Charles Bach, Jr.

Position: Executive VP
Professional Engineer (IL, MO, IA, KS) and a licensed Structural Engineer (IL). Since joining PSBA, Charlie has been the corporate officer in charge of structural engineering projects for the firm.

Michael Purol

Position: President
Professional Engineer (IL, MO) Since joining PSBA, Michael has been responsible for project management of all projects located in the State of Missouri. Michael has nearly 12 years of project management experience.

Matthew Walker

Position: Civil Engineer
Professional Engineer (MO) Matt has provided bridge design services for MoDOT’s BRO program, CDBG and Credit Bridges, construction inspections, surveying, and general civil engineering consulting services.

Douglas Seeber

Position: Sr. Engineer
Professional Engineer (IL, MO, IA) Doug has experience in: road design/highway engineering, municipal engineering, abandoned coal mines, subdivisions, water and sewer pump stations and main design, and bridge and culvert hydraulics.

Tamera Depke

Position: Civil Engineer
Professional Engineer (IL) Tammy’s experience includes: design of roads/highways, site, bridge and storm sewer. Hydraulic analysis, storm water pollution prevention plans, specification writing and construction observation.

James “Skip” Wilson

Position: Sr. Technician
Skip is responsible for the inspection of bridges throughout the State of Missouri. Before joining PSBA, Skip was employed for nearly 30 years for MoDOT conducting bridge and highway maintenance and inspection.
When it comes to Bridge Design Services, PSBA is at the top of the list with over 48 years of experience in providing a wide range of engineering, architectural, GIS and surveying services. Our team has the experience and the dedication to see a project from the design phase through to the ribbon cutting. Our strive for excellence sets us apart. Below is a brief description of a handful of past Bridge Design projects that our team has worked on in Missouri, Illinois and Iowa.

North 18th Street Bridge FAU RT 78214, Quincy, IL Design of a new bridge over the Burlington Northern Santa Fe RR tracks and Cedar Creek. The project consisted of providing the design of a new bridge over the BNSF Railroad tracks and over Cedar Creek on North 18th Street in Quincy, IL. The bridge measures 461 feet back to back of abutments with spans of 98 feet, 2 @ 130 feet and 98 feet. The superstructure consists of 42” deep steel plate girders with a poured concrete deck. The bridge has two 12 foot lanes with 5-foot bike lanes on both sides and a 6-foot sidewalk on the west side. At each abutment, a mechanically stabilized earth (M.S.E.) wall was utilized as a retaining structure to keep the bridge at an economical length. New approach roadways and associated drainage design were also within the scope of this project. The project received innovative design funding for the use of galvanizing on all of the steel items including the plate girders, reinforcing steel, bearings, fencing and railing.

North 5th Street Bridge Over Cedar Creek, Quincy, IL Design of replacement structure and associated road work. Provided surveys, hydraulics, flood flow histories, permits, bridge condition report, preliminary bridge design and hydraulic report which included economic analysis of bridge and high water effects), prepared environmental and planning documents, prepared preliminary roadway and drainage structure plans; traffic studies and counts and special intersection studies as required; complete general and details plans, special provisions and estimates of cost. This bridge is a single span, 128 foot by 35-foot wide steel plate girder structure in an 8-inch concrete deck, concrete parapets with open abutments.

Bridge Replacement/Rehabilitation on SN 034-3142 over Spring Creek, Hancock Co, IL PSBA provided hydraulic reports, permits, preliminary bridge design, project development report, bridge condition report and final plans. This bridge will be widened to allow for two lanes of traffic, precast prestressed concrete deck beams, Type S-1 guardrail on both sides and open abutments to allow for better hydraulic flow.

Triple Barrel Box Culvert on Co Hwy 12, Broadwell Township, Logan Co, IL PSBA provided detailed surveys, hydraulic surveys, prepared Corps of Engineers permit, bridge condition report, preliminary bridge design, hydraulic report, final plans, environmental documents, preliminary roadway and drainage structure plans and final plans for the triple box culvert to replace the current structure.

Culvert over Waggoner Creek, Hancock Co, IL Prepared hydraulic surveys, Corps of Engineer permit, bridge condition report, preliminary bridge design, hydraulic report, and final plans for the replacement of the existing culvert.

Route 61, Clark & Lewis County, Missouri from Route B in Lewis County to Fox River Bridge in Clark County, MO PSBA provided hydraulic surveys of all bridges and culverts along the 14 Mile project.
Phase II Engineering Services for Various Routes, Various Sections, Various Counties in District 6 for the Illinois Department of Transportation Provided Phase II Engineering services including field surveys, plat preparation, right-of-way staking, hydraulic surveys, and hydraulic analysis for various bridges and culverts throughout District 6 in Illinois.

Miscellaneous Engineering for various projects in various counties in District 6 for the Illinois Department of Transportation Provided hydraulic surveys and hydraulic analysis for various bridge projects throughout District 6 in Illinois.

Phase I and/or Phase II for Various Projects in Various Counties in District 6 for the Illinois Department of Transportation Provide PE II structure plans for the replacement of two structures on IL-96; completed PE I route surveys, hydraulic surveys and hydraulic analysis for three structures on IL 57 and IL 96; completed pick-up surveys, prepared preliminary and final project report for the 3R Bridge Replacement project in IL 10 over Macoupin Creek near Carlinville and the 3R Bridge Replacement project on IL 96 over Railroad Creek, Hamilton, IL.

Soft Match Credit and BRO Programs – Monroe and Ralls County, MO PSBA has provided professional engineering services to Monroe and Ralls County, Missouri on numerous BRO and Soft Match Credit projects. Services included preliminary and Right of Way plans, design alternatives and cost estimates. Construction and engineering services included detailed construction plans for in-house construction, bidding and specification documents for contract construction, inspection and material certification services and local agency reimbursement documentation.

4-Lane Expressway Improvements of U.S. 218, Washington County, IA – 16.2 Miles–Cost $20,475,000 PSBA provided professional services in connection with the improvement of a 16.2-mile portion of U.S. Highway 218 (Avenue of the Saints), in Washington County, IA. PSBA provided plans and specifications; preliminary bridge foundation design (TS&L’s for 12 new bridges and 3 twin box culverts); minor drainage structures through single barrel RCB’s; full ROW layout and design. Expressway standards were used in the design of this project.

US 218 4-Lane Expressway Improvements North of Donnellson to the Henry County Line–Cost $17,612,000 PSBA was the prime consultant for improving 9.3 miles of US Highway 218. The improvements consisted of converting two-lanes to a four-lane expressway. Elements of the project were as follows: project survey; aerial mapping; public hearing displays; geotechnical services, bridge hydraulic and condition reports; structural TS&L plans for 3 new bridges and 4 new box culverts; and preliminary and final plans. The project was developed by PSBA on MicroStation SE and Geopak Design software.