

TOWN OF WATERTOWN, CONNECTICUT

NOTICE OF BID

**Watertown Dog Park Fencing
Watertown Parks & Recreation Department**

Sealed bids are invited and will be received by the Purchasing Agent of the Town of Watertown at the office of the Purchasing Agent, Watertown Town Hall, 61 Echo Lake Road, Watertown, Connecticut, until **11:00 a.m., September 16, 2021**, at which time and place they will be publicly opened and read aloud for furnishing chain link fencing and wood guard rail for the Watertown Dog Park, 1363 Main Street, Watertown, CT.

The Information for Bidders, Form of Bid, Plans, Specifications, and other contract documents may be obtained or examined at the office of the Purchasing Agent, Watertown Town Hall, 61 Echo Lake Road, Watertown, Connecticut 06795 or by accessing the Town of Watertown's website at <http://www.watertownct.org>. Proposals must be submitted on the forms provided and in a sealed envelope plainly marked "**Bid – Watertown Dog Park Fencing**"

To receive consideration, bids must be in the hands of the Purchasing Agent or her authorized representative no later than the day and hour mentioned above.

The Purchasing Agent reserves the right to accept or reject any or all bids; to waive any informality; or to accept any bid deemed in the best interests of the Town of Watertown.

The Town of Watertown reserves the right to take into account the residency of bidders within the Town of Watertown and/or the location of the bidder's business within the Town of Watertown in awarding this bid.

All bids will be considered valid for a period of sixty (60) days.

Donna Ford
Purchasing Agent
Town of Watertown

INFORMATION FOR BIDDERS

TOWN OF WATERTOWN, CONNECTICUT 06795

Watertown Dog Park Fencing Watertown Parks & Recreation Department

BID OPENING: 11:00 a.m., Thursday, September 16, 2021

PROPOSALS RECEIVED

All bids must be in a sealed envelope and received prior to **11:00 a.m., September, 16, 2021**, at the office of the Purchasing Agent, Watertown Town Hall, 61 Echo Lake Road, Watertown, Connecticut 06795.

PREPARATION OF PROPOSALS

Proposals must be made upon forms contained herein. The blank spaces in the Proposal must be filled in correctly where indicated. The Bidder must state the prices for which he proposes to do each item of the work contemplated. In case of discrepancy where both words and the numerals are requested, the words shall govern. Ditto marks are not considered writing or printing and shall not be used. The Bidder shall sign his Proposal correctly. If the Proposal is made by an individual, his name, post office address and telephone number must be shown. If made by a firm, partnership, or corporation, the Proposal must be signed by an official of the firm, partnership, or corporation authorized to sign contracts, and must show the post office address and telephone number of the firm, partnership, or corporation. Failure to do so may disqualify the bid.

Each bid must be submitted in a sealed envelope bearing on the outside the name of the Bidder, post office address, and name of the project for which the bid is submitted. If forwarded by mail, the sealed envelope containing the bid must be enclosed in another envelope addressed to: The Purchasing Agent, Watertown Town Hall, 61 Echo Lake Road, Watertown, CT 06795.

All information shall be entered in ink or by typewriter. Mistakes may be crossed out and corrections inserted before submission of your bid. The person signing the bid shall initial corrections in ink.

Corrections and/or modifications received after the closing time specified will not be accepted.

SUBMISSION OF PROPOSALS

All proposals and literature shall be submitted **IN DUPLICATE** on the proposal form, which is a part of these specifications.

Descriptive literature containing complete specifications must accompany each bid. If a bidder wishes to furnish additional information, more sheets may be added.

Adobe Acrobat® Reader is required to view electronic documents on-line. If you do not have Adobe Acrobat® Reader, you may download it for free from Adobe at <http://www.adobe.com/products/acrobat/readstep.html>.

Response summaries will be available online at <http://www.watertownct.org> on the day of the bid opening.

Responses delivered via fax are received subject to the following qualifications and limitations:

1. The Town is not responsible for the confidentiality of the information transmitted.
2. The Town cannot guarantee that its fax equipment will be operational and able to receive transmittals by a particular time and date. It is the Bidder's responsibility to ensure that quotations are received in their entirety and on time at the required location. It is recommended that vendors be advised to call immediately after transmitting a document electronically to confirm complete and accurate receipt by the Town. The Town assumes no liability in the event that a bidder's electronic transmission is not received by the Town in a timely fashion, or is not received either in its entirety or error-free.
3. Bids transmitted electronically which have a bond requirement are subject to the same submittal requirements as those responses delivered via traditional means, such as mail or hand delivery, or as otherwise stipulated by appropriate authority.

INCURRING COSTS

The Town of Watertown is not liable for any cost incurred for the preparation of proposals or submission of samples by the firms submitting proposals for the work requested in this bid document or request for proposals.

FAMILIARITY WITH THE WORK

Each bidder is considered to have examined the work to fully acquaint himself with the exact existing conditions relating to the work and has fully informed himself as to the work involved and the difficulties and restrictions attending the performance of this bid. Failure to do so will not relieve a bidder of his obligation to furnish all labor, equipment and materials necessary to carry out the work for the consideration set forth in this bid. The submission of a bid will be considered as conclusive evidence that the bidder has made such examination.

Where exploration or inspection data is shown on the Plans and/or specifications or made available to the Bidder, it is understood that such data were obtained in the usual manner and with reasonable care and are to be interpreted and used as the Bidder sees fit. There is no expressed or implied agreement that the data has been correctly indicated, and the Bidder is cautioned to, take into account that conditions affecting the work may differ from those indicated.

CONSIDERATION OF PRIOR SERVICE

Previous performance, quality of service and merchandise will be considered.

ADDENDA AND INTERPRETATIONS & ALTERNATE PROPOSALS

Addenda information will be available online at <http://www.watertownct.org>. Adobe Acrobat® Reader may be required to view this document. We strongly suggest that you check for any addenda a minimum of forty-eight hours in advance of the bid deadline.

At the time of the opening of bids each bidder will be presumed to have inspected the work and to have read and to be thoroughly familiar with all of the Contract Documents (including all addenda). The failure or omission of any bidder to receive or examine any form, instruction or document shall in no way relieve any bidder from any obligation in respect to his bid.

If any person contemplating submitting a proposal is in doubt as to the true meaning of any part of these specifications, he may submit a written request for an interpretation to the Purchasing Agent. No interpretations as to the meaning of the plans, specifications or other Contract Documents will be made to any bidder orally.

Every request for such interpretation should be emailed to the Town of Watertown, Purchasing Agent, Donna Ford, ford@watertownct.org and to be given consideration, must be received at least five (5) days prior to the date fixed for the opening of Bids. Any and all such interpretations and any supplementary instructions will be in the form of written Addenda to the Specifications which, if issued, will be posted on the Town's website for all prospective bidders to view no later than three (3) days prior to the date fixed for the opening of bids. Failure of any bidder to receive any such Addendum or interpretations shall not relieve any bidder from any obligations under his bid as submitted. All Addenda so issued shall become part of the Contract Documents. Oral explanations will not be binding on the Town.

