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Research & Strategic Analysis

PRE-CHARRETTE MEMORANDUM

DATE: June 12, 2000

PROPERTY: 450-Acre Study Area
City of Hercules
Contra Costa County, California

Tables 1 through 8 summarize the depth and breadth of the potential market position for new residential construction within the City of Hercules, Contra Costa County, California. The Appendix Tables detail the migration and target market data covering the appropriate draw area(s) for the City.

CONCLUSIONS AND RECOMMENDATIONS

This study identifies the market potential for new residential construction, to be leased or sold within the 450-acre Study Area, straddling Interstate 80 in the City of Hercules, Contra Costa County, California.

The depth and breadth of the potential market have been determined using Zimmerman/Volk Associates' proprietary target market methodology. In contrast to classical supply/demand analysis—which is based on supply-side dynamics and baseline demographic projections—target market analysis establishes the optimum market position derived from the housing preferences and lifestyle characteristics of households in the draw area within the framework of the local housing market context.

The target market methodology is particularly effective in defining housing potential because it encompasses not only basic demographic characteristics, such as income qualification and age, but also less-frequently analyzed attributes such as mobility rates, lifestyle patterns and compatibility issues.

The extent and characteristics of the potential market for new housing units in the Study Area were therefore determined through detailed analysis of households currently living within the appropriate draw areas. These draw areas were derived through migration and mobility analyses, incorporating information obtained from real estate brokers, sales persons, local officials and other knowledgeable sources, and from Zimmerman/Volk Associates' field investigation.

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A significant market exists for new residential construction within traditional neighborhood developments to be located in the Hercules Study Area; the optimum market position is outlined below. The optimum market position has been based on market conditions as of the end of the first quarter of this year (as outlined in the market information provided by Anthony Hurt & Associates). Because of the recent extreme volatility of the Bay Area residential marketplace, the optimum market position should be regarded as a moving target, and periodically re-evaluated. The proposed range of new housing units, constructed within traditional neighborhoods, will increase the residential options for households currently living in Hercules as well as for those moving from elsewhere within the Bay Area.

The proposed rent and price levels place the recommended residential units within the current leasing and purchasing capabilities of target market households and establish an optimum initial market position for residential development within the Hercules Study Area. Anecdotal data and analysis of new traditional neighborhood developments nationally suggest that, once a neighborhood is established, appreciation of remaining dwelling units—manifest as either rising values or escalating absorption of those units—should occur at a higher rate than in typical projects or subdivisions outside the city.

The optimum market position for the Study Area has been developed based on a variety of factors, including but not limited to:

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- The plan to develop individual sites according to traditional neighborhood principles;
 - The attractive topography and view potential of the Study Area; the proximity to the San Pablo Bay, the North Shore Business Park, City Hall; the direct access to Interstate 80 and the John Muir Freeway (Route 4); and the potentially advantageous physical location of the City within Contra Costa County and the Bay Area;
 - The proposals to construct significant associated commercial/office space and amenities within the Study Area;
 - The new unit purchase and rental propensities of draw area households; and
 - The residential context in the Northern Bay Area.

Draw area household analysis has established that, in the year 2000, more than 3,600 households have the potential to purchase or rent a range of new market-rate housing units within the City of Hercules. (See METHODOLOGY *below and* Table 1.)

Potential Market for New Housing Units
Study Area
City of Hercules, Contra Costa County, California

Households with potential to move within/to Contra Costa County:	47,470	100.0%
Potential market for new housing units in the City of Hercules:	3,610	7.6%

The optimum residential mix is, therefore, the distribution of the range of housing types according to the new unit purchase and rental propensities of those 3,600 draw area households (*see also* Table 1):

Optimum Residential Mix
Study Area
City of Hercules, Contra Costa County, California

