



January 9, 2006

H.F. LENZ COMPANY

Renaissance Center
1001 State Street, Suite 907
Erie, PA 16501-1829
Phone: 814-455-7435
FAX: 814-459-8363

Engineers
Planners
Surveyors
Energy Consultants

UPS NEXT DAY AIR

Dr. Norbert J. Kennerknecht
Director, Buildings and Grounds Services
Warren County School District
185 Hospital Drive
Warren, PA 16365-4885

Subject: WCSD Eisenhower Sewage Treatment Plant Improvements
HFL File No. 2005-1040.01

RE: Proposal

Dear Norbert:

Enclosed, per your request, are two copies of H. F. Lenz Company's Statement of Qualifications relative to Sewage Treatment Plants. Also enclosed are our Man Hour Breakdown Proposal and proposed Scope of Work to complete the Eisenhower Sewage Treatment Plant Improvement Evaluation as requested by your Board of Directors.

If you would like us to proceed with this work, please send us a revised work order to supersede the design work order you had previously forwarded to our office.

If you have any questions, please feel free to give myself or John Boderocco, in our Johnstown office, a call.

Sincerely,

H.F. LENZ COMPANY

John M. Dombrowski, P.E., Associate
Branch Office Manager

Cc: John R. Boderocco
Matthew Donatelli

I:\PROJECTS\2005-1040.01\LETTERS\06_0109\PROPOSAL.DOC

H F LENZ COMPANY PROFESSIONAL DESIGN SERVICES FEE BREAKDOWN
WARREN COUNTY SCHOOL DISTRICT
EISENHOWER SEWAGE TREATMENT PLANT IMPROVEMENT EVALUATION
HFL FILE NO. 2005-1040.01

TASK	PRINC	PROJ MGR	CIVIL/ST ENG	MECH ENG	ELEC ENG	PLUMB ENG	CADD DRAFT	FIELD REPRES	SPEC WRITER	CLERICAL	TOTAL
1. Perform site investigation and review of existing STP											
a. Review design drawings.	4		4								8
b. Review on-site operating conditions.	12		12		1						25
c. Review historical discharge records and permit limits.	2		2								4
d. Review building water consumption records.	1		1							1	2
d. Document existing conditions observed with photos.	1		1								3
2. Prepare a report on conditions observed and potential improvements											
a. Narrative of existing system description and condition.	4		4	2	2					4	16
b. Evaluate surge conditions and potential need for flow equalization.	1		2							1	4
c. Evaluate need for grit removal and/or solids grinding.	1		2							1	4
d. Evaluate air compressor conditions and options.	1		2	2	1					1	7
e. Evaluate sludge holding facilities.	1		2							1	4
f. Evaluate potential need and benefit of tertiary treatment.	1		2							1	4
g. Evaluate chemical disinfection treatment effectiveness.	1		2							1	4
h. Evaluate any existing pumping systems.	1		2	2						1	5
i. Evaluate structural integrity of piping and structures.	1		2							1	4
j. Evaluate auxiliary facilities and utility services.	1		2							1	4
3. Prepare construction costs associated with the potential improvements listed in Item 2.	4		8							2	14
4. Prepare a cost breakdown for complete replacement of the Sewage Treatment Plant	2		4	2	4	2				4	18
5. Evaluate alternate means for treatment such as .	1		4							2	7
6. Discuss with WCSD the preliminary findings and identify if additional investigations may be required:	4		4								
a. Sludge sampling/testing											8
b. Material thickness testing											0
c. Water quality sampling/testing of influent/effluent											0
7. Prepare a report for presentation to WCSD Board.	8		8	2	2	2				8	30
8. Address questions and/or comments from Board presentation.	2		4							2	8
9. Submit final report to WCSD with recommendation on how to proceed	4		4							2	10
TOTAL HOURS	58	0	77	10	10	4	0	0	0	34	193
HOURLY RATE	\$193.66	\$89.30	\$68.36	\$68.36	\$68.36	\$68.36	\$38.39	\$56.09	\$68.36	\$34.57	
TOTAL HOURS * HOURLY RATE	\$7,752.28	\$0.00	\$5,263.72	\$683.60	\$683.60	\$273.44	\$0.00	\$0.00	\$0.00	\$1,175.38	
TOTAL LABOR COSTS											\$15,832.02

Anticipated Reimbursible Expenses (Not-to-Exceed): **\$600.00**
Total Proposed Fee: \$16,432.02

WARREN COUNTY SCHOOL DISTRICT
EISENHOWER SEWAGE TREATMENT PLANT IMPROVEMENTS
HFL FILE NO. 2005-1040.01

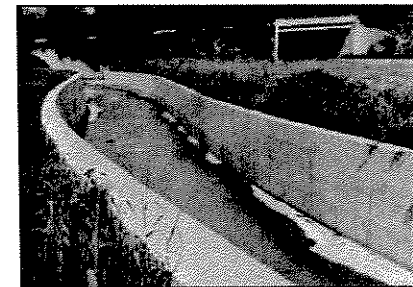
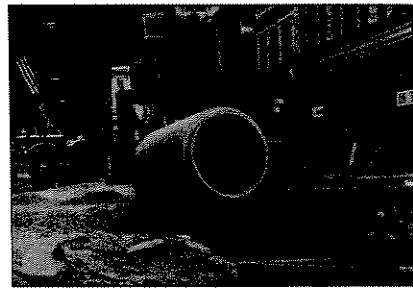
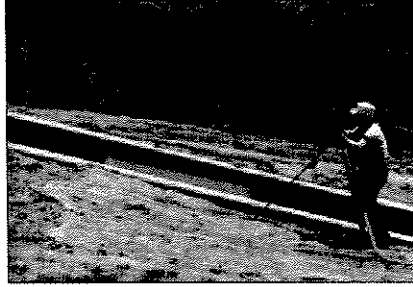
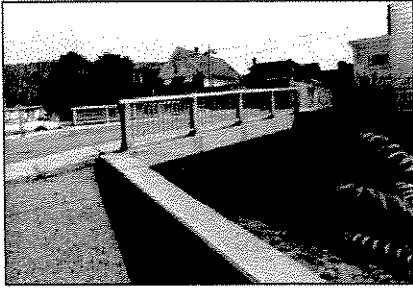
SCOPE OF WORK

1. Perform site investigation and review of existing Sewage Treatment Plant.
 - a. Review design drawings.
 - b. Review on-site operating conditions.
 - c. Review historical discharge records and permit limits.
 - d. Review building water consumption records.
 - e. Document existing conditions observed with photos.
2. Prepare a report outlining the conditions observed and potential improvements for consideration. Example of items to be included:
 - a. Narrative of existing system description and condition.
 - b. Evaluate surge conditions and potential need for flow equalization.
 - c. Evaluate need for grit removal and/or solids grinding.
 - d. Evaluate air compressor conditions and options.
 - e. Evaluate sludge holding facilities.
 - f. Evaluate potential need and benefit of tertiary treatment.
 - g. Evaluate chemical disinfection treatment effectiveness.
 - h. Evaluate any existing pumping systems.
 - i. Evaluate structural integrity of piping and structures.
 - j. Evaluate auxiliary facilities and utility services.
3. Prepare a breakdown of construction costs associated with the potential improvements listed in Item 2.
4. Prepare a cost breakdown for a complete replacement of the Sewage Treatment Plant.
5. Evaluate whether there are alternate means for sewage treatment such as combine with other existing treatment facilities.

6. Discuss with WCSD the preliminary findings and identify if additional investigations may be required to:
 - a. Sludge sampling/testing
 - b. Material thickness testing
 - c. Water quality sampling/testing of influent/effluent
7. Prepare a report for presentation to WCSD Board.
8. Address questions and/or comments from Board presentation.
9. Submit fifteen (15) copies of final report to WCSD with recommendation on how to proceed.

C:\TEMPORARY INTERNET FILES\OLK71B\05_1222 SCOPE OF WORK JRB.DOC

12/22/05



Statement of Qualifications

for

Professional Engineering Services

prepared for

***Warren County School District
Eisenhower Sewage Treatment Plant***

January 2, 2005

HFL File 2005-7000.50



**H.F. LENZ
COMPANY**

Engineers • Planners • Surveyors • Energy Consultants

Main Office: 1407 Scalp Avenue, Johnstown, PA 15904
Phone: 814-269-9300 Fax: 814-269-9301 www.hflenz.com

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Phone: 412-371-9073 Fax: 412-371-9076 dpalmer@hflenz.com

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Phone: 814-455-7435 Fax: 814-459-8363 jdombrowski@hflenz.com



H.F. LENZ
COMPANY

Statement of Qualifications

for

Professional Engineering Services

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- 2 Selected Project Experience Profile
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H.F. LENZ
COMPANY

Firm Profile

Currently in its 59th year, the H.F. Lenz Company is a Pennsylvania-based firm offering a full range of engineering services for building systems, infrastructure, and industry. Our projects span the nation, with the heaviest concentration in the Northeast, and exceed \$250 million in construction annually.

A remarkable 85 percent of our work consists of repeat commissions from clients who appreciate our responsive, value-added service.

The H.F. Lenz Company employs 182 people in our Johnstown, Pennsylvania headquarters and satellite offices in Pittsburgh and Erie, Pennsylvania.



Services offered include:

- Mechanical Engineering
- Electrical Engineering
- Plumbing Engineering
- Life Safety / Fire Protection Engineering
- Communications Engineering
- Energy Management
- Civil Engineering
- Structural Engineering
- Industrial Engineering
- Surveying
- Construction Phase Services
- Commissioning

TEAM APPROACH

To better serve our clients, the H.F. Lenz Company has organized the firm into several multi-discipline design teams that are dedicated to specific market types or project types. Each market sector—corporate, government, health care, education, and industry—is served by a team of specialists who understand the unique needs of the clients they serve. Each team has the necessary resources and multi-discipline staff—HVAC, electrical, plumbing, and fire protection/life safety—to successfully complete both small and large projects. Our teams are headed by one or more principals of the firm who specialize in a particular market segment or type of engineering project. These teams are cross trained and have experience serving in back-up roles as needed. Our clients benefit from this approach because the team is focused, experienced, and dedicated to one type of project—the clients' project. A brief description of H.F. Lenz Company's team structures and experience follows.



CIVIL / STRUCTURAL

This team provides civil and structural engineering and professional land services for a variety of projects involving land development and infrastructure improvements. Typical projects include the complete site development for new retail stores and other buildings, site utilities design, off-site highway improvements and access roads, site lighting and security, water and waste water conveyance systems, parking facilities, and governmental approvals and permits. Our professional surveying services include photogrammetric



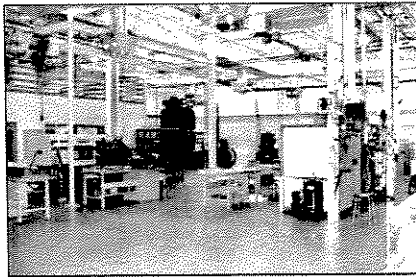


mapping, topographic and boundary surveys, right-of-way surveys, utility surveys, and construction stake-out surveys.

