PUBLIC SAFETY HEADQUARTERS GREEN INFRASTRUCTURE

STORMWATER MANAGEMENT PRACTICES

VEGETATED ROOF (GREEN ROOF)



Five vegetated roofs use special drainage systems to slow down, evaporate, and filter rainwater before it enters the drain. Green roofs also moderate internal temperatures.

RAINWATER HARVESTING SYSTEM



Rainwater is harvested from the top roof and collected in an underground, 25,000-gallon cistern. Water from the cistern is used to irrigate landscaping around the building.

WET POND **CONTINUOUS MONITORING & ADAPTIVE CONTROL (CMAC)**



Using a cloud-based platform, the CMAC system continuously watches the weather forecast and monitors the pond water levels. The system automatically adjusts valves to meet site pollutant removal and volume control goals.

REGENERATIVE STORMWATER CONVEYANCE (RSC)



RSC systems (the outfall to the pond) is an open-channel, sand seepage filtering system that utilizes a series of shallow aquatic pools, riffle weir grade controls, native vegetation and underlying sand channel. The system combines features and treatment benefits of swales, infiltration, filtering and wetland practices.









BIORETENTION BASIN OR RAINGARDEN



landscaped These depressed, gardens capture and filter stormwater runoff. During storms, runoff temporarily ponds then rapidly filters through a bed of sand, soil, and organic filtering media. Native plants like rushes and sedges help take up and treat stormwater, provide wildlife benefits, and create appealing landscaping.

PERVIOUS PAVERS





The PSHQ service driveway is paved with permeable pavers. These interlocking brick pavers allow water to drain through the gaps between the bricks into a gravel base below. The water then infiltrates or slow flows into the storm drain system that discharges to the wet pond.

Vegetated swales provide the same services as bioretention cells, but they are shallower, configured as linear channels, and can be planted with sod or native plants. These swales create a 1,100-foot-long treatment path that terminates at an engineered outfall.



VEGETATED SWALES