

# CITY OF HIGH POINT

## AGENDA ITEM



**Title: Contract - JWC Environmental Inc. Eastside Waste Water Treatment Plant**

**From:** Robby Stone – Public Services Director  
Derrick Boone – Asst. Director Public Services

**Meeting Date:** May 15, 2023

**Public Hearing:** No

**Advertising Date:** N/A

**Advertised By:** N/A

**Attachments:** Attachment A – Bid Tabulation  
Attachment B- Additional Equipment Information

### **PURPOSE:**

To purchase a fine bar screen and washer compactor that will replace the existing mechanical screen (#2) and compactor that is no longer functional at the Eastside Wastewater Treatment Plant (WWTP).

### **BACKGROUND:**

The Eastside WWTP has three mechanical bar screens at the plant influent that function as part of the preliminary treatment process. A bar screen is a mechanical filter used to remove large objects, such as rags and plastics, from wastewater (see picture below). The mechanical bar screen in the #2 location is 20-years old, and it has been difficult to obtain replacement parts and technical support from the manufacturer. The Public Services Department received two bids for a replacement bar screen. The lowest bidder is JWC Environmental Inc. with a base bid of \$213,935 for a fine screen unit /washer compactor and an alternate bid of \$39,880 for a dual shafted grinder.

### **BUDGET IMPACT:**

Funds for this project are available in the FY 2022-2023 budget.

### **RECOMMENDATION / ACTION REQUESTED:**

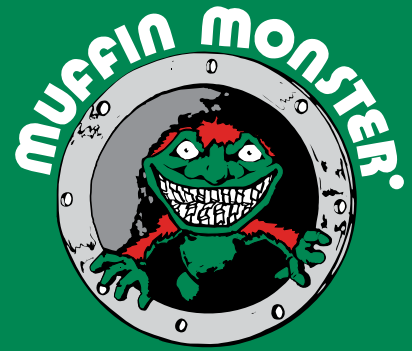
The Public Services Department recommends awarding the contract to JWC Environmental Inc. in the total amount of \$253,815 which includes the alternate bid item.



Example Bar Screen at the Eastside WWTP

**Bid Tabulation  
City of High Point, North Carolina  
Fine Bar Screen and Compactor Replacement  
Bid 37-050323**

<b>Contractor</b>	<b>Fine Screening Unit</b>	<b>Washer, Compactor</b>	<b>Total Base Bid Price</b>	<b>Alternate Bid (Dual Shafted Grinder)</b>
<b>Parkson Corp</b>	<b>\$229,000.00</b>	<b>Included</b>	<b>\$229,000</b>	<b>N/A</b>
<b>JWC Environmental</b>	<b>\$169,450.00</b>	<b>\$44,485.00</b>	<b>\$213,935.00</b>	<b>\$39,880.00</b>



## Monster Separation Systems®

# FINESCREEN MONSTER®



The Finescreen Monster provides a high capture rate of wastewater solids, including small debris. It incorporates a continuous band of stainless steel panels or optional StapleGuard ultra high molecular weight (UHMW) polyethylene perforated panels attached to heavy-duty stainless steel roller chains. Panels are available with 1/8" or 1/4" (3 or 6 mm) openings. Stainless steel rollers track in UHMW guides at the bottom of the screen, thus eliminating the need for sprockets or bearings submerged in the wastewater flow.

### Advanced Design

- Completely stainless steel.
- UHMW side seals and Buna-N rubber with polypropylene bristle bottom sealing strip prevent debris from passing around the screen.

### Enhanced Cleaning System

- Brushless cleaning system using water spray with UHMW panels.
- Lower maintenance and better panel cleaning.

### Ease of Maintenance

- Easy to lift access covers and easy to reach assembly allows simple fine tuning.

### Staple Guard UHMW Polyethylene Perforated Panels (optional)

- Reduces stapling (or hair pinning) on the panels.
- Highly abrasion, wear and corrosion resistant.

## Equipment Sizing

**Screen Panel Hole Size:**  $\varnothing$  1/8" or 1/4" (3 or 6 mm) holes

**Depth:** Up to 40' (12.2 m) with a max 6' (1.8 m) discharge height

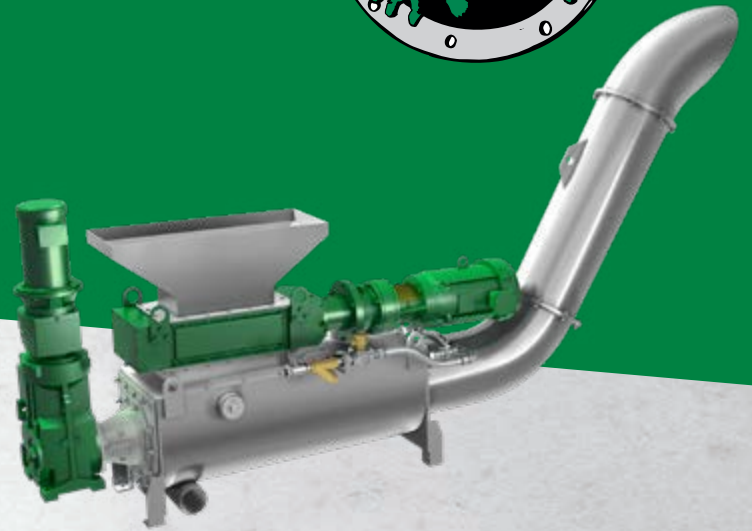
**Width:** 2' to 8' (.6 to 2.4 m)

**Angle:** 60° to 85° inclination; 70° standard





# MONSTER WASH PRESS



The Monster Wash Press is JWC Environmental's latest generation of washer compactors. The Monster Wash Press processes screenings to separate water and organics from the solids. The result is a clean, dry, light and compact discharge which reduces the amount of waste to be dumped, ultimately saving treatment facilities time and money.