We provide these services for new stores and distribution centers for major discount retailers, shopping mall developers, industrial plants, local municipalities, and several agencies of the federal government.

INDUSTRIAL

Multi-discipline engineering projects for industrial clients include new manufacturing facilities, layout and design for modification, replacement, or new installation of industrial process equipment and facilities, complete building retrofits, new and renovated office space, laboratories, high-bay expansions and fit-outs, and complete site development for new or expansion projects. The firm is also well known for energy conservation projects including complete facilities energy audits and the design of building automation systems.



Specific experience includes new or relocation of underground and aboveground general and process utilities, power distribution systems, motor control centers, industrial lighting, industrial heating systems, specialized ventilation and exhaust

systems, drainage and sewer systems, fuel storage and distribution, building and equipment foundations design, overhead crane alignment and design, structural steel design, roofing systems, plumbing and piping design, emergency power systems, security systems, communications systems, and fire alarm systems.

EDUCATION

For well over 50 years, the H.F. Lenz Company has served primary and higher education facilities, completing well over 900 projects throughout the eastern United States and ranging in size from 1,000 to 350,000 sq. ft. Our Education Team engineers have extensive experience in all types of specialized areas common to educational facilities including classroom and administration buildings, libraries, science buildings and laboratories, gymnasiums/athletic fields, student unions, dining/banquet facilities, residence halls, conferencing centers, video studios, and laundry facilities.



HEALTH CARE

Our Health Care Team is headed by Timothy M. Earhart, P.E., Principal; Steven J. Gridley, P.E., Principal and Vice President; and John R. Boderocco, P.E., Principal and Vice President. The team's experience includes new construction, renovation projects, and evaluations and studies. Their experience ranges from renovations of individual departments, to modifying or replacing building-wide mechanical, electrical, and fire protection/life safety systems. Health care experience includes hospitals, nursing homes, assisted living facilities, laboratories and medical office suites. Projects range in size from 500 to 850,000 sq. ft., are wide-spread throughout the eastern states, and total anywhere from \$5,000 to \$130,000,000.





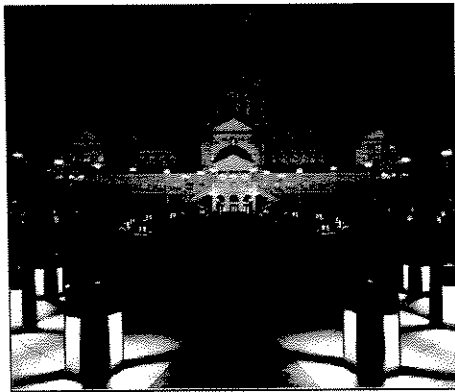
CORPORATE

Whether a project requires new construction, renovation, tenant fit-up, or historic restoration, clients are looking for design solutions to satisfy current and future needs without over-extending their budgets. The Corporate Team is comprised of leaders specializing in the design of high- and low-rise buildings for corporate headquarters, data centers, financial institutions, retail facilities, and light industrial/manufacturing facilities. Regardless of size, whether it be a fit-up of 2,000 sq.ft. of tenant space or renovations to a 1,000,000 sq.ft. historic office building, this Team can complete the project successfully.



GOVERNMENT

Our Government Team is built upon decades of experience with federal and state agencies. It is responsible for the renovation or new design of courthouses, federal office buildings, post offices, correctional facilities, and military installations with costs ranging from \$100,000 to \$34,000,000 for both large and small projects. These projects were completed for such clients as the Department of Corrections, General Service Administration, U.S. Postal Service, U.S. Army Corps of Engineers and other DOD agencies throughout the eastern United States. The individuals who make up this group are experts in the design of mechanical, electrical, civil, structural, plumbing, and fire protection/life safety systems. They are thoroughly familiar with metric design and current government and military standards.





H.F. LENZ
COMPANY

Professional Capacity

The H.F. Lenz Company presently employs 182 people in our Johnstown, Pennsylvania headquarters and our satellite offices in Pittsburgh and Erie. Within the firm, all engineering disciplines are represented in-house. Additionally, all of our engineers are cross-trained among the various disciplines, leading to improved communication and overall project efficiency.

The following is a breakdown of our staff capacity:

MECHANICAL/ELECTRICAL DIVISION 97 Total

- 33 Mechanical
- 23 Electrical
- 4 Plumbing/Fire Protection
- 37 Technicians/CADD Operators

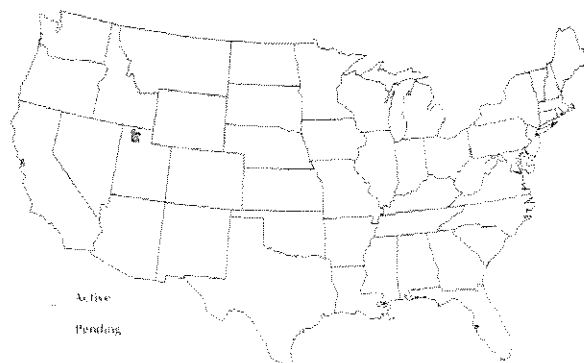
CIVIL/STRUCTURAL/SURVEY DIVISION 34 Total

- 13 Civil
- 9 Structural
- 6 Technicians/CADD Operators
- 5 Surveyors
- 1 Construction Inspector

ADDITIONAL STAFF 51 Total

- 9 Construction Inspectors
- 7 Technicians/CADD Operators
- 35 Support Services

182 Total Personnel



H.F. Lenz Company's projects are located throughout the United States, and our 43 professional engineers are registered in a total of 36 states, as shown in the map to the left.



Civil / Structural Engineering and Surveying

The H.F. Lenz Company's Civil Engineering and Surveying Divisions provide civil, structural, and land surveying services for various commercial, institutional, industrial, and municipal clients. Our engineering services include complete site and infrastructure planning and design as well as structural analysis and design for new construction and alterations and additions to existing structures. Specific services include:

Civil Engineering

- Site Selection and Analysis Studies
- Site Utilities Design
- Wetland Mitigation
- Traffic Control and Circulation
- Off-Site Highway Improvements, Site Access Roads, and Approaches
- Curbing and Sidewalks
- Site Lighting
- Security Fencing, Cameras, and Intrusion Detection
- Flood Control Dams
- Parking Facilities
- Stormwater Management
- Soil Erosion and Sedimentation Control
- State and Local Government Approvals and Permits
- Waste Water Treatment Facilities
- Underground Fuel Storage and Distribution
- Highway Design
- Domestic Water Distribution Systems
- Water Storage Tanks
- Waterway Encroachment Permits
- Horizontal Directional Drilling
- Sewer System Evaluation Studies
- Sanitary Sewer Systems
- Water Distribution Systems

Structural Engineering

- Multi-Story Buildings
- Parking Garages
- Retaining Walls
- Pedestrian and Vehicular Bridges
- Equipment Supports and Foundations
- Structural Inspections and Evaluations
- Floor and Roof Load Surveys
- Industrial Ductwork Design
- Structural Steel Design
- Timber Construction Design
- Reinforced and Unreinforced Masonry Design

- Reinforced Concrete Design
- Reinforced Concrete Repair
- Bridge Design
- Utility Tunnels
- Precast Cast Concrete Design
- Light Gage Metal Framing Design
- Complete Building Analysis, Design, and Detailing
- Municipal Street Reconstruction and Paving Projects
- Bridge Inspection

Surveying

- Geodetic Control Surveys
- Photogrammetric Mapping
- Control Surveys
- Route Surveys
- Utility Surveys
- Construction Stake-Out Surveys
- As-Built Surveys
- Right-of-Way Surveys
- Topographic Surveys
- Settlement and Displacement Surveys
- Hydrographic Surveys
- Boundary Retracement Surveys
- Subdivision Design Surveys
- Optical Tooling Surveys
- Heavy Industry Machinery Alignment Surveys
- Utility Mapping
- Flood Plain Mapping

Additional Services

- Feasibility Studies
- Environmental Assessments
- Conceptual Engineering Reports
- Construction Observation and Monitoring
- Construction Administration
- Materials Testing (Quality Assurance, Quality Control)
- Shop Drawing and Submittal Review



The H.F. Lenz Company has over 59 years experience in the evaluation, master planning, and design of all types of mechanical, electrical, fire protection/life safety, and plumbing systems for both new construction and renovation projects. We have designed the mechanical/electrical systems for commercial office buildings, health care facilities, educational facilities, manufacturing plants, military installations, historic structures, and facilities for federal, state, and local governments. Our clients include private corporations, financial institutions, developers, architectural firms, and numerous federal and state agencies. We offer the following engineering services:

Mechanical Engineering

- Indoor Air Quality
- Heating and Cooling Plants
- Heating and Cooling Systems
- Air Handling Systems
- Computer Support Systems
- Heat Recovery Systems
- Automatic Temperature Control
- Cogeneration
- Domestic Water Systems
- Sanitary and Stormwater Systems
- Medical and Industrial Gas Systems
- Fuel Storage and Distribution Systems

Electrical Engineering

- Power Distribution
- Power Conditioning
- Harmonics
- Lighting Systems
- Security Systems
- Telecommunications Systems
- Emergency Power Systems
- Uninterruptible Power Supplies
- Substations

Fire Protection/Life Safety Engineering

- Fire Detection and Alarm Systems
- Sprinkler, Dry Chemical, and FM-200 Fire Suppression Systems
- Smoke Control Systems
- AFFF Systems
- Double interlock preaction system

Analytical Services

- Building Evaluation Reports
- Feasibility Studies
- Geothermal Heat Pump Systems
- Alternative Refrigerants
- Utility Planning
- Long Range Energy Studies
- Conceptual Engineering Reports
- Preventive Maintenance Scheduling
- Life Cycle Costing
- Facilities Management
- Value Engineering

Energy Management

- Energy Audits
- Technical Assistance Studies
- Energy Management Systems
- Facility Energy Management Plans
- Energy Retrofit
- Alternate Energy Sources

Industrial Engineering

- Detail Drafting
- Overhead Crane Modifications
- Heavy Industrial Equipment Modifications
- Process Piping and Control
- Industrial Ventilation Systems
- Industrial Waste Systems
- Protective Coatings

Specialty Services

- LEED™ Certification/Design
- Full Service Commissioning
- Energy Modeling



H.F. LENZ
COMPANY

Construction-Phase Services

In addition to providing detailed design services, our engineers and field representatives are intimately familiar with the technical reviews, value engineering, cost estimating, constructibility reviews, and on-site project representation required for successful project completion. We have performed these functions for projects designed by our staff, as well as for projects designed by other professionals.

