



# REQUEST FOR QUOTATION

PLEASE COMPLETE THE FOLLOWING CONTACT INFORMATION:

## NOTES

Company Name: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

Contact Name: \_\_\_\_\_

Contact Title: \_\_\_\_\_

Phone Number: \_\_\_\_\_

E-mail: \_\_\_\_\_

1. Quoted prices are to be net thirty (30) calendar days: all discounts are to be deducted and reflected in net prices.
2. The County reserves the right to reject any and/or all quotes, to waive any technicalities in the quote, and to take whatever action is in the best interest of Washington County, Maryland.
3. The County is exempt from State of Maryland Sales Tax. The County's Maryland Sales Tax Exemption Number is 3000129 2.

## RETURN QUOTATIONS TO:

WASHINGTON COUNTY PURCHASING DEPARTMENT  
Washington County Administration Complex  
100 West Washington Street, Third Floor, Suite 3200  
Hagerstown, Maryland 21740  
**Attention:** Carin Bakner, Procurement Specialist II  
**Telephone Number:** 240-313-2330

## REQUEST FOR QUOTATION

**THIS IS NOT  
AN ORDER**

### DATE ISSUED

5/13/2022

### DELIVERY WANTED

See Attachment

## DESCRIPTION

### SANDY HOOK WwTP ULTRAVIOLET DISINFECTION SYSTEM REPLACEMENT Q-22-724

*(See Attached Instructions & Specifications)*

**QUOTATION DUE: Wednesday, June 8, 2022, no later than 3:00 P.M., (EDT/EST)** and must be time-stamped in the Purchasing Department. Opening of quotations will follow. Interested parties are invited to hear a reading of the quotes. All quoters who wish to hear a reading of the quotes shall call prior to the teleconference 240-313-2330 to receive instructions.

**QUOTATIONS TO BE ADDRESSED TO:** Washington County Purchasing Department, Attn: Carin Bakner, Procurement Specialist II, Washington County Administration Complex, 100 West Washington Street, Third Floor, Suite 3200, Hagerstown, Maryland 21740 and enclosed in a sealed opaque envelope marked "**QUOTATION – (Q-22-724) SANDY HOOK WwTP ULTRAVIOLET DISINFECTION SYSTEM REPLACEMENT**" and bearing the vendor's name and address.

Having received clarification on all items of conflict or upon which any doubt arose, the undersigned proposed to furnish all labor, materials and equipment called for by said specifications and instructions for the TOTAL LUMP SUM QUOTATION.

**NOTE: This page is to be returned with the Form of Proposal**

We quote you as above - F.O.B. \_\_\_\_\_

Official Signature \_\_\_\_\_

Name Printed \_\_\_\_\_

Telephone Number \_\_\_\_\_

Acknowledge Addenda # \_\_\_\_\_ Date \_\_\_\_\_

# \_\_\_\_\_ Date \_\_\_\_\_, # \_\_\_\_\_ Date \_\_\_\_\_

Delivery/Service can be performed no later than  
\_\_\_\_\_ calendar days from receipt of order.

Date \_\_\_\_\_

**Q-22-724**  
**REQUEST FOR QUOTATION**

**SANDY HOOK WwTP ULTRAVIOLET DISINFECTION SYSTEM REPLACEMENT**

**INSTRUCTIONS**

1. **QUOTATION SUBMISSION:** Quotations are to be submitted enclosed in a sealed opaque envelope bearing the name and address of the firm submitting the quote and marked **“QUOTATION – (Q-22-724) SANDY HOOK WwTP ULTRAVIOLET DISINFECTION SYSTEM REPLACEMENT”**. Quotations are to be addressed to Carin Bakner, Procurement Specialist II, Washington County Purchasing Department, Washington County Administration Complex, 100 West Washington Street, Third Floor, Suite 3200, Hagerstown, Maryland, 21740. **Please direct all inquiries to Carin Bakner, Procurement Specialist II, at 240-313-2330, Fax - 240-313-2331. Facsimile or Electronic Quotes will not be accepted.**
2. **QUOTATION OPENING:** Quotations must be received and time-stamped in the Purchasing Department no later than **3:00 P.M., (EDT/EST) Wednesday, June 8, 2022**. Quotations will be opened and read at that time in the Washington County Administration Complex, Third Floor Conference Room 3000, 100 West Washington Street, Hagerstown, Maryland. All interested parties are invited to attend.
3. **PRE-QUOTATION CONFERENCE/TELECONFERENCE:**  
A Pre-Quotation Conference/Teleconference will be held in person in the Washington County Administration Complex, Third Floor Conference Room 3000, 100 West Washington Street, Hagerstown, Maryland 21740, **10:00 A.M., (EDT/EST) Friday, May 20, 2022** at which time County personnel will be present to answer any questions. All interested quoters wishing to take part in the meeting by teleconference shall call prior to the meeting 240-313-2330 to receive instructions. All interested quoters are requested to take part in the conference/teleconference. Participation in this meeting is not mandatory, but it is strongly encouraged.  
  
**NOTE:** All Quoters must enter the Washington County Administrative Complex through either the front door at the 100 West Washington Street entrance or through the rear entrance (w/blue canopy roof) which is handicap accessible and must use the elevator to access the Purchasing Department to submit their quote and/or to attend the Pre-Quotation Conference and/or the Quote Opening. Alternate routes are controlled by a door access system. The general public will be subject to wand search and will be required to remove any unauthorized items from the building prior to entry. Prohibited items include but are not limited to: Weapons of any type; Firearms, ammunition and explosive devices; Cutting instruments of any type - including knives, scissors, box cutters, work tools, knitting needles, or anything with a cutting edge, etc.; Pepper spray, mace or any other chemical defense sprays; and Illegal substances.
4. **AWARD OF CONTRACT:** Washington County shall award the contract to the responsible, responsive low Quoter based on the total sum for the project. Carelessness in quoting prices, or in preparation of quotation otherwise, will not relieve the Quoter. Erasures or changes in quotations

*Instructions*

**Sandy Hook WwTP Ultraviolet Disinfection System Replacement**

**Q-22-724**

**Page 2**

must be initialed. Upon approval of the cost proposal, it is the County's intent to issue a Notice to Proceed (purchase order) within fourteen (14) days.

5. **CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION:** The quoter/vendor certifies, by submission of this quotation or acceptance of this contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this quotation that it will include this clause without modification in all lower tier transactions, solicitations, quotations, contracts, and subcontracts. Where the quoter/vendor or any lower tier participant is able to certify to this statement, it shall attach an explanation to this solicitation/proposal.
6. **BROCHURES, DESCRIPTIVE LITERATURE, MANUALS:**
  - a. Firms submitting quotes shall furnish complete descriptive literature and specifications of the equipment upon which the Quotation is based. Refer to the General Conditions.
  - b. Failure to comply with this requirement may be ample cause for rejection of the Quotation.
7. **DELIVERY:** The Ultraviolet (UV) Disinfection System shall be installed at the Sandy Hook Wastewater Treatment Plant (WwTP) located at 18954 Sandy Hook Road, Knoxville, MD 21758. The successful Quoter shall guarantee delivery and installation of the Ultraviolet (UV) Disinfection System as specified herein, no later than ninety (90) consecutive calendar days after notice of award. All delivery / installation and demo costs and charges shall be included in the Quotation.
8. **DISCOUNTS:** Quoted prices are to be net thirty (30) calendar days; all discounts are to be deducted and reflected in net prices.
9. **DISPUTES:** In cases of disputes as to whether or not an item or service quoted or delivered meets specifications, the decision of the County Commissioners or authorized representative shall be final and binding on both parties.
10. **EQUAL OPPORTUNITY:** The Board of County Commissioners of Washington County, Maryland does not discriminate on the basis of race, color, national origin, sex, religion, age and disability in employment or the provision of services. Individuals requiring special accommodations are requested to contact the Purchasing Department at 240-313-2330 Voice, TDD Dial 711 to make arrangements no later than seven (7) calendar days prior to the Quotation Opening.
11. **EXCEPTION:** The submission of a quotation shall be considered an agreement to all items, conditions, and specifications provided herein and in the various quotation documents unless specifically noted otherwise in the quotation.
12. **INSURANCE:** The successful Quoter must show, upon request and prior to the execution of a Contract or issuance of Purchase Orders and as required by the County, evidence of appropriate insurance as outlined in the attached ***Insurance Requirements for Independent Contractors***

