

GREEN & GRAY

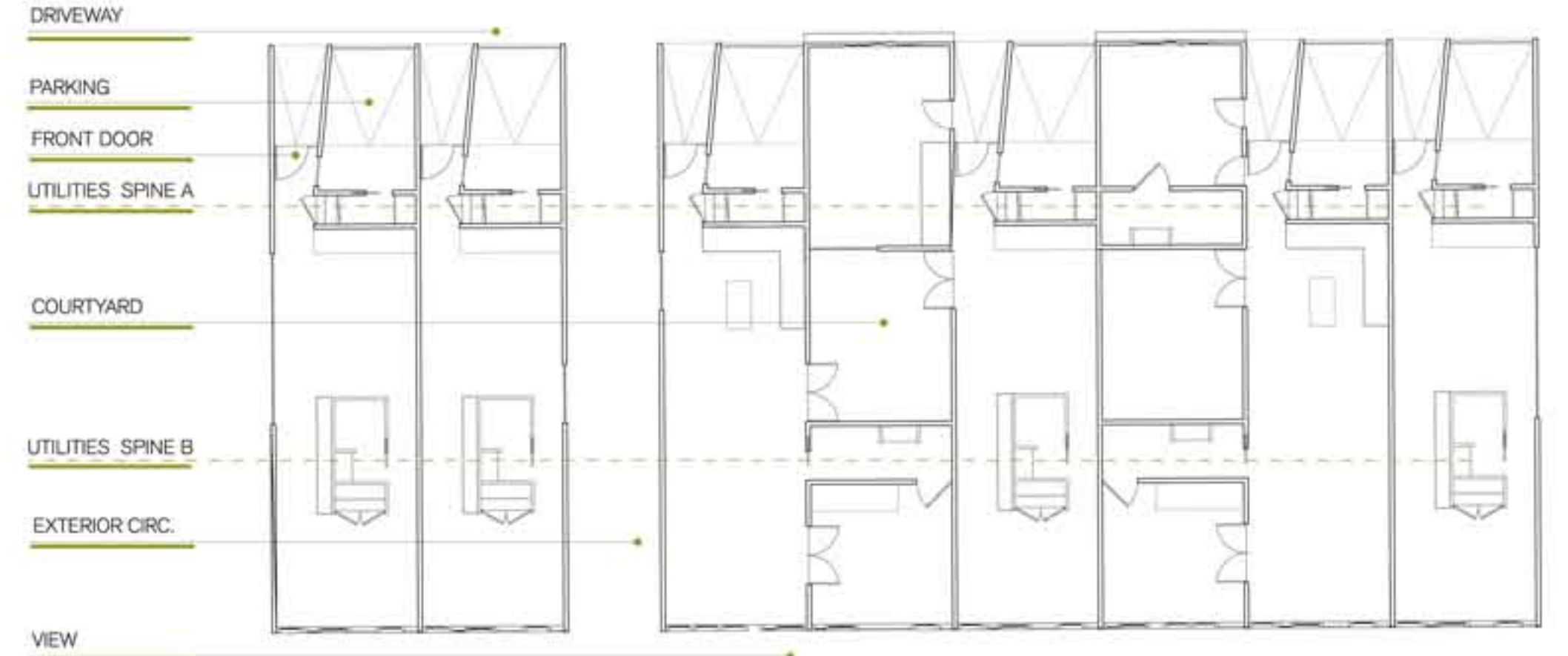
SENIOR CITIZEN HOUSING
AS A PROVOKING AGENT TO RE-IMAGINE THE SUBURB

- PROGRAM
- MATERIALS
- VEGETATION
- COMMUNITY AGRICULTURAL PLOTS
- COURTYARD FACING UNITS
- PRIVATE COURTYARD
- GUEST PARKING
- ATTACHED GARAGE
- FOREST - CITY TRANSECT



