



City of Tacoma, WA

**TACOMA WATER
REQUEST FOR BIDS
CORNELL 100HP PUMP AND MOTORS
SPECIFICATION NO. TW24-0196N**



City of Tacoma
Tacoma Water

REQUEST FOR BIDS TW24-0196N
Cornell 100HP Pumps and Motors

Submittal Deadline: 11:00 a.m., Pacific Time, Friday, August 30, 2024

Submittals must be received by the City’s Procurement and Payables Division by 11:00 a.m. Pacific Time.

For electronic submittals, the City of Tacoma will designate the time of receipt recorded by our email server, as the official time of receipt. This clock will be used as the official time of receipt of all parts of electronic bid submittals. Include the specification number in the subject line of your email. Your submittal must be sent as an attachment, links to your electronic submittal will not be accepted.

For in person submittals, the City of Tacoma will designate the time of receipt recorded by the timestamp located at the lobby security desk, as the official time of receipt. Include the specification number on the outside of the envelope. Late submittals will be returned unopened and rejected as non-responsive.

Submittal Delivery: Submittals will be received as follows:

<p>By Email: sendbid@cityoftacoma.org Maximum email size, including attachments: 35 MB. Multiple emails may be sent for each submittal.</p> <p>Note: Email may pass through multiple servers before arriving at its destination. Please allow sufficient time for email delivery of submittals. Timely electronic delivery is at the risk of the supplier.</p>	<p>In Person: Tacoma Public Utilities Administration Building North Main Floor, Lobby Security Desk 3628 South 35th Street Tacoma, WA 98409 Monday – Friday 8:00 am to 4:30 pm</p>
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Solicitation Documents: An electronic copy of the complete solicitation documents may be viewed and obtained by accessing the City of Tacoma Purchasing website at www.TacomaPurchasing.org.

- [Register for the Bid Holders List](#) to receive notices of addenda, questions and answers and related updates.
- Click here to see a [list of vendors registered for this solicitation](#).

Project Scope: Cornell 100HP Pumps and Motors for Tacoma Water Pump Station.

Estimate: \$125,000

Paid Sick Leave: The City of Tacoma requires all employers to provide paid sick leave in accordance with Washington State law.

Americans with Disabilities Act (ADA Information): The City of Tacoma, in accordance with Section 504 of the Rehabilitation Act (Section 504) and the Americans with Disabilities Act (ADA), commits to nondiscrimination on the basis of disability, in all of its programs and activities. Specification materials can be made available in an alternate format by emailing the contact listed below in the *Additional Information* section.

Title VI Information: “The City of Tacoma” in accordance with provisions of Title VI of the Civil Rights Act of 1964, (78 Stat. 252, 42 U.S.C. sections 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin in consideration of award.

Additional Information: Requests for information regarding the specifications may be obtained by contacting Becky Lewis by email to rlewis4@cityoftacoma.org.

Protest Policy: City of Tacoma protest policy, located at www.tacomapurchasing.org, specifies procedures for protests submitted prior to and after submittal deadline.



Meeting sites are accessible to persons with disabilities. Reasonable accommodations for persons with disabilities can be arranged with 48 hours advance notice by calling 253-502-8468.

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SUBMITTAL CHECK LIST

This checklist identifies items to be included with your submittal. Any submittal received without these required items may be deemed non-responsive and not be considered for award. Submittals must be received by the City of Tacoma Purchasing Division by the date and time specified in the Request for Bids page.

<p>The following items make up your complete electronic submittal package (include all the items below):</p>	
<p>Signature Page (Appendix A) To be filled in and executed by a duly authorized officer or representative of the bidding entity. If the bidder is a subsidiary or doing business on behalf of another entity, so state, and provide the firm name under which business is hereby transacted.</p>	
<p>Price Proposal Form (Appendix A) The unit prices bid must be shown in the space provided. Check your computations for omissions and errors.</p>	
<p>After award, the following documents will be executed:</p>	
<p>One time Purchase Order</p>	

1. MINIMUM REQUIREMENTS

Supply and delivery of three (3) Cornell 100HP pumps and motors.