*Instructions*

**Sandy Hook WwTP Ultraviolet Disinfection System Replacement**

Q-22-724

Page 3

policy. Insurance coverage is required for the duration of the contract term. The quotation shall be identified on the certificate and the Board of County Commissioners of Washington County, Maryland shall be named as an additional insured. The certificate holder on the certificate shall be listed as the Board of County Commissioners of Washington County, Maryland, 100 West Washington Street, Hagerstown, Maryland.

13. **INTERPRETATION, DISCREPANCIES, OMISSIONS:** Should any Quoter find discrepancies in, or omissions from the documents or be in doubt of their meaning, or feel that the specifications are discriminatory, he/she should at once request, in writing, an interpretation from Carin Bakner, Procurement Specialist II, Washington County Purchasing Department, Washington County Administration Complex, 100 West Washington Street, Suite 3200, Hagerstown, Maryland, 21740, Fax: 240-313-2331; or send questions in Microsoft Word platform via-email to [purchasingquestions@washco-md.net](mailto:purchasingquestions@washco-md.net).

All necessary interpretations will be issued to all Quoters by the Washington County Purchasing Director in the form of addenda to the specifications, and such addenda shall become part of the Contract Documents. Exceptions taken in no way obligates the County to change the specifications. Failure of any Quoter to receive any such addendum or interpretation shall not relieve such Quoter from any obligation under his/her quotation as submitted. The County will assume no responsibility for oral instructions or suggestions. **ORAL ANSWERS WILL NOT BE BINDING ON THE COUNTY.** Any requests received after 4:00 P.M., (EDT/EST), Friday, May 27, 2022 may not be considered.

14. **LANDFILL FEES:** Disposal of items shall be at an approved sanitary landfill and any fees for it must be included in the Contractor's quotation.
15. **LAWS AND REGULATIONS:** The Bidder's attention is directed to the fact that all applicable State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the Contract the same as though herein written out in full. The successful Quote shall pay all sales, consumer, use another similar taxes required by law and shall secure all permits, fees and licenses necessary for the execution of the work.
16. **LIQUIDATED DAMAGES:** Assessments shall be made at the rate of one percent (1%) of the quoted price, per unit, per day, for each unit not delivered by the due date. This assessment shall be deducted from the invoice price.
17. **LUMP SUM PROPOSAL:** A lump sum proposal is being requested for the work. The total sum for the work shall include the cost of any and all permits and/or fees, the cost of all applicable seals and other taxes required by Local, State and Federal laws, the cost of required bonds and insurance's, the cost of all material, labor, equipment, plant and other services and facilities of every nature whatsoever or as may be necessary to complete the project as described in the specifications.
18. **MATERIAL AND WORKMANSHIP:** All equipment furnished shall be guaranteed to be new, unused and of current manufacture, to meet all requirements of the specifications, and to be in

intended use condition at time of delivery. All workmanship shall be of high quality and accomplished in a professional manner so as to ensure functionality of the equipment.

19. **PAYMENT:** Payment will be made within thirty (30) calendar days of receipt of invoice submitted after final inspection, approval and acceptance of the installation of the new Ultraviolet (UV) Disinfection System by a County's Representative. Invoices shall be submitted in duplicate to the Department of Water Quality, 16232 Elliott Parkway, Williamsport, MD 21795.
20. **PAYMENT OF COUNTY AND MUNICIPAL TAXES:** Effective October 1, 1993, in compliance with Section 1-106(b)(3) of the Code of the Public Local Laws of Washington County, Maryland, "If a Bidder has not paid all taxes owed to the County or a municipal corporation in the County, the County Commissioners may reject the Bidder's bid."
21. **POLITICAL CONTRIBUTION DISCLOSURE:** In accordance with Maryland Code, State Finance and Procurement Article, §17-402, the Bidder shall comply with Maryland Code, Election Law Article, Title 14, which requires that every person that enters into contracts, leases, or other agreements with the State, a county, or any incorporated municipality, or their agencies during a calendar year in which the person receives in the aggregate \$100,000 or more, shall file with the State Administrative Board of Election Laws a statement disclosing contributions in excess of \$500 made during the reporting period to a candidate for elective office in any primary or general election. The statement shall be filed with the State Administrative Board of Election Laws: (1) before a purchase or execution of a lease or contract by the State, a county, an incorporated municipality or their agencies, and shall cover the preceding two (2) calendar years; and (2) if the contribution is made after the execution of a lease or contract, then twice a year, throughout the contract term, on: (a) February 5, to cover the 6-month period ending January 31; and (b) August 5, to cover the 6-month period ending July 31.
22. **REDUCTION OF PRICES:** Any reduction of prices during the period of this contract shall be passed on to the Board of County Commissioners of Washington County, Maryland.
23. **QUALIFICATION:** The Board of County Commissioners of Washington County, Maryland may make such investigations as it deems necessary to determine the ability of the Bidder to perform the work, and the Bidders shall furnish to the County all such information and data for this purpose as the County may request. The County reserves the right to reject any bid if the evidence submitted by or investigation of such Bidder fails to satisfy the County that such Bidder is properly qualified to carry out the obligation of the contract and to complete the work contemplated therein. Conditional quotations will not be accepted.
24. **QUOTER'S RESPONSIBILITY:** Prior to contracting, private corporations must either be incorporated in the State of Maryland or registered with the Maryland Department of Assessments and Taxation as a foreign corporation and must be in good standing. Proof of such standing is required prior to the start of the contracting process and shall remain in good standing during the contract period. The website for the Maryland Department of Assessments and Taxation: <http://dat.maryland.gov/Pages/sdatforms.aspx#BNE> and the phone numbers for the State Department of Assessments and taxation are: (410) 767-1340 or (888) 246-5941.

25. **RESERVATIONS:** The Board of County Commissioners of Washington County, Maryland, reserves the right to accept or reject any or all quotes, to waive formalities, informalities and technicalities therein. The Board reserves the right to contact a Quoter for clarifications and may, at its sole discretion, allow a Quoter to correct any and all formalities, informalities and technicalities in the best interest of Washington County, Maryland.
26. **SALES TAX:** Washington County Government is exempt from State of Maryland Sales Tax. The County's Maryland Sales Tax Exemption Number is 3000129 2. The County will provide a sales tax exemption certificate for the items provided under this contract.
27. **SUBSTITUTIONS:** Any Quoter who contemplates offering equipment that differs from that specified SHALL obtain the County's written approval prior to quotation opening. Substitution literature shall be received in the Purchasing Department **no later than 4:00 P.M., (EDT/EST), Friday, May 27, 2022**. Requests received after this deadline for substitutions may not be considered. All correspondence regarding this quote shall be directed to and issued by the Washington County Purchasing Department.