HOUSING TYPES @ 1/16TH

UNIT SUMMARY + DISTRIBUTION	
NUMBER OF BASE DWELLINGS	19
NUMBER OF DWELLINGS WITH ADD ON UNITS	08
NUMBER OF DWELLINGS WITHOUT ADD ON UNITS	11
NUMBER OF DWELLINGS W/ PRIVATE ENTRY BEDROOM	04
TOTAL NUMBER OF DWELLINGS INCLUDING ADD ON UNITS	27
SQUARE FOOTAGE	
TYPE A (6 INDIVIDUAL + 5 ADD ON X 742 SQ FT)	6,162 SQ FT
TYPE B (3 X 1060 SQ FT)	3,180 SQ FT
TYPE C (6 X 1060 SQ FT)	6,360 SQ FT
TYPE D OR E (2 X 1380)	2,760 SQ FT
TYPE F (2 X 1380)	2,760 SQ FT
WILD CARD UNITS (2 X 680)	1,116 SQ FT
COMMUNAL / COMMERCIAL AREAS	6,400 SQ FT
TOTAL BUILT AREA	30,798 SQ FT
PARKING (ATTACHED TO UNIT 25 / VISITORS: 25)	50 SPACES



HOUSING CLUSTER; ONE OF MULTIPLE CONFIGURATIONS

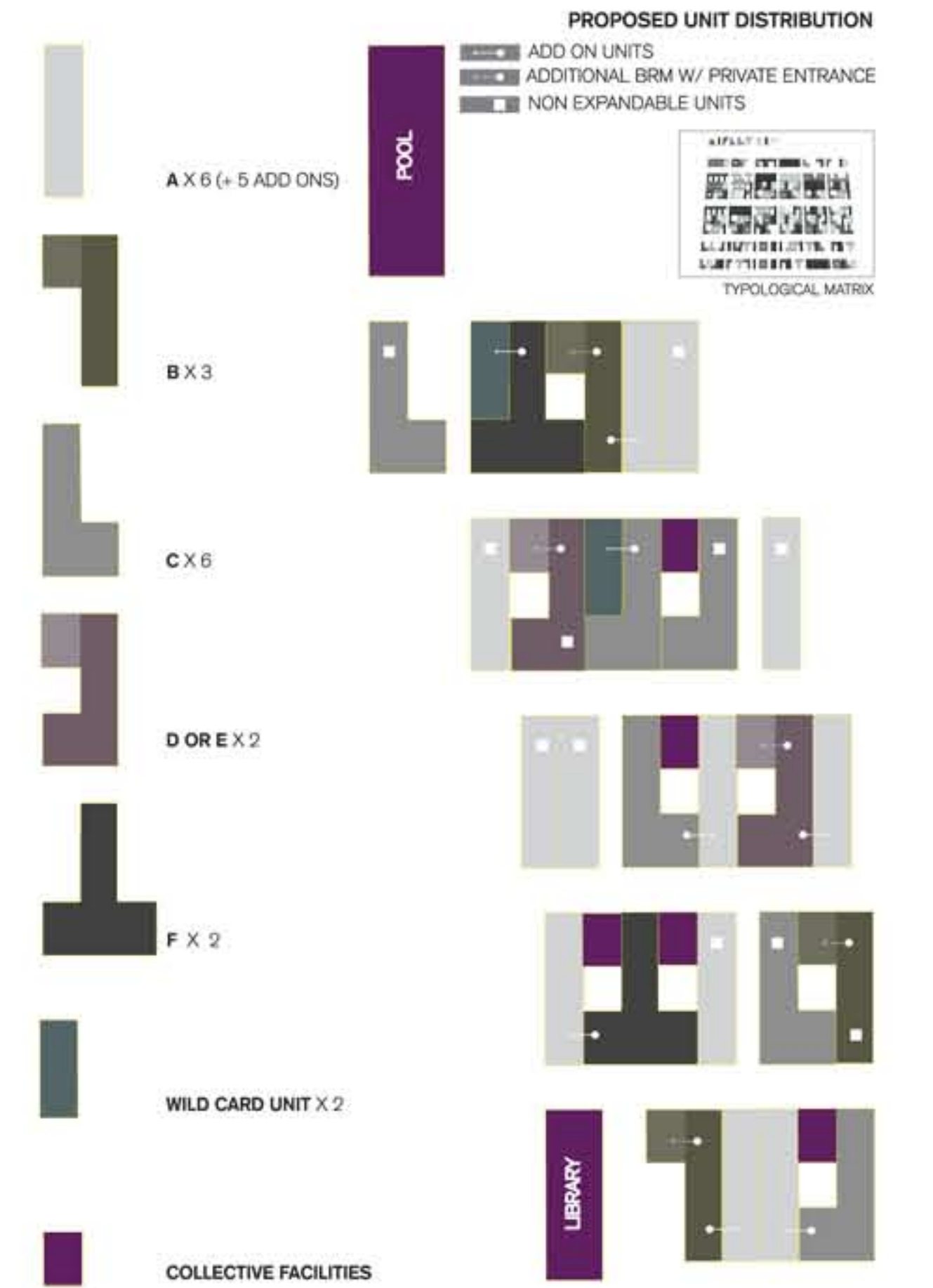
VIEW OF COMMERCIAL PLAZA AND LIBRARY

