

WATER STORAGE

Each water storage option would accommodate one million gallons (1MG), a volume that project engineers have determined would adequately serve the project area. Both options would provide an underground pump station and large-capacity subsurface storage placed beneath the walkways next to the lawn panels at 4th Street and 7th Street¹ (see Figure 2.8).

Option E1 – The subsurface water storage system would be laid out end-to-end and installed in a linear configuration using pre-fabricated concrete pipes as cisterns beneath the north-south walkways.

Option E2 – The subsurface water storage system would be installed in a more compact configuration using either cast-in-place concrete box cisterns or pre-fabricated box culverts used as cisterns. Both configurations can be customized to the site constraints and would be installed under the walkways adjacent to the turf panels. The decision to use precast or cast-in-place approaches would be made during the design phase of the project to best accommodate requirements.

Figure 2.8 – Water Storage Locations



¹ 1MG of storage is proposed to be installed in multiple phases with half the capacity provided in the first phase via two 0.25MG tanks. Phase II would provide another 0.25MG and the remaining 0.25MG would be provided in a future (yet to be funded) phase. By installing 1MG of water storage improvements, approximately 67.5% or 7.56MGs of the 11.2MG yearly average irrigation demand for the Mall lawn panels would be met from collected rainwater.