HOUSING TYPE	NUMBER OF HOUSEHOLDS	PERCENT OF TOTAL
Multi-family for-rent	950	26.3%
Multi-family for-sale	360	10.0%
Single-family attached for-sale	350	9.7%
Low-range single-family detached	550	15.2%
Mid-range single-family detached	790	21.9%
High-range single-family detached	<u>610</u>	<u>16.9%</u>
Total	3,610	100.0%

The residential mix for traditional neighborhoods typically includes the full range of housing types, as follows:

- Multi-family for-rent (apartments over retail/commercial/office space or in loft, courtyard or mansion buildings);
- Multi-family for-sale (condominium-ownership lofts or flats in loft, courtyard or mansion buildings);
- Single-family attached for-sale (townhouses and duplexes, including live-work);
- Low-range houses single-family detached (bungalow courts and village houses);
- Mid-range houses single-family detached (walking court and neighborhood houses); and
- High-range houses single-family detached (close houses and mansions).

The household composition of the potential market reflects the following percentages (*see also* Tables 2 through 8):

**Potential Market For New Housing Units
By Household Type
Study Area
City of Hercules, Contra Costa County, California**

HOUSEHOLD TYPE	PERCENT
Empty-nesters and retirees	31%
Families	41%
Younger Singles & Couples	<u>28%</u>
Total	100%

A mix of younger singles and couples (*Fast-Track Professionals, Suburban Strivers, and The VIPs*, among others—well-to-do professionals and dot-com entrepreneurs from Oakland, San Francisco and the southern Bay Area) and newly-arrived families (primarily *Unibox Transferees*) comprise the primary market for higher density residential development in Hercules: rental apartments, which are currently in short supply in the city; for-sale apartments; and townhouses.

The potential purchasers of detached houses are among the most affluent households in the country, including empty nesters—*Nouveau Money* and *Affluent Empty Nesters*—and older families: *Cosmopolitan Families, Full-Nest Suburbanites, and Landed Gentry*.

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Based on the characteristics of the target households, the residential context, the plan to develop the individual sites using traditional neighborhood principles, and the associated commercial/office space and amenities proposed to be built, the optimum market position for new development within the Study Area is as follows (*see also* Table 9):

PRELIMINARY OPTIMUM MARKET POSITION
Hercules Study Area
City of Hercules, Contra Costa County, California

Percent	Average Net Density/Lot Size	Housing Type	Base Rent/Price Range	Approx. Unit Size Range	Base Rent/Price Per Sq. Ft.
MULTI-FAMILY FOR-RENT					
26.3%	n/a	Accessory Apartments/ Apartments Over Commercial	\$400 to \$1,100	250 to 750	\$1.47 to \$1.60
	35 to 50 du	Hard Lofts {Live-work}	\$800 to \$1,900	500 to 1,500	\$1.27 to \$1.60
	35 to 50 du	Courtyard Apartments Studio, 1BR, 2BR	\$1,000 to \$1,500	550 to 1,000	\$1.50 to \$1.82
	7,200 sf {72x100}	Mansion Apartments 1BR, 2BR, 3BR	\$1,300 to \$2,100	500 to 1,250	\$1.68 to \$2.00
MULTI-FAMILY FOR-SALE					
10.0%	35 to 50 du	Hard Lofts {Live-work}	\$90,000 to \$225,000	500 to 1,500	\$150 to \$180
	35 to 50 du	Courtyard Apartments 1BR, 2BR	\$160,000 to \$195,000	850 to 1,100	\$177 to \$188
	7,200 sf {72x100}	Mansion Apartments 2BR, 3BR	\$200,000 to \$275,000	1,000 to 1,400	\$196 to \$200
SINGLE-FAMILY ATTACHED FOR-SALE					
9.7%	1,260 sf {18x80}	Flex Townhouses {Live-work; 400 sf work}	\$235,000 to \$315,000	1,200 to 1,700	\$185 to \$196
	2,160 sf {24x90}	Townhouses	\$240,000 to \$300,000	1,200 to 1,600	\$188 to \$200
LOW-RANGE SINGLE-FAMILY DETACHED FOR-SALE					
15.2%	14 du	Bungalow Court	\$285,000 to \$325,000	1,400 to 1,700	\$191 to \$204
	3,600 sf {36x100}	Village Houses	\$335,000 to \$375,000	1,600 to 1,900	\$197 to \$209

