1. FARRAND HOUSE

SITE & LANDSCAPE

- Extend educational, arts, and innovation programming to the western reaches of the property
- Embrace the Dell as a primary campus asset
- Carry forward the Dumbarton Oaks tradition of commanding landscape views and terracing
- Promote the coexistence of public programming with horticultural operations
- Integrate resiliency and sustainable practices throughout
FARRAND HOUSE: EXISTING CONDITIONS

VIEW FROM VEHICULAR ENTRANCE

VIEW OF PARKING
FARRAND HOUSE: EXISTING CONDITIONS

VIEW OF SEATING AREA AT GARDENER’S COURT

VIEW OF COOLING TOWERS FROM PARKING

FEBRUARY 28, 2022
VIEW OF RETAINING WALLS ALONG GARDENER’S COURT

VIEW OF PATH TO ACORN COTTAGE
FARRAND HOUSE: PROPOSED PROGRAM DIAGRAM

- **GARDEN WITH BIORETENTION** 2,000 SF
- **ENTRY GARDEN AND ALLEE** 2,000 SF
- **COOLING TOWERS**
- **GARDENER'S COURT** 4,000 SF
- **DUMPSTERS AND STORAGE** 1,200 SF
- **OVERLOOK** 1,000 SF
- **DEODAR CEDAR**
- **MULCH**
- **GATHERING GARDEN WITH BIORETENTION** 2,000 SF
- **GARDENER'S LODGE**
- **DEODAR CEDAR**
- **LONDON PLANE**
- **S STREET**
- **TO DELL**
- **PROPOSED FARRAND HOUSE** 36' X 75'
- **JELLEF CENTER**
- **DELL**
SEEDED AGGREGATE CONCRETE
BLUESTONE
SETTS

BRICK WALL
FIELDSTONE WALL
WOOD SCREEN
• (34) TREES TO REMOVE
• (9) TREES TO TRANSPLANT
• (96) NEW TREES
1. FARRAND HOUSE

BUILDING & PROGRAM

- EXPAND YOUTH EDUCATION PROGRAM
- SUPPORT RESIDENT AND VISITING SCHOLARS AND ARTISTS
- INVITE A BROADER COMMUNITY TO ENGAGE MORE DEEPLY WITH DUMBARTON OAKS
- INTEGRATE THE BUILDING WITH EXISTING LANDFORMS AND TOPOGRAPHY
- EMBRACE CONTEXTUAL MATERIALS AND FORMS OF DUMBARTON’S EXISTING BUILDINGS
- ACHIEVE THE HIGHEST SUSTAINABILITY GOALS POSSIBLE
FARRAND HOUSE: EAST ELEVATION
SCALE: 1/16" : 1'0"
**Farrand House: Sustainability Goals**

**Reduce Consumption**

"High comfort - low impact"

**Architectural Systems**

- Exterior Shading
- Earth Duct
- Night Cooling

**Passive Design**

- Climate Zoning
- Shallow Floor Plans

**High Efficiency**

- Heat Recovery
- Geothermal

**Harness Natural Resources**

- LEED Gold
- Living Building Challenge Core Certification
- Net Zero Energy Consumption

- Photovoltaic Systems
- Water Collection

**Sustainability Goals**

- Net Zero Energy Consumption
- Harness Natural Resources
- LEED Gold
- Living Building Challenge Core Certification

**Architectural Diagram**

- Architectural diagram showing various systems such as exterior shading, earth ducts, night cooling, solar chimney, radiant floor cooling, dedicated outdoor air system, and geothermal heat pump.
- Reduced cooling loads in summer
- Flexibility of system allows high solar heat gains in winter

- Low embodied energy
- Increased thermal resistance

- Material sourced locally / recycled
- High thermal mass

- Low carbon footprint
- Used sparingly for foundations

- Material sourced locally
- High thermal mass

- Long life span
- Low maintenance

- High thermal mass

- Used sparingly for foundations

- DEDICATED OUTDOOR AIR SYSTEM
- GEOTHERMAL HEAT PUMP
- BATTERY
- 2-4 BOREHOLES

- EXTERIOR SHADING
- CROSS LAMINATED TIMBER STRUCTURE
- LOW CARBON CONCRETE
- RECYCLED ZINC CLADDING
- TERRAZZO
- LIMESTONE

- PV ON ROOF
- SOLAR CHIMNEY
- RADIANT FLOOR COOLING
- EXTERIOR SHADING
- EARTH DUCT

FARRAND HOUSE: REDUCING EMBODIED CARBON