

Presentation by Reinaldo Borges

- Principal/Founder of Borges + Associates
- Co-chair on the Sea Level Rise Task Force at the American Institute of Architects (AIA Miami)
- Board member of the City of Miami Sea Level Rise and the Climate Resilience Committees
- Chair of Real Estate Council and member of the Executive Board of Governors of the Miami Beach Chamber of Commerce
- Featured in Season 2 of YEARS OF LIVING DANGEROUSLY documentary series on the effects of Climate Change
- Active member of the Urban Land Institute and the US Green Building Council



THE AMERICAN INSTITUTE OF ARCHITECTS: Sustainability Initiative

Architects of Resilience



Buildings and communities are subjected to destructive forces from fire, storms, earthquakes, flooding, and even intentional attack. The challenges facing the built environment are evolving with climate change, environmental degradation, and population growth. Architects have a responsibility to design a resilient environment that can more successfully adapt to natural conditions and that can more readily absorb and recover from adverse events. The AIA supports policies, programs, and practices that promote adaptable and resilient buildings and communities. —AIA Position Statement on Resilience

Design is the solution: **no one-size-fits-all approach**

Each community is unique in its challenges. One community faces sea level rise and skyrocketing housing costs, while another community addresses vacant properties and job loss. These wide-ranging and complex risks and conditions preclude the use of cookie cutter solutions. Complex challenges require innovative solutions.

Role of the architect:

Architects are uniquely positioned to develop innovative approaches for improving our nation's resilience across a wide variety of scenarios. Architects are:

systems thinkers who blend environmental science, building science and social science

project leaders absorb incredible amounts of information, prioritize issues to guide decision-making



