

CHALLENGES AND  
OPPORTUNITIES OF AFFORDABLE  
HOUSING IN RURAL  
ENVIRONMENTS



DOUGLAS P. KALLFELZ, PARTNER – UNION STUDIO ARCHITECTURE AND COMMUNITY  
DESIGN



**DOUGLAS P. KALLFELZ**, AIA, LEED AP, CNU  
**Principal**

**Education**

**Harvard University**, Cambridge, MA

Graduate School of Design

Advanced Studies Program, Masters of Design Studies

**Syracuse University**, Syracuse, NY

School of Architecture

Bachelor of Architecture - Cum Laude, with Honors

**Professional Affiliations**

President, **American Institute of Architects | RI Chapter**

Member, ETA II Class, **Leadership Rhode Island**

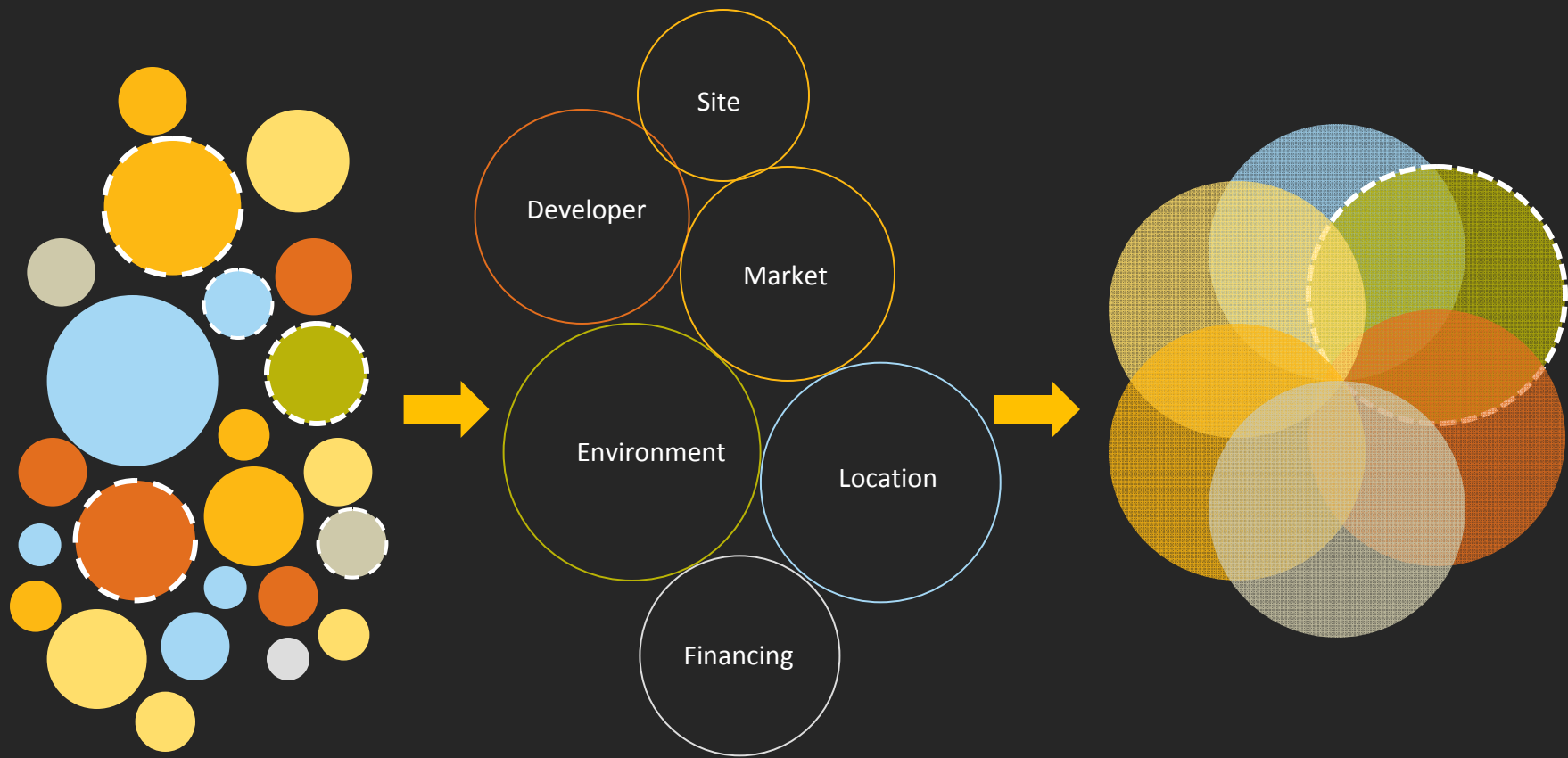
Member, **Congress for the New Urbanism (CNU)**