The specifications listed are to be interpreted as meaning the minimum acceptable by the Town of Watertown. Bidders are requested to submit quotations on the basis of these specifications. Alternative bids providing a broader scope and/or services than requested in these specifications may receive consideration providing such equipment and/or service is clearly explained. Any exceptions to the specifications requested herein must be clearly noted in writing and are to be included as a part of your bid proposal. If none are included it will be assumed that there are none.

Definition of the word "complete" means that each unit of the equipment proposed shall include all appurtenances, fasteners, parts, accessories, and services ordinarily catalogued.

An item equal to that named or described in the specifications may be furnished by the Bidder, except where expressly noted as "no substitutions." The naming of any commercial name, trademark, or other identification shall not be construed to exclude any item of any manufacturer not mentioned by name,

nor limit competition, but shall establish a standard of equality only. An item shall be considered equal to the item so named or described if:

- A. It is at least equal in quality, durability, appearance, strength and design.
- B. It will perform at least equally the function imposed by the design for the work being contracted for or the material being purchased.
- C. It conforms substantially, even with deviations, to the detailed requirements for the item in the specifications.

The Bidder shall hold the Town of Watertown, its officers, agents, servants, and employees, harmless from liability of any nature or kind because of use of any copyrighted or uncopyrighted compositions, secret process, patented or unpatented inventions, articles or appliances furnished or used under this bid, and agrees to defend, at his own expense, any and all actions brought against the Town of Watertown or himself because of the unauthorized use of such articles.

QUOTATION LIMITATION

Bidders shall offer only **ONE ITEM AND PRICE** for each line item bid. If an or equal item is to be bid, the bidder is to select the brand and model that meets or exceeds the specified item, and submit his bid for that item.

ESTIMATE OF WORK

For bidding purposes, the work has been subdivided into unit price items. The quantities shown are to be considered as approximate only. The Purchasing Agent does not expressly or by implication agree that the actual quantity will correspond therewith, but reserves the right to increase or decrease the amount of any item or portion of the work as deemed necessary.

SAMPLES

Samples of articles, when required shall be furnished free of cost of any sort to the Town of Watertown. Samples received may be retained by the Town for future comparison. Samples which are not destroyed by testing, or which are not retained for future comparison will be returned upon request at the bidder's expense.

WITHDRAWAL OF BID

Bidders may withdraw their proposals at any time prior to the bid date. No agent/broker shall withdraw or cancel their proposal for a period of sixty (60) days after the bid closing date of **11:00 a.m., Thursday, September 16, 2021**. The successful agent/broker shall not withdraw, cancel or modify their proposal.

SUBCONTRACTORS

- A. Each bidder contemplating the use of any subcontractor shall submit a list of subcontractors as listed on the Bid Form.

- B. The apparent low bidder shall file with the Town of Watertown, within five (5) days after the date of bid opening, a complete list of the names and addresses of competent, responsible and qualified subcontractors who are actually to perform major portions of the work. This in no way restricts or limits the requirement that all subcontractors must be approved by the Town.
- C. Subcontractors listed on the Bid Form or those previously approved may not be changed without the approval of the Town of Watertown.

Local subcontractors, material suppliers, and labor in the Town of Watertown should be considered and sought insofar, as is practical in the performance of this project.

QUALIFICATION OF BIDDER

In determining the qualifications of a bidder, the Town may consider his record in the performance of any contracts for similar work into which he may have previously entered; and the Town expressly reserves the right to reject the bid of such bidder if such record discloses that such bidder, in the opinion of the Town, has not properly performed such contracts or has habitually, and without just cause, neglected the payment of bills or has otherwise disregarded his obligations to subcontractors, suppliers, state or local codes, men or employees of subcontractors.

The Town may make such investigation as he deems necessary to determine the ability of the bidder to perform the work and the bidder shall furnish to the Town all such information and data for this purpose as the Town may request. The Town reserves the right to reject any bid if the evidence submitted by or the investigation of such bidder fails to satisfy the Town that such bidder is properly qualified, or that such bidder misrepresented material facts in the bid documents.

DISQUALIFICATION OF BIDDERS

More than one proposal from an individual, firm, partnership, corporation, or an association under the same or different names will not be considered. Reasonable grounds for believing that any Bidder is interested in more than one proposal for the work contemplated will cause the rejection of all proposals in which such Bidder is interested. Any or all proposals in which such Bidder is interested will be rejected if there is reason for believing that collusion exists among the Bidders and all participants in such collusion will not be considered in future proposals for the same work. Proposals in which the prices are obviously unbalanced may be rejected. No Contract will be awarded except to competent Bidders capable of performing the class of work contemplated.

DELIVERY

Inasmuch as this work concerns a needed public improvement, the provisions of this bid relating to the time of delivery, performance and completion of the work are of the essence of this bid. Accordingly, the successful bidder shall commence work **upon receipt of the signed Purchase Order** unless the Town shall authorize or direct a further delay, and shall proceed with the work diligently so as to permit completion no later than **thirty (30) calendar days after receipt of the Town's Purchase Order**.

Time of delivery shall be stated as the number of calendar days following receipt of the Purchase Order by the Bidder to receipt of the goods or services by the Town of Watertown.

Prices quoted must include delivery to the Town of Watertown as specified on the Purchase Order. No charges will be allowed for parking, crating, freight, express or cartage unless specifically stated and included in this bid.

Time of delivery may be considered in the award.

PAYMENT

The Town, after inspection and acceptance of workmanship, and in consideration of the faithful performance by the Bidder of all and singular his covenants, promises, and agreements contained herein, agrees to pay the Bidder for the full completion by him of the work embraced in this Contract, within (30) Thirty Days of the receipt of the final invoice. When subcontractors or suppliers are utilized, the successful Bidder for this project shall be required to submit a Mechanics Lien Waiver, acceptable to the Town, with each progress payment and/or at time of final payment prior to any payment being made.

Time, in connection with any discount offered, will be computed from the date of delivery to the Town or from the date a correct invoice is received by the Town's Finance Department, if the latter date is later than the date of delivery.

Prices will be considered as **NET**, if no cash or payment discount is shown.

The successful bidder shall submit invoices to the following address:

Town of Watertown
Parks & Recreation Department
61 Echo Lake Rd.
Watertown, CT 06795

IT IS UNDERSTOOD AND AGREED THAT SHOULD A BID BE ACCEPTED, IT WILL AUTOMATICALLY BECOME THE CONTRACT OR AN ADDENDUM TO ANY CONTRACT AGREED UPON.

Notification of the bid award will be made by issuance of a purchase order. Bidders are to list their bids on the appropriate attached sheets. Bidders may attach a letter of explanation. A clear notification should be made on the standard bid sheets at the appropriate point of explanation that there is a letter of explanation attached. All bids must be NET prices.

The successful bidder shall submit an itemized invoice to the Town of Watertown for the work as described herein.

The bidder shall be required to submit a Mechanics Lien Waiver, acceptable to the Town of Watertown, with each progress payment and at time of final payment prior to any payment being made.

