

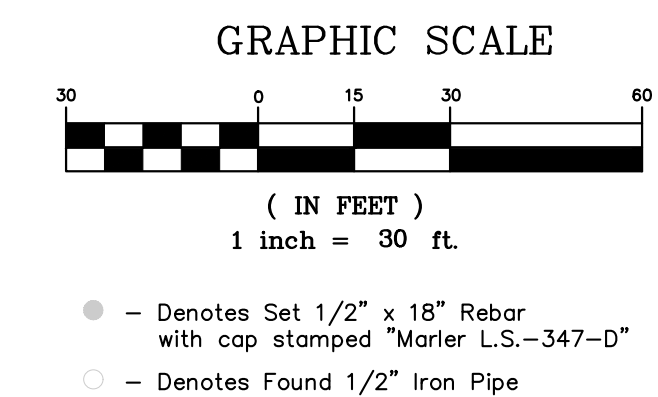
**STORMWATER MANAGEMENT NOTE:**  
LAND AREA DISTURBED = 25,340 S.F.

ANY FUTURE LAND DISTURBANCE AND/OR INCREASE IN IMPERVIOUS AREA ON THIS SITE MAY REQUIRE ADDITIONAL STORM WATER MANAGEMENT PER MSD REGULATIONS IN PLACE AT THAT TIME (INCLUDING TOTAL LAND DISTURBANCE AND/OR IMPERVIOUSNESS ADDED ON THIS PLAN).

BMP TABLE						
Area	Tributary Area	Impervious Area	Pervious Area	BMP	Water Quality Volume Required	Water Quality Volume Provided
1	15,773 S.F.	15,773 S.F.	0 S.F.	HDS UNIT	N/A	N/A