**Q-22-724**  
**REQUEST FOR QUOTATION**

**SANDY HOOK WwTP ULTRAVIOLET DISINFECTION SYSTEM REPLACEMENT**

**GENERAL CONDITIONS**

1. The successful vendor shall supply the County with the following technical information at or before the time of installation of the equipment:
  - a. TECHNICAL MANUAL – One (1) complete copy with the equipment at the time of delivery/install or no later than ninety (90) calendar days after delivery.
  - b. WIRING DIAGRAM – One (1) complete copy with the equipment at the time of delivery/install or no later than ninety (90) calendar days after delivery.
  - c. PARTS BOOK – One (1) complete book on all components with the equipment at the time of delivery/install or no later than ninety (90) calendar days after delivery.
  - d. BUILD OR SPEC SHEETS – One (1) complete copy with the equipment at the time of delivery/install or no later than ninety (90) calendar days after delivery.
2. The County shall not accept any new equipment until all damage and defects have been repaired and factory shortages replaced.
3. The new Ultraviolet (UV) system shall be installed in the existing Ultraviolet (UV) channel without requiring any structural modifications.
4. The County can stop the flow to the Ultraviolet (UV) system for a maximum of eight (8) hours, so the demo of the old system and installation of the new system must be completed within those eight (8) hours.
5. The Sandy Hook Wastewater Treatment Plant (WwTP) is located at 18954 Sandy Hook Road, Knoxville, MD 21758. Drawings of the existing UV channel is attached (**Attachment 1**).

**Q-22-724**  
**REQUEST FOR QUOTATION**

**SANDY HOOK WwTP ULTRAVIOLET DISINFECTION SYSTEM REPLACEMENT**

**SPECIFICATIONS**

**I. SUMMARY:**

The Washington County Department of Environmental Management is requesting price quotations from qualified and interested firms to provide an Ultraviolet (UV) Disinfection System complete with Ultraviolet (UV) lamp modules, effluent channel, level control, and Ultraviolet (UV) monitoring system as shown on the Contract Drawings (**Attachment 1**) and as herein specified for the Sandy Hook Wastewater Treatment Plant.

**II. GENERAL REQUIREMENTS:**

1. The awarded vendor shall furnish all labor, materials, equipment, and appurtenances required to provide an open channel gravity flow Ultraviolet (UV) Disinfection System. The system is to be complete and operational with all control equipment and accessories as shown and specified.
2. The awarded vendor is expected to remove the existing Ultraviolet (UV) Disinfection System.
3. The awarded vendor is expected to install the new Ultraviolet (UV) Disinfection System in accordance with the Shop Drawing Manufacturer's instructions. The Ultraviolet (UV) Disinfection System will be designed for complete outdoor installation without shelter or supplemental cooling/heating required.
4. A minimum of one (1) day training shall be provided for onsite training of the new Ultraviolet (UV) Disinfection System's operation and maintenance by a certified manufacturer's technician.

**III. QUALIFICATION REQUIREMENTS:**

Any alternate Ultraviolet (UV) manufacturer that is proposed on this Project may be asked to submit the following when requested by the Owner:

1. Documentation that proves the manufacturer has been regularly engaged in the manufacture of Ultraviolet (UV) systems with a proven track record of at least 25 installations in North America.
2. The manufacturer will provide documentation of previous experience with municipal Ultraviolet (UV) Disinfection Systems in wastewater applications with electronic ballasts.



3. Submittals from manufacturers will include a complete and detailed proposal of equipment offered, including the number of lamps proposed and a detailed description of any exceptions taken to the specification.
4. The manufacturer will submit a bioassay evaluation for the proposed reactor. This bioassay will have been validated by an independent third party and have followed protocols described in the US EPA Design Manual Municipal Wastewater Disinfection (EPN62511-86/021), without exception. The manufacturer's bioassay report must demonstrate that the proposed Ultraviolet (UV) system design and number of lamps will deliver the specified dose.
5. Independent certification of lamp aging factor must be submitted. Testing to be in accordance with protocols described in NWRI Ultraviolet (UV) Disinfection Guidelines for Drinking Water and Water Reuse (May 2003).
6. Documentation of Ultraviolet (UV) manufacturer's service capabilities including location and experience.
7. Sample disinfection performance guarantee including scope and duration of guarantee.

**IV. DESIGN CRITERIA:** THE FOLLOWING DESCRIPTION OF EQUIPMENT SHALL BE PROVIDED.

1. Provide equipment which will disinfect an effluent with the following characteristics:

Peak Flow	30,000 US GPD
Total Suspended Solids	30 mg/l
Ultraviolet Transmittance @ 253.7 nm	65%
Annual Effluent Temperature Range	33 to 85 ° F
Effluent standard to be guaranteed	126 E. Coli/100 ml, based on a 30-day Geometric Mean of daily samples

2. The Ultraviolet (UV) equipment will be installed in a cast-in-place concrete channel, not furnished as part of this system, and having dimensions as shown on the drawings.
3. The system supplied will be arranged in the following manner.

Number of Lamps in each UV Lamp Module	Two (2)
Number of UV Lamp Modules	Three (3) per bank
Number of UV Banks	One (1)

4. The lamp array configuration will be evenly spaced in both horizontal and vertical rows with all lamps parallel to each other and to the effluent flow.

## **V. PERFORMANCE REQUIREMENTS:**

1. The Ultraviolet (UV) Disinfection System will be designed to deliver a minimum Ultraviolet (UV) dose of 31,023  $\mu\text{rWs}/\text{cm}^2$ , in effluent with an Ultraviolet (UV) Transmission of 65% after reductions for quartz sleeve absorption, sleeve fouling, and at lamp aging. The basis for evaluating the Ultraviolet (UV) dose delivered by the Ultraviolet (UV) system will be the manufacturer's bioassay as carried out by an independent third party. Bioassay validation methodology to follow protocols described in US EPA Design Manual - Municipal Wastewater Disinfection (EPA/625/1-86/021), without exception.
2. The Ultraviolet (UV) Disinfection System will produce an effluent conforming to the following discharge permit: 126 E. Coli/100 ml, based on a 30-day Geometric Mean.

## **VI. SUBMITTALS REQUIRED:**

1. Shop drawings shall be submitted for review showing the following:
  - a) Complete description in sufficient detail to permit an item comparison with the specification.
  - b) Dimensions and installation requirements
  - c) Descriptive information including catalog cuts and manufacturers specifications for all components.
  - d) Electrical schematics and layouts
  - e) Independent bioassay report demonstrating dose delivered under design conditions
  - f) Experience documentation

## **VII. GUARANTEE:**

1. The equipment furnished under this section will be free of defects in material and workmanship, including damages that may be incurred during shipping for a period of 12 months from date of start-up.
2. The Ultraviolet (UV) lamps are to be warranted for a minimum of 12,000 hours (non-prorated). Prorated lamp warranties will not be accepted.

