



CITY OF SPARTA  
6 Liberty Square  
P.O. Box 30  
Sparta, Tennessee 38583  
931.836.3248  
931.836.3941 fax  
www.spartatn.com

# AGENDA

## BOARD OF MAYOR AND ALDERMEN

*Thursday, July 20, 2023 - 5:00 PM*  
*Sparta City Hall, 2<sup>nd</sup> Floor*

1. Approval of the Minutes of the July 6, 2023 regular meeting.

### SPECIAL PRESENTATIONS

2. Life Saving Awards to J.T. King, Justin Cunningham, & Austin Edwards.

### RESOLUTIONS

3. Resolution No. 23-584, a Resolution authorizing the City of Sparta to participate in the "Safety Partners" Matching Grant Program.
4. Resolution No. 23-585, a Resolution establishing a Surplus Property Policy.

### CONTRACTS

5. Approve contract with Recreational Concepts as consultants for the "Splash Park" design and construction.
6. Authorize Hethcoat & Davis Engineers to design the upgrade for the Flocculators at the Water Plant.
7. Authorize Hethcoat & Davis Engineers to evaluate and design a water sludge solids processing system for the Water Plant.
8. Approve contract with Hethcoat & Davis Engineers to provide a Hydraulic Water Model in the amount of \$55,000.00 for the Water Department.

### PURCHASING

9. Authorize the solicitation of bids for the purchase of various sizes of ductile iron utility poles for the Electric Department.

### MISCELLANEOUS

10. Department heads reports.
11. Other NEW business.
12. UNFINISHED business.
13. Citizen Comments from Sparta Citizens (3minute limit).
14. Adjourn.



# *MINUTES*

July 6, 2023

The Board of Mayor and Aldermen of the City of Sparta, White County, Tennessee, met in a scheduled meeting at Sparta City Hall, at 5:00 PM on the 6th day of July 2023, with Mayor Jerry Lowery presiding.

**Members Present**

**Members Absent**

- Vice-Mayor Bobby Officer
- Alderman Jim Floyd
- Alderman Brian Jones
- Alderman Travis McBride
- Alderman Judy Payne
- Alderman Brent Young

Status of other city staff members were:

Tonya R. Tindle	City Administrator / City Recorder	Present
Dillard Quick	Public Works Director	Present
Caroline Sapp	City Attorney	Present
Nick Dunn	Police Chief	Present
Kirk Young	Fire Chief	Present
Mike O'Neal	Codes Enforcement	Present
Tonia Wilson	Finance Director	Present
Belva Bess	Electric Manager	Present

A quorum was present and notice had been previously mailed to all members and the news media. Mayor Lowery called the meeting to order. Travis McBride opened with a prayer. Bobby Officer led the Pledge of Allegiance by request of the mayor.

There was a motion by Alderman Payne with a second by Alderman Young to approve the minutes of the June 15, 2023 regular called meeting, which had been previously mailed to all board members and read by each member prior to the meeting. All voted "Aye" by voice vote. Motion passed.

There was a motion by Alderman Floyd with a second by Alderman Payne to approve Resolution No.23-583, a resolution authorizing the budgeted appropriations for Financial Aid to Public Service, Nonprofit, and Charitable Organizations for the fiscal year ending June 30, 2024. The roll call was as follows:

- Alderman Floyd.....Yes
  - Alderman Jones.....Yes
  - Alderman McBride.....Yes
  - Vice-Mayor Officer.....Yes
  - Alderman Payne.....Yes
  - Alderman Young.....Yes
  - Mayor Lowery.....Yes
- The motion passed.

There was a motion by Alderman Payne with a second by Alderman McBride to approve the City Recorder's Financials for May 2023. All voted "Aye" by voice vote. Motion passed.

There was a motion by Alderman Floyd with a second by Alderman Young to authorize the solicitation of bids for the replacement of a 300hp high-service pump at the Water Plant. All voted "Aye" by voice vote. Motion passed.

There was a motion by Alderman Young with a second by Vice-Mayor Officer for the solicitation of bids for the sealing and striping of the tennis courts at N. Carter Street Park. All voted "Aye" by voice vote. Motion passed.

There was a motion by Alderman Payne with a second by Alderman Young to authorize the solicitation of bids for the purchase of six (6) metal street light poles and LED lights to complete the installation of new street light poles on the East side of the historical district. All voted "Aye" by voice vote. Motion passed.

The mayor declared the Board to be in session as the Beer Board.

There was a motion by Vice-Mayor Officer with a second by Alderman Payne to approve the application for an on-site beer permit for Komang Hartawan D/B/A Casa Luna located at 184 Churchill Drive. All voted "Aye" by voice vote. Motion passed.

The mayor declared the session of the Beer Board closed.

There was a motion by Vice-Mayor Officer with a second by Alderman Payne to authorize the solicitation of bids for CCTV inspection of sewer lines for the public works department. All voted "Aye" by voice vote. Motion passed.

Department heads placed their reports in the agenda and Aldermen asked questions.

Citizens comments were heard:

- Chris Sapp addressed the board regarding mobile food trucks.

No additional items were discussed.

There being no further business, there was a motion to adjourn by Alderman Payne with a second by Alderman Young. All voted "Aye" by voice vote. Motion passed. The meeting was adjourned at 5:19 P.M.

Read and approved this \_\_\_\_\_ day of \_\_\_\_\_, 2023

\_\_\_\_\_  
Jerry Lowery, Mayor

ATTEST

\_\_\_\_\_  
Tonya R. Tindle, City Recorder

***AGENDA ITEM #2***

## SPECIAL PRESENTATIONS

J.T. King, Justin Cunningham, and Austin Edwards will be presented with life-saving awards for their heroic efforts for an incident that happened at the Calfkiler River Dam, where two kayakers were trapped in the rapids at the dam.

*AGENDA ITEM #3*

## RESOLUTION

<b>A RESOLUTION AUTHORIZING THE CITY OF SPARTA TO PARTICIPATE IN THE "SAFETY PARTNERS" MATCHING GRANT PROGRAM</b>	RESOLUTION # 23-584
	Requested By:
	Prepared By: Lorie Jeffries
	Approved:  City Attorney
	Minute Book                      Page

WHEREAS, the safety and well being of the employees of the City of Sparta is of the greatest importance; and

WHEREAS, all efforts shall be made to provide a safe and hazard free workplace for the City of Sparta employees; and

WHEREAS, The Public Entity Partners seeks to encourage the establishment of a safe workplace by offering a "Safety Partners" Matching Grant Program; and

WHEREAS, the City of Sparta now seeks to participate in this important program.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF MAYOR AND ALDERMEN OF THE CITY OF SPARTA, TENNESSEE the following:

SECTION 1. That the City of Sparta is hereby authorized to submit application for a "Safety Partners" Loss Control Matching Grant through Public Entity Partners.

SECTION 2. That the City of Sparta is further authorized to provide a matching sum to serve as a match for any monies provided by this grant.

