

Chapter 4  
SUITABILITY OF THE RICHMOND FIELD STATION FOR  
UNIVERSITY STUDENT FAMILY HOUSING

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Introduction

During most of the existence of the University of California at Berkeley, the private sector provided almost all housing for students. Currently, 30 percent of the students are provided with University-owned or affiliated housing units (Office of the Chancellor, 1981), including 1,022 apartments at Albany Village and Smyth Fernwald for students with families. Due to the lack of new private housing construction and the competition for existing housing in Berkeley by non-students, the private sector is becoming less capable of meeting the housing needs of students.

The Richmond Field Station, a tract of land owned by the University of California which might be suitable for married student housing, borders the San Francisco Bay in Richmond, California (Figure 1). The 100-acre site is managed by the College of Engineering and is used for research activities primarily associated with the Colleges of Engineering and Natural Resources. The site also accommodates a conference center, auditorium, and the Northern Regional Library Facility (Figure 2).

The U.C. Berkeley Campus Planning Office (CPO) has sent out a request for proposals for a master site plan for the Richmond Field Station. This plan, which will be prepared under the direction of the CPO by Roma Design Group in San Francisco, will provide a framework for the reorganization of existing facilities and the development of new ones on the site. The increasing pressure upon the scarce space resources at the Berkeley campus has led the University to consider this site as a potential "Richmond Campus." The new campus will provide space for administrative units that do not require substantial daily contact with the central campus. The vision projected for the Richmond Campus is a "high-technology urban satellite campus and research park" (UCB Campus Planning Office, 1986). The University hopes to lease some of the land on a temporary basis to private developers, under an agreement that ownership of new structures reverts to the University after 20 years.

According to the goals listed in "Housing Policies for the 1980's" (Office of the Chancellor, 1981), the Berkeley administration seeks to provide student family housing for 30 percent of the student family population; this equals approximately 950 housing units (University of California, Berkeley Food Services, Housing and Child Care Department, 1986). Currently, the University exceeds its student family housing goal. However, 800 people on the waiting list must wait at least eight and as much as 30 months before they will be able to rent a University-operated apartment. Even