At the time of award, the successful bidder shall be required to supply the Town of Watertown a Certificate of Good Standing, certifying that the corporation is in fact a valid corporation and presently licensed to conduct business in the State of Connecticut.

SALES TAX

Certain materials and supplies incorporated in the work of this project are exempt from Connecticut Sales Tax. The Bidder shall familiarize himself with current regulations of the State Tax Department. The tax on materials or supplies exempted by such regulations shall not be included as part of the bid. The Town will furnish the successful Bidder sales tax exemption authorization.

CARE AND PROTECTION OF PROPERTY

The Bidder shall take particular care to avoid damages to all private and public property and to private or public improvements within the Town's right of way. He shall make good any damages to the satisfaction of the Town. There shall be no additional compensation for the repair or restoration of private or public property improvements.

COMPLIANCE WITH FEDERAL, STATE AND LOCAL CODES

The Bidder shall be responsible for full compliance with any Federal, State and/or Local codes, laws, regulations and standards, as applicable, to any project fully or partially funded by Local, State and/or Federal funding.

AWARD

The Town of Watertown reserves the right to accept or reject any bid to best serve its interests, or to hold the bids for sixty (60) days before decision.

The Town reserves the right to reject any and all bids (or any part thereof), to waive defects in proposals, or to accept any proposal deemed to be in its best interest.

Exceptions will be considered to the specification provided, providing they are listed and fully explained on a separate page entitled "EXCEPTIONS TO SPECIFICATIONS"

Each exception will be considered as to its degree of impact and total effect on the bid. The purchaser shall determine which (if any taken) exceptions are acceptable, and this determination shall be final.

The Town of Watertown reserves the right:

- 1) To award bids received on the basis of individual items, or groups of items, or on the entire list of items.
- 2) To reject any or all bids, or any part thereof.
- 3) To waive any informality in the bids.
- 4) The Town of Watertown reserves the right to take into account the residency of bidders within the Town of Watertown and/or the location of the bidders business within the Town of Watertown in awarding this bid.
- 5) To accept the bid that is in the best interest of the Town of Watertown. The Purchasing Agent's decision shall be final.

INSURANCE

A. General:

The Bidder shall be responsible for maintaining insurance coverage in force for the life of the contract of the kinds and adequate amounts to secure all of the Bidder's obligations under the contract with an insurance company with an AM Best Rating of A - VII or better licensed to write such insurance in Connecticut and acceptable to the Town of Watertown.

The insurer shall provide the Town of Watertown with Certificates of Insurance signed by an authorized representative of the insurance company(ies) prior to the performance of this contract describing the coverage and providing that the insurer shall give the Town of Watertown written notice at least thirty (30) days in advance of any termination, expiration, or any and all change in coverage.

Such insurance or renewals or replacements thereof shall remain in force during the Bidder's responsibility under this agreement.

The Bidder at his own cost and expense shall procure and maintain all insurance required and shall name the Town of Watertown as an additional insured on all contracts except Worker's Compensation and Professional Errors & Omissions coverage.

In order to facilitate this requirement for insurance, it is recommended that the bidder forward a copy of this exhibit to the bidder's insurance representative(s).

B. Specific Requirements:

(1) Workers' Compensation Insurance

The Bidder shall provide Workers' Compensation Insurance required by law and the Employer's Liability Insurance for at least the amounts of liability for Bodily Injury by accident of \$100,000 each accident; Bodily Injury by Disease each employee of \$100,000; Bodily Injury by Disease, policy limit of \$500,000.

(2) Commercial General Liability Insurance

The Bidder shall carry Commercial General Liability policy (Insurance Services Office Incorporated Form CG-0001 or equivalent). A per occurrence limit of \$1,000,000 is required. The Aggregate Limit will be not less than \$1,000,000.

(3) Business Automobile Liability Insurance

The Bidder shall carry Business Automobile Liability Insurance. (Insurance Services Office Incorporated Form CA-00001 or equivalent). A per occurrence limit of \$1,000,000 is required. "Any Auto" (symbol 1 or equivalent) is required.

C. Hold Harmless & Subcontractor's Requirements:

The Bidder shall require the same insurance that it is required to carry by the Town of Watertown to be carried by any subcontractors and independent contractors hired by the Bidder and to obtain Certificates of Insurance before subcontractors and independent contractors are permitted to begin work.

The Bidder shall require that the Town of Watertown be named as Additional Insured on all subcontractor's and independent contractor's policies before they are permitted to begin work.

The Bidder and all subcontractors and independent contractors and their insurers shall waive all rights of subrogation against the Town of Watertown, and its officers, agents, servants and employees for losses arising from the work performed by each on this contract.

The Bidder assumes and agrees to hold harmless, indemnify, protect and defend the Town of Watertown against any and all liability for injuries and damages to Bidder and to Bidder's employees, agents, subcontractors and guests, third parties or otherwise incident to or resulting from any and all operations performed by a contractor under any terms of this contract.

D. Other Data:

NOTE 1: If Bidder is only a vender shipping goods via Common Carrier only, General Liability is required.

NOTE 2: If Bidder is a Professional, Errors & Omission coverage will be required.

NOTE 3: The Town reserves the right to amend amounts of coverage required and the types of coverage provided based on work or service to be performed.

GUARANTEE

The bidder shall unconditionally guarantee for a period of one (1) year from the date of acceptance, all materials, supplies, equipment, and services; including but not limited to its workmanship, delivery and installation. If within the guarantee period there are any defects or signs of deterioration the bidder shall repair, adjust or replace the item(s) to the complete satisfaction of the Town. These repairs, adjustments, or replacements are at the sole expense of the bidder and shall be made at such times that are agreeable to the Purchasing Agent so that it is least detrimental to instructional programs.

PERMITS

When required all licenses and permits for complying with any applicable Federal, State, and Municipal laws, codes, regulations in connection with the prosecution of the work shall be obtained by the Bidder, at no additional cost to the Town. The cost of Local permits will be assessed at sixteen cents per one thousand dollars of construction value as declared on the building permit application pursuant to State of Connecticut Statute Sec. 29-263 by the Town of Watertown. The successful contractor will be responsible for payment to the Town of Watertown Building Inspection Department.

PREVAILING WAGE RATES

The Town of Watertown shall require the payment of prevailing rates of wages in accordance with the wage section of the Connecticut General Statutes 31-53, 93-392 and shall institute such investigations and periodic monitoring procedures as deemed necessary to determine compliance with labor standard provisions and the Federal requirements of the Statutes as amended.

NONDISCRIMINATION IN EMPLOYMENT

The successful bidder shall agree and warrant that, in the performance of this contract, he will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, sex, religion, or national origin in any manner prohibited by State, Federal, County, or Municipal law. A certification of Nonsegregated Facilities and a Certification Regarding Equal Employment Opportunity shall be considered a part of this contract.

DISPUTE RESOLUTION

1. Mandatory Negotiation.

The parties agree that they will attempt to negotiate in good faith any dispute of any nature arising under this agreement. The parties shall negotiate in good faith at not less than two (2) negotiation sessions prior to seeking any resolution of any dispute by any means under Dispute Resolution provisions contained herein below. Each party shall have the right to legal representation at any such negotiation session.

