small homes case study





Easthampton, MA - Backyard ADUs First Build

"Your backyard abounds with opportunity."

Backyard ADUs, owned by Chris Lee, is an Easthampton-based builder of backyard tiny homes whose business model capitalizes on the Massachusetts regulatory trend that allows the building of 400-900 sf Accessory Dwelling Units. Backyard ADUs completed its first home, a 525 sq. ft 1 bedroom costing \$125,000, in May of 2020. The modular home was built to finish by PVS in Pennsylvania and then shipped to the backyard of Sarah Hunter, whose mother will be living in this apartment. Sarah's mother sold her larger house to finance this build.

Cost/ Design:

• Square footage: 525

• Cost of the modular unit: \$70,000

Site Work Cost: \$30,000Labor Cost: \$25,000Total Cost: \$125,000

 Beds/baths: 1 Bedroom 1 Bath, combined kitchen and living room

 Bells/whistles: Stamped concrete front walkway, parking pad and bushes to satisfy permitting.

 House Specifications: R- 20 2x6 walls filled with dense packed cellulose, rim joints & basement walls done with spray foam

Length to complete: 3 weeks for site
work and modular assembly, 2-3 months for permitting

• HERS score: 54



Financing:

• Main source of finance: Homeowner assets

• Grant: none

 Investment payback timeframe: 6 years (as compared to paying rent for a one bedroom apartment @ \$1,500)

• If it was to be rented out at \$1,500 a month, \$540,000 in revenue over a 30 year period.

Regulatory:

- The regulatory and permitting process takes an uncertain about of time (anywhere from 2-4 months), making it risky to confirm the project schedule before the approval is received from local regulatory agencies
- The regulatory process is not designed for low-impact projects like backyard builds; the regulatory hearing system is designed to assess much larger neighborhood impacts, and presenting the backyard builds as part of this can spark more neighborhood controversy than is warranted
- Backyard ADUs has been working to ease the regulatory process in different towns to promote their builds around the Pioneer Valley

Lessons Learned

- In smaller spaces, choices like wall construction, heat and hot water appliances have a large impact on HERS rating differences
- Involving neighbors in the planning stages of a backyard build is essential
 - Opening dialogue furthers neighbor understanding and answers easy questions about the project before the public hearing stage of the regulatory process
 - Allowing neighbors to feel involved in the planning process fosters a more positive environment around the build and can ease opposition later on
- Promoting backyard builds as a way to keep family closer is expected to gain traction due to the 2020 pandemic
 - Backyard builds can allow relatives to age in place or families to host temporary guests in a separate, detached space

Learn More:

- https://backyardadus.com/
- On Facebook @backyardadus