



CONTRACT DATA SHEET

Monroe County Division of Purchasing
200 County Office Building, Rochester NY 14614

TITLE: INSTALLATION OF UNDERGROUND CONDUIT,
PULLBOXES, PEDESTALS, AND APPURTENANCES

CONTRACT #: 0514-22 (7700000120)

CONTRACT DATES: 08/01/2022 – 07/31/2023

BUYER: Sean Wilcox
PHONE: 585/753-1136
EMAIL: swilcox@monroecounty.gov

VENDOR(S): M. L. Caccamise Electric Corp.
721 Portland Avenue
Rochester, NY 14621
P: (585) 266-0330

Sean Wilcox
Buyer

XC: BP FILE
VENDOR

TERMS AND CONDITIONS

<u>BID ITEM:</u>	INSTALLATION OF UNDERGROUND CONDUIT, PULLBOXES, PEDESTALS AND APPURTENANCES
<u>FOR:</u>	Department of Transportation
<u>PURCHASING CONTACT:</u>	<p>The Buyer, identified below, is the sole point of contact regarding this Bid from the date of issuance until the bids are opened and the results made public.</p> <p>Sean Wilcox Monroe County Division of Purchasing 39 West Main Street Room 200 Rochester, NY 14614 Email: swilcox@monroecounty.gov</p> <p>All requests for bid clarification must be submitted in writing to the Buyer referenced above and received no later than close of business (5:00 PM Eastern Standard Time) on <u>Monday, June 13, 2022</u>.</p> <p>All questions will be answered and documented in writing as an Addendum to the Bid. These will be sent out to all Bidders who received the original Bid no later than <u>Tuesday, June 14, 2022</u>.</p>
<u>DUPLICATE COPIES:</u>	<u>PLEASE SUBMIT YOUR BID IN DUPLICATE; THE ORIGINAL AND ONE (1) COPY.</u>
<u>BID INFORMATION:</u>	At the time of bid, the bidder shall supply detailed specifications and MWBE requirements for the item(s) contained herein, and shall clearly indicate any areas in which item or items offered do not fully comply with the specifications contained herein.
<u>SUBMITTAL OF FORMAL PROPOSAL:</u>	<p>Bid proposal must be legible and submitted in the original form, bearing an original signature. EMAILS AND FACSIMILES ARE NOT ACCEPTABLE.</p> <p>All bidders must submit proof that they have obtained the required Workers' Compensation and Disability Benefits Insurance coverage or PROOF that they are exempt. (Visit www.wcb.ny.gov for forms.)</p>
<u>SPECIFICATION ALTERATIONS:</u>	Specifications will be construed to be complete and be considered the entire description of the goods or services upon which Monroe County is now seeking bids. Only formal written addenda can materially alter this set of specifications. No verbal statement made by a Monroe County employee or anyone else is binding nor shall such statement be considered an official part of this public bid proposal.

NYS WAGE RATES:

Pursuant to the provision of Section 220-A of the New York State Labor Law, as amended, the Contractor (and related Subcontractors) will be obligated to pay all workers in the covered classes only the applicable prevailing wage rates and supplements. The minimum hourly wage rate to be paid the various classes of labor performing work under this contract shall be in accordance with schedules which have been established or may hereafter be established or increased, by the New York State Department of Labor during the contract term. **Refer to NYS Wage Schedule PRC# 2022005947 developed for this project.**

QUANTITIES:

The quantities listed are the estimated annual requirements and should not be construed to represent either maximum or minimum quantities to be ordered during the contract term. **Estimates are based upon actual annual usage by County departments only.**

QUALIFIED BIDDER:

Each bidder must be prepared to present satisfactory proof of his capacity and ability to perform this contract. Such proof may include, but is not limited to, an inspection of the bidder's facilities and equipment, financial statements, references and performance of similar contracts. **The Purchasing Manager reserves the right to reject any bid where the bidder cannot satisfy the County as to their ability to perform.** Monroe County reserves the right to reject any and all bids if the Monroe County Purchasing Manager deems said action to be in the best interests of Monroe County.

**METHOD OF
AWARD:**

Monroe County intends to award the bid to the lowest responsive and responsible bidder, based on the **TOTAL**. **Bidder must bid on all items in order to be considered.** **The County reserves the right to reject any and all bids** if the Purchasing Manager deems said action to be in the best interest of the County.

CONTRACT TERM:

Contract will start with the date of the contract award and run through **July 31, 2023**, with the option to renew the contract up to four (4) additional twelve (12) month periods with the mutual consent of both parties.

PRICE CHANGES:

Price changes may be proposed by either party no later than forty-five (45) days prior to contract extension, based upon manufacturer price changes which must be supported with documentation. Should price changes not be acceptable to both parties, the contract will not be extended. Prices may change only at the time of extension.

BRAND REFERENCE:

References to a manufacturer's product by brand name or number are done solely to establish the minimum quality and performance characteristics required. Bidders may submit bids on alternates, but must attach two (2) copies of manufacturer specifications for any alternate at the time of the bid. Further, the bidder must demonstrate that the alternate proposed has a sufficient operating track record to show the equipment will perform per the specified brand. The acceptance of a bidder's alternate rests solely with Monroe County.

**PURCHASE ORDER
ISSUANCE:**

Delivery of services may be directed by the receipt of a Purchase Order only. **Items that are not part of this bid will not be paid for by Monroe County.** As to all purchase orders issued by Monroe County, exceptions may only be authorized, in writing, by the Purchasing Manager or her authorized agent prior to delivery.

**PERFORMANCE
BOND:**

The successful bidder shall procure, execute and deliver to the Owner and maintain at his own cost and expense a Performance Bond in the amount of the contract, of surety company approved by the Owner and authorized to do business in the State of New York as a surety. The security can be in the form of a Certified Check, Bank Draft, Standard Form of Irrevocable Letter of Credit or Performance Bond.

DELIVERY:

Delivery to be **F.O.B. Destination as specified by Purchase Order.** Delivery costs must be built into the unit prices. Delivery must be made **within (2) weeks** after receipt of order. The County reserves the right to terminate the contract in the event the specified delivery time is not met.

**BILLING
PROCEDURE:**

All invoices for items sold any authorized agency as a result of this contract must be billed in the following manner: Purchase Order #, Quantity, Description of Item Purchased, BP#, Item #, Extension and Total. **ALL INVOICES MUST BE MARKED WITH THE PURCHASE ORDER NUMBER. INVOICES WITHOUT THIS INFORMATION WILL NOT BE PROCESSED FOR PAYMENT.**

**UNCONTEMPLATED
PURCHASES:**

Monroe County reserves the right to request separate bids for such quantities of items on this contract that may be best procured via separate public bid offering and to otherwise act in furthering its own best interests.

SUBCONTRACT:

The successful Bidder shall not subcontract any work without first obtaining the written consent of the Monroe County Purchasing Manager. Notwithstanding the foregoing, subcontractor(s) set forth in a Bidder's MBE/WBE Utilization Plan submitted pursuant to the Minority and Women Owned Business Enterprise Requirements and approved by the County's Director of Diversity, Equity, and Inclusion shall be deemed to be approved subcontractor(s).

RELATED ITEMS:

The County reserves the right to add related sites to this contract during the contract term upon agreement by both parties as to the price. Approval must be given in writing by the Purchasing Manager or her Designee.

**REPORT OF
PURCHASE:**

The Contractor must, upon request, provide the County Purchasing Manager with detailed information showing how much of each item was delivered under this contract.

MINIMUM ORDER:

No minimum order is specified for this contract. Agencies must be able to order as needed. **Political subdivisions and others authorized by law may participate in this contract.**

**WARRANTY/
GUARAGUARANTEE:**

All warranties by manufacturer shall apply. Bidder shall, as part of its proposal, furnish its warranty/guarantee for all goods/services to be furnished hereunder. As a minimum, Bidder shall warrant all goods as defined in specifications from date of acceptance. Bidder shall be obligated to repair or replace all defects in material or workmanship, which are discovered or exist during said period. All labor, parts and transportation shall be at Bidder's expense.