The Monster Wash Press may be outfitted with a Muffin Monster® grinder to pre-condition the screenings before they enter the washer compactor. The grinder breaks open rags, plastics and trash to promote washing and removal of soft organics during the wash cycle. Additionally, pre-conditioned screenings result in superior compaction, reducing the volume of discharge that must be hauled away.

Discharge from the pre-conditioning Muffin Monster or directly from the screen enters a Pre-Wash Zone where the debris is soaked to begin the process of separating organics from the solids. An auger rotor transports the soaked debris into the Active Wash Zone of the Monster Wash Press where a paddle rotor\* agitates the material, enhancing wash water penetration throughout the debris. The soft organic washed from the solids pass through a screen and return to the plant's waste stream for treatment. The washed solids are moved to the Transport and Compaction Zone where water is removed and the solids are compacted. The resultant discharge emerges from the Monster Wash Press as a dry, solid plug.

## Features and Benefits

### Dual Shafted Grinder (optional)

- 30K Muffin Monster grinds screenings discharge for the best washing and compacting
- Easy to retrofit grinderless Monster Wash Press with Muffin Monster

### Pre-Wash Zone

- Soaks screenings to jump-start separation of organics from solids
- Brushless auger rotor to promote free movement of debris to active wash zone

### Active Wash Zone

- Paddle rotor\* mixes and break-ups debris in wash zone to optimize separation of soft organics from solids
- Brushed rotor keeps screen clean
- 2, 3, or 6 mm perforated screens to separate solids from organics

### Easy Maintenance

- Segmented auger rotor brush for easy brush replacement
- Removable top cover and drive end plate\* minimizes clearance space needed to remove rotor and screen
- Field replaceable screen
- Multiple inspection ports for easy examination of equipment and operation

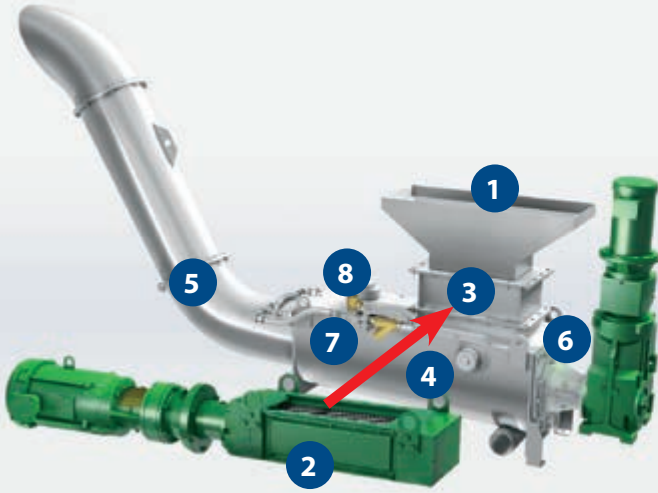


The Monster Wash Press is available only in North America

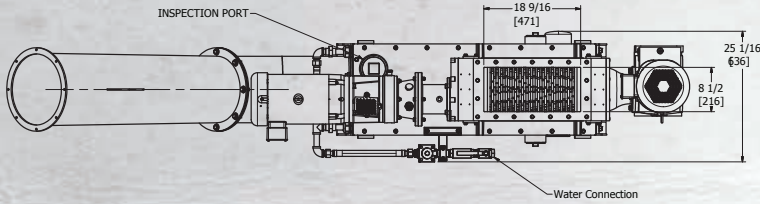
\* Patent Pending

[www.jwce.com](http://www.jwce.com)

# Monster wash press details



1. Hopper collect screenings
2. Muffin Monster grinds up material (optional)
3. Easy to install grinder later
4. Active Wash Zone cleans screenings
5. Cleaned discharge is dewatered and compacted
6. Removable top cover and drive end plate for easy removal of rotor and screen
7. Segmented rotor brush for easy brush replacement
8. Inspection ports

