



Steven Andrews Engineering  
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## **PETER A. HEYE, P.E.**

### **EDUCATION:**

Civil Engineering, University of Nebraska at Omaha

### **PROFESSIONAL DATA:**

Registered Professional Engineer, Civil, States of California, R.C.E. No. 47390

Registered Professional Engineer, Civil, States of Nebraska, R.C.E. No. E-3655

**EXPERIENCE:** Forty-two years of experience in master planning, design and construction of wastewater lift stations, wastewater treatment plants, wastewater reclamation plants, force mains, gravity sewers, groundwater supply, water treatment, water pipelines, water storage reservoirs; preparation of master water supply plans and water reuse systems for private developments and governmental agencies.

Senior Project Manager for the design of the Theo Lacy Facility Improvements, Industrial Size Garbage Grinder, Orange, California. Mr. Heye managed the design of three (3) muffin monster grinder pump assemblies for the Orange County Sheriff Department. The project included two (2) 12-inch muffin monster grinder pumps assemblies and one (1) 8-inch muffin monster grinder pump assembly each placed in a separate below grade valve vault.

Senior Project Manager for the design of two (2) sump pump vaults and seven (7) above ground water tanks for conveyance and detention of storm water runoff to meet onsite water quality objectives. The project was located at the Waste Management Irvine Hauling Station in Irvine CA. The project included an 8-foot deep precast concrete manhole with dual submersible 450 gpm sump pumps, 6-inch PVC on-site piping connecting to the seven (7) HDPE poly process tanks each having a capacity of 10,300 gallons of wastewater storage connected in series.

Senior Project Engineer for planning and design of water treatment plant for Lewis Operating Corporation in Chino, California. Project includes developing domestic water demands, costs, facility phasing and design of 3,500 gpm ion exchange water treatment plant, booster pumps, transmission mains, brine disposal and ancillary systems for extremely impaired raw water sources.

Senior Project Manager for the design of the Preserve City of Chino Sewer Lift Station for the City of Chino. Provided quality control reviews for the new lift station utilizing submersible sewage pumps, emergency engine generator, lift station structure, inlet gravity sewer and pump discharge piping. Provided engineering support during construction phase of the project on an as needed basis.

Project Manager for the City of Rialto, Well No.3A Replacement project. The project involved a preliminary siting evaluation for a new well in which several alternative sites were identified for the new well. After site selection a well drilling design was prepared to construct the new well. Upon completion of the new well and test pumping it was discovered that the water quality of the well did not meet standards for arsenic. A report was prepared to evaluate the alternatives to bring the well

into compliance with water quality standards. Alternatives evaluated included installation of packer, on site blending and arsenic treatment.

Project Manager for the City of Lynwood, Well No. 22 design. The project involved a preliminary siting evaluation for the new well in which several alternative sites were identified for the new well. After site selection a well drilling design was prepared to construct the new well. The design involved equipping the domestic water well with a 2500 gpm pump and 250 hp electric motor for newly developed water well. Sodium hypochlorite storage and feed facilities were included along with site design and emergency generator building enclosure. The project also included a waste to drain discharge pipe with filtration system prior to discharge to storm drains.

Project Manager for the City of Lynwood Well No. 9 Sand Separator Replacement. The Project included the replacement of a sand separator/surge tank rated for 1800 gpm at existing Well No. 9. The sand separator vessel was an 8'-0" diameter by 20'-0" long fabricated steel tank with baffles.

Project Manager for the City of Lynwood Water Main Replacement design in State Street from Long Beach Blvd to Tweedy Street and in Tweedy Street from State Street to Long Beach Blvd. The project involved the replacement of existing 6" and 1 1/2" water mains and the replacement of water services and hydrants along the route. The project consisted of 2750 feet of 8" DIP, requiring extensive existing utility investigations and traffic control in high traffic areas.

Project Manager for the City of Lynwood New Sewer main in Long Beach Boulevard at Imperial Highway. The project consisted of the design of 440 feet of 8" VCP in Long Beach Boulevard connecting to a Los Angeles County Sanitation District sewer in Imperial Highway. A new manhole was constructed for the connection to the LACSD sewer. The sewer connection was permitted through the LACSD. The project was built entirely at night due to the high traffic conditions on Long Beach Boulevard.