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Percent	Average Net Density/ Lot Size	Housing Type	Base Rent/ Price Range	Approx. Unit Size Range	Base Rent/Price Per Sq. Ft.
MID-RANGE SINGLE-FAMILY DETACHED FOR-SALE					
21.9%	10 du	Walking Court Houses	\$390,000 to \$450,000	1,900 to 2,300	\$196 to \$205
	4,800 sf {48x100}	Neighborhood Houses	\$410,000 to \$475,000	2,000 to 2,400	\$198 to \$205
HIGH-RANGE SINGLE-FAMILY DETACHED FOR-SALE					
16.9%	8.5 du	Close Houses	\$490,000 to \$535,000	2,300 to 2,600	\$206 to \$213
	6,000 sf {60x100}	Mansions	\$525,000 to \$595,000	2,400 to 2,800	\$213 to \$219

NOTE: The proposed rents and prices are in June 2000 dollars at base levels, exclusive of location, construction type, premiums, options and upgrades. As noted above, due to the volatility of the Bay Area housing market, these rents and prices should be reviewed periodically.

Absorption paces have been forecast as annualized averages. For example, although the annualized average absorption of rental apartments is forecast at 240 units per year, it is highly likely that, due to pent-up demand, more of these units, at the recommended rents and sizes, could be absorbed in the first year of marketing. However, it is also possible that, because of phasing and/or construction staging issues, none of these units would be available for another year or so. Therefore, absorption forecasts have been annualized over the projected absorption period for each housing type, from initial marketing to build-out of the last unit. Forecasts of absorption of new housing units within the Hercules Study Area has also been based on market conditions at the end of the first quarter of this year (as outlined in the market information provided by Anthony Hurt & Associates), and is as follows (*see again* Table 9):

ANNUALIZED AVERAGE ABSORPTION
Hercules Study Area
City of Hercules, Contra Costa County, California

Multi-family for-rent	240	net of turnover
Multi-family for-sale	48	
Single-family attached	48	
Low-range single-family detached	70	
Mid-range single-family detached	70	
High-range single-family detached	60	

At the annualized annual absorption of 536 units, new residential development would require a capture rate of 14.8 percent of the 3,610 households, identified through target market analysis, that have the potential to rent or purchase new housing units in the City of Hercules in the year 2000—a rate that is well within the target market methodology’s parameters of feasibility.

In the context of the target market methodology, and for a development area of the proposed size and scale, a capture rate of 25 percent of the potential market—or more than 900 households in the year 2000—is achievable.

The annualized average absorption paces require specific capture rates of those households that, in the year 2000, represent the potential market for each housing type, as follows:

REQUIRED CAPTURE RATES
Based on Annualized Average Absorption
Hercules Study Area
City of Hercules, Contra Costa County, California

Housing Type	Annual Market Potential (HHs)	Annual Average Absorption (Units)	Required Capture Rate
Multi-family for-rent	950	240	25.2%
Multi-family for-sale	360	48	13.3
Single-family attached	350	48	13.7
Low-range single-family detached	550	70	12.7
Mid-range single-family detached	790	70	8.9
High-range single-family detached	610	20	9.8

These housing type-specific capture rates are within the parameters required for feasible development. There is a high degree of confidence in a capture rate of

25 to 30 percent for rental apartments, and a capture rate of 15 to 20 percent for each of the for-sale housing types. The target market capture rates of the potential purchaser or renter pool are a unique and highly-refined measure of feasibility. Target market capture rates are not equivalent to—and should not be confused with—penetration rates or traffic conversion rates.