2. Mandatory Mediation.

Any dispute or question arising under the provisions of this agreement, which has not been resolved under the mandatory negotiation provision, shall be submitted to non-binding mediation before one (1) mediator agreed upon by the parties or appointed by the American Arbitration Association. Mediation proceedings shall take place at any suitable location in Watertown, Connecticut and shall be conducted in accordance with the rules and procedures of the mediation then applicable of the American Arbitration Association. If an independent mediator is agreed upon by the parties, said independent mediator shall establish the rules of such mediation. Each party shall pay one half of all costs and expenses of such mediation. The parties shall use their best efforts to reach a good faith resolution of said dispute within ninety (90) days after the commencement of the mediation proceedings. Any decision of the mediator shall not be binding upon the parties except by agreement of the parties.

3. Election to Begin Court Proceedings.

Provided the parties have completed the mandatory negotiation proceedings and the foregoing provisions with respect to mediation notwithstanding, if either party determines that mediation is not an appropriate means to settle any such dispute, such party shall have the right to commence judicial proceedings for the purpose of settling any such dispute.

MECHANICS LIEN WAIVERS

The successful Bidder shall be required to submit a Mechanics Lien Waiver, acceptable to the Town of Watertown, with each progress payment, and/or at time of final payment, prior to any payment made.

For further technical or administrative information contact Ms. Donna Ford, Purchasing Agent at (860) 945-5260 or via email at ford@watertownct.org.

TOWN OF WATERTOWN, CONNECTICUT

TECHNICAL SPECIFICATIONS

Town of Watertown
Dog Park Chain Link Fence

CHAIN LINK FENCES AND GATES (Type: 2” mesh, vinyl coated black, Type 2b)

PART 1 GENERAL

1.1 SUMMARY

A. Section includes

1. Furnishing and installing woven wire fencing systems of the type and height specified and supported by metal posts erected where indicated on the Drawings and as specified herein, including fence and gates.

B. Contractor shall coordinate work between all Subcontractors, sections, and trades required for the proper completion of the work.

C. Contractor is responsible for all health and safety.

1.2 REFERENCES

A. Reference herein to any technical society, organization, group or regulation are made in accordance with the following abbreviations and, unless otherwise noted or specified, all work under this Section shall conform to the latest edition as applicable.

B. Code of Federal Regulations (CFR).

1. 29 CFR 1926, Safety and Health Regulations for Construction.

C. American Society for Testing and Materials (ASTM).

1. ASTM A53 - Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless.

2. ASTM A90- Standard Test Method for Weight (Mass) of Coating on Iron or Steel Articles with Zinc or Zinc Alloy.

3. ASTM A123- Zinc (Hot Dip Galvanized) Coatings on Iron and Steel Products.

4. ASTM A153- Standard Specification for Zinc Coating (Hot Dip) on Iron and Steel Hardware.

5. ASTM A392- Standard Specification for Zinc-Coated Steel Chain-Link Fence Fabric.

6. ASTM A428- Standard Test Method for Weight (Mass) of Coating on Aluminum-Coated Iron or Steel Articles.

7. ASTM A491- Standard Specification for Aluminum Coated Steel Chain Link Fence Fabric.

8. ASTM A780 – Standard Specification for Repair of Damaged and Uncoated Areas of Hot Dip Galvanized Coatings.

9. ASTM A817- Standard Specification for Metallic-Coated Steel Wire for Chain Link Fence Fabric and Marcellled Tension Wire.

10. ASTM A824 - Standard Specification Metallic-Coated Steel Marcellled Tension Wire for Use with Chain Link Fence.

11. ASTM B211- Standard Specification for Aluminum and Aluminum-Alloy Bar, Rod and Wire.
12. ASTM C94 - Standard Specification for Ready-Mixed Concrete.
13. ASTM F552 - Standard Terminology Relating to Chain Link Fencing.
14. ASTM F567- Standard Practice for Installation of Chain Link Fence.
15. ASTM F626 - Standard Specification for Fence Fittings.
16. ASTM F668 - Specification for Polymer Coated Chain Link Fence Fabric.
17. ASTM F900 - Standard Specification for Industrial and Commercial Swing Gates.
18. ASTM F934 - Specification for Standard Colors for Polymer-Coated Chain Link.
19. ASTM F1043 - Strength and Protective Coatings on Metal Industrial Chain Link Fence Framework.
20. ASTM F1083 - Standard Specification for Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures.
21. ASTM F1183 - Standard Specification for Aluminum Alloy Chain Link Fence Fabric.

D. Chain Link Fence Manufacturer's Institute

1. Chain Link Fence Manufacturer's Institute Product Manual, latest revision.

1.3 SUBMITTALS

- A. Shop drawings showing the plan layout, spacing of components, post foundation dimensions, hardware anchorage, gates and a schedule of components.
- B. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for chain-link fences and gates.
 1. Fence and gate posts, rails, and fittings.
 2. Chain-link fabric, reinforcements, and attachments.
 3. Accessories: Privacy slats.
 4. Gates, locking mechanisms and hardware.
- C. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work. Show accessories, hardware, gate operation, and operational clearances.
- D. Samples for Initial Selection: For components with factory-applied color finishes.
- E. Samples for Verification: Prepared on Samples of size indicated below:
 1. Polymer-Coated Components: In 6-inch lengths for components and on full-sized units for accessories.
- F. Delegated-Design Submittal: For chain-link fences and gate framework indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified factory-authorized service representative.
- B. Product Certificates: For each type of chain-link fence, and gate, from manufacturer.
- C. Product Test Reports: For framing strength according to ASTM F 1043.
- D. Field quality-control reports.
- E. Warranty: Sample of special warranty.

1.5 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For the following to include in emergency, operation, and maintenance manuals:

1. Polymer finishes.
2. Gate hardware.

1.6 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

B. Supply material in accordance with Chain Link Fence Manufacturer's Institute Product Manual and this Specification.

C. Perform installation in accordance with ASTM F567.

D. Maintain all facilities installed under this Section in proper and safe condition throughout the progress of the work.

E. Testing Agency Qualifications: For testing fence grounding. Member company of NETA or an NRTL.

1. Testing Agency's Field Supervisor: Currently certified by NETA to supervise on-site testing.

F. 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.

G. Emergency Access Requirements: Comply with requirements of authorities having jurisdiction for gates with automatic gate operators serving as a required means of access.

H. Mockups: Build mockups to set quality standards for fabrication and installation.

1. Include 10-foot length of fence and gate.

I. Preinstallation Conference: Conduct conference at Project site.

1. Inspect and discuss electrical roughing-in, equipment bases, and other preparatory work specified elsewhere.
2. Review sequence of operation for each type of gate operator.
3. Review coordination of interlocked equipment specified in this Section and elsewhere.
4. Review required testing, inspecting, and certifying procedures.

1.7 PROJECT CONDITIONS

A. Field Measurements: Verify layout information for chain-link fences and gates shown on Drawings in relation to property survey and existing structures. Verify dimensions by field measurements.

