Design & construction of oil-water separator for natural oil seeps (Beverly Hills, California)

Initially the City of Beverly Hills retained Lindmark Engineering to evaluate and characterize natural oil seeps in a City-owned park. These seeps, which were induced by rainwater infiltration, had overwhelmed the existing system that was intended to collect and control the seepage. We reviewed all available documents on the existing system, which had been determined to be inadequate, and performed targeted fieldwork to further examine the construction and condition of the existing components. We also investigated and decontaminated subsurface structures affected by the oil seepage.

After defining the tributary oil-seepage area, we were able to calculate the appropriate design flow for the oil-water separator. We selected and designed a system with a capacity of 1,200 gallons, a flow rate of 80 gallons per minute, and a minimum retention time of 30 minutes.

We incorporated design features such as oil-level and failure alarms to alert facility personnel of problems with the system, thus making it easier for them to carry out their oversight of the system. We also prepared a comprehensive operation and maintenance manual that included not only the oil-water separator but also the collection system and permitting compliance. *Client: City of Beverly Hills*

For more information on this project, please contact Lindmark Engineering at (818) 707-6100 or ulf.lindmark@efiglobal.com.