designing TODs

high-density mixed-use green housing developments at transit stations......



defining TODs

transit Oriented development

- the area within a half-mile radius
- a ten minute walk
 of a regional / city transit station





defining TODs

recipe:

- transit
- open space
- high quality walking and cycling
- shopping
- employment
- reduced auto parking
- high-density residential (allows for a variety of housing choices, size and income)





TODs Prop 1c funding

- initial prop 1c funding of \$300 million
- over two funding rounds HCD awarded \$271 million
 - Created 27 developments
 - Produced *6,158 homes*
 - Leveraged more than \$1.6 billion in federal and private capital
 - Through point scoring system a majority of projects points were based on features that <u>reduce GHG</u> and <u>vehicle miles</u> <u>traveled</u>



why TODs

"Residents living near transit stations are 5 times more likely to commute by transit as the average resident in the same city not living near transit."

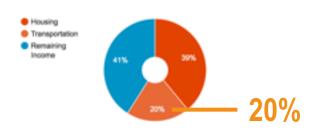
BART/CalTrans: Travel Characteristics of TOD in California



Kapolei, HI

Average Housing + Transportation Costs % Income

Factoring in both housing and transportation costs provides a more comprehensive way of thinking about the cost of housing and true affordability.



Transportation Costs

In dispersed areas, people need to own more vehicles and rely upon driving them farther distances which also drives up the cost of living.



\$14,848

Annual Transportation Costs



2.02

Autos Per Household



23.442

Average Household VMT

why TODs

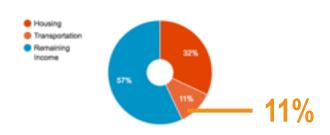
Housing + Transportation (H+T)® Affordability Index Center for Neighborhood Technology www.htaindex.cnt.org

The statistics above are modeled for the Regional Typical Household. Income: \$72,764 Commuters: 1.43 Household Size: 3.00 (Urban Honolulu, HI)



Average Housing + Transportation Costs % Income

Factoring in both housing and transportation costs provides a more comprehensive way of thinking about the cost of housing and true affordability.



Transportation Costs

In dispersed areas, people need to own more vehicles and rely upon driving them farther distances which also drives up the cost of living.



\$8,919

Annual Transportation Costs

10.85 Tonnes

Annual Greenhouse Gas per Household



1.15

Autos Per Household



Average Household VMT

The statistics above are modeled for the Regional Typical Household. Income: \$77,887 Commuters: 1.19 Household Size: 2.66 (San Francisco-Oakland-Hayward, CA)

Transit Ridership % of Workers

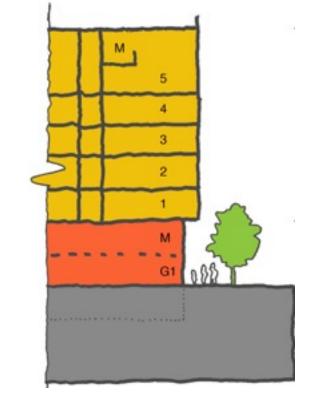
Annual Transit Trips

4.74 Tonnes Annual Greenhouse Gas per Household

4 TOD projects

PARKING / CONSTRUCTION TYPES

• WRAP / TYPE III



- TUCK UNDER + SURFACE / TYPE V
- PODIUM / TYPE V
- MECHANIZED STACKER / TYPE III





LEED For Homes Mid-Rise



affordable rental family housing

community space

+ retail

Units per acre units per acre units per acre units per acre units 204 parking spaces (1.3 per unit) wrap garage

