## 1. Description of the proposed screening plant

- 1.1. The proposed screening plant will be made up of a feeder/hopper, two screening plants and eight conveyor belts. The aggregate re-grading will start by the aggregate being loaded into the hopper/feeder then onto a conveyor belt to be placed in the first screening plant. The aggregate will be sieved into the three larger sizes of aggregate and then travel up three conveyor belts and dumped into three individual cone shaped piles.
- 1.2. The remaining smaller aggregate will then travel up a conveyor belt to the second screening plant where it will be separated into the three smaller sized aggregate. These smaller sizes will then travel up three different conveyor belts and dumped into three individual cone shaped piles. The result will be six piles of well graded uniform piles of aggregate to be used in the asphalt mix.

## 2. Hopper/Feeder – Quantity One

- 2.1. 20 cu. yd. (15 m3) hopper
- 2.2. <sup>1</sup>/<sub>4</sub>" (6 mm) steel plate construction
- 2.3. Approximate 16' (4880 mm) x 7'9" (2360 mm) top opening
- 2.4. Manually adjustable discharge gate
- 2.5. 36" (900 mm) wide x approx. 18' (5490 mm) long, roller belt feeder
- 2.6. Drive Assembly V-belt drive for approx. 100 FPM (0.5 m/s) belt speed Capacity 750 TPH (680 MTPH) of 100 PCF (1.6 T/m3) material
- 2.7. Motor 15 HP (11 kW) TEFC constant speed electric motor 3/60/460
- 2.8. Reducer shaft mount
- 2.9. Head Pulley grooved rubber lagged, Dodge bearings
- 2.10. Tail Pulley Dodge bearings
- 2.11. Take-up 6" (150 mm) travel screw type
- 2.12. Idlers CEMA"C" 5" (127 mm) diameter, steel roll sealed for life ball bearings
- 2.13. Belt 3 ply, 330 PIW with 3/16" (5 mm) x 1/16" (1.5 mm) bottom covers; vulcanized splice
- 2.14. Variable Frequency Drive for 15 HP (11 kW) feeder drive.
- 2.15. Motor starters, circuit breakers, start-stop pushbutton controls, and wiring for 15 HP feeder drive and 15HP conveyor (item 2) drive in NEMA enclosure mounted per Astec standards with motor cables, LESS power supply cord.
- 2.16. Stainless steel panel in lieu of standard.
- 2.17. Paint: Two part urethane primer, two part urethane topcoat

### 3. 30" X 60' Portable Stacking Conveyor – Quantity Two

- 3.1. Frame: 24" (610 mm) deep lattice
- 3.2. Undercarriage: Manual telescoping pin lock
- 3.3. Axle single axle with single 11:00 22.5 tires on swivel wheel boxes
- 3.4. Drive Assembly Head end, v-belt drive for 350 FPM (1.8 m/s) belt speed
- 3.5. Capacity –500 TPH (450 MTPH) of 100 pcf (1.6 T/m3) material Motor 15 HP (11 kW) electric, 1800 RPM, TEFC 3/60/460, Reducer Class I, Dodge TA3203 shaft mount
- 3.6. Backstop Internal type in reducer
- 3.7. Head Pulley 16" (406 mm) grooved rubber lagged, Dodge bearings Tail Pulley 14" (356 mm) steel wing, Dodge bearings
- 3.8. Take-Up 12" (305 mm) travel screw type
- 3.9. Idlers CEMA "B" 5" (127 mm) diameter, steel roll, sealed for life ball bearings; Load Area Idlers 20 degree close spaced under receiving trough;

