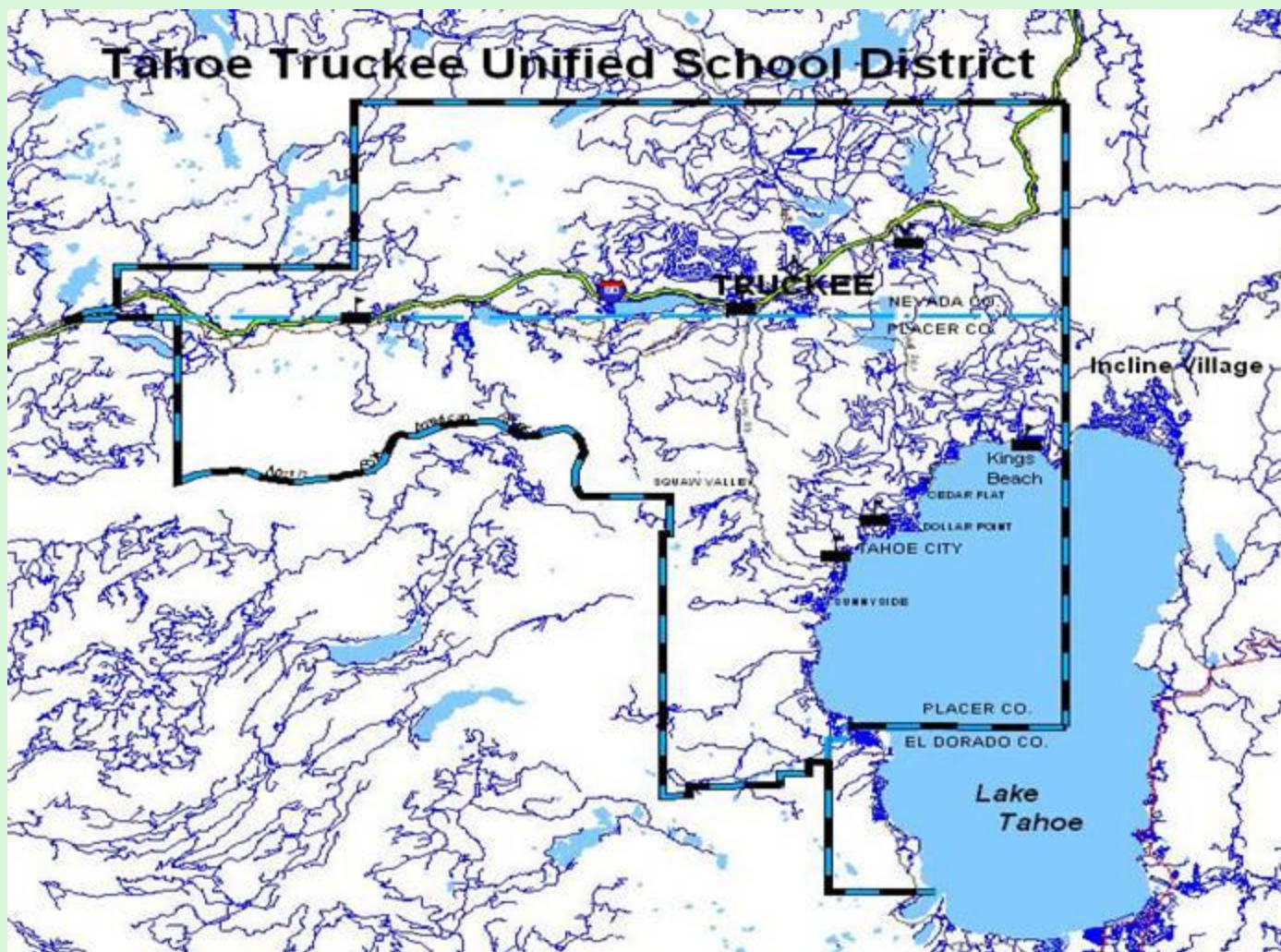


District Map



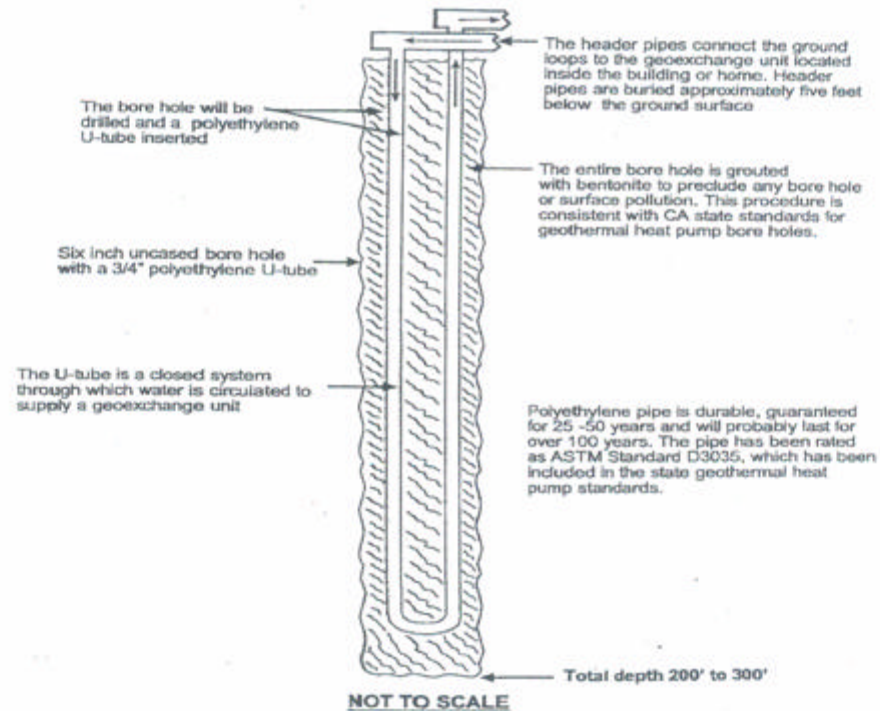
Advantages of a Ground Source System

- Heating and Cooling in One System
- Energy Efficient
- Low Maintenance
- Environmentally Friendly.

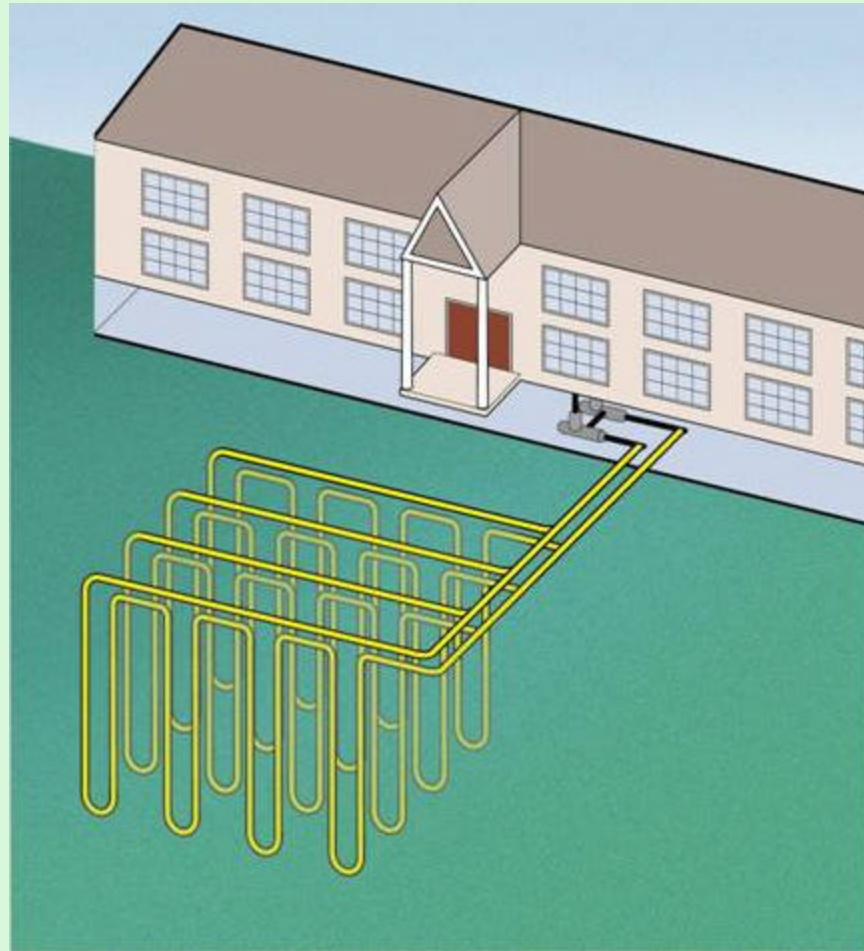




SAMPLE OF A STANDARD GEOEXCHANGE BORE HOLE



Vertical Well Field



Source: GHPC

Ground Source Efficiency

<i>4 Pipe Boiler Chiller (90% efficient boiler)</i>		<i>Ground Source System</i>	
BTU Input (Combustion of natural gas)	60,000	BTU Input (Electrical Power to operate heat pump)	13,600
BTU Output (Heat into classroom)	54,000	BTU Output (Heat into classroom)	54,000