## **VIII. MANUFACTURER:**

1. The Ultraviolet (UV) Disinfection System used as the basis of design is a model 5000 by Glasco Ultraviolet, LLC of Mahwah, New Jersey or approved equal. If other equipment is

proposed, the Contractor must demonstrate to the Owner that all requirements of materials, validation, experience, performance, and workmanship have been met or exceeded by the equipment proposed. Contractors proposing alternate manufacturers will be responsible for all costs associated with system evaluation and redesign including all electrical, mechanical and civil aspects of the installation (if required).

## **IX. DESIGN, CONSTRUCTION AND MATERIALS:**

1. General
  - a. All material in contact with effluent will be stainless steel or quartz.
  - b. All material exposed to Ultraviolet (UV) light will be stainless steel, anodized aluminum, quartz 214, or Teflon.
2. Ultraviolet (UV) Module (UVM)
  - a. Each Ultraviolet (UV) lamp module will consist of two (2) lamps and their corresponding electronic ballast. Each lamp will be enclosed in its individual quartz sleeve, one end of which will be closed, and the other end sealed by a lamp end seal and holder.
  - b. The electrical wires connecting the lamps to the electronic ballasts will be enclosed in the stainless steel. Systems where lamp wiring is submerged in the effluent and exposed to Ultraviolet (UV) light will not be allowed.
  - c. Each Ultraviolet (UV) module will be provided with a standard 120 Volt plug and weatherproof cable for connection to a receptacle. The cable length will be as required. A total of three (3) Ultraviolet (UV) modules per bank will be supplied. Lamp status will be displayed on top of each Ultraviolet (UV) module using watertight LED indicator lights.
  - d. Modules will be approximately sixty-eight (68) inches long, twenty (20) inches high and two point eight (2.8) inches wide, weighing approximately thirty-eight (38) pounds. Materials of construction will be stainless steel type 316, anodized aluminum, quartz 214, and Teflon.
3. Ultraviolet (UV) Lamps
  - a. The Ultraviolet (UV) system will use low pressure mercury slimline lamps of the hot cathode, instant start design.
  - b. 90% of Ultraviolet (UV) output will be within the wavelengths of 233.7 to 273.7 nm.
  - c. The operating life of the lamp will be guaranteed for 12,000 hours, non-prorated.
  - d. Independent validation of lamp aging factor is required.

4. Lamp End Seal and Lamp Holder
  - a. The open end of the lamp sleeve will be sealed by means of a sleeve nut which threads onto a sleeve cup and compresses the sleeve 'O' ring.
  - b. The sleeve nut will have a knurled surface to allow a positive handgrip for tightening. The sleeve nut will not require any tools for removal.
5. Ultraviolet (UV) Lamp Sleeves
  - a. Quart sleeves to be type 214 clear fused quartz circular tubing as manufactured by General Electric or equal.
  - b. Quartz to be rated for Ultraviolet (UV) transmission of 89% and not subject to solarization.
  - c. The nominal wall thickness will be 1.0 to 2.0 mm to maximize Ultraviolet (UV) transmission.
6. Effluent Channel
  - a. One Ultraviolet (UV) units will be provided with one (1) stainless steel 304, Ultraviolet (UV) module support rack and one (1) downstream level control weir.
  - b. Concrete channel will have the dimensions as shown on the Drawings.
7. Level Control Weir

Weir will be located downstream of the Ultraviolet (UV) modules to maintain an average water depth of twelve (12) inches and ensure lamp submergence at all times.

  - a. Maximum effluent level variance from zero to peak flow will not exceed 1.5 inches.
  - b. Weir will be welded watertight.
8. Electrical
  - a. The Ultraviolet (UV) Disinfection System will be divided into four (4) Ultraviolet (UV) modules per bank.
  - b. Interconnecting Cables to be standard 120 Volt, weatherproof, ten (10) feet long and will be suitable for outdoor installation.
  - c. Power Distribution Receptacles:
    - 1) 120 Volt receptacles rated for continuous outdoor use will be provided. Receptacles will be of the duplex type complete with ground fault interrupter circuitry.

2) Receptacles to be provided by the Ultraviolet (UV) Manufacturer.

d. Power Consumption

1) Maximum power draw to Ultraviolet (UV) System will be 1400 watts.

2) All electrical supplies will be 120 Volt, 60Hz.

3) A separate 120 Volt, 5-amp supply to be provided for the Monitoring System.

9. Cleaning Procedure

The Ultraviolet (UV) lamp modules will be cleaned by removing from the effluent channel and hand wiping the sleeves with an acid solution, using a non-abrasive cloth.

10. Monitoring System

a. One (1) submersible Ultraviolet (UV) sensor will continuously monitor the Ultraviolet (UV) intensity produced in the bank of Ultraviolet (UV) lamp modules. The sensor will measure only the germicidal portion of the light emitted by the Ultraviolet (UV) lamps.

b. Ultraviolet (UV) intensity will be indicated on a three (3) character display in mW/cm<sup>2</sup>.

c. Elapsed time in hours (lamp age) will be indicated on a five (5) character display.

d. Both displays will utilize LEDs and will be visible through the panel door.

e. A dry contact will be provided for remote indication of Low UV intensity alarm.

f. Monitoring System will be enclosed in a fiberglass Type 4X wall mounted panel and is to be located less than twelve (12) from the LED end of the Ultraviolet (UV) Module.

11. Power Distribution Receptacle (PDR)

a. Duplex ground fault interrupter receptacle(s) will be provided by the Ultraviolet (UV) Manufacturer.

b. Receptacles will be mounted in an individual, painted cast aluminum junction box complete with a Type 3R rain shield for outdoor installation.

c. Contractor to supply appropriate 120 Volt, single phase, 60 Hz circuit to power the PDRs which have a total current draw of approximately 12.68 amps. Contractor to be responsible for distributing the power from the main 120 Volt feed to the individual PDRs. Responsibility is to be all encompassing and in accordance with the local electrical codes.

12. Maintenance Rack

One Type 304 stainless steel maintenance rack will be supplied. The rack is designed to facilitate the servicing operation of the Ultraviolet (UV) modules.

13. Spare Parts

The following additional parts will be furnished:

- a. Two (2) Ultraviolet (UV) Lamps
- b. Two (2) Lamp Sleeves
- c. Two (2) Lamp Holders
- d. Two (2) Operator Kits (including I face shield, gloves, cleaning solution)

**POLICY TITLE:** Insurance Requirements for Independent Contractors

**ADOPTION DATE:** August 29, 1989

**EFFECTIVE DATE:** September 1, 1989

**FILING INSTRUCTIONS:**

**I. PURPOSE**

To protect Washington County, Maryland against liability, loss or expense due to damaged property, injury to or death of any person or persons and for care and loss of services arising in any way, out of, or in connection with or resulting from the work or service performed on behalf of Washington County, Maryland.

**II. ACTION**

The following should be inserted in all Independent Contractor Contracts:

"The Contractor shall procure and maintain at his sole expense and until final acceptance of the work by the County, insurance as hereinafter enumerated in policies written by insurance companies admitted in the State of Maryland, have A.M. Best rating of A- or better or its equivalent, and acceptable to the County."

1. **Workers Compensation:** The Contractor agrees to comply with Workers Compensation laws of the State of Maryland and to maintain a Workers Compensation and Employers Liability Policy.

