023

Journeyworker:
All classification $ 12.34

OVERTIME PAY

See (B, E, P, T) on OVERTIME PAGE

HOLIDAY

Paid: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE
Overtime: See (5, 6, 11, 15, 16, 25, 26) on HOLIDAY PAGE

REGISTERED APPRENTICES

Wages per hour:
One (1) year term at the following wage rates:

	07/01/2023
1st year	$ 16.00
2nd year	17.00
3rd year	18.00
1st year*	$ 16.39
2nd year*	17.44
3rd year*	18.54
1st year**	$ 18.50
2nd year**	19.50
3rd year**	20.50

*Note: Applies on New Construction & complete renovation
** Note: Applies when working on scaffolds over 34 feet.

Supplemental benefits:
Per hour:

1st year $ 8.69

2nd year	8.69
3rd year	8.69

8-8A/28A-MP

Plumber 03/01/2024

JOB DESCRIPTION Plumber **DISTRICT** 6

ENTIRE COUNTIES
Jefferson, St. Lawrence

PARTIAL COUNTIES
Franklin: Only the Village of Hogansburg and the St. Regis Indian Reservation.
Lewis: Entire County with the exception of the Townships of Lyonsdale, West Turin, Leyden and Lewis.

WAGES
Per hour: 07/01/2023

Plumber/Steamfitter	$ 37.22

SINGLE IRREGULAR WORK SHIFT: Additional 15% premium added to the wage above for a single irregular work shift outside of normal working hours.

NOTE - The "Employer Registration" (30.1) use of a '4 Day/10 Hour Work schedules' will no longer be accepted or processed. All registered projects prior to June 30, 2023 will expire within the granted time frame.

For Pre-Registered Projects Four (4), Ten (10) hour days may be worked at straight time during a week, Monday thru Thursday. Friday may be used as a make-up day. Tuesday thru Friday may be worked with no make-up day. For further clarification contact your local Bureau Office.

SUPPLEMENTAL BENEFITS
Per hour:

Journeyman	$ 27.94*

*NOTE: $ 15.21 of the supplemental benefits are paid at the same premium as shown for the overtime work performed at the energy producing facilities whose primary function is the sale of power or the production of fuel. This also includes semi-conductor manufacturer and/or fabrication plants.

OVERTIME PAY
Time and one half for the 9th & 10th hours Monday thru Friday and first 10 hours on Saturday. All other overtime hours are double-time.

HOLIDAY
Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE
NOTE: When a holiday falls on a Saturday, the holiday will be observed on the Friday before. If a holiday falls on a Sunday, the holiday will be observed on the following Monday.

REGISTERED APPRENTICES
WAGES per hour: (1) year terms at the following percentage of Journeyman's wage.

1st year	2nd year	3rd year	4th year	5th year
50%	55%	65%	75%	85%

SUPPLEMENTAL BENEFITS per hour*:

1st year	$ 18.89
2nd year	23.40
3rd year	26.11
4th/5th years	27.91

*NOTE: Below is the portion of supplemental benefits paid at overtime premium for work performed at energy producing facilities whose primary function is the sale of power or the production of fuel. This also includes semi-conductor manufacturer and/or fabrication plants.

1st year	$ 7.61
2nd year	11.41
3rd year	13.69
4th/5th year	15.21

6-81Wtr

Roofer 03/01/2024

JOB DESCRIPTION Roofer **DISTRICT** 6

ENTIRE COUNTIES
Cayuga, Cortland, Franklin, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, Seneca, St. Lawrence

WAGES

Per hour:	07/01/2023	06/01/2024 Additional
Roofer, Waterproofer	$ 32.25	$ 2.00*

Additional per hour:	
Green Roofing**	$ 0.25
Pitch Removal & Appl.	1.50
Asbestos Abatement	1.50
Irregular Shift(s)***	4.00

*To be allocated at a later date.

Does not include metal roof flashings, gravel stop, or metal roofing; See Sheetmetal Worker wage schedule.

NOTES:
** Green Roofing is any component of green technology or living roof above the roof membrane including, but not limited to, the fabric, dirt and plantings.

***WHEN MANDATED BY THE OWNER OR CONTRACTING AGENCY, THERE IS AN ADDITIONAL PREMIUM FOR HOURS WORKED BEFORE 5:30AM AND AFTER 5:30PM.

SUPPLEMENTAL BENEFITS

Per hour:	
Journeyman	$ 25.85
Additional contribution on any Asbestos Abatement work	0.75

OVERTIME PAY
See (B, E, E2*, Q) on OVERTIME PAGE
*NOTE - If a holiday falls in that week and 32 hours were worked, Saturday will be paid at 1 1/2 times the rate.

HOLIDAY
Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE
NOTE: When any of these holidays falls on Sunday, the following day shall be observed as a holiday.

REGISTERED APPRENTICES
WAGES per hour: 1000 hour terms at the following percentage of the Journeyman's wage:

1st term (0 to 999)	65%
2nd term (1000 to 1999)	70%
3rd term (2000 to 2999)	75%
4th term (3000 to 3999)	85%

Additional per hour:	
Green Roofing**	$ 0.25
Pitch Removal & Appl.	1.50
Asbestos Abatement	1.50

SUPPLEMENTAL BENEFITS per hour:

1st term	$ 19.48
2nd term	21.40
3rd term	24.85
4th term	25.85
Additional contribution on any Asbestos Abatement work	$ 0.75

6-195

Sheetmetal Worker **03/01/2024**

JOB DESCRIPTION Sheetmetal Worker **DISTRICT** 6

ENTIRE COUNTIES
Cayuga, Chenango, Cortland, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, St. Lawrence

WAGES

Per hour:	07/01/2023	05/01/2024
Sheetmetal Worker:		Additional
**(under $10 million)	$ 34.25	$ 1.26*
**(over $10 million)	$ 35.25	$ 1.26*

*To be allocated at a later date.

**For total cost of Sheetmetal contract only.

TO INCLUDE METAL ROOF FLASHINGS, GRAVEL STOP, AND METAL STANDING SEAM ROOFING.

SUPPLEMENTAL BENEFITS

Per hour:

Journeyman	$ 22.60

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

When any holiday falls on a Saturday, the Friday before such holiday shall be recognized as the legal holiday. Any holiday falling on Sunday, the following Monday shall be recognized as the legal holiday.

REGISTERED APPRENTICES

WAGES per hour: One year terms at the following percentage of Journeyman's wage.

1st	2nd	3rd	4th	5th
45%	55%	65%	75%	85%
$ 15.41	$ 18.84	$22.26	$ 25.69	$ 29.11

SUPPLEMENTAL BENEFITS per hour:

$ 13.36	$ 14.43	$ 15.49	$ 17.59	$ 18.66

6-58

Sprinkler Fitter — 03/01/2024

JOB DESCRIPTION Sprinkler Fitter **DISTRICT** 1

ENTIRE COUNTIES

Allegany, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Lewis, Livingston, Madison, Monroe, Montgomery, Niagara, Oneida, Onondaga, Ontario, Orleans, Oswego, Otsego, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Tioga, Tompkins, Washington, Wayne, Wyoming, Yates

WAGES

Per hour	07/01/2023
Sprinkler Fitter	$ 40.04

SUPPLEMENTAL BENEFITS

Per hour

Journeyperson	$ 28.24

OVERTIME PAY

See (B, E, Q) on OVERTIME PAGE

HOLIDAY

Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

Note: When a holiday falls on Sunday, the following Monday shall be considered a holiday and all work performed on either day shall be at the double time rate. When a holiday falls on Saturday, the preceding Friday shall be considered a holiday and all work performed on either day shall be at the double time rate.

REGISTERED APPRENTICES

Wages per hour

One Half Year terms at the following wage.

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
$ 19.15	$ 21.28	$ 23.16	$ 25.29	$ 27.41	$ 29.54	$ 31.67	$ 33.80	$ 35.93	$ 38.05

Supplemental Benefits per hour

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
$ 8.74	$ 8.74	$ 20.32	$ 20.32	$ 20.57	$ 20.57	$ 20.57	$ 20.57	$ 20.57	$ 20.57

1-669

Teamster - Building 03/01/2024

JOB DESCRIPTION Teamster - Building **DISTRICT** 7

ENTIRE COUNTIES
Clinton, Essex, Franklin, Jefferson, St. Lawrence

PARTIAL COUNTIES
Lewis: Only the Townships of Croghan, Denmark, Diana, New Bremen,Harrisburg, Montague, Osceola and Pinckney.
Oswego: Only the Towns of Boylston, Redfield, and Sandy Creek.
Warren: Only the Townships of Hague, Horicon, Chester and Johnsburg.

WAGES
GROUP #1: Fuel Trucks, Fork Lift* (Warehouse Area Only), Warehouse*, Yardman*, Truck Helper, Pickups, Panel Truck, Flatbody Material Trucks (straight jobs), Single axle Dump Trucks, Dumpsters, Material Checkers/Receivers*, Greasers, Tiremen, Mechanic Helpers/Parts Chasers, Bus.
GROUP #2: Tandems, Mechanics & Batch Trucks.
GROUP #3: Semi Trailers, Low Boys, Asphalt Distributor Trucks, and Agitator Mixer Truck, Dump Crete Type Vehicles and 3 axle Dump trucks.
GROUP #4: Asbestos Removal, Special earth moving Euclid type or similar off highway equip.(non self load.) Articulated and all-track dump trucks.

*NOTE - Applies when a temporary warehouse structure is built/utilized specifically for a public work project.

Per hour:	07/01/2023
GROUP #1	$ 26.50
GROUP #2	27.50
GROUP #3	27.60
GROUP #4	26.76

SUPPLEMENTAL BENEFITS
Per hour:

Journeyman	$ 21.16

OVERTIME PAY
See (B, E, Q) on OVERTIME PAGE

HOLIDAY
Paid: See (1) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE

7-687B

Teamster - Heavy&Highway 03/01/2024

JOB DESCRIPTION Teamster - Heavy&Highway **DISTRICT** 7

ENTIRE COUNTIES
Clinton, Essex, Franklin, Jefferson, St. Lawrence

PARTIAL COUNTIES
Lewis: Only the Townships of Croghan, Denmark, Diana, New Bremen,Harrisburg, Montague, Osceola and Pinckney.
Oswego: Only the Towns of Boylston, Redfield, and Sandy Creek.
Warren: Only the Townships of Hague, Horicon, Chester and Johnsburg.

WAGES
GROUP #1: Warehousemen*, Yardmen*, Truck Helpers, Pickups, Panel Trucks, Flatboy Material Trucks(straight jobs), Single Axle Dump Trucks, Dumpsters, Material Checkers/Receivers*, Greasers, Truck Tiremen, Mechanics Helpers/Parts Chasers, Fork Lift* (Warehouse Area Only), Tandems and Batch Trucks, Mechanics. Semi-Trailers, Low-Boy Trucks, Asphalt Distributor Trucks, and Agitator, Mixer Trucks and Dumpcrete type vehicles, Truck Mechanic, Fuel Truck.
GROUP #2: Specialized Earth Moving Equipment, Euclid type, or similar off-highway where not self-loading, Straddle (Ross) Carrier, and self-contained concrete mobile truck. Off-highway Tandem Back-Dump, Twin Engine Equipment and Double-Hitched Equipment where not self-loading.

*NOTE - Applies when a temporary warehouse structure is built/utilized specifically for a public work project.

Per hour: 07/01/2023

GROUP #1	$ 28.59
GROUP #2	28.81

Additional $1.50 per hour for hazardous waste removal work on a City, County, State and/or Federal Designated waste site and regulations require employee to use or wear respiratory protection.

SUPPLEMENTAL BENEFITS
Per hour:

Journeyman	$ 23.39

OVERTIME PAY
See (B, E, Q) on OVERTIME PAGE

HOLIDAY
Paid: See (5, 6) on HOLIDAY PAGE
Overtime: See (5, 6) on HOLIDAY PAGE
NOTE: If a holiday falls on a Sunday, it will be celebrated on Monday.

7-687

Welder 03/01/2024

JOB DESCRIPTION Welder **DISTRICT** 1

ENTIRE COUNTIES
Albany, Allegany, Bronx, Broome, Cattaraugus, Cayuga, Chautauqua, Chemung, Chenango, Clinton, Columbia, Cortland, Delaware, Dutchess, Erie, Essex, Franklin, Fulton, Genesee, Greene, Hamilton, Herkimer, Jefferson, Kings, Lewis, Livingston, Madison, Monroe, Montgomery, Nassau, New York, Niagara, Oneida, Onondaga, Ontario, Orange, Orleans, Oswego, Otsego, Putnam, Queens, Rensselaer, Richmond, Rockland, Saratoga, Schenectady, Schoharie, Schuyler, Seneca, St. Lawrence, Steuben, Suffolk, Sullivan, Tioga, Tompkins, Ulster, Warren, Washington, Wayne, Westchester, Wyoming, Yates

WAGES
Per hour 07/01/2023

Welder: To be paid the same rate of the mechanic performing the work.*

*EXCEPTION: If a specific welder certification is required, then the 'Certified Welder' rate in that trade tag will be paid.

OVERTIME PAY

HOLIDAY

1-As Per Trade

Overtime Codes

Following is an explanation of the code(s) listed in the OVERTIME section of each classification contained in the attached schedule. Additional requirements may also be listed in the HOLIDAY section.