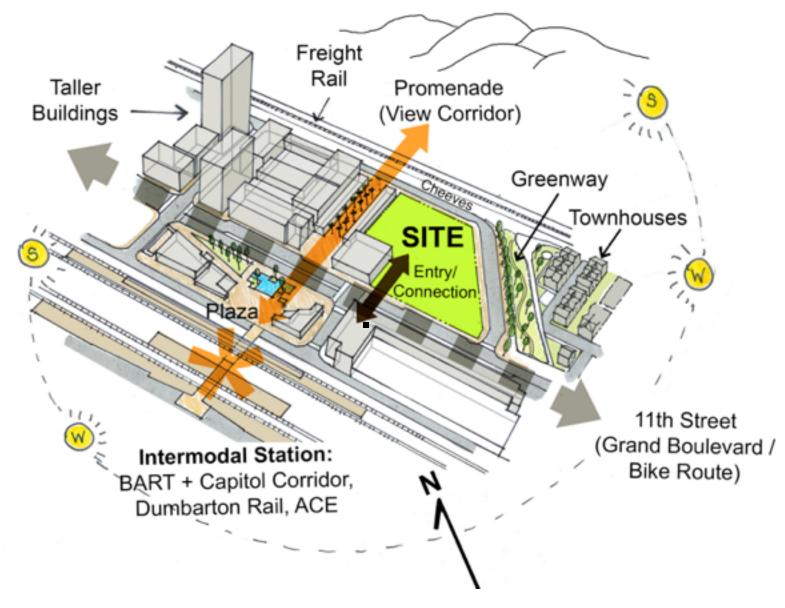
Developer: MidPen Housing

Station Center TOD - WRAP















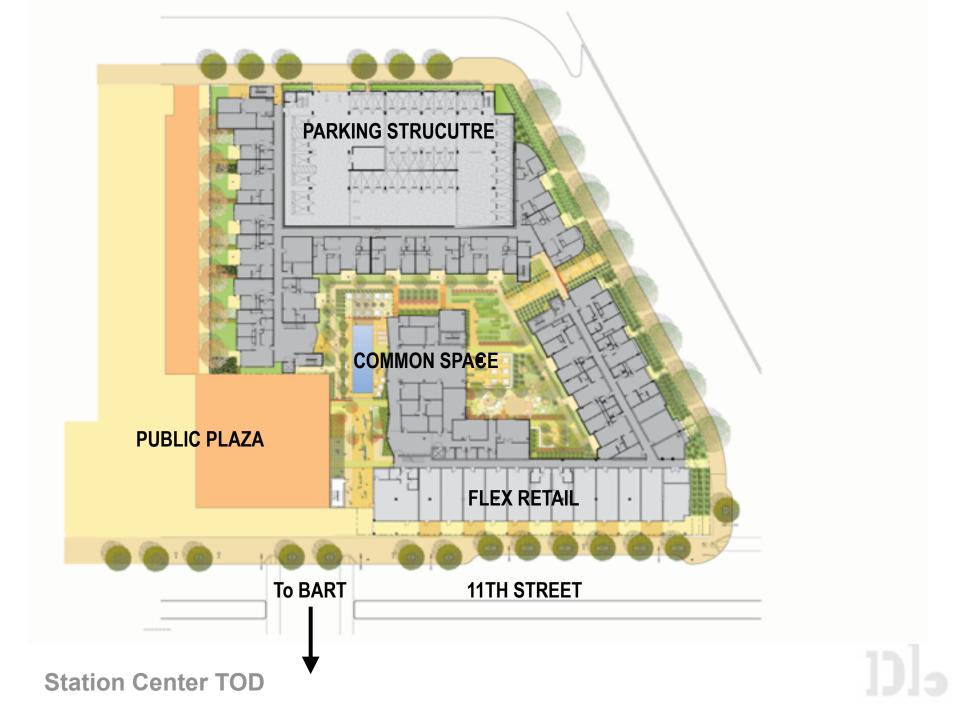


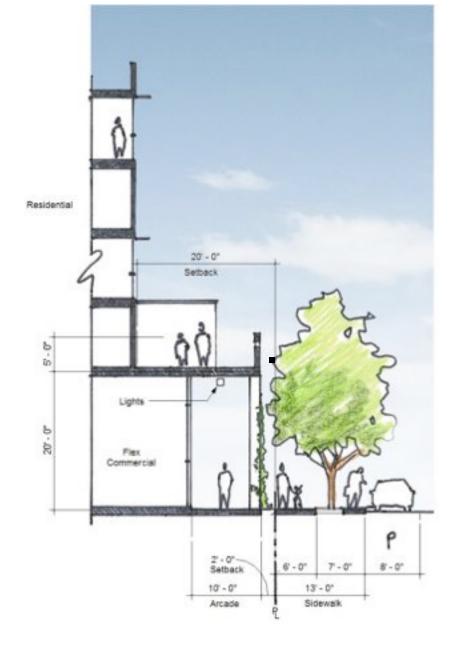