Board of Directors, **American Institute of Architects | RI Chapter 2008-2011**

Chair, **AIA Education Committee | Rhode Island**

Board of Directors, **Bristol Warren Education Foundation**

Board Member, **Warren Planning Board**



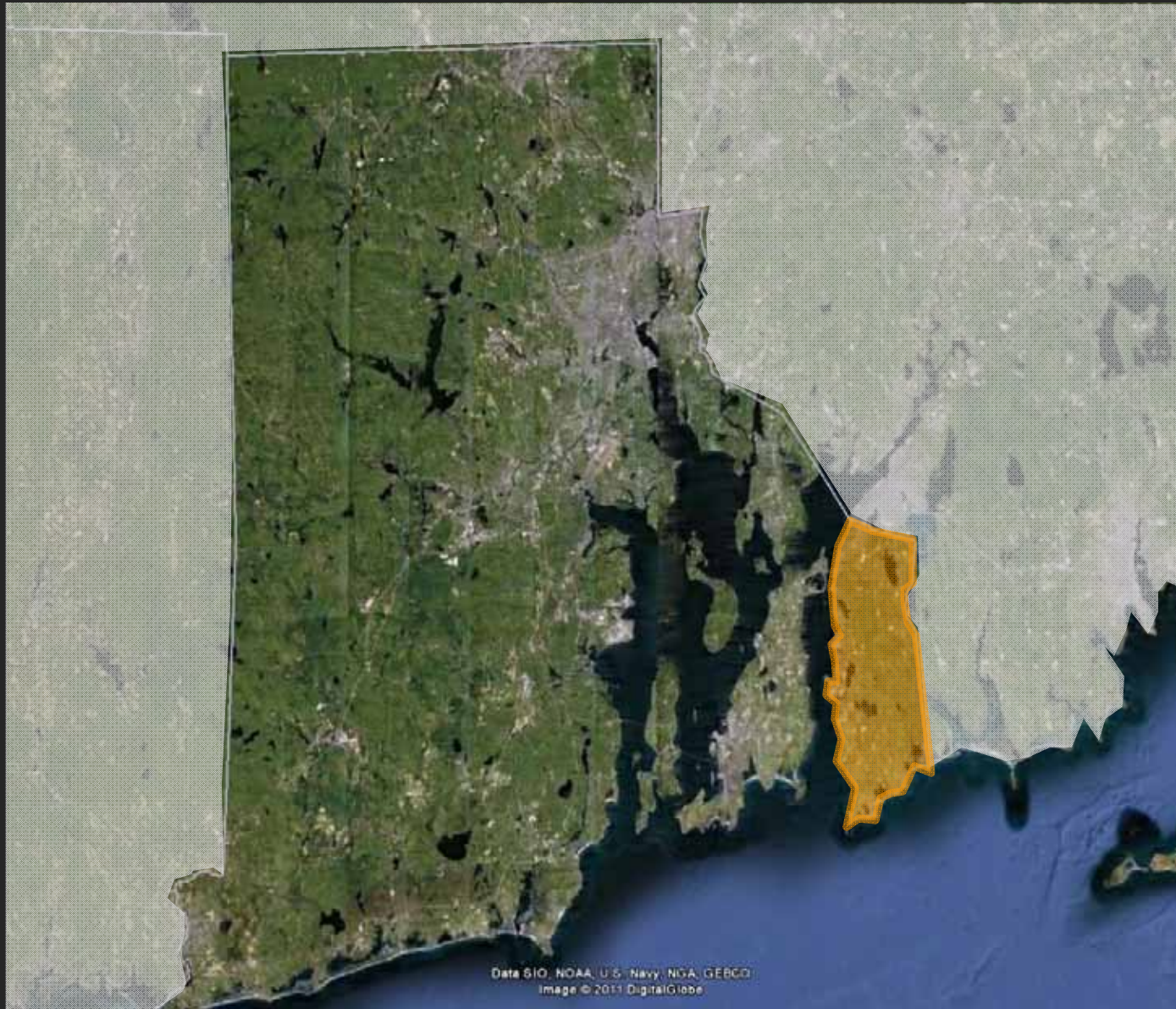
CHALLENGES AND OPPORTUNITIES OF AFFORDABLE HOUSING IN RURAL ENVIRONMENTS  
DOUGLAS P. KALLFELZ, PARTNER – UNION STUDIO ARCHITECTURE AND COMMUNITY  
DESIGN