NOTE: Supplemental Benefits are 'Per hour worked' (for each hour worked) unless otherwise noted

(AA)	Time and one half of the hourly rate after 7 and one half hours per day
(A)	Time and one half of the hourly rate after 7 hours per day
(B)	Time and one half of the hourly rate after 8 hours per day
(B1)	Time and one half of the hourly rate for the 9th & 10th hours week days and the 1st 8 hours on Saturday. Double the hourly rate for all additional hours
(B2)	Time and one half of the hourly rate after 40 hours per week
(C)	Double the hourly rate after 7 hours per day
(C1)	Double the hourly rate after 7 and one half hours per day
(D)	Double the hourly rate after 8 hours per day
(D1)	Double the hourly rate after 9 hours per day
(E)	Time and one half of the hourly rate on Saturday
(E1)	Time and one half 1st 4 hours on Saturday; Double the hourly rate all additional Saturday hours
(E2)	Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
(E3)	Between November 1st and March 3rd Saturday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather, provided a given employee has worked between 16 and 32 hours that week
(E4)	Saturday and Sunday may be used as a make-up day at straight time when a day is lost during that week due to inclement weather
(E5)	Double time after 8 hours on Saturdays
(F)	Time and one half of the hourly rate on Saturday and Sunday
(G)	Time and one half of the hourly rate on Saturday and Holidays
(H)	Time and one half of the hourly rate on Saturday, Sunday, and Holidays
(I)	Time and one half of the hourly rate on Sunday
(J)	Time and one half of the hourly rate on Sunday and Holidays
(K)	Time and one half of the hourly rate on Holidays
(L)	Double the hourly rate on Saturday
(M)	Double the hourly rate on Saturday and Sunday
(N)	Double the hourly rate on Saturday and Holidays
(O)	Double the hourly rate on Saturday, Sunday, and Holidays
(P)	Double the hourly rate on Sunday
(Q)	Double the hourly rate on Sunday and Holidays
(R)	Double the hourly rate on Holidays
(S)	Two and one half times the hourly rate for Holidays

(S1) Two and one half times the hourly rate the first 8 hours on Sunday or Holidays One and one half times the hourly rate all additional hours.

(T) Triple the hourly rate for Holidays

(U) Four times the hourly rate for Holidays

(V) Including benefits at SAME PREMIUM as shown for overtime

(W) Time and one half for benefits on all overtime hours.

(X) Benefits payable on Paid Holiday at straight time. If worked, additional benefit amount will be required for worked hours. (Refer to other codes listed.)

Holiday Codes

PAID Holidays:

Paid Holidays are days for which an eligible employee receives a regular day's pay, but is not required to perform work. If an employee works on a day listed as a paid holiday, this remuneration is in addition to payment of the required prevailing rate for the work actually performed.

OVERTIME Holiday Pay:

Overtime holiday pay is the premium pay that is required for work performed on specified holidays. It is only required where the employee actually performs work on such holidays. The applicable holidays are listed under HOLIDAYS: OVERTIME. The required rate of pay for these covered holidays can be found in the OVERTIME PAY section listings for each classification.

Following is an explanation of the code(s) listed in the HOLIDAY section of each classification contained in the attached schedule. The Holidays as listed below are to be paid at the wage rates at which the employee is normally classified.

(1)	None
(2)	Labor Day
(3)	Memorial Day and Labor Day
(4)	Memorial Day and July 4th
(5)	Memorial Day, July 4th, and Labor Day
(6)	New Year's, Thanksgiving, and Christmas
(7)	Lincoln's Birthday, Washington's Birthday, and Veterans Day
(8)	Good Friday
(9)	Lincoln's Birthday
(10)	Washington's Birthday
(11)	Columbus Day
(12)	Election Day
(13)	Presidential Election Day
(14)	1/2 Day on Presidential Election Day
(15)	Veterans Day
(16)	Day after Thanksgiving
(17)	July 4th
(18)	1/2 Day before Christmas
(19)	1/2 Day before New Years
(20)	Thanksgiving
(21)	New Year's Day
(22)	Christmas
(23)	Day before Christmas
(24)	Day before New Year's
(25)	Presidents' Day
(26)	Martin Luther King, Jr. Day
(27)	Memorial Day
(28)	Easter Sunday

(29) Juneteenth

New York State Department of Labor - Bureau of Public Work
State Office Building Campus
Building 12 - Room 130
Albany, New York 12226

REQUEST FOR WAGE AND SUPPLEMENT INFORMATION

As Required by Articles 8 and 9 of the NYS Labor Law

Fax (518) 485-1870 or mail this form for new schedules or for determination for additional occupations.

This Form Must Be Typed

Submitted By: (Check Only One) ☐ Contracting Agency ☐ Architect or Engineering Firm ☐ Public Work District Office Date:

A. Public Work Contract to be let by: (Enter Data Pertaining to Contracting/Public Agency)

1. Name and complete address ☐ (Check if new or change)

Telephone Fax

E-Mail:

2. NY State Units (see Item 5).

- ☐ 01 DOT
- ☐ 02 OGS
- ☐ 03 Dormitory Authority
- ☐ 04 State University Construction Fund
- ☐ 05 Mental Hygiene Facilities Corp.
- ☐ 06 OTHER N.Y. STATE UNIT
- ☐ 07 City
- ☐ 08 Local School District
- ☐ 09 Special Local District, i.e., Fire, Sewer, Water District
- ☐ 1O Village
- ☐ 11 Town
- ☐ 12 County
- ☐ 13 Other Non-N.Y. State (Describe)

3. SEND REPLY TO ☐ (check if new or change)
Name and complete address:

Telephone Fax

E-Mail:

4. SERVICE REQUIRED. Check appropriate box and provide project information.

☐ New Schedule of Wages and Supplements.

APPROXIMATE BID DATE :

☐ Additional Occupation and/or Redetermination

PRC NUMBER ISSUED PREVIOUSLY FOR THIS PROJECT :

OFFICE USE ONLY

B. PROJECT PARTICULARS

5. Project Title

Description of Work

Contract Identification Number

Note: For NYS units, the OSC Contract No.

6. Location of Project:
Location on Site

Route No/Street Address

Village or City

Town

County

7. Nature of Project - Check One:

- ☐ 1. New Building
- ☐ 2. Addition to Existing Structure
- ☐ 3. Heavy and Highway Construction (New and Repair)
- ☐ 4. New Sewer or Waterline
- ☐ 5. Other New Construction (Explain)
- ☐ 6. Other Reconstruction, Maintenance, Repair or Alteration
- ☐ 7. Demolition
- ☐ 8. Building Service Contract

8. OCCUPATION FOR PROJECT :

- ☐ Construction (Building, Heavy Highway/Sewer/Water)
- ☐ Tunnel
- ☐ Residential
- ☐ Landscape Maintenance
- ☐ Elevator maintenance
- ☐ Exterminators, Fumigators
- ☐ Fire Safety Director, NYC Only
- ☐ Fuel Delivery
- ☐ Guards, Watchmen
- ☐ Janitors, Porters, Cleaners, Elevator Operators
- ☐ Moving furniture and equipment
- ☐ Trash and refuse removal
- ☐ Window cleaners
- ☐ Other (Describe)

9. Does this project comply with the Wicks Law involving separate bidding? YES ☐ NO ☐

10. Name and Title of Requester

Signature

NEW YORK STATE DEPARTMENT OF LABOR
Bureau of Public Work - Debarment List

LIST OF EMPLOYERS INELIGIBLE TO BID ON OR BE AWARDED ANY PUBLIC WORK CONTRACT

Under Article 8 and Article 9 of the NYS Labor Law, a contractor, sub-contractor and/or its successor shall be debarred and ineligible to submit a bid on or be awarded any public work or public building service contract/sub-contract with the state, any municipal corporation or public body for a period of five (5) years from the date of debarment when:

- Two (2) final determinations have been rendered within any consecutive six-year (6) period determining that such contractor, sub-contractor and/or its successor has WILLFULLY failed to pay the prevailing wage and/or supplements;
- One (1) final determination involves falsification of payroll records or the kickback of wages and/or supplements.

The agency issuing the determination and providing the information, is denoted under the heading 'Fiscal Officer'. DOL = New York State Department of Labor; NYC = New York City Comptroller's Office; AG = New York State Attorney General's Office; DA = County District Attorney's Office.

Debarment Database: To search for contractors, sub-contractors and/or their successors debarred from bidding or being awarded any public work contract or subcontract under NYS Labor Law Articles 8 and 9, or under NYS Workers' Compensation Law Section 141-b, access the database at this link: https://apps.labor.ny.gov/EDList/searchPage.do

For inquiries where WCB is listed as the "Agency", please call 1-866-546-9322

NYSDOL Bureau of Public Work Debarment List 03/01/2024

Article 8

AGENCY	Fiscal Officer	FEIN	EMPLOYER NAME	EMPLOYER DBA NAME	ADDRESS	DEBARMENT START DATE	DEBARMENT END DATE
DOL	DOL	*****5754	0369 CONTRACTORS, LLC		515 WEST AVE UNIT PH 13NORWALK CT 06850	05/12/2021	05/12/2026
DOL	DOL	*****5784	A.J.M. TRUCKING, INC.		PO BOX 2064 MONROE NY 10950	02/12/2024	02/12/2029
DOL	DOL	*****4018	ADIRONDACK BUILDING RESTORATION INC.		4156 WILSON ROAD EAST TABERG NY 13471	03/26/2019	03/26/2024
DOL	AG	*****1812	ADVANCED BUILDERS & LAND DEVELOPMENT, INC.		400 OSER AVE #2300HAUPPAUGE NY 11788	09/11/2019	09/11/2024
DOL	DOL	*****1687	ADVANCED SAFETY SPRINKLER INC		261 MILL ROAD P.O BOX 296EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	NYC		ALL COUNTY SEWER & DRAIN, INC.		7 GREENFIELD DR WARWICK NY 10990	03/25/2022	03/25/2027
DOL	NYC		AMJED PARVEZ		401 HANOVER AVENUE STATEN ISLAND NY 10304	01/11/2021	01/11/2026
DOL	DOL		ANGELO F COKER		2610 SOUTH SALINA STREET SUITE 14SYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DOL		ANGELO GARCIA		515 WEST AVE UNIT PH 13NORWALK CT 06850	05/12/2021	05/12/2026
DOL	DOL		ANGELO TONDO		449 WEST MOMBSHA ROAD MONROE NY 10950	06/06/2022	06/06/2027
DOL	DOL	*****4231	ANKER'S ELECTRIC SERVICE, INC.		10 SOUTH 5TH ST LOCUST VALLEY NY 11560	09/26/2022	09/26/2027
DOL	DOL		ANTHONY MONGELLI		PO BOX 2064 MONROE NY 10950	02/12/2024	02/12/2029
DOL	NYC		ARADCO CONSTRUCTION CORP		115-46 132RD ST SOUTH OZONE PARK NY 11420	09/17/2020	09/17/2025
DOL	DOL		ARNOLD A. PAOLINI		1250 BROADWAY ST BUFFALO NY 14212	02/03/2020	02/03/2025
DOL	NYC		ARSHAD MEHMOOD		168-42 88TH AVENUE JAMAICA NY 11432	11/20/2019	11/20/2024
DOL	NYC		AVM CONSTRUCTION CORP		117-72 123RD ST SOUTH OZONE PARK NY 11420	09/17/2020	09/17/2025
DOL	NYC		AZIDABEGUM		524 MCDONALD AVENUE BROOKLYN NY 11218	09/17/2020	09/17/2025
DOL	DOL	*****8421	B & B DRYWALL, INC		206 WARREN AVE APT 1WHITE PLAINS NY 10603	12/14/2021	12/14/2026
DOL	DOL		BERNARD BEGLEY		38 LONG RIDGE ROAD BEDFORD NY 10506	12/18/2019	12/18/2024
DOL	NYC	*****2113	BHW CONTRACTING, INC.		401 HANOVER AVENUE STATEN ISLAND NY 10304	01/11/2021	01/11/2026
DOL	DOL	*****3627	BJB CONSTRUCTION CORP.		38 LONG RIDGE ROAD BEDFORD NY 10506	12/18/2019	12/18/2024
DOL	DOL	*****5078	BLACK RIVER TREE REMOVAL, LLC		29807 ANDREWS ROAD BLACK RIVER NY 13032	10/17/2023	10/17/2028
DOL	DOL	*****4512	BOB BRUNO EXCAVATING, INC		5 MORNINGSIDE DR AUBURN NY 13021	05/28/2019	05/28/2024
DOL	DOL		BRADLEY J SCHUKA		4 BROTHERS ROAD WAPPINGERS FALLS NY 12590	10/20/2020	10/20/2025
DOL	DOL	*****9383	C.C. PAVING AND EXCAVATING, INC.		2610 SOUTH SALINA ST SUITE 12SYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DOL	*****4083	C.P.D. ENTERPRISES, INC		P.O BOX 281 WALDEN NY 12586	03/03/2020	03/03/2025
DOL	DOL	*****5161	CALADRI DEVELOPMENT CORP.		1223 PARK ST. PEEKSKILL NY 10566	05/17/2021	05/17/2026
DOL	DOL	*****3391	CALI ENTERPRISES, INC.		1223 PARK STREET PEEKSKILL NY 10566	05/17/2021	05/17/2026
DOL	NYC		CALVIN WALTERS		465 EAST THIRD ST MT. VERNON NY 10550	09/09/2019	09/09/2024
DOL	DOL	*****4155	CASA BUILDERS, INC.	FRIEDLANDER CONSTRUCTION	64 N PUTT CONNERS ROAD NEW PALTZ NY 12561	05/10/2023	05/10/2028
DOL	AG	*****7247	CENTURY CONCRETE CORP		2375 RAYNOR ST RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	DOL	*****0026	CHANTICLEER CONSTRUCTION LLC		4 BROTHERS ROAD WAPPINGERS FALLS NY 12590	10/20/2020	10/20/2025
DOL	NYC	*****2117	CHARAN ELECTRICAL ENTERPRISES		9-11 40TH AVENUE LONG ISLAND CITY NY 11101	09/26/2023	09/26/2028
DOL	NYC		CHARLES ZAHRADKA		863 WASHINGTON STREET FRANKLIN SQUARE NY 11010	03/10/2020	03/10/2025