- 3.10. Troughing Idlers 35 degree on 4' (1220 mm) spacing;
- 3.11. Return Idlers flat rolls on 10' (3050 mm) spacing
- 3.12. Receiving Trough 5'6" (1680 mm) with adjustable rubber flashing
- 3.13. Belt: Grade 2, 2 ply, 220 PIW, 1/8" (3 mm) x 1/16" (1.5 mm) mechanical fasteners
- 3.14. Paint: Two part urethane primer, two part urethane topcoat
- 3.15. Belt Cleaner: Martin with tensioner
- 3.16. Rock Box Hopper
- 3.17. AR Liner 1/4" (6 mm) AR 400 for receiving trough
- 3.18. Anchor Pivot for radial travel.
- 3.19. CEMA "C" vs. B Idlers 5" (127 mm) diameter, steel roll, sealed for life ball bearings.
- 3.20. Pintle Hitch bolt on design.
- 3.21. Rubber Disc Returns.
- 3.22. Belt Grade 2, 3 ply, 330 PIW, 3/16" (5 mm) x 1/16" (1.5 mm) vs. standard
- 3.23. Knock down Style Conveyor vs. standard.
- 3.24. Discharge Hood with rock shelf and 1/4" (6mm) AR liner
- 3.25. Safety Stop Switch with cable trip line.

### 4. 30" X 40' Portable Stacking Conveyor – Quantity Six

- 4.1. Frame: 24" (610 mm) deep lattice
- 4.2. Undercarriage: Manual telescoping pin lock
- 4.3. Axle single axle with single 11:00 22.5 tires on swivel wheel boxes
- 4.4. Drive Assembly Head end, v-belt drive for 350 FPM (1.8 m/s) belt speed
- 4.5. Capacity –500 TPH (450 MTPH) of 100 pcf (1.6 T/m3) material Motor 15 HP (11 kW) electric, 1800 RPM, TEFC 3/60/460, Reducer Class I, Dodge TA3203 shaft mount
- 4.6. Backstop Internal type in reducer
- 4.7. Head Pulley 16" (406 mm) grooved rubber lagged, Dodge bearings Tail Pulley 14" (356 mm) steel wing, Dodge bearings
- 4.8. Take-Up 12" (305 mm) travel screw type
- 4.9. Idlers CEMA "B" 5" (127 mm) diameter, steel roll, sealed for life ball bearings; Load Area Idlers 20 degree close spaced under receiving trough;
- 4.10. Troughing Idlers 35 degree on 4' (1220 mm) spacing;
- 4.11. Return Idlers flat rolls on 10' (3050 mm) spacing
- 4.12. Receiving Trough 5'6" (1680 mm) with adjustable rubber flashing
- 4.13. Belt: Grade 2, 2 ply, 220 PIW, 1/8" (3 mm) x 1/16" (1.5 mm) mechanical fasteners
- 4.14. Paint: Two part urethane primer, two part urethane topcoat
- 4.15. Belt Cleaner: Martin with tensioner
- 4.16. Rock Box Hopper
- 4.17. AR Liner 1/4" (6 mm) AR 400 for receiving trough
- 4.18. Anchor Pivot for radial travel.
- 4.19. CEMA "C" vs. B Idlers 5" (127 mm) diameter, steel roll, sealed for life ball bearings.
- 4.20. Pintle Hitch bolt on design.
- 4.21. Rubber Disc Returns.
- 4.22. Belt Grade 2, 3 ply, 330 PIW, 3/16" (5 mm) x 1/16" (1.5 mm) vs. standard
- 4.23. Knock down Style Conveyor vs. standard.
- 4.24. Discharge Hood with rock shelf and 1/4" (6mm) AR liner
- 4.25. Safety Stop Switch with cable trip line.

### 5. Vari-Vibe® High-Frequency Screen Plant – Quantity Two

5.1. Screen - 3618VM PEP Vari-Vibe® high-frequency screen with 6' x 18' (1830mm x 5490mm) top and middle decks, and 6' x 12' (1830mm x 3660mm) bottom deck; Deck mounted

variable speed hydraulic vibrators have five (5) force amplitude settings; Hydraulic mechanism for variable operating angles; Fines collecting hopper; Top and bottom deck discharge chutes; Aggregate spreader