2. STANDARD TERMS AND CONDITIONS

City of Tacoma [Standard Terms and Conditions](#) apply.

3. DESCRIPTION OF WORK

Tacoma Public Utilities (TPU) is soliciting bids for the supply and delivery of three (3) Cornell 100HP pumps and motors. These pumps and motors are to be provided for installation by the City in an existing pump station that provides municipal potable water service to customers of Tacoma Water.

4. ANTICIPATED CONTRACT TERM

This is a one time purchase.

5. CALENDAR OF EVENTS

This is a tentative schedule only and may be altered at the sole discretion of the City.

The anticipated schedule of events concerning this RFB is as follows:

Submittal Due Date:	8/30/2024
Anticipated Award Date, on or about:	September 2024

6. DISCLAIMER

The City is not liable for any costs incurred by the Respondent for the preparation of materials or a proposal submitted in response to this RFB, for conducting any presentations to the City, or any other activities related to responding to this RFB, or to any subsequent requirements of the contract negotiation process.

7. RESPONSIVENESS

Bid submittals must provide ninety (90) days for acceptance by City from the due date for receipt of submittals. All submittals will be reviewed by the City to determine compliance with the requirements and instructions specified in this RFB. The Respondent is specifically notified that failure to comply with any part of this RFB may result in rejection of the submittal as non-responsive. The City reserves the right, in its sole discretion, to waive irregularities deemed immaterial. The City also reserves the right to not award a contract or to issue subsequent RFB's

8. AWARD

Awardee shall be required to comply with 2 CFR part 25, and obtain a unique entity identifier and/or be registered in the federal System for Award Management as appropriate.

Award will be made to the lowest responsive, responsible bidder. All bidders shall provide unit or lump sum pricing for each line item. Each line item will be added up for a subtotal price. The subtotal price will be compared amongst each bidder, including any payment discount terms offered twenty (20) days or more. The City may also take into consideration all other criteria for determining award, including evaluation factors set forth in Municipal Code Section 1.06.262.

All other elements or factors, whether or not specifically provided for in this specification, which would affect the final cost to and the benefits to be derived by the City will be considered in determining the award of the contract. The final award decision will be based on the best interests of the City.

The City reserves the right to let the contract to the lowest responsible bidder whose bid will be the most advantageous to the City, price and any other factors considered. In evaluating the proposals, the City may also consider any or all of the following:

1. Compliance with specification.
2. Proposal prices, listed separately if requested, as well as a lump sum total
3. Time of completion/delivery.
4. Warranty terms.
5. Bidder's responsibility based on, but not limited to:
 - a) Ability, capacity, organization, technical qualifications and skill to perform the contract or provide the services required.
 - b) References, judgment, experience, efficiency and stability.
 - c) Whether the contract can be performed within the time specified.
 - d) Quality of performance of previous contracts or services

9. DELIVERY

Delivery shall be to the Tacoma Public Utilities, Water Warehouse, 3506 South 35th Street, Tacoma, WA 98409.

Tacoma Water must take delivery within twenty-four (24) weeks of the award of the contract.

Each vendor will be required to submit a delivery timeline they can commit to. Purchase order delivery dates will reflect this timeline. In the event a purchase order deliver date is not met, the City reserves the right to purchase these products elsewhere if they are in a time constraint. If constant late deliveries occur, the City may terminate the contract.

Hours of operation shall be Monday through Friday, 9:00 a.m. to 3:30 p.m., excluding legal holidays, as referred to in the Standard Terms and Conditions or as otherwise approved by the City.

10. WARRANTY

Parts:

The supplier shall guarantee the equipment to be free of defects in design, materials, and workmanship for a period of two (2) years following the date of acceptance. This warranty shall include all parts, labor, and other expenses, so that no cost to the City from any warranty related problem will result. If the manufacturer's warranty extends beyond that of the two (2) years required, that warranty shall also be supplied, and shall be fully transferable to the City.

11. INSPECTION

All goods are subject to final inspection and acceptance by the City. If any inspection fails, the vendor shall be required to make arrangements to exchange the goods at their own expense and replace it in a timely manner acceptable to the City.

