

June 1994

Affordable housing site initial analysis and feasibility study

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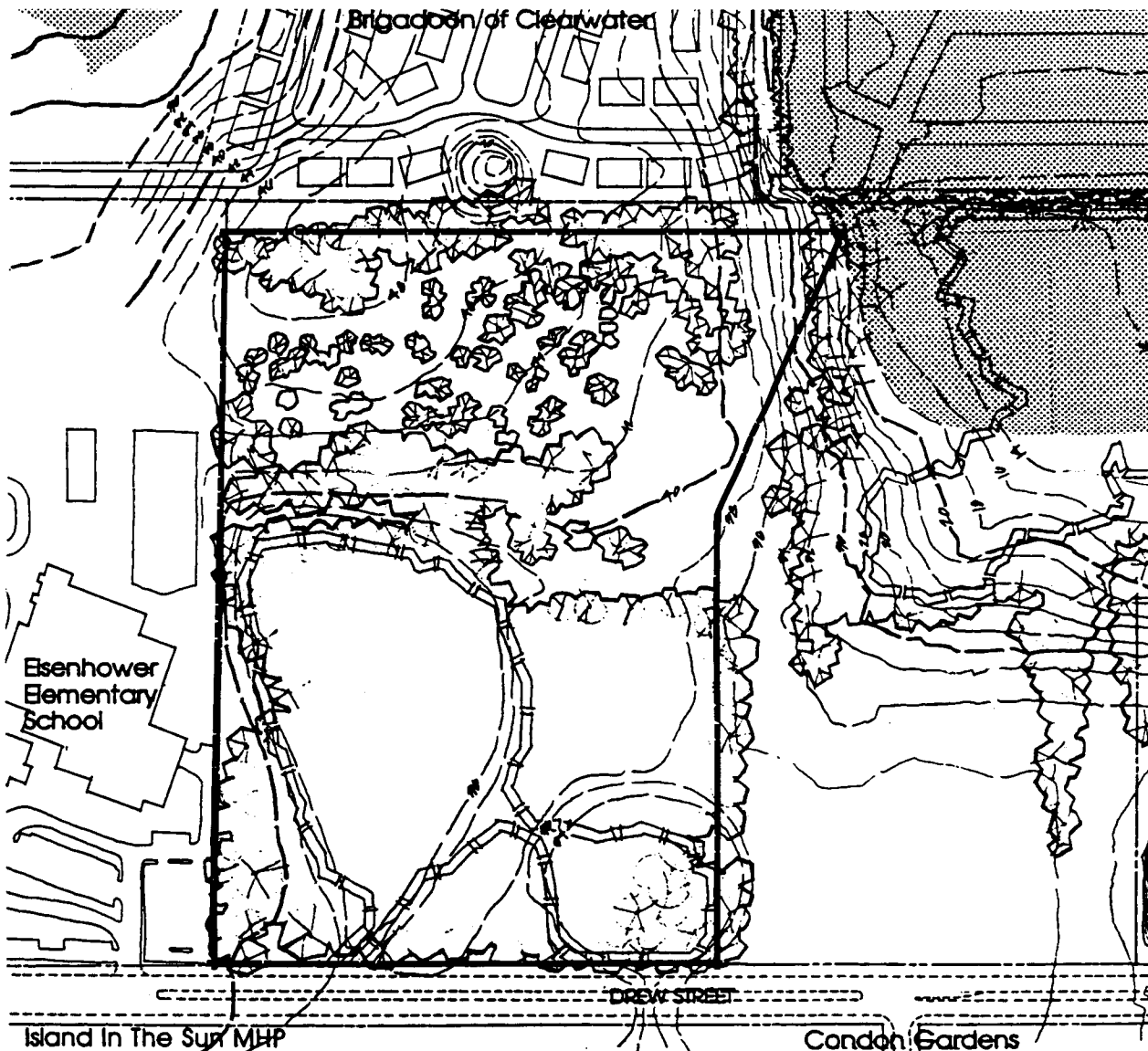
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AFFORDABLE HOUSING SITE INITIAL ANALYSIS AND FEASIBILITY STUDY



PREPARED FOR: CLEARWATER HOUSING AUTHORITY JUNE 30, 1994

AFFORDABLE HOUSING SITE INITIAL ANALYSIS AND FEASIBILITY STUDY

project number: 4950-33-10065-LO

prepared for: Clearwater Housing Authority
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prepared by: Florida Center for Community Design + Research
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date: June 30, 1994

**AFFORDABLE HOUSING SITE
INITIAL ANALYSIS AND FEASIBILITY STUDY
PROJECT # 4950-33-10065-LO**

INTRODUCTION

This report summarizes an initial analysis and feasibility study prepared by the Florida Center for Community Design + Research for the Clearwater Housing Authority of a 26 acre parcel of land. This parcel was analyzed for its potential to support an affordable housing development. After examining the conditions of the site edges through field visits, aerial photographs, prior studies of the site and adjacent parcel area, and the City of Clearwater's *Code of Ordinances* and *Comprehensive Plan*, findings are presented in five sections:

1. Site and Context
2. Environmental Conditions
3. Infrastructure
4. Potential Connections
5. Development Feasibility

Much of the material presented in these sections draws from studies prepared in 1992. At the time, this site was part of a larger, 57.36 acre parcel under consideration for purchase by the City of Clearwater. The City purchased the eastern portion of the property and a 50' wide strip along the northern section of the site. The studies referenced in the following text include:

- "Phase 1 Environmental Audit Report, Drew Street Property, Clearwater, Florida," prepared by King Engineering Associates, Inc. for Mr. Art Kader, Assistant Director of Parks and Recreation, City of Clearwater, dated March 1992.
- "Appraisal Report: Drew Street Residential Acreage Approx. 600' West of Hampton Road, Clearwater, Florida," prepared by James M. Millspaugh, MAI, dated February 19, 1992, for Mr. Art Kader, Parks and Recreation Department, City of Clearwater, transmitted May 6, 1992.
- "Appraisal of 57.36 Acre Site Located on the North Side of Drew Street Approximately 1/2 Mile West of McMullen-Booth Road, Clearwater, Pinellas County, Florida," prepared by Urban Economics, Inc. for Mr. John F. Gerlach, CCIM, with Lee Arnold and Associates, transmitted June 29, 1992.

- "57 Acre Drew Street Property, City of Clearwater, Concept Plan" prepared by King Engineering Associates, Inc., dated April 7, 1992.
- correspondence between King Engineering Associates, Inc. and Mr. Art Kader: April 9, 1992, regarding environmental considerations and "extraordinary costs" of developing the ±54 acre parcel for apartments, as shown on the March 1992 concept plan prepared by King Engineering.

February 18, 1993, regarding results of groundwater testing for concentrations of heavy metals on Drew Street property purchased by the City of Clearwater.

- "25.96 ± Acre Multi-Family Site, Drew Street," marketing brochure prepared by Arnold Associates, no date.

The *Code of Ordinances, City of Clearwater, Florida*, effective February 4, 1993, was referenced for zoning and land development regulations. However, Louis Hilton, City of Clearwater Central Permitting Department, pointed out in a phone conversation (June 22, 1994,) that changes have been made to the zoning regulations. These changes were discussed with regard to the RM-16 zoning category and other potential zoning categories for the site.

The *City of Clearwater Comprehensive Plan Goals, Objectives, and Policies*, adopted November 16, 1989, was reviewed to provide a planning context for the site and its surroundings. Relevant objectives and policies from elements such as Future Land Use and Housing are cited.

1. SITE AND CONTEXT

The site under consideration for a potential affordable housing development comprises approximately 25.96 acres, with approximately 851 feet of frontage along Drew Street and extending north from Drew Street approximately 1240 feet. It currently is undeveloped, although the northern portion of the site exhibits the remains of a citrus grove. With much of the site covered by trees, the southern portion has been identified as environmentally sensitive. Two depressions near Drew Street indicate wet areas, and runoff from Drew Street currently discharges into these depressions.

Review of recent aerial photos and the 1992 King Engineering study indicate the presence of orange groves on the site. The 1992 "Phase 1 Environmental Audit Report" prepared by King Engineering describes analysis of a series of aerial photographs dating from 1926 to 1990 to determine what, if any, development has occurred on the parcel. The site showed no signs of development on the 1926 and 1943 aerial photos. The 1957 aerial photo revealed orange groves on the site, remnants of which are visible on the 1990 aerial. A waste water treatment plant was located on what is now the adjacent City-owned property.

The site appears to have received no further development than vehicle trails and areas of dumping. The contents of the dump sites, while described in the King Engineering report, should be studied further to determine if any hazardous materials are included or have contaminated the site. During the site visit, the King Engineering report notes that there were "no obvious indications of recent gasoline, oil, or other hazardous materials, wastes or contamination spills".¹ The dump sites are noted on a map in the King Engineering study; a copy of this map is contained in the Appendix of this report.