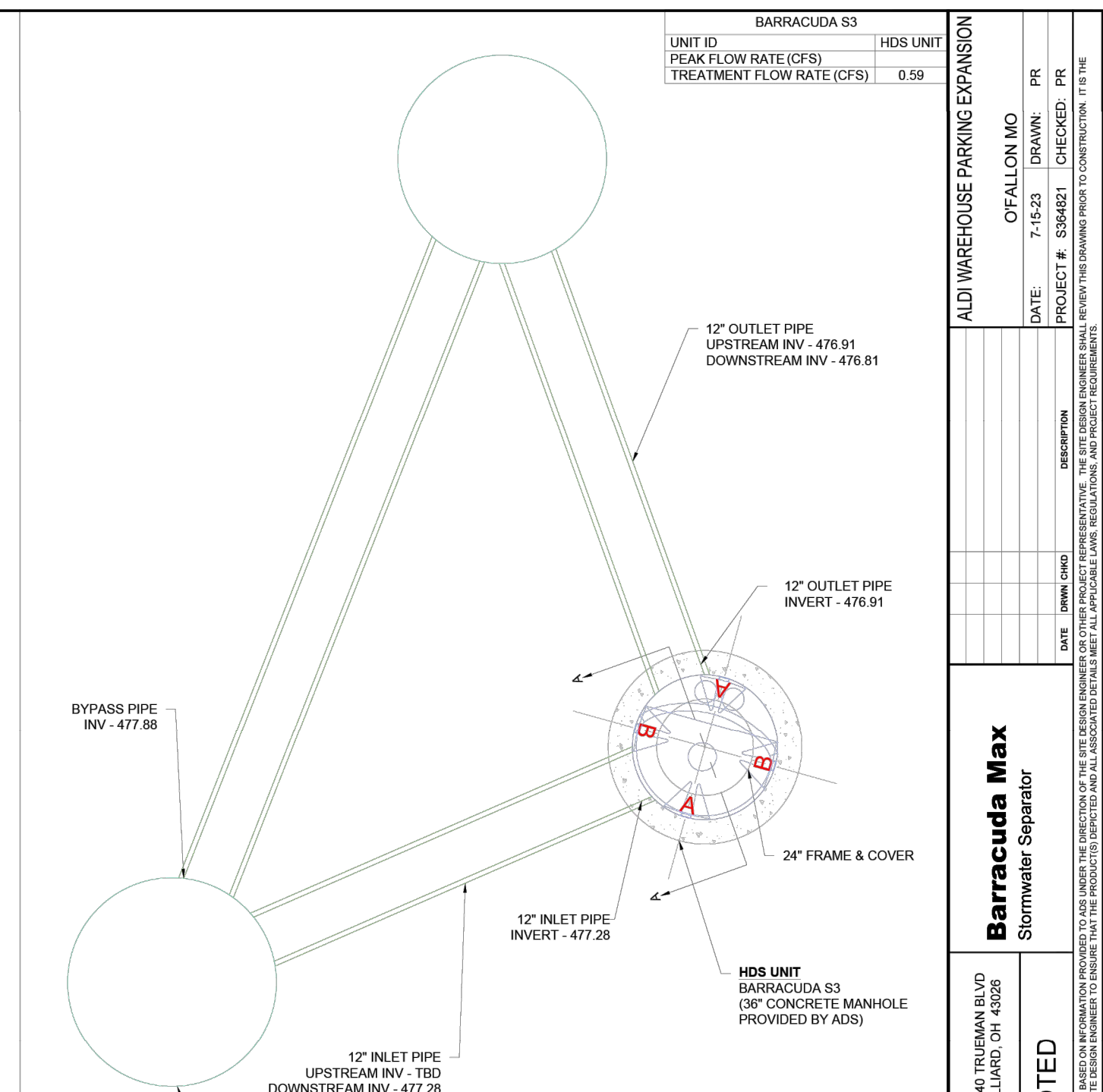
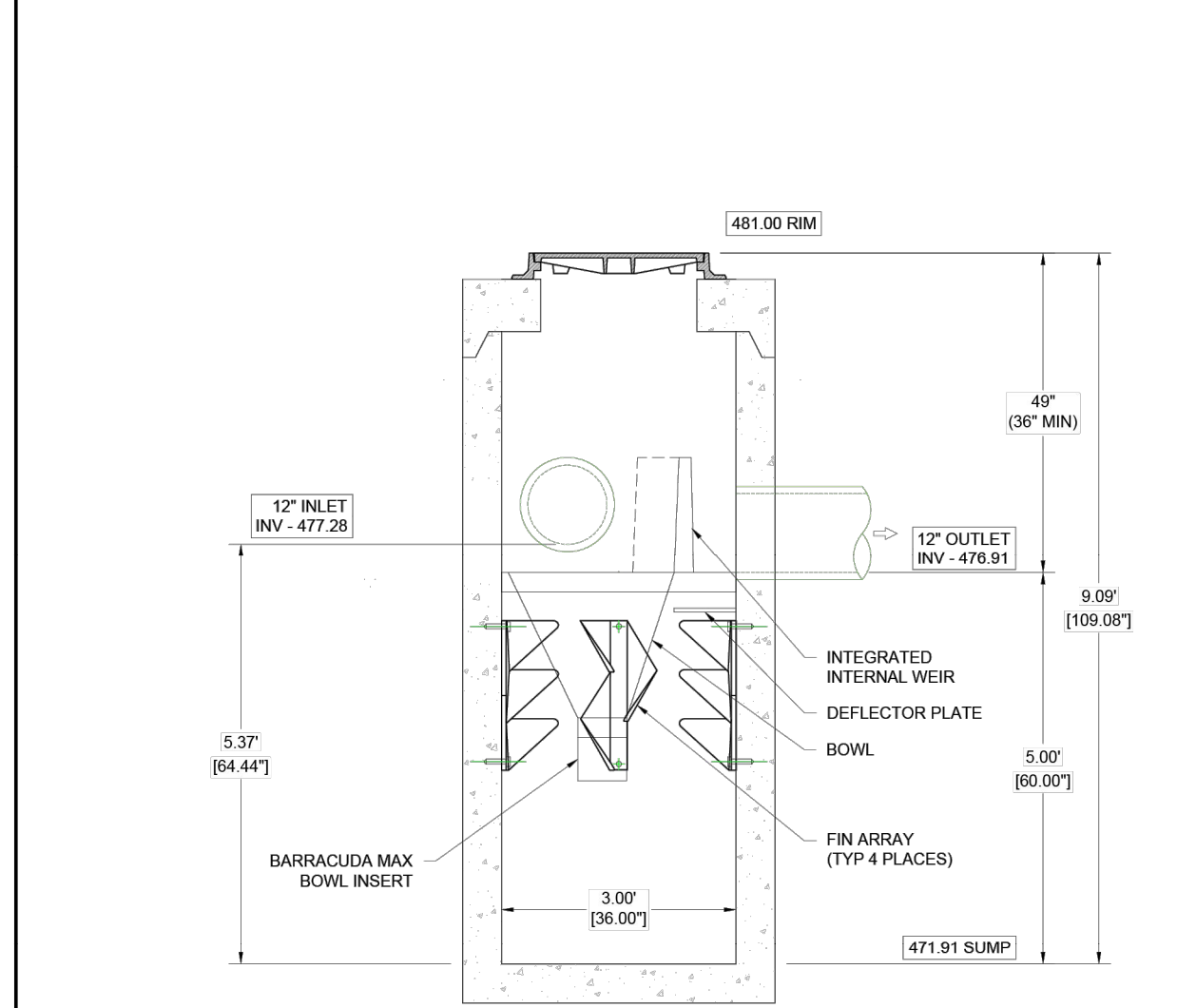
**BEST MANAGEMENT PRACTICE (BMP) CONSTRUCTION NOTES**