Read and approved this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

**CITY OF SPARTA**

\_\_\_\_\_  
Jerry Lowery, Mayor

ATTEST:

\_\_\_\_\_  
Tonya R. Tindle, City Recorder



*AGENDA ITEM #4*

**RESOLUTION**

<b><i>A RESOLUTION OF THE CITY OF SPARTA, TO ESTABLISH A POLICY FOR THE SALE AND DISPOSAL OF PROPERTY DETERMINED TO BE SURPLUS TO THE CITY'S NEEDS.</i></b>	RESOLUTION # 23-585
	Requested By: Tonya Tindle, City Administrator
	Prepared By:
	Approved: City Attorney
	Minute Book                  Page

**WHEREAS**, it is in the public interest for the City of Sparta to periodically sell or dispose of certain machinery, equipment, or materials which, by nature of its obsolescence, low value, or disrepair, has been determined by the Board of Mayor and Aldermen to be surplus to the realistic and foreseeable needs of the city; and

**WHEREAS**, Board of Mayor and Aldermen wishes to establish a uniform policy, which provides that obsolete and unneeded property will be offered for sale to the general public in an open, transparent, and cost-effective manner, and assures against usable and valuable property from wrongfully being declared obsolete and offered for sale.

**NOW, THEREFORE, BE IT RESOLVED BY THE SPARTA MAYOR AND BOARD OF ALDERMEN, AS FOLLOWS:**

1. **Title.** This Resolution shall be known as the “Sparta Surplus Property Policy” and shall be the official guideline for the sale of the City’s surplus properties.
  
2. **Authority to declare property as surplus to the City’s needs.** Any member of the Board, the city administrator, any department head, the City’s property manager, or the City’s purchasing manager may nominate any City-owned property for disposal or sale as surplus property. All such nominations shall be made on forms developed by the City and signed by the person making the nomination. Signed nominations shall be forwarded to the Board for the final decision authorizing the sale. It shall be the official policy of the City of Sparta that no city-owned property shall be sold, or offered for sale, as surplus property without prior authorization by the Board. The Board’s authorization to sell surplus property shall be in the form of a Resolution.

**3. Unauthorized sales.** Any employee of the City of Sparta found to have sold, or offered for sale, any City-owned property in violation of the Sparta Surplus Property Policy shall be subject to disciplinary action and, if applicable, criminal prosecution.

**4. Surplus property nomination form.** The City Recorder shall develop a form which shall be used by department heads to nominate surplus property for sale. As a minimum, such form shall contain the following information:

- a) A brief description of the item proposed for sale, including manufacturer, model number, serial number, age, and condition;
- b) The department or office to which the property is assigned;
- c) An explanation of why the property is no longer needed by the City;
- d) The name and signature of the person making the nomination.

**5. Surplus property criteria.** All signed surplus property nomination forms shall be promptly forwarded by the City Recorder to the Board. Before classifying any property as being surplus, the Board shall consider the following:

- a) The age and condition of the property;
- b) The cost of replacing the property, if any;
- c) The anticipated remaining life of the property;
- d) Whether the property might reasonably, safely, and efficiently be used by another City department or office.

**6. Sales procedures.** Unless otherwise directed by the Board, all surplus property approved for sale shall be sold according to the following procedure:

- a) The City Administrator shall be wholly and solely responsible for advertising and conducting all surplus property sales.
- b) The preferred method of sale shall be a public auction, on a cash, certified check, or if applicable, debit or credit card basis. A public auction may include the use of a nationally recognized government surplus website, such as GovDeals.com or PublicSurplus.com. Sales on such websites shall include a buyer's premium so that the buyer bears the cost for using the website service. When a public auction is not practical or efficient, the Board may direct the sale to take place by means of sealed bids. The opening of all sealed bids shall take place in a meeting open to all bidders and the general public.
- c) It shall be the City's policy that sales of surplus property shall be awarded to the highest bidder.

- d) All surplus property auctions shall be advertised in advance in a newspaper of local circulation (or on the appropriate website, as noted above).
- e) Prior to the sale, all City logos or other symbols are to be removed or destroyed from the items to be sold.

**7. Sale of dangerous property.** It shall be the policy of Sparta to avoid the sale of surplus property that might reasonably be dangerous or hazardous to the ultimate purchaser. Dangerous or hazardous items shall include, but are not limited to, the following:

- a) Explosives;
- b) Volatile or highly toxic chemicals; and
- c) Equipment and materials that cannot be operated or used safely due to obsolescence, product defect, lack of maintenance, etc.

**8. Distribution.** The City Administrator is hereby directed to distribute a copy of this resolution to every employee of the City of Sparta and in each copy of the City's employee handbook issued after the effective date of this Resolution.

**9. Effective date.** This Resolution shall be in full force and effect from and after its date of adoption by the Sparta Board of Mayor and Aldermen.

Read and approved this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

**CITY OF SPARTA**

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Jerry Lowery, Mayor

ATTEST:

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Tonya R. Tindle, City Recorder

***AGENDA ITEM #5***

Recreational Concepts is preparing the agreement and when it is available it will be sent out as soon as we get it, to allow you time to read it before the meeting.

***AGENDA ITEM #6***

## Tonya Tindle

---

**From:** Dillard Quick  
**Sent:** Friday, July 14, 2023 1:46 PM  
**To:** Tonya Tindle  
**Subject:** FW: Sparta Water Plant - Flocculators  
**Attachments:** Prelim Cost Estimate-Flocculators.pdf; Sparta TN Sharpe Quote Q3-73254.pdf; SKETCH.pdf

Tonya,

We talked to Lieve and believe number 2 would be the best for our system. \$277,000. Lieve added, add \$100,00 for structural, electrical and demo as an estimate. Engineering fees to be added to the total price.

---

**From:** Lieve Schanno <lieve.schanno@hdengr.com>  
**Sent:** Friday, July 7, 2023 10:32 AM  
**To:** Dillard Quick <d.quick@spartatn.gov>; Greg O'Neal <g.oneal@spartatn.gov>; Jason Hale <j.hale@spartatn.gov>  
**Cc:** Alton Hethcoat <alton.hethcoat@hdengr.com>; Jacob Baker <jacob.baker@hdengr.com>  
**Subject:** Sparta Water Plant - Flocculators

**[EXTERNAL EMAIL]** CAUTION: This is an external email that originated from outside our email system. Do not click links or open attachments unless you recognize and trust the sender. If in doubt, call sender at a number you already know before clicking links or attachments.

Good morning Dillard, Greg and Jason –

I just got word from Alton that you are ready to proceed with final design for the flocculators at the water plant.