CONTEXT

The area surrounding the site contains a mix of community uses and residential types, as indicated on the "Context" map. The site's immediate boundaries consist of public facilities and residential development. Eisenhower Elementary School lies immediately west of the site, and the City of Clearwater owns property along its eastern and northern boundaries. The 31.4 acre City property is planned for park and recreational uses. "Brigadoon of Clearwater," a townhouse development, lies north of the 50' wide strip of City-owned land. "Island in the Sun Mobile Home Park" is located on the south side of Drew Street, although there is no access from Drew Street. "Condon Gardens Apartments" are located east of "Island in the Sun", with entry roads from Drew Street. The surrounding area also includes a mix of single family residential development, apartments, and two adult congregate living facilities.

Shopping, employment, educational, and civic uses are found in proximity to the site. Commercial shopping centers and office developments are located within a mile of the site on Drew Street, Gulf-to-Bay Boulevard (State Road 60), and along

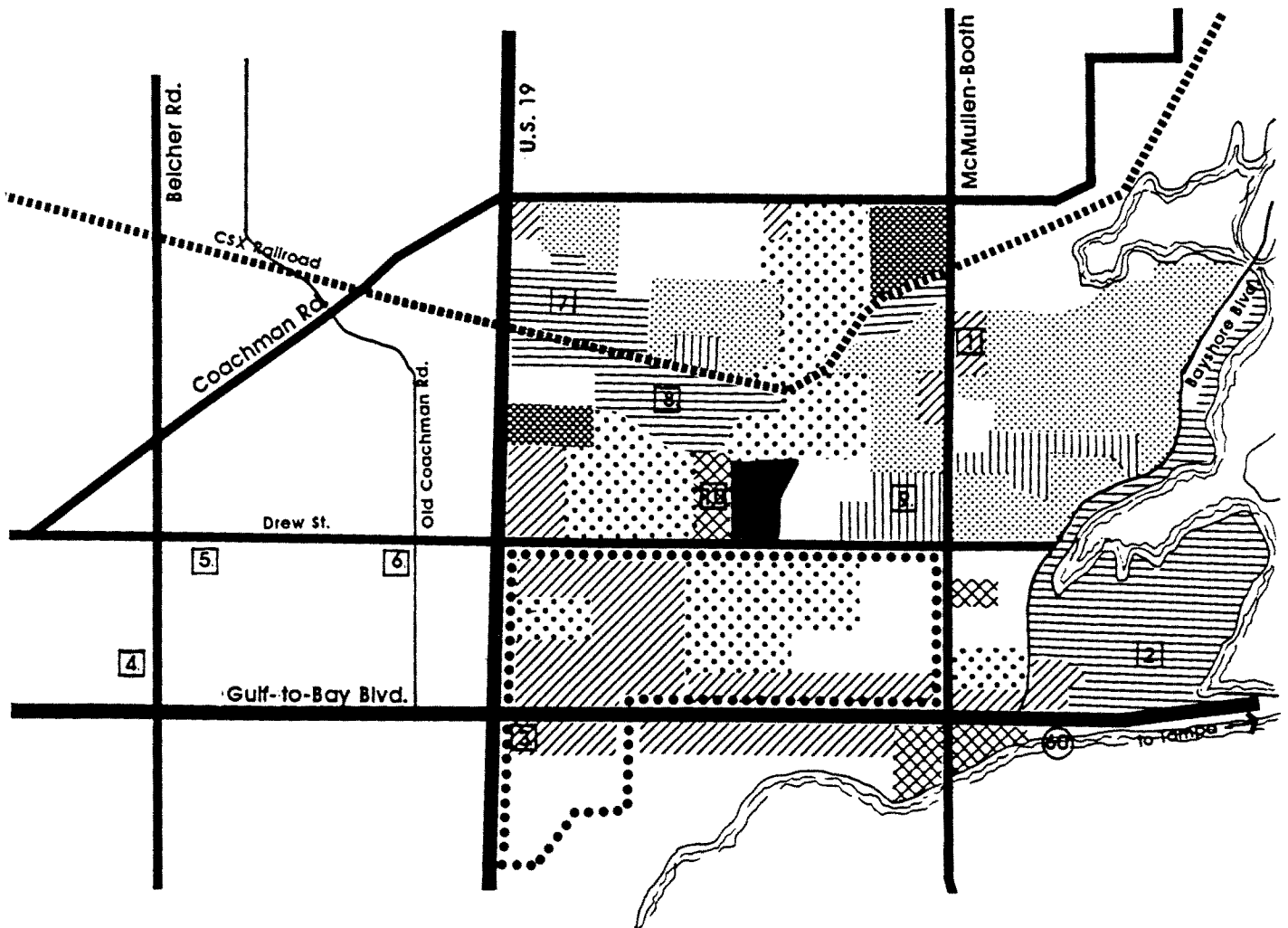
U.S. 19. Educational and civic facilities are nearby. Along with Eisenhower Elementary School adjacent to the site, St. Petersburg Junior College, the Clearwater East Branch Library, and a Post Office are within two miles of the site. Parks and recreational facilities are readily accessible, including the Eddie C. Moore Recreational Complex east of the site, Cliff Stevens Park along Alligator Creek just north of the Brigadoon development, Moccasin Lake Park further north along U.S. 19, Chesapeake Park south of Drew Street near McMullen-Booth Road, and MacMullen Park southwest of Gulf-to-Bay Boulevard.

The area immediately south of the site is targeted for economic development, and may be a source of employment. The City's *Comprehensive Plan* identifies as a "Regional Activity Center" the area bounded north-south by Drew Street and Gulf-to-Bay Boulevard and other streets, and east-west by McMullen-Booth Road and Old Coachman Road just west of U.S. 19. The Center is intended to support the Park Place/Clearwater Mall area Development of Regional Impact and to encourage redevelopment of "under-used parcels." Office headquarters jobs and related growth are part of an economic development sector planning effort.

ZONING CONSIDERATIONS

As noted on the "Site Area and Zoning" map, the site is zoned RM 16: Multiple-Family Residential 16. According to Louis Hilton, Clearwater Central Permitting Department, this zoning category in the most recent issue of the Land Development Code allows up to 15 dwelling units per gross acre. The dwelling units may include single-family, two-family, three-family, townhouses, and/or multiple-family residences or a combination thereof. Each housing type results in a different set of "dimensional and numerical development requirements", however, which can reduce the overall potential density of the site. Surrounding residential uses include a range of densities and zoning classifications, including RPD 12 (Residential Planned Development 12) for Brigadoon of Clearwater, RMH (Residential Mobile Home) for Kapok Mobile Home Park, and RPD 8 (Residential Planned Development 8) for Condon Gardens.

While the RM-16 zoning category allows up to 15 dwelling units per gross acre, site conditions warrant consideration for requesting a change in the zoning category to MPD (Master Planned Development). The "dimensional and numerical development requirements", including setbacks and minimum lot dimensions, for the RM-16 category and those regulating the selected housing type(s) would be difficult to achieve given the site's topography, dense tree cover, and wetlands. Revisions to the zoning categories allow a maximum density of 5 dwelling units per acre for any RPD (Residential Planned Development) category, and so the MPD category would need to be used. This category applies only to sites of 25 acres or more, for a range of uses. The rezoning of the site to MPD would allow greater flexibility in the site plan, including an allowance for zero-lot line house configurations.



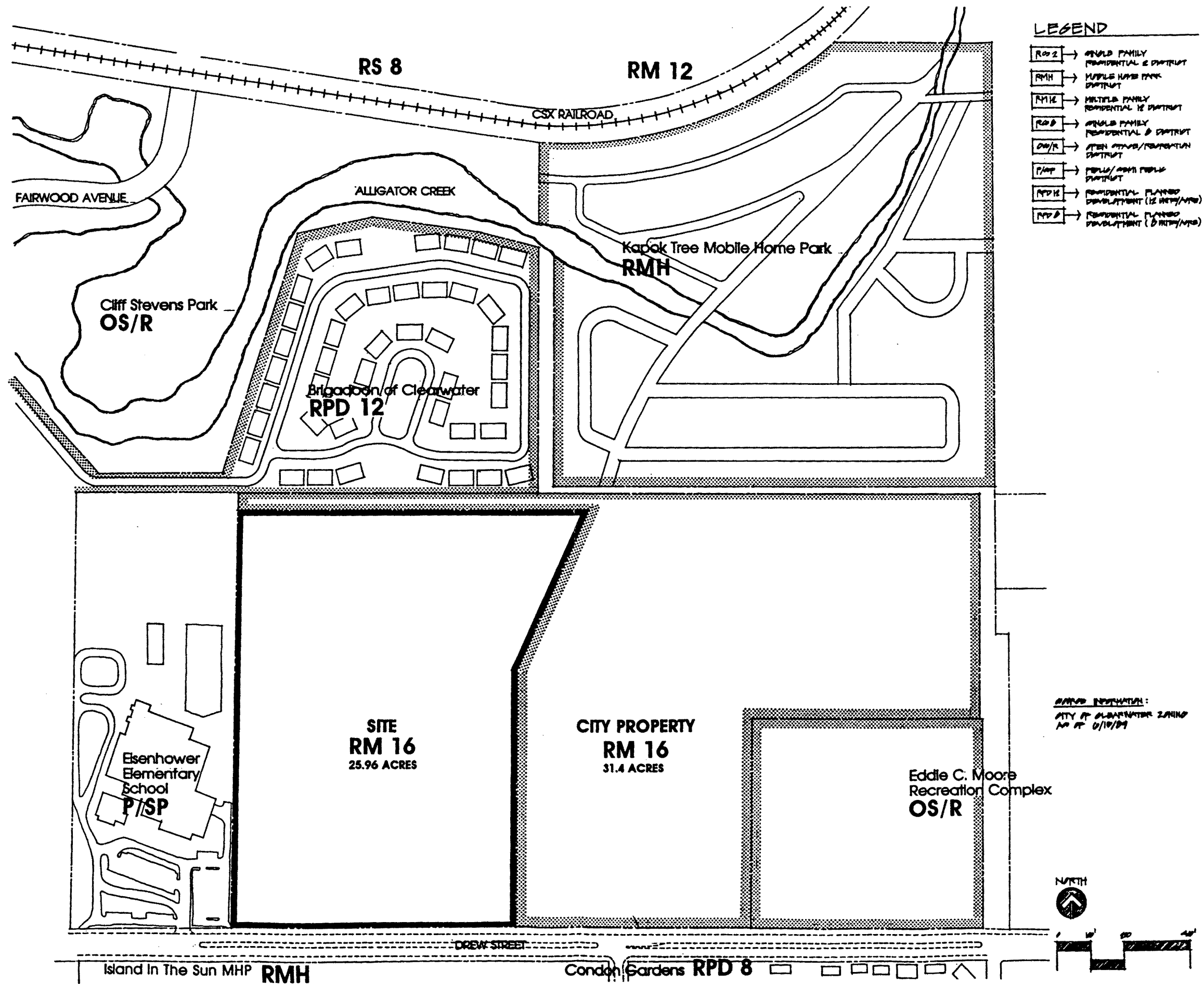
1. Ruth Eckerd Hall
2. Clearwater Christian College
3. Clearwater Mall
4. Post Office
5. Clearwater East Library
6. St. Petersburg Jr. College
7. Moccasin Lake Park
8. Cliff Stevens Park
9. Eddle C. Moore Park
10. Eisenhower Elementary