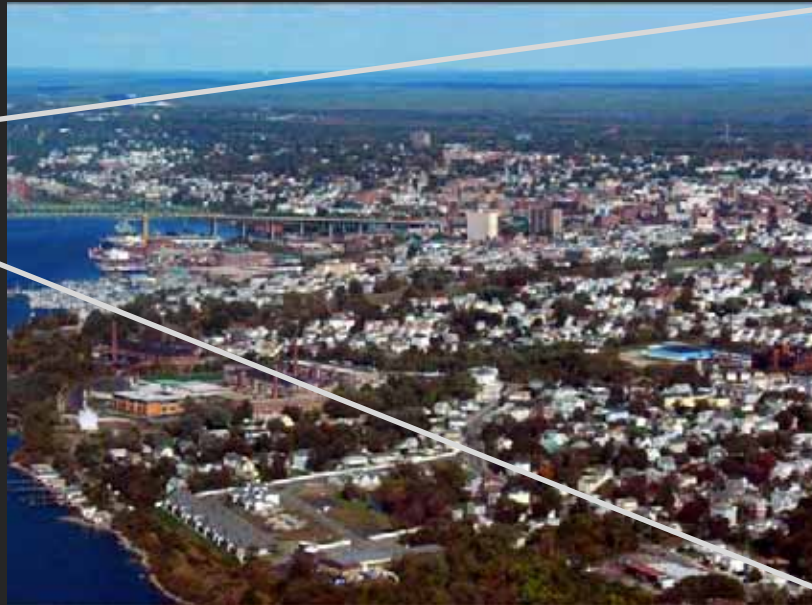
SANDYWOODS FARM – AN AFFORDABLE ARTS / AGRO COMMUNITY, TIVERTON RI





SANDYWOODS FARM – AN AFFORDABLE ARTS / AGRO COMMUNITY, TIVERTON RI





SANDYWOODS FARM – AN AFFORDABLE ARTS / AGRO COMMUNITY, TIVERTON RI





SANDYWOODS FARM – AN AFFORDABLE ARTS / AGRO COMMUNITY, TIVERTON RI





SANDYWOODS FARM – AN AFFORDABLE ARTS / AGRO COMMUNITY, TIVERTON RI





SANDYWOODS FARM – AN AFFORDABLE ARTS / AGRO COMMUNITY, TIVERTON RI





**SANDYWOODS FARM** – AN AFFORDABLE ARTS / AGRO COMMUNITY, TIVERTON RI





175 Acres of farmland

Set back from the main road

Adjacent to town recreational amenities

50 Affordable artists housing units

22 market rate residential units

Mixed use gallery / retail and market space

Studio spaces / Buildings



SANDYWOODS FARM – AN AFFORDABLE ARTS / AGRO COMMUNITY, TIVERTON RI





SANDYWOODS FARM – AN AFFORDABLE ARTS / AGRO COMMUNITY, TIVERTON RI



WALKING TRAIL GIVES PUBLIC ACCESS TO THE OPEN SPACE.