B. Fence gates be mechanically restricted from swinging over Synthetic turf or Synthetic track surfacing materials.

1.8 DELIVERY, STORAGE AND HANDLING

A. Deliver fence fabric and accessories in packed cartons or firmly tied rolls.

B. Packages shall be labeled with the manufacturer's name.

C. Store fence fabric and accessories in a secure and dry place.

1.9 WARRANTY

A. Special Warranty: Manufacturer's standard form in which Installer agrees to repair or replace components of chain-link fences and gates that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:
2. Faulty operation of gate accessories and mechanisms.
3. Deterioration of metals, metal finishes, and other materials beyond normal weathering.

B. Warranty Period: Five years from date of Substantial Completion.

PART 2 PRODUCTS

2.1 CHAIN LINK FENCING SYSTEMS:

A. Permanent Chain Link Fence shall meet the following basic parameters:

1. Fence Height: Varies, refer to the Drawings.
2. Type: 2" mesh, vinyl coated black, Type 2b
3. All mesh to be knuckled both selvages.
4. Anchored post where indicated; top and bottom rails between posts unless otherwise indicated.
5. Gates: Height of gates shall match that of fence. Type and size of gates shall be as shown on the Drawings.
6. At Dog Park: Fence fabric shall be on inside of posts.

2.2 CHAIN LINK FENCING GENERAL

A. Material furnished shall be in good condition and shall not have been painted.

B. All posts and rails shall be straight, true to section and of sufficient length for proper installation.

C. Unless otherwise specified, hardware and accessories shall conform to the requirements of ASTM F626 and ASTM A123 or ASTM A153 as applicable for zinc-coating.

D. Post, framing and gate sizing shall be based on the following tables:

TABLE A – LINE FENCE FABRIC COMPONENT SIZING:

LINE FENCE FABRIC HEIGHT UP TO 4' 5' – 6' 8' – 10'
END, CORNER & PULL POST 2.375" O.D. 2.875" O.D. 3.5" O.D.
LINE POST 1.900" O.D. 2.375" O.D. 2.875" O.D.
TOP & BOTTOM RAIL 1.660" O.D. 1.660" O.D. 1.660" O.D.
FOOTING 12" DIA. 12" DIA. 15" DIA.

TABLE B – SINGLE LEAF GATE COMPONENT SIZING:

SINGLE LEAF GATE 6' H OR LESS 6'H – 12' H
GATE POST 2.875" O.D. 4" O.D.
GATE FRAME (4 SIDES) 1.875" 1.875"
INTERIOR UPRIGHT NONE 1-1/2"
FOOTING 12" DIA. 12" DIA.

TABLE C – DOUBLE LEAF GATE COMPONENT SIZING:

DOUBLE LEAF GATE 6'H OR LESS >6'H - <12'H 12'H OR MORE
GATE POST 2.875" O.D. 4" O.D. 4" O.D.
GATE FRAME (4 SIDES) 2" 2.375" O.D. 2.375" O.D.
INTERIOR UPRIGHT NONE 1-1/2" 2.375"
HEAVY DUTY HINGE 3 PER LEAF 3 PER LEAF 4 PER LEAF
FOOTING 12" DIA. 15" DIA. 15" DIA.

2.3 CHAIN-LINK FENCE FABRIC

- A. General: Provide fabric in one-piece heights measured between top and bottom of outer edge of selvage knuckle or twist. Comply with CLFMI Product Manual and with requirements indicated below:
1. Fabric Height: As indicated on Drawings.
 2. Steel Wire Fabric:
- B. Field Fencing: Wire with a diameter of 9 gauge galvanized core fused. Measured prior to application of coating.
- C. Mesh Size:
1. 2 inches. Measured prior to application of coating.
- D. Polymer-Coated Fabric: ASTM F 668, Class 2b.
1. Color: Black, ASTM F 934.
- E. Coat selvage ends of fabric that is metallic coated before the weaving process with manufacturer's standard clear protective coating.
1. Selvage: Knuckled at both selvages.

2.4 FENCE FRAMING

- A. Line Posts, Corner, End, pull posts and Rails: Comply with ASTM F 1043 for framing, including rails, braces, and line; terminal; and corner posts. Provide members with minimum dimensions and wall thickness according to ASTM F 1043 based on the following:
1. Fence Height: as Indicated on drawings
 2. Frame and post sizing as indicated in table A Section 2.2.
 3. Light Industrial Strength: Material Group IC-L, round steel pipe, electric-resistance welded pipe.
 4. End, Corner and Pull Post: Horizontal Framework Members: Intermediate top and bottom rails complying with ASTM F 1043.
 5. Brace Rails: Comply with ASTM F 1043.
 6. Finish shall match fence fabric: Vinyl Coated Color: Black Class 2b fused and adhered

2.5 BRACE ASSEMBLY

- A. Rails
1. 1.25-inch nominal (1.660 O.D.) steel pipe, steel pipe.
 - a. Vinyl Coated Color: Black Class 2b fused and adhered
- B. Truss rod shall be 3/8-inch with adjustable turnbuckles or truss tightener to match fabric type.
- C. Polymer coating over metallic coating.

1. Color: Black, ASTM F 934.

2.6 STRETCHER BARS

- A. Bars shall be one-piece lengths of zinc-coated steel, not less than 2-inches shorter than the full height of the fencing fabric with a minimum cross section of 3/16-inch by 3/4-inch, ASTM F626.
- B. Polymer coating over metallic coating.
- C. Color: Black, ASTM F 934.

2.7 TENSION WIRE

- A. Polymer-Coated Steel Wire: Marcellled (spiraled or crimped) No. 7 gage, (0.177-inches) diameter, ASTM A824, ASTM F 1664,
- B. Polymer coating Class 2b over-coated steel wire. Color Black, ASTM F 934.

2.8 HARDWARE AND TIES

- A. Hardware & tie finish shall match that of fence fabric used.
- B. Miscellaneous hardware, including but not limited to nuts, bolts, washers, clips, bands, rail ends, brackets, and straps shall be provided as required, hot-dip galvanized steel or aluminum alloy, ASTM F626.
- C. Tension bands shall be formed from flat or beveled steel and shall have a minimum thickness after galvanizing of 0.078-inches and a minimum width of 3/4-inch.
- D. Brace bands shall be formed from flat or beveled steel and shall have a minimum thickness after galvanizing of 0.108-inches and a minimum width of 3/4-inch.
- E. Wire ties shall be minimum 16-gage galvanized steel wire or minimum 9-gage aluminum alloy wire.
- F. All fasteners shall be hot-dip galvanized, ASTM F2329.
- G. Bolts: Steel, ASTM A307.
- H. Washers: Steel, round, ASTM F844.
- I. Bolts: Steel, ASTM A563 Grade A, hex head.

2.9 FITTINGS

- A. General: Comply with ASTM F 626.
- B. Post Caps: Provide for each post.
 1. Provide line post caps with loop to receive tension wire or top rail.
 2. Post caps shall be mechanically fastened to posts to prevent removal.
- C. Rail and Brace Ends: For each gate, corner, pull, and end post.
- D. Rail Fittings: Provide the following:
 1. Top Rail Sleeves: Pressed-steel or round-steel tubing not less than 6 inches long.
 2. Rail Clamps: Line and corner boulevard clamps for connecting intermediate and bottom rails in the fence line-to-line posts.
- E. Tension and Brace Bands: Pressed steel.

