

# MEMORANDUM

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TO: Town Council

FROM: Bill Bruce

DATE: July 26, 2024

RE: Elevated Water Storage Tank Construction

Please find in your packets a Resolution for Award of Bid for Construction of Elevated Water Tank, as well as a Discussion of Bids presented by John Grey of the Wooten Company, the engineer of record for this project. The Resolution does not specify a contract amount, as there are multiple options for Town Council to consider.

Caldwell Tanks, Inc. has submitted the lowest responsive, responsible bid of \$3,383,000. Caldwell Tanks has been approached with a proposal to remove most the linework from the proposed contract. The scope would retain the 4" line to connect to the Heritage Farm Park well system, and a 12" line to connect to the hydrant near the base of the tank. Their response is pending.

The Discussion of Bids also includes a full and updated estimate on all project costs related to the elevated water tank and 3-mile water main (separate project). Total expenses are estimated at \$8,844,660. Please note that this figure includes engineering costs that have already been expended.

Grant funding available for project costs include:

S.L. 2020-063 allocation	\$1,154,801.75
ARPA (allocated through Guilford Co.)	\$3,265,000.00
S.L. 2023-134 allocation	<u>\$4,500,000.00</u>
Total	\$8,919,801.75

Also included in your packet is in opinion of probable cost that reflects the removal of the linework portion from the elevated tank contract to the anticipated water main contract, as referenced above and discussed in Council's July 22 special called meeting. The potential cost savings reflect economies of scale when all linework is incorporated into the water main project.



Negotiations with Caldwell Tanks are ongoing. When a value engineered proposal removing linework from the tank contract is received this memo will be updated and redistributed. Furthermore, the Capital Project Ordinance will be updated to reflect the contract amount approved by Council.

**Requested Action:** Approve/deny the attached resolution with contract amount.





## RESOLUTION R-2024-11

### A RESOLUTION FOR AWARD OF BID FOR CONSTRUCTION OF ELEVATED WATER TANK

**WHEREAS**, on July 9, 2024, the Town of Oak Ridge received three bids for the construction of a 250,000 gallon elevated water storage tank, following advertisement of a formal Request for Proposals pursuant to N. C. Gen. Stat. § 143-129; and

**WHEREAS**, Caldwell Tanks, Inc. submitted the lowest responsive, responsible bid of \$3,383,000; and

**WHEREAS**, the lowest bid exceeded funds budgeted for the project, therefore the Town has negotiated with Caldwell Tanks, Inc. to value engineer the project to reduce the proposed contract to \$2,989,250;

**NOW, THEREFORE, be it resolved** that the Town Council of the Town of Oak Ridge accepts the negotiated bid submitted by Caldwell Tanks, Inc. for \$2,989,250 for construction of an elevated water tank and instructs the Town Manager and Finance Officer to execute the proposed contract.

Adopted this the 1<sup>st</sup> day of August, 2024.

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Jim Kinneman  
Mayor

ATTEST:

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Sandra B. Smith, CMC, NCCMC  
Asst. Town Manager/Town Clerk

**250,000 GALLON ELEVATED WATER TANK  
TOWN OF OAK RIDGE  
GUILFORD COUNTY, NORTH CAROLINA**

**SUBJECT: BID MODIFICATION #1**

**JULY 31, 2024**

To the Plans and Specifications for:  
Pump Station Improvements  
Town of Oak Ridge, N.C.

**To: LOW BIDDER**

The following revisions were made to the Bid Documents based on the negotiations with the low bidder prior to execution of the Contract Documents. This Modification forms a part of the Contract Documents and modifies the original Specifications and Drawings.