Construction Administration Services

The H.F. Lenz Company's Field Services Division provides a full range of construction administration services. This group is responsible for completing construction observation and monitoring services for approximately \$250 million in construction annually. Individual projects range in size from \$10,000 to \$130 million in construction costs and include the new construction and renovation of all types of institutional and commercial buildings.

Field Services representatives are responsible for carrying out the company standard of quality during construction. They have from 10 to 32 years of "hands-on" experience in all types of heating, ventilating, air conditioning, plumbing, fire protection, electrical, building management, site utility, and industrial mechanical systems, as well as in most structural and architectural construction. They have a thorough knowledge of system design concepts and a knowledge of Building Codes; National Electrical Code; SMACNA Standards; and DEP publications for sewer, water, and fuel storage tanks.

The H.F. Lenz Company's Field Services Division provides the following construction-phase services:

- On-site troubleshooting and testing.
- Observe on- or off-site field testing.
- Construction cost estimating and review.
- Coordination between trades at the site and with the engineer's office, the architect's office, the owner, and all applicable agencies.
- Monitor and observe construction workmanship, materials, and equipment to ensure conformity with contract documents.
- Monitor applicable code compliance during construction.
- Attend and record minutes of construction and coordination meetings.
- Evaluate and approve contractor's requests for payment.
- Evaluate contractor's estimates for changes in the contract price.
- Approve or disapprove vendor/contractor shop drawings.
- Maintain accurate field records and reports.
- Perform construction inspections and field surveys for work conformance.
- System evaluations including equipment operation schedules, equipment problems, and building operations.
- Coordinate and assist in operation and maintenance training.



The H.F. Lenz Company's Field Services Staff have demonstrated an ability to effectively manage construction and resolve problems. Their efforts consistently avoid unnecessary deletions, substitutions, and change orders that are common in the construction industry. They have an impressive record of controlling final construction costs to within one percent of the original bid amounts (less owner's program changes).

Pre-Construction Services

If required, our in-house staff of professional engineers can provide various types of preconstruction services. This can include reviewing system concepts, performing value engineering, developing or reviewing cost estimates, and reviewing construction specifications for compatibility of design and opportunities for cost containment.

Our engineers can also conduct constructibility reviews that will check for completeness of design documents and design coordination between disciplines. An evaluation of the constructibility of final construction documents can also be performed. At this stage, sequence of construction, construction timetables, and the need for construction phasing will be determined. Finally, a review of construction cost estimates for completeness, reasonableness, and accuracy can be performed.

Construction Quality Assurance

Our field representatives understand that the required contractor submittals and their submission schedule should be clarified at the start of the construction phase. The objective of the team in the early construction phase needs to be the diligent processing of submittals since this effort has a positive effect on construction progress. The benefits of identifying long lead items during the design phase which were pre-purchased are now realized in the construction schedule.

Construction schedules must be compiled and updated on a regular basis to permit the identification of both potential conflicts and opportunities, which when addressed early enough in the process, provide for a project completed within the desired time frame. Schedules must include milestone dates which are used to monitor construction progress.

Regularly scheduled field observations are necessary to review construction quality, monitor compliance with the construction documents, respond to contractor's questions, and to build the team spirit between the contractor and professionals. All observation visits and meetings are documented by written minutes which are distributed to all parties in a timely fashion. A photographic history of the construction progress is also commonly maintained during the project. As-built information is also maintained and monitored for future incorporation into conformance drawings.

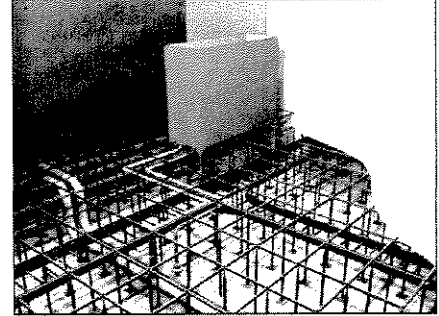
At the completion of the construction effort, the field representatives review the final product and prepare punchlists of work which needs to be completed or corrected. At this project stage, critical systems are performance tested to confirm that they meet the design objectives.



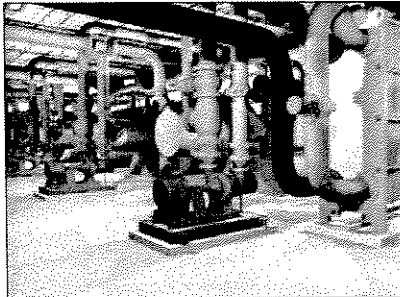
H.F. LENZ
COMPANY

Computer-Aided Drafting and Design

The H.F. Lenz Company has 113 *Pentium* PC-based CADD stations—all of which are networked with 100 megabit Category 5 data wiring with T1 WAN connection to the satellite offices in Erie and Pittsburgh and eleven file servers with a total capacity of 2 terabytes online storage. We currently utilize *AutoCAD* and *Autodesk AEC Suites* engineering design software modules. Files can be delivered email, disk, tape, or CD-ROM.



Autodesk AEC Suites is an AutoCAD enhancement package with extensive 3D capabilities including:

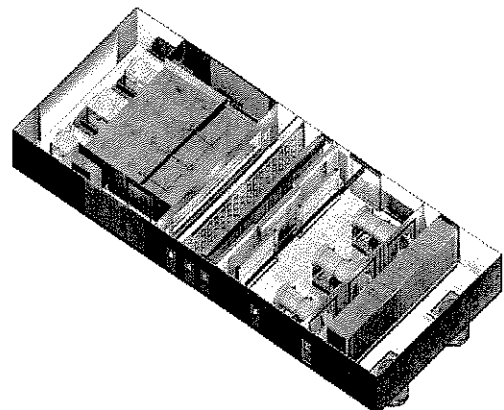


- Extensive 3D libraries
- Automatic sizing of information and generation in 3D
- Walk-through animation of 3D models
- Automatic tagging with attributes
- Time-saving routines for generating 3D models
- Routines to extract attribute definitions, intelligent objects and entities
- Flow and obstruction checks of systems

Hardware

113 *Pentium* PII, PIII, and PIV based CADD stations

- 1 MSA 1000 with dual ML570 with dual processors and 4 gig RAM each. 1 terabyte storage space. Fully redundant cluster server
- 2 Compaq Proliant 3000 file server with dual *Pentium* II 333 processors and 18 gigabyte disk space (328 meg RAM)
- 1 Compaq Proliant 6000 file server with dual *Pentium* 200 processors and 18 gigabyte disk space (1000 meg RAM)
- 1 Compaq Proliant 3000 file server with dual *Pentium* III 500 processors and 218 gigabyte disk space (1000 meg RAM)
- 1 Compaq Proliant 3000 file server with dual *Pentium* III 500 processors and 82 gigabyte disk space (512 meg RAM)
- 2 Compaq Proliant 3000 file server with dual *Pentium* III 500 processors and 18 gigabyte disk space (512 meg RAM)





2 Compaq Proliant ML530 file server with dual Pentium III 900 processors and 110 gigabyte disk space (512 meg RAM)

1 Compaq Proliant ML570 file server with dual Pentium III 900 processors with dual power supplies and 1 terabyte of disk space (2 gigabytes RAM)

4 CD-RW rewritables

1 Hewlett Packard Jetstore 6000 tape backup

1 Quantum/ATL SDLT tape backup

1 Compaq DLT Library 15/30 tape backup

1 Compaq DLT Library 35/70 tape backup

3 Hewlett Packard LaserJet 4MV printers

2 Hewlett Packard 1055CM color design jet plotter

1 Océ 9700 laser plotter

1 Océ 9600 laser plotter

2 Océ TDS600 laser plotter

1 Océ 9400 laser plotter

1 1.544 Kbps T-1 Internet connection full to all locations of H.F. Lenz Company

2 Hewlett Packard ScanJet 4C flat bed scanners

2 Xerox Document Centres 470ST with copy, scan, fax, and print capabilities

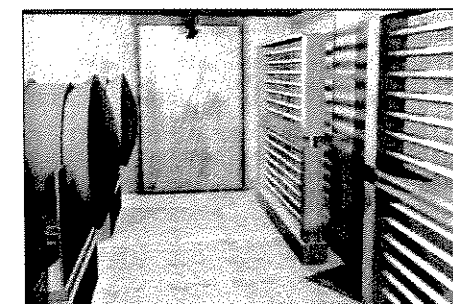
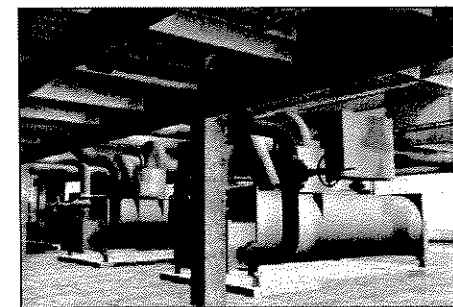
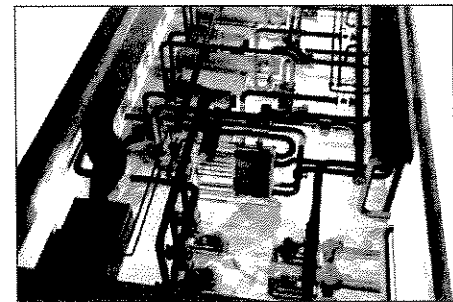
7 Xerox Document Centres 432ST with copy, scan, fax, and print capabilities

1 Océ 9700 full-scale scanner

3 Océ 9600 full-scale scanner

Software

- Windows 2000 Workstation
- Land Innovation - Site Comp 5.2
- Autodesk AEC Suites
- Microstation V8
- Autodesk 3D Studio Viz
- Autodesk Lightscape
- STAAD and STAAD Pro & RAM Structural System
- Microsoft server applications used: Exchange, SQL, ISA Server 2000 & 4.0
- OCE Reprodesk Reproduction Software
- More than 300 software applications for general office mechanical, plumbing, electrical, fire protection, civil, and structural engineering
- AUTOManager Meridian 2002 (Cyco Software)





OVERVIEW

With a professional and support staff of 34 dedicated to civil/structural engineering and surveying, the H.F. Lenz Company offers a full range of professional services to municipalities and municipal authorities. In addition to the services outlined below, municipalities can rely on us to assist them in zoning administration and code interpretation; preparing applications for Community Development Block Grants, Community Facilities Grants, and PennVest loans through the Pennsylvania Infrastructure Investment Program; and administering their liquid fuels and annual paving programs; and to prepare sanitary sewer corrective action plans. For Upper Yoder Township, we successfully obtained a PennVest loan for sanitary sewer system rehabilitation and upgrades, administered it on the Township's behalf, and provided engineering design services for the resulting construction project.

WASTEWATER TREATMENT FACILITIES

The H.F. Lenz Company has completed the evaluation and design of modifications to dozens of existing wastewater treatment facilities. This work has included the rehabilitation and upgrading of existing treatment plants, pump stations, control buildings, and associated appurtenances. Many times, the age and inherent environment in which this equipment is required to function dictates the need for rehabilitation work. In other cases, overloading conditions and/or fluctuation in flows cause problems with the treatment process.