1. Dillard - Please confirm that you want to proceed with flocculator final design.
2. Based on the initial cost estimates, I think we want to design based on a vertical mixer type of flocculator. The preliminary cost estimates and an example by Sharpe mixers is attached.
3. The sketch attached is the proposed layout we discussed before. Let us know if you want to proceed with this layout.
4. I am going to have the intern engineer Jacob Baker working with me on the process design.
5. Structural and Electrical engineering support will be needed for this. John Cole will design the electrical and Skyhook Structural Engineers will provide the structural engineering (same as previous water plant designs)

Jacob, Alton and I look forward to working with you on this. – Lieve

*Ms. Lieve C. Schanno, P.E.*  
*Senior Project Engineer*



278 Franklin Road, Suite #200  
P: 615-577-4300  
D: 615-479-9892  
E: [lieve.schanno@hdengr.com](mailto:lieve.schanno@hdengr.com)

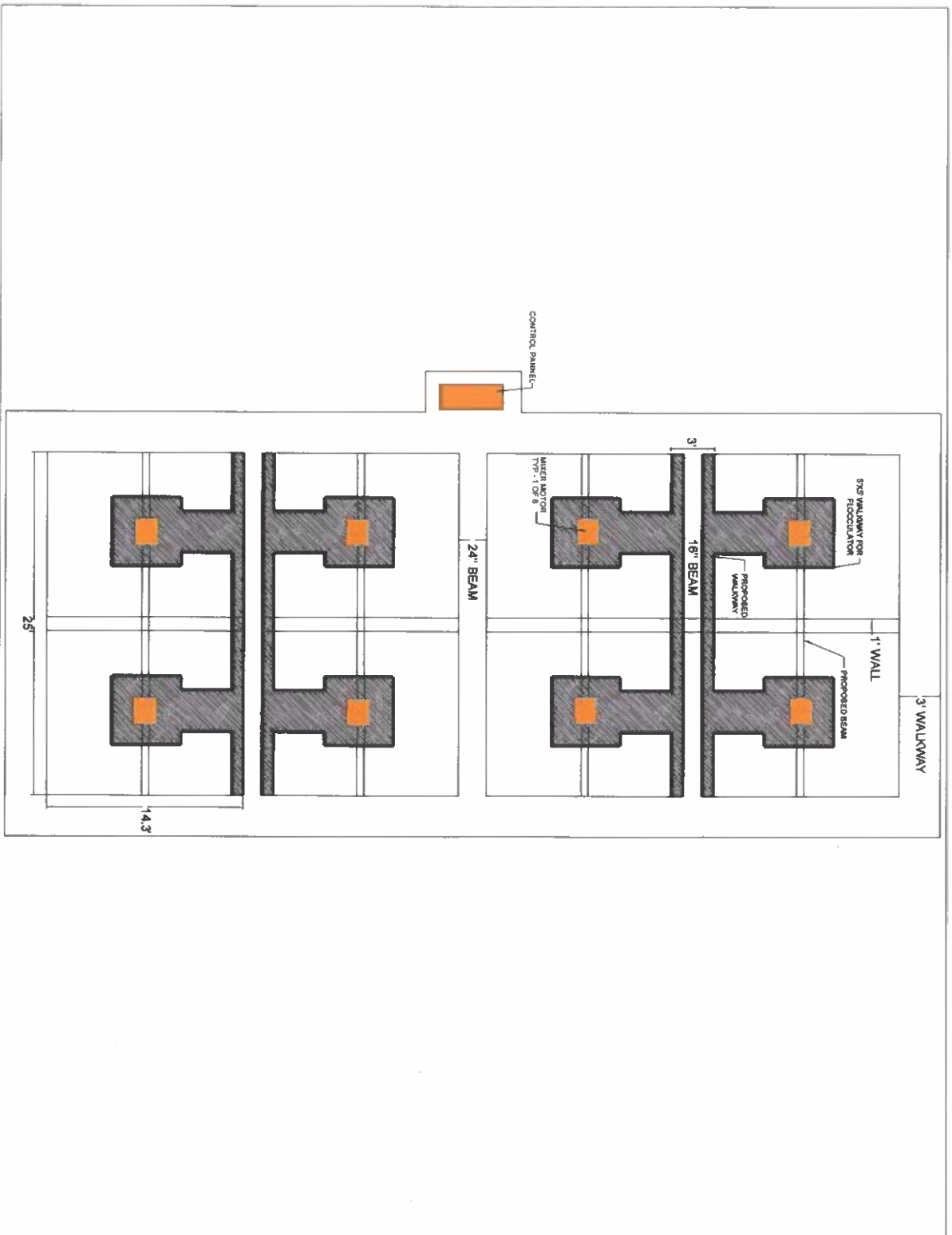


**COST ESTIMATE**

2023 FLOCCULATOR REPLACEMENT

2/17/2023

	JOE SANFORD - BAR ENVIRONMENTAL	JOHN HARWARD - PRINCIPLE ENVIRONMENTAL	SETH DOBYNS - GUTHRIE SALES	JOE SANFORD - BAR ENVIRONMENTAL	JOE SANFORD - BAR ENVIRONMENTAL
	SHARPE - TOP ENTERING	ENVIRO PAX - VERTICAL	DYNAMIX - VERTICAL	ANCO - HORIZ PADDLE WHEEL	ANCO - WALKING BEAM
EQUIPMENT	\$117,880 (8 MIXERS)	\$237,000 (8 MIXERS)	\$168,800	\$450,000 - \$470,000	\$530,000 - \$550,000
INSTALLATION	\$40,000	\$40,000	\$40,000	\$100,000	\$50,000
VARIABLE FREQUENCY DRIVES	\$80,000 (\$10,000/Panel)	OPTIONAL		N/A	N/A
STRUCTURAL SUPPORT OF MIXER	YES	YES	YES	YES	YES
WALKWAY ACCESS	YES	YES	YES	NO	NO
ELECTRICAL	YES	YES	YES	YES	YES
COMMENTS	FREIGHT INCLUDED	SOME SERVICES INCLUDED		CONTROLS NOT INCLUDED	CONTROLS NOT INCLUDED
TOTAL COST					



**QUOTATION**

Customer: **Sparta TN, WTP**

Date : January 30, 2023  
validity: 30 Days

Proposal No. : Q3-73254

Est. Shipment : 18 weeks

>> after drawing approval or release

F.O.B. : Factory

Terms : NET 30 DAYS, OAC

<b>Application :</b> Flocculation Tanks		<b>ON-CENTER MOUNTING</b>	
<b>Design conditions :</b>	Viscosity(cps): 1	Sp.Grav: 1.00	Temp.: Ambient Pressure: Atmospheric
<b>Tank dimensions :</b>	300 Wide x 165 long x 156.8 " overall height from mixer base to tank floor Tank Volume (gallons)= 29600		
<b>Liquid levels:</b>	Design max (from tank floor): 138"; Min. Liquid Level: 82"		
<b>Equipment :</b>	<b>N-SERIES HELICAL DRIVE TOP-ENTERING MIXER</b>		
	Quantity : 8	<b>Mixer Model # 1.5N2 -52</b>	
<b>Motor :</b>	1.50 Horsepower, @ 1750 RPM, 3PH, 60Hz, 230/460 VOLTS TE-INV.DUTY 145TC Frame, Motor Furnished by Sharpe , Mounted by Sharpe TEFC- PREMIUM EFFICIENT		
<b>Mixer Drive :</b>	N2 Parallel Helical Gearbox with OilSafe Effective Drywell 51.7:1 Ratio, Rated at 2.48 Horsepower		
<b>Mixer mounting :</b>	Mounting Plate Furnished		
<b>Wetted Parts :</b>	SS316		
<b>Shaft :</b>	2.38 "Dia. X 114 " long from mounting base, turning @ 34 RPM Includes No In-Tank Shaft Coupling		
<b>Impellers :</b>	65.0 "dia HYF-218 Hydrofoil Impeller Split Cast Hub Pumping Down, Turning Clockwise Looking Down <b>19 " min. opening required to install impeller</b>		
		Ship Wt.,each= 400 lbs	
Q1QP-071122			