RISK REDUCTION

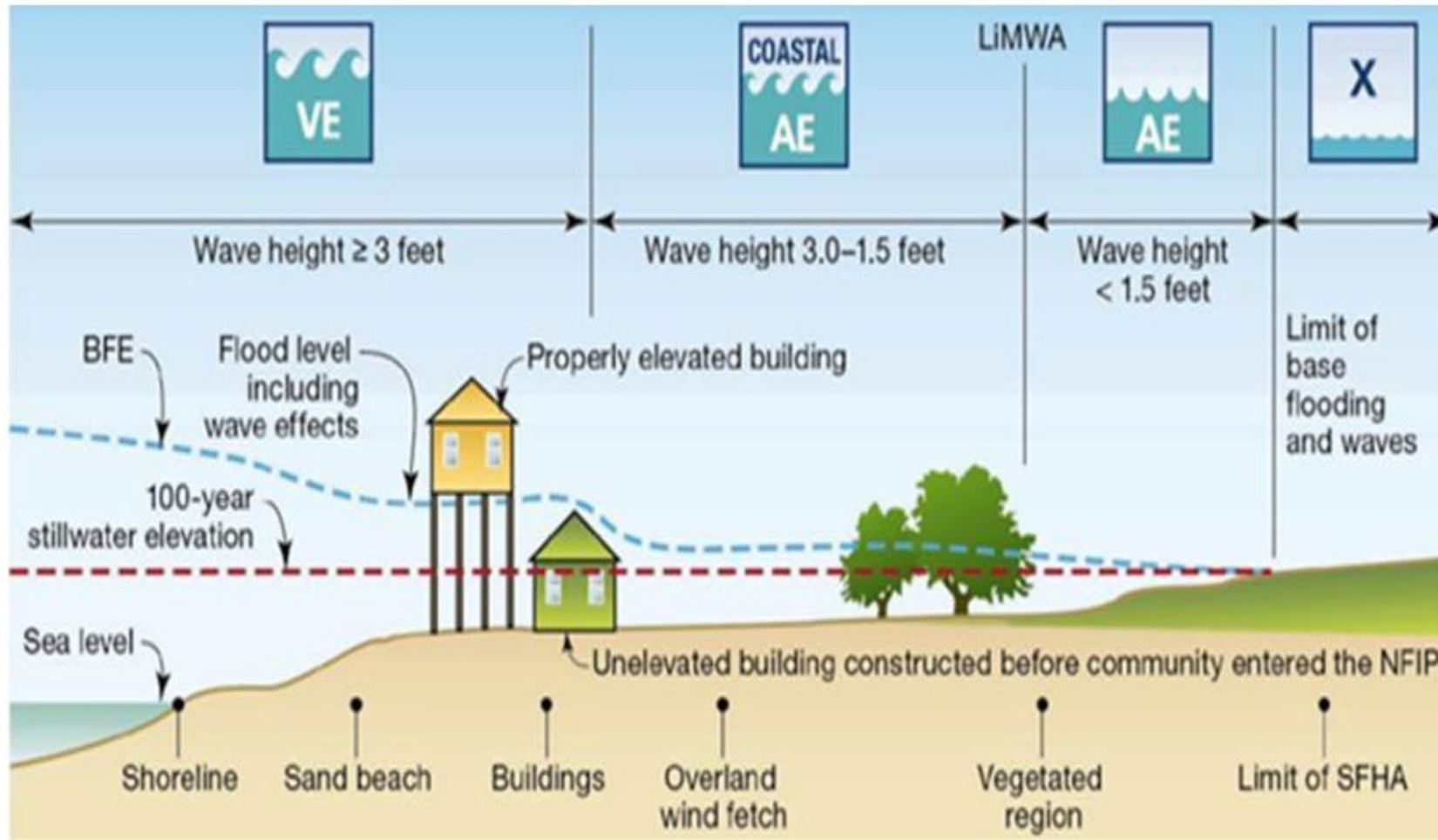
Additional Elevation Requirements

1. Single most cost-effective measure to reduce risk. FEMA Technical Bulletin P-499 recommends at least 3 feet.
2. Reduces frequency and severity of damage
3. Reduce damage.
 - Quicker re-occupation after events
 - Less need for government help
 - Property owners reduce repair expenses
 - Small business more likely to stay open
4. Lower NFIP premiums
5. Provides margin of safety against extraordinary or unknown flood risk.

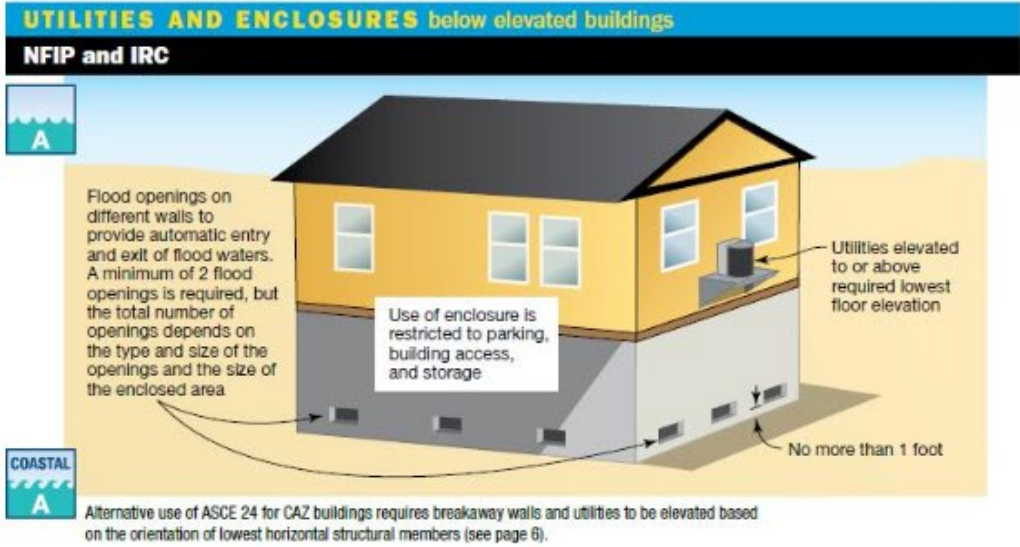
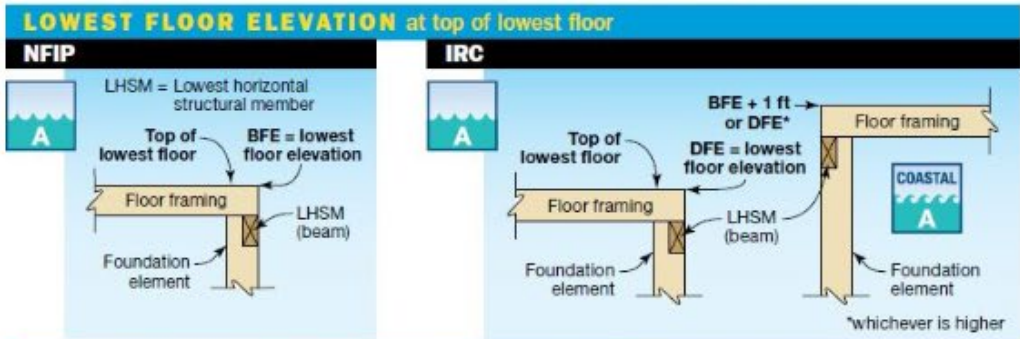
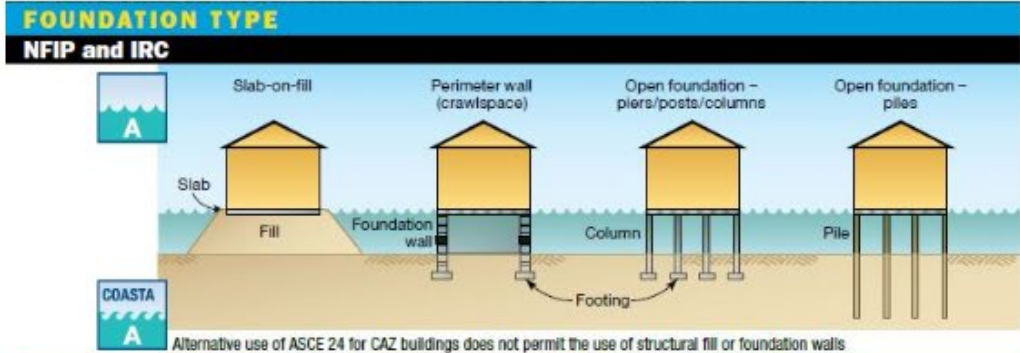
Under the Flood Insurance Reform Act of 2012, You Could Save More than \$90,000 over 10 Years if You Build 3 Feet above Base Flood Elevation