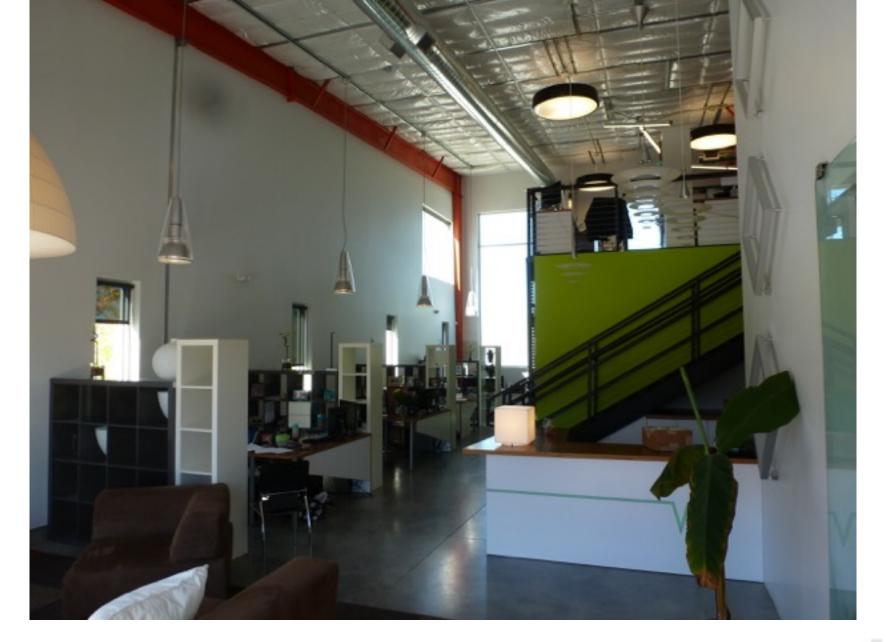










































affordable rental family housing

+

community space

+

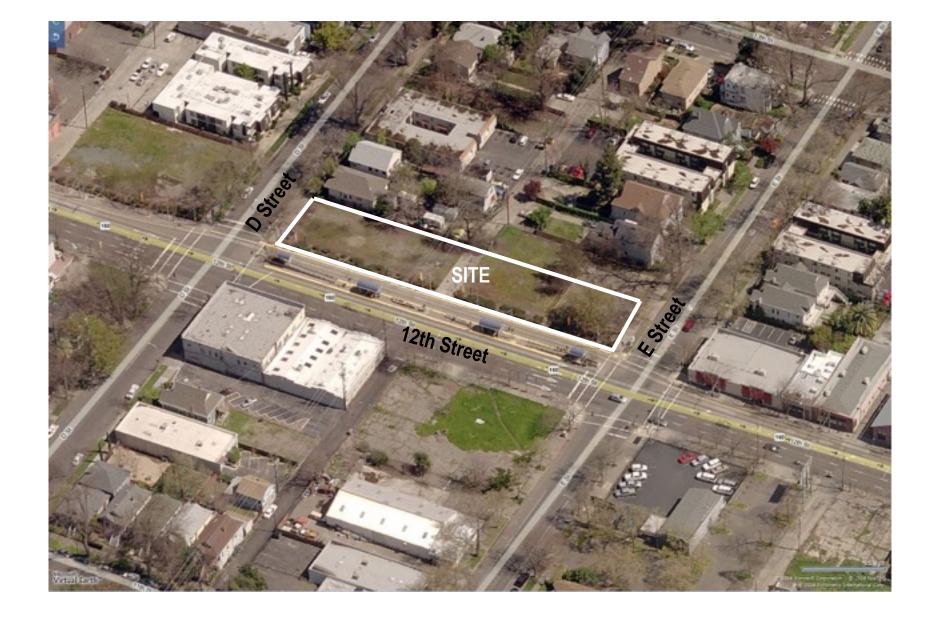
retail

76units per acre63 units68 parking spaces (1.08 per unit)

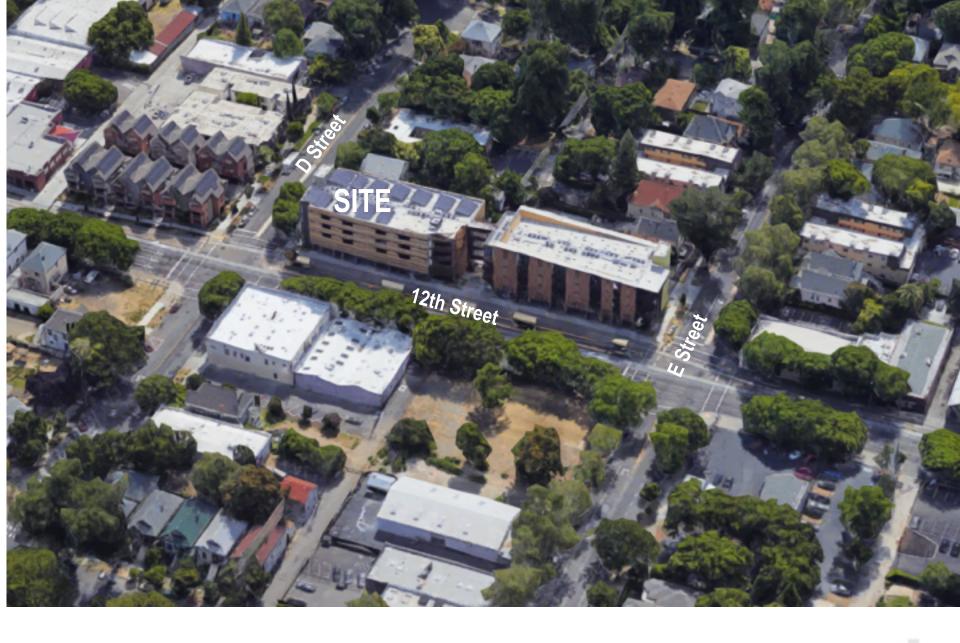
tuck under + surface parking

Developer: DOMUS Development

La Valentina - Tuck Under + Surface Dia



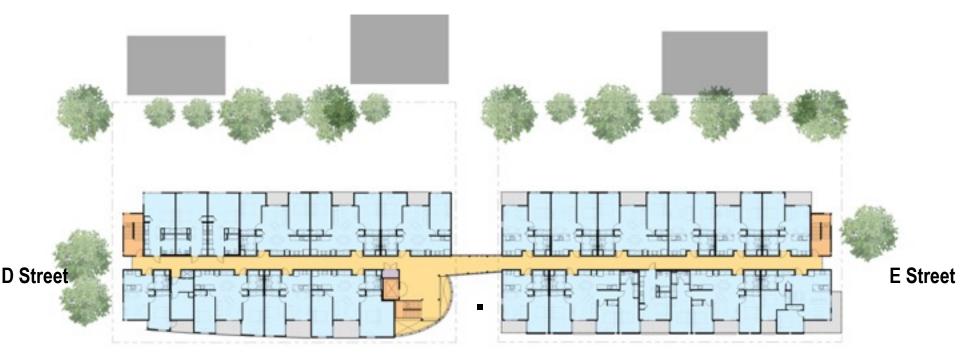










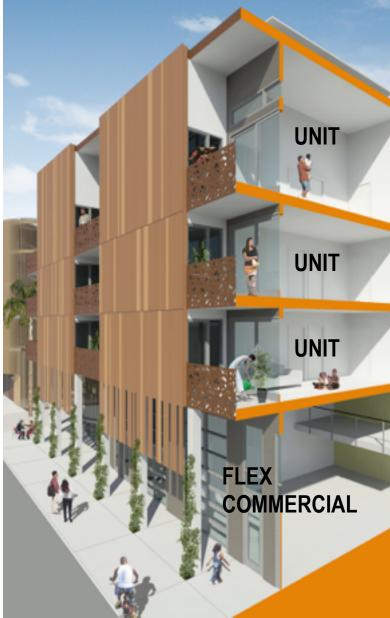


Alkali Flat / La Valentina Light Rail Station

12th Street







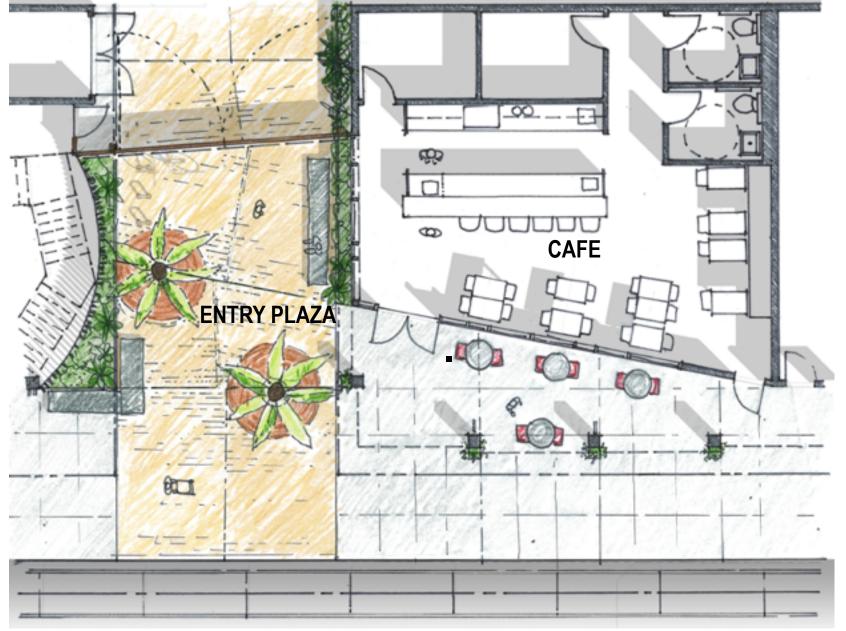












TRANSIT STATION









Armstrong Place and Armstrong Senior Affordable Housing

5600 Third Street BRIDGE Housing, Developer



Total Parcel Area: 136,756 sf 240 units on 3.14 acres 76 units per acre 155 parking spaces .65 spaces / unit







EXISITNG SITE - VIEW ALONG 3RD STREET



EXISITNG SITE - VIEW ALONG BANCROFT



View from 3rd and Armstrong





GOLD



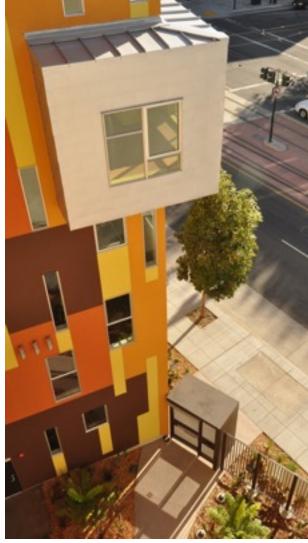
100% affordable senior rental housing retail teen health center structured parking

145 units per acre 116 units on 0.8 acre 29 parking spaces 2 car-share spaces 0.27 spaces / unit



Armstrong Senior HUD Apartments





Site Plan

Courtyard Entry





Upper Level Podium Plan

Rents: \$0 to \$635 per month

Income Level o to 50 % AMI with AMI at \$86,000

Funding Sources

- Low Income Housing Tax Credits \$10,000,000
- State Transit Oriented Development Funds (Prop 1c) \$9,000,000
- •60% of the units are HUD 202 (includes construction cost + operating expenses) \$9,000,000
- \$10,000,000 long term loan from SF Redevelopment Agency (SFRA)
- •\$2,500,000 land cost from SFRA

Development Costs

- •Land Purchase: (\$2,500,000)
- •Construction: \$30,000,000 / \$225 per GSF
- •Soft costs: \$8,000,000
- •Total: \$40,500,000

Dla

Armstrong Senior HUD Apartments





ANANSE NTONAN: "spider's web" A symbol of wisdom, creativity and the complexities of life

BESE SAKA: "sack of kola nuts"
A symbol of abundance and power

Adinkra: West African Tribal Symbols

Armstrong Senior HUD Apartments







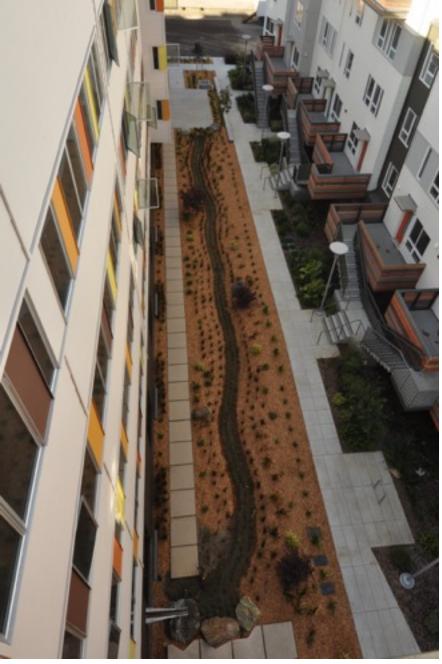


Ghanian Dutch wax-resist batiks









Armstrong Senior registered - LEED NC Gold

- transit & walkable neighborhood
- storm water retention system
- bike room
- bicycle showers & lockers for retail
- City Carshare pod
- exceed Title 24 by 23.5%
- 52 kW photovoltaic system
- 2,000 gal. solar thermal system 60%
- hydronic space heat
- enhanced commissioning
- energy star appliances
- recycled & regional materials
- no-low VOC materials
- corridor motion sensor lighting controls
- Green Communities grant



100% affordable first-time home buyer ownership housing



53 units per acre
124 units on 2.33 acres
52-2 bedrooms
48-3 bedrooms
24-4 bedrooms
124 parking spaces

1 spaces / unit









View of Townhouse Stoops along Bancroft



Home Buyer Overview

- •first time home buyers
- •income levels of 60%, 80%, and 100% of the Area Medium Income
- down payment assistance-HomeBricks
- •units priced from \$166k to \$350k

Funding Sources

- •\$30,000,000 loan from SFRA
- •\$30,000,000 conventional construction loan from Bank of America

Development Costs

- •Land Purchase: \$7,000,000
- •Construction Cost: \$41,000,000 / \$170 per gross SF
- •Soft costs: \$12,000,000
- •Total: \$60,000,000



View of Main Entry Court along Bancroft







View of play structure in Main Courtyard which measures 100 x 80 feet









2012 Global Award for Excellence

2012 ULI Global Award for Excellence Winner

Presented to

Armstrong Place Senior and Family Housing

San Francisco, California, United States Owner/Developer: Kevin Griffith, BRIDGE Housing Corporation Architect: David Baker + Partners, Full Circle Architecture, TSH International



in creating and scalaring thriving communities worklands.



The Art of Affordable Housing

developments take creative design approaches to providing appealing environments while

AFFORDABLE HOUSING DOES not have to look like pilen boxes, how the five like pilen boxes. Though eight budgets may restrict options for materials, architects have found ways to add variety, mixing exterior testures and colors, breaking up massing, and integraling at into the architecture. Careful sting leaves soom for gifterous outdoor open spaces—whether

landscaped courtyards or public plazas—that provide places for residents to get to know each other or enoisy a respite from life in the city. All completed in the past five years, the following ten projects (listed alphabetically) exemptify levels of design more typically found in market rate housing. A

design strategies that reduce energy and water use—crucial whether the tenant or the owner. operator pays the utility bills.

1. Armstrong Place Senior and Family Housing

Lamburgo Place Seria and Family Housing And Plankset and C. and Ambarus More papelin more and of Institution housing into services "selections" complexes, they risk betterming solitated from the larger community, to encourage more properties of the services of the community of the services of the services and the part better the services of the services of the community services and the services of the services of services as well as a complex of fire selection services and the services of the services of services as well as a complex of fire selection produced by an admitted and the services for services and the services of the services services and the services of the services services and the services of productions of the services and productions of the services of productions of services and services serv

32 URBAN LAND JANUARY/FEBRUARY 2012







market-rate rental housing

+

retail

+

PDR (production, distribution & repair)