FARM BUILDINGS ARE TYPICALLY LOCATED ADJACENT TO ROAD FOR EFFICIENCY.



THE TRUE CHARACTER OF AGRARIAN PLACES IS GEOMETRY AS MANDATED BY FARMING.



UNDISTURBED LANDSCAPE SHOWCASES NATURAL BEAUTY.



MARKET RATE HOMES CLUSTER TO CREATE TRUE PUBLIC SPACE.



GROUP STUDIOS DESIGNED AS ICONIC, SIMPLE FARM STRUCTURES.



STUDIOS MIGHT HAVE ASSOCIATED OUTDOOR WORK & EXHIBIT SPACES.



RESIDENTIAL UNITS ARRANGED IN PEDESTRIAN CLUSTERS BY MEDIUM.



MAIN PUBLIC SPACE SHOULD HAPPEN AT "CROSSROADS" OF MARKET RATE AND AFFORDABLE COMMUNITIES.

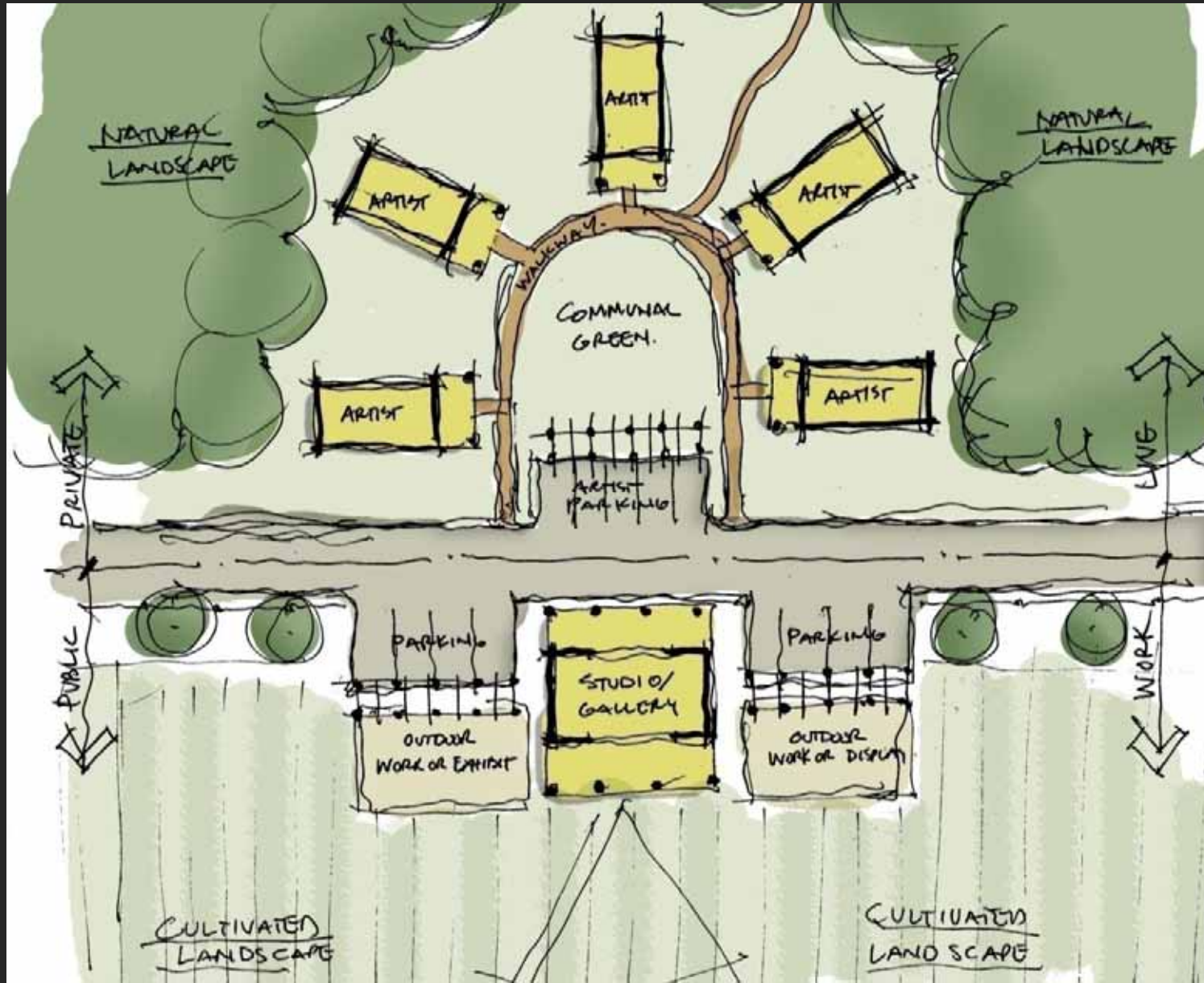


"GREEN" ASPECT CREATES PUBLIC PLACE AND ICONIC IMAGE FOR COMMUNITY.