In completing these projects, an evaluation of the existing equipment, piping, tanks, wet wells, buildings, controls, etc., is typically completed to establish the required scope of the project. Improvements to the treatment process are also evaluated for incorporation into the project. Many times, the installation of flow equalization tanks allows for the stabilization of flows to the treatment plant, resulting in the ability to minimize the size of the plant while providing for stable operating conditions.

The upgrading of older equipment, controls, flow monitors, and the plant structures themselves are typical to the projects in which we have been involved. We are experienced at specifying the repair of deteriorated structures such as concrete or steel tanks, wet wells, piping, etc., with acid- and moisture-resistant coatings.

We have also completed the design of upgrades to sewage and industrial waste pumping stations. These pump stations have ranged in size from small stations serving individual facilities to large municipal stations. This work has included total pump station rehabilitation involving such items as the replacement of pumps, motors, communitors, controls, piping, valves, etc., along with repairs to severely deteriorated concrete within the pump station wet wells.

Wastewater treatment facilities designed by the H.F. Lenz Company include small-flow residential on-lot sewage treatment and package sewage treatment plants ranging in size from 10,000 to 30,000 GPD. We have also been involved in the design of municipal wastewater treatment plants.



WASTEWATER COLLECTION AND CONVEYANCE

Our services include the design of new or replacement collection and conveyance systems as well as the investigation and evaluation of existing systems in the form of infiltration/inflow analyses, physical surveys, television monitoring, pressure testing, water testing, smoke testing, flow testing, and computerized system analyses. We have designed a number of municipal wastewater handling facilities, as well as sewerage systems to connect new residential, commercial, and governmental developments.

STORMWATER MANAGEMENT

The design of stormwater management systems must take into account contributing watershed areas and the impact on downstream facilities. Our engineers evaluate existing site hydrologic conditions and, wherever possible, attempt to enhance natural drainage patterns to support surface and ground water resources. The use of natural filtration and settling processes are maximized to decrease post-development pollutant loads. Our services include NPDES permitting, erosion and sedimentation control plans, water quantity control, stormwater retention design, municipal stormwater handling facilities, stream channel improvements, waterway openings for stream culverts and bridges, and drainage design for roadways. H.F. Lenz Company engineers are familiar with Pa DEP's MS4 program, and assist our municipal clients in the permitting process.

INFLOW AND INFILTRATION STUDIES

H.F. Lenz Company's engineers have worked with numerous municipalities and authorities in conducting sanitary sewer evaluations of their existing systems. The studies involve installation of flow meter to continuously monitor the flow in the sewer lines. From this monitoring, we can determine which areas have excessive inflow and infiltration and then performed more detailed investigations by dye and smoke testing of these areas to determine individual violation.

SURVEYING

The H.F. Lenz Company's diversified capabilities include all phases of land surveying services including boundary, topographic, and utility surveys; global positioning system surveys; subdivision design surveys; and construction surveys.



H.F. LENZ
COMPANY

Wastewater Collection and Conveyance

Edinboro University

Edinboro, Pennsylvania

Analysis of existing wastewater collection and conveyance system for a 44-building campus.

West Virginia University

Evansdale, West Virginia

Survey of an existing wastewater collection and conveyance system.

City of Johnstown

Johnstown, Pennsylvania

Monitored the cleaning, inspection, and design of the city's sanitary sewer system after the Johnstown Flood of 1977 and completed the design of repairs to portions of the system.

Middle Monongahela Industrial

Development Association, Inc.

Washington County, Pennsylvania

Site design of a 256-acre business park including 2.5 miles of roadway, stormwater management, erosion control, and site utilities

Westmoreland County Industrial

Development Corporation

Westmoreland County, Pennsylvania

Site design of a 115-acre industrial/business park including 1.0 mile of roadway, stormwater management, erosion control, and site utilities

Cambria County Industrial

Development Corporation

Cambria County, Pennsylvania

Site design of an 80-acre industrial/business park including 0.75 miles of roadway, stormwater management, erosion control, and site utilities

Main Street Sanitary Sewers

Johnstown, Pennsylvania

Design and construction inspection of 2,800 LF of sanitary sewer.

Meadowcrest Estates Subdivision

Johnstown, Pennsylvania

Wastewater collection system for new 71-acre, 145-lot residential development and connection to municipal interceptors.

Upper Yoder Township

Cambria County, Pennsylvania

Study and design of rehabilitation for entire township sanitary sewer system. Included flow monitoring, inspection, smoke testing, and closed-circuit television inspection.

Lorain Borough

Cambria County, Pennsylvania

Study and design of rehabilitation for entire borough sanitary sewer system.

Indian Village

Johnstown, Pennsylvania

Prepared construction documents, solicited price quotes, and coordinated construction associated with emergency repair situations.

Drury Lane

Johnstown, Pennsylvania

Analyzed existing pump station and force main and designed repairs and upgrades to pumps and station piping.

Fort Ritchie

Fort Ritchie, Maryland

Monitored the inspection of the facility's sanitary sewer system and prepared rehabilitation design.

Sell Street

Johnstown, Pennsylvania

Extension of existing sanitary sewer to alleviate basement flooding of three residences.

Westmont Borough

Cambria County, Pennsylvania

Detailed evaluation of the borough's storm and sanitary sewer system. Included flow monitoring, inspection, smoke testing, and closed-circuit television inspection.

Laurel Valley Golf Club

Ligonier, Pennsylvania

One-mile sanitary sewer extension with pumping station.

Letterkenny Army Depot

Chambersburg, Pennsylvania

Study and design of rehabilitation of two sanitary sewer and three industrial waste sewer pumping stations.



Woodmont and Girard Streets

Johnstown, Pennsylvania

Repairs to two lift stations including pump and control replacement and electrical upgrades.

Laurel Hill State Park

Somerset, Pennsylvania

Design of new sanitary sewer system, including lift stations.

Johnstown Wastewater Treatment Plant

Johnstown, Pennsylvania

Provided engineering services and technical support for Johnstown Industrial Pretreatment Program.

Woodmont Area

Johnstown, Pennsylvania

Rehabilitation of approximately 1,000 feet of sanitary sewer main by sliplining and installation of new PVC sewer pipe. Included Pa DEP permitting.



**Dornick Point
Wastewater Treatment Plant
Johnstown, Pennsylvania**

- Upgrade of 12 MGD sewage treatment plant to secondary treatment
- New clarifier, new oxygen reactor, new gravity thickener, and new oxygen generation building
- Replacement of all ventilating systems
- Hazardous explosion-proof construction of HVAC and electrical systems
- Chlorine sensors and alarms
- New domestic water and plumbing systems
- New power distribution and lighting systems
- New diesel emergency generator
- Construction administration services

**Clarion-Limestone School District
Clarion, Pennsylvania**

- Added a grit chamber, replace comminutor knife heads, chlorinator, and level controller to existing 30,000 GPD sewage treatment plant
- Permitting
- Construction administration services

**Conemaugh Township High School
Davidsville, Pennsylvania**

- New wastewater treatment plant facility to handle sewage from a school population of 740 students
- Flow equalization tank and flow control box
- Aeration and settling tanks
- Sand filter beds; one duty and one standby
- Chlorine contact tank
- Construction administration services

**GPU Genco
Generating Station, Unit No. 3
Homer City, Pennsylvania**

- Replacement of an existing overloaded sewage treatment plant with a new in-ground packaged sewage treatment plant consisting of two parallel 10,000 GPD extended aeration treatment plants to handle both high- and low-flow periods
- Flow equalization
- Controls and equipment building
- Perimeter fence
- Permitting

**GPU Genco
Power Generating Station
Shawville, Pennsylvania**

- Added a 10,000-gallon flow equalization tank to existing 10,000 GPD sewage treatment plant
- Permitting
- Construction administration services

**Mahoning Elementary School
New Bethlehem, Pennsylvania**

- New interceptor line
- Acid dilution basin for treating waste water
- Complete in-ground packaged sewage treatment plant
- New combination laboratory equipment and plant controls building
- Two treated sewage holding lagoons
- Spray irrigation system and spray field

**Pleasant Valley Middle School
Brodheadsville, Pennsylvania**

- New advanced wastewater treatment plant facility to handle sewage flow from a school population of 1,000
- Combination laboratory and plant controls building
- Two holding lagoons
- Sewage discharged via spray irrigation system
- New roadway
- Single perimeter fence
- Erosion and sedimentation control plan
- Construction administration services

**Redbank-Hawthorn Elementary School
New Bethlehem, Pennsylvania**

- Installed new equalization, comminutor, and pumps and controls
- Furnished and installed a new equipment building
- Provided new electrical service
- Installed new blowers, air distribution system, froth spray system, main control panel, and associated piping and wiring
- Interfaced equalization tank and existing sewage treatment plant
- Performed modified sewage treatment system startup and testing



United School District

Armagh, Pennsylvania

- Additions and improvements to an existing extended aeration sewage treatment plant serving the Junior/Senior High School and the Elementary School
- New flow equalization tank
- Replacement of microstrainer with sand filters
- Perimeter fencing
- Service road extension
- Construction administration services

Additional projects:

- Fort Necessity National Battlefield
On-lot sewage system
Farmington, Pennsylvania
- Pleasant Valley High School
Brodheads ville, Pennsylvania
- Towamensing Elementary School
Towamensing, Pennsylvania
- Indian Valley High School
Lewistown, Pennsylvania
- Palmerton School District
Palmerton, Pennsylvania
- Glendale Elementary School
Glendale, Pennsylvania
- Robertsdale Elementary School
Robertsdale, Pennsylvania
- Southern Huntingdon School District
Orbisonia, Pennsylvania



**Bedford County Business Park
Bedford, Pennsylvania**

- 143-acre site
- Soil Conservation Service National Pollutant Discharge Elimination System Permit (NPDES)
- PA DEP/U.S. Army Corps of Engineers Joint Permit Application
- PaDOT Highway Occupancy Permit
- Local and county government approvals

**Cambria County Industrial
Development Corporation
Cambria County, Pennsylvania**

- 80-acre site
- Soil Conservation Service National Pollutant Discharge Elimination System Permit (NPDES)
- PaDOT Highway Occupancy Permit
- Local and county government approvals
- PA DEP Sewage Facilities Planning Modules

**Cannondale Corporation
Bedford, Pennsylvania**

- 10.3-acre site
- PA DEP Sewage Facilities Planning Modules
- PA DEP/U.S. Army Corps of Engineers Joint Permit Application
- PaDOT Highway Occupancy Permit
- Local and county government approvals

**Food Lion - Proposed Site
Johnstown, Pennsylvania**

- PA DEP Sewage Facilities Planning Modules
- Soil Conservation Service Erosion and Sedimentation Control Plan Approval
- PaDOT Highway Occupancy Permit
- Local and county government approvals