Please address your order to:

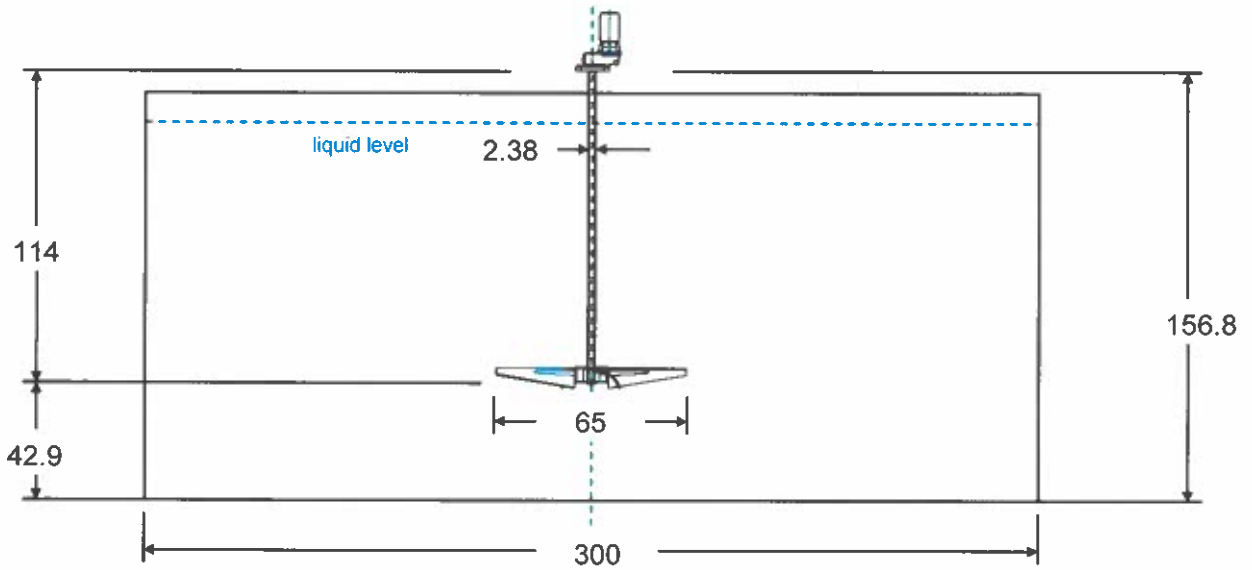
Hayward Gordon  
5 Brigden Gate  
Halton Hills, ON L7G 0A3

*Note - This quote is valid for 30 days.  
Any order placed as a result of this proposal is  
subject to Sharpe Mixers Terms and  
Conditions.*

Quotation prepared by: *Kyle Sides*

**Sharpe Mixers**

For reference only; use certified drawings for construction. Dimensions are in inches



NOTES: Tank / Mixer Layout intended for scaled view of in-tank components only. Mixer drive proportions may vary slightly depending on motor type or other options. Please review drawing carefully and inform Sharpe Mixers immediately if any tank dimensions are inaccurate. Drawing generated by Sharpe Mixers Q1QP mixer selection program, Copyright 2005, Seattle, WA.

Mixer weight = 400 lbs  
 Design Torque = 4825 lbs-in  
 Design OHM = 3799 lbs-in  
 est. full tank volume = 33600 gal (127190 L)  
 est. volume @ liquid level = 29571 gal (111941 L)



**TOP ENTERING MIXER / TANK LAYOUT DETAIL**

Mixer Model # 1.5N2 -52

Quantity: 8

Customer: Sparta TN, WTP

Sharpe # Q3-73254

Application: Flocculation Tanks

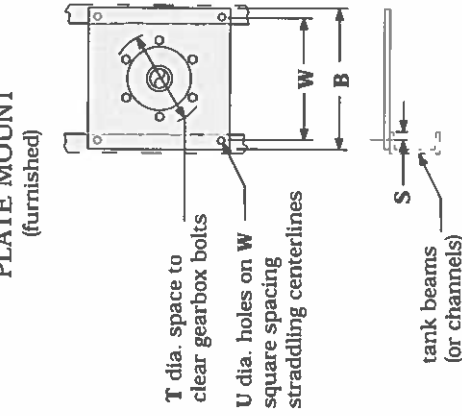
Drawing # L3-73254

(800) 237-8815 - www.sharpemixers.com

Q1QP-071122 1/30/23 2:56 PM

Drawing not to scale. Dimensions are for reference only. Use certified prints for construction. Dimensions in inches.

**MOUNTING DETAIL  
PLATE MOUNT  
(furnished)**

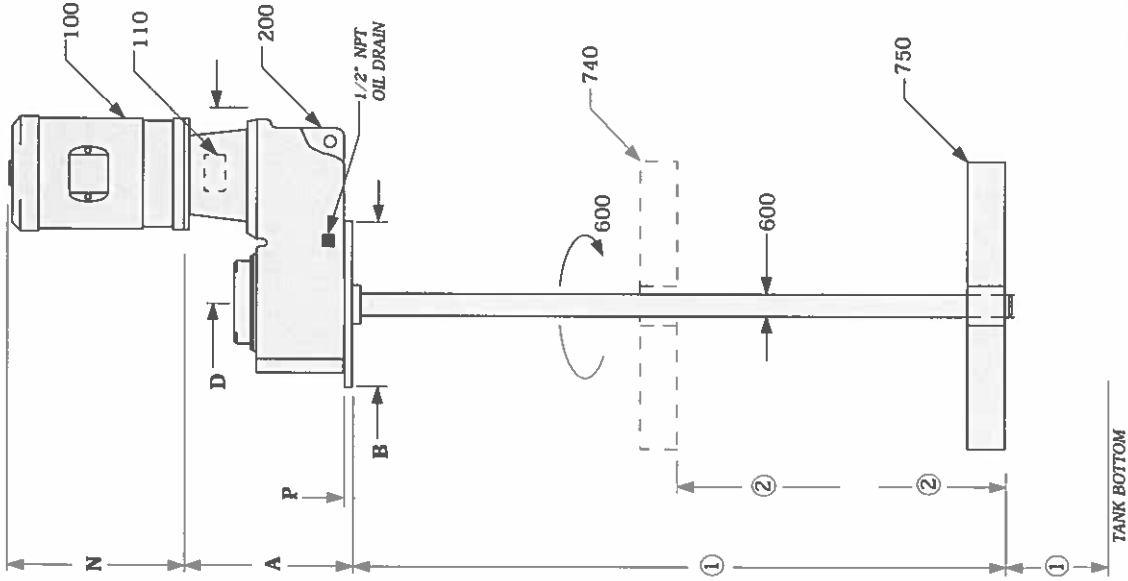


\*NEMA frames shown are for 1750 rpm motors. Weights and Outline dimensions (A,B,D,M,N) are approximate.