**COMPLIANCE WITH
THE LAW:**

The Contractor agrees to procure all necessary licenses and permits. The Contractor shall comply with all laws, rules and regulations pertaining to the payment of wages and all other matters applicable to the work performed under this contract

OTHER AGENCIES:

The Contractor(s) **must** honor the prices, terms and conditions of this contract with political subdivisions or districts located in whole or in part within Monroe County. In addition, the contractor **may**, but is not required to, extend the prices, terms and conditions of this contract to any other political subdivision or district. Usage of this contract by any of these other political subdivisions or districts will have to be coordinated between that subdivision or district and the contractor. Orders placed against this contract between any subdivision or district will be contracts solely between the Contractor(s) and those entities. Monroe County will not be responsible for, nor will it have any liability or other obligation for, such contract between the Contractor(s) and any third party.

INDEMNIFICATION:

The Contractor agrees to defend, indemnify and save harmless the County, its officers, agents, servants and employees from and against any and all liability, damages, costs or expenses, causes of action, suits, judgments, losses and claims of every name not described, including attorneys' fees and disbursements, brought against the County which may arise, be sustained or occasioned directly or indirectly by any person, firm or corporation arising out of or resulting from the performance of the services by the Contractor, arising from any act, omission or negligence of the Contractor, its agents and employees or arising from any breach or default by the Contractor under this Agreement. Nothing herein is intended to relieve the County from its own negligence or misfeasance or to assume any such liability for the County by the Contractor.

**EQUAL PAY
CERTIFICATION:**

Prior to the execution of this Agreement, the Contractor shall submit to the County an Equal Pay Certification ("Certification") affirming the Contractor's compliance with the Federal Equal Pay Act, 29 USC § 206 and New York State Labor Law §194, as amended from time to time ("Equal Pay Laws"). As set forth in the Certification, the Contractor's violation of one or more of the Equal Pay Laws or its filing of a false or misleading Certification during the term of this Agreement may constitute grounds for the County in its sole discretion to immediately terminate the Agreement and for determining the Contractor to be not qualified to participate in future Monroe County contracts.

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a. Requirements (forms included in appendix a)

The Bidder shall take affirmative steps to afford opportunities for MBE and WBE firms on the project and the Bidder shall make its best efforts to meet the MBE/WBE participation goals established for this project. The specific affirmative steps to be taken by Bidder are described in subparagraphs b and d below.

The Bidder shall designate, in writing, an executive of its company who will have overall responsibility for implementing the Bidder's MBE/WBE Utilization Plan. The successful Bidder shall be responsible for maintaining records showing subcontractor awards to MBE and WBE firms and all specific efforts to award subcontracts to such firms even if not successful. A copy of the monthly report form is included in these Requirements. This report form is to be completed by the successful Bidder and submitted to the County with each monthly progress payment application.

Bidders that are either MBEs or WBEs will be allowed to include their own participation towards meeting MBE/WBE participation goals established for this project. In the event a Bidder is a MBE, such Bidder shall remain subject to the goal of subcontracting at least three percent (3%) of the total cost of services to a WBE. In the event a Bidder is a WBE, such Bidder shall remain subject to the goal of subcontracting at least twelve percent (12%) of the total cost of services to a MBE. In the event a Bidder is both a MBE and WBE, the Bidder shall choose one of the two designations and shall remain subject to the subcontracting best efforts requirement for the designation not chosen.

M/WBE firms must be certified by the New York State office of Minority and Women's Business Development or the Monroe County M/WBE Certification Program (locally funded contracts only). The County reserves the right to require specific certification program(s) for its projects.

The successful Bidder shall also be required to submit payment records, which demonstrate payment by the Bidder to all subcontractors, including the MBE and WBE firms utilized on the project. Such submissions shall include affidavits certifying payments to subcontractors for work previously paid for by the County.

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b. Bidder's Detailed M/WBE Utilization Plan

An M/WBE utilization plan shall be submitted with each Bid. The utilization plan must include a detailed MBE/WBE Utilization Plan form and a

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signed Letter of Intent from each of the MBE/WBE firms identified in the Plan.

The Plan must identify the MBE and WBE firms to be utilized by the Bidder. If specific spend information is not available, complete details must be provided on the actual work M/WBEs will complete on the project, together with an explanation as to why spending data is not available shall be provided. If a firm is unable to show attainment of program goals when submitting the utilization plan, Bidder must submit a Request for M/WBE Utilization Waiver with the initial bid. An approved Utilization Plan or granted utilization waiver will be required prior to contract issue. If the Utilization Plan is reviewed and determined to be insufficient and/or a utilization waiver is not granted, the bid may be disqualified as non-responsive.

The County's Director of Diversity, Equity, and Inclusion (DEI) shall be responsible for approving Bidder's MBE/WBE Utilization Plan; any utilization waiver applications; and/or reviewing each subcontractor's MBE or WBE certifications.

The successful Bidder will be obligated, throughout the term of the Contract, to furnish to the County's M/WBE Program Manager copies of all subcontracts with M/WBE firms for Project work. Failure to provide the County with a copy of such subcontracts prior to commencement of the subcontracted work shall constitute a breach of Bidder's obligations and the County shall have the right, at its discretion, to order the work suspended until Bidder has complied with this provision. Any costs associated with or resulting from a suspension of work due to Bidder's failure to comply with this provision shall be Bidder's sole responsibility.

Any amendments to the Utilization Plan submitted by Bidder must be approved by the County's M/WBE Program Manager, including, without limitation, changes in the work to be subcontracted to MBE/WBE firms; changes in the use of MBE/WBE firms; and/or substitutions of MBE/WBE firms. Updated utilization plans shall be submitted for change orders over \$20,000.

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c. Disqualification of Proposals

Without limiting other grounds for the disqualification of bids on the basis of nonresponsiveness and/or nonresponsibility, the County may disqualify a bid as being nonresponsive and/or nonresponsible for failure to provide a timely MBE/WBE Utilization Plan, obtain a waiver, and/or remedy noted deficiencies in the Bidder's MBE/WBE Utilization Plan.

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d. Best Effort

Where it appears that a Bidder, after making its best efforts, cannot comply with M/WBE participation requirements, a Bidder may submit a written application with its bid requesting a partial or total waiver of such requirements, setting forth the reasons for the Bidder's inability to meet any or all of the participation requirements and an explanation of the efforts undertaken by the Bidder to obtain the required participation of certified businesses. The County's Director of DEI will evaluate utilization waiver applications to determine if the Bidder's efforts are sufficient to grant the waiver. Efforts to obtain M/WBE participation that are merely pro forma are

not best efforts, nor are efforts that, even if they are sincerely motivated, given all relevant circumstances, could not reasonably be expected to produce a level of M/WBE participation sufficient to meet the goal. In order to evaluate a Bidder's best efforts, the County's Director of DEI will consider the quality, quantity, and intensity of the different kinds of efforts that the Bidder has made. Below is a list of the types of actions which the County's Director of DEI will consider as part of the Bidder's best efforts to obtain M/WBE participation. It is not intended to be a mandatory checklist, nor is it intended to be exhaustive or exclusive. Other factors or types of efforts may be relevant in appropriate cases:

1. The Bidder shall conduct market research to identify small business contractors and suppliers and solicit, through all reasonable and available means, the interest of all certified M/WBEs that have the capability to perform the work of the contract. This may include attendance at pre-bid and business matchmaking meetings and events; advertising and/or written notices; posting of notices of sources sought and/or requests for proposals, written notices or emails to all certified M/WBEs listed in the appropriate directory of certified firms that specialize in the areas of work desired and which are located in the area or surrounding area.
2. The Bidder shall solicit this interest as early in the bidding process as practicable, to allow the M/WBEs to respond to the solicitation and submit a timely offer. The Bidder shall determine with certainty if the M/WBEs are interested by taking appropriate steps, including following up the initial solicitation with at least one additional solicitation via a different media. **The Bidder shall solicit quotes from qualified firms listed in the NYS M/WBE or Monroe County directory, regardless if they have their own database of M/WBE firms.** The Bidder shall keep records of efforts to solicit and negotiate with M/WBEs as evidence of best efforts. These records must include the firms contacted, method of contact, evidence of actions, and contact information of individuals that were sent outreach efforts. M/WBE firms should be given a minimum of 10 business days to submit quotes.
3. Selecting portions of the work to be performed by M/WBEs in order to increase the likelihood that the M/WBE goal will be achieved. This includes, where appropriate, either breaking down operations or combining like or related operations into logistically and

