

# **SEWER MASTER PLAN UPDATE**

## **HCDA KAKA'AKO MAUKA DISTRICT**

Kaka'ako, O'ahu, Hawai'i

October 2014

Prepared for:  
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2012.70.0900

# 1 PURPOSE

The purpose of this study is to provide an updated sewer master plan for the Hawai‘i Community Development Authority (HCDA) Kaka‘ako Community Development District (KCDD) – Mauka Area. The analysis reflects development projects currently or soon to be under construction, developments and infrastructure upgrades proposed by the Howard Hughes Group (HHG) for their properties within the district, and the increased densities proposed in the Transit Oriented Development (TOD) overlay for the KCDD Mauka area. The infrastructure requirements associated with the current developments and infrastructure improvements were not available at the time the previous utility analyses presented in the *Mauka Area Infrastructure Plan*<sup>1</sup> prepared in conjunction with the *KCDD Final Supplemental Environmental Impact Statement – Mauka Area Plan*<sup>2</sup> was prepared.

Recommendations for system improvements are made to upgrade the infrastructure system to meet the demands of the projected development scenarios. The master plan will be used by the City and County of Honolulu (City) as a guide for evaluating infrastructure needs for future developments in the KCDD Mauka Area.

# 2 BACKGROUND

HCDA is considering rule changes for the KCDD to incorporate transit oriented development. Rule changes would permit greater development densities than currently allowed under the Mauka Area rules. The sewer master plan maintained by City does not reflect the on-going developments or proposed densities as allowed in the Mauka Area rules. The City master plan for the KCDD Mauka Area was last updated in 2009. This study will model the existing sewer infrastructure systems and comment on whether the existing systems can sustain an increase in development density.

The study area is approximately 503 acres, bound by South King Street, Pi‘ikoi Street, Ala Moana Boulevard, and Punchbowl Street. The analysis considers four scenarios: the existing condition, a Future Baseline Condition, the Proposed TOD Alternative A, and the 690 Pohukaina Street Project. Where appropriate, projects currently approved for development are incorporated into each scenario.

- The existing condition is defined as the current land uses for each tax map key parcel and include redevelopment projects that have an approved sewer connection application or that are currently under construction. Uses and densities were derived from real property records of the individual tax map parcels within the study area.
- The Future Baseline Condition represents full build out in accordance with the current Mauka Area rules. Redevelopment is evaluated by large city blocks, combining several

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<sup>1</sup> M&E Pacific, *Kakaako Community Development District, Mauka Area Infrastructure Plan* (Honolulu: March 2009).

<sup>2</sup> EDAW, Inc., *Kakaako Community Development District, Final Supplemental Environmental Impact Statement, Mauka Area Plan* (Honolulu, May 2009).

adjacent TMK parcels generally bound by the existing street grid. A capacity study<sup>3</sup> detailing the number of residential units and floor areas for non-domestic uses was prepared, presenting a plausible development plan in conformance with the current Mauka Area rules.

- The TOD Alternative A represents the full build out of the KCDD utilizing an increase in densities over and above what is currently allowed in the Mauka Area rules. A redevelopment plan was prepared using the same methodology as the Future Baseline Condition with the proposed TOD Alternative A densities.
- The TOD Alternative B proposes densities similar to the TOD Alternative A, however, with a 400-ft building height cap imposed. The resulting densities for Alternative B are approximately 10% less than Alternative A. Given the marginal difference in densities, the master plan analysis considers only the greater densities proposed under TOD Alternative A.
- The 690 Pohukaina Street Project is a high-rise condominium project that is incorporated into TOD Alternatives A and B. The project is evaluated as being constructed prior to full build out of the TOD Alternatives. The existing condition model was modified to incorporate the project.

For the purposes of the infrastructure master plan update, infrastructure demands for specific blocks in the Future Baseline and TOD Alternative A scenarios were adjusted to reflect properties that are not likely to be redeveloped. For example, high-rise condominiums, government agency facilities, open space areas such as parks and cemeteries, and projects near or under construction are assumed to remain under both scenarios. See Figure 1 in the appendix.

## 3 ANALYSIS

This sewer master plan update is generally prepared in accordance with Chapter 20 of the Design Standards of the Wastewater Department (Design Standards), Volume 1, July 1993. The hydraulic analysis was performed using the EPA Storm Water Management Model (SWMM) version 5 as implemented in the Autodesk Storm and Sanitary Analysis 2014 application.

### 3.1 POPULATION

The land use categories and corresponding capita rate are utilized for the existing condition:

**Table 1: Population Rates**

Use	Unit Capita	Unit	Average daily flow rate (gpcd)
SF Residential	4 residents	Dwelling	80
MF Residential	2.8 residents	Dwelling	80

<sup>3</sup>Note the capacity study only suggests a possible development scenario. The HCDA Rules allow for a great degree of flexibility in development. Blocks may be developed as a single project, or as multiple smaller parcels and proposed uses may vary widely.

<b>Use</b>	<b>Unit Capita</b>	<b>Unit</b>	<b>Average daily flow rate (gpcd)</b>
Civic / Office	300 employees	Acre	25
Retail	140 employees	Acre	25
General/Light Industry	100 employees	Acre	25
Parking Structure	1 employee	Each	25
School	1 student	Per 80 sf	25
Restaurant	1 cover	Per 25 sf	5 gal/cover @ 6 services per day
Cinema	Metered water consumption rates used in lieu of population estimates based on patronage.		

See Tables 2, 3, and 4 in the appendix.

### 3.2 FLOW DETERMINATION

The determination of total wastewater flow generally conforms to the Design Standards. The design wastewater flows and dry weather infiltration/inflow are determined in accordance with the Design Standards. All sewers are assumed to be below the ground water table. A single flow factor is determined for each scenario, based on the total equivalent population for that scenario. Wet weather inflow and infiltration (WWI/I) is not computed in accordance with the Design Standards, rather, is based on the 5 year 24 hour values provided by the City<sup>4</sup>. The design and WWI/I flow values are assigned to the corresponding manholes. See Figures 1B, 1C, Table 5, and Table 6 in the appendix.

The off-site sewage flow rates are adjusted to reflect population growth for the Future Baseline and TOD Alternative A scenarios. Off-site sewer service basins which drain to the KCDD system were determined for each boundary SMH where offsite flows are applied in the model. The model assumes the net change in off-site sewer generation is equivalent to the average population growth within the off-site sewer basin.

Population growth rates are derived from projections for Development Plan Areas and subareas developed by the City and County of Honolulu.<sup>5</sup> Growth rates are computed by comparing 2010 and 2035 projections for each area. Local rates of change vary from a decrease of 1.5% in Wai'alaeh-Kahala to an increase of 94.1% over 2010 in the Ala Moana-Kaka'ako area.

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<sup>4</sup> Updated City sewer models indicate the 5 year 24hr inflow and infiltration values are much higher than the what is computed using the Design Standards.

<sup>5</sup> Department of Planning and Permitting projections posted at <http://www.honoluluudpp.org/Portals/0/pdfs/planning/demographics2/Projections/2000-2035byDPSA.pdf>. The projections were made in 2009, and based on the State's 2035 Series of State and County population projections. More recent projections are available for the State and County, but not for subareas.

**Table 7: Offsite Sewer Flows**

<b>Boundary SMH</b>	<b>Existing Design Maximum Flow (mgd)</b>	<b>Average Year 2035 Population Growth Factor</b>	<b>Future / TOD Alternative A Design Maximum Flow (mgd)</b>	<b>Wet Weather I/I 5 yr 24 hr (mgd)</b>
339739	0.0115	139%	0.0161	0.0271
340340	0.0018	139%	0.0025	0.0076
340475	0.5609	139%	0.6170	0.9523
340496	0.3596	139%	0.5013	0.3220
340787	0.0457	107%	0.0491	0.1386
<b>341080</b>	<b>14.5126</b>	<b>103%</b>	<b>14.9983</b>	<b>65.3885</b>
S60" Ward Avenue				
341082	0.0275	103%	0.0295	0.0808
341270	0.0710	107%	0.0760	0.1242
341283	0.0370	107%	0.0398	0.0922
351590	0.0082	107%	0.0088	0.0144
351869	0.5657	107%	0.6078	0.6399
352912	4.1797	127%	5.3062	5.3216
379476	0.0045	194%	0.0087	0.0782
380402	22.0012	102%	22.4288	0.0000
380962	0.0033	194%	0.0064	0.0152
381780	0.0211	194%	0.0410	0.0476
683754	2.1605	139%	3.0121	0.0428
4025665	3.1025	125%	3.8761	0.1851
<b>4076088</b>	<b>5.7604</b>	<b>127%</b>	<b>7.3130</b>	<b>0.0000</b>
36" Kapi'olani Boulevard				
Total Off-site Flow	53.4347		58.9385	73.4781

Wet weather I/I values as derived from City dataset.

### 3.3 HYDRAULIC ANALYSIS

The sewer infrastructure system hydraulic network modeling is performed using hydrodynamic routing methods. A static hydraulic model is inappropriate for this analysis as several sections of the existing sewers in Kaka'ako are at adverse slopes<sup>6</sup>. Per discussions with the City and County of Honolulu Department of Design and Construction (DDC), the following modeling parameters area utilized to maintain consistency with the DDC's models:

- Mannings n = 0.013 for all reaches
- No entrance or exit losses are applied to manhole junctions

<sup>6</sup> Sewer mains with adverse slopes slope uphill. This condition generally occurs where sags in the sewer mains have developed. The computations used to compute pipe flow in a static model would yield erroneous results when applied to adversely sloped sections.

The sewer network is based on GIS data obtained from the City. Apparent discrepancies in the GIS data were confirmed or corrected in consultation with the City. Modifications to the sewer networks for the Future Baseline and TOD Alternative A were made to incorporate the proposed improvements planned by the HHG within the study area. HHG is proposing to:

- Install a 24" relief sewer in Ward Avenue between Ilaniwai and Auahi Streets
- Reroute the 48" trunk sewer from under the Ross Dress for Less and Sports Authority stores into Ward Avenue
- Replace the 6" sewers in Pohukaina Street between Koula and Ward Avenue with 12" sewers
- Install a 36" sewer in Auahi Street between Kamakee Street and Ward Avenue
- Replace the 8" sewer in Auahi Street between Kamakee Street and Queen Lane with a 12" sewer.

See Figure 2 in the appendix.

### **3.4 OFF-SITE RELIEF SEWER PROJECTS**

The City is studying several relief sewer projects outside the KCDD that will provide increased sewer capacity to the Mauka Area. The details of these relief sewer projects, including time schedules, are currently being evaluated internally at the City and have not been released to the public at this time. The City has indicated the relief sewer projects will be designed to accommodate TOD developments outside of the KCDD once the impact of those developments are determined. While this study does not identify specific relief sewer projects, it does suggest minimum flow reductions needed to alleviate any surcharged conditions in the study area.

### **3.5 RESULTS**

#### **Existing Condition**

The peak flow model indicates surcharged sewers:

- The 30" and 60"trunk sewers in Auahi Street and Ward Avenue respectively, on the west side of the KCDD
- A portion of the 21" trunk sewer in Kapi'olani Boulevard near Pensacola Street
- 8" and 24" branch sewers connecting to the 72" Auahi Street between Keawe Street and Cooke Street
- 8" sewer immediately downstream of the Halekauwila Place sewer connection on Keawe Street

New developments with increased sewer demands within the KCDD may not be able to connect to the adjacent sewers because the City does not allow a sewer connection to a line that is surcharged or to a line which discharges to a surcharged line. See Figure 3 in the appendix.

#### **Future Baseline**

The surcharged condition under the existing condition is compounded under the Future Baseline scenario west of Ward Avenue. The proposed HHG sewer system improvements will provide sufficient capacity for the HHG developments east of Ward Avenue. The following sewers remain surcharged:

- The 30", 36", 60", and 78" trunk sewers in South Street, Auahi Street, and Ward Avenue on the west side of the KCDD
- The 8", 10", and 12" Halekauwila Street sewers between South Street and just west of Coral Street
- The 10" Pohukaina Street sewer between South Street and Keawe Street
- The 8" sewer immediately downstream of the Halekauwila Place sewer connection on Keawe Street
- The 36" sewer around the former CompUSA building on South and Auahi Streets and Ala Moana Boulevard
- The planned HHG 12" sewer on Pohukaina Street between Koula Street and Ward Avenue and branching 6" sewers on 'Ohe and Koula Streets
- Portions of the 21" trunk sewer in Kapi'olani Boulevard near Pensacola Street
- The 12" and 18" branching sewers on Kawaihao and Queen Streets, connecting to the 36" sewer in Kamake'e Street

See Figure 4 in the appendix.

#### **TOD Alternative A**

The surcharged condition under the Future Baseline scenario is compounded under the TOD Alternative A scenario. In addition to the sewers surcharged under the Future Baseline condition, the following sewers are surcharged:

- The 8", 10", and 12" Halekauwila Street sewers from South Street to east of Cooke Street
- The 8" and 10" Pohukaina Street sewers from South Street to Coral Street
- The 6" Ilaniwai Street sewer between Cooke Street and Ward Avenue

See Figure 5 in the appendix.

## **690 Pohukaina Street Project**

The existing sewers adjacent to the 690 Pohukaina Street project have insufficient capacity for the projected wastewater flows and the downstream sewers in South Street and Auahi Street are surcharged. Furthermore, the model indicates the 8" sewer in Keawe Street does not have sufficient capacity for the Halekauwila Place sewage flow.

See Figure 6 in the appendix.

## **3.6 MITIGATION MEASURES**

### **Future Baseline**

- Replace 480 lf of 10" sewer on Pohukaina Street between South and Keawe Streets, SMH 4025647 to SMH 683930, with a 12" sewer.
- Upsize 305 lf of HHG's planned sewer in Pohukaina Street between Ahui Street and Ward Avenue from 12" to 18" diameter, between SMH 379756 and the new 24" sewer in Ward Avenue. Sewer demands from Blocks 48N and 55 (KS D) are redirected to this line as the adjacent 6" and 8" sewers are inadequate.
- City's proposed diversion of sewage flow from the 60" Ward Avenue trunk sewer; a minimum of 27 MGD was used in the analysis.

See Figure 7 in the appendix.

### **TOD Alternative A**

- Replace 480 lf of 10" sewer on Halekauwila Street between South and Keawe Streets, SMH 4025647 to SMH 683930, with a 12" sewer.
- Replace 310 lf of 8" sewer on Keawe Street makai of Halekauwila Street, SMH 683930 to SMH 341527, with a 12" sewer.
- Replace 250 lf of 6" sewer on Ilaniwai between Kamani Street and Ward Avenue, SMH 342208 to SMH 342321, with an 8" sewer.
- Upsize 305 lf of HHG's planned sewer in Pohukaina Street between Ahui Street and Ward Avenue from 12" to 18" diameter, between SMH 379756 and the new 24" sewer in Ward Avenue. Sewer demands from Blocks 48N and 55 (KS D) are redirected to this line as the adjacent 6" and 8" sewers are inadequate.

See Figure 8 in the appendix.

### **Off-site Diversion**

Approximately 132 MGD of sewage flow originates outside the KCDD and passes through the study area. A diversion of a minimum of 27 MGD of sewage flow from the 60" Ward Avenue trunk sewer will alleviate surcharged conditions in Ward Avenue, Auahi Street, and South Street under the Future Baseline and TOD Alternative A scenarios.

## **Surcharged Sewers to Remain**

With the proposed diversion and sewer system improvements in place, a number of existing branching sewer mains will remain surcharged. Under ideal conditions the top of a branching sewer is typically set at an elevation equal to the top of the trunk sewer to minimize surcharging of the branching sewer. The following branching sewers all connect to a trunk sewer with the branching sewer invert set at or near the trunk sewer invert. The branch sewer profiles suggest external factors such as a conflicting utility precluded a higher invert connection or larger pipe diameter. In these instances, surcharging of the branching sewers is practically unavoidable.

- The 8" sewer, ID 4065997, at the intersection of Auahi and Coral Streets
- The 24" sewer, ID 3014925, at the intersection of Cooke and Auahi Streets
- The 30" sewer, IDs 685449, 685488, and 3010720, on Auahi Street between South and Keawe Streets
- The 10" sewer, ID 4026585, at the intersection of Halekauwila and Cooke Streets
- The 6" sewer, ID 344232, at the intersection of Archer Lane and South Beretania Street
- The triple barrel 12" sewers, ID 3015527, at the intersection of Kapi'olani Boulevard and Pensacola Street
- The 21" sewer, ID 380522, on Kapi'olani Boulevard, just west of Pensacola Street
- The 8" sewer, ID 4047070, 12" sewer, ID 4046376, and 18" sewer, ID 2023300 connecting to the 36" Kamake'e Street sewer.

See Figure 8 in the appendix.

## **690 Pohukaina Street Project Sewer Connection**

The 690 Pohukaina Street Project is located in the area impacted by the surcharged sewer lines in South and Auahi Streets. In accordance with the Design Standards, a sewer connection to a surcharged line is typically not allowed. The project would not be able to connect to the sewers fronting the property. The following off-site improvement would provide sewer service to the project:

- Replace 480 lf of 10" sewer on Pohukaina Street between South and Keawe Streets, SMH 4025647 to SMH 683930, with a 12" sewer.

See Figure 9 in the appendix.

## 4 CONCLUSION

The KCDD Mauka Area sewer system is impaired by the larger off-site sewer flows that surcharge the trunk sewers in the district. Sewer system improvements proposed by HHG and herein in addition to an off-site sewer diversion proposed by the City will free sewer capacity within the KCDD.

On-site sewer improvements include:

### **HHG Proposed Improvements**

- Install a 24" relief sewer in Ward Avenue between Ilaniwai and Auahi Streets
- Reroute the 48" trunk sewer from under the Ross Dress for Less and Sports Authority stores into Ward Avenue
- Replace the 6" sewers in Pohukaina Street between Koula and Ward Avenue with 12" sewers
- Install a 36" sewer in Auahi Street between Kamakee Street and Ward Avenue
- Replace the 8" sewer in Auahi Street between Kamakee Street and Queen Lane with a 12" sewer.

### **Future Baseline**

- Replace 480 lf of 10" sewer on Halekauwila Street between South and Keawe Streets with a 12" sewer.
- Upsize 305 lf of HHG's planned sewer in Pohukaina Street between Ahui Street and Ward Avenue from 12" to 18" diameter.

### **TOD Alternative A**

- Replace 480 lf of 10" sewer on Halekauwila Street between South and Keawe Streets with a 12" sewer.
- Replace 310 lf of 8" sewer on Keawe Street makai of Halekauwila Street with a 12" sewer.
- Replace 250 lf of 6" sewers on Ilaniwai between Cooke Street and Ward Avenue with 8" sewers.
- Upsize 305 lf of HHG's planned sewer in Pohukaina Street between Ahui Street and Ward Avenue from 12" to 18" diameter.

# APPENDICES

## Figures

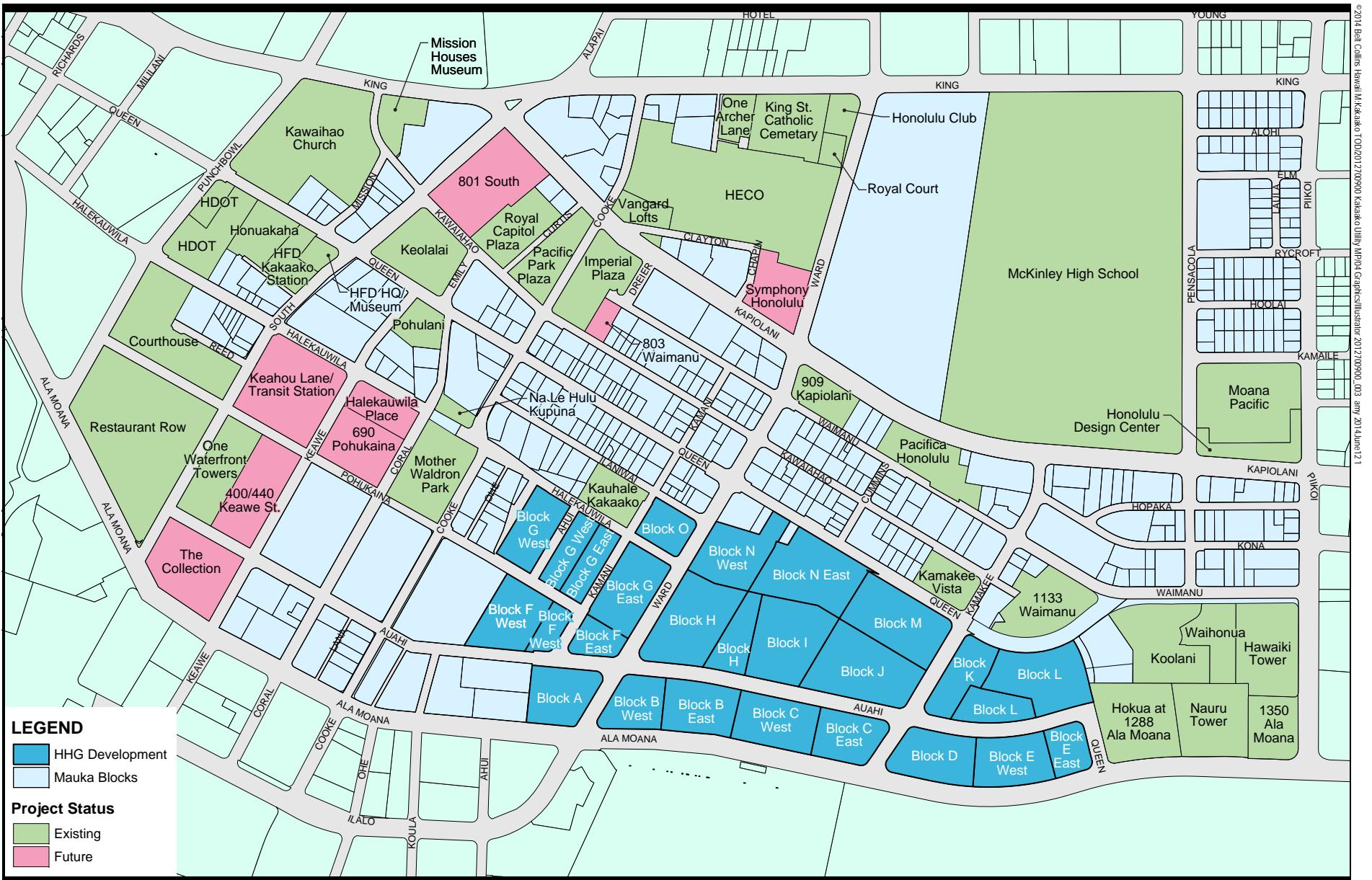
- Figure 1 – Mauka Area Projects
- Figure 1b – Flow Generation
- Figure 1c – Discharge SMH
- Figure 2 – Howard Hughes Group Development and Proposed Sewer Improvements
- Figure 3 – Existing Condition Peak Flow
- Figure 4 – Future Condition Peak Flow
- Figure 5 – TOD Alternative A Peak Flow
- Figure 6 – 690 Pohukaina Street Project Impact
- Figure 7 - Future Condition with Diversions Peak Flow
- Figure 8 – TOD Alternative A with Diversions Peak Flow
- Figure 9 – 690 Pohukaina Street Project Sewer Connection

## Tables

- Table 2 – Population and Utility Demands – Existing Condition
- Table 3 – Population and Utility Demands – Future Baseline
- Table 4 – Population and Utility Demands – TOD Alternative A
- Table 5 – Flow Computation – Existing Condition
- Table 6 – Flow Computation – Future Baseline and TOD Alternative A