**MOTOR DIM'S**

HP •	NEMA FRAME	N'	WT*
1/3-2	56C	11	37
1-1.5	143TC	11.3	41
1.5-2	145TC	11.3	50
3	182TC	11.8	65
5	184TC	12.8	87
7.5	213TC	15	145
10	215TC	16.5	160
15	254TC	19.6	310
20	256TC	21.3	345
25	284TC	20.3	425
30	286TC	21.8	455
40	324TC	26.5	575
50	326TC	26.5	634

- 100 - MOTOR ①
- 110 - FLEXIBLE MOTOR COUPLING
- 200 - GEAR REDUCER ①
- 600 - SHAFT ①
- 740 - UPPER IMPELLER ②
- 750 - LOWER IMPELLER ①



- ① Impeller(s), shaft and other details are dependent on specific application and will be described in the Quotation/Data Sheet.
- ② Items are optional and will be described in the Quotation/Data Sheet if provided
- ③ Basic weight shown in lbs is for mixer drive only, less motor and wetted parts.

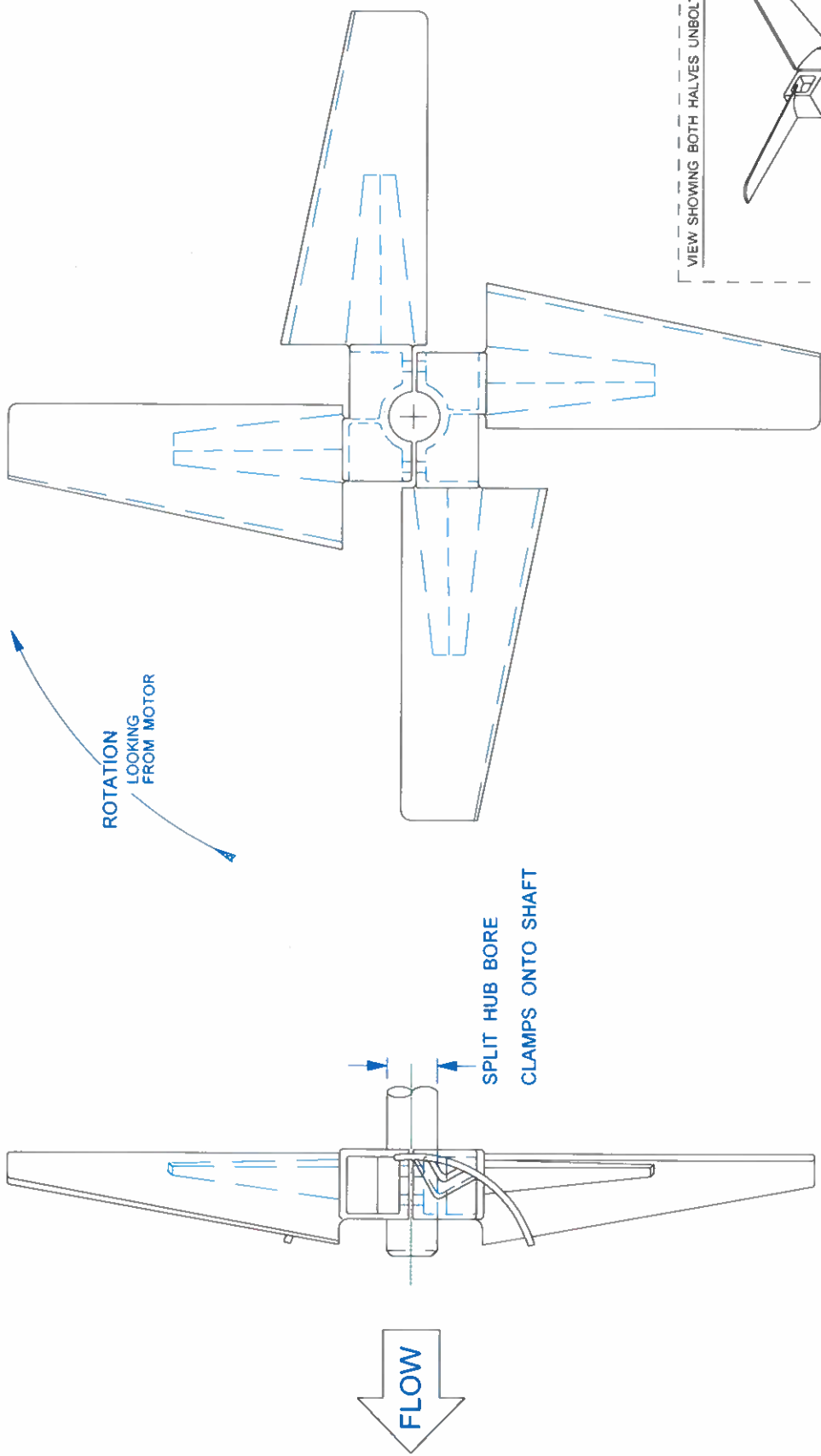
**OVERALL DIMENSIONS**

	N1	N2	N3	N4	N5	N6	N7	N8	N9
A (MAX)	10.94	11.77	12.83	15.33	17.23	18.03	21.78	23.49	24.89
B	11	11	12	14	16	18	21	24	30
D	7.95	9.73	11.03	13.03	15	16.1	17.75	20.63	25.95
J (MAX)	5.75	6.25	7	8	9	12.5	12.5	13	15
P	.38	.38	.5	.63	.75	.88	1	1.25	1.5
S	.63	.63	.75	.75	.88	.88	.88	.88	1
T	5.5	6	7.5	8.75	9.5	11.75	13.25	15.5	17.25
U	.43	.43	.56	.56	.68	.88	.94	1.13	1.31
W	9	9	10.5	12	14	16	18	21	27
WT	60	90	120	190	270	430	600	850	1400