-  Site
-  Recreation
-  Conservation
-  Regional Activity Center
-  Public/Semi-Public
-  Commercial/Tourist
-  Industrial
-  Medium Density Residential
-  Low Density Residential

Context Map



NTS



AFFORDABLE HOUSING SITE ■ DREW STREET PROPERTY ■ CLEARWATER

INITIAL ANALYSIS AND FEASIBILITY STUDY

Site Area & Zoning

Prepared for: Clearwater Housing Authority
 Prepared by: The Florida Center for Community Design + Research
 June 1994

2. ENVIRONMENTAL CONDITIONS

Based upon examination of aerial photos, City of Clearwater topographic maps, and a study and concept plan prepared by King Engineering, the site exhibits a variety of environmental conditions. The site's topography and tree cover could enhance the design of a residential development, however, wetlands and the density of trees create limitations to development. These site features are noted on the "Environmental Conditions" map.

TOPOGRAPHY, WETLANDS, AND SOILS

Overall, the site's landform is gently sloping, with drainage patterns running from the north to the south. The highest elevation, 48 msl, lies at the northwest corner of the site and drops to the south and east as a 1% - 4% slope to elevation 40 msl. Below elevation 40, the southern section of the site drops quickly on the west side to a flat area, and the southeast corner contains a depression. Only the northeast corner exhibits a steep slope, where the land drops to the east at a slope of approximately 10%.

According to the 1992 King Engineering Concept plan, and both 1992 appraisal reports, the site's southern section contains wetlands. The area is described on the 1992 King Engineering Concept Plan, and is transferred onto the "Environmental Conditions" map. It is important to note that the area in the King Engineering Concept Plan designated as wetlands is not exact, and would need to be verified.

The extent, exact location, and jurisdiction of the wetlands will affect the site's potential development. Objective 1.1 of the *City of Clearwater Comprehensive Plan* states that "structural development shall not be permitted on any land subject to Department of Environmental Regulation [now known as Department of Environmental Protection] wetlands jurisdiction, unless acceptable mitigation plans are approved. Policy 1.1.1 states that "any permanent or temporary alteration of Department of Environmental Regulation jurisdictional or non-jurisdictional wetlands, ...shall only be permitted upon a finding by the City Commission of public necessity, and upon consideration of mitigation." If the southern edge of the site is a continuous wetland system, as indicated on the King Engineering Concept Plan, access to the site likely will require review and mitigation.

However, since stormwater from Drew Street drains into the wetland areas (see "Infrastructure" map), these areas may not fall under state jurisdiction. Mike Quillen, Water Resource Engineer in Clearwater's Environmental Management Division noted in a phone conversation (June 24, 1994,) that a field determination would need to be made. He pointed out that the areas do not appear on either the City's Future Land Use or Zoning Maps as Conservation or Preservation areas. Since the areas receive stormwater runoff and are not connected to a larger wetland system, they may qualify for a designation of "isolated wetlands". If this is the case, permits for access across the area should not be difficult to secure.

The site should not be affected by flooding. The site appears to be outside the 100 year floodplain, according to the August 19, 1991, Flood Insurance Rate Map and the 100 year floodplain designation on the City's Zoning Map (which is shown on the "Environmental Conditions" map). Much of the Kapok Mobile Home Park property, and the northern section of the adjacent City property lie within the 100 year floodplain.

Aside from the wetland areas, indicators and documentation suggest that the soils are a sandy type, which would support development. The presence of a citrus grove is a good indicator of sandy soils. Additionally, the Millspaugh appraisal notes that "the 1972 Pinellas County Soil Survey (Sheet 12)... identifies most buildable areas of the site as being comprised of various sandy type soils. It further shows the noted wetland areas as being terra ceia muck, which is seldom developable land."² An on-site soils test is recommended to confirm the soil composition.

TREE COVER

The site contains significant tree cover; aerial photos illustrate complete canopy coverage on its southern half. Along Drew Street, views into the site are limited by dense tree and understory vegetation. The northern half of the site, however is more open, and exhibits the remains of a citrus grove. A cluster of trees and undergrowth lie along the northern boundary of the site, and completely block views into the site from "Brigadoon of Clearwater".

The presence of such dense vegetation serves as both a significant potential amenity for residential development and as a limitation to the extent of such development. The City of Clearwater Tree Protection Ordinance limits the extent of clearing through replacement requirements or contributions. For residential properties over 1/2 acre, this ordinance allows the removal of 25% of the DBH (tree diameter at breast height, measured 4 1/2 feet above grade) of existing protected trees without replacement. Protected trees are defined as trees having a DBH of four inches or greater. This allowance is given only at one time, prior to construction. With significant tree cover on the southern portion of the site, this allowance should make the more open northern half of the site developable without requiring mitigation. Portions of the more densely covered areas also may be selectively developed as larger lot residences.

The dense tree and understory planting creates a visual and sound buffer from Drew Street, and enhances the quality and value of a neighborhood. As many existing trees should be preserved as possible in developed areas, for climatic, environmental, spatial, and aesthetic considerations. In addition, new tree planting is anticipated for lining residential streets and shading yards. Roadway, buffering, and residential plantings could contribute to tree replacements that may be required if an excess of 25% of the site's tree DBH is removed.

The Tree Protection Ordinance provides a conditional "Native Understory Plant

Credit," which could further reduce replacement requirements and enhance the environmental qualities of the site. This credit applies to the preservation of native ground cover, shrubs, and small trees which are often critical to the survival of trees after development. The credit allows the reduction of total tree replacement requirements up to 25% if "native understory vegetation is allowed to remain within green areas around the subject trees"³, as determined by the director.

To determine the extent of tree cover and potential area of tree removal without mitigation, a tree survey should be undertaken. This survey would identify the number, size, location, and species of trees. With this information, a more accurate assessment of the developable area and potential mitigation costs could be determined.

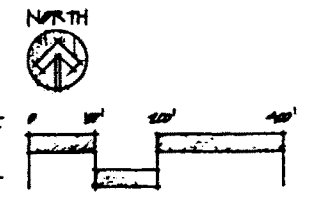
It should be noted that the Concept Plan of an apartment complex prepared by King Engineering identified a significant cost for tree replacement. The plan sited apartment buildings with roadways and parking areas along the southern half of the current City parcel and the northern half of this site. The April 9, 1992 letter from King Engineering to Mr. Art Kader, Clearwater Parks and Recreation Department, described extraordinary costs for development. The letter notes that approximately 11.1 acres of significant tree cover would be impacted by the plan. An estimation for the total DBH was made during a field visit: "approximately 105 caliper inches of tree diameter is contained in a 25' x 25' square area. This was verified to be the average for numerous sample areas in the heavily vegetated portions of the site. Using this figure, it can then be determined that approximately 81,000 caliper inches of tree diameter exist within the heavily vegetated area."⁴ The letter continues with an estimate of the tree loss due to development minus the 25% allowance. Using a \$20 per diameter inch contribution cost to the City of Clearwater Tree Fund, the estimated contribution based on the concept plan development was \$569,000. The letter continues that the figure could be substantially reduced if the additional credit for preservation of understory vegetation were accepted. The cost then could approximate \$83,000. The King Engineering letter notes that "without a tree survey, however, it is only possible to give a range of the 'extraordinary cost' created by development within a heavily treed area of the City of Clearwater."⁵



