Project Profile:

Solar Facility Design

Owner: Confidential Client
Location: Hillsboro, Oregon

Evergreen Engineering provided engineering and design services to establish operations within a Crystal Growing facility (formerly utilized as a semiconductor grade silicon manufacturing operation). This project was completed within three phases, including installation of various growing furnaces and expansion of cropping.

Evergreen Engineering provided the following services:

- Preliminary Engineering
- Scope Development
- Detailed Design
- Construction Estimates
- General Contracting Services
- Startup/System Commissioning

Specific tasks included:

- Architectural Design
  - New Door Opening from Growing Floor to Maintenance Shop
  - New Door Opening Between Slice and Final Clean and Package
  - Remote Break Rooms and Lunch Room (level 2)
  - New Restroom Facilities
- Structural Design
  - Structural Framing and Floor Modifications around growing furnaces (level 1)
  - Furnace pedestal installations
  - Reinforcement of grating over GCW Trench
  - Dumbwaiter Framing
  - Equipment Seismic Anchorage
- Process Design
  - Process Raw Material
  - Finished Product Handling System Support
  - Slurry Supply
  - Waste Systems Assistance
  - Process Utility Design and Planning
- Mechanical Design
  - Design and Planning for grower cooling water, exhaust, compressed air, house vacuum, and associated piping, ducting, and tool hook-up
- Electrical Design
  - Design and layout for expansion of growing furnaces and other process tools
  - Electrical Design and Layout for utilities and facilities systems
  - Other Associated Controls
- Sustainable Design
  - LEED accredited professionals
  - Environmental-friendly solutions
  - Storm Water Management
  - Solar Strategies
  - Energy Efficiency
  - Rainwater Harvesting

Evergreen Engineering Performance

Our reputation of listening to a client's needs was truly illustrated with this project. Our client commends our professionalism and timely project delivery.