

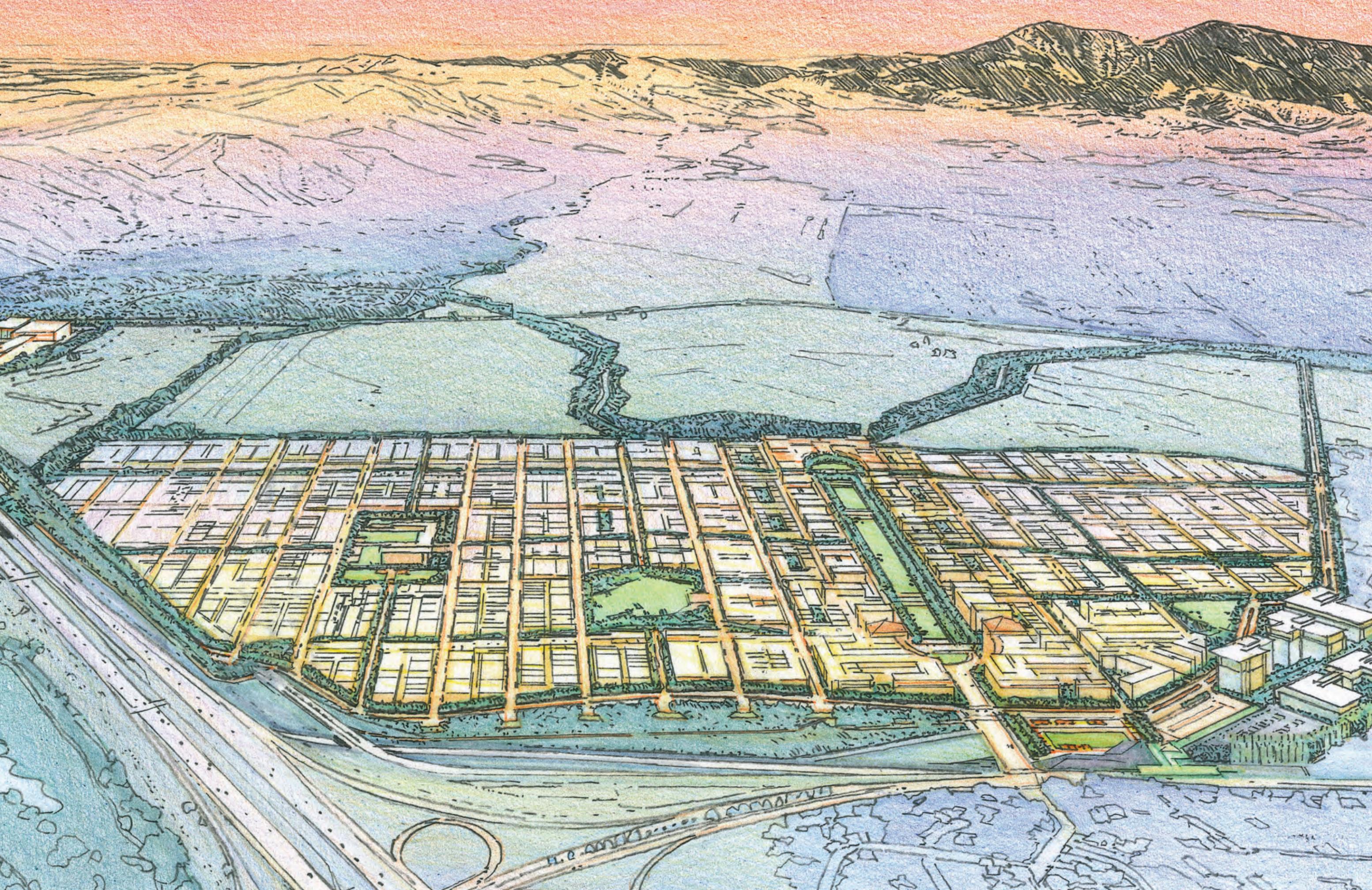
Concord Naval Weapons Station
City of Concord Local Reuse Authority

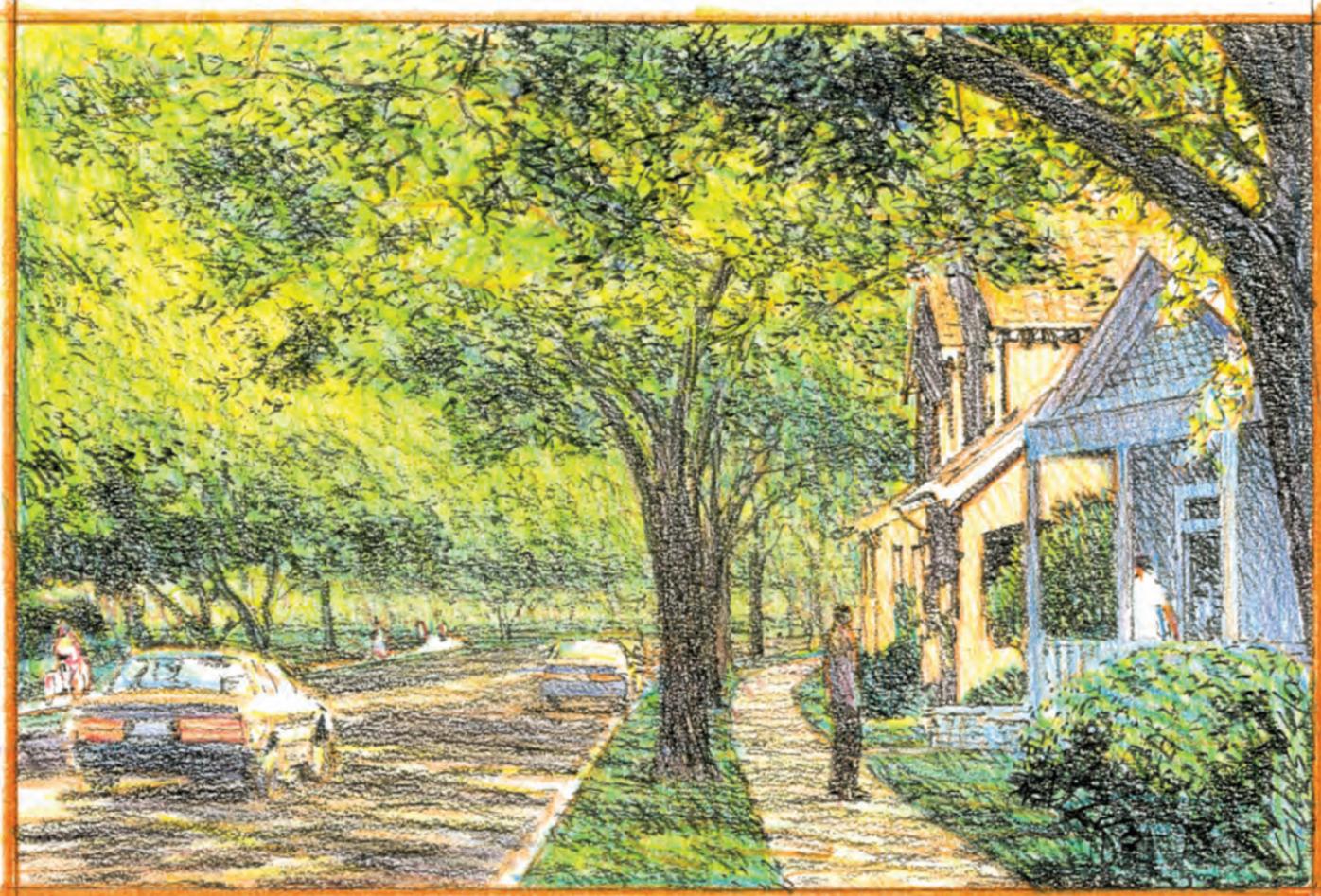
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Appendix A: Example Documents

Appendix B: Team Resumes

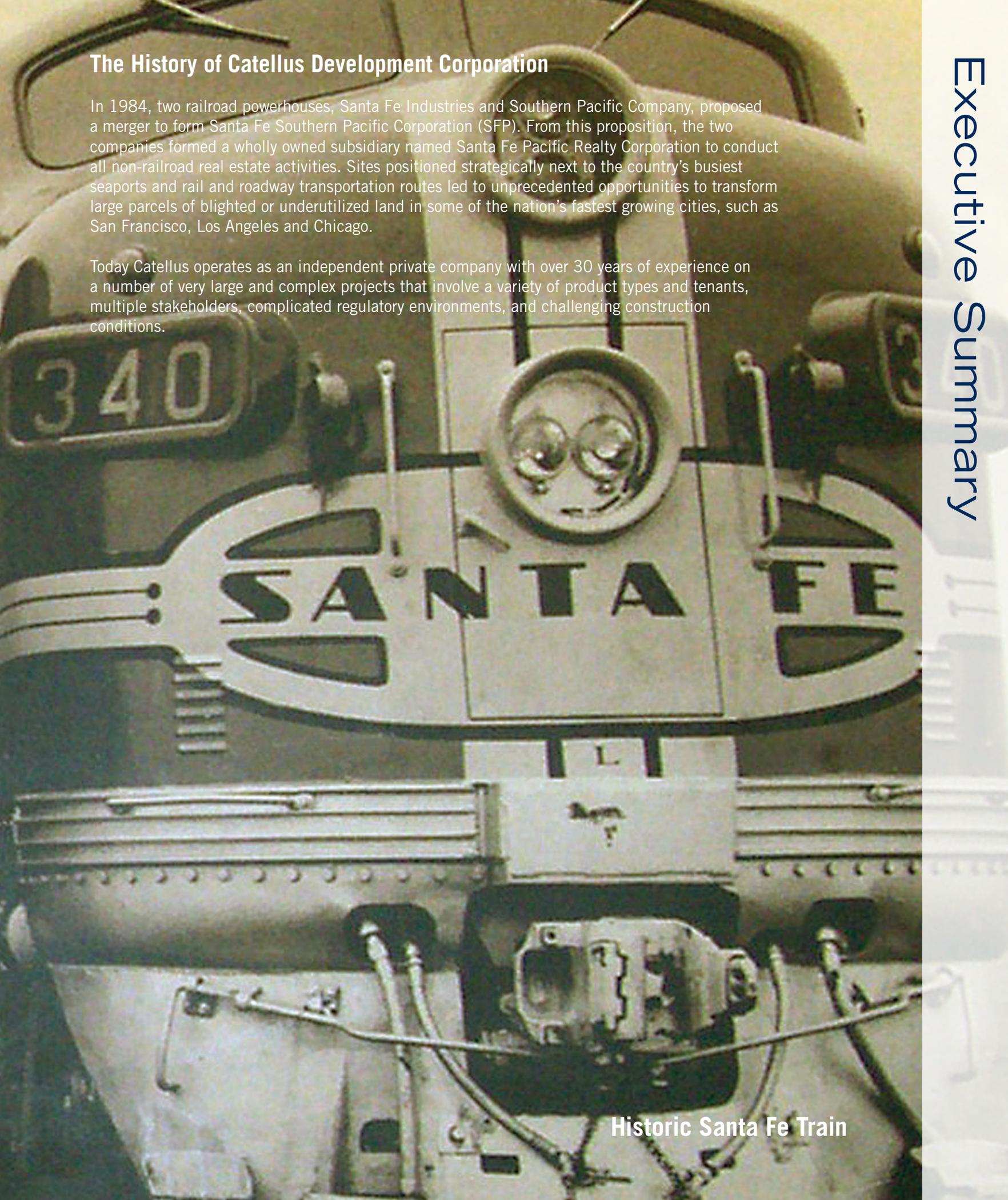




The History of Catellus Development Corporation

In 1984, two railroad powerhouses, Santa Fe Industries and Southern Pacific Company, proposed a merger to form Santa Fe Southern Pacific Corporation (SFP). From this proposition, the two companies formed a wholly owned subsidiary named Santa Fe Pacific Realty Corporation to conduct all non-railroad real estate activities. Sites positioned strategically next to the country's busiest seaports and rail and roadway transportation routes led to unprecedented opportunities to transform large parcels of blighted or underutilized land in some of the nation's fastest growing cities, such as San Francisco, Los Angeles and Chicago.

Today Catellus operates as an independent private company with over 30 years of experience on a number of very large and complex projects that involve a variety of product types and tenants, multiple stakeholders, complicated regulatory environments, and challenging construction conditions.



Historic Santa Fe Train

Redevelopment of the Concord Naval Weapons Station (“CNWS”) is a once-in-a-generation opportunity for Northern California. After months of planning and analysis, Catellus is more confident than ever that it is the right partner for the City of Concord.

Together, Catellus and Concord can deliver a world-class project that will not only be a model of sustainable, transit-oriented development, but also an economic engine for the City and region for years to come. Under Catellus’ stewardship, CNWS will be a project that stakeholders can be extremely proud of, and, more importantly, a project which will greatly increase the quality of life for Concord’s residents.

Realization of the City’s aspirations will rely heavily on a broad vision and an unwavering commitment to the Project’s core goals. Over the last twenty years, no company in the Nation has a better track record in these endeavors than Catellus.

As one of the Country’s premier master developers, Catellus manages the complex fabric of long-term, capital-intensive land development

projects. In one cohesive process we manage consultants, contractors, homebuilders, tenants and end-users, all while collaborating with a diverse mix of stakeholders, forging results that meet the goals of our public/private partnerships.

Catellus’ core business is large-scale land development. The importance of this fact is threefold. First, our company has the institutional stamina and deep financial reserves required to weather the cyclical nature of the business. Second, our core leadership group has worked together for over 20 years as land developers, delivering an unrivaled resume of completed marque projects. Finally, as a master developer, and not a homebuilder, we operate our business with an eye towards what’s best for the master plan and its stakeholders, and not as means to control a residential lot inventory pipeline.

From highly urban projects like Mission Bay in San Francisco, to suburban projects like Serrano in El Dorado Hills, our leadership understands what terms like “large-scale” and “long-term” really mean and have consistently been successful at overcoming obstacles and completing projects.



Since our selection to the short list of potential Master Developers, Catellus has taken the following actions:

1. Reviewed the approved Reuse Project Area Plan to understand the goals of the community and the guidelines for development;
2. Developed a conceptual site plan for the Development Phase One Property, consistent with the Reuse Project Area Plan;
3. Completed a thorough residential market analysis that provides for 10 years of residential development with an array of over 10 product types;
4. Created a mass grading and site leveling plan;
5. Generated an estimate of the offsite costs and backbone infrastructure required to deliver the Development Phase One Property;
6. Coordinated with affordable housing developers to review the affordability requirements and to strategize on ways to maximize access to affordable housing financing;
7. Reviewed the project's EIR and supporting documents to understand the under pinnings of the existing entitlement and the basis for future mitigation measures;
8. Analyzed numerous sustainability options and integrations strategies for our proposed Development Phase One Property;
9. Reviewed the environmental conditions and back up documentation in order to efficiently phase the project and understand future land use restrictions; and

10. Finalized a Phase One proforma that summarizes sources and uses of funds and the financial feasibility of Development Phase One.

Catellus and ROMA Design Group have created an extraordinary plan for the Development Phase One property. The 413-acre plan contemplates development in a manner consistent with the community's vision, focusing on key project assets like the North Concord BART station. The plan also provides direct connections to the nearby Coast Guard housing project and Willow Pass Park, both of which are planned for near-term improvement. The plan provides direct relationship to Diablo Creek Golf Course as well as to Mt. Diablo Creek, and also includes a 10-acre, 200-foot-wide "Central Park" among its many open space area offerings.

The Phase One proposal directs development into the portion of the First Transfer area that is least constrained by the Contra Costa Canal and unencumbered by remediation areas, hazardous materials, wetlands, and sensitive habitat. It also directs development into the most accessible portion of the site, not only through its connections to BART and buses at the North Concord BART Station, but also to the two freeway interchanges along Highway 4. It provides for linkage from one end of the City to the other, through the Coast Guard site on one side and under the highway to the Diablo Golf Course on the other. It also connects the commercial development planned at the Willow Pass interchange.

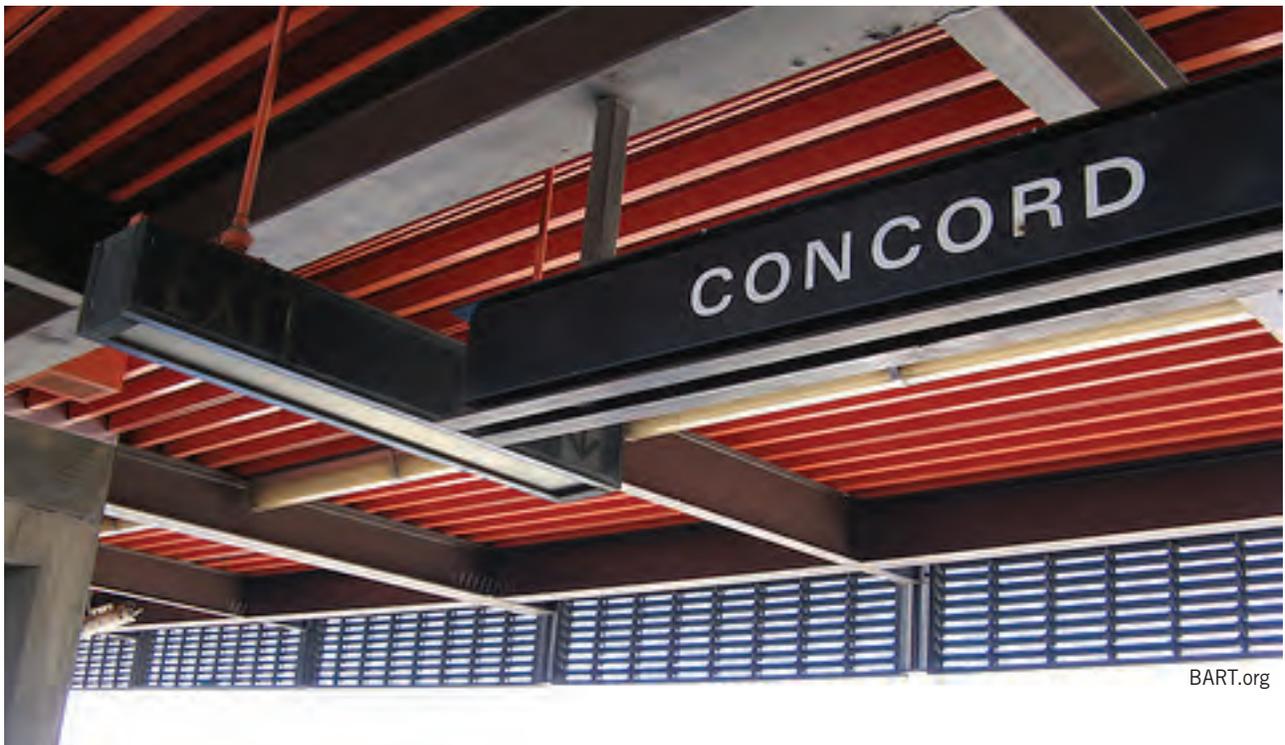
Our strategy is to establish a distinctive transit-oriented village early on in the evolution of the reuse of the property. The plan envisions the adjacency to BART as the single most important factor that will add to the character and identity of the development. It places the initial phase of growth in a location where it can build upon the existing City context and connect to multiple points of access.

Rather than beginning with low-density development in the middle of the property and proceeding in the direction of BART along an elongated route, our plan concentrates development in close proximity to the station and develops outward.

The Project's proximity to the North Concord BART Station makes it the only transit-oriented development opportunity in the Bay Area with

enough undeveloped land to accommodate a large-scale master-planned community. The plan responds to that opportunity by configuring development in a compact urban form that is, for the most part, within a 15-minute walking distance of the station. New development is organized around an efficient walkable grid that undulates with the topography, heightens diversity and builds connections to amenities and resources that will add to the quality of life of existing and future Concord residents.

The deal structure Catellus proposes for the CNWS partnership is the same it has successfully used at Mueller in Austin, Alameda Landing in Alameda, and most recently at the 300-acre ASU redevelopment project in Tempe. The structure is a true public/private partnership and uses a unique "open book" financial structure



BART.org

Development Phase One would commence adjacent to BART and move east. This would place a wide array of residential product types and the mixed-use Town Center within a 15 minute walk of transit.

Executive Summary

to align the interests of Catellus, the City and other stakeholders. The structure uses the value-creation process to deliver land compensation to the Navy, infrastructure, amenities, and land compensation to the City, key project requirements (like affordable housing) to stakeholders, and a fixed, fair return to Catellus.

The Catellus investment approach is rigorous, disciplined and completely transparent. Infrastructure outlays are balanced with value-creation opportunities in a manner which allows the project to proceed in a variety of economic environments. During the recent economic downturn, as many developers struggled for survival, Catellus, because of this deal structure and its financial discipline, was making significant progress at both Mueller and Alameda Landing. Aerial photos of our projects from before and after the recession tell quite a story when compared to those of other developers' projects.

Catellus will need to hit the ground running to take advantage of an early construction start following the Navy's First Transfer Parcel conveyance in 2016. Community outreach meetings will commence immediately to finalize the Phase One Development Plan and map out steps to its implementation.

The myriad of supporting documents including the Area Plan Implementation Work Program, Specific Plan/Master Plan, Habitat Mitigation and Monitoring Plan, CNWS Design Book, Traffic Demand Management Plan, Greenhouse Gas Reduction Program, and others will need to be completed. Catellus will meet with all stakeholders and establish the relationships which will be vital to the Project's long-term success.



Mission Bay has successfully integrated the Caltrain (pictured) commuter rail service, Muni light rail, two miles of bike lanes, 1,000 new bike racks, and 66,700 linear feet of pedestrian friendly sidewalks.

Catellus understands the importance of building a strong team of consultants in order to be successful. We will lean heavily on experts in master planning, architecture, landscaping, placemaking, sustainability, engineering and traffic. In this effort, we have partnered with experts that are uniquely qualified to take on a project of this complexity: ROMA Design Group, BCV Architects, CMPBS, BKF Engineers, Cox Castle & Nicholson, Square Peg, Langan Treadwell & Rollo, IRIS

Environmental, and Real Estate Economics are on the Catellus team. We will also look to expand our consultant team with Concord area businesses that bring local knowledge and expertise.

Catellus' roots are in the San Francisco Bay Area and we maintain our headquarters in Oakland. Our experienced team is in the final construction stages for projects in Alameda and Fremont and timing is perfect for a seamless transition to our next challenge.

Catellus takes great pride in its hard-earned track record. For over 30 years, we have transformed former airports, military bases and urban industrial sites into thriving commercial, retail and residential communities. We're good listeners, creative problem solvers, and above all, trusted partners.

Through our majority owner, TPG, we have exceptional financial strength and the institutional patience and long-term vision that are vital to successful land development.

Our skill set spans the entire gamut of real estate product types – land development, homebuilding, retail development, office development, industrial development and property management. This breadth of scope will be critically important to implementing a complicated project like CNWS. We are excited about our future in Concord and look forward to a long, successful partnership with the City and its constituents.

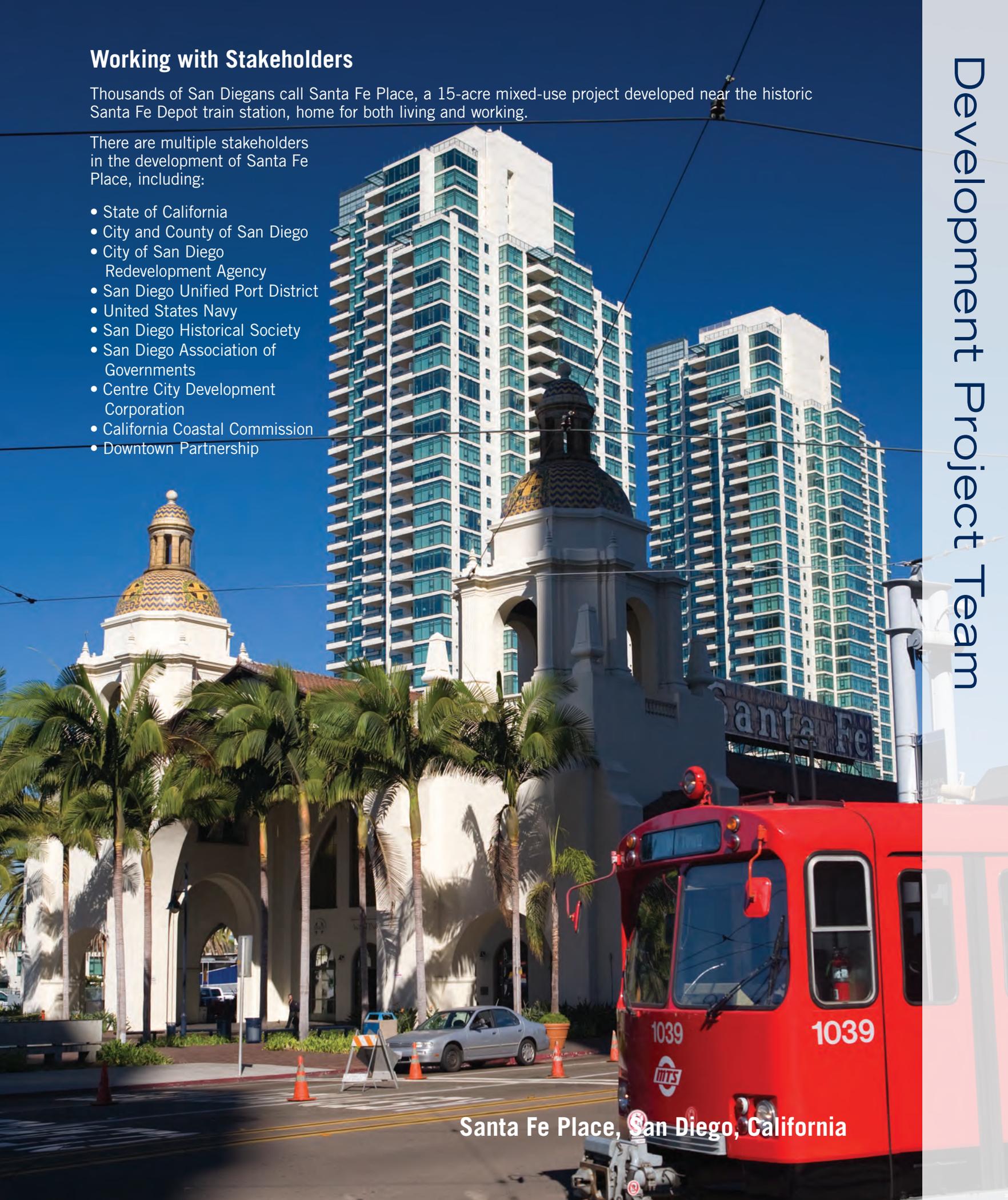


Working with Stakeholders

Thousands of San Diegans call Santa Fe Place, a 15-acre mixed-use project developed near the historic Santa Fe Depot train station, home for both living and working.

There are multiple stakeholders in the development of Santa Fe Place, including:

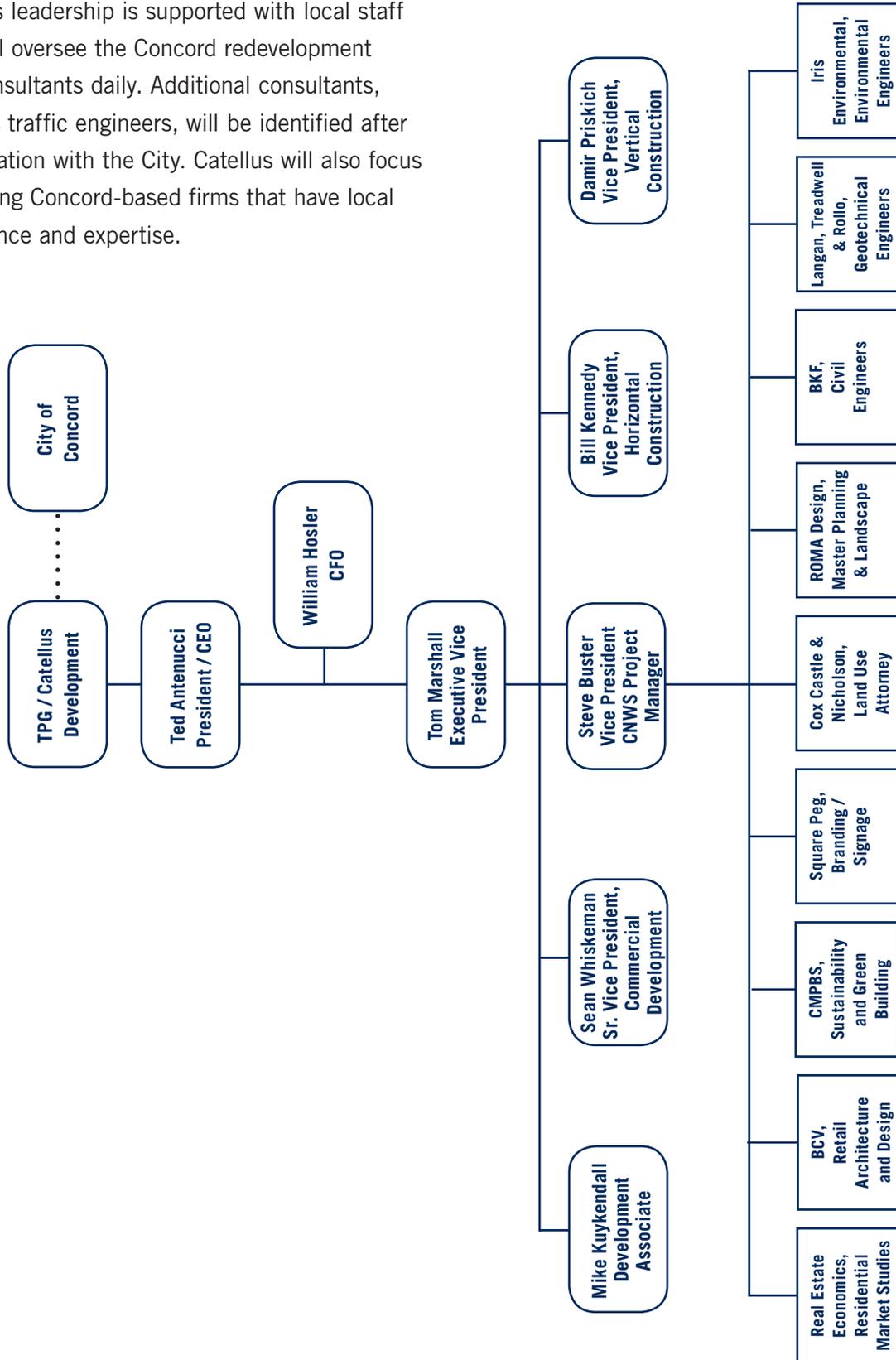
- State of California
- City and County of San Diego
- City of San Diego
Redevelopment Agency
- San Diego Unified Port District
- United States Navy
- San Diego Historical Society
- San Diego Association of
Governments
- Centre City Development
Corporation
- California Coastal Commission
- Downtown Partnership



Santa Fe Place, San Diego, California

Organization Chart

Catellus leadership is supported with local staff who will oversee the Concord redevelopment and consultants daily. Additional consultants, such as traffic engineers, will be identified after consultation with the City. Catellus will also focus on adding Concord-based firms that have local experience and expertise.



As Catellus is a privately owned, single-entity Master Developer, all decisions involving the redevelopment of Concord will be expedited through a streamlined internal approval process, with no external partners or shareholders to consult. As Master Developer, Catellus is also directly responsible for managing all consultants and contractors.

After careful consideration of the requirements for implementing the Concord Reuse Plan, Catellus has decided to engage ROMA Design Group in place of Perkins + Will as master planners. ROMA is the original master planner for our Mueller project in Austin, Texas and they are based in San Francisco. ROMA's focus on the creation of sustainable communities, transit-oriented districts, attractive residential neighborhoods and vibrant commercial mixed-use centers is well suited for the planning, community outreach and coordination needed during development. More information on ROMA's qualifications can be found below.

The full Concord team is outlined below and resumes for key team members can be found in Appendix B.

Master Developer

Catellus Development Corporation

Tom Marshall, Executive Vice President

Steve Buster, Vice President

Catellus is a national leader in mixed-use development, solving some of America's most complex land challenges. With nearly 30 years of experience as a Master Developer, Catellus has transformed former airports, military bases and urban industrial sites into thriving retail,

residential and commercial communities.

These projects, which often include substantial public amenities, add economic, social and environmental value to the communities they serve. Catellus has both the financial strength and development expertise to turn vision into reality at even the most demanding development sites.

Catellus Development Corporation, as Master Developer, will provide full oversight for the CRP redevelopment. Consultants and contractors will be identified collaboratively with the Local Reuse Authority as planning for the redevelopment begins. The following list is not comprehensive, but represents the primary consultant team that Catellus intends to use.

Master Planner

ROMA Design Group

Boris Dramov, FAIA, FAICP, President

Bonnie Fisher, FASLA, LEED AP, Principal

ROMA Design Group is a firm of architects, landscape architects and planners that specializes in urban design. Our focus is on the creation of sustainable communities, transit-oriented districts, attractive residential neighborhoods and vibrant commercial mixed-use centers that contribute to the quality of life in the surrounding city and region.

We are well-recognized for our efforts in the large-scale transformation of urban places. We are experienced in working on high profile projects that balance public objectives with private entrepreneurial interests, that are enriched by the values of a community and the specificity of place, that involve orchestrating a diverse team often comprised of many architects and landscape

architects as well as specialized technical consultants and which integrate a multiplicity of economic, environmental, design and engineering considerations into thoughtful and carefully-conceived plans.

Our approach is one that is both visionary and practical. We think strategically about a project - how to build synergy, how to effectively phase development, how to work well with the community to build support for the project and to facilitate implementation. We have worked on major development projects in Bay Area cities such as San Francisco, Oakland, Alameda and Suisun City as well as other parts of California and regions of the United States as well as internationally.

Our work has resulted in the construction of tens of thousands of residential dwellings within well-planned neighborhoods along with several hundred thousand square feet of retail and commercial development. Notable amongst these and particularly relevant to Concord is our long-standing involvement in the planning, design and implementation of an award winning mixed-use residential community on the site of the decommissioned Mueller municipal airport in Austin, which is being developed by Catellus.

Our approach is also one that emphasizes the creation of a clear, coherent and attractive urban structure that utilizes open space to both punctuate and provide connectivity within the urban fabric, knitting new areas together with older ones and creating opportunities for a variety of functional, recreational and environmental uses.

We are often involved in the design of the public spaces that bind together the urban experience and link key destinations, both within the city and in the surrounding landscape. We are intensely committed to the artful expression, environmental responsiveness and sociability of cities in each of the projects we undertake.

Over several decades, ROMA has evolved from its early years to its current interdisciplinary practice led by Principals Boris Dramov and Bonnie Fisher and supported by a staff of highly qualified and talented design professionals. Projects undertaken by the firm are the recipient of many national awards programs including from the American Institute of Architects, American Society of Landscape Architects, American Institute of Planners, the Congress for New Urbanism, and the Urban Land Institute. ROMA is a member of the US Green Building Council.

Retail Architect

BCV Architects

Hans Baldauf, AIA LEED AP, Founding Principal

BCV Architects is a San Francisco-based architecture and design firm with experience in creating exquisitely detailed environments and sustainable communities. Since its founding in 1997, BCV has established a reputation for the design of highly successful Bay Area projects, including the landmark San Francisco Ferry Building Marketplace, the retail design of the groundbreaking Market Square project along the city's Mid-Market corridor, re-conceptualization of Walnut Creek's downtown retail environment and numerous prominent restaurant and retail designs.

Working on a variety of urban projects at transit hubs, along the waterfront, in residential neighborhoods and for emerging, master-planned communities has given BCV a wide breadth of experience in creating dynamic environments that knit together the public realm and become enduring destinations. Our understanding of the power of place, the movement of people, and the desire for an authentic experience informs all our designs, large and small. The firm's partners pursue this range of work because they believe architecture is most effective when informed by the breadth and complexity of human experience.

BCV understands the intricacies involved in creating a successful retail experience, as well as the ways that retail design can be woven into a larger project for a vibrant "main street" that supports the surrounding community. Our past projects encompass a variety of work including prototype, flagship and individual stores, lifestyle and retail centers, and urban planning and feasibility studies. This work is complemented by BCV's hospitality experience as architects of custom homes, restaurants, and wineries to create welcoming experiences defined by a high level of design and attention to detail. BCV Architects' design ethos is a response to the ethical, cultural, social, economic and historic implications of a project and its place in the environment.

Sustainability

Center for Maximum Building Potential Systems
Gail Vittori, LEED Fellow, Co-Director

The Center for Maximum Potential Building Systems (CMPBS), established in 1975, is a non-profit education, research, and demonstration

organization specializing in life cycle planning and design. CMPBS has led Mueller's sustainability efforts and works on large master-planned projects nationwide. We undertake projects based on their potential contribution to site, regional and global sustainability and human health, and actively pursue collaborations with associate organizations, businesses and professional firms.

Projects emphasize regional contexts as bases for responsible resource use relative to materials, energy, water, waste, food, and meaningful employment. Our expertise is accessible through green planning and design services, conference presentations, public lectures, and published papers.

Civil Engineering

BKF Engineers

Daniel Schaefer, P.E., LEED-AP, Principal
Christopher Mills, P.E., P.L.S., Project Manager

Since our humble 1915 Bay Area beginning, BKF Engineers and its staff of 250 professionals continues to build our reputation on sound fundamentals.

Our ability to plan, design, and manage complex infrastructure projects leads to their successful completion. BKF's involvement from the inception through construction enables us to design a project that identifies physical constraints, potential risks, and value engineering alternatives to deliver projects that exceed expectations. This knowledge helps us shape the early stages (feasibility, planning, and environmental review processes) to culminate in projects built on sound fundamentals: having solid design elements,

understanding project impacts thoroughly, providing financially feasible construction, and implementing appropriate phasing strategies.

Establishing designs based on defined goals, practical alternatives, and well-documented deliverables facilitate complicated construction. We develop projects that are economical, sustainable, and respectful of the community they serve.

Geotechnical Engineering

Langan Treadwell Rollo

Richard Rodgers, PE, GE, Managing Principal
Haze Rodgers, PE, GE, Senior Project Engineer

Langan Treadwell Rollo (Langan), provides a unique mix of geotechnical, environmental, site/civil and earthquake engineering services from our six California offices. Founded in 1970, we bring decades of experience supporting some of the most challenging projects throughout the state, including commercial, industrial, high-rise and mixed-use buildings, and residential developments.

From urban brownfield redevelopment to complex waterfront revitalization, and from seismic retrofits for mission critical facilities to major infrastructure initiatives, our services yield measurable value to our clients' projects. Our internal coordination between disciplines reduces the coordination efforts of the clients and allows us to collaborate more efficiently with the public and regulatory agencies, other project stakeholders and design team members.

Langan has provided geotechnical services for large development projects and understands

the complexities of developing closed military bases and other large tracts of land into mixed-use projects. We are familiar with site-specific conditions at the Concord Naval Weapons Station, and the regulatory agencies involved. We bring relevant experience from our services provided for the following projects: Naval Station Treasure Island, Mare Island Naval Shipyard, Alameda Landing, and Bay Meadows.

Langan works closely with our clients and the design and construction team to engineer cost-effective geotechnical solutions appropriate for proposed structures and the governing site conditions. Our reputation as a premier geotechnical consultant has been earned by managing hundreds of projects involving complex, technically challenging sites where highly specialized site preparation, foundations, and fast-track engineering solutions are required.

Langan works with project teams to provide leading edge, focused, streamlined investigations and risk-based remediation. We excel in promoting and gaining regulatory acceptance of risk based strategies to obtain cost effective site closures. Langan possesses expertise in a wide variety of projects including state Voluntary Programs, Brownfields, RCRA, State and Federal Superfund, Manufactured Gas Plants (MGP) and Storage Tank programs.

Environmental Engineering

Iris Environmental

Nicholas Loizeaux, PG, Principal
Adrienne LcPierre, Principal

Iris Environmental provides environmental consulting, permitting, agency interface,

monitoring, and engineering services to clients with regulated sites throughout the United States with the focus on the Pacific Coast. Our critical strengths are reflected in a proven track record of assisting clients effectively steer through their respective regulatory frameworks and overcome the many unique challenges associated with site investigations, permitting, compliance, and remediation to realize project goals with efficient and cost effective strategies.

The Iris Environmental team has extensive experience navigating environmental due diligence, site investigations, remediation, and regulatory negotiations to guide corrective action programs to successful end points. Iris Environmental maintains a Class A California contractor license that allows us to follow our programs through to full implementation and success. We remain on the cutting edge of environmental issues such as control of soil vapor and vapor intrusion concerns.

Iris Environmental is recognized by both the California Department of Toxic Substances Control (DTSC) and Regional Water Quality Control Boards (RWQCB) as a leader in the use of risk-based decision-making for environmental compliance. Our clients routinely benefit from our ability to develop effective environmental strategies and to have these strategies approved by oversight agencies with little or no delay.

We have strong working relationships with Federal, State and local regulatory agencies, and have successfully obtained regulatory consensus and documented approval on numerous site investigations, risk assessments and site management plans. We take great pride

in our ability to work collaboratively with the different stakeholders involved in a project, and successfully negotiate health-protective and cost-effective solutions.

Land Use Attorney

Cox Castle & Nicholson

Margo N. Bradish, Partner

Cox, Castle & Nicholson LLP (“CCN”) is recognized statewide as a leader in the area of land use and entitlements. CCN has extensive experience in all aspects of land use law relevant to the CNWS project, including negotiating entitlements, contingent purchase agreements, securing discretionary land use approvals from local agencies, complying with CEQA, obtaining vested rights, negotiating fees and exactions, creating subdivisions, obtaining permits and resource agency approvals, and addressing the unique issues associated with military base reuse. CCN prides itself on developing and implementing a strategic approach to entitlement matters, counseling clients on both the legal requirements and the options for developing political support, neutralizing opposition, and minimizing the risk of challenge.

Marketing and Design

Square Peg Design

Scott Cuyler, Principal and Creative Director

At Square Peg, the focus of our work is on the development of branding and visual communications for the built environment. We design the elements in the visual layer between the architecture and the end user; elements which enhance the environment while identifying,

informing, directing and, in some cases, entertaining the user. These elements typically include identity design, branding, wayfinding, analysis & design, signing, special features, signing criteria, marketing communications, amenity design, branded environments, and public art & pageantry.

Market Research

Real Estate Economics

Mark Boud, Principal

Real Estate Economics is a leading national provider of real estate consulting services and online research tools. Working with builders, lenders, investors, developers and others in the real estate development industry, the team at Real Estate Economics has created the most comprehensive and insightful consulting services and online information tools available on a national level.

Real Estate Economics was founded in 1995 by Mark Boud, a well respected real estate economist. The company's main office is in San Clemente, California. A team of highly experienced consultants at Real Estate Economics

provides market analyses, feasibility studies, land optimization studies, supply/demand analyses and site-specific market reports for a diverse set of clients throughout major markets in the United States, with special emphasis on the west coastal markets, Hawaii, Nevada, Arizona, Utah, Colorado, Texas, Georgia, Florida, and the Carolinas. This team of consultants has the experience and knowledge to understand the changing market conditions and opportunities unique to each area they serve.

Born out of the company's consulting efforts, Real Estate Economics has also created online real estate information tools that allow subscribers to conduct their own research with precision and speed. Within minutes, detailed statistics and reports can be generated for any site area within any major region of the nation. Detailed information on all actively selling new home developments are available in select western markets, with existing home sales records, distressed housing records, demographic and socioeconomic trends, builder rankings, employment, building permits and even floor plan renderings available in most national markets. All information can be accessed at www.realestateeconomics.com.

Building Sustainable Environments

The Village of Glenview selected Catellus as Master Developer of Prairie Glen Corporate Campus, a 90-acre office park and home for area businesses at The Glen, including headquarters for Beltone and Anixter International, Inc.

When Glenview Naval Air Station was decommissioned in 1993, abandoned runways bloomed with indigenous plants, providing a habitat for at least two endangered species. Embracing this discovery, the Village of Glenview dedicated 32 acres as Air Station Prairie in its transformation of the former naval site into a 1,000-acre, mixed-use redevelopment called The Glen. The prairie would become part of Prairie Glen Corporate Campus.

Establishing property setbacks, buffers and height restrictions, the prairie was protected as the centerpiece for new mid-level office buildings. Funding from Catellus also helped build the Evelyn Pease Tyner Interpretive Center, a 3,000-square foot prairie educational facility certified LEED® Platinum by the U.S. Green Building Council and managed by the Glenview Park District.



Air Station Prairie, Glenview, Illinois

As briefly described in the Executive Summary, the proposed Development Phase One Property builds upon and develops further the vision established by the City and the community. It reinforces key assets and opportunities of the site, including the North Concord BART station, visibility from the highway and proximity to two interchanges. It reinforces a direct connection to the nearby Coast Guard housing and Willow Pass Park, which are planned for improvement, and strengthens the relationship to Diablo Creek Golf Course as well as to Mt. Diablo Creek, which is an important amenity and natural resource extending through the entire CNWS property.

The Phase One proposal will provide for city-wide connections to be completed and at the same time, provide a framework for the future extension of the planned development area.

Our strategy would establish a distinctive transit-oriented village early on in the evolution of the reuse of the property. It envisions the adjacency to BART as the single most important factor that will add to the character and identity of the development. It places the initial phase of growth in a location where it can build upon the existing context and connect to multiple points of access. Rather than beginning with low-density development in the middle of the property and proceeding in the direction of BART along an elongated route, our proposal would concentrate development in proximity to the station and develop connections to the existing city.