## Model Inputs and Results

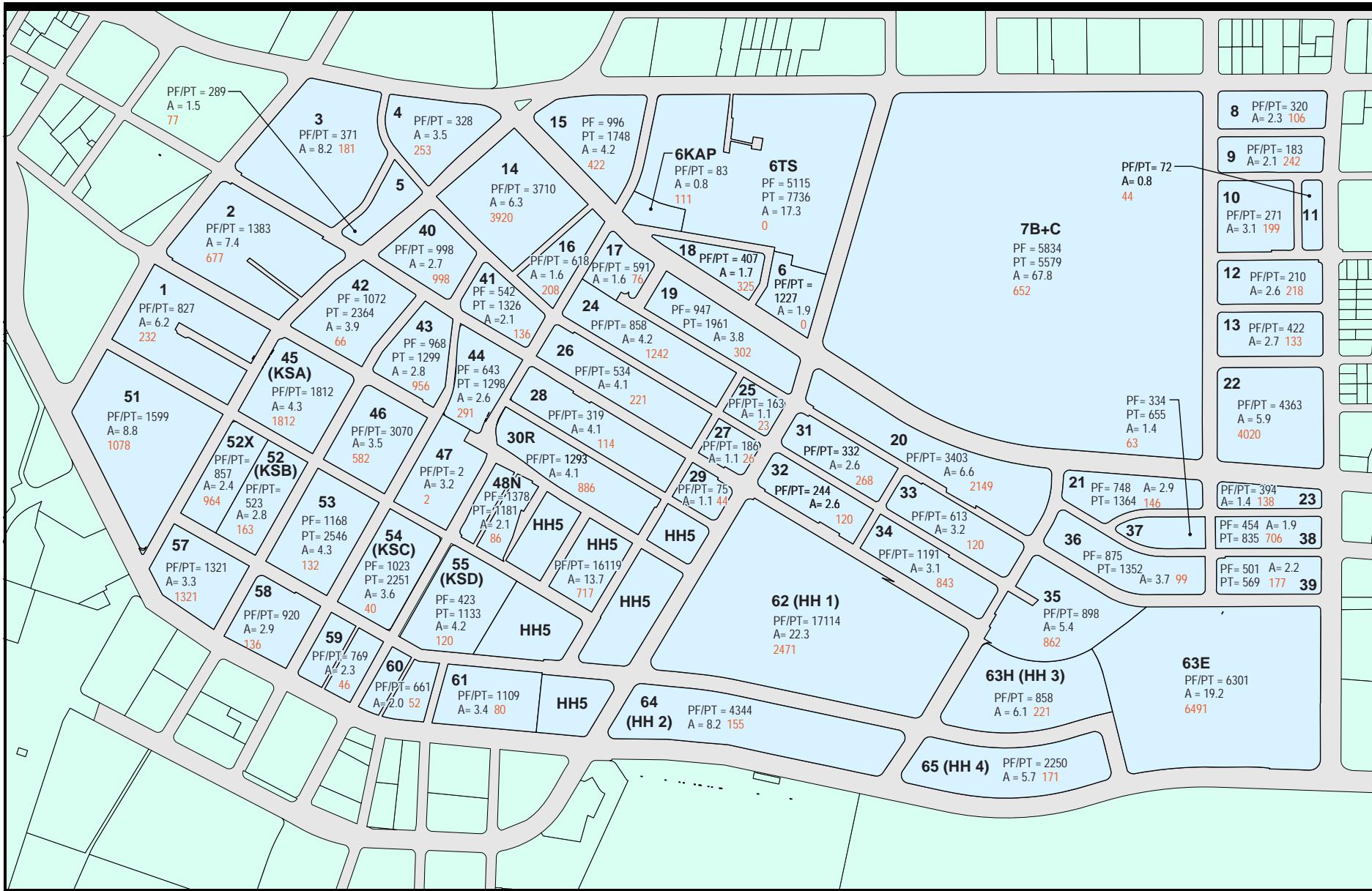
- Discharge Manhole Summary
- Existing Condition
- Future Baseline
- TOD Alternative A
- Future Baseline w/Diversion and Improvements
- TOD Alternative A w/Diversion and Improvements
- 690 Pohukaina w/Improvements



**Figure 1**  
**Mauka Area Projects**

Kakaako Mauka Sewer Master Plan  
HCDA  
6/12/2014



**LEGEND**

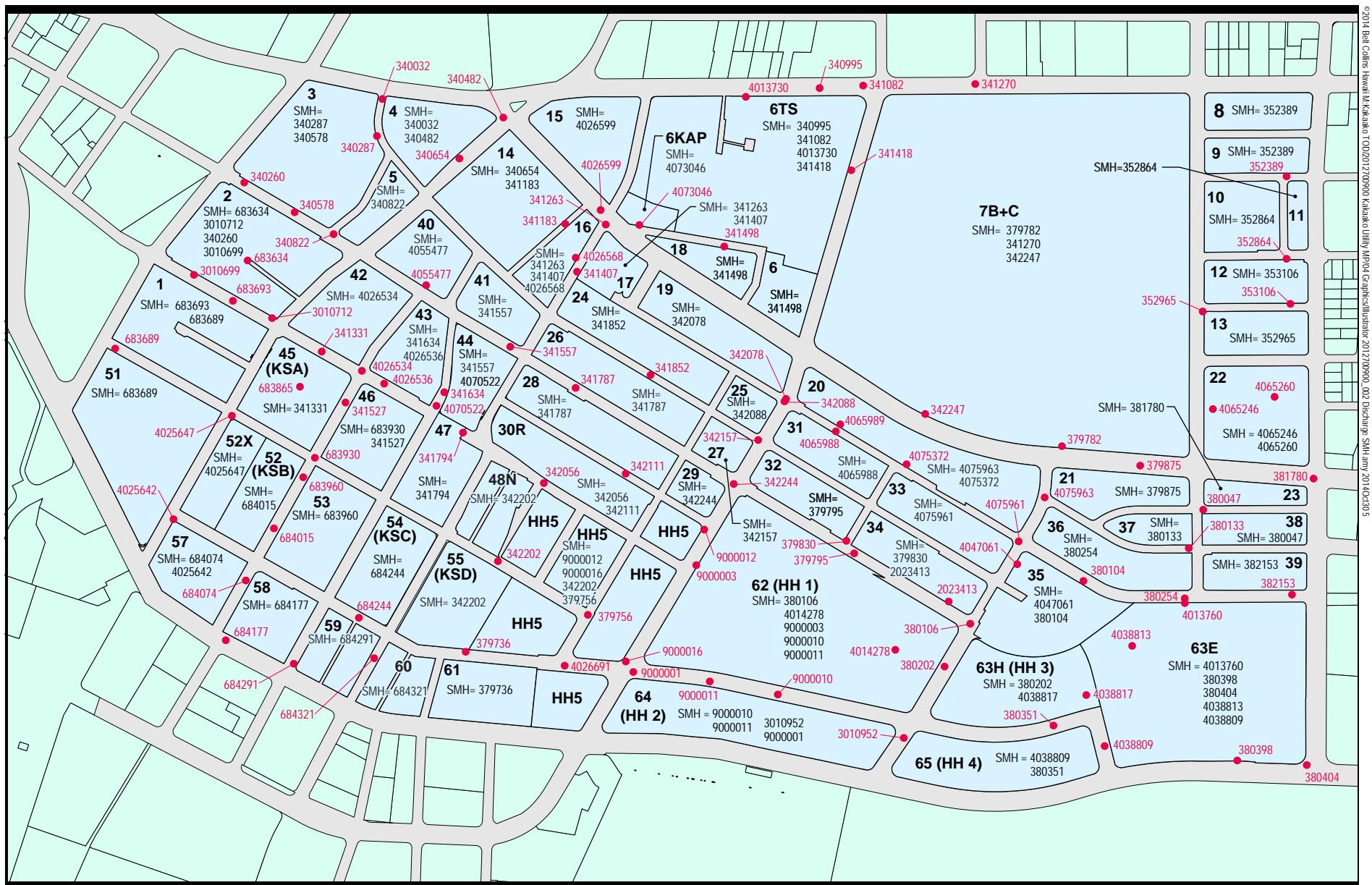
- 100 Existing equivalent population, capita
- PF Future base equivalent population, capita
- PT TOD equivalent population, capita
- A Block area, acre
- SMH Discharge point



0 175 350 700  
SCALE IN FEET

**Figure 1B**  
**Flow Generation**

Kakaako Mauka Sewer Master Plan  
HCDA  
6/13/2014



## LEGEND

### SMH Discharge point



SCALE IN FEET

SMH      Discharge point  
●          Sewer Manhole  
**397936**      Sewer Manhole ID Number

**Figure 1C**  
ischarge SMH

Kakaako Mauka Sewer Master Plan  
HCDA  
6/11/2014



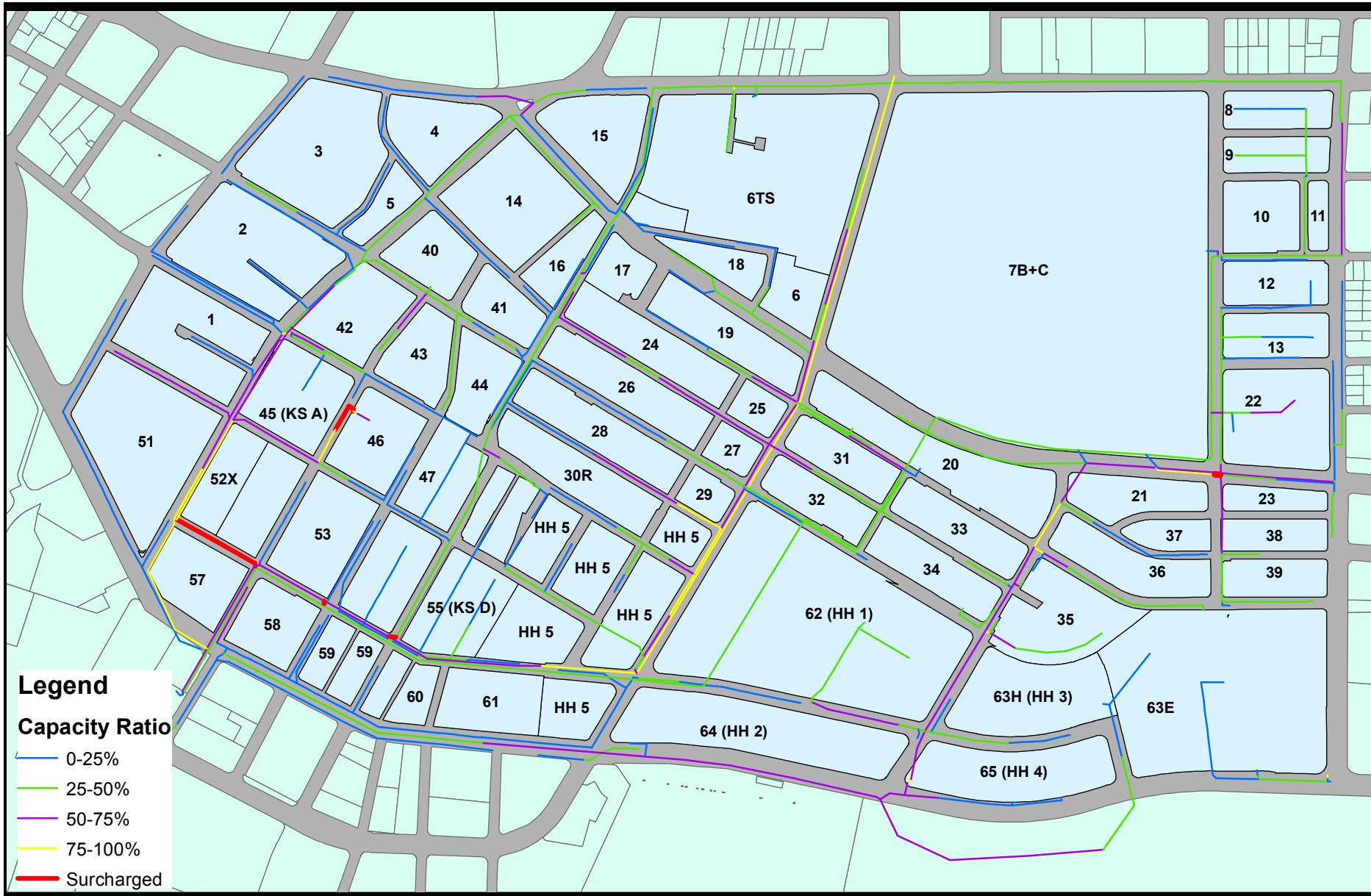
Figure 2

### Howard Hughes Group Development and Proposed Sewer Improvements

Kakaako Mauka Sewer Master Plan  
HCDA  
10/30/2014



0 87.5 175 350  
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**Figure 3**

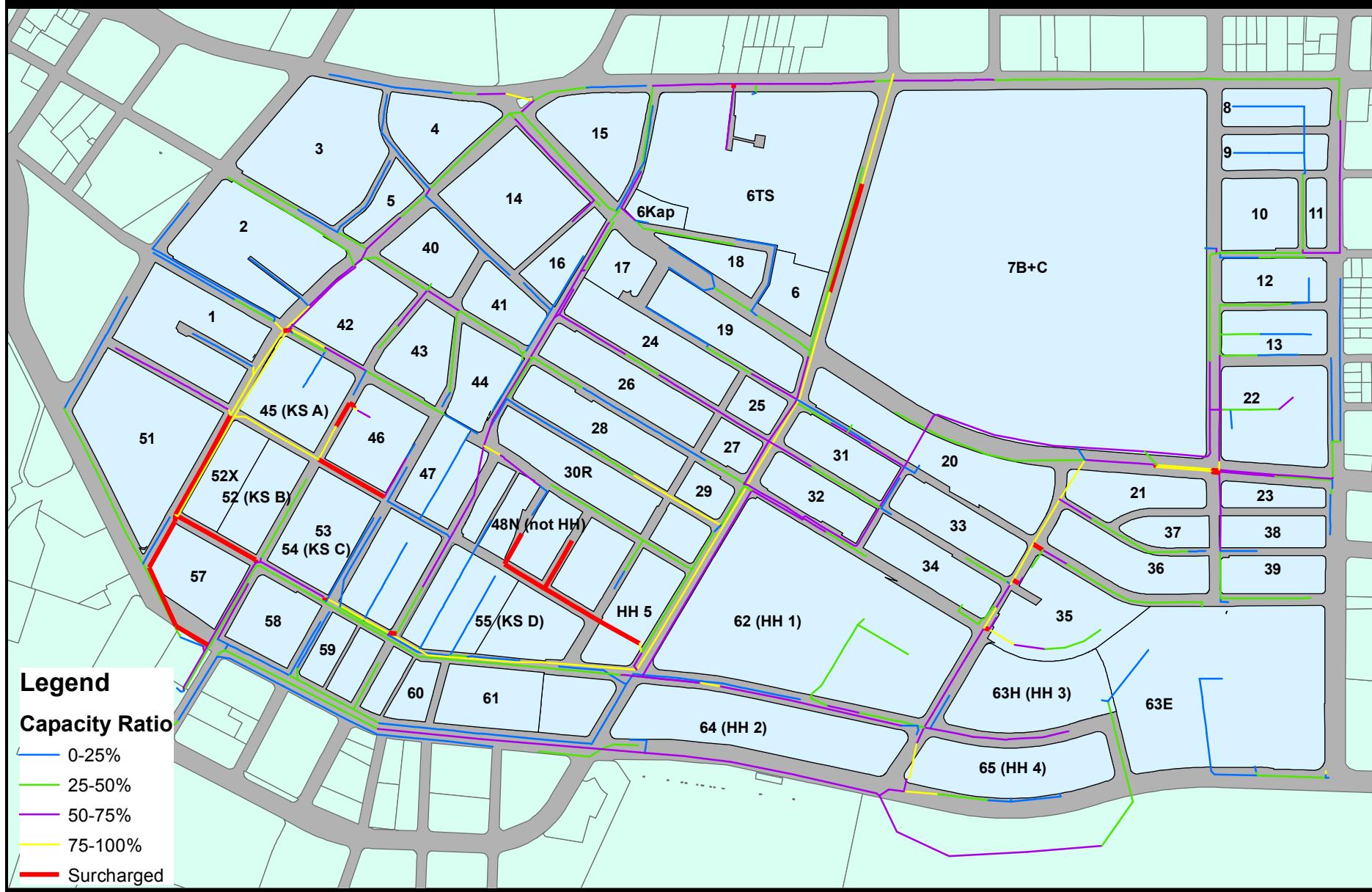
Kakaako Mauka Sewer Master Plan

HCDA

HSBA  
6/17/2014



A horizontal number line starting at 0 and ending at 700. Tick marks are present at 0, 175, 350, and 700. The segment between 0 and 175 is shaded black and labeled "SCALE IN FEET".

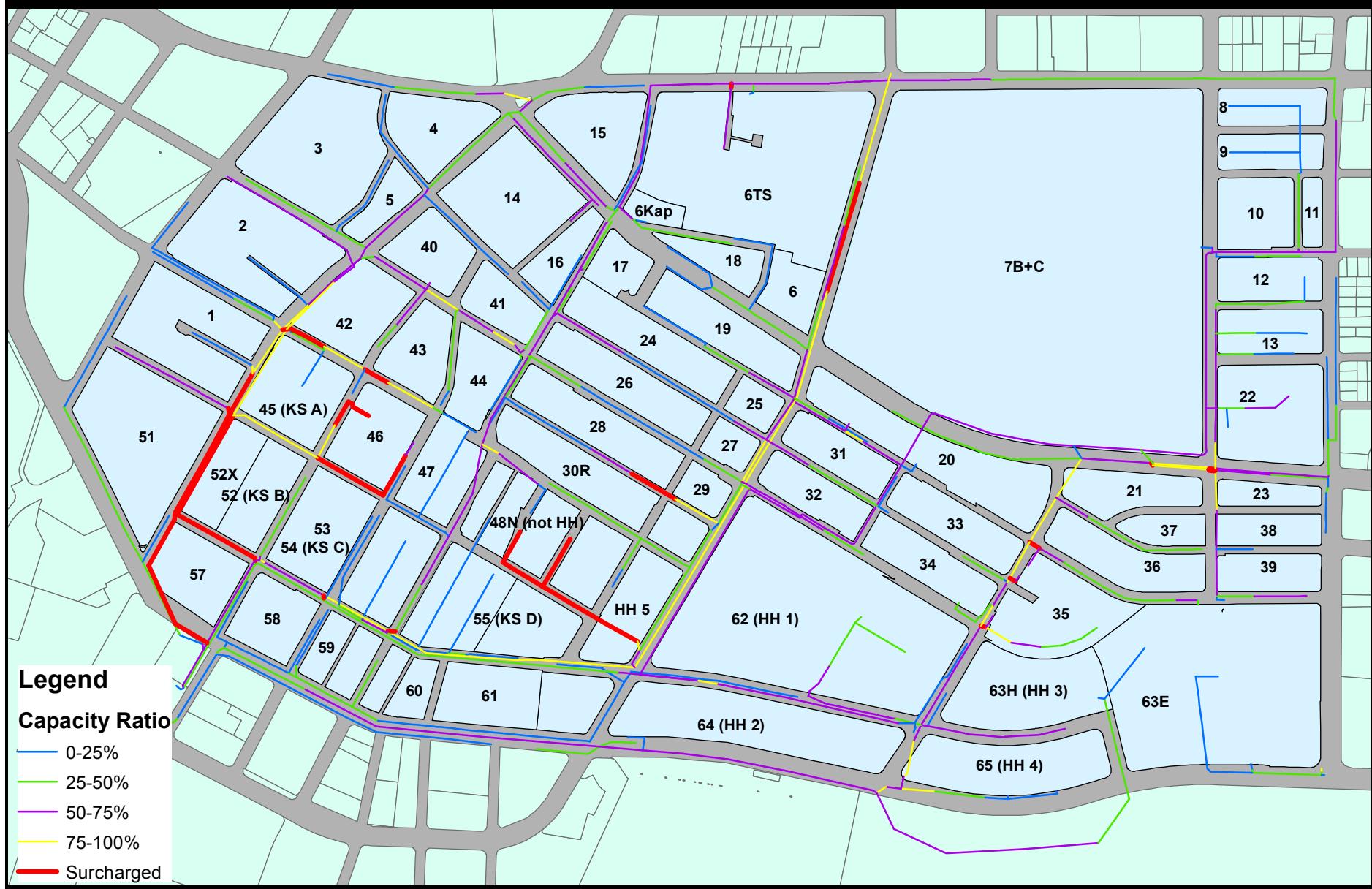


**Figure 4**  
**Future Condition Peak Flow**

Kakaako Mauka Sewer Master Plan  
HCDA  
10/30/2014



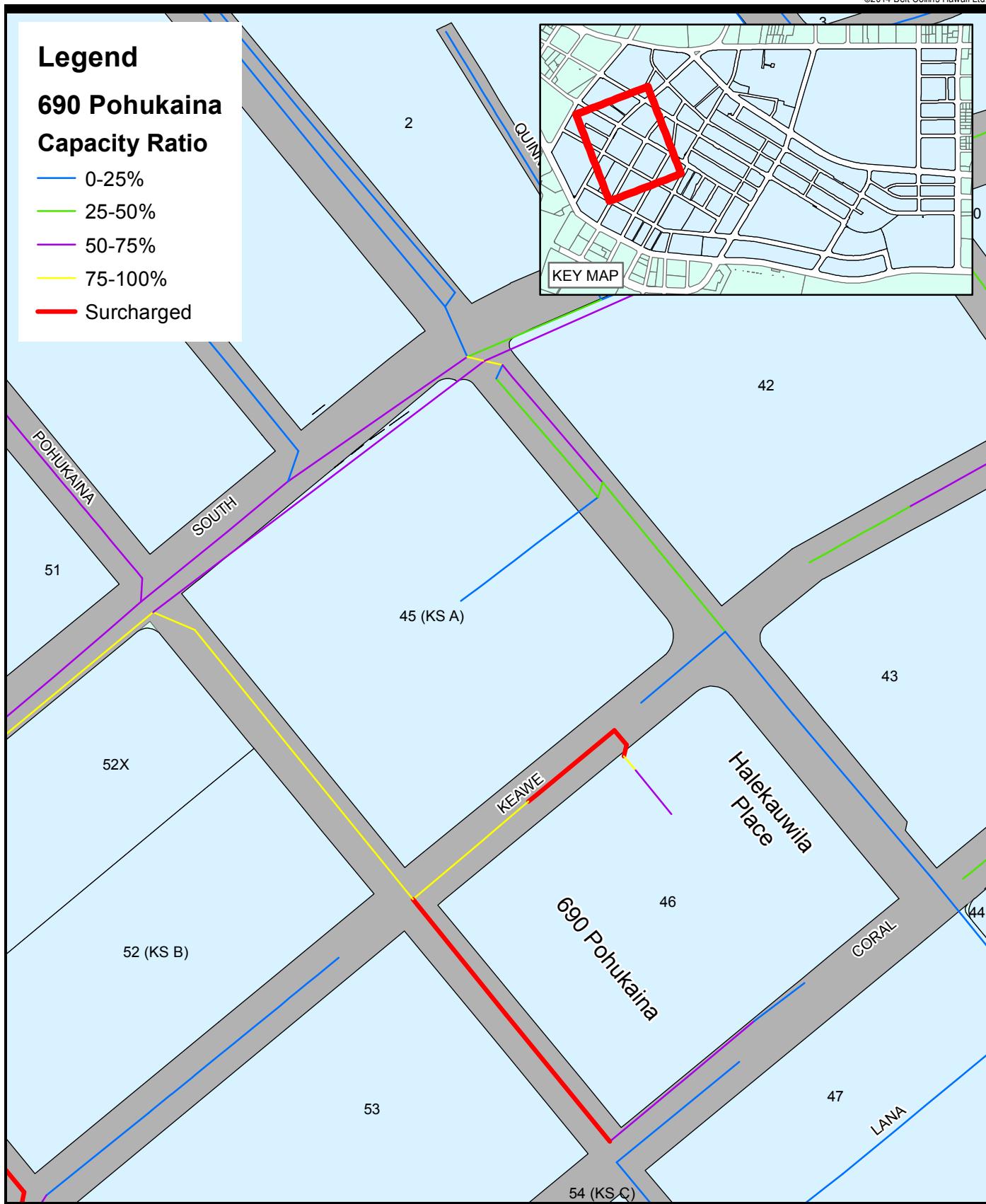
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**Figure 5**  
**TOD Overlay Peak Flow**  
Kakaako Mauka Sewer Master Plan  
HCDA  
10/30/2014