- 5.2. Main Frame High strength, welded steel frame with 18" (460mm) wide flange main beams; Fifth wheel attachment plate and kingpin; Telescopic support legs (manual extend and pin); Outrigger-style stabilizing legs by screen; Tandem axle leaf spring suspension with air brakes; Eight (8) 11:00 x 22.5 dual-mounted tires; Trailer light package; Mud flaps; Walkways along both sides of screen; Platform at feed end of screen; Frame-level platform with access ladder.
- 5.3. Delivery Conveyor Nominal 42" x 38' (1050mm x 11.6m) conveyor with variable speed hydraulic drive; Formed plate frame, Full length skirt boards; Rubber lagged head pulley and self-cleaning wing tail pulley mounted on pillow block bearings; Screw type take-ups; CEMA-C troughing and return idlers; Return idler guards; Belting is 220 PIW, 1/8" (3mm) top cover and 1/16" (1.5mm) bottom cover; Vulcanized splice; Primary belt cleaner.
- 5.4. Power, Electrical & Hydraulic Two hydraulic power units: one with 50 HP (37 kW) electric motor and 90 gallon (340 liter) reservoir, and one with 30 HP (22 kW) electric motor and 90 gallon (340 liter) reservoir; Direct coupled, pressure compensated pumps; Hydraulic system high pressure and return filters.
- 5.5. Controls NEMA-4 rated control panel with push button controls to operate hydraulic power unit; Includes wiring to motor; Emergency stops; Low oil level shut off switches and warning strobe; Mechanical controls for plant functions.
- 5.6. Paint Two-part urethane with two-part urethane topcoat Factory standard color(s).
- 5.7. Carbon Steel Screen Cloth for 3618VM.
- 5.8. Four (4) Hydraulic Legs for Levelling Plant; 4" (100mm) bore x 48" (1220mm) stroke (powered from plant hydraulic system); Includes two (2) crank-type landing jacks near kingpin to separate plant from towing tractor.
- 5.9. Fines Conveyor
- 5.10. Three 24" Cross Conveyors (one for each deck)
- 5.11. Additional Electric Starters for four off-plant conveyors
- 5.12. Stainless steel control panel in lieu of standard
- 5.13. Stainless Steel Screen Cloth for 3618VM
- 5.14. Vinyl Dust Cover



03/20/2024

# **Radial Stacker** 40' [12.2m] Stackers





## Frame

- Heavy-duty lattice type

## **Idlers**

- All standard idlers are CEMA B – 5" [127mm] diameter

• 35 degree troughing idlers on 4' [1.2m] spacing

- 20 degree idlers at feed point close spacing
- Flat steel return idlers on 10' [3m] spacing

## Undercarriage

- Manual telescoping pin lock
- Axle single axle with single 11:00 22.5 tires on swivel wheel boxes

## **Receiving Trough**

- 5' 6" [1.7m] long with adjustable rubber flashing

## **Belt Drive**

- Head end drive
- 3/60/230-460 TEFC electric motor
- Class I Dodge shaft mount reducer with backstop
- V-belt, motor mounts and guards
- 3/8" [9.5mm] grooved, rubber lagged head pulley
- Steel wing tail pulley
- 12" [305mm] Screw take-up
- Belt Speed 350 FPM [1.7 MPS]

#### 03/20/2024

# **Radial Stacker** 60' [18.3m] Stackers





### Frame

- Heavy-duty lattice type

## **Idlers**

- All standard idlers are CEMA B – 5" [127mm] diameter

• 35 degree troughing idlers on 4' [1.2m] spacing

- 20 degree idlers at feed point close spacing
- Flat steel return idlers on 10' [3m] spacing

## Undercarriage

- Manual telescoping pin lock
- Axle single axle with single 11:00 22.5 tires on swivel wheel boxes

## **Receiving Trough**

- 5' 6" [1.7m] long with adjustable rubber flashing

## **Belt Drive**

- Head end drive
- 3/60/230-460 TEFC electric motor
- Class I Dodge shaft mount reducer with backstop
- V-belt, motor mounts and guards
- 3/8" [9.5mm] grooved, head pulley
- Steel wing tail pulley
- 12" [305mm] Screw take-up
- Belt Speed 350 FPM [1.7 MPS]