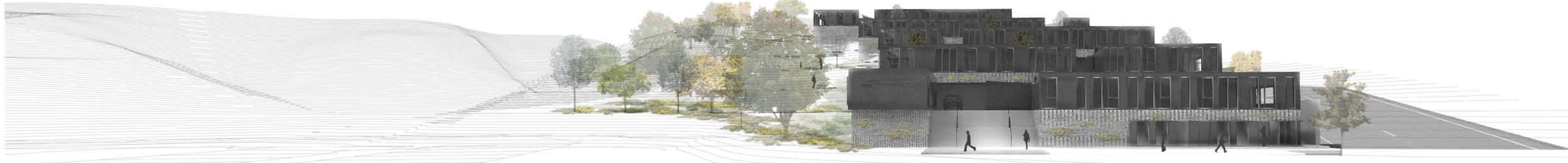


INTERIOR VIEWS



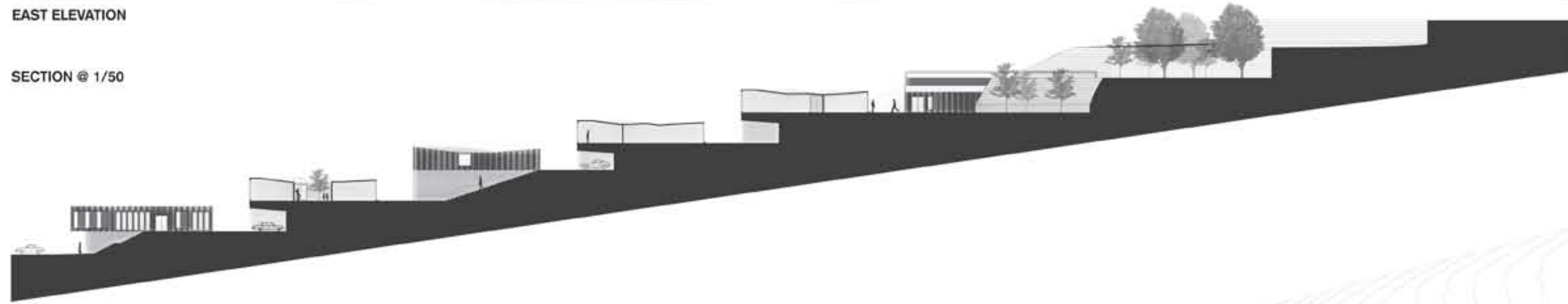
VIEW FROM POOL DECK





EAST ELEVATION

SECTION @ 1/50



BAHIA DRIVE

LOWER LEVEL COMMUNAL PARKING

COMMERCIAL BELOW RESIDENTIAL

SHARED COURTYARD (BY 2 UNITS)

LIBRARY PLAZA

PRIVATE COURTYARD

COMMUNAL LIBRARY

SHARED OFFICE BY BLOCK

UPPER LEVEL COMMUNAL PARKING

RAIN WATER HARVEST CISTERN

OUTDOOR COMMUNAL CIRCULATION

SWIMMING POOL

COMMUNAL AGRICULTURAL PODS

MIXED OAKS FOREST

GENERAL DESIGN STRATEGY

This project proposes the creation of a **vibrant senior citizen community** through an integrated architecture and landscape strategy that creates a series of well tempered nested spaces of multiple scales for **active and sustainable** senior citizen living in Novato, CA.