Hampton Inn

Johnstown, Pennsylvania

- PA DEP Sewage Facilities Planning Modules
- Soil Conservation Service Erosion and Sedimentation Control Plan Approval
- Local and county government approvals

**The Home Depot
Johnstown, Pennsylvania**

- 20-acre site
- PA DEP/U.S. Army Corps of Engineers Joint Permit Application for Wetland Mitigation
- Soil Conservation Service National Pollutant Discharge Elimination System Permit (NPDES)
- PA DEP Sewage Facilities Planning Modules
- PaDOT Highway Occupancy Permit
- Local and county government approvals

**JARI Center for Business Development
Johnstown, Pennsylvania**

- PA DEP Sewage Facilities Planning Modules
- Soil Conservation Service Erosion and Sedimentation Control Plan Approval
- Local and county government approvals

**Kennametal, Inc. World Headquarters
Latrobe, Pennsylvania**

- 23-acre site
- Soil Conservation Service National Pollutant Discharge Elimination System Permit (NPDES)
- Soil Conservation Service Erosion and Sedimentation Control Plan Approval
- Local and county government approvals

**Lockheed Martin AeroParts, Inc.
Johnstown, Pennsylvania**

- 15-acre site
- PA DEP Sewage Facilities Planning Modules
- Soil Conservation Service Erosion and Sedimentation Control Plan Approval
- Local and county government approvals

**Marshall's Distribution Center Expansion
Bridgewater, Virginia**

- 27-acre site
- VA DER Erosion and Sedimentation Control Plan Approval
- Local and county government approvals



**Middle Monongahela Industrial
Development Association, Inc.
Washington County, Pennsylvania**

- 256-acre site
- Soil Conservation Service National Pollutant Discharge Elimination System Permit (NPDES)
- PA DEP Sewage Facilities Planning Modules
- Local and county government approvals

**Meadowcrest Estates Subdivision
Johnstown, Pennsylvania**

- 158-acre site
- PA DEP National Pollutant Discharge Elimination System Permit (NPDES)
- PA DEP Sewage Facilities Planning Modules
- Local and county government approvals

**Pennsylvania State University
Nittany Lion Inn Expansion
University Park, Pennsylvania**

- PA DEP Sewage Facilities Planning Modules
- Local and county government approvals

**Railroaders Memorial Museum
Altoona, Pennsylvania**

- Soil Conservation Service National Pollutant Discharge Elimination System Permit (NPDES)
- Local and county government approvals

**Social Security Administration
Wilkes-Barre, Pennsylvania**

- 75-acre site
- PA DEP Sewage Facilities Planning Modules
- Soil Conservation Service Erosion and Sedimentation Control Plan Approval
- PA DEP Earth Disturbance Permit
- Local and county government approvals

**Wal-Mart Stores, Inc.
Latrobe, Pennsylvania**

- 27.5-acre site
- PA DEP/U.S. Army Corps of Engineers Joint Permit Application for Wetland Mitigation
- Soil Conservation Service National Pollutant Discharge Elimination System Permit (NPDES)

- PA DEP Sewage Facilities Planning Modules
- PaDOT Highway Occupancy Permit
- Local and county government approvals

**Wal-Mart Stores, Inc.
DuBois, Pennsylvania**

- 21.9-acre site
- PA DEP/U.S. Army Corps of Engineers Sewage Facilities Planning Modules
- Soil Conservation Service Erosion and Sedimentation Control Plan Approval
- PaDOT Highway Occupancy Permit
- Local and county government approvals

**Wal-Mart Stores, Inc.
Grove City, Pennsylvania**

- 12.9-acre site
- Soil Conservation Service Joint Permit Application for Wetland Mitigation
- PA DEP National Pollutant Discharge Elimination System Permit (NPDES)
- PA DEP Sewage Facilities Planning Modules
- PaDOT Highway Occupancy Permit
- Local and county government approvals

**Westmoreland County Industrial
Development Corporation
Westmoreland County, Pennsylvania**

- 115-acre site
- Soil Conservation Service National Pollutant Discharge Elimination System Permit (NPDES)
- PA DEP/U.S. Army Corps of Engineers Joint Permit Application
- PA DEP Sewage Facilities Planning Modules
- Local and county government approvals

**Windber Medical Center
Windber, Pennsylvania**

- PA DEP Sewage Facilities Planning Modules
- Soil Conservation Service Erosion and Sedimentation Control Plan Approval
- PaDOT Highway Occupancy Permit
- Local and county government approvals



H.F. LENZ
COMPANY

Surveying

Bethlehem Steel Corporation
Lackawanna, New York
13" rod mill motor, gear box,
and mill stand realignment

Bethlehem Steel Corporation
Johnstown, Pennsylvania
Horizontal and vertical machinery alignment
survey and optical tooling

Lockheed Martin AeroParts, Inc.
Johnstown, Pennsylvania
Topographic and utility survey

Pennsylvania Electric Company
Corporate Headquarters
Johnstown, Pennsylvania
Conventional topographic, interior, and
utility survey

U.S. Army Corps of Engineers
Baltimore District
Fort Ritchie, Maryland
Surveying services for master planning
of site utilities

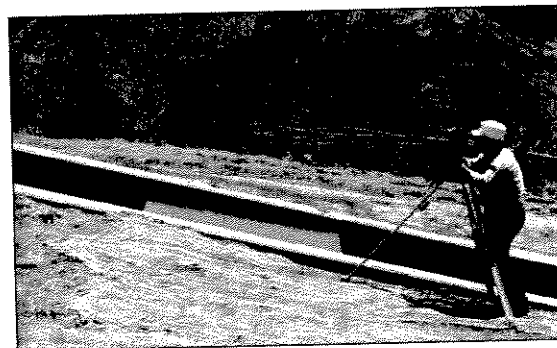
Federal Correctional Institution
Loretto, Pennsylvania
Topographic and utility surveys

Marshall's Distribution Center Expansion
Bridgewater, Virginia
Photogrammetric topographic mapping and
utility location surveys

Pennsylvania Department of
Environmental Resources
Harrisburg, Pennsylvania State-wide open-end
contract for topographic surveying services for
stream improvement projects

Pennsylvania Electric Company
New Southern Division Headquarters
Johnstown, Pennsylvania
Topographic and utility survey

Pennsylvania State Capitol Addition
Harrisburg, Pennsylvania
30-acre aerial topographic mapping and
utility survey



Presbyterian University Hospital
University of Pittsburgh
Medical Health Care Division
Pittsburgh, Pennsylvania
Aerial photography and field editing,
utility, and planimetric surveys

Social Security Administration
Data Operations Center
Wilkes-Barre, Pennsylvania
Topographic and boundary retracement surveys

University of Pittsburgh at Johnstown
Johnstown, Pennsylvania
Aerial planimetric mapping and utility
surveys of a 650-acre campus

University of Pittsburgh at Johnstown
Performing Arts Center
Johnstown, Pennsylvania
8-acre aerial topographic mapping and
utility survey

Kiewit-Eastern Company
Conemaugh Dam Hydroelectric Project
Indiana and Westmoreland Counties,
Pennsylvania
Preliminary control surveys, construction
stake-out, and site grading

Commonwealth of Pennsylvania
Department of General Services
Somerset County, Pennsylvania
Topographic survey for modifications to Laurel
Hill State Park Dam, 5,000 linear feet



Bedford County Industrial Park

Bedford, Pennsylvania

Sanitary sewer, water, natural gas, electric, telephone, fiber optic, and cable systems for a proposed 143-acre business park

Federal Correctional Institution

Loretto, Pennsylvania

Extension of water, sanitary sewer, electric, telephone, and natural gas systems

Fort Necessity National Battlefield

Farmington, Pennsylvania

Water supply and distribution; wastewater collection; fuel oil storage and piping; and electric, telephone, and security systems

Johnstown School District

Johnstown, Pennsylvania

Water, sanitary sewer, electric, telephone, and natural gas systems for a proposed elementary school

Kennametal, Inc.

Withers Cove Industrial Park

Charlotte, North Carolina

Water, sanitary sewer, electric, telephone, and natural gas systems for a six-acre site

Lockheed Martin AeroParts, Inc.

Johnstown, Pennsylvania

Sanitary sewers, water, natural gas, and electric services

Marshall's Distribution Center

Bridgewater, Virginia

Electrical distribution; security and communication systems; domestic water and fire service; and storm and sanitary sewers

Meadowcrest Estates Subdivision

Johnstown, Pennsylvania

Site utilities including water, sanitary sewer, electric, telephone, and natural gas systems for a 71-acre, 145-lot residential development

Pennsylvania Electric Company

Corporate Headquarters Complex

Johnstown, Pennsylvania

Electrical distribution; storm and sanitary sewers; domestic water and fire service; security and communication systems; and chilled and hot water distribution

Pennsylvania State University

Nittany Lion Inn

State College, Pennsylvania

Water, sanitary sewer, electric, telephone, and natural gas systems for a 135,000 sq.ft. addition

Marshall's Distribution Center

Bridgewater, Virginia

Electrical distribution; security and communication systems; domestic water and fire service; and storm and sanitary sewers

Pennsylvania State Capitol Complex

Harrisburg, Pennsylvania

Steam and chilled water distribution; new domestic water and fire service loop; electrical distribution; storm and sanitary sewers; and security and communication systems on a 30-acre site

Social Security Administration

East Mountain Business Park

Wilkes-Barre, Pennsylvania

Electric, water, and sanitary and storm sewers for a 75-acre tract

U.S. Army Reserve Aviation Facility

Johnstown, Pennsylvania

Water, sanitary sewer, electric, telephone, and natural gas systems for an 80-acre site

University of Pittsburgh at Johnstown

Johnstown, Pennsylvania

Hot and chilled water distribution; domestic water and fire service; storm and sanitary sewers; and electrical distribution on a 1,000-acre campus

Veterans Affairs Medical Center

Highland Drive Facility

Pittsburgh, Pennsylvania

New chilled water distribution, fire service lines, and fire alarm system serving a nine-building complex

Veterans Affairs Medical Center

Philadelphia, Pennsylvania

New electrical distribution, communication and security systems; steam and chilled water distribution; domestic water and fire service; natural gas; and storm and sanitary sewer



H.F. LENZ
COMPANY

School Projects Primary and Secondary

Abington School District Elementary Schools

Abington, Pennsylvania

- Copper Beach Elementary
- Highland Elementary
- Overlook Elementary

Abington High School

Abington, Pennsylvania

New sound system in auditorium

Altoona Area School District

Altoona, Pennsylvania

Boiler and underground steam line replacement

Ambridge Senior High School

Zelienople, Pennsylvania

Mechanical design of a new senior high school

Anna Jarvis Elementary School

Grafton, West Virginia

Unit ventilator replacement

Baggaley Elementary School

Latrobe, Pennsylvania

Additions and renovations

Bedford Area High School

Bedford, Pennsylvania

Renovation of a 148,000 sq.ft. facility

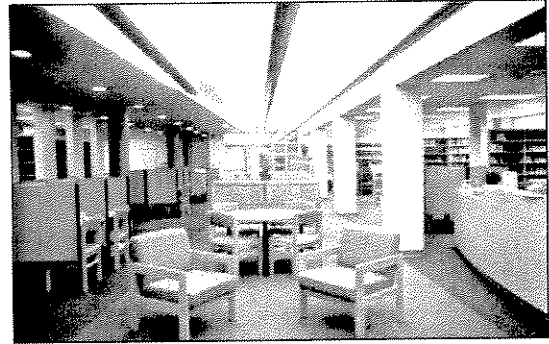
Bedford Elementary School

Bedford, Pennsylvania

New elementary school



Cambria Heights Elementary School. The H.F. Lenz Company provided engineering services for this new elementary school.