NYSDOL Bureau of Public Work Debarment List 03/01/2024

Article 8

DOL	DOL		CHRISTOPHER GRECO		26 NORTH MYRTLE AVENUE SPRING VALLEY NY 10956	02/18/2021	02/18/2026
DOL	DOL		CHRISTOPHER PAPASTEFANOU A/K/A CHRIS PAPASTEFANOU		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	DOL		CRAIG JOHANSEN		10 SOUTH 5TH ST LOCUST VALLEY NY 11560	09/26/2022	09/26/2027
DOL	DOL	*****3228	CROSS-COUNTY LANDSCAPING AND TREE SERVICE, INC.	ROCKLAND TREE SERVICE	26 NORTH MYRTLE AVENUE SPRING VALLEY NY 10956	02/18/2021	02/18/2026
DOL	DOL	*****7619	DANCO CONSTRUCTION UNLIMITED INC.		485 RAFT AVENUE HOLBROOK NY 11741	10/19/2021	10/19/2026
DOL	DOL		DANIEL ROBERT MCNALLY		7 GREENFIELD DRIVE WARWICK NY 10990	03/25/2022	03/25/2027
DOL	DOL		DARIAN L COKER		2610 SOUTH SALINA ST SUITE 2CSYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DOL		DAVID FRIEDLANDER		64 NORTH PUTT CORNERS RD NEW PALTZ NY 12561	05/10/2023	05/10/2028
DOL	NYC		DAVID WEINER		14 NEW DROP LANE 2ND FLOORSTATEN ISLAND NY 10306	11/14/2019	11/14/2024
DOL	DOL		DELPHI PAINTING & DECORATING CO INC		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	DOL		DINA TAYLOR		64 N PUTT CONNERS RD NEW PALTZ NY 12561	05/10/2023	05/10/2028
DOL	DOL	*****5175	EAGLE MECHANICAL AND GENERAL CONSTRUCTION LLC		11371 RIDGE RD WOLCOTT NY 14590	02/03/2020	02/03/2025
DOL	AG		EDWIN HUTZLER		23 NORTH HOWELLS RD BELLPORT NY 11713	08/04/2021	08/04/2026
DOL	DA		EDWIN HUTZLER		2375 RAYNOR STREET RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	DOL	*****0780	EMES HEATING & PLUMBING CONTR		5 EMES LANE MONSEY NY 10952	01/20/2002	01/20/3002
DOL	NYC	*****5917	EPOCH ELECTRICAL, INC		97-18 50TH AVE CORONA NY 11368	04/19/2018	04/19/2024
DOL	DOL		EUGENIUSZ "GINO" KUCHAR		195 KINGSLAND AVE BROOKLYN NY 11222	12/22/2023	12/22/2028
DOL	DOL		FAIGY LOWINGER		11 MOUNTAIN RD 28 VAN BUREN DRMONROE NY 10950	03/20/2019	03/20/2024
DOL	DA		FREDERICK HUTZLER		2375 RAYNOR STREET RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	NYC	*****6616	G & G MECHANICAL ENTERPRISES, LLC.		1936 HEMPSTEAD TURNPIKE EAST MEDOW NY 11554	11/29/2019	11/29/2024
DOL	DOL	*****2998	G.E.M. AMERICAN CONSTRUCTION CORP.		195 KINGSLAND AVE BROOKLYN NY 11222	12/22/2023	12/22/2028
DOL	DOL		GABRIEL FRASSETTI			04/10/2019	04/10/2024
DOL	NYC		GAYATRI MANGRU		21 DAREWOOD LANE VALLEY STREAM NY 11581	09/17/2020	09/17/2025
DOL	DA		GEORGE LUCEY		150 KINGS STREET BROOKLYN NY 11231	01/19/1998	01/19/2998
DOL	DOL		GIGI SCHNECKENBURGER		261 MILL RD EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	DA		GIOVANNA TRAVALJA		3735 9TH ST LONG ISLAND CITY NY 11101	01/05/2023	01/05/2028
DOL	DA	*****0213	GORILLA CONTRACTING GROUP, LLC		505 MANHATTAN AVE WEST BABYLON NY 11704	10/05/2023	10/05/2028
DOL	DOL		HANS RATH		24 ELDOR AVENUE NEW CITY NY 10956	02/03/2020	02/03/2025
DOL	DOL		HERBERT CLEMEN		42 FOWLER AVENUE CORTLAND MANOR NY 10567	01/24/2023	01/24/2028
DOL	DOL		HERBERT CLEMEN		42 FOWLER AVENUE CORTLAND MANOR NY 10567	10/25/2022	10/25/2027
DOL	DOL		IRENE KASELIS		32 PENNINGTON AVE WALDWICK NJ 07463	05/30/2019	05/30/2024
DOL	DOL	*****9211	J. WASE CONSTRUCTION CORP.		8545 RT 9W ATHENS NY 12015	03/09/2021	03/09/2026
DOL	DOL		J.M.J CONSTRUCTION		151 OSTRANDER AVENUE SYRACUSE NY 13205	11/21/2022	11/21/2027
DOL	DOL		J.R. NELSON CONSTRUCTION		531 THIRD STREET ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL		J.R. NELSON CONSTRUCTION		531 THIRD STREET ALBANY NY 12206	12/22/2022	12/22/2027

NYSDOL Bureau of Public Work Debarment List 03/01/2024

Article 8

DOL	DOL		J.R. NELSON CONSTRUCTION		531 THIRD STREET ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL		J.R. NELSON, LLC		531 THIRD STREET ALBANY NY 12206	12/22/2022	12/22/2027
DOL	DOL		J.R. NELSON, LLC		531 THIRD STREET ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL		J.R. NELSON, LLC		531 THIRD STREET ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL		J.R.N COMPANIES, LLC		531 THIRD STREET ALBANY NY 12206	12/12/2022	12/12/2027
DOL	DOL		J.R.N COMPANIES, LLC		531 THIRD STREET ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL		J.R.N COMPANIES, LLC		531 THIRD STREET ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL	*****1147	J.R.N. CONSTRUCTION, LLC		531 THIRD ST ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL	*****1147	J.R.N. CONSTRUCTION, LLC		531 THIRD ST ALBANY NY 12206	12/22/2022	12/22/2027
DOL	DOL	*****1147	J.R.N. CONSTRUCTION, LLC		531 THIRD ST ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL		JAMES J. BAKER		7901 GEE ROAD CANASTOTA NY 13032	08/17/2021	08/17/2026
DOL	DOL		JASON P. RACE		3469 STATE RT. 69 PERISH NY 13131	09/29/2021	09/29/2026
DOL	DOL		JASON P. RACE		3469 STATE RT. 69 PERISH NY 13131	02/09/2022	02/09/2027
DOL	DOL		JASON P. RACE		3469 STATE RT. 69 PERISH NY 13131	11/15/2022	11/15/2027
DOL	DOL		JASON P. RACE		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
DOL	DOL	*****7993	JBS DIRT, INC.		7901 GEE ROAD CANASTOTA NY 13032	08/17/2021	08/17/2026
DOL	DOL	*****2435	JEFFEL D. JOHNSON	JMJ7 AND SON	5553 CAIRNSTRAIL CLAY NY 13041	11/21/2022	11/21/2027
DOL	DOL		JEFFEL JOHNSON ELITE CARPENTER REMODEL AND CONSTRUCTION		C2 EVERGREEN CIRCLE LIVERPOOL NY 13090	11/21/2022	11/21/2027
DOL	DOL	*****2435	JEFFREY M. JOHNSON	JMJ7 AND SON	5553 CAIRNS TRAIL CLAY NY 13041	11/21/2022	11/21/2027
DOL	NYC		JENNIFER GUERRERO		1936 HEMPSTEAD TURNPIKE EAST MEADOW NY 11554	11/29/2019	11/29/2024
DOL	DOL		JIM PLAUGHER		17613 SANTE FE LINE ROAD WAYNEFIELD OH 45896	07/16/2021	07/16/2026
DOL	DOL		JMJ7 & SON CONSTRUCTION, LLC		5553 CAIRNS TRAIL LIVERPOOL NY 13041	11/21/2022	11/21/2027
DOL	DOL		JMJ7 AND SONS CONTRACTORS		5553 CAIRNS TRAIL CLAY NY 13041	11/21/2022	11/21/2027
DOL	DOL		JMJ7 CONTRACTORS		7014 13TH AVENUE BROOKLYN NY 11228	11/21/2022	11/21/2027
DOL	DOL		JMJ7 CONTRACTORS AND SONS		5553 CAIRNS TRAIL CLAY NY 13041	11/21/2022	11/21/2027
DOL	DOL		JMJ7 CONTRACTORS, LLC		5553 CAIRNS TRAIL CLAY NY 13041	11/21/2022	11/21/2027
DOL	DOL		JOHN GOCEK		14B COMMERCIAL AVE ALBANY NY 12065	11/14/2019	11/14/2024
DOL	DOL		JOHN MARKOVIC		47 MANDON TERRACE HAWTHORN NJ 07506	03/29/2021	03/29/2026
DOL	DOL		JOHN WASE		8545 RT 9W ATHENS NY 12015	03/09/2021	03/09/2026
DOL	DOL		JON E DEYOUNG		261 MILL RD P.O BOX 296EAST AURORA NY 14052	05/29/2019	05/29/2024
DOL	DOL		JORGE RAMOS		8970 MIKE GARCIA DR MANASSAS VA 20109	07/16/2021	07/16/2026
DOL	DOL		JOSEPH K. SALERNO		1010 TILDEN AVE UTICA NY 13501	07/24/2023	07/24/2028
DOL	DOL		JOSEPH K. SALERNO II		1010 TILDEN AVE UTICA NY 13501	07/24/2023	07/24/2028
DOL	DOL	*****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	02/09/2022	02/09/2027
DOL	DOL	*****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	11/15/2022	11/15/2027
DOL	DOL	*****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	09/29/2021	09/29/2026

NYSDOL Bureau of Public Work Debarment List 03/01/2024

Article 8

DOL	DOL	*****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
DOL	DOL	*****5116	JP RACE PAINTING, INC. T/A RACE PAINTING		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
DOL	DOL		JRN CONSTRUCTION CO, LLC		1024 BROADWAY ALBANY NY 12204	11/07/2023	11/07/2028
DOL	DOL	*****1147	JRN CONSTRUCTION, LLC		531 THIRD STREET ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL	*****1147	JRN CONSTRUCTION, LLC		531 THIRD STREET ALBANY NY 12206	12/22/2022	12/22/2027
DOL	DOL	*****1147	JRN CONSTRUCTION, LLC		531 THIRD STREET ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL		JRN PAVING, LLC		531 THIRD STREET ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL		JRN PAVING, LLC		531 THIRD STREET ALBANY NY 12206	12/22/2022	12/22/2027
DOL	DOL		JRN PAVING, LLC		531 THIRD STREET ALBANY NY 12206	11/07/2023	11/07/2028
DOL	DOL		JULIUS AND GITA BEHREND		5 EMES LANE MONSEY NY 10952	11/20/2002	11/20/3002
DOL	DOL		KARIN MANGIN		796 PHELPS ROAD FRANKLIN LAKES NJ 07417	12/01/2020	12/01/2025
DOL	DOL		KATE E. CONNOR		7088 INTERSTATE ISLAND RD SYRACUSE NY 13209	03/31/2021	03/31/2026
DOL	DOL		KEAN INDUSTRIES, LLC		2345 RT. 52 SUITE 2NHOPEWELL JUNCTION NY 12533	12/18/2023	12/18/2028
DOL	DOL	*****2959	KELC DEVELOPMENT, INC		7088 INTERSTATE ISLAND RD SYRACUSE NY 13209	03/31/2021	03/31/2026
DOL	DOL		KIMBERLY F. BAKER		7901 GEE ROAD CANASTOTA NY 13032	08/17/2021	08/17/2026
DOL	DOL		KMA GROUP II, INC.		29-10 38TH AVENUE LONG ISLAND CITY NY 11101	10/11/2023	10/11/2028
DOL	DOL	*****1833	KMA GROUP INC.		29-10 38TH AVENUE LONG ISLAND CITY NY 11101	10/11/2023	10/11/2028
DOL	DOL		KMA INSULATION, INC.		29-10 38TH AVENUE LONG ISLAND CITY NY 11101	10/11/2023	10/11/2028
DOL	DOL		KRIN HEINEMANN		2345 ROUTE 52, SUITE 2N HOPEWELL JUNCTION NY 12533	12/18/2023	12/18/2028
DOL	NYC		KULWANT S. DEOL		9-11 40TH AVENUE LONG ISLAND CITY NY 11101	09/26/2023	09/26/2028
DOL	DA	*****8816	LAKE CONSTRUCTION AND DEVELOPMENT CORPORATION		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	DOL		LEROY E. NELSON JR		531 THIRD ST ALBANY NY 12206	10/25/2022	10/25/2027
DOL	DOL		LEROY E. NELSON JR		531 THIRD ST ALBANY NY 12206	12/22/2022	12/22/2027
DOL	DOL		LEROY E. NELSON JR		531 THIRD ST ALBANY NY 12206	11/07/2023	11/07/2028
DOL	AG	*****3291	LINTECH ELECTRIC, INC.		3006 TILDEN AVE BROOKLYN NY 11226	02/16/2022	02/16/2027
DOL	DOL		LOUIS A. CALICCHIA		1223 PARK ST. PEEKSKILL NY 10566	05/17/2021	05/17/2026
DOL	NYC		LUBOMIR PETER SVOBODA		27 HOUSMAN AVE STATEN ISLAND NY 10303	12/26/2019	12/26/2024
DOL	NYC		M & L STEEL & ORNAMENTAL IRON CORP.		27 HOUSMAN AVE STATEN ISLAND NY 10303	12/26/2019	12/26/2024
DOL	DOL	*****2196	MAINSTREAM SPECIALTIES, INC.		11 OLD TOWN RD SELKIRK NY 12158	02/02/2021	02/02/2026
DOL	DA		MANUEL P TOBIO		150 KINGS STREET BROOKLYN NY 14444	08/19/1998	08/19/2998
DOL	DA		MANUEL TOBIO		150 KINGS STREET BROOKLYN NY 11231	08/19/1998	08/19/2998
DOL	NYC		MARIA NUBILE		84-22 GRAND AVENUE ELMHURST NY 11373	03/10/2020	03/10/2025
DOL	DOL		MATTHEW P. KILGORE		4156 WILSON ROAD EAST TABERG NY 13471	03/26/2019	03/26/2024
DOL	DOL	*****4829	MILESTONE ENVIRONMENTAL CORPORATION		704 GINESI DRIVE SUITE 29MORGANVILLE NJ 07751	04/10/2019	04/10/2024
DOL	NYC	*****9926	MILLENNIUM FIRE PROTECTION, LLC		325 W. 38TH STREET SUITE 204NEW YORK NY 10018	11/14/2019	11/14/2024