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economically feasible units to facilitate M/WBE participation, **even when the Bidder might prefer to perform these work items with its own forces.** This may include, where possible, establishing flexible time frames for performance and delivery schedules in a manner that encourages and facilitates M/WBE participation

4. Providing interested M/WBEs with adequate information on where and how to obtain the plans, specifications, and requirements of the contract in a timely manner to assist them in responding to a solicitation with their timely offer.
5. Negotiating in good faith with interested M/WBEs. It is the Bidder's responsibility to make a portion of the work available to M/WBE subcontractors and material suppliers and to select those portions of the work or material needs consistent with the available M/WBE subcontractors and material suppliers, to facilitate M/WBE participation. Evidence of such negotiation includes the names, addresses, and telephone numbers of M/WBEs that were considered; a description of the information provided regarding the plans and specifications for the work selected for subcontracting; and evidence as to why additional agreements could not be reached for M/WBEs to perform the work.
6. Additional Costs. The fact that there may be some additional costs involved in finding and using M/WBEs is not in itself sufficient reason for a Bidder's failure to meet the contract M/WBE goal, as long as such costs are reasonable. The ability or desire of a Bidder to perform the work of a contract with its own organization does not relieve the Bidder of the responsibility to make best efforts.
7. Replacement Firms. A Bidder's inability to find a replacement M/WBE at the original price is not sufficient to support a finding that best efforts have been made to replace the original M/WBE. The fact that the Bidder has the ability and/or desire to perform the contract work with its own forces does not relieve the Bidder of the obligation to make best efforts to find a replacement M/WBE, and it is not a sound basis for rejecting a prospective replacement M/WBE's reasonable quote.

8. Making efforts to assist interested M/WBEs in obtaining bonding, lines of credit or insurance as required by the Department or the Bidder.
9. Making efforts to assist interested M/WBEs in obtaining necessary equipment, supplies, materials, or related assistance.
10. The County's M/WBE Program Manager will provide assistance to potential bidders in connecting with M/WBEs.

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e. Payment Deductions

The Bidder's failure to perform in accordance with an approved M/WBE Utilization Plan shall constitute a default by the Bidder of the obligations under the Contract. In the event of such a default by Bidder, the County shall be entitled to deduct payment to Bidder in the percentage amount of the Contract which equals Bidder's shortfall from the M/WBE participation goals for this project. Such deductions by the County may begin with the Bidder's initial payment application, and will carry-over to subsequent payment applications until the total amount of the deductions equals the amount of the MBE/WBE participation goal shortfall. In the event the Bidder thereafter performs in accordance with an approved M/WBE Utilization Plan, the County will reimburse any payment deductions made pursuant to this provision. In the event the Bidder continues to fail to perform in accordance with an approved M/WBE Utilization Plan, the County will retain any payment deductions made pursuant to this provision and may seek any other rights and remedies available to County under law or in equity.

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f. Additional Requirements

1. M/WBE Supplier

M/WBE supplier participation shall be based on 50% of their contract amount. This participation shall be based on 100% of contract amount if said MBE/WBE installs the material they are supplying.

A supplier is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials or supplies required for the performance of the contract are bought, kept in stock, and regularly sold to the public in the usual course of business. It is a firm that engages in, as its principal business, and in its own name, the purchase and sale of the products in question. One who deals in bulk items such as steel, cement, gravel,

stone and petroleum products need not keep such products in stock, if it owns or operates distribution equipment.

2. M/WBE Trucking

No material costs will be credited towards a project's M/WBE goals. M/WBE trucking participation credit will be granted for the utilization of M/WBE owned or leased equipment only.

3. M/WBE Labor Only Subcontracts

The M/WBE subcontractor shall submit documentation of the relationship between its work force and the Bidder's work force. The Bidder and the M/WBE subcontractors shall submit copies of the certified payrolls to the County (or designee).

4. M/WBE Subcontract to Non-M/WBE

In order to allow management flexibility for M/WBE firms, the M/WBE firms are permitted to subcontract up to 49% of any single M/WBE subcontract to non-M/WBEs and still have the whole M/WBE subcontract count towards fulfillment of the M/WBE utilization requirement. If the M/WBE firm contracts out more than 49% of any single M/WBE subcontract to non-M/WBE firms, the Subcontract between the M/WBE and the prime Bidder shall no longer be considered a bona fide M/WBE subcontract.

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g. Conditions of Participation

M/WBE participation will be counted toward meeting the M/WBE contract goals, subject to all of the following conditions:

1. Commercially Useful Function

The Bidder is responsible for ensuring that M/WBEs working on the contract perform a commercially useful function. A M/WBE is considered to perform a commercially useful function when it is responsible for the execution of a distinct element of work on a contract and carries out his/her responsibilities by actually performing, managing, and supervising the work involved in accordance with normal industry practice (except where such practices are inconsistent with the M/WBE regulations). Arrangements that erode the ownership, control, or independence of the M/WBE or in any other way does not meet the commercially useful function requirement, the Bidder shall receive no credit toward the goal.

2. Work Force

The M/WBE firm must employ a work force (including administrative and clerical) separate and apart from that employed by the Bidder, other subcontractors on the project, or their affiliates. This does not preclude the employment by the M/WBE of an individual that has been previously employed by another firm involved in the Contract, provided that the individual was independently recruited by the M/WBE in accordance with customary industry practice. The routine transfer of work crews from another employer to the M/WBE shall not be allowed.

3. Supervision

All work performed by the M/WBE must be controlled and supervised by the M/WBE without duplication of supervisory personnel from the Bidder or other subcontractors. This does not preclude routine communication between the supervisory personnel of the M/WBE and other supervisors necessary to coordinate the work of the contract.

4. Equipment

M/WBE subcontractors may supplement their equipment by renting or leasing additional equipment in accordance with customary industry practice. However, no more than

50% of the equipment required to perform the work of the subcontractor may be obtained from the Bidder, other subcontractors on the project, or their affiliates. If the M/WBE obtains equipment from any of those sources, the County of Monroe shall receive from the M/WBE documentation demonstrating that similar equipment and terms could not be obtained at a lower cost from other customary sources of equipment. The required documentation shall include, but not be limited to, copies of the rental or leasing agreements, and the names, addresses, and terms quoted by other sources of equipment.

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h. Certification Process

The State of New York and Monroe County maintains a list of firms which have previously been certified as MBE's or WBE's as those terms are defined below.

1. Definitions

The following terms are defined as follows:

- (a) Minority Business Enterprise (MBE) - an independent business completely or substantially owned, controlled and operated by one or more members of specified minority groups or socially and economically disadvantaged individuals.
- (b) Women's Business Enterprise (WBE) - an independent business completely or substantially owned, controlled and operated by one or more women.
- (c) Independent - demonstrably free from any control, domination or undue influence by individuals or businesses who are not intended to be primary beneficiaries of the MBE/WBE program.
- (d) Business - an entity capable of performing a commercially useful function, including

management and supervision of the work.

- (e) Owned, controlled and operated - minority or women owners must: (a) have at least 51% of the beneficial ownership interest of the business; (b) share in the risks and profits commensurate with their percentage of ownership; (c) possess the power to direct or cause the direction of the management and policies of the business; (d) be actively involved in the day-to-day management and operation of the firm.
- (f) Specified minority groups - Black Americans, Hispanic Americans, Native Americans and Asian Pacific Americans.
- (g) Socially and economically disadvantaged - member of a group or an individual found to be socially and economically disadvantaged by the U.S. Small Business Administration under Section 8(a) of the Small Business Act, as amended (15 USC Section 637 (a)).

BP#0514-22
INSTALLATION OF UNDERGROUND CONDUIT, PULLBOXES, PEDESTALS
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SPECIFICATIONS

SECTION 203 - EXCAVATION AND EMBANKMENT

203-1 DESCRIPTION. This work shall consist of excavation, disposal, placement and compaction of all materials that are not provided for under another section of these Specifications, and shall be executed in conformance with payment lines, grades, thicknesses and typical sections specified in the contract documents.

203-1.01 Unclassified Excavation. Unclassified excavation shall consist of the excavation and disposal of all materials, of any description, encountered in the course of construction, unless otherwise specified in the contract. Estimated limits and descriptions of subsurface deposits and formations which may be shown on the plans, are supplied in accordance with §102-05, Subsurface Information.

