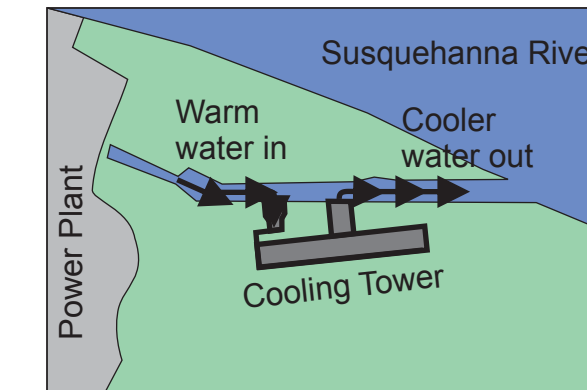


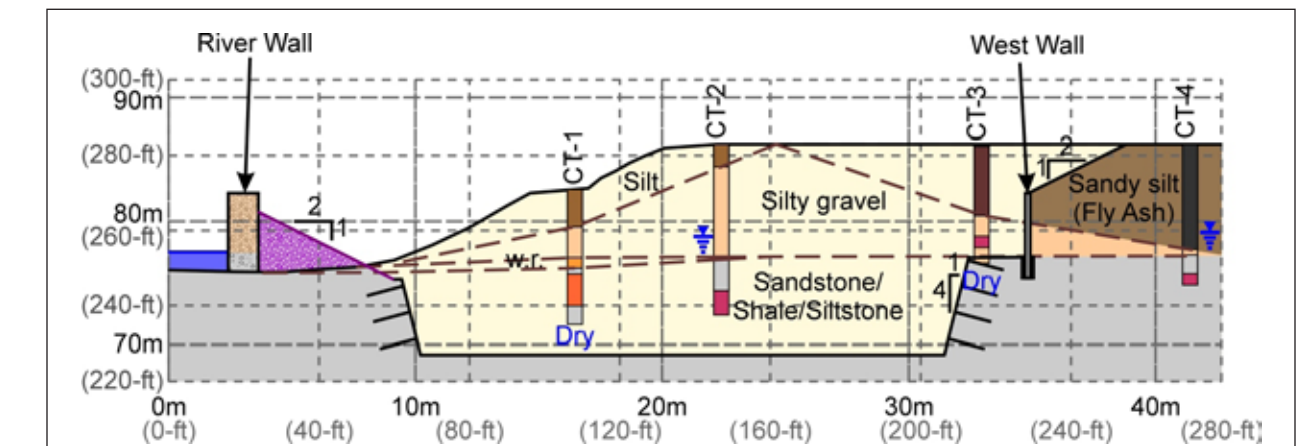
Design and Construction of Temporary Excavation Support at a Water Intake Structure



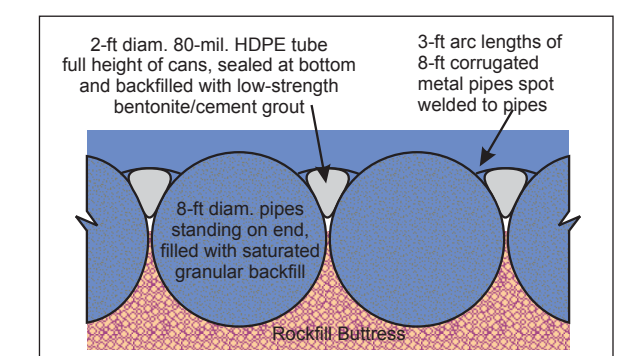
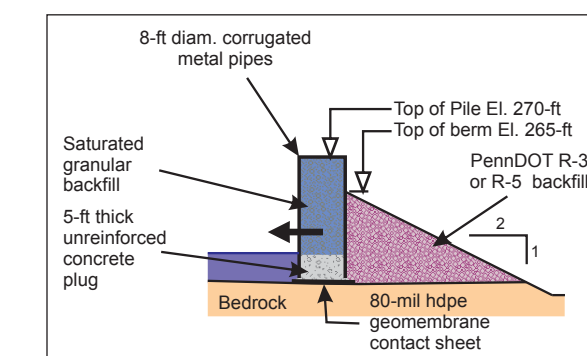
This paper describes the design and construction considerations for a water tight barrier in the Susquehanna River enabling the construction of a water intake structure that was part of a new Cooling Tower project at a power plant.



The site presented challenging conditions, which required innovative design and construction techniques to construct the river wall in the dry, maintain a water-tight barrier, and provide for unfettered wall removal and channel restoration.



A gravity wall system made from corrugated metal pipe sections was stood on end, backfilled with site soils and supported on the land side by a rockfill buttress resulting in significant savings in cost and time over conventional barrier support systems.



Gordon Elliott, Ph.D., M.ASCE, P.E.
and Gary Pate, P.E.