- ALL STORM WATER FLOW TO THE BMP AREAS SHALL BE DIVERTED, PLUGGED OR DISCONNECTED UNTIL THE CONSTRUCTION SITE IS STABLE AND THE CITY INSPECTOR PROVIDES APPROVAL TO PLACE THE BMP ONLINE.
- CONSTRUCTION SITE RUNOFF SHALL NOT FLOW INTO BMP AREAS.
- AREAS NOT SUBJECT TO IMMEDIATE CONSTRUCTION ACTIVITY SHALL REMAIN VEGETATED AND UNDISTURBED AS LONG AS POSSIBLE.
- CONTRACTOR IS RESPONSIBLE FOR ALL COORDINATION AND ASSOCIATED COSTS REQUIRED IN OBTAINING OBSERVATION AND VERIFICATION BY A MISSOURI PROFESSIONAL ENGINEER.



**PRODUCT SPECIFICATIONS**

- THE STORMWATER TREATMENT UNIT SHALL BE AN IN-LINE UNIT CAPABLE OF CONVEYING 100% OF THE DESIGN PEAK FLOW IF PEAK FLOW RATES EXCEED MAXIMUM HYDRAULIC RATE. THE UNIT SHALL BE INSTALLED OFFLINE.
- THE BARRACUDA UNIT SHALL BE DESIGNED TO REMOVE AT LEAST 80% OF THE SUSPENDED SOLIDS ON AN ANNUAL AGGREGATE REMOVAL BASIS. SAID REMOVAL SHALL BE BASED ON FULL-SCALE THIRD PARTY TESTING USING OK-110 MEDIA GRADATION OR EQUIVALENT AND 300 mg/L INFLUENT CONCENTRATION. SAID FULL SCALE TESTING SHALL HAVE INCLUDED SEDIMENT CAPTURE BASED ON ACTUAL TOTAL MASS COLLECTED BY THE STORMWATER TREATMENT UNIT.
- OR
- THE BARRACUDA UNIT SHALL BE DESIGNED TO REMOVE AT LEAST 50% OF TSS USING A MEDIA MIX WITH  $d_{50}$  75 MICRON AND 200 MG/L INFLUENT CONCENTRATION.
- OR
- THE BARRACUDA UNIT SHALL BE DESIGNED TO REMOVE AT LEAST 50% OF TSS PER CURRENT NJDEPNJCAT HDS PROTOCOL.