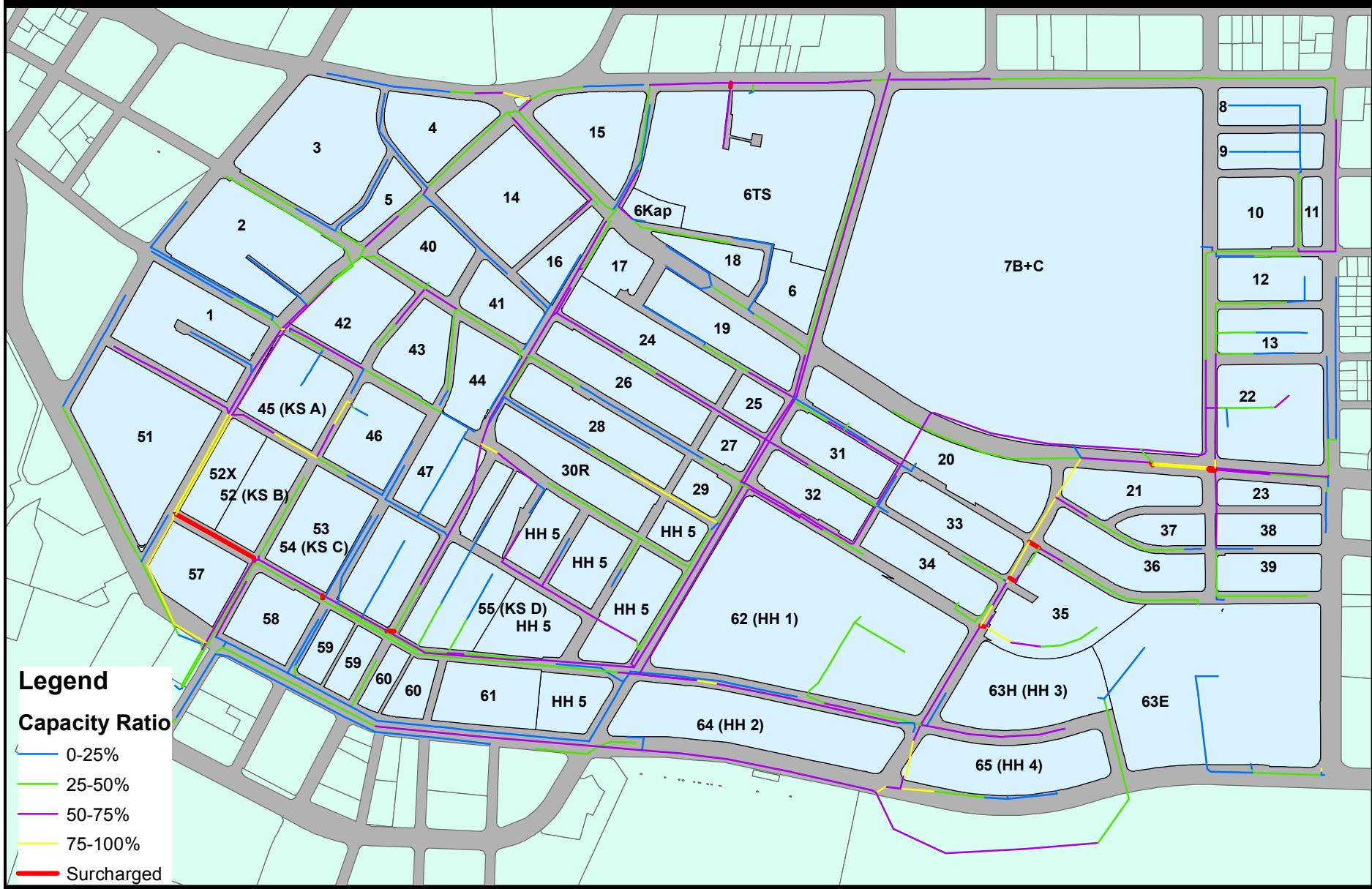
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SCALE IN FEET

**Figure 6**  
**690 Pohukaina Street Project Impact**

Kakaako Mauak Sewer Master Plan  
HCDA  
10/30/2014

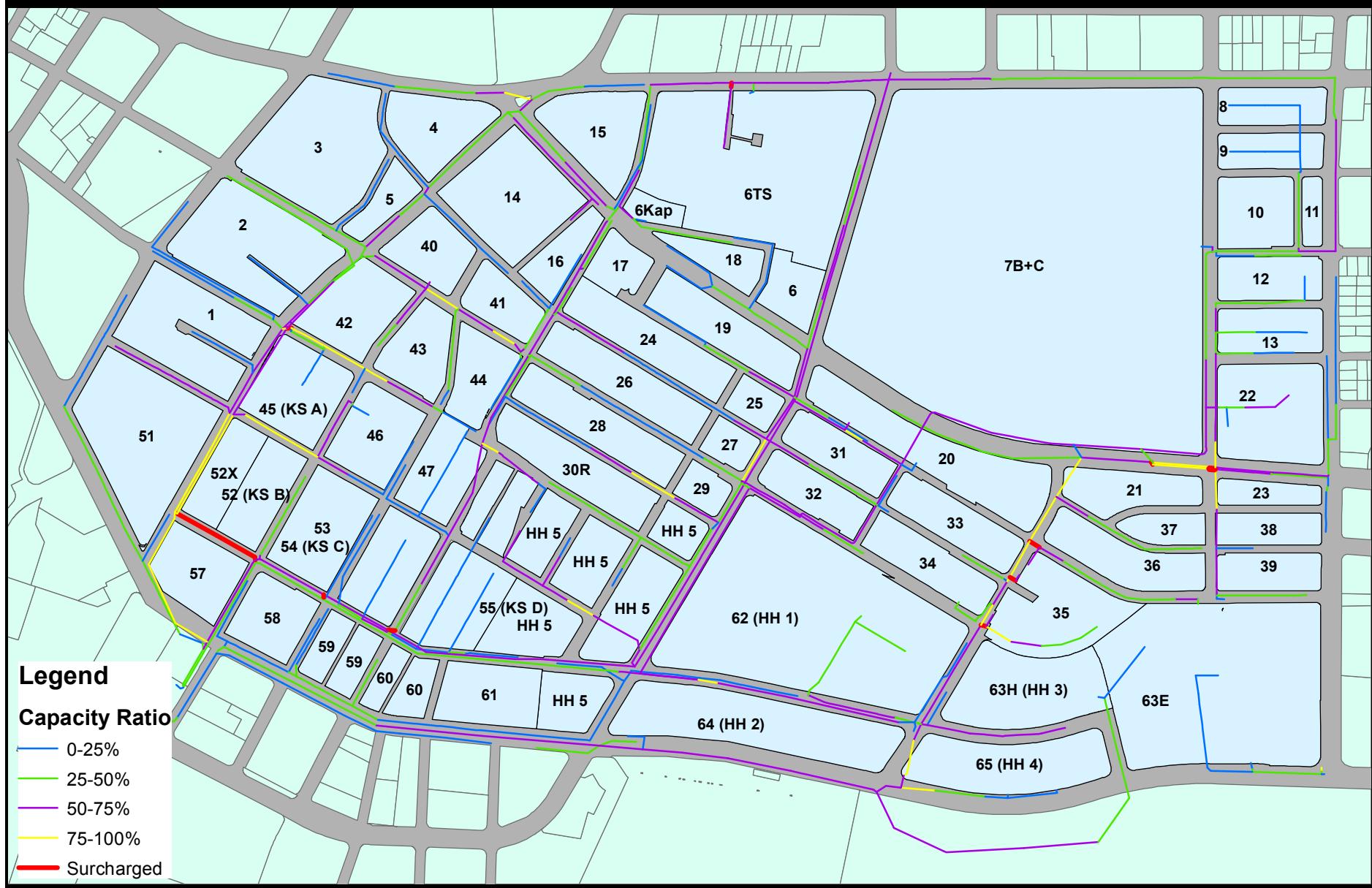


**Figure 7**  
**Future Condition with Diversions Peak Flow**

Kakaako Mauka Sewer Master Plan  
HCDA  
6/17/2014



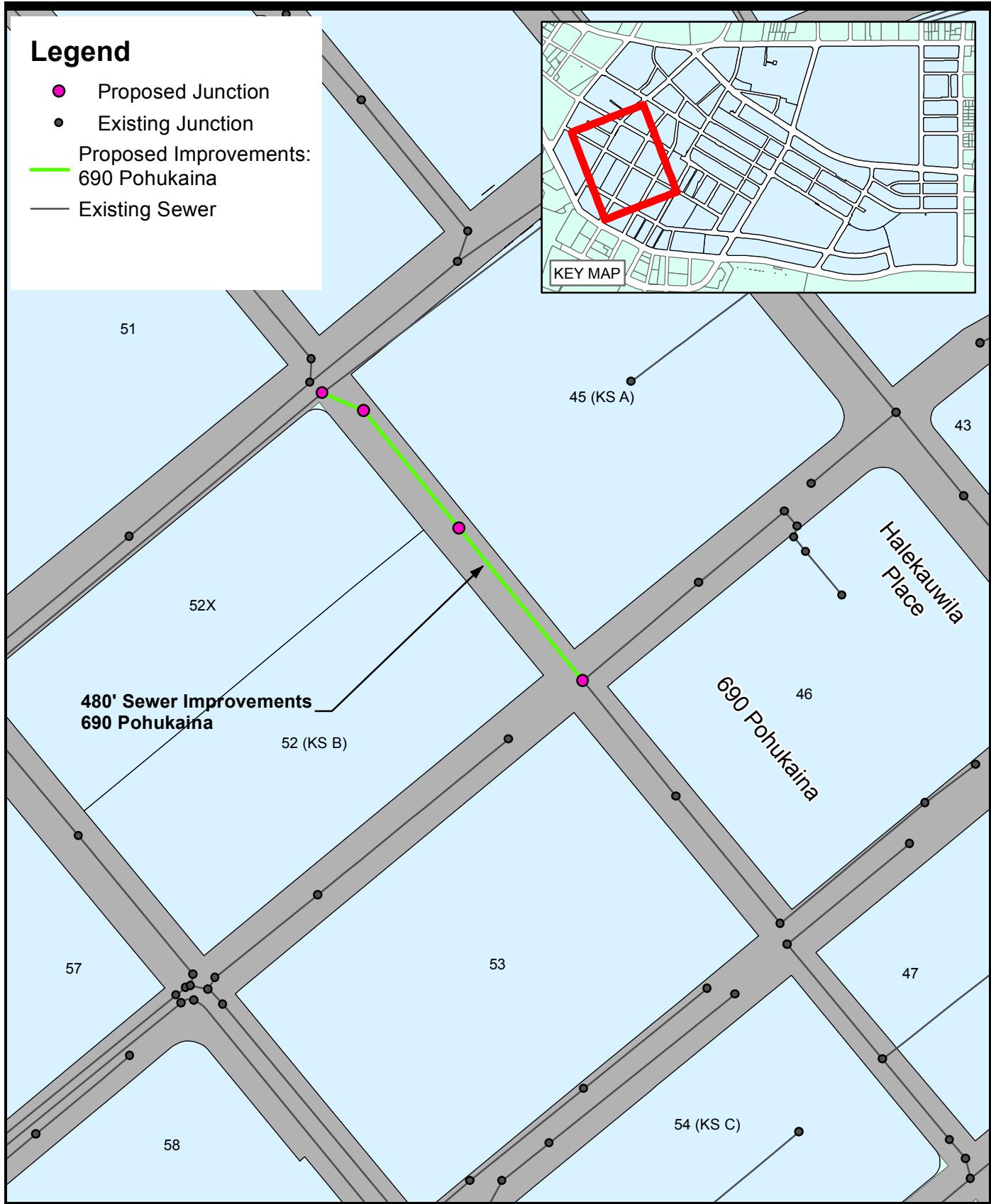
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SCALE IN FEET



**Figure 8**  
**TOD Alternative A with Diversions Peak Flow**

Kakaako Mauka Sewer Master Plan  
HCDA  
6/17/2014





**Figure 9**  
**690 Pohukaina Street Project Sewer Improvements**

Kakaako Mauka Sewer Master Plan  
HCDA  
10/30/2014



0 50 100 200  
SCALE IN FEET

## Discharge Manhole Summary

ID	TOD Block	Alias	EX_DF	FUT_DWF	TOD_DWF	I15YR6HR	I15YR24HR
339665			0.00000	0.00000	0.00000	0.00000	0.00000
339739		offsite	0.01152	0.01610	0.01610	0.04279	0.02705
339841			0.00000	0.00000	0.00000	0.00000	0.00000
340006			0.00000	0.00000	0.00000	0.04190	0.02441
340015			0.00000	0.00000	0.00000	0.00000	0.00000
340032	Block 4	Mission Houses	0.00695	0.00695	0.00695	0.02429	0.01508
340195			0.00000	0.00000	0.00000	0.03503	0.02067
340260	Block 2	DOT, Honuakaha	0.09626	0.11840	0.11840	0.02698	0.01676
340282			0.00000	0.00000	0.00000	0.02875	0.01708
340287	Block 3	Kawaihao Church	0.01727	0.02120	0.02120	0.03828	0.02379
340340		offsite	0.00177	0.00250	0.00250	0.01177	0.00765
340426			0.00000	0.00000	0.00000	0.01768	0.01059
340475		offsite	0.56094	0.61704	0.61704	1.50347	0.95233
340479			0.01434	0.00000	0.00000	0.02211	0.01381
340482	Block 4		0.00000	0.01623	0.01557	0.00471	0.00000
340496		offsite	0.35958	0.50130	0.50130	0.59202	0.32204
340497			0.05024	0.00000	0.00000	0.00000	0.00494
340514			0.00000	0.00000	0.00000	0.00613	0.00000
340523			0.00000	0.00000	0.00000	0.00934	0.00488
340578	Block 3		0.02318	0.04157	0.03990	0.01148	0.00080
340654	Block 14	801 South Street	0.69336	0.64932	0.62983	0.01181	0.00000
340663			0.03196	0.00000	0.00000	0.05300	0.00000
340679			0.00000	0.00000	0.00000	0.00538	0.00000
340746			0.00132	0.00000	0.00000	0.03660	0.02384
340778			0.00000	0.00000	0.00000	0.01090	0.00000
340787		offsite	0.04570	0.04910	0.04910	0.09504	0.13863
340789			0.00000	0.00000	0.00000	0.00547	0.00011
340801			0.00198	0.00000	0.00000	0.00000	0.00000
340822	Block 5		0.00000	0.85568	0.82112	0.00789	0.00519
340845			0.00000	0.00000	0.00000	0.00000	0.00000
340852			0.00000	0.00000	0.00000	0.00000	0.00000
340860			0.00000	0.00000	0.00000	0.01228	0.00500
340869			0.00000	0.00000	0.00000	0.01364	0.01346
340876			0.00000	0.00000	0.00000	0.01727	0.01082
340917			0.00000	0.00000	0.00000	0.00000	0.00000
340961			0.00000	0.00000	0.00000	0.00000	0.00000
340969			0.00000	0.00000	0.00000	0.01660	0.01165
340971			0.00000	0.00000	0.00000	0.01208	0.00768
340995	Block 6TS	King St. Catholic Cemetery	0.00142	0.00142	0.00142	0.02613	0.02279
341034			0.00339	0.00000	0.00000	0.02823	0.00014
341052			0.00000	0.00000	0.00000	0.00000	0.04974
341080		offsite	14.51260	14.99830	14.99830	63.30600	65.38850
341082	Block 6TS	Honolulu Club, offsite	0.10729	0.10930	0.10930	0.09424	0.08080
341085			0.00000	0.00000	0.00000	0.01076	0.01061
341090			0.00000	0.00000	0.00000	0.02581	0.00766
341111			0.00000	0.00000	0.00000	0.00804	0.00790
341119			0.00000	0.00000	0.00000	0.00000	0.03224
341125			0.00000	0.00000	0.00000	0.01887	0.01912
341127			0.00303	0.00000	0.00000	0.01764	0.00960
341161			0.00000	0.00000	0.00000	0.00259	0.00125
341165			0.00000	0.00000	0.00000	0.02285	0.00889
341183	Block 14	Royal Capitol	0.18823	0.31192	0.30268	0.03763	0.00185
341186			0.00000	0.00000	0.00000	0.00000	0.00000
341193			0.00000	0.00000	0.00000	0.01626	0.00008
341195			0.00000	0.00000	0.00000	0.02536	0.02475
341199			0.00000	0.00000	0.00000	0.00000	0.00000
341205			0.00000	0.00000	0.00000	0.00000	0.00000
341243			0.00000	0.00000	0.00000	0.00567	0.00208
341252			0.00000	0.00000	0.00000	0.01558	0.01028
341258			0.00000	0.00000	0.00000	0.00605	0.00638
341263	Block 17		0.00000	0.11237	0.10783	0.00061	0.00059
341270	Block 7B+C	Blasidell 50%	0.07103	0.82167	0.75657	0.13390	0.12418
341283		offsite	0.03694	0.03980	0.03980	0.09922	0.09216
341308			0.01583	0.00000	0.00000	0.01091	0.00700
341328			0.00000	0.00000	0.00000	0.01075	0.00754
341331	Block 45 (KSA)	Keahou Lane	0.40590	0.38614	0.37401	0.04364	0.03970
341339			0.00000	0.00000	0.00000	0.01719	0.01137
341360			0.00181	0.00000	0.00000	0.02045	0.01032
341372			0.00000	0.00000	0.00000	0.00910	0.00445
341383			0.00000	0.00000	0.00000	0.01495	0.00952
341389			0.00000	0.00000	0.00000	0.02653	0.02458
341402			0.01145	0.00000	0.00000	0.01864	0.01214
341403			0.00000	0.00000	0.00000	0.01326	0.01156

## Discharge Manhole Summary

ID	TOD Block	Alias	EX_DF	FUT_DWF	TOD_DWF	I15YR6HR	I15YR24HR
341407	Block 17 , Block 24	Imperial Plaza	0.14731	0.18120	0.18120	0.00000	0.00000
341418	Block 6TS	Royal Court, HECO	0.10100	0.10100	0.10100	0.02560	0.01462
341424			0.00000	0.00000	0.00000	0.01092	0.00451
341438			0.06054	0.00000	0.00000	0.00111	0.00071
341444			0.00000	0.00000	0.00000	0.00263	0.00050
341468			0.00000	0.00000	0.00000	0.04100	0.04820
341490			0.00000	0.00000	0.00000	0.01244	0.01277
341491			0.00278	0.00000	0.00000	0.01720	0.00769
341498	Block 6, Block 18	Symphony Park	0.01289	0.35656	0.34216	0.00450	0.00432
341504			0.00000	0.00000	0.00000	0.05522	0.03481
341508			0.00000	0.00000	0.00000	0.00168	0.00000
341511			0.00000	0.00000	0.00000	0.00264	0.00000
341527	Block 46	Halekauwila Place	0.56720	0.56720	0.56720	0.00628	0.00617
341533			0.00000	0.00000	0.00000	0.01804	0.01544
341556			0.00000	0.00000	0.00000	0.01659	0.01675
341557	Block 41, Block 44		0.00876	0.25867	0.54971	0.00014	0.00007
341561			0.00000	0.00000	0.00000	0.00869	0.00868
341574			0.00000	0.00000	0.00000	0.00979	0.00825
341588			0.02017	0.00000	0.00000	0.02090	0.02093
341598			0.00000	0.00000	0.00000	0.00000	0.00000
341599			0.00000	0.00000	0.00000	0.00000	0.00000
341601			0.00114	0.00000	0.00000	0.01219	0.00713
341615			0.00000	0.00000	0.00000	0.00690	0.00630
341617			0.00000	0.00000	0.00000	0.01167	0.01176
341619			0.02293	0.00000	0.00000	0.00503	0.00353
341625			0.00000	0.00000	0.00000	0.00002	0.00006
341634	Block 43	Pohulani	0.19786	0.16764	0.16764	0.03363	0.01347
341656			0.03028	0.00000	0.00000	0.01732	0.01773
341660			0.00148	0.00000	0.00000	0.01173	0.00884
341677			0.00000	0.00000	0.00000	0.01283	0.01293
341729			0.00047	0.00000	0.00000	0.00421	0.00433
341730			0.00441	0.00000	0.00000	0.00000	0.01520
341743			0.00000	0.00000	0.00000	0.00417	0.00435
341764			0.02944	0.00000	0.00000	0.00464	0.00397
341780			0.00000	0.00000	0.00000	0.05342	0.05310
341782			0.00000	0.00000	0.00000	0.02470	0.03080
341786			0.00000	0.00000	0.00000	0.01971	0.02000
341787	Block 26, Block 28		0.01414	0.18613	0.17861	0.01714	0.01686
341794	Block 47	Mother Waldron Park	0.00000	0.00048	0.00046	0.00370	0.00361
341797			0.00000	0.00000	0.00000	0.01066	0.01061
341798			0.00000	0.00000	0.00000	0.00749	0.00783
341803			0.00065	0.00000	0.00000	0.01161	0.01074
341812			0.00407	0.00000	0.00000	0.01942	0.01834
341814			0.00000	0.00000	0.00000	0.01368	0.01306
341826			0.00175	0.00000	0.00000	0.00728	0.00738
341852	Block 24	803 Waimanu	0.10110	0.18274	0.17700	0.01418	0.01380
341904			0.00000	0.00000	0.00000	0.01465	0.01438
341914			0.00000	0.00000	0.00000	0.00623	0.00604
341927			0.00000	0.00000	0.00000	0.00000	0.00676
341934			0.01335	0.00000	0.00000	0.00454	0.00439
341935			0.00000	0.00000	0.00000	0.01438	0.01196
341945			0.00868	0.00000	0.00000	0.01306	0.01273
341964			0.00000	0.00000	0.00000	0.01075	0.01073
341965			0.00000	0.00000	0.00000	0.00357	0.00367
341967			0.02831	0.00000	0.00000	0.01566	0.01508
341970			0.02984	0.00000	0.00000	0.00289	0.00297
341976			0.05047	0.00000	0.00000	0.01201	0.01159
341980			0.00000	0.00000	0.00000	0.00808	0.00735
342021			0.00000	0.00000	0.00000	0.01394	0.00897
342026			0.01069	0.00000	0.00000	0.01309	0.01291
342028			0.00000	0.00000	0.00000	0.01249	0.01237
342039			0.00906	0.00000	0.00000	0.00982	0.00976
342049			0.00466	0.00000	0.00000	0.00910	0.00901
342056	Block 30R		0.00391	0.08895	0.08536	0.00268	0.00265
342065			0.00000	0.00000	0.00000	0.00336	0.00318
342078	Block 19		0.00000	0.25239	0.50091	0.00785	0.00843
342079			0.00000	0.00000	0.00000	0.00250	0.00770
342081			0.00424	0.00000	0.00000	0.00000	0.00000
342082			0.00000	0.00000	0.00000	0.01584	0.01567
342088	Block 25		0.00000	0.03565	0.03421	0.00000	0.08502
342093			0.00706	0.00000	0.00000	0.01182	0.01171
342098			0.00000	0.00000	0.00000	0.00000	0.00000
342111	Block 30R	Kauhale Kaka'ako	0.18176	0.22360	0.22360	0.00795	0.00777

## Discharge Manhole Summary

ID	TOD Block	Alias	EX_DF	FUT_DWF	TOD_DWF	I15YR6HR	I15YR24HR
342114			0.00381	0.00000	0.00000	0.01434	0.01434
342145			0.01049	0.00000	0.00000	0.01248	0.01238
342150			0.00928	0.00000	0.00000	0.00468	0.00454
342154			0.00209	0.00000	0.00000	0.00391	0.00382
342157	Block 27		0.00000	0.04052	0.03888	0.01047	0.01087
342161			0.00000	0.00000	0.00000	0.00333	0.00341
342162			0.00678	0.00000	0.00000	0.00621	0.00621
342168			0.00000	0.00000	0.00000	0.00992	0.01045
342180			0.00000	0.00000	0.00000	0.02097	0.03948
342199			0.00172	0.00000	0.00000	0.03761	0.04904
342202	Block HH5, Block 48N, Block 55 (KSD)	Block G West	0.01309	1.09140	1.18000	0.00629	0.00499
342207			0.00238	0.00000	0.00000	0.00758	0.00753
342208			0.00769	0.00000	0.00000	0.01408	0.01421
342210			0.00573	0.00000	0.00000	0.00337	0.00324
342212			0.00000	0.00000	0.00000	0.01050	0.01510
342221			0.00000	0.00000	0.00000	0.00616	0.00574
342231			0.00000	0.00000	0.00000	0.00194	0.00330
342244	Block 29		0.00000	0.01637	0.01571	0.05083	0.05250
342247	Block 7B+C	Blasidell 50%	0.00000	0.81670	0.75160	0.00000	0.00000
342248			0.00157	0.00000	0.00000	0.00487	0.00483
342249			0.00672	0.00000	0.00000	0.00551	0.00558
342253			0.00000	0.00000	0.00000	0.00000	0.00000
342258			0.04589	0.00000	0.00000	0.00381	0.00371
342261			0.01044	0.00000	0.00000	0.00500	0.00528
342283			0.02484	0.00000	0.00000	0.00255	0.00179
342308			0.00137	0.00000	0.00000	0.01132	0.00837
342309			0.00000	0.00000	0.00000	0.02204	0.03036
342320			0.00000	0.00000	0.00000	0.00790	0.00725
342321			0.00000	0.00000	0.00000	0.01556	0.01691
342348			0.00577	0.00000	0.00000	0.01685	0.01674
342353			0.00700	0.00000	0.00000	0.00922	0.00864
342356			0.01175	0.00000	0.00000	0.00496	0.00524
342357			0.02584	0.00000	0.00000	0.00645	0.00301
342358			0.00000	0.00000	0.00000	0.00000	0.00000
342367			0.00499	0.00000	0.00000	0.00751	0.00749
342369			0.00000	0.00000	0.00000	0.01101	0.00000
342376			0.00000	0.00000	0.00000	0.00000	0.00000
342385			0.00667	0.00000	0.00000	0.01018	0.00791
342391			0.00000	0.00000	0.00000	0.00770	0.02080
342394			0.00841	0.00000	0.00000	0.00628	0.00578
342398			0.00000	0.00000	0.00000	0.03283	0.02430
342402			0.02716	0.00000	0.00000	0.02440	0.02461
351395			0.00000	0.00000	0.00000	0.00000	0.00000
351559			0.00000	0.00000	0.00000	0.01607	0.01453
351590		offsite	0.00823	0.00880	0.00880	0.01625	0.01441
351697			0.00000	0.00000	0.00000	0.02517	0.01944
351789			0.02399	0.00000	0.00000	0.00670	0.00428
351869		offsite	0.56571	0.60780	0.60780	0.81173	0.63989
351871			0.00000	0.00000	0.00000	0.00465	0.00273
351958			0.00000	0.00000	0.00000	0.00363	0.00214
352086			0.05461	0.00000	0.00000	0.01452	0.00812
352091			0.00000	0.00000	0.00000	0.00090	0.00092
352146			0.00000	0.00000	0.00000	0.00091	0.00148
352166			0.00000	0.00000	0.00000	0.00418	0.00110
352253			0.00000	0.00000	0.00000	0.00188	0.00000
352389	Block 8, Block 9		0.00000	0.10987	0.10543	0.00357	0.00210
352390			0.02167	0.00000	0.00000	0.00311	0.00183
352471			0.00000	0.00000	0.00000	0.00137	0.00184
352602			0.00000	0.00000	0.00000	0.01067	0.01182
352620			0.00000	0.00000	0.00000	0.00834	0.00863
352633			0.00000	0.00000	0.00000	0.00627	0.00317
352644			0.00000	0.00000	0.00000	0.00000	0.00000
352653			0.00000	0.00000	0.00000	0.03043	0.02990
352674			0.00000	0.00000	0.00000	0.00000	0.00000
352684			0.00000	0.00000	0.00000	0.00118	0.00131
352759			0.00271	0.00000	0.00000	0.00517	0.00401
352777			0.00000	0.00000	0.00000	0.04301	0.00134
352821			0.00000	0.00000	0.00000	0.00241	0.00112
352831			0.00000	0.00000	0.00000	0.00000	0.00000
352864	Block 10, Block 11		0.02212	0.07489	0.07186	0.00261	0.00199
352912		offsite	4.17971	5.30620	5.30620	4.75938	5.32158
352940			0.00542	0.00000	0.00000	0.02418	0.03114
352965	Block 13		0.00000	0.09219	0.08847	0.01499	0.01991

## Discharge Manhole Summary

ID	TOD Block	Alias	EX_DF	FUT_DWF	TOD_DWF	I15YR6HR	I15YR24HR
352972			0.00000	0.00000	0.00000	0.00538	0.00620
353056			0.00000	0.00000	0.00000	0.00960	0.01098
353059			0.00000	0.00000	0.00000	0.00972	0.01246
353085			0.00000	0.00000	0.00000	0.00738	0.00803
353096			0.00000	0.00000	0.00000	0.01230	0.01630
353106	Block 12		0.00000	0.04584	0.04399	0.00605	0.00675
353205			0.00000	0.00000	0.00000	0.00497	0.00756
379475			0.00115	0.00000	0.00000	0.01077	0.09161
379476		offsite	0.00448	0.00870	0.00870	0.03537	0.07820
379481			0.00000	0.00000	0.00000	0.00851	0.04428
379484			0.00000	0.00000	0.00000	0.02280	0.03117
379488			0.00000	0.00000	0.00000	0.00678	0.01687
379586			0.00000	0.00000	0.00000	0.00568	0.03034
379722			0.00000	0.00000	0.00000	0.00000	0.00000
379729			0.00076	0.00000	0.00000	0.01343	0.01894
379734			0.00000	0.00000	0.00000	0.00326	0.00324
379736	Block 61		0.00000	0.24216	0.23238	0.00368	0.00314
379737			0.01178	0.00000	0.00000	0.00000	0.00000
379754			0.00848	0.00000	0.00000	0.00564	0.00499
379756	Block HHS	Block G East	0.01076	1.56000	1.56000	0.01008	0.00884
379761			0.00000	0.00000	0.00000	0.02837	0.00000
379764			0.00825	0.00000	0.00000	0.01601	0.02261
379765			0.00733	0.00000	0.00000	0.00817	0.00803
379771			0.01614	0.00000	0.00000	0.00666	0.00589
379779			0.00000	0.00000	0.00000	0.00830	0.00622
379781			0.00000	0.00000	0.00000	0.00000	0.00000
379782	Block 7B+C	McKinley High School	0.12694	0.12694	0.12694	0.02800	0.00510
379786			0.00000	0.00000	0.00000	0.00000	0.00000
379790			0.00000	0.00000	0.00000	0.00000	0.00000
379792			0.00000	0.00000	0.00000	0.00000	0.00000
379795	Block 32		0.00000	0.05321	0.09254	0.00000	0.00000
379805			0.00000	0.00000	0.00000	0.00608	0.00952
379810			0.02464	0.00000	0.00000	0.00687	0.00642
379812			0.02357	0.00000	0.00000	0.00389	0.00181
379817			0.00000	0.00000	0.00000	0.01370	0.63330
379829			0.00000	0.00000	0.00000	0.01526	0.00000
379830	Block 34		0.00000	0.07599	0.07292	0.00709	0.00646
379831			0.00000	0.00000	0.00000	0.00000	0.00916
379855			0.00000	0.00000	0.00000	0.00000	0.00000
379857			0.00000	0.00000	0.00000	0.00415	0.00234
379870			0.00032	0.00000	0.00000	0.01010	0.18784
379873			0.00000	0.00000	0.00000	0.00496	0.03941
379874			0.00000	0.00000	0.00000	0.00000	0.00000
379875	Block 21		0.01899	0.16323	0.28574	0.00760	0.01231
379881			0.00000	0.00000	0.00000	0.01326	0.02474
379886			0.00000	0.00000	0.00000	0.00000	0.00000
379890			0.00000	0.00000	0.00000	0.00000	0.00000
379892			0.00000	0.00000	0.00000	0.00000	0.00000
379894			0.01361	0.00000	0.00000	0.02239	0.02998
379901			0.00000	0.00000	0.00000	0.00000	0.00003
379904			0.00456	0.00000	0.00000	0.00715	0.11439
379906			0.00000	0.00000	0.00000	0.00091	0.00060
379920			0.00000	0.00000	0.00000	0.00096	0.00054
379921			0.00000	0.00000	0.00000	0.00000	0.00000
379941			0.00000	0.00000	0.00000	0.00000	0.02562
379943			0.01182	0.00000	0.00000	0.00000	0.00000
379948			0.00142	0.00000	0.00000	0.01415	0.01520
379949			0.00000	0.00000	0.00000	0.00535	0.00369
379950			0.03167	0.00000	0.00000	0.00542	0.00156
379952			0.00000	0.00000	0.00000	0.33862	0.45957
379979			0.00000	0.00000	0.00000	0.00000	0.00000
379995			0.00000	0.00000	0.00000	0.00000	0.00907
380002			0.03418	0.00000	0.00000	0.00628	0.00437
380017			0.00000	0.00000	0.00000	0.02850	0.03726
380018			0.00000	0.00000	0.00000	0.00538	0.00000
380025			0.01011	0.00000	0.00000	0.00599	0.01529
380028			0.00000	0.00000	0.00000	0.00000	0.00233
380033			0.00000	0.00000	0.00000	0.01661	0.00000
380045			0.00000	0.00000	0.00000	0.00000	0.03803
380047	Block 38		0.00000	0.09905	0.17484	0.01986	0.03127
380055			0.00000	0.00000	0.00000	0.01090	0.00744
380067			0.00000	0.00000	0.00000	0.00000	0.01961
380104	Block 35		0.01280	0.02290	0.02290	0.00867	0.01286

## Discharge Manhole Summary

ID	TOD Block	Alias	EX_DF	FUT_DWF	TOD_DWF	I15YR6HR	I15YR24HR
380106	Block 62 (HH1)		0.00000	0.81000	0.81000	0.00000	0.00646
380113			0.03502	0.00000	0.00000	0.00685	0.00484
380133	Block 37		0.00517	0.07283	0.13714	0.00480	0.00332
380147			0.00000	0.00000	0.00000	0.00000	0.00000
380149			0.00000	0.00000	0.00000	0.00556	0.00972
380159			0.00000	0.00000	0.00000	0.01176	0.01771
380189			0.00133	0.00000	0.00000	0.00899	0.01221
380202	Block 63H (HH3)	Block K	0.00000	0.39000	0.39000	0.00421	0.00865
380209			0.00000	0.00000	0.00000	0.00000	0.00000
380210			0.00000	0.00000	0.00000	0.01105	0.01713
380234			0.00209	0.00000	0.00000	0.00847	0.01106
380249			0.00356	0.00000	0.00000	0.01091	0.01458
380254	Block 36		0.00000	0.19108	0.28324	0.00383	0.00113
380260			0.00000	0.00000	0.00000	0.00623	0.00979
380263			0.00000	0.00000	0.00000	0.00511	0.00814
380268			0.00000	0.00000	0.00000	0.00000	0.00000
380270			0.00000	0.00000	0.00000	0.00193	0.00422
380272			0.00000	0.00000	0.00000	0.01104	0.01464
380283			0.00000	0.00000	0.00000	0.00000	0.00000
380285			0.00000	0.00000	0.00000	0.00882	0.01169
380287			0.00000	0.00000	0.00000	0.00000	0.00000
380289			0.00000	0.00000	0.00000	0.00000	0.00000
380312			0.00000	0.00000	0.00000	0.00921	0.01350
380333			0.00000	0.00000	0.00000	0.00641	0.00924
380336			0.00000	0.00000	0.00000	0.07342	0.00000
380338			0.00000	0.00000	0.00000	0.00000	0.00000
380347			0.00000	0.00000	0.00000	0.00563	0.00784
380351	Block 65 (HH4)	Block D, Block E/West	0.02666	0.86000	0.86000	0.01352	0.01799
380367			0.00000	0.00000	0.00000	0.00835	0.01388
380368			0.00000	0.00000	0.00000	0.00477	0.00636
380369			0.00000	0.00000	0.00000	0.00560	0.07810
380372			0.00000	0.00000	0.00000	0.00755	0.01231
380377			0.00000	0.00000	0.00000	0.00933	0.01233
380378			0.00000	0.00000	0.00000	0.00000	0.00000
380380			0.00000	0.00000	0.00000	0.01145	0.01558
380381			0.00000	0.00000	0.00000	0.01242	0.01709
380382			0.00000	0.00000	0.00000	0.00680	0.00892
380383			0.00000	0.00000	0.00000	0.01482	0.02223
380389			0.00000	0.00000	0.00000	0.00670	0.09060
380394			0.00000	0.00000	0.00000	0.00482	0.00682
380397			0.00000	0.00000	0.00000	0.00820	0.10270
380398	Block 63E	Nauru Tower	0.32337	0.31009	0.29899	0.00000	0.00000
380400			0.00000	0.00000	0.00000	0.00548	0.01065
380402		offsite	22.00120	22.42880	22.42880	0.01919	0.00000
380404	Block 63E	1350 Ala Moana	0.22320	0.27450	0.27450	0.01904	0.00000
380405			0.00000	0.00000	0.00000	0.00000	0.00000
380962		offsite	0.00330	0.00640	0.00640	0.01466	0.01522
381297			0.00000	0.00000	0.00000	0.00813	0.00446
381340			0.03002	0.00000	0.00000	0.00630	0.00603
381342			0.00000	0.00000	0.00000	0.00875	0.01224
381401			0.00000	0.00000	0.00000	0.00969	0.01253
381442			0.00000	0.00000	0.00000	0.00619	0.00770
381454			0.00000	0.00000	0.00000	0.00784	0.00983
381561			0.00000	0.00000	0.00000	0.00377	0.00528
381567			0.00000	0.00000	0.00000	0.00781	0.00863
381642			0.09721	0.00000	0.00000	0.00392	0.01026
381648			0.00000	0.00000	0.00000	0.00623	0.00538
381684			0.00000	0.00000	0.00000	0.00000	-0.14905
381771			0.00000	0.00000	0.00000	0.00000	0.00000
381780	Block 23	offsite	0.02111	0.10598	0.10250	0.02605	0.04760
381816			0.00000	0.00000	0.00000	0.00000	0.00000
381836			0.00000	0.00000	0.00000	0.00926	0.01284
381994			0.03303	0.00000	0.00000	0.02648	0.03403
382153	Block 39		0.01799	0.10929	0.12556	0.05771	0.07586
683492			0.00000	0.00000	0.00000	0.00000	0.00000
683559			0.00000	0.00000	0.00000	0.01358	0.00828
683582			0.00000	0.00000	0.00000	0.00457	0.00000
683588			0.00000	0.00000	0.00000	0.00921	0.00606
683592			0.00000	0.00000	0.00000	0.01359	0.00555
683617			0.00000	0.00000	0.00000	0.03858	0.02211
683632			0.00000	0.00000	0.00000	0.01482	0.00295
683634	Block 2	HFD Station and Museum	0.03750	0.02680	0.02680	0.00801	0.00000
683647			0.00000	0.00000	0.00000	0.02377	0.01399

## Discharge Manhole Summary

ID	TOD Block	Alias	EX_DF	FUT_DWF	TOD_DWF	I15YR6HR	I15YR24HR
683669		Federal Building	0.04723	0.04723	0.04723	0.02819	0.01826
683689	Block 1, Block 51	US Courthouse, Restaurant Row	0.27642	0.26738	0.25658	0.04321	0.02515
683693	Block 1		0.00308	0.12996	0.12471	0.00206	0.00071
683714			0.01425	0.00000	0.00000	0.03635	0.01639
683742			0.00000	0.00000	0.00000	0.00000	0.00000
683750			0.00046	0.00000	0.00000	0.02490	0.01221
683754	offsite		2.16049	3.00310	3.00310	0.04458	0.04278
683760			0.00140	0.00000	0.00000	0.00000	0.00000
683766			0.00000	0.00000	0.00000	0.05306	0.02978
683784			0.00000	0.00000	0.00000	0.00954	0.00529
683789			0.00000	0.00000	0.00000	0.02389	0.02284
683801			0.00000	0.00000	0.00000	0.00000	0.04544
683858			0.00000	0.00000	0.00000	0.02384	0.01378
683866			0.00000	0.00000	0.00000	0.00000	0.00000
683871			0.00000	0.00000	0.00000	0.00600	0.01282
683872			0.00000	0.00000	0.00000	0.01209	0.01159
683899			0.01648	0.00000	0.00000	0.02994	0.02778
683904			0.00000	0.00000	0.00000	0.00000	0.00722
683927			0.00000	0.00000	0.00000	0.07134	0.13891
683930	Block 46	690 Pohukaina	0.00462	0.64836	0.62896	0.01513	0.01918
683933			0.00000	0.00000	0.00000	0.06754	0.00000
683960	Block 53		0.01559	0.08070	0.15000	0.01632	0.01597
683996			0.00000	0.00000	0.00000	0.00000	0.00000
683997			0.00000	0.00000	0.00000	0.00000	0.00000
684015	Block 52 (KSB)	400/440 Keawe Street	0.00000	0.11144	0.10794	0.03930	0.03970
684033			0.00000	0.00000	0.00000	0.00000	0.00000
684041			0.00000	0.00000	0.00000	0.00000	0.00560
684047			0.00000	0.00000	0.00000	0.00000	0.00000
684050			0.00000	0.00000	0.00000	0.00000	0.00000
684051			0.00000	0.00000	0.00000	0.61570	0.59490
684052			0.00000	0.00000	0.00000	0.05406	0.06547
684074	Block 57	The Collection	0.30520	0.28151	0.27266	0.00637	0.00398
684075			0.00000	0.00000	0.00000	0.00000	0.00000
684091			0.00000	0.00000	0.00000	0.01053	0.01057
684110			0.00533	0.00000	0.00000	0.00228	0.00108
684119			0.00000	0.00000	0.00000	0.00579	0.00593
684126			0.00000	0.00000	0.00000	0.00000	0.00000
684135			0.00000	0.00000	0.00000	0.01035	0.01036
684148			0.00000	0.00000	0.00000	0.00000	0.00000
684149			0.00000	0.00000	0.00000	0.26268	0.00000
684151			0.00000	0.00000	0.00000	0.05357	0.05554
684153			0.00000	0.00000	0.00000	0.01328	0.00000
684163			0.00000	0.00000	0.00000	0.00000	0.00000
684170			0.00000	0.00000	0.00000	0.00000	0.00000
684173			0.00000	0.00000	0.00000	0.01043	0.01049
684177	Block 58		0.00000	0.24532	0.23509	0.01949	0.00000
684182			0.00000	0.00000	0.00000	0.00000	0.00000
684191			0.00000	0.00000	0.00000	0.00406	0.00917
684192			0.00521	0.00000	0.00000	0.00050	0.00036
684197			0.00000	0.00000	0.00000	0.00000	0.00000
684204			0.00000	0.00000	0.00000	0.00211	0.00423
684209			0.01593	0.00000	0.00000	0.00383	0.00249
684216			0.00000	0.00000	0.00000	0.01408	0.02308
684244	Block 54 (KSC)		0.00000	0.22326	0.47158	0.02186	0.02268
684251			0.00000	0.00000	0.00000	43.15100	37.84970
684290			0.00000	0.00000	0.00000	0.00569	0.00000
684291	Block 59		0.00000	0.16784	0.16106	0.00498	0.00353
684295			0.00000	0.00000	0.00000	0.00974	0.01496
684296			0.00000	0.00000	0.00000	0.14237	0.10308
684297			0.00000	0.00000	0.00000	0.00000	0.00000
684298			0.00000	0.00000	0.00000	0.05926	0.06550
684299			0.00000	0.00000	0.00000	0.00000	0.00000
684301			0.00000	0.00000	0.00000	0.00000	0.00000
684302			0.00000	0.00000	0.00000	0.00794	0.02363
684305			0.00000	0.00000	0.00000	0.07955	0.09806
684318			0.00000	0.00000	0.00000	0.00000	0.45200
684321	Block 60		0.00292	0.14420	0.13837	0.00502	0.00369
1004956			0.01228	0.00000	0.00000	0.00942	0.00534
1004976			0.00000	0.00000	0.00000	0.00930	0.00504
2023299			0.00000	0.00000	0.00000	0.00093	0.00403
2023413	Block 34	Kamakee Vista	0.15868	0.19520	0.19520	0.01062	0.01371
3010699	Block 2	Department of Transportation	0.01667	0.02050	0.02050	0.01038	0.00678
3010701			0.00099	0.00000	0.00000	0.01280	0.00049

## Discharge Manhole Summary

ID	TOD Block		Alias	EX_DF	FUT_DWF	TOD_DWF	I15YR6HR	I15YR24HR
3010712		Block 2		0.00122	0.15419	0.14796	0.01656	0.00955
3010721				0.00000	0.00000	0.00000	0.00000	0.01393
3010952	Block 64 (HH2)		Block C	0.00000	0.39000	0.39000	0.00000	0.00000
3010954				0.00000	0.00000	0.00000	0.00178	0.00434
3010956				0.00000	0.00000	0.00000	0.00030	0.00251
3010959				0.00000	0.00000	0.00000	0.00000	0.00000
3013634				0.01150	0.00000	0.00000	0.01958	0.01750
3014917				0.00000	0.00000	0.00000	0.06470	0.12944
4009797				0.00000	0.00000	0.00000	0.40377	1.25210
4013594				0.00000	0.00000	0.00000	0.01152	0.01598
4013595				0.00000	0.00000	0.00000	0.00000	0.00000
4013598				0.00000	0.00000	0.00000	0.00372	0.00511
4013626				0.00322	0.00000	0.00000	0.00582	0.00547
4013729				0.00000	0.00000	0.00000	0.00290	0.00295
4013730	Block 6TS		One Archer Lane	0.20890	0.20890	0.20890	0.00793	0.00806
4013732				0.00000	0.00000	0.00000	0.00000	0.00000
4013760	Block 63E		Waihonua, Hawaiki Tower	0.50197	0.61740	0.61740	0.00000	0.00000
4014268				0.00000	0.00000	0.00000	0.00046	0.00079
4014270				0.00000	0.00000	0.00000	0.00251	0.00345
4014272				0.00000	0.00000	0.00000	0.00374	0.00509
4014274				0.00000	0.00000	0.00000	0.01508	0.01988
4014276				0.03167	0.00000	0.00000	0.01477	0.01983
4014278	Block 62 (HH1)		Block J, Ward Entertainment Complex	0.13590	0.13590	0.13590	0.01613	0.01997
4014280				0.00000	0.00000	0.00000	0.01604	0.01917
4020183				0.00000	0.00000	0.00000	0.00917	0.00386
4020187				0.00443	0.00000	0.00000	0.01559	0.00620
4020189				0.01210	0.00000	0.00000	0.00516	0.00160
4025637				0.00000	0.00000	0.00000	0.00000	0.00000
4025638				0.00000	0.00000	0.00000	0.00000	0.11149
4025640				0.00000	0.00000	0.00000	0.00000	0.19446
4025642	Block 57		The Collection	0.00000	0.29552	0.28320	0.00000	0.19165
4025645				0.00000	0.00000	0.00000	0.00000	0.00000
4025647	Block 52X		One Waterfront Towers	0.21764	0.21764	0.21764	0.00000	0.02025
4025650				0.00000	0.00000	0.00000	1.33863	0.00000
4025653				0.00853	0.00000	0.00000	0.00000	0.00000
4025655				0.00000	0.00000	0.00000	0.00000	0.00000
4025657				0.00000	0.00000	0.00000	0.00000	0.00000
4025660				0.00000	0.00000	0.00000	0.00000	0.02715
4025661				0.00000	0.00000	0.00000	0.00000	0.04020
4025663				0.00000	0.00000	0.00000	0.00000	0.13375
4025665				3.10250	3.87610	3.87610	0.00000	0.18505
4026531				0.00000	0.00000	0.00000	0.01917	0.02714
4026534	Block 42			0.00000	0.23396	0.49520	0.00000	0.01158
4026536	Block 43			0.00123	0.21050	0.27100	0.02058	0.01100
4026538				0.00275	0.00000	0.00000	0.01066	0.00799
4026540				0.00000	0.00000	0.00000	0.00673	0.00446
4026542				0.00000	0.00000	0.00000	0.00106	0.00068
4026546				0.01010	0.00000	0.00000	0.01025	0.00812
4026560				0.00000	0.00000	0.00000	0.00095	0.00067
4026561				0.00000	0.00000	0.00000	0.00142	0.00133
4026562				0.00000	0.00000	0.00000	0.00019	0.00006
4026564				0.00143	0.00000	0.00000	0.00944	0.00492
4026566				0.00000	0.00000	0.00000	0.01006	0.00350
4026568	Block 16		Pacific Park Plaza	0.04693	0.04539	0.04356	0.01153	0.00202
4026584				0.00000	0.00000	0.00000	0.01940	0.01929
4026586				0.00672	0.00000	0.00000	0.00783	0.00811
4026597				0.00000	0.00000	0.00000	0.00000	0.00000
4026599	Block 15			0.00448	0.21751	0.36621	0.00046	0.00000
4026601				0.00000	0.00000	0.00000	0.00000	0.00000
4026688				0.00000	0.00000	0.00000	0.00000	0.00000
4026690				0.00000	0.00000	0.00000	0.00000	0.00000
4026691	Block 61		Block A	0.00000	0.42000	0.42000	0.00000	0.00000
4038807				0.00000	0.00000	0.00000	0.07689	0.12575
4038809	Block 63E , Block 65 (HH4)		Hokua, Block E East	0.18444	0.22690	0.22690	0.00158	0.01756
4038811				0.00000	0.00000	0.00000	0.00638	0.03810
4038813	Block 63E		Koolani	0.24377	0.29980	0.29980	0.00788	0.01780
4038817	Block 63H (HH3)		Block K, Block L	0.04623	0.05690	0.05690	0.00788	0.01780
4039005				0.00000	0.00000	0.00000	0.00054	0.00071
4042830				0.00000	0.00000	0.00000	0.00000	0.25440
4044086				0.00000	0.00000	0.00000	0.00443	0.00622
4044526				0.00000	0.00000	0.00000	0.00000	0.00000
4044793				0.00000	0.00000	0.00000	0.00629	0.00000
4044866				0.00000	0.00000	0.00000	0.00296	0.00284