- A. General
  - 1. The original low Bid was from Caldwell Tanks, Inc. with a Bid of \$3,383,000.00. This bid was over the available funds.
- B. Bidding Requirements
  - 1. Document 00410, Bid Form
    - a. The proposed 12-inch water main shall be deleted from the Project from the proposed gate valve north of the fire hydrant nearest the elevated water tank.
- C. Drawing Requirements
  - 1. The following Drawings shall be deleted from the Project:
    - a. Drawing No. C-1.03, 12-inch Water Main will be deleted from the project.
    - b. Drawing No. C-1.01, Site Plan & Erosion Control will be revised to indicate to remove deleted water main and to add appropriate notes to the water main appurtenances to remain.
- D. Change to Bid Price
  - 1. The Bid Price shall be lowered based on the above revisions as follows:

	Original Bid Amount, July 9, 2024						\$3,383,000.00
Proposed Contract Amount							
	Elevated Water Tank and Associated Site Work.						\$2,703,000.00
	Revise the following unit price quantities	Bid Quantity	Deduct	Contract Amount	Unit	Unit Price	
1.	12-inch AWWA C-900 PVC Water Main	1,1280	1,175	105	LF	\$250	\$26,250.00
2.	4-inch AWWA C-900 PVC Water Main	1,025	0	1,025	LF	\$100	\$102,500.00
3.	12-Inch Gate Valve and Box	6	4	2	EA	\$10,000	\$20,000.00
4.	4-inch Gate Valve and Box	3	0	3	EA	\$2,500	\$7,500.00
5.	Fire Hydrant Assembly	2	1	1	EA	\$10,000	\$10,000.00
6.	Backflow Prevention Assembly	1	1	0	EA	\$50,000	\$0.00
7.	Testing Firm Allowance	1	0	1	LS	\$90,000	\$90,000.00
8.	Shrub Replacement Allowance	1	0	1	LS	\$30,000	\$30,000.00
<b>Proposed Contract Amount</b>							<b>\$2,989,250.00</b>

- 2. As specified in the Bid Documents the unit price items shall be paid based on the quantities actually installed.

The foregoing changes shall be incorporated in the Contract Documents.

CLIENT: Town of Oak Ridge  
 PROJECT: Water Transmission Line and Elevated Tank  
 DATE: 7/24/2024  
 PROJECT OPINION OF PROBABLE COST

	DESCRIPTION	Estimated Quantity	Unit	Unit Price	TOTAL COST
1.	Mobilization (3% Construction Cost)	1	LS	\$116,300	\$116,300
2.	8-Inch PVC Water Line	125	LF	\$100	\$12,500
3.	12-Inch PVC Water Line	16,017	LF	\$140	\$2,242,400
4.	Connect to Existing 8" Main	1	EA	\$4,500	\$4,500
5.	Connect to Existing 12" Main	1	EA	\$6,000	\$6,000
6.	12-Inch Restrained Joint PVC Water Line w/ 24-Inch Steel Encasement Bore and Jack	843	LF	\$1,000	\$843,000
7.	8-inch Gate Valve and Box	5	EA	\$4,000	\$20,000
8.	12-Inch Gate Valve and Box	11	EA	\$7,000	\$77,000
9.	Fire Hydrant Assembly	22	EA	\$11,000	\$242,000
10.	Ditch Liner	2,810	SY	\$5	\$14,100
11.	Ditch Check	16	EA	\$200	\$3,200
12.	Wattle Barrier	3,271	LF	\$15	\$49,100
13.	Silt Fence	164	LF	\$5	\$900
14.	Silt Fence Outlet	1	EA	\$200	\$200
15.	Catch Basin Inlet Protection	12	EA	\$200	\$2,400
16.	Construction Entrance	1	EA	\$4,000	\$4,000
17.	Asphalt Pavement Repair	220	SY	\$100	\$22,000
18.	Concrete Pavement Repair	112	SY	\$130	\$14,600
19.	Gravel Drive Repair	337	SY	\$40	\$13,500
20.	Brick Drive Repair	16	SY	\$200	\$3,200
21.	Concrete Sidewalk Repair	120	SY	\$130	\$15,600
22.	Curb & Gutter Repair	170	LF	\$100	\$17,000
24.	Rock Excavation	796	CY	\$100	\$79,600
25.	Meter Vault and Valve Vault	1	LS	\$190,900	\$190,900
	Contingency	10%			\$399,410
	<b>Linework Subtotal</b>				<b>\$4,393,410</b>
Elevated Tank Project					
1.	250,000 Gal Elevated Tank	1	LS	\$2,703,000	\$2,703,000
2.	12-inch AWWA C-900 PVC Water Main	1,280	LF	\$250	\$320,000
3.	4-inch AWWA C-900 PVC Water Main	1,025	LF	\$100	\$102,500
4.	12-Inch Gate Valve and Box	6	EA	\$10,000	\$60,000
5.	4-inch Gate Valve and Box	3	EA	\$2,500	\$7,500
6.	Fire Hydrant Assembly	2	EA	\$10,000	\$20,000
7.	Backflow Prevention Assembly	1	EA	\$50,000	\$50,000
8.	Testing Firm Allowance	1	LS	\$90,000	\$90,000
9.	Shrub Replacement Allowance	1	LS	\$30,000	\$30,000
	Contingency	5%			\$169,150
	<b>Tank Subtotal</b>				<b>\$3,552,150</b>
Engineering Services:					
	a. Tank Design				\$105,050
	b. Tank Construction Services				\$209,550
	c. Waterline Design				\$319,150
	d. Waterline Construction Services				\$265,350
	<b>Engineering Services Subtotal:</b>				<b>\$899,100</b>
	<b>Total Opinion of Probable Cost</b>				<b>\$8,844,660</b>