Bright Schools Program

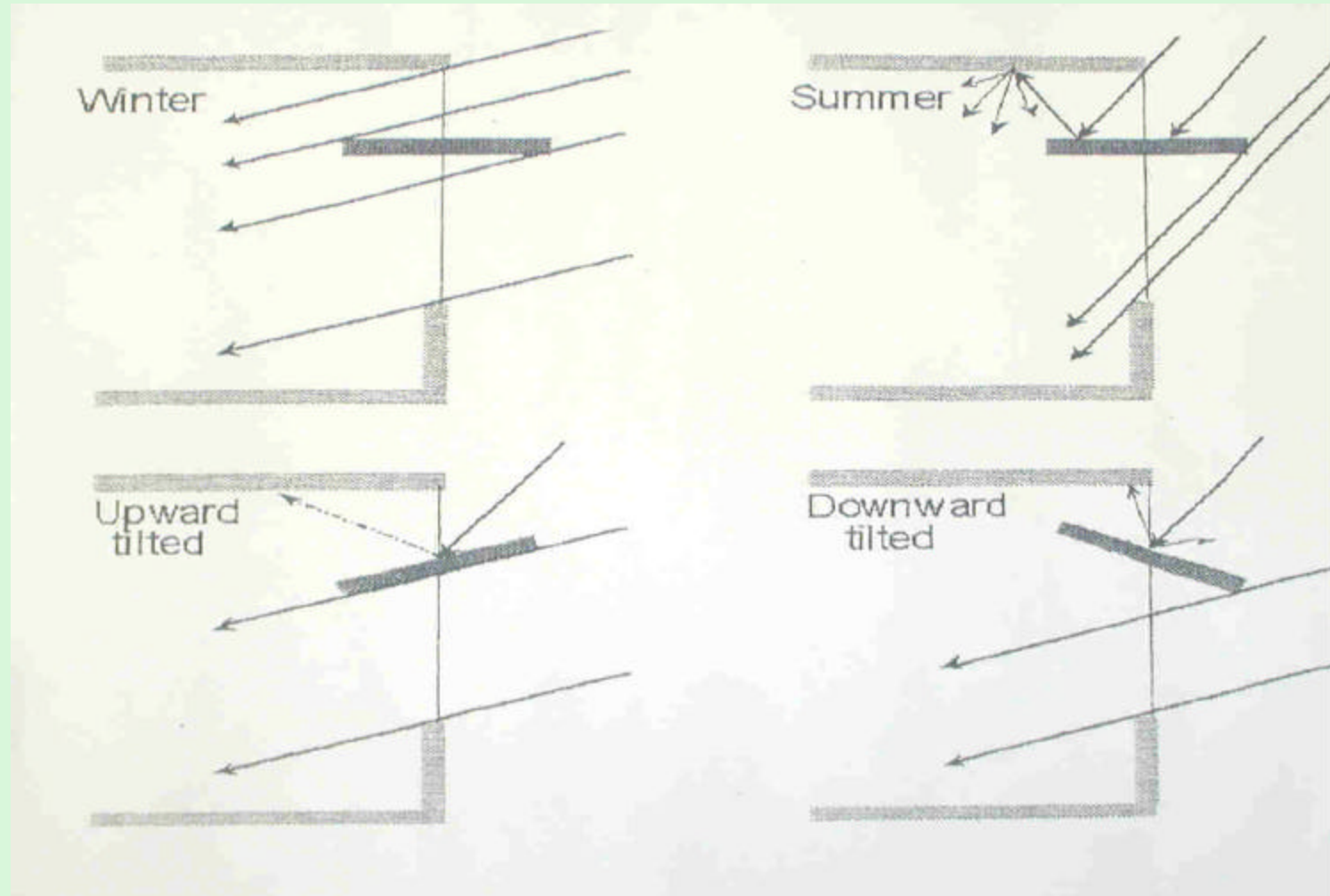
- Provide Design Consultation
- Compare Different Technologies
- Identify Energy Saving Measures
- Develop Specs for Energy Efficient Equip.
- Review Construction Documents
- Provide V.E. on Energy Efficient Measures
- Assist in Selection of Design Professionals
- Low Cost Financing



