

# PARAGON

Engineering Services, Inc.

**James L. Sanford, PE**

*Senior Electrical Engineer*

## EDUCATION

A.A., Electrical Engineering & Technology,  
The Pennsylvania State University, 1961

## REGISTRATIONS

DC 1996	DE 1987	FL 2000
MS 1988	NJ 1977	PA 1972
GA 1996	LA 1988	MD 1976
VA 1983		



## EXPERIENCE

Mr. Sanford is presently a Senior Electrical Engineer at Paragon Engineering Services, Mechanical, Electrical and Plumbing Engineering Firm based in York, Pennsylvania. Paragon Engineering Services has a very diverse client base throughout the country.

While working for another employer, Mr. Sanford was responsible for assigning and supervising those projects involving the Electrical and Mechanical Engineering Groups. His duties include coordination of department design activities, staffing / manpower assignments, direct supervision of electrical engineering assignments, electrical system planning and evaluation. He also served as liaison between the various departments of the company as well as with outside clients. Where appropriate, he provides electrical coordination and direction to regional offices involved with electrical services and support. Mr. Sanford was responsible for providing electrical project review on all assignments and is the electrical representative on the QA/QC team. His other duties included department management issues, budget control, and fiduciary responsibility, both to the company as well as our clients.

**Rosslyn Tunnel, Rosslyn, Virginia** – Designed the lighting and lighting control, power and control for ventilation system and security cameras for the Rosslyn Tunnel on I66 in Rosslyn Virginia just across the Potomac River from Washington DC. Design included both all related electrical design work for the tunnel as well as a plaza above the tunnel.

**Tuscarora Mountain Tunnel On Pennsylvania Turnpike, Pennsylvania** – As a senior electrical engineer, I conducted electrical surveys in April 2002 to determine existing conditions for east bound and west bound tunnel electrical lighting and power systems in the ventilation tunnels, cross tunnels as well as electrical service and distribution equipment and emergency power generation equipment in the portal building. I participated in the development of a conditions report as well as recommendations of repair work.

## Other Experience:

**Hand-In-Hand Fire Company, Bird-In-Hand, Pennsylvania** - This project is a design build project and consists of 5350 square feet of additions and total renovation of 3550 square feet of existing building. New addition consisted of offices, kitchen, fire hall and basement. An all new commercial kitchen is to be installed. The entire building, with the exception of some cooking equipment, is backed up by a new diesel generator. The existing service will be changed from a 120/240 volt, 3 phase open delta to a new 120/208 volt, 3 phase wye service.

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**The Good Shepherd Ministries, Washington County, Maryland** - design/build support services for a 8,000 square foot New Church Facility. Design included an 800amp service, power distribution to include convenience receptacles, power for all building systems and owner supplied equipment, interior lighting design to include fluorescent general illumination, emergency lighting and lighting controls, parking lot lighting to include pole mounted metal halide fixtures with photo sensor and time clock control, and empty outlet box and conduit system for owner supplied telephone, data, fire, access control, intrusion detection, and paging/sound system.

**Elmwood Medical and Endoscopy Center** - This project included a build out of a rental space, providing electrical heating, ventilating and air conditioning systems for medical offices approximately 3700 square foot and 4800 square foot class B surgery and selecting plumbing piping and fixtures and sizes and selecting water heater. Electrical provided separate service for office, interior lighting design to include fluorescent general illumination, UPS emergency lighting and control, voice/data requirements, fire alarm system and nurse call system. The project also included volt drop and short circuit studies for all rental space in the entire building.

**Apple BMW, York, Pennsylvania** – This design/build support services for a 14,000 square foot new facility. Project consisted of a show room, sales offices and preparation bays. Design included Hvac, Plumbing, Power and lighting. The mechanical system included condensing gas furnaces and packaged gas/dx rooftop Units. Power distribution to include convenience receptacles, power for all building systems and owner supplied equipment, interior lighting design.

**Apple Cadillac, York, Pennsylvania** - This project consists of a new building located at the present Apple Cadillac complex to prepare cars for customer delivery. Project consisted of a show room, sales offices and preparation bays. A separate 400 amp, 120/208 volt, 3 phase electric service will be installed for this building. Building will have specialty lighting for the show room.