203-1.02 Embankment. The embankment is the portion of a fill section situated between the embankment foundation and the subgrade surface, excluding any material placed under another section of these specifications.

203-1.03 Embankment Foundation. The embankment foundation is the surface upon which an embankment is constructed after all work required under §203-3.09 has been completed.

203-1.04 Subgrade Surface. The subgrade surface is the surface of the road section upon which the select materials and/or subbase are placed.

203-1.05 Subgrade Area. The subgrade area is that portion of an embankment situated above either of the following, but excluding any material placed under another section of these specifications.

- A.** A line located 0.6 m below the subgrade surface and extended to the intersection with the embankment side slopes, or
- B.** The embankment foundation, whichever is higher.

The material and compaction requirements for the subgrade area in embankments are found in §203-2.02 and §203-3.12, respectively.

In cut sections, the subgrade area is not defined except where undercut and backfill with a select material item is specified or ordered: in such cases, the payment lines for undercut work shall define the subgrade area.

203-1.06 Embankment Side Slope Area. The embankment side slope areas are those cross-sectional areas of an embankment situated outside of lines projected downward and outward on a one on one slope from the edges of the subgrade surface to their intersection with the embankment foundation, but excluding any portion lying within a subgrade area.

203-1.07 Topsoil. See Section 613, Topsoil.

203-1.08 Suitable Material. A material whose composition is satisfactory for use in embankment construction is a suitable material. The moisture content of the material has no bearing upon such designation. In general, any mineral (inorganic) soil, blasted or broken rock and similar materials of natural or man-made (i.e. recycled) origin, including mixtures thereof, are considered suitable materials. Determinations of whether a specific natural material is a suitable material shall be made by the COUNTY on the above basis.

SECTION 206 - TRENCH, CULVERT AND STRUCTURE EXCAVATION

206-1 DESCRIPTION

206-1.01 General. This work shall consist of the excavation of all materials and backfill or disposal of excavated material required for trenches, culverts, structures, conduit and direct burial cable not otherwise provided for in other sections of these specifications. All such excavation shall be unclassified excavation as defined in §203-1.01. The work shall also consist of all required protection necessary to ensure the safety of the workers and the public.

206-1.02 Trench and Culvert Excavation and Trench and Culvert Excavation - Original Grade (O.G.) The work specified under these items shall include the excavation for and backfill of all culverts, pipe lines, and other minor structures including but not limited to leaching basins, catch basins, field inlets, manholes and drop inlets.

206-1.03 Structure Excavation. The work specified under this item shall include the excavation for all bridge foundations, walls and other major structures and backfill of suitable excavated material if another item is not specified.

206-1.04 Conduit Excavation and Backfill including Surface Restoration. The work specified under this item shall include the excavation, necessary backfill and surface restoration required for conduits and direct burial cables.

206-1.05 Test Pits. The work specified under this item shall include the excavation and backfill of test pits at locations shown in the contract documents, or as directed by the COUNTY. Excavation and backfill methods, limits and equipment used shall be approved by the COUNTY. This work will not relieve the contractor of the responsibility to locate underground facilities as required under 16 NYCRR 753.

206-2 MATERIALS. (Not Specified).

206-3 CONSTRUCTION DETAILS

206-3.01 General. The appropriate construction details specified for "Excavation and Embankment" in §203-3.01 through and including §203-3.12, §203-3.15, and the requirements of "Legal Relations and Responsibility to Public" in Section 107 shall apply to the work specified in this section.

The excavation shall be dewatered and kept free from water, snow and ice when necessary.

Special care shall be taken not to disturb the bottom of the excavation, and not to remove the material at final grade until just before the structure is placed.

The Contractor shall be responsible at all times for carrying out of all excavation operations in a safe and prudent manner so that the workers, the public, and adjacent public and private property will be protected from unreasonable hazard. Details and requirements of this protection shall conform to Title 29 Code of Federal Regulations, Part 1926, Safety and Health Regulations for Construction (OSHA) and §107-05 Safety and Health Requirements Paragraph F and §107-08 Preservation of Property. All applicable local, State and/or Federal requirements shall be observed and necessary permits acquired by the Contractor.

If no support or protective system is shown in the plans or proposal, the Contractor may open the excavation with the sides sloped to a stable slope not steeper than that allowed by the Title 29 Code of Federal Regulations, Part 1926, Safety and Health Regulations for Construction (OSHA). Taking this option, however, does not relieve the Contractor of responsibilities as stated in this subsection. When the Contractor chooses this option, the materials used and method of construction outside the payment lines shall be in accordance with the requirements of this Section.

When excavation is required for the installation of conduit or direct burial cable, the Contractor shall notify the COUNTY upon completion of the excavation. No conduit or cable shall be placed in the excavation until the COUNTY has approved the depth and cross-section.

206-3.02 Replacement of Pavement Structure Courses. When the Contractor, in placing conduits, direct burial cable or utilities, excavates into the pavement, subgrade, subbase, or shoulder courses, such courses must be replaced in kind, character and condition, to maintain a uniform road section.

206-3.03 Disposal of Excavated Material. The provisions of §203-3.06 and/or §203-3.07 shall apply to all material excavated under this section which is not used as backfill.

206-3.04 Test Pits. The Contractor shall excavate and backfill test pits in order to determine existing underground utility type, size and/or condition where new utility connections to existing facilities are proposed. The Contractor shall excavate and backfill test pits in a manner approved by the COUNTY that prevents damage to wrappings, coatings or other protective coverings, such as by hand digging, vacuum excavation or similar non-destructive locating equipment. The limits of the excavation shall be those sufficient to determine existing utility type, size and/or condition.

206-4 METHOD OF MEASUREMENT

206-4.01 General. The quantity of excavation shall be the number of cubic meters of material computed from payment lines shown on the plans or the appropriate standard sheets, except where revised payment lines are established by the COUNTY prior to performing the work. Work performed beyond any designated payment line will not be included in the computation of quantities for the item involved.

206-4.02 Trench and Culvert Excavation. Unless otherwise shown or indicated on the contract plans, payment lines for excavation of pipe and culvert lines, and minor structures will be determined as follows:

A. Bottom Payment Line. The elevation of the bottom payment line shall be the invert elevation of the pipe, conduit, or culvert. For pipes, conduits, or culverts of nominal horizontal dimensions of 300 to 3700 mm, the width of the excavations at the bottom payment line shall be the nominal inside horizontal dimension of the pipe, conduit, or culvert plus 1.2 m, or three (3) times the nominal inside horizontal dimension, whichever is less; for pipes with a nominal horizontal dimension greater than 3700 mm the width will be as shown on the appropriate standard sheets or in the contract documents. For concrete pipe, twice the minimum wall thickness shall be added to the preceding.

B. Top Payment Line. Except when otherwise provided in the contract, the payment line in a cut section shall be the surface at the centerline of the pipe, culvert or conduit after completion of the general excavation and prior to excavation to place material paid for under another item of the contract; except that, when an undercut is made for unstable conditions, the payment line will be at the top of the undercut backfill. The payment line in a fill section shall be the ground surface prior to commencing work on the contract.

C. Side Payment Lines. The side payment lines of the excavation shall be vertical to the bottom of payment line, regardless of whether sheeting is or is not required or used.

For utility lines, exclusive of conduit and cable lines, of less than 300 mm diameter, the excavation width shall be the actual bottom width necessary, as determined by the COUNTY, to properly perform the installation work required, or 1 m, whichever is less.

D. Payment Lines for Minor Structures. Payment lines for minor structures shall be vertical from the bottom of the footing and shall extend out 0.6 m from the perimeter of the structure footing. The top payment line shall be the same as for (B) above.

206-4.03 Conduit Excavation and Backfill including Surface Restoration. The quantity of conduit and/or cable excavation and backfill including surface restoration for payment shall be the number of linear meters measured along the center of the conduit and/or cable placed, in accordance with the methods stated below.

Wherever a pair or group of conduits and/or cables are physically connected together, they shall be considered as a single conduit and/or cable.

A. Wherever conduit and/or cable in the same trench are physically separated laterally by 150 mm or more between centerlines, as shown on the plans or as directed by the COUNTY, the linear meter measurement shall be made along the center of each conduit and/or cable.