NYSDOL Bureau of Public Work Debarment List 03/01/2024

Article 8

DOL	NYC	*****0627	MILLENNIUM FIRE SERVICES, LLC		14 NEW DROP LNE 2ND FLOORSTATEN ISLAND NY 10306	11/14/2019	11/14/2024
DOL	DOL	*****1320	MJC MASON CONTRACTING, INC.		42 FOWLER AVENUE CORTLAND MANOR NY 10567	10/25/2022	10/25/2027
DOL	DOL	*****1320	MJC MASON CONTRACTING, INC.		42 FOWLER AVENUE CORTLAND MANOR NY 10567	01/24/2023	01/24/2028
DOL	NYC		MUHAMMED A. HASHEM		524 MCDONALD AVENUE BROOKLYN NY 11218	09/17/2020	09/17/2025
DOL	NYC		NAMOW, INC.		84-22 GRAND AVENUE ELMHURST NY 11373	03/10/2020	03/10/2025
DOL	DOL	*****7790	NATIONAL BUILDING & RESTORATION CORP		1010 TILDEN AVE UTICA NY 13501	07/24/2023	07/24/2028
DOL	DOL	*****1797	NATIONAL CONSTRUCTION SERVICES, INC		1010 TILDEN AVE UTICA NY 13501	07/24/2023	07/24/2028
DOL	NYC		NAVIT SINGH		402 JERICHO TURNPIKE NEW HYDE PARK NY 11040	08/10/2022	08/10/2027
DOL	DOL		NELCO CONTRACTING, LLC		1024 BROADWAY ALBANY NY 12204	11/07/2023	11/07/2028
DOL	DA		NICHOLAS T. ANALITIS		505 MANHATTAN AVE WEST BABYLON NY 11704	10/05/2023	10/05/2028
DOL	DOL		NICHOLE E. FRASER A/K/A NICHOLE RACE		3469 STATE RT. 69 PERISH NY 13131	03/01/2022	03/01/2027
DOL	DOL		NICHOLE E. FRASER A/K/A NICHOLE RACE		3469 STATE RT. 69 PERISH NY 13131	11/15/2022	11/15/2027
DOL	DOL		NICHOLE E. FRASER A/K/A NICHOLE RACE		3469 STATE RT. 69 PERISH NY 13131	09/29/2021	09/29/2026
DOL	DOL		NICHOLE E. FRASER A/K/A NICHOLE RACE		3469 STATE RT. 69 PERISH NY 13131	02/09/2022	02/09/2027
DOL	DOL	*****7429	NICOLAE I. BARBIR	BESTUCCO CONSTRUCTI ON, INC.	444 SCHANTZ ROAD ALLENTOWN PA 18104	09/17/2020	09/17/2025
DOL	NYC	*****5643	NYC LINE CONTRACTORS, INC.		402 JERICHO TURNPIKE NEW HYDE PARK NY 11040	08/10/2022	08/10/2027
DOL	DOL		PATRICK PENNACCHIO		2345 RT. 52 SUITE 2NHOPEWELL JUNCTION NY 12533	12/18/2023	12/18/2028
DOL	DOL		PATRICK PENNACCHIO		2345 RT. 52 SUITE 2NHOPEWELL JUNCTION NY 12533	12/18/2023	12/18/2028
DOL	DOL		PAULINE CHAHALES		935 S LAKE BLVD MAHOPAC NY 10541	03/02/2021	03/02/2026
DOL	DOL		PETER STEVENS		11 OLD TOWN ROAD SELKIRK NY 12158	02/02/2021	02/02/2026
DOL	DOL		PETER STEVENS		8269 21ST ST BELLEROSE NY 11426	12/22/2022	12/22/2027
DOL	DOL	*****0466	PRECISION BUILT FENCES, INC.		1617 MAIN ST PEEKSKILL NY 10566	03/03/2020	03/03/2025
DOL	NYC		RASHEL CONSTRUCTION CORP		524 MCDONALD AVENUE BROOKLYN NY 11218	09/17/2020	09/17/2025
DOL	DOL	*****1068	RATH MECHANICAL CONTRACTORS, INC.		24 ELDOR AVENUE NEW CITY NY 10956	02/03/2020	02/03/2025
DOL	DOL	*****2633	RAW POWER ELECTRIC CORP.		3 PARK CIRCLE MIDDLETOWN NY 10940	07/11/2022	07/11/2027
DOL	DA	*****7559	REGAL CONTRACTING INC.		24 WOODBINE AVE NORTHPORT NY 11768	10/01/2020	10/01/2025
DOL	DOL		RICHARD REGGIO		1617 MAIN ST PEEKSKILL NY 10566	03/03/2020	03/03/2025
DOL	DOL		ROBBYE BISSESAR		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	01/11/2003	01/11/3003
DOL	DOL		ROBERT A. VALERINO		3841 LANYARD COURT NEW PORT RICHEY FL 34652	07/09/2019	07/09/2024
DOL	DOL		ROBERT BRUNO		5 MORNINGSIDE DRIVE AUBURN NY 13021	05/28/2019	05/28/2024
DOL	DOL		ROMEO WARREN		161 ROBYN RD MONROE NY 10950	07/11/2022	07/11/2027
DOL	DOL		RONALD MESSEN		14B COMMERCIAL AVE ALBANY NY 12065	11/14/2019	11/14/2024
DOL	DOL	*****7172	RZ & AL INC.		198 RIDGE AVENUE VALLEY STREAM NY 11581	06/06/2022	06/06/2027
DOL	DOL	*****1365	S & L PAINTING, INC.		11 MOUNTAIN ROAD P.O BOX 408MONROE NY 10950	03/20/2019	03/20/2024
DOL	DOL		SAL FRESINA MASONRY CONTRACTORS, INC.		1935 TEALL AVENUE SYRACUSE NY 13206	07/16/2021	07/16/2026

NYSDOL Bureau of Public Work Debarment List 03/01/2024

Article 8

DOL	DOL		SAL MASONRY CONTRACTORS, INC.		(SEE COMMENTS) SYRACUSE NY 13202	07/16/2021	07/16/2026
DOL	DOL	*****9874	SALFREE ENTERPRISES INC		P.O BOX 14 2821 GARDNER RDPOMPEI NY 13138	07/16/2021	07/16/2026
DOL	DOL		SALVATORE A FRESINA A/K/A SAM FRESINA		107 FACTORY AVE P.O BOX 11070SYRACUSE NY 13218	07/16/2021	07/16/2026
DOL	DOL		SAM FRESINA		107 FACTORY AVE P.O BOX 11070SYRACUSE NY 13218	07/16/2021	07/16/2026
DOL	NYC	*****0349	SAM WATERPROOFING INC		168-42 88TH AVENUE APT.1 AJAMAICA NY 11432	11/20/2019	11/20/2024
DOL	DA	*****0476	SAMCO ELECTRIC CORP.		3735 9TH ST LONG ISLAND CITY NY 11101	01/05/2023	01/05/2028
DOL	NYC	*****1130	SCANA CONSTRUCTION CORP.		863 WASHINGTON STREET FRANKLIN SQUARE NY 11010	03/10/2020	03/10/2025
DOL	DOL	*****2045	SCOTT DUFFIE	DUFFIE'S ELECTRIC, INC.	P.O BOX 111 CORNWALL NY 12518	03/03/2020	03/03/2025
DOL	DOL		SCOTT DUFFIE		P.O BOX 111 CORNWALL NY 12518	03/03/2020	03/03/2025
DOL	DOL		SHULEM LOWINGER		11 MOUNTAIN ROAD 28 VAN BUREN DRMONROE NY 10950	03/20/2019	03/20/2024
DOL	DA		SILVANO TRAVALJA		3735 9TH ST LONG ISLAND CITY NY 11101	01/05/2023	01/05/2028
DOL	DOL	*****0440	SOLAR GUYS INC.		8970 MIKE GARCIA DR MANASSAS VA 20109	07/16/2021	07/16/2026
DOL	NYC		SOMATIE RAMSUNAHAI		115-46 132ND ST SOUTH OZONE PARK NY 11420	09/17/2020	09/17/2025
DOL	DOL	*****2221	SOUTH BUFFALO ELECTRIC, INC.		1250 BROADWAY ST BUFFALO NY 14212	02/03/2020	02/03/2025
DOL	NYC	*****3661	SPANIER BUILDING MAINTENANCE CORP		200 OAK DRIVE SYOSSET NY 11791	03/14/2022	03/14/2027
DOL	DOL		STANADOS KALOGELAS		485 RAFT AVENUE HOLBROOK NY 11741	10/19/2021	10/19/2026
DOL	DOL	*****3496	STAR INTERNATIONAL INC		89-51 SPRINGFIELD BLVD QUEENS VILLAGE NY 11427	08/11/2003	08/11/3003
DOL	DOL	*****6844	STEAM PLANT AND CHX SYSTEMS INC.		14B COMMERCIAL AVENUE ALBANY NY 12065	11/14/2019	11/14/2024
DOL	DOL	*****9933	STEED GENERAL CONTRACTORS, INC.		1445 COMMERCE AVE BRONX NY 10461	05/30/2019	05/30/2024
DOL	DOL	*****9528	STEEL-IT, LLC.		17613 SANTE FE LINE ROAD WAYNESFIELD OH 45896	07/16/2021	07/16/2026
DOL	DOL		STEFANOS PAPASTEFANOU, JR. A/K/A STEVE PAPASTEFANOU, JR.		256 WEST SADDLE RIVER RD UPPER SADDLE RIVER NJ 07458	05/30/2019	05/30/2024
DOL	DOL	*****3800	SUBURBAN RESTORATION CO. INC.		5-10 BANTA PLACE FAIR LAWN PLACE NJ 07410	03/29/2021	03/29/2026
DOL	DOL	*****9150	SURGE INC.		8269 21ST STREET BELLEROSE NY 11426	12/22/2022	12/22/2027
DOL	DOL		SYED RAZA		198 RIDGE AVENUE NY 11581	06/06/2022	06/06/2027
DOL	DOL		TERRY THOMPSON		11371 RIDGE RD WOLCOTT NY 14590	02/03/2020	02/03/2025
DOL	DOL	*****9733	TERSAL CONSTRUCTION SERVICES INC		107 FACTORY AVE P.O BOX 11070SYRACUSE NY 13208	07/16/2021	07/16/2026
DOL	DOL		TERSAL CONTRACTORS, INC.		221 GARDNER RD P.O BOX 14POMPEI NY 13138	07/16/2021	07/16/2026
DOL	DOL		TERSAL DEVELOPMENT CORP.		1935 TEALL AVENUE SYRACUSE NY 13206	07/16/2021	07/16/2026
DOL	DOL	*****5766	THE COKER CORPORATION	COKER CORPORATIO N	2610 SOUTH SALINA ST SUITE 14SYRACUSE NY 13205	09/17/2020	09/17/2025
DOL	DOL		TIMOTHY PERCY		29807 ANDREWS ROAD BLACK RIVER NY 13612	10/17/2023	10/17/2028
DOL	DA	*****1050	TRI STATE CONSTRUCTION OF NY CORP.		50-39 175TH PLACE FRESH MEADOWS NY 11365	03/28/2022	03/28/2027
DOL	DA	*****4106	TRIPLE H CONCRETE CORP		2375 RAYNOR STREET RONKONKOMA NY 11779	08/04/2021	08/04/2026
DOL	DOL	*****8210	UPSTATE CONCRETE & MASONRY CONTRACTING CO INC		449 WEST MOMBSHA ROAD MONROE NY 10950	06/06/2022	06/06/2027

NYSDOL Bureau of Public Work Debarment List 03/01/2024

Article 8

DOL	DOL	*****6418	VALHALLA CONSTRUCTION, LLC.		796 PHLEPS ROAD FRANKLIN LAKES NJ 07417	12/01/2020	12/01/2025
DOL	NYC	*****2426	VICKRAM MANGRU	VICK CONSTRUCTION	21 DAREWOOD LANE VALLEY STREAM NY 11581	09/17/2020	09/17/2025
DOL	NYC		VICKRAM MANGRU		21 DAREWOOD LANE VALLEY STREAM NY 11581	09/17/2020	09/17/2025
DOL	DOL		VIKTORIA RATH		24 ELDOR AVENUE NEW CITY NY 10956	02/03/2020	02/03/2025
DOL	NYC	*****3673	WALTERS AND WALTERS, INC.		465 EAST AND THIRD ST MT. VERNON NY 10550	09/09/2019	09/09/2024
DOL	DOL	*****3296	WESTERN NEW YORK CONTRACTORS, INC.		3841 LAYNARD COURT NEW PORT RICHEY FL 34652	07/09/2019	07/09/2024
DOL	DOL	*****8266	WILLIAM CHRIS MCCLENDON	MCCLENDON ASPHALT PAVING	1646 FALLS STREET NIAGARA FALLS NY 14303	05/01/2023	05/01/2028
DOL	DOL		WILLIAM CHRIS MCCLENDON		1646 FALLS STREET NIAGARA FALLS NY 14303	05/01/2023	05/01/2028
DOL	DOL		WILLIAM G. PROERFRIEDT		85 SPRUCEWOOD ROAD WEST BABYLON NY 11704	01/19/2021	01/19/2026
DOL	DOL	*****5924	WILLIAM G. PROPHY, LLC	WGP CONTRACTING, INC.	54 PENTAQUIT AVE BAYSHORE NY 11706	01/19/2021	01/19/2026
DOL	DOL		XENOFON EFTHIMIADIS		29-10 38TH AVENUE LONG ISLAND CITY NY 11101	10/11/2023	10/11/2028

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DAVIS-BACON ACT
FEDERAL PREVAILING WAGE RATES

D040965

"General Decision Number: NY20240009 01/05/2024

Superseded General Decision Number: NY20230009

State: New York

Construction Types: Heavy and Highway

Counties: Jefferson, Lewis and St Lawrence Counties in New York.

