



Town of Surf City
PO Box 2475
Surf City, NC 28445

**Formal Request for Proposal (RFP)
For
Surf City Water Treatment Plant
Filter Tank Rehabilitation Project**

August 15, 2021

The Town of Surf City (herein referred to as the Town) request proposals for completion of filter tank rehabilitation at our Water Treatment Plant. Proposals will be received at the Surf City Town Hall located at 214 W. Florence Way, Surf City NC 28445 until **2:00 pm on September 30, 2021.**

The successful proposer (herein referred to as “Contractor”) shall furnish all permits, materials, equipment and labor necessary to perform all tasks described in Scope of Work, including: removing and disposing of existing media; performing a visual inspection of each tank and repairing defective areas (including spot and patch welding) as needed; preparing and painting interior surfaces as needed; pressure testing; and installing new media in a total of two (2) steel tank filter vessels. Work will be performed at the Town’s Water Treatment Plant, 102 H2O Place, Surf City, NC 28445. Work will be scheduled during reduced water demand times between January 5th and March 15th, 2021. Tanks will be taken down, serviced, put back in service one at a time. Both tanks will be fully operational by March 15th, 2021.

The Request for Proposal is available at [Surf City, NC | Official Website \(surfcitync.gov\)](http://Surf City, NC | Official Website (surfcitync.gov)), by calling David Price at (910) 329-1055 or by email request made to dprice@surfcitync.gov.

The Town reserves the right to reject any or all proposals, to waive informalities, and to accept any proposal which, in the opinion of the Town, appears to be in its best interest. The right is reserved to hold any or all proposals for a period of thirty (30) days from the opening thereof.

Scope of Work
Surf City Water Treatment Plant
Filter Tank Rehabilitation Project

The Contractor shall provide all labor, equipment, and materials necessary to: remove and dispose of existing media; perform visual inspection of each tank and repair defective areas as needed; prepare and paint interior surfaces as needed; conduct testing of the painted tank; and install new media in a total of two (2) steel tank filter vessels. All work to be performed at the Surf City Water Treatment Plant, 102 H2O Place, Surf City NC 28445.

Contractors wishing to physically inspect the work location should contact David Price, Surf City Director of Public Utilities, via email at dprice@surfcitync.gov to arrange a suitable date and time. For informational purposes, the attached drawing illustrates approximate tank dimensions and layout.

All work on this project shall conform to the following requirements:

1) General Requirements

- a) Work shall be performed in accordance with all applicable state and local codes and regulations governing this project.
- b) Contractor shall be responsible for securing and paying for all permits required to complete the project.
- c) The Town shall provide access to an onsite potable water source for use during the work.
- d) Access to the plant is restricted, so work schedules and material deliveries must be coordinated in advance with the plant operator to ensure adequate access and avoid/minimize impacts to water production activities.
- e) Conduct operations in such a manner as to avoid damage to the other site facilities (controls, building, security gate and fencing, etc.) Any such damage shall be repaired by the Contractor at no additional cost to the Town.
- f) Conduct operations in such a manner that one of the two tanks being rehabilitated is to stay in service at all times.
- g) **Due to the COVID-19 pandemic, the Contractor shall observe all current Center for Disease Control (CDC) guidelines.**

2) Filter Media Removal and Disposal

- a) Empty and vacuum clean steel tank (30 ft straight shell by 10 ft OD, each shell is comprised of 3 cells) of all existing green sand and gravel media.
- b) All removed media shall be hauled and disposed off-site by the Contractor.
- c) The Town will provide to the Contractor AS with TCLP analysis and/or MSDS sheets for the media, as required by the landfill prior to disposal.

3) Tank Preparation and Coating

- a) Pressure wash tank interiors and remove remaining debris.
- b) Inspect interior components (underdrain system, surface wash equipment, inlet distributor, air scour equipment, wash water troughs, etc.) and advise the Town of any deficiencies discovered prior to proceeding. The intent is to re-use the existing inlet distributor; if it is determined that

the existing inlet are not suitable for re-use; the Contractor shall furnish and install a new distributor as a change order extra with prior written approval of the Town. Underdrain repairs are not part of the Scope of Work.