The aim of the project goes beyond providing high quality domestic space for senior citizens. It projects a new **iconic presence** along Bahia Drive becoming a visual and commercial node for the suburban extensions in Northeastern Novato.

SITE STRATEGY

The site strategy proposes a **denser housing configuration model** that capitalizes on the existing development patterns in the area which place **residential rings** along the perimeter of expansive forested / vegetated areas. The housing component is clustered along the edge of Bahia Drive taking advantage of the existing land movements, and freeing up the rest of the site for **recreational agriculture** and a **Blue Oak** reforestation strategy.

The site is configured following four basic operations (see phasing strategy):

1. **Transfer** of development rights from **Parcel B to Parcel A**.
2. Extension of roads and bundled utilities along Bahia drive and into the site.
3. Construction of **5 energy efficient residential clusters** and adjacent landscape / agricultural grounds.
4. Restoration of Blue Oak Woodlands on the Southwestern portion of Parcel A and throughout Parcel B, as part of a larger **carbon sequestration strategy** for Marin County.

HOUSING CLUSTERS

The design strategy favors a rich diversity of unit types, ranging from studios to 2 bedroom units. The project is composed of **19 units (plus 8 add on units)** organized in 5 "courtyard" clusters. All units are **single level**, have light exposure on three sides, and in most cases have **direct access to a private or shared courtyard**. Communal rooms and **internal care rooms** are distributed in every cluster, and selected units have an additional bedroom with private entry.

INTEGRATED BUILDING SYSTEMS

The unit clusters are built with **wood frame construction from locally sourced timber** with a well-insulated **thermal envelope** and clad with **recycled rubber**. To reduce energy use, each unit has a combined furnace and water heater as well as high performance windows that use low e glazing to maximize day lighting. Each cluster bundles its utilities into two high efficiency spines minimizing their linear extension into the site. Each building block is sited on a soil platform contained by a **low irrigation precast vegetated retaining wall**. The project estimates a **20% to 25%** reduction in total energy use.

METABOLIC SITE SYSTEMS

As part of a larger site strategy, the project introduces four key actions:

1. Minimize **semi-porous paved surface** areas.
2. Driveways and parking lot drains contain a **pollutant separation** and a **filtering system** for run off water. Water is collected for landscape irrigation.
3. The development of **communal agricultural pods** that serve as an additional source of income for residents as well as a recreational amenity for seniors.
4. **Reforestation strategy** that re-introduces endangered fauna and contributes to Marin County's aggressive carbon sequestration initiative.

CONCEPTUAL ESTIMATE

Initial estimates show that total costs for project would fit within a \$250 to \$300 per Sq FT budget. In perimeter costs would range between \$120 and \$140 per SQ FT, including extra greening costs that would be paid back throughout the life of the project. Costs are significantly minimized through the reduction of road and infrastructure footprints.

PHASE 4

ACTION A: ESTABLISH A PROACTIVE RE-FORESTATION STRATEGY THAT RESTORES BLUE / MIXED OAK WOODLANDS OVER PARCEL B AND THE SOUTHWESTERN PORTION OF PARCEL A.

BENEFITS: THE MIXED OAK WOODLAND WOULD PROVIDE A CARBON SEQUESTRATION POTENTIAL OF APPROXIMATELY 480 METRIC TONS PER YEAR, INCREASING THE AMOUNT OF CARBON SEQUESTERED THROUGHOUT MARIN COUNTY FROM MIXED OAK FORESTS



EXISTING VEGETATED SURFACES

PHASE 3

ACTION A: BUILD PROPOSED HOUSING PROJECT, ADJACENT LANDSCAPE AREAS AND AGRICULTURAL PODS TAKING ADVANTAGE OF ON SITE PLAY FORMS.