The plan responds to the opportunity by configuring development in a compact urban form that is, for the most part, within a 15-minute walking distance of the BART Intermodal Station.



The North Concord BART Station is the only transit-oriented development (“TOD”) opportunity in the Bay Area with enough undeveloped land to accommodate a new master planned community.

New development is organized around an efficient walkable grid that undulates with the topography, heightens diversity and builds connections to amenities and resources that will add to the quality of life of existing and future Concord residents.

The proposed Phase One Development Area currently comprises 413 acres, including the transit village and the proposed commercial area adjacent to the Willow Pass interchange. Of this area, approximately 372 acres is located within the First Transfer Parcel.

Although the final configuration and size of the Development Area will be finalized in discussions with the City, our proposal assumes that there may be room for negotiating with the Navy to expand the First Transfer Parcel to include the pie-shaped area adjacent to the Coast Guard property, which comprises approximately 41 acres. It is our understanding that the City is considering redevelopment of the Coast Guard property for more intensive residential use and we believe that the ability to create contiguous development between our proposed Phase One Development and the Coast Guard property would

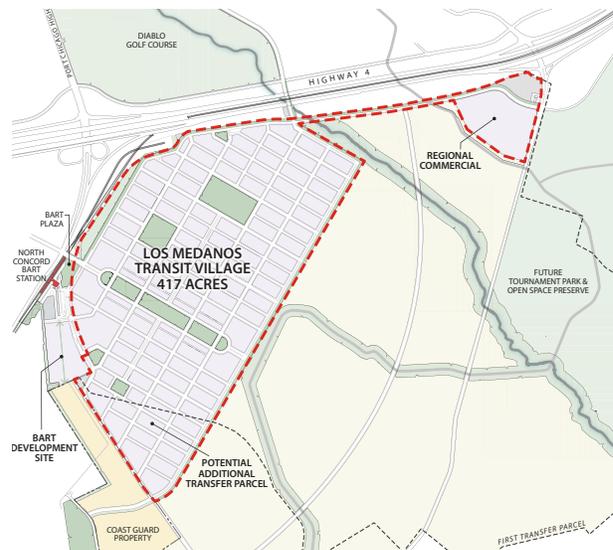
be of significant benefit to the City and to the community.

In undertaking the Los Medanos Transit Village, or Development Phase One Property, we would propose to work with BART to find a way to consolidate its current surface parking and to develop the excess land with high density office and commercial development.

Preliminarily, we have indicated the retention of the bus bays as currently configured and the construction of a parking garage for the 2,000 replacement parking spaces. We believe that this garage could be built both below grade to match the grade of the platform level as well as above grade, but additional studies will be needed to finalize this approach. If necessary, the parking garage could also span over the Intermodal Bus station area.

We have also assumed that there would be an approximate 50-foot wide greenway between the parking area and the adjacent residential development that will connect to a greenway on the Coast Guard property that would ultimately lead to Willow Pass Park. For planning purposes, we have assumed that approximately 13.3 acres may then be available for office and commercial development on the BART site. If this site is developed to an intensity of up to 3 FAR, 1.7 million square feet of development could be accommodated there, however, as we discuss later in this section, the demand for office space is still recovering and needs a few years to improve.

Redevelopment of the BART property would be subject to negotiations with BART and the City and it would likely be the last phase of development of the Los Medanos Village.



The proposed Phase One Development Area currently comprises 413 acres and includes the transit village and proposed commercial area adjacent to the Willow Pass interchange. See page 31 for a larger view of the Phase One Development Area.

The proposed Development Phase One Property features a fine grain mix of higher intensity mixed-use residential development with urban qualities and a diversity of housing types, that range in size, density and affordability. Consistent with the Area Plan, the scale and orientation of the blocks provide for flexibility and adaptability to a wide range of residential products.

An urban grid is proposed that heightens a sense of topography by direct juxtaposition with it, opening up views and creating a stronger sense of orientation and place. Tree-lined streets will create a continuous vegetated canopy, with homes oriented to the streets in a way that creates a socially interactive community. Parking garages for residential units will be accommodated primarily along rear alleys and in auto courts in order to reduce their visual dominance.

Homes and units will face the street, mediated by buildings that promote neighborliness. The

density of the neighborhoods will be greater than in the City of Concord today. As shown in the axonometric plans, the proposed housing is anticipated to include mixed-use apartment buildings, generally four to five stories in height with encapsulated parking and internal courtyard open spaces, preferably at grade. In addition, a mixture of attached, cluster, stacked flats and row house buildings and small-lot single-family homes will comprise much of the new Phase One development area, with building heights ranging from 35 feet to 50 feet.

Building styles are anticipated to be diverse and will range from traditional to more contemporary and many of the attached and detached housing types will be organized around internal open spaces. A mixture of housing will be carefully configured to promote a diverse and inter-generational population, offering a significant component of affordability.

The housing types identified for the property are based on a preliminary market study for a 10-year absorption program and development prototypes have been developed in response to

market considerations. Residential development will be undertaken in increments based on a realistic absorption over a 10-year period, creating sufficient revenues to offset the large infrastructure costs. However, it is anticipated that the housing program and building types will be further refined and fine-tuned, based not only on market and financial realities but also in consideration of creating a neighborly and attractive place.

At the heart of the Los Medanos Transit Village will be a vibrant mixed-use district comprised of higher density residential buildings, which over time will attract additional commercial office and retail shops, restaurants, cafes, entertainment and public-serving uses as well as potentially a small hotel. This urban district will be located close to the BART station and will be composed of mid-rise buildings ranging from 40 to 80 feet in height.

The proposal also includes commercial development on a 35-acre parcel adjacent to the Willow Pass interchange. This site is proposed to be developed for approximately 300,000 to

GARDEN COURT DETACHED HOUSE (ZERO LOT LINE)

17.5 DU/AC (INCLUDING 1/2 OF ADJACENT ALLEYS)
14 UNITS ON 35,000 SF SITE (.8 AC)
2,500 GROSS SF PER UNIT
MIDDLE UNITS: 1,560 NET SF PER LOT
END UNITS: 2,450 NET SF PER LOT
28 PARKING SPACES (2 CARS PER UNIT)



350,000 square feet of regional and local serving commercial uses that could include large retail stores as well as the possibility of a supermarket.

A great deal of careful thought has already been given to the nature of the Los Medanos Transit Village and the desire to meet high standards for environmental quality and sustainability in future growth and development of the City of Concord. Our proposal embraces these aspirations wholeheartedly and places sustainability at the core of community design, building design and infrastructure design. It is anticipated that the Phase One Development will be guided by best practices and demonstrate innovation through resource efficient design, the selection of regional materials that are non-toxic, recycled and sustainably harvested and site designs that provide heat island mitigation, light pollution reduction and stormwater management.

The proposed Development Phase One Property includes a number of significant new open spaces. It features parks and greenways that organize the community, punctuate the topography, provide identity and continuity and contribute to a healthy, vibrant and sustainable community.

The open spaces comprise approximately 43 acres within the CNWS site and are envisioned as an integral part of the larger open space system that the City has established for the entire property. Principal amongst the open spaces is the proposal for a Central Park that will create a gateway into the community and a connection to BART and the BART Transit Plaza. This 10-acre park is conceived as a well proportioned, 200-foot wide space adjoined on either side by Los



Central Park will be designed as a flexible green capable of hosting a wide variety of recreational activities.

Medanos Boulevard and framed by a double row planting of trees.

Taller buildings of three to four stories in height are planned to front the park and larger mixed-use multi-family buildings, possibly with ground-floor retail spaces, will frame either end to enhance spatial definition and bring a greater number of people into proximity with the park. The park will be designed as a flexible green capable of hosting a wide variety of recreational activities and incorporating a separated bicycle/pedestrian path. It will be a relatively flat open space that can accommodate walking, jogging, bicycling, informal sports, children's play and adult fitness as well as small and large community events, parades and celebrations.

The Central Park is aligned toward the future transit plaza at the entry to the BART station and will lead to it. The smaller 1.8 acre plaza / open space will become a cross-roads of movement and activity energized by its relationship to the BART station, the Central Park and the Transit Village and linked by a potential pedestrian way to the Coast Guard site and to Willow Pass Park. It

will reflect many of the qualities of Todos Santos Plaza and be a green and tree canopied space that can be used for special events, such as a farmer's market or seasonal fair, but at the same time be an attractive and inviting place to linger on an everyday basis.

To the north of Central Park, an approximate 5-acre park would be created at the ridge top to mark the high point in the topography. This park will afford great views to the surrounding area and will be designed as a choreographed unfolding and opening up to vistas in all directions. It can become an attractive place for strolling, dogwalking, picnicking, running and a variety of informal recreational activities. Like the hilltop parks of San Francisco, this park would become a distinctive landmark that orients the community and reveals its physiographic structure.

Sixteen acres of landscaped greenways are planned along the perimeter of the Phase One Development. Comprising approximately 50 feet in width, the greenways will provide for street tree planting, a 14-foot wide pedestrian/bicycle trail and potential stormwater treatment. These are conceived as tributaries to the larger "necklace" of greenways that extend into the city and into the future planned development area.

Along the highway, the greenway will create a continuous path for bicyclists and pedestrians, that is uninterrupted by curb cuts and driveways and which will extend all the way from the BART station and transit plaza at the foot of Los Medanos Boulevard to the Willow Pass interchange. At Diablo Creek, the perimeter greenway will change direction and follow the edge of the property east and continue along the

edge of the property to the south to the Coast Guard property. From there, there is the potential future connection through the Coast Guard property to the existing, improved and expanded Willow Pass Park.

Complementing these parks and greenways are additional neighborhood parks that will contribute to the diversity of recreational experiences within the Phase One Development. In addition, an approximate nine-acre site is reserved for an elementary school/park within the northern neighborhood connected to the rest of the community by a green street.

This school is envisioned to provide recreational and community facilities for use by the community in after school hours. If, in future discussions with the MDUSD, population forecasts and facility needs do not warrant a new school in this location, then the site may be reprogrammed for other uses, including park, recreation, public facilities and community uses.

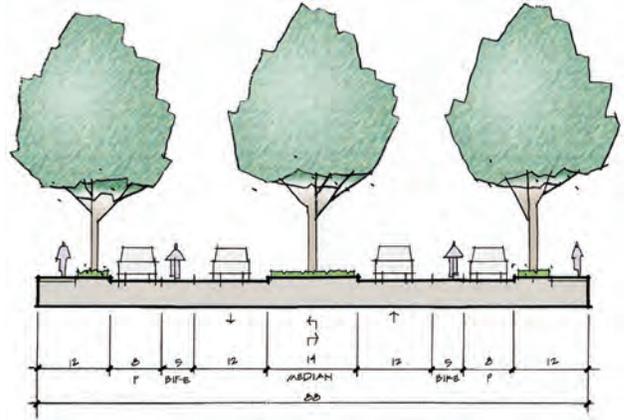
Streets are the connective tissue of the community. At Los Medanos Transit Village, they have been conceived and designed not only as movement corridors, but also as important public spaces that provide a strong sense of place and orientation and contribute to the livability and sustainability of the community. Consistent with the Area Plan, all of the streets will serve a mixture of pedestrian, bicycle and vehicular functions. They will be well-landscaped in consideration of Concord's climate and the opportunity to provide shade and canopy, comfort and amenity.

Walkable streets are generally oriented and sized as set forth by the Area Plan, however, as we

proceed with the project, we intend to spend additional time to differentiate the pattern even further in response to market opportunities and more detailed information on topographic features and relationships.

Los Medanos Boulevard is the principal street and organizing element not only for the Development Phase One Property but also for the future growth of the community. It is positioned centrally within the project, provides the structure for the Central Park and will connect directly to BART as well as via Port Chicago Highway to Highway 4. This street will provide the opportunity to serve an important transit role as well as be integrated with the most significant park within the village.

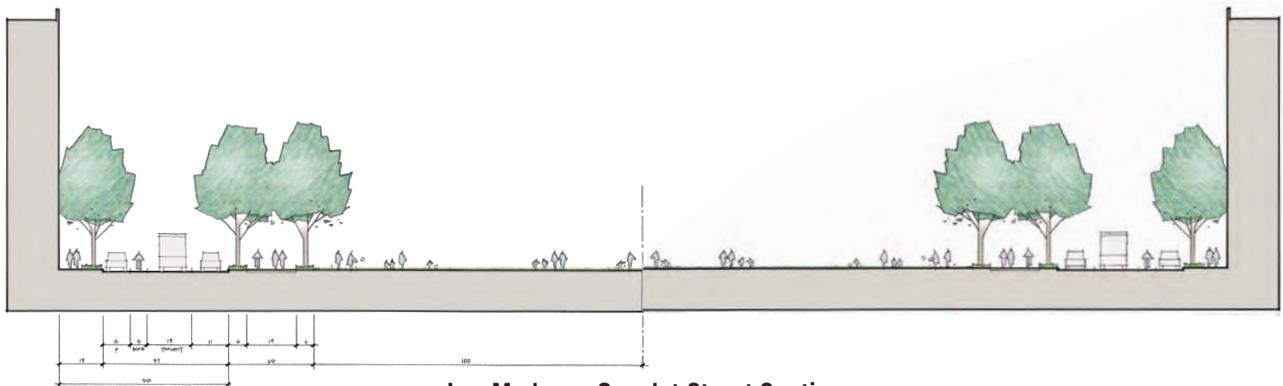
A transit loop within the village is planned as an overlay on village streets to provide for potential shuttle serve connections with Los Medanos and BART. Perimeter connectors with adjacent greenways surround the Phase One development and extend to connect with other parts of the city, including the important connection under the highway to Diablo Golf Course as well as potentially through the Coast Guard property to Willow Pass Park. Finally, within the Phase One Development, the park streets are lushly landscaped corridors that emphasize pedestrian



Panoramic at BART Street Section

and bicycle connections to the major parks and school and connect to the perimeter greenways around the property and to other parts of the city. Cross-sections are available to further give a sense of the anticipated scale and character of each roadway.

There is a significant amount of infrastructure that will need to be constructed to serve the development of the property, both on site and off site. One of the first infrastructure improvements to be made will be the reconfiguration of the intersection of Panoramic Drive so that it extends into the site and connects to Los Medanos Boulevard, which is central to the project. In undertaking this improvement, the new transit plaza can be created as an entry, partially on CNWS transferred property and partially on



Los Medanos Couplet Street Section

BART property. In addition, a reconfiguration of the access road that traverses the intersection would have to be provided for BART access. How access will be gained to the lower level trackway and to the mainline that tunnels under a portion of Highway 4 to the median and connects to Pittsburg needs to be discussed.

Panoramic Drive fronting along BART may need to be reconfigured, as suggested in our plan, to create a better intersection spacing with Port Chicago Highway but it provides an excellent opportunity to extend to the Coast Guard property and can be located equally along the property line with the Coast Guard development, ultimately connecting to Willow Pass and beyond.

The Residential Market and Optimized Land Plan

Catellus engaged Real Estate Economics (“REE”) to complete a thorough residential market study of the Development Phase One Property. The Concord residential market lies between the high price/value ratio of the Walnut Creek/Lafayette market and the more affordable Pittsburg/Bay Point area. The location provides CNWS with the opportunity to price new home product between these two points, effectively filling the large gap of product and prices. CNWS will also offer an attractive and relatively affordable alternative to the increasingly expensive Danville, San Ramon, Dublin and Pleasanton markets along the I-680 corridor.

The most recent jobs report for this region remains healthy, with 23,700 jobs added during the past 12 months, with growth in most industries. The public sector is now adding jobs at a surprisingly high rate, enhancing what has so far been a private sector driven recovery.

Construction jobs are increasing rapidly, as are trade jobs, professional and business service jobs, educational and health services jobs, and leisure and hospitality jobs.

Overall new housing supply will fall during 2014 as strong sales activity continues to deplete inventories. Year-to-date regional single-family permits are actually lower than the corresponding level one year previous. Multi-family permit activity (apartments and condos) are less than half the corresponding level one year previous.

After strong market conditions and ‘hyper’ price appreciation from mid-year 2012 through 2013, sales volume and price appreciation are now slowing in the subject region – not because of reduced housing demand, but rather due to reduced affordability. Year-over-year regional price appreciation has averaged 12.3% in this region from July 2013 to July 2014, with price appreciation (in percentage terms) skewed toward smaller homes. Though housing demand will remain strong, price appreciation will moderate during the next 12 months due to reduced affordability.

According to REE’s 10-year residential forecast, between 2015 and 2019, the housing market will remain significantly under supplied, but over valuation of housing will become evident by 2017. Over valuation will continue through the forecast period, and will remain sustainable until an economic downturn forces prices down toward the long-term equilibrium relationship between housing costs and household incomes. This will likely occur sometime after the first five years of the forecast period. Overall, the next five years will be typified by healthy housing market

conditions – chronic under supply of housing and a sustained period of high prices, with diminishing levels of price appreciation as the market rides a high price plateau.

Using an “optimized land plan approach” that responds to market demand, REE recommends a 10-year housing supply of approximately 3,300 market rate units over 10 product types. Market rate residential uses include detached single-family lots, condos, stacked flats, townhomes, live/work units, and apartments.

Each sub-phase will feature a wide variety of available product types. It is anticipated that CNWS could absorb as high as 500 – 600 for-sale homes per year during a core marketing/ construction period. A copy of the REE market study is available upon request.

While we are not constrained by the findings, the REE report provides reliable guidelines that address market demand as we work with the community and the City to master plan and ultimately complete the Development Phase One Property.

Since Catellus is not a homebuilder, we will use a competitive bidding “Request For Proposals” process to select the homebuilders for each phase of development. This will allow us to select multiple, best-in-class builders, provide diverse architecture and generate the highest value for the land.

Regional Retail/Flex Commercial Center

As a whole, the East Bay retail market is healthy. Retail shopping center vacancy in the East Bay stood at 5.7% at the close of Q3 2014. Vacancy has decreased considerably from the 6.5% rate

of a year ago and has been trending steadily downwards ever since peaking at 7.3% in Q3 2011. A large portion of the absorption this year has occurred in new, high quality product that has been recently constructed over the past two years. As vacancy decreases, rental rates continue to increase, although they are still well below pre-recession highs. Much of the space that has been lingering on the market is older Class B and C space.

On a more local level, retail along the 680 corridor is very healthy with a vacancy rate at close to 4%. The market begins to soften along Highway 4 once you arrive in the Pittsburg / Antioch areas, however, Concord’s location is much more comparable to the retail market in the surrounding communities of Walnut Creek and Pleasant Hill, which remain strong.

After a flurry of new development in 2012 and 2013, East Bay retail development has been relatively quiet in 2014. The only large notable construction start is phase two of the Target-anchored Catellus project at Alameda Landing which will contain a new 50,000 square foot Safeway store, Michaels, and over 80,000 square feet of restaurants and shop space.

The Development Phase One Property contemplates +/- 30 acres of regional serving retail and commercial space at the intersection of Highway 4 and Willow Pass Road including approximately five acres for the future electrical substation. This center would be connected to the TOD Area by a new frontage road running parallel with Highway 4. With significant traffic passing on Willow Pass Road (38,000 cars), as well as Highway 4 (153,000 cars), there is near term

market potential for retail on this site. The volume of traffic passing by this area of the project daily will be very compelling to retailers.

Regional Retail center and a regional retail center. The neighborhood center would consist of a large format grocery store that will serve the daily needs of new CNWS residents as well as commuters on Highway 4 and Willow Pass Road. Other potential uses include fitness, junior box retailers, a drug store, service uses and restaurants. The new frontage road will include sidewalks and bike lanes to provide easy access from the residential areas for bicycles and pedestrians.

Demand for the retail center could be sufficient to start construction within the first three years of the project as residential units are completed and sold. There are existing grocery stores on Willow Pass Road that could serve the project immediately, but the demand for an additional grocery-anchored retail center with close proximity to new homes at CNWS will likely grow quickly.

On the remainder of the Regional Retail property, there is potential for general merchandise, home improvement, and other big box retailers. Target could be a candidate in the general merchandise category, although they have existing locations in Pleasant Hill and Pittsburg. Lowes and Home Depot also have nearby locations, but may be interested in filling a void at CNWS. Junior Box retailers and shop space will follow these major anchor users. The regional center could also feature office, R&D, and/or light industrial uses if demand warrants and the site is expanded.

Catellus has deep and diverse retail experience in creating exciting developments in similar projects. In addition, our partnership with Terranomics

(Cassidy Turley), the dominant retail brokerage firm in the greater Bay Area market and our real estate brokerage consultant for this project, will provide us with further connections and insight into new retailers and concepts.

Terranomics has already conducted a preliminary “void analysis” that identifies gaps in the market for every retail category. We will begin by targeting retailers that are expanding regionally and do not have a presence in the Concord submarket. Similar to our efforts in Alameda, we will conduct leakage studies to identify categories of retail uses that are under served in the community and we will partner with the City to create a Retail Tenancing Strategy that provides guidance on which retail uses to pursue in order to retain local sales tax dollars and attract regional shoppers.

The Town Center

The Development Phase One Property and adjacent BART property will feature a Town Center with a variety of interesting walkable retail, high-density multi-family residential, office, hospitality, service, dining and entertainment options. The Town Center will become a tremendous amenity for the entire CNWS project. Timing of the build-out of the town center will depend on market demand and the project likely needs to experience a few years of residential growth before such a demand is generated. There would likely be near term potential for daily needs such as boutique grocery, cafés, and convenience stores and those uses could potentially be constructed early on in the development.

The Town Center retail presents a unique long-term opportunity. While town centers typically attract “Lifestyle” retailing, the critical mass of

Lifestyle tenants in Walnut Creek may limit this possibility. However, with the mix of residential, commercial, retail and entertainment uses in the Town Center, a significant portion of the space can be expected to be filled by entertainment, restaurants, casual food options and small shops. Other possibilities include a bowling alley, a live music venue, a performing arts space and possibly a boutique theater.

The Town Center could also feature multi-story office space as discussed earlier. The Concord office market continues to recover from the recession. Class A office vacancy in the Concord submarket is still above 20% and very few significant office transactions have occurred over the last several years. However, there have been some positive signs in the past year that a modest recovery is beginning.

Absorption throughout the I-680 corridor is at one of its highest levels since 2000. The Swift Plaza, a one-million-square-foot Class A project near Downtown BART, is a very comparable project that has seen several recent leases in the last year, predominantly with financial services/insurance firms such as AIG, AmTrust North America, Genworth Financial and WCS Lending. Swift Plaza's location adjacent to BART contributes significantly to its success.

Bank of America, Wells Fargo, Chevron and T-Mobile are among several large corporations that have a significant presence in Concord and could be potential Town Center office users in the future. It will take continued resurgence in the financial services industry for the Concord office market to experience a full recovery. Such a recovery would foster lower vacancy,

rising rents, new construction, development and redevelopment in the market.

Lastly, a full-service hotel and conference center will serve the corporate/office market in the area and, with its location within the Town Center, it could become a prime destination for weddings and other private events. As Master Developer, Catellus will leverage relationships with major hotel flags in order to secure a first-class facility for CNWS.

More information on project phasing considerations, regulatory agency negotiations, affordable housing accommodations, labor practices, construction and key financial issues are outlined in the Development Phase One Property Concept and Development Phase One Property Financing Strategy.

Sustainability in Art

Completed in July 2009, “SunFlowers – An Electric Garden” is Austin’s largest public art installation in size and funding, consisting of 15 flowerlike sculptures designed to capture solar energy and cast patterns of shade along the western edge of Mueller’s hike and bike trail during the day, using a small portion of the solar energy they collect to illuminate the sculptures at night.

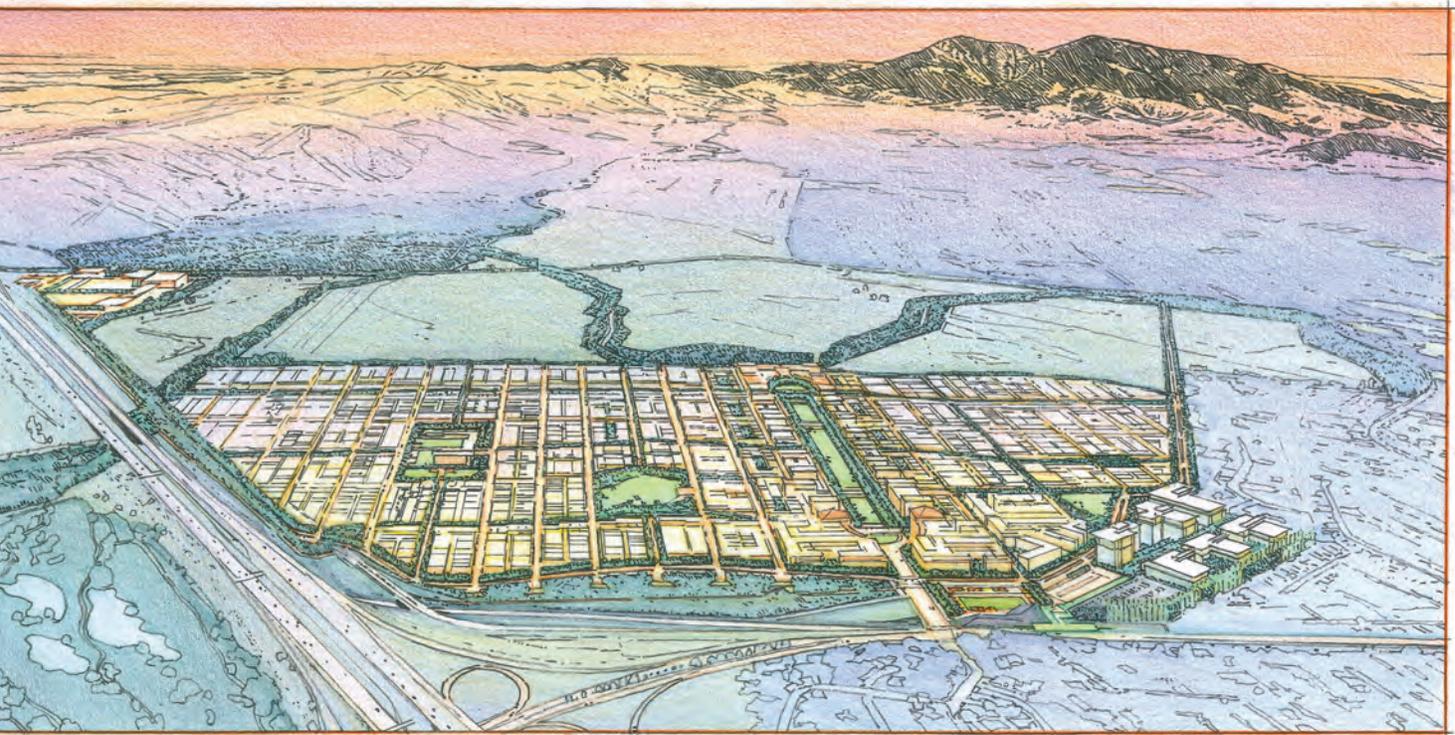
Created by artists Mags Harries and Lajos Héder of Harries/Héder Collaborative, each SunFlower towers 18-24 feet above a footpath that stretches nearly 540 feet. Each SunFlower collects solar energy through photovoltaic arrays that enable the sculptures to not only offer visual interest, but to also sustain their own energy needs and provide excess energy to the grid. The panels produce approximately 18,000 kWh each year.

4a. Conceptual Plans

1) Development Concept Summary

As discussed in the Project Vision section, Catellus envisions the adjacency to BART as the single most important factor that will add to the character and identity of the development and will drive demand for residential housing.

The plan is configured in a compact urban form that is, for the most part, within a 15-minute walking distance of the BART Intermodal Station. New development is organized around an efficient walkable grid that connects to open space and amenities. Regional commercial space will provide every day needs for residents and visitors.

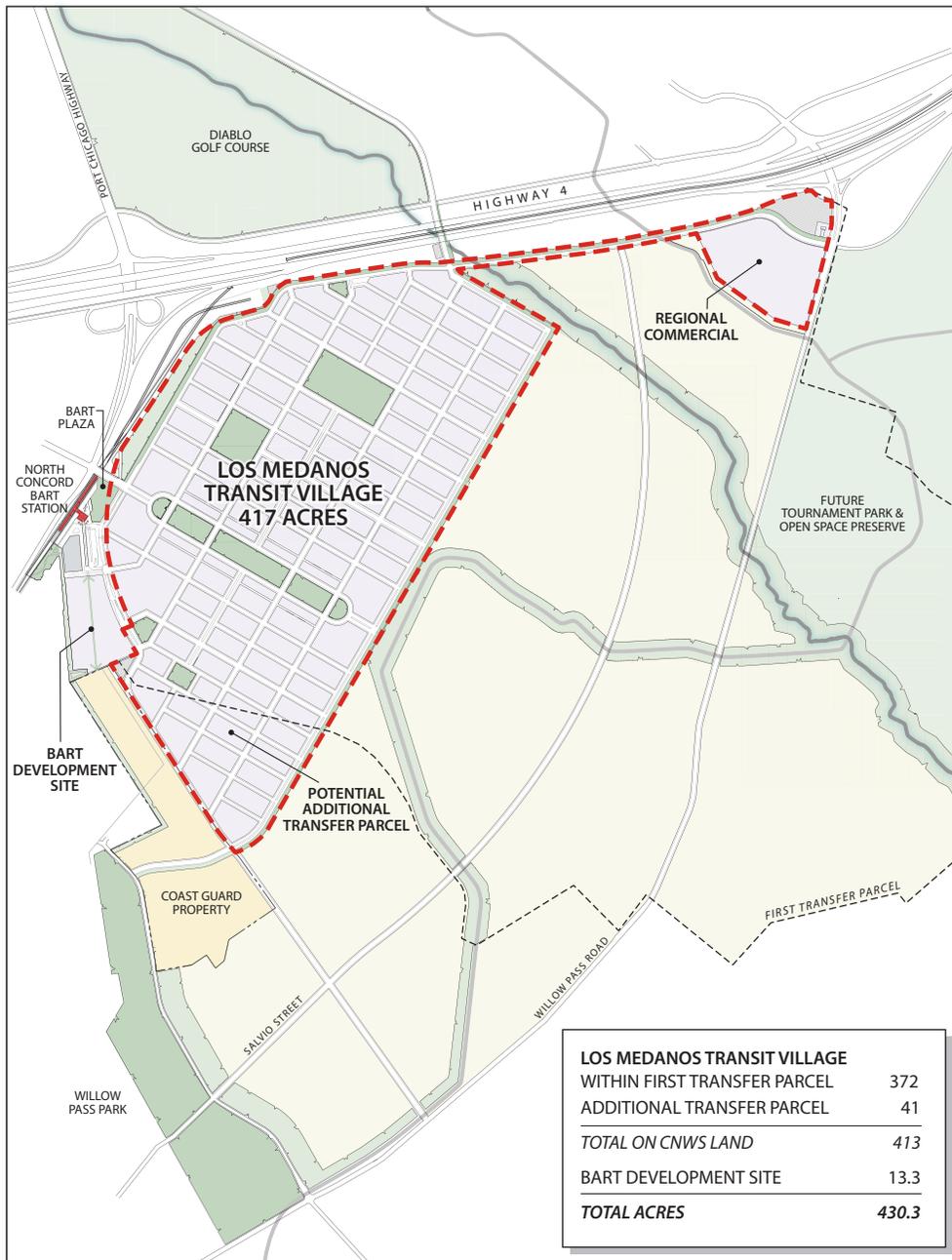


2) Development Phase One Location

The Phase One proposal directs development into the portion of the First Transfer area that is least constrained by the Contra Costa Canal and unencumbered by Remediation Areas, hazardous materials, wetlands, and sensitive habitat. It also directs development into the most accessible portion of the site, through its connections to

the BART intermodal station and two freeway interchanges along Highway 4.

It provides for city-wide connections to be completed and at the same time, provides a framework for the future extension of the planned development area. Phase One includes an additional 41 acres of land that is currently outside of the Navy's First Transfer Parcel.



PHASE ONE DEVELOPMENT PLAN AND LINKAGES

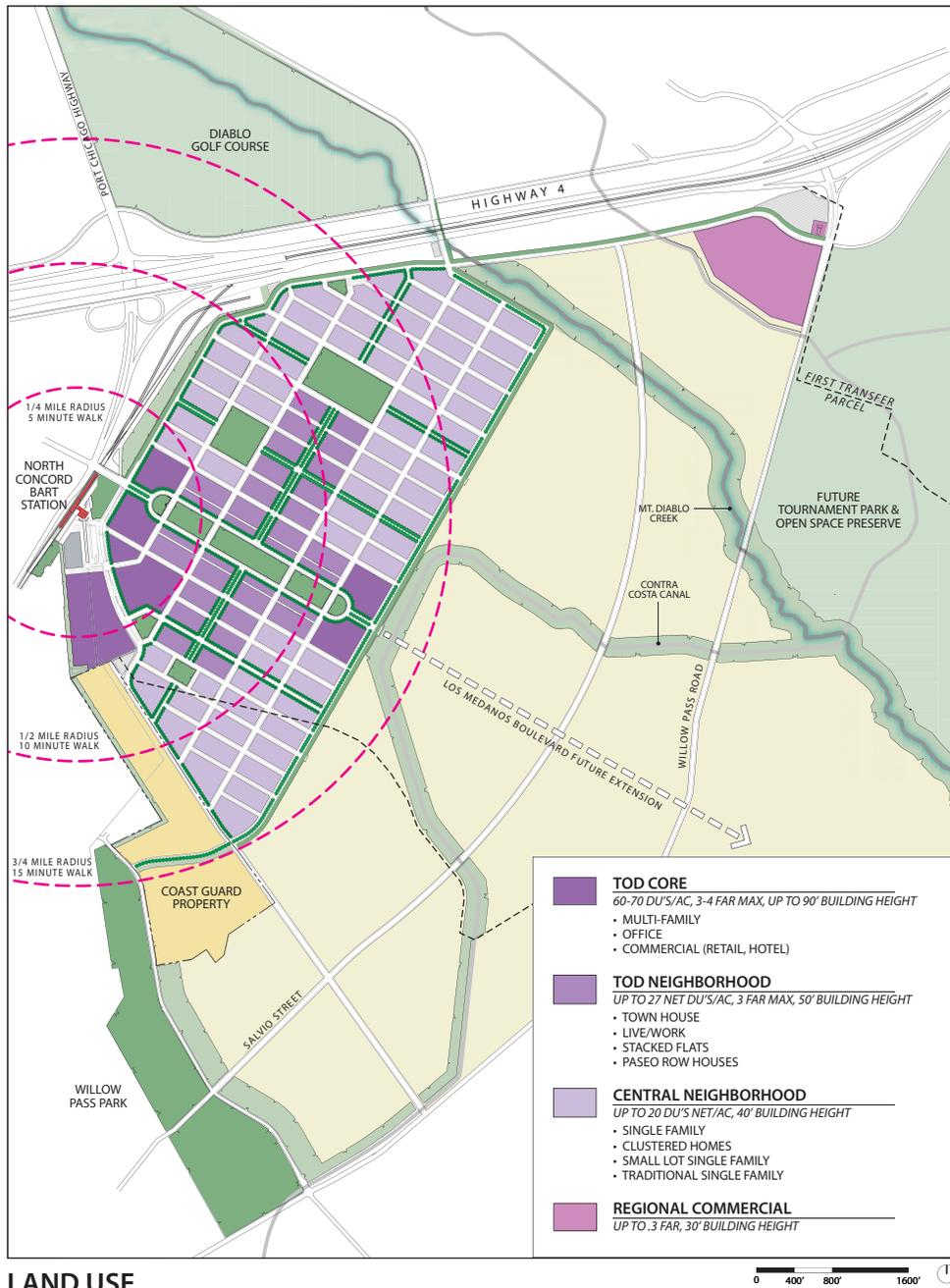


3) Site Development Plan

The proposed Development Phase One Property features a fine grain mix of higher intensity mixed use residential development with urban qualities and a diversity of housing types, that range in size, density and affordability.

Consistent with the Area Plan, the scale and orientation of the blocks provide for flexibility

and adaptability to a wide range of residential products. An urban grid is proposed with homes and units that will face the street. As shown in the axonometric plans, the proposed housing is anticipated to include mixed use apartment buildings and a mixture of attached, cluster, stacked flats and row house buildings and small-lot single-family homes.



LAND USE

4) Sketch Vignettes

Tree-lined streets will create a continuous vegetated canopy, with homes oriented to the streets in a way that creates a socially interactive community. Relatively flat open space will accommodate walking, jogging, bicycling, informal sports, children's play and adult fitness as well as small and large community events, parades and celebrations.



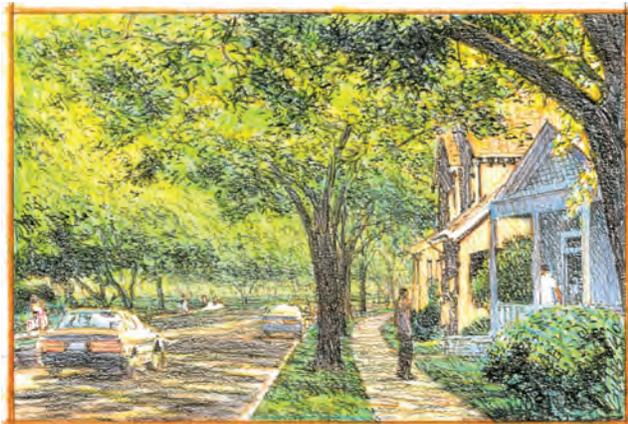
Greenway



Central Park



Neighborhood Park



Neighborhood Street

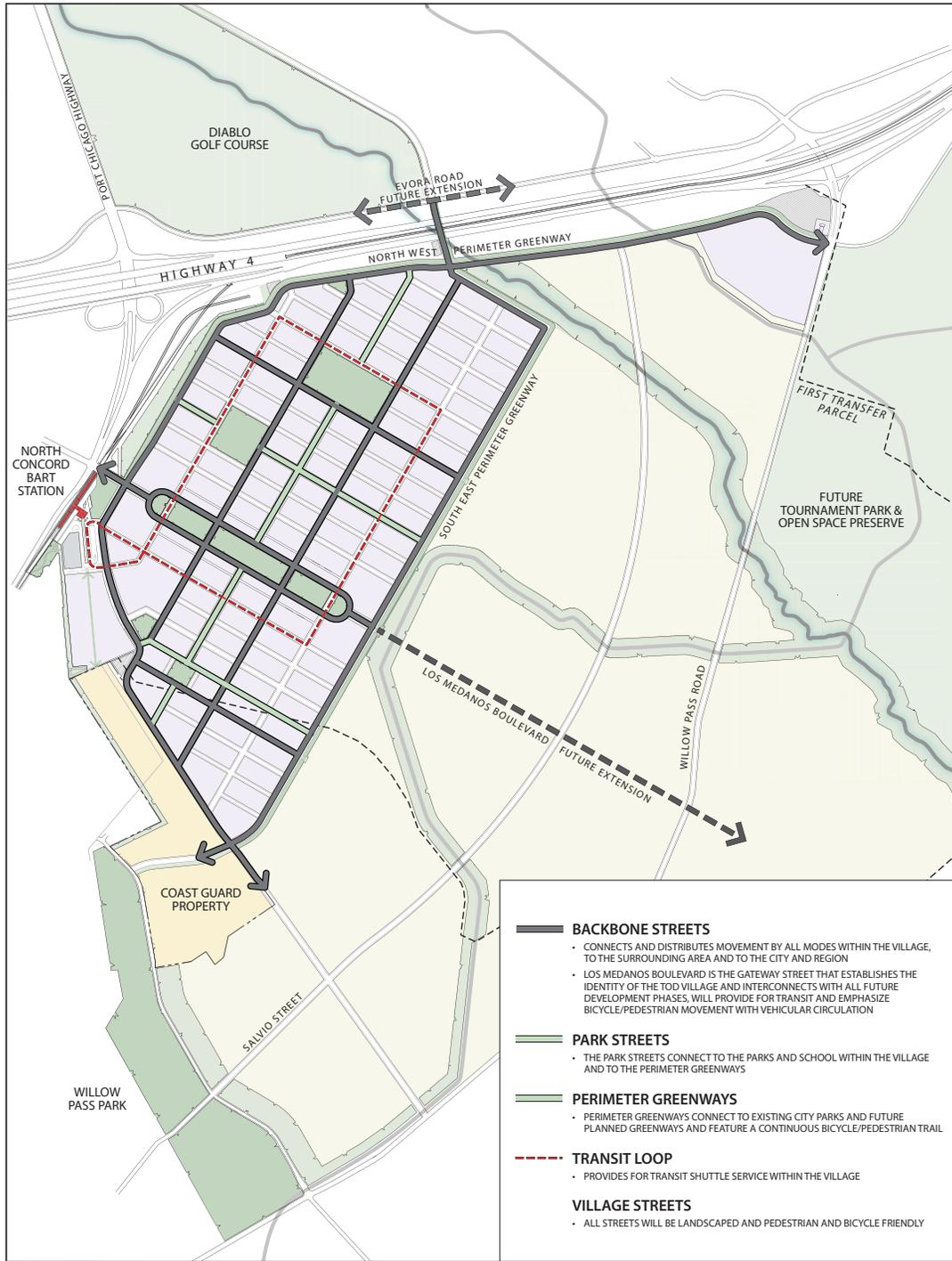


Commercial Area

5) Circulation Plan

A walkable, bikeable grid, including greenways, connects the North Concord BART Station to the proposed project area housing, open space and amenities. The street circulation links the

Coast Guard site on one side to the commercial development planned at the Willow Pass interchange. Los Medanos Road is positioned to extend into the future Village Areas toward Willow Pass Road.



CIRCULATION

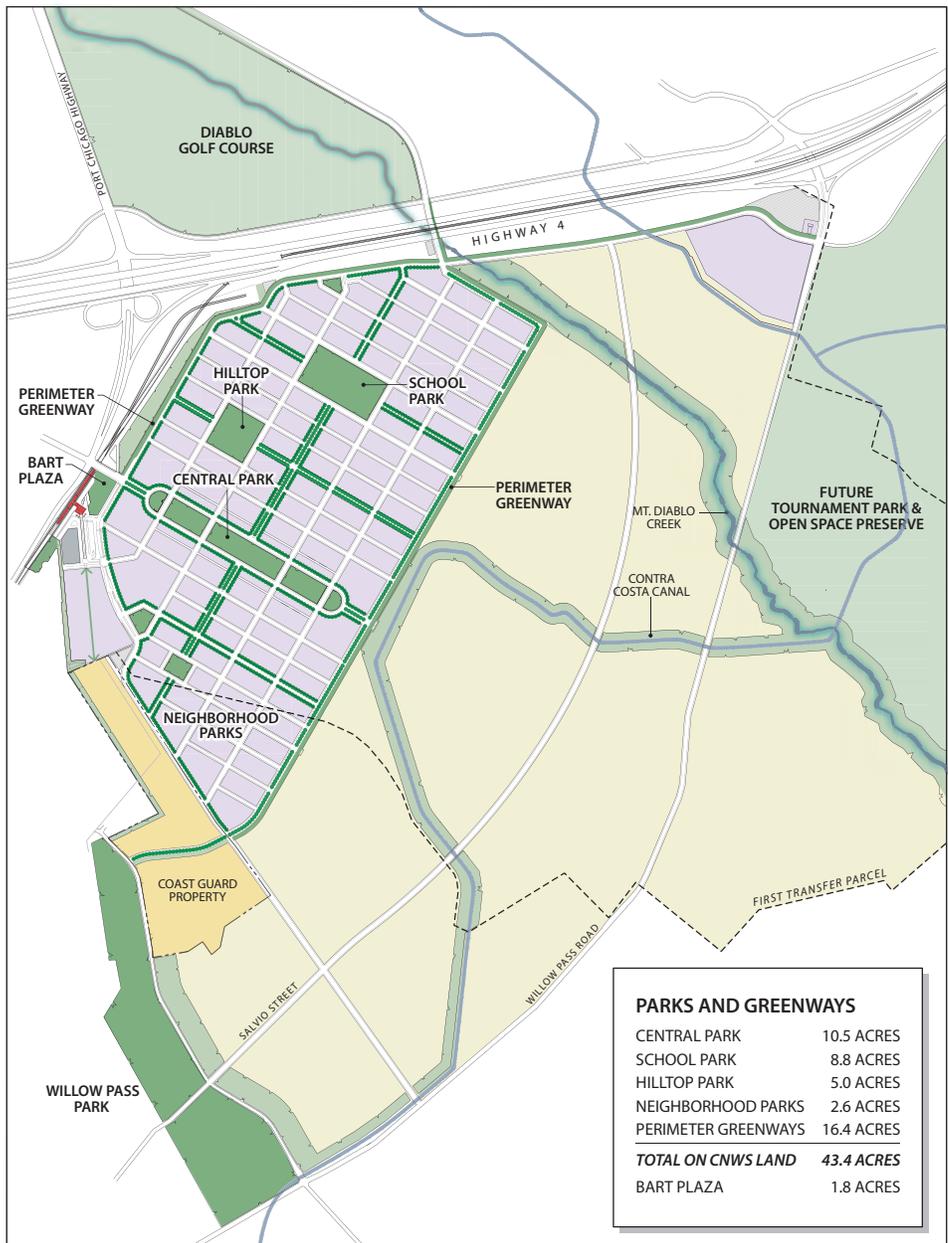


6) Open Space Plan

Open spaces comprise approximately 43 acres within the CNWS site. Principal amongst the open spaces is the proposal for a Central Park that will create a gateway into the community and a connection to BART and the BART Transit Plaza. This 10-acre park is conceived as a well-proportioned, 200-foot wide, space adjoined on either side by Los Medanos Boulevard and framed by a double row planting of trees. Taller buildings of 3-4 stories in height are planned to front onto the park and larger mixed-use multi-family buildings will frame either end to enhance spatial definition and bring a greater number of people into proximity with the park.

