

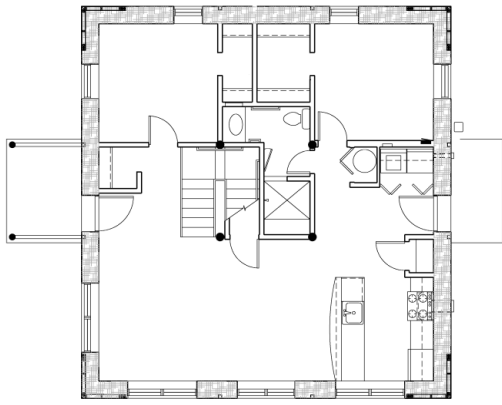


## SULLIVAN STRAW BALE HOUSE

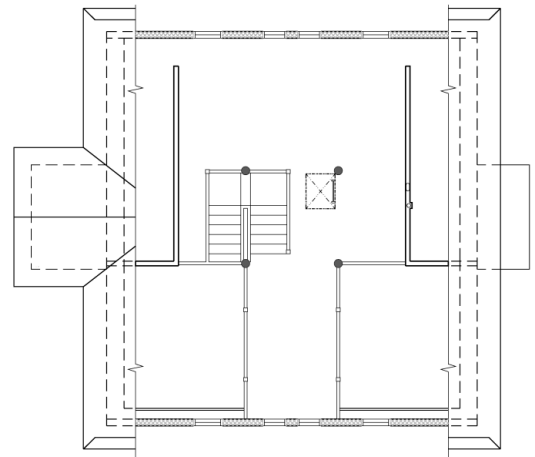
BILLINGS, MONTANA

This project's client had both ambitious sustainability goals and a very tight budget. High Plains developed a design using a combination of a shallow, insulated mono-slab foundation with radiant floor heating, load bearing wood post and beam frame, straw bale infill walls, and structural insulated panel roof and gable ends. Combining these elements in an integrated fashion meant that every feature does double or triple duty: the foundation is simultaneously the heating distribution system and finished floor; the "crow's nest" cupola provides a premier space while also being an integral part of the stack-driven natural ventilation system; and the plastered straw bale walls not only super-insulate the house but also make home ownership accessible for those with little funds for materials but plenty of sweat equity.





FIRST FLOOR PLAN



SECOND FLOOR PLAN



OPEN KITCHEN



SECOND FLOOR UP TO LOFTED BIRD'S NEST



BIRD'S NEST



LIVING ROOM, DINING ROOM AND KITCHEN