## Discharge Manhole Summary

ID	TOD Block	Alias	EX_DF	FUT_DWF	TOD_DWF	I15YR6HR	I15YR24HR
4046051			0.00000	0.00000	0.00000	0.00000	0.13280
4046053			0.00000	0.00000	0.00000	0.00000	0.00000
4046055			0.00000	0.00000	0.00000	0.00000	0.00000
4046375			0.00000	0.00000	0.00000	0.00000	0.00000
4046377			0.00000	0.00000	0.00000	0.00361	0.01052
4046379			0.00000	0.00000	0.00000	0.00462	0.00703
4046381			0.00000	0.00000	0.00000	0.00602	0.00586
4046383			0.00000	0.00000	0.00000	0.00598	0.00558
4046385	Block 35	1133 Waimanu	0.17700	0.17700	0.17700	0.00679	0.00809
4047055			0.00326	0.00000	0.00000	0.00351	0.00471
4047061	Block 35		0.00858	0.18825	0.18065	0.00209	0.00275
4047068			0.00000	0.00000	0.00000	0.00872	0.01019
4047071			0.00421	0.00000	0.00000	0.00100	0.00033
4051543			0.00000	0.00000	0.00000	0.00000	0.00000
4055477	Block 40	Keola Lai	0.22595	0.22595	0.22595	0.01494	0.00984
4065243			0.00000	0.00000	0.00000	0.02089	0.00905
4065244			0.00000	0.00000	0.00000	0.00156	0.00271
4065246	Block 22	Honolulu Design Center	0.09710	0.09710	0.09710	0.00000	0.00000
4065248			0.00000	0.00000	0.00000	0.00247	0.00244
4065254			0.00000	0.00000	0.00000	0.00247	0.00244
4065256			0.00000	0.00000	0.00000	0.00000	0.00000
4065260	Block 22	Moana Pacific	0.88737	0.83008	0.80532	0.00000	0.00000
4065988	Block 31		0.00000	0.07238	0.06946	0.00260	0.00276
4065989	Block 20	909 Kapi'olani	0.14690	0.14690	0.14690	0.00843	0.00885
4065994			0.00000	0.00000	0.00000	0.00589	0.00587
4065995			0.00000	0.00000	0.00000	0.77647	0.80853
4066890			0.00000	0.00000	0.00000	0.00134	0.00148
4068852			0.00000	0.00000	0.00000	0.00443	0.00452
4070284			0.00000	0.00000	0.00000	0.00000	0.00000
4070286			0.00000	0.00000	0.00000	0.00000	0.00000
4070522	Block 44	Nā Le Hulu Kūpuna	0.05780	0.05780	0.05780	0.00000	0.00000
4073046	Block 6Kap	Vanguard Apartments	0.02497	0.02415	0.02318	0.00000	0.00000
4073048			0.00000	0.00000	0.00000	0.00000	0.00000
4075025			0.00000	0.00000	0.00000	0.00000	0.00000
4075027			0.00000	0.00000	0.00000	0.00000	0.00000
4075030			0.00000	0.00000	0.00000	0.00000	0.00000
4075347			0.00000	0.00000	0.00000	0.00000	0.00000
4075352			0.00000	0.00000	0.00000	0.00000	0.00000
4075362			0.00000	0.00000	0.00000	0.00000	0.00000
4075370			0.00000	0.00000	0.00000	0.00000	0.00000
4075372	Block 20	Pacifica Honolulu	0.31144	0.38310	0.38310	0.00000	0.00000
4075943			0.00000	0.00000	0.00000	0.00000	0.00000
4075945			0.00000	0.00000	0.00000	0.00000	0.00000
4075947			0.00000	0.00000	0.00000	0.00000	0.00000
4075949			0.00000	0.00000	0.00000	0.00000	0.00000
4075951			0.00000	0.00000	0.00000	0.00000	0.00000
4075957			0.00440	0.00000	0.00000	0.00000	0.00000
4075961	Block 33		0.00315	0.13378	0.12837	0.00000	0.00000
4075962			0.00000	0.00000	0.00000	0.00000	0.00000
4075963	Block 20		0.00000	0.27384	0.26278	0.00000	0.00000
4075964			0.00028	0.00000	0.00000	0.00000	0.00000
4076017			0.00000	0.00000	0.00000	0.00000	0.00000
4076018			0.00000	0.00000	0.00000	0.00000	0.00000
4076088		offsite	5.76041	7.31300	7.31300	0.00000	0.00000
4077063			0.00000	0.00000	0.00000	0.00000	0.00000
4079658			0.00000	0.00000	0.00000	0.00000	0.00000
4079920			0.00000	0.00000	0.00000	0.00000	0.00000
4079921			0.01202	0.00000	0.00000	0.00000	0.00000
4079929			0.13460	0.00000	0.00000	0.00000	0.00000
4079935			0.00000	0.00000	0.00000	0.00000	0.00000
4100473			0.00000	0.00000	0.00000	0.00000	0.00000
4100725			0.00000	0.00000	0.00000	0.00000	0.00000
4100729			0.00000	0.00000	0.00000	0.00000	0.00000
4100731			0.00000	0.00000	0.00000	0.00000	0.00000
4100733			0.00000	0.00000	0.00000	0.00000	0.00000
4100735			0.00000	0.00000	0.00000	0.00000	0.00000
9000001	Block 64 (HH2)	Block B West	0.00000	0.30000	0.30000	0.00000	0.00000
9000002			0.00000	0.00000	0.00000	0.00000	0.00000
9000003	Block 62 (HH1)	Block N East, Block N West	0.00000	1.08000	1.08000	0.00000	0.00000
9000004			0.00000	0.00000	0.00000	0.00000	0.00000
9000005			0.00000	0.00000	0.00000	0.00000	0.00000
9000006			0.00000	0.00000	0.00000	0.00000	0.00000
9000007			0.00000	0.00000	0.00000	0.00000	0.00000

## Discharge Manhole Summary

ID	TOD Block	Alias	EX_DF	FUT_DWF	TOD_DWF	I15YR6HR	I15YR24HR
9000008			0.00000	0.00000	0.00000	0.00000	0.00000
9000009			0.00000	0.00000	0.00000	0.00000	0.00000
9000010	Block 62 (HH1), Block 64( HH2)	Block C West, Block I	0.00000	2.25000	2.25000	0.00000	0.00000
9000011	Block 62 (HH1), Block 64( HH2)	Block B East, Block H	0.00000	1.18000	1.18000	0.00000	0.00000
9000012	Block HH5	Block O	0.00000	0.75000	0.75000	0.00000	0.00000
9000013			0.00000	0.00000	0.00000	0.00000	0.00000
9000014			0.00000	0.00000	0.00000	0.00000	0.00000
9000015			0.00000	0.00000	0.00000	0.00000	0.00000
9000016	Block HH5	Block F East, Block F West	0.00000	0.87000	0.87000	0.00000	0.00000

Table 2: Population and Utility Demands - Existing Condition

Development Name	Land Use: Existing Condition										Water										
	Block	TMK	HCDA Neighborhood	SF Residential	MF Residential	Hotel	Civic / Office	Commercial / Retail	General / Light Industry	Other	Use	SF Residential	MF Residential	Hotel	Civic / Office	Commercial	General / Light Industry	Other	Average Day Flow		
				units	units	units	SF	SF	SF			gal/unit	gal/unit	ga/unit	gal/1000 sf	gal/1000 sf	gal/1000 sf				
RESTAURANT ROW	51	21029001 Pauahi		500,812		41,999					OFFICES		0	0	34557	0	0		34557		
KEAHOU LANE	45 (KS A)	21030001 Pauahi		632							APARTMENT/COMMERCIAL		0	252800	0	2898	0		255698		
COURTHOUSE - SINGLE STORY	1	21030003 Civic Center			68,300		1,000				OFFICES		0	0	4713	0	0		4713		
	1	21030008 Civic Center									WAREHOUSE		0	0	0	0	92		92		
	1	21030008 Civic Center			6,000						OFFICES		0	0	414	0	0		414		
	1	21030013 Civic Center			2,874						OFFICES		0	0	199	0	0		199		
	1	21030014 Civic Center					2,856				WAREHOUSE		0	0	0	0	263		263		
	1	21030015 Civic Center			9,438						OFF ENCL WAREHSE		0	0	0	652	0	0		652	
	1	21030017 Civic Center			19,907						OFFICES		0	0	1374	0	0		1374		
	2	21031002 Civic Center			2,500						OFFICES		0	0	0	173	0	0		173	
	2	21031005 Civic Center			1,553		1,533				OFFICES / WAREHOUSE		0	0	0	106	0	142		248	
	2	21031008 Civic Center			22,753						BANK/SAVINGS INST/PARKING		0	0	1570	0	0		1570		
	2	21031010 Civic Center									PARK STRUCTURE		0	0	0	0	0		0		
DOT	2	21031012 Civic Center			55,000						OFFICES		0	0	3795	0	0		3795		
DOT	2	21031015 Civic Center			50,050						OFFICES		0	0	3454	0	0		3454		
HFD HQ/Museum	2	21031018 Civic Center			5,200						OFFICES		0	0	359	0	0		359		
HFD Kaka'ako Station	2	21031019 Civic Center		6							APARTMENT		0	2400	0	0	0		2400		
	2	21031020 Civic Center			14,200						OFFICES / APARTMENT		0	0	980	0	0		980		
HONUAKAHA	2	21031021 Civic Center		96		18,202					OFFICES / PARKING		0	38400	0	1256	0		39656		
	2	21031024 Civic Center			11,410						OFFICES/PARKING		0	0	788	0	0		788		
	42	21031030 Pauahi			26,800						AUTO PARTS/SERVICE		0	0	0	0	2466		2466		
	42	21031032 Pauahi			2,284		5,450				OFFICES/WAREHOUSE		0	0	158	0	502		660		
	42	21031033 Pauahi			17,554						OFFICES		0	0	1212	0	0		1212		
Mission Houses	4	21032001 Civic Center			103,433						OFFICES/PARKING		0	0	7137	0	0		7137		
Mission Houses	4	21032002 Civic Center			14,163						OFFICES		0	0	978	0	0		978		
	5	21032007 Civic Center			420						LIGHT MANUFACTURING		0	0	0	0	39		39		
	5	21032008 Civic Center		2	19,289						WAREHOUSE		0	0	0	0	1775		1775		
	5	21032009 Civic Center			4,079						SF HOME	1000	0	0	0	0	0		1000		
	5	21032010 Civic Center					25,004				OFFICES		0	0	282	0	0		282		
	5	21032010 Civic Center			5,002						WAREHOUSE		0	0	0	0	2301		2301		
	5	21032011 Civic Center			5,893						MEZZ ENCL OFFICE		0	0	346	0	0		346		
	5	21032012 Civic Center			4,060		5,893				AUTO PARTS/SERVICE		0	0	0	0	543		543		
KAWAIHAO CHURCH	3	21032015 Civic Center			30,186						WAREHOUSE		0	0	281	0	543		824		
	3	21032017 Civic Center			11,805						RELIGIOUS INST		0	0	0	0	0		2083	Commercial	
	3	21032017 Civic Center			4,977						RELIGIOUS INST		0	0	0	0	0		815	Commercial	
	3	21032017 Civic Center			14,500						SCHOOL		0	0	0	0	0		3780	60 gal/student	
	3	21032022 Civic Center			6,192						OFFICES		0	0	1001	0	0		1001		
	3	21032023 Civic Center			2,262						SCHOOL	6,192	0	0	0	0	0		4680	60 gal/student	
HECO	6TS	21044003 Thomas Square			15,385						WAREHOUSE		0	0	428	0	0		428		
HECO	6TS	21044003 Thomas Square			140,843						OFFICES		0	0	0	0	209		209		
	6TS	21044004 Thomas Square			2,769						WAREHOUSE		0	0	0	0	209		209		
HONOLULU CLUB	6TS	21044005 Thomas Square			69,299						BENEATH BLDG PARK ENCL		0	0	1062	0	0		1062		
HONOLULU CLUB	6TS	21044005 Thomas Square									WAREHOUSE		0	0	0	0	12958		12958		
HONOLULU CLUB	6TS	21044005 Thomas Square									BENEATH BLDG PARK ENCL		0	0	0	0	0		0		
	16	21044022 Kapiolani			84,296						OFFICES		0	0	5817	0	0		5817		
	18	21044022 Kapiolani			4,679						RETAIL STORE		0	0	323	0	0		323		
	18	21044022 Kapiolani			9,933						WAREHOUSE		0	0	0	914	0			914	
	18	21044023 Kapiolani			36,380						AUTO SHOWROOM/OFFICE		0	0	0	2511	0			2511	
	18	21044023 Kapiolani									PARK STRUCTURE		0	0	0	0	0		0		
	18	21044023 Kapiolani			28,196						AUTO PARTS/SERVICE		0	0	0	0	2595		2595		
ROYAL COURT	6TS	21044033 Thomas Square		112							APARTMENT		0	44800	0	0	0		44800		
	18	21044034 Kapiolani									CONVENIENCE STORE		0	0	0	121	0			276	Commercial
	6TS	21044038 Thomas Square			1,749						APARTMENT		0	132400	0	0	0		132400		
ONE ARCHER LANE	6Kap	21044041 Thomas Square		331							APARTMENT		0	15200	0	0	0		15200		
VANGUARD LOFTS	6Kap	21044046 Kapiolani		38							AUTO SHOWROOM/OFFICE		0	0	0	250	0			250	
VANGUARD LOFTS	15	21046001 Kapiolani			3,857						MEZZ ENCL OFFICE		0	0	0	267	0			267	
	15	21046001 Kapiolani			3,814		10,727				AUTO PARTS/SERVICE		0	0	0	0	987		987		
	15	21046001 Kapiolani									AUTO SHOWROOM/OFFICE		0	0	0	264	0			264	
	15	21046002 Kapiolani			14,170						OFFICES		0	0	978	0	0		978		
	15	21046003 Kapiolani			11,993						OFFICES		0	0	828	0	0		828		
	15	21046005 Kapiolani			2,538						OFFICES		0	0	176	0	0		176		
	15	21046005 Kapiolani			6,213						MEZZ ENCL OFFICE		0	0	429	0	0		429		
	15	21046005 Kapiolani			6,213						WAREHOUSE		0	0	0	572	0			572	
	15	21046007 Kapiolani			42,978						OFFICES		0	0	2966	0	0		2966		
HO'OMANA'AUAQAO O																					
Hawaii - CHURCH	15	21046009 Kapiolani									RELIGIOUS INST		0	0	0	0	0		477		
PACIFIC PARK PLAZA	16	21047001 Kapiolani			96,613						OFFICES		0	0	6667	0	0		6667		
	14	21047002 Kapiolani									PARK STRUCTURE		0	0	0	0	0		0		
801 SOUTH PH1	14	21047003 Kapiolani		636									0	254400	0	0	0		254400		
801 SOUTH PH1	14	21047003 Kapiolani											0	0	0	0	0		0		
801 SOUTH PH1	14	21047004 Kapiolani			66,593						OFFICES		0	0	4595	0	0		4595		
801 SOUTH PH2	14	21047004 Kapiolani			410						APARTMENT		0	164000	0	0	0		164000		
801 SOUTH PH2	14	21047004 Kapiolani											0	0	0	0	0		0		

Table 2: Population and Utility Demands - Existing Condition

Development Name	Land Use: Existing Condition										Water										Average Day Flow
	Block	TMK	HCDA Neighborhood	SF Residential	MF Residential	Hotel	Civic / Office	Commercial / Retail	General / Light Industry	Other	Use	SF Residential	MF Residential	Hotel	Civil / Office	Commercial	General / Light Industry	Other			
ROYAL CAPITOL PLAZA	14	21047005 Kapiolani						3,724	SF	1,506	AUTO SHOWROOM/OFFICE	0	0	0	0	257	0	257			
	14	21047005 Kapiolani									AUTO PARTS/SERVICE	0	0	0	0	139	0	139			
	14	21047005 Kapiolani						3,984			OFFICES	0	0	0	0	275	0	275			
	14	21047008 Kapiolani									APARTMENT	0	118800	0	0	0	0	0	118800		
	14	21047008 Kapiolani		297				947			CONVENIENCE STORE	0	0	0	0	0	0	0	66		
	14	21047008 Kapiolani						1,511			MINI-WAREHOUSE	0	0	0	0	66	0	0	140		
	14	21047008 Kapiolani						7,630			OFF ENCL WAREHSE	0	0	0	0	0	0	0	702		
	41	21049001 Pauahi									WAREHOUSE	0	0	0	0	28	0	0	28		
	41	21049001 Pauahi						7,985			RETAIL STORE	0	0	0	0	551	0	0	551		
	41	21049002 Pauahi						5,158			WAREHOUSE	0	0	0	0	0	475	0	475		
KEOLA LAI	41	21049005 Pauahi						3,996			MEZZ ENCL OFFICE	0	0	0	0	276	0	0	276		
	41	21049006 Pauahi						40,491			WAREHOUSE	0	0	0	0	0	0	0	3726		
	41	21049006 Pauahi						19,096			MEZZ ENCL OFFICE	0	0	0	0	1318	0	0	1318		
	40	21048008 Pauahi									APARTMENT	0	141200	0	0	0	0	0	141200		
	40	21048008 Pauahi		353							RETAIL STORE	0	0	0	0	594	0	0	594		
	41	21048022 Pauahi						8,607			RESTAURANT	0	0	0	0	0	0	93 Commercial	93		
	41	21048022 Pauahi						812			OFFICES	0	0	0	0	57	0	0	57		
	41	21048022 Pauahi	4								APARTMENT	0	1600	0	0	0	0	0	1600		
	27	21049001 Central Kakaako						2,629			SERVICE STATION W/BAYS	0	0	0	0	0	0	0	242		
	27	21049003 Central Kakaako	1					1,650			APARTMENT	0	400	0	0	0	0	0	400		
IMPERIAL PLAZA	27	21049004 Central Kakaako						2,100			OFFICES	0	0	0	0	114	0	0	114		
	27	21049005 Central Kakaako	2								WAREHOUSE	0	0	0	0	0	0	0	194		
	26	21049008 Central Kakaako						4,917			APARTMENT	0	800	0	0	0	0	0	800		
	26	21049009 Central Kakaako						2,500			OFFICES	0	0	0	0	340	0	0	340		
	26	21049010 Central Kakaako						3,750			AUTO PARTS/SERVICE	0	0	0	0	0	0	0	230		
	26	21049011 Central Kakaako						855			WAREHOUSE	0	0	0	0	59	0	0	59		
	26	21049012 Central Kakaako						902			OFFICES	0	0	0	0	63	0	0	63		
	26	21049014 Central Kakaako						1,970			AUTO PARTS/SERVICE	0	0	0	0	0	0	0	182		
	26	21049015 Central Kakaako						700			OFF ENCL WAREHSE	0	0	0	0	10	0	0	10		
	26	21049018 Central Kakaako						2,700			OFFICES	0	0	0	0	49	0	0	49		
803 Waimanu	26	21049019 Central Kakaako						14,940			WAREHOUSE	0	0	0	0	0	0	0	200		
	26	21049020 Central Kakaako						4,628			OFFICES	0	0	0	0	187	0	0	187		
	26	21049021 Central Kakaako						1,650			WAREHOUSE	0	0	0	0	0	0	0	1031		
	26	21049022 Central Kakaako						2,794			WAREHOUSE	0	0	0	0	0	0	0	320		
	26	21049023 Central Kakaako	500								OFF ENCL WAREHSE	0	0	0	0	35	0	0	35		
	26	21049024 Central Kakaako						6,750			WAREHOUSE	0	0	0	0	0	0	0	621		
	26	21049025 Central Kakaako						1,428			RETAIL STORE	0	0	0	0	99	0	0	99		
	26	21049026 Central Kakaako						4,250			WAREHOUSE	0	0	0	0	0	0	0	391		
	26	21049028 Central Kakaako						808			OFFICES	0	0	0	0	56	0	0	56		
	26	21049027 Central Kakaako	206					4,600			RESTAURANT	0	0	0	0	0	0	0	318 Commercial		
IMPERIAL PLAZA	24	21049027 Central Kakaako									APARTMENT	0	82400	0	0	0	0	0	82400		
	17	21049027 Central Kakaako						50,967			RETAIL STORE	0	0	0	0	3517	0	0	3517		
	17	21049027 Central Kakaako		10,904							OFFICES	0	0	0	0	753	0	0	753		
	17	21049027 Central Kakaako	483								MEZZ ENCL OFFICE	0	0	0	0	34	0	0	34		
	26	21049028 Central Kakaako						3,600			WAREHOUSE	0	0	0	0	0	0	0	332		
	26	21049029 Central Kakaako						2,000			WAREHOUSE	0	0	0	0	0	0	0	184		
	26	21049030 Central Kakaako						846			MEZZ DISPLAY SALES	0	0	0	0	59	0	0	59		
	26	21049030 Central Kakaako						5,000			WAREHOUSE	0	0	0	0	0	0	0	460		
	26	21049031 Central Kakaako						3,945			WAREHOUSE	0	0	0	0	0	0	0	363		
	26	21049032 Central Kakaako			1,000						MEZZ ENCL OFFICE	0	0	0	0	69	0	0	69		
803 Waimanu	26	21049032 Central Kakaako	1,000					8,400			OFFICES	0	0	0	0	69	0	0	773		
	26	21049033 Central Kakaako			288						WAREHOUSE	0	0	0	0	20	0	0	20		
	26	21049033 Central Kakaako						3,285			OFF ENCL WAREHSE	0	0	0	0	0	0	0	303		
	26	21049037 Central Kakaako			200						WAREHOUSE	0	0	0	0	14	0	0	14		
	26	21049037 Central Kakaako						1,300			OFFICES	0	0	0	0	0	0	0	120		
	26	21049038 Central Kakaako			520						WAREHOUSE	0	0	0	0	36	0	0	36		
	26	21049038 Central Kakaako						4,000			OFFICES	0	0	0	0	0	0	0	368		
	24	21049040 Central Kakaako						4,000			WAREHOUSE	0	0	0	0	0	0	0	368		
	24	21049041 Central Kakaako			3,000						OFFICES	0	0	0	0	207	0	0	207		
	24	21049041 Central Kakaako						3,000			WAREHOUSE	0	0	0	0	0	0	0	276		
803 Waimanu	24	21049042 Central Kakaako						3,750			WAREHOUSE	0	0	0	0	0	0	0	345		
	24	21049043 Central Kakaako						1,904			RETAIL STORE	0	0	0	0	0	0	0	132		
	24	21049043 Central Kakaako						1,428			WAREHOUSE	0	0	0	0	0	0	0	132		
	24	21049044 Central Kakaako			30,000						OFFICES	0	0	0	0	2070	0	0	2070		
	24	21049045 Central Kakaako						182,450			WAREHOUSE	0	0	0	0	0	0	0	16786		
	24	21049046 Central Kakaako						1,600			WAREHOUSE	0	0	0	0	0	0	0	148		
	24	21049047 Central Kakaako						1,050			WAREHOUSE	0	0	0	0	0	0	0	97		
	24	21049050 Central Kakaako	153								APARTMENT	0	61200	0	0	0	0	0	0	61200	
	24	21049054 Central Kakaako						975			OFFICES	0	0	0	0	68	0	0	68		
	24	21049054 Central Kakaako		1,364							WAREHOUSE	0	0	0	0	95	0	0	95		
803 Waimanu	24	21049054 Central Kakaako						5,353			WAREHOUSE	0	0	0	0	0	0	0	493		
	25	21049055 Central Kakaako						1,620			RETAIL STORE	0	0	0	0	0	0	0	112		
	25	21049055 Central Kakaako						2,250			WAREHOUSE	0	0	0	0	0	0	0	207		
	25	21049056 Central Kakaako	1								SF HOME	500	0	0	0	0	0	0	0	500	