Minimum Limits Required:

Workers Compensation -	Statutory
Employers Liability -	\$100,000 (Each Accident)
	\$500,000 (Disease - Policy Limit)
	\$100,000 (Disease - Each Employee)

2. **Comprehensive General Liability Insurance:** The Contractor shall provide Comprehensive General Liability including Products and Completed Operations.

Minimum Limits Required:

\$1,000,000 combined single limit for Bodily Injury and Property Damage.

Such insurance shall protect the County, its agents, elected and appointed officials, commission members and employees, and **name Board of County Commissioners of Washington County, Maryland** on the policy as additional insured against liability, loss or expense due to damaged property (including loss of use), injury to or death of any person or persons and for care and loss of services arising in any way, out of, or in connection with or resulting from the work of service performed on behalf of Washington County, Maryland.

## 2. **Comprehensive General Liability Insurance** (continued)

The Contractor is ultimately responsible that Subcontractors, if subcontracting is authorized, procure and maintain at their sole expense and until final acceptance of the work by the County, insurance as hereinafter enumerated in policies written by insurance companies admitted in the State of Maryland, have A.M. Best rating of A- or better or its equivalent, and acceptable to the County.

3. **Business Automobile Liability:** The Contractor shall provide Business Auto Liability including coverage for all leased, owned, non-owned and hired vehicles.

Minimum Limits Required:

\$1,000,000 combined single limit for Bodily Injury or Property Damage.

**Certificate(s) of Insurance:** The Contractor shall provide certificates of insurance requiring a 30-day notice of cancellation to the Purchasing Department, Board of County Commissioners of Washington County, Maryland prior to the start of the applicable project.

Approval of the insurance by the County shall not in any way relieve or decrease the liability of the Contractor. It is expressly understood that the County does not in any way represent that the specified limits of liability or coverage or policy forms are sufficient or adequate to protect the interest or liabilities of the Contractor.

All responsibility for payment of any sums resulting from any deductible provisions, corridor, or self-insured retention conditions of the policy or policies shall remain with the Contractor.

**General Indemnity:** The Contractor shall indemnify, defend and save harmless the Board of County Commissioners of Washington County, Maryland, its appointed or elected officials, commission members, employees and agents for any and all suits, legal actions, administrative proceedings, claims, demands, damages, liabilities, interest, attorneys fees, costs and expenses of whatsoever kind of nature, whether arising before or after final acceptance and in any manner directly or indirectly caused, occasioned or contributed to in whole or in part by reason of any act, error or omission, fault or negligence whether active or passive by the Contractor, or any one acting under its direction, control or on its behalf in connection with or incident to its performance of the Contract.

Revision Date: August 27, 1991

Effective Date: August 27, 1991

Revision Date: March 4, 1997

Effective Date: March 4, 1997



**Background and Applicability:**

In conjunction with the Office of Management and Budget and other affected Federal agencies, DOT published an update to 49 CFR Part 29 on November 26, 2003. This government-wide regulation implements Executive Order 12549, *Debarment and Suspension*, Executive Order 12689, *Debarment and Suspension*, and 31 U.S.C. 6101 note (Section 2455, Public Law 103-355, 108 Stat. 3327).

The provisions of Part 29 apply to all grantee contracts and subcontracts at any level expected to equal or exceed \$25,000 as well as any contract or subcontract (at any level) for Federally required auditing services, 49 CFR 29.220(b). This represents a change from prior practice in that the dollar threshold for application of these rules has been lowered from \$100,000 to \$25,000. These are contracts and subcontracts referred to in the regulation as “covered transactions.”

Grantees, Contractors, and Subcontractors (at any level) that enter into covered transactions are required to verify that the entity (as well as its principals and affiliates) they propose to contract or subcontract with is not excluded or disqualified. They do this by (a) Checking the Excluded Parties List System, (b) Collecting a certification from that person, or (c) Adding a clause or condition to the contract or subcontract. This represents a change from prior practice in that certification is still acceptable but is no longer required, 49 CFR 29.300.

Grantees, Contractors, and Subcontractors who enter into covered transactions also must require the entities they contract with to comply with 49 CFR 29, Subpart C and include this requirement in their own subsequent covered transactions (i.e., the requirement flows down to subcontracts at all levels).

This contract is a covered transaction for purposes of 49 CFR Part 29. As such, the Contractor is required to verify that none of the Contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945.

The Contractor is required to comply with 49 CFR 29, Subpart C and must include the requirement to comply with 49 CFR 29, Subpart C in any lower tier covered transaction it enters into.

By signing and submitting its quote, the Quoter certifies as follows: The certification in this clause is a material representation of fact relied upon by the *County*. If it is later determined that the Quoter knowingly rendered an erroneous certification, in addition to remedies available to the *County*, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

The Quoter agrees to comply with the requirements of 49 CFR 29, Subpart C while this offer is valid and throughout the period of any contract that may arise from this offer.

The Quoter further agrees to include a provision requiring such compliance in its lower tier covered transactions.