<b>If Linework portion of Tank Contract was moved to Linework Section</b>						
1.	Mobilization (3% Construction Cost)	1	LS	\$120,000	\$120,000	
2.	8-Inch PVC Water Line	125	LF	\$100	\$12,500	
3.	12-Inch PVC Water Line (w/ 1,165 from tank project)	17,182	LF	\$140	\$2,405,500	
4.	Connect to Existing 8" Main	1	EA	\$4,500	\$4,500	
5.	Connect to Existing 12" Main	1	EA	\$6,000	\$6,000	
6.	12-Inch Restrained Joint PVC Water Line w/ 24-Inch Steel Encasement Bore and Jack	843	LF	\$1,000	\$843,000	
7.	8-inch Gate Valve and Box	5	EA	\$4,000	\$20,000	
8.	12-Inch Gate Valve and Box	15	EA	\$7,000	\$105,000	
9.	Fire Hydrant Assembly	23	EA	\$11,000	\$253,000	
10.	Ditch Liner	2,810	SY	\$5	\$14,100	
11.	Ditch Check	16	EA	\$200	\$3,200	
12.	Wattle Barrier	3,271	LF	\$15	\$49,100	
13.	Silt Fence	164	LF	\$5	\$900	
14.	Silt Fence Outlet	1	EA	\$200	\$200	
15.	Catch Basin Inlet Protection	12	EA	\$200	\$2,400	
16.	Construction Entrance	1	EA	\$4,000	\$4,000	
17.	Asphalt Pavement Repair	220	SY	\$100	\$22,000	
18.	Concrete Pavement Repair	112	SY	\$130	\$14,600	
19.	Gravel Drive Repair	337	SY	\$40	\$13,500	
20.	Brick Drive Repair	16	SY	\$200	\$3,200	
21.	Concrete Sidewalk Repair	120	SY	\$130	\$15,600	
22.	Curb & Gutter Repair	170	LF	\$100	\$17,000	
24.	Rock Excavation	0	CY	\$100	\$0	
25.	Meter Vault and Valve Vault	1	LS	\$190,900	\$190,900	
	Backflow Preventer	1	LS	\$50,000	\$50,000	
	Contingency	10%			\$421,250	
	<b>Linework Subtotal</b>				<b>\$4,591,450</b>	<b>\$198,040</b>
<b>Elevated Tank Project</b>						
1.	250,000 Gal Elevated Tank	1	LS	\$2,703,000	\$2,703,000	
2.	12-inch AWWA C-900 PVC Water Main	105	LF	\$250	\$26,300	
3.	4-inch AWWA C-900 PVC Water Main	1,025	LF	\$100	\$102,500	
4.	12-Inch Gate Valve and Box	2	EA	\$10,000	\$20,000	
5.	4-inch Gate Valve and Box	3	EA	\$2,500	\$7,500	
6.	Fire Hydrant Assembly	1	EA	\$10,000	\$10,000	
7.	Backflow Prevention Assembly	0	EA	\$50,000	\$0	
8.	Testing Firm Allowance	1	LS	\$90,000	\$90,000	
9.	Shrub Replacement Allowance	1	LS	\$30,000	\$30,000	
	Contingency	5%			\$146,650	
	<b>Tank Subtotal</b>				<b>\$3,135,950</b>	<b>(\$416,200)</b>
<b>Engineering Services:</b>						
	a. Tank Design				\$105,050	
	b. Tank Construction Services				\$209,550	
	c. Waterline Design				\$319,150	
	d. Waterline Construction Services				\$265,350	
	<b>Engineering Services Subtotal:</b>				<b>\$899,100</b>	
<b>Total Opinion of Probable Cost</b>					<b>\$8,626,500</b>	<b>(\$218,160)</b>