**Snyder's of Hanover, Hanover, Pennsylvania** - design and development of the building heating, ventilating and air conditioning systems to include rooftop heating, ventilation, and air conditioning systems for the addition with direct expansion cooling and natural gas heat; building plumbing systems to include extending the existing water and natural gas services to the addition, potable hot and cold water, sanitary waste and vent, and storm drainage systems including related plumbing fixtures. Electrical systems to include the evaluation of the existing electrical loading of the building, primary switch addition to existing exterior switchgear, primary service entrance to the plant, primary and secondary main switchgear, power distribution to include 480/277V distribution panels with associated step-down transformers and 208/120V distribution panels, relocated scales, new SBR Tank, interior lighting, exterior lighting for new parking areas, new dock area, and basketball court; and accommodations for telephone, data, fire, and security systems by owner. The project consisted of approximately 75,000 square foot addition to the existing facility. The addition includes approximately 12,500 square feet of office area, expanded line area, new packaging area, and new warehouse area.

**Exact Packaging, Inc., Stonebridge Business Park, Stewartstown, Pennsylvania** - Managed duties including the design/build support services for a 15,000 square foot manufacturing facility and a 6,080 square foot office building. Design included power distribution to include convenience receptacles, power for all building systems and owner supplied process equipment, interior lighting design to include fluorescent general illumination, emergency lighting and lighting controls, and empty outlet box and conduit system for owner supplied telephone, data, fire, access control, intrusion detection, and paging/sound system.

**Sheridan Press, Hanover, Pennsylvania** – design for this project consisted of demolition of 30,000 square foot existing Tennis Court Facility and 9,600 square foot existing office area and the construction of 27,000 square foot warehouse/staging area addition and 30,000 total square foot, two story office addition at the site of the existing production facility in Hanover Pa. The office addition consisted of small individual offices, large open space offices, conference rooms, server room and gang toilets. The warehouse/staging area addition included lighting, lighting control, power, power for mechanical, UPS system design, modifications to the existing generator system, new primary electric service and new parking lot lighting. This was a design/build project with Swam Electrical Contractors.

**St. John The Baptist Church School, New Freedom, Pennsylvania.** - The project was a design/build total renovation of the existing building and a new 29,000 square foot addition. New addition consisted of 17 new classrooms, complete new cooking kitchen, new office complex, new library, new conference room, new toilets, new nurse's office, renovation of the existing multi-purpose room and office complex and a new mechanical/electrical area. New systems installed were new stage dimming system, new fire alarm system, new battery operated emergency lighting system, new sound system, new voice/data system, new CATV distribution system and a new power distribution system. The new service was 800 amps @ 277/480 volt, 3 phase.

**American Access Care, Springfield Township, Pennsylvania** – This project consisted of electrical and mechanical design for a new 4600 square foot office including heating, cooling and ventilation system, temperature control system, plumbing piping and fixtures, new power, telephone and CATV service, power distribution within the building to include convenience receptacles, power for all building systems and for owner supplied equipment, interior and parking lot lighting design to include night lighting, emergency lighting and controls.

**International Trucking Terminal, York, Pennsylvania** - 390,000 square foot warehouse terminal facility. Our portion of this project was electrical design. This project consisted of an all new 390,000 square foot parts distribution system for International Trucks. Project consisted of new metal halide fixtures in the warehouse portion of the building with fluorescent fixtures in the two office areas of the building. New power and telephone service was provided. An empty conduit system was provided for a voice/data system. Power was provided for two separate computer rooms. There were approximately 1100 metal halide lights in the warehouse area that had to be controlled by four switches. The building had many motor operated overhead doors and dock levelers. Power had to be provided for a battery charging area and conveyor system. This was a design/build project with Dietz/Nauman Electrical Contractors.

**Ravenna Office Park Business College, Ravenna, Ohio** – This was a design/bid project consisting of a one-story, 20,000 square foot Business College. Mechanical services included heating, cooling and ventilating system, plumbing piping and fixtures and size and select water heater, design and installation of a wet pipe fire protection sprinkler system. Provided new power distribution service to include convenience receptacles, interior lighting design included fluorescent general illumination, night lighting, emergency lighting and controls. Provisions were made for data, fire alarm, security/card access, sound, CATV and clocks.