A 1.8 acre BART Transit Plaza will reflect many of the qualities of Todos Santos Plaza and be a green and tree canopied space that can be used for special events, such as a farmer's market or seasonal fair. An approximate 5-acre park would be created at the ridge top to mark the high point in the topography. Sixteen acres of landscaped greenways/ bike trails 50 feet in width are planned along

the perimeter of the Phase One Development. Additional neighborhood parks will contribute to the diversity of recreational experiences within the Phase One Development. An approximate 9-acre site is reserved for an elementary school/park within the northern neighborhood connected to the rest of the community by a green street. If a new school in this location is not warranted, then the site may be reprogrammed for other uses, including park, recreation and community uses.



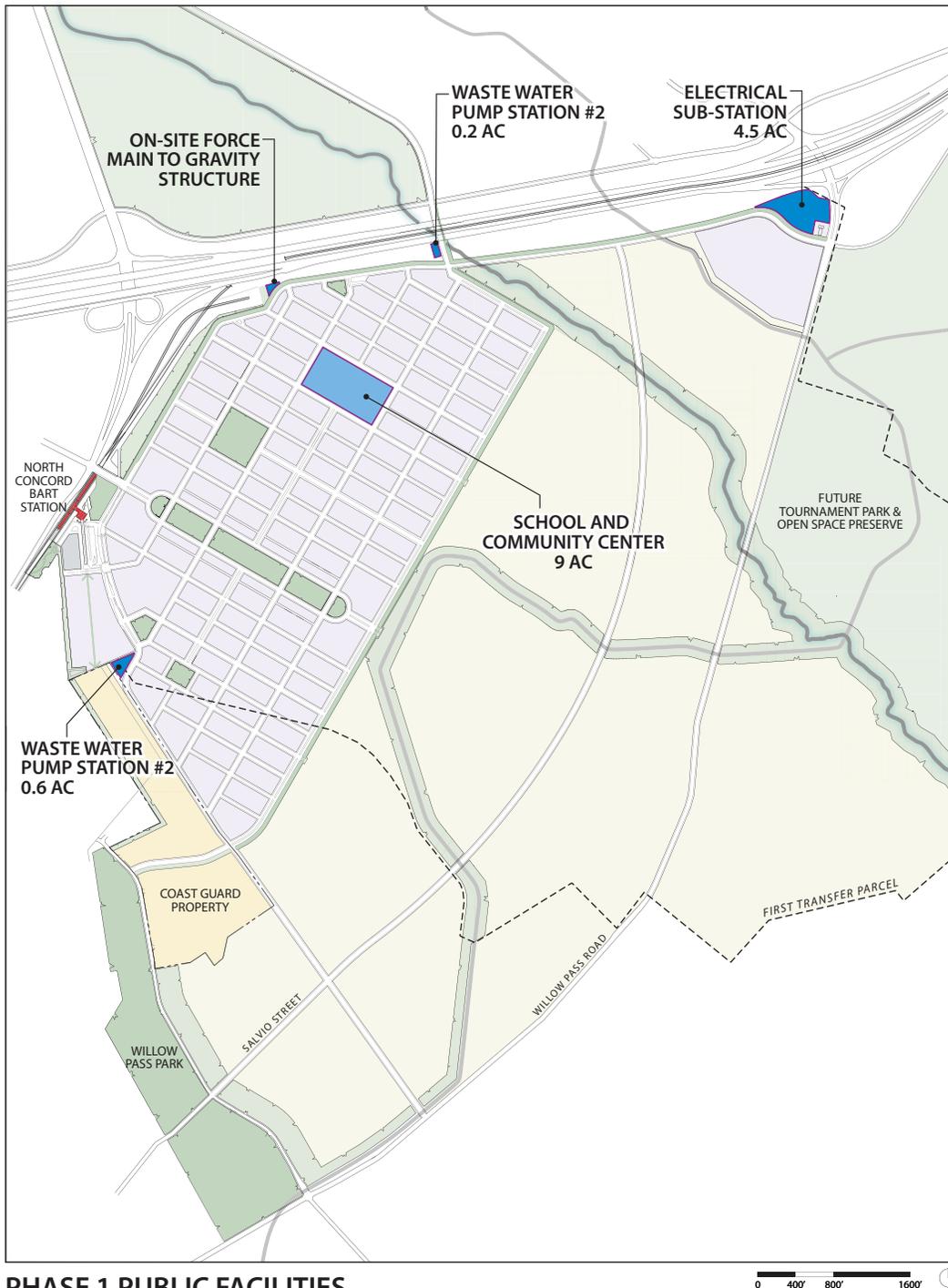
OPEN SPACE



7) Proposed Public Facilities

As mentioned above, approximately nine acres of the Phase One Property will be reserved for an elementary school. If the Mount Diablo Unified School District does not require a new school in this location due to excess capacity,

the land could be converted to a park, recreation center or community center. Land has also been set aside for public facilities related to the backbone infrastructure systems including the future electrical substation and wastewater pump stations.



PHASE 1 PUBLIC FACILITIES

8) Infrastructure and Utility Systems

Preliminary concepts for offsite utility infrastructure include new connections for sewer to the wastewater treatment plant as well as a recycled water line that will serve the project. A new, higher capacity water tank is planned adjacent to the existing tank on the north side of Highway 4. The existing tank would be converted to recycled water. A substation is planned adjacent to the Regional Commercial Center. We have also prepared preliminary backbone utility trunkline diagrams shown on the following pages.

9) Subphasing Plan

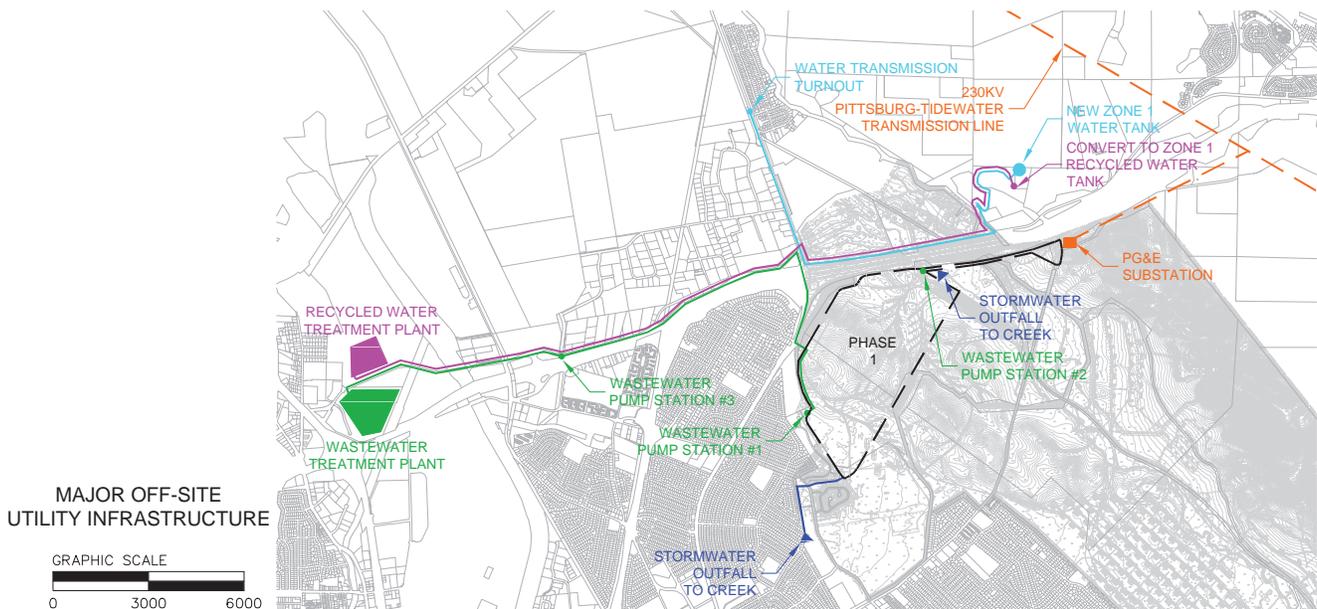
In order to maximize land value with efficient infrastructure investment, our intention is to phase infrastructure construction based on market demand so that developed land can be absorbed by market in a timely fashion. The Development Phase One Property will be split into sub-phases as detailed below. Each sub-phase will allow us to better respond to market conditions and achieve maximum infrastructure efficiency. Catellus will coordinate with the City and community to ensure the sub-phasing plan meets their expectations.

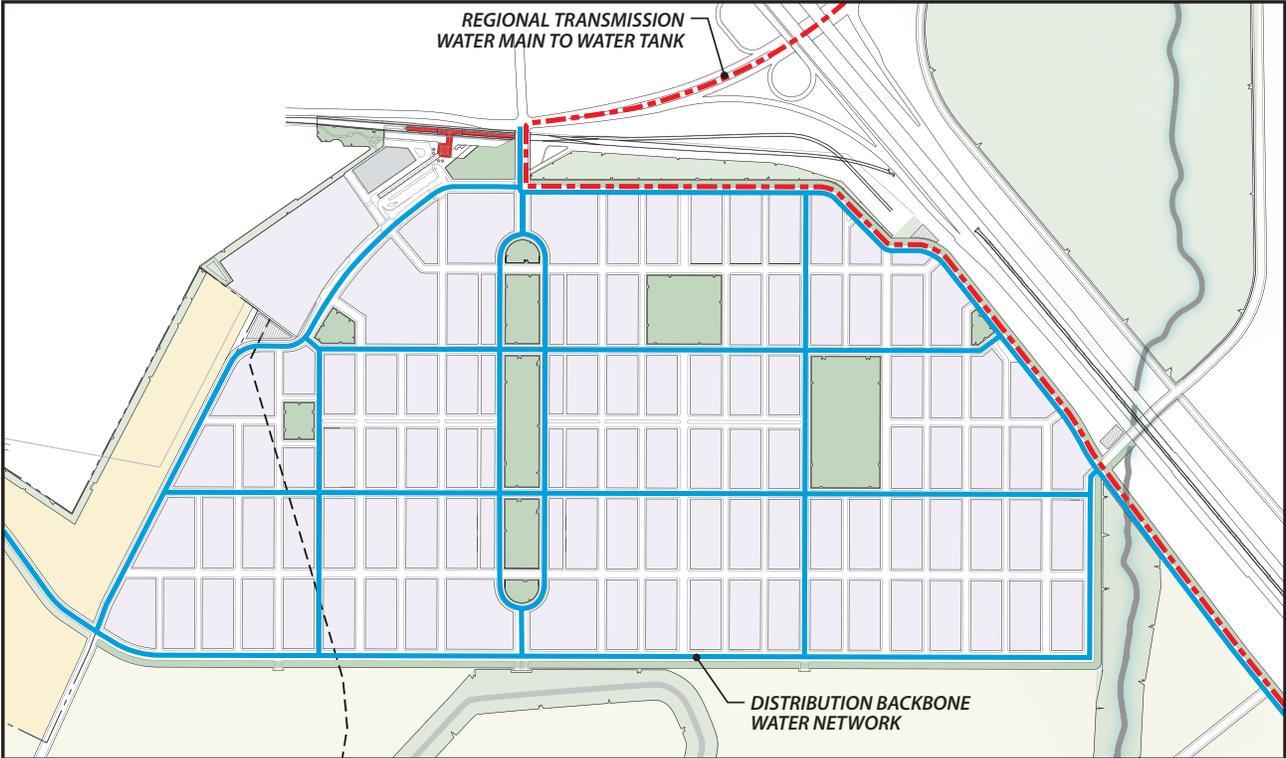
We are open to changing the sub-phasing plan if needed.

Sub-phase A – Commencing adjacent to the North Concord BART station, the project will include a wide array of residential uses including detached single-family, townhomes, condos/stacked flats, and affordable housing. This sub-phase will also include retail, the commencement of the Central Park and land held for the future Town Center commercial and residential uses. The regional retail center at Highway 4 and Willow Pass Road could also be constructed in this sub-phase depending on market demand.

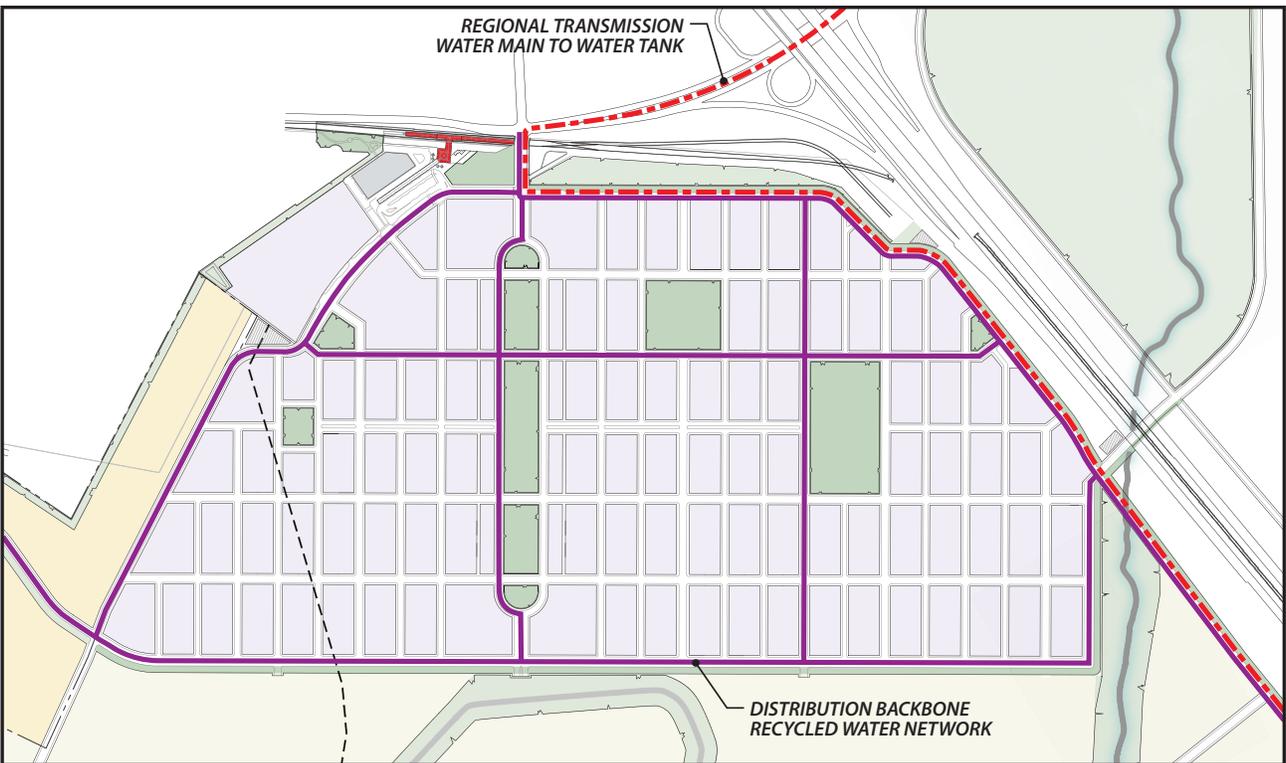
Sub-phase B – Likely a continuation of the residential build out from North Concord BART station and expanding based on efficient infrastructure build out. There will be a continued effort to deliver detached and attached single family lots as well as additional affordable housing.

Sub-phase C – The remaining residential uses and completion of the Town Center.

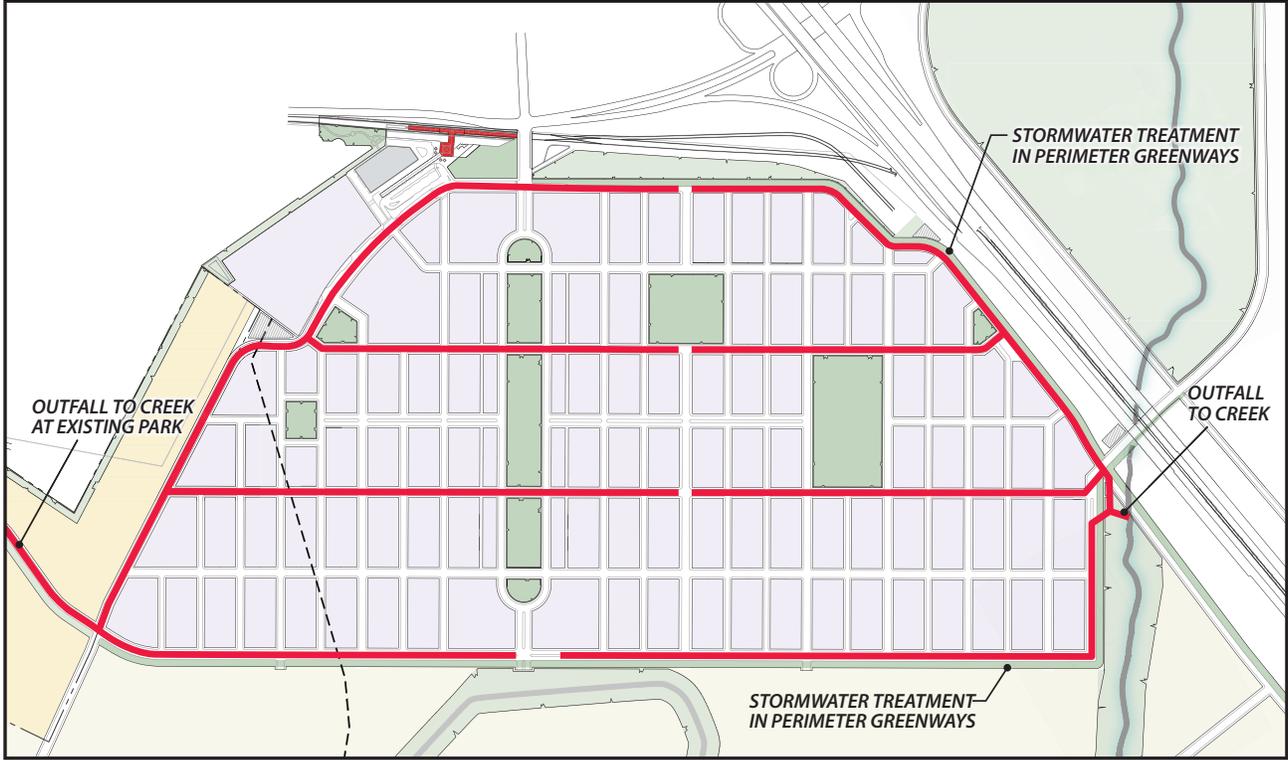




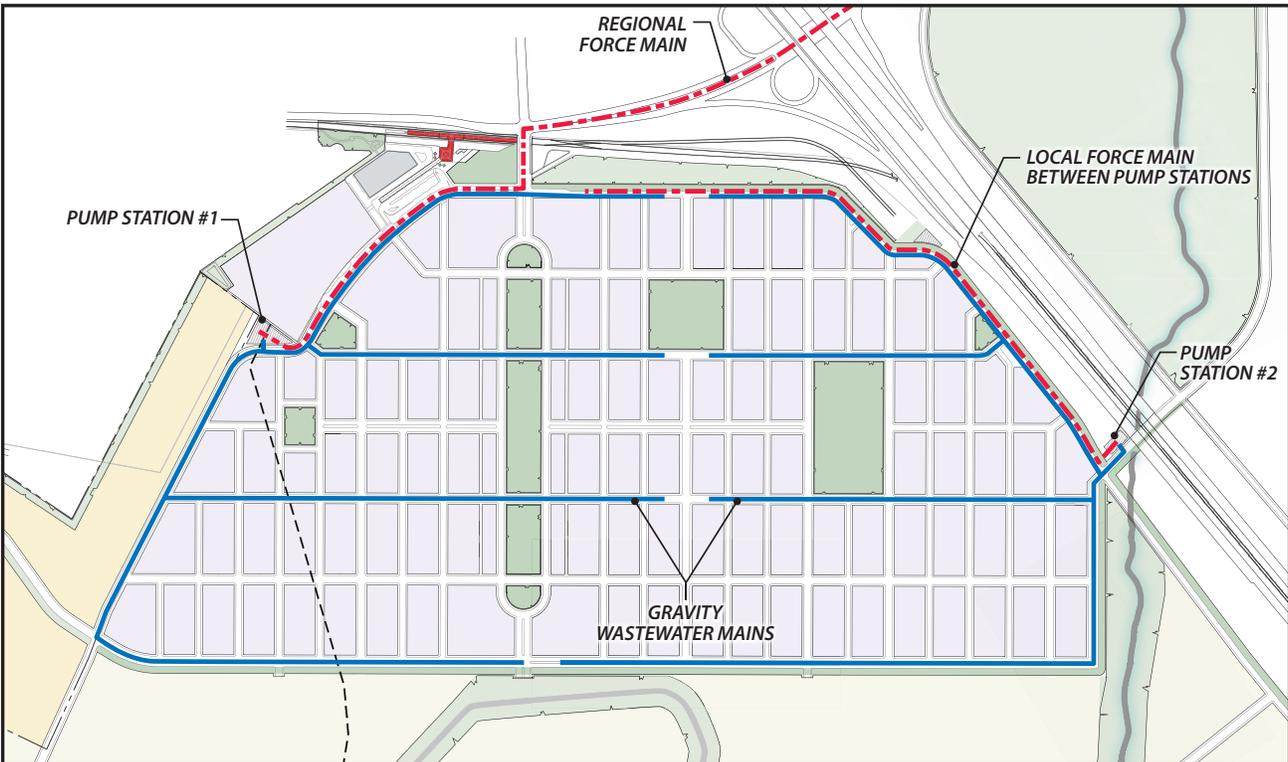
PHASE ONE DOMESTIC WATER SYSTEM BACKBONE TRUNKLINES



PHASE ONE RECYCLED WATER SYSTEM BACKBONE TRUNKLINES



PHASE ONE STORMWATER DRAINAGE SYSTEM BACKBONE TRUNKLINES



PHASE ONE WASTEWATER SYSTEM BACKBONE TRUNKLINES

4b. Vision Board

The Vision Board is submitted with this Proposal in 30x40" format. The board includes a summary of our vision for the CNWS, along with illustrations demonstrating the development plan and character of the Catellus proposal.

4c. Affordable Housing Approach

Affordable housing is an extremely important component of a successful master-planned community and Catellus is committed to complying with the City Council's January 2012 affordable housing resolution and recent update to the City's Housing Element. Ongoing collaboration between Catellus, the City, the community and affordable builders will be crucial.

Catellus has a successful track record of incorporating large components of affordable housing into master-planned communities. At our Mueller project in Austin, Texas, we've successfully integrated 25% affordable units into a community of 5,900 single and multifamily homes, including tax credit affordable apartment communities. Similarly, Mission Bay in San Francisco is planned to include 29% affordable housing units throughout the 6,900-unit development project.

In Alameda, Catellus has partnered with RCD to complete two phases of very-low- and low-income affordable housing projects. Phase 1, Shinsei Gardens, is a 39-unit multifamily project that earned the US Green Building Council's highest certification of LEED Platinum. Shinsei Gardens provides housing opportunities for low income families, persons with disabilities and Veterans.



Shinsei Gardens is a 39-unit multifamily project that earned the US Green Building Council's highest certification of LEED Platinum. Shinsei Gardens provides housing opportunities for low income families, persons with disabilities and Veterans.

Catellus and RCD are collaborating on the second phase of Shinsei Gardens, a project that will include 32 very-low- and low-income residents.

Over its lifetime, CNWS will include 3,020 affordable units representing 25% of the total residential units planned for the project. Two thousand one hundred twenty units will be provided to a diverse range of low income qualifying renters / buyers and an additional 900 units will be provided for low-income seniors, veterans, and teachers. Catellus will work with the City, community and affordable builders to deliver the affordable housing types and allocations that were provided for in the Housing Element and RFP.

Allocation of Affordable Housing at CNWS	Units	Percent
Homeless Accommodation	260	2.1%
Habitat for Humanity	60	0.5%
Very Low Income	800	6.6%
Low Income	630	5.2%
Moderate Income	1,270	10.4%
Total Affordable Housing	3,020	25%

Over the last several months, Catellus has met with three prominent Bay Area affordable housing builders MidPen Housing, Bridge Housing and RCD. Due to the size and scale of the affordable housing requirement at CNWS, it is likely that development of the affordable units will be constructed by multiple builders and phased over time. Catellus is committed to working with a diverse set of affordable builders, each of which will bring a unique expertise to CNWS with a variety of architecture, amenities and facilities.

The economics of an affordable housing partnership vary from parcel to parcel. One of the driving factors is the affordable builder's ability to compete for public funds, such as State Cap & Trade Funds and State Proposition 1C funds. Access to public transportation within close proximity of an affordable development is one of the most important metrics in order to win funding from either of these sources.

Fortunately for CNWS, a large component of the affordable housing requirement can be located within walking distance of the North Concord BART station providing a huge advantage for builders to compete for funds. For instance, the Cap and Trade program funding is available to projects within ½ mile of a major transit stop. Additional subsidies are often needed as well and Catellus is willing to consider a variety of options including in-lieu fee payments, land dedications and delivery of offsite and onsite utilities. The Catellus proforma, discussed in a later section, currently assumes an in lieu fee to gap finance the very low / low affordable housing projects. The in lieu fee is shown as a cost in the residential residual calculation.



Wildflower Terrace is a 9% tax credit affordable apartment community for seniors 55 and better in Mueller, Austin, TX.

In addition, tax credits play an integral part of the financing for new affordable developments and we will work directly with affordable builders to help maximize their tax credit potential. 9% tax credits are provided to 100% affordable buildings and projects compete for these tax credits through a scoring mechanism that ranks a variety of local amenities, such as proximity to grocery stores. In addition, 9% tax credit projects get higher scoring if they're within ¼ mile of transit.

Tax credits are also available to mixed-income projects, but only at the 4% level, so long as they have integrated at least 20% affordable housing. In the very early stages of the Development Phase One Project, mixed-income buildings focused on 4% tax credits may be the best alternative until enough local amenities are available for builders to effectively compete for 9% tax credits.

Once Catellus is selected as the project's Master Developer, we will actively work with the City, community and affordable builders to determine the best locations and phasing for affordable projects, with a focus on areas within walking distance of the North Concord BART station. Based on feedback from MidPen, Bridge, and

RCD, very low- / low-income projects should be in the two to four acre size and could range in density from 25 du/acre to 70 du/acre. The higher density range is expected at CNWS.

Moderate income units will likely be dispersed throughout the market rate housing areas and be constructed by the market rate residential builders and these units will need to be subsidized.

4d. - 4e. Approach to Entitlements, Environmental Documentation, Conservation and Open Space

Catellus manages the entitlement process using a consensus-based approach. Our reputation as a company hinges on our ability to earn the trust of the local community and third-party agencies and to provide a finished project that is highly regarded and widely embraced. This is especially true in our public/private partnerships. Throughout the entitlement process, Catellus will continue to be accessible to the community and respectful of its concerns.

The City of Concord has conducted extensive community and agency engagement over years of project planning and has laid an excellent foundation for Catellus' next generation work. Existing entitlements include the following:

1. The Concord Reuse Project Area Plan is complete and has been adopted. The Area Plan provides the vision for the planning area, policies and standards for development and conservation, and includes technical policies for specific items such as climate change;
2. In accordance with CEQA, a final programmatic EIR and addendum have been certified. The program-level EIR informs agencies and the public, on a broad level, of

significant environmental effects associated with the Area Plan and identifies ways to minimize the significant effects of the project. Details regarding site-specific issues can be deferred until the preparation of later project EIRs or negative declarations;

3. The General Plan has been amended to include the findings of the Area Plan. The General Plan provides the City with a long range comprehensive plan and policy to guide future development;
4. In accordance with NEPA, a Draft Environmental Impact Statement has been provided by the Navy for public comment. Similar to the City's program level EIR, the EIS evaluates the potential environmental consequences of the disposal and subsequent reuse of the Navy property; and
5. An interim zoning district for the Reuse Area ("Study District") has been created and added to the City zoning maps as an interim condition until detailed zoning standards are created through a Specific Plan or similar mechanism.

Catellus is ready to advance the entitlement effort required to commence construction of the Development Phase One Property. Once selected as the preferred Master Developer, we will work with the City to create a detailed Area Plan Implementation Work Program.

The Area Plan Implementation Work Program would include:

Environmental Protection – At Alameda Landing, Catellus has worked with a multitude of federal and state agencies to secure natural resource project approvals. This list includes the U.S.

Navy, the Bay Conservation Development Commission (“BCDC”), the Regional Water Quality Control Board, the Army Corps of Engineers, the Department of Toxic Substances and Controls (“DTSC”) and many others.

Close coordination with the East Bay Regional Park District will be required and a site-wide Habitat Mitigation and Monitoring Plan (“HMMP”) will need to be finalized. At Pacific Commons, an 840-acre mixed use project in Fremont, CA, Catellus donated over 440 acres of wetlands to the U.S. Fish and Wildlife for habitat conservation and protection of the vernal pool tadpole shrimp. A California native, the shrimp has been in existence for 15 million years and on the endangered species list since 1994.

Open space is a valuable asset to the project around it. And, as good stewards of the environment, we are committed to responsible, sustainable development.

Detailed Planning and Design - Catellus will likely pursue approval of a Specific Plan to establish zoning, the future allowable uses and development standards for the Development Phase One Property. Close coordination with the City will determine the best procedure for completion of the Specific Plan.

At Alameda Landing the City did not have a flexible mechanism for mixed-use zoning. Catellus worked with the City to create a new “MX” zone. We then created a flexible, mixed-use Master Plan that provided guidelines for land uses, conceptual development plans for each subarea, circulation, public open space requirements, building height limits, etc. As we have developed the property in phases, compliance with the Master Plan



At Pacific Commons Catellus donated over 440 acres of wetlands to the U.S. Fish and Wildlife for habitat conservation and protection of the vernal pool tadpole shrimp.

has been carefully monitored and periodic amendments to the Master Plan have been made.

At Mueller, we worked with the City to create the Mueller Design Book that provided design guidelines for open space, streets, transit, residential neighborhood development standards, landscaping, commercial standards and sustainability. For reference, an excerpt is included in Appendix A this RFP response.

Catellus will create a “CNWS Design Book” that will build on the guidelines of the Area Plan to set standards for future development of the Development Phase One Property and the remaining areas of the project.

Regional Planning – CNWS will have a considerable impact on regional growth. Catellus will closely coordinate with the Sustainable Communities Strategy planning process, Association of Bay Area Governments, MTC, and BAAQMD as needed to integrate the Area Plan into regional growth projections.

Safety and Remediation – Catellus has partnered with IRIS Environmental on numerous complicated mixed-use brownfield redevelopment projects. See page 48 for a summary of Catellus’ approach to environmental clean-up.

Financing Mechanisms – Catellus will coordinate with the City to set appropriate funding mechanisms that ensure the long-term viability of the project. At Alameda Landing, the Development Agreement fixed specific impact fees such as police and fire fees and a City-wide development fee to help fund ongoing City costs. The City of Alameda has a “Fiscal Net Neutrality” policy which impacts the Alameda Landing project in several ways. For instance, a Maintenance Services District (“MSD”) was created to finance the ongoing maintenance and repairs of the public infrastructure over time. Property owners are assessed annually and the incremental tax is collected in a fund for future MSD costs. Maintenance is managed by the City.

Climate Action / Sustainability – Catellus is partnering with the leading expert in sustainable design, the Center for Maximum Potential Building Systems (“CMPBS”). The Greenhouse Gas Reduction Program will be an early initiative in the entitlement process in order to mitigate potential impacts of the Area Plan are discussed later in the proposal.

Economic Development – Close coordination with John Montagh and his team at Economic Development will be critical. Attracting tax generating and job generating businesses to CNWS will be a key to the project’s success. At Alameda Landing, we conducted detailed retail leakage studies to identify categories of retail

uses that were under served in the community. We partnered with the City to create a Retail Tenancing Strategy that provided guidance on which retail uses to pursue in order to retain local sales tax dollars and attract regional shoppers. The leakage studies also helped in our marketing efforts that ultimately convinced Target Corporation to open a new store on the island.

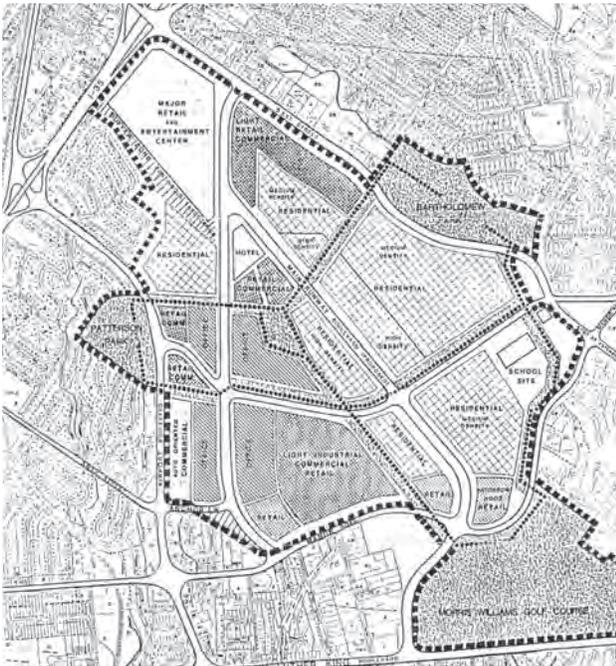
Transportation - A Transportation Demand Management Program will need to be created and approved by the City of Concord and will require coordination with the Contra Costa Transportation Authority, TRANSPAC, and several other jurisdictions. At Alameda Landing, Catellus created a Transportation Demand Management Program (“TDM”). The mission of the Alameda TDM is to reduce single-occupancy vehicle trips to and from Alameda Landing by encouraging alternative modes of transportation. The TDM program is managed by a newly created non-profit corporation and is 100% privately funded. Among other initiatives, the Alameda TDM has created a free shuttle service from Alameda Landing to the downtown Oakland BART station during peak morning and afternoon commute hours. The Alameda TDM closely coordinates with area businesses and residents to increase shuttle ridership and reduce single occupancy car trips.

In addition to the work outlined In the Area Plan Implementation Work Program, numerous supplementary approvals are required in order to commence construction of the Development Phase One Property. Catellus will actively engage the Navy, DTSC, Army Corps of Engineers, the Regional Board and any other third party agencies to identify and complete any remaining entitlements necessary. Catellus will work actively

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with the City to complete all required subdivision maps in compliance with the Map Act. Subareas of the Development Phase One Property will need Final Design Review approval by the Planning Commission including development plan approval.

Catellus' proposed Development Phase One Property is compliant with the Concord Reuse Project Area Plan and the City's General Plan. To the extent any portion of the proposed plan becomes non-compliant with the Area Plan and/or General Plan, Catellus will cooperate with the City and any stakeholders to make those portions compliant. If Catellus, the City, and the community determine that adjustments need to be made to the General Plan, we will work diligently to make those adjustments as quickly as possible, including any necessary addendums or supplements to the certified EIR. The Mitigation Monitoring and Reporting Program will be diligently followed to ensure the project stays in compliance with the certified EIR.



1984 C.A.R.E. Plan created by neighbors was used to begin preliminary design for the Mueller Master Plan.

Once selected as the preferred Master Developer, Catellus will work directly with the City to engage the Navy in order to finalize any remaining entitlements that require Navy approval, such as the EIS. The latest EIS draft concludes that the Navy finds few “significant adverse impacts” in its analysis of the City’s reuse plan. Air quality was one specific concern that could be mitigated by sustainable design such as installing solar panels and providing access to public transportation including BART and high capacity bus service connecting BART with the rest of the project. The draft report also recognizes the traffic impacts that will arise due to development of CNWS.

Catellus' consensus based approach within the community will ensure an efficient entitlement process with the best results. Nowhere is our commitment to community as a Master Developer more evident than at Mueller, a 700-acre redevelopment of Austin’s former airport in Austin, Texas.



2014 Mueller Master Plan is similar in land use to requests from neighbors over 30 years ago.

Conversations about redeveloping the Robert Mueller Municipal Airport began in the early 1980s with a group called CARE (Citizens for Airport Relocation), drawing up a preliminary development plan in 1984. Almost 20 years of community input was followed by the selection of Catellus as Master Developer. Before a development agreement was ever signed, Catellus embraced the history of community involvement and attended and hosted hundreds of outreach and neighborhood association meetings.

This spirit of community input is still a hallmark of Mueller today. In 2008, after years of successful planning and development at Mueller, the City of Austin and Catellus were honored with a Community Stewardship Award for the ambitious redevelopment of the Mueller project. Expert judges from across the country recognized Mueller's innovative master plan, commitment to stewardship, and preservation and enhancement of the quality of life in the Central Texas region.

4f. Approach to Labor Issues

Decades of experience as a Master Developer have presented Catellus with numerous projects that required collaboration with the local Building Trade Unions. At Mission Bay, Alameda Landing, Pacific Commons and numerous other large-scale projects, we have established successful relationships with local Labor.

Public infrastructure on Catellus projects is almost exclusively built at local prevailing wages. Catellus will often utilize the same prevailing wage contractors that installed the public infrastructure to complete the private utility improvements, in-tract streets and onsite work.

We also have established working relationships with local Building Trade Unions on the vertical construction even in the absence of a Project Labor Agreement. Most recently, Catellus and the local Union Trades agreed to work collaboratively to construct eight new retail shop buildings totaling over 70,000 square feet at the Alameda Landing project.

We stand ready to work with the Contra Costa Central Labor Council to hire local labor. In the event that a Project Labor Agreement becomes an obligation for any reason, a fair and responsible Labor Agreement is very attainable and Catellus has the experience to negotiate and implement such an agreement. Pacific Commons in Fremont and Bayport Alameda are both examples of projects that were completed with Project Labor Agreements. Working with the Building and Construction Trades Council of Alameda County, Catellus successfully negotiated agreements that were signed by the Carpenter's, Cement Masons, Electrical Workers, Iron Workers, Roofers, Teamsters and many more trades.

The most important recommendation Catellus can make is to ensure the agreement allows for a sufficient number of construction bids for each trade. A Project Labor Agreement can be a concern when there are an insufficient number of union bids and a vertical developer or homebuilder is prohibited from seeking non-union bids to supplement the offering.

The City's "Hire Concord First" provision presents a great opportunity to create local jobs and enhance the local economy, not to mention the very gratifying endeavor of hiring local Veterans. Catellus will engage the Building Trades and

Veteran's groups to put a plan in place that maximizes the potential for hiring of local employees, Veterans and businesses.

At our Mueller project in Austin, Catellus hosted contractor fairs to explain the project and have general contractors available to talk about upcoming bids. Outreach to minority-owned businesses and women-owned businesses will also be a focus. Similar to the Project Labor Agreements discussed above, there is always an important balance that needs to be struck between adhering to specific hiring programs and providing builders with fair construction pricing.

4g. Approach to Environmental Clean-Up

For nearly 20 years, Catellus has teamed with Iris Environmental for strategic and technical assistance with complicated mixed-use brownfields redevelopment projects. These frequently include properties formerly used for military, manufacturing and/or heavy industrial uses. Iris Environmental principals and staff are trained in a wide variety of scientific disciplines, including applied earth sciences, hydrology, geological sciences, environmental health and toxicology, environmental engineering, and atmospheric chemistry.

Catellus and Iris Environmental have assessed, remediated and provided mitigation measures on large brownfield sites with multiple contaminants of concern and multiple potential receptors and exposure pathways. These sites have included former military facilities and involved numerous regulatory agencies including local and County entities, State Water Resources Control Board, Department of Toxic Substances Control and the United States Environmental Protection Agency.

Catellus and Iris Environmental have a long track record of successfully redeveloping former military sites such as the Concord Naval Weapons Station. Comparable complex brownfield site redevelopments performed by Catellus and Iris Environmental include the Mission Bay site in San Francisco, California, the Pacific Commons site in Fremont, California, and several former military installations. Each of these involved working cooperatively with regulatory agencies throughout and involved issues comparable to those found at CNWS such as railroad-related contamination, buried debris fields including underground storage tanks, fuel-related and solvent-related impacts to soil, soil gas and groundwater, and heavy metal impacts from various sources.

Although Installation Restoration Sites 11 and 13 (IR11 and IR13) are not affecting the proposed Development Phase One Property, our team will need to be immediately engaged with the Navy to prepare for later phase development. Our team has the requisite expertise to handle several redevelopment scenarios.

A first task is to provide cooperative oversight of the United States Department of the Navy's (DON) ongoing site investigation and remediation activities while Phase One development is ongoing. Since 2006, Catellus and Iris Environmental have worked in a comparable role overseeing the DON's investigation and remedial activities at the former Fleet Industrial Supply Center Alameda (FISCA) adjacent to the former Naval Air Station Alameda in Alameda, California.

A second task would be to take over investigation and remediation activities from the DON in order to expedite the closure process. Catellus and Iris

Environmental have successfully performed such “privatization” of the process at both the FISCA site in Alameda as well as two former United States Air Force sites located in El Segundo and Hawthorne, California.

In the case of IR11 and IR13, Iris Environmental has experience investigating, evaluating and remediating military dumping, storage and burn areas and the associated contamination including perchlorate, semi-volatile organic compounds, fuel range compounds and heavy metals. Iris Environmental has conducted numerous human health risk evaluations to assess human health exposures under an unrestricted site reuse scenario (i.e. residential site use), and has performed remediation and/or mitigation where necessary. Catellus and Iris Environmental can comply with all institutional control restrictions on redevelopment activities including construction oversight for digging restrictions and identification and management of potential unexploded ordinance (UXO).

4h. Environmental Sustainability

Catellus is a national leader in integrating sustainable design into master planned communities. We have partnered with the most prominent sustainable design expert in the country, the Center for Maximum Potential Building Systems (“CMPBS”). CMPBS has guided our sustainable design at Mueller since the beginning of the project. Gail Vittori, a LEED Fellow, is Co-Director of CMPBS, the 2014 Chair of the Green Building Certification Institute Board of Directors and was the 2009 Chair of the U.S. Green Building Council’s Board of Directors. Ms.



Dell Children’s Medical Center of Central Texas is the first and only acute care center to achieve LEED Platinum certification. Among other sustainable features, the hospital is served by the Mueller Energy Center, an onsite CHP plant.

Vittori has been intimately involved in the Mueller project and would take on a similar role with CNWS.

At Mueller, Catellus and CMPBS created the Mueller Green Resources Guide to provide building practices that incorporate healthy, environmentally sensitive, socially responsible, and cost-effective strategies into design, construction, and operations. Some sustainable highlights of Mueller include:

1. Being the largest LEED for Neighborhood Development (LEED-ND) Pilot Project in the United States. LEED-ND is comprised of three stages, with final certification granted in stage three. To date, Mueller has earned Stage two approval and Catellus will submit Stage three plans for review and approval by the USGBC in mid-2015;
2. The highest concentration of residential solar in the United States – currently one in four homes have photovoltaic panels;

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3. The highest concentration of electric vehicles in the United States;
4. Using solar trash compactors in the parks that hold three times the amount of recycling and waste and send text updates to maintenance crews in order to reduce gas and labor;
5. Being home to the first LEED Platinum-certified hospital in the world;
6. A reclaimed water system that serves all irrigation as well as several buildings;
7. The Mueller Energy Center – a CHP plant that was constructed onsite. Unlike traditional power plants, the hot exhaust air created in the combustion process is recycled to produce steam. The steam is then used both to heat the hospital and as fuel input to an absorption chiller. The chiller provides chilled water for air conditioning and dehumidification for the hospital. By recycling the exhaust heat, energy that normally is wasted is captured and put to good use;
8. “Solar Sunflowers” was, at installation, the largest public art project in Austin and collects enough solar energy to power the lighting in the retail center parking lot. Excess power is directed back to the grid;
9. The project features “green roofs” on multiple buildings with rain water catchment systems;
10. A 32-acre restoration of the endangered Blackland Prairie ecosystem showcasing native plantings with outdoor classrooms;
11. An integrated Pest Management system was put in place through a deed restriction that requires all property owners use the least toxic method to eliminate pests, weeds, etc.;



Homes in Mueller demonstrate residential solar. One in four homeowners have retrofit their new homes with photovoltaic solar panels.

12. Pecan Street Inc. is currently onsite using Mueller as a test case for smart appliances and wiring in homes to show real time energy consumption; and
13. Mueller's landscape plant palette emphasizes native plants, with a 10% allowance for non-invasive adapted species.

When Catellus began development at Mueller over a decade ago, the sustainable practices mentioned above were groundbreaking.

At CNWS, we are committed to integrating the groundbreaking practices of tomorrow, as well as the successful principles of yesterday. As we consider sustainable enhancements throughout the project, careful consideration must be given to the economic feasibility of each system. We are committed to working with the community to determine the highest priorities and to incorporate the maximum amount of sustainable practices in a responsible manner.

CNWS offers unique opportunities to apply energy efficiency and sustainability strategies at both a building and neighborhood level. These strategies will help attract new tenants, residents, and visitors to the community to make it competitive in the market for the future. They also can provide added benefits to the City of Concord including protecting air quality, mitigating urban heat island effects and minimizing light pollution.

The Greenhouse Gas Reduction Program will be an early initiative in the entitlement process. The program will include the creation of green design guidelines outlining requirements for green building certifications such as LEED and/or any local green building programs.



A green roof adds to the LEED Platinum rated Ronald McDonald Houses' sustainable features in Mueller, Austin, Texas.