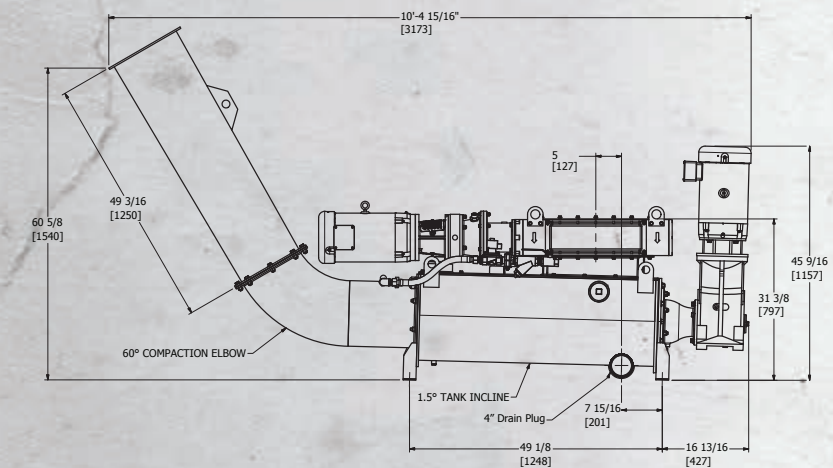
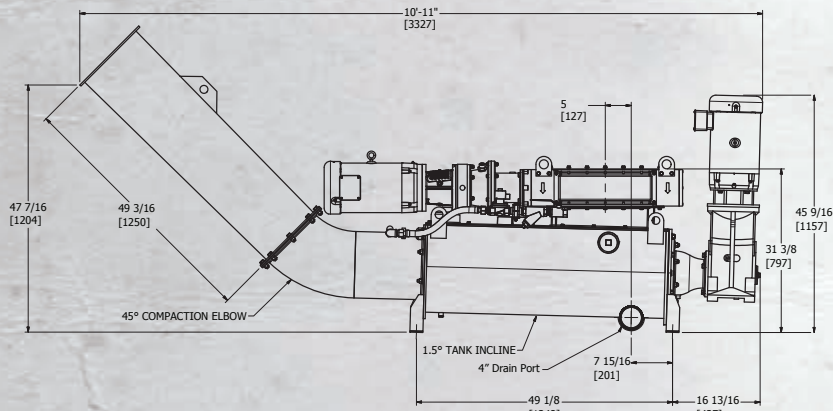


## Standard Construction

- Tank, screen, compaction elbow and transport tube: 304 stainless steel
- Auger rotor: Alloy steel
- Grinder with MWP3018: Ductile iron housing, hardened alloy steel cutters

## Optional Equipment

- 316 stainless steel tank, screen, compaction elbow and transport tube
- Discharge bagger
- Stainless steel roller base
- Discharge tip
- Customized hopper
- Customized discharge transport assembly



### STANDARD FEATURES

	MWP0018	MWP3018
Grinder Motor - hp (kW)	N/A	10 (7.5)
Auger Screw Motor - hp (kW)	5 (3.7)	5 (3.7)
Upgradeable to Add Grinder	Yes	Grinder Included
Dry Weight w/Controller - lb (kg)	1425 (647)	2025 (920)

### PERFORMANCE

	MWP0018	MWP3018
Continuous Throughput - ft <sup>3</sup> /hr (m <sup>3</sup> /hr)	206 (5.8)	78 (2.2)
Batch Output - ft <sup>3</sup> /hr (m <sup>3</sup> /hr)	120 (3.4)	46 (1.3)
Water Capacity* - gpm (l/s)	280 (17.7)	

\*For 3mm or 6mm perforated screen

The Monster Wash Press is available only in North America



**Headquarters**  
 2850 Red Hill Ave., Suite 125  
 Santa Ana, CA 92705 USA  
 toll free: **800.331.2277**  
 phone: **949.833.3888**  
 fax: **949.833.8858**  
 email: **fwce@fwce.com**

[www.fwce.com](http://www.fwce.com)





FORMAL BID RECOMMENDATION
REQUEST FOR COUNCIL APPROVAL

DEPARTMENT: Public Services Department

COUNCIL AGENDA DATE: May 15, 2023

BID NO.: 37-050323 CONTRACT NO.: DATE OPENED: May 3, 2023

DESCRIPTION:
Fine Bar Screen and Compactor

PURPOSE:
To purchase a fine bar screen and washer compactor that will replace the existing mechanical screen (#2) and compactor that is no longer functional at the Eastside Wastewater Treatment Plant (WWTP).

COMMENTS:

RECOMMEND AWARD TO: JWC Environmental Inc. AMOUNT: \$253,815.00

JUSTIFICATION:
Lowest Bidder

Table with 5 columns: ACCOUNTING UNIT, ACCOUNT, ACTIVITY, CATEGORY, BUDGETED AMOUNT. Includes a total budgeted amount row.

DEPARTMENT HEAD: Robby Stone Digitally signed by Robby Stone Date: 2023.05.04 07:50:03 -04'00' DATE: 5-4-2023

The Purchasing Division concurs with recommendation submitted by the and recommends award to the lowest responsible, responsive bidder in the amount of \$.

PURCHASING MANAGER: Candy E. Harmon Digitally signed by Candy E. Harmon Date: 2023.05.04 08:05:04 -04'00' DATE: 5-4-2023

Approved for Submission to Council
FINANCIAL SERVICES DIRECTOR: Bobby Fitzjohn Digitally signed by Bobby Fitzjohn Date: 2023.05.04 08:11:45 -04'00' DATE: 5-4-2023

CITY MANAGER: DATE: