...a more sustainable, higher density, infill housing typology

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Crash Test Housing

the lower level
to penetrate down to
below allows the daylight
a light well in the floor
spaces
southern light to northern
enter each unit brings
opportunities for light to
providing additional

scales of use throughout the site
providing a variety of indoor and
introducing unexpected elements into
unexpected spaces, and unexpected
unit and site designs - unexpected uses,
and attachment of individual
organizing element throughout
the "party wall" acts as an
Unit System

units or divide for smaller units
units designs can combine for larger
variety of housing types for the existing
three different sized units provide a

off from roofs for use in yard irrigation
integrated gutters collect stormwater run-

Passive Strategies
cooling in warm months
through each unit, providing all necessary
exposure allow summer winds to cross
narrow unit dimensions and southern
Cross Ventilation

Winter Sun
penetrate the unit, providing some direct
overhangs are sized to allow winter sun to

Community Spaces

for each unit
addition to private outdoor spaces
providing shared outdoor spaces in
unit designs
for unit owners, thus allowing smaller
providing centralized shared spaces

Transition Spaces

variety of materials and textures both
inside and outside of the home
box of suburbia by introducing a
Materials and Textures

Solar collectors heat water for all units
supplement plug loads within units
photovoltaic panels provide energy to
summer
detects surfaces to prevent overheating in
provide shading of southern window
Summer Sun

overhangs, trellis structures, and awnings

Three-Unit East-West Section Perspective
SINGLE LOT, THREE-UNIT DEVELOPMENT DOUBLE LOT, SIX-UNIT DEVELOPMENTScales of Use

Three-Unit Site Plan
Unit A Data
Bathrooms: 1 Three-Unit Site Plan
Bedrooms: 1
Square Footage: 1,130 sf
Unit B Data
Bathrooms: 1.5
Bedrooms: 1 + flex
Square Footage: 1,130 sf
Unit C Data
Bathrooms: 1 + flex
Bedrooms: 2
Square Footage: 275 sf

Community Room Data

Unit Selling Prices: $320,000
Unit A

Construction Cost: $450,000
Unit B

Proforma Data
Units per Acre: 22
Zoning: R5,000
Square Footage: 6,000sf (120' x 50')

Seattle, WA
Locaton: 1148 20th Ave.
Site Plan Data

Unit Selling Prices: $450,000
Unit C

Construction Cost: $350,000
Unit B

Proforma Data
Units per Acre: 24
Zoning: R5ah (100' x 110')
Square Footage: 11,000sf

Portland, OR
Location: 4206 & 4216 NE 10th Ave.
Site Plan Data