Land Use Mix - The land use mix will reflect New Urbanist design focused on accessibility to transit. The thoughtful mix of uses will include green space and pervious materials to reduce the urban heat island effect while pedestrian-oriented design will focus on reducing automobile-centric development. This will reduce car emissions improving air quality and noise pollution.

Building Design / Renewable Energy Systems - All buildings will be designed with sustainable features in mind. For example, design guidelines in Mueller require buildings and homes to be "solar ready" allowing future users or owners to add photovoltaic panels without running power to the roof post construction. We are also committed to exploring the newest and most innovative forms of waste reduction and conservation.

For example, advancements in trash collection and disposal are revolutionizing master-planned communities around the world. Conventional methods of waste collection, transport, and disposal continue to erode budgetary choices,

deteriorate resources, and endanger the environment.

Memios, based in North Carolina, has designed a high tech waste management system that all but eliminates the need for regular trash trucks and their severe carbon emissions. The Memios system has been installed on large hospitals such as Duke University and could be rolled out into the Town Center Area, Campus/Commercial Area, or even the neighborhood centers at CNWS.

Their system operates much like modern sewer and water utilities that carry contaminated waste away from their point of origin. A high speed concentrated air stream, rather than water, is used as the transport medium. Trash and recyclables entering the air stream network are immediately contained and rapidly transported away through a sealed pipe network where automation separates materials for eventual recycling recovery and energy conversion at a central collection location.

Automated waste receptacles are conveniently located in and around a facility to replace trash storage areas and labor intensive collection activities. Receptacles are connected to a high speed sealed pipe network to rapidly transport trash and recyclables to a central collection area. The system operates 24 hours a day, 365 days a year with minimal maintenance. Local waste management companies can purchase and manage the system, retaining local jobs.

Water Conservation - Water conservation is an essential element for the CNWS development. The need is ever more apparent given the current drought. The project has the opportunity to take advantage of every drop of water that falls on the

site, conserve its use, match use with quality, and engage in recycling/reuse strategies to create a true water cycle. Some of the technologies to do this are state of the shelf/state of the art; others are in early stage development. It is essential that we plan for water resilience knowing that some technologies will advance from proof of concept to implementation during the project life cycle.

Energy Conservation - Northern California has a relatively benign climate and enables very low energy use intensity (kbtu/sf/yr) for all building types. Our goal should be to enable passive solar strategies both in master planning and building design to do most of the work and we can rely on external energy more as a back-up than a primary source. A mix of on-site renewables, combined heat and power (like the Mueller Energy Center mentioned above), fuel cells, etc. are all possibilities.

Catellus will create a construction best practices guide for the Concord redevelopment. Similar guides have been used in other redevelopment projects such as Mueller. This guide will outline requirements from contractors and vendors to meet green urbanism goals such as recycling and mitigating air and noise pollution. This guide will also offer additional strategies contractors can employ to meet Concord's sustainability goals along with worksheets to help Catellus track these efforts.

The guide will identify strategies to address reclamation, conservation, waste reduction, material conservation and renewable energy systems. An excerpt from the Construction Best Practices guide currently used in Mueller can be found in Appendix A.

Reclamation and Conservation - Any materials demolished onsite, such as existing roadways, will be evaluated for recycling. Any buildings will be de-constructed rather than demolished and any materials (metal, salvageable wood, road base) will be recycled either onsite or through other salvage programs. In past projects runway and parking lot materials have been reused on and offsite in the construction of new roadways. At Alameda Landing, Catellus deconstructed two large former Navy warehouses and reused over 95% by weight of the materials demolished on site.

Waste Reduction/Material Conservation - As construction begins, Catellus will require all contractors to write and implement a construction waste management plan specifically addressing reclamation, recycling and storage. Goals in other similar projects have been set at 50% diversion with a goal to recycle or salvage a minimum of 50% of non-hazardous waste materials. Construction waste management best practices and strategies will be outlined in the Construction Best Practices document along with additional resources to provide strategies to meet or exceed these goals. At Mueller, this strategy has successfully diverted 410,874 tons of construction from landfills from 2007 to 2013.

4i. Public Outreach and Communications

At Catellus, we build successful public/private partnerships ensuring a mutually rewarding project and maximizing benefits for all entities involved. Often this requires us to navigate challenging issues of public policy and local political dynamics. We are focused on building community in an environmentally sustainable manner and take pride in creating lasting partnerships with the

communities in which we work, committing for the long-term, not just the duration of the project.

Through our partnerships, corporate giving, community outreach, employee involvement and education, we are committed to building healthy and productive relationships with the local communities in which we do business.

Our reputation as a company hinges on our ability to earn the trust of the local community and to provide a finished project that is highly regarded and widely embraced.

Catellus plans to continue the outreach modeled by the Local Reuse Authority. Public outreach sessions and individual meetings with stakeholders will help us and our planners understand goals and views for the CRP.

Along with outreach for the master plan, Catellus plans to work with the LRA, community and other stakeholder for branding.

There is a very personal relationship between a community and its brand. Because of this bond, we propose a very public branding process for CNWS. Catellus will conduct focus groups with all constituents to make sure the new name for CNWS resonates well with the community-at-large. Branding efforts will be focused on creating a new, unique community while also complementing and enhancing the current brand of Concord. We aim to add to what already exists rather than creating a totally separate destination. The expanded brand will reflect the qualities of the new place we are creating on the former naval base. Some of our initial thoughts are outlined below.

Brand Qualities: Important qualities that reflect the brand include:

- **Inclusive:** The new plan invites the public in for a range of activities and uses. The mix of housing options (rental and for-sale) will attract people from diverse age groups and a broad variety of income levels.
- **Civic minded:** Public involvement in the design of the Area Plan has resulted in a number of uses that support the common good: affordable housing, vast open space, and public facilities.
- **Respectful of the past, designed for the future:** This land is significant in the history of Northern California. While the new community will reflect the latest in land planning and building science, its brand should also celebrate its legacy.
- **Healthy:** Many of the design features of the new community are conducive to physical activity, an approach that aligns well with the Urban Land Institute's Healthy Places Initiative. Sustainable buildings, walking and bicycling trails, open space and on site sports amenities are a key part of the experience and should be reflected in the brand.

This outreach will carry beyond the initial planning phases to continue throughout development. For example, in Austin, Texas the Mueller project has hosted hundreds of meetings gathering citizen input even 10 years after being declared Master Developer.

All of the meeting structures listed below have been conducted for other Catellus projects and may be used for the Concord development.



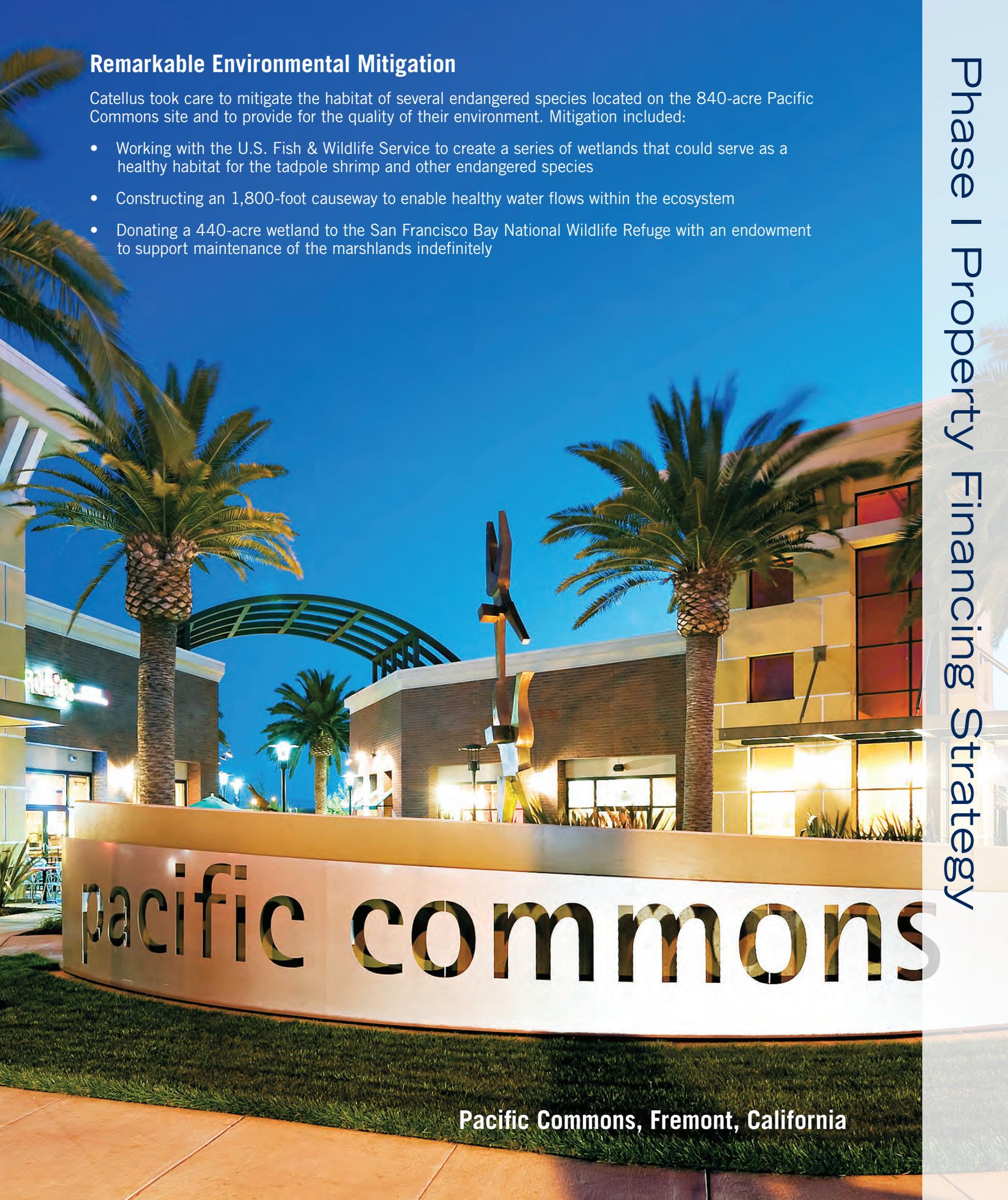
Interested Austinites learn about Mueller's master plan in the education session "Mueller 101".

- **Open Houses:** These sessions are structured similar to an open house and would include large prints of plans, images and statements. Attendees receive note cards to leave feedback or give feedback directly to subject matter experts who will record these ideas and have the ability to write on plans directly.
- **Town Halls:** These meetings include a presentation on a particular topic with breakout tables to collect feedback and answer questions.
- **101s, 201s, 301s:** These sessions are used to educate interested parties on the progress of development. An overall presentation is given and breakout tables are available for questions and answers on individual topics such as parks, construction, employers, etc.
- **Other Meetings:** There will also be other meetings and presentations as requested by stakeholder groups, the Local Reuse Authority and City of Concord.

Remarkable Environmental Mitigation

Catellus took care to mitigate the habitat of several endangered species located on the 840-acre Pacific Commons site and to provide for the quality of their environment. Mitigation included:

- Working with the U.S. Fish & Wildlife Service to create a series of wetlands that could serve as a healthy habitat for the tadpole shrimp and other endangered species
- Constructing an 1,800-foot causeway to enable healthy water flows within the ecosystem
- Donating a 440-acre wetland to the San Francisco Bay National Wildlife Refuge with an endowment to support maintenance of the marshlands indefinitely



pacific commons

Pacific Commons, Fremont, California

Development of the Phase One Property will happen through a true public/private partnership between the City of Concord and Catellus. Catellus is proposing an open book approach that is modeled after the partnership we've had with the City of Austin for over a decade.

As the Master Developer, Catellus will work closely with the City, the community and the other stakeholders to develop and finalize a Development Phase One Property master plan endorsed by all parties. Once we secure all entitlements and permits, Catellus will front all of the infrastructure construction costs, negotiate with third-party builders/developers to maximize land value, secure public financing and/or other funding sources and oversee the successful execution of the master plan.

As each phase of the project is commenced, Catellus will assume all risks for infrastructure cost increases, absorption delays, market fluctuations and other development contingencies associated with that phase. Considering the risk and monetary/personnel investment needed for a redevelopment project of this magnitude, we propose that Catellus receive a Master Developer Return equal to the greater of 15% Land Sales Revenue or 15% Internal Rate of Return with an additional waterfall structure to be negotiated with the City of Concord at final lookback.

Any public financing secured will be used to reimburse public-finance-eligible project costs. Public financing could include an Enhanced Infrastructure Financing District ("EIFD"), recently signed into law by Governor Jerry Brown, a Community Facilities District ("CFD"), or other public financing mechanisms in order to reimburse the project for public infrastructure

costs (further discussed below). Land Sales Revenues will be used to reimburse any project costs not covered by public financing and other project costs including the Master Developer Return. Any remaining balance will be distributed according to the waterfall agreement.

In addition, upon completion of the project, the City of Concord will have a vibrant new community with extensive open space, a Central Park, diverse uses including employment centers and a Town Center where people can live, work and play. Net of any taxes necessary to fund the public financing, all of the incremental tax revenues including transfer taxes, property taxes, sales taxes, local service taxes and other miscellaneous tax revenues, can be used by taxing entities for their specific needs and initiatives and for community enhancement projects.

This approach aligns Catellus' interests with the City's interests and creates a true partnership relationship to ensure successful implementation of the master plan that is endorsed by, and of maximum benefit to, all the parties. Also, by not fixing the land value up front, the City will be able to benefit from the increase in land values as the project progresses.

5a. Conceptual Development Budget

Catellus has attached an initial financial model to illustrate anticipated Sources and Uses of funds for the Development Phase One Property. The financial model is based on assumptions and estimates that will be further refined during the ENA period. These assumptions are based on information acquired from many sources including the market study by REE, engineers estimates, builders, brokerage firms, past experience and

UPDATE --- THIS PAGE REPLACES THE FOLLOWING PAGE 56

ANNUAL CASH FLOW

CATELLUS - CNWS - DEVELOPMENT PHASE ONE PROPERTY

	Total	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
SOURCES															
Land Sales Revenue															
Multifamily Apartments	34,675,751	-	-	-	-	-	-	-	-	9,427,952	9,710,790	10,002,114	5,534,895	-	-
P1 Condos / Stacked Flats	53,303,619	-	-	-	-	6,206,855	6,393,061	6,584,853	6,782,398	6,985,870	6,715,750	6,917,222	6,717,611	-	-
P2 10-Pac Autocourt Town	63,827,419	-	-	-	7,412,121	7,634,485	7,863,519	8,099,425	8,342,407	8,592,680	8,850,460	7,032,323	-	-	-
P3A Townhomes	47,644,255	-	-	-	-	-	6,149,430	6,333,913	6,523,930	6,719,648	6,921,237	7,128,875	7,867,222	-	-
P3B Live/Work Towns	9,661,402	-	-	-	-	-	-	-	-	4,844,064	4,817,338	-	-	-	-
P4 Clustered Detached	73,675,124	-	-	-	8,013,437	8,253,840	8,501,455	8,756,499	9,019,194	9,289,770	9,568,463	9,855,517	2,416,948	-	-
P5 2-Pack/Cluster/40x70 Lot	72,664,783	-	-	-	-	-	-	9,925,114	10,222,868	10,529,554	10,845,440	11,170,804	11,505,928	8,465,075	-
P6 45x75 Lot/50x70 Lot	75,302,046	-	-	-	10,744,271	11,066,599	11,398,597	11,740,555	12,092,772	12,455,555	5,803,696	-	-	-	-
P7 50x85 Lot/52x80 Lot	71,387,072	-	-	-	-	-	-	-	14,160,849	14,585,675	15,023,245	15,473,942	12,143,361	-	-
P8 55x92 Lot/55x105 Lot	110,037,898	-	-	-	14,913,995	15,361,414	15,822,257	16,296,925	16,785,832	17,289,407	13,568,068	-	-	-	-
P9 60x95Lot/55x105 Lot	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Flex - Regional Retail	26,711,299	-	-	-	26,711,299	-	-	-	-	-	-	-	-	-	-
TBD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Land Sales Revenue	638,890,669	-	-	-	67,795,123	48,523,194	56,128,319	67,737,283	83,930,251	100,720,174	91,824,488	67,580,796	46,185,965	8,465,075	-
CFD Public Financing	105,083,939	-	-	-	-	20,812,734	-	-	31,390,287	-	-	-	52,880,918	-	-
EIFD Public Financing	91,008,399	-	-	-	-	14,684,404	-	-	25,551,108	-	-	-	50,772,887	-	-
Total Sources	834,983,007	-	-	-	67,795,123	84,020,331	56,128,319	67,737,283	140,871,647	100,720,174	91,824,488	67,580,796	149,839,770	8,465,075	-
USES															
Development Costs	Total														
Hard Costs	414,341,225	-	-	36,298,028	37,023,989	37,764,468	47,030,387	47,970,995	48,930,415	38,655,531	39,428,641	40,217,214	41,021,558	-	-
Soft Costs	99,472,707	2,925,000	10,889,408	11,107,197	11,329,340	11,287,293	11,513,039	11,743,300	6,957,996	7,097,155	7,239,099	7,383,880	-	-	-
Misc Costs (Maintenance, CM Fee)	28,515,178	1,628,700	729,134	2,481,022	2,525,642	2,559,335	3,014,032	3,069,313	2,904,812	2,417,740	2,461,095	2,505,317	2,219,035	-	-
Indirect Costs	6,400,000	400,000	1,000,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	-	-
Contingency	93,330,516	482,500	1,163,941	8,395,325	8,562,732	8,706,623	10,582,381	10,793,529	10,506,882	8,465,822	8,634,638	8,806,831	8,229,312	-	-
Sub-Total Development Costs	642,059,625	5,436,200	13,782,483	58,781,572	59,941,703	60,817,719	72,639,839	74,077,136	69,800,104	57,136,248	58,263,473	59,413,242	51,969,905	-	-
Other Costs															
Transfer Tax @ 1.00% (seller)	6,388,907	-	-	-	677,951	485,232	561,283	677,373	839,303	1,007,202	918,245	675,808	461,860	84,651	-
Closing Costs @ 1.00%	6,388,907	-	-	-	677,951	485,232	561,283	677,373	839,303	1,007,202	918,245	675,808	461,860	84,651	-
SF Resi Commission @ 3.00%	17,325,109	-	-	-	1,232,515	1,455,696	1,683,850	2,032,118	2,517,908	2,738,767	2,463,411	1,727,360	1,219,532	253,952	-
MF/Comm Resi Commission @ 4.00%	2,455,482	-	-	-	1,068,452	-	-	-	-	377,118	388,432	400,085	221,396	-	-
Developer Profit @ 15%	95,833,600	-	-	-	10,169,268	7,278,479	8,419,248	10,160,592	12,589,538	15,108,026	13,773,673	10,137,119	6,927,895	1,269,761	-
Subtotal Other Costs	128,392,004	-	-	-	13,826,138	9,704,639	11,225,664	13,547,457	16,786,050	20,238,314	18,462,005	13,616,180	9,292,542	1,693,015	-
Total Uses	770,451,630	5,436,200	13,782,483	58,781,572	73,767,841	70,522,358	83,865,503	87,624,593	86,586,155	77,374,562	76,725,478	73,029,423	61,262,447	1,693,015	-
NET CASH FLOW	64,531,377	(5,436,200)	(13,782,483)	(58,781,572)	(5,972,718)	13,497,973	(27,737,184)	(19,887,310)	54,285,492	23,345,612	15,099,009	(5,448,626)	88,577,323	6,772,060	-
Cumulative Cash Flow		(5,436,200)	(19,218,683)	(78,000,255)	(83,972,973)	(70,475,000)	(98,212,183)	(118,099,493)	(63,814,001)	(40,468,389)	(25,369,379)	(30,818,006)	57,759,317	64,531,378	64,531,378

ANNUAL CASH FLOW

CONCORD - DEVELOPMENT PHASE ONE PROPERTY

	Total	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
SOURCES															
Land Sales Revenue															
Multifamily Apartments	20,190,706	-	-	-	-	-	-	-	5,708,016	5,708,016	5,708,016	3,066,659	-	-	-
P1 Condos / Stacked Flats	37,682,894	-	-	-	4,864,401	4,864,401	4,864,401	4,864,401	4,864,401	4,540,108	4,540,108	4,280,673	-	-	-
P2 10-Pac Autocourt Town	47,077,728	-	-	6,057,796	6,057,796	6,057,796	6,057,796	6,057,796	6,057,796	6,057,796	4,673,157	-	-	-	-
P3A Townhomes	34,006,179	-	-	-	-	4,808,955	4,808,955	4,808,955	4,808,955	4,808,955	4,808,955	5,152,451	-	-	-
P3B Live/Work Towns	6,722,099	-	-	-	-	-	-	-	3,420,015	3,302,084	-	-	-	-	-
P4 Clustered Detached	55,586,851	-	-	6,747,537	6,747,537	6,747,537	6,747,537	6,747,537	6,747,537	6,747,537	6,747,537	1,606,556	-	-	-
P5 2-Pack/Cluster/40x70 Lot	51,364,060	-	-	-	-	-	7,649,966	7,649,966	7,649,966	7,649,966	7,649,966	7,649,966	5,464,262	-	-
P6 45x75 Lot/50x70 Lot	58,598,604	-	-	9,081,703	9,081,703	9,081,703	9,081,703	9,081,703	9,081,703	4,108,389	-	-	-	-	-
P7 50x85 Lot/52x80 Lot	50,752,707	-	-	-	-	-	-	10,658,069	10,658,069	10,658,069	10,658,069	8,120,433	-	-	-
P8 55x92 Lot/55x105 Lot	85,583,953	-	-	12,656,782	12,656,782	12,656,782	12,656,782	12,656,782	12,656,782	9,643,262	-	-	-	-	-
P9 60x95Lot/55x105 Lot	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Commercial Flex - Regional Retail	23,891,718	-	-	23,891,718	-	-	-	-	-	-	-	-	-	-	-
TBD	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Land Sales Revenue	471,457,500	-	-	58,435,535	39,408,218	44,217,173	51,867,139	62,525,208	71,653,239	63,224,181	44,785,806	29,876,740	5,464,262	-	-
CFD Public Financing	102,022,708	-	-	-	-	27,639,356	-	-	36,038,899	-	-	-	38,344,453	-	-
EIFD Public Financing	90,723,247	-	-	-	-	20,762,595	-	-	31,591,655	-	-	-	38,368,997	-	-
Total Sources	664,203,455	-	-	58,435,535	39,408,218	92,619,123	51,867,139	62,525,208	139,283,793	63,224,181	44,785,806	29,876,740	82,177,712	-	-
USES															
Development Costs	Total														
Hard Costs	364,424,698	-	-	37,459,907	37,459,907	37,459,907	45,620,086	45,620,086	45,620,086	28,796,179	28,796,179	28,796,179	28,796,179	-	-
Soft Costs	90,218,628	2,925,000	11,237,972	11,237,972	11,237,972	10,948,821	10,948,821	10,948,821	5,183,312	5,183,312	5,183,312	5,183,312	-	-	-
Misc Costs (Maintenance, CM Fee)	25,712,005	1,628,700	744,471	2,542,546	2,542,546	2,529,824	2,921,512	2,921,512	2,667,830	1,860,282	1,860,282	1,860,282	1,632,217	-	-
Indirect Costs	6,400,000	400,000	1,000,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	-	-
Contingency	82,421,802	482,500	1,198,797	8,640,779	8,640,779	8,611,864	10,243,899	10,243,899	9,667,348	6,302,567	6,302,567	6,302,567	5,784,236	-	-
Sub-Total Development Costs	569,177,133	5,436,200	14,181,240	60,381,205	60,381,205	60,050,415	70,234,318	70,234,318	63,638,577	42,642,341	42,642,341	42,642,341	36,712,632	-	-
Other Costs															
Transfer Tax @ 1.00% (seller)	4,714,575	-	-	584,355	394,082	442,172	518,671	625,252	716,532	632,242	447,858	298,767	54,643	-	-
Closing Costs @ 1.00%	4,714,575	-	-	584,355	394,082	442,172	518,671	625,252	716,532	632,242	447,858	298,767	54,643	-	-
SF Resi Commission @ 3.00%	12,821,252	-	-	1,036,315	1,182,247	1,326,515	1,556,014	1,875,756	1,978,357	1,725,485	1,172,334	804,302	163,928	-	-
MF/Comm Resi Commission @ 4.00%	1,763,297	-	-	955,669	-	-	-	-	228,321	228,321	228,321	122,666	-	-	-
Developer Profit @ 15%	70,718,625	-	-	8,765,330	5,911,233	6,632,576	7,780,071	9,378,781	10,747,986	9,483,627	6,717,871	4,481,511	819,639	-	-
Subtotal Other Costs	94,732,324	-	-	11,926,024	7,881,644	8,843,435	10,373,428	12,505,042	14,387,728	12,701,916	9,014,241	6,006,015	1,092,852	-	-
Total Uses	663,909,458	5,436,200	14,181,240	72,307,229	68,262,848	68,893,850	80,607,746	82,739,360	78,026,304	55,344,258	51,656,583	48,648,356	37,805,484	-	-
NET CASH FLOW	293,997	(5,436,200)	(14,181,240)	(13,871,694)	(28,854,630)	23,725,274	(28,740,607)	(20,214,152)	61,257,488	7,879,923	(6,870,776)	(18,771,616)	44,372,228	-	-

Cumulative Cash Flow (5,436,200) (19,617,440) (33,489,134) (62,343,764) (38,618,491) (67,359,098) (87,573,250) (26,315,761) (18,435,838) (25,306,614) (44,078,230) 293,998 293,998 293,998



initial due diligence research. Given the sensitivity of these assumptions, this pro forma only provides the methodology on which Catellus would base the discussion of the proposal with the City. As these assumptions are further refined, Catellus will work with the City to define actual sources and uses for the project.

Catellus' estimated budget for the Development Phase One Property is approximately \$663.9 million. This includes grading, backbone infrastructure and utilities, parks and open spaces, base maintenance, ENA costs, offsite infrastructure costs, soft costs, and fees.

The Development Budget includes costs for the Exclusive Negotiation Agreement (“ENA”), Development Agreement (“DA”) and Purchase and Sale Agreement (“DDA”). Due diligence efforts include entitlements, land use legal, engineering, master planning, preliminary plan preparation and the preparation of design guidelines. These costs are estimated to be \$5.4 million.

Remediation, Demolition, Grading, and Site Leveling

The demolition, grading, and site leveling budget includes removal of any existing rail lines, buildings and pavement as phases are built. The costs assume that some of the demolished pavement materials could be recycled and used within parts of the proposed roadway sections. The Budget also includes mass grading of the site to prepare the project for development. A cut & fill map was created and recent project bids of similar magnitude were used for the unit costs. These costs are estimated to be \$37.6 million.

Streets and Utilities

The cost of the public roadways and utilities, including in tract streets, were developed on both

a per linear foot and per acre basis and includes drainage, potable and recycled water lines, wastewater, wastewater pumps, electric facilities, street lights, gas facilities, telecommunications, sidewalk and landscaping within the public ROW. The unit costs were pulled from recent projects of similar magnitude. The cost of the project was broken into three phases. These costs are estimated to be \$176.6 million.

Offsite Infrastructure Costs and Mitigation Measures

We are assuming costs for offsite utility infrastructure that will be required in order to serve the project. These include connection and upgrades to the existing sewer system, water storage tanks and pipe extending to the project area, a recycled water line extending from the Central Contra Costa Sanitary District, improvements to offsite intersections and roadways to mitigate traffic, connections to the new electrical substation, and improvements to offsite storm drains. These costs are estimated to be \$95.8 million.

Parks and Greenways

The landscape and streetscape guidelines and standards for the project will be developed to create a diverse, sustainable urban landscape. The landscape plantings will focus on native and well-adapted plants selected for low water consumption and long-term low maintenance requirements. High canopy trees will line the streets, drives, parking areas and other public areas to help achieve increased environmental quality, greater energy conservation and a reduction to the urban heat island effect. Permeable pavement will be installed to help manage storm water runoff. Also included is an

estimate for the required expansion/improvement to Willow Pass Park. The costs for parks and greenways are estimated to be \$27.4 million.

General Conditions and Contractor Fees

General conditions and contractor fees are estimated as a fixed percentage of hard costs and are projected to be \$27.0 million.

Soft Costs, Misc. Costs, Indirect Costs

Costs for master planning, civil engineering, traffic consulting, geotechnical engineering, landscape architecture, environmental consulting, green building consulting, construction materials testing, legal, marketing, public relations, advertising and other miscellaneous consultants and costs were estimated using a blend of information from our previous history with such large scale public / private partnership development efforts. Catellus would assemble and engage the consultant team previously identified in our proposal. These costs are estimated as a percentage of hard costs and will be allocated to each consultant during the ENA phase. Soft costs after the ENA phase are estimated to be \$117.4 million before contingency.

Fees to Catellus

1. 4% construction management fee on hard and soft costs for construction staff to manage and oversee the design, demolition and construction of infrastructure and landscape;
2. \$41,666.67 per month administration fee for project level management, marketing, development staff and general administrative costs for the Project;

3. 3% of Land Sales Revenue as commission for single-family residential land sales and 4% as commission for all other land transactions. Commissions will need to be adjusted higher to account for any outside broker involvement.
4. The greater of 15% Land Sales Revenue or 15% internal rate of return with additional waterfall structure to be negotiated with the City at final project lookback.

Assumptions

1. Inflation Factor – All land sale prices and costs are based on 2014 pricing.
2. Contingency – 20% on Hard costs and 10% on soft and indirect costs.
3. Development Costs – the Project Costs are estimates based on an expedited due diligence process. During the Exclusive Negotiation Agreement (ENA) process, a thorough due diligence process will be undertaken to firm up the Project Costs.

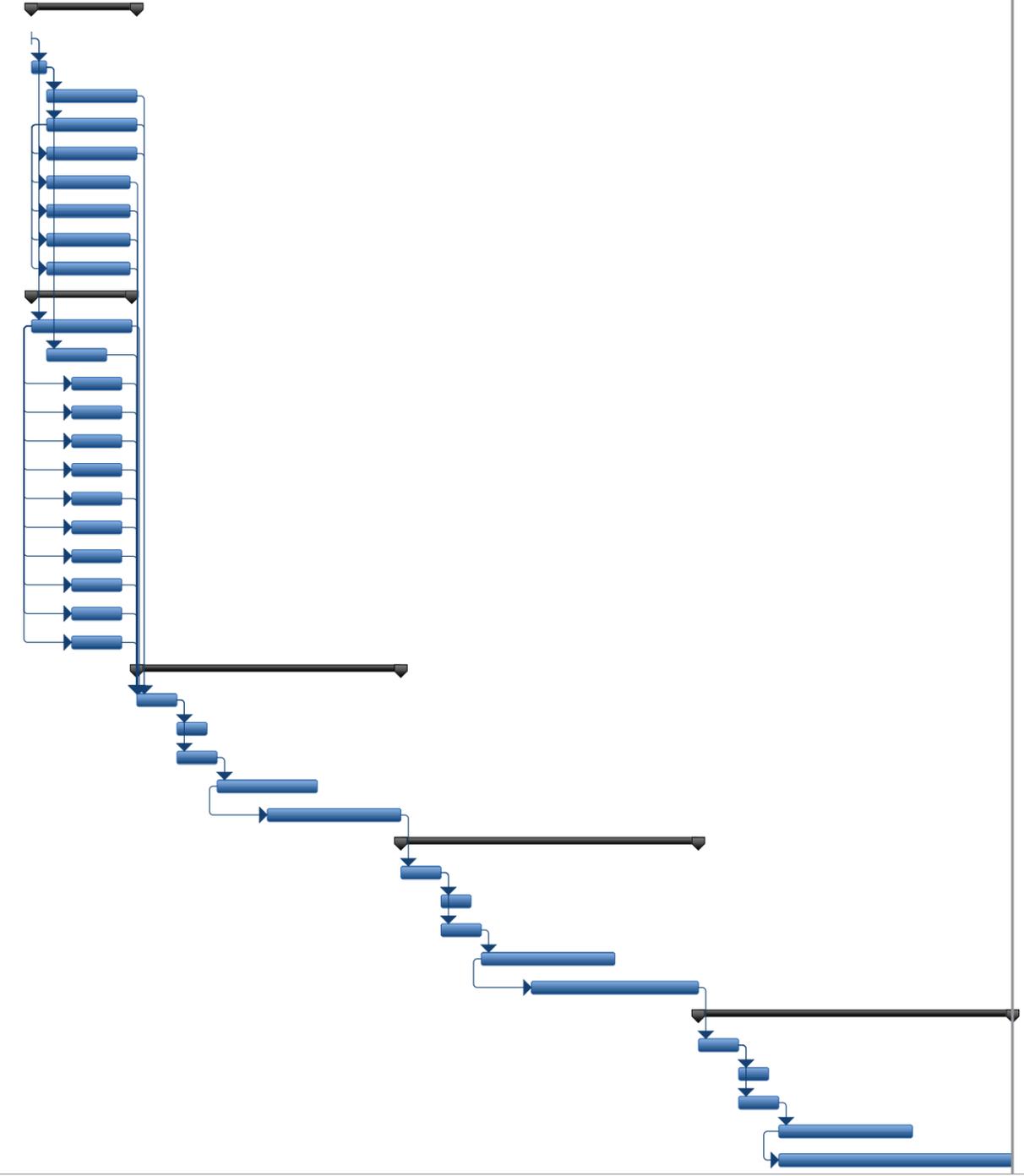
Takedown Schedule

To minimize carrying costs to the project, a phased takedown approach is proposed so that land will be taken down when it is ready for vertical development. In the meantime, Catellus will secure permits, front all the infrastructure costs, obtain public financing and oversee successful implementation of the master plan.

Catellus plans to fund project costs with internal equity. Catellus will pair internal equity with various public financing mechanisms available.

Concord Naval Weapons Station
Catellus - Master Developer Proposal
Draft Development Phase One Property Entitlement & Construction Schedule

ID	Task Name	Duration	Start	Finish	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
1	Development Phase One Property Schedule	2936 days	Wed 4/1/15	Wed 7/1/26														
2	ENA / DDA / Entitlements	316 days	Wed 4/1/15	Wed 6/15/16														
3	Catellus Selected As Preferred Master Developer	1 day	Wed 4/1/15	Wed 4/1/15														
4	Exclusive Negotiating Agreement ("ENA")	45 days	Thu 4/2/15	Wed 6/3/15														
5	Development Agreement ("DA")	270 days	Thu 6/4/15	Wed 6/15/16														
6	Disposition and Development Agreement ("DDA")	270 days	Thu 6/4/15	Wed 6/15/16														
7	Specific Plan / Zoning Approvals / Master Plan	270 days	Thu 6/4/15	Wed 6/15/16														
8	CNWS Design Book	250 days	Thu 6/4/15	Wed 5/18/16														
9	Master Branding / Marketing Plan	250 days	Thu 6/4/15	Wed 5/18/16														
10	Site Wide Habitat Mitigation and Monitoring Plan ("HMMP")	250 days	Thu 6/4/15	Wed 5/18/16														
11	Transportation Demand Management Program ("TDM")	250 days	Thu 6/4/15	Wed 5/18/16														
12	Stakeholders / Third Party Agency Meetings	300 days	Thu 4/2/15	Wed 5/25/16														
13	Community Meetings / Community Outreach	300 days	Thu 4/2/15	Wed 5/25/16														
14	U.S Navy - Economic Development Conveyance ("EDC")	180 days	Thu 6/4/15	Wed 2/10/16														
15	EPA / DTSC	150 days	Thu 9/17/15	Wed 4/13/16														
16	Building Trade Unions	150 days	Thu 9/17/15	Wed 4/13/16														
17	Bay Area Rapid Transit ("BART")	150 days	Thu 9/17/15	Wed 4/13/16														
18	Mount Diablo Unified School District	150 days	Thu 9/17/15	Wed 4/13/16														
19	East Bay Regional Park District ("EBRPD")	150 days	Thu 9/17/15	Wed 4/13/16														
20	Pacific Gas & Electric ("PG&E")	150 days	Thu 9/17/15	Wed 4/13/16														
21	Contra Costa Water District	150 days	Thu 9/17/15	Wed 4/13/16														
22	Sanitary Sewer District (City and Regional)	150 days	Thu 9/17/15	Wed 4/13/16														
23	Regional Water Quality Control Board	150 days	Thu 9/17/15	Wed 4/13/16														
24	Other Stakeholders / Third Parties	150 days	Thu 9/17/15	Wed 4/13/16														
25	Design and Construction of Development Phase 1A	790 days	Thu 6/16/16	Wed 6/26/19														
26	Design Review	120 days	Thu 6/16/16	Wed 11/30/16														
27	Subdivision Mapping	90 days	Thu 12/1/16	Wed 4/5/17														
28	Infrastructure Construction Drawings	120 days	Thu 12/1/16	Wed 5/17/17														
29	Phased Construction of Infrastructure	300 days	Thu 5/18/17	Wed 7/11/18														
30	Land Sales / Vertical Construction	400 days	Thu 12/14/17	Wed 6/26/19														
31	Design and Construction of Development Phase 1B	890 days	Thu 6/27/19	Wed 11/23/22														
32	Design Review	120 days	Thu 6/27/19	Wed 12/11/19														
33	Subdivision Mapping	90 days	Thu 12/12/19	Wed 4/15/20														
34	Infrastructure Construction Drawings	120 days	Thu 12/12/19	Wed 5/27/20														
35	Phased Construction of Infrastructure	400 days	Thu 5/28/20	Wed 12/8/21														
36	Land Sales / Vertical Construction	500 days	Thu 12/24/20	Wed 11/23/22														
37	Design and Construction of Development Phase 1C	940 days	Thu 11/24/22	Wed 7/1/26														
38	Design Review	120 days	Thu 11/24/22	Wed 5/10/23														
39	Subdivision Mapping	90 days	Thu 5/11/23	Wed 9/13/23														
40	Infrastructure Construction Drawings	120 days	Thu 5/11/23	Wed 10/25/23														
41	Phased Construction of Infrastructure	400 days	Thu 10/26/23	Wed 5/7/25														
42	Land Sales / Vertical Construction	700 days	Thu 10/26/23	Wed 7/1/26														



5b. Conceptual Operating Statement

Based on potential market land values for the various uses at the densities provided for in the development Phase One Property master plan, total land sales revenue to be generated from the project is estimated at approximately \$471.5 million. This includes multifamily, single-family attached and detached finished lot sales as well as the residual land value for the Regional Retail Area.

Land residual calculations, including residential finished lot prices by product type, are provided in detail in the excel file that was submitted with the proposal package. A reduction to the finished lot sale prices was made to account for the affordable housing gap financing.

We believe the land sale proceeds estimate provided understates the potential revenue since the RFP precluded projections of appreciation. Catellus firmly believes that using 2014 revenue values is conservative.

As discussed later in the proposal, the project will likely receive public financing. Public financing bond proceeds are estimated to be \$192.7 million.

Infrastructure and Common Area Maintenance Financing

Infrastructure costs for the Development Phase One Property will be funded using internal equity and public financing. Once complete, the public infrastructure would be conveyed to the City of Concord. A Maintenance Services District (“MSD”) or other mechanism could be created to finance the ongoing maintenance and repairs of the public infrastructure over time. Property owners would be assessed annually and the

incremental tax would be collected in a fund for MSD costs. Maintenance would be managed by the City. While Catellus will be conveying major portions of the public infrastructure to the City, the on-going operation and maintenance of common areas on private property throughout all phases of development will be overseen by an HOA or similar mechanism and the costs will be shared via assessments levied on all of the property owners and/or tenants. For example, at Alameda Landing, homeowners are assessed \$1,200 per year for MSD costs while commercial users pay \$.36 per square foot.

5c. Conceptual 15-Year Discounted Cash Flow Model and Investment Return Metrics

We have provided a discounted cash flow model that provides annual projections for both sources and uses of funds. Total sources are projected to be \$664.2 million and total uses are projected to be \$663.9 million. Our proposed partnership structure aligns our interests with the City and provides incentive for both parties to maximize profits by increasing land sales revenue, identifying additional sources of public financing, and managing infrastructure costs.

5d. Land Acquisition Payment Offer

Once Catellus is selected as the preferred master developer, we will work with the City to negotiate the terms of the land acquisition with the Navy. Our proposal to the Navy could include alternative deal structures, including up front land payments and/or profit participation, and the advantages and disadvantages to the Navy of each approach. Any land acquisition payment will be considered a Project Cost for purposes of the proforma. Our approach will require further detailed discussion with the City of Concord.

UPDATE --- THIS PAGE REPLACES THE FOLLOWING PAGE 61

SOURCES & USES - PHASED

CATELLUS - CNWS - DEVELOPMENT PHASE ONE PROPERTY

SOURCES	Total	ENA	Phase 1A	Phase 1B	Phase 1C
Land Sales Revenue					
Multifamily Apartments	34,675,751	-	-	-	34,675,751
P1 Condos / Stacked Flats	53,303,619	-	6,206,855	19,760,311	27,336,453
P2 10-Pac Autocourt Town	63,827,419	-	15,046,606	24,305,351	24,475,462
P3A Townhomes	47,644,255	-	-	19,007,273	28,636,982
P3B Live/Work Towns	9,661,402	-	-	-	9,661,402
P4 Clustered Detached	73,675,124	-	16,267,277	26,277,149	31,130,698
P5 2-Pack/Cluster/40x70 Lot	72,664,783	-	-	20,147,982	52,516,801
P6 45x75 Lot/50x70 Lot	75,302,046	-	21,810,871	35,231,925	18,259,251
P7 50x85 Lot/52x80 Lot	71,387,072	-	-	14,160,849	57,226,223
P8 55x92 Lot/55x105 Lot	110,037,898	-	30,275,409	48,905,014	30,857,475
P9 60x95Lot/55x105 Lot	-	-	-	-	-
Commercial Flex - Regional Retail	26,711,299	-	26,711,299	-	-
TBD	-	-	-	-	-
Total Land Sales Revenue	638,890,669	-	116,318,317	207,795,854	314,776,498
CFD Public Financing	105,083,939	-	20,812,734	31,390,287	52,880,918
EIFD Public Financing	91,008,399	-	14,684,404	25,551,108	50,772,887
TOTAL SOURCES	834,983,007	-	151,815,454	264,737,250	418,430,303
USES					
Development Costs					
Hard Costs	414,341,225	-	111,086,485	143,931,797	159,322,944
Soft Costs	99,472,707	2,925,000	33,325,945	34,543,631	28,678,130
Misc Costs (Maintenance, CM Fee)	28,515,178	1,628,700	7,798,493	9,178,646	9,909,339
Indirect Costs	6,400,000	400,000	2,500,000	1,500,000	2,000,000
Contingency	93,330,516	482,500	25,699,891	32,315,722	34,832,402
Sub-Total Development Costs	642,059,625	5,436,200	180,410,815	221,469,796	234,742,815
Other Costs					
Transfer Tax @ 1.00% (seller)	6,388,907	-	1,163,183	2,077,959	3,147,765
Closing Costs @ 1.00%	6,388,907	-	1,163,183	2,077,959	3,147,765
SF Resi Commission @ 3.00%	17,325,109	-	2,688,211	6,233,876	8,403,022
MF/Comm Resi Commission @ 4.00%	2,455,482	-	1,068,452	-	1,387,030
Developer Profit @ 15%	95,833,600	-	17,447,748	31,169,378	47,216,475
Total Other Costs	128,392,004	-	23,530,776	41,559,171	63,302,057
TOTAL USES	770,451,630	5,436,200	203,941,591	263,028,967	298,044,872
NET CASH FLOW	64,531,380	(5,436,200)	(52,126,136)	1,708,283	120,385,431

Development Phase I Financing Strategy

5e. Sources and Uses of Funds

SOURCES & USES - PHASED

CONCORD - DEVELOPMENT PHASE ONE PROPERTY

	Total	ENA	Phase 1A	Phase 1B	Phase 1C
SOURCES					
Land Sales Revenue					
Multifamily Apartments	20,190,706	-	-	5,708,016	14,482,690
P1 Condos / Stacked Flats	37,682,894	-	9,728,802	14,593,203	13,360,888
P2 10-Pac Autocourt Town	47,077,728	-	18,173,388	18,173,388	10,730,953
P3A Townhomes	34,006,179	-	4,808,955	14,426,864	14,770,360
P3B Live/Work Towns	6,722,099	-	-	3,420,015	3,302,084
P4 Clustered Detached	55,586,851	-	20,242,611	20,242,611	15,101,630
P5 2-Pack/Cluster/40x70 Lot	51,364,060	-	-	22,949,899	28,414,161
P6 45x75 Lot/50x70 Lot	58,598,604	-	27,245,108	27,245,108	4,108,389
P7 50x85 Lot/52x80 Lot	50,752,707	-	-	21,316,137	29,436,570
P8 55x92 Lot/55x105 Lot	85,583,953	-	37,970,345	37,970,345	9,643,262
P9 60x95Lot/55x105 Lot	-	-	-	-	-
Commercial Flex - Regional Retail	23,891,718	-	23,891,718	-	-
TBD	-	-	-	-	-
Total Land Sales Revenue	471,457,500	-	142,060,926	186,045,585	143,350,989
CFD Public Financing	102,022,708	-	27,639,356	36,038,899	38,344,453
EIFD Public Financing	90,723,247	-	20,762,595	31,591,655	38,368,997
TOTAL SOURCES	664,203,455	-	190,462,877	253,676,140	220,064,439
USES					
Development Costs					
Hard Costs	364,424,698	-	112,379,722	136,860,258	115,184,718
Soft Costs	90,218,628	2,925,000	33,713,917	32,846,462	20,733,249
Misc Costs (Maintenance, CM Fee)	25,712,005	1,628,700	7,877,639	8,764,537	7,441,129
Indirect Costs	6,400,000	400,000	2,500,000	1,500,000	2,000,000
Contingency	82,421,802	482,500	25,997,336	30,731,698	25,210,268
Sub-Total Development Costs	569,177,133	5,436,200	182,468,614	210,702,954	170,569,365
Other Costs					
Transfer Tax @ 1.00% (seller)	4,714,575	-	1,420,609	1,860,456	1,433,510
Closing Costs @ 1.00%	4,714,575	-	1,420,609	1,860,456	1,433,510
SF Resi Commission @ 3.00%	12,821,252	-	3,545,076	5,410,127	3,866,049
MF/Comm Resi Commission @ 4.00%	1,763,297	-	955,669	228,321	579,308
Developer Profit @ 15%	70,718,625	-	21,309,139	27,906,838	21,502,648
Total Other Costs	94,732,324	-	28,651,102	37,266,197	28,815,025
TOTAL USES	663,909,458	5,436,200	211,119,717	247,969,152	199,384,390
NET CASH FLOW	294,000	(5,436,200)	(20,656,840)	5,706,988	20,680,050

5f. Equity Contributions

Catellus plans to fund all horizontal project costs with internal equity. Given the long-term nature and higher risk of land development, internal equity gives us the ultimate advantage and flexibility to secure successful execution of the development. Catellus will pair internal equity with various public financing mechanisms.

A substantial advantage to using internal equity as a primary funding source means that funding is available immediately following selection as developer of the CNWS for predevelopment and Catellus has no funding contingencies outside of internal approvals.

5g. Debt Sources

As discussed above, Catellus is proposing equity and public financing mechanisms to fund land development. All vertical building development will be financed privately with a combination of an equity contribution and construction or permanent financing placed with various financial institutions and/or life insurance companies. Catellus has long-term working relationships with many different financial institutions to secure debt for any vertical development.

5h. Potential Public Financial Assistance

Sources of funds include potential public financing bond sale proceeds. There are existing mechanisms, such as CFD financing, as well as mechanisms (EIFDs) that are newly created. Catellus will work with the City to identify the public financing sources that maximize the benefit to the project. Catellus has completed several projects in California using similar tax increment and CFD financing including Mission Bay, Pacific

Commons and Alameda Landing. Some specifics of EIFD and CFD financing are below.

Enhanced Infrastructure Financing Districts (EIFD)

1. EIFDs (SB 628) is new legislation recently signed into law by Governor Brown and restores some of the Tax Increment Financing capability that was removed by the elimination of Redevelopment;
2. EIFD's serve a broader range of purposes than traditional IFDs. For example, they can fund transit priority projects such as CNWS, affordable housing, and sustainability;
3. Any taxing entity contributing a tax increment to an EIFD must consent and opt into participating. EIFDs cannot divert property tax revenues from schools or from any non-consenting taxing entity;
4. Bonds can be sold based on future tax increment with a 55% vote by the applicable electorate. Traditional IFD's were much harder to pass since they required a 2/3 majority approval;
5. EIFD bonds can be issued for durations up to 45 years vs. traditional IFDs which could only exist for 30 years after their initial formation.

Community Facilities Districts (CFD)

1. CFD Districts (Mello Roos) are another example of public financing. An additional tax is levied on property owners in order to reimburse the project for backbone infrastructure costs that are in the public right of way.
2. An advantage of CFDs is the ability for local municipalities to form the districts and hold a limited election by only the property owners within the district.

3. A disadvantage of CFD financing is the additional tax levied on property owners, such as residential, which may reduce the price a home builder is willing to pay for finished land.

4. Catellus is very experienced with CFD financing and we are able to maximize the public finance proceeds while also balancing the effect the additional tax will have on home builders.

There are a number of potential public funding sources and programs that could be pursued for the project, especially due its location as a Transit Oriented Development. Catellus has successfully applied for various funding mechanisms in other similar projects in the past and has a very positive history of dealing with government agencies.

In Southern California, Catellus structured a first-of-a-kind land swap with the U.S. Air force to build its new Space and Missile Center. The project required an act of Congress to permit the property exchange. At our project in Tracy, CA, Catellus worked with the City to secure \$5,000,000 of federally earmarked funds for design of a new interchange. If selected as the Master Developer, we will work with the City and the other various stakeholders to explore these mechanisms and identify the ones most suitable for this project.

High Standards for Green Urbanism

Mueller, a 700-acre mixed-use new urbanist community, has extensive sustainable building standards requiring all homes and commercial buildings to be LEED certified or rated in the Austin Energy Green Building program. Other sustainability efforts include:

- Participating in the LEED for Neighborhood Design pilot program - the only program in the world that certifies an entire community based on its sustainability efforts and design.
- Constructing 140 acres (75 built to date) of parks and greenspaces including a 32-acre restoration of the native Blackland Prairie ecosystem. This endangered ecosystem is found in less than 1% of the U.S. today.
- Deconstructing and recycling old airport buildings and runways. Catellus also remediated three historic airport structures. The Browning Hangar (pictured left) - now a community gathering and event space, the airport control tower - restored to its award-winning original design, and Mueller Central - an original aviation terminal now used as the community's information center and Catellus' local office.



Mueller Lake Park, Austin, Texas

6. Financial Capability Information

Full responses to the Financial Capability Information section are provided as a separate document titled *Financial Capability Information Package* in accordance with the LRA's requirements for submittal.

6a. Respondent Structure

In 1984, two railroad powerhouses, Santa Fe Industries and Southern Pacific Company, proposed a merger to form Santa Fe Southern Pacific Corporation "SFP". From this proposition, the two companies formed a wholly owned subsidiary named Santa Fe Pacific Realty Corporation to conduct all non-railroad real estate activities. Sites positioned strategically next to the country's busiest seaports and rail and roadway transportation routes led to

unprecedented opportunities to transform large parcels of blighted or underutilized land in some of the nation's fastest growing cities, such as San Francisco, Los Angeles and Chicago.

In December 1989, SFP sold 19.9% of the Company to Bay Area Real Estate Investment Associates, L.P., a California limited partnership between JMB/Bay Area Partners and the California Public Employees' Retirement System. The Company changed its name from Santa Fe Pacific Realty Corporation to Catellus Development Corporation in June 1990. SFP completed its disposition of Catellus by distributing, in the form of a stock dividend, its remaining 80.1% interest in the Company to its stockholders in December 1990 becoming an independent, publicly traded company.



Mission Bay is one of the most significant urban development projects in the United States. Sponsored by the San Francisco Redevelopment Agency and Catellus Development, Mission Bay set a new standard for innovative urban planning. It is a water-oriented community created by the leading minds in architecture, design and urban planning.

In 2005, Catellus merged with ProLogis in a landmark \$5 billion deal whereby Catellus' industrial assets were added to ProLogis' extensive industrial portfolio. In March 2011, TPG Capital, a global private equity concern with over \$58 billion of assets under management, together with the management team of Catellus Development Corporation, repurchased certain non-industrial assets through a new entity, Catellus Acquisition Company, LLC. ("CAC"). Catellus Development Corporation ("CDC") is a wholly-owned subsidiary of CAC and is the operating company which performs development, construction management, asset management, and property management services.

6b. Legal Issues Update

There has been no significant legal or arbitration exposure since the SOQ was submitted earlier this year.

6c. Current Financial Statements

A separate Financial Capability Information package has been submitted in addition to this proposal. The information includes 3 years of audited financial statements for Catellus Acquisition Company, LLC ("CAC").

6d. Material Changes in Financial Conditions

There have been no adverse Material Changes in financial condition over the last 3 years.

6e. Credit Rating Information

Catellus Acquisition Company, LLC does not have a credit rating.

6f. Financially Responsible Party Confirmation

Not applicable. There are no additional financially responsible parties other than Catellus Acquisition Company, LLC.

Catellus Developments Are Where You Want To Be

Turning urban infill locations into thriving, mixed-use developments means that Catellus can offer new office space located near some of the busiest cities in the nation, such as San Francisco, Los Angeles and Manhattan. Companies prefer these locations for their proximity to existing business districts and the branding possibilities they provide, as many locations are visible from busy highways and transportation hubs. Employees like being part of Catellus communities because they can immediately tap into the surrounding amenities, from housing to restaurants to shopping, be it onsite or within walking distance from the office.

Being close to urban locations means that our developments are connected to existing transportation networks, such as highways, train stations and airports. Connectivity is one of the key components of Catellus developments, and we often implement substantial infrastructure to create and enhance access to and from our projects.



Mueller, Austin, Texas

Comments on Agreements

The following are comments to the ENA and DDA drafts provided by the City of Concord. Catellus will take a collaborative approach to finalizing these agreements with the City and City Council. Our comments are based on our experience with similar documents on other comparable projects. We look forward to working together to finalize agreements that work for both parties and create a successful, lasting partnership.

Comments to the ENA

Section 3.2: Since a Development Agreement (“DA”) will need to be negotiated, in addition to a DDA, we should add that concept here.

Section 4: Catellus would like to request that, during the Term, the City provide notification to Developer of any third party offers or requests for negotiations received by City concerning the disposition of a portion of the Development Footprint or the Development Phase One Property.

Section 6: Our financial proposal contemplates a Master Developer Return equal to the greater of 15% Land Sales Revenue or 15% internal rate of return with an additional waterfall structure to be negotiated with the City of Concord at final lookback. Catellus requests that the Good Faith Deposit be considered an eligible project cost in the calculation of the IRR and waterfall agreement.

Section 8: In the last sentence, which addresses City’s discretion regarding implementation of CEQA. We suggest replacing “absolute discretion” with “discretion in accordance with applicable law”.

Section 9.2: We would like to request that Developer can recover reasonable attorney’s fees in the event of a City default.

Section 12: If any litigation is filed seeking to make public any Confidential Information, Catellus may elect to disclose the Confidential Information, rather than defending litigation.

Section 20: All design concepts and plans, so long as Catellus owns them and has the right to transfer them, will become the property of the City. We also suggest adding a provision that disclaims any representation or warranty of any kind regarding the plans, including whether or not the plans are sufficient for any particular purpose.

New Section: Right of Entry: Subject to approval by the U.S. Navy, Catellus requests that the City grant Developer, its employees, agents, and contractors the right to enter the Development Phase One Property for the purpose of conducting inspections, tests, examinations, surveys, studies, appraisals, and marketing tours during the Term.

Comments to the DDA

Section 1.2 (Definitions):

1. Affiliate – We request that a Manager of an LLC or General Partner shall also be presumed to have control for purposes of this definition.
2. Assignee – Clarify that Permitted Transfers shall not require consent and that, in any event, consent should not be unreasonably withheld.

3. Assignment and Transfers – We request that transfers within Master Developer may take place so long as the Catellus Parent continues to manage as contemplated by the Permitted Transfer definition below. The Catellus Parent needs to carry out recapitalization, M&A transactions, etc without restriction so we request that transfers within the Catellus Parent itself should not be restricted at all.
4. Permitted Transfers – Language could be expanded to allow for ordinary course of business transfers to government agencies, utility providers, associations, districts etc. that are necessary to carry out the development of the Project. Also, as long as the Catellus Parent is managing directly or indirectly the day to day, then any assignment or transfers should be allowed even if occurring prior to the Phase Three Conditions.
5. Phase Three Conditions Precedent (See also Sec. 2.3)
 - Defined as conditions precedent to City’s obligation to convey. We request that there also be conditions precedent to Master Developer’s obligation to acquire. This should also specify whether conditions are waivable by either party.
 - Add concept of “final approval” of Specific Plan, Tentative Map and other Entitlements (i.e., no challenges pending).
 - Condition 6 requires all Entitlements be complete before construction, which includes Final Maps. We may decide to do Conveyance Maps to create conveyance parcels and could then close before Final Maps are complete.
6. Phase Four Conditions Precedent (See also Sec. 2.3)
 - Definition assumes conveyance to an Assignee. Do these conditions also apply if Master Developer is the vertical developer? May not be an issue since the Master Developer may elect to develop vertically through another entity that could act as an Assignee.
 - Agreement should allow for direct conveyances from City to Assignee.
 - Condition 5 requires all Entitlements be complete before construction, which includes Final Maps. We may decide to do Conveyance Maps to create conveyance parcels and could then close before Final Maps are complete.
 - Conditions 6-10 – Needs further discussion with the City. These conditions relate to vertical improvements that a Merchant Builder will need to comply with. The City and Catellus need to be sure that we are not restraining our ability to market any parcels to builders. The requirement that improvements start within 30 days after conveyance is an example of a condition that would be concerning to a builder.
7. Pre-Existing Phase One Development Property Conditions - Catellus requests that the definition be expanded to include any migration of such conditions even if it occurred after the acquisition of the Parcel.
8. Schedule of Outside Performance Dates – The schedule will be determined after further discussion with the City. The parties should

also acknowledge that the schedule will need to be updated from time to time. Tolling for adverse market conditions should be added.

9. Title Insurance Policies – We recommend the 2006 ALTA Extended Coverage form.

Section 1.3.3, 2.1.2: Clarify that any termination of the DDA terminates the Interim Property Management Agreement as well.

Section 1.6.3, 1.6.4., 1.6.5, 1.6.6:

1. A Manager of an LLC or General Partner shall also be presumed to have control for purposes of this definition.
2. Definition of “change in control” in Sec. 1.6.3 should also be used in Sec. 1.6.5.
3. Section 1.6.4 – To be further discussed with the City. The City should have approval rights over non-Permitted Transfers. We would like to understand why the City is requesting approval rights over Permitted Transfers as well.
4. Section 1.6.6 – This section requires Master Developer to deliver to the City any agreement in connection with an Assignment to a Merchant Builder. We request the ability to redact any financial terms of such agreements and we request that the City agree to keep the agreement confidential.
5. Upon any such assignment to a Merchant Builder, the Master Developer should be released from all further obligations under the DDA for that parcel. Defaults by Assignee should not be a condition to City performance on other Parcels. The City should look solely to the Assignee and its parcel for remedies if

there is a default by Assignee.

Section 1.7.3: This section prohibits encumbrance before the Master Developer takes down land, but Conditions Precedent require evidence of financing and signed deed before land take down. Just a note to make sure these sections work together.

Section 1.7.3(b): Needs further discussion with the City to understand limitation on financing. (See also Sec. 3.4.2). In certain events, multiple parcels could be cross collateralized.

Section 1.7.5: Requires a Merchant Builder to sell units by dates within the Outside Performance Dates. Similar to comment above, the City and Catellus need to be sure that we are not restraining our ability to market any parcels to builders. Needs further discussion.

Section 1.7.6: If possible, Executive Director should have some leeway to extend individual dates by some limited amount of time, perhaps with a limit on the aggregate amount of extensions.

Section 1.8.2: Master Developer to review terms and conditions of MOA.

Section 2.1.2, 2.1.3: To be further discussed with the City. Catellus requests not to be liable under the indemnity if the matter giving rise to the claim, injury or damage was caused by the acts or omissions of City (irrespective of whether or not the City was negligent). The other concern would be if Catellus was liable merely because it discovered an existing adverse condition on the property.

Section 2.2.4: Catellus requests that any changes to the deed or leases should not have an adverse impact on either party.

Section 2.4.1: Catellus suggests we add an omnibus assignment that picks up any other property interests to be conveyed and such other documents as requested by the Title Company for the issuance of the title insurance policies.

Section 2.6: Reference that the condition of title needs to be evidenced by the issuance of the Title Insurance Policies.

Section 2.7.2: See comments regarding indemnity above.

Section 3.1: Minor language revisions in this Section. See for instance Section 3.1.2(d) which needs to reference “Master Developer or Assignee” in the middle of the paragraph.

Section 3.2: To be further discussed with the City. Need to understand what types of changes to the Project Budget are allowed without approval. For example, reallocation of costs from one line item to another should be allowed. Also, could the Project Budget change without approval in the event of a delay caused by a third party or previously unknown site conditions?

Section 3.3: To be further discussed with the City. Would be beneficial for the project if there was some ability to control and/or ability to review City Administrative costs.

Section 3.4.2: See note above re: cross collateralization.

Section 4.1.1: In some instances, an Assignee may be seeking some Entitlements.

Section 4.6: Clarify if this applies to Master Developer if there is no Assignee.

Section 4.11: Catellus requests to limit to “sole or active” negligence of Master Developer, consistent with reciprocal provisions applicable to City.

Section 5.3: Master Developer, or Assignee, shall remove any levy.

Section 6.1.3, 6.1.4: To be further discussed with the City. Typical cure periods for monetary defaults are 10 business days. Typical cure periods for non-monetary defaults are up to 180 days, especially given the length and complexity of this Project. So long as the defaulting party is diligently pursuing completion of a cure, the longer cure periods are more appropriate.

Section 6.1.6: To be further discussed with the City. Catellus would like to understand under what conditions the City can terminate the Agreement and exercise its right of reverter. In other projects, the right of reverter has caused some financing issues that we should discuss. The prohibition on conveyance of Parcels to before the satisfaction of Phase Four Conditions Precedent should not apply to Affiliate transfers or Permitted Financing.

Section 6.6, 6.7: To be further discussed with the City. Need to discuss a compromise agreement for either party to recover damages. Potentially, we could make both parties entitled to damages and have a cap on damages. Also, these provisions should be subject to the cure rights provided above.

Section 6.9: To be further discussed with the City. We would like to understand the conditions for which City can terminate. Also, we suggest this provision be expanded to address a circumstance when a default occurs mid-way through development. Remedies may be different for land already under construction, land taken down but not yet under construction, land not yet taken down, etc. The right of reverter should apply on a Parcel by Parcel basis so that an Assignee is not subject to a termination right for Master Developer's or another Assignee's default and vice versa.

Section 6.11.6: To be further discussed with the City. Deposit could be applied to each purchase price?

Section 6.12: Catellus would like to discuss a more specific standard than "Acts and omissions" which seems a little too broad. The retention of the Deposit (like other remedies) should be allocated by parcel so that a default on one parcel does not necessarily put at risk the entire Deposit.

Section 6.13.3: To be further discussed with the City in conjunction with Section 6.6 & 6.7 discussions regarding damages.

Section 7.2.1: Ideally, it should be Catellus' reasonable determination whether litigation is force majeure and preventing performance. Need to discuss adverse market conditions as a force majeure delay in conjunction with discussion on Outside Performance Dates and Tolling for adverse market conditions.

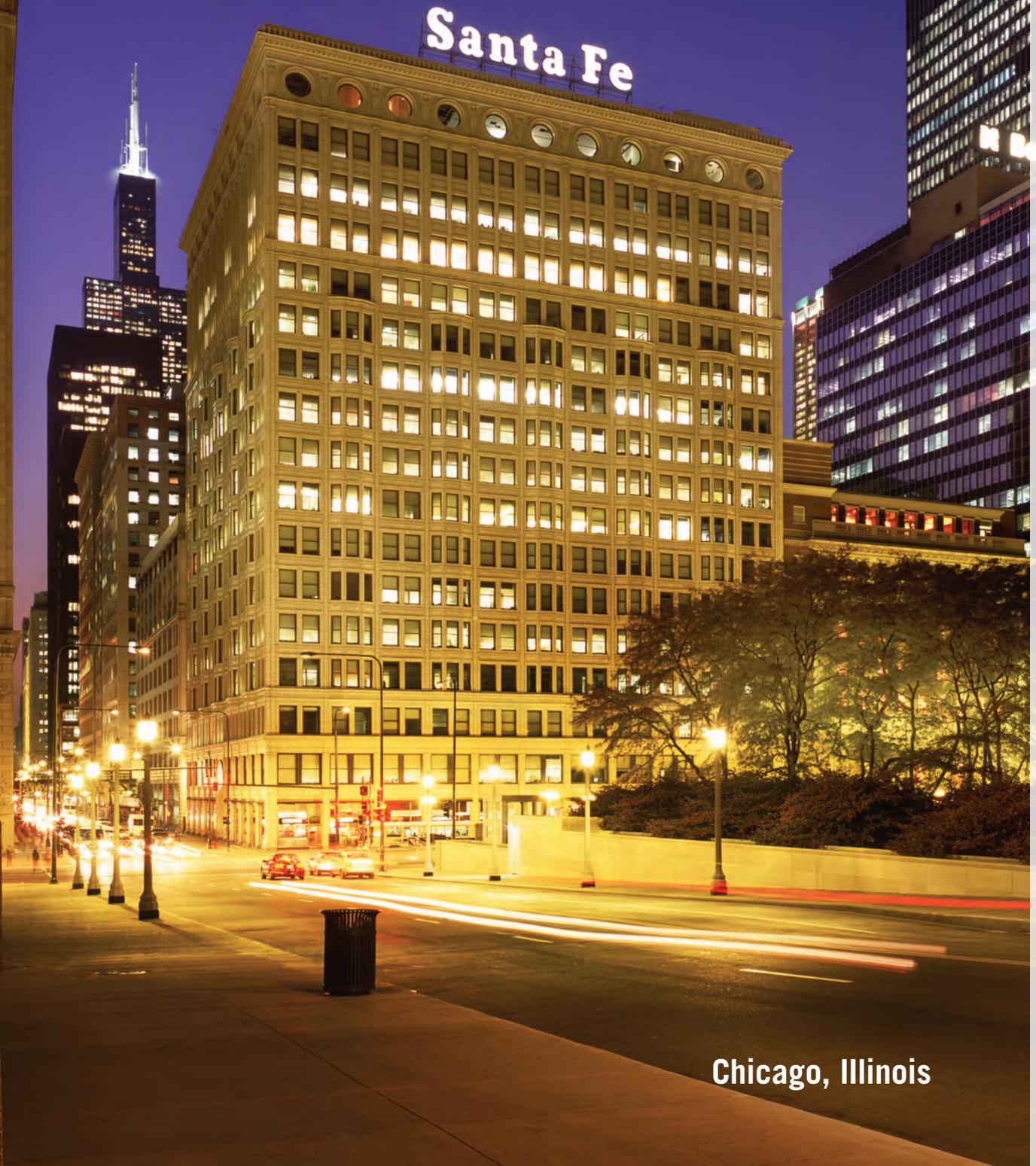
Section 7.4.1: To be further discussed with the City. Possible to have joint representation rather than paying two separate counsels. Also, there are circumstances where there is a monetary settlement paid by Master Developer directly to plaintiff to settle a Litigation Challenge. In those circumstances, does City need approval right?

Section 7.19: Effective Date should be date of City's approval of the Agreement.

Restoration

The Santa Fe Railway Exchange Building, is a 17-story office building in the Historic Michigan Boulevard District in the Loop community area of Chicago in Cook County, Illinois. It was designed by Frederick P. Dinkelberg of D. H. Burnham & Company and constructed in 1903.

Catellus fully renovated the building between 1981 and 1983. The historic building was once the headquarters building for Santa Fe Southern Pacific Corporation.



Chicago, Illinois

Appendix A

1. Design Guidelines Example

Excerpt from Mueller Design Book

The Mueller Design Book sets forth guidelines for the design of buildings and public and private open spaces within the Mueller community. These guidelines have been developed to promote a cohesive and high quality development that achieves the community's vision for Mueller. Select chapters have been included in this appendix as a sample.

To view a full copy of the Mueller Design Book, visit www.muelleraustin.com/plan/design/.

2. Sustainability Guidelines Example

Excerpt from Mueller Green Resources Guide

The Mueller Green Resources Guide is a reference document to support green building practices at Mueller. Green building incorporates healthy, environmentally sensitive, socially responsible and cost-effective strategies into the design, construction and operation of buildings. Today, green buildings are recognized as good for the environment, for people and for the bottom line. Select chapters have been included in this appendix as a sample.

To view a full copy of the Mueller Green Resources Guide, visit www.muelleraustin.com/plan/design/.

3. Construction Guidelines Example

Excerpt from Mueller Construction Best Practices

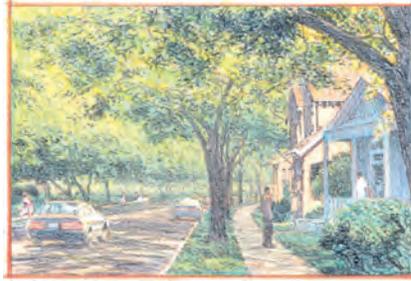
The Mueller Construction Best Practices is included in contracts with construction vendors in Mueller. This document provides guidance, tools and worksheets to help contractors develop in a sustainable manor. Select pages have been included in this appendix as a sample.

A full copy of the Mueller Construction Best Practices Guide will be provided upon request.

Mueller Design Book

(Excerpt)





MUELLER DESIGN BOOK

AUSTIN TEXAS

NOVEMBER 2004

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PREFACE

Over the past 20 years, a clear community vision has emerged for the Robert Mueller Municipal Airport site. As early as 1984, the CARE plan called for a new town in-town, promoting compact and higher density development, compatible with the surrounding single-family neighborhoods. In 1996, a 16-member Task Force representing a complete spectrum of Austin interests reiterated this vision, calling for the creation of a compact and pedestrian-oriented, mixed-use community. The Task Force challenged the City to create a district that would be a model for responsible urban development - an alternative to land-consumptive and automobile-dependent development patterns throughout the region that could influence the form and pattern of growth within Austin as it entered the new millennium. With this vision, the Task Force and the City Council articulated some clear goals, stating that the redevelopment of RMMA must marshal long-term market forces through an effective public-private partnership to promote:



RMMA is located three miles northeast of downtown Austin.

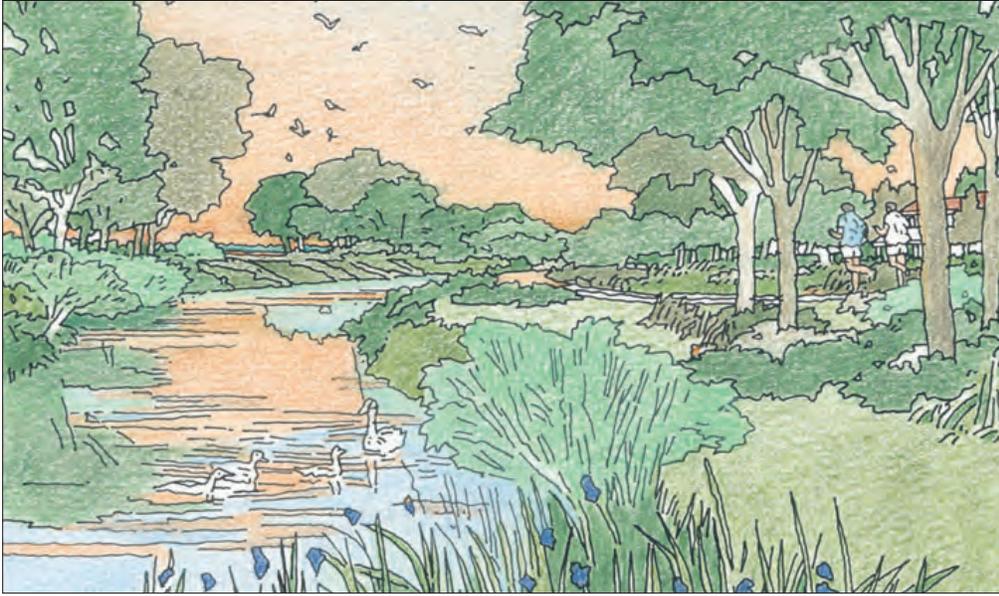
*Transit-Oriented
Development*



Pedestrian-Friendly Streets



- ***Fiscal Responsibility:*** Redevelopment must create a positive revenue stream that will fund on-site infrastructure and increase the City's tax base for the benefit of all citizens.
- ***Economic Development:*** The project should serve to reinforce Austin's role in an increasingly global marketplace and create a wide range of employment opportunities for a diversity of the community's citizens.
- ***East Austin Revitalization:*** The project must promote economic development opportunities within East Austin, giving local residents a direct stake in redevelopment.



Natural Greenways



Interactive Neighborhoods

- ***Compatibility with Surrounding Neighborhoods:*** Development must maintain and enhance the quality of life in adjacent neighborhoods, providing complementary linkages, land uses and transportation patterns.
- ***Diversity:*** Redevelopment must offer a wide range of housing choices in order to create a new community of socially and economically diverse residents.
- ***Sustainability:*** Development should be planned in a way that promotes energy and water efficiency, resource protection, reduced auto dependency, watershed protection and green space preservation.



The Mueller Plan is the product of many years of community involvement.

The Reuse and Redevelopment Plan was formulated on the basis of these goals and was adopted by the City Council in 2000. The product of many years of community involvement, the plan has become the springboard for more detailed development planning with Catellus Development Corporation, which was selected as the Master Developer for Mueller in 2002. Since that time Catellus (the Master Developer) and the City of Austin have been working to refine the plan and establish the specific terms for the disposition of the airport property within an overall Master Development Agreement. This Design Book represents an

updated Master Plan that encompasses and incorporates the 2000 Reuse and Redevelopment Plan, and is the result of that effort.

The Design Book sets forth guidelines for the design of buildings and public and private open spaces within the Mueller community and is incorporated as part of the Master Development Agreement between the Master Developer and the City of Austin. The guidelines are intended to supplement the zoning provisions of the Mueller Planned Unit Development (PUD), which was adopted by the City Council in August 2004, and the Mueller Master Community Covenants (Community Covenants) which have been formulated to establish the governance for the new community. As set forth in the Community Covenants, the design guidelines will be administered by a New Construction Council (NCC), comprised of design and real estate development professionals. The process for development and design approval is set forth in the final chapter of this Design Book.

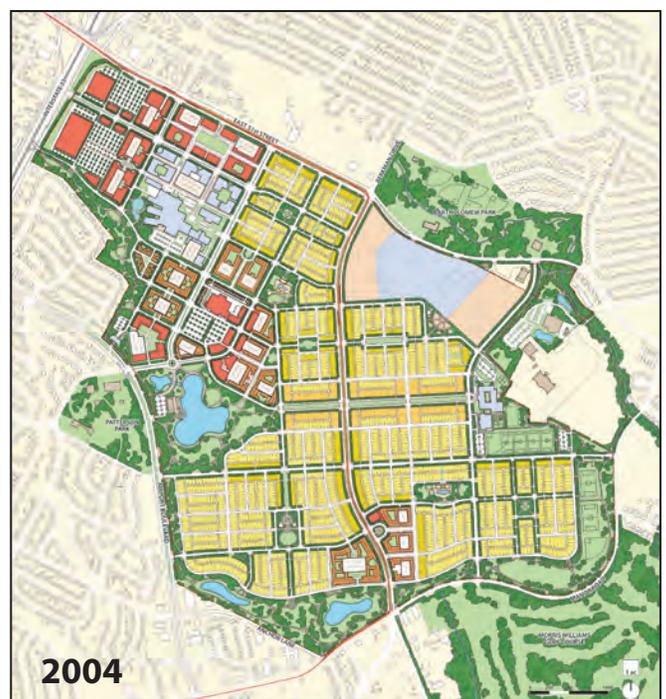
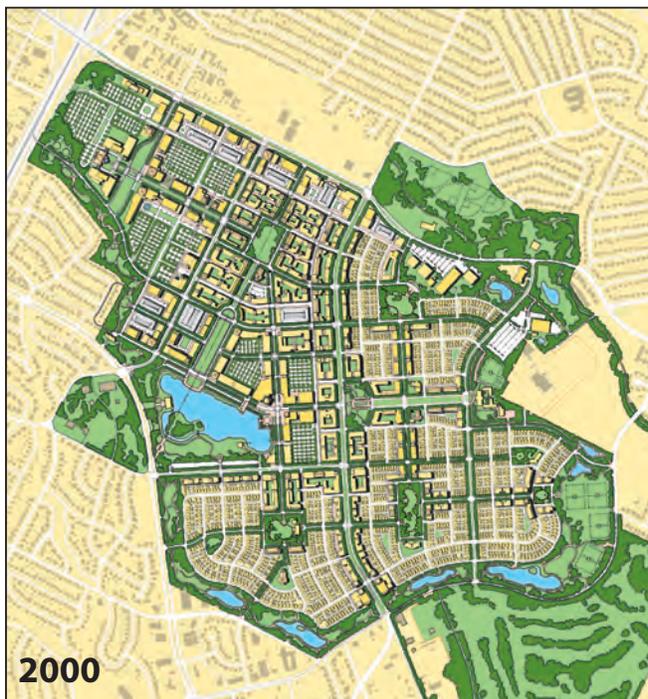
The design guidelines have been developed to promote a cohesive and high quality development that achieves the community's vision for Mueller. They are intended to guide new development in ways that promote connectivity, neighborliness, activity, authenticity, sustainability and livability. They are not intended to be highly prescriptive solutions that dictate a particular style, but rather as performance criteria that can encourage diversity, creativity and innovation in the spirit of the Austin community.

This Design Book is organized into eight chapters. Chapter One: The Plan for Mueller, describes the underlying goals and planning principles for the new community. Chapter Two: The Neighborhoods, outlines the design guidelines for Mueller's

four mixed-use residential neighborhoods. Chapter Three: The Town Center, provides the guidelines for the creation of a mixed-use commercial center within walking distance of these neighborhoods. Chapter Four: The Employment Centers, describes guidelines for the Northwest and Northeast Quadrants which include the Austin Film Studio, the Dell Children’s Medical Center of Central Texas (Children’s Hospital), and a regional retail and mixed-use complex along the I-35 frontage blocks. Chapter Five: Open Space and Recreation, describes the program and design treatments for parks and open spaces throughout Mueller. Chapter Six: Landscape and Streetscape, establishes the standards for planting and landscaping of streets and open spaces throughout the community. Chapter Seven: Sustainability and Green Urbanism, sets forth the design strategies for achieving a green urbanism through community design, building design and an integrated infrastructure system. Finally, Chapter Eight: Administration of the Design Book, describes the process and submission requirements for the review and approval of individual development projects.

In addition to these eight chapters, the Design Book includes two appendices that provide more detailed standards and technical information. Appendix A: Plant List, enumerates the range of trees, shrubs, vines, perennials, grasses and ground covers intended to create a sustainable, healthy, vibrant and diverse landscape palette. Appendix B: Mueller Street Cross Sections, describes the hierarchy of streets throughout the community, their critical dimensions and the location and placement of landscape elements.

Since 2002, Catellus and the City of Austin have been working to refine the plan. In so doing, the fundamental structure and organization of the community has been maintained.





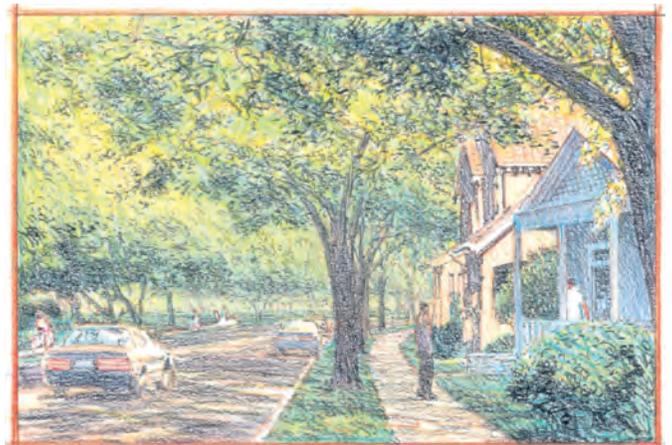
City Context

1 THE PLAN FOR MUELLER

For more than 70, years Mueller has been a void in the fabric of the East Austin community. The impacts of the airport have led to disinvestment and deterioration in surrounding neighborhoods. Redevelopment affords the opportunity to knit this approximately 700-acre property back into the community in a manner that will complement and enhance the quality of life and environment of adjacent areas while creating a new mixed-use community that is reflective of the City’s goals for a more sustainable and livable approach to growth in the region.

Redevelopment of the airport is also intended to achieve broader public objectives for economic development and revitalization; it will help to overcome the perceptual barrier of the I-35 freeway; and it will provide alternatives to the outward expansion of the City. In order to achieve the underlying goals of sustainability, compact development and neighborhood compatibility set forth by the community, specific planning principles have emerged for development of Mueller. These principles are the structuring elements of the master plan, and support a vision of a new community within a community—one that complements and extends the surrounding neighborhoods and becomes an integral part of the urban and social fabric of Austin.

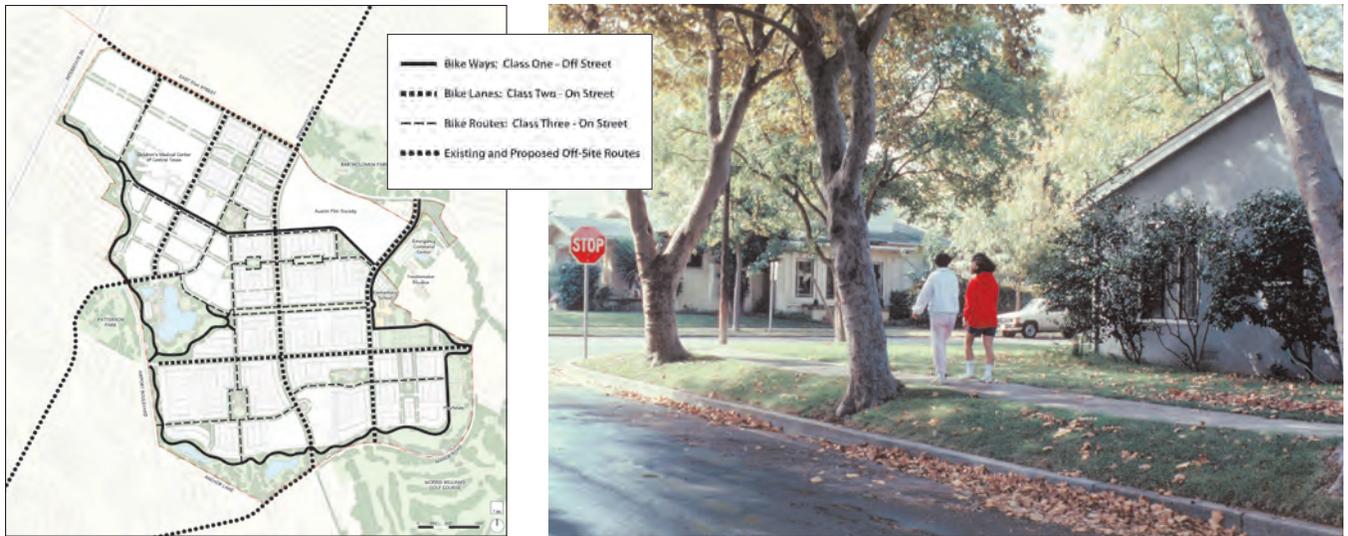
Redevelopment affords the opportunity to knit the airport property back into the community.





Open Space: An interconnected system of open spaces and pedestrian ways promote the walkability and amenity of the new community while forging strong links with surrounding neighborhoods.

Development of the Mueller site will result in significant new open space and recreational opportunities for residents, employees and visitors. The open space system, which comprises more than 20 percent of the property or approximately 140 acres, is designed to contribute to the overall structure and identity of the new community, providing a diversity of spatial experiences, including large parks and playfields offering recreational opportunities; smaller parks that contribute to a sense of community and neighborliness; urban plazas and open spaces that provide for social gatherings, celebrations and informal interaction; and an neighborhood school and community recreation center. A continuous system of landscaped greenways along the perimeter of the site will connect surrounding neighborhoods and open spaces, including Patterson and Bartholomew Parks and Morris Williams Golf Course, with the activities and open spaces within the new community. Lake Park, an approximately 30-acre park adjacent to the Town Center, provides a central open space amenity for informal gatherings as well as major civic events. As such, the open spaces of Mueller are intended to provide a seamless extension of existing open space resources and ultimately contribute to a larger “necklace” of greenways and creekside open spaces within the area. Chapter Five of this Design Book provides a more detailed description of each of the open space elements of the new community.



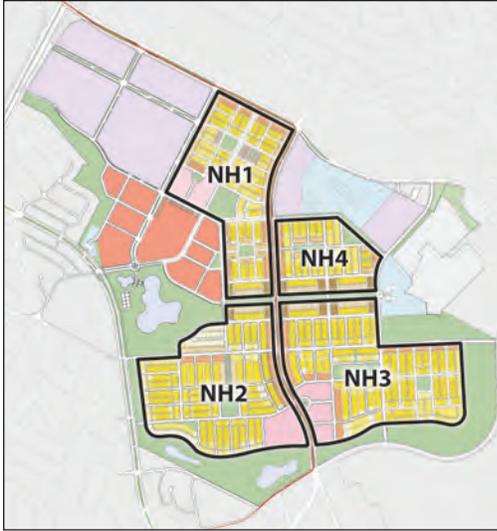
Streets: Roadways and streets are designed to distribute traffic in a way that minimizes impacts on adjacent communities. They serve as an extension of the open space, pedestrian and bicycle network, contributing to the community's sense of place and identity.

Streets are the “connective tissue” of our modern communities. At Mueller, they have been conceived and designed not only as movement corridors, but also as important public spaces that provide a strong sense of place and orientation and contribute to the social life of a community. The streets are designed to extend and enrich the open space system and the network of pedestrian and bicycle ways throughout the new community. The hierarchy of roadways gives structure to the community and to the districts and neighborhoods within it. The street pattern is designed to provide efficient vehicular circulation between I-35 and the regional roadway arterials in the vicinity of Mueller, including Airport Boulevard, East 51st Street and Manor Road. A network of roadways within the property distributes traffic to the various activities of the new community without overburdening the existing perimeter streets. Multiple connections to the perimeter streets are established to promote an even distribution of traffic and are carefully configured and operated to discourage cut-through traffic within the existing and future neighborhoods. Roadway connections to the adjacent neighborhoods have been developed in a way that provides for convenient access to the amenities of the new community while minimizing traffic intrusion. A comprehensive network of on and off street bicycle lanes and paths (see diagram above) is created throughout Mueller to extend the existing systems surrounding the site. Cross-sections for each of Mueller’s streets are provided in Appendix B.



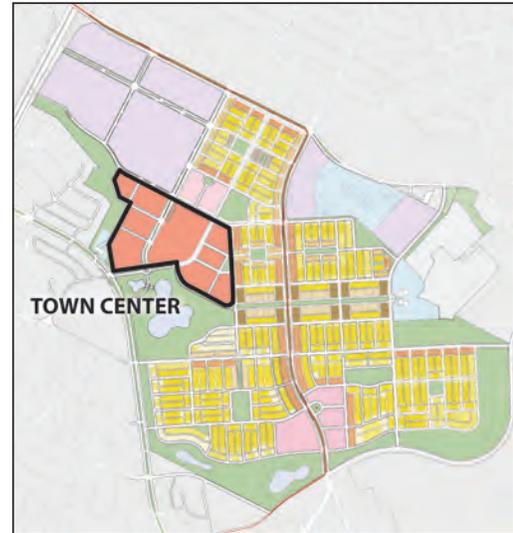
Transit: The pattern and intensity of development is planned in conjunction with a comprehensive program of transit improvements aimed at reducing automobile dependence.

Transit is essential to the goal of achieving a compact pedestrian-oriented community that fulfills the development potential of this property. Austin is currently planning for a program of commuter rail and rapid bus transit lines that will radiate out of the downtown core to the university, the new airport, and the outlying neighborhoods. Mueller offers one of the few opportunities in the region for the development of a transit-based community with sufficient densities and a pattern of land uses that can reinforce and justify the considerable public investment that will be necessary to support transit. As such, the Master Plan calls for alignment of the future rail through the heart of Mueller in a manner that will put the majority of residents and employees—more than 20,000 people—within a ten-minute walk of transit. A central transit boulevard offers a corridor for future commuter or light rail through the community. Mueller Boulevard will provide a key route for bus rapid transit, linking the Town Center and the Dell Children’s Medical Center of Central Texas with Airport Boulevard and 51st Street. It is estimated that such transit service combined with transportation demand management measures (e.g., employer programs to encourage carpooling, vanpooling and transit use) will divert up to 30 percent of single-occupancy vehicle trips generated by this new community.



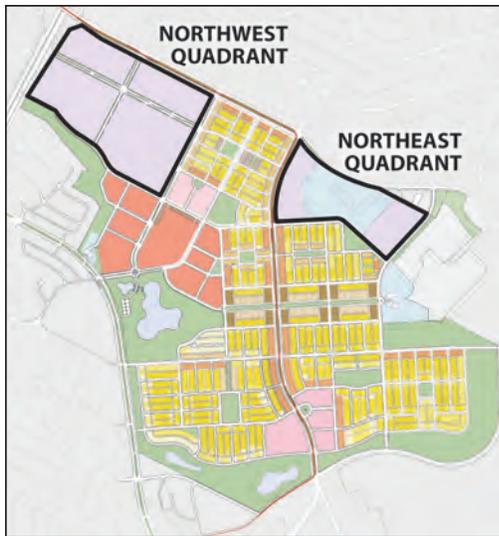
***Neighborhoods:** New neighborhoods extend the qualities of existing Austin neighborhoods while promoting a compact and walkable environment with a diversity of housing opportunities.*

Surrounding the Town Center, the plan calls for the creation of four mixed-use residential neighborhoods. The character of these neighborhoods will reflect many of the qualities of Austin’s distinctive neighborhoods. Tree-lined streets creating a continuous vegetated canopy are envisioned, with homes oriented to the streets in a way that creates a socially interactive community. Parking garages for residential units will be accommodated primarily along rear alleys and in auto courts in order to reduce their visual dominance. Homes and units will face the street, mediated by porches or stoops that promote neighborliness. Each neighborhood will be oriented to a central park, and will include smaller pocket parks with tot lots and play areas for children. The configuration of the streets and open spaces will provide walkable and bikeable connections to the Town Center, to the perimeter greenways, and to planned transit stations. The density of these neighborhoods will be greater than the existing ones that surround them. A mixture of small-lot single-family homes (“yard houses”), row houses, mixed-use “shop houses”, multi-unit “Mueller Houses”, and mixed-use apartment houses are carefully configured to promote a diverse and inter-generational population. Chapter Two of the Design Book provides design guidelines for development within the neighborhoods.



