

# **Due Diligence Infrastructure Report**

## **For Kakaako Block B**

**Honolulu, Oahu, Hawaii**

**Prepared for:  
Castle and Cooke Homes Hawaii, Inc.  
680 Iwilei Road, Suite 510  
Honolulu, Hawaii 96817**

**Prepared by:  
ParEn, Inc.  
dba Park Engineering  
711 Kapiolani Boulevard, Suite 1500  
Honolulu, Hawaii 96813**

**January 2014**

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# 1 PROJECT DESCRIPTION

Castle and Cooke Homes Hawaii Inc. (CCHHI), in partnership with Kamehameha Schools is proposing to redevelop Block B in Kakaako Mauka. The project site is bounded by Auahi Street, Keawe Street and Pohukaina Street, all of which are owned and maintained by the City and County of Honolulu. The western half of the block is occupied by Waterfront Towers. Figure 1-1 is a vicinity and location map of the project site.

Conceptual plans dated November 14, 2013 for redevelopment of the site were prepared by Design Partners Incorporated (DPI). It includes seven-story, for-sale, residential building with ground floor retail on the makai half of the block. The for-sale building, designated as B-1, is being developed by CCHHI. Parking for the retail and for-sale residential is accommodated by an at-grade parking lot beneath and behind the building. The mauka half of the block has a seven-floor, residential rental building which has parking levels beneath the residential floors. Kamehameha Schools is developing the rental project, which is designated at B-2. The conceptual plans have been attached as Appendix A.

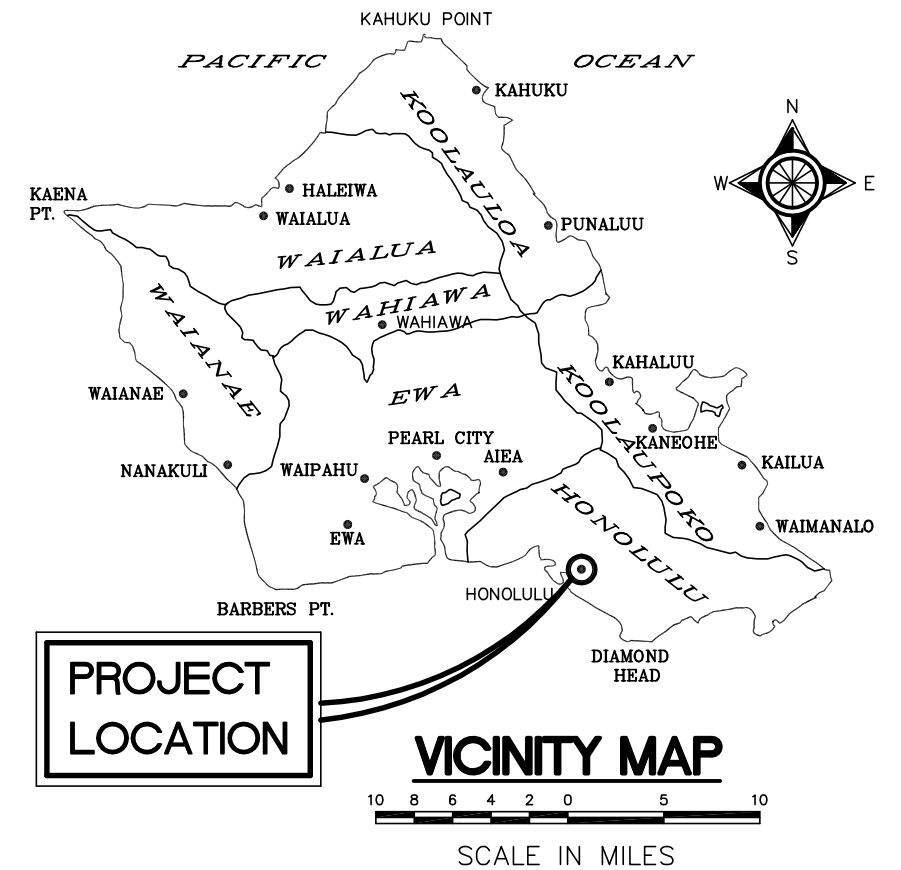
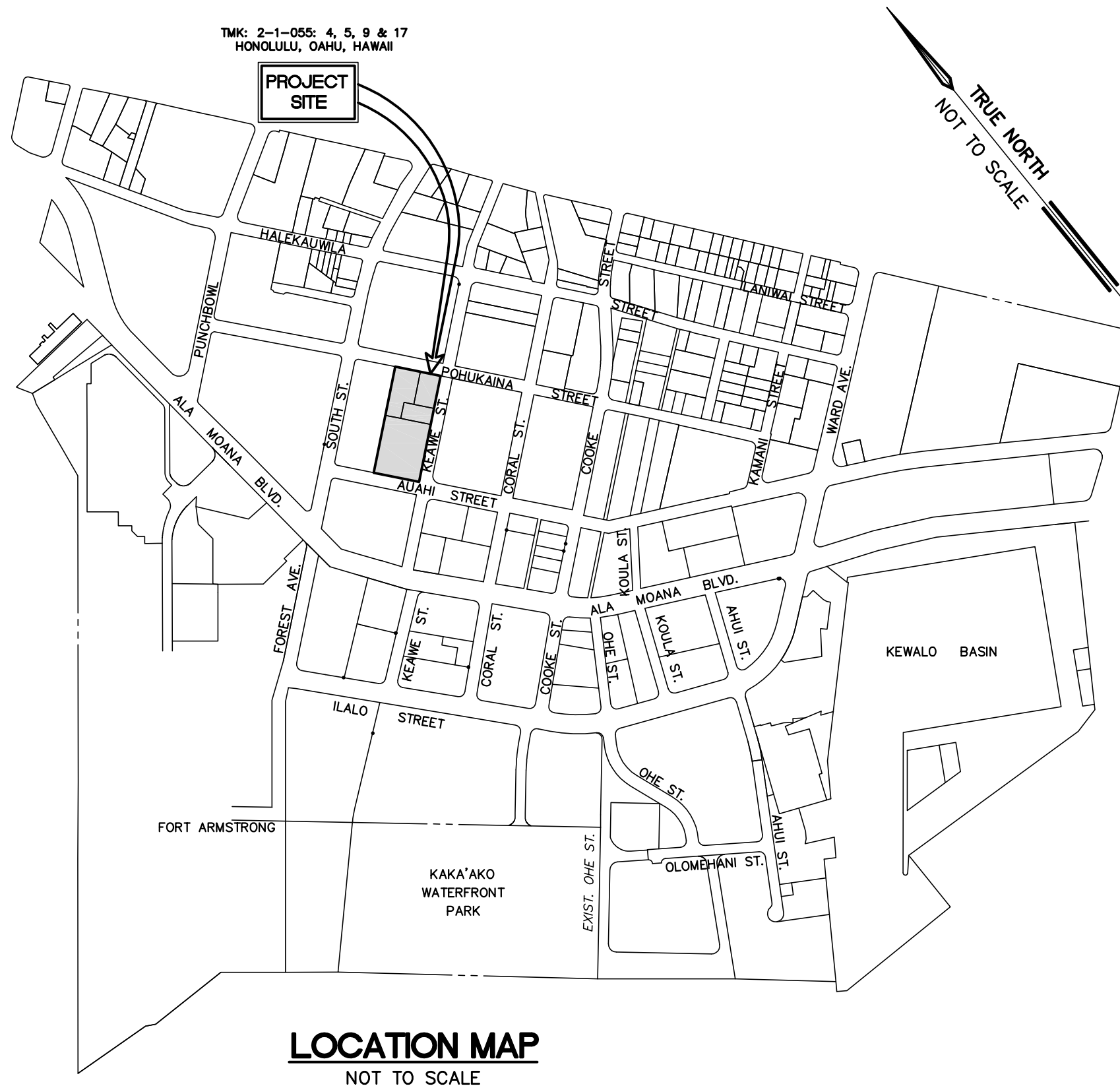
DPI also prepared a table of unit counts, floor area ratio (FAR) calculations and parking counts for the various types of uses. There are 20 one-bedroom, 55 two-bedroom, and 20 three-bedroom units for a total of 95 residential units in the for-sale building. The retail space on the ground floor has a gross area of 9,852 square feet. The rental building has 40 studio, 16 one-bedroom, and 32 two-bedroom units for a total of 88 units. The table is also included in Appendix A.