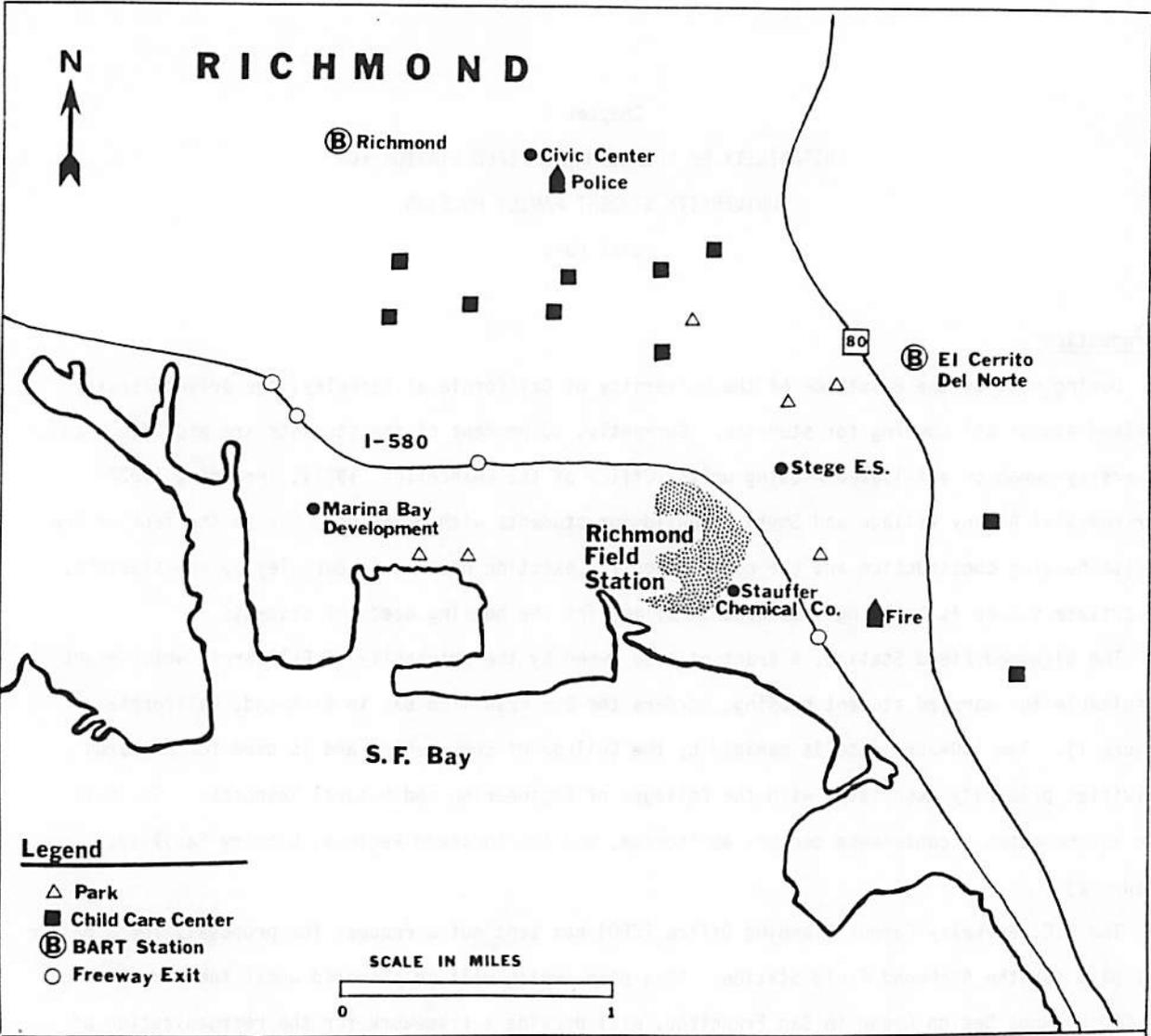


Figure 1: Location Map of Surrounding Areas of the Richmond Field Station  
Source: California State Automobile Association, 1986.

though the University is meeting its stated goal in providing housing for student families, the demand for family housing is still high.

The idea of converting the Richmond Field Station into an extension of the Berkeley campus is relatively new. No past studies have been made regarding the possibility of University housing on this site. Even though the University has sent out a request for proposals to develop student housing (University of California, Berkeley Campus Planning Office, 1986b), the request focuses on housing construction and renovation for upper-division single students, not for student families.

U.C. Berkeley students with families are mainly graduate students who need privacy and nearby childcare for their children while they are at school or work. It is assumed that these students are

predominantly low-income because they devote most of their time and energy to their studies. They desire low-rise, low-density apartments rather than the current high-rise residence halls.

The potential research facilities for the Richmond Field Station are intended to serve graduate and post-graduate students. These students may have children and want to stay close to both school and home. Thus, the graduate students using the Richmond Field Station as their primary campus and who have families may benefit from living in close proximity of the Richmond Field Station. Because the Richmond Field Station will probably remain at a lower level of development density than the Berkeley campus surroundings, student family housing units built on this site will provide the privacy and quiet environment desired by graduate students with families who are associated with research there.

The University of California, Berkeley upholds the traditional concept that it functions mainly as an educational institution whose overriding concern is providing quality education and which cannot concern itself with its impact on the surrounding town (Office of the Chancellor, 1981). The University