Visually Comfortable

- Increase Window Size
- Light Colored Walls and Ceilings
- Indirect Lighting
- Motion Sensors
- Windows at Eye Level
- Sensors on Lights near Windows
- Sky Lights
- Horizontal Mini Blinds

Horizontal Window Blinds



High Performance School

- Energy Efficient
- Visually, Thermally and Acoustically Comfortable
- Healthy
- Material Efficient
- Water Efficient
- Easily Maintained
- Environmentally Responsive
- Commissioned
- A Building that Teaches
- Safe and Secure for Students
- Community Resource
- Stimulating Architecture
- Adaptable to Changing Needs

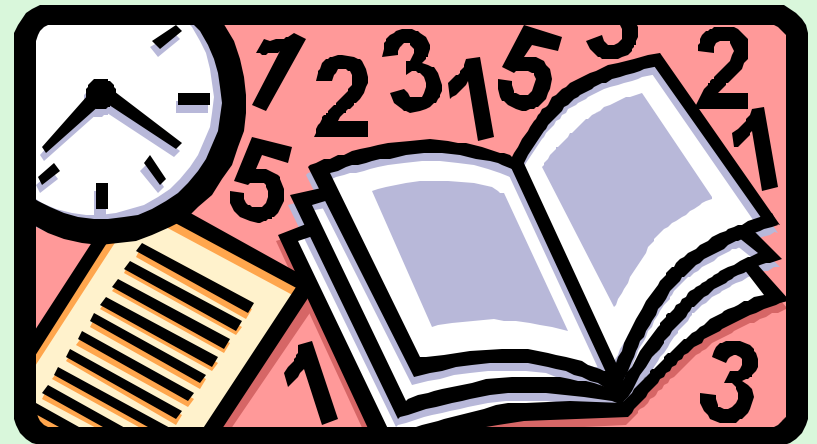


CHPS Point System

- Site – 14 points
- Water – 5 points
- Energy - 24 points
- Materials – 11 points
- Indoor Environmental Quality – 17 points
- District Resolutions – 10 points

Thermally Comfortable

- Operable Windows
- Individual room T Stats
- Low E Glazing
- Adjustable Blinds



Acoustically Comfortable

- Carpet
- Acoustical Ceilings
- Tackable Wall Coverings
- Quiet Mechanical System
- Set back from roadway



Healthy

- Operable Windows
- Outside Air from Mechanical System
- VOC and Non- Toxic Materials
 - Paint
 - Carpeting
 - Plywood
 - Fiberglass Insulation
 - Ceiling Tile
 - Linoleum
- Dry Cleaning of Floors
- 30 Day Flush out

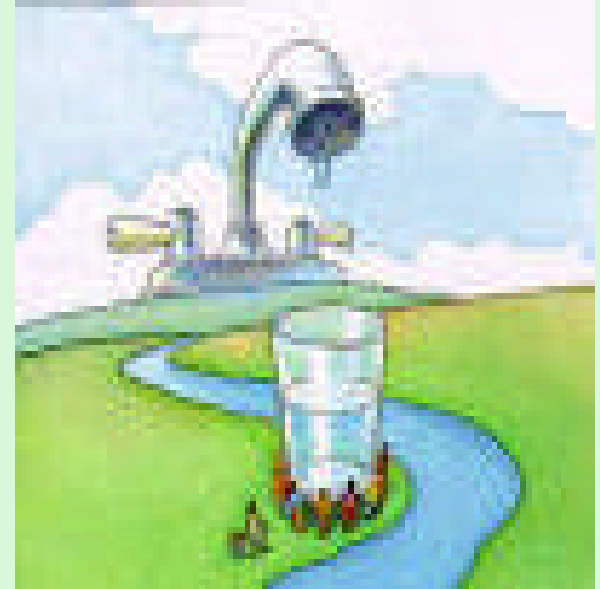


Material Efficient

- Steel and Block Structure
- Fly ash
- Recycled/Recyclable Materials
 - Carpeting
 - Linoleum
 - Ceiling Tile
 - Tackable Wall Board
 - Walk off Mats
 - Toilet Partitions
 - Fiberglass Insulation
- Contractor Recycling
- Recycling Center in Cafeteria

Water Efficient

- No Permanent Irrigation
- Synthetic Field
- Low Flow Fixtures
- Automatic Faucets



Easily Maintained

- Staff Instruction on Heat and Light Controls
- No Waxing and Stripping of floors
- Durable Wall surfaces
- Mini Blinds housed within Window Panes
- Snow Melt
- Cool Roof

Environmentally Responsive

- Reduced Site Disturbance
- Bermed into Slope
- Maintain Trees
- Storm Water Retention
- No Light Pollution