An ALTA survey of the site was performed by Towill, Shigeoka and Associates in 2008. Parcel information, including lot area and current uses are shown in Table 1-1 below.

**TABLE 1-1  
DEVELOPMENT AREA BY TMK**

<b>TMK</b>	<b>LOT</b>	<b>LAND AREA (SQ. FT.)</b>	<b>LAND AREA (ACRES)</b>	<b>CURRENT USE</b>
<b>2-1-054:025</b>	1	66,110	1.52	J's BBQ, Power House Gym, Hawaiian Beauty Products, Office, Warehouse
<b>2-1-054:028</b>	2	16,554	0.38	Alu Like Building
<b>2-1-054:027</b>	3-A	27,552	0.63	Myron B. Thompson Academy
<b>2-1-054:032</b>	3-B	12,263	0.28	Parking Lot
<b>TOTAL</b>		122,479	2.81	





KAKAAKO BLOCK B  
VICINITY AND LOCATION MAP

Vehicular access for the site currently occurs from all three frontage streets, Auahi Street, Keawe Street and Pohukaina Street. Development of the for-sale and rental building proposes to utilize single access points from Auahi Street and Pohukaina Street, respectively. The Auahi Street driveway connection has been coordinated to align with the driveway for the Collections project by Alexander and Baldwin. A composite site plan with civil utilities is provided as Figure 1-2.

## **2 TOPOGRAPHY**

Topography at the project site ranges from elevation 4 to 8 feet MSL. Terrain at the site is gently sloped from Pohukaina Street to Auahi Street with an average slope of approximately 2%.

## **3 LAND USE**

The project site is within the Mauka Area of the Kakaako Community Development District which is under the planning, regulation and development responsibility of the Hawaii Community Development Authority (HCDA).

The Mauka Area Plan and Rules were updated and adopted in September 2011. However, this project is part of Kamehameha School's Kaiaulu O Kakaako Master Plan which was approved in 2009. Under this master plan, Block B is slated for Residential-Commercial Mixed Use which is consistent with the Mauka Area Plan and Rules.

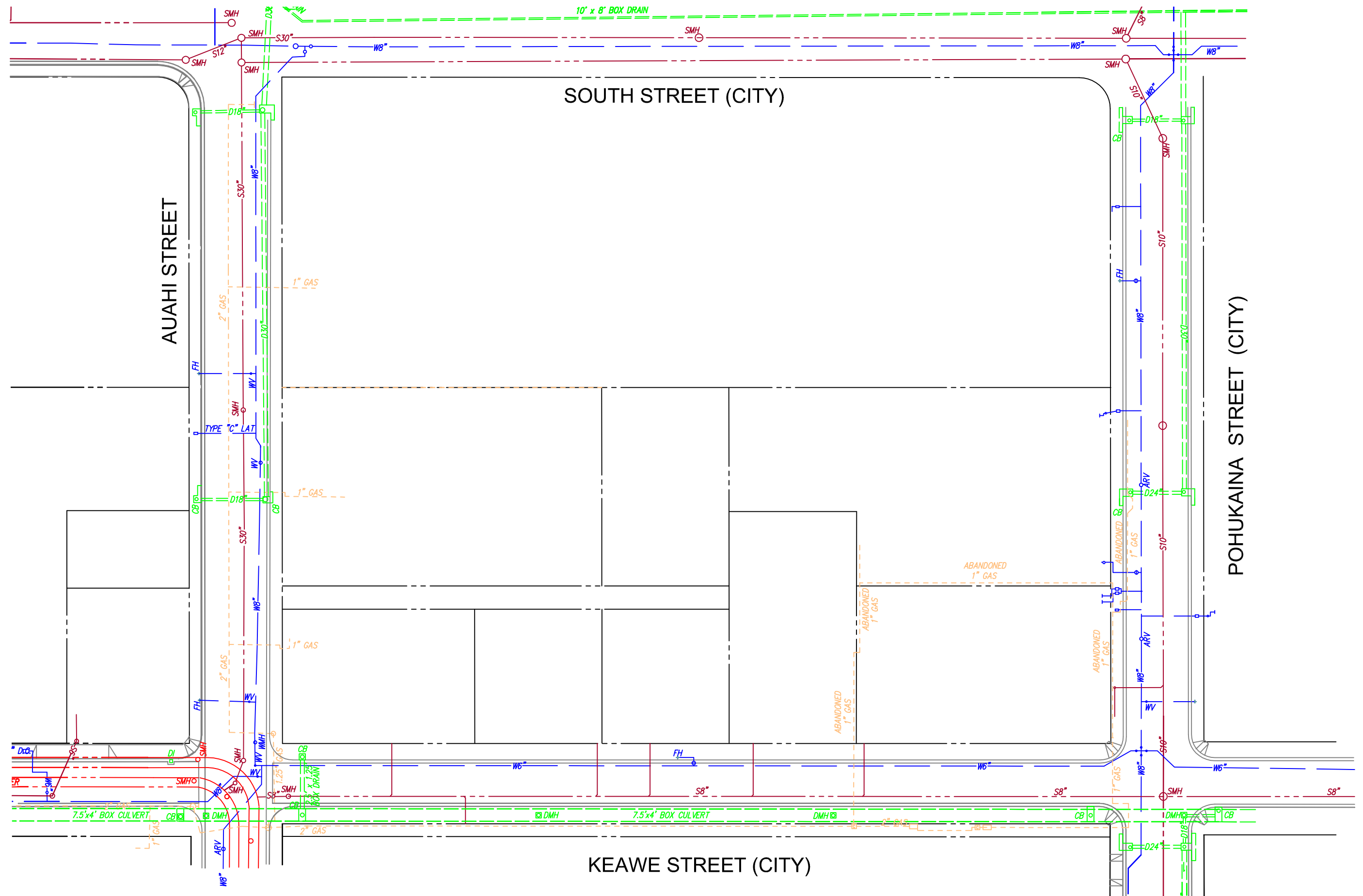
## **4 FLOOD ZONE**

Federal Emergency Management Act (FEMA) Flood Insurance Rate Maps (FIRM) were recently updated in January of 2011. Based on the latest FIRM map data, the entire project site is designated as being in Zone X, areas determined to be outside the 0.2% (500-year) annual chance floodplain. No special measures are required for flooding. The FIRM map panel associated with this area is identified as 15003C0362G. Figure 4-1 shows the flood zone information in the vicinity of the project site.