ACTION B: DEVELOP A LANDSCAPE RESTORATION PLAN THAT REPLANTS ENDANGERED HERBS, INCLUDING MARIN DWARF FLAX, TIBURAN JEWEL FLOWER, AND TIBURAN INDIAN PAINTBRUSH

BENEFITS: THE PROVISION OF A NEW SUBURBAN LANDSCAPE THAT PROPOSES AN INTEGRAL APPROACH TO LIVE, WORK AND PLAY.



TOPOGRAPHY

PHASE 2

ACTION A: EXTEND UTILITIES FROM MISTY ROAD

ACTION B: EXTEND DRIVEWAYS FROM BAHIA DRIVE

ACTION C: BUILD CISTERN (NORTHWEST CORNER) FOR RAIN WATER HARVESTING

BENEFITS: REDUCE ROAD SURFACE TO THE MINIMUM REQUIRED AND TREAT IT AS A LANDSCAPED SURFACE.

CREATE UTILITY SPINES THAT CONSOLIDATE SERVICES AND REDUCE COSTS

COLLECT AND USE RAINWATER FOR AGRICULTURAL AND LANDSCAPE PURPOSES THROUGH DELAYED RELEASE

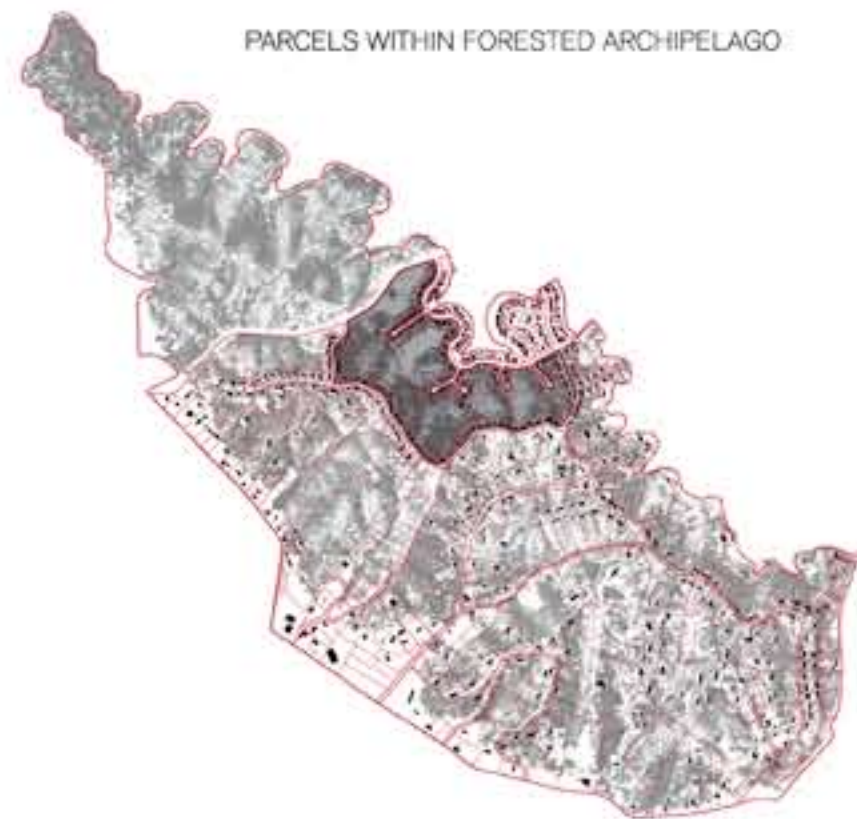


PARCELS WITHIN FORESTED ARCHIPELAGO

PHASE 1

ACTION A: TRANSFER DEVELOPMENT RIGHTS FROM PARCEL B TO PARCEL A.

BENEFIT: CLOSE DEVELOPMENT RING ALONG THE EDGE AND MINIMIZE IMPACT ON FORESTED AREAS



EXPANDED SITE CONTEXT OF FOREST AND SPRAWL