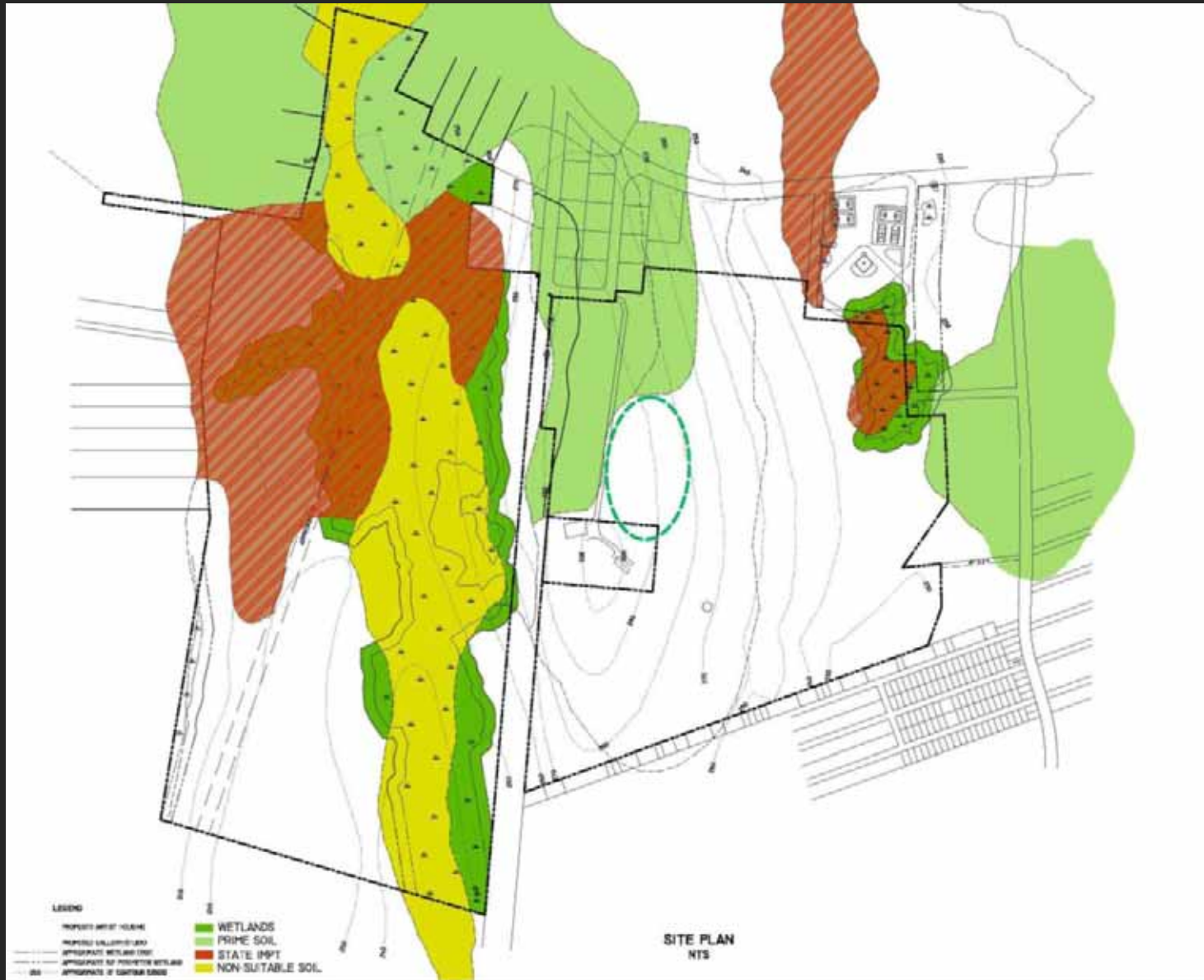
# SANDYWOODS FARM – AN AFFORDABLE ARTS / AGRO COMMUNITY, TIVERTON RI







SANDYWOODS FARM – AN AFFORDABLE ARTS / AGRO COMMUNITY, TIVERTON RI



SANDYWOODS FARM – AN AFFORDABLE ARTS / AGRO COMMUNITY, TIVERTON RI





SANDYWOODS FARM – AN AFFORDABLE ARTS / AGRO COMMUNITY, TIVERTON RI



SANDYWOODS FARM – AN AFFORDABLE ARTS / AGRO COMMUNITY, TIVERTON RI





SANDYWOODS FARM – AN AFFORDABLE ARTS / AGRO COMMUNITY, TIVERTON RI



111.22 Acres Open Space

97.06 Acres donated To land trust





30 Acres preserved Agricultural space







24 Acres  
Residential/Commercial



- Great Idea! How do you do it – affordably?
  - No Natural Gas
  - No storm drainage infrastructure
  - No Sewer
  - Difficult Soils

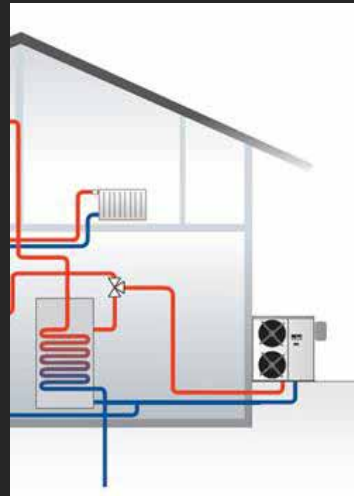




- Perhaps these are the challenges we need?
  - No Natural Gas
  - No storm drainage infrastructure
  - No Sewer
  - Difficult Soils