## **5 SEWER SYSTEM**

### **5.1. EXISTING SEWER SYSTEM**

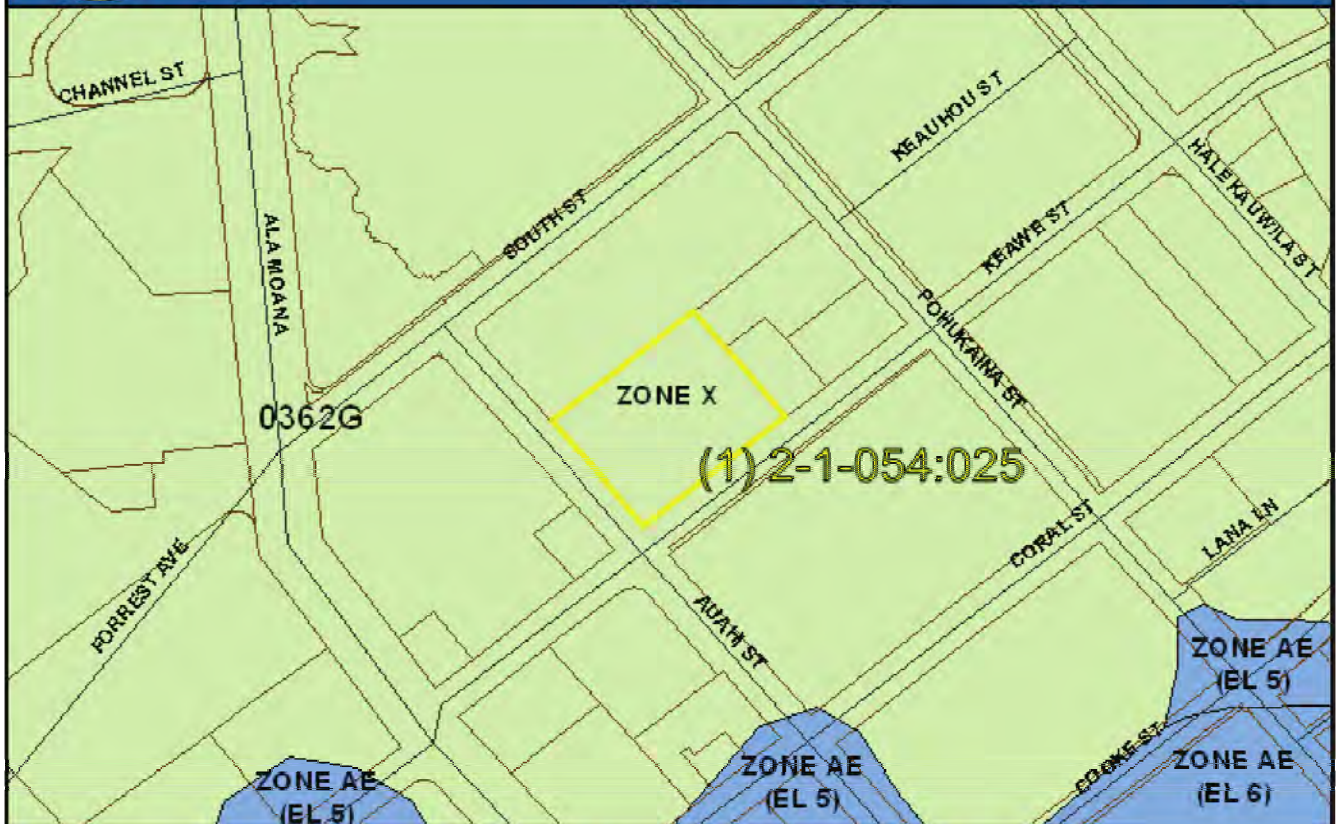
The project site is in close proximity to the Ala Moana Wastewater Pump Station, a major pump station for the region that conveys wastewater under the



KAKAAKO BLOCK B  
SITE PLAN



# State of Hawaii FLOOD HAZARD ASSESSMENT REPORT



## NATIONAL FLOOD INSURANCE PROGRAM

### FLOOD ZONE DEFINITIONS

**SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD** – The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water-surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

- Zone A: No BFE determined.
- Zone AE: BFE determined.
- Zone AH: Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.
- Zone AO: Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.
- Zone V: Coastal flood zone with velocity hazard (wave action); no BFE determined.
- Zone VE: Coastal flood zone with velocity hazard (wave action); BFE determined.
- Zone AEF: Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.

**NON-SPECIAL FLOOD HAZARD AREA** – An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

- Zone XS (X shaded): Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.
- Zone X: Areas determined to be outside the 0.2% annual chance floodplain.

### OTHER FLOOD AREAS

- Zone D: Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

### PROPERTY INFORMATION

**COUNTY:** HONOLULU  
**TMK NO:** (1) 2-1-054-025  
**PARCEL ADDRESS:** 630 AUAI ST  
HONOLULU, HI 96813  
**FIRM INDEX DATE:** JANUARY 19, 2011  
**LETTER OF MAP CHANGE(S):** NONE  
**FEMA FIRM PANEL(S):** 15003C0362G  
**PANEL EFFECTIVE DATE:** JANUARY 19, 2011

**PARCEL DATA FROM:** APRIL 2013  
**IMAGERY DATA FROM:** MAY 2008

### IMPORTANT PHONE NUMBERS

**County NFIP Coordinator**  
City and County of Honolulu  
Mario Siu-Li, CFM (808) 768-8096  
**State NFIP Coordinator**  
Carol Tyau-Beam, P.E., CFM (808) 587-0267

*Disclaimer: The Department of Land and Natural Resources (DLNR) assumes no responsibility arising from the use of the information contained in this report. Viewers/Users are responsible for verifying the accuracy of the information and agree to indemnify the DLNR from any liability, which may arise from its use.*

*If this map has been identified as "PRELIMINARY" or "UNOFFICIAL", please note that it is being provided for informational purposes and is not to be used for official/legal decisions, regulatory compliance, or flood insurance rating. Contact your county NFIP coordinator for flood zone determinations to be used for compliance with local floodplain management regulations.*

KAKAAKO BLOCK B  
FLOOD MAP



ParEn, Inc.  
dba Park Engineering  
Engineers, Surveyors, Planners

FIGURE 4-1

channel to the Sand Island Wastewater Treatment Plant. There is a 30-inch sewer line on Auahi Street that connects to the 72-inch diameter trunk sewer at the intersection of Auahi Street and Keawe Street. In Keawe Street fronting the project site, there is an 8-inch sewer main that collects localized sewer flows. There are five existing sewer laterals servicing the existing buildings from the Keawe Street sewer line. Pohukaina Street has a 10-inch sewer line that flows into a trunk sewer on South Street. Figure 5-1 is a map of the existing sewer system.

## 5.2. PROJECTED SEWER DEMAND

It is estimated that the proposed project will generate a peak wastewater flow of 0.24 million gallons per day (MGD). Flow computations are based on the “Design Standards of the Department of Wastewater Management”, Volume 1, City and County of Honolulu, State of Hawaii, dated July 1993 with an average daily per capita flow of 80 gallons per day. Average daily wastewater generation is based on the City standard population densities associated with the proposed development type. Table 5-1 shows the two land use types associated with this development.

**TABLE 5-1  
WASTEWATER GENERATION BY LAND USE TYPE**

<i>Land Use</i>	<i>Quantity</i>	<i>Units</i>
<b><i>Residential Multi-Family</i></b>	2.8	Capita per unit
<b><i>Commercial/Retail</i></b>	150*	SF per capita

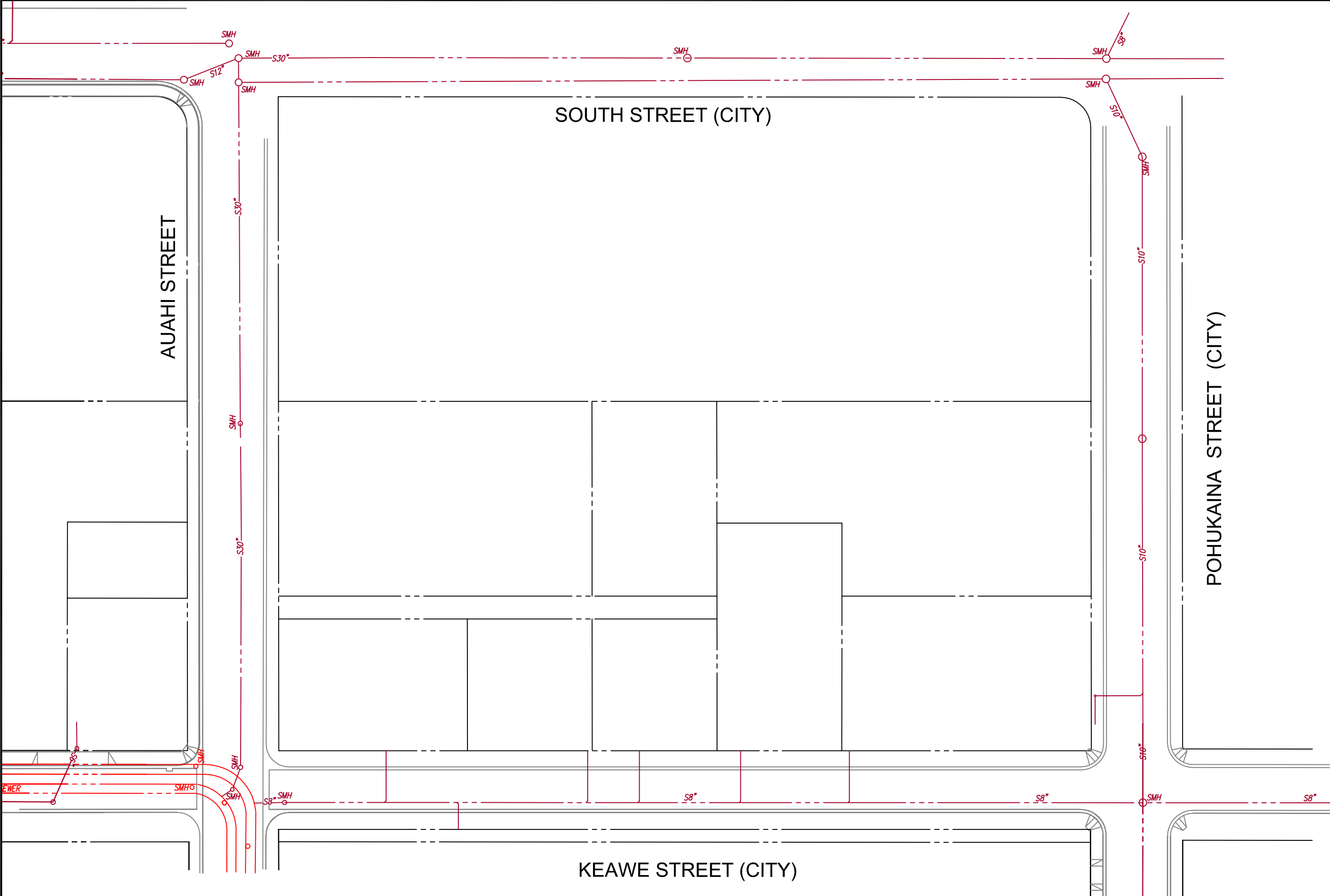
\* Per capita flow rate of 25 gallons per day.