Bedford Area High School. The library, which features indirect lighting and a network computer system, was part of a 148,000 sq.ft. renovation to the historic high school building.

Bellwood-Antis High School

Bellwood, Pennsylvania

New field house

Blairsville Area School District

Blairsville, Pennsylvania

Feasibility Study

Brockway Area Elementary School

Brockway, Pennsylvania

Renovations

Brockway Area Jr./Sr. High School

Brockway, Pennsylvania

- Renovations and addition
- Multipurpose Building Additions

Cambria Heights Elementary School

Patton, Pennsylvania

New construction

Cambria Heights Middle School

Patton, Pennsylvania

New construction

Capon Bridge Elementary School

Capon Bridge, West Virginia

Addition

Carrick Jr./Sr. High School

Pittsburgh, Pennsylvania

Addition and renovation



Charlotte Lappla Elementary School
Wellsboro, Pennsylvania
Renovations and additions

New Paris Center Elementary School
New Paris, Pennsylvania
Water heater replacement

Chief Logan Middle School
Lewistown, Pennsylvania
Energy conservation study and grant application

Clarion Jr./Sr. High School
Clarion, Pennsylvania
Renovation

Clarion Limestone Jr./Sr. High School
Strattanville, Pennsylvania
Renovation and addition

Cochran Elementary School
Williamsport, Pennsylvania
Additions and renovations

Conemaugh Township High School
Davidsville, Pennsylvania
Additions and renovations

Conemaugh Valley Jr./Sr. High School
Johnstown, Pennsylvania
Technology upgrade

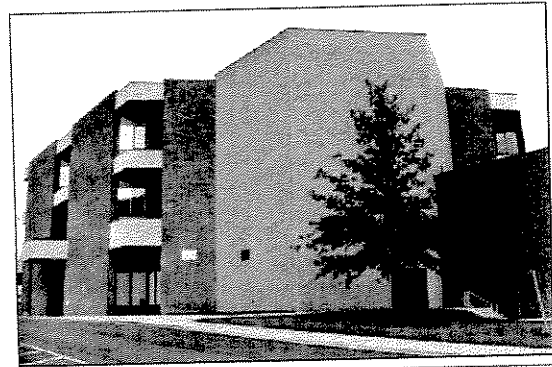
Cumberland Perry Area
Vocational Technical School
Mechanicsburg, Pennsylvania
Feasibility study

Curtain Middle School
Williamsport, Pennsylvania
Boiler replacement

East Derry Elementary School
Lewistown, Pennsylvania
Additions and renovations

East Pike Elementary School
Indiana, Pennsylvania
Renovations and Additions

East Side Elementary School
Johnstown, Pennsylvania
Alterations and additions



East Side Elementary School. The 104,000 sq.ft. renovation and addition project included new telephone and Category 5 / fiber optic data distribution systems.

Eisenhower Elementary School
Indiana, Pennsylvania
Electrical upgrade

Elk County Christian High School
Elk County, Pennsylvania
Renovations and Addition

Elm Grove Elementary School
McMurray, Pennsylvania
Modular classroom addition

Elmsport Elementary School
Elmsport, Pennsylvania
Additions and renovations

Ferndale Elementary School
Johnstown, Pennsylvania
Addition and Renovations

Ferndale High School
Johnstown, Pennsylvania

- Feasibility study
- ADA renovation
- Stormwater management - new parking facility

Forest Hills School District
Cambria County, Pennsylvania

- Elementary school quality control review
- Resident Inspection Services

Grafton High School
Grafton, West Virginia
Addition and renovations



**Greater Johnstown School District
Johnstown, Pennsylvania**

- District administrative offices
- Construction management of new high school

**Gregg Township Elementary School
Spring Mills, Pennsylvania**
Renovation and addition

**Haverford School District
Havertown, Pennsylvania**

- Feasibility study
- Auditorium renovations
- Stadium renovations
- Boiler replacement
- Structural Study

**Holidaysburg Senior High School
Holidaysburg, Pennsylvania**
Tri-fuels boiler plant and electric heat conversion

**Holidaysburg Junior High School
Holidaysburg, Pennsylvania**
Renovation

**Homer Center Elementary
Homer Center, Pennsylvania**
New elementary school

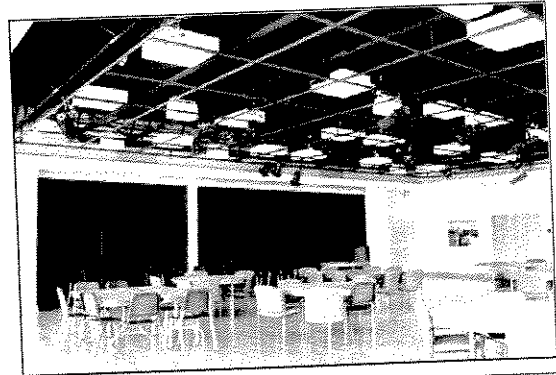
**Indian Valley High School and
Elementary School
Lewistown, Pennsylvania**
Tri-fuels boiler plant

**Indiana Area Senior High School
Indiana, Pennsylvania**
Additions and renovations

**Jersey Shore Area High School
Jersey Shore, Pennsylvania**
Feasibility study and pool upgrades

**Juniata Gap Elementary School
Altoona, Pennsylvania**
New construction

**Keith Junior High School
Horsham, Pennsylvania**
Boiler replacement



Latrobe High School. The center for student creativity houses state-of-the-art sound and lighting equipment, and light-controlled window coverings. This space was designed to also be used by the community.

**Keystone High School
Erie, Pennsylvania**
Gymnasium HVAC

**Keystone Elementary School
Erie, Pennsylvania**
Boiler

**Latrobe High School
Latrobe, Pennsylvania**
Renovations and additions

**Laurel Valley Elementary School
New Florence, Pennsylvania**
Additions and renovations

**Laurel Valley High School
New Florence, Pennsylvania**
Additions and renovations

**Lewistown Senior High School
Lewistown, Pennsylvania**
Energy conservation study and grant application

**Ligonier Valley Middle School
Ligonier, Pennsylvania**
Addition and alterations

**Lincoln Elementary School
Tyrone, Pennsylvania**
Renovation



Lower Merion School District

Ardmore, Pennsylvania

District-wide telecommunications network and school information and communication systems cabling standards

Lyter Elementary School

Montoursville, Pennsylvania

New elementary school

Maple Ridge Elementary School

Somerset, Pennsylvania

Renovations

Martinsburg Elementary School

Martinsburg, Pennsylvania

New elementary school

McMurray Elementary School

McMurray, Pennsylvania

New construction

Mellon Elementary School

Ligonier, Pennsylvania

Additions and renovations

Miles Township Elementary School

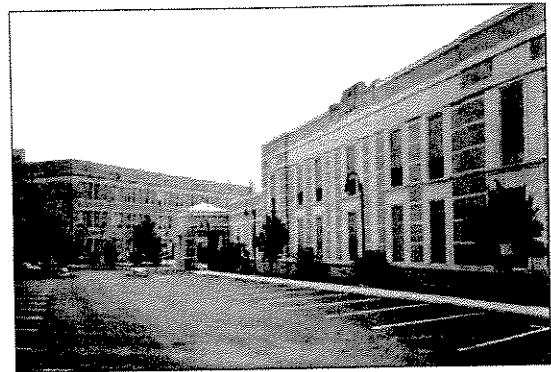
Rebersburg, Pennsylvania

Renovation and addition

Milton Area Jr./Sr. High School

Milton, Pennsylvania

Addition and renovations



Lower Merion School District. WAN and LAN telecommunications cabling and network standards were developed and implemented for 12 buildings.

Montgomery High School

Montgomery, Pennsylvania

Additions and alterations

Montoursville Area High School

Montoursville, Pennsylvania

Cafeteria addition

Morgantown High School

Morgantown, West Virginia

Addition and renovation

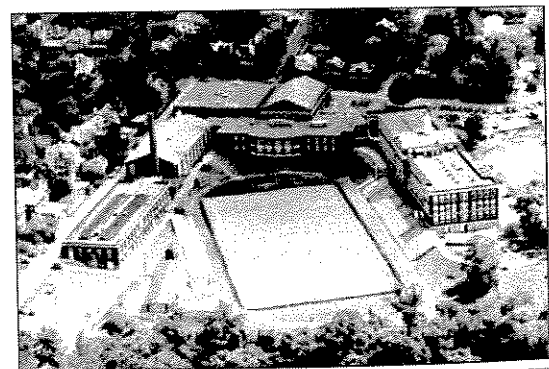
Moshannon Valley High School

Houtzdale, Pennsylvania

Renovation



Martinsburg Elementary School. Low-glare lighting and an overhead air system provides the library with a comfortable learning environment.



Morgantown High School. Mechanical/electrical design services were completed for a 125,000 sq.ft. building renovation and an 83,000 sq.ft. addition.

Mountain View Elementary School
Latrobe, Pennsylvania
Renovation and additon

Mountoursville School District
Montoursville, Pennsylvania
Security systems

New Paris / Central Elementary
Fishertown, Pennsylvania
Hot water heater replacement

Northern Bedford High School
Loysburg, Pennsylvania
Renovation

Northern Cambria School District
Northern Cambria, Pennsylvania
Computer room HVAC upgrades

North Clarion Elementary School
Tionesta, Pennsylvania
Renovation

North Clarion High School
Tionesta, Pennsylvania
High school air conditioning

North Pocono School District
Moscow, Pennsylvania
Feasibility study

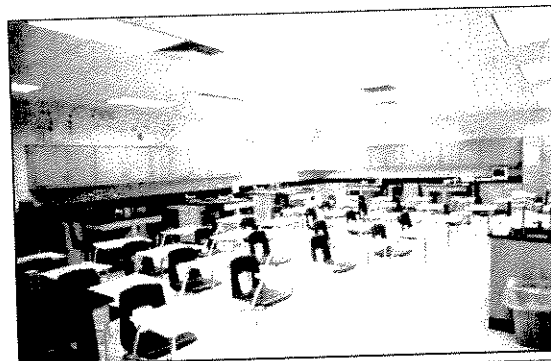
North Star Central Elementary
Boswell, Pennsylvania
Addition and renovations

North Star Middle School
Boswell, Pennsylvania
Additions and renovations

Osceola Mills Elementary School
Osceola Mills, Pennsylvania
Renovation

Palmerton High School
Palmerton, Pennsylvania
Addition and renovations

Peters Township High School
McMurray, Pennsylvania
Stadium rehabilitation



Penn Cambria High School. Science tables around the perimeter with traditional desks in the center, provide a flexible lab and teaching space in the science room.

Penn Cambria High School
Cresson, Pennsylvania
Renovation and addition

Penn Cambria Middle School
Gallitzen, Pennsylvania
Renovation

Penn Cambria Intermediate School
Patten, Pennsylvania
Renovations

Penns Valley Area School District
Spring Mills, Pennsylvania
Sewage treatment plant

Penns Valley Area Jr./Sr. High School
Spring Mills, Pennsylvania
Renovation and addition

Philipsburg-Osceola Elementary School
Philipsburg, Pennsylvania
Modular classroom

Philipsburg-Osceola High School
Philipsburg, Pennsylvania
Additions and alterations

Pleasant Valley Elementary School
Brodheadsville, Pennsylvania
Renovation

Pleasant Valley Middle School
Brodheadsville, Pennsylvania
New school and new sewage treatment plant



Punxsutawney Middle School
Punxsutawney, Pennsylvania
Renovations

Queen of the World Elementary School
St. Marys, Pennsylvania
Renovations and Addition

Redbank Valley High School
New Bethlehem, Pennsylvania
Addition

Richland High School
Johnstown, Pennsylvania
Technology upgrade

Richland Area School District
Johnstown, Pennsylvania
HVAC roof units

Richland Middle School
Johnstown, Pennsylvania
Renovations

Ridgedale Elementary School
Ridgedale, West Virginia
New elementary school and addition

Riverview School District
Oakmont, Pennsylvania
Feasibility study

Roaring Spring Elementary School
Roaring Spring, Pennsylvania
Swimming pool alterations

Rock Butler Middle School
Wellsboro, Pennsylvania
HVAC upgrades

Roosevelt Middle School
Morrisville, Pennsylvania
Additions and renovations

Saint George Elementary School
Erie, Pennsylvania
Additions

Salladasburg Elementary School
Salladasburg, Pennsylvania
Additions and renovations

School District of Haverford Township
Havertown, Pennsylvania
Feasibility study

School District of Philadelphia
J. Hampton Moore Elementary School
Philadelphia, Pennsylvania
HVAC system design

Slanesville Elementary School
Slanesville, Pennsylvania
Addition

Somerset Elementary School
Somerset, Pennsylvania
New construction

Southern Huntingdon School District
Huntingdon, Pennsylvania
Feasibility study

South Jefferson High School
Charlestown, West Virginia
HVAC, Plumbing and Electrical design services
for the new 1500 student high school

Sto-Rox School District
McKees Rocks, Pennsylvania
Feasibility study

Taylor County Vo-Tech
Grafton, West Virginia
Rooftop replacement

Titusville Area Schools
Titusville, Pennsylvania
Structural design, new construction

Troy Area School District
Troy, Pennsylvania
Feasibility study

Turkeyfoot Valley School District
Confluence, Pennsylvania
Jr./Sr. high school boiler replacement

Tussey Mountain School District
Saxton, Pennsylvania

- Field lighting
- Feasibility study



Tuscarora School District
Tuscarora, Pennsylvania
Feasibility study

Tyrone High School
Tyrone, Pennsylvania
Boiler repairs

United Jr./Sr. High School
Armagh, Pennsylvania
Alterations and additions

United School District
Armagh, Pennsylvania
Sewage treatment renovations

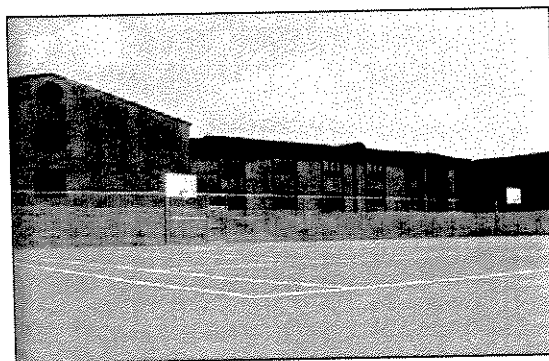
University Park Elementary School
Johnstown, Pennsylvania
Renovations and addition

Warren County School District
Warren County, Pennsylvania
Security camera

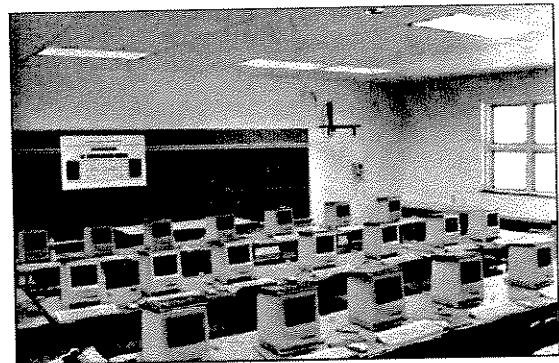
Waynesboro Area Middle School
Waynesboro, Pennsylvania
Electric service for modular classrooms

Warren County School District
Warren, Pennsylvania

- Boiler replacement at four schools
- Fire alarm system replacement
- Security camera system at 12 schools
- Gymnasium ventilation study



Windber Elementary School. The well field for the school's geothermal heat pump system is concealed beneath the tennis courts and parking area.



University Park Elementary School. Fiber optic and Category 5 data cabling were designed for the computer network system serving all classrooms.

- Stage dimming panel replacement
- Library air conditioning
- Air conditioning study
- Air conditioning replacement

Weller Field Concession Building
Ligonier, Pennsylvania
Additions and renovation

Wellsboro Area School District
Wellsboro, Pennsylvania
Feasibility Study and technology upgrade

Westmont Hilltop High School
Johnstown, Pennsylvania
Renovations and addition

Williamsport Area High School
Williamsport, Pennsylvania
Maintenance storage garage, vocational technical addition, and auditorium renovation

Windber Elementary School
Windber, Pennsylvania
New construction

Windber Area High School and Middle School
Windber, Pennsylvania
Addition and Renovations



H.F. LENZ
COMPANY

John R. Boderocco, P.E.
Principal-in-Charge and Sanitary Engineer

Mr. Boderocco is responsible for the evaluation and design of sewage treatment plants, industrial facilities, college and university facilities, laboratories, schools, hospitals, office buildings, and utility systems for private, public, and governmental agencies. His projects have involved mechanical/electrical systems design, HVAC and electrical systems retrofit, building energy conservation, institutional heating plant designs, and civil and municipal engineering.

As Principal-in-Charge, he is responsible for client contact; contract development and negotiation; establishing the project scope, timetable, and overall system concepts; preparing reports and cost estimates; monitoring design to ensure quality and coordination; permit preparation and acquisition, construction management; and other project management functions. His projects include:

Conemaugh Township High School
Davidsville, Pennsylvania
Mechanical, electrical, and civil design of secondary sewage treatment plant including sewage lift stations, forced mains, and gravity discharge lines

Mahoning Elementary School
New Bethlehem, Pennsylvania
Sewage treatment plant renovation

United School District
Armagh, Pennsylvania
Mechanical, electrical, and civil design for sewage treatment plant upgrade meeting tertiary treatment standards

Pleasant Valley Middle School
Brodheadsville, Pennsylvania
Tertiary treatment sewage treatment plant including gravity sewer collection system, storage of treated effluent, and spray irrigation systems

Redbank-Hawthorn Elementary School
New Bethlehem, Pennsylvania
Sewage treatment plant renovation

Pleasant Valley High School
Brodheadsville, Pennsylvania
Tertiary treatment sewage treatment plant including gravity sewer collection system, storage of treated effluent, and spray irrigation systems

Dornick Point Sewage Treatment Plant
Johnstown, Pennsylvania
Mechanical, electrical, and non-process piping for 12 MGD sewage treatment plant

Kennametal, Inc.
Solon, Ohio
Environmental analysis of waste oil system

GPU Genco
Homer City Generating Station, Unit 3
Homer City, Pennsylvania
Replacement sewage treatment plant

Education

Bachelor of Science, Environmental Engineering, 1978, Pennsylvania State University

Experience

H.F. Lenz Company 1978 - Present
Pennsylvania State University 1978

Professional Registration / Certification

Licensed Professional Engineer in Pennsylvania

Professional Affiliations

National Society of Professional Engineers • Pennsylvania Society of Professional Engineers • American Hospital Association • American Society of Heating, Refrigeration and Air-Conditioning Engineers • American Water Works Association • International Society for Pharmaceutical Engineering



H.F. LENZ
COMPANY

Alex D. Lapinsky, P.E.
Civil Engineer

Mr. Lapinsky's responsibilities include initial planning through final design, supervision of design teams, contract management during construction, and final inspection of completed projects. He has been responsible for sanitary sewer investigations, the design of sewage treatment plants, and site development. He is well-versed in site utilities, site access, grading and drainage, and other site evaluation factors including zoning requirements and permitting. He is also experienced in the structural design of buildings, foundations, bridges, and highways. Throughout construction of projects, he has made inspections and tests to confirm suitability of materials and has been responsible for shop drawing reviews, maintaining documentation of construction progress, periodic estimates, and final inspection and payment. His projects include:

Clarion Limestone School District
Clarion, Pennsylvania
Sewage treatment plant expansion and renovation

Conemaugh Township High School
Davidsville, Pennsylvania
Sewage treatment plant

Redbank-Hawthorne Elementary School
New Bethlehem, Pennsylvania
Sewage treatment plant expansion and renovation

United School District
Armagh, Pennsylvania
Sewage treatment plant renovations

Woodmont, Upper Yoder Township
Cambria County, Pennsylvania
Study and design of rehabilitation of two sanitary sewer and three industrial waste sewer pumping stations

Richland Township
Johnstown, Pennsylvania
Stormwater management reviews for development projects

GPU Genco
Homer City Generating Station
Homer City, Pennsylvania
– Unit #3 sewage facility replacement
– Access to desilting ponds

Meadowcrest Estates Subdivision
Johnstown, Pennsylvania
Site planning and development including waste water collection system for a new 71-acre, 145-lot residential development

Lorain Borough
Cambria County, Pennsylvania
Study and design of rehabilitation for entire borough sanitary sewer system

Westmont Borough
Johnstown, Pennsylvania
Sanitary sewer investigation

Pennsylvania State Capitol Complex
Harrisburg, Pennsylvania
Monitored the inspection of the complex-wide sanitary and storm sewer system and designed repairs and relocation of portions of the system