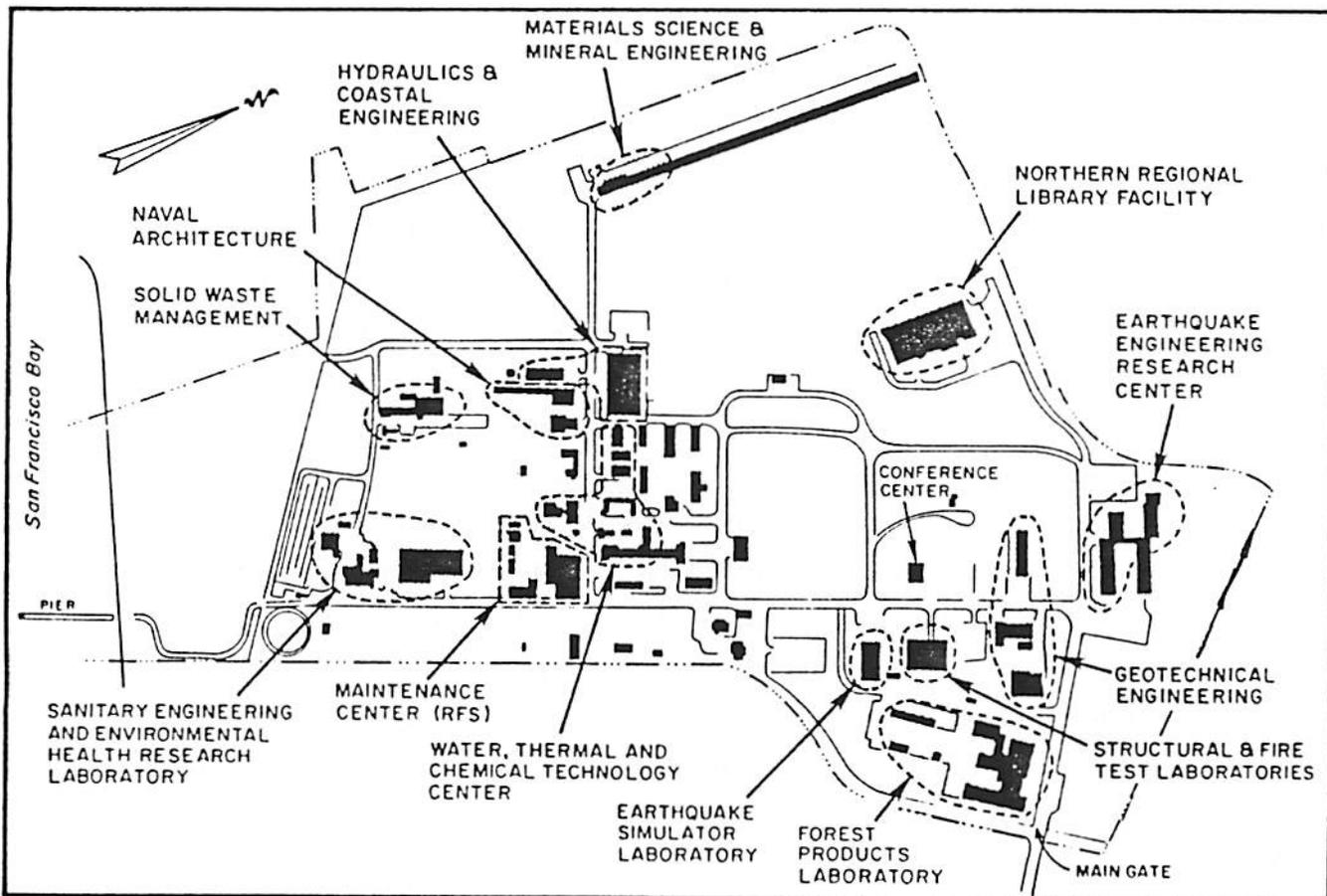


Figure 2: University of California, Richmond Field Station  
Source: University of California, Information handout

does not believe that provision of housing is a high-priority concern, but rather that the private sector will have to provide the needed housing units (Gigliello, 1986). The University also believes that any buildings built on the Field Station are temporary units and should be adaptable to as many uses as possible. Residential buildings are not as adaptable as other buildings. Furthermore, if an apartment complex site was needed for a sewage laboratory, the University would face the difficult problem of relocating its residents. Finally, residential buildings in the past have not been economically feasible for the University. With the current high costs of financing and construction, there is a question whether the University or anyone else today can build affordable housing which students would find physically attractive (Office of the Chancellor, 1981). Rarely has any University-owned residence unit generated enough revenue to sustain its costs (Gigliello, 1986).