B. Wherever a pair or group of conduits and/or cable in the same trench are physically separated laterally by less than 150 mm between centerlines of adjacent conduit and/or cable, as shown on the plans or as directed by the COUNTY, the linear meter measurement for those conduits and/or cable shall be made along the center of that pair or group of conduit and/or cables.

206-4.04 Trench and Culvert Excavation - O.G. The provisions of §206-4.02 Trench and Culvert Excavation shall apply, except the top payment line shall be the existing ground surface at the centerline of the pipe, culvert or conduit prior to commencing work on the contract.

206-4.05 Test Pits. The quantity to be measured for payment will be the number of test holes excavated and backfilled in accordance with the contract documents.

206-5 BASIS OF PAYMENT

206-5.01 Trench, Culvert and Structure Excavation. The unit price bid for this work shall include the cost of labor, materials and equipment required to satisfactorily complete the work, including the costs of excavation, backfill (except select backfill paid for separately), disposal of excavated material, presplitting rock excavations where required, and keeping the site dewatered and free from earth, water, ice and snow when necessary.

The cost for necessary guarding and protection required to protect the public from open trenches and, that required for the protection to ensure the safety of the workers shall be included in the bid price for Trench, Culvert and Structure Excavation. Progress payments will be made after the excavation has been completed, and prior to the completion of other work included under this item, including but not limited to pumping, fencing and backfilling. Payment will be made, at the unit price bid, for 75% of the quantity excavated within the prescribed payment lines. The balance of the quantity excavated will be paid for upon proper completion of backfill placement.

If the Contractor chooses the slope layback option to satisfy OSHA, no extra payment will be made for the cost of any labor, equipment or material necessary to restore the area outside the payment lines shown on the plans.

206-5.02 Sheet piling, Cofferdams or Temporary Water Diversion Structures. Payment for Sheet piling, Cofferdams or Temporary Water Diversion Structures required by the plans, specifications, or ordered by the COUNTY in writing will be made in accordance with the appropriate item.

Where cofferdams are specified for structure excavation, the work required to keep the site free from earth, water, ice and snow shall be included in the item for cofferdams when necessary.

206-5.03 Replacement of Pavement Structure Courses. With exception of the Conduit Excavation and Backfill including Surface Restoration item, the work of replacing pavement, subcourses and shoulder courses shall be paid for and performed under the provisions of their respective items and subsections.

206-5.04 Conduit Excavation and Backfill including Surface Restoration. The unit price bid per linear meter for this work shall include the cost of furnishing all labor, materials and equipment necessary to excavate and backfill the trench and to replace any pavement, shoulder, and sidewalk courses, subcourses, curbs, drives, lawns and other top surfaces as required to complete the work.

206-5.05 Test Pits. The unit price bid for this work shall include the cost of furnishing all labor, materials and equipment necessary to excavate and backfill the test pit and replace any pavement, shoulder and sidewalk courses, subcourses, curbs, drives, lawns and other top surfaces required to complete the work.

Payment will be made under:

Item No.	Item	Pay Unit
206.01	Structure Excavation	Linear Feet
206.02	Trench and Culvert Excavation	Linear Feet
206.03	Conduit Excavation and Backfill including Surface Restoration	Feet
206.04	Trench and Culvert Excavation - O.G.	Linear Feet
206.05	Test Pit Excavation	Each

ITEM 206.10XXM TRAFFIC SIGNAL CONDUIT EXCAVATION AND RESTORATION

DESCRIPTION

This work shall consist of the excavation and necessary backfill and restoration required for traffic signal conduits.

MATERIALS

Materials for the restoration of top surfaces shall be as indicated on the plans and as approved by the COUNTY.

CONSTRUCTION DETAILS

The requirements of subsection 206-3 of the NYSDOT Standard Specifications, latest revision, shall apply with the following additions:

When the CONTRACTOR is required to excavate through pavement or sidewalk, he shall saw cut along neat lines as shown on the plans or as ordered by the COUNTY. An approved power saw, as approved by the COUNTY prior to actual use, shall be used to saw cut to the depth specified on the plans or as directed by the COUNTY.

The conduit excavation and backfill and the restoration of top surface courses shall also conform to the applicable notes and details shown on the plans.

METHOD OF MEASUREMENT

Subsection 206-4.03 of the NYSDOT Standard Specifications, latest revision, shall apply. Measurement shall be made in meters.

BASIS OF PAYMENT

The unit price bid per linear meter shall include the cost of furnishing all labor, materials and equipment necessary to complete the work including excavation, backfill, saw cutting and restoring as shown on the plans.

Any damage to existing pavement, sidewalk, curb or other facilities caused by the CONTRACTOR's operations shall be repaired by the CONTRACTOR to the satisfaction of the COUNTY at no additional cost to the COUNTY.

Payment will be made under:

<u>Item No.</u>	<u>Item</u>	<u>Pay Unit</u>
206.1015	Traffic Signal Conduit Excavation and Restoration in Asphalt Concrete	Linear Feet
206.1016	Traffic Signal Conduit Excavation and Restoration in Portland Cement Concrete	Linear Feet
206.1017	Traffic Signal Conduit Excavation and Restoration in Composite Pavement	Linear Feet
206.1018	Traffic Signal Conduit Excavation and Restoration in Concrete Sidewalk and Driveways	Linear Feet
206.1019	Traffic Signal Conduit Excavation and Restoration in Asphalt Sidewalk and Driveways	Linear Feet
206.1020	Traffic Signal Conduit Excavation and Restoration in Grass and Unpaved Areas	Linear Feet

Section 500

PORTLAND CEMENT CONCRETE

SECTION 501 - PORTLAND CEMENT CONCRETE - GENERAL

501-1 DESCRIPTION. These general requirements apply to concrete furnished for pavement, structures and incidental construction. Additional requirements may be specified in the contract item. All testing will be done in accordance with Department procedures.

501-2 MATERIALS

501-2.01 Composition of Mixtures. The Contractor shall inform the Regional Director, in writing, of the materials sources prior to mixing concrete. Proportion and mix portland cement, fine aggregate, coarse aggregate, water, admixtures, pozzolan and /or microsilica to create a homogeneous portland cement concrete mixture.

Produce the class of concrete indicated in the contract documents. However, substitutions may be made according to Table 501-1, Concrete Class Options.

TABLE 501-1 CONCRETE CLASS OPTIONS	
Concrete Class Specified	Allowable Class Options
A	C, E, F ¹ , H or HP
C	F ¹
D	DP
DP	None
E	F ¹ or H or HP
H	HP
F, G, GG, or HP	None
I	J
J	None

NOTES:

1. Regional Director approval required for pavement applications, including approach slabs. D.C.E.S. approval required for structural or deck applications, excluding approach slabs. Class F may not be used in mass placements, or as a substitute for Class A in Sign Structure, Signal Pole, and Luminary foundations.

501-2.02 Material Requirements

Portland Cement	701-01	Fly Ash	711-10
Blended Portland Cement	701-03	Microsilica	711-11
Coarse Aggregates	703-02	GGBFS *	711-12
Concrete Sand	703-07	Water	712-01
Admixtures	711-08		

* Ground Granulated Blast Furnace Slag

A. Cementitious Materials. Use only cementitious materials meeting §701-01 whose brand name and type appears on the Department's Approved List. Cementitious materials stored over the winter at concrete producing facilities will be retested for specification compliance. All contaminated, or hardened cementitious material will be rejected and not used in Department work.

The Department will consider requests to evaluate alternate cements, pozzolan or microsilica. The use of alternatives is subject to approval by the Director, Materials Bureau.

1. Portland Cement. Use Type I, Type II or Type I/II cement, except as indicated below or in the contract documents.

Type I cement is restricted to fresh water and low sulfate soil areas. Use Type II or Type I/II cement in high sulfate, and salt water areas. Salt water areas are defined as; The Hudson River south of the Newburg-Beacon Bridge, and all other tidal / sea water spray areas of New York State. Type I/II cement is defined as a cement that meets the requirements of both Type I and Type II cements. High alkali cement is defined as any portland cement having an alkali content in excess of 0.70% as denoted on the Approved List. High alkali cement use is restricted, unless otherwise approved by the Regional Director, to mixtures that do not contain reactive aggregates (as denoted in the Department's List of Approved Sources of Aggregates).