**N - SERIES HOLLOW GEARBOX OUTPUT PLATE MOUNT W/ C-FACE MOTOR**

DWG NO.: S4617

CADD # N.Plate.HOLLOW.CFACE.S 6-05



**ENERGY EFFICIENT HYFLO 218 IMPELLER**

**SPLIT HUB DESIGN**

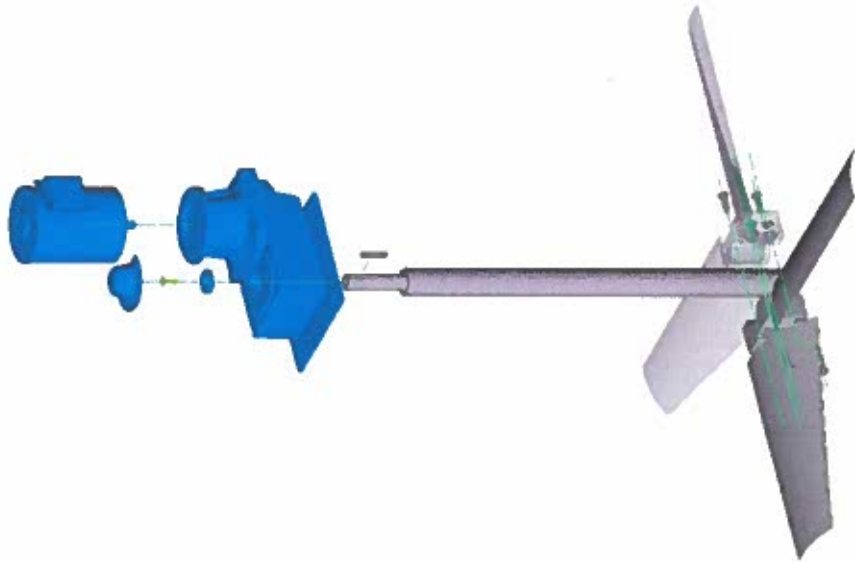
CUSTOMER:

SHARPE ORDER NO.:

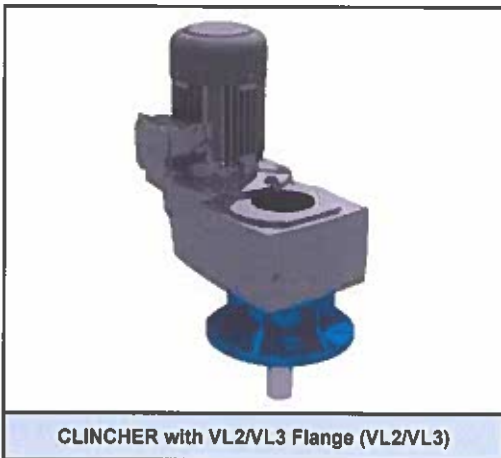
CUST. P.O.#:

DWG NO.: A9760

SHARPE MIXERS P.O.BOX 3906 SEATTLE, WA. 98124 (206) 767-5660 FAX (206) 767-9170



A



CLINCHER with VL2/VL3 Flange (VL2/VL3)

## VL2 – Spread Bearing Design

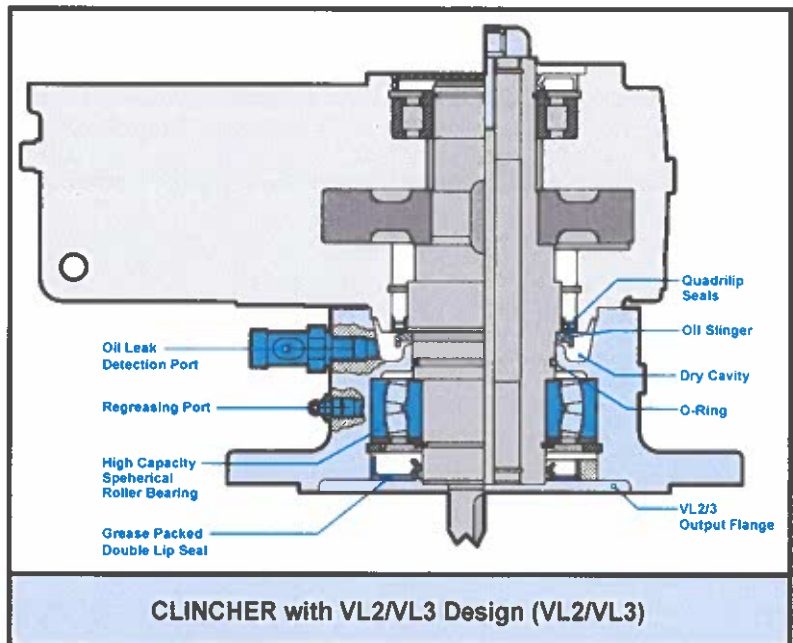
NORD offers reinforced output shaft bearings with increased bearing distance. The lower bearing is a oversized, double row spherical bearing, which absorbs high overhung and thrust loads while providing a longer bearing service life. The spherical roller bearing is especially useful in compensating for alignment errors in long agitator shafts. The VL2 spread bearing design is commonly used for shredders, mixers, overhead conveyors or applications requiring increased bearing load carrying capacities. Included with the VL2 design is a grease fitting for the lower bearing and a removable plug to allow excess grease to purge from the bearing cavity.

## VL3 – Spread Bearing Design with Oil Safe Dry Cavity

The VL3 dry cavity design adds additional oil leak protective measures to the VL2 spread bearing design. NORD's Quadralip™ sealing system prevents oil from leaking from the gearbox into the VL2 flange. If in any case oil does leak past the Quadralip™ seals, it would flow down to the oil slinger mounted onto the shaft. As the shaft rotates, the oil will sling off into the dry cavity. A sight tube is provided for dry cavity inspection. At the bottom of the spread bearing flange is greased packed, double lip seal.

NORD can calculate the service life upon request. The following values are required for calculation:

- |   |             |
|---|-------------|
| ■ Rated Power                                   | P [hp]      |
| ■ Output Speed                                  | $n_2$ [rpm] |
| ■ Overhung Force                                | $F_r$ [lb]  |
| ■ Axial Force (thrust)                          | $F_a$ [lb]  |
| ■ Overhung force to the flange support distance | C [in]      |
| ■ Required Service Life                         | $L_h$ [h]   |



CLINCHER with VL2/VL3 Design (VL2/VL3)



*AGENDA ITEM #7*

## Tonya Tindle

---

**From:** Dillard Quick  
**Sent:** Friday, July 7, 2023 2:37 PM  
**To:** Tonya Tindle  
**Subject:** FW: Sparta Water Plant - Sludge Solids Processing

**From:** Lieve Schanno <lieve.schanno@hdengr.com>  
**Sent:** Friday, July 7, 2023 11:26 AM  
**To:** Dillard Quick <d.quick@spartatn.gov>; Greg O'Neal <g.oneal@spartatn.gov>; Jason Hale <j.hale@spartatn.gov>  
**Cc:** Alton Hethcoat <alton.hethcoat@hdengr.com>; Jacob Baker <jacob.baker@hdengr.com>  
**Subject:** Sparta Water Plant - Sludge Solids Processing

**[EXTERNAL EMAIL]** CAUTION: This is an external email that originated from outside our email system. Do not click links or open attachments unless you recognize and trust the sender. If in doubt, call sender at a number you already know before clicking links or attachments.

