

# MAJOR GENERAL EMMETT J. BEAN FEDERAL CENTER

## LAWRENCE, IN - STORMWATER CASE STUDY

Throughout history, military compounds have worked to ensure their buildings are updated with the most modern infrastructure. A large portion of maintenance that any facility faces is to ensure parking lots and outdoor storage areas remain safe during unpredictable weather events. This inspired a portion of the renovations to the United States’ second largest military facility behind the Pentagon; the Major General Emmett J. Bean Federal Center, commonly referred to as Building One.



Building One operates as finance offices for the entire U.S. military. Situated over the 72 acres of land, the 3-story masonry structure was built in 1953 and houses over 4,800 employees. The Bean Federal Center contains 60 percent of the nation’s entire usable square footage for DFAS safes, vaults and financial systems, and the only DFAS area for classified data. The building is the third largest federal building in the country.



<b>System 1:</b>	
Storage Provided	16,260 CF
Area	6,828.8 SF
Chamber Model	Recharger® V8HD
# Units	144
<b>System 2:</b>	
Storage Provided	23,214 CF
Area	6,723.38 SF
Chamber Model	Recharger® 902HD
# Units	216
<b>System 3:</b>	
Storage Provided	42,015 CF
Area	12,496 SF
Chamber Model	Recharger® 902HD
# Units	384
<b>Project Engineer</b>	Dewberry Peoria, IL
<b>Contractor</b>	HIS Constructors, Inc. Indianapolis, IN

The Federal Center was undergoing a repair and alteration project as part of center-wide site improvements — the largest of which is the remodeling of the parking area. In addition to resurfacing and reconfiguring over 1,000,000 square feet, the project proposal called for an updated stormwater management system to address serious drainage deficiencies that have historically plagued the lots.

Much of the current stormwater system for Building One is as old as the building itself, and is in a state of disrepair, repeatedly causing flooding of the parking lot during storms.

# CULTEC CONTACTOR® & RECHARGER® STORMWATER SOLUTIONS

"The reconstruction of the parking lot was a major part of the overall project," said Jay Schiel of Utility Pipe Sales. "The current parking lot had very poor drainage and there was virtually no stormwater management on site prior to our efforts in concert with the design engineers and contractors."

However, implementing the underneath the parking lot wasn't as simple as it seemed; there was an issue of inconsistent groundcover. Over the years as the parking lot weathered away, so did the cover, leaving behind varied depths.



**Installation of System 1**

The varied elevations created the challenge of finding a system capable of meeting high-volume requirements under both limited and excess cover, depending on the location. The wide variety of chamber sizes offered by CULTEC were ideal for the area's varying cover requirements. CULTEC chambers offers the most extensive line of chamber sizes in industry, ranging from 8.5" — 48" high to fit almost any installation requirement. Engineers were able to utilize two sizes of CULTEC chambers to accommodate the varied site restraints.

In addition, CULTEC products meet traffic wheel load criteria and are manufactured at facilities with strict quality control, making them ideal for a military installation.

For the Center, CULTEC's Recharger® V8HD™ and Recharger® 902HD™ products were specified. Both chambers are ultra-high capacity and would address the flooding issues while withstanding heavy rainfall and traffic conditions.

"We're proud to offer a wide variety of chambers for different capacity and cover requirements," said Dan Gera, CULTEC Technical Manager. "The breadth of product line is one of the strengths of the CULTEC product. The customer can trust that CULTEC will have their solution, no matter the site requirements". CULTEC Separator™ rows were also installed on the exterior rows of each bed at any location where water entered the system.

According to superintendent Grant Collinsworth of HIS Constructors, Inc., "the installation went quickly and the CULTEC representative was onsite to answer any questions." The project was well received by the General Services Administration, who can now be confident that their parking areas will drain stormwater properly for the years to come.