LEGEND

PROPERTY LINE	---
EXISTING GRADE	—
WETLAND LIMITS	
TREE COVER	~
10 YR. FLOOD PLAN	▨

SOURCE INFORMATION
FLOOD PLAN:
 CITY OF CLEARWATER 2000
 ALA. MARSH, MDI
UTILITY:
 CITY OF CLEARWATER 2000 ALA
 MARSH, MDI
TREE COVER:
 CITY OF CLEARWATER AERIAL PHOTO
 MARSH, MDI; PROVIDED BY NATURE
 AERIAL PHOTO, CLEARWATER, FL
WETLANDS:
 CITY OF CLEARWATER 2000 AT
 STREET PLAN, APRIL, 1982
 PROVIDED BY KING ENGINEERING
 CONSULTANTS, INC., CLEARWATER, FL



AFFORDABLE HOUSING SITE ■ DREW STREET PROPERTY ■ CLEARWATER
INITIAL ANALYSIS AND FEASIBILITY STUDY
Environmental Conditions

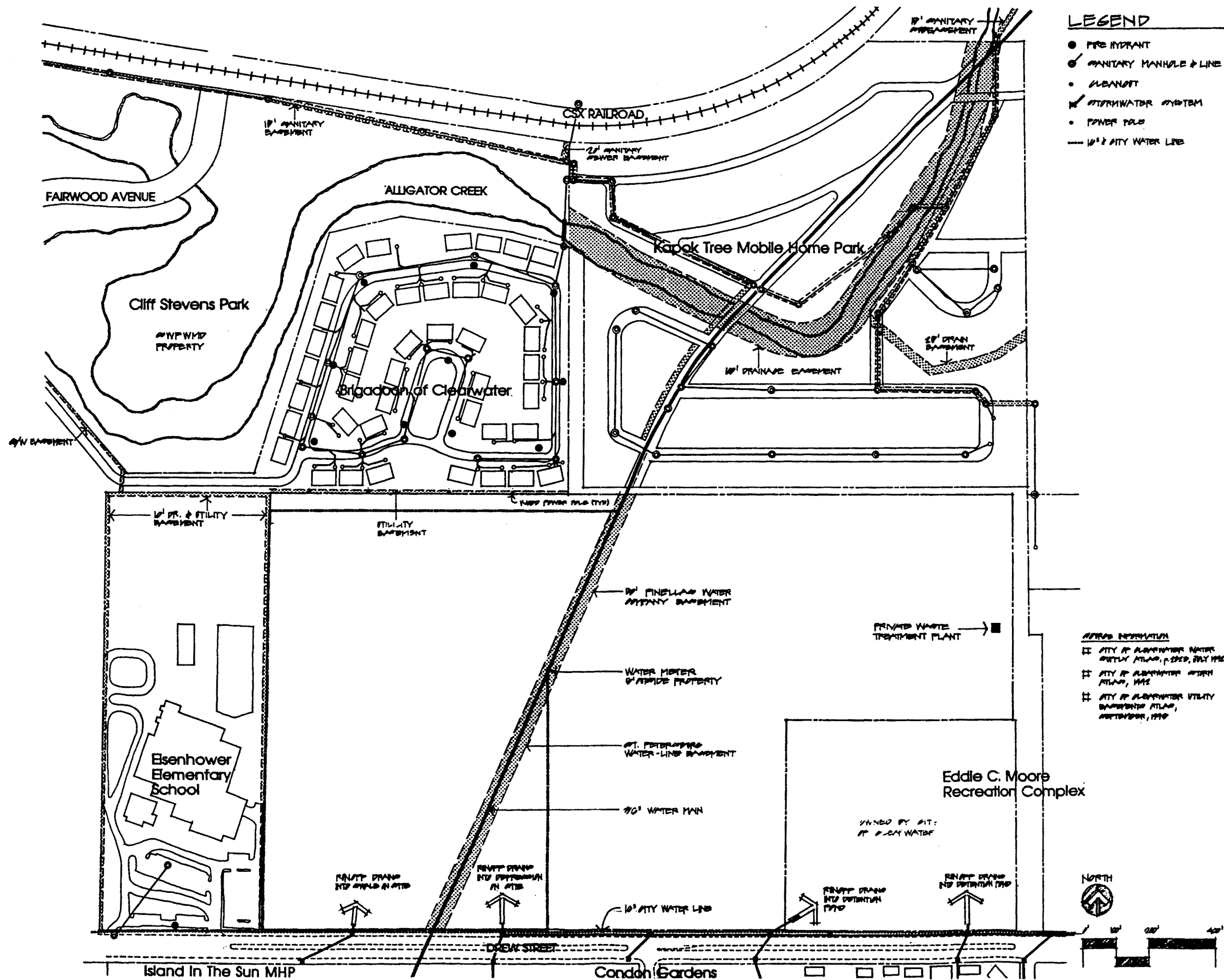
Prepared for: Clearwater Housing Authority
 Prepared by: The Florida Center for Community Design + Research
 June 1994

3. INFRASTRUCTURE

As noted in both 1992 appraisal reports for the property, there is reasonable access to water and sanitary sewer lines. The site is within the City's Water Service Area, and a 16" water main is located along Drew Street. The site is located within the City's Sewer Service Area, in the Northeast District for Wastewater Treatment Facilities. The *City of Clearwater Comprehensive Plan* notes that it has adequate sewage system capacity for existing and planned development. As noted on the "Infrastructure" Map, the nearest sanitary sewer line appears to be the one serving Eisenhower Elementary School. Access to this line along the western edge of the site would preclude the need to cross the City of St. Petersburg water line. This assumes that no development would occur east of the water line on the site. As noted in the April 9, 1992, letter from King Engineering to Mr. Art Kader, sewage lines for development which crosses the St. Petersburg water line would need a standard pump station.

Easements for various utilities affect the site. The "Infrastructure" map depicts utility easements which run along the western edge of the site and along the southern boundary of Brigadoon of Clearwater. A City of St. Petersburg water main and corresponding easement mark the northeast property boundary, and pass through the southeast section of the site. Along the northeast property line, 20' of the easement is contained within the property. As the line passes through the property, the easement is 50' wide.

The site is located in the Alligator Creek Drainage Basin, within Clearwater's Drainage Service Area. Alligator Creek lies north of the site, bordering "Brigadoon of Clearwater". A small section of the site's northwest corner slopes towards Alligator Creek. The majority of the site directs stormwater movement to the south and the east. Currently, stormwater runoff from Drew Street enters the site and drains into the wetland areas at two points. As noted in the previous section, this condition may affect the jurisdictional designation and limits of the wetlands.



- LEGEND**
- FIRE HYDRANT
 - SANITARY MANHOLE & LINE
 - CLEANOUT
 - ▨ STORMWATER SYSTEM
 - POWER POLE
 - 16" CITY WATER LINE

- OTHER INFORMATION**
- ▨ CITY OF CLEARWATER WATER SUPPLY ATLAS, P. 2022, JULY 1982
 - ▨ CITY OF CLEARWATER STORM ATLAS, 1982
 - ▨ CITY OF CLEARWATER UTILITY BASINAGE ATLAS, OCTOBER, 1989

AFFORDABLE HOUSING SITE ■ DREW STREET PROPERTY ■ CLEARWATER
INITIAL ANALYSIS AND FEASIBILITY STUDY
Infrastructure

Prepared for: Clearwater Housing Authority
 Prepared by: The Florida Center for Community Design + Research
 June 1994

4. POTENTIAL CONNECTIONS

The site is bounded on three sides by public land, and by Drew Street on its southern edge. A variety of potential connections may be made between the site and its surrounds, including pedestrian and bicycle, roadway, and mass transit. The land uses immediate to the site provide opportunities for recreational and open space links. They also provide a context for the required "Recreation and Open Space Land Dedication". The various connection opportunities are illustrated on the "Potential Connections" map.

OPEN SPACE

The City of Clearwater property to the north and east of the site is planned for park and recreational uses. The 50' wide strip along the northern boundary of the site, intended for a trail connection to Cliff Stevens Park just north of Eisenhower Elementary, offers potential pedestrian and open space access for development on the site.

In addition, the steep sloping, densely forested, and wetland areas along the eastern portion of the site could be candidate areas for land contributions to the City's "Recreation and Open Space Land Dedication" requirements (Chapter 54 of the *Code of Ordinances*). These areas border the City property, and could be incorporated into the recreational and open space planning of the City land. The steeply sloping area at the site's northeast corner would provide the City with a less steep path along the 50' strip. The forested area and wetland could be an ideal wildlife habitat, interpretive trail/boardwalk system, and passive recreation facility. An example of such a use of wetlands for interpretive and passive recreational functions is Lettuce Lake Park, in Hillsborough County.