HEAVY AND HIGHWAY CONSTRUCTION PROJECTS:

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	. Executive Order 14026 generally applies to the contract. . The contractor must pay all covered workers at least $17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	. Executive Order 13658 generally applies to the contract. . The contractor must pay all covered workers at least $12.90 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number	Publication Date
0	01/05/2024

D040965

BOIL0175-001 01/01/2021

	Rates	Fringes
BOILERMAKER	$ 35.23	26.61

BRNY0002-012 06/01/2018

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER	$ 37.23	19.51

FOOTNOTE
a. Paid Holidays: Memorial Day, July the 4th, Labor Day, and Thanksgiving Day (provided the employee is employed one day before and one day after the holiday).

CARP0277-007 07/01/2022

	Rates	Fringes
Carpenters:		
HEAVY & HIGHWAY CONSTRUCTION	$ 34.13	25.30

a. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day

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ELEC0910-005 04/01/2023

	Rates	Fringes
ELECTRICIAN	$ 40.50	5.75%+23.13

ELEC1249-003 05/01/2023

	Rates	Fringes
ELECTRICIAN (LINE CONSTRUCTION: LIGHTING AND TRAFFIC SIGNAL Including any and all Fiber Optic Cable necessary for Traffic Signal Systems, Traffic Monitoring systems and Road Weather information systems)		
Flagman	$ 29.59	7%+35.40
Groundman (Truck Driver)	$ 39.46	7%+35.40
Groundman Truck Driver (tractor trailer unit)	$ 41.92	7%+35.40
Lineman & Technician	$ 49.32	7%+35.40
Mechanic	$ 39.46	7%+35.40

FOOTNOTE:

a. New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, plus President's Day, Good Friday, Decoration Day, Election Day for the President of the United States and Election Day for the Governor of the State of New York, provided the employee works the day before or the day after the holiday.

D040965

ELEC1249-004 05/01/2023

	Rates	Fringes
ELECTRICIAN (Line Construction)		
Overhead and underground distribution and maintenance work and all overhead and underground transmission line work including any and all fiber optic ground wire, fiber optic shield wire or any other like product by any other name manufactured for the dual purpose of ground fault protection and fiber optic capabilities :		
Flagman	$ 34.44	7%+35.40
Groundman digging machine operator	$ 51.66	7%+35.40
Groundman truck driver (tractor trailer unit)	$ 48.79	7%+35.40
Groundman Truck driver	$ 45.92	7%+35.40
Lineman and Technician	$ 57.40	7%+38.40
Mechanic	$ 45.92	7%+35.40
Substation:		
Cable Splicer	$ 63.14	7%+38.40
Flagman	$ 34.44	7%+35.40
Ground man truck driver	$ 45.92	7%+35.40
Groundman digging machine operator	$ 51.66	7%+35.40
Groundman truck driver (tractor trailer unit)	$ 48.79	7%+35.40
Lineman & Technician	$ 57.40	7%+38.40
Mechanic	$ 45.92	7%+35.40
Switching structures; railroad catenary installation and maintenance, third rail type underground fluid or gas filled transmission conduit and cable installations (including any and all fiber optic ground product by any other name manufactured for the dual purpose of ground fault protection and fiber optic capabilities), pipetype cable installation and maintenance jobs or projects, and maintenance bonding of rails; Pipetype cable installation		
Cable Splicer	$ 64.59	7%+38.40
Flagman	$ 35.23	7%+35.40
Groundman Digging Machine Operator	$ 52.85	7%+35.40
Groundman Truck Driver (tractor-trailer unit)	$ 49.91	7%+35.40

Groundman Truck Driver.....$ 46.98 7%+35.40
Lineman & Technician.....$ 58.72 7%+38.40
Mechanic.....$ 46.98 7%+35.40

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Presidents' Day, Memorial Day, Good Friday, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, and Election Day for the President of the United States and Election Day for the Governor of New York State, provided the employee works two days before or two days after the holiday.

ELEC1249-008 01/01/2022

	Rates	Fringes
ELECTRICIAN (Line Construction)		
TELEPHONE, CATV FIBEROPTICS CABLE AND EQUIPMENT		
Cable splicer	$ 36.28	3%+5.14
Groundman	$ 18.25	3%+5.14
Installer Repairman-Teledata		
Lineman/Technician-Equipment Operator	$ 34.43	3%+5.14
Tree Trimmer	$ 28.25	3%+10.23

a. New Year's Day, President's Day, Good Friday, Decoration Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Day after Thanksgiving, Christmas Day.

ELEV0062-002 01/01/2023

	Rates	Fringes
ELEVATOR MECHANIC	$ 53.69	37.335+a+b

FOOTNOTE:
a.Vacation: 6%/under 5 years based on regular hourly rate for all hours worked. 8%/over 5 years based on regular hourly rate for all hours worked.
b. PAID HOLIDAYS: New Year's Day; Memorial Day; Independence Day; Labor Day; Veterans' Day; Thanksgiving Day; the Friday after Thanksgiving Day; and Christmas Day.

ENGI0158-010 07/01/2017

LEWIS AND ST LAWRENCE COUNTIES

	Rates	Fringes
Power Equipment Operator BUILDING		
GROUP 1	$ 36.84	23.80+a
GROUP 2	$ 34.78	23.80+a
GROUP 3	$ 30.68	23.80+a
GROUP 4	$ 38.84	23.80+a

POWER EQUIPMENT OPERATORS CLASSIFICATIONS (BUILDING)

D040965

GROUP 1: Air plako, asphalt and blacktop roller, automated concrete spreader (CMI or equivalent), automated fine grade machine (CMI), backhoe, Belt placer, blacktop spreader (such as barber Greene & Blaw Knox), blacktop plant (automated), blast or rotary drill (truck or cat mounted), boom truck, cableway, caisson auger, Carry-all Scraper (self-loading), central mix plant (automated), cherry picker (15 ton capacity), Compressor, pump, generator or welding machine (when used in a battery of not more than 4); crane, crusher (rock), derrick, diesel power unit, dragline, dredge, dual drum paver, elevating grader (self-propelled) or towed, elevator hoist (2 cage), excavator (all purpose-hydraulically operated), fork lift (loed and lull and other rough terrain type), front end loader (4 c.y. and over), gradall, grader (power), head tower (Saurman or equal), host (2 or 3 drums), hydroblaster (laser pump), (LCM's) work boat operator, light plants (compressors and generators), locomotive, maintenance engineer, maintenance welder, mine hoist, mucking machine or mole, overhead crane -fixed permanent, pile driver, quarry master or equivalent, refrigeration equipment (for soil stabilization), sea mule, shovel, side boom, slip form paver, straddle buggy (ross carrier, lumber carrier), tractor drawn belt type loader (Euclid loader), tranching machine (digging capacity of over 4 ft depth), truck crane (operator), truck of trailer mounted log chipper (self feeder), tug operator (except, rented equipment), tunnel shovel, vibro or sonic hammer controls (when not mounted in proximity to the rig operator

GROUP 2: ""A"" frame truck, blacktop plant (non automatic), All Back Dumps, boring machine, bulldozer, cagehoist, Carry-all scraper, central mix plant (non automated), cherry picker 15 tons and under), Compressor (500 C.F. and over), concrete paver (single drum over 16S), Concrete Pump, core boring machine, drill rigs (tractor mounted), elevator (as a material hoist), fork lift (all others), front end loader (under 4 c.y.), gunite machine, high pressure boilder 15 lbs & over), hoist (one drum), hydraulic breaking hammer (drop hammer), Kolman plant loader (screening gravel), maintenance grease man, mixer for stabilized base (self propelled Seaman mixer), monorail machine, parapet concrete or pavement grinder, post hole digger (truck or tractor mounted), power sweeper (wayne or similar), pump (4"" and over, pump-crete or sqeeze-crete, road widener (front end of grader or self prop.), roller, self contained hydraulic bench drill, shell winder (motorized), snorkel (overhead arms), snowblower control man, trenching machine (digging capacity of 4 ft or less), tugger hoist, vibrotamp, well drill, well point system, winch (motor driver),winch cat, winch truck (submersible pumps when used in lieu of well point system

GROUP 3: Compressor (up to 500 C.F.), concrete paver or mixer (under 16S), concrete pavement spreaders and finishers (not automated), conveyor (over 12 ft), electric submersible pump (4"" and over), farm tractor with or without accessories, fine grade machine (not automated), fireman, form tamper, generator (2,500 Watts and over), grout pump, hydraulic pump, mechanical heaters (more than 2 mechanical heaters or any mechanical heater or heaters whose combined output exceeds 640,000 BTU per hour (manufacturer's rating) plus one contained heating unit (i.e. sundog, air heat type, new Holland hay dryer type

excluded), mulching machine, oiler, power driven welding machine - 300 amp. and over (other than all electric), power heaterman (hay dryer), pump (under 4""), revinus widener (road widener), single light plant, steam cleaner or jenny, tractor with or without towed accessories

GROUP 4: Master mechanic

PREMIUMS:

Hazmat work	2.50
Quad 9 Bulldozer or Multibowl Scraper	.50

CRANE PREMIUMS (Add to Group 1 Rate):

All Lattice Boom Cranes (65 ton capacity and over) Group 1 Rate Plus 1.75
All Hydraulic Cranes (100 ton capacity and over) Group 1 Rate Plus 1.75
All Hydraulic Cranes (80 ton capacity to 99 ton capacity) Group 1 Rate Plus 1.25
All Hydraulic Cranes (65 ton capacity to 79 ton capacity) Group 1 Rate Plus 1.10

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day provided the employee has worked five consecutive working days before and the working day after the holiday.

ENGI0158-020 07/01/2022

	Rates	Fringes
Power equipment operators:		
GROUP 1	$ 48.15	30.55
GROUP 2	$ 47.27	30.55
GROUP 3	$ 43.99	30.55
GROUP 4	$ 52.15	30.55
GROUP 5	$ 51.15	30.55
GROUP 6	$ 50.15	30.55
GROUP 7	$ 49.50	30.55

POWER EQUIPMENT OPERATORS CLASSIFICATIONS

GROUP 1: Asphalt Curb Machine, Self Propelled, Slipform, Automated Concrete Spreader (CMI Type), Automatic Fine Grader, Backhoe (Except Tractor Mounted, Rubber Tired), Backhoe Excavator Full Swing (CAT 212 or similar type), Back Filling Machine, Belt Placer (CMI Type), Blacktop Plant (Automated), Boom truck , Cableway, Caisson Auger, Central Mix Concrete Plant (Automated), Concrete Curb Machine, Self Propelled, Slipform, Concrete Pump, Crane, Cherry Picker, Derricks (steel erection), Dragline, Overhead Crane (Gantry or Straddle type), Pile Driver, Truck Crane, Directional Drilling Machine, Dredge, Dual Drum Paver, Excavator (All Purpose Hydraulically Operated) (Gradall or Similar), Front End Loader (4 cu. yd. and Over), Head Tower (Sauerman or Equal), Hoist (Two or Three Drum), Holland Loader, Maintenance Engineer, Mine Hoist, Mucking Machine or Mole Pavement Breaker(SP) Wertgen; PB-4 and similar type, Power Grader, Profiler (over 105 H.P.) Quad 9, Quarry Master (or equivalent), Scraper, Fireman, Fork Lift, Form Tamper, Grout Pump, Gunite Machine, Hammers (Hydraulic self-propelled), Hydra-Spiker, ride-on,

Hydraulic Pump (jacking system), Hydro-Blaster (Water), Mulching Machine, Oiler, Parapet Concrete or Pavement, Shovel, Side Boom, Slip Form Paver, Tractor Drawn, BeltType Loader, Truck or Trailer Mounted Log , Chipper (Self Feeder), Tug Operator (Manned Rented Equipment Excluded), Tunnel Shovel

GROUP 2: Asphalt Paver, Backhoe (Tractor Mounted, Rubber Tired), Bituminous Recycler Machine, Bituminous Spreader and Mixer, Blacktop Plant (NonAutomated), Blast or Rotary Drill (Truck or Tractor Mounted), Boring Machine, Cage Hoist, Central Mix Plant (NonAutomated) and All Concrete Batching Plants, Cherry Picker (5 tons capacity and under), Concrete Paver (Over 16S), Crawler Drill, Self-contained, Crusher, Diesel Power Unit, Drill Rigs, Tractor Mounted, Front End Loader (Under 4 cu. yd.), Greaseman/Lubrication Engineer, HiPressure Boiler (15 lbs. and over), Hoist (One Drum), Hydro-Axe, Kolman Plant Loader and Similar Type Loaders, L.C.M. Work Boat Operator, Locomotive Mixer (for stabilized base selfpropelled), Monorail Machine, Plant Engineer, Profiler (105 H.P. and under), Grinder, Post Hole Digger and Post Driver, Power Broom (towed), Power Heaterman, Power Sweeper, Revinius Widener, Roller (Grade and Fill), Scarifier, ride-on, Shell Winder, Skid steer loader (Bobcat or similar), Span-Saw, ride-on, Steam Cleaner, Pug Mill, Pump Crete Ready Mix Concrete Plant Refrigeration Equipment (for soil stabilization)Road Widener, Roller (all above subgrade), Sea Mule, Self-contained Ride-on Rock Drill, Excluding Air-Track Type Drill, Skidder, Tractor with Dozer and/or Pusher, Trencher. Tugger Hoist, Vermeer saw (ride on, any size or type), Winch, Winch Cat

GROUP 3: A Frame Winch Hoist on Truck , Articulated Heavy Hauler, Aggregate Plant, Asphalt or Concrete Grooving, Machine (ride on), Ballast Regulator, Ride-on Boiler (used in conjunction with production), Bituminous Heater, self-propelled, Boat (powered), Cement and Bin Operator, Compressors, Dust Collectors, Generators, Pumps, Welding Machines, Light Plants, Heaters (hands-off equipment), Concrete Pavement Spreader and Finisher, Concrete Paver or Mixer (16S and under), Concrete Saw (self-propelled), Conveyor, Deck Hand, Directional Drill Machine Locator, Drill, (Core), Drill, (Well,) Farm Tractor with accessories, Fine Grade Machine, Tamper, ride-on, Tie Extractor, ride-on, Tie Handler, ride-on, Tie Inserter, ride-on, Tie Spacer, ride-on, Tire Repair, Track Liner, ride-on, Tractor, Tractor (with towed accessories), Vibratory Compactor, Vibro Tamp, Well Point

GROUP 4: Tower Cranes

GROUP 5: Cranes 50 tons and over

GROUP 6: Cranes 49 tons and below

GROUP 7: Master Mechanic

FOOTNOTE:

a. New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day provided the employee has worked the working day before and the working day after the holiday.