- F. Tension Bars: Steel, length not less than 2 inches (50 mm) shorter than full height of chain-link fabric. Provide one bar for each gate and end post, and two for each corner and pull post, unless fabric is integrally woven into post.
- G. Truss Rod Assemblies: Steel, hot-dip galvanized after threading rod and turnbuckle or other means of adjustment.
- H. Tie Wires, Clips, and Fasteners: ASTM F 626.
 - 1. Standard Round Wire Ties: For attaching chain-link fabric to posts, rails, and frames, complying with the following:
- I. Hot-Dip Galvanized Steel: 0.148-inch- (3.76-mm-) diameter wire; galvanized coating thickness matching coating thickness of chain-link fence fabric.
- J. Finish:
 - 1. Metallic Coating for Pressed Steel or Cast Iron: Not less than 1.2 oz. /sq. ft. (366 g /sq. m) zinc.
- K. Polymer coating over metallic coating.

2.10 GATES

- A. Gate Construction: ASTM F900. Corners welded or assembled with special malleable or pressed-steel fittings and rivets or bolts to provide rigid connections.
- B. Pipe and Tubing:
 - 1. Zinc-Coated Steel: Comply with ASTM F 1043 and ASTM F 1083; protective coating and finish to match fence framing.
- C. Posts: Round tubular steel.
 - 1. Size: Refer to tables Section 2.2 for post sizes based on fence height and gate type.
- D. Gate Frames and Bracing: Round tubular steel.
 - 1. Size: Refer to tables Section 2.2 for post sizes based on fence height and gate type.
- E. Assemble gate frames by welded connections. When width of gate leaf exceeds 10 feet, install mid-distance vertical tubing of the same size and weight as frame members. When either horizontal or vertical bracing is not required, provide truss rods as cross bracing to prevent sag or twist.
- F. Horizontal bid bracing shall be used on all gates.
- G. Wire Fencing Fabric: Fabric shall match that of fence, attached securely to frame at intervals not exceeding 15-inches.
- H. Hardware:
 - 1. Hinges: 180-degree outward swing only.
 - 2. Refer to tables Section 2.2 for quantities and type based on gate type.
- I. Hinge brackets shall be tack welded after install and coated.
- J. Gates shall not allow swing over track surfacing or synthetic turf.
- K. Open gate position shall lie parallel to adjacent fence line
 - 1. Latches permitting operation from both sides of gate with provision for padlocking accessible from both sides of gate.
 - 2. All gates shall be equipped with hot-dipped galvanized steel hinges and latch with provisions for padlocking.

3. Double gates and single gates with leaf width 4 feet and greater shall be equipped with a minimum ½” drop bar, lockable latch receivers and gate hold backs, one each leaf.
4. Hinges shall be cast steel hinges capable of 180 degree opening. Tack weld hinge brackets to the steel post after installation to lock each hinge to the gate post and prevent sagging. No-lift-off type hinges. Box type hinges are not acceptable.
5. Gate Leaves: Configured with intermediate members and diagonal truss rods or tubular members as necessary to provide rigid construction, free from sag or twist.
6. Latches, hinges, stops, keepers and other hardware items shall be furnished as required for proper operation.

2.11 CONCRETE

A. Concrete shall conform to ASTM C94; or pre-packaged concrete mix, ASTM C387. Minimum 28-day compressive strength of 3,000 psi. No air entrainment.

2.12 GROUT AND ANCHORING CEMENT

A. Non-shrink, Nonmetallic Grout: Premixed, factory-packaged, non-staining, noncorrosive, nongaseous grout complying with ASTM C 1107. Provide grout, recommended in writing by manufacturer, for exterior applications.

B. Erosion-Resistant Anchoring Cement: Factory-packaged, non-shrink, non-staining, hydraulic controlled expansion cement formulation for mixing with potable water at Project site to create pourable anchoring, patching, and grouting compound. Provide formulation that is resistant to erosion from water exposure without needing protection by a sealer or waterproof coating and that is recommended in writing by manufacturer, for exterior applications.

PART 3 EXECUTION

3.1 GENERAL

- A. Install fence with properly trained crew as shown on the drawings in accordance with ASTM F567.
- B. Install all nuts for tension bands and hardware bolts on the side of the fence opposite the fabric.

3.2 EXAMINATION

A. Examine areas and conditions, with Installer present, for compliance with requirements for a verified survey of property lines and legal boundaries, site clearing, earthwork, pavement work, and other conditions affecting performance of the Work.

1. Do not begin installation before final grading is completed unless otherwise permitted by Town Engineer

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.3 PREPARATION

A. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 500 feet or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures,

benchmarks, and property monuments. The Town Of Watertown, CT Engineering Department will provide the contractor with the survey control information and bench mark for this project.

3.4 INSTALLATION, GENERAL

- A. Install chain-link fencing to comply with ASTM F 567 and more stringent requirements indicated.
 - 1. Install fencing on established boundary lines inside property line.

3.5 CHAIN-LINK FENCE INSTALLATION

- A. Post Excavation: Drill or hand-excavate holes for posts to diameters and spacings indicated, in firm, undisturbed soil.
- B. Post Setting: Set posts in concrete at indicated spacing into firm, undisturbed soil.
 - 1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
 - 2. Concrete post footings shall have a plan diameter 12-inches greater than the post diameter. Holes shall be clean and free of loose soil and debris. Concrete shall be placed continuously in one operation and tamped or vibrated for consolidation. Tops of the concrete footings shall be crowned to shed water.
 - 3. Gate post/footings shall be installed a minimum of 42-inches below grade.
 - 4. All corner, end posts, and gate posts shall be braced.
- C. Brace each gate and corner post to adjacent line post with horizontal center brace rail and diagonal truss rods. Install brace rail one bay from end and gate posts.
- D. Corner and terminal posts are to be braced horizontally and diagonally. The braces are to extend over one adjacent panel. Changes in line of 30 degrees or more shall be considered as corners.
- E. Braces and truss rods shall be securely fastened to posts with appropriate hardware.
- F. Pull posts with two braces shall be provided for all heights where changes in horizontal or vertical alignment of ten (10) degrees or more occur.
 - 1. Concrete Fill: Place concrete around posts to dimensions indicated and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.
- G. Concealed Concrete: Top 3 inches below grade as indicated on Drawings to allow covering with surface material.
- H. Posts Set into Concrete in Sleeves: Use steel pipe sleeves preset and anchored into concrete for installing posts. After posts have been inserted into sleeves, fill annular space between post and sleeve with non-shrink, nonmetallic grout, mixed and placed to comply with anchoring material manufacturer's written instructions, and finished sloped to drain water away from post.
- I. Posts Set into Voids in Concrete: Form or core drill holes not less than 5 inches deep and 3/4 inch larger than OD of post. Clean holes of loose material, insert posts, and fill annular space between post and concrete with non-shrink, nonmetallic grout, mixed and placed to comply with anchoring material manufacturer's written instructions, and finished sloped to drain water away from post.
- J. Terminal Posts: Locate terminal end, corner, and gate posts per ASTM F 567 and terminal pull posts at changes in horizontal or vertical alignment of 15 degrees or more.