The Recreation and Open Space Land requirements apply to all new residential developments of eight dwelling units or more, and call for a contribution of land or fees. The Recreation Land contribution is assessed at 150 square feet per dwelling unit. At the time of site plan review, the parks and recreation director "shall determine whether the recreation land impact fee shall be satisfied by a land dedication, money payment, or a combination thereof."⁶ The Open Space Land impact fee is based on the ratio between the City's public open space and developed land. Like the Recreation Land fee, the amount is determined by the parks and recreation director at the time of site plan review. This fee may be satisfied by land dedication, money payment, or a combination. Consideration is given to "the preservation of environmentally sensitive areas; the amount of land to be dedicated; presence or absence and location of other open space resources in the area; planned open space needs; and the ability to maintain open space lands in a cost effective manner."⁷

PEDESTRIAN AND BICYCLE

Numerous opportunities for pedestrian and bicycle connections are identified on

the "Potential Connections" Map. A sidewalk exists along the site at Drew Street, and offers pedestrian access to the adjacent Eisenhower Elementary School, the Eddie C. Moore Recreation Complex, and other residential development along Drew Street. A marked and signalized crosswalk is located on Drew Street at Eisenhower Elementary, offering a safe pedestrian crossing west of the site. Crosswalks and signals are not as close east of the site, and should be provided if the site is developed.

As noted above, the 50' wide strip of City-owned land along the north side of the site offers potential connections with an extensive path and open space system, when developed. Such a path system would also provide pedestrian access between "Brigadoon of Clearwater" and the site, offering neighboring residents opportunities to visit without the use of automobiles. Within the site, pedestrian connections can be made to the City-owned property to the east, and along the west side of the site to Drew Street. Other pedestrian paths could occur alongside the selected roadway access to the site.

ROADWAY

Adjacent and surrounding arterial roadways offer good access between the site and surrounding community, as well as other parts of the metropolitan area. The site is located between U.S. 19 and McMullen-Booth Road along Drew Street. As a City Collector east of U.S. 19, Drew Street is a four-lane divided roadway. Drew Street continues as a four-lane roadway west of U.S. 19, and provides direct access to downtown Clearwater. Like U.S. 19, the widened McMullen-Booth Road with its Bayside Bridge offers direct access to cities north and south of Clearwater. McMullen-Booth Road also offers access to Gulf-to-Bay Boulevard (State Road 60), which crosses the Bay to Tampa.

In the location of the site, Drew Street does not have congestion problems which would necessitate a traffic impact study. Clearwater's *Code of Ordinances* Section 42.05 requires a traffic impact study if a proposed development generates 140 or more vehicle trips per day and "will impact a backlogged road, or if the development will generate one percent or more of the peak hour capacity of any road within the city identified on the future traffic circulation map which is determined to be operating at a level of service standard of D or below during peak hour."⁸ The development of this site could result in 140 or more vehicle trips per day, however, improvements to Drew Street give it a sufficient capacity.

Drew Street offers the only immediate access to the site. The location of an entry drive near the middle of the site's frontage offers the least impact on the identified wetlands. This location also gives the best potential condition for a Drew Street median cut and left turn lane for east-bound traffic. The "Potential Connections" map illustrates this location. Roy Sattinger, Clearwater Engineering Department, prepared the plans for the Drew Street improvements and believes that a curb cut and left turn lane at this location should not be problematic. A formal review of such a proposal would be undertaken by the City's Transportation Department.

From a Drew Street entry, two routes could allow access to the developable land on the north side of the site: one along the western property boundary with minimal contact of the southwest wetland, and one bridging over the wetland areas, where they appear to be connected by a narrow link. The provision of two routes could ease traffic congestion within the site.

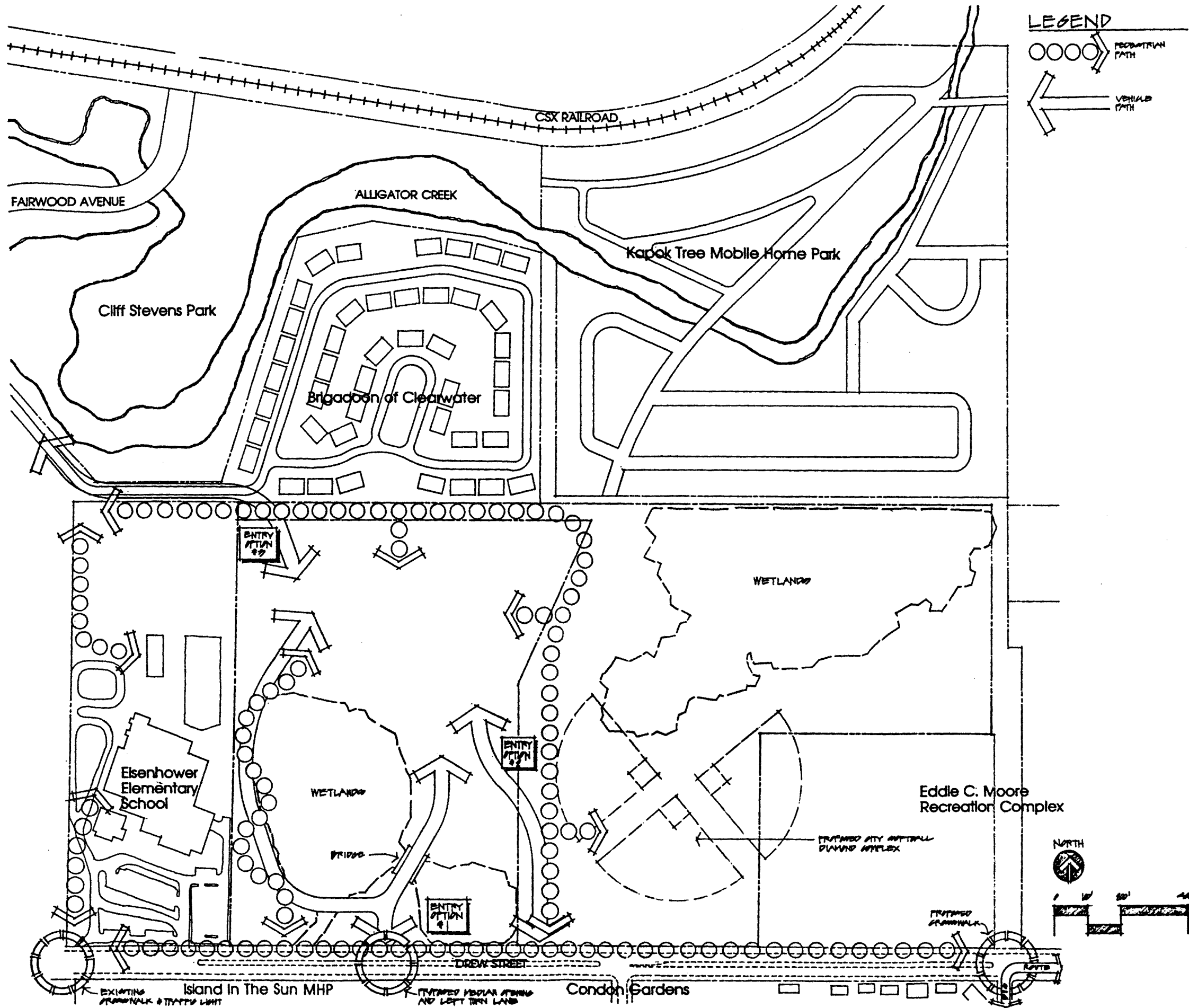
To avoid any conflict with the wetlands along the southern part of the site, an alternative access point from Drew Street would involve seeking an easement from the City of Clearwater. This alternative would be most appropriate if located where an existing median cut occurs at Condon Gardens. Such an easement could affect conceptual plans for ball fields and parking in this area of the City property, as indicated on the "Potential Connections" map.

A third alternative for access to the developable northern portion of the site would require easements from the City of Clearwater, as well as from the development of "Brigadoon of Clearwater". This alternative suggests access from Brigadoon Drive, near the northwest corner of the site. An easement would need to be secured from the City to cross the 50' wide strip of land separating the site from Brigadoon Drive. Additionally, Brigadoon Drive is privately owned and may need to be widened to accommodate significant additional traffic.

Currently, the right-of-way for the potentially affected section of Brigadoon Drive is the only private property separating the northern edge of Eisenhower Elementary School from Cliff Stevens Park. A sidewalk easement allows pedestrians to cross from the school to the park at one point. The planned path linking Cliff Stevens Park with Eddie C. Moore Recreation Complex via the City property at the north side of the site seems to rely upon access across school property, unless another sidewalk easement were secured or that section of Brigadoon Drive were purchased by the City. If the City purchased the park-lined section of Brigadoon Drive, access to the site's northern edge could be feasible. Brigadoon Drive meets Fairwood Avenue, a two-lane which currently is not congested.

MASS TRANSIT

Mass transit service is not immediate to the site, but is located at Condon Gardens on the south side of Drew Street. The Pinellas Suncoast Transit Authority (P.S.T.A.) route travels down Bayview to Gulf-to-Bay Boulevard, with stops including the Clearwater Mall, transfers to other routes, and the downtown route transfer center. To improve pedestrian access to existing bus stops at Condon Gardens, a crosswalk and traffic light should be provided at Bayview. Ideally, a new or revised bus route would travel along Drew Street and provide residents access to other uses along the corridor.