Company Name \_\_\_\_\_

Signature of Contractor’s Authorized Official \_\_\_\_\_

Printed Name of Contractor’s Authorized Official \_\_\_\_\_

Printed Title of Contractor’s Authorized Official \_\_\_\_\_

Date \_\_\_\_\_

Q-22-724

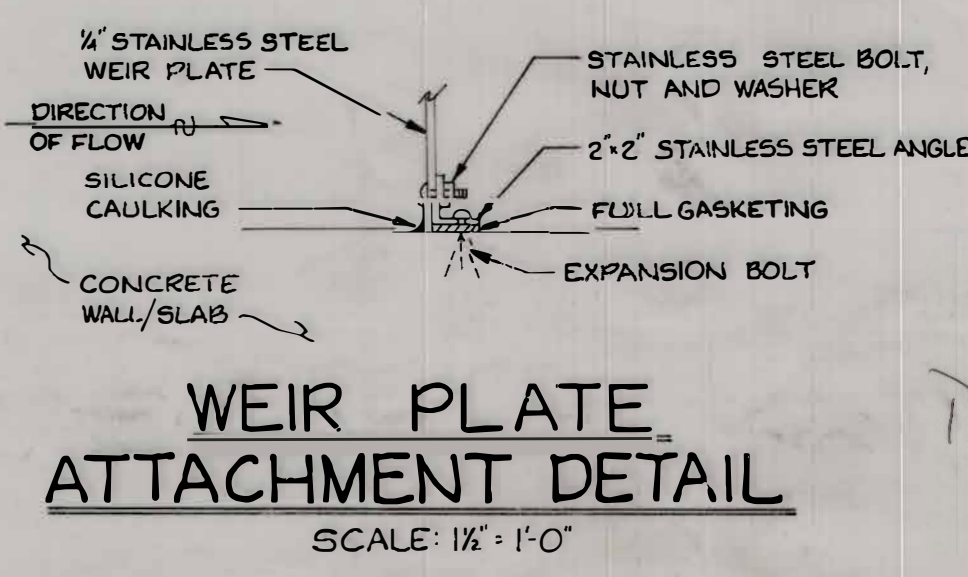
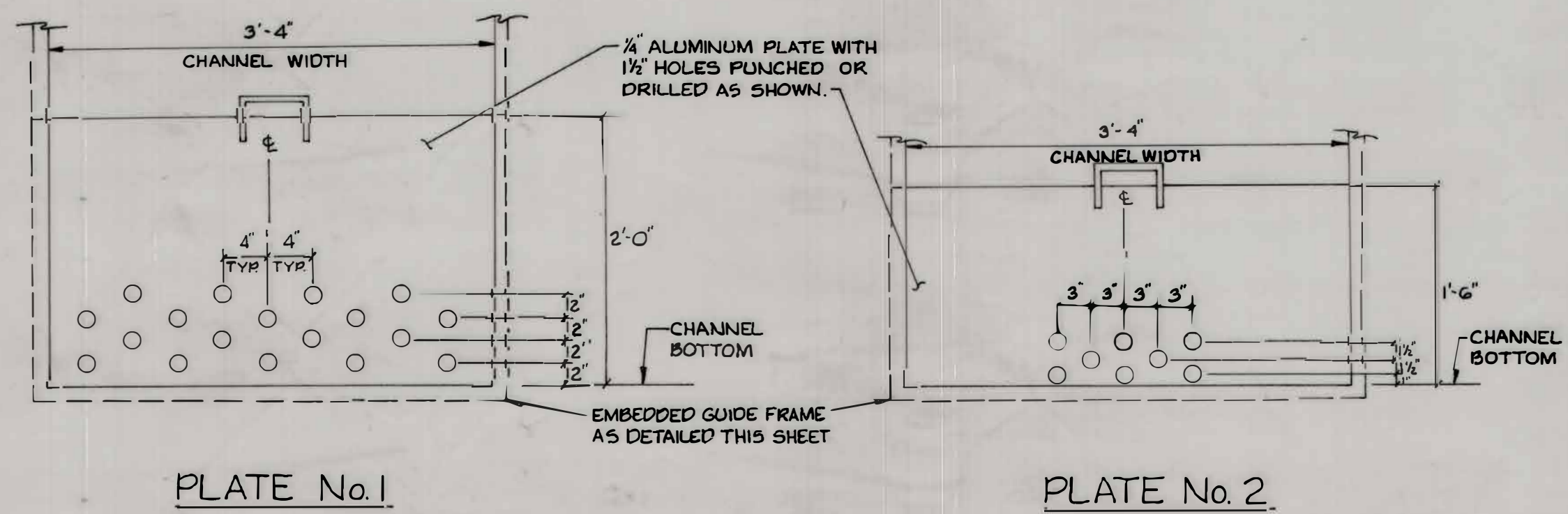