2. Blended Portland Cement. Blended cements meeting the requirements of 701-03, may be used as follows:

a. *Type IP or SM.* Blended Portland Cement (Type IP or Type SM), may be used in all classes of concrete listed in Table 501-03, Concrete Mixtures, except Class F. Type IP or SM blended cement replaces the portland cement/pozzolan portion of the designed mix in Class DP, G, GG, or HP concrete. When using Type IP or SM blended cement in Class DP and HP concrete, an addition of Microsilica §711-11 is required.

b. *Type SF.* Blended Portland Cement (Type SF), may be used in Class DP or HP concrete. Type SF blended cement replaces the portland cement/microsilica portion of the designed mix in Class DP or HP concrete. When using Type SF blended cement in Class DP or HP concrete, an addition of Fly Ash, §711-10, or Ground Granulated Blast Furnace Slag (GGBFS), §711-12, is required.

c. *Ternary Blend.* Blended Portland Cement (Ternary Blend), may be used in Class DP or HP concrete. Ternary blend cement in Class DP or HP concrete replaces the entire portland cement/pozzolan/microsilica portion of the designed mix. No subsequent addition of cementitious material is required or allowed.

3. Pozzolan. Pozzolan is defined as Fly Ash, §711-10, or Ground Granulated Blast-Furnace Slag (GGBFS), §711-12. All classes of concrete, except Class F, allow or require a pozzolan as a partial replacement for portland cement. Classes DP, G, GG, and HP concrete require the use of a pozzolan.

4. Microsilica. Class DP and HP concrete require Microsilica, §711-11.

SECTION 608 - SIDEWALKS, DRIVEWAYS AND BICYCLE PATHS

608-1 DESCRIPTION. This work shall consist of the construction of either a Portland Cement concrete sidewalk, an asphalt concrete sidewalk, an asphalt concrete driveway, bicycle paths, or furnishing and placing precast concrete paving, brick paving or grouted stone block paving. All work shall be in accordance with these specifications and in reasonably close conformity with the lines and grades shown on the plans or established by the COUNTY.

608-2 MATERIALS. Materials shall meet the requirements specified in the following subsections of section 700--Materials:

Portland Cement	701-01
Bituminous Materials (As specified)	702-00
Asphalt Cement for Paving	702-02 or 702-03
Fine Aggregates	703-01
Coarse Aggregates	703-02
Mortar Sand	703-03
Cushion Sand	703-06
Concrete Sand	703-07
Mineral Filler	703-08
Brick Pavers	704-08
Stone Blocks	704-09
Precast Concrete Pavers	704-13
Premoulded Resilient Joint Filler	705-07
Masonry Mortar	705-21
Wire Fabric For Concrete Reinforcement	709-02
Water	712-01

608-2.01 Portland Cement Concrete Sidewalk and Driveways. The material requirements and composition shall comply with the specifications for Class A concrete in §501-2 under "Portland Cement Concrete--General". Concrete shall be proportioned in accordance with the aggregate weights specified for Class A concrete in Table 501-3, Concrete Proportions.

608-2.02 Asphalt Concrete Sidewalks, Driveways, and Bicycle Paths. The mixture requirements for these items shall either be 9.5 mm or 19.0 mm mixtures. These mixtures shall be designed for <0.3 million ESALs and produced in accordance to Section 401 using coarse aggregate Type F9. The number of courses and course thicknesses shall be as given in Table 608 - 1, Hot Mix Asphalt Composition.

TABLE 608-1
HOT MIX ASPHALT COMPOSITION

Total Paved Thickness	9.5 mm Mix	19.0 mm Mix	Number of Courses
40 mm	40 mm		1
50 mm	50 mm		1
80+ mm	40 mm	40+ mm	2+

Notes:

1. For the 19.0 mm mixture, the maximum thickness that can be placed in one pass is 75 mm.

2. A course shall consist of one or more separate lifts of hot mix asphalt, as directed by the COUNTY, to attain the indicated thickness.

ITEM 686.61M ADJUST FRAMES AND COVERS (PULL BOXES)

DESCRIPTION

Under this item the CONTRACTOR shall adjust existing pullbox frames to match new grades as ordered by the COUNTY.

MATERIAL AND METHODS

The CONTRACTOR shall adjust existing pullbox to new grades. The CONTRACTOR shall repair and perform whatever work related to the pullbox as necessary in order to establish an acceptable repair and adjustment.

MEASUREMENT AND PAYMENT

Payment will be per unit bid price and shall include the cost of excavation, the adjustment, any repairs and all the material, equipment and labor necessary to complete the work.

Payment will be made under:

<u>Item No.</u>	<u>Item</u>	<u>Pay Unit</u>
686.61M	Adjust Frames and Covers (Pull Boxes)	EA

ITEM 686.62M REMOVE TRAFFIC SIGNAL PULLBOXES

DESCRIPTION

Under this item the CONTRACTOR shall remove pullboxes as ordered by the COUNTY.

MATERIALS

None specified.

CONSTRUCTION DETAILS

The CONTRACTOR shall remove pull boxes in accordance with the specifications, plans and as ordered by the COUNTY. The pullboxes shall become the property of the CONTRACTOR and be removed from the site.

The CONTRACTOR shall remove the pullboxes located in the roadway area by sawcutting the pavement 600mm from the edge of the existing frame. The entire pullbox shall be removed.

The CONTRACTOR shall backfill the excavation in accordance with NYSDOT Standard Specifications Section 680-3.09, latest revision, to the top of the subgrade. Final restoration shall be in accordance with the plans and performed under other items in the contract.

The CONTRACTOR shall remove pullboxes located in the sidewalk by sawcutting the sidewalk 600mm away from the pullbox frame or by breaking the sidewalk at score lines and removing entire sidewalk flags. The CONTRACTOR shall backfill the excavation in accordance with NYSDOT Standard Specifications, Section 680-3.09, latest revision. Final restoration shall be in accordance with the plans.

METHOD OF MEASUREMENT

The quantity shall be measured as the number of pullboxes removed in accordance with the plans, specifications and orders of the COUNTY.

BASIS OF PAYMENT

The unit price bid for each pullbox removed shall cover the cost of disposal, all labor, backfill and excavation material and equipment necessary. Payment for sawcutting, backfilling with subbase material and restoration shall be included under other items.

Payment will be made under:

<u>Item No.</u>	<u>Item</u>	<u>Pay Unit</u>
686.62M	Remove Traffic Signal Pullboxes	EA

ITEM 686.5099M CONCRETE BASE REMOVAL (POLE AND CONTROLLER)

DESCRIPTION

Under this item the CONTRACTOR shall remove existing anchor bolt type pole bases and controller bases that are no longer required, and restore the area disturbed by the base removal.

MATERIALS

All materials used for restoration shall conform to the appropriate section of the NYSDOT Standard Construction and Material Specifications, latest revision, and as ordered by the COUNTY.

CONSTRUCTION DETAILS

The CONTRACTOR shall remove the entire concrete base, or remove the top 550 mm to 600 mm of the concrete and anchor bolts. The CONTRACTOR shall backfill and restore the entire area disturbed by the base removal to an elevation level with existing ground. The restored surface area shall be replaced with material that matches existing adjacent surfaces. Sub-base course backfill material shall be consistent with the type of material used to restore the surface area.

METHOD OF MEASUREMENT

This item will be measured for payment as the number of each concrete base removed in accordance with the contract documents and as directed by the COUNTY.

BASIS OF PAYMENT

The unit price bid for this item shall include the furnishing of all labor, materials, tools, equipment, and incidentals as necessary to complete the work, including excavation, removal and disposal of bases, and all materials for backfill, and to match adjacent surface area.

Payment will be made under:

<u>Item No.</u>	<u>Item</u>	<u>Pay Unit</u>
686.5099M	Concrete Base Removal (Pole and Controller)	EA

ITEM C686.520xxx CONDUIT PVC SCHEDULE 80

DESCRIPTION

Work under this item shall include furnishing and installing new PVC Schedule 80 conduit as shown on the plans, or as directed by the COUNTY.

MATERIAL AND METHODS

Conduit and fittings are to be Schedule 80, rigid, extra-heavy wall polyvinyl chloride (PVC) conduit as specified by Underwriter Laboratories Standard UL-651. The conduit is to meet the specifications included in the NEMA Standard Specification TC-2 for electrical plastic conduit EPC-80.