AFFORDABLE HOUSING SITE ■ DREW STREET PROPERTY ■ CLEARWATER
INITIAL ANALYSIS AND FEASIBILITY STUDY
Potential Connections

Prepared for: Clearwater Housing Authority
 Prepared by: The Florida Center for Community Design + Research
 June 1994

5. DEVELOPMENT FEASIBILITY

Portions of the site could be developed easily as housing, and the *City of Clearwater Comprehensive Plan* supports provision of affordable housing. Portions of supportive goals and objectives are described below. However, certain environmental, access, and land dedication issues will affect the potential number and development cost of the units. The following text summarizes aspects of the previous sections which could affect the development potential of the site, and needed actions to verify development potential.

AFFORDABLE HOUSING GOALS

The *City of Clearwater Comprehensive Plan* Housing Element supports provisions for affordable housing, and discusses trends in the City's residential development. The Element notes that as much as 76% of the current housing stock in Clearwater has been constructed since 1960. While the construction of new housing is fairly evenly divided between single- and multi-family units, "the increase in the cost of new single-family homes has risen dramatically faster than the sale price of existing single family homes."⁹ Given population projections for the year 2000, an additional 10,000 housing units will be needed for an "adequate supply of housing."¹⁰

Further, the Plan's Objective 13.3 calls for a sufficient supply of standard and affordable housing for Clearwater's households, and Objective 13.4 identifies provisions for adequate affordable housing sites. Policies of this objective note:

- "Assisted housing projects for families should not contain more than fifty (50) units nor be more than two (2) stories high."
- "Assisted housing should be landscaped and architecturally compatible with the surrounding neighborhood."
- "Assisted housing units should be located in close proximity to employment centers and mass transit services."
- "Buildings and grounds at assisted housing locations should be maintained so as to preserve a desirable living environment."
- "Maintain a minimum of 3,500 acres of the City zoned for densities from eight (8) to sixteen (16) units per acre and/or for mobile homes in order to accommodate more affordable small lots, small and medium size apartments, and mobile homes."

CONTEXT

As described in the "Site and Context" section of this report, the site appears to have had no permanent development except for the orange groves, trails, and dump sites. These dump sites, however, may contain hazardous materials which could affect development.

needed:

To be assured that the dump sites do not contain hazardous materials, and that

hazardous materials have not leached into the soil, a site visit and analysis should be undertaken by appropriate environmental scientists.

ZONING CONSIDERATIONS

The current zoning of the site, RM 16, allows a maximum of 15 dwelling units per gross acre. The "dimensional and numerical requirements" for this zoning category constrain the potential total density and range of dwelling types. A change in the zoning category to MPD, Master Planned Development, would offer greater flexibility.

needed:

Staff with the Clearwater Central Permitting Department should be consulted to thoroughly review the constraints and opportunities available with current and potential changed zoning designations. The process for changing the zoning designation should be reviewed.

WATER EASEMENT

The City of St. Petersburg water line and easement which passes through the site is not developable for buildings, although roadways pass over it. This easement occupies 1.2 acres of the site, of which 0.2 acres lies within the identified wetlands and 0.8 lies within the area of dense tree cover.

TOPOGRAPHY

The site's topography offers few constraints for development, with the exceptions of the northeast corner of the site and the edges of the wetland areas. The wetland areas should be preserved, regardless of their jurisdictional conditions, and are indicated on the "Development Feasibility" map as they were shown on the 1992 King Engineering Concept Plan.

The northeast corner of the site reaches a slope of 10%, draining towards the wetland on the City owned property. While not easy to develop for housing, this approximately 0.73 acre area could be attractive for meeting the required "Recreation and Open Space Land Dedication". Although the City has a 50' wide strip along the northern edge of the site for a trail, this area is steep where the strip meets the remainder of the City parcel. The development of a trail at this location would require a 20' rise in elevation (from elevation 20 msl to 40 msl) over approximately 210' of the strip. In addition, such a trail would be located near the wetland on the City property. If the northeast corner of the site were dedicated for recreation and/or open space land, the trail could have a much more gentle slope and avoid the wetland. The trail could move along the west side of the City property at elevation 36 and rise to elevation 40 across this section of dedicated land.

SOILS

The soils on the site should be tested for potential hazardous materials at dump sites, as well as composition. Soils with muck, or a high organic content, will be

more difficult to develop than sandy soils.

needed:

A soils test should be undertaken at various locations throughout the site to determine potential hazardous materials, surface and subsurface soil composition, and depth to water table.

WETLANDS CONSERVATION

The February 1992 Appraisal Report prepared by James M. Millspaugh describes the wetlands on the "western parcel" (this site) as 6.5 acres. Calculations of the wetlands delineated on the 1992 King Engineering Concept Plan indicate that the wetlands could cover up to 7.1 acres. The wetlands exact size and boundaries would need to be determined on-site according to jurisdictional definitions.

As noted in the "Potential Connections" section, access to the site from Drew Street could be constrained by the conditions and extent of the wetlands. If the wetlands are deemed under state jurisdiction, a series of permits and mitigation measures would need to be secured for a roadway.

However, since stormwater from Drew Street drains into the wetland areas (see "Infrastructure" map), these areas may not fall under state jurisdiction. As described in the Environmental Conditions section, Mike Quillen, Water Resource Engineer in Clearwater's Environmental Management Division, noted in a phone conversation (June 24, 1994,) that a field determination would need to be made. Since the areas receive stormwater runoff and are not connected to a larger wetland system, they may be qualify for designation as "isolated wetlands". If this is the case, access across the area would not be a significant problem. In addition, these wetland areas could be suggested to serve as retention areas for site development, following appropriate review.

The wetlands areas, regardless of designation, could be candidate areas for the City's Recreation and Open Space Land Dedication requirements. These areas are contiguous to City land planned for recreational uses. They could be used for interpretive functions, passive recreation, and wildlife habitat.

needed:

In order to assess development constraints, the wetlands status should be determined. This determination could begin with a field visit by the City's Environmental Management Division. Such a determination will affect ease of securing access from Drew Street and will allow discussion of potential use of these areas for retention from site development.

TREE PROTECTION

The southern half of the site is densely forested, and would need to be selectively developed to reduce replacement requirements established in the Clearwater Tree Protection Ordinance. Development of the site's northern half, while still

containing some large trees, would not greatly impact the total tree coverage on the site. As described in the "Environmental Conditions" section of the report, up to 25% of the DBH (diameter at breast height, 4 1/2' above grade) of protected trees may be removed at one time without mitigation. The removal of additional protected trees will require replacement or contribution of fees to the City's Tree Bank.

Based on review of aerial photos on the site, approximately 64% of the site, or 16.7 acres, is under dense tree cover. Of this area, 7.1 acres is included in the estimated wetlands areas and 0.8 acres lies within the City of St. Petersburg water easement as undevelopable areas. The remaining 8.8 acre area could be developed, although the extent of clearing would be subject to the City's Tree Protection Ordinance. The economic, environmental, climatic, aesthetic, and spatial benefits of the trees also must be considered. To reduce potential impacts, this forested area could be selectively developed with housing that would require minimal clearing, such as single family housing.

Portions of the densely forested areas along the eastern portion of the site also could be considered for contribution to the City's Recreation and Open Space Land Dedication. Within the wetlands, this area could offer opportunities for passive recreation, interpretive trails, and wildlife habitat.

needed:

A tree survey of the site is needed to determine the amount and location of protected trees. A more accurate assessment of developable areas could be identified, based on a maximum removal of 25% of the DBH of protected trees.

POTENTIAL FOR ACCESS AND/OR DEVELOPMENT EASEMENTS

The potential for securing alternative access points and/or easements for the site will affect the location and extent of development. If access could be gained via the City property from Drew Street, the potential for trading land area could be explored. The densely forested southern half of the site could be offered in trade for portions of the open area along Drew Street. If access could be gained via Brigadoon Drive, the extent of potential development could be affected by the capacity of the roadway, or ability to improve roadway capacity.

RECREATION AND OPEN SPACE IMPACT CONTRIBUTIONS

As described in the paragraphs above, and to greater extent in the "Potential Connections" sections regarding open space, land and/or fees will need to be contributed for recreation and open space land dedication requirements. The park and recreation director's determination of whether the contribution will consist of land or fees occurs at the time of site plan review. Certain criteria are included in this determination, including the context of the proposed land to be contributed.

The areas suggested above for contribution should hold value for the adjacent City

property. Notably, the northeast wedge of land on the site offers the City property an elevated and easy gradient for a path. The densely forested and wet areas of the site, while not conducive to active recreation, could be attractive passive recreation areas. The nearby Eddie C. Moore Recreation Complex contains a range of active sports areas, but offers little opportunity for passive recreation. Such proposals would need to be reviewed by and discussed with the parks and recreation director and/or staff to determine their feasibility. The alternative, fee-based contribution, would affect the cost of the site and housing.