***Town Center:** A walkable and transit-oriented Town Center provides the social, cultural and commercial focus for both the new community and the surrounding neighborhoods.*

At the heart of the Mueller community, a vibrant mixed-use district is envisioned. This district will be composed of higher density residential buildings, commercial office buildings and a ground-level environment of street-oriented activities, including retail shops, restaurants, cafés, entertainment and public-serving uses. This urban district, composed of mid-rise buildings up to eight floors in height, will be situated within easy walking distance of the existing and planned neighborhoods that surround it. At the core of the Town Center, a pedestrian and bicycle-friendly retail street (i.e., Aldrich Street) lined with shops and restaurants and anchored by a major grocery store will provide a convenient destination for residents and an attractive gathering place for people throughout Central and East Austin. Chapter Three provides design guidelines and a more detailed description of the Town Center.



The Employment Centers: Mueller provides opportunities for economic development and job creation in a way that complements and extends the compact and pedestrian-friendly pattern of the community.

In addition to the mixed-use Town Center, the Mueller plan designates approximately 18 percent of the airport site or approximately 120 acres for employment uses, intended to promote the creation of a balanced community where people both live and work, and where the City's broader economic development goals can be achieved. Austin homegrown businesses and those that manifest the values of sustainability are particularly encouraged. The Northwest Quadrant, adjacent to I-35, is targeted for major employment and regional uses that can benefit from this highly accessible and visible location. Approximately 32 acres of this area has already been purchased by the Seton Healthcare Network for the development of the Dell Children's Medical Center of Central Texas; approximately 50 acres adjacent to I-35 and East 51st Street have been identified for compatible regional-serving retail and office or residential uses, and an additional 42 acres of land along East 51st Street accommodates the film production campus of the Austin Film Studio and adjacent lands for office, retail and other employment uses. The employment centers are seen as an integral part of Mueller, with the same levels of pedestrian orientation, connectivity and amenity as the surrounding community. Chapter Four provides design guidelines for these mixed-use employment centers.



The creation of a compact, walkable and transit-oriented community with a mixture of residential, commercial and civic uses provides a clear alternative to automobile-dominant patterns of development.

Sustainability: *The Mueller community embraces the fundamental tenets of sustainable development and design and is intended to develop a new model of “green urbanism”.*

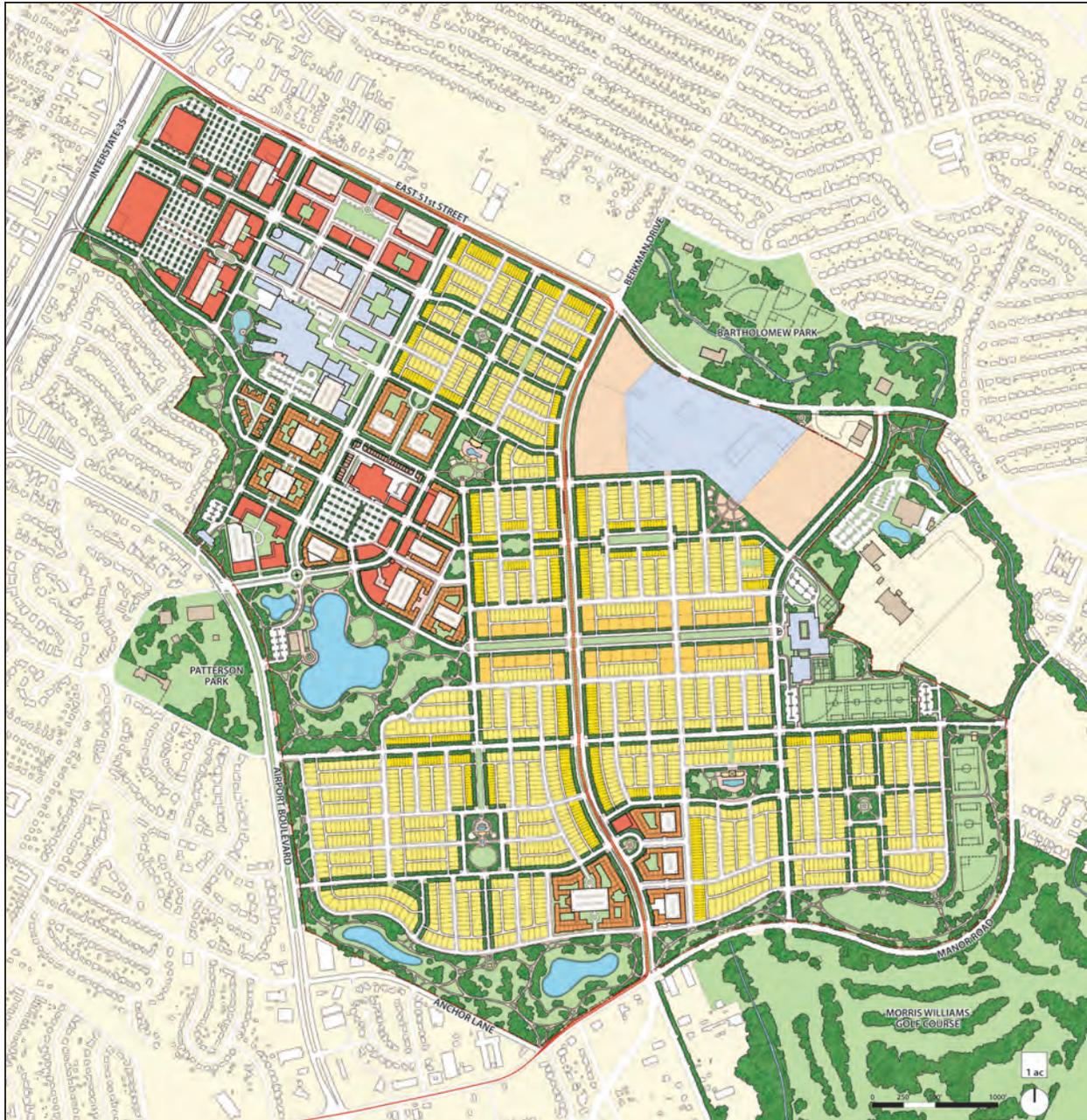
The design of the Mueller community combines the principles of Traditional Neighborhood Development and New Urbanism with state-of-the-art practices for green building and sustainable design. A new model of “green urbanism” has emerged with Mueller, promoting sustainability at three distinct levels:

- **Green Community Design:** The creation of a compact, walkable and transit-oriented community with a mixture of residential, commercial and civic uses provides a clear alternative to the automobile-dominant patterns of development that have prevailed for much of the 20th century.
- **Green Buildings:** Mueller combines national principles for green building developed by the U.S. Green Building Council’s LEED® (Leadership in Energy and Environmental Design) with the City’s own Green Building Program to encourage: resource efficient design; the selection of regional materials that are non-toxic, recycled and sustainably harvested; and site designs that provide heat island mitigation, light pollution reduction and stormwater management.



- **Green Infrastructure:** Mueller’s infrastructure system including its parks, roadways, and utilities is designed to promote fundamental sustainability principles. The park system is designed to reduce off-site flooding and to naturally filter pollutants from stormwater before it is released into the natural stream systems. The street system is designed to support pedestrian and bicycle circulation. Over 15,000 trees selected from an approved list of sustainable and indigenous plant materials will be planted to create a diverse and comfortable environment that mitigates the heat island effect, reduces stormwater runoff and filters the air. The utility system is also designed to reduce resource consumption through the extension of reclaimed water for irrigation into much of the community. An innovative on-site cooling, heating and power plant by Austin Energy is also planned to meet the electrical and thermal needs of the Children’s Hospital complex and nearby commercial and residential development within the Northwest Quadrant Town Center and northern neighborhoods of the community. Chapter Seven of this Design Book provides specific performance criteria aimed at achieving all three levels of sustainability.

Over 15,000 trees will be planted at Mueller to create a comfortable environment that mitigates the heat island effect, reduces stormwater runoff and filters the air.



-  **Civic/Institutional**
Neighborhood school, recreation center, hospital, Austin Film Society, fire station
-  **Yard Houses**
Single family detached
-  **Row Houses/Shop Houses**
Townhouse, single family attached, live-work loft
-  **Mueller Houses**
Condos/lofts with 4 to 6 units per house
-  **Mixed-Use Sites**
Office, high density multifamily, retail
-  **Mixed Use Commercial**
Retail, office, medical office, research development
-  **Mixed Use Residential**
Office, high density multifamily, retail
-  **Publicly Accessible Open Space**



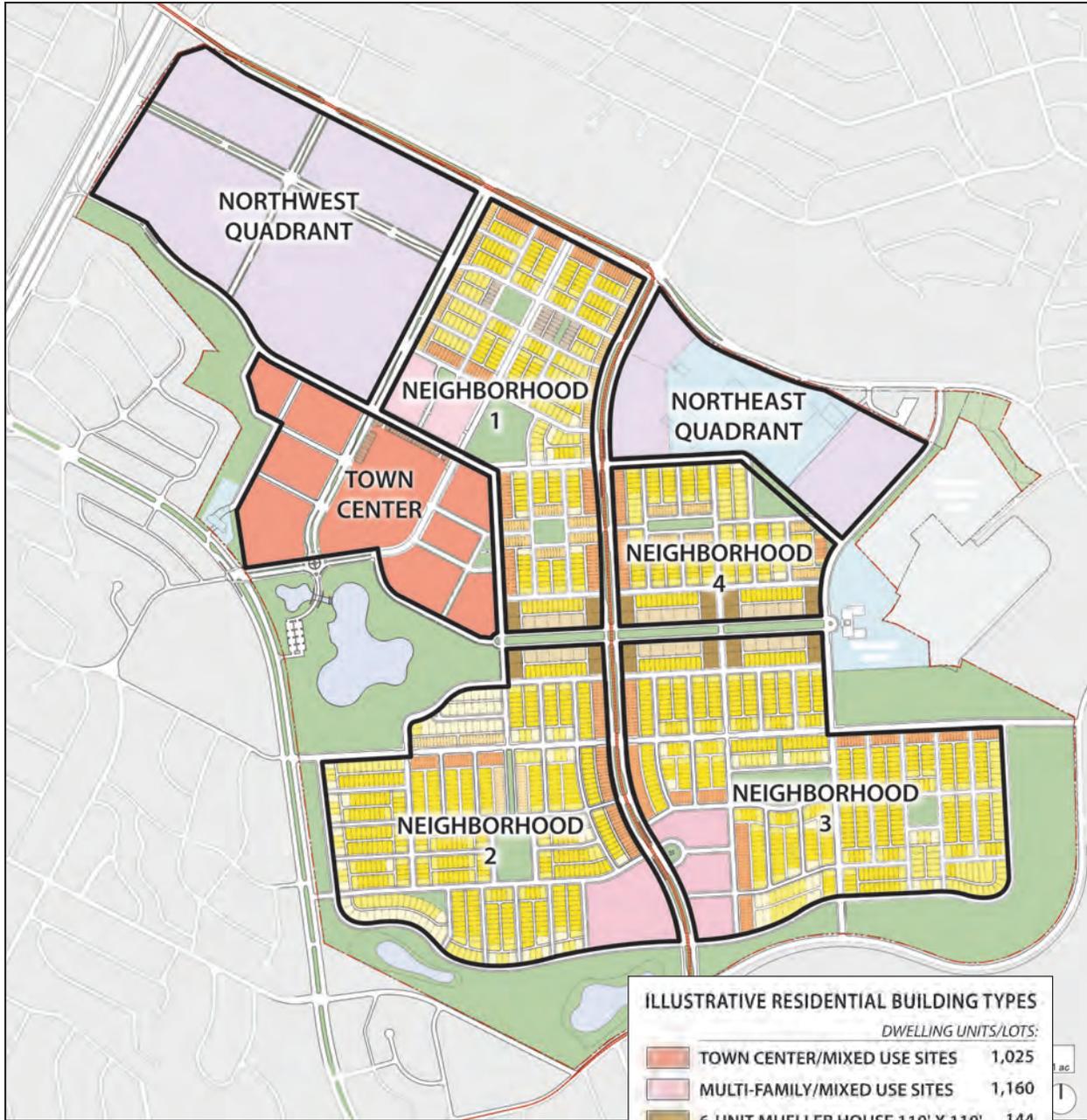
Illustrative Plan and Development Program

The illustrative plan and development program indicates how the Mueller community could potentially build out in conformance with the Master Plan and this Design Book over the next 10 to 15 years. As shown, it is anticipated that the community could be developed with approximately 4,600 units of housing, and four million square feet of commercial or employment uses. The PUD zoning allows for up to 6,450 units of residential development and up to 5.3 million square feet of commercial development subject to the limitations of the Traffic Impact Analysis. This Master Plan establishes a minimum residential program of 2,880 residential units, with at least 50% of these required to be developed for ownership housing in detached or attached units. At least 25 percent of all housing units at RMMA will be affordable to families or individuals whose incomes are less than or equal to 80 percent of the median family income (MFI) for the Austin Metropolitan Area. All affordable rental housing units will have rents not greater than Fair Market Rents (FMR) for existing housing, adjusted for tenant paid utilities.

It is expected that the precise program and configuration of development will vary somewhat from the illustrative plan and program as opportunities and new conditions present themselves. However, the underlying planning principles and design objectives set forth in this chapter will form the basis for implementing the vision of the Mueller community. The following chapters of this book provide the design guidelines that will be used by individual builders, developers, architects and landscape architects in bringing this vision to reality.

ILLUSTRATIVE DEVELOPMENT PROGRAM

Area	Net Land Area (acres)	Non-Residential (sf)					Residential (dwelling units)				
		Office	Retail	Hospital	Film Production	Total (sf)	Apartments/Condos	Mueller Houses	Row House/Shop House	Yard House/Garden House	Total (du)
Northwest Quadrant	82.0	1,561,000	410,000	637,000		2,608,000					
Northeast Quadrant	42.2	683,000	15,000		220,000	918,000					
Town Center	41.7	306,000	210,000			516,000	1,025		28		1,053
Neighborhood 1	55.1		5,000			5,000	460	44	239	284	1,027
Neighborhood 2	78.4						280	44	128	528	980
Neighborhood 3	83.3		7,500			7,500	420	88	124	545	1,177
Neighborhood 4	29.9							88	86	168	342
Public Open Space	150.2										
Elementary School	10.2										
Roadways/Alleys	127.4										
Total	700.4	2,550,000	647,500	637,000	220,000	4,054,500	2,185	264	605	1,525	4,579



The Mueller Neighborhoods

ILLUSTRATIVE RESIDENTIAL BUILDING TYPES	
	DWELLING UNITS/LOTS:
TOWN CENTER/MIXED USE SITES	1,025
MULTI-FAMILY/MIXED USE SITES	1,160
6-UNIT MUELLER HOUSE 110' X 110'	144
4-UNIT MUELLER HOUSE 90' X 110'	120
ROW HOUSE 22.5' X 90'	337
ROW HOUSE 22.5' X 70'	240
SHOP HOUSE 25' X 55'	28
YARD HOUSE 55' X 90'	101*
YARD HOUSE 45' X 90'	407*
YARD HOUSE 37' X 90'	993
GARDEN COURT HOUSE	24
PUBLIC OPEN SPACE	
TOTAL	4,579*

* Up to 125 Carriage house units would also be permitted in this illustrative program.

2 THE NEIGHBORHOODS

Introduction

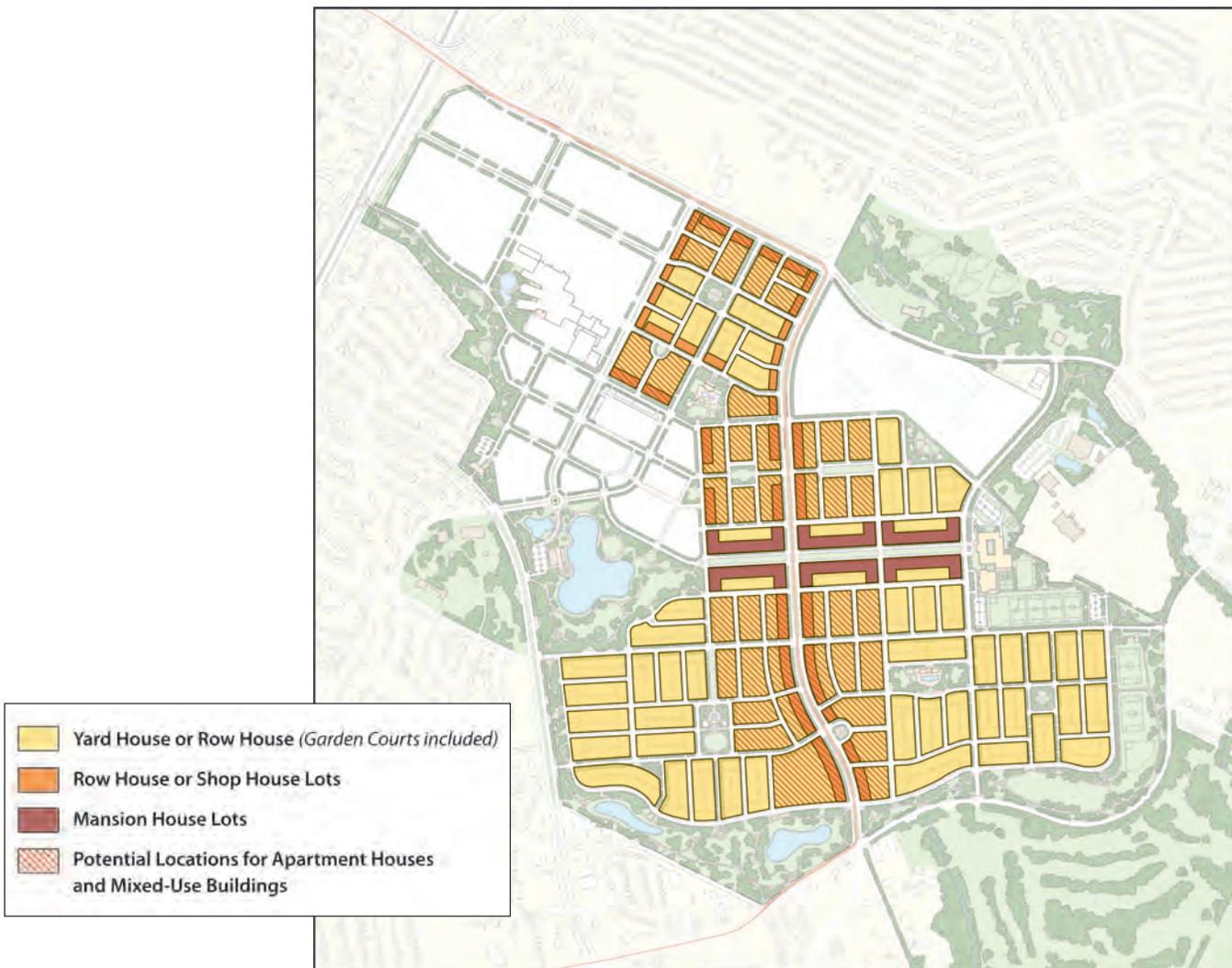
The Mueller community includes four mixed-use residential neighborhoods organized around and within convenient walking distance of the Town Center. Each of the neighborhoods is programmed with a wide range of building types to foster a population with diverse demographic and economic characteristics. Families, seniors, single workers, young couples and students will live within close proximity of one another, promoting neighborhoods that reflect the diversity and richness of the larger Austin community. Each neighborhood contains a park as a focal point with resident-serving amenities and with direct visual and pedestrian linkages to the Town Center. While one particular architectural style is not mandated, all buildings within the neighborhoods will be designed to be:

- ***Neighborly***, with a strong street-orientation, and with porches and entries that promote interaction and socialization among residents and that reinforce the pedestrian scale and character of the community.
- ***Sustainable***, employing strategies to conserve energy and water resources, use healthy long-lasting and low-maintenance building materials, integrate building siting and landscaping, and mitigate light pollution and heat island effect.
- ***Compatible***, in scale and character with adjacent structures in the same vicinity.
- ***Indigenous***, utilizing to the extent practicable, local materials and regional Central Texas architectural approaches.

A series of six building types including: Yard Houses, Garden Court Houses, Row Houses, Live-Work Shop Houses, Mueller Houses (i.e., multi-unit four and six-plex buildings) and Apartment Houses are envisioned within the neighborhoods. Building types are located to help structure the community. For instance, Mueller Houses, designed to resemble larger traditional homes, are located along the community's main east-west boulevard to create a stately parkway linking the neighborhood school with the Lake Park and the Town Center. Residential row houses as

well as live-work shop houses are located along the north-south transit boulevard to provide spatial definition to this wide street and to promote a diversity of activity. Apartments and mixed-use buildings are located in clusters around planned transit stops and adjacent to the Town Center to provide a concentration of activity and neighborhood services. Yard houses on a range of lot sizes and garden courts are distributed throughout the neighborhoods and along the perimeter greenways. The distribution of residential and mixed-use building types is illustrated on the diagram below. Additional building types may be introduced, if the NCC finds that such building types reinforce the following neighborhood building design characteristics.

The remainder of this chapter describes: site planning standards to guide the layout and organization of the neighborhoods; design guidelines for each of the six neighborhood building types; and guidelines that pertain to the design character, treatments and materials of all neighborhood buildings.



Distribution of Neighborhood Building Types

NEIGHBORHOOD SITE PLANNING STANDARDS

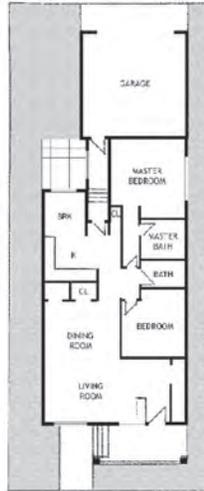
A Preliminary Plan (Case # C8-04-0043) has been filed by the Master Developer with the City of Austin, describing the layout of the neighborhoods and the Town Center. Any revisions to the layout of the neighborhoods shown in the Preliminary Plan must adhere to the following site planning standards:

- a. With the exception of multi-family residential or mixed-use sites, all properties will be served by alleys. Some exceptions to this standard may be provided as described in the guidelines for yard houses.
- b. Block lengths will typically be 600 feet or less in length, and will not exceed a maximum length of 750 feet. Cul-de-sacs are not permitted, except as an interim condition.
- c. To the extent practicable, blocks should be oriented in a north-south direction, so that the majority of detached (yard house) and attached (row house) lots present their narrower frontage to the west.
- d. At least 90 percent of all residential units will be within 600 feet of an open space (measured from the front entry of the unit to the open space along public streets), including a neighborhood park, pocket park, greenway, or Lake Park, and no unit will be greater than 850 feet from such an open space.
- e. At least 90 percent of all detached “yard-house” lots will be no greater than 5,000 square feet in area.
- f. A minimum of 1,440 detached “yard-house” units and/or attached “row house” or “shop house” units will be provided within the neighborhoods.
- g. A minimum of approximately 15 acres of land will be designated for multi-family housing or mixed-use residential/commercial development within the neighborhoods. Multi-family parcels will be distributed throughout the neighborhoods, with any one parcel not exceeding an area of approximately seven acres.
- h. Each neighborhood will include a neighborhood park with a minimum area of approximately two acres.
- i. Neighborhood and pocket parks, Lake Park, and the perimeter greenways will be lined with public streets, and residential units along those streets will front such open spaces. Rear yards will not be permitted to abut public open space.
- j. The design and treatment of streets within the neighborhoods will be consistent with the Mueller street cross sections set forth in Appendix B of this Design Book.

Note: The term “neighborhoods” as used in this Design Book may not correspond to neighborhoods created by the Master Development under the Community Covenants. Neighborhoods created under the Community Covenants are created for the purpose of facilitating a representative system of voting. There may be multiple voting neighborhoods within each of the four mixed-use residential neighborhoods referred to in this Chapter.

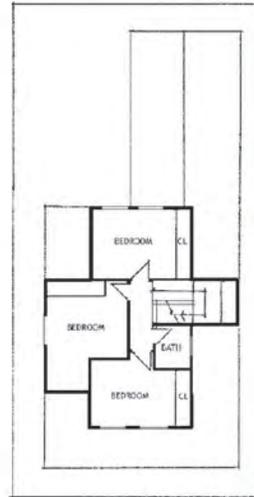
BUNGALOW

65 % Impervious Cover
1330 SF Floor Area



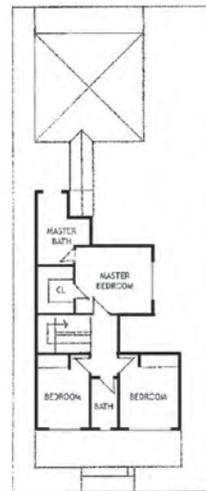
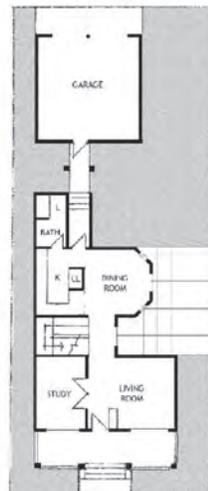
1-1/2 STORY COTTAGE

44% Impervious Cover
2330 sf Floor Area



2-STORY

46% Impervious Cover
1592 SF Floor Area



Yard House Concepts

2.1 YARD HOUSES

The single-family detached “yard house” is the predominant building type in each of the mixed residential neighborhoods. Single-family detached lots generally range in size from approximately 3,300 square feet (37’ x 90’) to 5,000 square feet (55’ x 90’), promoting a diversity of housing opportunities. The following guidelines must be applied to the design of all yard houses within the community:

Auto Access: Yard houses will be served by rear alleys. Fronting garages will be permitted only in exceptional cases, where the garage is at least 50 feet back from the front property line, where a side yard driveway from the street is a maximum of 10 feet in width, and where the site and architectural design is skillfully employed to reduce or eliminate the visual effect of the garage.

Variation and Diversity: To promote diversity and interest within the neighborhoods, the following guidelines are applied:

- Each block face should contain at least four different floor plan models with no more than two of the same building elevation. A separation of at least four lots should be maintained for any model with similar elevations, colors or materials.
- To the extent practicable, a mix of single, one-and one-half, and two-story homes should be introduced along a block face.
- A mix of materials, colors and treatments should be employed.

Porches: All yard houses will have ground level front or corner porches with a minimum area of 80 square feet and a minimum depth of six feet. Yard houses on lots of 4,500 square feet or greater will have ground level porches with a minimum area of 100 square feet and a minimum depth of seven feet. Reduction of the porch area requirements will be considered by the NCC, if such reductions are deemed to improve the visual diversity of the street frontage. Unless there

In the spirit of traditional Austin neighborhoods, Yard Houses will include a mixture of bungalows, one-and one-half and two-story buildings, all with a strong orientation to the street.



is no other reasonable way to meet City of Austin visitability requirements (e.g., elevating the garage to the same level as the unit), the porch will be no less than 18 inches or more than 36 inches above the elevation of the fronting sidewalk to provide privacy and clear separation from the street. The porch will be clearly delineated from the front yard with at least a 12-inch grade change; the use of columns and open railings is strongly encouraged. Two story porches and second floor cantilevered porches in the tradition of Central Texas residential buildings are also encouraged to provide additional outdoor space, and to mediate the harsh summer sun.

Roof Forms: Yard houses should have sloping roofs, employing gables, hips and dormers. To the extent practicable, south-facing slopes should be introduced to allow for the architectural integration of photovoltaics, solar water heating and induced ventilation, subject to NCC approval. The roof pitch of the principal building should generally utilize slopes of 6:12 or greater and generally no more than 9:12; however, greater slopes up to 12:12 may be appropriate where living space is incorporated into the roof. Slopes of less than 6:12 will be permitted subject to NCC approval, where eaves project from the face of the building, or for porch roof pitches and ancillary buildings and wings. Flat roofs are also permitted on ancillary structures, when they are used for outdoor terraces and decks. Mansard and false roofs are not permitted on yard house structures. Rooftop equipment (e.g., HVAC units, satellite dishes, vent stacks, etc.) will be architecturally integrated within the volume of the building, and not visible from streets, alleys or other public areas. Photovoltaic and solar water heating systems are permitted subject to NCC approval, but should be architecturally integrated into the roof and/or building form and not visible from public streets.

Building Height and Massing: Yard houses will not exceed a height of 30 feet or two-and one-half stories. Massing of two-story yard houses should:

- Concentrate height toward the front of the lot, with the two-story portion set back by at least 25 feet from the rear property line. (Exceptions will be made for Carriage Houses as described below.)
- Employ changes in volume and plane, sloping roofs, and porches to reduce the perceived scale of the structure.
- Introduce moldings, belt courses, decorative eaves and other architectural elements that provide interest and scale.



Buildings on corner lots should be sited and designed so that they present attractive elevations to both streets.

Front Yard Setbacks: The front wall of yard houses will be set back by a minimum of 10 feet from the front property line, but no more than 15 feet. (Lots on corners will be assumed to have two “fronts”.) Porches, awnings, chimneys and roof overhangs may encroach within this front yard setback area up to five feet from the front property line. Up to two bay windows will also be permitted to encroach into the front yard setback area by up to 24 inches, provided that the total floor area of the bay windows does not exceed 20 square feet.

Side Yards: Within the side yard setbacks prescribed by the Mueller zoning, buildings should be sited and designed to maximize usability of outdoor open space, to reduce summer heat gain within the home, and to optimize privacy between units. To this end, each unit should be designed with an open and closed side; the orientation of open sides should to the maximum extent possible, avoid western exposures.

Site Coverage: Yard house lots must be designed to have an impervious cover that does not exceed 75 percent.

Rear Yard: Garages will be set back from the rear property line and alley by a minimum of five feet. Any additional setback beyond five feet should be configured to ensure that no driveway is less than 20 feet in depth.

Corner Lots: Buildings on corner lots should be sited and specially designed so that they present attractive elevations to both streets. Building and landscape elements, house massing, wrap-around porches, façade composition, and other design strategies should be employed. Where a garage presents its side elevation to the street, it should be specially designed as an extension of the primary building elevation.

Terminus Lots: Houses on lots that terminate thoroughfares and/or views should be sited and designed so they respond to, and take advantage of, the specific site conditions. Care should be taken to ensure that these façades are particularly well composed and detailed.

Garages: Semi-detached and detached garages are encouraged on lots greater than 4,000 square feet to promote more usable rear yards and a more interesting and varied alleyscape. Detached and semi-detached garages should be separated from the principal mass of the building by at least 10 feet; semi-detached garages may be connected to the principal building by a one-story “breezeway” or connector with a width not exceeding 12 feet. Three-car garages are allowed only on detached garages or in semi-detached garages with tandem configurations. A maximum of one additional exterior or covered parking space is permitted on lots with a width of 45 feet or greater. The maximum size of an individual covered or uncovered off-street parking space is 12 feet by 24 feet.



Carriage house units are encouraged to promote housing diversity, live-work opportunities, and to enliven the alleys.

Carriage House Units: Carriage house units, located above detached and semi-detached garages, and on lots equal to or greater than 45 feet in width, are encouraged to promote housing diversity, live-work opportunities, and to enliven the alleys. They will be subject to the following conditions:

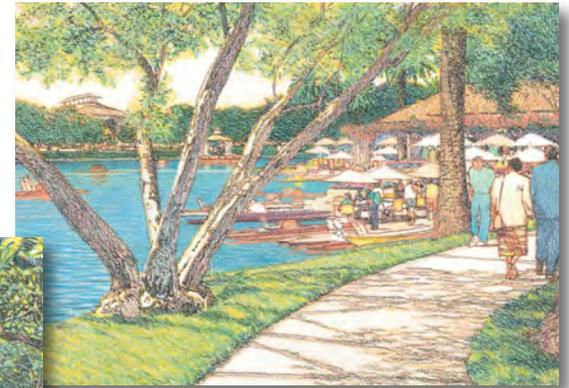
- The usable floor area of a carriage unit will not exceed 500 square feet.
- The general massing of the carriage house should be one-and one-half to two-stories in height; the structure will not exceed 25 feet in height, and should use sloping roofs and dormers to reduce the scale.
- The carriage house will be separated from the principal building mass by at least 10 feet.
- The design and materials of the carriage house should be complementary with the main building and surrounding structures.
- No more than 50 percent of the units along a block face will include carriage houses.

Mueller Green Resources Guide

(Excerpt)



MUELLER GREEN RESOURCES GUIDE



Center for Maximum Potential Building Systems

Version 3 • October 2012

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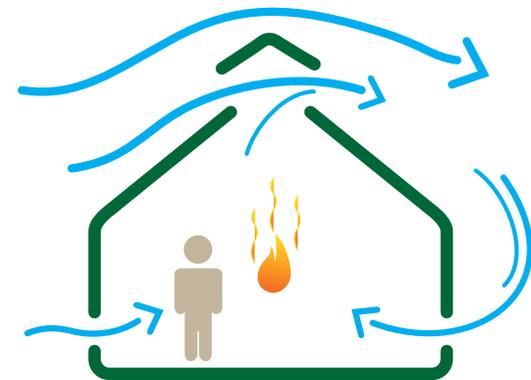
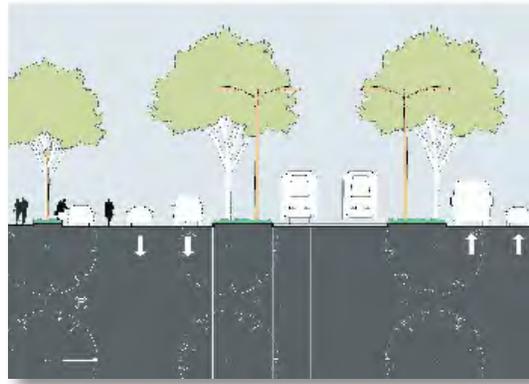
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CHAPTER I

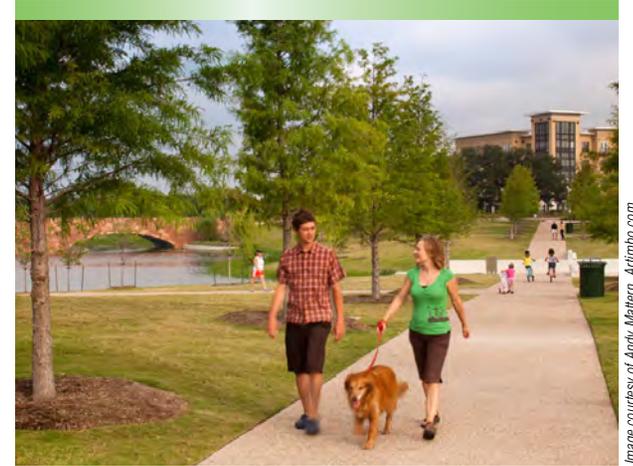
Introduction



The *Mueller Green Resources Guide* is a reference document to support green building practices at Mueller. Green building incorporates healthy, environmentally sensitive, socially responsible, and cost-effective strategies into building design, construction and operations. Today, green buildings are recognized as beneficial for the environment, for people, and for the bottom line.

GUIDING PRINCIPLES FOR GREEN BUILDING

- 1) **Design with Nature:** Specify climate- and site-responsive design and green infrastructure features to achieve building resilience and sustain ecosystems at local, regional and global scales.
 - 2) **Design for Flexibility:** Anticipate change in user needs by designing open, flexible building systems.
 - 3) **Design for Water and Energy:** Use green infrastructure to maximize stormwater retention and infiltration on site, minimize potable water use and take advantage of rainwater harvesting and reclaimed water sources, and take advantage of climatic design principles and on-site renewable energy systems to complement high-efficiency mechanical and electrical systems.
 - 4) **Design for Healthy Environments:** Specify and use non-toxic and low-emitting materials and maximize daylight and views for building occupants to protect air quality and enhance human health and well-being.
 - 5) **Design for Zero Waste:** Manage construction sites and design buildings to promote reduction and reuse, divert recyclable and compostable debris from landfills, and specify and use high recycled-content materials.
-



Why Green Building?

Over the last three decades public awareness has heightened over the effects of buildings on the environment and human health. In the U.S., buildings are responsible for:

- 40% of energy use
- 13% of water use
- 40% of raw stone, gravel, sand and steel use
- 25% of virgin wood use

In addition, buildings generate about 39% of carbon dioxide emissions—a greenhouse gas associated with global warming—and 35% of municipal solid waste. Extracting, processing, and transporting building materials can disrupt sensitive ecological systems, and result in particulate and chemical emissions that can pollute the air, land and water. Furthermore, because people in the U.S. spend about 90% of every day indoors, it is essential that buildings have healthy indoor environments.

By integrating climatic design principles with environmentally-sensitive construction practices, healthy building materials, native plant landscaping, green infrastructure, and energy- and water-efficient mechanical and plumbing equipment, green buildings have lower operating costs, higher return on investment and appreciation, and enhanced occupant health and productivity. Based on recent

studies, green buildings on average have a first cost premium of about two percent; these are commonly recouped from lower operating costs. Moreover, with the prospect of escalating energy costs, green building is a smart business decision and a demonstration of community and environmental stewardship.



Image courtesy City of Austin

FOCUS ON *Climate Change*

In February 2005, 141 countries adopted the Kyoto Protocol as a response to climate change resulting from greenhouse gas emissions. While the U.S. has not ratified the Protocol, local governments, cities and organizations around the country have united to address the challenge.

The U.S. Mayor's Climate Protection Agreement, launched in 2005, calls for the nation's mayors to take leadership in creating policies and programs to reduce greenhouse gas emissions within their communities. As of April 2012, over 1,000 mayors have signed the agreement, including Austin's former Mayor Will Wynn. The Agreement focuses on three strategic actions:

1. Strive to meet or beat the Kyoto Protocol targets in their own communities, through actions ranging from anti-sprawl land use policies to urban forest restoration projects to public information campaigns;
2. Urge state governments and the federal government to enact policies and programs to meet or beat the greenhouse gas emission reduction target suggested for the United States in the Kyoto Protocol – 7% reduction from 1990 levels by 2012; and,
3. Urge the U.S. Congress to pass the bipartisan greenhouse gas reduction legislation, which would establish a national emissions trading system.

Source: U.S. Conference of Mayors [Pilot Protection Agreement](#)

Austin Climate Protection Program

In February 2007, Austin City Council resolved to make Austin the leading city in the U.S. in the effort to reduce and reverse the negative impacts of climate change.

Included in the resolution that created the Austin Climate Protection Plan:

- Implement building codes that require all new single-family homes to be *net zero-energy capable* by 2015.
- *Increase energy efficiency* in all other new construction by 75% through building codes by 2015.
- Require disclosure of historic energy use, facilitate and *require energy efficiency improvements in existing homes and buildings at point of sale*.
- Develop enhanced incentives and standards for Austin Energy Green Building; develop a "*carbon neutral*" certification.

A Net Zero-Energy Capable Home achieves an efficiency level approximately 65% higher than homes built to the City of Austin Energy Code in effect in November 2006. This enables these homes to achieve annual net zero-energy with the provision of on-site energy generation.

Because all homes in Austin will have to be built to this standard at point of sale beginning in 2015, homes at Mueller can take the opportunity to build as close to net zero-energy capable as possible *now* to avoid upgrades/retrofits that may be required in the future. Homes can benefit from guidance in the *Mueller Green Resources Guide* to put them on track to become net zero-energy capable.

Architecture 2030 Challenge

Architecture 2030 is a non-profit organization established in 2002 by architect Edward Mazria. The 2030 Challenge goal is “to achieve a dramatic reduction in the climate change-causing greenhouse gas (GHG) emissions of the building sector by changing the way buildings and developments are planned, designed and constructed.” (from www.architecture2030.org).

Architecture 2030 Targets:

- All new buildings, developments and major renovations shall be designed to meet a fossil fuel, greenhouse gas emitting, energy consumption performance standard of 60% below the regional (or country) average for that building type.
- At a minimum, an equal amount of existing building area shall be renovated annually to meet a fossil fuel, greenhouse gas emitting, energy consumption performance standard of 60% below the regional (or country) average for that building type.
- The fossil fuel reduction standard for all new buildings and major renovations shall be increased to:
 - 70% in 2015
 - 80% in 2020
 - 90% in 2025
 - Carbon neutral by 2030 (using no greenhouse gas-emitting fossil fuel energy to operate)

Achieving the targets may be accomplished through innovative design strategies, generating on-site renewable power and/or the purchase (maximum 20%) of renewable energy.* More information, energy charts, an incentive database, resources, and links are available at www.architecture2030.org.

In November 2006, Austin Mayor Will Wynn joined with his peers to support the 2030 Challenge with the unanimous passage of Resolution #50 by the U.S. Conference of Mayors. The 2030 Challenge is also supported by the American Institute of Architects, the U.S. Green Building Council, the American Society of Heating, Refrigerating and Air-Conditioning Engineers, the U.S. Environmental Protection Agency, the American Solar Energy Society and many other endorsing organizations and firms.

* Austin Energy's GreenChoice is a Green-E certified renewable energy based electricity provider. See Chapter 3 for more information about GreenChoice.

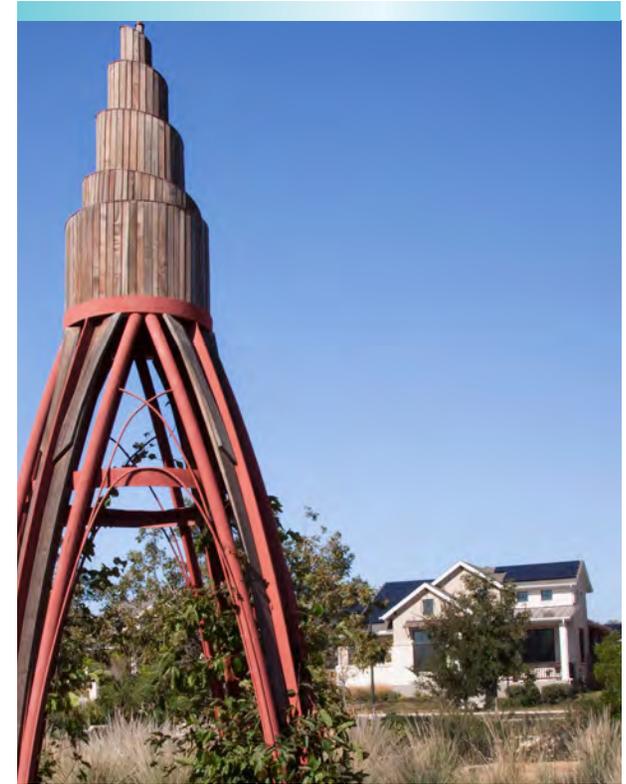


Image courtesy of Eco-Logic Design

Green Building Rating Systems

Chapter Two provides an overview of green building rating systems relevant to new construction projects at Mueller.

Projects at Mueller may pursue a green building rating from two established programs:

- U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) Green Building Rating System
- Austin Energy Green Building (AEGB) Rating System

These rating systems provide strategies and best practices for creating green buildings and assessing building performance using their respective criteria and measurement.

Green Urbanism

Mueller's master plan is based on sound, pragmatic urban planning principles that emphasize a pedestrian-friendly streetscape and mixed-use development pattern; transportation options including auto, transit, bicycle and pedestrian connectivity; clustering of development to provide abundant parks and open space; and a system of wet ponds that remove pollutants from stormwater. These integrated planning principles, site design and development strategies reinforce Mueller's sustainability and green building goals and provide visible examples of "green urbanism."

Chapter Three describes the four Green Urbanism Signature Themes that underlie design and construction at Mueller.

Protecting Air Quality addresses indoor and outdoor air quality considerations.

Mitigating Urban Heat Island Effects provides strategies to lessen a site's contribution to elevated air temperatures in urban areas.

Protecting the Night Sky responds to light pollution's adverse effect on nocturnal habitat.

Creating Green Buildings, the broadest Signature Theme, offers strategies to support the design, construction, and operation of healthy, green buildings.

Each Signature Theme is divided into the following sections:

Overview

Punch List – summarizes key strategies

Strategies – provides guidance for implementation

Together, the Signature Themes guide the development of a large, mixed-use project with an aim to measurably benefit current and future generations.

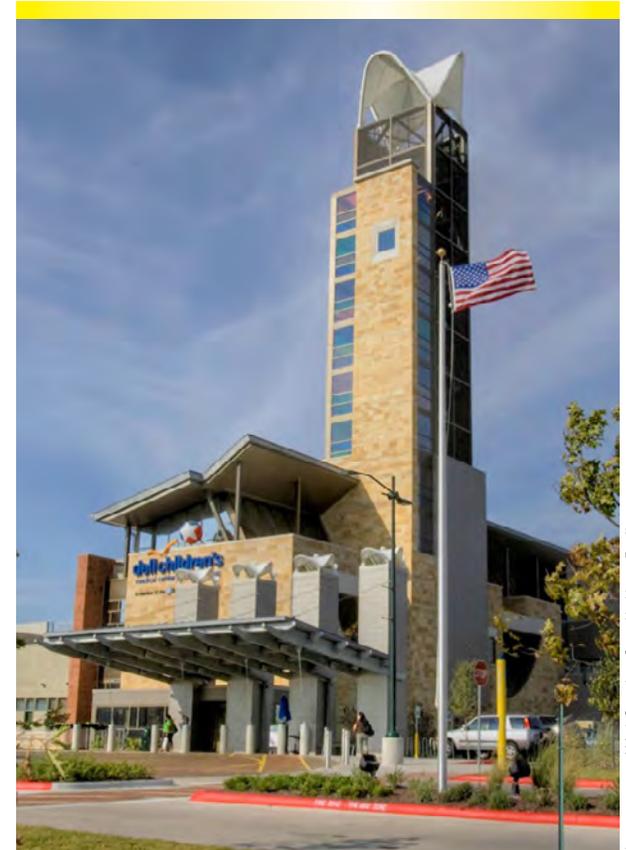


Image courtesy of Mark Swenitzer, Secon Healthcare Family

CHAPTER 2

USGBC'S LEED® & Austin Energy Green Building Rating Systems



Introduction

All projects at Mueller greater than 25,000 square feet are required to achieve either the U.S. Green Building Council’s LEED certification or Austin Energy Green Building rating. To date, most projects constructed at Mueller – even those less than 25,000 square feet – meet that requirement. In general, the two rating systems share similar frameworks: both identify multiple green building strategies, some of which are mandatory for certification and others that can be pursued at the discretion of the project delivery team. Both also require achieving a minimum number of points based on the varying certification levels.