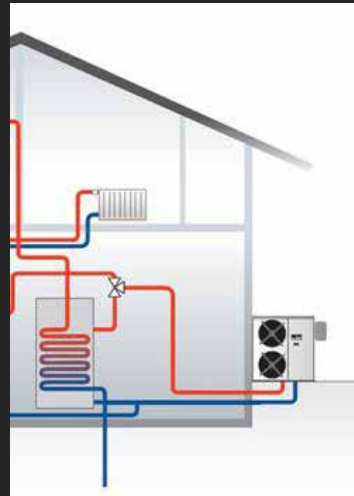


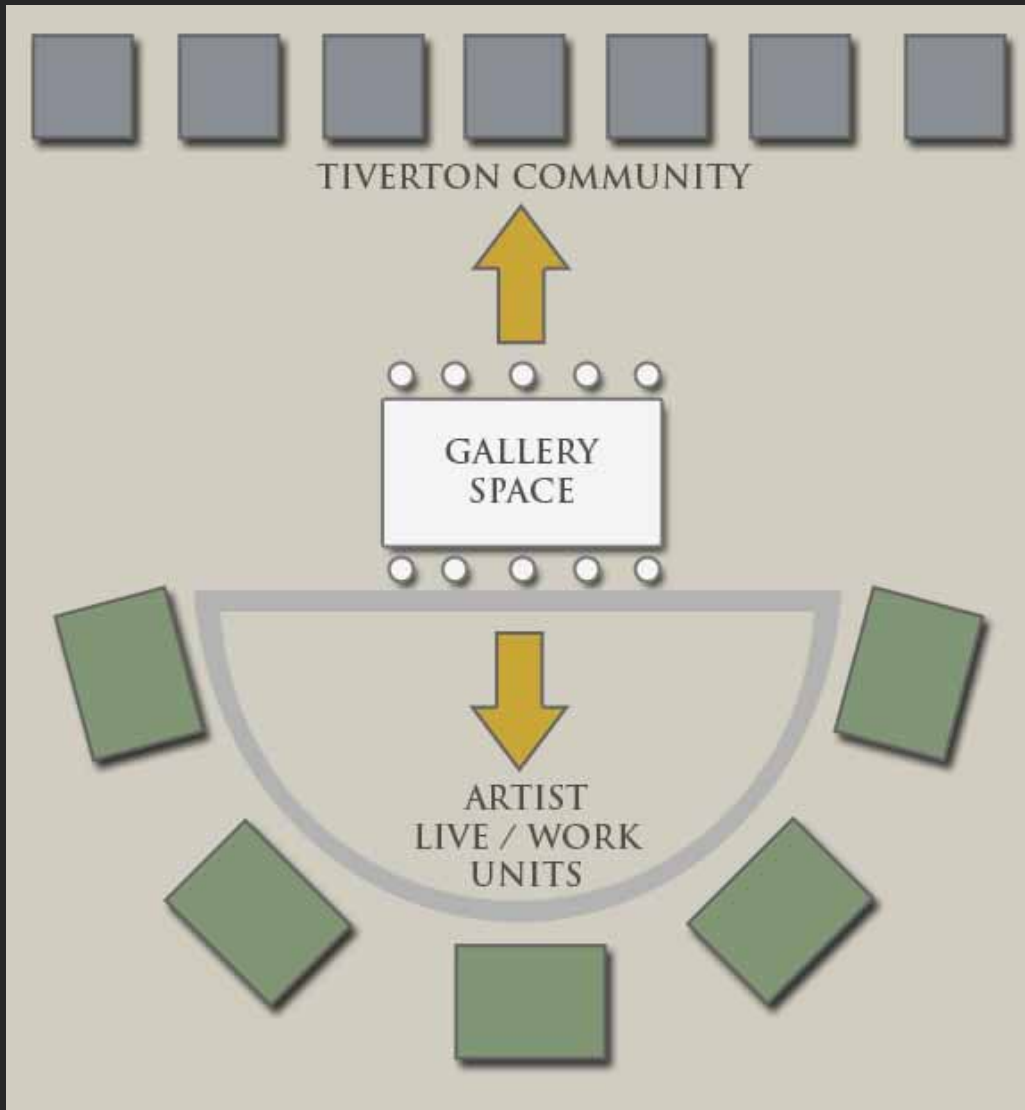
- Forced the design team to look at more sustainable options throughout?
  - Tighter / better insulated construction
  - High efficiency air to air heat pumps
  - Even smaller footprints and dense planning
  - On site energy generation