**Recharger® 902HD Chambers**

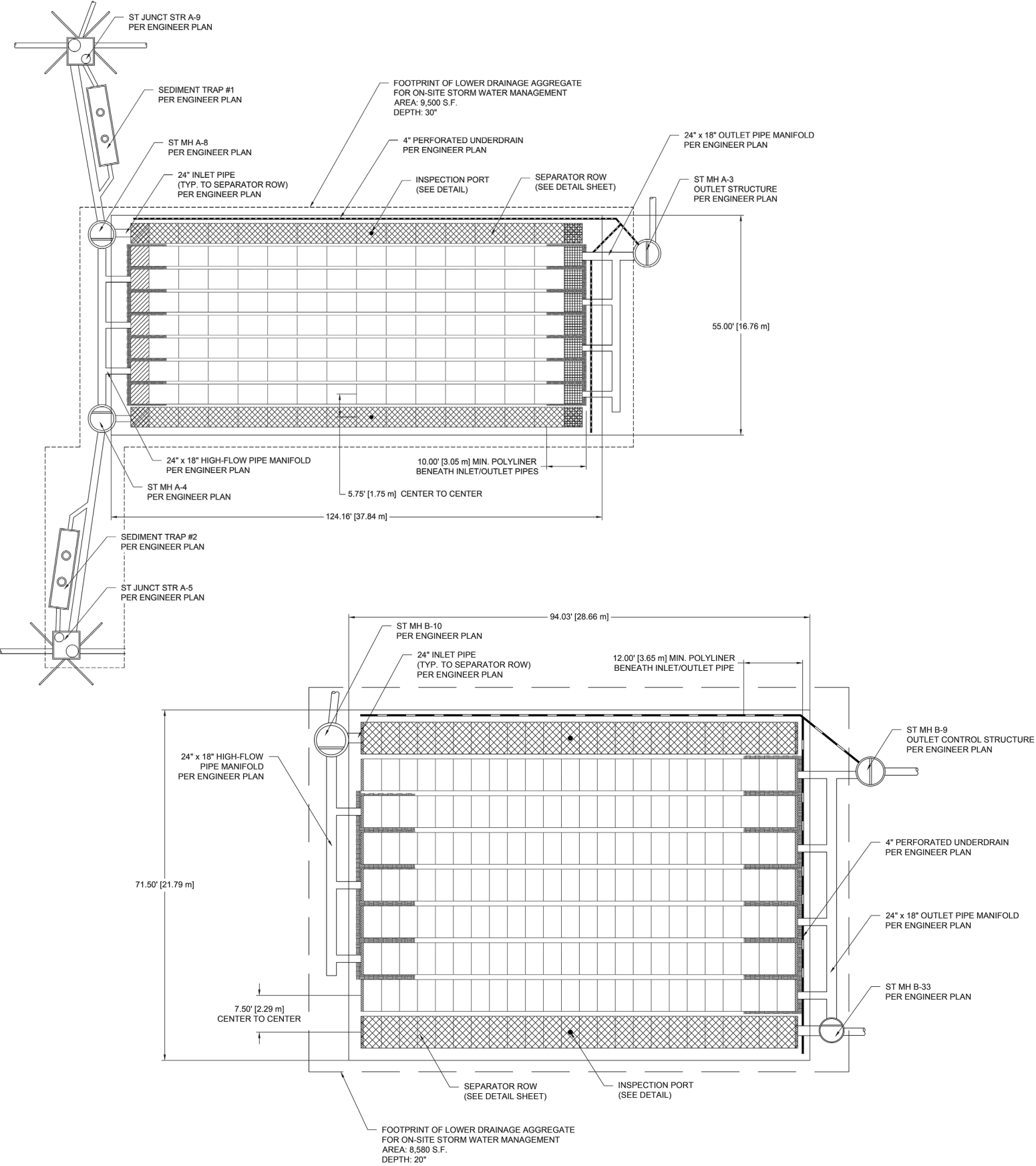


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