**PROJECT INFORMATION**

ENGINEERED	CRAIG DAVL GREEN
PRODUCT	314-298-1590
MANAGER	CRAIG DAVL GREEN@ADSPPIPE.COM
ADS SALES REP	BRIAN SNELSON
	6185936130
	BRIAN.SNELSON@ADSPPIPE.COM
PROJECT NO.	S364821

**ADS**  
Advanced Drainage Systems, Inc.

**ALDI WAREHOUSE PARKING EXPANSION**  
O'FALLON MO

**BAYSAYER BARRACUDA SPECIFICATIONS**

**MATERIALS AND DESIGN**  
CONCRETE STRUCTURES: DESIGNED FOR H-20 TRAFFIC LOADING AND APPLICABLE SOIL LOADS OR AS OTHERWISE DETERMINED BY A LICENSED PROFESSIONAL ENGINEER. THE MATERIALS AND STRUCTURAL DESIGN OF THE DEVICES SHALL BE PER ASTM C937 AND ASTM C2066.

48" MP MANHOLE STRUCTURES: MADE FROM AN IMPACT MODIFIED COPOLYMER POLYPROPYLENE MEETING THE MATERIAL REQUIREMENTS OF ASTM F2784. THE ECCENTRIC CONE REDUCER SHALL BE MANUFACTURED FROM POLYETHYLENE MATERIAL MEETING ASTM D3350 CELL CLASS 213300C. GASKETS SHALL BE MADE OF MATERIAL MEETING THE REQUIREMENTS OF ASTM F477.

SEPARATOR INTERNALS SHALL BE SUBSTANTIALLY CONSTRUCTED OF STAINLESS STEEL, POLYETHYLENE, OR OTHER THERMOPLASTIC MATERIAL APPROVED BY THE MANUFACTURER.

**PERFORMANCE**  
THE STORMWATER TREATMENT UNIT SHALL BE AN IN-LINE UNIT CAPABLE OF CONVEYING 100% OF THE DESIGN PEAK FLOW IF PEAK FLOW RATES EXCEED MAXIMUM HYDRAULIC RATE. THE UNIT SHALL BE INSTALLED OFFLINE.

THE STORMWATER TREATMENT UNIT INTERNALS SHALL CONSIST OF (1)SEPARATOR CONE ASSEMBLY, AND (1)SUMP ASSEMBLY WHICH INCLUDES(4) LEGS WITH TIE-INS.

THE BARRACUDA UNIT SHALL BE DESIGNED TO REMOVE AT LEAST 80% OF THE SUSPENDED SOLIDS ON AN ANNUAL AGGREGATE REMOVAL BASIS. SAID REMOVAL SHALL BE BASED ON FULL-SCALE THIRD PARTY TESTING USING OK-110 MEDIA GRADATION OR EQUIVALENT AND 300 mg/L INFLUENT CONCENTRATION. SAID FULL SCALE TESTING SHALL HAVE INCLUDED SEDIMENT CAPTURE BASED ON ACTUAL TOTAL MASS COLLECTED BY THE STORMWATER TREATMENT UNIT.

OR

THE BARRACUDA UNIT SHALL BE DESIGNED TO REMOVE AT LEAST 50% OF TSS USING A MEDIA MIX WITH  $d_{50}$  75 MICRON AND 200 MG/L INFLUENT CONCENTRATION.

OR

THE BARRACUDA UNIT SHALL BE DESIGNED TO REMOVE AT LEAST 50% OF TSS PER CURRENT NJDEPNJCAT HDS PROTOCOL.