The request for proposals for the development of the Richmond Field Station does not mention housing as an important consideration, but the Roma Design Group will briefly review the feasibility of constructing University housing on the site (Gigliello, 1986). Although the University does not feel student family housing should be built on the Richmond Field Station, there is a great need for housing units. It is clear that a detailed analysis of the potential suitability of the site for this use is important; such an evaluation is the purpose of this paper.

#### Methodology

I first discuss two types of accessibility, vehicular and pedestrian. I measure the distance in miles from places to which residents should be able to walk, such as the potential Richmond Field Station campus, elementary school and recreation areas. For places of employment, and shopping centers, I measure the distance from the Richmond Field Station in minutes of travel time rather than miles of highway access.

The location of the site in relation to other existing commercial and residential areas is examined. Adjacent areas are analyzed to determine if they are compatible with or enhance the desirability of housing on the site. Amenities such as open land for scenic and recreational areas and cultural facilities such as parks, museums, and libraries, and public facilities such as fire stations, police stations and child care facilities are evaluated. The availability of public utilities such as water, sewers, electricity, gas and telephone services are important site selection factors. Potential conflicts with student residential development caused by railroad tracks, noxious industrial uses, and blighted residential surroundings are also assessed in the location of the site. Finally, physical characteristics including geology and topography are assessed.

#### Data

Table 1 suggests some maximum distances or time allowances for the potential resident to commute from home to other necessary places in the larger community. This ideal standard is set by the Residential Development Handbook (O'Mara, 1978), and is based upon the fact that often developers start

with a raw piece of land, developing a new residential community with all of its amenities and facilities. However, it is rare that any developer is able to develop without any constraints. Thus, this standard cannot be strictly followed.

	<u>IDEAL STANDARD</u>	<u>ACTUAL</u>
New Richmond Campus	1 mile	on site
Stege Elementary School	1 mile	less than 1 mile
Eastshore Community Park	3.5 miles	all less than 1 mile
Plaza I Park		
Plaza II Park		
Crescent Park		
Boorman Park		
John F. Kennedy Park		
Marina Park		
Marina Green Park		
General Shopping	4 minutes by car	4 minutes by car
San Francisco (employment)	40 minutes by car	35 minutes by car (non-peak hours) 60 minutes by car (peak hours)

Table 1: Ideal Standard of Maximum Distances from Home to Places in the Community  
Source: O'Mara, 1978.

Table 1 shows that the new Richmond campus would be within a few feet of the housing units. Stege Elementary School, which serves the Richmond Field Station location, is less than one mile away. The Eastshore Community Park, which offers programs for senior citizens, recreation facilities for adults and daycamp activities for children, is less than half a mile away. Plaza I Park, Plaza II Park, Crescent Park, Boorman Park, John F. Kennedy Park, Marina Park and Marina Green Park are all less than one mile in distance from the Richmond Field Station. Groceries and basic necessities can be obtained only four minutes away by car. The city of Richmond's central business district is not a major area for employment. San Francisco, which is 40-60 minutes away during peak hours, is the primary employment center for the area (Deasy, 1987). This too is within the ideal 40 minute standard.

The main access to the site is by public transportation and automobile. The Hoffman Corridor section of I-580 Freeway, located to the east of the site, provides automobile access to the Richmond Field Station. The #10 Hoffman Boulevard bus, an AC Transit line, currently stops by the Richmond Field Station's main gate once every 30 minutes, from which it takes 15 minutes to reach the El Cerrito Del Norte BART station. A University shuttle also commutes to the Field Station nine times a day.

The present site is zoned for "special industry" (South Richmond Shoreline, 1977). The Stauffer Chemical Company and neighboring warehouses give the area around the site a grey, industrial atmosphere.

