

KEYED NOTES MARK QTY DESCRIPTION PRECAST CONCRETE BASIN w/ MONOLITHIC BOTTOM, H20 RATED 2 NOT USED EXTERIOR OF ASSEMBLY TO BE LINED WITH WATER PROOFING EPOXY 3 4 NOT USED 5 1 NOT USED 4 NOT USED 6 3 CAST-IN PIPE SLEEVE W/ WATER STOP, SS304 8 3 PIPE PENETRATION SEAL, LINKSEAL REMOVABLE DEBRIS SCREEN 1, SS304 1/4" THK BARS @ 2" O.C., 88% OA REMOVABLE DEBRIS SCREEN 2, SS304 19W4 GW-100 BAR GRATING, 77% OA REMOVABLE DEBRIS SCREEN 3, SS304 1/4"ø HOLE ON 5/16" CNT PERFORATED SCREEN, 58% OA REMOVABLE HINGED COVER SCREEN, SS304 1/4"ø 12 HOLE ON 5/16" CNT PERFORATED SCREEN, 58% BYPASS PLATFORM SCREEN, SS304 19W4 GW-100 13 BAR GRATING, 77% OA 1 NOT USED 15 INTERIOR CHANNEL LINED W/ 10 GAUGE SS304 NAMEPLATE INDICATING: MFG: ParkUSA 888-611-PARK 16 www.ParkUSA.com DATE MANUFACTURED

BAR SCREEN ASSEMBLIES ARE USED IN AN OPEN CHANNEL (FREE SURFACE) FLOW APPLICATIONS TO SEPARATE & DETAIN COURSE DEBRIS AND CONTRADAND. THESE UNUSUAL SOLIDS HAVE A POTENTIAL FOR "CLOGGING" THE PUBLIC SEWER LINE, CAUSING EXPENSIVE CLEANING AND DOWNTIME OF THE SEWER SYSTEM. BAR SCREENS CAN BE USED FOR SANITARY OR STORMWATER APPLICATIONS. AS OPPOSED TO EXPENSIVE AUTOMATIC RAKE SCREENS, BAR SCREENS ARE MORE ECONOMICAL BUT REQUIRE MANUAL CLEANING. BAR SCREENS ARE IDEAL FOR FACILITIES WHICH HAVE A FULL MAINTENANCE STAFF. THE BAR SCREEN IS DESIGNED FOR EASE OF MAINTENANCE WHILE MAXIMIZING SAFETY. THE BAR SCREEN CONSISTS OF A STRUCTURAL CONCRETE VAULT ASSEMBLY WITH A PREFORMED CHANNEL. THE CHANNEL IS PLACED AT THE FLOWLINE ELEVATION OF THE INLET AND OUTLET SEWER PIPE CONNECTIONS (TYPICALLY AT 3' TO 8' BELOW GRADE). WITHIN THE CHANNEL, VERTICAL STAINLESS STEEL SCREENS ARE POSITIONED AT AN INCLINED ANGLE. SCREEN OPENINGS ARE TYPICALLY 1/2" TO 2". OFTEN, MULTIPLE SCREENS ARE USED WITH PROGRESSIVELY SMALLER SCREEN OPENINGS.

TYPICAL APPLICATIONS INCLUDE: JAIL & PRISON FACILITIES, SUBSTANCE ABUSE FACILITIES, NURSING HOMES, & DORMS DETENTION POND STORMWATER DRAINAGE.

THE PARKUSA® BAR SCREEN ASSEMBLY IS A SOLUTION FOR YOUR NEXT DESIGN CHALLENGE. A COMPLETE BAR SCREEN ASSEMBLY CAN INCLUDE; PRECAST CONCRETE STRUCTURE W/ ACCESS HATCH, GRATING, OR HANDRAILS, STAINLESS STEEL OR GALVANIZED PLATFORMS & SCREENS, OSHA APPROVED LADDERS, AUTOMATIC FLOW METER & TOTALIZER, PROTECTIVE SURFACE LINERS, AND HOISTS & RAKING TOOLS.

CONTACT PARK FOR DESIGN & APPLICATION RECOMMENDATIONS.

SEWAGE BAR SCREEN SPECIFICATIONS GENERAL:

- 1. A BAR SCREEN SHALL BE PROVIDED AND INSTALLED AS INDICATED ON PLANS. SYSTEM SHALL BE PARK ENVIRONMENTAL EQUIPMENT MODEL BSAH-1500 (888-611-7275). THE SYSTEM SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 2. BAR SCREEN DESIGN SHALL CONFORM TO CRITERIA SET FORTH BY THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS (IAPMO), ASTM C913, AND ANY OTHER STATE/LOCAL REQUIREMENTS.
- 3. THE BAR SCREEN SHALL BE PROVIDED WITH [12] SETS OF INSTALLATION, OPERATION & MAINTENANCE MANUALS THAT CONTAIN CLEAR AND CONCISE DESCRIPTIONS.
- 4. CONTRACTOR SHALL SUBMIT REQUIRED COPIES OF MANUFACTURER'S EQUIPMENT SPECIFICATION FOR ENGINEER'S REVIEW. SHOP DRAWINGS SHALL INCLUDE THE FOLLOWING:
- DETAILED MANUFACTURER'S DATA INCLUDING INSTALLATION PLAN/ELEVATION DRAWINGS, REBAR LAYOUT DRAWINGS, AND BUOYANCY CALCULATIONS, ALL CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER.
- b) SCREEN ASSEMBLY FABRICATION SPECIFICATIONS.
- c) JOINT SEALANT & COATINGS SPECIFICATIONS

- 1. CONCRETE: THE BAR SCREEN TANK SHALL BE CONSTRUCTED OF PRECAST CONCRETE HAVING A 28 DAY MINIMUM COMPRESSIVE STRENGTH OF 4500 PSI USING A TYPE I PORTLAND CEMENT.
- 2. STEEL REINFORCEMENT: THE BAR SCREEN shall be designed for H-20-44 traffic loading as defined by AASHTO LRFD 8th ED, 2017 USING A 30% IMPACT FACTOR. STRUCTURAL REINFORCEMENT PLACEMENT SHALL BE IN ACCORDANCE TO ACI ALL REINFORCEMENT STEEL SHALL COMPLY WITH ASTM A615 GRADE 60 OR ASTM A706 GRADE 60. BAR BENDING SHALL COMPLY WITH LATEST ACI STANDARDS. LIFTING INSERTS TO BE INSTALLED FOR HANDLING PER MANUFACTURER'S REQUIREMENTS.
- 3. HANDRAIL & LADDER: THE BAR SCREEN SHALL HAVE ADEQUATE SAFETY HANDRAIL, SELF-CLOSING SAFETY GATE AND LADDER ACCESSORIES. ALL EQUIPMENT SHALL MEET OSHA REQUIREMENTS.
- 4.BAR SCREEN ASSEMBLY: THE BAR SCREEN SHALL BE EQUIPPED WITH A FILTRATION BAR SCREEN DEVICE. THE ASSEMBLY SHALL BE DESIGNED TO PERMIT EASY INSPECTION AND CLEANING. ALL MATERIALS SHALL BE GRADE 304 STAINLESS STEEL CONSTRUCTION.
- 5. PROTECTIVE LINER: THE BAR SCREEN CHANNEL SHALL BE LINED WITH A STAINLESS STEEL LINING WITHIN THE

## C: INSTALLATION:

- 1. THE BAR SCREEN SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS AND ACCORDING TO PLANS AND SPECIFICATIONS. THE MANUFACTURER SHALL HAVE REPRESENTATION DURING THE SETTING PROCEDURE TO INSURE PROPER INSTALLATION.
- 2. THE BAR SCREEN SHALL BE INSTALLED ON LEVEL, UNDISTURBED SOIL OR AN APPROVED COMPACT FILL WITH A LOAD BEARING CAPACITY OF MINIMUM 2000 PSF.
- 3. THE BAR SCREEN SHALL BE BACKFILLED AFTER PLACEMENT WITH AN APPROVED BACKFILL MATERIAL. BACKFILL OF ALL SIDES OF STRUCTURE SHALL BE PERFORMED SIMULTANEOUSLY TO PREVENT UNBALANCED LATERAL PRESSURES DURING CONSTRUCTION.
- 4. ALL JOINTS SHALL BE MADE WATER-TIGHT. MANUFACTURER SHALL SEAL JOINTS WITH A PLASTIC FLEXIBLE GASKET CONFORMING TO AASHTO M-198-75 FOR BITUMEN GASKET.
- 5. ALL BAR SCREEN INLET/OUTLET/VENT PIPING SHALL BE INSTALLED IN ACCORDANCE TO MANUFACTURER'S RECOMMENDATIONS AND PROJECT SPECIFICATIONS.
- 6.BAR SCREEN SHALL BE FILLED WITH CLEAN WATER PRIOR TO START-UP OF SYSTEM. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR TESTING AND START-UP.

BAR SCREEN ASSEMBLY MODEL BSAH					
MODEL NO.	MAX FLOW [GPM]	LENGTH L	WIDTH W	CHANNEL WIDTH, CW	CHANNEL DEPTH, CD
BSAP-750-FG	750	7'-10"	4'-4"	14"	24"
BSAP-1000-FG	1000	8'-8"	5'-0"	18"	24"
BSAP-1500-FG	1500	9'-0"	6'-0"	22"	30"
BSAP-2000-FG	2000	13'-0"	7'-0"	26"	36"

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BAR SCREEN ASSEMBLY

PROGRESSIVE SCREENING w/ FLUSH GRATE, MODEL BSAP-

DRN ENG DWG. NO. DATE 2023

BSAP-1