+

public park

99 units per acre
453 units

307 parking spaces (0.65 per unit) mechanized parking stackers

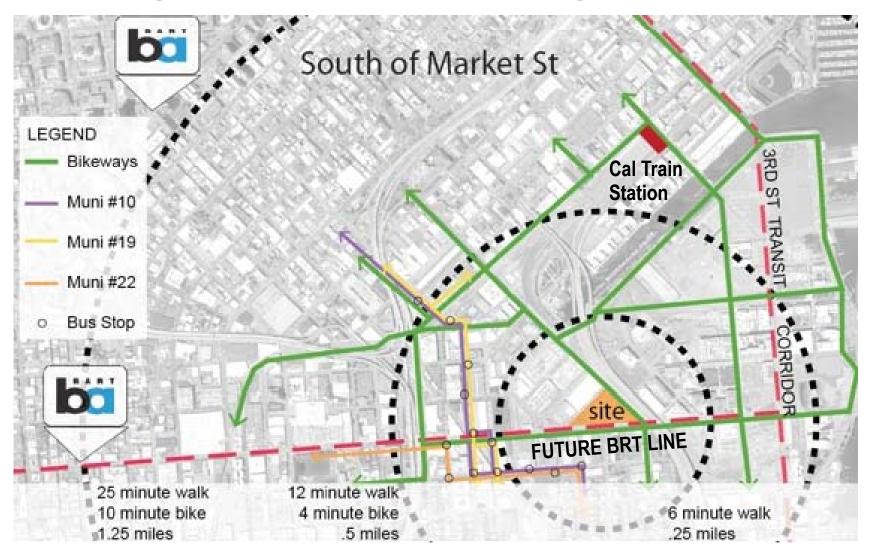
Developer: Equity Residential

Potrero 1010 - Mechanized

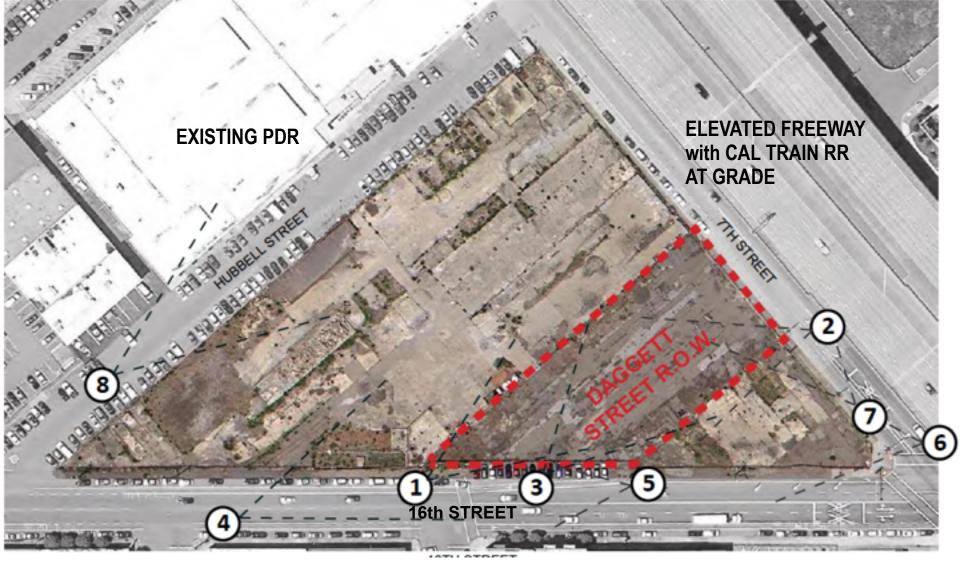




Neighborhood Linkages



30 MINUTE WALKING DISTANCE to 30,000 JOBS!



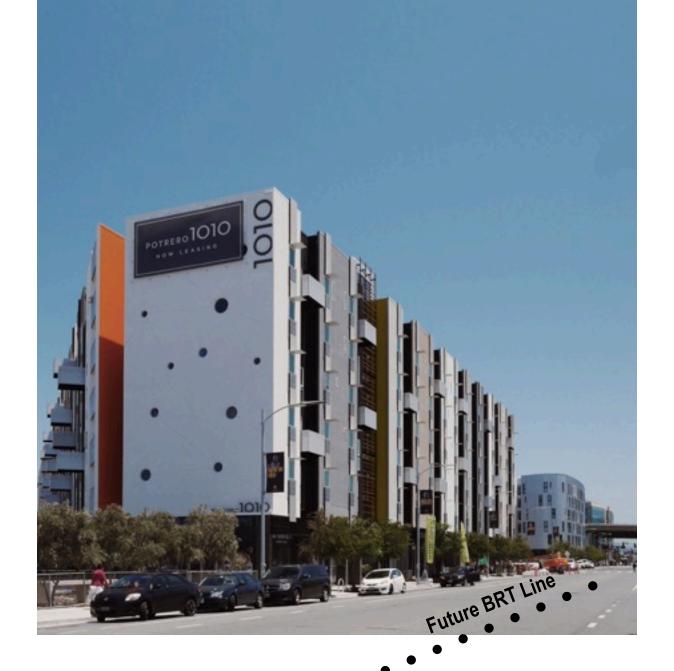








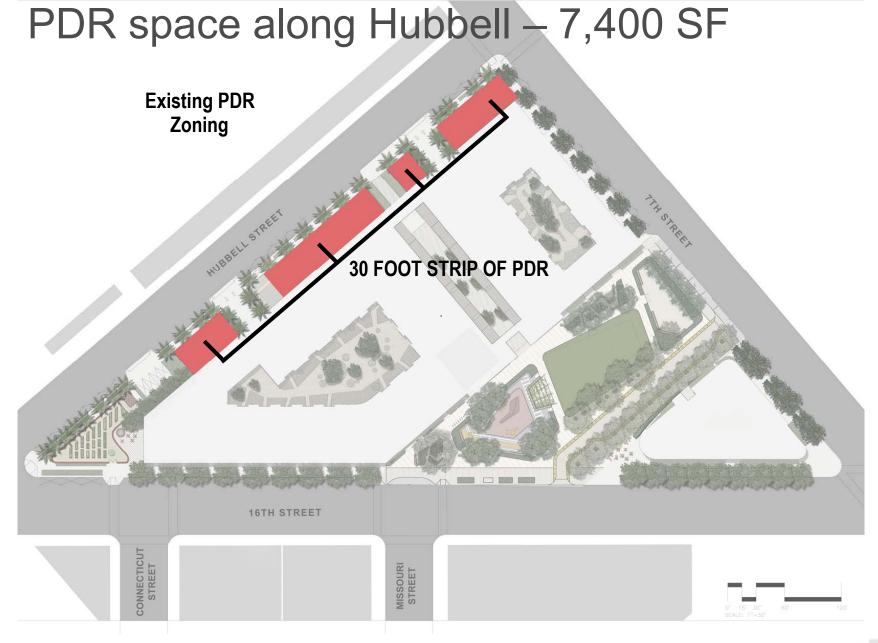






