The Hoffman Corridor section of I-580 Freeway secludes the Richmond Field Station from run-down neighborhoods on its northern side. Towards the west, the Marina Bay development, a complex of luxury garden-condominiums, apartments with waterfront recreation access, and commercial stores, is expected to provide 3,370 housing units to upper-middle class residents in the next eight to ten years. To the south, the site faces a spectacular view of San Francisco, overlooking the Bay. The vast open space in this direction is one of the site's greatest assets.

Cultural amenities such as museums and libraries are located less than two miles away. The Northern Regional Library Facility is located on the Richmond Field Station (Figure 2). The main branch of the Richmond City Library, which offers programs for children and workshops for adults, is located at the Civic Center.

Figure 1 shows that public facilities such as fire and police stations are only one and a half miles away. Approximately ten child care centers are in the vicinity of the Richmond Field Station.

The 12-inch water lines just outside the facility could hold the extra water required by additional residents. The water mains from the main water plant could transport sufficient additional clean water to new residents (Lee, 1986). A proposed 12-inch steel sewer main will run south from 34th Street toward Seaver Avenue and then circle back up to South 38th Street. If residential housing were to be built on the Richmond Field Station, sewer lines could be attached to these mains to carry the sewage to the plant (Wyatt, 1987). Telephone, electricity, and gas are currently supplied to the Field Station; the only problem with installation may be construction regulations on underground wiring of the lines.

The only uses that may cause a conflict are the surrounding industrial buildings and freeway. Although residential units are not usually built next to industrial buildings, heavy buffering of views can solve this problem. Noise pollution is not expected to increase from the development of the new freeway, due to the construction of noise buffers that muffle sound. Vehicle emissions are not expected to increase significantly as a result of the construction of the new Hoffman Corridor section of I-580 Freeway (The State of California Department of Transportation, 1980).

The site lies on a low-lying, flat alluvial plain. Alluvium is unconsolidated material deposited during relatively recent geologic time by a stream or other moving body of water. Alluvial soils are a mixture of interbedded sands, gravels, silts, and stiff clays. Although alluvium is not as hard and sturdy as bedrock, buildings are built on it when the proper precautions have been made; virtually all of the flat-lying areas between the Bay and the surrounding hills are composed of alluvium. No faults cross the site, which lowers the risk of seismic damage (The State of California Department of Transportation, 1980).

As measured from the U.S. Geological Survey Topographic Quadrangle for the area, the land slopes less than one degree. Since the land is relatively flat, the construction of buildings is easier than

if the land were steeply sloped.

### Discussion

The data presented here have shown that the site is suitable for University student family housing. The site is not accessible by foot or at the moment by bicycle. However, the Hoffman Corridor section of I-580 Freeway provides excellent access by automobile, public transportation or University shuttle. Other public facilities such as fire and police stations, parks, schools, libraries and museums are in close vicinity of the Richmond Field Station. Child care is a main concern of student families, and ten child care centers are within a few minutes of travel. Some centers even offer a shuttle service to pick up children from any location in Richmond.

Even though the surrounding industrial uses pose a possible threat to the desirability of residential housing, proper buffering of views and a focus on the spectacular view of the Bay can lessen this problem. Freeways usually pose noise and air pollution problems for residential units. However, as stated in the Environmental Impact Report for the new freeway, noise and air pollutants will not significantly increase.

Water, electricity and gas lines currently supply the site. Additional extension lines to water and sewer mains can be added on as needed. Finally, the geology and topography of the site present no serious constraints to the construction and occupancy of residential buildings.

### Recommendations

The problem of housing shortage is severe. Even if the University is currently providing student family housing to 30 percent of the student families, the fact is there is still a shortage of rental housing in the private sector in Berkeley. Searching for a place to live may take one to three weeks (University of California, Berkeley Food Services, Housing and Child Care Department, no date).

Rarely are these units found within walking distance. Most students live an average of one mile away.

The decision to build additional housing rests ultimately on the UC Regents. They should change their goal to meet all the needs of housing for the students. They should increase the 30 percent goal to serve 100 percent of the students by finding some land parcels for housing; the Richmond Field Station may be the perfect solution.

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