D040965

IRON0060-003 07/01/2023

HEAVY/HIGHWAY CONSTRUCTION

JEFFERSON COUNTY (Townships of Adams, Alexandria, Brownsville, Cape Vincent, Clayton, Ellisburg, Henderson, Housfield, Le Ray, Lorraine, Lyme, Orleans, Pamelia, Rodman, Rutland, Theresa, Watertown and Worth)

	Rates	Fringes
IRONWORKER		
Structural, Ornamental, reinforcing precast concrete erector, machinery mover & rigger, fence erector, stone derrickman, welder, sheeter, sheeter bucker-up	$ 33.00	30.83

IRON0440-005 07/01/2023

HEAVY/HIGHWAY CONSTRUCTION (REMAINDER OF JEFFERSON COUNTY)

LEWIS AND ST. LAWRENCE COUNTIES BUILDING/HEAVY/HIGHWAY CONSTRUCTION

	Rates	Fringes
IRONWORKER		
STRUCTURAL, ORNAMENTAL, RODMAN, MACHINERY MOVERS & RIGGER, FENCE ERECTOR, REINFORCING, STONE DERRICKMAN	$ 32.00	31.00

LABO1822-004 07/01/2022

LEWIS AND ST. LAWRENCE COUNTIES ONLY

JEFFERSON, LEWIS AND ST. LAWRENCE COUNTIES

	Rates	Fringes
Laborers:		
HEAVY & HIGHWAY		
GROUP 1	$ 29.27	26.80+a
GROUP 2	$ 29.27	26.80+a
GROUP 3	$ 29.47	26.80+a
GROUP 4	$ 29.67	26.80+a
GROUP 5	$ 32.27	26.80+a

FOOTNOTE:

a. New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, Christmas Day, provided the employee has worked the working day before the holiday and working day after the holiday.

LABORER CLASSIFICATIONS

D040965

GROUP 1: Laborers, flaggers, outboard and hand boats.

GROUP 2: Bull float, chain saw, concrete aggregate, bin concrete bootman, gin buggy, hand or machine vibrator, jackhammer, mason tender, mortar mixer, pavement breaker, handlers of all steel mesh, small generators for laborers; tools, installation of bridge drainage pipe, pipelayers, vibrator type rollers, tamper, drill doctor, tail or screw operator on asphalt paver, water pump operator (1 1/2 inch and single diaphram), nozzle (asphalt, gunnite, seeding and sandblasting), laborers on chain link fence erection, rock splitter and power unit, pusher type concrete saw and all other gas, electric, oil and air tool operators, wrecking laborer.

GROUP 3: All rock or drill machine operators (except quarry master and similar type, acetylene torch operators, asphalt raker, powerderman.

GROUP 4: Blasters, form setters, stone or granite curb setters.

GROUP 5: Hazardous waste removal.

PAIN0004-022 05/01/2022

LEWIS COUNTY (Townships of High Market, Lewis, Leyden, Lyonsdale, Osceola, Turin and West Turin)

	Rates	Fringes
Painter, Bridge		
HEAVY & HIGHWAY CONSTRUCTION		
Bridges	$ 41.06	29.59
Painter:		
BUILDING CONSTRUCTION		
Brush & Roll, Drywall Taping/Finishing	$ 23.25	21.21
Spray/Sandblasting/Structural Steel	$ 23.75	21.21

PAIN0004-026 05/01/2022

JEFFERSON COUNTY; LEWIS COUNTY (Townships of Diana, Croghan, New Bremen, Watson, Greig, Martinsburg, Lwville, Denmark, Harrisburg, Montague and Pinckney); ST. LAWRENCE COUNTY

	Rates	Fringes
Painters:		
Bridge	$ 41.06	29.59
Brush & Roll, Paperhanging, Wallcoverings	$ 23.25	21.21
Sandblasting	$ 23.75	21.21
Steel Painting	$ 23.75	21.21
Steel Spray Painting	$ 23.75	21.21
Swing Staging, Window Jacks, Cup Spray Painting, Steam Cleaning and Hydro Water Blasting	$ 23.75	21.21

D040965

PAIN0677-001 05/01/2023

	Rates	Fringes
GLAZIER	$ 28.05	27.95

PLUM0073-003 05/01/2019

JEFFERSON, LEWIS (Twps of Diana, Croghan, New Bremen, Watson, Greig, Martinsburg, Lewisville, Denmark, Harrisburg, Montague, Pinkney, Highmarket, Oscellia, and Turin) AND ST. LAWRENCE COUNTIES

	Rates	Fringes
Plumber and Steamfitter	$ 31.43	23.61

PLUM0112-004 05/01/2023

LEWIS COUNTY Townships of Lewis, Leyden, Lyonsdale, West Turin

	Rates	Fringes
PLUMBER (Including Steamfiitting)		
Northern Zone	$ 41.40	31.70

ROOF0195-001 06/01/2023

	Rates	Fringes
ROOFER	$ 32.25	25.51

SFNY0669-001 04/01/2023

	Rates	Fringes
SPRINKLER FITTER	$ 42.73	26.47

SHEE0058-004 05/01/2022

LEWIS and ST. LAWRENCE COUNTIES

	Rates	Fringes
Sheet Metal Worker		
Projects over $10 million	$ 33.89	22.46
Incl. HVAC Duct		
Projects with sheetmetal work totaling $10 million or less	$ 32.89	22.46

TEAM0687-001 06/01/2018

	Rates	Fringes
Truck drivers:		
HEAVY & HIGHWAY		
GROUP 1	$ 25.82	25.16+a
GROUP 2	$ 26.04	25.16+a

FOOTNOTE:

a. PAID HOLIDAYS: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day

D040965

TRUCK DRIVERS CLASSIFICATIONS:

GROUP 1: Pick-ups, panel trucks, flatboy material trucks (strait jobs), single axle dump trucks, dumpsters, greasers, truck tiremen,, parts chaser, tandems and batch trucks, mechanics, semi trailer, lowboy trucks, asphalt distributor trucks and agitator, mixer trucks and dumpcrete type vehicles, truck mechanic, fuel truck and bus

GROUP 2: Special earth moving quipment (euclid type), or similar off highway equipment, where not self loaded, straddle (ross) carrier, and self contained concrete mobile unit, off highway tandem back dump, twin engine equipment and double hitched equipment where not self loaded

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

* an existing published wage determination

D040965

* a survey underlying a wage determination
* a Wage and Hour Division letter setting forth a position on a wage determination matter
* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION"

SPONSOR CONTRACT AGREEMENT

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STATE OF NEW YORK
Jefferson County Highway Department
AGREEMENT

Contract No.: D040965
P.I.N.: 7753.77
County: Jefferson

THIS AGREEMENT, entered into this the _____ day of ____, 20____, by **THE COUNTY OF JEFFERSON**, hereinafter referred to as "**OWNER**", and _____

_____

Whose principal office is located at _____
hereinafter called the "**CONTRACTOR**".

WITNESSETH: That the OWNER and the CONTRACTOR for the consideration hereinafter named agree as follows:

ARTICLE 1 – WORK TO BE DONE

The CONTRACTOR shall furnish all the materials, appliances, tools and labor of every kind required, and construct and complete in the most substantial and skillful manner, the construction, improvement or reconstruction of the project, and as generally identified and shown on the contract plans entitled:

REPLACEMENT OF NOBLE STREET (B.I.N. 3371810) OVER WEST CREEK
VILLAGE OF EVANS MILLS
P.I.N. 7753.77

all in accordance with the project "Proposal" book and the "Standard Specifications" of the New York State Department of Transportation, which contain the information for bidders; proposal form, contract Agreement, and bonds; and payment items; and do everything required by the Contract and/or Contract Documents as defined herein.

The CONTRACTOR further agrees their bid proposal is not based upon the assumption that any specifications, traffic restrictions, scheduling or phasing/staging requirements will be waived; an extension of Contract Completion Date will be granted; a labor dispensation will be granted; substitution of non-approved products, alternatives or claimed functional equivalents for specified construction materials and methods will be allowed; or any Value Engineering Change Proposals will be approved.

ARTICLE 2 – ENGINEER

The Project has been designed by Stantec Consulting Services Inc., who is hereinafter called the **ENGINEER** and who is to act as the OWNER's representative, assume all duties and responsibilities and have the rights and authority assigned in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

ARTICLE 3 – CONTRACT TIMES

3.1 Start and Completion Times: The CONTRACTOR agrees that it will begin the work herein embraced within five days of the date stipulated in the Notice to Proceed, issued by the OWNER, unless the consent

of the OWNER, in writing, is given to begin at a later date, and that it will prosecute the same so that it shall be entirely completed and performed on or before **September 30, 2025**.

3.2 Damages for Delay in Completion Attributable to Contractor: Damages for delay occasioned by the acts or omissions of CONTRACTOR or its subcontractors or any party for whom it is responsible shall be assessed to the CONTRACTOR as follows:

3.2.1 Engineering Charges: If the Work is not substantially completed, or is not completed and ready for final acceptance, within the respective maximum allowable times specified in paragraph 3.1, engineering charges incurred by the OWNER after the aforesaid completion time will be charged to the CONTRACTOR in addition to the total amount of liquidated damages and other definable damages to be assessed pursuant to paragraph 3.2.2 below and deducted from monies owed the CONTRACTOR.

The amount will be determined by OWNER, based on ENGINEER's accounting records and fee invoices submitted to OWNER for services rendered by ENGINEER during the applicable time periods. The engineering charges shall be allocated equally to all the contractors held responsible for the delay in completion of the Project.

3.2.2 Liquidated Damages: OWNER and CONTRACTOR recognize that time is of the essence in this Agreement, and that OWNER will suffer financial loss in addition to extra engineering costs if the Work is not completed within the times specified in paragraph 3.1 above, plus any extensions thereof. They also recognize the delays, expense and difficulties involved in proving in a legal proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty), CONTRACTOR shall pay OWNER five-hundred dollars ($500) per day that expires after the time specified in paragraph 3.1 and for Substantial Completion until the Work is substantially complete, plus any engineering charges assessed pursuant to paragraph 3.2.1 above.

After Substantial Completion, if CONTRACTOR shall neglect, refuse or fail to complete the remaining Work within the time specified in paragraph 3.1 for final completion and final acceptance or any proper extension thereof granted by OWNER, CONTRACTOR shall pay OWNER as liquidated damages for delay (but not as a penalty) $1,000 per day that expires after the time specified in paragraph 3.1 for final acceptance of work until the Work has received final acceptance from the Engineer.

The calculated amounts of liquidated damages will be deducted from payments made to CONTRACTOR beginning with the payment period within which liquidated damages have begun. However, at its option, OWNER may deduct the total amount of such damages from CONTRACTOR's final payment.

3.3 No Damage for Delay attributable to OWNER: CONTRACTOR agrees to make no monetary claims for delay in the performance of this Contract occasioned by any act or omission of the OWNER or any of its representatives, and agrees that such a claim shall be fully compensated for by an extension of time to complete the performance of the Work as provided herein.

ARTICLE 4 – CONTRACT PRICE

As the work progresses in accordance with the contract and in a manner that is satisfactory to the OWNER, the OWNER hereby agrees to make payments to the CONTRACTOR therefore, based upon the proposal attached hereto and made a part hereof, as follows:

a.) The OWNER shall pay to the CONTRACTOR for the performance of this Agreement subject to additions and deductions and the adjustment of final quantities as provided herein, the total Base Bid, an amount equal to the sum of the established unit price for each separately identified item of Unit Price Work times the estimated quantity of that item as indicated in the Itemized Proposal forms (Contract Price) as follows:

D040965
CONTRACT
PRICE _____ $ _____ dollars
(Use words) *(figures)*

b.) The total Contract Price shall also be adjusted to cover changes in the work ordered by the OWNER or the CONSULTANT, but not shown on the Plans or required by Specifications. Such increases or decreases in the Contract Price shall be determined by the provisions of Article 5.

c.) The OWNER is exempt under Section 1116 of the Tax Law and therefore, no sales tax shall be included in the bids.