Table 2: Population and Utility Demands - Existing Condition

Development Name	Land Use: Existing Condition										Water										Average Day Flow
	Block	TMK	HDCA Neighborhood	SF Residential	MF Residential	Hotel	Civic / Office	Commercial / Retail	General / Light Industry	Other	Use	SF Residential	MF Residential	Hotel	Civil / Office	Commercial	General / Light Industry	Other			
25	21049057 Central Kakaako		units 1	units	units	SF	SF	SF	SF	SF	SF HOME	500 gal/unit	0 gal/unit	0 ga/unit	0 gal/1000 sf	0 gal/1000 sf	0 gal/1000 sf	0 gal	500 gpd	500	
25	21049058 Central Kakaako										WAREHOUSE	0	0	0	0	0	0	0	394	394	
25	21049060 Central Kakaako										RETAIL STORE	0	0	0	0	0	0	70	0	70	
25	21049060 Central Kakaako										WAREHOUSE	0	0	0	0	0	0	0	221	221	
25	21049061 Central Kakaako										WAREHOUSE	0	0	0	0	0	0	0	350	350	
19	21049063 Kapiolani										OFFICES	0	0	0	0	0	0	0	360	360	
19	21049063 Kapiolani										RESTAURANT	0	0	0	0	0	0	0	362	362	
19	21049064 Kapiolani										OFFICES	0	0	0	0	0	0	0	209	209	
19	21049064 Kapiolani										RESTAURANT	0	0	0	0	0	0	0	240	240	
19	21049065 Kapiolani										AUTO SHOWROOM/OFFICE	53,124 gal/unit	0 gal/unit	0 ga/unit	0 gal/1000 sf	0 gal/1000 sf	0 gal/1000 sf	0 gal	3666	3666	
19	21049065 Kapiolani										MEZZ DISPLAY SALES	1,034	0	0	0	0	0	0	72	72	
25	21049069 Central Kakaako										RETAIL STORE	2,805	0	0	0	0	0	0	194	194	
24	21049070 Central Kakaako										OFF ENCL WAREHSE	160	0	0	0	0	0	0	12	12	
24	21049071 Central Kakaako										WAREHOUSE	1,830	0	0	0	0	0	0	169	169	
24	21049073 Central Kakaako										WAREHOUSE	7,580	0	0	0	0	0	0	698	698	
19	21049075 Kapiolani										MEZZ DISPLAY SALES	665	0	0	0	0	0	0	46	46	
19	21049075 Kapiolani										OFFICES	1,501	0	0	0	0	0	0	0	104	
19	21049075 Kapiolani										WAREHOUSE	5,267	0	0	0	0	0	0	0	485	
24	21049076 Central Kakaako										OFFICES	1,026	0	0	0	0	0	0	71	71	
24	21049076 Central Kakaako										WAREHOUSE	6,030	0	0	0	0	0	0	0	555	
27	21049078 Central Kakaako										AUTO PARTS/SERVICE	14,500	0	0	0	0	0	0	0	1334	
26	21049079 Central Kakaako										WAREHOUSE	3,564	0	0	0	0	0	0	0	328	
19	21049080 Kapiolani										3,129 RESTAURANT	665	0	0	0	0	0	0	0	216	
HH 5	21050001 Pauahi										WAREHOUSE	9,600	0	0	0	0	0	0	0	884	
30R	21050002 Central Kakaako										OFFICES	3,050	0	0	0	0	0	0	0	211	
30R	21050003 Central Kakaako										OFF ENCL WAREHSE	3,500	0	0	0	0	0	0	0	242	
30R	21050003 Central Kakaako										WAREHOUSE	20,500	0	0	0	0	0	0	0	1886	
30R	21050004 Central Kakaako										OFF ENCL WAREHSE	6,202	0	0	0	0	0	0	0	428	
30R	21050004 Central Kakaako										RETAIL STORE	3,082	0	0	0	0	0	0	0	213	
30R	21050004 Central Kakaako										WAREHOUSE	12,241	0	0	0	0	0	0	0	1127	
30R	21050007 Central Kakaako										OFFICES	7,030	0	0	0	0	0	0	0	371	
30R	21050009 Central Kakaako										WAREHOUSE	4,029	0	0	0	0	0	0	0	85	
30R	21050011 Central Kakaako										OFFICES	1,200	0	0	0	0	0	0	0	83	
30R	21050012 Central Kakaako										WAREHOUSE	14,550	0	0	0	0	0	0	0	1339	
30R	21050012 Central Kakaako										OFFICES	1,488	0	0	0	0	0	0	0	103	
28	21050016 Central Kakaako										PARKING PAR/ENCL	6,816	0	0	0	0	0	0	0	0	
28	21050017 Central Kakaako										WAREHOUSE	5,150	0	0	0	0	0	0	0	628	
28	21050018 Central Kakaako										WAREHOUSE	6,300	0	0	0	0	0	0	0	474	
28	21050024 Central Kakaako										OFFICES	320	0	0	0	0	0	0	0	435	
28	21050027 Central Kakaako										MEZZ DISPLAY SALES	720	0	0	0	0	0	0	0	50	
28	21050027 Central Kakaako										WAREHOUSE	2,850	0	0	0	0	0	0	0	263	
28	21050028 Central Kakaako										MEZZ DISPLAY SALES	1,388	0	0	0	0	0	0	0	96	
28	21050028 Central Kakaako										OFFICES	8,200	0	0	0	0	0	0	0	96	
28	21050030 Central Kakaako										WAREHOUSE	9,750	0	0	0	0	0	0	0	755	
28	21050030 Central Kakaako										LIGHT MANUFACTURING	8,000	0	0	0	0	0	0	0	897	
28	21050031 Central Kakaako										WAREHOUSE	1,207	0	0	0	0	0	0	0	736	
28	21050031 Central Kakaako										RETAIL STORE	2,289	0	0	0	0	0	0	0	84	
28	21050032 Central Kakaako										WAREHOUSE	4,319	0	0	0	0	0	0	0	211	
28	21050032 Central Kakaako										RETAIL STORE	1	0	0	0	0	0	0	0	299	
28	21050033 Central Kakaako										MEZZ ENCL OFFICE	240	0	0	0	0	0	0	0	17	
28	21050033 Central Kakaako										WAREHOUSE	2,104	0	0	0	0	0	0	0	194	
28	21050034 Central Kakaako										VETERINARIAN	2,116	0	0	0	0	0	0	0	147	
28	21050034 Central Kakaako										WAREHOUSE	4,644	0	0	0	0	0	0	0	428	
28	21050035 Central Kakaako										WAREHOUSE	6,000	0	0	0	0	0	0	0	552	
28	21050036 Central Kakaako										OFFICES	557	0	0	0	0	0	0	0	39	
28	21050036 Central Kakaako										WAREHOUSE	6,422	0	0	0	0	0	0	0	591	
28	21050037 Central Kakaako										APARTMENT	1	400	0	0	0	0	0	0	400	
28	21050037 Central Kakaako										OFFICES	760	0	0	0	0	0	0	0	53	
28	21050038 Central Kakaako										MEZZ ENCL OFFICE	440	0	0	0	0	0	0	0	31	
28	21050039 Central Kakaako										WAREHOUSE	3,772	0	0	0	0	0	0	0	348	
28	21050042 Central Kakaako										BENEATH BLDG PARK ENCL	7,300	0	0	0	0	0	0	0	0	
29	21050043 Central Kakaako										WAREHOUSE	905	0	0	0	0	0	0	0	672	
29	21050043 Central Kakaako										MEZZ ENCL OFFICE	3,761	0	0	0	0	0	0	0	347	
29	21050045 Central Kakaako										AUTO PARTS/SERVICE	1,600	0	0	0	0	0	0	0	237	
29	21050046 Central Kakaako										AUTO PARTS/SERVICE	4,050	0	0	0	0	0	0	0	274	
29	21050046 Central Kakaako										WAREHOUSE	7,150	0	0	0	0	0	0	0	373	
29	21050049 Central Kakaako	2									MEZZ ENCL OFFICE	2,000	0	0	0	0	0	0	0	111	
29	21050052 Central Kakaako	3,096									APARTMENT	6,943	0	0	0	0	0	0	0	800	
29	21050052 Central Kakaako	3,096									BANK/SAVINGS INST	7,150	0	0	0	0	0	0	0	214	
29	21050052 Central Kakaako	6,943									MEZZ ENCL OFFICE	2,000	0	0	0	0	0	0	0	480	
28	21050054 Central Kakaako										WAREHOUSE	2,000	0	0	0	0	0	0	0	494	
28	21050055 Central Kakaako										WAREHOUSE	2,000	0	0	0	0	0	0	0	184	

Table 2: Population and Utility Demands - Existing Condition

Development Name	Land Use: Existing Condition										Water										Average Day Flow	
	Block	TMK	HCDA Neighborhood	SF Residential	MF Residential	Hotel	Civic / Office	Commercial / Retail	General / Light Industry	Other	Use	SF Residential	MF Residential	Hotel	Civil / Office	Commercial	General / Light Industry	Other				
				units	units	units	SF	SF	SF	SF	gal/unit	gal/unit	ga/unit	gal/1000 sf	gal/1000 sf	gal/1000 sf	gal	gpd				
	29	21050056 Central Kakaako		2,075			AUTO PARTS/SERVICE				0	0	0	0	0	0	191		191			
	28	21050057 Central Kakaako		3,000			WAREHOUSE				0	0	0	0	0	0	276		276			
	30R	21050058 Central Kakaako		5,677			LIGHT MANUFACTURING				0	0	0	0	0	0	523		523			
	28	21050059 Central Kakaako		2,900			LIGHT MANUFACTURING				0	0	0	0	0	0	267		267			
	28	21050060 Central Kakaako		960			WAREHOUSE				0	0	0	0	0	0	89		89			
	HH 5	21050061 Pauahi		12,800			RETAIL STORE				0	0	0	0	0	0	884	0	884			
	HH 5	21050061 Pauahi		15,429			WAREHOUSE				0	0	0	0	0	0	1420		1420			
	HH 5	21050062 Pauahi		4,808			RESTAURANT				0	0	0	0	0	0	0	332 Commercial		332		
	HH 5	21050062 Pauahi		4,808			WAREHOUSE				0	0	0	0	0	0	443		443			
KAUHALE Kaka'ako	30R	21050070 Central Kakaako	269				APARTMENT				0	107600	0	0	0	0	0		107600			
KAUHALE Kaka'ako	30R	21050070 Central Kakaako					SCHOOL				0	0	0	0	0	0	0	5340 60 gal/student		5340		
KAUHALE Kaka'ako	30R	21050070 Central Kakaako		3,763			OFFICES				0	0	0	0	0	0	0	260		260		
KAUHALE Kaka'ako	30R	21050070 Central Kakaako			220		CONVENIENCE STORE				0	0	0	0	0	0	0	16		16		
KAUHALE Kaka'ako	30R	21050070 Central Kakaako					BENEATH BLDG PARK ENCL				0	0	0	0	0	0	0	0		0		
	44	21051001 Pauahi		9,128			MEZZ ENCL OFFICE				0	0	0	0	0	0	0	630		630		
	44	21051002 Pauahi		10,775			AUTO PARTS/SERVICE				0	0	0	0	0	0	0	992		992		
	44	21051002 Pauahi		16,000			OFFICES				0	0	0	0	0	0	0	1104		1104		
	44	21051002 Pauahi		15,916			WAREHOUSE				0	0	0	0	0	0	0	1465		1465		
	43	21051007 Pauahi		18,028			OFFICES				0	0	0	0	0	0	0	1244		1244		
	43	21051010 Pauahi		7,589			WAREHOUSE				0	0	0	0	0	0	0	699		699		
	43	21051011 Pauahi		17,000			WAREHOUSE				0	0	0	0	0	0	0	1564		1564		
	43	21051012 Pauahi		1,480			OFFICES				0	0	0	0	0	0	0	103		103		
	43	21051012 Pauahi		29,687			WAREHOUSE				0	0	0	0	0	0	0	0	2732		2732	
POHULANI	43	21051013 Pauahi	262				APARTMENT				0	104800	0	0	0	0	0		104800			
	43	21051018 Pauahi	2,592				MEZZ ENCL OFFICE				0	0	0	0	0	0	0	179		179		
	43	21051018 Pauahi		6,570			WAREHOUSE				0	0	0	0	0	0	0	605		605		
	43	21051031 Pauahi		3,259			OFF ENCL WAREHSE				0	0	0	0	0	0	0	225		225		
	43	21051033 Pauahi	3	47,715			APARTMENT				0	1200	0	0	0	0	0		1200		1200	
	43	21051033 Pauahi					OFFICES				0	0	0	0	0	0	0	3293		3293		
NĀ LE HULU KŪPUNA	44	21051038 Pauahi	76				RACQUET BALL COURT				0	0	0	0	0	0	0	0	1137 Commercial		1137	
NĀ LE HULU KŪPUNA	44	21051038 Pauahi		1,995			APARTMENT				0	30400	0	0	0	0	0		30400			
LIBRARY WAREHOUSE / Haleakuwila Place	46	21051041 Pauahi		18,000			WAREHOUSE				0	0	0	0	0	0	0	1656		1656		
	46	21051042 Pauahi	203				APARTMENT				0	81200	0	0	0	0	0		81200			
	48N (not HH)	21052001 Pauahi		4,340			MEZZ ENCL OFFICE				0	0	0	0	0	0	0	300		300		
	48N (not HH)	21052001 Pauahi		23,334			WAREHOUSE				0	0	0	0	0	0	0	2147		2147		
	48N (not HH)	21052002 Pauahi	405				OFF ENCL WAREHSE				0	0	0	0	0	0	0	28		28		
	48N (not HH)	21052002 Pauahi		3,080			WAREHOUSE				0	0	0	0	0	0	0	284		284		
	48N (not HH)	21052003 Pauahi	312				MEZZ ENCL OFFICE				0	0	0	0	0	0	0	22		22		
	48N (not HH)	21052003 Pauahi		1,968			WAREHOUSE				0	0	0	0	0	0	0	182		182		
	48N (not HH)	21052005 Pauahi		6,320			WAREHOUSE				0	0	0	0	0	0	0	582		582		
	48N (not HH)	21052007 Pauahi	280		6,222		OFF ENCL WAREHSE				0	0	0	0	0	0	0	0	20		20	
	48N (not HH)	21052007 Pauahi					WAREHOUSE				0	0	0	0	0	0	0	573		573		
	48N (not HH)	21052008 Pauahi	16,800				OFFICES				0	0	0	0	0	0	0	1160		1160		
	HH 5	21052010 Pauahi	4,992				OFFICES				0	0	0	0	0	0	0	345		345		
	HH 5	21052011 Pauahi		8,452			MINI-WAREHOUSE				0	0	0	0	0	0	0	778		778		
	HH 5	21052012 Pauahi		1,618			OFFICES				0	0	0	0	0	0	0	112		112		
	HH 5	21052012 Pauahi		32,998			WAREHOUSE				0	0	0	0	0	0	0	3036		3036		
	48N (not HH)	21052013 Pauahi		11,978			WAREHOUSE				0	0	0	0	0	0	0	1102		1102		
	HH 5	21052017 Pauahi	3,530				MEZZ ENCL OFFICE				0	0	0	0	0	0	0	244		244		
	HH 5	21052020 Pauahi		4,340			WAREHOUSE				0	0	0	0	0	0	0	400		400		
	HH 5	21052020 Pauahi	16,936		15,668		OFFICES				0	0	0	0	0	0	0	1169		1169		
	HH 5	21052020 Pauahi		10,403			RETAIL STORE				0	0	0	0	0	0	0	1082		1082		
	HH 5	21052024 Pauahi	4,936				OFFICES				0	0	0	0	0	0	0	718		718		
	HH 5	21052027 Pauahi		4,936			OFFICES				0	0	0	0	0	0	0	341		341		
	HH 5	21052027 Pauahi					RESTAURANT				0	0	0	0	0	0	0	0	0	0		
	HH 5	21052028 Pauahi	8,571				OFFICES				0	0	0	0	0	0	0	592		592		
	HH 5	21052028 Pauahi		3,380			WAREHOUSE				0	0	0	0	0	0	0	0	311		311	
	HH 5	21052031 Pauahi	2,800				MEZZ ENCL OFFICE				0	0	0	0	0	0	0	194		194		
	HH 5	21052031 Pauahi		2,800			WAREHOUSE				0	0	0	0	0	0	0	0	258		258	
	HH 5	21052032 Pauahi		10,000			OFFICES				0	0	0	0	0	0	0	690		690		
	HH 5	21052033 Pauahi		3,240			OFF ENCL WAREHSE				0	0	0	0	0	0	0	224		224		
	HH 5	21052034 Pauahi		740			MEZZ ENCL OFFICE				0	0	0	0	0	0	0	52		52		
	HH 5	21052034 Pauahi		3,050			WAREHOUSE				0	0	0	0	0	0	0	0	281		281	
	HH 5	21052035 Pauahi		4,300			OFFICES				0	0	0	0	0	0	0	297		297		
	HH 5	21052036 Pauahi		10,320			OFFICES				0	0	0	0	0	0	0	713		713		
	HH 5	21052038 Pauahi		4,000			OFF ENCL WAREHSE				0	0	0	0	0	0	0	276		276		
	HH 5	21052039 Pauahi		680			OFFICES				0	0	0	0	0	0	0	47		47		
	HH 5	21052039 Pauahi		8,000			WAREHOUSE				0	0	0	0	0	0	0	0	736		736	
	HH 5	21052040 Pauahi		4,000			WAREHOUSE				0	0	0	0	0	0	0	0	368		368	
	HH 5	21052042 Pauahi		4,640			MEZZ ENCL OFFICE				0	0	0	0	0	0	0	321		321		
	HH 5	21052042 Pauahi		12,600			OFF ENCL WAREHSE				0	0	0	0	0	0	0	870		870		
	HH 5	21052043 Pauahi		2,214			MEZZ ENCL OFFICE				0	0	0	0	0	0	0	153		153		
	HH 5	21052043 Pauahi		3,050			WAREHOUSE				0	0	0	0	0	0	0	0	1160		1160	
	HH 5	21052045 Pauahi		9,2																		

Table 2: Population and Utility Demands - Existing Conditions

Development Name	Land Use: Existing Condition										Water										Average Day Flow
	Block	TMK	HCDA Neighborhood	SF Residential	MF Residential	Hotel	Civic / Office	Commercial / Retail	General / Light Industry	Other	SF Residential		MF Residential		Hotel		Civil Office		Commercial		Other
											500	400	400	350	69	69	69	69	92	92	
ONE WATERFRONT TOWERS	HH 5	21052053 Pauahi									0	0	0	0	0	0	0	0	409	409	
ONE WATERFRONT TOWERS	HH 5	21052054 Pauahi		1							500	0	0	0	0	0	0	0	0	0	
ONE WATERFRONT TOWERS	HH 5	21053001 Pauahi									500	0	0	0	0	0	0	0	0	4681	
ONE WATERFRONT TOWERS	HH 5	21053030 Pauahi									0	0	0	0	0	0	0	0	0	1192	0
ONE WATERFRONT TOWERS	HH 5	21053030 Pauahi									0	0	0	0	0	0	0	0	0	973	0
ONE WATERFRONT TOWERS	55 (KS D)	21053032 Pauahi									0	0	0	0	0	0	0	0	0	0	0
ONE WATERFRONT TOWERS	55 (KS D)	21053032 Pauahi									0	0	0	0	0	0	0	0	0	10030	0
ONE WATERFRONT TOWERS	55 (KS D)	21053032 Pauahi									0	0	0	0	0	0	0	0	0	1380	0
ONE WATERFRONT TOWERS	55 (KS D)	21053032 Pauahi									0	0	0	0	0	0	0	0	0	0	331 Commercial
ONE WATERFRONT TOWERS	53	21054021 Pauahi									0	0	0	0	0	0	0	0	0	0	0
ONE WATERFRONT TOWERS	53	21054021 Pauahi									0	0	0	0	0	0	0	0	0	304	0
ONE WATERFRONT TOWERS	53	21054021 Pauahi									0	0	0	0	0	0	0	0	0	2825	0
ONE WATERFRONT TOWERS	53	21054021 Pauahi									0	0	0	0	0	0	0	0	0	770	0
THE COLLECTION	52X	21054022 Pauahi									OFFICES	0	0	0	0	3443	0	0	0	0	0
THE COLLECTION	52X	21054022 Pauahi		306							OFFICES	0	0	0	0	0	0	0	0	0	0
THE COLLECTION	52 (KS B)	21054025 Pauahi									APARTMENT	0	122400	0	0	0	0	0	0	0	122400
THE COLLECTION	52 (KS B)	21054025 Pauahi									WAREHOUSE	0	0	0	0	0	0	0	0	0	3747
THE COLLECTION	52 (KS B)	21054025 Pauahi									OFF ENCL WAREHSE	0	0	0	0	686	0	0	0	0	0
THE COLLECTION	52 (KS B)	21054025 Pauahi									RETAIL STORE	0	0	0	0	0	0	0	0	1268	0
THE COLLECTION	52 (KS B)	21054027 Pauahi									SCHOOL	0	0	0	0	0	0	0	0	0	0
THE COLLECTION	52 (KS B)	21054027 Pauahi									MEZZ ENCL OFFICE	0	0	0	0	207	0	0	0	0	0
THE COLLECTION	52 (KS B)	21054028 Pauahi									WAREHOUSE	0	0	0	0	0	0	0	0	0	2264
THE COLLECTION	52 (KS B)	21054028 Pauahi									OFF ENCL WAREHSE	0	0	0	0	90	0	0	0	0	0
THE COLLECTION	54 (KS C)	21054036 Pauahi									WAREHOUSE	0	0	0	0	0	0	0	0	0	5146
THE COLLECTION	59	21055001 Pauahi									RETAIL STORE	0	0	0	0	0	0	0	0	349	0
THE COLLECTION	59	21055002 Pauahi									AUTO SHOWROOM/OFFICE	0	0	0	0	681	0	0	0	0	0
THE COLLECTION	59	21055002 Pauahi									AUTO PARTS/SERVICE	0	0	0	0	0	0	0	0	0	236
THE COLLECTION	58	21055003 Pauahi									RETAIL STORE	0	0	0	0	0	0	0	0	379	0
THE COLLECTION	58	21055003 Pauahi									WAREHOUSE	0	0	0	0	0	0	0	0	0	806
THE COLLECTION	58	21055003 Pauahi									MEZZ ENCL OFFICE	0	0	0	0	379	0	0	0	0	0
THE COLLECTION	57	21055004 Pauahi		467							APARTMENT/COMMERCIAL	0	186800	0	0	0	0	0	0	0	186800
THE COLLECTION	58	21055006 Pauahi									WAREHOUSE	0	0	0	0	0	0	0	0	0	642
THE COLLECTION	58	21055021 Pauahi									OFFICES	0	0	0	0	497	0	0	0	0	0
THE COLLECTION	58	21055026 Pauahi		22,128							OFFICES	0	0	0	0	1527	0	0	0	0	0
THE COLLECTION	59	21055032 Pauahi									RETAIL STORE	0	0	0	0	0	0	0	0	167	0
THE COLLECTION	59	21055032 Pauahi									WAREHOUSE	0	0	0	0	0	0	0	0	0	442
THE COLLECTION	59	21055033 Pauahi									OFFICES	0	0	0	0	14	0	0	0	0	0
THE COLLECTION	59	21055034 Pauahi									WAREHOUSE	0	0	0	0	0	0	0	0	0	668
THE COLLECTION	59	21055035 Pauahi									RETAIL STORE	0	0	0	0	0	0	0	0	0	343
THE COLLECTION	58	21055038 Pauahi									WAREHOUSE	0	0	0	0	0	0	0	0	0	494
THE COLLECTION	58	21055038 Pauahi									OFFICES	0	0	0	0	735	0	0	0	0	0
THE COLLECTION	58	21055038 Pauahi									WAREHOUSE	0	0	0	0	0	0	0	0	0	1874
THE COLLECTION	58	21055038 Pauahi									MEZZ ENCL OFFICE	0	0	0	0	133	0	0	0	0	0
THE COLLECTION	HH 5	21056001 Pauahi									OFFICES	0	0	0	0	0	0	0	0	0	0
THE COLLECTION	HH 5	21056001 Pauahi									BANK/SAVINGS INST	0	0	0	0	493	0	0	0	0	0
THE COLLECTION	61	21056002 Pauahi									OFFICES	0	0	0	0	363	0	0	0	0	0
THE COLLECTION	61	21056002 Pauahi									WAREHOUSE	0	0	0	0	0	0	0	0	0	1140
THE COLLECTION	60	21056003 Pauahi									RETAIL STORE	0	0	0	0	0	0	0	0	0	1656
THE COLLECTION	60	21056004 Pauahi									WAREHOUSE	0	0	0	0	0	0	0	0	0	490
THE COLLECTION	60	21056004 Pauahi									OFF ENCL WAREHSE	0	0	0	0	84	0	0	0	0	0
THE COLLECTION	60	21056004 Pauahi									AUTO SHOWROOM/OFFICE	0	0	0	0	0	0	0	0	0	1185
THE COLLECTION	61	21056007 Pauahi									OFFICES	0	0	0	0	0	0	0	0	0	1437
THE COLLECTION	61	21056008 Pauahi									OFFICES	0	0	0	0	115	0	0	0	0	0
THE COLLECTION	61	21056008 Pauahi									AUTO PARTS/SERVICE	0	0	0	0	0	0	0	0	0	1476
THE COLLECTION	64 (HH 2)	23001005 Auahi									MEZZ DISPLAY SALES	0	0	0	0	0	0	0	0	0	205
THE COLLECTION	64 (HH 2)	23001005 Auahi		3,717							MEZZ ENCL OFFICE	0	0	0	0	257	0	0	0	0	0
THE COLLECTION	64 (HH 2)	23001005 Auahi									PARK STRUCTURE	0	0	0	0	0	0	0	0	0	0
THE COLLECTION	64 (HH 2)	23001005 Auahi									RESTAURANT	0	0	0	0	0	0	0	0	0	122 Commercial
THE COLLECTION	64 (HH 2)	23001005 Auahi									RETAIL STORE	0	0	0	0	0	0	0	0	0	7612
THE COLLECTION	62 (HH 1)	23002001 Auahi									RETAIL STORE	0	0	0	0	0	0	0	0	0	5655
THE COLLECTION	62 (HH 1)	23002001 Auahi									WAREHOUSE	0	0	0	0	0	0	0	0	0	7438
THE COLLECTION	62 (HH 1)	23002002 Auahi									WAREHOUSE	0	0	0	0	0	0	0	0	0	0
THE COLLECTION	62 (HH 1)	23002057 Auahi									RESTAURANT	0	0	0	0	0	0	0	0	0	517 Commercial
THE COLLECTION	62 (HH 1)	23002058 Auahi									OFF ENCL WAREHSE	0	0	0	0	97	0	0	0	0	0
THE COLLECTION	62 (HH 1)	23002058 Auahi									WAREHOUSE	0	0	0	0	0	0	0	0	0	515
THE COLLECTION	62 (HH 1)	23002059 Auahi									DEPARTMENT STORE	0	0	0	0	4455	0	0	0	0	0
THE COLLECTION	62 (HH 1)	23002059 Auahi									WAREHOUSE	0	0	0	0	0	0	0	0	0	1605
THE COLLECTION	62 (HH 1)	23002066 Auahi									WAREHOUSE	0	0	0	0	0	0	0	0	0	227
THE COLLECTION	62 (HH 1)	23002069 Auahi									WAREHOUSE	0	0	0	0	0	0	0	0	0	368
THE COLLECTION	62 (HH 1)	23002104 Auahi									WAREHOUSE	0	0	0	0	0	0	0	0	0	0
THE COLLECTION	62 (HH 1)	23002104 Auahi									BENEATH BLDG PARK ENCL	0	0	0	0	0	0	0	0	0	0
THE COLLECTION	62 (HH 1)	23002104 Auahi									CINEMA	0	0	0	0	0	0	0	0	0	0
THE COLLECTION	62 (HH 1)	23002104 Auahi									RESTAURANT	0	0	0	0	0	0	0	0	0	5981 Commercial
THE COLLECTION	62 (HH 1)	23002104 Auahi									MEZZ DISPLAY SALES	0	0	0	0	0	0	0	0	0	2671 Commercial
THE COLLECTION	34	23003004 Central Kakaako									OFFICES	0	0	0	0	0	0	0	0	0	0
THE COLLECTION	34	23003004 Central Kakaako									OFFICES	0	0	0	0	0	0	0	0	0	0
THE COLLECTION	34	23003005 Central Kakaako		2,900							OFFICES	0	0	0	0	0	0	0	0	0	0
THE COLLECTION	34	23003005 Central Kakaako									OFFICES	0	0	0	0	0	0	0	0	0	0
THE COLLECTION	34	23003006 Central Kakaako									WAREHOUSE	0	0	0	0	0	0	0	0	0	0
THE COLLECTION	34	23003006 Central Kakaako									WAREHOUSE	0	0	0	0	0	0	0	0	0	0
THE COLLECTION	34	23003006 Central Kakaako																			

