

project type

New Academic Building

project name

Lancaster Central Elementary

location

Bluffton, Indiana



client

Northern Wells Community School Board

scope

PEDCO was selected to design a new elementary school building for Northern Wells Community School Board. This is a 130,000 square foot school that has three classroom 'pods', each of which contains a computer classroom, special needs areas, and restrooms. A central core houses a media library, art labs, staff lounge, multipurpose areas, and administrative spaces. Another pod contains a cafeteria, gymnasium, and kitchen.

A geothermal system was designed in a central location to accommodate maintenance and contains 54 horizontal underground heat pump loops, each of which are 500 feet long, to transfer heat to/from the surrounding earth. Outside air for the school is pretreated with energy recovery heat wheels, reducing the facility's energy consumption and eliminating the need for hot water boilers. The building envelope was super-insulated to achieve heat loss/gain low enough to make the geothermal system a smart, cost-saving solution.

services provided

Mechanical, Electrical, Plumbing, Construction Administration