K. Line Posts: Space line posts uniformly as indicated on the Drawings. Unless indicated otherwise, spacing shall be 8 feet on-center.

L. Post Bracing and Intermediate Rails: Install according to ASTM F 567, maintaining plumb position and alignment of fencing. Diagonally brace terminal posts to adjacent line posts with truss rods and turnbuckles. Install braces at end and gate posts and at both sides of corner and pull posts.

1. horizontal braces at mid-height of fabric 72 inches or higher, on fences with top rail and at two-third fabric height on fences without top rail. Install so posts are plumb when diagonal rod is under proper tension.

M. Tension Wire: Install according to ASTM F567, maintaining plumb position and alignment of fencing. Pull wire taut, without sags. Fasten fabric to tension wire with 0.120-inch-diameter hog rings of same material and finish as fabric wire, spaced a maximum of 24 inches on center. Install tension wire in locations indicated before stretching fabric. Provide horizontal tension wire at the following locations:

1. Extended along top and bottom of fence fabric. Install top tension wire through post cap loops. Install bottom tension wire within 6 inches (152 mm) of bottom of fabric and tie to each post with not less than same diameter and type of wire.

N. Top Rail: Install according to ASTM F567, maintaining plumb position and alignment of fencing. Run rail continuously through line post caps, bending to radius for curved runs and terminating into rail end attached to posts or post caps fabricated to receive rail at terminal posts. Provide expansion couplings as recommended in writing by fencing manufacturer.

O. Intermediate and Bottom Rails: Install and secure to posts with fittings.

P. Chain-Link Fabric: Apply fabric to outside of enclosing framework. Leave 1 inch between finish grade or surface and bottom selvage unless otherwise indicated. Pull fabric taut and tie to posts, rails, and tension wires. Anchor to framework so fabric remains under tension after pulling force is released.

Q. Tension or Stretcher Bars: Thread through fabric and secure to end, corner, pull, and gate posts with tension bands spaced not more than 15 inches on-center.

R. Tie Wires: Use wire of proper length to firmly secure fabric to line posts and rails. Attach wire at one end to chain-link fabric, wrap wire around post a minimum of 180 degrees, and attach other end to chain-link fabric per ASTM F626. Bend ends of wire to minimize hazard to individuals and clothing.

1. Maximum Spacing: Tie fabric to line posts at 12 inches on-center and to braces at 24 inches on-center.

S. Fasteners: Install nuts for tension bands and carriage bolts on the side of the fence opposite the fabric side.

T. Fabric:

1. Do not install fabric until concrete post footings have cured seven (7) days. Provide fabric of the height specified. Install fabric on the public side of the fence, with bottom no greater than 2-inches above the ground surface. Fabric shall be pulled taut to prevent sagging and provide a uniform smooth appearance. Fasten fabric to line posts at intervals not exceeding 15-inches with ties as specified.

2. Install tension wire in one continuous length between pull posts, weaved through fence fabric at top. Tension wire shall be applied to provide a wire without visible sag between posts. Fasten fabric to tension wire at intervals not exceeding 24-inches with ties or hog rings as specified.
3. Where it is not practicable to conform the fence to general contour of the ground, as at ditches, channels, etc., the opening beneath the fence shall be enclosed with chain link fabric and sufficiently braced to preclude access, but not to restrict the flow of water.

3.6 GATE INSTALLATION

- A. Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach fabric as for fencing. Attach hardware using tamper resistant or concealed means. Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation and lubricate where necessary.
- B. Provide swing gates at the locations and dimensions shown on the Drawings. Do not install gates until concrete post footings have cured seven (7) days.
- C. Gates shall be installed plumb, level, and secure, with full opening without interference. Hardware shall be installed and adjusted for smooth operation and lubricated where necessary.
- D. Provide concrete center drop to footing depth and suitable drop rod sleeve at each leaf at center of double gate openings.
- E. Gates shall not be able to swing over adjacent track surfacing. Gates shall open 180 degrees, fully so that gate leaf lies parallel to adjacent fence.

3.7 GROUNDING AND BONDING

- A. Fence Grounding: Install at maximum intervals of 1,500 feet except as follows:
- B. Fences within 100 feet of buildings, structures, walkways, and roadways: Ground at maximum intervals of 750 feet.
 1. Gates and Other Fence Openings: Ground fence on each side of opening.
 2. Bond metal gates to gate posts.
 3. Coordinate subparagraph below with Drawings in projects where intentional discontinuities are provided in metal fencing conductivity to localize lightning effects to the vicinity of strikes. See Evaluations.
 4. Bond across openings, with and without gates, except openings indicated as intentional fence discontinuities. Use No. 2 AWG wire and bury it at least 18 inches below finished grade.
- C. Protection at Crossings of Overhead Electrical Power Lines: Ground fence at location of crossing and at a maximum distance of 150 feet on each side of crossing.
- D. Plans and details on Electrical Drawings and requirements in Division 26 Sections may revise or illustrate application of requirement below or may require grounding that exceeds minimum requirements in IEEE C2. Fences enclosing electrical substations are often bonded to a station grounding mat.
- E. Fences Enclosing Electrical Power Distribution Equipment: Ground as required by IEEE C2 unless otherwise indicated.

F. Grounding Method: At each grounding location, drive a grounding rod vertically until the top is 6-inches below finished grade. Connect rod to fence with No. 6 AWG conductor. Connect conductor to each fence component at the grounding location, including the following:

1. Make grounding connections to each barbed wire strand with wire-to-wire connectors designed for this purpose.
2. Make grounding connections to each barbed tape coil with connectors designed for this purpose.

G. Bonding Method for Gates: Connect bonding jumper between gate post and gate frame.

H. Connections: Make connections to minimize possibility of galvanic action or electrolysis. Select connectors, connection hardware, conductors, and connection methods so metal indirect contact will be galvanically compatible.

1. Use electroplated or hot-tin-coated materials to ensure high conductivity and to make contact points closer in order of galvanic series.
2. Make connections with clean, bare metal at points of contact.
3. Make aluminum-to-steel connections with stainless-steel separators and mechanical clamps.
4. Make aluminum-to-galvanized-steel connections with tin-plated copper jumpers and mechanical clamps.
5. Coat and seal connections having dissimilar metals with inert material to prevent future penetration of moisture to contact surfaces.

I. Bonding to Lightning Protection System: If fence terminates at lightning-protected building or structure, ground the fence and bond the fence grounding conductor to lightning protection down conductor or lightning protection grounding conductor complying with NFPA 780.