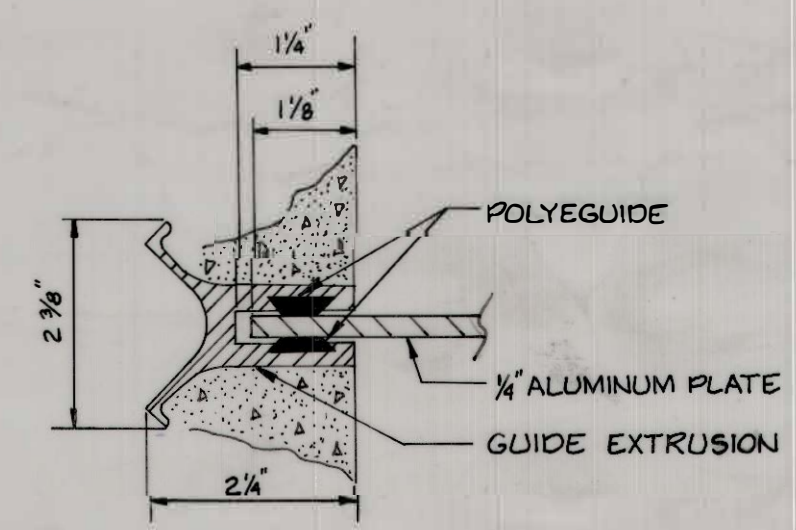
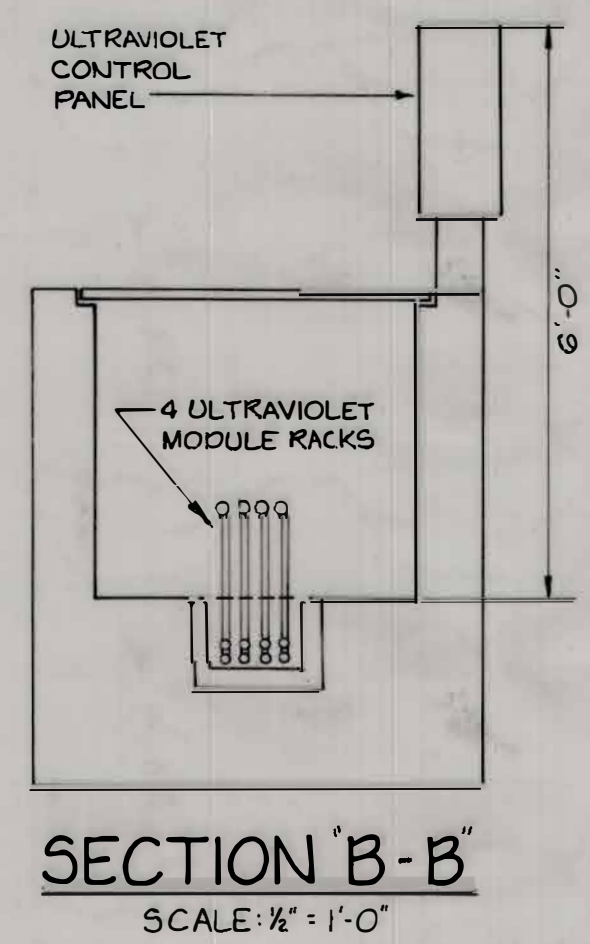
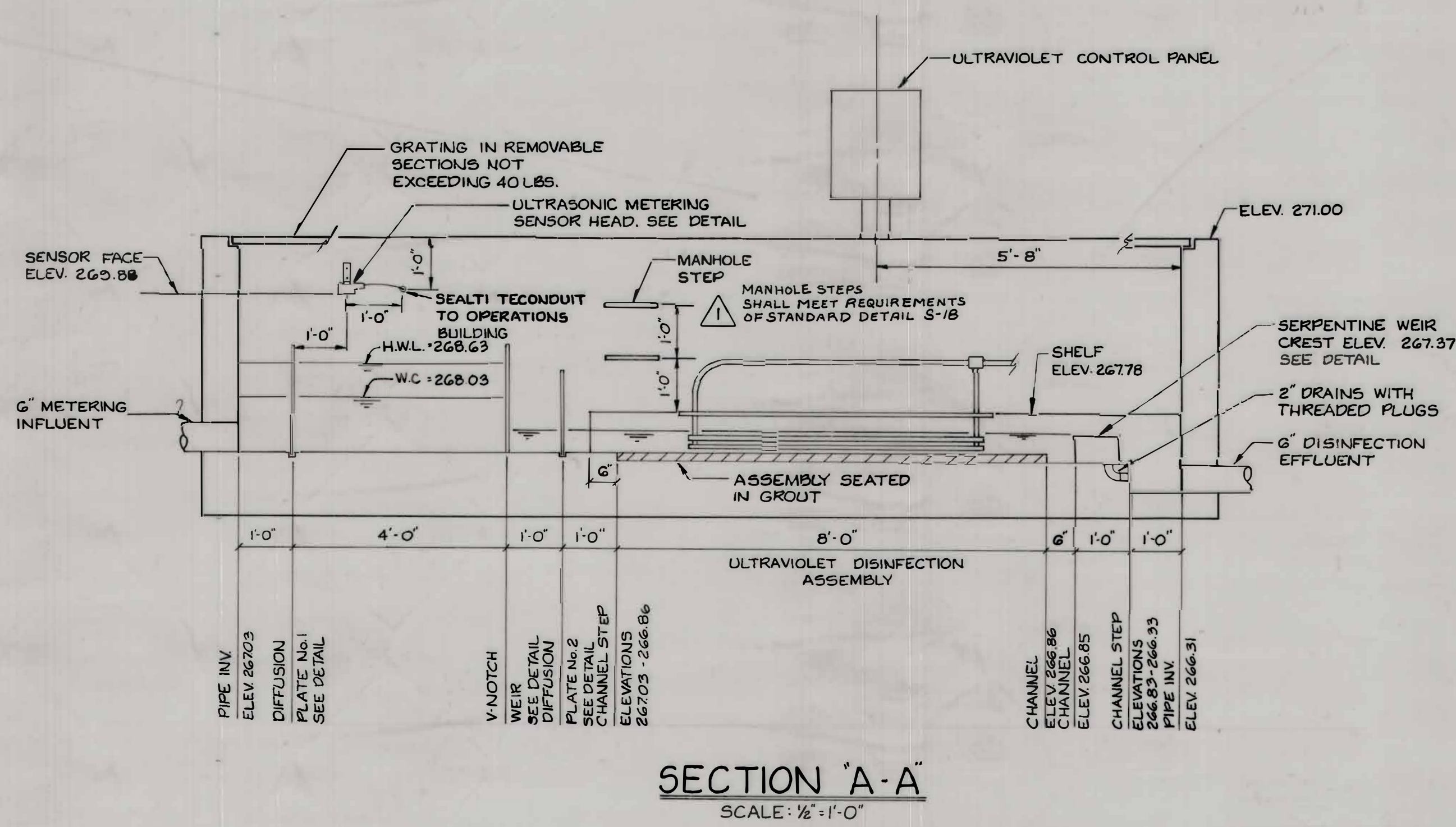
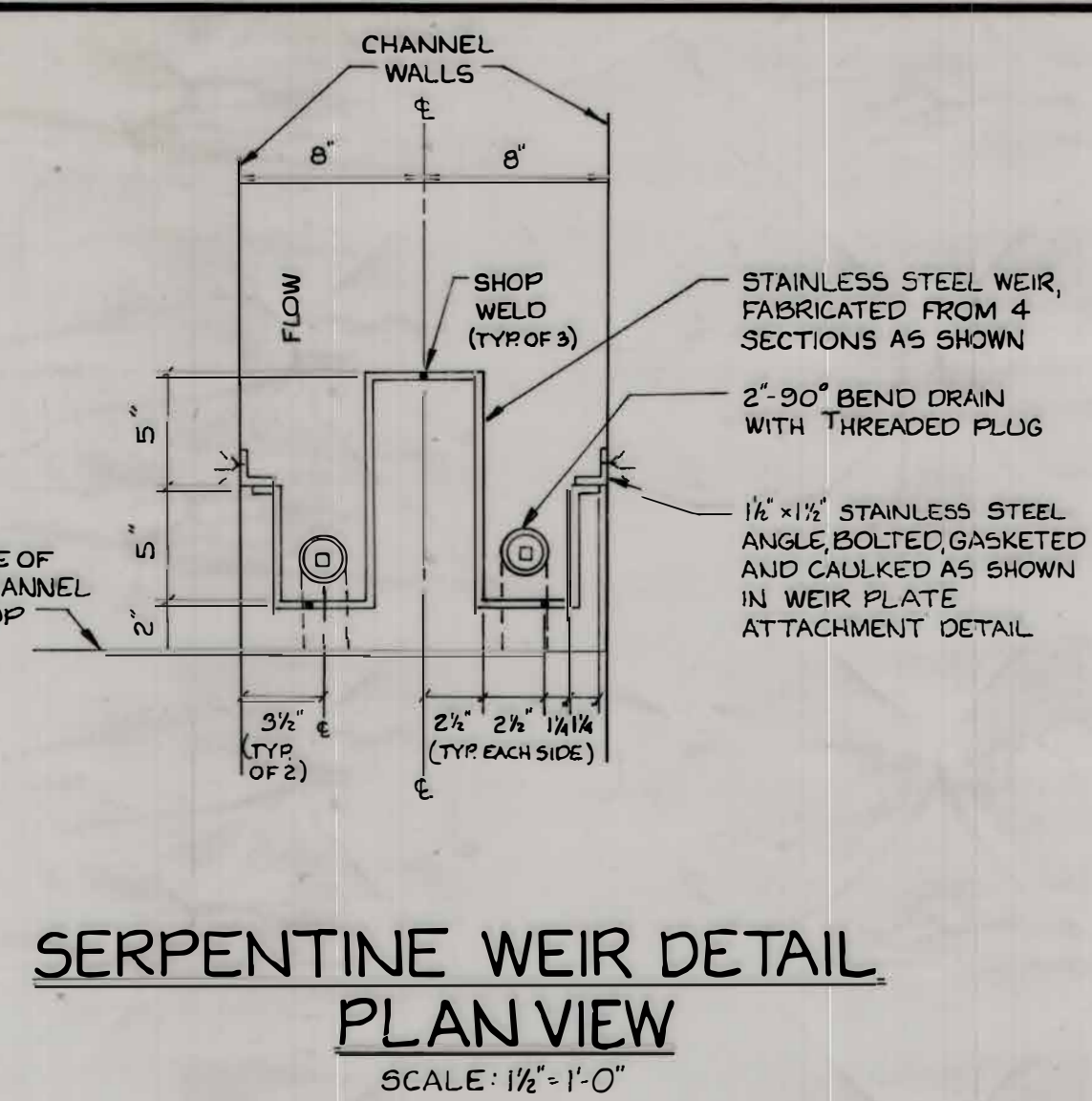
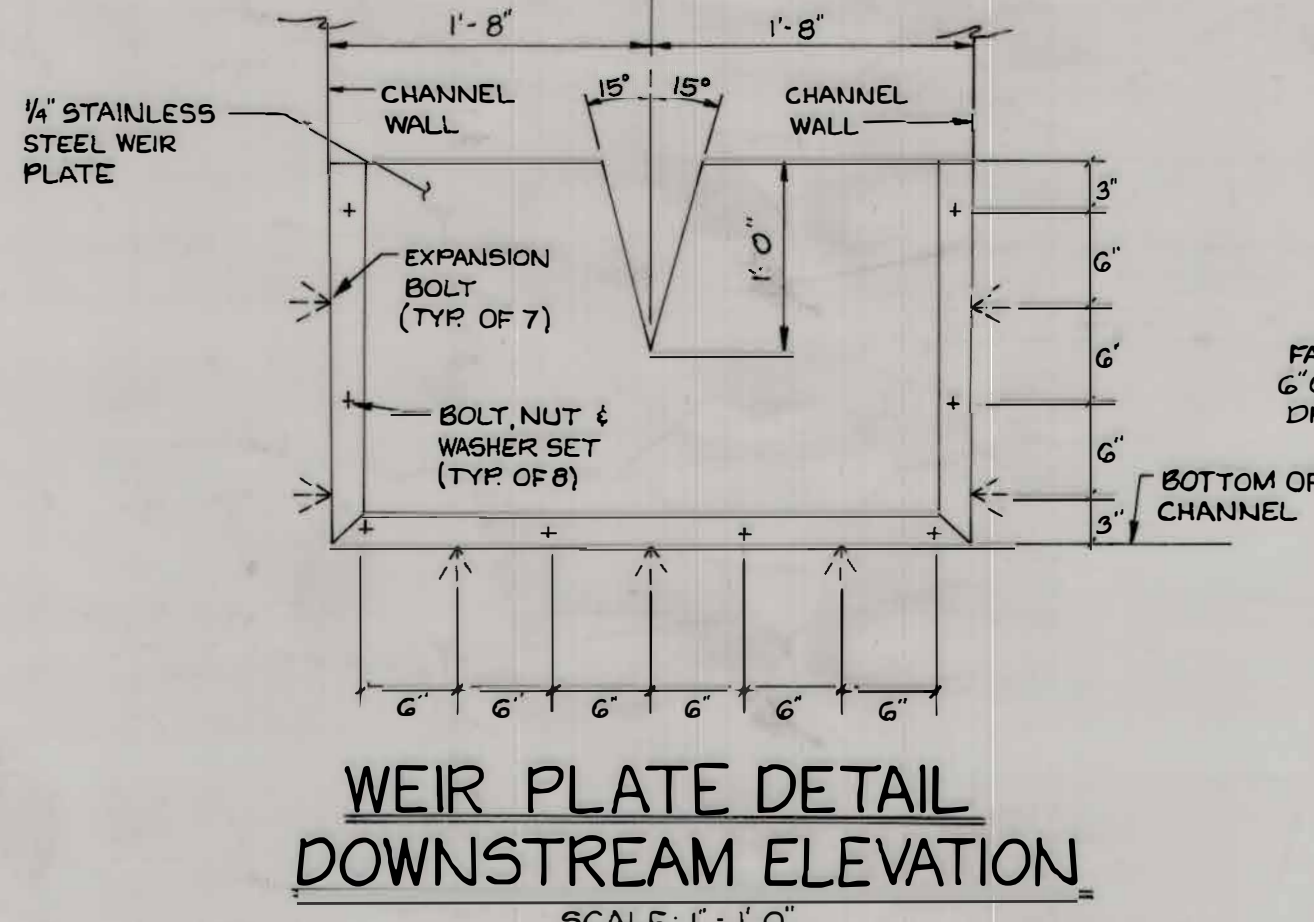
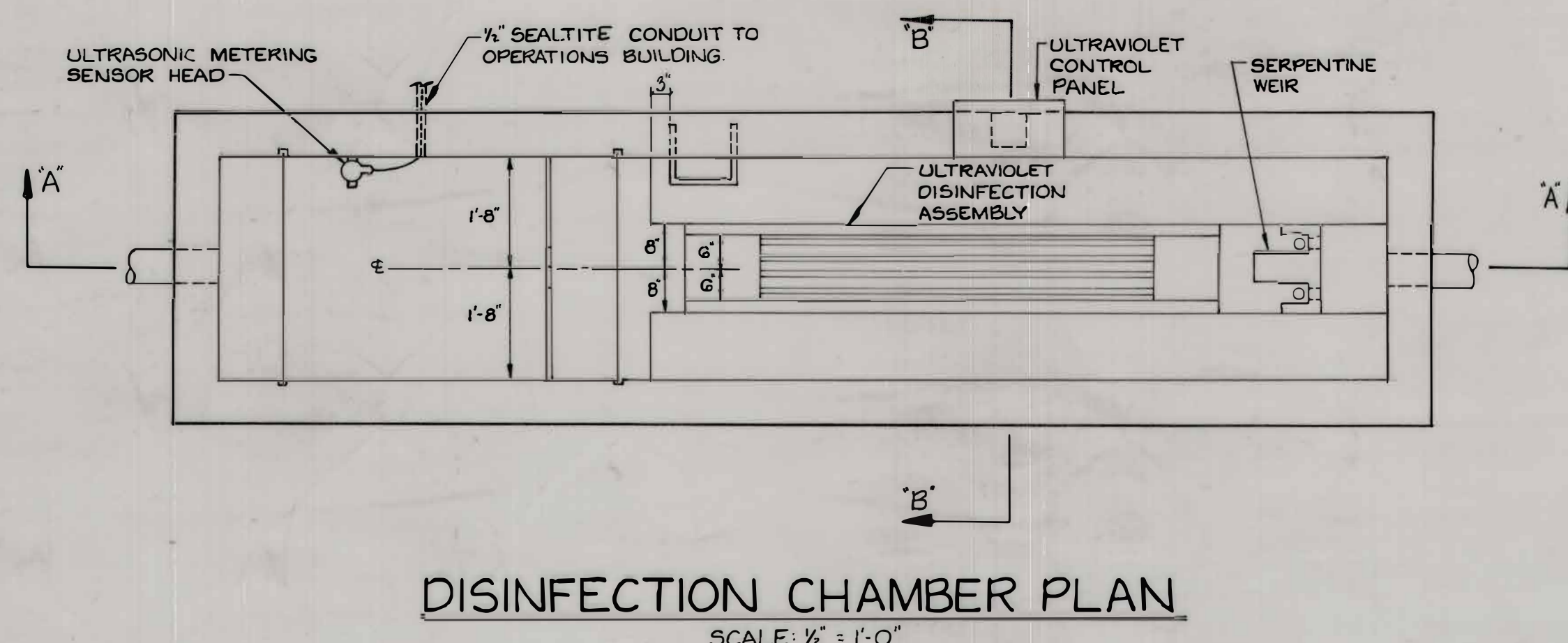
**SANDY HOOK WwTP ULTRAVIOLET DISINFECTION SYSTEM REPLACEMENT**