**MEMORANDUM OF NEGOTIATION  
CONSTRUCTION CONTRACT**

*(attach to executed contract)*

(for proposed contract award less than bid amount)

OWNER: Town of Oak Ridge  
CONTRACTOR: Caldwell Tanks, Inc  
PROJECT ENGINEER: The Wooten Company

CONTRACT BASE BID AMOUNT \$3,383,000 BID DATE: July 9, 2024

Contract as Base Bid included the following Work items:

1. 250,000 Gallons Elevated Water Tank
2. Site work required for Tank as indicated on the Drawings
3. 1,280 feet of 12-inch water main and appurtenances
4. 1,025 feet of 4-inch water main and appurtenances
5. Backflow Prevention Assembly
6. Testing Firm Allowance
7. Shrub Replacement Allowance

The Owner and Contractor acknowledge and agree that the bid received on the above project has resulted in the project budget being exceeded and that a contract cannot be awarded based on the amount of the bid received. This memorandum documents that both parties to the contract entered and completed negotiations in order to arrive at a mutually acceptable contract amount and scope on which the construction contract is to be awarded. It is hereby agreed that the terms and conditions as stated in this document shall be binding on all parties and it shall become a part of the terms and conditions of the contract upon the Award.

The Scope changes in the contractor's bid and the associated proposed contract prices are outlined in the attached Section 00540: Bid Modification #1 dated July 31, 2024. The changes in the terms and provisions of the contract are hereby incorporated into the proposed contract award.

PROPOSED NEGOTIATED CONTRACT AWARD AMOUNT: \$2,989,250.00

This memorandum shall be valid and binding up to and inclusive of September 7, 2024.

**We agree to the terms and conditions of this document:**

OWNER:

CONTRACTOR:

\_\_\_\_\_  
Name

\_\_\_\_\_  
Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Title

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Signature

DISCUSSION OF BIDS, revised 7/24/2024

TOWN OF OAK RIDGE

250,000 GALLON ELEVATED WATER TANK

OAK RIDGE, NORTH CAROLINA

BIDS RECEIVED JULY 9, 2024

TWC PROJECT 3405-B

I. INTRODUCTION

The Project was advertised on June 8, 2024, in *The Greensboro News and Record* for a bid opening of June 27, 2024, at which time only one (1) bid was received. It was re-advertised on July 5, 2024, in *The Greensboro News and Record* for a bid opening of July 9, 2024. The Advertisement and Re-Advertisement for Bids was also submitted to the following plan rooms on June 4, 2024: Dodge Company, Construct Connect, and NC Bid Network.

Addendum 1 was issued on June 13, 2024, Addendum 2 issued on June 24, 2024, and Addendum 3 was issued on June 25, 2024. All were emailed to all plan holders, plan rooms and the Owner.

The Bid Opening for the Town of Oak Ridge 250,000 Gallon Elevated Water Tank project was held at 2:00 p.m. on Tuesday, July 9, 2024, and three (3) bids were received.

The Bid Opening results are the subject of this Discussion of Bids.

II. PROPOSAL REQUESTED

The following construction proposal was requested:

- a. 250,000 Gallon Elevated Water Tank (Waterspheroid)
- b. Associated Site Work as indicated on the Drawings
- c. 1,280 feet of 12-inch water main
- d. 1,025 feet of 4-inch water main
- e. Valves, Fire Hydrants, and other associated appurtenances.

Addendum Number 1 was issued to replace the Project Manual dated June 10, 2024, with the Project Manual dated June 13, 2024.

Addendum Number 2 was issued to revise the items on the Unit Price Bid table and Bid Form; to add paragraphs to the Technical Specifications; and to revise Drawing Requirements.