Material failing to meet the requirements of this contract will be held at Vendor's risk and may be returned to Vendor. If so returned, the cost of transportation, unpacking, inspection, repackaging, reshipping, or other like expenses are the responsibility of the Vendor.

12. APPROVED ITEM EQUIVALENT

No substitutes will be accepted.

13. POINT OF MANUFACTURE AND PART AVAILABILITY

Equipment of domestic manufacture is preferred. Replacement components of all equipment furnished under this specification shall be in United States stock, available for immediate shipment.

14. COMPLIANCE WITH SPECIFICATIONS

All products shall be new and unused. Any product that does not comply with any part of these technical specifications shall be rejected and the vendor shall, at its own expense, including shipping, replace the item.

15. MATERIALS AND WORKMANSHIP

The successful bidder shall be required to furnish all materials necessary to perform contractual requirements. Materials and workmanship for this contract shall conform to all codes, regulations and requirements for such specifications contained herein and the normal uses for which intended. Material shall be manufactured in accordance with the best commercial practices and standards for this type of goods. All literature and products must be packaged and labeled to sell in the United States.

Unless otherwise indicated, provide all high quality, new and unused materials, free from any defects, and suitable for the intended use and the space provided. All materials shall be the best available for the purpose intended as dictated by the best current engineering practice.

Materials shall be approved by Underwriters Labs (UL), American Society for Testing and Materials (ASTM), Factory Mutual (FM), American Water Works Association (AWWA), and National Electrical Manufacturers Association (NEMA), wherever standards have been established by those organizations. Wetted parts shall be approved by National Sanitation Foundation (NSF) for use with potable water (NSF 61).

16. ENVIRONMENTALLY PREFERABLE PROCUREMENT

In accordance with the [City's Sustainable Procurement Policy](#) and [Climate Action Plan](#), it is the policy of the City of Tacoma to encourage the use of products or services that help to minimize the environmental and human health impacts of City Operations. Respondents are encouraged to incorporate environmentally preferable products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, products, manufacturing, packaging, distribution reuse, operation, maintenance or disposal of the product or service.

The City of Tacoma encourages the use of sustainability practices and desires any awarded contractor(s) to assist in efforts to address such factors when feasible for:

- Durability, reusability, or refillable
- Pollutant releases, especially persistent bioaccumulative toxins (PBTs), low volatile organic compounds (VOCs), and air quality and stormwater impacts
- Toxicity of products used
- Greenhouse gas emissions, including transportation of products and services, and embodied carbon
- Recycled content
- Energy and water resource efficiency

17. LEAP REQUIREMENTS

This project has no LEAP requirements, however, the City of Tacoma is committed to equality in employment for WA-State approved Apprentices, City of Tacoma residents, residents of local economically distressed areas, youth, veterans, minorities, and women. Please contact the [LEAP Office](#) for assistance in locating qualified employees. Visit the [LEAP website](#) for more information.

18. EQUITY IN CONTRACTING

This project has no EIC requirements, however, the City of Tacoma is committed to encouraging firms certified through the [Washington State Office of Minority and Women's Business Enterprise](#) to participate in City contracting opportunities. See **TMC 1.07 Equity in Contracting Policy** at the City's [Equity in Contracting Program website](#).

APPENDIX A

Signature Page

Price Proposal Form

SIGNATURE PAGE

**CITY OF TACOMA
Tacoma Water**

All submittals must be in ink or typewritten, executed by a duly authorized officer or representative of the bidding/proposing entity, and received and time stamped as directed in the **Request for Bids page near the beginning of the specification**. If the bidder/proposer is a subsidiary or doing business on behalf of another entity, so state, and provide the firm name under which business is hereby transacted.

**REQUEST FOR BID SPECIFICATION NO. TW24-0196N
Cornell 100HP Pumps and Motors**

The undersigned bidder/proposer hereby agrees to execute the proposed contract and furnish all materials, labor, tools, equipment and all other facilities and services in accordance with these specifications.