NFIP and IBC ZONES

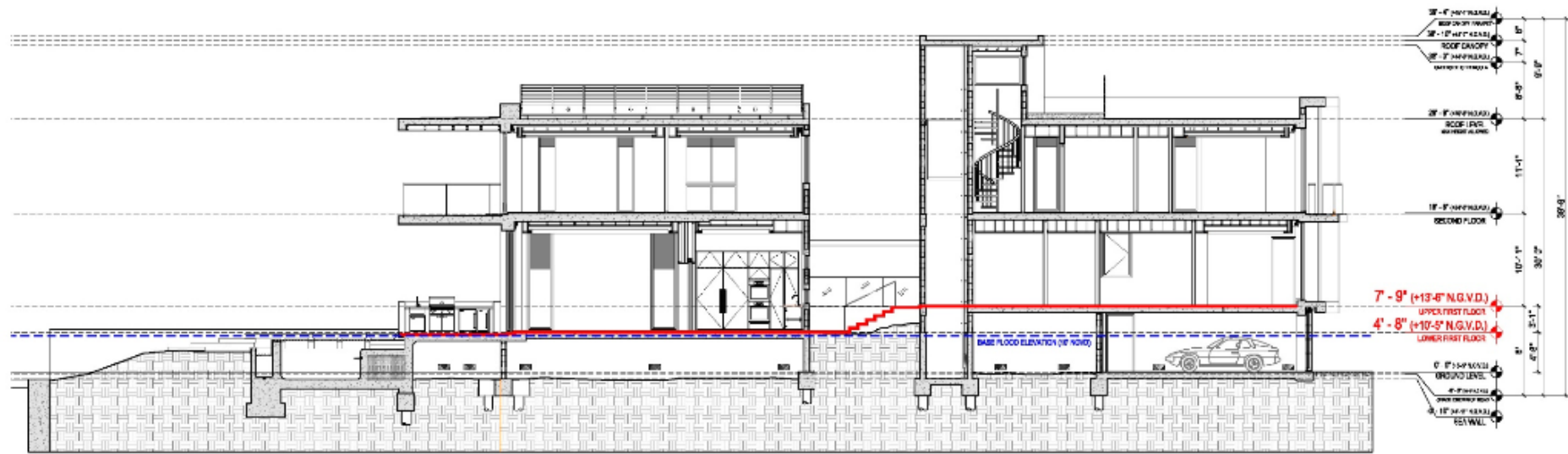


NFIP and IRC



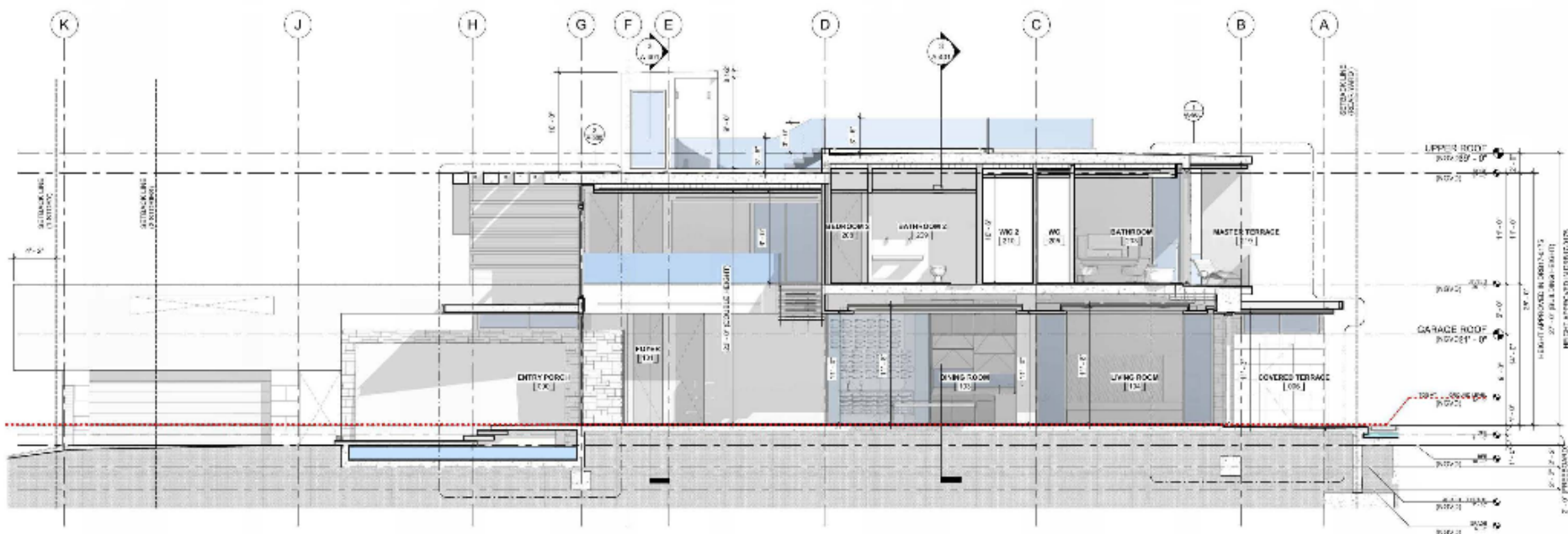






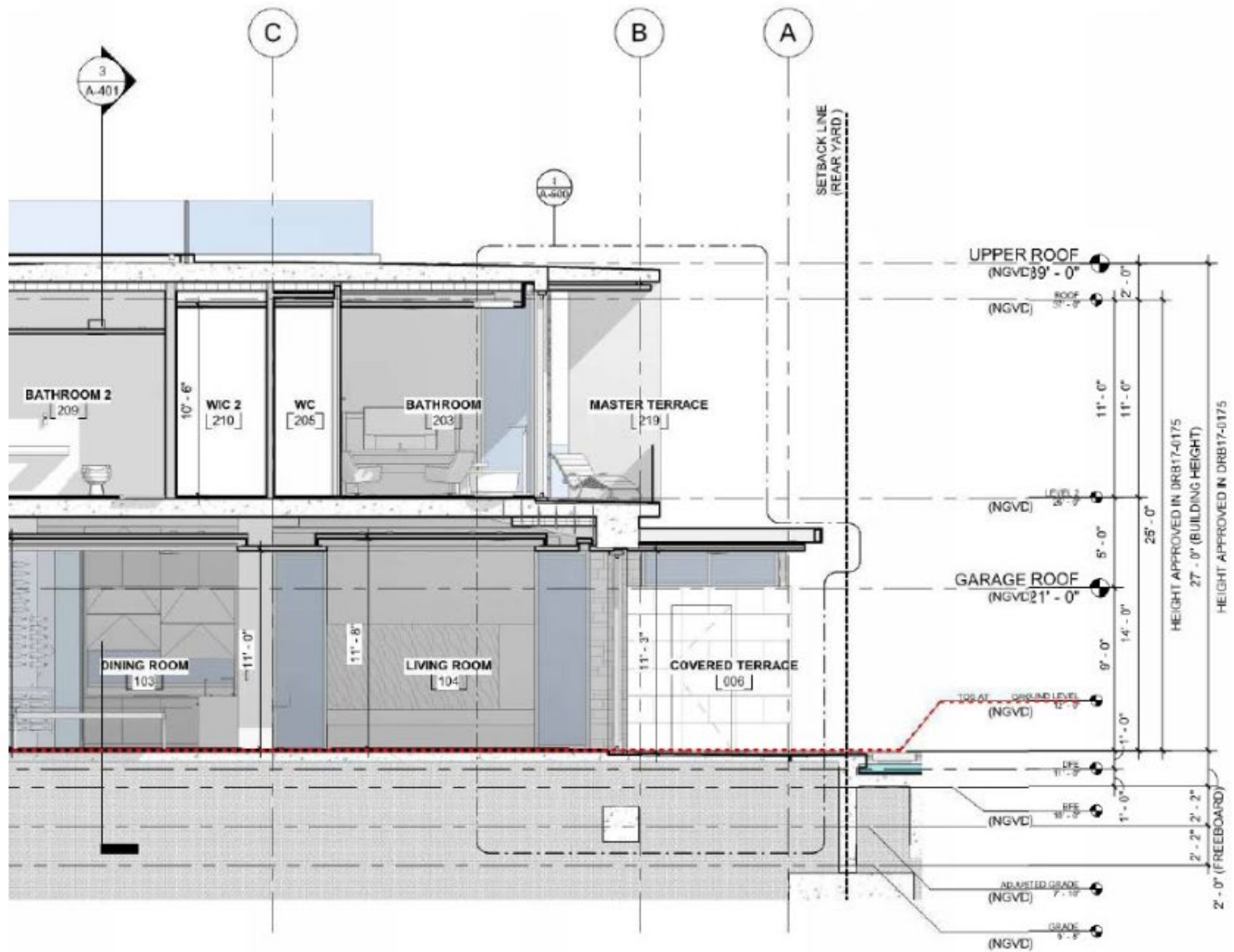


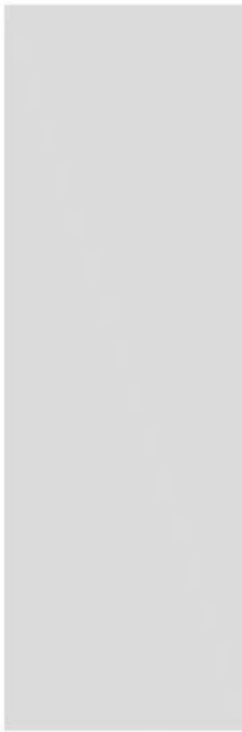
Hibiscus Island Residence



12'-0" NGVD

10'-0" NGVD
(BFE)





Sheridan Avenue Residence