Table 2.1 summarizes the green building certification level required for each building type at Mueller. Both rating systems can be used for specified building types; projects can choose to pursue both. The identified certification levels are minimum standards. Building teams are encouraged to achieve higher levels.

Mueller and LEED for Neighborhood Development.

In 2007, Mueller was selected as one of 238 development projects around the world to participate in the LEED for Neighborhood Development Pilot Program. The entire 711-acre Mueller development is pursuing certification under this pilot rating system. In 2009, Mueller earned a Stage 2 Silver certification for its approved master plan. Mueller is targeting final LEED for Neighborhood Development Pilot Stage 3

Table 2.1: Mueller Green Building Minimum Certification Requirements

Building Type	USGBC LEED		Austin Energy Green Building
Commercial Office	LEED for New Construction: Certified	and/or	AEGB Commercial: Two-Star Rating
Retail New Construction; Tenant Space	LEED for Retail: Certified	and/or	AEGB Commercial: Two-Star Rating
Multi-Family Residential	< 4 Stories: LEED for Homes 4 - 6 Stories: LEED for New Construction or LEED for Homes* > 6 Stories: LEED for New Construction	and/or	< 4 Stories - AEGB Multi-Family Residential: Two-Star Rating 4 - 6 Stories: AEGB Commercial or Multi-Family: Two-Star Rating > 6 Stories: AEGB Commercial: Two-Star Rating
Single-Family Residential Detached Single-Family Homes; Duplexes; Townhomes	LEED for Homes	and/or	AEGB Single-Family Residential: Three-Star Rating

Note: Builders and developers are encouraged to exceed these certification levels.
* Multi-Family Residential Projects between 4 and 6 stories must use the “LEED for Homes Multifamily Midrise Rating System.”

certification by the pilot period's conclusion in 2016 when the development is anticipated to achieve 75 percent substantial completion.

The LEED for Neighborhood Development Pilot rating system includes prerequisites and voluntary credits in four categories: Smart Location & Linkage, Neighborhood Pattern & Design, Green Construction & Technology,¹ Innovation & Design Process.

Mueller's engagement in the LEED for Neighborhood Development pilot supports the four Mueller Green Urbanism Signature Themes at the development scale. Chapter Three includes descriptions of specific goals and strategies as they align with the Green Urbanism Signature Themes.

Deciding Between LEED and Austin Energy Green Building Certifications, or Choosing Both.

Commercial, multi- and single-family residential projects at Mueller have the option to achieve either LEED or Austin Energy Green Building (AEGB) certification. Projects that choose to pursue both certifications may streamline documentation to avoid duplication of effort, in coordination with Austin Energy Green Building staff.

¹ Modified to Green Infrastructure & Buildings in the balloted LEED 2009 for Neighborhood Development.



Solar panels on the roof of a home at Mueller.

Image courtesy of Eco-Logic Design

Project teams that pursue LEED benefit from a balloted rating system developed by national and international subject matter experts who serve on volunteer committees, and from national exposure and recognition. LEED is an attractive option for national firms familiar with the LEED process

Project teams that pursue an AEGB rating benefit from a tool that reflects Austin's environmental priorities, local recognition and exposure of project

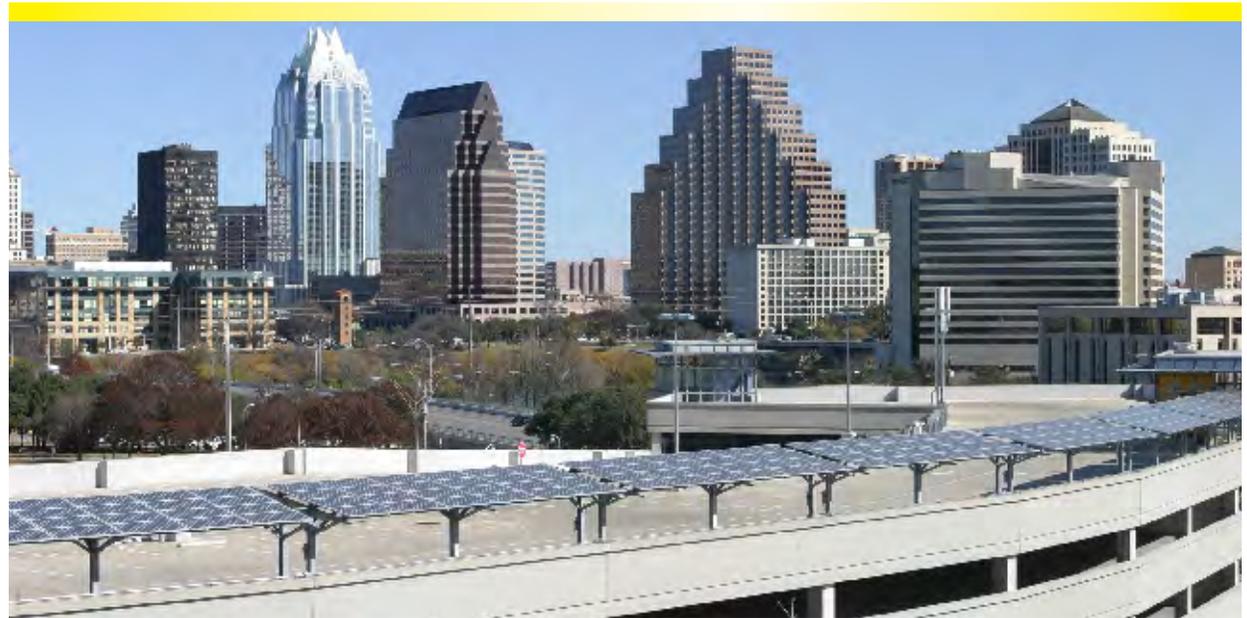
achievements, and availability of AEGB staff to provide technical assistance. AEGB staff is available to identify relevant strategies that have been successfully implemented at Mueller as well as development-wide features that may contribute to credit achievement.

Pursuing *both* LEED and AEGB certifications may be desirable, with many shared credits and strategies across the two rating systems. This approach offers two distinct advantages: provides local and national recognition and exposure and establishes benchmarked leadership at both scales. To facilitate this, Austin Energy Green Building staff can identify strategies that fulfill requirements of both rating systems, and on a project-by-project basis can accept similar documentation. Because the requirements are not always identical, it is essential for project teams that opt to pursue both rating systems to have a thorough understanding of their similarities and differences and to consult with Austin Energy Green Building staff for their concurrence. When strategies are similar but requirements different, project teams are encouraged to pursue the more stringent reference standard.

Several projects at Mueller have pursued both LEED and AEGB certification. See Table 2.2.

Table 2.2: Projects at Mueller that have achieved LEED and AEGB certification.

Project	LEED Certification	GBP Commercial Rating
Seton Family of Hospitals Administrative Offices	Gold	4-Star
Dell Children's Medical Center of Central Texas	Platinum	5-Star
Mueller Central	Gold	4-Star
Mueller South Regional Retail - Starbucks	Silver (LEED for Commercial Interiors)	3-Star



Photovoltaic shading on public parking garage.

Image courtesy of Austin Energy

LEED and AEGB Certification Processes

For LEED for New Construction & LEED for Retail

Project teams pursuing LEED for New Construction and LEED for Retail must first register their project with the Green Building Certification Institute (www.gbci.org) and with the related LEED Online, the web-based resource for managing the LEED documentation process. As part of the registration process, project teams must choose one of two submittal options:

- A two-phase design + construction review: design documentation is submitted to GBCI for review; a final design + construction submittal is submitted after the end of construction.
- A combined review: design and construction documents are submitted after the end of construction.

Following any preliminary LEED review (design + construction, or combined), project teams have an opportunity to respond to GBCI's review comments. GBCI then conducts a final review, during which they award or deny credits. Project LEED certification is awarded following the project team's response to the final review.

For LEED for Homes

Project teams pursuing LEED for Homes begin the registration process by contacting a LEED for Homes Green Rater to confirm project eligibility. The Green Rater's project involvement begins during design and continues throughout the construction process. After a Green Rater is identified and the project is determined to be eligible for LEED for Homes, the projects must register through the USGBC website (www.usgbc.org). The Green Rater works with the LEED for Homes Green Provider and is responsible for on-site verification, assembling the project certification package and submitting it for certification review.

AEGB Commercial, Multi- and Single-Family Ratings

Teams pursuing AEGB Commercial, Multi- and Single-Family Ratings must register their project on the AEGB Online Rating System, the primary resource for managing electronic documentation during the AEGB review process. The most significant difference between the AEGB and LEED review processes are AEGB's interaction with projects through in-person consulting and site visits. AEGB representatives are assigned to a project at registration. Throughout project design and construction phases, AEGB staff consult with the project team, provide guidance towards meeting rating system requirements and conduct project site visits to confirm appropriate construction practices.

AEGB site visit and submittal phase requirements vary across the three rating systems. Teams pursuing an AEGB Single-Family Rating are required to attend a Single-Family Orientation prior to registering their project. The Commercial and Multi-Family Ratings make use of four submittal phases; planning, design, construction, and closeout.

- Planning and design phases: project teams submit preliminary project information, establish green building goals, and submit design documents.
- Construction phase: AEGB conducts occasional site visits, while the project team compiles construction documentation and provides monthly updates using the online rating system.
- Closeout phase, the project team responds with any remaining final documentation, and AEGB generates a final rating.

AEGB staff review updates and documentation and communicate with team members as necessary. Upon completion of documentation and site visits, AEGB provides approval for documented credits.

USGBC's LEED® *Green Building Rating System*

The U.S. Green Building Council's (USGBC) Leadership in Energy and Environmental Design (LEED) Green Building Rating System is a voluntary, consensus-based, internationally-recognized certification system to support the design, construction and operations of high-performance, sustainable buildings. The non-profit USGBC, established in 1993, has rapidly become the most widely recognized green building organization in the U.S. and globally. Nine LEED rating systems are currently in use in the marketplace. Each corresponds to a distinct market sector (see Table 2.3). New projects pursuing LEED certification must select the appropriate rating system during the registration process; some building types are required to use a specific rating system.

New construction projects at Mueller will generally use one of three rating systems:

- Commercial office and multi-family projects use **LEED for New Construction**;
- Retail establishments use **LEED for Retail**;
- Single-family residential, duplexes, and multi-family projects up to 6 stories use **LEED for Homes**.

Version 3, LEED 2009, is the current issue of all LEED rating systems except for LEED for Homes,

most recently issued in 2008. LEED rating systems are updated regularly, with LEED V4 anticipated to be released in 2013.

Green Building Certification Institute

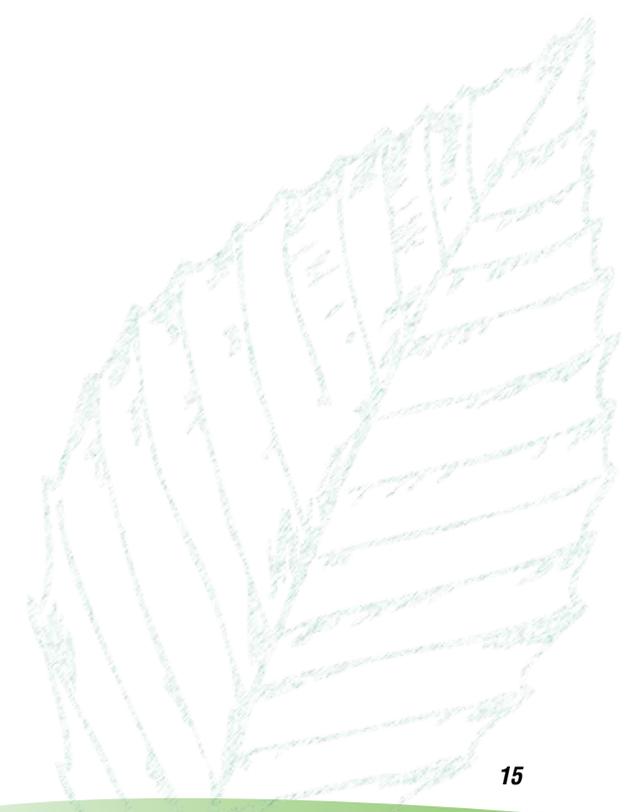
The Green Building Certification Institute (GBCI) was established in 2008 as an independent third party organization to administer and provide oversight for green building-related professional credentialing and project certification programs, including LEED accredited professionals and LEED certified projects, respectively. Project teams pursuing LEED certification, with the exception of LEED for Homes, must register the project with GBCI (www.gbci.org).

Projects pursuing LEED certification must meet **Minimum Program Requirements (MPRs)**. The MPRs identify the appropriate building types to pursue LEED certification and together fulfill three goals: provide clear guidance to LEED customers; protect the integrity of the LEED program; and reduce complications that occur during the LEED certification process. The seven MPRs, below, apply to all LEED Rating Systems except LEED

Table 2.3 - LEED Rating Systems

■ New Construction	■ Healthcare
■ Core & Shell	■ Homes
■ Schools	■ Neighborhood Development
■ Retail*	■ Existing Buildings Operations and Maintenance
■ Commercial Interiors	

* LEED for Retail includes two distinct rating systems: LEED for Retail - New Construction and Major Renovations and LEED for Retail - Commercial Interiors.



for Neighborhood Development which has no Minimum Program Requirements:

1. Must comply with environmental laws
2. Must be a complete, permanent building or space
3. Must use a reasonable site boundary
4. Must comply with minimum floor area requirements
5. Must comply with minimum occupancy rates
6. Must commit to sharing whole-building energy and water usage data
7. Must comply with a minimum building area-to-site area ratio

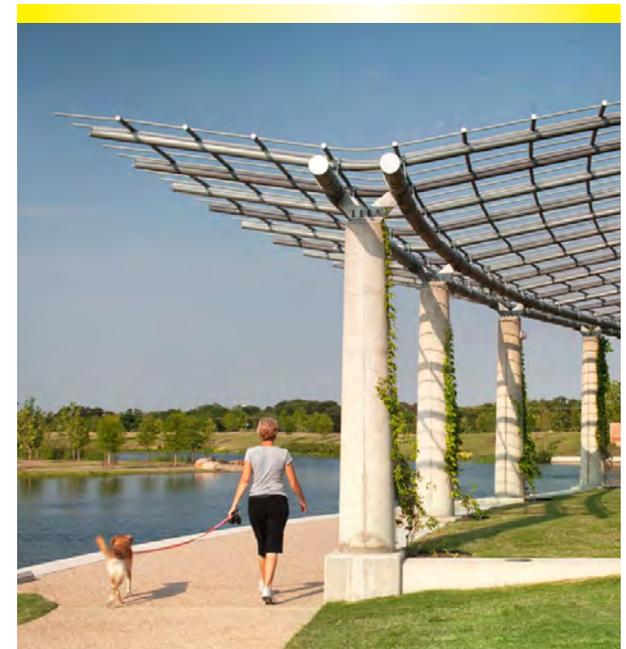
For more information, see www.usgbc.org/DisplayPage.aspx?CMSPageID=2102.

LEED Pilot Credits are innovative green building strategies available for market testing prior to the LEED public comment and balloting processes. Project teams may attempt Pilot Credits and provide feedback to facilitate the introduction of new credits into LEED through an open and transparent process. Projects registered for all LEED Rating Systems may earn up to the number of innovation points available with a specific rating system with pilot credits. The LEED Pilot Credit Library can be accessed through the [USGBC website](http://www.usgbc.org).

Regional Priority Credits, developed by each of eight regions as having region-specific significance, were debuted in LEED 2009. They offer project teams up to four additional points for earning LEED credits associated with each of the Regional Priority Credits.

LEED 2009 for New Construction Regional Priority Credits applicable to Mueller projects (subject to change in future versions of LEED; refer to www.usgbc.org for current information):

- SSc5.1: Site Development – Protect or Restore Habitat
- SSc6.1: Stormwater Design – Quantity Control
- SSc6.2: Stormwater Design – Quality Control
- WEc2: Innovative Wastewater Technologies
- EAc2: On-Site Renewable Energy (1% of total energy load)
- MRc2: Construction Waste Management (diversion of 75% construction waste)



Development Scale Credit Achievement

For master planned developments like Mueller, the Green Building Certification Institute (GBCI) allows individual buildings pursuing LEED certification to achieve pre-selected credits by claiming strategies implemented on the development scale, such as infrastructure for stormwater quantity and quality control and brownfield remediation. Several LEED certified projects at Mueller have successfully used this approach to achieve specific credits.

LEED 2009 for New Construction credits for which the Mueller development-wide strategy may fulfill individual project credit requirements include:

- **SSc1 Site Selection** - This credit rewards projects that select sites with minimal impact on environmentally sensitive areas. The entire Mueller development is located on the former Robert Mueller Municipal Airport (RMMA) and is considered previously developed. The site is not considered prime farmland, habitat for threatened or endangered species, within a development setback from a wetland, or previously set aside for public parkland.
- **SSc3 Brownfield Development** - The entire Mueller property was identified as meeting the EPA's definition of a "brownfield" by the Project hydrogeologist who oversaw the RMMA environmental assessment and remediation. In response to the brownfield determination, data encompassing the entire 711-acre site was submitted to the Texas Commission on Environmental Quality (TCEQ) Voluntary Cleanup Program (VCP) to achieve regulatory closure with regard to environmental issues associated with former aviation operations. For several projects at Mueller pursuing LEED certification including Dell Children's Medical Center of Central Texas and Dell Pediatric Research Institute, the Green Building Certification Institute recognized the assessment and remediation work done to the site as a whole as sufficient to achieve SSc3.

- **SSc5.2 Site Development, Maximize Open Space** - The Master Development Agreement between Catellus Austin LLC and the City of Austin requires a minimum of 140 acres (20% of the total Mueller redevelopment land area) of publicly accessible open space in the final development. A number of projects including Frost Bank and the Seton Administrative Offices have claimed this open space requirement to fulfill requirements of SSc5.2. The City of Austin Economic Growth and Redevelopment Services Office can support project documentation with a letter acknowledging this arrangement.

- **SSc6.1 Stormwater Design, Quantity Control** - A series of stormwater detention ponds integrated into Mueller's landscaped greenbelts and parks were sized to manage stormwater runoff from the entire Mueller site. A number of projects have successfully documented qualifying post-development discharge rates based on development scale stormwater management strategies.

- **SSc6.2 Stormwater Design, Quality Control** - Similar to SSc6.1, Mueller's stormwater detention ponds have allowed projects to document LEED-compliant stormwater quality. The ponds are designed to remove 80% of average annual post-development total suspended solids (TSS) from project runoff.

NOTE: Strategies described above are relative to LEED 2009 requirements. Projects pursuing certification using future versions of LEED should assess credit requirements of the specific rating system in use at that time.

Individual projects attempting to claim development scale strategies to achieve LEED credits should contact Carl Paulson at Catellus Development Corporation for more information.

Mueller Requirement - LEED for New Construction

Eligibility: Commercial and office projects; multi-family residential projects four stories or greater.²

Mueller Requirement: Certified-level certification. Higher certification levels are encouraged.

Fees: Registration and Certification fees apply. Fee structure based on USGBC membership status and project square footage. Refer to [GBCI website](#) for specific fee information.

Overview

The LEED for New Construction rating system is organized into five major categories:

- Sustainable Sites
- Water Efficiency
- Energy & Atmosphere
- Materials and Resources
- Indoor Environmental Quality

A sixth category, Innovation and Design Process, addresses exemplary performance and strategies not covered under credits in other categories, including LEED Pilot Credits. This sixth category is important because it promotes novel approaches to green building and site-specific elements; it also recognizes the participation of a LEED Accredited Professional on the design team.

² Multi-family residential projects with 4 - 6 stories may pursue either LEED for New Construction or LEED for Homes certification. Multi-family projects greater than 6 stories must pursue LEED for New Construction.

Each of the LEED categories is divided into prerequisites and credits. **Prerequisites** are required of all projects seeking LEED certification. Each project delivery team has the option to choose which **Credits** to pursue based on the particular goals and opportunities provided by their project, with a minimum number of points required to achieve each LEED certification level. See Table 2.4

Mueller Requirement - LEED for Retail

Eligibility: *LEED For Retail - New Construction and Major Renovations:* All new construction or major renovation of a retail project as defined by code. *LEED for Retail - Commercial Interiors:* Retail fit-outs of tenant spaces, Retail projects certified under LEED for Core and Shell.

Mueller Requirement: Certified-level Certification. Higher certification levels are encouraged.

Fees: Registration and Certification fees apply. Fee structure based on USGBC membership status and project square footage. Refer to [GBCI website](#) for specific fee information.

Overview

LEED for Retail includes two distinct rating systems oriented to the specific needs and goals of retail projects including big box stores, restaurants, banks, and smaller establishments. **LEED 2009 for Retail: New Construction and Major Renovations** (LEED Retail - NC) provides guidance for new retail projects

Table 2.4 - LEED Certification Levels*

Certification Level	Points Required**
Certified	40 to 49
Silver	50 to 59
Gold	60 to 79
Platinum	80 to 110

*The listed points requirements apply to all LEED rating systems except LEED for Homes. See Table 2.5 for the LEED for Homes point distribution.

**All point and certification requirements current as of this writing. Refer to the [USGBC website](#) for current information.

or major renovations of existing buildings. **LEED 2009 for Retail: Commercial Interiors Rating System** (LEED Retail - CI) is appropriate for interior finish-out of retail tenant spaces or projects pre-certified under LEED for Core and Shell. New projects will be directed to the appropriate rating system during the registration process.

Both rating systems include prerequisites and credits organized in the same six categories as LEED for New Construction and Regional Priority Credits. Although some prerequisites and credits are shared across rating systems, the LEED for Retail rating systems include credits specifically developed for retail projects. A minimum number of points are required to achieve each LEED certification level. See Table 2.4.

Mueller Requirement - LEED for Homes

Eligibility: Residential units less than 4 stories (mid-rise multi-family projects up to 6 stories may qualify using special guidance).

Mueller Requirement: LEED for Homes certification is encouraged though not required.

Fees: Registration and Certification fees apply. Fees based on USGBC membership status. Refer to [GBCI website](#) for specific fee information.

Overview

The LEED for Homes rating system was launched in 2008, specifically developed to support single-

and multi-family residential projects with fewer than 4 stories. Structured differently from other LEED rating systems, LEED for Homes requires the homeowner, developer, or builder to engage a LEED for Homes Provider as early in the process as possible. As of this writing there are 38 LEED for Homes Provider organizations located in most major housing markets in the U.S. Currently, six Providers service the Texas market; they are selected by the USGBC for their established expertise to support builders in the construction of high-performance, sustainable homes. The associated LEED for Homes Green Raters provide onsite verification of compliance with the LEED for Homes prerequisites and credits. In addition, all certified LEED for Homes projects must complete the Home Energy Rating System (HERS) Rating; many Green Raters are also HERS raters, streamlining this phase of the certification process.

LEED for Homes incorporates prerequisites and credits in eight categories:

- Innovation and Design Process
- Location & Linkages
- Sustainable Sites
- Water Efficiency
- Energy and Atmosphere
- Materials & Resources
- Indoor Environmental Quality
- Awareness & Education

Table 2.5 - LEED for Homes Certification Levels*

Certification Level	Points Required*
Certified	45 to 59
Silver	60 to 74
Gold	75 to 89
Platinum	90 to 136

*All point and certification requirements current as of this writing. Refer to the [USGBC website](#) for current information.



A LEED for Homes Gold-certified residence at Mueller built for the 2009 Parade of Homes sponsored by the Home Builders Association of Greater Austin.

Image courtesy of The Muskin Company

Similar to other LEED rating systems, LEED for Homes is based on a set of prerequisites and optional credits. Currently, LEED for Homes has a unique point distribution required to achieve each level of certification different than other LEED rating systems. See Table 2.5.

With Mueller’s LEED for Neighborhood Development Pilot Stage 2 Silver plan certification in place, homes at Mueller pursuing LEED for Homes certification can earn the maximum 10 points available in the Locations & Linkages LLC1.

Further Information

For information on LEED project registration and certification and LEED professional credentialing, visit www.gbci.org. For information about LEED educational and technical resources and USGBC membership, visit www.usgbc.org.

The *LEED Green Building Design & Construction Reference Guide*, 2009 edition, contains in-depth information regarding design strategies, requirements and calculations associated with each LEED prerequisite and credit applicable to LEED for New Construction, Core & Shell, and K-12 school projects and is available for purchase through the USGBC website www.usgbc.org. The reference guide for the LEED for Homes rating system and supplements for LEED for

Table 2.6 - Selected USGBC Resources

Description	Cost	Website
LEED Rating Systems Overview: Includes links to information about all LEED Rating Systems	Free Online Information	www.usgbc.org/DisplayPage.aspx?CMSPageID=222
LEED 2009 New Construction and Major Renovations Rating System (PDF)	Free Download	www.usgbc.org/ShowFile.aspx?DocumentID=8868
LEED 2009 Sample Credit Templates	Free Download	www.usgbc.org/DisplayPage.aspx?CMSPageID=1447
LEED 2009 Green Building Design and Construction Reference Guide (Includes LEED for New Construction, LEED for Core & Shell, LEED for Schools) LEED for Homes Reference Guide, 2009 Edition LEED 2009 for Retail and Healthcare Supplements	See USGBC website for current pricing	www.usgbc.org/Store/PublicationsList_New.aspx?CMSPageID=1518

Retail and LEED for Healthcare are also available for purchase through the USGBC website. Table 2.6 summarizes some of the USGBC resources applicable to projects at Mueller. (Updated reference guides will be issued with the release of future versions of LEED rating systems.)

AUSTIN ENERGY *Green Building*

Austin Energy Green Building (AEGB) is the first green building program in the nation. The initial program development began in 1989 through a public-private partnership between the City of Austin and the Center for Maximum Potential Building Systems funded by The Urban Consortium. The program launched in 1991 supported by a Department of Energy grant. The City of Austin-operated program assists building design and construction teams to create sustainable and healthy buildings. The program offers an array of educational and technical resources to address the unique facets of commercial, single- and multi-family residential buildings.

Mueller Requirement – Austin Energy Green Building Commercial Rating

Eligibility: All commercial, office, institutional, and retail projects, or multi-family buildings greater than 6 stories. Multi-family buildings from 4 to 6 stories have the option to use AEGB’s Commercial or Multi-Family Rating.³

Mueller Requirement: Two-Star Rating. Higher certification levels are encouraged.

³ The AEGB Online Rating System orients projects to the appropriate rating system during project registration.

Fees: Registration and Services Fees apply and vary by project square footage. Refer to the Austin Energy Green Building [Fee Schedule](#) for current fees.

Overview

Austin Energy Green Building Commercial Rating is organized around a system of green building measures associated with the projects’ design and construction phases. The system includes eight **Basic Requirements** that must be fulfilled, in addition to Voluntary Measures that earn points towards star ratings ranging from One- to Five-Stars.

Commercial Rating Voluntary Measures are organized into eight categories:

- Team
- Site
- Energy
- Water
- Indoor Environmental Quality
- Materials & Resources
- Education
- Innovation

Rating levels for the AEGB Commercial Rating are summarized in Table 2.7. Access the current [AEGB Commercial Rating Guidebook here](#).



Table 2.7 - AEGB Commercial Rating Levels.*

Star Rating	Points Required
One-Star	Basic Requirements
Two-Star	30 to 36
Three-Star	37 to 43
Four-Star	44 to 58

*All point and certification requirements current as of this writing.

Mueller Requirement – Austin Energy Green Building Multi-Family Rating

Eligibility: All multi-family residential projects of 6 stories or less.

Mueller Requirement: Two-Star Rating. Higher certification levels are encouraged.

Fees: Registration and Certification Fees apply and vary by project square footage. Refer to the Austin Energy Green Building [Fee Schedule](#) for current fees.

Overview

Multi-family residential projects at Mueller of 6 stories or less have the option to use the AEGB Multi-Family Residential Rating. This rating is similar in structure to the AEGB Commercial Rating but includes 14 Basic Requirements and Voluntary Measures specific to multi-family projects.

Multi-Family Voluntary Measures are organized into six categories:

- Site
- Indoor Environmental Quality
- Energy
- Materials & Resources
- Water
- Innovation

The rating levels for the AEGB Multi-Family Residential Rating are summarized in Table 2.8. Access the current [AEGB Multi-Family Rating Guidebook here](#).

Mueller Requirement – Austin Energy Green Building Single-Family Home Rating

Eligibility: Single-family homes, duplexes, and townhomes.

Mueller Requirement: Three-Star Rating. Higher certification levels are encouraged.

Fees: Registration and certification fees apply. Refer to the Austin Energy Green Building [Fee Schedule](#) for current fees.

Overview

Single-family, duplex and townhouse residences at Mueller are required to follow the AEGB Single-Family Home Rating. This rating includes 18 Basic Requirements and Voluntary Measures specific to single-family projects. Projects pursuing two or more Stars must also achieve specific points in addition to Basic Requirements. Rating levels for the AEGB Single-Family Rating are summarized in Table 2.9. Homebuilders are required to attend an AEGB Single-Family Orientation before registering new single-family projects. Access the current [AEGB Single-Family Rating Guidebook here](#).

Further Information

For additional or more current information regarding AEGB Rating Systems and certification, refer to the [AEGB website](#), or call 512-482-5300.

Table 2.8 - AEGB Multi-Family Rating Levels.*

Star Rating	Points Required
One-Star	Basic Requirements
Two-Star	29 to 35
Three-Star	36 to 42
Four-Star	43 to 56
Five-Star	57 or more

*All point and certification requirements current as of this writing.

Table 2.9 - AEGB Single-Family Rating Levels.*

Star Rating	Points Required
One-Star	Basic Requirements
Two-Star	50 to 74 including specific measures
Three-Star	75 to 99 including specific measures
Four-Star	100 to 149 including specific measures
Five-Star	150 or more including specific measures

*All point and certification requirements current as of this writing.

Mueller Construction Best Practices

(Excerpt)



MUELLER GREEN URBANISM

CONSTRUCTION BEST PRACTICES

CONSTRUCTION SITE RECYCLING

THE CHALLENGE

In 2003, nearly 540,000 tons of Construction, Demolition, and Landclearing (CD&L) debris were deposited in central Texas landfills, accounting for approximately 24% of Austin's municipal solid waste. In fact, for every square foot of construction, about 2.2 pounds of waste is generated. By adopting best practices for construction site recycling and waste management supported by education, on-site training and tracking, more than 80% of total construction debris can be diverted from Austin-area landfills through reuse, recycle and salvage. Diverting waste from landfills conserves resources, extends regional landfill life, and can result in lower costs associated with waste management. Austin has been a leader in municipal solid waste recycling, and is one of more than 60 cities worldwide with a commitment to a Zero Waste Goal.

As part of Mueller's commitment to Green Urbanism, all commercial construction projects require certification by either the U.S. Green Building Council's LEED®-NC or Austin Energy Green Building Program's (AEGBP) Commercial Rating Tool – some projects may choose to pursue certification by both. Both LEED and AEGBP have credits associated with construction waste management. (see Appendix F)

REQUIREMENTS

- Write and implement a construction waste management plan.** (see Appendix A)
- Submit construction waste tracking documents to document compliance with the 50% diversion goal.** (see Appendix B)
- Recycle and/or salvage a minimum of 50% of non-hazardous construction debris, by weight.** Excavated soil and landclearing debris do not contribute to this goal. (see Appendix C-E)

CONSTRUCTION WASTE MANAGEMENT BEST PRACTICE STRATEGIES

To optimize waste reduction opportunities and diversion from landfills, a multi-pronged approach is recommended:

1. Minimize waste at the front end (See Appendix D)

- Design with standard material dimensions to reduce cut-offs.
- Purchase only the quantities needed on the job.
- Avoid materials that do not have local recycling markets or are difficult to recycle, such as PVC.
- Implement sensible materials handling and storage to prevent damage and contamination.
- Educate design team early on about waste minimization strategies.

2. Set up the job site for recycling

- Clearly label on-site containers for material recycling and store in an accessible location.
- Train construction personnel in the material sorting policy.
- Monitor bins periodically to prevent waste mixing as a result of crews or passersby throwing trash into the bins. Even small amounts of contamination can cause an entire roll-off of recyclables to be landfilled, adding unnecessary expense and reducing the diversion rate. Some materials may require watertight storage or locks to prevent damage or tampering.
- Establish clear lines of communication with haulers through on-site training and signage clear instructional signage (in English and Spanish) on how and what to separate. Properly trained haulers will save time and money by reducing contamination.
- Discuss the status of waste management implementation during weekly construction meetings, and track diversion goals throughout construction. Ensuring correct containers are on-site during each phase of construction is critical to successful material separation, while staging appropriate containers during the various construction phases keeps costs down.

3. Follow one of the two basic approaches to segregate recyclables from wastes

- Provide separate containers for each recyclable material (e.g., clean wood, rubble, drywall, mixed metals).
- Provide a container for co-mingled recyclables, such as drywall, clean wood, and metals, which then get separated at an off-site location for recycling or salvage. This procedure simplifies the on-site coordination and may reduce costs.

Discuss these options with your recycling service provider, consultant, or waste hauler to decide which approach will maximize landfill diversion – some projects find that a combined approach is most successful.

4. Maximize reuse, salvage, and/or recycle opportunities through the construction process

- Identify markets for the materials likely to be generated in the course of construction.
- Provide appropriate collection containers to facilitate on-site segregation and minimize contamination.
- Educate the construction team in proper waste management practices.
- Track and document CD&L management during active construction.

FURTHER INFORMATION

U.S. Green Building Council & LEED, www.usgbc.org, 202/828-7422

Austin Energy Green Building Program Rating Tool - Your AEGBP Project Representative, www.austinenergy.com. Residential - 974-7827. Commercial - 505-3663.

APPENDIX A

CONSTRUCTION WASTE MANAGEMENT PLAN

Whether using LEED or AEGBP, a Construction Waste Management Plan is required to establish project goals and to identify the strategies that will be employed to achieve the goals. Every project should consult with local waste haulers and recyclers to verify their ability to implement the Plan. For large projects, a Division 1 Construction Waste Management section, 01505 should be included in the project specifications. See sample plan below.

The Construction Waste Management Plan can be written by the General Contractor, Sustainability or Waste Management Consultant, or Architect, and should include the following elements:

- Establish Waste Reduction Goal** achieved through reuse, salvage, recycle – a 50% goal is required.
- Estimate total quantities of recyclables and waste anticipated for the project**, the recycler(s)/landfill where the wastes will be disposed, and the revenue/tipping fee.
- Identify materials to be generated during construction** (e.g., landclearing, concrete and masonry, wood/lumber, drywall, paint, plumbing pipe cut-offs, carpet, metals, electrical cable/wire cut-offs, ceiling tile, insulation, solvents/sealants/adhesives, beverage containers, packaging materials such as cardboard, plastics, foam, and general trash).
- Target specific materials and strategies for landfill diversion through reuse, salvage, recycle** (e.g., clean wood, clean sawdust; concrete and masonry; mixed metals; drywall; carpet; cardboard; paint and joint compound buckets and boxes; plastic, glass and metal beverage containers).
- Describe placement of recycling containers and specific materials handling procedures** (e.g., cardboard in covered container; beverage containers in 55-gallon drums with holes drilled into lids).
- Schedule phasing of construction containers to correlate with specific construction phases.**
- Identify the person responsible for managing and overseeing construction waste management.**
- Distribute copies of the Waste Management Plan** to the Job Site Foreman and each Subcontractor.
- Provide on-site training** of separation, handling, and recycling, salvage for each subcontractor crew that comes on-site.
- Ensure that all hazardous wastes are segregated, stored, and removed from the job site according to local regulations.**
- Indicate how materials will be transported from the job site to a recycler or landfill.**
- Schedule Construction Waste Management Updates** at the regular Job Site Progress Meetings.
- Document construction waste management using a spreadsheet** that includes a Summary of Materials Recycled, Diverted and Landfilled, and retains manifests, weight tickets, receipts, and/or invoices.

SAMPLE C&D WASTE MANAGEMENT PLAN

This is a Sample Waste Management Plan – use as a guide when developing your own plan.

COMPANY: Austin Best Construction
PROJECT: Mueller Office Building, Austin, TX
DESIGNATED RECYCLING COORDINATOR: John Doe

Waste Management Goals

- This project will recycle or salvage for reuse a minimum 50%, by weight, of the non-hazardous waste generated on site, with a goal of diverting 75%.

Waste Reduction Measures

- Reusable metal forms will be used for concrete structural elements.
- Each major vendor will be sent a letter requesting their cooperation to minimize on-site waste generation through minimal or take-back packaging, and just-in-time delivery. The Recycling Coordinator will provide a draft letter to each Prime Contractor for their use.
- Excavated rock will be crushed and used as fill on site.

Communication Plan

- Waste prevention and recycling activities will be discussed at each job meeting.
- As each new subcontractor comes on-site, the Recycling Coordinator will present him/her with a copy of the Waste Management Plan and show them the recycling areas.
- The subcontractor will be expected to make sure all their crews comply with the Waste Management Plan.
- All recycling containers will be clearly labeled in English and Spanish, with acceptable/unacceptable materials posted. Each sign will have a graphic illustrating the materials to be recycled.
- Lists of acceptable/unacceptable materials will be posted throughout the site.
- If methods or container locations change during the course of the project, the Recycling Coordinator will notify each contractor and subcontractor in writing.

Expected Project Waste, Disposal, and Handling

The following charts identify waste materials expected on this project, their disposal method, and handling procedures. Documentation to be provided:

Demolition Phase

Material	Quantity	Recycle/Disposal Method	Handling Procedure
Asphalt from parking lot	100 tons	Ground on-site, reused as fill	
Wood Framing	6 tons	Recycled - Wood Recycling Northwest	Separate "clean wood" in clean wood bin
Remaining Materials	8 tons	Landfill - Sound Disposal	Dispose in "trash" dumpster

Construction Phase

Material	Quantity	Recycle/Disposal Method	Handling Procedure
Concrete	2 tons	Recycle – 973 Pit	Deposit in concrete bin. Rebar OK
Forming Boards		Reuse as many times as possible then recycle. Stack next to supply of new form boards for reuse.	Recycle clean unusable forms in wood recycling bin
Scrap Metal	5 tons	Recycle - Seattle Metals	Deposit all metals in metal dumpster
Drywall	10 tons	Subcontractor will recycle and submit reports to recycling coordinator	Either provide container or collect in vehicle for recycling
All other wastes	14 tons	Landfill - Sound Disposal	Dispose of in "trash" dumpster

SUMMARY - EXPECTED C&D WASTE AND DIVERSION RATE

Total C&D Waste	x Tons	Total waste expected to be generated in demo and construction.
Total Recycled +	y Tons	Materials to be diverted from landfills, by salvage, reuse and recycling.
Diversion Rate	y/x %	Percentage of project's waste expected to be diverted from landfills.

This plan has been prepared with the knowledge and cooperation of the demolition subcontractor, DDD Demo, and the other Prime contractors on the project: EEE Electrical Contracting; MMM Mechanical; and, PPP Plumbing, Ltd.

SIGNED: _____, Very Best Construction Company January 1, 2006

APPENDIX B

CONSTRUCTION WASTE MANAGEMENT DOCUMENTATION

Documenting construction waste management activities is required to achieve either the LEED-NC or AEGBP points. As a general approach, use a spreadsheet to track performance during construction (see sample form, below). For each material recycled, diverted, or landfilled, include the amount (choose tons or cubic yards), the date removed from the job site, the receiving party, the transportation cost, the amount of any money paid or received, and the net total cost or savings of recycling or diverting each material.

- Attach all manifests, weight tickets, receipts, and/or invoices to the Summary** for documentation.

- Tracking recycling and landfilling activities by weight is required by AEGBP. For projects using LEED-NC, calculations must use a consistent metric (weight or volume).**

The following table provides a basis to convert cubic yards to pounds for selected materials.

Material	Density (lbs/CY)
Mixed Waste	350
Wood	300
Cardboard	100
Gypsum Wallboard	500
Rubble	1400

APPENDIX C

CENTRAL TEXAS RECYCLING BUSINESSES

The following businesses provide recycling or salvage services for construction, demolition and landclearing debris. Contact them directly or coordinate materials handling through a Recycling Consultant.

Business Name & #	Concrete/Rubble & Masonry	Clean Wood & Sawdust	Drywall	Metals	Cardboard	Asphalt	Paints, Stains, Solvents	Other Materials and Information	Pickup Y/N	Container Size
973 Pit Materials 512/276-7575	X					X		Accepts concrete and masonry units, clean fill, rubble, and asphalt	N	
ACCO/BFI Recycling 512/385-7600					X			Accepts large quantities of baled cardboard on-site. Also recycles office paper	Y	Baled only
Austin Pipe & Metal 512/477-4640				X				Pays more per pound for separated metals than commingled, but accepts both.	N	
Austin Wood Recycling 512/259-7430								Accepts natural tree and brush waste, no processed materials	N	
City of Austin Hazardous Waste 512/243-1894							X	Accepts paints and solvents, lawn care chemicals, cleaning and automotive products See website for full list: http://www.ci.austin.tx.us/sws/hhwwhat.htm	N	
City of Austin Waste Diversion Ctr 512/243-1894				X				Accepts mixed metals and metal appliances	N	
Commercial Metals 512/442-2384				X				Pays more per pound for separated metals than commingled, but accepts both.	N	
Davey Tree 512/451-4986				X	X			Onsite tree trimming, tree removal, and mulching service	Y	
Ecology Action 512/322-0000				X	X			Accepts cardboard, mixed metals	N	
Habitat for Humanity ReStore 512/478-2165	X	X				X	X	Accepts uncured bags of concrete and mortar, usable bricks and blocks, lumber ≥ 6' in length, bundled asphalt shingles. Any quantity white latex paint, full gallons other paint – paint must not be more than 10 years old. Clean, large quantities of insulation.	N	
Texas Organic Products/Texas Disposal Systems 512/243-4100		X	X	X				Recycles untreated, unpainted scrap lumber and brush. Recycles metals, cans, glass, and batteries. Drywall and other materials go to landfill. Materials must be separated on site.	Y	14-40 Cu. yds

APPENDIX D

ON-SITE WASTE MINIMIZATION STRATEGIES AND SOURCES FOR DIVERSION

Concrete

- Use onsite for retaining walls, landscaping or fill.

Lumber

- Cover and store on level blocking to minimize warping, twisting and waste.
- Set aside lumber and plywood/OSB cut-offs that can be used later as fire blocking, spacers in header construction, temporary ramps, etc.

Drywall

- Large scraps can be set aside for use as filler pieces in areas such as closets.
- Reuse joint compound buckets for tool or material storage by clients or crews.

Masonry

- During construction, collect, stack and cover brick and other masonry materials to prevent soiling or loss.
- Clean concrete chunks, old brick, broken blocks, and other masonry rubble can be buried on-site during foundation back-filling.
- Salvage usable bricks, blocks, slate shingles, tile and other masonry materials from remodeling and construction. Store for future jobs or divert to salvage operations such as Habitat for Humanity ReStore, or donate to local schools or artists.

Metals

- During construction separate metals for recycling, including copper piping, wire and flashing; aluminum siding, flashing and guttering; iron and steel banding from bundles, nails and fasteners, galvanized flashing and roofing, and rebar; and lead chimney flashing.
- Scrap rebar can be saved, salvaged or resold to be used in small projects such as sidewalks, patios, driveway repair, etc.
- It is critical to keep lead out of landfills because it could leach into groundwater.

Insulation

- Install left-over insulation in interior wall cavities or on top of installed attic insulation if it cannot be used on another job.

Plastic and Vinyl

- Minimize waste of vinyl siding, flooring and countertop materials by ordering only quantity needed.
- Due to acute and long-term toxicity NEVER burn plastic or vinyl.

Paints, Stains, Solvents and Sealants

- Save unused portions for your next job or store for ongoing touch-up.

APPENDIX E

CONSTRUCTION RECYCLING & WASTE MANAGEMENT RESOURCES

For general recommendations for Waste Reduction, contact

- City of Austin Solid Waste Services Waste Reduction Assistance Program (WRAP)**
(512) 974-9043

WASTE MANAGEMENT CONSULTANTS

Consultants are available to design and implement effective waste management strategies tailored to your project. Many hauling companies may be unaware of all the recycling and salvaging options available. Experienced consultants will help you design a strategic waste management plan that will enable efficient separation and accurate material accounting systems. In addition to helping you find sources for your materials, consultants can help coordinate with hauling companies and may be available to assist in the documentation process.

- Discuss your Waste Management Plan with your LEED consultant and/or AEGBP Representative.