POTENTIAL DEVELOPABLE AREA/NUMBER OF UNITS

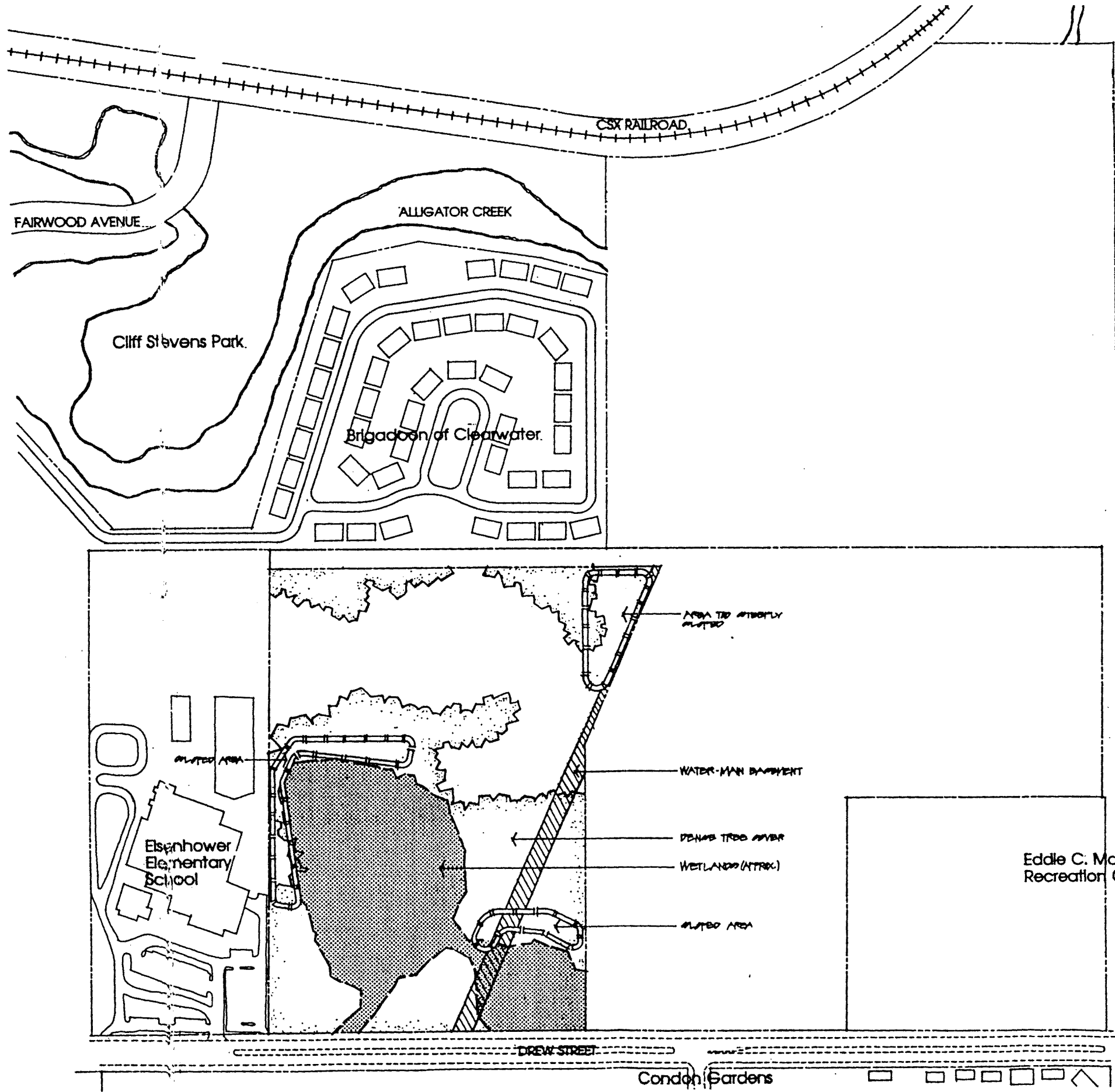
Based upon the current zoning designation, the site could contain 15 dwelling units per gross acre. On this approximately 25.96 acre site, the zoning suggests a potential of 389 total units on the site. The low lying wet areas, dense vegetation, and steep slopes reduce the available developable area significantly, and thus could result in increased net density.

A review of the 1992 King Engineering Concept Plan illustrates approximately 220 units on the site, as a 3-story multi-family unit type. The Concept Plan extended development into the forested area, but avoided the identified wetlands areas and St. Petersburg Water Easement. Such a development pattern results in large parking areas surrounding the buildings, in a manner similar to the nearby "Brigadoon of Clearwater" development. While more open space may be achieved if the wetlands could be used to retain development runoff, the pattern would not change significantly.

The amount of undevelopable land will vary, depending upon the determination of the wetland areas and the extent of tree cover. As noted on the "Potential Developable Area" map, a series of deductions from the total acreage will affect the potential location and net density of residential development. The City of St. Petersburg water easement, which crosses the site, occupies 1.2 acres of land. The forested area southeast of the water easement and outside the wetland could be developable, but may necessitate a standard pump station to cross the line. The 0.73 acre northeast corner of the site would be difficult to develop given its steep slope. The wetlands, as depicted on the 1992 King Engineering Concept Plan, occupy approximately 7.1 acres of the site, of which 0.2 acres is already deducted for the water easement. By deducting the water easement, steeply sloped northeast corner, and suggested wetland areas from the 25.96 site area, 17.13 acres remain as an estimated developable area. In addition, two areas are noted on the map around the wetland areas where slopes reach up to 10% and would need to be protected. Of this 17.13 acres, approximately 8.33 acres is relatively open, and 8.8 acres is under dense tree cover.

While approximately 17.13 acres has been identified as developable, the potential number of units for the site will depend upon the selected type(s) of housing units and their net densities within portions of the site. The dense tree cover and more open site areas could contain different types of housing units, and/or could be

clustered with dense tree and understory plantings in between. The relatively open area should be easy to develop; this area comprises the former citrus grove in the northern portion of the site, with a high elevation and relatively flat slope. The northern edges of the site contain some dense tree cover which buffers views from the strip of City property and "Brigadoon of Clearwater". The southern half of the site contains developable areas under dense tree cover. As previously mentioned, the preservation of trees and understory provides significant residential value and is guided by the City's Tree Protection Ordinance. This portion of the site could be selectively cleared for lower density residential development. This area will need to be cleared somewhat for access from Drew Street, if alternative access points are not pursued.



AREA	POTENTIAL DEVELOPABLE AREA
□ TOTAL SITE	29.46 ACRES
□ WATER BARRIERS (AS WITH TRUCK COVER AS WITH WETLANDS AS WITH TOTAL) - 1.2	28.26 ACRES
□ WETLANDS (POTENTIAL) - 7.9	20.36 ACRES
□ WETLANDS (POTENTIAL) - 8.2	12.16 ACRES
□ TRUCK COVER (POTENTIAL) - 7.1	15.06 ACRES
□ TRUCK COVER (POTENTIAL) - 2.8	12.26 ACRES
□ TRUCK COVER (POTENTIAL) - 0.9	11.36 ACRES

AT THE 12.16 ACRES OF POTENTIAL DEVELOPABLE LAND, 8.3 ACRES IS RELATIVELY PROTECTED, AND 3.86 ACRES IS RELATIVELY CLEAR.

AFFORDABLE HOUSING SITE ■ DREW STREET PROPERTY ■ CLEARWATER
INITIAL ANALYSIS AND FEASIBILITY STUDY
Potential Developable Areas

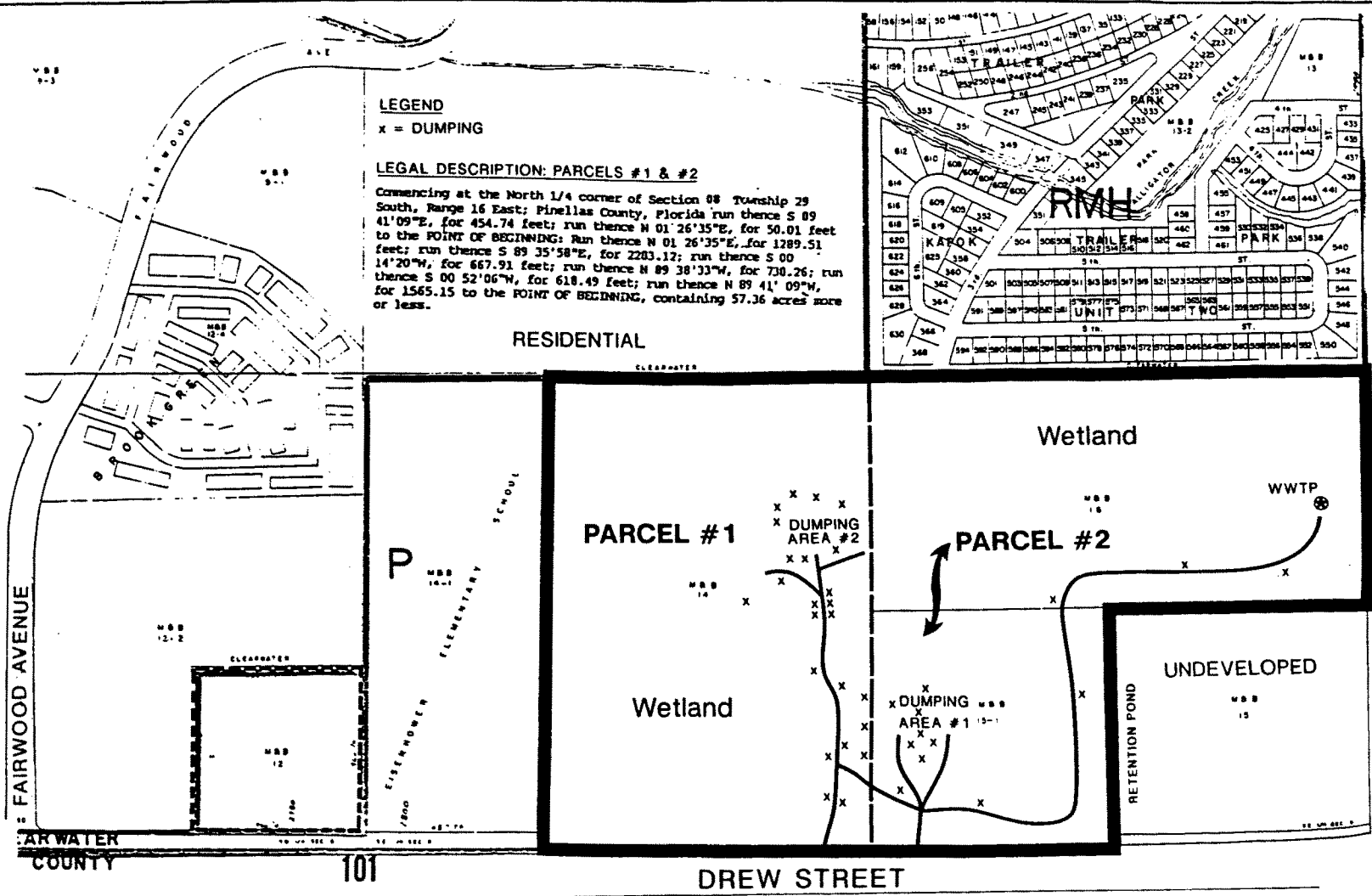
Prepared for: Clearwater Housing Authority
 Prepared by: The Florida Center for Community Design + Research
 June 1994