Good morning Dillard, Greg and Jason –

I just got word from Alton that you would like to evaluate options for sludge solids processing- possibly using a belt press.

1. Dillard - Please confirm that you want to proceed with sludge solids processing design.
2. Alton tells me that a land application permit has been obtained, that requires a minimum 18% solids. Please send me a copy of that.
3. Let me know if you have been in communication with any belt press vendors and if so, who?
4. I am going to have the intern engineer Jacob Baker working with me on the process design.

Jacob, Alton and I look forward to working with you on this. – Lieve

*Ms. Lieve C. Schanno, P.E.*  
*Senior Project Engineer*



278 Franklin Road, Suite #200  
P: 615-577-4300  
D: 615-479-9892  
E: [lieve.schanno@hdengr.com](mailto:lieve.schanno@hdengr.com)

*AGENDA ITEM #8*

July 14, 2023

File 1005-06

Ms. Tonya Tindle, City Administrator  
6 Liberty Square  
Sparta, TN 38583

**RE: Water System Hydraulic Model  
City of Sparta, TN**

Ms. Tindle:

Thank you for giving Hethcoat & Davis the chance to submit a proposal for providing professional services to the City of Sparta. We appreciate the opportunity and responsibility that the City is considering vesting in us, and we look forward to the chance to continue working with you and your staff. Our relationships with our clients are **extremely** important to us, and we welcome the opportunity to prove that we can provide the level of **priority service** and **attention** that you and the Sparta deserve.

A water model can be an extremely valuable tool for performing in-depth analysis of the existing distribution system and operational parameters. Additionally, new developments can easily be evaluated, long-term projections can be incorporated, and system improvement recommendations can be made. Ultimately, the water model can provide data and information that will ensure a high-level of service for all customers.

Our immediate priority will be to evaluate and analyze the existing water distribution system and develop a calibrated water model that mimics your current system.

**Therefore, we are pleased to submit our proposal for developing a computerized water system hydraulic model and long-term capital improvements plan for the City of Sparta.** The development of the Hydraulic Model will begin with a “work plan”

The work plan will consist of constructing the hydraulic model so as to assist in evaluating the following water distribution issues: (1) how much water can be transmitted through the existing network thereby creating an accurate representation of current system performance; (2) evaluation of existing pressure zone(s); (3) examination of water storage and simulation of tank operation (filling / cycling) under various conditions; (4) examination of existing water booster stations to determine their capacity, efficiency and run-times; (5) an evaluation of existing fire flow capabilities; and (6) evaluation of existing service areas and associated sources to determine distribution efficiency.

## Scope of Services

Hethcoat & Davis, Inc. (H&D) would propose the following task-based approach. After each task, H&D would provide the City with known and suspected information to aid in the evaluation of the existing system. All pressure monitoring and related equipment, would be installed by H&D with assistance from the City. H&D will establish the specific location for their installation. H&D staff would be responsible for relocating the data loggers, as necessary with assistance from the City, to new locations for additional data collection. All copies of existing GIS database information, maps, as-built data, record drawings, pump curves, billing data, MOR's, etc., would be furnished by the City.

**The tasks associated with the development of the Model will include:**

### ***Task 1. Data Collection/System Investigation***

H&D, with the help of the City, would acquire the necessary data to perform the hydraulic analysis. Existing data will be researched, copied, and documented in a useable format. Field pressure data will be acquired as needed using H&D and City forces. Data to be gathered may include, but is not limited to, the following:

#### **□ Existing Data**

- Base File Data (GIS Shapefile Format preferred – Roads, Parcels, Contours, Aerial Photos, etc.)
- Water Source, Water Line Data, Storage Tank, Booster Station, System Valve Inventory and Meter Inventory (GIS Shapefile Format)
- Control Valve, Flow Control Valve, Pressure Reducing Valve Inventory (GIS Shapefile Format preferred)
- Billing Route Maps / Pressure Zone Boundaries
- Operations Data Including Booster Station Pump Data (Pump Curves, Metered Flows, etc.) and Tank Level Trend Data (SCADA/Telemetry in Excel Format)
- At least one year of Monthly Operating Reports, including data for “water bought/pumped” (Excel Format)
- At least one year of Monthly Water Consumption Totals for all customers (Excel Format)
- Complaints / Problems (low pressure, water quality, etc.)
- Planned Infrastructure Improvements
- Potential Wholesale Water Purchases and/or Wholesale Sales Contracts

#### **□ Additional Data to be collected**

- Pressure data from the distribution system

- Fire Flow Tests (as needed to verify flows, line sizes, C-Factors)

The data will be collected and organized to effectively represent the existing conditions. The accuracy of the data collected is paramount in the engineering evaluation tasks to follow. Enough data loggers need to be placed across the system to adequately cover the area. Gathering pressure data with a few loggers extends the data collection period and also distorts the data as the water system does not remain the same over a long period. Shortening the data collection periods will improve the accuracy of the calibration. This step will require close cooperation with City staff to determine current operating parameters.

### ***Task 2. Calibration and Hydraulic Analysis***

The calibration and hydraulic analysis will be performed to profile and mirror the existing distribution system and the effects created by the existing demands. The computer modeling hydraulic analysis will utilize Innovyze InfoWater software to process the data. This software will allow the user to construct a pictorial representation of the water system. A digital GIS map of the City's water system will be evaluated for use as the base map, depending upon its level of accuracy and completeness. The analysis will establish and reaffirm the existing conditions and estimate the changes that will occur when improvements are integrated, identify any sub-standard existing facilities that should be upgraded. This is the most critical step in the process as an inaccurately calibrated model provides little to no useful output. Once the model is calibrated, it will be used to identify the new infrastructure that may be necessary to eliminate any flow and pressure problems, or to address future flow, pressure, quality and capacity issues.

### ***Task 3. Report Summary***

H&D will provide a report that summarizes the analysis performed, calibration results, recommendations for system improvements, figures, maps, and concept level cost estimates for system improvements.

As you can see, the information the Model provides is extensive and comprehensive. Most importantly, **it provides you with a mechanism to project and plan for growth, identify and remedy issues within your system and enhance your pro-active approach to development.**

Based on what we know about the size of your system, we would anticipate that the time required to complete the development of the model should not exceed 210 days for a lump sum cost of **\$55,000.00**. This would be invoiced to you monthly based on

percent work complete. We would be happy to work with you on the terms of the contract and any potential modifications to the scope or timing of invoicing.

If this proposal is acceptable, please indicate by executing this document in the space designated below. Retain one copy for your files and return one executed copy to us for our files.

Please give me a call if you have any questions or require additional information.

