PROPOSED DESIGN CONCEPT – Site Plan

WETHERSFIELD HIGH SCHOOL - Additions and Renovations – “As New”
PROPOSED DESIGN CONCEPT - Building Plan - Level 100 / 200

KEY PROGRAM ELEMENTS
FLOOR LEVEL - 100

BUILDING ADDITIONS
- Music
- Media Center
- Gymnasium

MUSIC
- Electronic Music
- Recording Studio

ART & TECHNOLOGY
- Shared Graphics Lab
- Shared Lecture Space & Gallery

PHYSICAL EDUCATION
- Accessibility to all Site Facilities
- Title IX – Impacts Locker & Team Rooms

SPECIAL EDUCATION
- Address Program Deficiencies
- ADA / OCR

BUSINESS
- Multi Purpose Spaces
- Technology in All Classrooms

ADMINISTRATION
- Guidance & Admin Offices

WETHERSFIELD HIGH SCHOOL - Additions and Renovations - “As New”
WETHERSFIELD HIGH SCHOOL - Additions and Renovations – “As New”
PROPOSED DESIGN CONCEPT – Gymnasium

WETHERSFIELD HIGH SCHOOL - Additions and Renovations – “As New”
KEY PROGRAM ELEMENTS

AUDITORIUM
- Mezzanine
- Stage Depth
- Green Room (Shared Space)
- Seating Capacity 825 - 850

SP. EDUCATION & BUSINESS

WETHERSFIELD HIGH SCHOOL - Additions and Renovations - “As New”
PROPOSED DESIGN CONCEPT - Community Lobby
PROPOSED DESIGN CONCEPT – Auditorium view from Stage

WETHERSFIELD HIGH SCHOOL - Additions and Renovations – “As New”
PROPOSED DESIGN CONCEPT - Building Plan

KEY PROGRAM ELEMENTS

ART COURTYARD AND STUDENT ACCESS
- Separation of Vehicular Traffic
- New Service & Loading Dock
- Safe Access
- ADA / OCR
- Integration & Sharing of Classrooms

WETHERSFIELD HIGH SCHOOL - Additions and Renovations - “As New”
PROPOSED DESIGN CONCEPT – Student Entrance & Art Courtyard

WETHERSFIELD HIGH SCHOOL - Additions and Renovations – “As New”
PROPOSED DESIGN CONCEPT - Building Plan - Level 100 thru 500

KEY PROGRAM ELEMENTS
CIRCULATION
- Natural Light
- Student Friendly Space
- Clear Simple Circulation
- Security & Administrative Presence

WETHERSFIELD HIGH SCHOOL - Additions and Renovations - “As New”
PROPOSED DESIGN CONCEPT – Central Stair view from Cafeteria

WETHERSFIELD HIGH SCHOOL - Additions and Renovations – “As New”
PROPOSED DESIGN CONCEPT - Building Plan - Level 300 Classrooms

WETHERSFIELD HIGH SCHOOL - Additions and Renovations - “As New”
PROPOSED DESIGN CONCEPT - Building Plan - Level 400 Science

GREEN ROOF

PHOTOVOLTAIC ARRAY

KEY PROGRAM ELEMENTS

SCIENCE
- Clab-Rooms
- Shared Storage & Prep Rooms
- Greenhouse - gh
- Green Roof
- Access to Sustainable Systems

WETHERSFIELD HIGH SCHOOL - Additions and Renovations - “As New”
PROPOSED DESIGN CONCEPT – Science Clabroom Images

WETHERSFIELD HIGH SCHOOL - Additions and Renovations – “As New”
PROPOSED DESIGN CONCEPT - Building Infrastructure & Systems

KEY PROGRAM ELEMENTS

BASEMENT & LOWER LEVELS

- MPE & FP Systems
  - New Boiler Plant
  - New Emergency Generator
  - Additional Storage
  - New Building Infrastructure