**FORM OF PROPOSAL**

Item No.	Item Description	Unit of Measure	Qty	Total Price (Figures)
1	Removal of existing UV system and furnish and install new UV system  _____ Dollars (Written)  _____ per Cents (Written)	Ea.	1	\$ _____ (Figures)

REMARKS/EXCEPTIONS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_





NOTE:  
CONTRACTOR SHALL COORDINATE  
OVERALL DIMENSIONS OF SLIDE  
PLATES WITH MANUFACTURER OF  
GUIDE FRAME TO ALLOW FOR  
EMBEDMENT DEPTH.

**Harris, Smariga & Associates, Inc.**  
Planners/Engineers/Surveyors  
The Patrick Center/30 West Patrick Street, Suite 300/Frederick, MD 21701  
(301) 662-4488, Montgomery County (301) 831-4048

REVISIONS:  
1. REVISED PER ADDENDUM No. 1 10.24.91  
2. REV PER W.C.S.D. COMM. 6/28/93 gvv

**SANDY HOOK  
W.W.T.P.**  
METERING AND DISINFECTION  
MECHANICAL  
PLAN AND DETAILS

SCALE: AS NOTED  
DRAWN BY: JCL/J.S.B.  
CHECKED BY: E.A.H.  
DATE: 7-20-90  
SHEET: 30  
OF: 46  
PROJECT NO. 6021