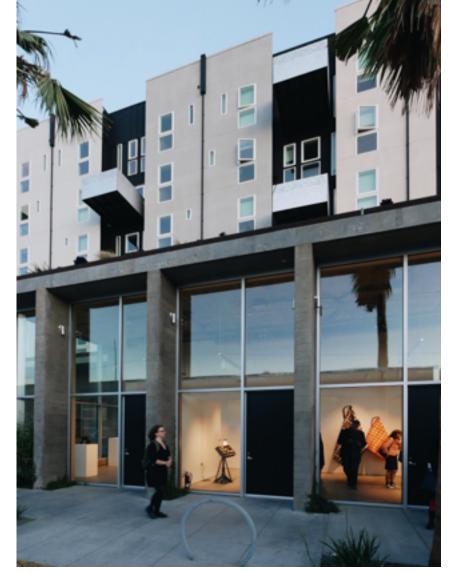






CCA Artist Studios





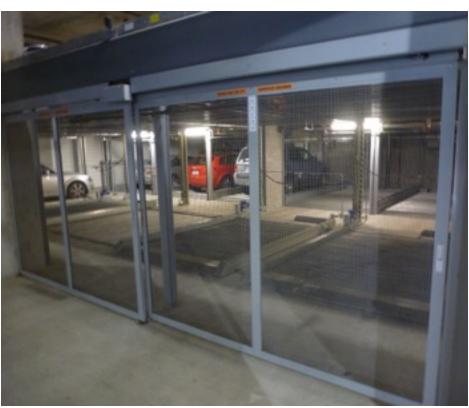


CCA Artist Studios

306 parking spaces (.65 ratio) 10 electric vehicle charging stations 4 car share **Parking Garage Car Share Parking Garage** 16TH STREET







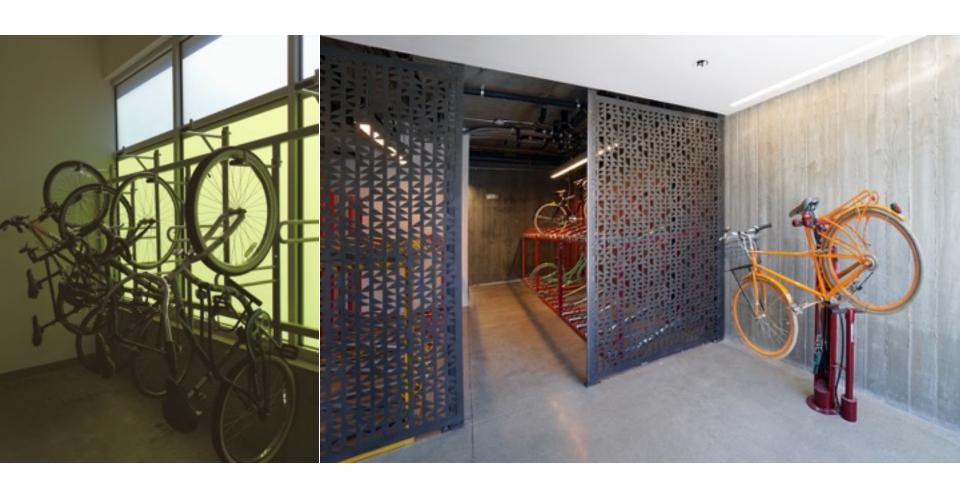




Car Share - Zip Car



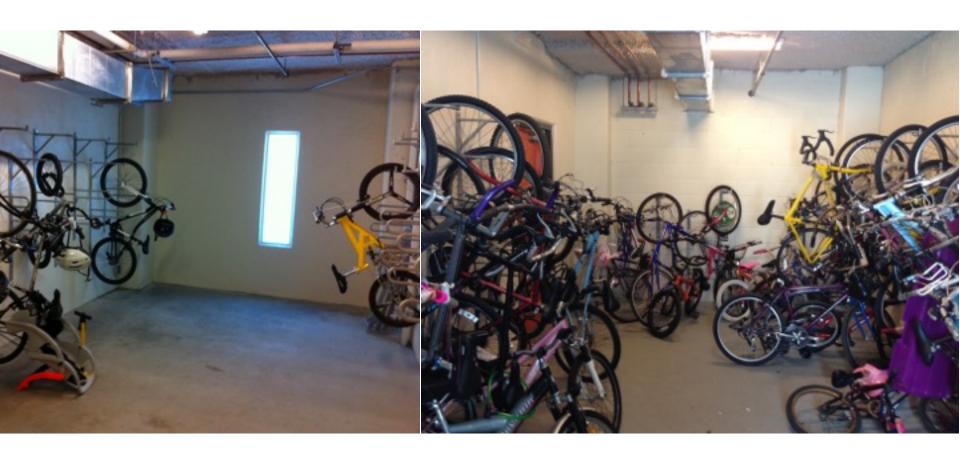




Bike Storage



ONE BIKE SPACE PER BEDROOM......





