THE SAINT PAUL PRIZE DESIGN COMPETITION 2005

AN URBAN NEIGHBORHOOD & HOUSE DESIGN

Summary:

Neighborhood plan: 21 lots, 3600 SF min.
Prototype: 1440 gross square feet

A1 EAST ELEVATION STUDY 1
3/16"=1'-0"

A2 EAST ELEVATION STUDY 2
3/16"=1'-0"

Prototype:

To take advantage of the benefits of a prototype, each house is constructed with identical SIP panels for the above grade walls.
By varying cladding and window options and using different on site hand framed elements (porch roofs, etc), the same 16'x28' structure can take on a variety of exterior expressions.

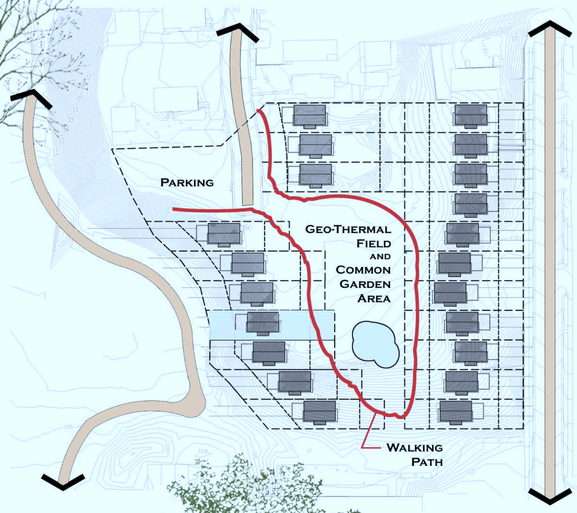
Efficiency:

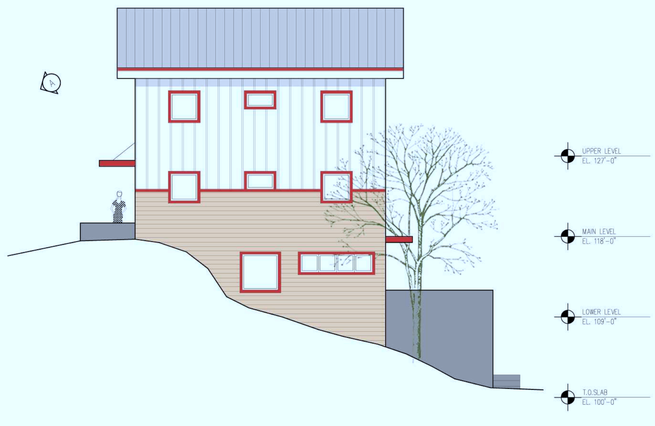
SIP panels allow for a continuous thermal envelope and minimal on-site waste and expediant construction.
Nailable insulated concrete forms provide the structure, insulation, and finish material nailing substrate in one product.
Geo-thermal radiant heat provides a very efficient heating system. Cooling is accomplished through operable windows and a whole-house exhaust fan at the top of the stair.

Clad windows, cement board siding, and standing seam metal roofs are durable and low maintenance.

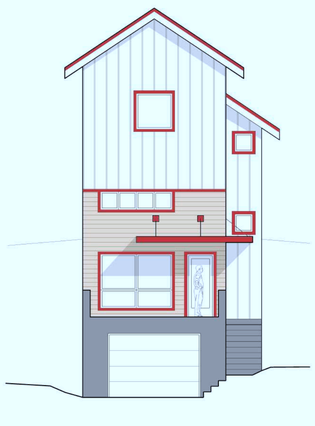
Neighborhood:

The steep grade of the bluff naturally divides lower street traffic from the bluff top where the front porches of the houses face onto a communal garden and play area.
Walking paths encircle the shared area, linking the houses to each other, to guest parking at the end of Rivoli St, and to the surrounding Dayton's bluff neighborhood.
Shared elements also include a rain water retention area as part of the communal garden. A large field of geo-thermal wells below the garden will serve as a mini "district energy."





B NORTH ELEVATION
1/8"=1'-0"



C WEST ELEVATION
1/8"=1'-0"

D SOUTH ELEVATION
1/8"=1'-0"