Sincerely,

Alton Hethcoat, P.E.  
Principal, Hethcoat & Davis

Accepted:

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(Name/Title)

Copy: Cory Borum, PE

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(Date)

***AGENDA ITEM #9***



## Belva Bess

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**From:** Tommy Johnson  
**Sent:** Friday, July 07, 2023 8:27 AM  
**To:** Belva Bess  
**Subject:** Pole Quote

Class 1 45 ft Ductile iron Weathered Pole QTY 1  
Class 1 50 ft Ductile iron Weathered Pole QTY 5  
Class 1 55 ft Ductile iron Weathered Pole QTY 2

Utility  
Poles

### Vendors

Thomas Smith [thomas.smith@gresco.com](mailto:thomas.smith@gresco.com)  
Anderson, Tanya <[TWelch@wescodist.com](mailto:TWelch@wescodist.com)>  
WIGTON Rebecca <[rwigton@irby.com](mailto:rwigton@irby.com)>  
'Shari Perry' <[s.perry@capeelectric.com](mailto:s.perry@capeelectric.com)>  
Megan Nixon <[mnixon@smithville-electric.com](mailto:mnixon@smithville-electric.com)>  
Sarah Rowe <[sarah@powersupplycompany.biz](mailto:sarah@powersupplycompany.biz)>

## *Miscellaneous Information*

## Public Works

July 13, 2023

### WATER

Repaired several leaks.

Installed two new fire hydrants.

Set two new water taps.

Mowed, trimmed and sprayed water tank properties and raw intake property.

Abandoned two water lines: 1 on Cooper St., and 1 on John Henry Demps.

July 12 had a TDEC inspection.

Repaired yards and patched roads

Meter change-out program is on schedule.

Worked with pavers installing water valve risers.

### WATER PLANT

Work as usual.

### SEWER OPERATING

Located for contractors and utilities.

Checked pump stations daily.

Sprayed and mowed right of ways, manholes and pump stations.

5 sewer calls.

Working with pavers installing sewer risers.

### SEWER PLANT

Plant is operating with no overflows.

Still looking for another contractor to supplement the sludge hauling. Hauler is having a hard time keeping up with the amount of sludge the plant is producing. Not having any luck finding a contractor to haul sludge.

### STREET DEPARTMENT

Normal mowing of parks and square.

Bush hogging properties and roadways.

Worked on Pavilion. Inspections passed. Starting ceiling and walls, then fixtures.

Watered new shrubs at monument signs on 111.

Mosquito spraying started and scheduled for once a month unless needed otherwise.

Building set of steps for the sample site at the water plant.

Worked on replacing tile at Allen Dr.

#### SANITATION

All trash was picked up on schedule.

Still hauling our own trash to Southern Central. We are only taking brush to the landfill.

Road tractor is in shop with turbo out and front load truck the push button shift is being replaced.

## **Sparta Electric System**

**7/1/2023 to 7/17/2023**

- **Outages: Storm 7/5 (667 Woodlawn- Lightning hit transformer, line down Turn Table Rd- tree, 148 N Church – fuse, Traffic Light 111 & Roosevelt, 670 Turn Table – Transformer) Pearson St- Squirrel, Gaines St- Squirrel, Cherokee Circle- fuse, 234 & 224 – Re-Closure, 19 Marchbanks- Customer Breaker, Valley View- Squirrel, Allen Dr – Dump Truck hit line, Villa Ln- Bird**
- **Re-Sagged wire – Dibrell St.**
- **Set Service Pole- New Service- 528 S Young St.**
- **Set Primary Pole – 188 Churchill Dr.**
- **Replace Primary Pole & Transformer – 184 Churchill Dr.**
- **Disconnect & Re-Connect Service – 14 N Main St.**
- **Disconnect & Re-Connect Service – 425 N Spring St.**
- **Set new Transformer and removed open wire- Churchill**
- **Hooked up new service and set new transformer – 141 S Carter St.**
- **Set Service Pole – White Co High School Jumbotron**
- **Remove Service – 239 King St- Tearing down house**
- **Completed Re-Routing of lines and Pole replacement on Spring St at Railroad**
- **Replaced one of four bad Double Circuit Poles from Ford Dealer to Sparta Exit**
- **Completed 5 Year VIP Investment Credit Agreement with Sparta Metal Processing, TVA and Sparta Electric**
- **Street & Security Light Maintenance**
- **Spraying and Bush hogging Right of Way**

## Kirk's Notes July 6th thru July 20th

### Calls:

July 6th	Structure Fire	34 Gracey St
July 6th	LZ Setup	401 Sewell Dr
July 7th	Fire Alarm	34 Gracey St
July 11th	Structure Fire	530 Flatt St
July 11th	Tree Fire	541 West Bockman Way
July 11 <sup>th</sup>	LZ Setup	401 Sewell Dr
July 14 <sup>th</sup>	LZ Setup	401 Sewell Dr
July 17 <sup>th</sup>	MVA	Mose Dr in front of Panda Garden

### Totals:

Structure Fire – 2  
LZ Setup – 3  
Fire Alarm – 1  
Tree Fire – 1  
MVA - 1

### Other:

Upper Cumberland Fire Chiefs meeting July 17th hosted by Sparta Fire Dept.

## Tonya Tindle

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**From:** Nick Dunn  
**Sent:** Monday, July 17, 2023 10:01 AM  
**To:** Tonya Tindle  
**Subject:** Re: Bullet points

Vcif grant is finished . We're waiting on approval from Ocjp  
Austin McCoy is scheduled to go to the academy in fall of this year. He is still in Fto and doing well.

775 calls in june  
4145 calls year to date

Sent from my iPhone

On Jul 17, 2023, at 9:14 AM, Tonya Tindle <t.tindle@spartatn.gov> wrote:

I need bullet points for the agenda please!

**Tonya R. Tindle**

*City Administrator*

City of Sparta

Phone: 931-836-3248

6 Liberty Square Sparta TN 38583

Email: [t.tindle@spartatn.gov](mailto:t.tindle@spartatn.gov)

<image001.png>

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## Tonya Tindle

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**From:** Mike O'Neal  
**Sent:** Monday, July 17, 2023 3:15 PM  
**To:** Tonya Tindle  
**Subject:** July 20th Board Meeting

**Commercial**      Burger King continues making progress  
                         120 -250 Del Toro Circle making progress  
                         Seeds of Hope have decided to demo their old home project and build new. (239 King St. between  
Hardies and N. Wilson St.)

**Residential**      New homes permits are up from last month

**Municipal Codes**      We have had 4 yards to be cleaned by owner  
                         We have 2 under notice  
                         118 Gracey St. has been demoed leaving a vacant lot (This house was falling in and very  
overgrown) We worked  
                         with the owner resulting with no cost to the City.

**Mike O'Neal**  
*Codes Enforcement Officer*  
City of Sparta  
Phone: 931-836-3248  
6 Liberty Square Sparta TN 38583  
Email: m.oneal@spartatn.gov



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