

Years Experience: 19

Education

The Pennsylvania State University, Bachelor of Science, Structural Design and Civil Engineering Technology
The Pennsylvania State University, Associate in Engineering, Architectural Engineering Technology
Montana College of Mineral Science and Technology, Environmental Engineering Under Graduate Studies

Active Registrations

Engineer In Training

Experience and Qualifications

Mr. Chavara has been involved in a variety of civil and environmental projects from his experiences as a consulting engineer in the private sector and commercial and industrial and public entities. He has been a project engineer and project manager for a variety of small and large public water, storm water and sanitary projects in various municipalities in Pennsylvania and Maryland, and more recently at the Highlands Development in Ohio County, West Virginia. His experiences include design of sketch plans and conceptual site development plans and utility plan design. He has experience on hydraulic design of pumping and treatment systems; hydrologic analysis of drainage areas for storm water management designs and wetland area delineation's. His experiences also include design of sediment and erosion control plans; obtaining DEP/COE permit approvals; streambank stabilization and rehabilitation designs, and structural design and analysis of steel and concrete bridge and building members and miscellaneous structures.

Representative Projects:

- Fort Henry Business and Industrial Centre, a.k.a. 'the Highlands', Ohio County, West Virginia. Mr. Chavara has experience on variety of site design engineering and permitting aspects relative to the completed development of the 'Highlands' Site in Phases 1 through 6, 8 and 10. He is also involved on the team for site design and permitting for the development of the 'Highlands' Sub-Lots 1 through 4, 6, 7, 9 and 13. He is responsible for design of temporary and final Site Drainage and Stormwater Management Control Plans; and Erosion and Sediment Pollution Control Plans. This work includes the design of new Water Line and Sanitary Sewer, Review and approval of Shop Drawings, submissions for WV DEP Permitting; and completion of the WV DOT Highway Occupancy Permits for Site Access.
- Bradley/Cionni Floodplain Determination Hydrology Report, Wellsburg, Brooke County, West Virginia. This work included determining the Base Flood Elevation of the 100 year Flood for the Ohio River and the correlation of the flooding affected by the development to the surrounding site. Mr. Chavara was responsible for all site engineering for the design and development of a new commercial building. His responsibilities included design of temporary and final Site Drainage and Stormwater Management Plan, complete Erosion and Sediment Pollution Control Design, both Water and Sanitary Sewer Design, and submission of the WV DOT Highway Occupancy Permit for Site Access.
- Mt. Zion Cemetery Drainage and Pavement Improvements Wheeling, Ohio County, WV. Mr. Chavara has assessed the Site Drainage conditions and storm damages from heavy rainfalls in Sept. 2004. He was in charge of final design of new Stormwater System and including selective Pavement Replacement and Repairs throughout the site.
- Family Dollar Plaza, Brookville, Pa. and Family Dollar Plaza, Addison Borough, Somerset County, Pa. Mr. Chavara was responsible for the Final Site Development Grading Plan. His primary responsibility centered on the design and permitting approvals of the Stormwater Management Control Plan; and Erosion and Sediment Pollution Control Plan. Due to site constraints on these projects an underground Storm Detention Facility was designed for each location to control Peak Post-Development Runoff.
- Beaver Valley Salt Dome, Exit 10 Big Beaver, Beaver County, Pa, and Kegg Maintenance Facility Salt Dome, Center County, Pa. Mr. Chavara was involved on two separate projects for the Pennsylvania Turnpike Commission. He was responsible for the Final Site Development Grading Plan, and design and permitting approvals necessary for the Stormwater Management Control and Erosion and Sediment Pollution Control Plans.

- Dallas Avenue Sanitary Sewer Extension, Harrison Township, Allegheny County, Pa. Mr. Chavara investigated and designed a new sanitary sewer extension project needed to re-route excessive combined sewage in a busy shopping center area where surcharging was a prevalent occurrence in the adjacent downstream residential area during the most precipitation events. He developed the final design drawings and compiled the Contract Documents; He also designed the Traffic and Maintenance Controls; and E & S Control Plan; acquired the Highway Occupancy and DEP approvals.
- Russett Venture Water and Sewer Projects, Anne Arundel County, Maryland. Mr. Chavara was involved on the design of a new water supply extension main; a new Water Booster Pumping station and distribution system; a new sanitary sewer collection system; a new sanitary pumping station(s) and force main conveyance system for a new private/municipal joint venture of a major planned residential community project in New Maryland City. He compiled the Contract Documents; designed the MD SHA Traffic and Maintenance Controls; obtained the Erosion and Sedimentation Control Plan approvals; and MD DEP/COE wetland approvals; and designed the complete/final restoration plans and details.
- State Avenue Water and Sewer Replacement Project, Coraopolis, Allegheny County, Pa. Mr. Chavara designed the new replacement Utility Plans and Details, and compiled the necessary Contract Documents. He prepared the Erosion and Sedimentation Control Plan; and Traffic and Maintenance Control Plan, acquired the Highway Occupancy and DEP permits; and including the complete pavement reconstruction and final restoration plans and details.
- Garden Valley Sanitary Trunk Sewer, Hopewell Township, Beaver County, Pa. Mr. Chavara completed the design of a new gravity trunk sewer for additional future sewerage capacity in the entire drainage basin. He was involved in the design of an inverted siphon through the Raccoon Creek streambed, as necessary, to convey the sewage to the POTW. The trunk sewer followed a meandering stream and was partially constructed in several pristine wetland areas. The construction involved installing temporary and permanent stream crossings in a various remote locations.
- Development of Sewerage Collection and Conveyance Systems; and, including existing pump system improvements in various municipalities in the Pittsburgh, Pa. region. Including areas of Harrison, Harmony, Kilbuck and Ohio Townships. Designed new sanitary sewer extension projects to serve municipal areas where the residents had been served by own private septic systems or without adequate or needed sewage treatment available; compiled the Contract Documents; project/construction management; designed the approved Traffic and Maintenance Control Plans; and, final approved E & S Control Plan, and permanent restoration details.
- Noblestown Road Water Main Extension, Collier Township, Allegheny County, Pa. Designed new potable water main extension needed to serve a remote area where ground water contaminants had threatened the health and safety of the rural residents' private wells. Compiled the Contract Documents; designed the State Highway Traffic and Maintenance Controls; and E & S Control Plan including permanent stream crossings; prepare and acquire the right-of-way easements; and, complete/final restoration plan and details.
- Community Development Projects, His engineering and design work in many different municipalities throughout Southwestern Pennsylvania was done on an annual basis through the Beaver County and Allegheny Department of Economic Development. The work itself centered on completion of qualified projects in distressed areas of disadvantaged communities. The work ranged all over the spectrum from installation of Playground equipment and handicapped accessible Tot Lots, Demolition of Dilapidated Structures, Roadway Reconstruction, Replacement of Catch Basins and Handicapped Curb Cut Ramps, Public Water Well Cleaning and Rehabilitation, Concrete Stair Replacement, selective replacement of Water lines and Storm and Sanitary Sewers, etc.

Certifications:

Storm Water Management and Best Management Practices
 Sediment and Erosion Controls, Maryland and Pennsylvania
 Wetland Delineation and Identification
 Waste Water Treatment Operations I and II
 Pennsylvania One-Call Systems, Inc. Dig Notification and Safety Training
 Member of Pine Township Environmental Advisory Council