

**Sand Bioreactor Wastewater Treatment System
In Chinese Village**

中国小城市沙生物反应器污水处理系统

Shandong Academy of Agricultural Sciences/Ohio State University

山东省农业科学院/俄亥俄州立大学

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Wang Yanqin / Karen Mancl

王艳芹 / 马可人

In Shandong Province, the village of Le Jia Cun of 360 people in Zhangqiu Prefecture constructed a village/wastewater treatment/park (VWP) system on land once used as a dump next to the village.

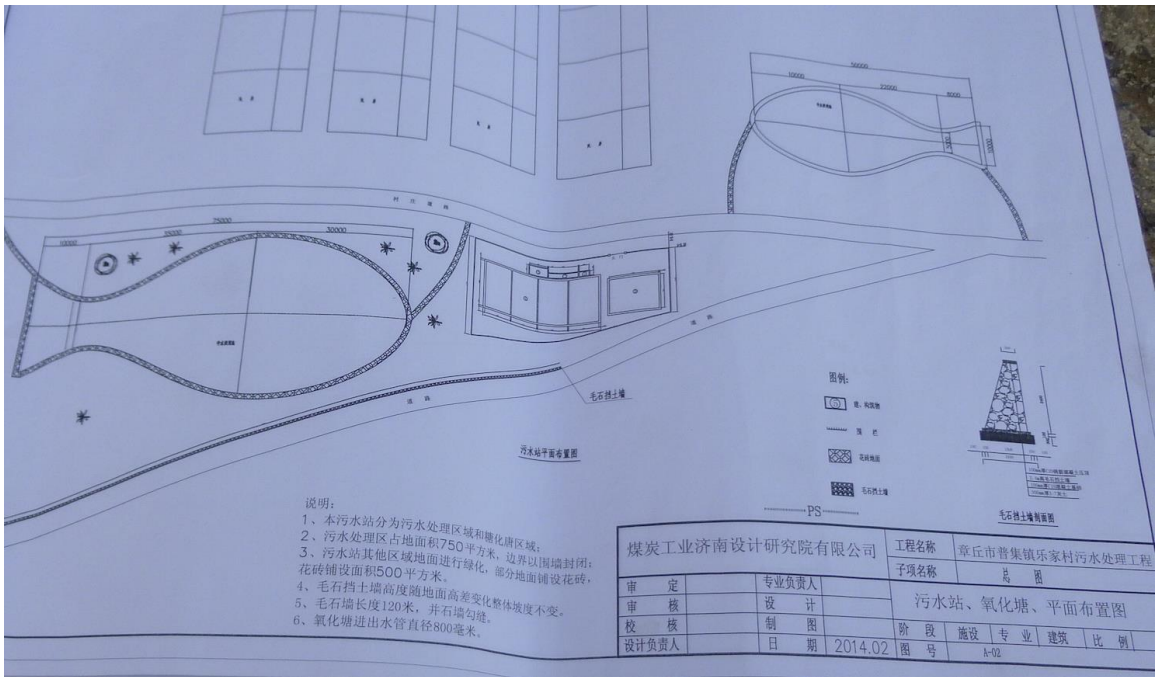
山东省章丘市普集镇乐家村拥有常住人口 360 人。该村旁边原有的垃圾场如今已建设成为一个小型废水处理系统/公园 (VWP)。

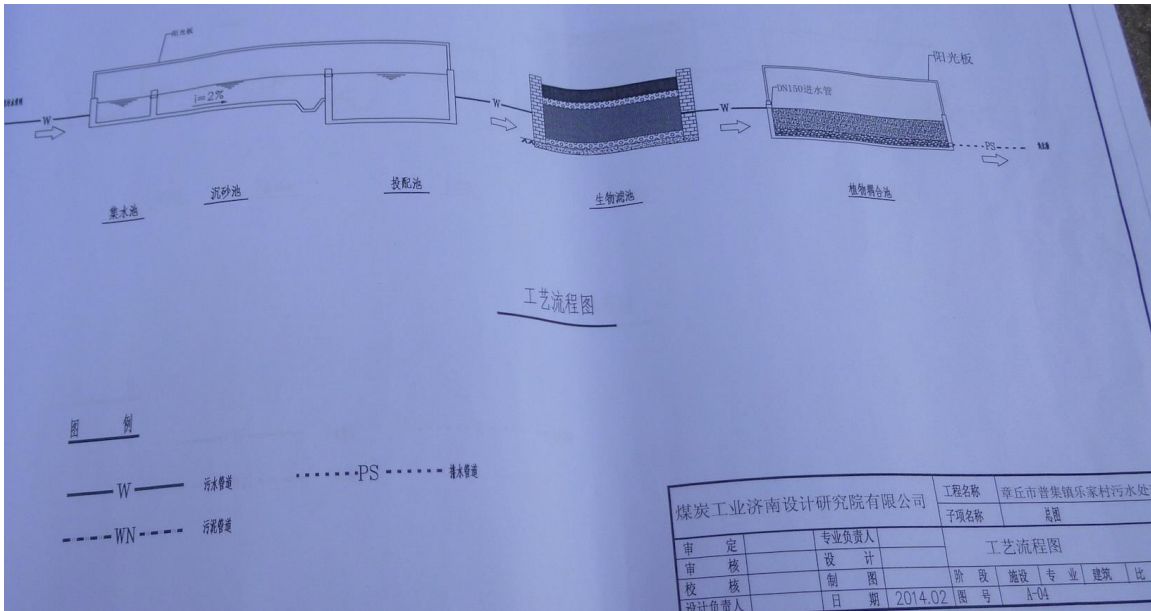


The site was cleared and leveled with plans for a park.
 规划用地事先进行了清理和整平。



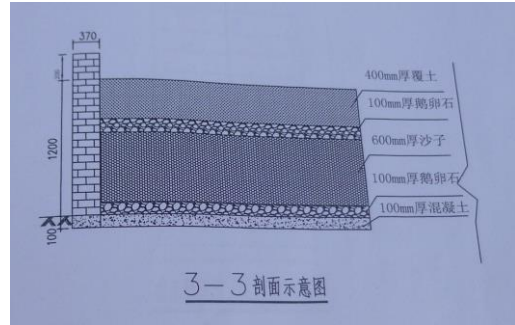
Plans for the park included a septic tank, sand bioreactor, greenhouse and fish ponds.
 公园规划项目包括化粪池、沙生物反应器、温室以及鱼池。





The sand bioreactor followed the OSU design and was contained in conventional Chinese brick and concrete basins.

沙生物反应器由俄亥俄州立大学设计，池底由混凝土浇筑，池壁由砖砌而成。



The clean sand was placed in the bioreactors and a perforated pipe wastewater distribution system was placed on top of the sand as outlined in the OSU design manual. 如俄亥俄州立大学设计手册中所述，反应器以洗净的石英砂作为滤层媒介，滤层上方铺设穿孔配水管作为进水配水系统。



Sand bioreactor construction costs were 250,000 RMB (\$40,260). Park construction is nearly complete and bioreactor effluent is clean and clear.

该沙生物反应器的建设费用为 25 万元 (约合 40,260 美元)。目前该公园已基本建成，生物反应器处理效果显著，出水水质良好。