A summary of the wastewater computation is presented in Appendix B.

## 5.3. PROJECT IMPACTS ON THE SEWER SYSTEM

A sewer connection application for the project was submitted to the Department of Planning and Permitting, Wastewater Branch (WWB) based on estimated unit counts and retail floor area for the project. WWB has determined that there currently is adequate capacity in the existing wastewater infrastructure to support the proposed project. Connection to the City’s wastewater system will likely use the existing sewer laterals on Keawe Street. Wastewater system facilities charge for the for-sale project has been estimated at \$415,373 while the assessment for rental project is \$389,942. These figures are approximate





## KAKAAKO BLOCK B EXISTING SEWER SYSTEM

and will need to be updated at the time of building permit. A copy of the approved sewer connection application is included in Appendix C.

Approval of sewer connection applications are based on available capacity and are awarded on a first come, first served basis.

## **6 DRAINAGE SYSTEM**

### **6.1. EXISTING DRAINAGE CONDITIONS**

Currently, Block B is almost completely covered by impervious surfaces. Commercial, retail and warehouse buildings and a large surface parking lots cover most of the site with small pockets of landscaping around the edges of parking areas.

Drainage facilities in the adjacent streets include catch basins on all surrounding roadways. There is a 7.5'x4' reinforced concrete box culvert on Keawe Street and 18-inch, 24-inch and 30-inch drain pipe on Auahi Street and Pohukaina Street. Drainage from these streets flow in westerly direction into the 10'x8' box culvert on South Street. A map of the existing drainage improvements is included as Figure 6-1.

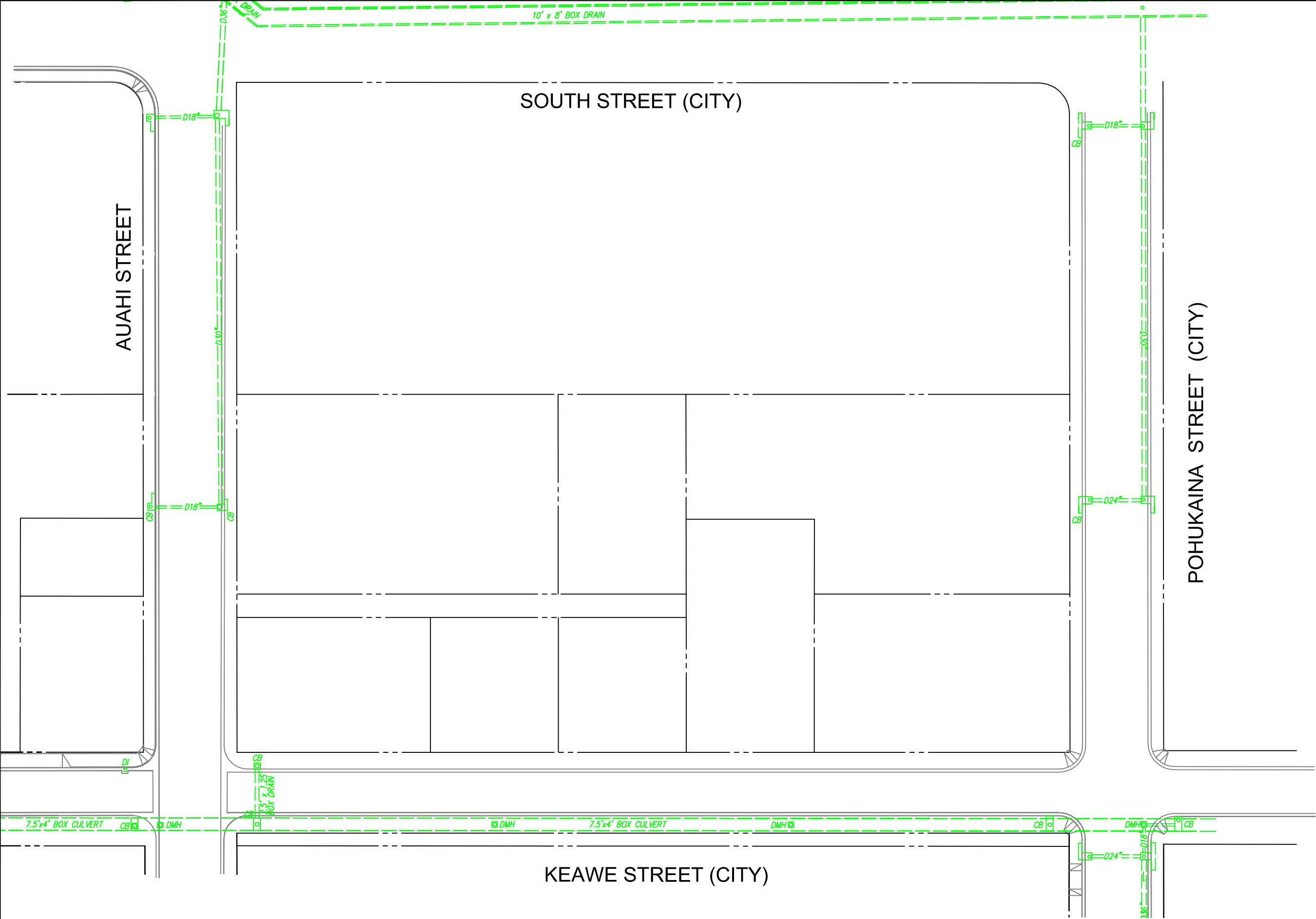
### **6.2. PROPOSED DRAINAGE CONDITIONS**

Development of the project site will result in lot coverage comparable to the existing conditions. The residential and retail structures and the associated parking structure will result in roughly the same amount of impervious area, therefore, the quantity of runoff generated from the project site will essentially remain the same.

### **6.3. PROJECT IMPACTS ON THE DRAINAGE SYSTEM**

In general, stormwater runoff from project site will be collected by onsite drainage systems prior to any discharge into the City or State's storm drainage system. Drainage improvements for the project will be designed in accordance with the "Rules Relating to Storm Drainage Standards", Department of Planning and Permitting, City and County of Honolulu, Honolulu, Hawaii, dated January 2000 and subsequent amendments.

The Storm Drainage Standards of the City and County have recently been updated to address post construction runoff and include LID requirements. Based on the area of redevelopment for each zone in excess of one acre, the projects would be classified as Priority A. Requirements for Priority A projects are to incorporate appropriate LID site design strategies and source control Best Management Practices (BMPs) to the maximum extent practicable. Site design



KAKAAKO BLOCK B  
EXISTING DRAINAGE SYSTEM



strategies appropriate for this project would be to reduce impervious surfaces and direct runoff to landscape areas. The goal of source control measures is to minimize runoff and reduce the potential introduction of pollutants into the runoff stream. For this project, excess runoff from watering landscaped areas can be eliminated through the use of automatic irrigation systems. Drain inlets and parking/loading areas should be properly maintained to remove pollutants from being discharged into the storm drain system.