3.8 FIELD QUALITY CONTROL

A. Grounding-Resistance Testing: Engage a qualified testing agency to perform tests and inspections.

1. Grounding-Resistance Tests: Subject completed grounding system to a megger test at each grounding location. Measure grounding resistance no fewer than two full days after last trace of precipitation, without soil having been moistened by any means other than natural drainage or seepage and without chemical treatment or other artificial means of reducing natural grounding resistance. Perform tests by two-point method according to IEEE 81.
2. Excessive Grounding Resistance: If resistance to grounding exceeds specified value, notify Architect promptly. Include recommendations for reducing grounding resistance and a proposal to accomplish recommended work.
3. Report: Prepare test reports certified by a testing agency of grounding resistance at each test location. Include observations of weather and other phenomena that may affect test results.

3.9 ADJUSTING

A. Gates: Adjust gates to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.

B. Lubricate hardware and other moving parts.

3.10 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's personnel to adjust, operate, and maintain chain-link fences and gates.

Basis of Payment: This work will be paid for at the contract unit price per linear foot (meter) for "Chain Link Fence" or "Polyvinyl Chloride Chain Link Fence" of the height specified, complete in place, which price shall include all materials, equipment, tools, excavation, backfill, disposal of surplus material and labor incidental thereto. Payment will be made under:

Pay Item	Pay Unit
(5' Polyvinyl Chloride Chain Link Fence	L.F. (m)

Gate work will be paid for at the contract unit price each for "Chain Link Gate" or "Polyvinyl Chloride Chain Link Gate" of the type and size specified; complete in place, which price shall include gate frame, gate posts, chain link fabric, lock, concrete, excavation, backfill, fabrication, installation, disposal of surplus material, and all materials, equipment, tools, labor and any work incidental thereto. Payment will be made under:

Pay Item	Pay Unit
(8') Polyvinyl Chloride) Chain Link Gate	EA. (EA.)
(3') Polyvinyl Chloride) Chain Link Gate	EA. (EA.)

Part 2 General

* Supplemental - Please bid separately

WOOD GUIDE RAIL-MORTISE TYPE

SUMMARY

A. Section includes

1. Furnishing and installing wooden guide rail system (mortise) of the type and height specified and Including all materials and equipment required to erected guide rail indicated on the Drawings as specified.
 - a. Contractor shall coordinate work between all Subcontractors, sections, and trades required for the proper completion of the work.
 - b. Contractor is responsible for all health and safety.

MATERIAL

2 Southern yellow pine

WOOD POST TO BE A MINIMUM OF 10" X 10" X 6'-0" .40 CCA TREATED AFTER MILLING FOR MAXIMUM EFFECTIVENESS.

THE RAILS OR TO BE 4" X 10" 12'-0" .40 CCA TREATED AFTER MILLING FOR MAXIMUM Effectiveness, or approved equal, and approved by the town engineer

Basis of Payment: This work will be paid for at the contract unit price per lump sum for "mortise wood guide rail of the height specified, complete in place, which price shall include all materials, equipment, and labor incidental thereto. Payment will be made under tools, excavation, backfill, disposal of surplus material and labor incidental thereto. Payment will be made under:

Pay Item	Pay Unit
(mortise Wood guide Rail	L.S. (L.S.)

PLEASE

**IT IS A REQUIREMENT OF
THIS BID THAT EACH
PROPOSAL SUBMITTED
MUST HAVE A DUPLICATE
COPY ATTACHED.**

**YOUR COOPERATION IS
APPRECIATED**

**TOWN OF WATERTOWN
WATERTOWN, CONNECTICUT 06795
BID PROPOSAL
Dog Park Fencing
Watertown Public Works Department**

BID OPENING: 11:00 a.m., Thursday, September 16, 2021

*TO: Donna Ford, Purchasing Agent
Town of Watertown
Watertown Town Hall
61 Echo Lake Road
Watertown, CT 06795*

The undersigned, as bidder, agrees to furnish labor, equipment and material for paving rehabilitating various roads as specified herein and declares that no person or persons, other than those named herein, are interested in this Proposal; that this Proposal is made without collusion with any person, firm, or corporation; that he has carefully examined the location of the proposed work, the proposed Form of Contract, and the Contract Drawings therein referred to: that no person or persons acting in any official capacity for the Town is directly or indirectly interested therein or in any portion of the profit thereof; and that he proposes and agrees, if this Proposal is accepted, to execute the Form of Contract with the Town; to provide all necessary equipment, tools, labor and deliver and to do all work and furnish all materials specified in the Contract, in the manner and time therein prescribed, and according to the requirements of the Town as therein set forth, and that he will take in full payment therefor, the following unit prices and lump sums, to wit:

FIRM _____

Street

City State Zip Code

NAME _____

Please Print

TELEPHONE NUMBER _____

FAX NUMBER _____

EMAIL ADDRESS _____

SIGNED _____ DATE _____

PROPOSAL

Description/Unit Price	Estimated Computed Quantities	Totals
Item # 1		
<u>5' Polyvinyl Chloride Chain Link Fence,</u>		
<u>Type: 2" mesh, vinyl coated black, Type 2b</u>		
The unit price of _____ Dollars		
and _____ Cents		
(\$ _____) per (L.F.)	1600 L.F.	\$ _____
Item # 2		
<u>(8') Polyvinyl Chloride) Chain Link Gate</u>		
The unit price of _____ Dollars		
and _____ Cents		
(\$ _____) (EA.)	3 EA.	\$ _____
Item # 3		
<u>(3') Polyvinyl Chloride) Chain Link Gate</u>		
The unit price of _____ Dollars		
and _____ Cents		
(\$ _____) (EA.)	3 EA.	\$ _____
Item #4		
<u>Wood Guide Rail Mortise Type</u>		
The unit price of _____ Dollars		
And _____ Cents		
(\$ _____) per (L.F.)	70 L.F.	\$ _____
		Computed Total – \$ _____

NOTE: The Computed Totals are for convenience in initial comparison of bids and are not an official part of this Proposal. The Town reserves the right to eliminate any Item or portion of the work, which it deems to be in its best interest.

Payment Terms _____

Starting Date _____

Time to Completion _____ Working Days

Warranty _____

Have you taken any exceptions or have you deviated from our printed specification and if so, are such suggested changes clearly noted on the page provided for exceptions to specifications?

yes

no

RECEIPT OF ADDENDA

<u>ADDENDUM #</u>	<u>SIGNATURE</u>	<u>DATE</u>
1.	_____	__/__/__
2.	_____	__/__/__
3.	_____	__/__/__
4.	_____	__/__/__

NAME OF BIDDER: _____

OFFICIAL ADDRESS: _____

PHONE NUMBER: _____

BY: _____ TITLE: _____
(Please Print)

DATE: _____

SIGNATURE: _____

REFERENCES

The Bidder is required to fill out the following form to enable the Owner to make inquires and judgement as to the Bidder's experience, skill, available financial resources, credit and business standing.

1. Number of years the Bidder has been in business: _____.

5. Does the Bidder plan to sublet any part of this work; and if so, give details.

6. List equipment the Bidder owns that is available for this project.

7. List equipment the Bidder plans to rent or purchase for this project.

8. List name, address and telephone number for the following:

Surety: _____

Bank: _____

Major Material
Supplier: _____