Project Manager for the design and construction of City of Pomona Water Main Replacement projects. Five separate projects were designed with a total of over 36,000 feet of 6, 8, 10 and 12-inch DIP. Two jacked and bored casing crossings of State Highway 71 were included and a crossing of Metrolink railroad tracks. Also included was the rehabilitation of an existing 24-inch steel pipe using CIPP liner.

Construction Project Manager for the construction of three water and sewer projects for the City of Pomona. One project included the replacement of over 400 water services in a residential area of the City. Another project included the installation of 45 new sewer manholes throughout the City. The total value of the three projects was approximately \$1,700,000.

Project Manager for the installation of new motor control center and emergency generator at Idaho Street Well for the City of La Habra. The Idaho Street well facility includes an existing well, air stripper tower and booster pump. For reliability purposes the City needed to replace the existing motor control center and upgrade controls and instrumentation systems. A new 350 Kw engine generator was installed as emergency backup during power failures. A new flow meter and pump controls were added.

Project Manager for watermain replacement projects for Kinneloa Irrigation District. Three projects were designed with a total of 1095 feet of 16-inch DIP, 2730 feet of 8-inch DIP and 420 feet of 4-inch DIP. Installation of gate valves, fire hydrants, pressure relief valves and connections to existing mains were included.

Inland Empire Utilities Agency, Chino, California. As an extension of staff, Mr. Heye prepared request for proposals for various Agency projects, negotiated contracts with consultants, assisted with capital budget preparation, and performed as the project manager for recycled water pipeline design projects with a construction value of \$4,600,000. In addition he performed project plan checks for conformance with Agency standards.

Project Manager for Valley Center Municipal Water District Sewer Collection System, Valley Center, California. Mr. Heye managed the design of a sewer collection system for a community using septic tanks and under order from the County of San Diego to install a central sewer system. The project included approximately 15,000 lin. ft. of sewer pipes ranging in size from 8 inches to 24 inches. As project manager, he was responsible for directing the survey subconsultant in surveying and mapping the project, utility investigation, easement identification, and documentation for over 100 parcels. The project included the design of a wastewater treatment plant for the community.

Project Manager for the design of two recycled water pipeline projects for the City of Chino Hills, California. The projects involved 3,800 feet of 8-inch PVC and 7,800 feet of 16-inch PVC or ductile iron pipe. The pipelines are located in arterial and residential streets, requiring extensive utility research and coordination.

Construction Manager on Alhambra Water Pipelines, Alhambra, California. Project involved the installation of a water transmission pipeline in Alhambra, California. The pipeline is approximately 2,200 feet of 12-inch ductile iron and cement coated and lined steel pipe. The alignment included the crossing of two major intersections. One intersection required nighttime construction due to traffic loads on the affected streets. The pipeline construction was in conjunction with a street improvement project of a major arterial street in the City. This required interfacing with the construction manager for the street improvement project.

Project Manager for Otay Water District Recycled Water Transmission Pipelines, San Diego County, California. Prepared design and specifications for approximately 24,000 feet of 16-inch and 20-inch cement mortar lined and coated steel recycled water transmission piping. Unique design elements included the sharing of easements for new pipeline with a large-diameter water supply pipeline and high-pressure natural gas transmission lines. The project alignment crossed a high school site, requiring easements and special construction timing to accommodate school schedules.

Project Manager for Moulton Niguel Water District Reclaimed Water Pipelines, Orange County, California. The projects included the design of two reclaimed water pipelines with a total of approximately 53,000 lin. ft. of pipe ranging from 6 inches to 16 inches. The projects included pressure-reducing valves and service connections to existing meters.

Project Manager for Irvine Ranch Water District Bonita Canyon Water and Recycled Water Planning and Design. The project involved preparation of subarea plan for domestic water and recycled water serving the Bonita Canyon area of the City of Irvine. Project design included dual water and recycled water transmission mains in Bonita Canyon Road. Pipe sizes ranged from 16" to 36" in size.