Priority A projects also require on-site retention and/or biofiltration unless it is determined to be infeasible. On-site retention could potentially be achieved under parking areas and other open space areas. Biofiltration could also be incorporated within landscaped areas to promote infiltration and pollutant removal to improve the quality and reduce the quantity of stormwater runoff.

In the case of the proposed project, stormwater retention may not be feasible due to the shallow depth to groundwater. The site should qualify for an exemption based on the requirement that the BMP invert be at least 3 feet above the seasonal high ground water table. Biofiltration will also be challenging due to the limited space available at the site and the proximity to the high water table. Potential LID measures suitable for the site include green roofs, downspout disconnects and tree box filters.

## **7 WATER SYSTEM**

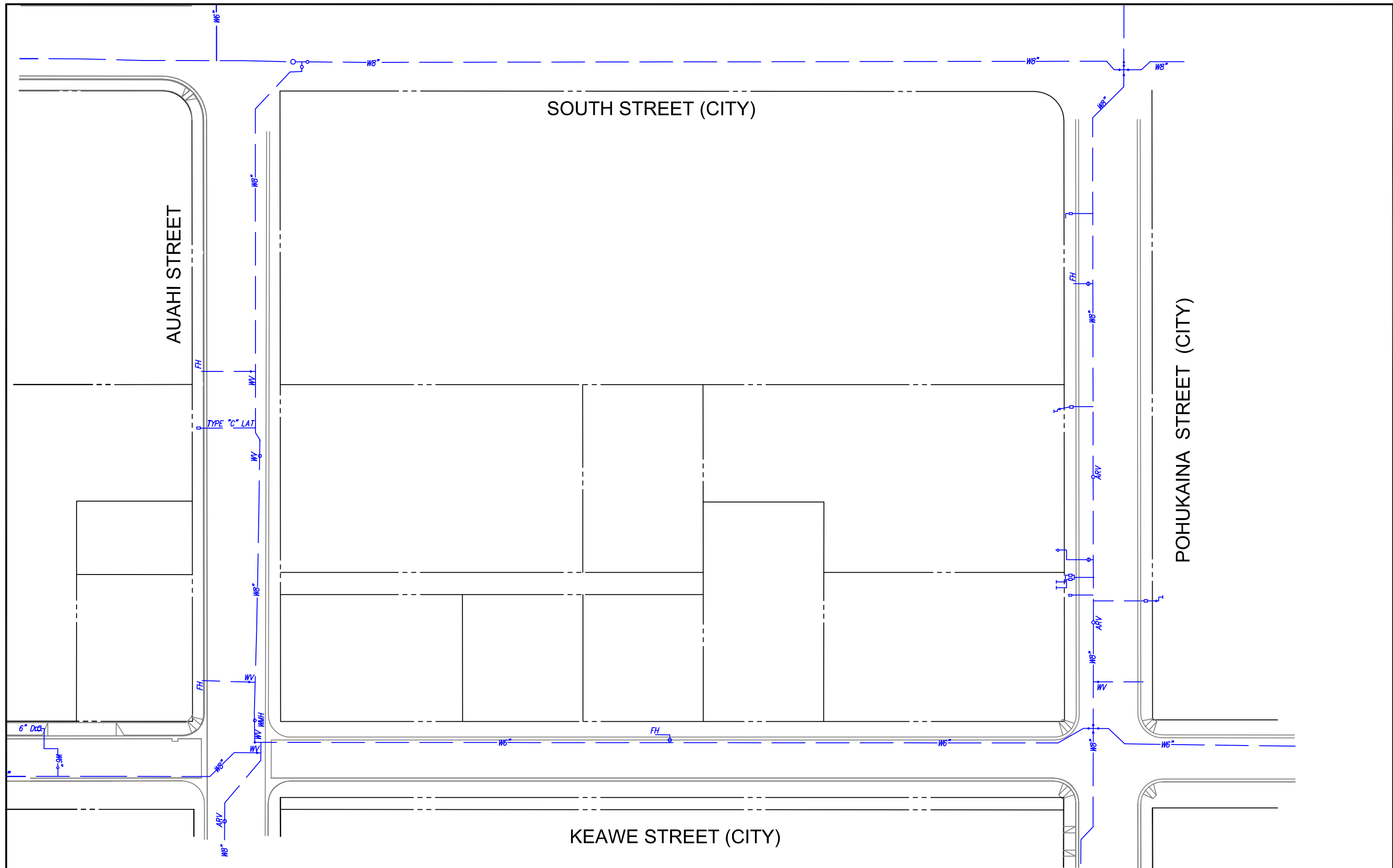
### **7.1. EXISTING WATER SYSTEM**

The existing water infrastructure is owned and operated by the Honolulu Board of Water Supply (BWS). South Street, Auahi Street and Pohukaina Street all have 8-inch water lines while Keawe Street has a 6-inch cast iron main. All water lines are looped and are a part of the BWS 180 foot service zone. Existing water system infrastructure is attached as Figure 7-1. Static water pressure at the project site is approximately 75 psi.

There are existing domestic water meters servicing the site on Auahi Street, Keawe Street and Pohukaina Street. A 6-inch DC meter on Pohukaina Street provides fire protection water for the Myron B. Thompson Academy. Fire hydrants are available on all three streets surrounding the Block B.

### **7.2. PROJECTED WATER DEMAND**

Water system demands are estimated in accordance with the Water System Standards for the Honolulu Board of Water Supply date 2002.



KAKAAKO BLOCK B  
EXISTING WATER SYSTEM

### 7.2.1 POTABLE WATER

From Table 100-18, Domestic consumption guidelines of the Water System Standards, the average daily demand of 400 gallons per unit for multi-family low rise. Retail use for a Commercial/Residential Mixed Use has a demand of 120 gallons per 1,000 square feet. For the proposed development, Table 7-1 outlines the domestic demands by category. Maximum day demand is computed by multiplying the average day demand by 1.5. Peak hour demand is average day demand multiplied by a factor of 3.0.

**TABLE 7-1  
POTABLE WATER DEMAND**

<b>CATEGORY</b>	<b>UNITS</b>	<b>DAILY DEMAND RATE</b>	<b>AVERAGE DAILY DEMAND</b>	<b>MAXIMUM DAY DEMAND</b>	<b>PEAK HOUR DEMAND</b>
<b>PARCEL B-1 FOR SALE BUILDING</b>					
<b>MF Low Rise</b>	95	400 gal	39,000	57,000	114,000
<b>Commercial</b>	9,852	120gal/ 1000 sf	1,182	1,773	3,546
<b>SUBTOTAL B-1</b>			40,182	58,773	117,546
<b>PARCEL B-2 RENTAL BUILDING</b>					
<b>MF Low Rise</b>	88	400 gal	35,200	52,800	105,600
<b>SUBTOTAL B-2</b>			35,200	52,800	105,600
<b>TOTAL</b>			75,382	111,573	223,146

### 7.2.2 FIRE PROTECTION WATER

Fire service for the proposed project is outlined in Table 100-19, Fire Flow Requirements of the Water System Standards. Although the residential component can be categorized as mid-rise, the high-rise residential and neighborhood retail fire flow is more appropriate. The required fire flow is 2,000 gpm for two hours with a fire hydrant spacing of 250 feet. For the on-site fire hydrant system, 8-inch diameter mains should be sufficient to

provide the minimum flow rate of 2,000 gpm with a minimum pressure of 20 psi.

### **7.3. PROJECT IMPACT ON WATER SYSTEM**

An inquiry was made to the Honolulu Board of Water Supply to determine the water availability for the proposed project. The response from BWS is included as Appendix D. In their response BWS has indicated that the existing water system is adequate to support the proposed development. BWS reserves the right to revise its findings until the final approval of the building permit application. Water system facilities charge for the project will need to be determined at building permit and will depend on the net change in fixture unit counts and flows with the proposed development.

## **8 GAS SYSTEM**

### **8.1. EXISTING GAS SYSTEM**

Gas company records show that there are 2-inch gas lines on Auahi Street and Keawe Street. Gas company maps have been included as Figure 8-1.

### **8.2. PROJECTED GAS SYSTEM DEMANDS AND IMPACTS**

No requirements for gas for either the residential or retail uses have been established. Should there be a desire to provide gas to either of these uses, the demands, availability and impacts should be confirmed with The Gas Company.