The bidder/proposer agrees, by submitting a bid/proposal under these specifications, that in the event any litigation should arise concerning the submission of bids/proposals or the award of contract under this specification, Request for Bids, Request for Proposals or Request for Qualifications, the venue of such action or litigation shall be in the Superior Court of the State of Washington, in and for the County of Pierce.

Non-Collusion Declaration

The undersigned bidder/proposer hereby certifies under penalty of perjury that this bid/proposal is genuine and not a sham or collusive bid/proposal, or made in the interests or on behalf of any person or entity not herein named; and that said bidder/proposer has not directly or indirectly induced or solicited any contractor or supplier on the above work to put in a sham bid/proposal or any person or entity to refrain from submitting a bid/proposal; and that said bidder/proposer has not, in any manner, sought by collusion to secure to itself an advantage over any other contractor(s) or person(s).

Bidder/Proposer's Registered Name

Signature of Person Authorized to Enter Date
into Contracts for Bidder/Proposer

Address

Printed Name and Title

City, State, Zip

(Area Code) Telephone Number / Fax Number

Authorized Signatory E-Mail Address

State Business License Number
in WA, also known as UBI (Unified Business Identifier) Number

E.I.No. / Federal Social Security Number Used on Quarterly
Federal Tax Return, U.S. Treasury Dept. Form 941

State Contractor's License Number
(See Ch. 18.27, R.C.W.)

E-Mail Address for Communications

Addendum acknowledgement #1_____ #2_____ #3_____ #4_____ #5_____

THIS PAGE MUST BE SIGNED AND RETURNED WITH SUBMITTAL.



Price Proposal
TW24-0196N

Vendor Name: _____

Bidder agrees to furnish the following FOB Destination freight prepaid and allowed, Tacoma Public Utilities, Water Warehouse, 3506 South 35th Street, Tacoma, WA 98409

Enter the cost (Unit Price) for each item below. The unit price and total cost must be shown in the spaced provided. Total cost shall be determined by multiplying the unit price by the estimated quantity (Quantity). Unit costs shall be all-inclusive and include all components needed for the delivery of the goods and services as described in this solicitation.

Part Number	Item Name	Description	Manufacturer	Qty	UoM	Unit Cost	Total Cost
6HH-CC-100-4	100 HP Pump and Motor	Close coupled pump & motor for potable water	Cornell	3	EA	\$	\$
					EA	\$	\$
					EA	\$	\$
						Base Bid	\$
						Sales Tax @ 10.3%	\$
						Total	\$

APPENDIX B
Technical Provisions

TECHNICAL PROVISIONS

1. DESIGN

The pump/motor shall be the products of reputable, experienced manufacturers with at least five (5) years experience in the manufacture of similar equipment. All equipment shall be of industrial grade and of standard construction, and shall be capable of long, reliable, trouble-free service.

2. PUMP AND MOTOR

The pump shall be a Cornell Model 6H-CC or Engineer Approved Equal

The pump shall be capable of delivering water at the following capacities and heads when operating with the Net Positive Suction Head Available at 10 feet (minimum).

The pump employed within the pump station shall be of the horizontal end suction, centrifugal type. The pump shall be of close grain cast iron construction complete with bronze trim.

a. PUMP

Design primary operating point shall be 2000 gpm at 148 feet Total Dynamic Head (TDH). Minimum efficiency at this point shall be 85%.

Pump shall be capable of continuous operation at 1,700 gpm with at least 165 feet TDH.

Pump shall be capable of continuous operation at 2,300 gpm with at least 128 feet TDH.

b. DETAILED PUMP SPECIFICATIONS

The pump shall conform to the detailed specifications as set forth below:

i. CASING

The pump casing shall be constructed of ASTM-A48, Class 30, grey cast iron, or Engineer Approved Equal.

The castings shall be smooth, sound, fine grained, high density and free of sand pockets, carbon concentrations, and all other detrimental flaws and defects. They shall be machined to a close fit and shall be designed so that they can be easily disassembled and reassembled. All waterways shall be machined and polished smooth for optimum efficiency.

The casing shall be capable of withstanding a hydrostatic pressure of 125 percent of shut-off load, minimum.