- c) Perform a visual inspection of each tank and spot weld patches over defective areas as needed. Spot welds or welded patches on exterior will require application of primer and painting once completed.
- d) If deficiencies in coating is noticed, apply a two-part epoxy coating certified for potable water service in accordance with manufacturer's requirement for application and curing after change order is issued by the Town.
- e) Provide an inspection by the epoxy coating manufacturer to verify proper application to tank integrity testing.
- f) Provide detailed photos of the interior of the vessel after coating is applied.

4) Tank Integrity Testing

- a) Once the interior coating has fully cured, and prior to placing new media, the Contractor shall fill each tank, pressurized to 35 psi for a duration of 60 minutes, and inspect for leaks.
- b) Any leaks found shall be repaired in accordance with Item 3d (spot welding and/or welded patches).
- c) Locations where repairs were made after interior coating shall be photographed, inspected, surface-prepared and recoated in accordance with the coating manufacturer's requirements.
- d) After curing of repair coating, tank(s) shall be retested for leaks in accordance with item 4a to verify the successful completion of repairs.

5) Gravel and Filter Media Replacement

- a) Contractor shall furnish and install graded gravel bed material in accordance with tank manufacturer's requirements.
- b) Gravel bed Material Requirements (**Quantity shown is per cell**):

Bed Depth	Quantity per Cell (ft3)	Gravel Size	Layer
4"	36	1/8" x 1/16"	5th Layer (top)
4"	35	1/4" x 1/8"	4th Layer
2"	17	1/2" x 1/4"	3rd Layer
2"	17	3/4" x 1/2"	2nd Layer
4"	32	1-1/2" x 3/4"	1st Layer (Bottom)
<1/1/4	10	1-1/2" x 3/4"	Below Sandvalves

- c) Upon completion of gravel bed installation, the Contractor shall install Greensand Plus and Anthracite Filter Media in accordance with tank manufacturer and media manufacturer recommendations. Filter Media shall be supplied by the Contractor.
- d) Filter Media Requirements (**Quantity shown is per cell**):

<u>Media</u>	<u>Quantity (Cubic ft)</u>
Anthracite (Eff. Size 0.7-0.8mm)	166
Greensand Plus (Eff. Size 0.3-0.35mm)	167

- e) After all media is installed, ready the tank for service.
- f) Clean up all debris, surplus equipment and materials and remove them from the site.
- g) Note: Contractor shall verify all material quantities prior to ordering.