Table 2: Population and Utility Demands - Existing Condition

Development Name	Block	TMK	HDCA Neighborhood	Land Use: Existing Condition								Water	Average Day Flow						
				SF Residential	MF Residential	Hotel	Civic / Office	Commercial / Retail	General / Light Industry	Other	Use								
				units	units	units	SF	SF	SF	SF	Use	gal/unit	gal/unit	gal/unit	gal/1000 sf	gal/1000 sf	gal/1000 sf	gal	gpd
	34	23003007 Central Kakaako		2							APARTMENT	0	800	0	0	0	0	0	800
	34	23003008 Central Kakaako			21,888						MINI-WAREHOUSE	0	0	0	1511	0	0	0	1511
	34	23003008 Central Kakaako			2,786						OFF ENCL WAREHSE	0	0	0	193	0	0	0	193
	34	23003008 Central Kakaako				21,207					WAREHOUSE	0	0	0	0	0	0	1952	1952
	34	23003011 Central Kakaako			1,732						OFF ENCL WAREHSE	0	0	0	120	0	0	0	120
	34	23003011 Central Kakaako				3,000					RACQUET BALL COURT	0	0	0	0	0	0	207	207
	34	23003012 Central Kakaako					2,784				WAREHOUSE	0	0	0	0	0	0	257	257
	34	23003013 Central Kakaako			3,000						OFFICES	0	0	0	207	0	0	0	207
	34	23003014 Central Kakaako										0	0	0	0	0	0	0	0
	34	23003015 Central Kakaako			15,000						OFFICES	0	0	0	1035	0	0	0	1035
KAMAKEE VISTA	34	23003018 Central Kakaako	226								APARTMENT	0	90400	0	0	0	0	0	90400
KAMAKEE VISTA	34	23003018 Central Kakaako			736						MEZZ ENCL OFFICE	0	0	0	51	0	0	0	51
KAMAKEE VISTA	34	23003018 Central Kakaako			15,285						OFFICES	0	0	0	1055	0	0	0	1055
KAMAKEE VISTA	34	23003018 Central Kakaako				9,059					PARKING PAR/ENCL	0	0	0	0	0	0	0	0
KAMAKEE VISTA	34	23003018 Central Kakaako					1,792				SCHOOL	0	0	0	0	0	0	6840 60 gal/student	6840
	32	23003019 Central Kakaako					969				WAREHOUSE	0	0	0	0	0	0	165	165
	32	23003020 Central Kakaako					9,969				MEZZ ENCL OFFICE	0	0	0	67	0	0	0	67
	32	23003020 Central Kakaako					3,500				WAREHOUSE	0	0	0	0	0	0	918	918
	32	23003021 Central Kakaako					2,472				MEZZ DISPLAY SALES	0	0	0	0	0	0	171	171
	32	23003022 Central Kakaako			948						MEZZ ENCL OFFICE	0	0	0	66	0	0	0	66
	32	23003022 Central Kakaako			556						OFF ENCL WAREHSE	0	0	0	39	0	0	0	39
	32	23003023 Central Kakaako				7,120					WAREHOUSE	0	0	0	0	0	0	656	656
	32	23003024 Central Kakaako			6,493			5,513			WAREHOUSE	0	0	0	0	0	0	778	778
	32	23003024 Central Kakaako						4,018			OFFICES	0	0	0	449	0	0	0	449
	32	23003026 Central Kakaako			690						RETAIL STORE	0	0	0	0	0	0	381	381
	32	23003026 Central Kakaako					1,890				LIGHT MANUFACTURING	0	0	0	0	0	0	370	370
	32	23003026 Central Kakaako									MEZZ ENCL OFFICE	0	0	0	48	0	0	0	48
	32	23003028 Central Kakaako			2,940						RESTAURANT	0	0	0	0	0	0	131 Commercial	131
	32	23003030 Central Kakaako	1								WAREHOUSE	0	0	0	0	0	0	271	271
	32	23003031 Central Kakaako			312						SF HOME	500	0	0	0	0	0	0	500
	32	23003031 Central Kakaako			572			1,628			MEZZ ENCL OFFICE	0	0	0	22	0	0	0	22
	32	23003031 Central Kakaako									OFFICES	0	0	0	40	0	0	0	40
	32	23003032 Central Kakaako	1								APARTMENT	0	400	0	0	0	0	0	400
	32	23003032 Central Kakaako			2,526						BENEATH BLDG PARK ENCL	0	0	0	0	0	0	0	0
	33	23003037 Central Kakaako				8,550					OFFICES	0	0	0	175	0	0	0	175
	33	23003038 Central Kakaako			2,800						WAREHOUSE	0	0	0	0	0	0	787	787
	33	23003038 Central Kakaako			2,800						MEZZ ENCL OFFICE	0	0	0	194	0	0	0	194
	33	23003038 Central Kakaako				13,680					OFF ENCL WAREHSE	0	0	0	194	0	0	0	194
	33	23003043 Central Kakaako			24,064						WAREHOUSE	0	0	0	0	0	0	1259	1259
	33	23003046 Central Kakaako			4,414						OFFICES	0	0	0	1661	0	0	0	1661
	33	23003047 Central Kakaako			3,000						WAREHOUSE	0	0	0	0	0	0	407	407
	33	23003048 Central Kakaako			3,800						OFF ENCL WAREHSE	0	0	0	0	0	0	276	276
	33	23003049 Central Kakaako			3,936			3,936			OFFICES	0	0	0	272	0	0	0	350
	33	23003059 Central Kakaako				27,158					RETAIL STORE	0	0	0	0	0	0	272	272
	31	23003061 Central Kakaako			4,199						WAREHOUSE	0	0	0	0	0	0	2499	2499
	31	23003061 Central Kakaako					1,409				OFF ENCL WAREHSE	0	0	0	290	0	0	0	290
	31	23003062 Central Kakaako									RESTAURANT	0	0	0	0	0	0	98 Commercial	98
	31	23003062 Central Kakaako									BENEATH BLDG PARK ENCL	0	0	0	0	0	0	0	0
	31	23003063 Central Kakaako			7,500						WAREHOUSE	0	0	0	0	0	0	690	690
	31	23003063 Central Kakaako			480						OFF ENCL WAREHSE	0	0	0	34	0	0	0	34
	31	23003063 Central Kakaako			1,920						WAREHOUSE	0	0	0	0	0	0	177	177
	31	23003064 Central Kakaako			10,000						OFF ENCL WAREHSE	0	0	0	0	0	0	920	920
	31	23003065 Central Kakaako	1,446								WAREHOUSE	0	0	0	100	0	0	0	100
	31	23003066 Central Kakaako			2,644						OFFICES	0	0	0	0	0	0	244	244
	31	23003066 Central Kakaako			6,500						WAREHOUSE	0	0	0	0	0	0	598	598
	31	23003067 Central Kakaako			7,530						MEZZ ENCL OFFICE	0	0	0	520	0	0	0	520
	31	23003067 Central Kakaako			2,244						OFF ENCL WAREHSE	0	0	0	155	0	0	0	155
	31	23003067 Central Kakaako			12,504						WAREHOUSE	0	0	0	0	0	0	1151	1151
	31	23003068 Central Kakaako			1,600						OFF ENCL WAREHSE	0	0	0	111	0	0	0	111
	31	23003069 Central Kakaako			3,680						WAREHOUSE	0	0	0	0	0	0	339	339
	31	23003069 Central Kakaako			1,520						MEZZ ENCL OFFICE	0	0	0	105	0	0	0	105
	31	23003069 Central Kakaako			3,560						WAREHOUSE	0	0	0	0	0	0	328	328
	20	23003071 Kapiolani			1,287						MEZZ ENCL OFFICE	0	0	0	89	0	0	0	89
	20	23003071 Kapiolani			2,803						OFF ENCL WAREHSE	0	0	0	194	0	0	0	194
	20	23003071 Kapiolani				7,127					WAREHOUSE	0	0	0	0	0	0	656	656
909 Kapiolani	20	23003073 Kapiolani	228								APARTMENT	0	91200	0	0	0	0	0	91200
909 Kapiolani	20	23003073 Kapiolani			3,923						OFFICES	0	0	0	271	0	0	0	271
909 Kapiolani	20	23003073 Kapiolani			4,838						WAREHOUSE	0	0	0	0	0	0	446	446
909 Kapiolani	20	23003074 Kapiolani			1,680						OFFICES	0	0	0	0	0	0	155	155
909 Kapiolani	20	23003074 Kapiolani			1,000						WAREHOUSE	0	0	0	69	0	0	0	69
909 Kapiolani	20	23003075 Kapiolani			16,990						OFFICES	0	0	0	1173	0	0	0	1173
909 Kapiolani	31	23003078 Central Kakaako			2,684						MINI-WAREHOUSE	0	0	0	186	0	0	0	186
909 Kapiolani	31	23003078 Central Kakaako				9,200					WAREHOUSE	0	0	0	0	0	0	847	847
909 Kapiolani	32	23003081 Central Kakaako			2,016						OFFICES	0	0	0	140	0	0	0	140
909 Kapiolani	32	23003083 Central Kakaako			720						OFF ENCL WAREHSE	0	0	0	50	0	0	0	50
909 Kapiolani	32	23003083 Central Kakaako			2,240						WAREHOUSE	0	0	0	0	0	0	207	207

Table 2: Population and Utility Demands - Existing Condition

Development Name	Land Use: Existing Condition										Water										Average Day Flow
	Block	TMK	HCDA Neighborhood	SF Residential	MF Residential	Hotel	Civic / Office	Commercial / Retail	General / Light Industry	Other	Use	SF Residential	MF Residential	Hotel	Civil / Office	Commercial	General / Light Industry	Other			
				units	units	units	SF	SF	SF	SF	gal/unit	gal/unit	ga/unit	gal/1000 sf	gal/1000 sf	gal/1000 sf	gal	gpd			
	31	23003090 Central Kakaako		1,250																	87
	31	23003091 Central Kakaako										OFFICES									518
	31	23003092 Central Kakaako										7,500 RESTAURANT	0	0	0	0	0	0	518 Commercial		518
	31	23003093 Central Kakaako										WAREHOUSE	0	0	0	0	0	0			336
	31	23003093 Central Kakaako										MEZZ ENCL OFFICE	0	0	0	58	0	0			58
	31	23003093 Central Kakaako										OFFICES	0	0	0	0	0	0			633
	32	23003094 Central Kakaako										WAREHOUSE	0	0	0	65	0	0			65
	32	23003094 Central Kakaako										OFFICES	0	0	0	0	0	0			265
	32	23003095 Central Kakaako										WAREHOUSE	0	0	0	0	0	0			265
	20	23003097 Kapiolani										OFFICES	0	0	0	844	0	0			844
	20	23003098 Kapiolani										OFFICES	0	0	0	954	0	0			954
	20	23003099 Kapiolani										BANK/SAVINGS INST	0	0	0	132	0	0			132
	20	23003099 Kapiolani										OFFICES	0	0	0	1062	0	0			1062
PACIFICA HONOLULU	20	23003105 Kapiolani		489								APARTMENT	0	195600	0	0	0	0			195600
PACIFICA HONOLULU	20	23003105 Kapiolani										RETAIL STORE	0	0	0	0	689	0			689
	21	23004002 Kapiolani										OFFICES	0	0	0	498	0	0			498
	21	23004003 Kapiolani										OFFICES	0	0	0	1062	0	0			1062
	21	23004003 Kapiolani										RETAIL STORE	0	0	0	0	257	0			257
	21	23004007 Kapiolani										RESTAURANT	0	0	0	0	0	0	294 Commercial		294
	21	23004007 Kapiolani										RETAIL STORE	0	0	0	294	0	0			294
	21	23004010 Kapiolani										CAR WASH AUTOMATIC	0	0	0	0	0	0	131 Commercial		131
	21	23004010 Kapiolani										SERVICE STATION W/BAYS	0	0	0	0	180	0			180
	21	23004012 Kapiolani										WAREHOUSE	0	0	0	0	809	0			809
1133 WAIMANU	35	23004025 Central Kakaako		282								APARTMENT	0	112800	0	0	0	0			112800
	35	23004029 Central Kakaako										BENEATH BLDG PARK ENCL	0	0	0	0	0	0			0
	35	23004029 Central Kakaako										OFFICES	0	0	0	453	0	0			453
	35	23004031 Central Kakaako										OFFICES	0	0	0	40	0	0			40
	35	23004033 Central Kakaako										BENEATH BLDG PARK ENCL	0	0	0	0	0	0			0
	35	23004033 Central Kakaako										MEZZ ENCL OFFICE	0	0	0	205	0	0			205
	35	23004033 Central Kakaako										OFFICES	0	0	0	205	0	0			205
	35	23004033 Central Kakaako										WAREHOUSE	0	0	0	0	717	0			717
	35	23004034 Central Kakaako										RESTAURANT	0	0	0	0	0	0	138 Commercial		138
	36	23004035 Central Kakaako										OFF ENCL WAREHSE	0	0	0	403	0	0			403
	36	23004035 Central Kakaako										OFFICES	0	0	0	502	0	0			502
	36	23004035 Central Kakaako										WAREHOUSE	0	0	0	0	3569	0			3569
	21	23004037 Kapiolani										OFFICES	0	0	0	12	0	0			12
	21	23004039 Kapiolani										AUTO PARTS/SERVICE	0	0	0	0	115	0			115
	36	23004048 Central Kakaako										OFF ENCL WAREHSE	0	0	0	147	0	0			147
	36	23004048 Central Kakaako										WAREHOUSE	0	0	0	0	598	0			598
	36	23004051 Central Kakaako										OFFICES	0	0	0	127	0	0			127
	36	23004051 Central Kakaako										WAREHOUSE	0	0	0	0	248	0			248
	36	23004069 Central Kakaako										OFF ENCL WAREHSE	0	0	0	63	0	0			63
	36	23004069 Central Kakaako										WAREHOUSE	0	0	0	0	670	0			670
	35	23004071 Central Kakaako										RETAIL STORE	0	0	0	39	0	0			39
HOKUA AT 1288 ALA MOANA	63E	23005001 Auahi										OFFICES	0	0	0	2228	0	0			2228
HOKUA AT 1288 ALA MOANA	63E	23005001 Auahi										APARTMENT	0	99200	0	0	0	0			99200
	65 (HH 4)	23005004 Auahi										OFFICES	0	0	0	1566	0	0			1566
	65 (HH 4)	23005006 Auahi										MEZZ DISPLAY SALES	0	0	0	0	272	0			272
	65 (HH 4)	23005006 Auahi										MEZZ DISPLAY SALES	0	0	0	64	0	0			64
	65 (HH 4)	23005006 Auahi										PARK STRUCTURE	0	0	0	0	0	0			0
	65 (HH 4)	23005006 Auahi										RETAIL STORE	0	0	0	0	8030	0			8030
	63H (HH 3)	23005013 Auahi										DEPARTMENT STORE	0	0	0	0	4698	0			4698
	63H (HH 3)	23005013 Auahi										MEZZ DISPLAY SALES	0	0	0	420	0	0			420
	63H (HH 3)	23005013 Auahi										PARK STRUCTURE	0	0	0	0	0	0			0
WARD VILLAGE SHOPS	63H (HH 3)	23005014 Auahi										DEPARTMENT STORE	0	0	0	8955	0	0			8955
	63H (HH 3)	23005019 Auahi										RETAIL STORE	0	0	0	1084	0	0			1084
1350 ALA MOANA	63E	23006001 Auahi										APARTMENT	0	141200	0	0	0	0			141200
NAURU TOWER	63E	23006003 Auahi										WAREHOUSE	0	0	0	0	441	0			441
NAURU TOWER	63E	23006003 Auahi										OFFICES	0	0	0	772	0	0			772
NAURU TOWER	63E	23006003 Auahi										RESTAURANT	0	0	0	0	0	0	742 Commercial		742
HAWAIKI TOWER	63E	23006004 Auahi										APARTMENT	0	172000	0	0	0	0			172000
HAWAIKI TOWER	63E	23006004 Auahi										OFFICES	0	0	0	2894	0	0			2894
KOOLANI	63E	23006014 Auahi										APARTMENT	0	148000	0	0	0	0			148000
KOOLANI	63E	23006014 Auahi										OFFICES	0	0	0	1416	0	0			1416
WAIHONUA	63E	23006017 Auahi										APARTMENT	0	138000	0	0	0	0			138000
	39	23007023 Central Kakaako										OFFICES	0	0	0	1177	0	0			1177
	39	23007026 Central Kakaako										WAREHOUSE	0	0	0	0	232	0			232
	39	23007027 Central Kakaako										OFFICES	0	0	0	527	0	0			527
	39	23007028 Central Kakaako										BAR LOUNGE	0	0	0	0	0	0	392 Commercial		392
	39	23007028 Central Kakaako										WAREHOUSE	0	0	0	0	0	0			678
	39	23007029 Central Kakaako										OFFICES	0	0	0	308	0	0			308
	39	23007029 Central Kakaako										OFF ENCL WAREHSE	0	0	0	102	0	0			102
	36	23007033 Central Kakaako										WAREHOUSE	0	0	0	0	609	0			609
	36	23007033 Central Kakaako										OFF ENCL WAREHSE	0	0	0	62	0	0			62
	36	23007036 Central Kakaako										OFFICES	0	0	0	62	0	0			62
	36	23007036 Central Kakaako										WAREHOUSE	0	0	0	0	415	0			415
	36	23007039 Central Kakaako										BENEATH BLDG PARK ENCL	0	0	0	0	0	0			0
	36	23007039 Central Kakaako										WAREHOUSE	0	0	0	0	662	0			662