ENDNOTES

1. "Phase 1 Environmental Audit Report, Drew Street Property, Clearwater, Florida," prepared by King Engineering Associates, Inc., March 1992, page 16.
2. "Appraisal Report: Drew Street Residential Acreage Approx. 600' West of Hampton Road, Clearwater, Florida," prepared by James M. Millspaugh, MAI, dated February 19, 1992, for Mr. Art Kader, Parks and Recreation Department, City of Clearwater, transmitted May 6, 1992, pp. 12, 13.
3. "City of Clearwater Tree Protection Ordinance," Chapter 52, Section 52.38.1(b).
4. April 9, 1992, letter from King Engineering Associates, Inc. to Mr. Art Kader, Clearwater Parks and Recreation Department, page 3.
5. *ibid.*
6. *City of Clearwater Code of Ordinances*, effective February 4, 1993, Section 54.23.3.
7. *City of Clearwater Code of Ordinances*, effective February 4, 1993, Section 54.53.3.
8. *Code of Ordinances, City of Clearwater*, effective February 3, 1993, Section 42.05.
9. *City of Clearwater Comprehensive Plan*, adopted November 16, 1989, page 65.
10. *ibid*, page 67.

APPENDIX

1. Site Map locating dumping areas, from "Phase 1 Environmental Audit Report, Drew Street Property, Clearwater, Florida" prepared by King Engineering Associates, Inc. for Mr. Art Kader, Assistant Director of Parks and Recreation, City of Clearwater, dated March 1992.
2. "57 Acre Drew Street Property, City of Clearwater, Concept Plan" prepared by King Engineering Associates, Inc., dated April 7, 1992, modified and contained in "Appraisal Report: Drew Street Residential Acreage Approx. 600' West of Hampton Road, Clearwater, Florida" prepared by James M. Millspaugh, MAI, dated February 19, 1992, for Mr. Art Kader, Parks and Recreation Department, City of Clearwater, transmitted May 6, 1992.



Job No. 2110-024-000

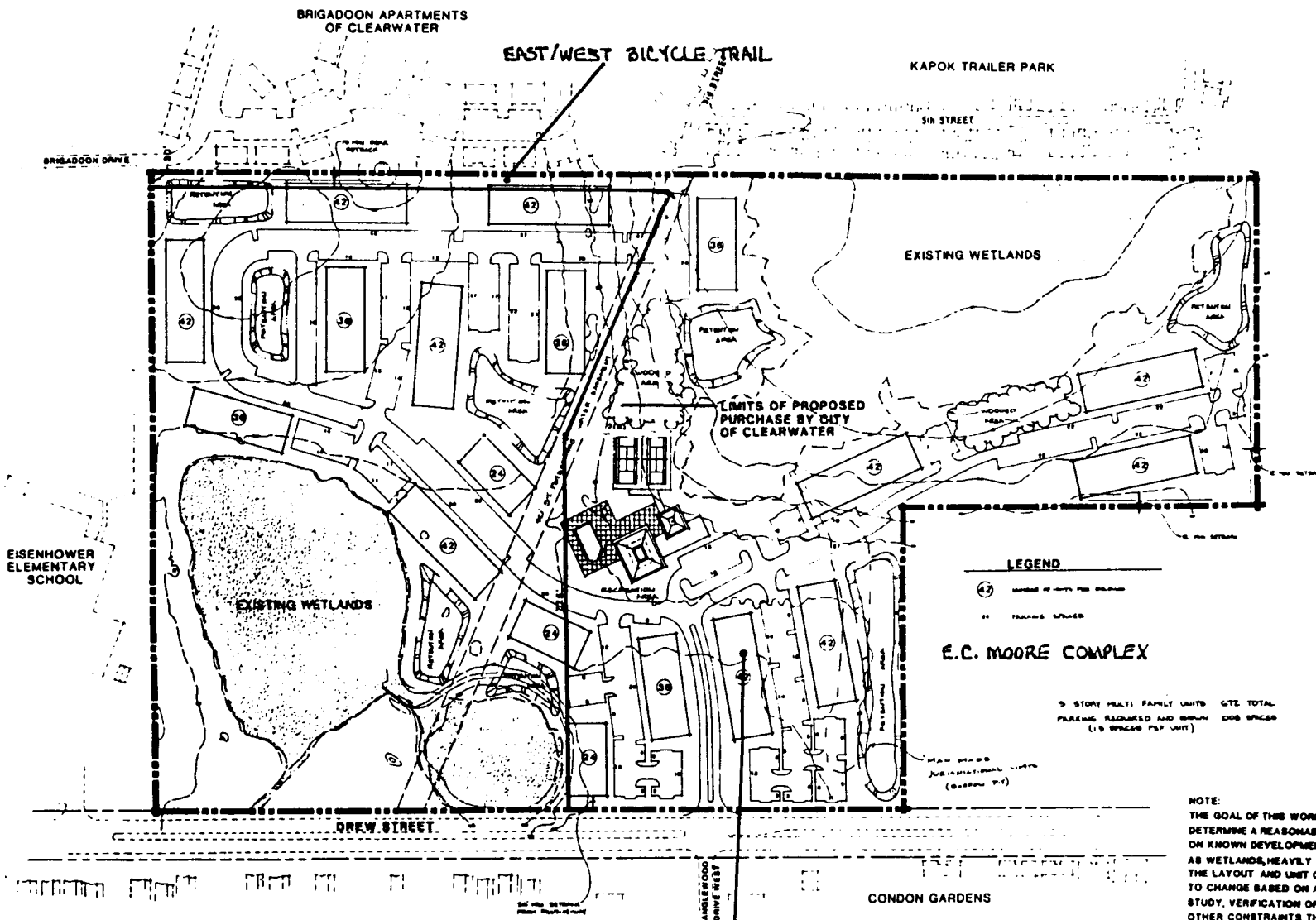
March, 1992

SITE MAP

DREW STREET SITE - CLEARWATER, FLA.

KEA
3440 BEAUMONT CENTER BLVD.
TAMPA FL. 33634

Fig. 2



LEGEND

43 UNITS OF CITY OF CLEARWATER

11 PARKING SPACES

E.C. MOORE COMPLEX

3 STORY MULTI FAMILY UNITS GTE TOTAL
PARKING REQUIRED AND SUPPLY 1000 SPACES
(15 SPACES PER UNIT)

NOTE:
THE GOAL OF THIS WORK EFFORT WAS TO DETERMINE A REASONABLE UNIT COUNT BASED ON KNOWN DEVELOPMENT CONSTRAINTS SUCH AS WETLANDS, HEAVILY VEGETATED AREAS ETC. THE LAYOUT AND UNIT COUNT ARE SUBJECT TO CHANGE BASED ON A DETAILED DRAINAGE STUDY, VERIFICATION OF WETLAND LIMITS, AND OTHER CONSTRAINTS THAT WERE NOT PART OF THIS WORK EFFORT.

PROPOSED 3 FIELD SOFTBALL COMPLEX



AFFORDABLE HOUSING SITE INITIAL ANALYSIS AND FEASIBILITY STUDY

Florida Center for Community Design + Research
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client: Clearwater Housing Authority
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Clearwater, FL 34617

project
number: 4950-33-10065-LO

project dates: May 27 - June 30, 1994

principal
investigators: James A. Moore, PhD, Director
Julie M. Johnson, ASLA, AICP, Senior Research Associate

project team: Amy Holmes
Mike Faulhaber

administration: Kirsten Miller Jameson