In the case of conflicting test requirements, the more stringent of the test requirements is to be met.

The conduit shall be placed within the trench and shall have a minimum cover of at least 18 inches, except under roadways where the minimum cover shall be 24 inches, unless specified otherwise on the plans. Conduit installed under roadways shall extend at least 1 foot behind the face of the curb, or as approved by the COUNTY. The conduit shall be laid on a uniform grade to allow any condensation to drain to pull boxes.

The conduit fittings shall be assembled in the trench in accordance with the manufacturer's latest instructions and as approved by the COUNTY. The joints shall be cemented in accordance with Federal Specification W-C-1094A and Underwriter Laboratories Standard UL-514. The joint cement solvent shall meet the requirements of ASTM D2564, or alternately be of the type recommended by the conduit manufacturer. Warning tape shall be placed in the open cut trenches approximately 6 inches above the conduit.

All bends in the conduit shall be made without kinking, flattening, or appreciably reducing the internal diameter of the conduit.

All conduit connected to pullboxes and handholes shall be installed flush with the inside wall and a minimum of 3 inches above the bottom of the floor.

All conduit shall be tested for clear bore and correct installation, using a mandrel, brush and snake, before the installation will be accepted. The mandrel shall be turned approximately 85 percent of the internal diameter of the conduit to be tested. Two short wire brushes shall be included in the mandrel assembly. Snaking of conduits shall be done in the presence of the COUNTY. All conduit which rejects the mandrel shall be cleared. After providing a 500 pound nylon pull cord in the conduit, all empty conduit and duct openings shall be plugged with a tapered hard rubber plug. At least 3 feet of extra rope shall be left at each end.

BASIS OF ACCEPTANCE

The conduit shall be accepted upon the basis of the manufacturer's certification that it meets the requirements of this specification, as well as being Underwriters Laboratory Listed. Fittings, couplings, and solvent cement shall be accepted upon the manufacturer's certification that they meet the requirements of this specification.

METHOD OF MEASUREMENT

The quantity to be measured for payment shall be the number of lineal feet of conduit installed in accordance with the contract documents and as directed by the COUNTY.

BASIS OF PAYMENT

The unit bid price for this item shall include the cost of furnishing and installing new conduit, fittings, warning tape, pull cord, couplings and insulating bushings; cementing of the joints and fittings; testing for clear bore and correct installation; connecting conduit to handholes, pullboxes, existing conduit, traffic signal pole foundations, and other electrical equipment. Payment for trenching, boring, and surface restoration shall be included under other items.

Payment will be made under:

<u>Item No.</u>	<u>Item</u>	<u>Pay Unit</u>
C686.520603	Conduit PVC Schedule 80 - 1" Dia	L.F.
C686.520606	Conduit PVC Schedule 80 - 2" Dia	L.F.
C686.520608	Conduit PVC Schedule 80 - 3" Dia	L.F.
C686.520610	Conduit PVC Schedule 80 - 4" Dia	L.F.

DESCRIPTION

Under this item, the CONTRACTOR shall rod and clean existing conduit that has been designated to house the communication cable, to make certain that the conduit is clean and satisfactory for the installation of cable. The locations of the designated conduit is to be furnished by the COUNTY.

MATERIALS

None Specified

CONSTRUCTION DETAILS

A steel mandrel no less than 2 inches long and having a diameter no less than 70 percent of the inside diameter of the conduit shall be passed through the entire run of conduit from one end to the other between manholes and/or pullboxes, without binding.

The CONTRACTOR will be required under this item to attempt to clear any obstruction that will not allow this passage of the rod or mandrel. Only those methods, approved by the owning agency or utility company, shall be employed to clear such obstruction. If it is not possible to clear an obstruction by the methods approved above, the conduit will be repaired under other pay items.

After the conduit has been rodded and cleaned, the CONTRACTOR shall furnish and install a No. 10AWG galvanized steel or nylon fish in the conduit from one end to the other, leaving no less than one foot of extra wire in each manhole or pullbox. The galvanized wire shall be grounded to a suitable grounding device at each end of the conduit.

The CONTRACTOR will be required to conform to the provisions of the General Conditions and Special Conditions - Location of Existing Utilities of the contract proposal, while performing work on this item.

METHOD OF MEASUREMENT

This item will be measured for payment as the number of linear feet of conduit actually rodded and cleaned in accordance with the Contract Documents and to the satisfaction of the COUNTY.

BASIS OF PAYMENT

Payment for the amount of conduit rodded and cleaned will be made upon approval of the COUNTY, for the measured quantity at the contract price per linear foot; which price shall be full compensation for furnishing, transporting, installing and adjusting all materials; pumping water from manholes and pullboxes; and for all labor, tools, materials, equipment and incidentals necessary to complete the work in accordance with the plans and specifications.

Payment shall also include maintaining the cleaned and rodded conduit in such condition until after the installation of cable.

Payment will be made under:

<u>Item No.</u>	<u>Item</u>	<u>Pay Unit</u>
C686.9956	Rod and Clean Conduit	L.F.

ITEM 680.94350010 – EMBEDDED WOOD UTILITY POLE - 35 FEET

ITEM 680.94400010 – EMBEDDED WOOD UTILITY POLE – 40 FEET

DESCRIPTION:

Under this item, the Contractor shall furnish and install a wood utility pole suitable for attachment of power source risers, temporary traffic signal span wires, and ancillary equipment.

MATERIALS:

The pole shall be Southern Pine and meet the requirements of ANSI O5.01 for Class 4 utility type poles. The pole shall be given a preservative treatment using a water-borne preservative in accordance with subsection 708-31 of the New York State Standard Specifications.

CONSTRUCTION DETAILS:

The pole shall be erected plumb in an augured hole of sufficient depth to allow for a minimum of 6 ½ ft. embedment. The area around the pole shall be backfilled with suitable material and thoroughly compacted to the satisfaction of the COUNTY. The Contractor shall restore, in kind, all areas which were disturbed by the pole installation operation. Poles supporting span wires shall be raked to appear plumb after loaded by span and guy wires if specified.

METHOD OF MEASUREMENT:

The work will be measured as the number of embedded wood utility poles furnished and installed in accordance with the Contract Documents and AOB E.

BASIS OF PAYMENT

The unit prices bid shall include costs for all labor, materials and equipment necessary to satisfactorily complete the work including: excavation, pole installation, backfill and restoration. Guy assemblies, when required, in conjunction with the utility pole installation will be furnished and installed under separate contract items. Removal of temporary wood span poles, when required, will be paid separately under the item "Remove Traffic Signal Equipment."

ITEM C686.79XX**SIGNAL EQUIPMENT REMOVAL****DESCRIPTION**

This work shall consist of removing traffic signal equipment as shown on the plans and as ordered by the COUNTY.

CONSTRUCTION DETAILS

The Contractor shall carefully remove existing vehicle signal heads, mast arms, signal poles, pedestrian signal heads, pedestrian buttons and signs, sonic detectors, controllers, controller cabinets, span wires and signal cable as shown on the plans.

The removed equipment shall be carefully stored until it can be returned to Monroe County. Contact Ernie Fattore (753-7772) to arrange for material drop off.

Care shall be exercised in removing and salvaging electrical equipment so that it will remain in its original form and existing condition whenever possible. The Contractor will be required to replace at his own expense any traffic signal equipment which is determined by the COUNTY to have been damaged or destroyed by the Contractor's operations.

METHOD OF MEASUREMENT

Payment for this work shall be made by the number of mast arms and poles removed in accordance with the plans and specifications.

Payment will be made under:

<u>Item No.</u>	<u>Item</u>	<u>Pay Unit</u>
C686.7902	Removal of Traffic Signal Mast Arm	EA
C686.7903	Removal of Traffic Signal Pole Embedded	EA
C686.7904	Removal of Traffic Signal Pole Anchor Base	EA
C686.7905	Removal of Wood Poles	EA

ITEM C689.85 MAST ARM (TRAFFIC SIGNAL), VARIABLE LENGTH (FURNISHED)

DESCRIPTION

Under this item the CONTRACTOR shall install steel mast arms for traffic signals as shown on the plans and/or as directed by the COUNTY.

MATERIAL

The mast arms will be furnished by the COUNTY to the CONTRACTOR for installation.