Triad Building Maintenance

2938 East 12th Street

Austin, TX 78702

(512) 385-1189

Contact: Adrian Neely, Owner

Construction and demolition waste consultation and management.

WASTE HAULERS

Most of these companies provide both container drop-off and pickup services and some provide same-day site pickup. Your waste hauler will find markets for waste materials and advise on separation requirements.

Action Disposal / Allied Waste / BFI

(512) 251-4810

(512) 247-5647

20, 30, 40-yard containers available, material separation on request.

Accurate

(512) 989-3229

10, 20, 30, 40-yard rolloff containers available.

Central Texas Refuse

(512) 243-2833

20, 30, 40-yard rolloff containers available, material separation on request.

APPENDIX F

GREEN BUILDING RATING SYSTEMS

FOR PROJECTS USING LEED-NC 2.2

Materials & Resources Credit 2 – Construction Waste Management – 2 points Optional

Requirements:

- Develop and implement a waste management plan, quantifying material diversion goals. Recycle and/or salvage at least 50% of construction, demolition and land clearing waste. Calculations can be done by weight or volume, but must be consistent throughout. (An additional point is earned by diverting 75% or more.)

Submittals:

- Provide the LEED Letter Template, signed by the architect, owner, or other responsible party, tabulating the total waste material, quantities diverted and the means by which diverted, and declaring that the credit requirements have been met.

FOR PROJECTS USING AEGBP COMMERCIAL RATING TOOL

Basic Requirement

Requirements:

- Recycle and/or salvage at least 50% (by weight) of construction, demolition, and land clearing waste. (An optional point can be earned by achieving 75% diversion.)

Submittals:

- Provide specifications for Construction Waste Management in the Contract Documents.
Provide a Construction Waste Management Plan and copies of weight tickets for recycling, salvage and landfill with calculations demonstrating percent (by weight) of construction waste diverted from landfills.

MUELLER GREEN URBANISM

CONSTRUCTION BEST PRACTICES

CONSTRUCTION SITE NOISE CONTROL

THE CHALLENGE

Each year, an estimated 500,000 to 750,000 construction workers in the U.S. are continually exposed to potentially hazardous levels of noise. Excessive noise not only damages the hearing ability of exposed individuals but also has undesirable psychological effects that can lead to lower productivity and unsafe working conditions. The greatest contributors to construction noise include heavy equipment such as backhoes, cranes, dump trucks, and other vehicles, as well as pneumatic power tools such as air compressors and generators.

REQUIREMENTS

- Develop and Implement a Construction Noise Control Plan.** (see attached) Adopting a noise control plan on the construction site is essential for implementing all site noise control strategies. Such a plan is often integrated with other health and safety issues.
- Comply with Mueller Noise Curfews:** 7:00am – 7:00pm on weekdays and 9:00am – 7:00pm on weekends.
- Do not exceed 85dBA noise threshold levels,** as measured from the nearest receiving property line, but no less than 50 feet from the source.
- Comply with Equipment Idling Rules:** Do not exceed 5 minutes idle time. This conserves fuel, reduces maintenance costs and improves air quality on the construction site.

CONSTRUCTION SITE NOISE CONTROL STRATEGIES

1. Reduce Noise Emissions

Source control of noise on construction sites is the most effective long-term strategy to improve the safety and health of site workers and visitors.

- Select newer, quieter equipment for purchase and rental.**
In general, new equipment produces lower noise emissions than older equipment. Some new equipment is specially designed for quieter operation (e.g., silenced compressors) and in some cases offers superior performance. Whether purchasing or renting equipment, specify low noise emission design, or the quietest equipment available. Most manufacturers can provide specifications with noise emission information.
- Retrofit and maintain equipment.**
For existing equipment, install mufflers and other sound abatement materials. Also, it is important to maintain equipment to reduce unnecessary noise emissions. Frequent replacement of bearings, lubrication of parts, and sharpening saw blades, are all simple ways to reduce unnecessary noise.
- Isolate noisy construction activities.**
With foresight and planning, it is possible to limit some noise-generating construction activities to certain periods of time or to relegate these activities to unoccupied areas of the site.

2. Block and Absorb Noise Emissions

For noise generation that cannot be avoided, it is possible to block and absorb noise emissions.

- For indoor work, close off portions of the building where loud work is commencing.**
This strategy protects the rest of the site from the noise emissions.
- Employ temporary barriers.**
Set up portable barriers and enclosures to contain noise emissions from static equipment such as generators and concrete pumps as well as noisy construction activities.
- Retrofit equipment to protect workers.**
Retrofit heavy equipment with cabs and insulation to reduce noise exposure to equipment operators.

FURTHER INFORMATION

Montgomery County, MD Department of Environmental Protection Noise Control Ordinance
Noise Pollution Clearinghouse, www.nonoise.org

Occupational Health and Safety Administration (OSHA) Noise Website
www.osha.gov/SLTC/constructionnoise/

MUELLER GREEN URBANISM

CONSTRUCTION BEST PRACTICES

NOISE CONTROL PLAN

CONSTRUCTION WORK

A Noise Control Plan is required for all construction activities in which decibel limits will exceed 75dBA.

DATE _____

NAME OF COMPANY _____

CONTACT PERSON _____ TELEPHONE NUMBER _____

E-MAIL _____

BUSINESS ADDRESS _____

ESTIMATED DURATION OF ACTIVITY: DATES _____ TIMES _____

I, _____, certify that I will comply with the Mueller Noise Control Requirements, and not exceed the 85dBA threshold for construction activities under my supervision.

Company Representative

Date

Catellus

Date



NOISE CONTROL PLAN

CONTINUED

PLEASE PROVIDE THE FOLLOWING INFORMATION:

1. Comply with federal, state, and local noise regulations.

Physical damage to ears, such as rupture of the eardrum, occurs at about 150 decibels (dB) but prolonged exposure at noise levels of 85 dB and above can cause inner ear trauma and result in early hearing loss. Most construction sites exceed this lower threshold on a regular basis.

2. Describe equipment maintenance procedures to ensure proper performance.

3. Describe use of sound blocking or reduction measures, as appropriate, and provide ear protection to all site workers and visitors.

The most common strategy for hearing protection is to issue earplugs and other hearing protection devices (HPDs) such as muffs or semiaurals to all site workers. Also consider noise cancellation and communication HPDs. While these units are expensive, they allow for improved communication while protecting the hearing of site workers and visitors.

4. Provide a layout of the site, locating the sound blocking/reducing measures and noise hazard signage with relation to source of noise.

An easy and effective way to educate site workers and visitors about noise hazards is to post signs designating particular areas or the construction site as a whole as a noisy area. This alerts site visitors to the dangers to their hearing and reminds them to use hearing protection.

MUELLER GREEN URBANISM

CONSTRUCTION BEST PRACTICES

CONSTRUCTION SITE AIR EMISSIONS

THE CHALLENGE

Protecting Air Quality is one of Mueller's Green Urbanism signature themes. Being mindful of opportunities to reduce harmful emissions associated with construction practices is an essential element of Mueller's environmental and community stewardship. Left unchecked, construction site activities can harm air quality, affect worker health and safety, and create unintended health care costs and consequences for the local community. Diesel exhaust is a large source of Nitrogen Oxides (NOx). Regionally, construction-related NOx emissions are increasing and represent more than 20% (approximately 27.50 tons per day) of the total. When NOx emissions are combined with gas vapors, solvents and other gases known as Volatile Organic Compounds (VOCs) they form ground-level ozone in the presence of sunlight. An Air Pollution Reduction Plan has been developed for our region to help reduce ozone levels; it includes some of the recommendations found below. In addition, exposure to particulate matter, such as dust, can cause lung damage, and aggravate asthma, bronchitis, and emphysema.

REQUIREMENTS

- Limit engine idling time to five minutes for construction trucks and equipment.** This will result in cleaner air, lower fuel costs, and a quieter jobsite. *Note: Ignition systems on newer equipment allow for more frequent turning on and off of the engines than for older equipment. Also, newer equipment has lower emissions at a "cold start," and therefore does not require excessive warming up.*

- Implement a traffic flow plan designed to reduce interference from construction activities and non-construction vehicles.** This might include scheduling some activities for off-peak hours, creating dedicated routes for trucks that are maintained to prevent dust emissions, scheduling construction activities to avoid conflicts, and providing flag persons to direct traffic. Such efforts can also make the construction process more efficient by reducing undesirable traffic congestion.

- Purchase and Rent Low-Emissions Equipment.** When purchasing, renting or contracting equipment, specify equipment that complies with Tier 2 certification or higher. This applies to equipment manufactured from 2001 to 2006. More stringent Tier 3 standards will be phased in from 2006 to 2008. (see TERP funding on page 4)

- Establish a maintenance log to track regular maintenance of construction vehicles and equipment.** This should address fuel use, air emissions, tire pressure and noise to help ensure efficient and environmentally sound operations. For example, vehicles with visible smoke from exhaust for 10 seconds or more at idle or under load may require maintenance.

- When available, purchase or contract cleaner burning diesel fuel.** When petroleum diesel is burned in construction equipment unhealthy quantities of Nitrogen Oxides (NOx) and Particulate Matter (PM) can be emitted. Ultra Low Sulfur Diesel (ULSD) will be required nationwide by October of 2006. This fuel will not have NOx reducing qualities unless these qualities are requested (see below). The major regional fuel supplier will make Texas Low Emission Diesel (TxLED) available through their pipeline at a yet unknown date in 2007.
 - Ask your fuel supplier to add one of the Texas Commission on Environmental Quality (TCEQ) approved diesel fuel additives that will give petroleum diesel low emission qualities.** NOx emissions can be reduced by as much as 6%. The approved additives are: Oryxe, Lubrisol, Bio Friendly, and Viscon.

 - Contract for ULSD. Ask your fuel supplier to contact with Valero Refining for ULSD, which has other low emission diesel properties that reduce NOx emissions by up to 6%.** Particulate Matter (PM) is also greatly reduced with this fuel. Valero is currently the only supplier of ULSD with TxLED properties in the region.

 - Consider converting generator engines and other smaller engine applications to either Compressed Natural Gas (CNG) or Propane.** Some larger engines can also be converted, but it is better to buy Original Equipment Manufacturer (OEM) Alternative Fueled Vehicles when available. Alternative Fuel Systems on Anchor Lane next to the Mueller Site (474-8755) has onsite CNG, Propane and Bio Diesel fueling stations.

- Use bio-diesel, derived from new or reprocessed vegetable oil, can be used in many diesel engines without requiring modification.** As of November, 2005 only pure bio-diesel is available in Austin. An additive is expected to be approved for use with bio-diesel that will give it NOx emission reduction benefits similar to the additives available for regular petroleum diesel. At that time blends of bio-diesel and petroleum diesel will again be available for sale and cost competitive to petroleum diesel.

- Contain dust emissions on the job site as prescribed by municipal codes and standards.** Dust from the construction site can be a carrier for soot and other toxic chemicals. Dust particles laced with these chemicals can travel many miles from the site and can negatively impact the community's health. Recommended practices include:
 - Water disturbed areas a minimum of two times per day or more as necessary. (Prevent wasting water by installing pervious paving or a swale to create a water catchment zone through the site.)

 - Limit equipment speeds on-site to 15 mph.

CONSTRUCTION AIR QUALITY BEST PRACTICE STRATEGIES

- Establish a Construction Environmental Management System (EMS) including air emissions reductions activities, coordinated with construction specification language.** For more information, see the Associated General Contractors' publication, *Constructing an Environmental Management System*, www.agc.org.

- Enlist an air quality officer to monitor construction activities to ensure that measures to protect air quality are implemented.**

- Retrofit diesel engines with diesel oxidation catalysts.** These have been in use for more than 20 years and can lower PM emissions by 20 to 30 percent, but do not affect NOx emissions. Boston's Big Dig project, 200 diesel engines were retrofitted resulting in a reduction of diesel particulate by 3 tons annually without causing any operational problems or maintenance costs. (see TERP funding on page 4)

- Install a Particulate Matter Monitor.** This is an inexpensive device that works much like fly paper and requires that the filter be changed out periodically.

- **Encourage the use of electric powered tools and compressors.** Electric tools avoid the immediate exposure of construction workers to diesel exhaust and are also quieter leading to a safer and healthier worksite.

- **Calculate Idling Fuel Savings.** Use the EPA Fuel Savings Calculator at www.engineoff.org.

GREEN BUILDING STANDARDS

Neither the LEED Rating System nor the AEGBP Rating Systems address the use of diesel-powered equipment during construction. However, the strategies addressed above could be applied to a LEED or AEGBP Innovation Credit along with other construction site environmental quality measures.

TEXAS EMISSION REDUCTION PROGRAM (TERP)

TERP provides grants to private sector companies to reduce ozone-forming emissions. Grants pay for incremental costs associated with upgrading existing diesel engines or replacing them with new ones. Certain performance criteria have to be met to qualify. For information on the program and grant funding rounds go to: www.tceq.state.tx.us/implementation/air/terp/erig.html.

FURTHER INFORMATION

EPA Clean Diesel, www.epa.gov/cleandiesel/

Austin Biofuels, www.austinbiofuels.com

Clean Air Force of Central Texas, www.cleanairforce.org

Associated General Contractors, www.agc.org

Live, Work, Play

Catellus specializes in mixed-use and infill developments and takes pride in creating places where people want to live, work and play. Partnering with only the best homebuilders and developers ensures homes for people from all walks of life from senior housing to luxury communities to workforce housing, Catellus develops communities that attract new residents.

In Mueller, Catellus is working with over 15 homebuilders and apartment and condo developers while building 5,900 homes (2,950 multi-family and 2,950 single-family). Using different developers allows Catellus to achieve varied architecture and product offerings. This means that no matter your style, Catellus developments offer you a place to call home.



Mueller, Austin, Texas

The Catellus Team

The Catellus team has decades of experience developing master-planned communities and sites with unique land challenges. The Catellus leadership is supported with local staff specializing in all facets of redevelopment with experience in projects nation-wide.



Ted Antenucci, as of March 2011, serves as President and Chief Executive Officer of Catellus Development Corporation. Until June 2011, Mr. Antenucci was also President and Chief Investment Officer of ProLogis as well as a member of ProLogis' Executive Committee and served on the Board of Directors for ProLogis European Properties (PEPR), a public fund trading on the Euronext stock exchange in Amsterdam. Before joining ProLogis in September 2005, Mr. Antenucci held the position of President of Catellus Commercial Development Corporation, with responsibility for all development, construction and acquisition activities. Prior to that, Mr. Antenucci served as Executive Vice President of Catellus Commercial Group, where he managed the company's industrial development activities throughout the western United States, including northern and southern California, Denver, Chicago, Dallas and Portland. His long tenure with Catellus began in 1995.

Mr. Antenucci has served on the Board of Directors of Hudson Pacific Properties, as well as on Hudson's Audit Committee since June 2010. He is on the Board of Trustees of the Children's Hospital Foundation, a position he has held since December 2010. Mr. Antenucci was also appointed to the Board of Directors of Iron Mountain, Inc. in June of 2011.

Mr. Antenucci graduated with a Bachelor of Arts degree in business economics from the University of California at Santa Barbara in 1986.



C. William (Bill) Hosler, Chief Financial Officer of Catellus Development Corporation, previously served as Chief Financial Officer of Catellus from 1999 to 2005. In that role, Mr. Hosler oversaw the compilation and maintenance of all corporate financial information, capital markets activities, tax, Sarbanes-Oxley and investor relations, as well as the implementation of all corporate financial strategies, including the company's conversion to a REIT and its merger with ProLogis.

Subsequent to the Catellus merger, Mr. Hosler worked for or consulted with a variety of real estate companies. Prior to Catellus, he was Chief Financial Officer of the Morgan Stanley Real Estate Funds and was a member of the Investment Committee. His responsibilities included finance and tax strategies internationally, investor relations/fund raising,

currency and interest rate management, and capital market strategy. In total, he spent nine years at Morgan Stanley in various structured finance and capital markets areas.

Mr. Hosler received his Bachelor of Science degree in chemical engineering from the University of Notre Dame and his master of business administration from the Colgate Darden Graduate School of Business at the University of Virginia.



Tom Marshall, Executive Vice President–Development of Catellus Development Corporation, is responsible for the acquisition, development and disposition of the company’s mixed-use assets throughout the western United States.

Previously, Mr. Marshall served as Managing Director of Catellus Development Group, where he was responsible for all mixed-use development activities during five years of ProLogis ownership.

Prior to the Catellus merger with ProLogis, Mr. Marshall was Executive Vice President of Catellus Urban Development Corp., where he was responsible for the acquisition, development and disposition of the company’s residential and urban mixed-use assets.

Mr. Marshall’s 23-year development career spans all aspects of residential and mixed-use development, including homebuilding, large-scale suburban land development, infill urban development and brownfield development. Mr. Marshall has extensive transaction, entitlement and project management experience.

Mr. Marshall received a bachelor of science degree in economics and system science in 1985 and a master’s degree in real estate and finance in 1989, both from the University of California at Los Angeles.



Steve Buster, Vice President of Development, joined Catellus in 2007, and is responsible for the day-to-day management of the company’s mixed-use development projects. Mr. Buster actively manages land planning, entitlement, community outreach, collaboration with public agencies, sale and lease negotiations with builders and end users, and allocation of development capital.

Mr. Buster directs several dynamic projects for Catellus including Alameda Landing, a 72-acre residential, retail and commercial development in Alameda, CA; Timnath Farms, a 489-acre residential and commercial development in Fort Collins, CO; Tracy Lammers, a 650-acre mixed-use project in Tracy, CA; and Airpark 599, a 500-acre mixed use development in San Joaquin County, CA.

Mr. Buster is a member of the International Council of Shopping Centers and is Chairman of the West

Alameda Transportation Demand Management Association. Mr. Buster is located in the Catellus Oakland office.

Mr. Buster received his MBA from the University of Chicago, Booth School of Business with an emphasis in finance and a Bachelor of Science from the University of Southern California, Marshall School of Business with an emphasis in finance.



Sean Whiskeman, Senior Vice President, directs all Pacific-Region leasing, marketing, and development activity for retail development projects, with an emphasis on activity in the Bay Area.

Mr. Whiskeman first joined Catellus in 2001, and worked in an executive role until its merger with ProLogis in 2005. He managed entitlements, leasing, design, contract negotiation, and development for two major centers in northern California: Pacific Commons in Fremont and Alameda Landing in Alameda. Mr. Whiskeman also maintained a leadership role in planning the regional retail center at Catellus'

Mueller project in Austin, Texas.

In 2005 Mr. Whiskeman joined Westrust Ventures, a leading shopping-center developer, owner, and operator in California and became their Managing Director of Leasing and Marketing. He led leasing activity and marketing campaigns including five major neighborhood, power/lifestyle, and mixed-use projects encompassing 1.6 million square feet including The Plant in San Jose and Nutree in Vacaville. Mr. Whiskeman rejoined Catellus in 2008 and works from the Oakland, California office.

Mr. Whiskeman holds a Bachelor of Science degree in regional development from the University of Arizona and is a current member of the International Council of Shopping Centers and the Urban Land Institute.



William (Bill) Kennedy has over 22 years of urban redevelopment and construction experience delivering diverse large portfolio commercial, industrial, mixed-use and public and private infrastructure projects.

Mr. Kennedy served as First Vice President at ProLogis/Catellus Development Group in the San Francisco Bay Area from 2000, where he headed development activities on three of the company's most prominent properties. Notable mixed use projects within the shoreline of the San Francisco Bay include the 840 acre Pacific Commons commercial and retail center in Fremont California, remediation and redevelopment of 146 acres at the former Alameda Naval Air Station into residential and

commercial districts and the 303 acre Mission Bay urban mixed use and biotechnology development in San Francisco. Prior to that, Mr. Kennedy spent 8 years in Australia working with private developers and as the National Manager for James Hardie Building Systems. His experience covers a wide range of site remediation and supporting infrastructure work, heavy highway & transportation, wharves & seawalls, storm water treatment facilities, parks, open spaces and urban infill projects.

Mr. Kennedy is a sustainable development practitioner, a LEED® BD+C Accredited Professional, a Certified Energy Auditor and California licensed General Contractor with A (engineering), B (General Building), C-46 (Solar) and HAZ (Hazardous substance removal) certifications. Mr. Kennedy received a BA in Business Administration with an emphasis in Construction Management from Washington State University..

Boris Dramov, FAIA, FAICP

ROMA Design Group

President

Boris Dramov is the President of ROMA Design Group and the individual most responsible for the current interdisciplinary practice that characterizes the firm. Trained as an architect and urban designer, Boris was educated at USC (where he was named “most distinguished alumnus”), Columbia University and Harvard Graduate School of Design (Loeb Fellow). Boris has received numerous honors and awards for his work, from the AIA, CNU, APA and ULI, and is well known for his passionate commitment to cities across the US.

In San Francisco, Boris has made a significant contribution to the transformation of the urban waterfront, which began with the planning and urban design for the South Beach residential community on underutilized industrial land and which continued through the planning and completion of numerous projects, including the civic plazas, parks, promenades and ferry terminals in the Ferry Building area.

He has also played an important and longstanding role in the planning and design of downtown Santa Monica, beginning with the design of the successful Third Street Promenade, the Transit-Oriented Streets, the Downtown Residential areas, and the Civic Center area, which is currently being redeveloped according to our plans.

He also played a key role as the lead urban designer in the redevelopment of the San Diego Ballpark area, which included the siting and site design concept for the Padres Ballpark, the configuration of the streets and the conceptual

plans for residential infill, and the extension of the long-planned Bay/Park link on a new Park Boulevard, from Balboa Park to the Bay.

He was also the Principal in Charge of the Mueller community in Austin, as well as the preparation of plans for Waller Creek and the Second Street retail corridor. Boris also was the lead urban designer in charge of large-scale community planning projects in the Moscow region, in Tianjin, China and in the Philippines as well as the redevelopment of the Vancouver (Coal Harbour) waterfront and the Auckland New Zealand America’s Cup Harbour.

Furthermore, he has undertaken numerous transit planning and design projects, including for Union City BART Intermodal Station (the station facilities, public spaces and adjacent development areas), the San Jose Transit Mall (original design and subsequent phases of improvement) and the design of numerous mixed use streets, including most recently, the redesign of Jefferson Street in San Francisco’s Fisherman’s Wharf for a bicycle and pedestrian oriented street and the development of plans to incorporate bicycles into Embarcadero for the San Francisco Bicycle Coalition.

He assisted the VTA in the development of transit-oriented design guidelines and also worked in the City of Seattle on urban design solutions for the undergrounding of the Alaskan Way Viaduct and the repair and replacement of the seawall.

Bonnie Fisher, FASLA, LEED AP

ROMA Design Group

Principal

Bonnie Fisher is a planner and landscape architect and a longtime Principal at ROMA Design Group, where she has contributed to most of the firm's portfolio of projects over the past 20 years. Her work has ranged in scale from large urban design and environmental planning projects to the implementation of public spaces that enrich the urban fabric, contribute to social equity and add to the livability of residential neighborhoods. Bonnie was the Landscape Principal for the design of the Martin Luther King Memorial, for which she was featured in the Wall Street Journal two years ago.

She worked on the planning and design of the parks, open space and recreational areas in Santa Monica and recently was involved in the design of the plazas and open spaces adjacent to the BART Intermodal Station in Union City as well as the preparation of the design concept plan for the Santa Cruz Wharf.

From a community planning point of view, Bonnie has been involved in planning the redevelopment of numerous military bases, including Treasure Island, where she was the key Principal responsible for preparation of the City's Reuse Plan, Alameda, El Toro (for non-aviation uses and conceptualization of The Great Park as well as CSU Fullerton) and She also played a key role in the planning and design of the Mueller community, in particular its parks and open spaces, including the greenways as well as Lake Park adjacent to the Town Center.

She is currently involved in the planning and design of the open spaces associated with the new infill development on the old Sherwin Williams paint factory site in Emeryville as well as the 8-acre Shoreline Park and streetscape for Brooklyn Basin in Oakland. She was educated in landscape architecture, environmental planning and urban design at UC Berkeley and Harvard Graduate School of Design.

Hans Baldauf, AIA LEED AP

BCV Architects

Principal

Hans Baldauf is a founding principal of BCV Architects. Mr. Baldauf has extensive experience with a variety of project types, including office buildings, mixed-use development, flagship stores, retail centers, specialty food shops, restaurants, wineries and multi-unit and single family residences.

Mr. Baldauf's long-standing interest in the public realm has led BCV to design mixed-use and retail environments in unique settings that enrich their surrounding communities, such as the marketplace and retail component of the rehabilitated San Francisco Ferry Building.

Mr. Baldauf has also led the design of retail locations that respond to the needs of increased urban density throughout the Bay Area, including the seaming of six separate parcels for Walnut

Creek's downtown pedestrian core and the development of a retail and civic hub for Treasure Island, as part of a comprehensive master plan for residential and community placemaking on the Bay. Currently, Mr. Baldauf is designing the mixed-use town center for Inglewood, California's Hollywood Park, a master-planned community on the 238-acre site of the famous Hollywood Park racetrack.

Mr. Baldauf received both his AB and March degrees from Yale University, and has taught architecture at Yale, University of Illinois at Chicago, and Notre Dame University, where he served as visiting faculty at their Rome Studies program. Mr. Baldauf currently serves as president of the board of directors at CUESA (The Center for Urban Education about Sustainable Agriculture), and is a past chairman of the Maybeck Foundation, where he helped lead the restoration campaign for the Palace of Fine Arts.

Gail Vittori, LEED Fellow

Center for Maximum Building Potential Systems
Co-Director

Gail Vittori, LEED Fellow, is Co-Director of the Center for Maximum Potential Building Systems, a non-profit design firm established in 1975 where she has worked since 1979. Ms. Vittori is the 2014 Chair of the Green Building Certification Institute Board of Directors and was the 2009 Chair of the U.S. Green Building Council's Board of Directors. In 2011, she was one of 34 green building professionals inducted into the inaugural class of LEED Fellows, recognizing exceptional contribution in green building achievement.

Since 1993, Ms. Vittori has coordinated The Center's Sustainable Design Program, including serving as a Sustainable Design Consultant for the Pentagon Renovation Program's Commissioning Team from 1999 to 2008; numerous projects in Austin including the redevelopment of the 709-acre former Austin airport including piloting LEED for Neighborhood Development; the New ZACH Theatre; the Austin Federal Courthouse with Mack Scogin Merrill Elam Architects; the first LEED-Platinum certified hospital in the world, Dell Children's Medical Center of Central Texas, and the first LEED for Healthcare-Platinum certified building in the world, Dell Children's W.H. and Elaine McCarty South Tower; the 1.1 million square foot mixed use Block 21 project, home to Austin City Limits Studio and venue, W Hotel and Residences, offices and retail.

Ms. Vittori continues to influence local projects at the forefront of sustainability and health. From 2012-2013 she served as a sustainability consultant on the 75-acre Seahom EcoDistrict

and currently serves as the LEED consultant for the new 500,000 square foot Seton Medical Center at The University of Texas. She is also providing strategic sustainability guidance for the Colony Park Sustainable Communities Initiative collaborating on the development of a master plan for more than 250 City-owned acres in East Austin, and for the Central Health Master Plan, set to re-purpose a 14-acre downtown property.

Since 2000, Ms. Vittori has been a catalyst for several national initiatives focused on greening the health care sector and advancing fundamental human health considerations in green building. Examples include convening the Green Guide for Health Care in 2002 and serving as its co-coordinator to date, and serving on the U.S. Green Building Council's Green Building and Human Health Working Group. In addition, Ms. Vittori was Founding Chair of the U.S. Green Building Council's LEED for Healthcare core committee. She is co-author, with Robin Guenther FAIA, of *Sustainable Healthcare Architecture*, 2nd edition, published by Wiley and Sons in 2013.

Ms. Vittori was a Loeb Fellow at Harvard University's Graduate School of Design from 1998-1999, and attended the University of Massachusetts at Amherst where she studied economics. She received the Presidential Award for Leadership in Federal Energy Management in 2002 recognizing her participation on the Pentagon Renovation Program. Ms. Vittori was featured as an Innovator: Building a Greener World in TIME Magazine and, with Pliny Fisk III, in Texas Monthly's 35th year anniversary issue in the article "35 People Who Will Shape Our Future."

Daniel Schaefer, P.E., LEED-AP

BKF Engineers

Principal

Daniel Schaefer, P.E., LEED-AP - Civil Principal in Charge - As a working BKF Principal, Dan Schaefer specializes in facilitating sustainable communities. His 25 years of joint public and private experience provide a unique perspective to complex master-planned projects.

By focusing his efforts during the programming and feasibility phases, Dan leverages his ability to weigh alternatives to arrive at solutions that maximize value and ensure viability. In working with clients to create a shared vision, Mr. Schaefer implements those ideals into practical solutions with clear intent.

As the Civil Engineer Principal in Charge and Engineer of Record, Mr. Schaefer will direct the civil engineering investigations,

infrastructure planning and capacity analyses, and implementation phasing strategies. His work as Engineer of Record includes master planned roadways and utility infrastructure, pump stations, water tanks, mass grading, remedial grading and groundwater abatement, as well as in-tract improvements for commercial, retail, and residential projects. He will lead the effort for designing all infrastructure both on-site and off-site Phase 1 improvements.

Mr. Schaefer's work on similar plans extends throughout the Bay Area including various roles with BRAC projects at Alameda Naval Air Station, Moffett Field, Treasure Island, Hunter's Point, and Mare Island. His master planning experience also includes public specific area plans San Jose, Menlo Park, Fremont, Newark, Hayward, Oakland, Richmond, South San Francisco, Napa, and Antioch.

Richard Rodgers, PE, GE

Langan Treadwell Rollo

Managing Principal

Mr. Rodgers has managed the Bay Area geotechnical group at Langan since 1992. In this capacity, he provides geotechnical design and construction review and serves as Principal-in-Charge on numerous private and public projects. His typical assignments include directing explorations of soil, rock, and groundwater conditions, design and evaluation of foundation systems, evaluation and development of liquefaction potential and development liquefaction mitigation techniques, seismic response analyses, and construction monitoring. He provides consultation and quality control review for many of the firm's geotechnical projects.

Mr. Rodgers is instrumental in a wide variety of projects, including office and high-rise buildings, heavy industrial and port installations, bridges, hospitals, and educational facilities. He has led geotechnical studies for high-technology laboratory facilities, high-rises, and commercial and residential developments located in a variety of soil conditions. Mr. Rodgers has been the Principal-in-Charge for numerous projects that require installation of infrastructure and construction of buildings for large high-tech campuses and mixed-use developments.

Selected Projects

- Alameda Landing, Alameda, CA
- Sierra Point Business Park, San Francisco, CA
- 1070 and 1080 San Mateo Avenue, South San Francisco, CA
- Spanish Peaks Resort, Big Sky, MT
- Tosco Refinery Terminal, San Francisco, CA
- Tosco Mooring Dolphin, Richmond, CA
- China Basin Wharf, San Francisco, CA
- Lemoore Naval Air Station, Kings County, CA
- Lemoore Naval Air Station Child Development Center, Kings County, CA
- Naval Post-Graduate School, Monterey, CA
- VISA Metro Center, Foster City, CA
- Sun Microsystems Campus, Menlo Park, CA
- Sun Microsystems Campus Worldwide Manufacturing Facility, Newark, CA
- Sun Microsystems, Santa Clara, CA
- 3Com, Santa Clara, CA
- Electronic Arts, Redwood City, CA
- Montague Expressway On-Ramp at Sun Microsystems, Santa Clara, CA (Dedicated to the City)
- Shoreline Drive at Electronic Arts, Redwood City, CA (Dedicated to the City)
- Roadway and Infrastructure Design, Bay Meadows Redevelopment, San Mateo, CA

Education

M.S., Civil Engineering, University of California, Berkeley

B.S., Civil Engineering, University of California, Berkeley

Professional Registration

Professional Engineer (PE) in CA, MT, NY, ND

Geotechnical Engineer (GE) in CA

Affiliations

American Society of Civil Engineers, 1975-present

Structural Engineers Association of Northern California, 1978-present

Haze Rodgers, PE, GE

Langan Treadwell Rollo
Senior Project Engineer

Mr. Rodgers has over twelve years of professional experience managing, developing, and performing geotechnical studies including explorations, analyses, and construction observation services for various projects throughout California including Sacramento, the San Francisco Bay Area, Imperial Valley, the Central Valley, North Coast/Oregon Border, and Northern Central California, and San Diego. His project experience includes 1) utility and infrastructure, 2) commercial, retail, and residential developments, 3) schools and hospitals, 4) bridges and roadways, 5) Brownfield re-developments, 6) offshore marine structures, 7) landslide stabilizations, 8) development and construction on landfills, and 9) expert witness, forensic studies, and litigation support.

Mr. Rodgers has performed engineering analyses to evaluate soil structure interaction of shoring systems due to earthquake ground motions, settlement behavior of soil under various loads (fills, earthquake, and building); bearing capacity for shallow and deep foundations, lateral pile capacity; slope stability, seismic hazards including liquefaction, lateral spreading, cyclic compression, settlement potential; ground improvement techniques, and hydrologic characteristics for Low Impact development (LID).

Selected Projects

- Alameda Landing, Alameda CA
- Google Charleston Campus, Mountain View, CA
- 5300 Acre West Jackson Highway Development Master Plan, Sacramento County, CA
- Brighton Pond, Sacramento, CA

- Sutters Landing Park, Sacramento, CA
- 11th and J Streets, Sacramento, CA
- Meridian Phase II, Sacramento, CA
- Northgate Boulevard, Sacramento, CA
- UC Davis Beer Wine and Food Laboratory, Davis, CA
- Alza Bridge, Mountain View, CA
- Coliseum Gardens Creek Crossings, Oakland, CA
- SR-125 South, Otay Mesa, CA
- Vista Village Phase 2 Proposed Bridge Structure, Vista, CA
- Santa Margarita River Bridge, Camp Pendleton, CA
- Agua Hedionda Bridge 230.6, Carlsbad, CA
- Carlsbad Municipal Golf Course, Carlsbad, CA
- Imperial Valley Mall Road Improvements for Private Development, El Centro, CA
- Harbor Park, Pittsburg, CA
- Tracy Gateway, Tracy, CA

Education

B.S., Civil Engineering, San Jose State University

M.S., Geotechnical Engineering, University of California, Berkeley

Professional Registration

Professional Engineer (PE) in CA

Geotechnical Engineer (GE) in CA Affiliations

American Society of Civil Engineers,
2002-present

Certifications

40 hour Health and Safety Training per 29 CFR 1910.120

8-hour Radiation Safety Training Course (CA)

Excavation Safety & Competent Person Training

Adult CPR/AED and Standard First Aid Training



Nicholas T. Loizeaux, P.G.

Iris Environmental

Principal

Mr. Loizeaux is a Principal at Iris Environmental. He has over twenty years of experience as a technical consultant in the fields of geology, hydrogeology, and contaminated site investigation and remediation. Most of this work has been conducted under Superfund, due diligence, regulatory compliance, litigation, or Brownfields Redevelopment. He received a B.A. in Geological Sciences from Williams College and M.S. in Geological Sciences from the University of Colorado. The following projects are representative of Mr. Loizeaux's experience:

- Provided technical leadership and overall project management for the 20-year build-out of the Mission Bay site in San Francisco, California
- University of California campus; an entertainment complex; high-density housing; public open space; retail and commercial uses; a hotel; a police and fire station; office; biotech; and research and development facilities.
- Provided technical leadership and overall project management for the site assessment, acquisition, and remediation of two Los Angeles Air Force Base sites for conversion to residential site use.
- Iris Environmental prepared Site Characterization and Human Health Risk Assessment reports for review and approval by the Los Angeles Regional Water Quality Control Board and Office of Emergency Health Hazard Assessment in Sacramento, California.
- Managed closure and decommissioning of a former paperboard recycling and manufacturing Mill in Antioch, California. Oversaw preparation of a site-wide asbestos and lead paint survey, the revision of the facility's Stormwater Pollution Prevention Plan (SWPPP), and revision of its Spill Prevention, Control, and Countermeasures Plan (SPCC).
- Managed investigations for 300-acre Brownfield redevelopment in South of Market area in San Francisco, CA in a region of historical commercial and industrial use demanded constant interaction with counsel, client, and local and state regulatory agencies.
- Reviewed hydrogeologic data from an EPA Superfund site in Arizona in preparation for litigation and expert testimony. An innovative and defensible hydrogeologic framework was proposed to refute allegations of contaminant migration to a public water supply well.
- Responsible for the installation of a 300-foot monitoring well downgradient from an EPA Superfund site in Orange County, CA. The well was installed using dual-wall percussion hammer drilling on the 17th fairway of an exclusive country club. The well, constructed of medical-grade stainless steel, was the deepest well in the area and was instrumental in pinpointing a clean aquifer zone.

Registrations and Certifications

Professional Geologist, State of California, 1998

Registered Geologist, State of Washington, 2002

40-Hour Hazardous Waste Operations/Emergency Response

8-Hour Annual Refresher - Hazardous Waste Operations/Emergency Response

Adrienne LaPierre

Iris Environmental

Principal and President

Ms. LaPierre is a Principal and the President of Iris Environmental. Ms. LaPierre has over twenty-five years of experience in environmental consulting, with emphasis on toxicology and human health risk assessment. Ms. LaPierre is the Principal in charge of all risk assessment, risk management and risk communication at Iris Environmental. She has managed over 20 multipathway risk assessments for petroleum release sites, Superfund sites, RCRA facilities, town gas sites and various types of industrial properties. She has extensive experience in performing critical evaluations of the toxicological literature, defining dose-response relationships, establishing exposure limits, and evaluating potential causal associations between chemical exposures and documented adverse health effects. Ms. LaPierre has conducted more than 50 risk assessments involving the estimation of chemical exposure to consumer products or food. Many of these evaluations have been performed in support of assessments of compliance with California's Proposition 65.

Ms. LaPierre's extensive experience in California includes providing strategic risk-based guidance to numerous industrial clients during the

investigation, remediation, and closure stages of projects, and successfully negotiating cost-effective risk-based closure strategies with California Environmental Protection Agency's Department of Toxic Substances Control (DTSC), and the Regional Water Quality Control Boards. Ms. LaPierre brings exceptional risk communications skills to all projects, as much of her risk assessment experience has required leading community meetings to explain complex technical health risk issues to various public audiences and stakeholders. Ms. LaPierre is on the forefront of various evolving technical health risk assessment issues, and is brought in to many divisive projects to help disparate parties find common ground in solving complex technical environmental problems.

Ms. LaPierre received a B.S in Environmental Toxicology from the University of California at Davis and M.S. of Environmental Health Sciences from Harvard School of Public Health.

Advisory Positions

Active member of California's Brownfield Redevelopment Advisory Group (BRAG).

Active advisor to the Richmond Community Advisory Group (CAG). Work has involved advising the CAG and the Mayor of Richmond, on various local toxic issues that impact the community

Margo N. Bradish

Cox Castle & Nicholson

Partner

Whether it is for a developer, corporate client, local government, or non-profit organization, Margo's extensive land use experience allows her to strategize the development and entitlement process, secure development approvals, and negotiate entitlements-related contracts for her clients. During her over 20 years of practice, she has assisted clients in securing approvals for transit-oriented and urban infill developments, urban and suburban office and industrial buildings, residential and mixed use projects, shopping centers, senior housing, military base reuse projects, and an array of other projects. Margo takes a strategic approach to entitlement matters, counseling clients on both the legal requirements and the options for developing political support, neutralizing opposition, and minimizing the risk of challenge.

Margo advises her clients with respect to a wide variety of planning, zoning, and development laws, including general and specific plans, zoning compliance and amendments, development agreements, compliance with the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA), global warming and climate change regulations, historic resources, subdivisions, use permits, fees, exactions and conditions, density bonuses, and infrastructure finance. Margo also defends administrative and judicial challenges to land use entitlements.

In her practice, Margo advises clients on the land use aspects of acquisitions and dispositions. Margo has extensive experience advising both

buyers and sellers in real estate transactions that are contingent on the receipt of land use entitlements. Margo also conducts land use due diligence for real estate acquisitions and dispositions and portfolio transactions.

Awards and Affiliations

- Northern California Super Lawyers, 2012 - 2014
- Urban Land Institute (ULI), San Francisco District Council Executive Committee; Former
- Co-Chair, Urban Plan Committee
- San Francisco Planning and Urban Research, Advisory Council; Former Member, Board of Directors; Former Chair, San Francisco CEQA Reform Task Force; Former Co-Chair, SPUR-Heritage Joint Task Force on Historic Preservation
- Lambda Alpha International, Golden Gate Chapter, Former Member, Board of Directors; Former Co-Chair, Programs Committee
- Juror, Cal-Stanford Golden Shovel Real Estate Challenge, 2007-2009; Jury Chair, 2009
- Bar Association of San Francisco

Education

J.D., University of California, Berkeley School of Law (Boalt Hall), 1993

A.B., Brown University, 1990, magna cum laude, phi beta kappa

Bar and Court Admissions

State Bar of California

State Bar of Colorado

Scott Cuyler

Square Peg

Principal | Creative Director

Scott co-founded Square Peg Design in 1996 and is the firm's Creative Director. An award-winning designer in the practice of environmental graphics for over

30 years, Scott orchestrates the firm's design for environmental graphic, branding and wayfinding solutions for our clients' high profile projects locally, nationally and globally including:

- Armani Hotel at the Burj Khalifa | Dubai, UAE
- Sofitel Downtown Dubai | Dubai, UAE
- The Address Hotel, Dubai Mall | Dubai, UAE
- Ritz Carlton | Bali, Indonesia
- Westin Bonaventure | Los Angeles, California
- Carmel Valley Ranch | Carmel, California
- Salwa Resort | Salwa, Qatar
- Disney's Art of Animation Resort | Disney World, Orlando, Florida
- Disney's POP Century Resort | Disney World, Orlando, Florida
- RiverCamps | Panama City Beach, Florida
- MGM Grand Casino Resort | Ho Tram, Vietnam
- Venetian Macau Hotel & Casino | Macau
- Quechan Casino Resort | Flagstaff, Arizona
- The Dubai Mall | Dubai, UAE
- Downtown Dubai Public Realm | Dubai, UAE
- Msheireb Public Realm | Doha, Qatar
- Asia Square Towers | Marina Bay, Singapore
- Georgia Institute of Technology Wayfinding Master Plan | Atlanta, Georgia
- University of California, Merced Campus Wayfinding Master Plan | California
- South Coast Plaza | Costa Mesa, California
- MetroWalk | Taipei, Taiwan

Prior to co-founding Square Peg Design, Scott was an Associate at Sussman/Prezja (Los Angeles, CA) directing their environmental graphics and signing design projects including:

- Culver City Streetscape | Culver City, California
- The Citadel mixed-use project | Los Angeles, California
- New Jersey Performing Arts Center | Newark, New Jersey
- Horton Plaza | San Diego, California

Associations and Awards

SEGD: Society for Environmental Graphic Design

The Dubai Mall Ring Feature: SEGD 2009 | ADC 2008 | AIA 2009

YAHOO Corporate Headquarters

Walt Disney World Roadway Signing System-Orlando

The Citadel-Los Angeles

Denver Center for the Performing Arts

Apple Computer Research & Development Campus

Education

BFA in Graphic Arts | California College of Arts and Crafts | Oakland, California Mark Boud



Mark Boud

Real Estate Economics

Principal and Owner

Mark Robbins Boud is a graduate of Brigham Young University. He holds degrees in Economics and English Literature. Since graduation in 1985, Mr. Boud has been heavily involved in the analysis of commercial and residential real estate markets throughout the United States. His modeled forecasts and analytics are trusted by major builders, land developers, capital groups and financial institutions. He is quoted in the Wall Street Journal, USA Today, Forbes and other major newspapers, magazines and industry publications. Mr. Boud is a popular public speaker and industry panelist, and is actively involved in many building industry trade organizations.

Mr. Boud formally organized Real Estate Economics in 1995. The goal with this company is to promote the intelligent and successful development of real estate throughout the United States by an effective understanding and forecast of the economic cycle. Some clients include Standard Pacific Corporation, Bank of America, Lennar Corporation, Shea Homes, Cityview, Partners Bank, Newland Communities, Rio Tinto, Meritage Homes, Starwood, Alexander Baldwin, Queen Lili'uokalani Trust, Sunbelt Holdings and The Irvine Company.

Key consultants on Mr. Boud's team include John Mulville (Vice President of Consulting) and Gail Lottie (Chief Operating Officer), who combine for over 40 years of experience in commercial, residential and age qualified market research. Real Estate Economics' consultants are supported by a team of statisticians, research analysts,

programmers and administrative employees.

Most recently, Mr. Boud and his team have completed market, feasibility and fiscal impact studies, asset valuation reports and economic/market reports for commercial and housing developments for The Queen Lili'uokalani Trust on the Big Island (Hawaii), Rio Tinto at Daybreak (Salt Lake City, UT), A&B Properties on Oahu and Maui, Newland Communities in Washington, Atlanta and the Carolinas, Lennar Communities in Anaheim and Irvine, DMB in Arizona and the California Bay Area, and Standard Pacific Homes in California and Florida.

Mr. Boud's memberships include; the Urban Land Institute, the Building Industry Association, the Sales and Marketing Council, the Southern California Real Estate Research Council, and the Northern California Real Estate Research Council. Mr. Boud has guest-lectured at Cornell University, Arizona State University, University of Southern California, and Brigham Young University. Mr. Boud is also a founding board member of the Roger C. Hobbs Institute for Real Estate, Law and Environmental Studies at Chapman University in Orange County, California.