- ENERGY CONSERVATION
  - High Efficiency Boilers
  - Co-Generation
  - Building Envelope - Insulation
  - New Windows & Doors

Building Envelope and Energy Efficient Infrastructure...85%
Alternative Energy..........................................................15%

WETHERSFIELD HIGH SCHOOL - Additions and Renovations - “As New”
PROPOSED DESIGN CONCEPT – Building Energy Systems

Building Envelope and Energy Efficient Infrastructure......85% - Approximately
Alternative Energy .................................................................................15% - Approximately

OPTIONS EVALUATED 2008 – PRESENT

**Geothermal** technology (sometimes called ground source heating and cooling or geoexchange) is a simple, well proven, reliable and safe technology that uses the earth's renewable energy to provide high-efficiency heating and cooling. In winter, the system draws heat from the ground and transfers it to your home. In summer, it extracts heat from your home and transfers it to the ground. Hardware consists only of a heat pump connected to a water source such as a well or a series of small-diameter pipes buried underground. Well water or a water-based solution circulating through the pipes carries heat between the ground and the heat pump. The network of pipes can be hidden under your lawn, a garden, even your driveway.

**Co-Generation** - **Gas engine** CHP plants use a reciprocating gas engine which is generally more competitive than a gas turbine up to about 5 MW. The gaseous fuel used is normally natural gas. These plants are generally manufactured as fully packaged units that can be installed within a plantroom or external plant compound with simple connections to the site's gas supply and electrical distribution and heating systems.

A **fuel cell** is an electrochemical device that combines hydrogen fuel and oxygen from the air to produce electricity, and useable heat and water. Fuel cells produce Direct Current (DC) electricity without the conventional combustion reaction. Carbonate fuel cell power plants can utilize many fuel sources, including: Natural gas - Industrial and municipal wastewater treatment gas - Propane - Coal gas

**Photovoltaics (PV)** is a method of generating electrical power by converting solar radiation into direct current electricity using semiconductors that exhibit the photovoltaic effect. Photovoltaic power generation employs solar panels composed of a number of solar cells containing a photovoltaic material. Materials presently used for photovoltaics include monocrystalline silicon, polycrystalline silicon, amorphous silicon, cadmium telluride, and copper indium gallium selenide/sulfide.

WETHERSFIELD HIGH SCHOOL - Additions and Renovations – “As New”
PROPOSED DESIGN CONCEPT – Construction Phase One

WETHERSFIELD HIGH SCHOOL - Additions and Renovations – “As New”

PHASE ONE
July 2013 - August 2014
Site
- North Parking
Building
- New Gymnasium
- Strength Training
- Boys & Girls Locker Rooms
- Team Rooms / Storage / Lobby
- New Entrance Canopy
- New Media Center
- New Band Room & Storage
- Boiler Plant
PROPOSED DESIGN CONCEPT - Construction Phase Two

PHASE TWO
June 2014 - August 2014
Site
- South Parking
Building
- Chemistry Labs - 500 Level
- Gym Lobby & Offices
- Chorus Rehearsal Room
- FCS & Health
- Classrooms / Swing Space - 300 Level
- Classrooms - 100 Level
- Technology Education
- Boiler Plant

WETHERSFIELD HIGH SCHOOL - Additions and Renovations - “As New”
PROPOSED DESIGN CONCEPT  - Construction Phase Two

PHASE THREE
September 2014 - December 2014

Building
- Main Entry Canopy – 200 Level
- Science Labs – Level 400
- Classrooms – Level 400

PHASE FOUR
January 2015 - May 2015

Building
- Auditorium – 100 Level

PHASE FOUR
January 2015 - May 2015

Building
- Auditorium – Mezzanine

PHASE FOUR
January 2015 - May 2015

Building
- Auditorium – 100 Level
- Classrooms – 300 Level

WETHERSFIELD HIGH SCHOOL - Additions and Renovations – “As New”