The **target market capture rate** is derived by dividing the annual forecast absorption by the number of households that have the potential to move to the site in a given year.

The **penetration rate** is derived by dividing the total number of dwelling units planned for a property by the total number of draw area households, sometimes qualified by income.

The **traffic conversion rate** is derived by dividing the total number of buyers or renters by the total number of prospects that have visited a site.

Because the prospective market for a property is more precisely defined using target market methodology, a substantially smaller number of households are qualified; as a result, target market capture rates are higher than the more grossly-derived penetration rates. The resulting higher capture rates remain within the range of feasibility.

BUILDING AND UNIT TYPES

Building and unit types commonly used within traditional neighborhoods are described below. Other appropriate building types, not referenced in this study, are described in *The Lexicon of the New Urbanism, Section J: Building Type* (Duany Plater-Zyberk & Co., Miami, 1999.)

–MULTI-FAMILY–

- Loft Apartment Building: A new-construction building type inspired by adaptive re-use of 19th century warehouse and manufacturing buildings.

The building is usually elevator-served with double-loaded corridors. Unit interiors typically have high ceilings and commercial windows and can be minimally finished, limited to architectural elements such as columns and fin walls, or unfinished, with no interior partitions except those for bathrooms.

The building's loft apartments can be leased, as in a conventional income property, or sold to individual buyers, under condominium or cooperative ownership, in which the owner pays a monthly maintenance fee in addition to the purchase price.

Loft apartment buildings may require some regulatory relief to allow unfinished or minimally-finished interiors.

(Loft apartments can also be incorporated into multifamily buildings along with conventionally-finished apartment units.)

- Courtyard Apartment Building: A pedestrian-oriented equivalent to conventional garden apartment buildings and of similar densities. A courtyard building is three to four stories, U-shaped, with parking integral to the building or in an open lot to the rear. The courtyard apartment building should have a relatively shallow setback from the street.

The building's apartments can be leased, as in a conventional income property, or sold to individual buyers, under condominium or cooperative ownership, in which the owner pays a monthly maintenance fee in addition to the purchase price.

Courtyard apartment buildings sometimes require zoning relief or variance to permit shallow front yard setbacks.

- Mansion Apartment Building: A small-scale apartment building with a street façade resembling a large detached house. (See "Mansion Building" *below*.)

–SINGLE-FAMILY ATTACHED–

- Flex Townhouse {live-work}: Similar in form to a conventional suburban townhouse except that the garage—either attached or detached—is located at the rear of the unit and accessed from an alley or auto court. The unit contains ground-floor space that can function as residential, office, workshop or retail, depending on the needs of the owner. The code governing flex townhouses should strictly regulate form—such as building mass, height and build-to line—but loosely regulate use—imposing only standard life and safety requirements.
- Townhouse: Like the flex townhouse, the garage—either attached or detached—is located at the rear of the unit and accessed from an alley or auto court. Unlike conventional townhouse developments, townhouses in traditional neighborhoods conform to the pattern of streets, typically with shallow front-yard setbacks.

–SINGLE-FAMILY DETACHED–

- Bungalow Court: Relatively-small one- or one-and-a-half-story single-family detached houses—each with its own yard—arranged in a U-shape enfronting a small common or green. The bungalows are separated from the common area only by a sidewalk, path or other non-vehicular way. Parking is from rear lanes, alleys or in a common, rear-loaded lot. A bungalow almost always includes a large porch.
- Village House: A one-and-a-half- or two-story single-family detached house on a small lot, often with alley-loaded parking.
- Walking Court Houses: Two-story single-family detached houses—each with its own yard—enfronting a linear common or green. As with Bungalow Court units, the houses are separated from the common area only by a sidewalk, path or other non-vehicular way, and parking is from rear lanes or alleys. Also known as pedestrian courts.