## **9 ELECTRICAL SYSTEM**

### **9.1. EXISTING ELECTRICAL SYSTEM**

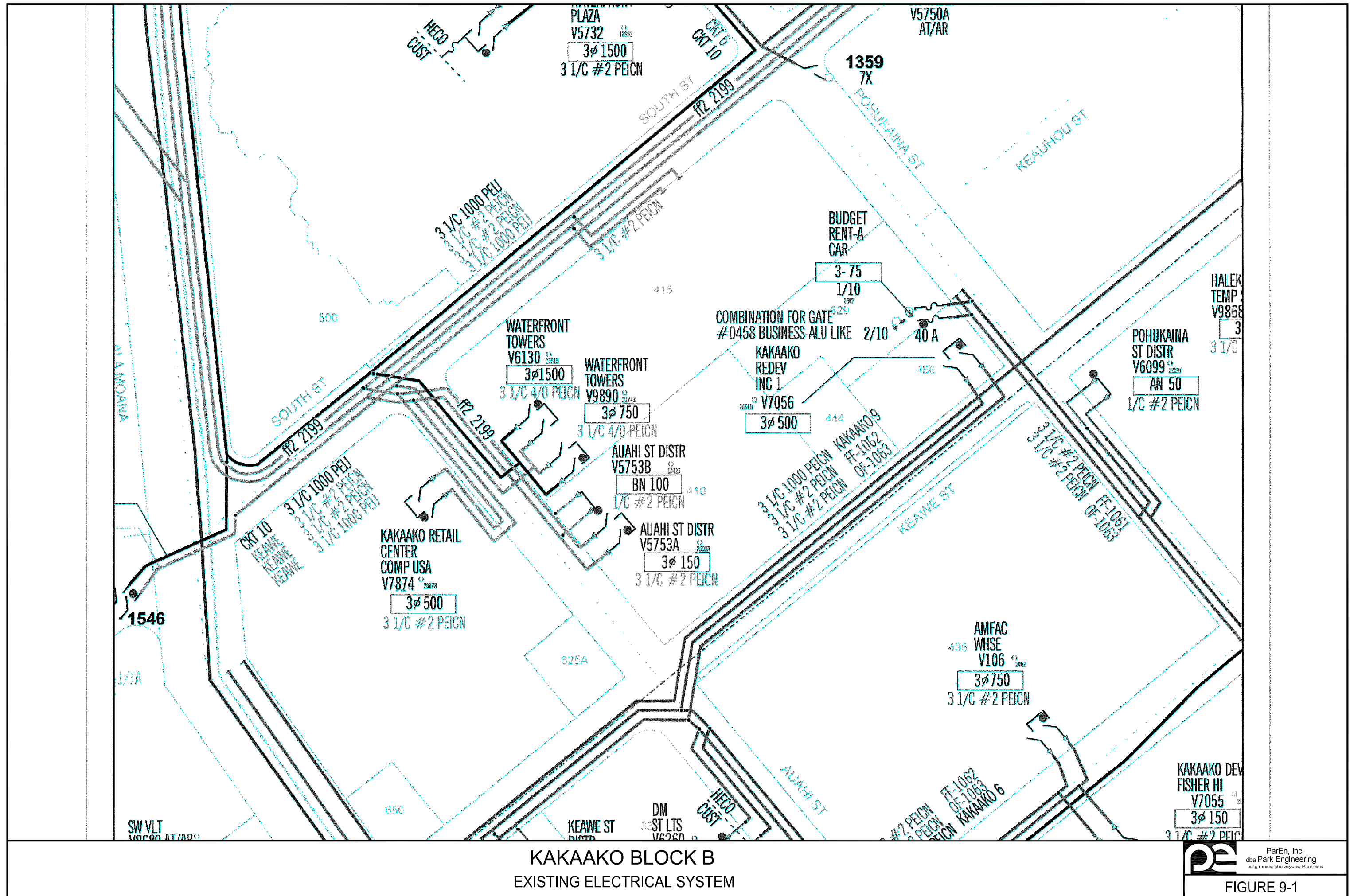
Hawaiian Electric Company (HECO) presently serves the area from their Honolulu Power Plant Substation, located at the makai corner of Alakea Street and Nimitz Highway, and their Kaka'ako Substation, located along Ilaniwai Street between Cooke Street and Kamani Street. Figure 9-1 is a diagram of the current electrical system servicing the area.

### **9.2. PROPOSED ELECTRICAL SYSTEM**

Ronald N.S. Ho & Associates made an inquiry to HECO regarding the impact of the proposed project on HECO's electrical system. Per HECO's correspondence of October 8, 2013, the proposed development would be connected to the existing 12.47 kV circuits located in underground duct systems along Keawe Street, Auahi Street and South Street. HECO will require the



KAKAAKO BLOCK B  
EXISTING GAS SYSTEM



developer to extend conduits from the future transformer locations to the nearest handhole/manhole along these streets. It should be noted that as a public utility, HECO cannot reserve capacity for any particular development, but must provide service on a “first come, first served” basis. Based on existing conditions, HECO does not anticipate that there will be off-site costs that will be passed onto the Developer. A copy of HECO’s response letter is included in Appendix E.

### **9.3. EXISTING TELECOMMUNICATIONS SYSTEM**

Hawaiian Telcom (HTCO) presently serves this area from their Alakea Central Office located within their headquarters building between Alakea and Bishop Streets. Oceanic Time Warner Cable’s (OTWC) head-end facility is located in Mililani Technology Park and serves the entire island of Oahu. Hawaiian Telcom (HTCO) presently serves the area from existing underground duct systems along Auahi Street, Keawe Street and South Street. OTWC presently serves the area from a fiber cable pulled into HTCO’s existing underground duct system on Pohukaina Street. The existing telephone system is provided as Figure 9-2.

### **9.4. PROPOSED TELECOMMUNICATIONS SYSTEM**

HTCO and OTWC will require their service to be extend from these underground duct systems to the service demarcation point of each building. Extension of OTWC service to the makai building may require that duct system be extended either on site or through South Sreet to the demarcation point of that building. Both HTCO and OTWC have indicated that, if requested, fiber optic service is available. HTCO’s response letter is attached as Appendix F.







Sewer Calculations

## **Appendix B**

*Kakaako Block B  
Infrastructure Report*

# SEWER CALCULATIONS

SEWER: BLOCK B  
DISTRICT: KAKAAKO  
REFERENCE MAPS:

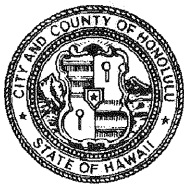
BY: KSJ

Normal Infil: 35 (gpcd) [USE 5 OR 35]  
Wet Infil: 2750 (gpcd) [USE 1250 OR 2750]

LAND USE	TRIB. AREA		TRIB. POPULATION		FLOW gpcd	AVE. FLOW (mgd)	MAX FLOW FACT.	MAX FLOW (mgd)	NORM DESIGN AVE		DESIGN HRLY FLOW (mgd)	WET INFILT. (mgd)	DESIGN PEAK FLOW (mgd)	Pipe Size (IN)	Slope (%)	Capacity (mgd)	Vel. (fps)	Qreq /Qall (%)
	Increment	Total	Units	Increment	Total				INFIL (mgd)	FLOW (mgd)								
<b>KAKAAKO BLOCK B</b>																		
<b>PARCEL B-1 FOR SALE UNITS</b>																		
RESIDENTIAL MID-RISE UNITS			95	266	266	80	0.0213	5.00	0.1064	0.0306	0.1157	0.0000	0.1157	8	2.00	0.96	4.25	0.12
COMMERCIAL (9852				21	21	80	0.0017	5.00	0.0084	0.0024	0.0091	0.0000	0.0091	8	2.00	0.96	4.25	0.01
<b>PARCEL B-2 RENTAL UNITS</b>																		
RESIDENTIAL MID-RISE UNITS			88	246	246	80	0.0197	5.00	0.0886	0.0283	0.1072	0.0000	0.1072	8	2.00	0.96	4.25	0.11
<b>TOTAL</b>		2.81	183		533	80	0.0427	5.00	0.2134	0.0613	0.2320	0.0077	0.2398	8	2.00	0.96	4.25	0.25
** PER WWB RETAIL 150 SF/PERSON, AT 25 GAL/PERSON																		
DESIGN CRITERIA POPULATION (GENERATING 25 GPCD) CONVERTED TO AN EQUIVALENT POPULATION (GENERATING 80 GPCD) BY MULTIPLYING UNIT/POP BY 0.3125																		