- Forced the design team to look at more sustainable options throughout?
  - Advanced community septic design
  - On-site stormwater management integrated into planning
  - Pedestrian networks

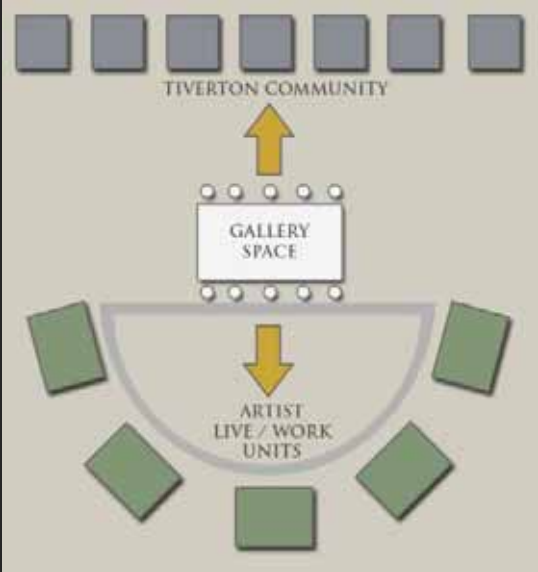




SANDYWOODS FARM – AN AFFORDABLE ARTS / AGRO COMMUNITY, TIVERTON RI



# Mixed Use Street



## Mixed Use Village Center

- Three mixed use buildings
  - Six one bedroom affordable flats
  - Galleries Below

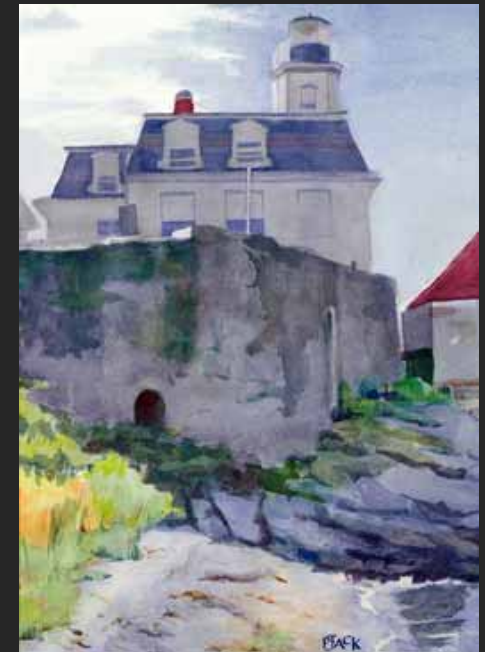






## Mixed Use Village Center

- Three mixed use buildings
  - Six one bedroom affordable flats
  - Galleries Below





## Mixed Use Village Center

- Three mixed use buildings
  - Six one bedroom affordable flats
  - Galleries below
- Community Building
  - Offices
  - Community space
  - Catering Kitchen





## Mixed Use Village Center



- Three mixed use buildings
  - Six one bedroom affordable flats
  - Galleries below
- Community Building
  - Offices
  - Community space
  - Catering Kitchen





- Future Planned Uses

- Farmers Market
- Greenhouses
- Farm Cafe
- Bed and Breakfast











SANDYWOODS FARM – AN AFFORDABLE ARTS / AGRO COMMUNITY, TIVERTON RI





SANDYWOODS FARM – AN AFFORDABLE ARTS / AGRO COMMUNITY, TIVERTON RI















“Affordability wasn’t the issue....the idea was to bring up our children to be part of a self sustaining community.”





*Affordable Housing – How Does It Fit  
Into Your Community*

Discussion

*Affordable Housing – How Does It Fit  
Into Your Community*

Thank You

Continue the conversation at  
[www.HousingWorksRI.org](http://www.HousingWorksRI.org)