Education

Bachelor of Science, Civil Engineering Technology 1978, University of Pittsburgh at Johnstown

Experience

H.F. Lenz Company 1978 - Present

Professional Registration / Certification

Licensed Professional Engineer in Pennsylvania



H.F. LENZ
COMPANY

William P. Stampilis, P.E.
Structural Engineer

Mr. Stampilis is responsible for the design and supervision of engineering projects involving structural steel, reinforced concrete, timber frame design, highway and bridge design, site planning, parking facilities, and fuel storage and dispensing systems. He is responsible for field investigation, the preparation of conceptual engineering reports, and the preparation and coordination of drawings, specifications, and cost estimates. He has been involved in the following projects:

Warren County School District
Warren, Pennsylvania
Sewage treatment plant upgrade study

Southern Huntindon Jr/Sr High School
Sewage treatment plant repairs including:
– *Rehabilitation of the concrete tank structure*
– *Replacement of various plant components*

Southern Huntindon School District
Three Springs, Pennsylvania
Sewage treatment plant lift station

Conemaugh Township High School
Davidsville, Pennsylvania
DEP permit for sewage treatment plant

Cumberland Perry Vo-Tech
Mechanicsburg, Pennsylvania
Structural design of building addition and modifications to the existing structure

Carnegie Mellon University
Pittsburgh, Pennsylvania
Campus redundant steam service utility tunnel construction

Richland Middle School
Johnstown, Pennsylvania
Analysis and monitoring of masonry walls

Federal Correctional Institute
Loretto, Pennsylvania
Structural design for a new construction and upgrade of masonry structures

U.S. Federal Courts
Johnstown, Pennsylvania
Structural design of floor supports for new shaft

Indiana Regional Medical Center
Women's Health Center
Indiana, Pennsylvania
New two story addition

North American Hoganas
Hollsopple, Pennsylvania
– *Two story office building addition*
– *Crane runway study*
– *Electrical equipment building*
– *Electric furnace transformer building*
– *Hot metal crane catwalk*
– *Shipping office building*
– *Guardhouse building*

Education

Civil Engineering Technology, University of Pittsburgh at Johnstown
Associate Degree, Drafting and Design 1972, Electronics Institute of Pittsburgh

Experience

H.F. Lenz Company 1983 - Present
Hinks & Locher 1982 - 1983
H.F. Lenz Company 1979 - 1982
L. Robert Kimball 1974 - 1979
Peter F. Loftus Corporation 1973 - 1974
Michael Baker, Jr. 1972 - 1973

Professional Registration / Certification

Licensed Professional Engineer in Pennsylvania

Professional Affiliation

American Concrete Institute



Mr. Facciani is responsible for the overall operation of the H.F. Lenz Company Survey Division. Managerial duties include preparing survey cost estimates, preparing technical and cost proposals, attending pre-bid conferences, and contract negotiations. He supervises a staff of survey crews, engineering technicians, and draftspersons. He prepares work orders and schedules and instructs field crews on the scope of work for all survey projects. He provides technical instruction to office personnel for mathematical tasks, drafting, and plan or report presentations.

Mr. Facciani has extensive experience in the following types of surveys: control surveys for photogrammetric mapping projects; construction surveys for roads, utility lines, small commercial sites and shopping malls; site development surveys for lot subdivisions; and all types of private boundary surveys. He has performed innumerable private surveys ranging in size from single lots to acreage (farms and timberland). Mr. Facciani is experienced in writing legal descriptions and has been called upon as an expert witness at trial. A representative sample of his projects includes:

Zamias Retail Site
Ebensburg, Pennsylvania
Topographic and boundary survey of 30-acre proposed retail development

Elsie Heard McAdoo
St. Clair Township, Westmoreland County
300 Acre Boundary Retracement Survey

Conemaugh Township
Somerset County, Pennsylvania
Topographical and control surveys needed for the design of a sanitary sewer line serving Jerome and surrounding areas; total length of approximately three miles

Graystone Estates Subdivision
Westmont Borough
Cambria County, Pennsylvania
Boundary survey and subdivision for a 1,000 ft. sewer line extension including field surveying for design, easement descriptions, and stakeout for construction

Cambria County Industrial Development Authority
Cambria Township, Pennsylvania
Aerial mapping and subdivision of 227-acre industrial park

Education

Associate degree, Forest Technology 1973, Pennsylvania State University

Experience

H.F. Lenz Company 1996 - Present
Hinks & Locher Engineers, Inc. 1974-1996

Professional Certification

Registered Professional Land Surveyor in Pennsylvania - 1983

Professional Affiliations

Pennsylvania Society of Land Surveyors (PSLS) • Secretary - Allegheny Heartlands Chapter

Whispering Pines Subdivision
Upper Yoder Township
Cambria County, Pennsylvania
600 ft. sewer line extension including field surveying for design, easement descriptions, and stakeout for construction

Hunters Ridge Subdivision
Richland Township
Cambria County, Pennsylvania
4,000 ft. sewer line extension including field surveying for design, easement descriptions, and stakeout for construction

West Hills Subdivision
Westmont Borough
Cambria County, Pennsylvania
Boundary survey and subdivision for a 2,000 ft. sewer line extension including field surveying for design, easement descriptions, and stakeout for construction

West Taylor Township
Cambria County, Pennsylvania
5,000 ft. sewer line extension including field surveying for design, easement descriptions, and stakeout for construction



H.F. LENZ
COMPANY

George A. McMillan IV, P.E.

Electrical Engineer and Construction-Phase Representative

Mr. McMillan is experienced in the design of power distribution systems, control systems, uninterruptible power supplies, lighting and emergency lighting systems, fire alarm systems, security, sound, and telephone systems. He is responsible for coordination with the client, the architect, regulatory agencies, and the engineering staff; project scheduling; and other project management functions. His project experience includes:

Warren County School District
Warren, Pennsylvania

- Boiler replacement at four schools
- Fire Alarm System replacement at Warren Area High School (130,000 square feet).
- Fire Alarm system replacement at Beaty Jr/Sr High School (95,000 square feet).
- Stage Lighting Panel Replacement at four schools
- Security camera system at 12 schools
- Gymnasium ventilation study
- Stage dimming panel replacement
- Library air conditioning
- Air conditioning study
- Air conditioning replacement

Windber Elementary School
Windber, Pennsylvania

Complete electrical and telecommunications design for the new 96,500 sq. ft. facility including all lighting, power, fire alarm, data, telephone, emergency power, and miscellaneous signaling systems for the facility

Clarion-Limestone High School
Strattanville, PA

Complete electrical and telecommunications design for the existing 130,000 sq. ft. facility including all lighting, power, fire alarm, data, telephone, emergency power, and miscellaneous signaling systems for the facility

East Side Elementary School
Johnstown, PA

Complete electrical and telecommunications design for the existing 104,000 sq. ft. facility including all lighting, power, fire alarm, data, telephone, emergency power, and miscellaneous signaling systems for the facility

Milton Area Middle and High School
Milton, Pennsylvania

Complete electrical and telecommunications design for the existing 295,000 sq. ft. facility including all lighting, power, fire alarm, data, telephone, emergency power, and miscellaneous signaling systems for the facility

Homer Center Elementary School
Indiana, Pennsylvania

Complete electrical and telecommunications design for the existing 96,500 sq. ft. facility including all lighting, power, fire alarm, data, telephone, emergency power, and miscellaneous signaling systems for the facility

Miles Township Elementary School
Rebersburg, Pennsylvania
Complete electrical design

Gregg Township Elementary School
Spring Mills, Pennsylvania
Complete electrical design

Education

Graduate Studies in Engineering Management, 1999-2003
Kennedy Western University

Bachelor of Science, Electrical Engineering Technology, 1996
University of Pittsburgh at Johnstown

Experience

H.F. Lenz Company 1994 - Present
Dynamic Design Engineering 1990 - 1994

Professional Certification

Licensed Professional Engineer in Pennsylvania and Ohio

Professional Affiliations

National Society of Professional Engineers and Pennsylvania Society of Professional Engineers



H.F. LENZ
COMPANY

John M. Dombrowski, P.E.

Project Manager, Mechanical Engineer and LEED™ Accredited Professional

Mr. Dombrowski manages the H.F. Lenz Company's Erie, Pennsylvania office. As Project Engineer/Project Manager, Mr. Dombrowski is responsible for the engineering design of all trades, the supervision of senior designers, the preparation of reports to determine optimal systems and/or equipment selections, and the coordination and checking of contract documents for completeness and quality. He is responsible for the coordination with the client, the architect, regulatory agencies, and the engineering staff; project scheduling; and other project management functions. Mr. Dombrowski is experienced in the design of heating, ventilating, and air conditioning, plumbing, fire protection, electrical and control systems for new construction and retrofit projects. He has served as Project Engineer or Project Manager on the following projects:

Warren County School District
Warren, Pennsylvania

- Boiler replacement at four schools
- Fire alarm system replacement
- Security camera system at 12 schools
- Gymnasium ventilation study
- Stage dimming panel replacement
- Library air conditioning
- Air conditioning study
- Air conditioning replacement

Conneaut Lake School District
Alice Shafer Elementary:

- HVAC design for a 8,000 sq.ft. classroom addition
- HVAC renovation for administration area

Sadsbury Elementary:

- HVAC design for a 19,500 sq.ft. classroom addition

- HVAC renovations to existing school

Conneaut High School:

- HVAC design for a 31,500 sq.ft. Gymnasium, Locker, and Administration addition
- HVAC renovations to 15,000 sq.ft. of existing space including classrooms, old gymnasium, kitchen, cafeteria, and media room

Cambria Heights Elementary School
Cresson, Pennsylvania

- New construction
- Geothermal heat pump feasibility study and design

Central High School
Martinsburg, Pennsylvania
Addition and renovations

S.S. Palmer Elementary School
Palmerton, Pennsylvania
Addition and renovations

Saint George Elementary School
Erie, Pennsylvania
Addition and renovations

East Freedom Elementary School
East Freedom, Pennsylvania
Addition and renovations

Mercyhurst Preparatory School
Erie, Pennsylvania
HVAC system replacement

Education

Bachelor of Architectural Engineering, 1982, Pennsylvania State University

Experience

H.F. Lenz Company 1982 - Present

Professional Certification

Licensed Professional Engineer in PA, OH, NY, IL, and WV • Certified LEED™ Professional

Professional Affiliations

National Society of Professional Engineers • American Society of Hospital Engineering (President of Hospital Engineers of Northwest PA division) • Pennsylvania Society of Professional Engineers • Member of The American Institute of Architects' Guidelines Revision Task Force assisting in the revision of "Guidelines for Construction and Equipment of Hospital and Medical Facilities," 1996-1997, 2000-2001 and 2006 editions.

Awards

1995-1996 ASHE National Vista Award Honorable Mention for Projects Over \$3 million.