Project Manager and Construction Manager for Pomona Wells 7 and 8B, Pomona, California. Project included wellhead treatment for Wells 7 and 8B in the City of Pomona. To meet nitrate blending and volatile organic compound removal requirements. The design included a chloramination disinfection system housed in a chemical storage and feed pump area. Other design

elements included modifications to the wet well and air stripper tower, two booster pumps, flow meter, control valve, motor control, instrumentation, supervisory control, and site piping. Construction management support involved startup assistance, preparation of the operation and maintenance manual, and preparation of operation plan.

Inland Empire Utilities Agency, Value Engineering, Chino, California. As a member of the Value Engineering team evaluating the San Bernardino Avenue Lift Station and Etiwanda Avenue Sewer Force Main project assisted in developing 20 cost-saving proposals for the lift station and 13 for the force main. Over \$1.5 million in life-cycle cost savings was identified.

Project Manager for Plant No. 2 Pump Station Rehabilitation, Alhambra, California. The project included designs for the rehabilitation of this wet-well/dry-well centrifugal pump. Construction methods that would keep the pump station in service during construction needed to be identified. The wet well capacity requirements were evaluated and wet well extension designed with temporary pump suction piping. The existing wet well was rehabilitated by repair of exposed reinforcing steel, cleaning of concrete surfaces, and application of epoxy coating.

Project Manager for the Bristol Street and Maxine Street Pump Stations, Santa Ana, California. The Bristol Street Pump Station required a new below-grade pumping station to replace an existing smaller unit in a major arterial street. The Maxine Street Pump Station required the installation of larger pumps in an existing underground structure. The pumps were vertical centrifugal constant-speed units.

Construction Manager for Southridge Recycled Water Pump Station for the Moulton Niguel Water District. The Pump Station is a 6,000 gpm reclaimed water pump station in Aliso Viejo, California. The project included four horizontal split case centrifugal pumps with inlet and outlet valves, piping and appurtenances. The pump station included a masonry block building with electrical and ventilation equipment.

Project Manager for the Overmyer Reservoirs and Booster Station Rehabilitation – Feasibility Study, Huntington Beach, California. Responsible for preparing a feasibility study for rehabilitating a 21.5 mg reservoir, two 1.0 mg reservoirs, and a booster station. Visual inspections were conducted along with a detailed structural analysis. The feasibility study included alternatives for rehabilitation of the reservoirs and pump station. Capital cost and life-cycle cost opinions were used to determine most cost-effective rehabilitation alternative.

Project Engineer for Metropolitan Water District of Southern California Chlorine Containment and Neutralization Study. The chlorine containment and neutralization study evaluated seven major water treatment and chlorine handling facilities in Southern California. As lead project engineer, Mr. Heye analyzed the Uniform Fire Code, evaluated sodium hypochlorite as an alternate to liquid chlorine, and developed design criteria for a chlorine containment and neutralization system with conceptual layouts for the system.

Project Manager for Torrance I-24 Water Main Replacement, Torrance, California. The project included design to replace approximately 30,000 feet of 6-inch through 12-inch domestic water pipelines. The alignments had numerous existing utilities, residential areas, and narrow rights-of-way.

Project Construction Manager for South Orange County Wastewater Authority Solids Dewatering Improvements, Orange County, California. The project involved providing construction engineering assistance for the installation of three centrifuges to replace existing belt filter presses. The project included relocation of existing screw conveyers, steel access platforms, and monorail system for equipment removal. New polymer feed equipment and odor scrubber with chemical feed equipment was also installed.

Project Engineer for Orange County Sanitation District Rehabilitation of District Siphons, Orange County, California. Assisted with preparation and review of specifications on design of air jumper pipes for 16 sanitary sewer siphons throughout OCSD's service area. Responsible for contacting seven member cities and other agencies to negotiate for encroachment permits, easements, and other agreements to construct improvements to the siphons.

Project Manager for Burbank Flow Meter Facility, Burbank, California. The project included the design of new flow metering equipment to reactivate an old 48-inch Parshall flume flow metering facility. The City of Burbank sewage flows to the City of Los Angeles system under contract agreement between the two cities. The project was needed to establish accurate flow data to determine billing between the City of Los Angeles and Burbank.

Project Manager for City of West Hollywood Flow Analysis, West Hollywood, California. The project required a flow analysis of the City of West Hollywood's sewer system to confirm flow measurements to the City of Los Angeles system.