Approved Sewer Connection  
Application

**Appendix C**  
*Kakaako Block B  
Infrastructure Report*



DEPARTMENT OF PLANNING AND PERMITTING  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET \* HONOLULU, HAWAII 96813

Phone: (808) 768-8209 \* Fax: (808) 768-4210

# SEWER CONNECTION APPLICATION

APPLICATION NO.: **2013/SCA-0663**

STATUS: **Approved**

**\$415,373.00**

DATE RECEIVED: **08/19/2013**

IWDP APP. NO.:

Estimated Wastewater  
System Facility Charge\*

PROJECT NAME: **2013/SCA-0663 Block B Makai-New 98 MFD and Commercial  
Development**

LOCATION:

Zone	Section	Plat	Parcel
<b>2</b>	<b>1</b>	<b>054</b>	<b>025</b>

**628 AUAHI ST Honolulu / Downtow**

**66,110 Sq. Ft.**

SPECIFIC LOCATION: **628 Auahi Street**

APPLICANT: **ParEn, Inc. dba Park Engineering**  
**Terilyn S. Watanabe, Senior Project Engineer**  
711 Kapiolani Boulevard Suite 1500  
Honolulu, HI 96813

DEVELOPMENT TYPE: **Dwelling, Multi-family**

SEWER CONNECTION WORK DESIRED: **Existing**

OTHER USES: **Commercial, 10,000 SF**

NON-RESIDENTIAL AREA: s.f.

APPROXIMATE DATE OF CONNECTION:

PROPOSED UNITS

EXISTING UNITS

UNITS TO BE DEMOLISHED

No. of New Units: **98**

No. of Existing Units: **0**

No. of Units to be Demolished: **0**

Studios:  
1-Bedroom: **21**  
2-Bedroom: **56**  
3-Bedroom: **21**  
4-Bedroom:  
5-Bedroom:  
6-Bedroom:

Studios:  
1-Bedroom:  
2-Bedroom:  
3-Bedroom:  
4-Bedroom:  
5-Bedroom:  
6-Bedroom:

Studios:  
1-Bedroom:  
2-Bedroom:  
3-Bedroom:  
4-Bedroom:  
5-Bedroom:  
6-Bedroom:

REMARKS

APPROVAL DATE: **09/03/2013**

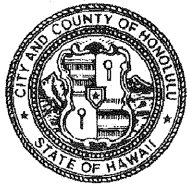
*Valid 2-years after approval date. Construction plans shall be completed and approved within this 2-year period. Construction shall commence within 1-year after approval of plans.*

EXPIRATION DATE: **09/03/2015**

*\* Applicable WSFC shall be collected at the prevailing rate in accordance with ROH 1990, Chapter 14, Sections 14-10.3, 14-10.4, 14-10.5 and Appendix 14-D.*

REVIEWED BY: **Tessa Ching**

*Tessa Ching*  
Site Development Division, Wastewater Branch



DEPARTMENT OF PLANNING AND PERMITTING  
**CITY AND COUNTY OF HONOLULU**

650 SOUTH KING STREET \* HONOLULU, HAWAII 96813

Phone: (808) 768-8209 \* Fax: (808) 768-4210

# SEWER CONNECTION APPLICATION

APPLICATION NO.: **2013/SCA-0648**

STATUS: **Approved**

DATE RECEIVED: **08/19/2013**

IWDP APP. NO.:

PROJECT NAME: **2013/SCA-0648 Block B Mauka: 92 MFD Units**

**\$389,942.00**

Estimated Wastewater  
System Facility Charge\*

**LOCATION:**

Zone	Section	Plat	Parcel
2	1	054	027

**629 POHUKAINA ST Honolulu / Dov**

**27,552 Sq. Ft.**

Zone	Section	Plat	Parcel
2	1	054	032

**444 KEAWE ST Honolulu / Downton**

**12,263 Sq. Ft.**

**SPECIFIC LOCATION: Kakaako - Diamond Head side of Waterfront Towers**

APPLICANT: **ParEn, Inc., dba Park Engineering**  
**ATTN: Terilyn S. Watanabe**  
711 Kapiolani Blvd Suite 1500  
Honolulu, Hawaii 96813

DEVELOPMENT TYPE: **Dwelling, Multi-family**

SEWER CONNECTION WORK DESIRED:

OTHER USES:

NON-RESIDENTIAL AREA: s.f.

APPROXIMATE DATE OF CONNECTION:

**PROPOSED UNITS**

No. of New Units: **92**

Studios: 40  
1-Bedroom: 17  
2-Bedroom: 25  
3-Bedroom: 10  
4-Bedroom:  
5-Bedroom:  
6-Bedroom:

**EXISTING UNITS**

No. of Existing Units: **0**

Studios:  
1-Bedroom:  
2-Bedroom:  
3-Bedroom:  
4-Bedroom:  
5-Bedroom:  
6-Bedroom:

**UNITS TO BE DEMOLISHED**

No. of Units to be Demolished: **0**

Studios:  
1-Bedroom:  
2-Bedroom:  
3-Bedroom:  
4-Bedroom:  
5-Bedroom:  
6-Bedroom:

**REMARKS**

APPROVAL DATE: **09/03/2013**

EXPIRATION DATE: **09/03/2015**

*Valid 2-years after approval date. Construction plans shall be completed and approved within this 2-year period. Construction shall commence within 1-year after approval of plans.*

*\* Applicable WSFC shall be collected at the prevailing rate in accordance with ROH 1990, Chapter 14, Sections 14-10.3, 14-10.4, 14-10.5 and Appendix 14-D.*

REVIEWED BY: **Tessa Ching**

Site Development Division Wastewater Branch

Water Availability Letter

## **Appendix D**

*Kakaako Block B  
Infrastructure Report*

## BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU  
630 SOUTH BERETANIA STREET  
HONOLULU, HI 96843



August 30, 2013

KIRK CALDWELL, MAYOR

DUANE R. MIYASHIRO, Chairman  
MAHEALANI CYPHER, Vice Chair  
THERESIA C. McMURDO  
ADAM C. WONG  
KAULANA H. R. PARK

ROSS S. SASAMURA, Ex-Officio  
GLENN M. OKIMOTO, Ex-Officio

ERNEST Y. W. LAU, P.E.  
Manager and Chief Engineer

ELLEN E. KITAMURA, P.E.  
Deputy Manager and Chief Engineer *mk*

Ms. Terilyn S. Watanabe, P.E.  
ParEn, Inc., dba Park Engineering  
711 Kapiolani Boulevard, Suite 1500  
Honolulu, Hawaii 96813

Dear Ms. Watanabe:

Subject: Your Email Dated August 20, 2013 Requesting the Availability of  
Water to the Proposed Kakaako Block B Residential/Commercial  
Condominium on Keawe Street – Tax Map Key: 2-1-054: 025, 027

Thank you for your email regarding the proposed 190-unit residential/commercial development.

The existing water system is adequate to accommodate the proposed residential/commercial condominium. However, please be advised that this information is based upon current data, and therefore, the Board of Water Supply reserves the right to change any position or information stated herein up until the final approval of the building permit application. The final decision on the availability of water will be confirmed when the building permit application is submitted for approval.

When water is made available, the applicant will be required to pay our Water System Facilities Charges for resource development, transmission and daily storage.

Water conservation measures are required for all proposed developments. These measures include low flow plumbing fixtures, utilization of nonpotable water for irrigation using rain catchment and chiller/air handler condensate, cooling tower conductivity meters and water softening recycling systems, drought tolerant plants, xeriscape landscaping, efficient irrigation systems and the use of Water Sense labeled ultra-low-flow water fixtures and toilets.

The on-site fire protection requirements should be coordinated with the Fire Prevention Bureau of the Honolulu Fire Department.

If you have any questions, please contact Robert Chun at 748-5443.