Materials:
It shall be understood that title to all materials is to pass to the OWNER prior to their incorporation into the realty, whether purchased by the CONTRACTOR, or by any subcontractor, or by any supplier. Since such CONTRACTOR or subcontractor or supplier, purchases the materials for resale as tangible personal property rather than as realty, they will not be required to pay the tax on their purchase, and each shall include with each order a Resale Certificate (Form ST-120.1).

Labor:
The OWNER shall furnish to the CONTRACTOR a Certificate of Capital Improvements (Form ST-124) which will exempt the CONTRACTOR from the tax on all labor. The CONTRACTOR shall copy and provide such copies to all his subcontractors for the same purpose.

The exemption does not, however, apply to tools, machinery, equipment or other property leased by or to the CONTRACTOR or to his subcontractors, and he and they shall be responsible for and pay any and all applicable taxes, including sales and compensating use taxes on such leased tools, machinery equipment or other property, and for such materials not incorporated into the project.

Title to all materials to be sold by the CONTRACTOR to the OWNER pursuant to the provisions of this AGREEMENT, shall immediately vest in the OWNER upon delivery of such material to the job site before its installation or incorporation into the project. Such materials shall then become the sole property of the OWNER, subject to the right of the OWNER and CONSULTANT to reject the same within a reasonable period for failure to conform to the standards and Specifications of the Contract Documents and the Purchase Orders.

The purchase by subcontractors of materials to be sold hereunder will also be a purchase for resale to the CONTRACTOR (either directly or through other subcontractors). The Subcontract Agreements providing for the resale of such material prior to and separate and apart from the incorporation of such materials into the project and such Subcontract Agreements shall be a form similar to this Agreement.

The sum paid under this Agreement shall be deemed to be in full consideration for the performance by the CONTRACTOR of all his duties and obligations under this Agreement in connection with said sale, including furnishing the use of construction equipment not owned by the CONTRACTOR or its subcontractors but rented from others.

Nothing in this article is intended or shall be construed as relieving the CONTRACTOR from his obligations under this Agreement, and the CONTRACTOR shall have the full continuing responsibility to install the material and supplies purchased in accordance with the provisions of this Agreement, to protect the same, to maintain them in proper condition and to forthwith repair, replace and make good any damage thereto without cost to the OWNER until such time as the work covered by the Agreement is fully accepted by the OWNER.

ARTICLE 5 – ADDITIONS-DEDUCTIONS-DEVIATIONS

Refer to Section 104 of the NYSDOT Standard Specifications, Scope of Work.

ARTICLE 6 – PROGRESS PAYMENTS

The OWNER shall make progress payments under this Agreement as follows:

a.) On not later than the fifth day of every month, the CONTRACTOR shall submit an approvable invoice covering the percentage of the total amount of the Contract which has been completed from the start of the project up to and including the last day of the preceding month, less any amount previously paid to the CONTRACTOR. Attached to said invoice shall be supporting documentation which may reasonably be required by the OWNER or the CONSULTANT.

b.) Not later than the fifth day of the month following the submittal of an approvable invoice, the OWNER will make partial payment to the CONTRACTOR on the basis of a duly certified approved estimate of the work performed during the preceding periods by the CONTRACTOR in accordance with the following terms:

(1) The OWNER has the right to withhold any amount necessary to satisfy any claims, liens or judgments against the CONTRACTOR and the subject project which have not been satisfactorily discharged.

(2) The OWNER hereby reserves the right to deduct from any monies due or to become due the CONTRACTOR any costs incurred by the OWNER arising out of this contract for the handling and/or processing of any liens, release of liens, restraining notices, garnishments, levies, summons, subpoenas or other documents, legal papers, suits or actions served upon or filed with the OWNER.

c.) No payment will be made for any materials or equipment until they are incorporated in the work; except, that partial payment may be made for the estimated value of the materials in short and/or critical supply (as verified by the OWNER) and materials specifically fabricated for the project, each as defined in the Contract, when delivered to the site or off site by the CONTRACTOR and suitably stored and secured as required by the OWNER, provided, however, that the CONTRACTOR, if so requested by the OWNER, shall furnish written evidence that he is the unconditional OWNER of the materials.

d.) All work covered by partial payments shall thereupon become the sole property of the OWNER, but this provision shall not be construed as relieving the CONTRACTOR from his sole responsibility for the care and protection of work upon which payments have been made, of the restoration of any damaged work, or as waiver of the right of the OWNER to require the fulfillment of all the terms of the Contract.

e.) Before any payments will be made under the Contract, the OWNER reserves the right to require the CONTRACTOR, and all subcontractors to submit written verified statements, in satisfactory form, certifying in detail to the amounts then due and unpaid by such CONTRACTOR and its subcontractor to all laborers for daily or weekly wages on account of labor performed upon the work under this Contract, or to other persons for materials, equipment and supplies delivered to the site of the work. The term "laborers", as used herein, shall include workers and mechanics.

ARTICLE 7 – ACCEPTANCE AND FINAL PAYMENT

a.) Upon completion of the project, the CONSULTANT shall make a final inspection for approval of all the work done under this Contract and shall, within 15 days after the acceptance of the work by the CONSULTANT and the OWNER, prepare a final certificate of the work done and the value thereof. The OWNER shall, upon approval of the final certificate, promptly pay the CONTRACTOR the entire sum so found due thereunder after deducting all previous payments under the Contract. All prior partial payments shall be subject to correction in the final invoice and payment.

b.) Before issuance of the final certificate, the CONTRACTOR shall submit evidence satisfactory to the OWNER and CONSULTANT that all payrolls, material bills, and other indebtedness connected with the work have been paid. In addition, the CONTRACTOR shall submit "red-line" drawings, one (1) bound copy of approved shop drawings, and one copy of final survey notes and computations.

ARTICLE 8 – DEFENSE AND INDEMNIFICATION

To the fullest extent permitted by law, the CONTRACTOR shall defend, indemnify and hold harmless the OWNER, Engineer, and /or the consultants, agents, officers, directors, and employees of any of them, from and against any claim, damage, loss or expense, including , but not limited to attorney fees, arising out of or resulting from performance of the work or events occurring in or about the premises of the OWNER, but only to the extent caused in whole or in part by (i) the negligent acts, omissions, fault or breach of the Contractor, its agents, subcontractors or suppliers, anyone directly or indirectly employed by any of them or anyone for whose act they be liable for or (ii) the breakage or malfunctioning of any tools, supplies, scaffolding or equipment used or furnished by the CONTRACTOR, its agents, subcontractors or suppliers, anyone directly or indirectly employed by any of them or anyone for whose act they be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder.

ARTICLE 9 – CONTRACTOR'S REPRESENTATIONS

In executing this Agreement, CONTRACTOR makes the following representations:

9.1 CONTRACTOR has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents including "technical data".

9.2 CONTRACTOR has visited the site and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress, performance or furnishing of the Work.

9.3 CONTRACTOR is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress, performance and furnishing of the Work.

9.4 CONTRACTOR has carefully studied all reports of explorations and tests of subsurface conditions at or contiguous to the site and all drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site (except Underground Facilities). CONTRACTOR acknowledges that such reports and drawings are not Contract Documents and may not be complete for CONTRACTOR's purposes. CONTRACTOR acknowledges that OWNER and ENGINEER do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Contract Documents with respect to Underground Facilities at or contiguous to the site. CONTRACTOR has obtained and carefully studied (or assumes responsibility for having done so) all such additional supplementary examinations, investigations, explorations, tests, studies and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto. CONTRACTOR does not consider that any additional examinations, investigations, explorations, tests, studies or data are necessary for the performance and furnishing of the Work at the Contract Price, within the Contract Times and in accordance with the other terms and conditions of the Contract Documents.

9.5 CONTRACTOR is aware of the general nature of work to be performed by OWNER and others at the site that relates to the Work as indicated in the Contract Documents.

9.6 CONTRACTOR has correlated the information known to CONTRACTOR, information and observations obtained from visits to the site, reports and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests, studies and data with the Contract Documents.

9.7 CONTRACTOR has given ENGINEER written notice of all conflicts, errors, ambiguities or discrepancies that CONTRACTOR has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

ARTICLE 10 – DOCUMENTS FORMING THE CONTRACT

The Contract (and Contract Documents) shall be deemed to include the advertisement for proposals; the contract proposal, including Special Notes and Special Specifications contained therein; the CONTRACTOR’s proposal; the Equal Employment Opportunity (EEO) participation goals; the Disadvantaged/Minority/Women’s Business Enterprise (D/M/WBE) participation goals; the contract Agreement; the base line data; the "Standard Specifications" including all addenda thereto identified in the contract proposal; the Standard Sheets; the plans; any amendments issued prior to the date of proposal

submission, project permits, and all provisions required by law to be inserted in the contract whether actually inserted or not. Whenever separate publications are referenced in the Contract Documents it shall mean those, as amended, which are current on the date of advertisement for bids.

ARTICLE 11 – MISCELLANEOUS

11.1 For the purposes of this Agreement, reference to the feminine shall include the masculine, reference to the singular shall include the plural, and reference to a person in the form of he or his shall also refer to a business entity.

11.2 Pursuant to the provisions of Section 109 of the General Municipal Law, no vendor to whom a contract is granted or awarded shall assign, transfer, convey, subcontract, or otherwise dispose of all or part of such contract, or of its right, title, and interest herein, including the performance of this contract or the right to receive monies due, or to become due, or of its power to execute this without prior written consent of the OWNER. In the event the CONTRACTOR shall, without prior written consent, assign, transfer, convey, subcontract or otherwise dispose of this contract, or of its right, title and interest herein, including the performance of this contract, or the right to receive monies due, or to become due, or its power to execute such contract, to any other person or corporations or upon receipt by OWNER of an attachment against the CONTRACTOR the OWNER shall be relieved and discharged form any and all liability and obligation growing out of such contract to such vendor and the person or corporation to which such contract shall have been assigned, its assignee, transferee, or sublessee shall forfeit and lose all monies theretofore assigned on this contract, except so much as may be required to pay its employees.

In accordance with Section 106 of the General Municipal Law, this Agreement shall be void and of no effect unless the CONTRACTOR shall secure compensation for the benefit of, and keep insured during the life of such contract, such employees, in compliance with the provisions of the Workmen's Compensation Law.

11.3 OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.

11.4 Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon OWNER or CONTRACTOR, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

11.5 Each and every provision of law and clause required by law to be inserted in this Contract should be, is an is deemed to be inserted herein, and if through a mistake or otherwise any such provision is not inserted, or is not correctly inserted, then upon the application of either party the Contract shall forthwith be amended physically to make such insertion.

11.6 Representations and Responsibility of CONTRACTOR: The CONTRACTOR warrants that he is financially solvent; that he has successfully completed work of comparable size, quality, and importance; that he accepts full responsibility for the actions or omissions and for the satisfactory completion of the work of its sub-contractors, workers, material suppliers, and all other of its agents; that he has read and is familiar with the CONTRACT DOCUMENTS: that he will comply fully with all federal, state and local

laws, ordinances and regulations pertinent to its performance of the Work; that he will furnish within ten (10) days upon request of the OWNER a current financial statement and current bank statements at any time during the progress of the Work.

11.7 Anti-Discrimination: 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 CONTRACTOR shall 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, demolition, or repair of any public building or public park or for the manufacture, sale or distribution of materials, equipment or supplies, and to the extent that this contract shall be performed within New York State, CONTRACTOR agrees that neither it nor its subcontractors shall be reason of race, creed, color disability, sex, age, or national origin:

Discriminate in hiring against any New York State citizen who is qualified and available to perform the work; or

Discriminate against or intimidate any employee hired for the performance or work under this contract.

11.8 Waiver of Immunity Clause: As provided in Article 5-A of the General Municipal Law the CONTRACTOR hereby agrees, if called before a Grand Jury to testify concerning this contract, to sign a waiver of immunity against criminal prosecution or to answer any relevant question concerning this transaction or contract. The refusal of the CONTRACTOR to do so shall:

Disqualify CONTRACTOR from all contracts with municipalities for a period of five (5) years and

Permit municipalities to terminate any contracts made with the CONTRACTOR after July 1, 1959.

11.9 Independent Contractor: The CONTRACTOR is an independent contractor and shall not be considered an agent of the OWNER, nor shall any of the CONTRACTOR'S employees or agents be considered subagents for the OWNER. In the Work required under this Agreement to be performed by the CONTRACTOR is not a joint venture between the OWNER and the CONTRACTOR. The CONTRACTOR is completely responsible for the proper handling and disposal of any hazardous materials required to be removed under the Contract Documents.

11.10 Set Off Rights: The OWNER shall have all of its common law, equitable and statutory rights of set-off. These rights shall include, but not be limited to, the OWNER'S option to withhold for the purposes of set off any monies due to the CONTRACTOR under this contract up to any amounts due and owing to the OWNER with regard to this contract, and any other contract with any other Department or Agency of the OWNER, including any contract commencing prior to the term of this contract, plus any amounts due an owing to the OWNER for any other reason including, without limitation, tax delinquencies, fee delinquencies or monetary penalties relative thereto.

11.11 Records: The CONTRACTOR shall establish and maintain complete and accurate books, records, documents, accounts and other evidence directly pertinent to its performance under this contract and to the performance of Subcontractors (hereinafter, collectively "the records"). The Records must be kept for six years following the date of Final Payment by OWNER to CONTRACTOR. The OWNER shall, at no cost and upon reasonable notice, have access to and the right to examine and copy any directly pertinent books,

document papers and records of the CONTRACTOR, in whatever form such records are maintained, relating to its performance of this Agreement, or relating to employees or agents, or equipment for which reimbursement is sought under this Agreement for so long as the records are maintained. All reports, documents, drawings, studies, specifications, subject data, memoranda, estimates, computations, etc., secured by and for the OWNER for the prosecution of a bid irrespective of the form in which such material has been maintained, including, but not limited to, hard copy, computer data, or other electronic media, shall become and remain the property of the OWNER upon termination or completion of the work at the direction of the OWNER. The OWNER shall have the right to use same for any public purpose without compensation to the CONTRACTOR. Reports and data shall be kept in the strictest confidence and shall not be released to any other persons or agency without the expressed written permission of the OWNER.