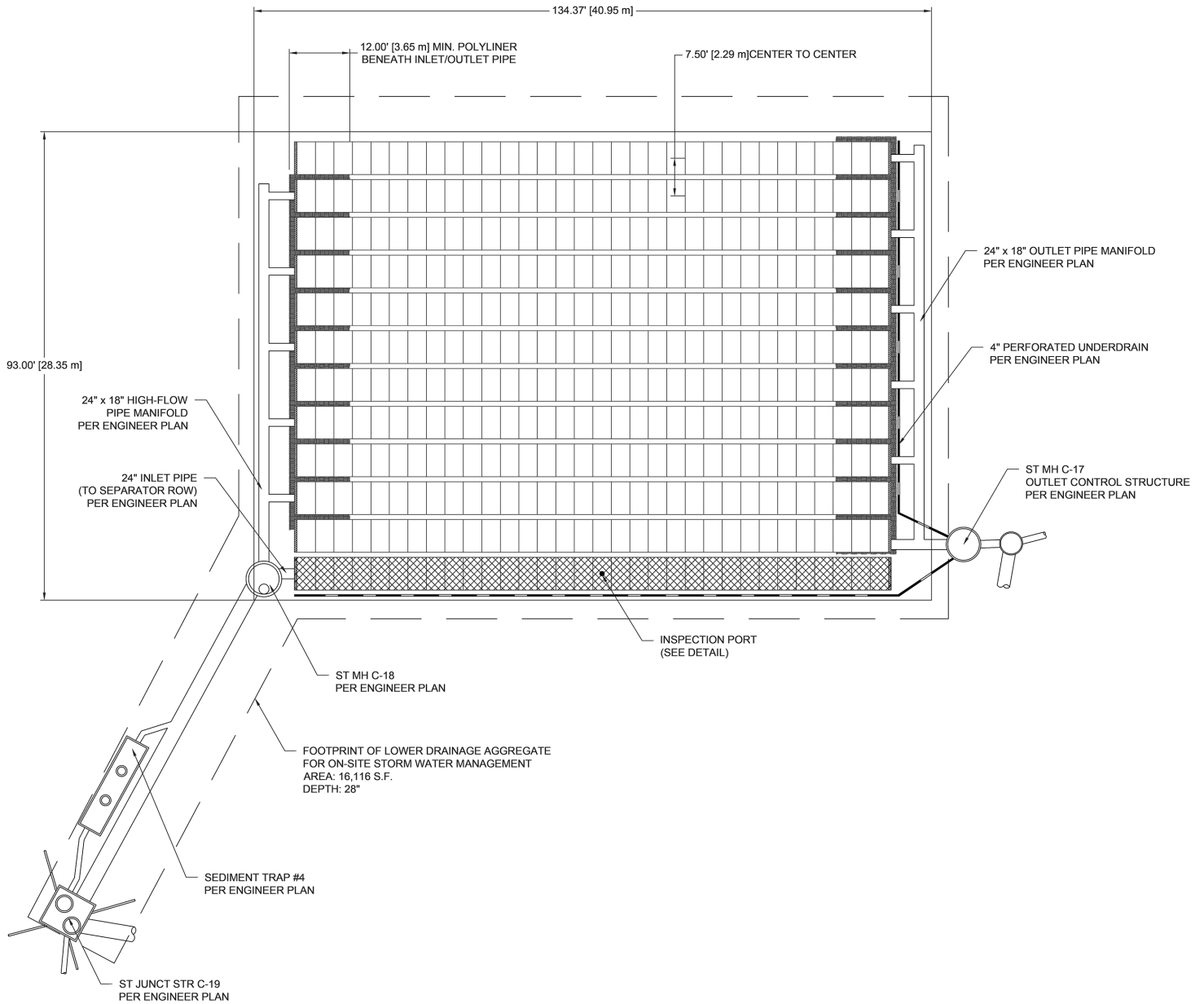
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