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- Neighborhood House: A two-story single-family detached house relatively close to the street with attached, detached, or open parking—whether alley-loaded or not—set well back from the front façade.
 - Close Houses: Two-story single-family detached houses—each with its own yard—arranged in a U-shape enfronting a close (a narrow common or green). Unlike Bungalow Court and Walking Court units, the houses are separated from the common area by a shared driveway, narrow lane or other small-scale vehicular way. Parking can be front- or rear-loaded.
 - Mansion House: A large two- or three-story single-family detached house, compatible with similar-sized flexible-use structures. (See “Mansion Building” *below*.)

–MISCELLANEOUS BUILDING TYPES–

- Accessory Unit: A secondary dwelling unit associated with a principal residence on a single lot. An accessory unit is typically located over the garage, attached or detached, of a rowhouse or detached house. Also known as “garage apartment,” “ancillary apartment,” “accessory apartment,” “granny flat,” “outbuilding” when detached, and “backbuilding” when attached to the principal residence.

Accessory units often require a zoning change or variance.

- Mansion Building: A two- or three-story flexible-use structure with a street façade resembling a large detached house (hence, “mansion”). The building can accommodate a variety of uses—from rental or for-sale apartments, professional offices, any of these uses over ground-floor retail, a bed and breakfast inn, or a large single-family detached house—and its physical structure complements other buildings within a neighborhood.

An attached version of the mansion, typically built to a sidewalk on the front lot line, is appropriate for town center locations. This version can

accommodate the same variety of uses as the detached, lower-density mansion.

Parking behind the mansion buildings can be either alley-loaded, or front-loaded served by shared drives. The form of the parking can be in open lots, garages with units above, or integral to the building.

Mansion buildings should be strictly regulated in form, but flexible in use. However, flexibility in use is somewhat constrained by the handicapped accessibility regulations in both the Fair Housing Act and the Americans with Disabilities Act.

METHODOLOGY

The proprietary target market methodology developed by Zimmerman/Volk Associates is an analytical technique, using the PRIZM geo-demographic system, that establishes the optimum market position for residential development of any property—from a specific site to an entire political jurisdiction—through cluster analysis of households living within designated draw areas. In contrast to classical supply/demand analysis—which is based on supply-side dynamics and baseline demographic projections—target market analysis establishes the optimum market position derived from the housing and lifestyle preferences of households in the draw area and within the framework of the local housing market context, even in locations where no close comparables exist.

In geo-demographic segmentation, clusters of households (usually between 10 and 15) are grouped according to a variety of significant factors, ranging from basic demographic characteristics, such as income qualification and age, to less-frequently considered attributes such as mobility rates, lifestyle patterns and compatibility issues. Zimmerman/Volk Associates has refined the analysis of these household clusters through the correlation of more than 500 data points related to housing preferences and consumer and lifestyle characteristics.

As a result of this process, Zimmerman/Volk Associates has identified 41 target market groups with median incomes that enable most of the households within

each group to qualify for market-rate housing. The most affluent of the 41 groups can afford the most expensive new ownership units; the least prosperous are candidates for the least expensive existing rental apartments.

Once the draw area(s) for a property have been defined, then—through field investigation, analysis of historic migration and development trends, and employment and commutation patterns—the households within those areas are quantified using the target market methodology. The potential market for new market-rate units is then determined by the correlation of a number of factors—including, but not limited to: household mobility rates; median incomes; lifestyle characteristics and housing preferences, including second/vacation home ownership propensities; the location of the site; and the competitive environment.

The end result of this series of filters is the optimum housing mix—by tenure, building configuration and household type, including specific recommendations for unit sizes, rents and/or prices—and projections of absorption within the local housing context.

Appendix Table 1.

Delineation of the Draw Areas (Migration Analysis)

In addition to households already living in Contra Costa County, households moving from outside the county comprise a significant part of the potential market for new housing units in the City of Hercules.

Taxpayer migration data provide the framework for the delineation of the draw area—the principal counties of origin for households that are likely to move to the City of Hercules. These data are maintained at the county and “county equivalent” level by the Internal Revenue Service and provide a clear representation of migration dynamics.