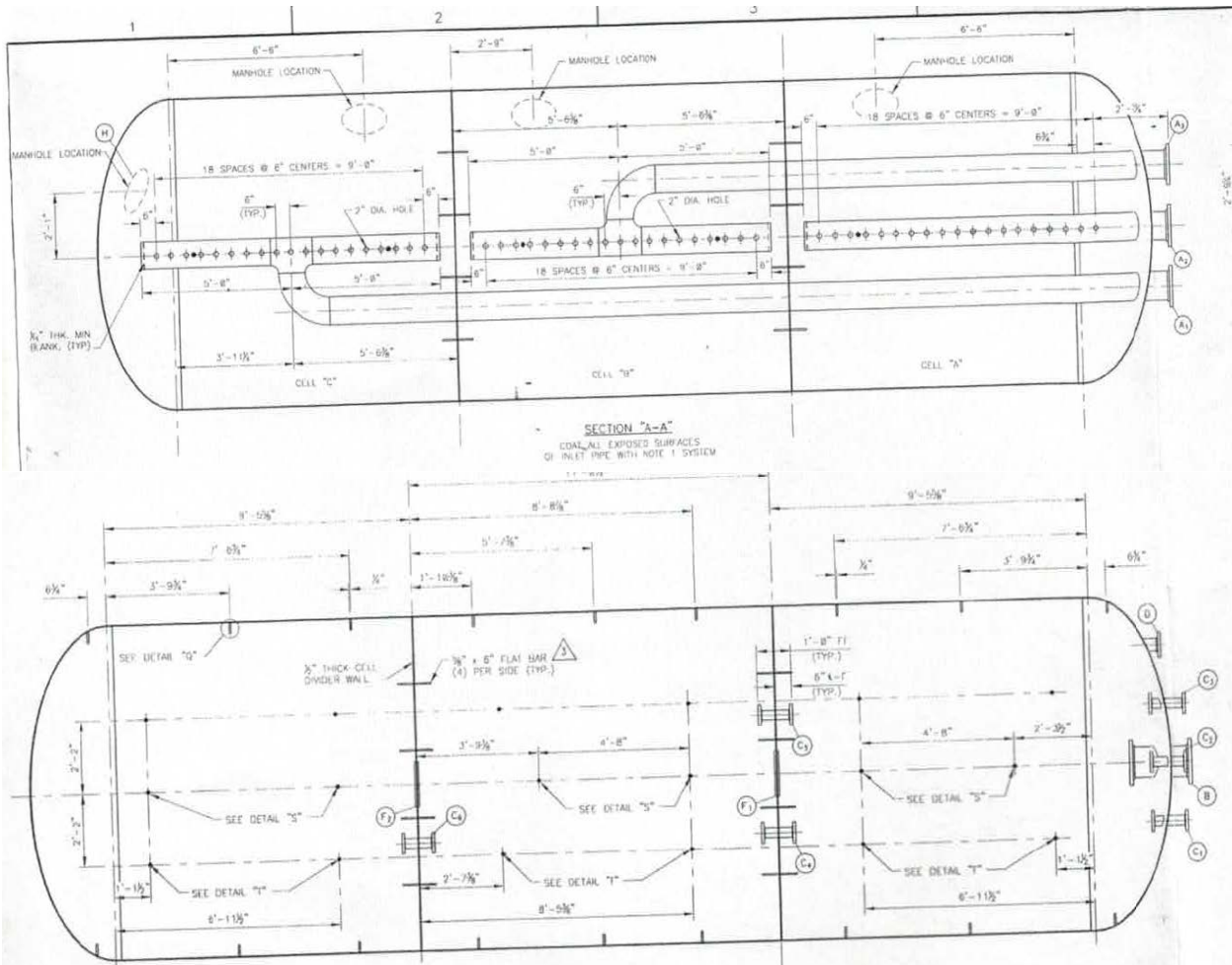
6) **Warranties**

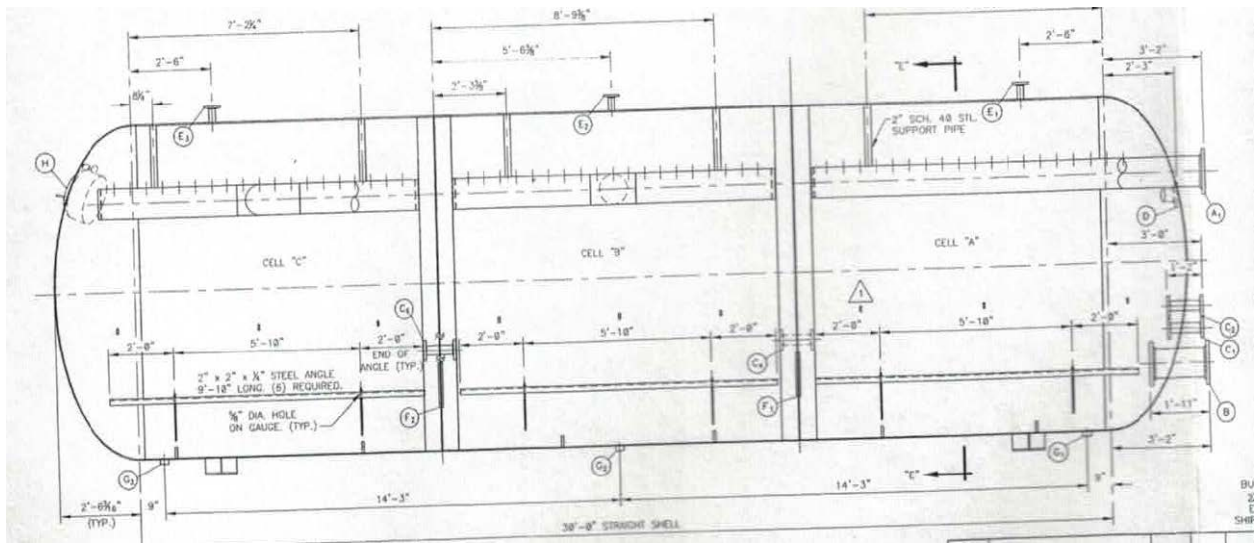
- a) Contractor shall warranty repairs for no less than (180) days for workmanship and provide the full manufacturer's warranty period on materials.

For the purpose of preparing and submitting a proposal, the Contractor shall provide a lump sum price for the totality of work described.

End of Scope of Work

Technical Drawings





Technical Drawings