Addendum Number 3 was issued to revise Technical Specification Requirements.



III. REVIEW OF PROPOSALS

The following bids were received:

Caldwell Tanks, Inc. of Louisville, KY	\$3,383,000
Maguire Iron, Inc. of Sioux Falls, SD	\$3,656,600
Phoenix Fabricators & Erectors, LLC of Avon, IN	\$3,767,164

IV. PROJECT COST AND FUNDING

Considering the low bid submitted and other known expenses, we provide the following summary of project costs:

Project Costs:

Low Bid (Tank)	\$3,383,000
5% Contingency	<u>\$169,150</u>
<b>Total Tank Construction cost:</b>	<b>\$3,552,150</b>

Anticipated Linework cost	\$3,994,000
10% Contingency	<u>\$399,410</u>
<b>Anticipated Linework Subtotal:</b>	<b>\$4,393,410</b>

Engineering Services:

a. Tank Design	\$105,050
b. Tank Construction Services	\$209,550
c. Waterline Design	\$319,150
d. Waterline Construction Services	<u>\$265,350</u>
<b>Engineering Services Subtotal:</b>	<b>\$899,100</b>

<b>Total Project Cost</b>	<b>\$8,844,660</b>
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The Town is using funding from direct appropriations and other sources directly provided to the Town, so we cannot provide a summary of available funding.

V. INFORMATION ON LOW BIDDER

Caldwell Tank, Inc. included with their Bid the required E-Verify Affidavit, Bid Bond and MWBE Documentation. Attached is a copy of the License Detail for Caldwell Tank, Inc. from the NC Licensing Board for General Contractors.

VI. CONCLUSION

Based on all information included in this Discussion, The Wooten Company offers no objection to the award of the Town of Oak Ridge 250,000 Gallon Elevated Water Tank project to: Caldwell Tanks, Inc. of Louisville, KY in the Bid amount of \$3,383,000.

This Discussion of Bids is respectfully re-submitted this 24<sup>th</sup> day of July 2024.



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John C. Grey, P.E.

Attachments: Licensing Details



## RESOLUTION R-2024-12

### CAPITAL PROJECT BUDGET ORDINANCE FOR CONSTRUCTION OF AN ELEVATED WATER TANK FOR THE TOWN OF OAK RIDGE

**BE IT ORDAINED** by the Town Council of Oak Ridge that, pursuant to N.C. Gen. Stat. § 159-13.2, the following capital project ordinance is hereby adopted:

- Section 1:** The project authorized by this ordinance is the construction of a 250,000-gallon elevated water storage tank and related appurtenances.
- Section 2:** The Town Manager is hereby authorized to proceed with the capital project within the guidelines set by the budget contained herein.
- Section 3:** The following amounts are appropriated for the project:
- |                                       |                   |
|---------------------------------------|-------------------|
| Elevated water tank and appurtenances | \$2,989,250       |
| Contingency                           | \$146,650         |
| Construction administration           | <u>\$ 209,550</u> |
| TOTAL                                 | \$3,345,450       |
- Section 4:** The following financing sources are anticipated to be available to complete the project:
- |   |              |
|---|--------------|
| American Rescue Plan Act (ARPA) appropriation       | \$ 3,265,000 |
| Appropriation allocated through Session Law 2020-63 | \$ 80,450    |
| TOTAL   | \$ 3,345,450 |
- Section 5:** The Finance Officer is hereby authorized to transfer appropriations as set forth herein between line item expenditures as he deems necessary during the course of development of the project, provided that (a) the amount of any such transfer shall not exceed the total amount of \$3,345,450 approved for the project without prior approval of the Council, and (b) the Finance Officer make periodic reports of all such transfers at regular Council meetings.
- Section 6:** Copies of this capital project ordinance shall be furnished to the Town Clerk, the Town Manager, the Mayor, and the Finance Officer for direction in carrying out the project.

**ADOPTED** this 1<sup>st</sup> day of August, 2024.

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Bill Bruce  
Town Manager

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Jim Kinneman  
Mayor

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Samuel K. Anders, CPA, MSA  
Finance Officer

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Sandra B. Smith, CMC, NCCMC  
Asst. Town Manager/Town Clerk