Zimmerman/Volk Associates has determined that counties that account for more than four percent of total migration represent the most significant sources of in-migrating households. In this instance, five counties—Alameda at

approximately 26 percent, San Francisco at between eight and nine percent, San Mateo at between 4.5 and 5.5 percent, and Santa Clara and Solano at between four and five percent each—have a four percent or greater share of total migration into Contra Costa County. Although a certain percentage of households will move from outside these draw areas—from other counties of the Bay Area, in particular—they will tend to share the same lifestyle characteristics and housing preferences as the draw area households.

Anecdotal information obtained from real estate brokers, sales persons, market analysts, and other knowledgeable sources was used to augment the migration data.

Therefore, the above-mentioned five counties, as well as Contra Costa County, have been designated as the draw area for new housing units to be built within the City of Hercules.

Appendix Table 2.

Target Market Classification of City Households

Geo-demographic data obtained from Claritas, Inc. provide a framework for the categorization of households, not only by demographic characteristics, but also by lifestyle preferences and socio-economic factors. For purposes of this study, only those household groups with median incomes that enable most of the households within each group to qualify for market-rate housing are included in the tables. An appendix containing detailed descriptions of each of these target market groups will be provided along with the completed analysis.

All of the 6,645 households living in the City of Hercules in 1999 have the capacity to rent or buy market-rate housing. More than 42 percent of these households are classified as younger singles and couples (as characterized within one of the Zimmerman/Volk Associates target market groups); approximately 31 percent are traditional families (in one Zimmerman/Volk Associates target market group); and just under 27 percent are empty nesters and retirees (in two Zimmerman/Volk Associates target market groups).

Appendix Table 3.

Internal Mobility (Households Moving within Contra Costa County)

Zimmerman/Volk Associates uses U.S. Bureau of the Census data, combined with Claritas data, to determine the number of households in each target market group that will move from one residence to another within a specific jurisdiction in a given year (internal mobility).

Using these data, Zimmerman/Volk Associates has determined that more than 34,900 households have the potential to move from one residence to another in Contra Costa County this year (2000).

Appendix Tables 4 through 9.

In-Migration from Other Counties

These tables determine the number of households in each target market group and living in each of the draw area counties (Alameda, San Francisco, San Mateo, Santa Clara and Solano) that are likely to move to Contra Costa County this year (through a correlation of Claritas data, U.S. Bureau of the Census data, and the Internal Revenue Service migration data).

Appendix Table 6 summarizes Appendix One, Tables 3 through 5.

Appendix Table 10 summarizes Appendix One, Tables 7 through 9.

Appendix Table 11.

Market Potential

Appendix Table 11 summarizes Appendix Tables 6 and 10. The numbers in the Total column on page one of this table indicate the depth and breadth of the potential market for year-round primary housing units in Contra Costa County in the year 2000 from the counties that make up the draw area.

Approximately 47,500 households currently living in Contra Costa County and the draw area counties are likely to move within or to Contra Costa County this year. More than 39 percent of these households are likely to be family households (in 14 market groups); approximately 32 percent are likely to be empty nesters and retirees (in 12 groups); and just under 29 percent are likely to be younger singles and couples (in 11 groups).

Appendix Tables 12 through 14, Table 1.

Market Potential for the City of Hercules

Currently, the City of Hercules comprises just under two percent of the more than 358,400 households living in Contra Costa County. As derived by the target market methodology, approximately 3,900 of the 47,500 qualified households that represent the market for new housing units in Contra Costa County are a market for new housing units in the City of Hercules, or more than eight percent of the total potential market. (*See Appendix Table 12.*)

These households have been categorized by tenure (renter/buyer profile) and propensity to lease or purchase various market-rate housing types in order to determine the housing preferences of the potential market. (*See Appendix Tables 13 and 14 and Table 1.*)