Very truly yours,

ERNEST Y. W. LAU, P.E.  
Manager and Chief Engineer

HECO Response Letter

## **Appendix E**

*Kakaako Block B  
Infrastructure Report*





October 7, 2013

RECEIVED

OCT - 8 2013

RONALD H. HO & ASSOC., INC.

Ron Ho & Associates, Inc.  
2153 North King Street, Suite 201  
Honolulu, HI 96819-4554

Attention: Mr. Steven Sakai, PE

Subject: Kaka'ako Parcel B Due Diligence

This letter is in response to your letter of August 16, 2013 on the above project.

1. There are existing circuits at the corner of Pohukaina and Keawe Streets that can be used to serve the proposed project. At this time the existing circuits have adequate capacity to serve the projected load of about 700kw. However this may not be the case if other projects are served ahead of this proposed development in the future. At this point we do not see any required off site developments required to serve the project. However this may not be the case in the future.
2. See attached distribution map of existing facilities.

Please let us know if we can be of assistance in any other way.

Sincerely,

Jimmy Lum  
Customer Engineer  
Planning & Design Division  
Customer Installations Department

SKS	DT	SS
RH	SJI	SL
GF	JS	BHS
	RK	GTN
AM	RS	AN
BJO	CC	GDT
KKO	EN	SYS
IK	CA	JO
SR		EHW
BHK		

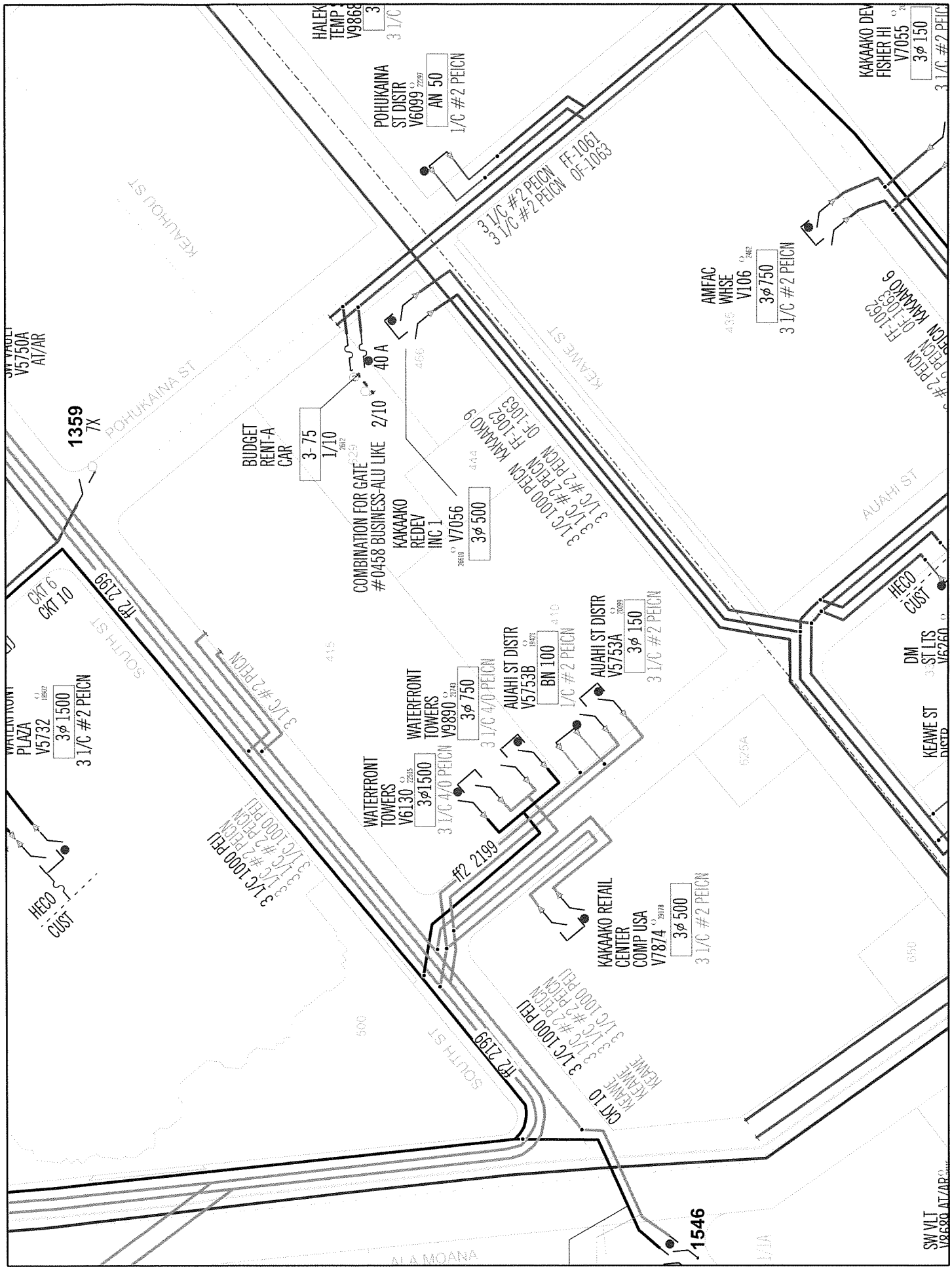
PROJECT # \_\_\_\_\_

DATE: \_\_\_\_\_

FILE	ACTION
INFO	TRASH

Attachment

cc: G. Fukumoto

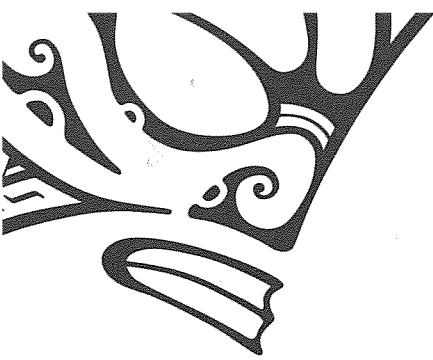


10/7/2013 8:40:00 AM 1 in = 136 ft

HTCO Response Letter

## **Appendix F**

*Kakaako Block B  
Infrastructure Report*



RECEIVED

Hawaiian Telcom

SEP 10 2013

September 6, 2013

RONALD N. S. HO & ASSOC., INC

Ronald N. S. Ho & Associates, Inc.  
2153 North King Street #201  
Honolulu, Hawaii 96819-4554  
Attention: Mr. Steven Sakai

Dear Mr. Sakai:

Subject: **Kaka'ako Parcel B Due Diligence**

In response to your letter dated August 16, 2013, we have determined that Hawaiian Telcom serves the site from its Alakea Central Office located at 1177 Bishop Street.

The preferred service point of connection to the property is located along Keawe Street or Auahi Street. The actual service point of connection will be dependent upon on the final design of the development.

Hawaiian Telcom will require two 4-inch conduits into the project. Any related distribution systems throughout the development may also require underground conduits, pullboxes and handholes. Hawaiian Telcom specifications require 2- or 4-inch conduits, 2'x 4' or 3'x 5' pullboxes, and 4'x 6' handholes. The sizes and amounts will be dependent upon the service requirements of the buildings being served.

The Developer's off-site improvement costs to provide service to the project site will include supplementing the existing underground structures and/or extending new underground support structures to the proposed project site. The responsibility of the costs belongs to the Developer.

The existing Hawaiian Telcom facilities serving the current customers are highlighted in yellow on the enclosed drawing. Please be aware that these locations are only approximate and that field locating should be done prior to any excavation work commencing.

Residential buildings will be provisioned with fiber optic cable and copper facilities are available for commercial customers. The number of fiber optic strands provided will be dependent upon the customer's service requirements.

If you have any questions or require assistance in the future on this project, please call me at 546-7761.

Sincerely,

Les Loo  
Network Engineer - Outside Plant Engineering  
Network Engineering & Planning

Enclosure

cc: File [Alakea]

SKS	DT	SS
RH	SJI	SL
GF	JS	BHS
	RK	GTN
AM	RS	AN
BJO	CC	GDT
KKO	BN	SNS
IK	CA	JO
SR		EHV
BHK		

PROJECT # \_\_\_\_\_  
DATE: \_\_\_\_\_

FILE INFO ACTION TRASH  
PO Box 2200, Honolulu, HI 96841 hawaiiantel.com

Always on.™

1" x 6'-10"