The casing shall be of double volute, back pull-out design and shall be bolted to the adapter with recessed lock fit to insure centering and alignment. No stud or bolt holes shall penetrate to liquid ways. Tapped openings shall be provided for priming, venting, draining and suction and discharge gauge connections.

Suction and discharge connections shall be ANSI 125# flanges, with bolt holes straddling the vertical centerline.

ii. IMPELLER

The pump impeller shall be enclosed, single suction type with double curvature vanes. The impeller shall be cast in one piece of ASTM B148 C95800 Nickel Aluminum Bronze, or Engineer Approved Equal. The impeller shall be statically and dynamically balanced and polished to insure smooth operation. The impeller shall be rigidly and positively attached to the shaft and accurately spaced within the pump casing, according to the manufacturer's/supplier's recommendations.

The outer tips of the impeller blades shall not be feathered and shall be of sufficient thickness to withstand considerable wear before reducing the impeller diameter or reducing efficiency. Impeller and casing assembly shall be designed to minimize axial thrust at all times.

iii. WEARING RINGS

The pump shall be provided with replaceable ASTM B271 C95800 or B505 C95800 Nickel Aluminum Bronze hub and suction wearing rings, or Engineer Approved Equal.

iv. SHAFT SLEEVE

A shaft sleeve shall be provided. The sleeve shall be constructed of 303 stainless steel or 416 stainless steel, or Engineer Approved Equal, and shall cover the full length of the shaft from the impeller hub to the motor end bracket.

v. STUFFING BOX

The stuffing box shall be cast integral with the pump casing. The stuffing box shall contain a single-face type mechanical seal. The seal shall have a carbon rotating head against a ceramic stationary face and shall be complete with a Buna-N boot with a stainless steel spring and spring retainer.

vi. CYCLOSEAL

A Cornell Cycloseal backplate with deflector vanes constructed of ASTM A48 Class 30 Grey Iron shall be provided, including a single mechanical seal. The design shall allow for continuous operation without the need for external flush water or venting.

vii. ADAPTER

The pump casing shall be rigidly connected to the motor with a cast iron (ASTM A48 Class 30) adapter bracket, or Engineer Approved Equal. The adapter shall keep the motor and pump casing in permanent alignment.

c. *MOTOR*

The pump driver shall be a premium efficiency, 480 Volt, 3 phase A.C. squirrel cage, induction motor of open drip-proof construction, close-coupled to the pump with rodent screens on all ventilating passages. The motor shall meet or exceed the 1997 efficiency requirements of the Department of Energy's Energy Policy Act. The extended motor shaft shall be of high strength steel (ANSI 1045, or Engineer Approved Equal) protected by a replaceable bronze (SAE 660, or Engineer Approved Equal) shaft sleeve. The motor shall have a Service Factor rating of 1.15 or greater and the maximum pumping horsepower load shall not exceed 85% of the Service Factor rating. The motor shall be 100 HP, 1780 RPM, and suitable for 3 phase, 60 cycle, 480 Volt electrical service. The motor bearings shall be sealed ball bearing type and designed to carry all radial and axial thrust loads. The motor shall be statically and dynamically balanced to insure smooth operation. The motor shall be inverter rated for use with a Variable Frequency Drive. The motor frame shall be 405.

3. FACTORY PUMP TESTS

The supplier shall provide the results of a certified factory pump test that show the following data:

- a. Head-capacity curves for each pump,
- b. Shaft brake horsepower curves for each pump,
- c. Water to water efficiency curves for each pump,
- d. Wire to water efficiency curves for each pump,
- e. The following tabulated data: gpm, voltage, amperage for each pump at various test conditions.

The tests shall be conducted after the impellers have been trimmed to meet head-capacity requirements. Field conditions are to be simulated as far as possible; any resulting corrections for field losses shall be calculated and the data shall be furnished to the City.

The certified factory test is required to demonstrate that the production units will, in fact, meet or exceed the guaranteed performance stated in the bid. The City's representative shall have the right to visit the manufacturer's shop/office to witness the pump tests. The supplier shall notify the City's representative two (2) weeks in advance of the factory pump tests.