Benefits

- Higher Test Scores
- Teacher Satisfaction and Retention
- Increased Attendance
- Reduced Maintenance and Operating Costs
- Reduced Liability Exposure
- Reduced Environmental Impacts

CEC Energy Partnership Program

- Local Governments
- Special Districts
- Public and Non-Profit Hospitals
- Public Care Facilities
- Colleges and Universities



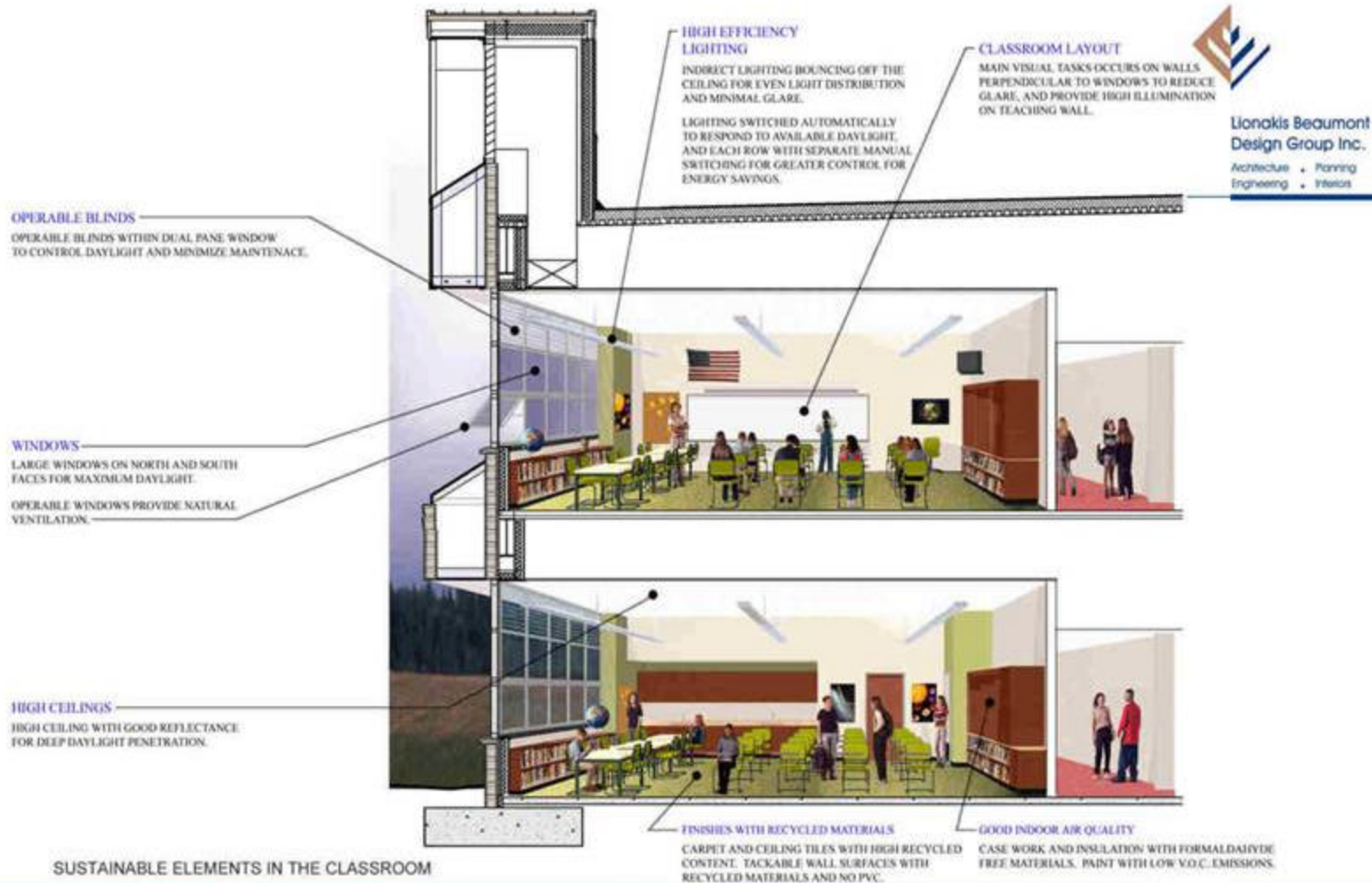
Piping and Vault



Alder Creek Middle School



High Performance Components



NEW TRUCKEE MIDDLE SCHOOL

MAY 6, 2003