CONSTRUCTION DETAILS

The requirements of NYSDOT Standard Specifications, Section 680-3.11, latest revision, shall apply.

METHOD OF MEASUREMENT

Payment for this work shall be made by the number of mast arms installed in accordance with the plans and specifications.

BASIS OF PAYMENT

The unit price bid for each shall include all labor, materials and equipment necessary to complete the work.

Payment will be made under:

<u>Item No.</u>	<u>Item</u>	<u>Pay Unit</u>
C689.85	Mast Arm (Traffic Signal), Variable Length (Furnished)	EA

ITEM C689.8200XX**MAST ARM TRAFFIC SIGNAL POLE (FURNISHED)****DESCRIPTION**

Under this item the CONTRACTOR shall install galvanized steel mast arm traffic signal poles as shown on the plans and/or as directed by the COUNTY.

MATERIALS

The poles will be furnished by the COUNTY to the CONTRACTOR for installation.

CONSTRUCTION DETAILS

The requirements of Section 680-3.10 through 680-3.12 of the NYSDOT Standard Specifications, latest revision, shall apply.

METHOD OF MEASUREMENT

Payment for this work shall be measured by the number of poles installed in accordance with the plans and specifications.

BASIS OF PAYMENT

The unit price bid per each shall include all labor, materials and equipment necessary to complete the work. Payment for excavation, backfill and concrete will be paid for under their respective items.

Payment will be made under:

<u>Item No.</u>	<u>Item</u>	<u>Pay Unit</u>
C689.820030	Mast Arm Traffic Signal Pole – Anchor Base (22') (Furnished)	Each
C689.820031	Mast Arm Traffic Signal Pole – Combination – Anchor Base (30') (Furnished)	Each

ITEM C689.9942

STEEL SPAN POLE – ANCHOR BOLT BASE (FURNISHED)

DESCRIPTION

Under this item, the CONTRACTOR shall install furnished steel span poles as shown on the plans and/or as ordered by the COUNTY.

MATERIALS AND METHOD

The poles and all component parts shall be of steel construction and shall be approved standard poles in accordance with NYSDOT Standard specifications, latest revision.

Cover casting or leaf covers shall be attached to the poles to conceal the anchor rods and nuts.

Poles shall have a Simplex Fitting (two bolt type) positioned as shown on the plans or as directed by the COUNTY.

BASIS OF PAYMENT

The quantity to be paid for under this item will be the number of poles placed in accordance with the plans and specifications and as directed by the COUNTY.

The price bid for these items shall include all work necessary to complete the installation.

Payment will be made under:

<u>Item No.</u>	<u>Item</u>	<u>Pay Unit</u>
C689.9942	Steel Span Pole – Anchor Bolt Base (Furnished)	EA

BP #0514-22
INSTALLATION OF UNDERGROUND CONDUIT, PULLBOXES, PEDESTALS AND APPURTENANCES
UNIT PRICE SHEET (as of 8/1/2022)

ITEM #	DESCRIPTION	UNIT PRICE
203.01	Unclassified Excavation & Disposal	\$188.90
206.1015	Conduit Excavation & Restoration In Asphalt Concrete	\$169.45
206.1016	Conduit Excavation & Restoration In Portland Cement Concrete	\$132.45
206.1017	Conduit Excavation & Restoration In Composite Pavement	\$148.48
206.1018	Conduit Excavation & Restoration In Concrete Sidewalk and Driveways	\$220.50
206.1019	Conduit Excavation & Restoration In Asphalt Sidewalk and Driveways	\$128.10
206.1020	Conduit Excavation & Restoration In Grass and Unpaved Areas	\$32.40
501.01	Portland Cement Concrete, Class A	\$260.00
680.01	Concrete Sidewalks & Driveways	\$1585.00
680.5001	Signal Pole Excavation & Concrete Foundation	\$1054.00
680.5002	Concrete Base For Signal Cabinet	\$1620.00
680.510301	24" Circular Pullbox (600mm)	\$1640.00
680.510401	30" Circular Pullbox (750mm)	\$1850.00
680.520103	Conduit Rigid Steel 1"	\$11.80
680.520106	Conduit Rigid Steel 2"	\$20.78
680.520108	Conduit Rigid Steel 3"	\$45.26
680.52011	Conduit Rigid Steel 4"	\$60.45
680.53	Conduit Jacking Or Boring	\$75.50
680.700603	Steel Riser Assembly 1"	\$315.00
680.700606	Steel Riser Assembly 2"	\$590.00
680.700608	Steel Riser Assembly 3"	\$1048.00

BP #0514-22
INSTALLATION OF UNDERGROUND CONDUIT, PULLBOXES, PEDESTALS AND APPURTENANCES
UNIT PRICE SHEET (as of 8/1/2022)

ITEM #	DESCRIPTION	UNIT PRICE
680.700610	Steel Riser Assembly 4"	\$1235.00
680.94350010	Installation of 35' Wood Pole	\$1070.00
680.94400010	Installation of 40' Wood Pole	\$1194.00
686.5099	Concrete Base Removal	\$688.00
686.520603	Conduit PVC Schedule 80 - 1"	\$5.85
686.520606	Conduit PVC Schedule 80 - 2"	\$10.53
686.520608	Conduit PVC Schedule 80 - 3"	\$17.24
686.520610	Conduit PVC Schedule 80 - 4"	\$25.47
686.61	Adjust Pullbox Frame & Cover	\$1186.00
686.62	Remove Traffic Signal Pullboxes	\$662.00
686.7902	Remove Traffic Signal Mast Arm	\$1029.00
686.7903	Remove Traffic Signal Pole Embedded	\$1078.00
686.7904	Remove Traffic Signal Pole Anchor Base	\$935.00
686.7905	Removal of Wood Pole	\$860.00
686.9956	Rod & Clean Duct	\$3.00
689.82003	Mast Arm Traffic Signal Pole - Anchor Base (22') (Furnished)	\$1078.00
689.820031	Mast Arm Traffic Signal Pole - Combination-Anchor Base (30') (Furnished)	\$1235.00
689.85	Mast Arm (Traffic Signal), Variable Length (Furnished)	\$1030.00
689.9942	Steel Span Pole - Anchor Bolt Base (Furnished)	\$1070.00

COMPLIANCE WITH FEDERAL SINGLE AUDIT ACT

In the event the Contractor is a recipient through this contract, directly or indirectly of any funds of or from the United States Government, Contractor agrees to comply fully with the terms and requirements of Federal Single Audit Act [Title 31 United States Code, Chapter 75], as amended from time to time. The Contractor shall comply with all requirements stated in Federal Office of Management and Budget Circulars A-102, A-110 and A-133 and such other circulars, interpretations, opinions, rules or regulations that may be issued in connection with the Federal Single Audit Act.

If on a cumulative basis the Contractor expends Seven Hundred Fifty Thousand and no/100 Dollars (\$750,000.00) or more in federal funds in any fiscal year, it shall cause to have a single audit conducted, the Data Collection Form (defined in Federal Office of Management and Budget Circular A-133) shall be submitted to the County; however, if there are findings or questioned costs related to the program that is federally funded by the County, the Contractor shall submit the complete reporting package (defined in Federal Office of Management and Budget Circular A-133) to the County.

If on a cumulative basis the Contractor expends less than Seven Hundred Fifty Thousand and no/100 Dollars (\$750,000.00) in federal funds in any fiscal year, it shall retain all documents relating to the federal programs for three (3) years after the close of the Contractor's fiscal year in which any payment was received from such federal programs.

All required documents must be submitted within nine (9) months of the close of the Contractor's fiscal year end to:

Monroe County Internal Audit Unit
304 County Office Building
39 West Main Street
Rochester, New York 14614

The Contractor shall, upon request of the County, provide the County such documentation, records, information and data and response to such inquiries as the County may deem necessary or appropriate and shall fully cooperate with internal and/or independent auditors designated by the County and permit such auditors to have access to, examine and copy all records, documents, reports and financial statements as the County deems necessary to assure or monitor payments to the Contractor under this contract.

The County's right of inspection and audit pursuant to this contract shall survive the payment of monies due to Contractor and shall remain in full force and effect for a period of three (3) years after the close of the Contractor's fiscal year in which any funds or payment was received from the County under this contract.