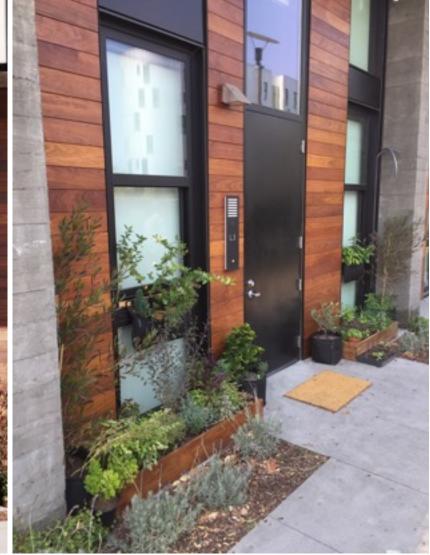
Ground Level Flex Units – 28 units 16TH STREET

















SHED Hair Salon



SCHEMATIC PLAN



Community Public Park





Community Park as Public Benefit





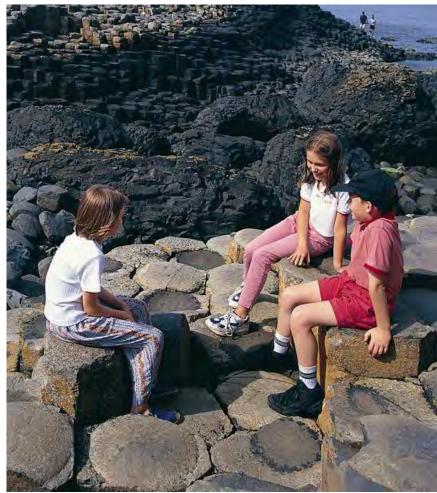






"PENTA-STEP" LANDSCAPE FEATURE





Giants Causeway, Northern Ireland





LAWN FEATURES







BANKING

MISSION MARSH BEARS

A DYNAMIC BATRYOUT INTO A NEW MEGHBORHOOD FINEY.

Mission Most diseas consists of those large excitations of qualification that from the superposition and from stational place of excitational grantee culture processed by the SF Department of Public works. As the sun comes to signal passes over the fines laws, these increase force will cast an array of strakes across the ground. The laws, will be intented to reach on their intention will highe and to create a dynamic entrypely into the past,

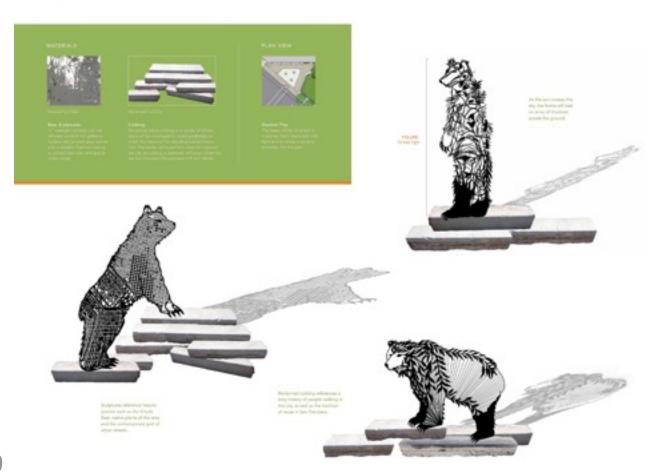
MATERIA PLANTS AND AMERICA OF THE AREA.

National Publishs below consecute for tree parts.

Master March States offices the fitter of it best of Diaggast Park while providence and proposeding to the contemporary sits the park will park will push to the perphenent of th responding to the design of the first force of the property of the control of part dates to the part dates to the first force of the part dates to the first force of the part dates to the first force of disclore of the excipture. It off also continues permetts sharper into the organic sames forms, referencing the contemporary grid of other areas and exchinctors in concert with the natural world.

STATING HISTORIC AND CONTEMPORARY SAN FRANCISCO

summer well-peer AND CONTEMPORARY LAW-READINGS.
After a year provincing the former flashing files become descripted with sever-structures, from the industry and forms, the supplice flashing arms a claim or authority and difference from any files for the reading files arms of the day form and the provincial arms of the day for the severence and the several customs. The amount temps with a the largest of the day for the severence and the send of a large flattery others and the sends of a large flattery orders and the sends of a large flattery orders are sending amount of years for a flatter flatters and the provincial orders are former of water for flatters and the sends are send or flatters are send or flatters and the sends are send or flatters are send or flatters. pre-a reference to the fratory debris that has bereath the ground.





Dla