

Greenhouse

Hosmer St

Norfolk St

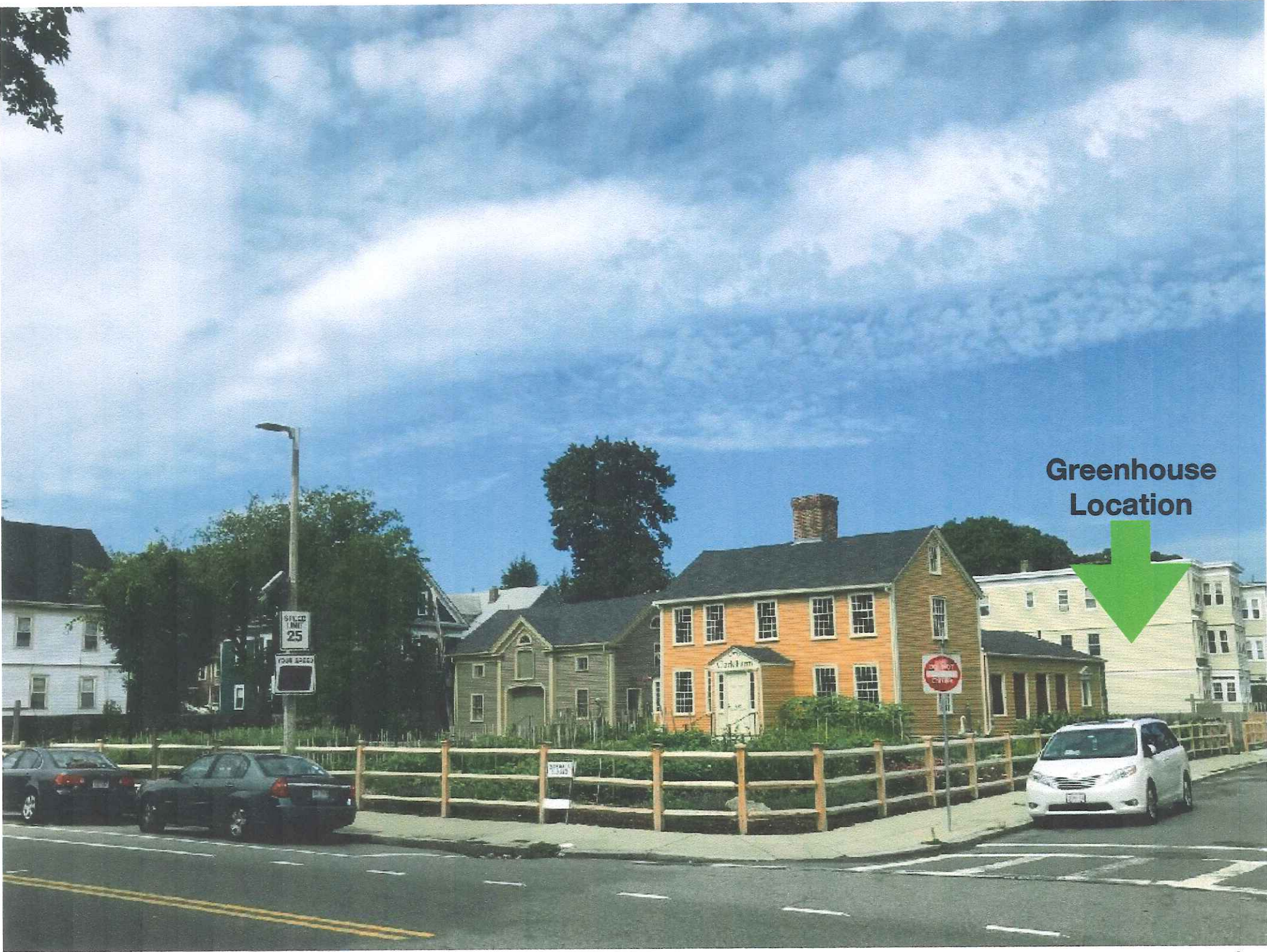
Street

Fowler Clark Epstein Farm (Mattapan) Greenhouse





View from Norfolk Street



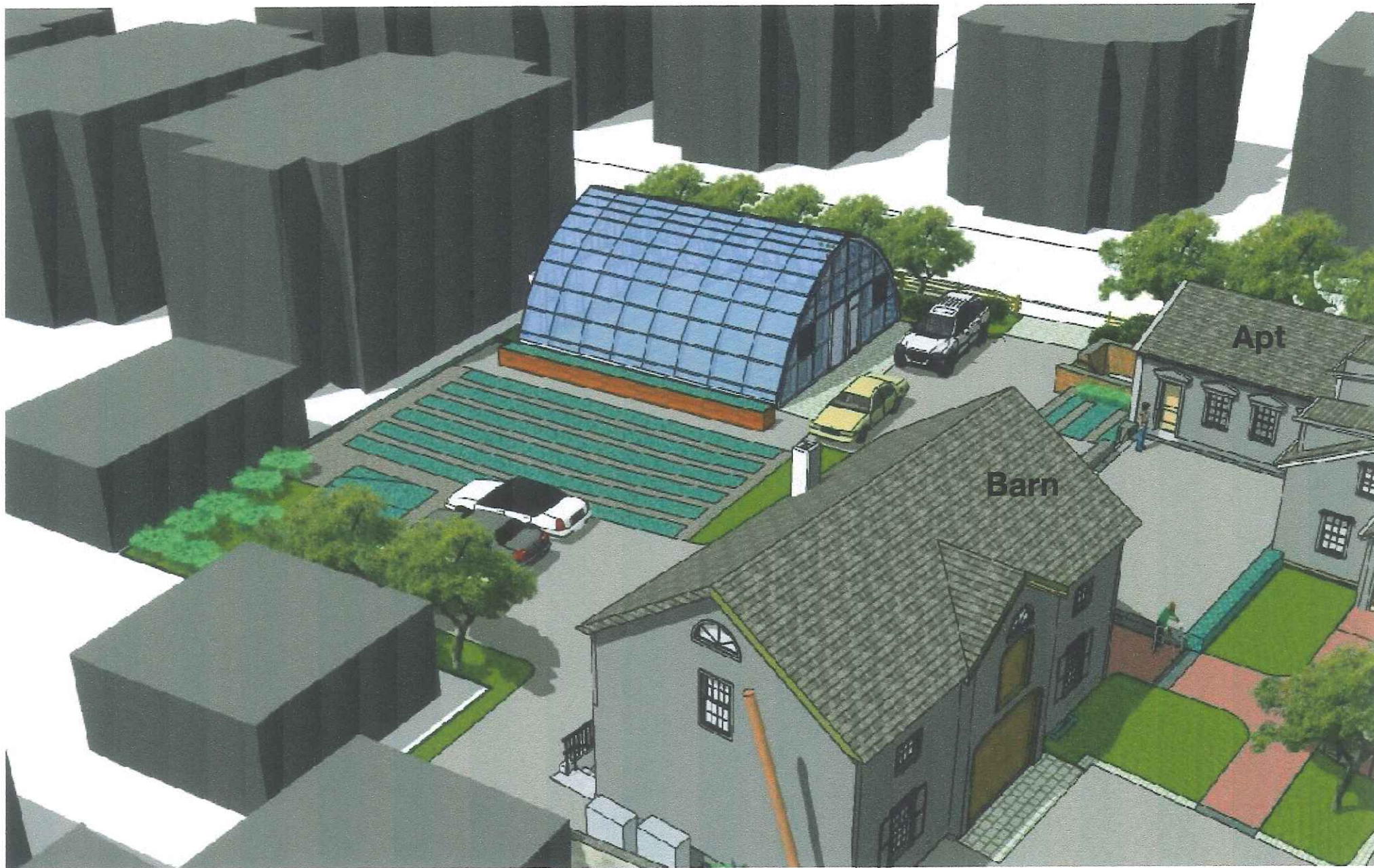
**Greenhouse
Location**





**Greenhouse
Location**

View From Hosmer Street



Bird's Eye View



View from Norfolk Street



View From Hosmer Street

Future UFI Greenhouse

at the

Fowler Clark Epstein Farm

Imagine our greenhouse!

For year round energy efficient growing, we are imagining a 21st century Greenhouse

What do you imagine?

Good for Growing

- Year round planting
- Fresh food all year
- Winter workshops
- Spring seedlings sale
- Protect fragile plants
- Research and experiments

Good for the Earth

- Fiberglass arches improve thermal performance
- Thin film integrated solar panels
- Low energy LED lighting
- Root zone heating
- Natural ventilation
- Rolling growing benches



View from Hosmer Street



Bird's eye view



View from Norfolk Street

Project Overview

ArchSolar will provide a greenhouse system with rigid polycarbonate glazing, plus pricing for mechanical ventilation, automatic shading curtains installed inside the structure, rolling greenhouse benches and grow monitoring software and smart controls. The greenhouse arches are made of pultruded curved fiberglass anchored on a knee wall. The end walls will be framed with galvanized steel and covered with rigid polycarbonate sheeting.

The greenhouse will be a single bay of width 36' and length 40' for a total area of 1,440 sqft. The greenhouse will be fitted with a cable driven shading energy retention curtain system. The structure of the greenhouse has been engineered to withstand up to 55lb/sqft snow load and up to 110mph wind load.

In comparison with traditional greenhouses, our structure offers improved thermal performance, speed of installation, and ease of expansion and reconfiguration. The structure's thermal performance is particularly valuable in the Northeast as it will lose less heat than a traditional metal greenhouse during cold winters and create less harmful condensation during humid springs and summers.

Technical Specifications:

- 36' width / arch span
- 40' length
- 1,440 sqft area
- 15' height
- 9' 10" truss height
- 6' 5" distance between arches
- 55 lbs per sqft snow load
- 110 mph wind load
- Hot-Dip galvanized steel ties
- 10mm polycarbonate roof glazing
- 10mm polycarbonate end walls
- Pultruded fiberglass arches