**MANUFACTURER**  
EACH STORMWATER TREATMENT SYSTEM SHALL BE A BARRACUDA SYSTEM AS MANUFACTURED BY BAYSAYER, LLC, 1030 DEER HOLLOW DR., MOUNT AIRY, MD 21771, PHONE (301)829-6870, FAX (301) 829-3747, TOLL FREE 1-800-259-7281 | 808-BAYSAYER@BAYSAYER.COM

**BARRACUDA MAINTENANCE**

BARRACUDA SYSTEMS MUST BE INSPECTED AND MAINTAINED PERIODICALLY. INSPECTION IS MADE BY CHECKING THE DEPTH OF SEDIMENT IN EACH MANHOLE WITH A GRADE STICK OR SIMILAR DEVICE. MAINTENANCE IS REQUIRED WHEN THE SEDIMENT DEPTH IN EXCEEDS 20 INCHES. MINIMUM INSPECTION IS RECOMMENDED TWICE A YEAR TO MAINTAIN OPERATION AND FUNCTION OF THE UNIT.

**MAINTENANCE INSTRUCTIONS**

- REMOVE THE MANHOLE COVER TO PROVIDE ACCESS TO THE POLLUTANT STORAGE. POLLUTANTS ARE STORED IN THE SUMP, BELOW THE BOWL ASSEMBLY VISIBLE FROM THE SURFACE. YOU'LL ACCESS THIS AREA THROUGH THE 18" DIAMETER ACCESS CYLINDER.
- USE A VACUUM TRUCK OR OTHER SIMILAR EQUIPMENT TO REMOVE ALL WATER, DEBRIS, OILS AND SEDIMENT.
- USE A HIGH PRESSURE HOSE TO CLEAN THE MANHOLE OF ALL THE REMAINING SEDIMENT AND DEBRIS. THEN, USE THE VACUUM TRUCK TO REMOVE THE WATER.
- FILL THE CLEANED MANHOLE WITH WATER UNTIL THE LEVEL REACHES THE INVERT OF THE OUTLET PIPE.
- REPLACE THE MANHOLE COVER.
- DISPOSE OF THE POLLUTED WATER, OILS, SEDIMENT AND TRASH AT AN APPROVED FACILITY.

- LOCAL REGULATIONS PROHIBIT THE DISCHARGE OF SOLID MATERIAL INTO THE SANITARY SYSTEM. CHECK WITH THE LOCAL SEWER AUTHORITY FOR AUTHORITY TO DISCHARGE THE LIQUID.
- SOME LOCALITIES TREAT THE POLLUTANTS AS LEACHATE. CHECK WITH LOCAL REGULATORS ABOUT DISPOSAL REQUIREMENTS.
- ADDITIONAL LOCAL REGULATIONS MAY APPLY TO THE MAINTENANCE PROCEDURE.

**BARRACUDA INSTALLATION NOTES**

INSTALLATION OF THE STORMWATER TREATMENT UNIT(S) SHALL BE PERFORMED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS. SUCH INSTRUCTIONS CAN BE OBTAINED BY CALLING ADVANCED DRAINAGE SYSTEMS AT (800) 921-6710 OR BY LOGGING ON TO [WWW.ADS-PIPE.COM](http://WWW.ADS-PIPE.COM) OR [WWW.BAYSAYER.COM](http://WWW.BAYSAYER.COM).

STATE OF MISSOURI  
BRANDON A. HARP, P.E.  
REGISTERED PROFESSIONAL ENGINEER  
PROFESSIONAL ENGINEER  
CECD LICENSE NO.: 2003004674

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**CEDC**  
CIVIL ENGINEERING  
DESIGN CONSULTANTS

Site Improvement Plans for  
**ALDI ~ WAREHOUSE PARKING EXPANSION**  
475 Pearl Drive  
O'Fallon, Missouri 63376

Proj. # 1888.4

No.	Description	Date
	To City	07-14-23
	Per City	08-16-23

**BEST MANAGEMENT PRACTICES PLAN**

**C8**