11.12 Executory Clause: The parties specifically agree that the CONTRACTOR'S duty to perform Work under this Agreement, and the OWNER'S obligation to pay for that Work shall be limited to the amount of money actually appropriated by the Jefferson County Board of Legislators and encumbered for the purposes of this Agreement. The CONTRACTOR shall have the right from time to time to demand proof from the OWNER of the availability of funding to fulfill the OWNER'S obligations to the CONTRACTOR under this Agreement.

11.13 No Waiver: In the event that the terms and conditions of the Agreement are not strictly enforced by the OWNER, such non-enforcement shall not act as or be deemed to act as a waiver or modification of this Agreement, nor shall such non-enforcement prevent the OWNER from enforcing each and every term of this Agreement thereafter.

11.14 Compliance with All Laws: The CONTRACTOR agrees that during the performance of the Work required pursuant to this Agreement, the CONTRACTOR and all employees working under its direction shall strictly comply with all local, state or federal laws, ordinances, rules or regulations controlling or limiting in any way the performance of the work required by this Agreement.

11.15 Third Party Relationships: Nothing contained in the Agreement shall create a contractual relationship with, an obligation to, or a cause of action in favor of any third-party against either the OWNER, ENGINEER or CONTRACTOR.

11.16 This Agreement shall be governed by and interpreted according to the laws of the State of New York.

11.17 Severability: If any provision of the Agreement is held invalid by a court of law, the remainder of the Agreement shall not be affected thereby if such remainder would then continue to conform to the laws of the State of New York.

11.18 Right to Suspend Work and Cancel Contract: It is mutually agreed that if at any time during the prosecution of the work the Jefferson County Superintendent of Highways shall determine that the work upon the contract is not being performed according to the contract or for the best interest of the OWNER, the execution of the work by the CONTRACTOR may be temporarily suspended by the Jefferson County Superintendent of Highways, who may then proceed with the work under his own direction in such manner as will accord with the contract specifications and be for the best interests of the OWNER; or he may terminate the CONTRACTOR’s employment under the contract while it is in progress, and thereupon proceed with the work, in affirmance of the contract, by contract negotiated or publicly let, by the use of his own forces, by calling upon the surety to complete the work in accordance with the plans and specifications or by a combination of any such methods; or he may cancel the contract and either re-

advertise or re-let as provided in Section 38 of the Highway Law, or complete the work under its own direction in such a manner as will accord with the contract specifications and be for the interests of the OWNER; any excess in the cost of completing the contract beyond the price for which it was originally awarded shall be charged to and paid by the CONTRACTOR failing to perform the work or its surety; all in pursuance of the provisions of Section 40 of the Highway Law.

Whenever the OWNER determines to suspend or stop work under the contract, a written notice sent by mail to the CONTRACTOR at its address and to the sureties at their respective addresses, shall be sufficient notice of its action in the premises.

OWNER's failure to exercise any of its rights under this Agreement, including its right to terminate the work or withhold payment, shall not constitute a waiver by the OWNER of any such rights. No inference of waiver of any option or right of the OWNER shall be drawn from OWNER's failure to enforce such rights or CONTRACTOR's failure to complete any portion of the work in accordance with any interim date, final date or any other deadline agreed upon as part of the project construction schedule. CONTRACTOR shall remain liable for any damages arising from its failure to perform in accordance with the schedule, notwithstanding any action or failure to act by OWNER, including but not limited to any delay in or failure to: terminate the Agreement; send any notice to the CONTRACTOR; or to take any action required or permitted by OWNER under this Agreement.

11.19 Determination as to Variances: In any case of any ambiguity in the plans, specifications or maps, or between any of them, the matter must be immediately submitted to the Jefferson County Superintendent of Highways, who shall adjust the same, and his decision in relation thereto shall be final and conclusive upon the parties.

11.20 Alterations and Omissions: The said work shall be performed in accordance with the true intent and meaning of the contract documents without any further expense of any nature whatsoever to the OWNER other than the consideration named in this Agreement.

The OWNER reserves the right, at any time during the progress of the work, to alter the plans or omit any portion of the work as it may deem reasonably necessary for the public interest making allowances for additions and deductions with compensation made in accordance with the Standard Specifications, for this work without constituting grounds for any claim by the CONTRACTOR for allowance for damages or for loss of anticipated profits, or for any variations between the approximate quantities and the quantities of the work as done.

11.21 Auditing Clause: The CONTRACTOR shall be subject to compliance audits at random intervals. Audits shall include both financial and programmatic checks as they apply to the signed Agreement. The auditor shall make determination on procedures and proper expenditures of funds. Any cost which is disallowed under the contract shall be reimbursed to Jefferson County by the CONTRACTOR.

11.22 Dispute Resolution: In an effort to resolve any conflicts that arise during the construction of the Project or following the completion of the Project, the OWNER and the CONTRACTOR agree that all disputes between them arising out of or relating to this Agreement shall first be submitted to non-binding mediation unless the parties mutually agree otherwise. After direction by the CONSULTANT to proceed with the disputed work, and throughout the mediation procedures, the CONTRACTOR shall diligently proceed with the performance of the Contract in accordance with all instructions of the CONSULTANT.

The OWNER and the CONTRACTOR further agree to include a similar mediation provision in all agreements with independent contractors, subcontractors and sub-consultants retained for the project and to require all independent contractors, subcontractors and sub-consultants also to include a similar

mediation provision in all agreements with subcontractors, sub-consultants, suppliers or fabricators so retained, thereby providing for mediation as the primary method for dispute resolution between the parties to those agreements.

11.23 Venues and Disputes: The exclusive means of disposing of any dispute arising under a contract with Jefferson County, which is not disposed of by agreement, shall be decided in a New York State Court of competent jurisdiction located within Jefferson County, New York. There shall be no right to binding arbitration. Pending final resolution of a dispute, the Vendor must proceed diligently with contract performance. The Vendor waives any dispute or claim not made in writing and received by the County within thirty (30) days of the occurrence giving rise to the dispute or claim. The claim must be in writing for sum certain and must be fully supported by all cost and pricing information.

11.24 Force Majeure: Except for the Owner's obligation to make payment for goods and/or services delivered hereunder, neither party hereto shall be liable for any failure to perform the terms of the contract when such failure is due to "force majeure" as hereinafter defined. The term "force majeure" as employed in this specification shall mean acts of God, strikes, lockouts, or industrial dispute or disturbances, civil disturbances, arrests and restraint from rulers or people, interruption by government or court orders, present and future valid orders of any regulatory body having proper jurisdiction, acts of the public enemy, wars, riots, blockades, insurrections, inability to secure or a delay in securing labor or materials, including delay in securing or inability to secure materials by reason of allocations promulgated by authorized governmental agencies, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, explosions, inability to obtain easements or right-of-way.

The "force majeure" shall, so far as possible, be remedied with a reasonable dispatch. The settlement of strikes or lockouts or industrial disputes or disturbances shall be entirely within the discretion of the party having the difficulty and the above requirement that any "force majeure" shall be remedied with all reasonable dispatch shall not require the settlement of strikes, lockouts, or industrial disputes or disturbances by acceding to the demands of any opposing party therein when such course is inadvisable in the discretion of the parties having the difficulty.

ARTICLE 12 – INSURANCE REQUIREMENTS

CONTRACTOR shall maintain or cause to be maintained, in full force and effect during the term of this Agreement, at its expense, Workers' Compensation Insurance, Employer's Liability Insurance, Disability Insurance, Commercial General Liability Insurance, Motor Vehicle Liability Insurance and other insurance with stated minimum coverages, all as listed below. Such policies are to be in the broadest form available on usual commercial terms, shall be written by insurers licensed to do business in the State of New York and which have an A.M. Best Rating of A(-) or better as determined in the most recent A.M. Best publication, and who have been fully informed as to the nature of the SERVICES to be performed, and shall cover risks and liability to CONTRACTOR resulting from this Agreement. Commercial General Liability shall include personal injury liability.

The OWNER, its officers, employees and agents shall be named as additional insureds on a primary and non-contributory basis on CONTRACTOR'S Commercial General Liability policy. In addition, a waiver of subrogation shall apply in favor of the OWNER, its officers, employees and agents on CONTRACTOR'S Commercial General Liability policy, as well as on CONTRACTOR'S Workers' Compensation Insurance policy. It is further understood that any obligations imposed upon the insured

(including, without limitation, the liability to pay premiums) shall be the sole obligation of CONTRACTOR and not those of the OWNER.

Notwithstanding anything to the contrary in this Agreement, CONTRACTOR irrevocably waives all claims against the OWNER for all losses, damages, claims or expenses resulting from risks commercially insurable under this insurance described in this Section. The provision of insurance by CONTRACTOR shall not in any way limit CONTRACTOR's liability under this Agreement.

Type of Coverage	**MINIMUM Limits of Coverage**
Workers' Compensation and NYS Disability	Statutory
Business Automobile Liability (Combined Bodily Injury and Property Damage arising out of the ownership, operation, use, loading or unloading of all owned, leased, hired and non-owned vehicles)	$1,000,000 Combined Single Limit
Commercial General Liability (Including Broad form contractual Liability, Combined bodily injury and property damage)	$1,000,000 Each Occurrence $2,000,000 General Aggregate Limit $2,000,000 Products-Completed Operations $1,000,000 Advertising/Personal Injury

Each policy of insurance required herein shall be specifically endorsed to provide that in the event of cancellation, non-renewal, or material change on the part of the insurer, prior written notice shall be provided to COUNTY in accordance with the terms of the CONTRACTOR'S policy. The inclusion of such endorsement shall be confirmed on the certificates of insurance required herein.

At the time of execution of this Agreement, and upon each policy renewal, CONTRACTOR shall submit to COUNTY certificates of insurance evidencing CONTRACTOR's compliance with the requirements of this Section, including certificates of insurance from any approved subcontractors. The CONTRACTOR shall furnish the appropriate ACORD Form Certificate of Insurance to COUNTY to evidence all coverage set forth above except Workers' Compensation and Disability Insurance. **A copy of the additional insured and waiver of subrogation endorsement forms must be submitted with the insurance certificates.**

Workers' Compensation coverage must be evidenced by Form C105.2 or New York State Insurance Fund Form U26.3. Disability Insurance coverage must be evidenced by Form DB120. **A copy of the waiver of subrogation endorsement form must be attached to the Workers' Compensation certificate of insurance.**

REQUIRED EXTENDED REPORTING COVERAGE FOR CLAIMS BASED POLICIES

In the event that CONTRACTOR'S Commercial General Liability Policy is a "claims made" policy, and coverage thereunder is cancelled or otherwise not renewed, and such policy is not replaced with another "claims made" Commercial General Liability Policy which provides continuing, uninterrupted coverage, CONTRACTOR shall be required to purchase extended reporting products-completed operations coverage for a minimum of three (3) years after completion of all work required of CONTRACTOR under this Agreement

REQUIRED MINIMUM RETROACTIVE DATE FOR CLAIMS BASED POLICIES

In the event that CONTRACTOR'S Commercial General Liability Policy is a "claims made" policy, the retroactive date for products-completed operations coverage under such policy must be at least one (1) year prior to the commencement date of this Agreement and must be shown on the appropriate ACORD Form Certificate of Insurance furnished to OWNER.

Approved by Department Head:

_____

James L. Lawrence Jr., Superintendent
Jefferson County Highway Department

IN WITNESS WHEREOF, this agreement has been executed by the OWNER, acting by and through the Jefferson County, and the CONTRACTOR or its appointed representative, who has executed this agreement on the day and year first written above.

Attest

William W. Johnson, Chairman, Jefferson County Legislature
Print Name & Title

_____ Date: _____
(Signature)

By: Jefferson County
OWNER

STATE OF NEW YORK ss. :
COUNTY OF Jefferson

On this _____ day of ___ 20 ____, before me personally came **William W. Johnson** to me known and known to me to be the person who being duly sworn, did depose and say that he resides in the County of Jefferson; that he is the Chairman for the Jefferson County Legislature, the County of Jefferson being the municipal corporation described in and which executed the above instrument; and that he signed his name to the foregoing instrument by virtue of the authority vested in him by the Jefferson County Board of Legislators.

_____
Notary Public

Attest

_____
Print Name & Title

_____ Date: _____

By: _____
(Signature)
CONTRACTOR Firm Name

(Acknowledgment of individual CONTRACTOR)
STATE OF NEW YORK ss. :
COUNTY OF _____

On this _____ day of _____ 20 ____, before me personally came _____ to me known and known to me to be the person described in and who executed the foregoing instrument, and acknowledged that he/she executed the same.

_____
Notary Public

(Acknowledgment of co-partnership CONTRACTOR)
STATE OF NEW YORK ss. :
COUNTY OF _____

On this _____ day of _____ 20 ____, before me personally came _____ to me known and known to me to be the person who executed the foregoing instrument, who, being duly sworn by me, did for himself/herself depose and say that he/she is a member of the firm of _____, consisting of himself/herself and _____ and that he/she executed the foregoing instrument and that he/she had authority to sign same, and he/she did duly acknowledge to me that he/she executed the same as the act and deed of said firm for the uses and purposes mentioned therein.

_____
Notary Public

(Acknowledgment of CONTRACTOR, if a corporation)
STATE OF NEW YORK ss. :
COUNTY OF _____

On this ____ day of _____ 20 ____, before me personally came _____ to me known, and known to me to be the person who being duly sworn, did depose and say that he/she resides in _____ that he/she is the _____ of the _____ the corporation described in and which executed the foregoing instrument; and that he/she signed his/her name thereto by order of the Board of Directors of said Corporation.

_____
Notary Public