

**Design Problem:**

Proposal for an expanded Boston EMS substation and response Center in Roslindale - with Bakery

General: Layout, Program, Goals

- 1.0 72 x 100 lot consisting of two parcels
- 2.0 One Parcel contains a bakery, the other an auto body shop that is actually being converted into an EMS substation
- 3.0 Proposed program for academic exercise:
 - First Floor - north of property line:
 - 2 bay garage - opens on side street
 - Day room
 - Locker room
 - 2-unisex bathroom/shower room/changing rooms
 - First floor - south of property line: Bakery
 - Basement - both sides property line: Storage
 - Second floor - both sides property line: Response Center
- 4.0 "Make this the 'greenest' EMS Substation in Boston."
 - LEED 'Silver' as a minimum - checking against V.2 is OK

Project Constraints

- 1.0 Plan dimensions have been set by the Structures III problem
- 2.0 Comply with 780 CMR 705 - Fire Walls - at Property Line

Structure - set by the Structures III problem**Skin (Envelope)**

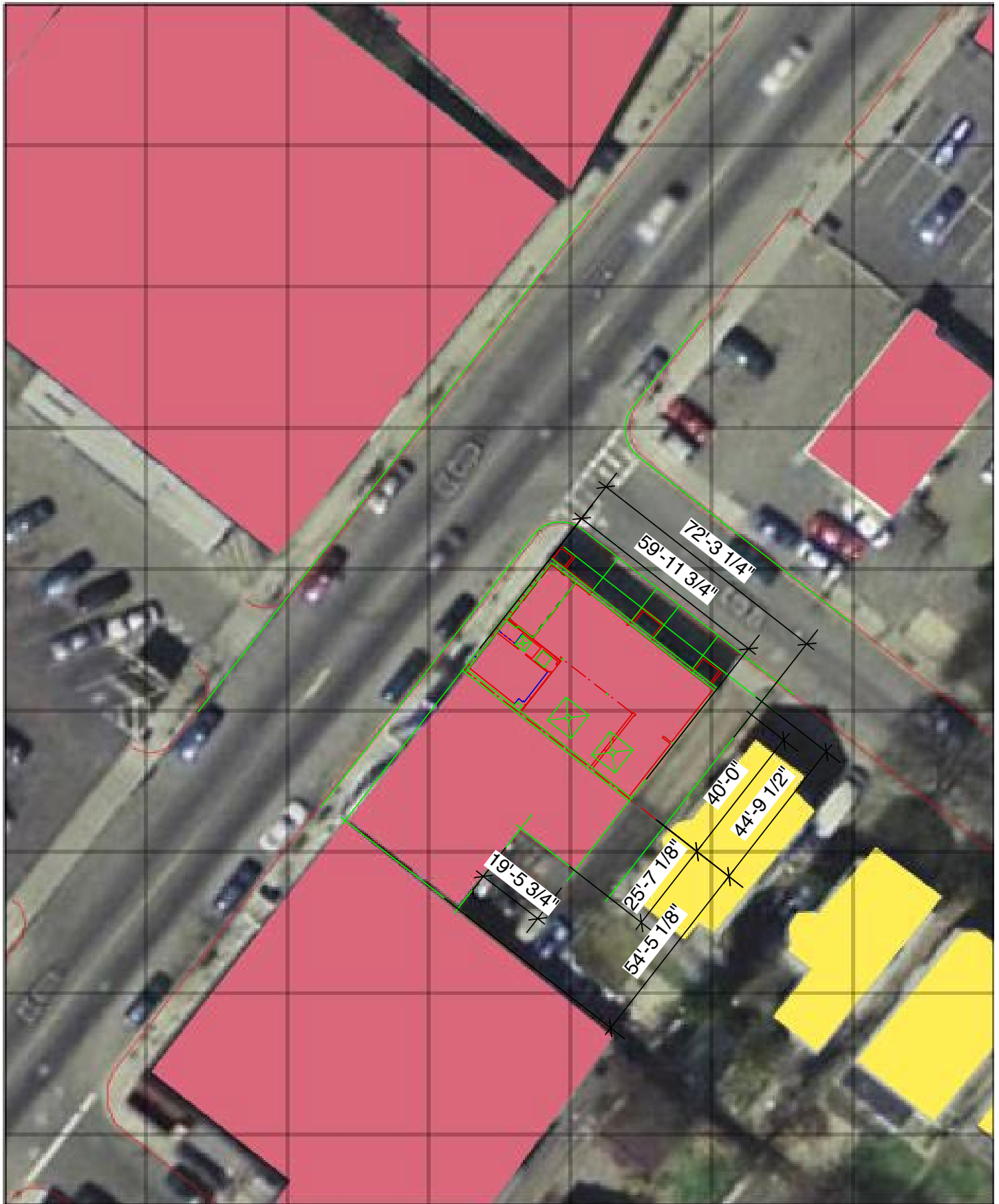
- 1.0 General: 25% better performance than required by Chapter 13 of the Massachusetts State Building Code
- 2.0 At and below grade: cast in place concrete, part basement for mechanical
- 3.0 Wall finishes: defined by Structures III problem
- 4.0 Roof: low slope design for internal drain.

Services (Mechanical)

- 1.0 HVAC - radiant solar hydronic heating, natural ventilation cooling
- 2.0 Plumbing - services for plumbing finishes, hot water heater
- 3.0 Fire Suppression - wet pipe sprinkler system
- 4.0 Electric -
 - Normal power - lighting and convenience outlets
 - Low Tension - communications, fire detection, and alarm

Safety (Interior Finishes)

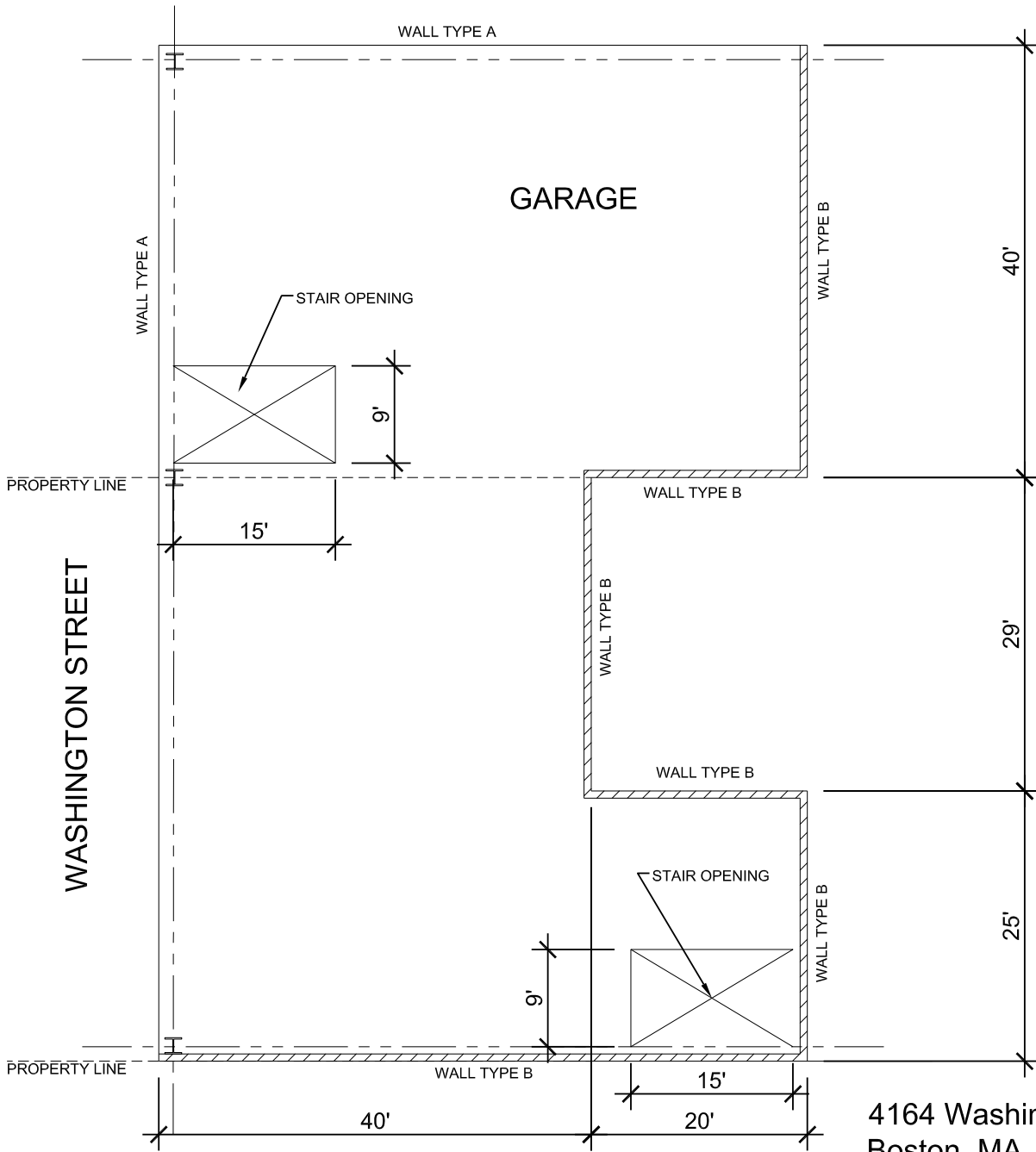
- 1.0 Non-combustible finishes
- 2.0 Impact resistant for heavy use



40 Feet 80 120

4164 Washington Street
Boston Redevelopment Authority





PLAN $\frac{1}{16}'' = 1'-0''$

NOTE: ALL DIMENSIONS ARE TO EXTERIOR OF WALLS



4164 Washington Street
Boston, MA
Wall Type A - Brick Veneer
Wall Type B - CMU