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Development Name	Block	TMK	HCDA Neighborhood	Land Use: Existing Condition								Water								Average Day Flow
				SF Residential	MF Residential	Hotel	Civic / Office	Commercial / Retail	General / Light Industry	Other	Use	SF Residential	MF Residential	Hotel	Civil / Office	Commercial	General / Light Industry	Other		
				units	units	units	SF	SF	SF	SF	Use	gal/unit	gal/unit	ga/unit	gal/1000 sf	gal/1000 sf	gal/1000 sf	gal	gpd	
39	23007044 Central Kakaako						3,710	SF	SF	SF	OFFICES	0	0	0	256	0	0	0	256	
39	23007045 Central Kakaako							8,460			WAREHOUSE	0	0	0	0	779			779	
39	23007049 Central Kakaako							2,045			RETAIL STORE	0	0	0	0	142			142	
39	23007049 Central Kakaako								18,240			WAREHOUSE	0	0	0	0	1679			1679
38	23007054 Central Kakaako								1,288			RESTAURANT	0	0	0	0	0	89 Commercial		89
38	23007054 Central Kakaako								1,664			WAREHOUSE	0	0	0	0	154			154
38	23007056 Central Kakaako								4,051			WAREHOUSE	0	0	0	0	373			373
38	23007057 Central Kakaako								14,960			MANUFACTURING	0	0	0	0	1377			1377
38	23007057 Central Kakaako								28,140			RESTAURANT	0	0	0	0	0	1942 Commercial		1942
38	23007061 Central Kakaako											BENEATH BLDG PARK ENCL	0	0	0	0	0			0
38	23007061 Central Kakaako						2,100					MEZZ ENCL OFFICE	0	0	0	0	0			145
38	23007061 Central Kakaako								4,500			WAREHOUSE	0	0	0	0	414			414
38	23007062 Central Kakaako							1,200			MEZZ DISPLAY SALES	0	0	0	0	83			83	
38	23007062 Central Kakaako								8,228			WAREHOUSE	0	0	0	0	757			757
38	23007063 Central Kakaako								8,000			WAREHOUSE	0	0	0	0	736			736
37	23007064 Central Kakaako						1,584					AUTO SHOWROOM/OFFICE	0	0	0	0	110			110
37	23007064 Central Kakaako								6,037			WAREHOUSE	0	0	0	0	556			556
37	23007066 Central Kakaako						1,144					OFF ENCL WAREHSE	0	0	0	0	0			79
37	23007066 Central Kakaako								6,608			WAREHOUSE	0	0	0	0	608			608
37	23007067 Central Kakaako						910					OFF ENCL WAREHSE	0	0	0	0	0			63
37	23007067 Central Kakaako								6,760			WAREHOUSE	0	0	0	0	622			622
37	23007069 Central Kakaako						360					MEZZ ENCL OFFICE	0	0	0	0	0			25
37	23007069 Central Kakaako						1,608					OFF ENCL WAREHSE	0	0	0	0	111			111
37	23007069 Central Kakaako							32,137			WAREHOUSE	0	0	0	0	2957			2957	
37	23007078 Central Kakaako						2,577					OFFICES	0	0	0	0	0			178
37	23007078 Central Kakaako							11,332			WAREHOUSE	0	0	0	0	1043			1043	
38	23007092 Central Kakaako							1,724			TAVERN/BAR	0	0	0	0	0	119 Commercial		119	
38	23007093 Central Kakaako						5,385					OFFICES	0	0	0	0	0			372
38	23007093 Central Kakaako								5,385			RESTAURANT	0	0	0	0	0	372 Commercial		372
23	23007098 Kapiolani							2,030			PARK STRUCTURE	0	0	0	0	0	141 Commercial		141	
23	23007099 Kapiolani										OFFICES	0	0	0	0	0			0	
23	23007100 Kapiolani						4,823				OFFICES	0	0	0	0	0			333	
23	23007107 Kapiolani						31,933				PARKING PARK/ENCL	0	0	0	0	0			2204	
BLAISDELL CENTER	7B+C	23008002 Thomas Square						19,864			RETAIL STORE	0	0	0	0	1371			1371	
MCKINLEY HIGH SCHOOL	7B+C	23008003 Thomas Square							4,747			PARK STRUCTURE	0	0	0	0	0	328 Commercial		328
	7B+C	23009001 Thomas Square									SCHOOL	0	0	0	0	0			0	
	12	23010001 Sheridan		2							APARTMENT	0	800	0	0	0			800	
HAWAIIANA APTS RYCROFT MANOR	12	23010002 Sheridan									SF HOME	500	0	0	0	0			500	
	12	23010003 Sheridan	1								SF HOME	500	0	0	0	0			500	
	12	23010004 Sheridan		4							APARTMENT	0	1600	0	0	0			1600	
	12	23010005 Sheridan		1							APARTMENT	0	400	0	0	0			400	
	12	23010006 Sheridan				1					SF HOME	500	0	0	0	0			500	
	12	23010007 Sheridan		2							APARTMENT	0	800	0	0	0			800	
	12	23010008 Sheridan			1						SF HOME	500	0	0	0	0			500	
	12	23010009 Sheridan									APARTMENT	0	5600	0	0	0			5600	
	12	23010012 Sheridan				2					APARTMENT	0	11600	0	0	0			11600	
	12	23010013 Sheridan			1						SF HOME	500	0	0	0	0			500	
	13	23010014 Sheridan				4					APARTMENT	0	1600	0	0	0			1600	
	13	23010015 Sheridan			1						SF HOME	500	0	0	0	0			500	
	13	23010016 Sheridan				2					APARTMENT	0	800	0	0	0			800	
	13	23010017 Sheridan				3					APARTMENT	0	1200	0	0	0			1200	
	13	23010018 Sheridan			1						SF HOME	500	0	0	0	0			500	
	13	23010019 Sheridan									APARTMENT	0	400	0	0	0			400	
	13	23010020 Sheridan				2					SF HOME	0	800	0	0	0			800	
	13	23010021 Sheridan									APARTMENT	0	800	0	0	0			800	
	13	23010022 Sheridan			1						SF HOME	500	0	0	0	0			500	
	13	23010023 Sheridan				2					APARTMENT	0	800	0	0	0			800	
	13	23010024 Sheridan				4					APARTMENT	0	1600	0	0	0			1600	
	13	23010025 Sheridan				4					APARTMENT	0	1600	0	0	0			1600	
	13	23010026 Sheridan			1						SF HOME	500	0	0	0	0			500	
	13	23010027 Sheridan									APARTMENT	0	400	0	0	0			400	
	22	23010028 Kapiolani		1,404							APARTMENT	0	561600	0	0	0			561600	
	13	23010083 Sheridan		1							SF HOME	500	0	0	0	0			500	
	13	23010092 Sheridan		1							SF HOME	500	0	0	0	0			500	
	13	23010093 Sheridan			2						APARTMENT	0	800	0	0	0			800	
	13	23010094 Sheridan			3						APARTMENT	0	1200	0	0	0			1200	
	13	23010096 Sheridan			2						APARTMENT	0	800	0	0	0			800	
	13	23010097 Sheridan			2						APARTMENT	0	800	0	0	0			800	
	13	23010098 Sheridan			2						APARTMENT	0	800	0	0	0			800	
	12	23010099 Sheridan		1							APARTMENT	0	400	0	0	0			400	
	12	23010100 Sheridan	1								SF HOME	500	0	0	0	0			500	
	12	23010101 Sheridan			2						APARTMENT	0	800	0	0	0			800	
	12	23010102 Sheridan			2						APARTMENT	0	800	0	0	0			800	
	12	23010103 Sheridan			2						APARTMENT	0	800	0	0	0			800	
	12	23010104 Sheridan			2						APARTMENT	0	800	0	0	0			800	
	12	23010105 Sheridan	1								SF HOME	500	0	0	0	0			500	
	12	23010106 Sheridan	1								SF HOME	500	0	0	0	0			500	

Table 2: Population and Utility Demands - Existing Condition

Development Name	Block	TMK	HCDA Neighborhood	Land Use: Existing Condition							Water										Average Day Flow
				SF Residential	MF Residential	Hotel	Civic / Office	Commercial / Retail	General / Light Industry	Other	SF Residential	MF Residential	Hotel	Civil / Office	Commercial	General / Light Industry	Other				
				units	units	units	SF	SF	SF	SF	gal/unit	gal/unit	ga/unit	gal/1000 sf	gal/1000 sf	gal/1000 sf	gal	gpd			
Honolulu Design Center	12	23010107 Sheridan		1														500			
Honolulu Design Center	22	23010111 Kapiolani																	1363		
	22	23010111 Kapiolani																	4148		
	10	23011002 Sheridan			460														32		
	10	23011002 Sheridan			969														67		
	10	23011002 Sheridan			2,766														191		
	10	23011002 Sheridan				5,207													360		
	10	23011002 Sheridan				28,573													360		
	10	23011002 Sheridan					7,058											21480	60 gal/student	21480	
	8	23011003 Sheridan			955														488		
	8	23011003 Sheridan					3,215												66		
	8	23011003 Sheridan						2											222		
	8	23011004 Sheridan							APARTMENT		0	800	0	0	0	0	0		800		
	8	23011005 Sheridan	1						SF HOME		500	0	0	0	0	0	0		500		
	8	23011006 Sheridan	1						RETAIL STORE		0	0	0	0	0	0	0		500		
	8	23011007 Sheridan	1						LIBRARY		0	0	0	0	0	0	0		500		
	8	23011008 Sheridan	1						MEZZ ENCL OFFICE		0	0	0	0	0	0	0		500		
	8	23011009 Sheridan	1						OFFICES		0	0	0	0	0	0	0		500		
	8	23011010 Sheridan	1						5,207		0	0	0	0	0	0	0		500		
	8	23011011 Sheridan	2						RELIGIOUS INST		0	0	0	0	0	0	0		500		
	8	23011012 Sheridan							SCHOOL		0	0	0	0	0	0	0		500		
	8	23011012 Sheridan			5,228				SOCIAL/FRATERNAL HALL		0	0	0	0	0	0	0		500		
	8	23011013 Sheridan			5,041				OFFICES		0	0	0	0	0	0	0		500		
	8	23011014 Sheridan			1,138				RETAIL STORE		0	0	0	0	0	0	0		500		
	8	23011015 Sheridan			1,920				OFFICES		0	0	0	0	0	0	0		500		
	8	23011016 Sheridan			2,400				RETAIL STORE		0	0	0	0	0	0	0		500		
	8	23011017 Sheridan			1,650				RETAIL STORE		0	0	0	0	0	0	0		500		
	8	23011018 Sheridan			1,281				OFFICES		0	0	0	0	0	0	0		500		
	8	23011018 Sheridan			3,294				RETAIL STORE		0	0	0	0	0	0	0		500		
	8	23011019 Sheridan			2,500				OFFICES		0	0	0	0	0	0	0		500		
	8	23011019 Sheridan			2,800				RETAIL STORE		0	0	0	0	0	0	0		500		
	9	23011021 Sheridan	4						APARTMENT		0	1600	0	0	0	0	0		1600		
	9	23011022 Sheridan	1						SF HOME		500	0	0	0	0	0	0		500		
	9	23011023 Sheridan	1						SF HOME		500	0	0	0	0	0	0		500		
	9	23011024 Sheridan	1						SF HOME		500	0	0	0	0	0	0		500		
	9	23011025 Sheridan	63						APARTMENT		0	25200	0	0	0	0	0		25200		
	9	23011028 Sheridan	2						APARTMENT		0	800	0	0	0	0	0		800		
	9	23011030 Sheridan	1						SF HOME		500	0	0	0	0	0	0		500		
	9	23011031 Sheridan	1						SF HOME		500	0	0	0	0	0	0		500		
	9	23011032 Sheridan	1						SF HOME		500	0	0	0	0	0	0		500		
	9	23011033 Sheridan	2						APARTMENT		0	800	0	0	0	0	0		800		
	9	23011034 Sheridan	1						SF HOME		500	0	0	0	0	0	0		500		
	9	23011035 Sheridan	1						SF HOME		500	0	0	0	0	0	0		500		
	9	23011036 Sheridan	1						APARTMENT		0	400	0	0	0	0	0		400		
	9	23011037 Sheridan	2						APARTMENT		0	800	0	0	0	0	0		800		
	11	23011038 Sheridan	1						SF HOME		500	0	0	0	0	0	0		500		
	11	23011039 Sheridan	1						SF HOME		500	0	0	0	0	0	0		500		
	11	23011040 Sheridan	1						SF HOME		500	0	0	0	0	0	0		500		
	11	23011041 Sheridan	2						APARTMENT		0	800	0	0	0	0	0		800		
	11	23011042 Sheridan	1						SF HOME		500	0	0	0	0	0	0		500		
	11	23011043 Sheridan	2						APARTMENT		0	800	0	0	0	0	0		800		
	11	23011044 Sheridan	4						APARTMENT		0	1600	0	0	0	0	0		1600		
	10	23011045 Sheridan	2						APARTMENT		0	800	0	0	0	0	0		800		
	10	23011046 Sheridan	1						SF HOME		500	0	0	0	0	0	0		500		
	10	23011047 Sheridan	1						SF HOME		500	0	0	0	0	0	0		500		
	10	23011048 Sheridan	4						APARTMENT		0	1600	0	0	0	0	0		1600		
	10	23011049 Sheridan	2						APARTMENT		0	800	0	0	0	0	0		800		
	10	23011050 Sheridan	1						SF HOME		500	0	0	0	0	0	0		500		
	10	23011051 Sheridan	4						APARTMENT		0	1600	0	0	0	0	0		1600		
	11	23011053 Sheridan	1						SF HOME		500	0	0	0	0	0	0		500		
	10	23011054 Sheridan	1						SF HOME		500	0	0	0	0	0	0		500		
											22,500	3,942,800	-	176,191	81,153	200,465	79,628		4,502,737		
690 Pohukaina	46	21051041 Pauahi		851	19,000	76,000		APARTMENT		0	340,400	0	1311	5244	0			346955			
Ward Entertainment Village	62 (HH 1)	23002104 Auahi																			

Table 2: Population and Utility Demands - Existing Conditions

Development Name	Land Use: Existing Condition										Sewer											
	Block	TMK	HCDA Neighborhood	SF Residential	MF Residential	Hotel	Civic / Office	Commercial / Retail	General / Light Industry	Other	Use	4	2.8	2	300	140	100	Other	Average Flow	Equivalent Population		
												units	units	units	SF	SF	SF	cap/unit	cap/unit	cap/unit	cpa	cpa
RESTAURANT ROW	51	21029001	Pauahi				500,812	41,999			OFFICES							3,449	-	-	86,228	1,000
KEAHOU LANE COURTHOUSE - SINGLE STORY	45 (KS A)	21030001	Pauahi	632							APARTMENT/COMMERCIAL	-		1,770	-	-	135	-	-	144,975	1,000	
	1	21030003	Civic Center				68,300				OFFICES	-		-			470	-	-	11,760		
	1	21030004	Civic Center				6,000	1,000			WAREHOUSE	-		-			41	-	-	58		
	1	21030013	Civic Center				2,874				OFFICES	-		-			20	-	-	1,034		
	1	21030014	Civic Center					2,856			OFFICES	-		-				-	-	495		
	1	21030015	Civic Center				9,438				WAREHOUSE	-		-				-	-	164		
	1	21030017	Civic Center				19,907				OFF ENCL WAREHSE	-		-			65	-	-	1,625		
	2	21031002	Civic Center				2,500				OFFICES	-		-			137	-	-	3,428		
	2	21031005	Civic Center				1,533	1,533			OFFICES / WAREHOUSE	-		-			11	-	-	352		
	2	21031006	Civic Center				22,753				BANK/SAVINGS INST/PARKING	-					157	-	-	3,918		
DOT	2	21031010	Civic Center								PARK STRUCTURE	-		-				-	-	1	25	
DOT	2	21031012	Civic Center				55,000				OFFICES	-					379	-	-	9,470		
HFD HQ/Museum	2	21031015	Civic Center				50,050				OFFICES	-					345	-	-	8,618		
HFD Kaka'ako Station	2	21031018	Civic Center				5,200				OFFICES	-					36	-	-	896		
	2	21031019	Civic Center	6							APARTMENT	-		17				-	-		1,360	
	2	21031021	Civic Center	96			14,200				OFFICES	-		-			98	-	-	2,445		
HONUAKAHA	2	21031024	Civic Center				11,410				APARTMENT / OFFICES	-		269			125	-	-	24,654		
	2	21031030	Pauahi					26,800				OFFICES/PARKING	-		79				-	-	1,965	
	42	21031032	Pauahi				2,284	5,450			AUTO PARTS/SERVICE	-		-				62	-	-	1,539	
	42	21031033	Pauahi				17,554				OFFICES/WAREHOUSE	-		-			16	-	-	707		
Mission Houses	4	21032001	Civic Center				103,433				OFFICES	-		-			121	-	-	3,023		
Mission Houses	4	21032002	Civic Center				14,163				OFFICES/PARKING	-		712			98	-	-	17,809		
	4	21032002	Civic Center					420			OFFICES	-		-			98	-	-	2,439		
	5	21032007	Civic Center				19,289				LIGHT MANUFACTURING	-		-				1	-	-	25	
	5	21032008	Civic Center	2							WAREHOUSE	-		-			44	-	-	1,108		
	5	21032009	Civic Center				4,079				SF HOME	-		-			28	-	-	640		
	5	21032010	Civic Center					25,004				OFFICES	-		-			703	-	-		
	5	21032010	Civic Center				5,002				WAREHOUSE	-		-			34	-	-	1,436		
	5	21032012	Civic Center				4,060	5,893			MEZZ ENCL OFFICE	-		-			28	-	-	862		
	3	21032015	Civic Center					30,186				AUTO PARTS/SERVICE	-		-			14	-	-	339	
KAWAIHAO CHURCH	3	21032017	Civic Center				11,805	11,805			WAREHOUSE	-		-			208	-	-	5,200		
	3	21032017	Civic Center					4,977				RELIGIOUS INST	-		-			82	-	-	2,050	
	3	21032017	Civic Center				14,500				SCHOOL	-		-				-	-	63	1,575	
	3	21032022	Civic Center					6,192				OFFICES	-		100				-	-	2,497	
	3	21032022	Civic Center						6,192			SCHOOL	-		-			78	-	-	1,950	
HECO	6TS	21044003	Thomas Square				15,385				OFFICES	-		-			43	-	-	1,067		
HECO	6TS	21044003	Thomas Square					140,843				WAREHOUSE	-		-			5	-	-	130	
HONOLULU CLUB	6TS	21044004	Thomas Square				2,769				BENEATH BLDG PARK ENCL	-		-			106	-	-	2,649		
HONOLULU CLUB	6TS	21044005	Thomas Square				69,299				OFFICES	-		-				-	-	323	8,084	
HONOLULU CLUB	6TS	21044005	Thomas Square								OFFICES	-		-			19	-	-	477		
	18	21044022	Kapiolani				84,296				10912 RESTAURANT	-		-			477	-	-	3274	16,370	
	18	21044022	Kapiolani					4,679			38909 BENEATH BLDG PARK ENCL	-		-			581	-	-	26		
	18	21044022	Kapiolani					9,933			OFFICES	-		-			15	-	-	14,514		
	18	21044022	Kapiolani					36,380			RETAIL STORE	-		-				-	-	376		
	18	21044023	Kapiolani								WAREHOUSE	-		-				-	-	571		
	18	21044023	Kapiolani								AUTO SHOWROOM/OFFICE	-		-			117	-	-	2,924		
	18	21044023	Kapiolani								PARK STRUCTURE	-		-				-	-	1	25	
	18	21044023	Kapiolani								AUTO PARTS/SERVICE	-		-				-	-	65	1,619	
ROYAL COURT	6TS	21044033	Thomas Square	112							APARTMENT	-		314				-	-	25,120		
	18	21044034	Kapiolani								4000 RESTAURANT	-		-				-	-	1200	6,000	
	6TS	21044038	Thomas Square				1,749				CONVENIENCE STORE	-		-			6	-	-	141		
ONE ARCHER LANE VANGUARD LOFTS	6Kap	21044041	Thomas Square	331							APARTMENT	-		927				-	-	74,160		
VANGUARD LOFTS	6Kap	21044046	Kapiolani	38							APARTMENT	-		107				-	-	8,560		
	15	21044046	Kapiolani				3,857				AUTO SHOWROOM/OFFICE	-		-				-	-	291		
	15	21046001	Kapiolani					10,727			MEZZ ENCL OFFICE	-		-			27	-	-	665		
	15	21046001	Kapiolani					11,446			AUTO PARTS/SERVICE	-		-				-	-	25	616	
	15	21046002	Kapiolani								AUTO SHOWROOM/OFFICE	-		-			12	-	-	307		
	15	21046003	Kapiolani				14,170				OFFICES	-		-			98	-	-	3434	17,170	
	15	21046003	Kapiolani				11,993				OFFICES	-		-			83	-	-	2,440		
	15	21046005	Kapiolani				2,538				OFFICES	-		-			17	-	-	2,065		
	15	21046005	Kapiolani				6,213				MEZZ ENCL OFFICE	-		-			43	-	-	437		
	15	21046005	Kapiolani					6,213			WAREHOUSE	-		-				-	-	1,070		
	15	21046007	Kapiolani				42,978				OFFICES	-		-			296	-	-	357		
HO'OMANA NA'AUAAO O																				7,400		
Hawai'i - CHURCH	15	21046003	Kapiolani					6,907			RELIGIOUS INST	-		-					-	48	1,200	
PACIFIC PARK PLAZA	16	21047001	Kapiolani				96,613				OFFICES	-		-			665	-	-	16,635		
	14	21047002	Kapiolani								PARK STRUCTURE	-		-				-	-			
801 SOUTH PH1	14	21047003	Kapiolani	636										1,781				-	-	142,480	1,000	
801 SOUTH PH1	14	21047003	Kapiolani					66,593			OFFICES	-		-			459	-	-	11,466		
801 SOUTH PH2	14	21047003	Kapiolani	410							APARTMENT	-		1,148				-	-	91,840	1,000	
801 SOUTH PH2	14	21047003	Kapiolani															-	-			

Table 2: Population and Utility Demands - Existing Condition

Development Name	Land Use: Existing Condition										Sewer									
	Block	TMK	HCDA Neighborhood	SF Residential	MF Residential	Hotel	Civic / Office	Commercial / Retail	General / Light Industry	Other	Use	4	2.8	2	300	140	100	Other	Average Flow	Equivalent Population
ROYAL CAPITOL PLAZA	14	21047005 Kapiolani						units	units	units	SF	SF	SF						300	4
	14	21047005 Kapiolani							3,724										87	1
	14	21047005 Kapiolani								1,506									686	9
	14	21047005 Kapiolani								3,984									66,560	832
	14	21047008 Kapiolani								297										
	14	21047008 Kapiolani																		
	14	21047008 Kapiolani																		
	14	21047008 Kapiolani																		
	41	21049001 Pauahi																		
	41	21049001 Pauahi																		
KEOLA LAI	41	21049001 Pauahi																		
	41	21049002 Pauahi																		
	41	21049002 Pauahi																		
	41	21049002 Pauahi																		
	41	21049002 Pauahi																		
	40	21048008 Pauahi																		
	40	21048008 Pauahi																		
	40	21048008 Pauahi																		
	41	21048022 Pauahi																		
	41	21048022 Pauahi																		
KEOLA LAI	41	21048022 Pauahi																		
	27	21049001 Central Kakaako																		
	27	21049003 Central Kakaako																		
	27	21049003 Central Kakaako																		
	27	21049004 Central Kakaako																		
	27	21049005 Central Kakaako																		
	26	21049008 Central Kakaako																		
	26	21049009 Central Kakaako																		
	26	21049010 Central Kakaako																		
	26	21049011 Central Kakaako																		
IMPERIAL PLAZA	26	21049011 Central Kakaako																		
	26	21049012 Central Kakaako																		
	26	21049014 Central Kakaako																		
	26	21049015 Central Kakaako																		
	26	21049018 Central Kakaako																		
	26	21049019 Central Kakaako																		
	26	21049020 Central Kakaako																		
	26	21049021 Central Kakaako																		
	26	21049022 Central Kakaako																		
	26	21049023 Central Kakaako																		
IMPERIAL PLAZA	26	21049027 Central Kakaako																		
	17	21049027 Central Kakaako																		
	17	21049027 Central Kakaako																		
	17	21049027 Central Kakaako																		
	26	21049028 Central Kakaako																		
	26	21049029 Central Kakaako																		
	26	21049030 Central Kakaako																		
	26	21049031 Central Kakaako																		
	26	21049032 Central Kakaako																		
	26	21049032 Central Kakaako																		
803 Waimanu	24	21049040 Central Kakaako																		
	24	21049041 Central Kakaako																		
	24	21049042 Central Kakaako																		
	24	21049043 Central Kakaako																		
	24	21049044 Central Kakaako																		
	24	21049045 Central Kakaako																		
	24	21049046 Central Kakaako																		
	24	21049047 Central Kakaako																		
	24	21049048 Central Kakaako																		
	24	21049049 Central Kakaako																		
803 Waimanu	24	21049050 Central Kakaako																		
	24	21049054 Central Kakaako																		
	24	21049054 Central Kakaako																		
	24	21049054 Central Kakaako																		
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Table 2: Population and Utility Demands - Existing Condition

Development Name	Land Use: Existing Condition										Sewer									
	Block	TMK	HCDA Neighborhood	SF Residential	MF Residential	Hotel	Civic / Office	Commercial / Retail	General / Light Industry	Other	Use	4	2.8	2	300	140	100	Other	Average Flow	Equivalent Population
25	21049057 Central Kakaako		units 1	units	units	SF	SF	SF	SF	SF	SF HOME	cap/unit 4	cap/unit	-	-	-	-	320	4	
25	21049058 Central Kakaako								4,275		WAREHOUSE							246	3	
25	21049060 Central Kakaako								1,008		RETAIL STORE							81	1	
25	21049060 Central Kakaako								2,400		WAREHOUSE							138	2	
25	21049061 Central Kakaako								3,800		WAREHOUSE							219	3	
19	21049063 Kapiolani										OFFICES							897	11	
19	21049063 Kapiolani								5,207		RESTAURANT							1572	98	
19	21049064 Kapiolani								5,239		OFFICES							521	7	
19	21049064 Kapiolani								3,022		RESTAURANT							1044	65	
19	21049065 Kapiolani								3,478		AUTO SHOWROOM/OFFICE							4,269	53	
19	21049065 Kapiolani								53,124		MEZZ DISPLAY SALES							84	1	
25	21049069 Central Kakaako								1,034		RETAIL STORE							226	3	
24	21049070 Central Kakaako								2,805		OFF ENCL WAREHSE							28	0	
24	21049071 Central Kakaako								160		WAREHOUSE							106	1	
24	21049073 Central Kakaako								1,830		WAREHOUSE							436	5	
19	21049075 Kapiolani								7,580		WAREHOUSE							54	1	
19	21049075 Kapiolani								665		MEZZ DISPLAY SALES							259	3	
19	21049075 Kapiolani								1,501		OFFICES							303	4	
24	21049076 Central Kakaako								5,267		WAREHOUSE							177	2	
24	21049076 Central Kakaako								1,026		OFFICES							347	4	
27	21049078 Central Kakaako								6,030		WAREHOUSE							833	10	
26	21049079 Central Kakaako								14,500		AUTO PARTS/SERVICE							703	9	
19	21049080 Kapiolani								3,564		WAREHOUSE							1,211	15	
HH 5	21050001 Pauahi								9,600		WAREHOUSE							836	10	
30R	21050002 Central Kakaako								3,050		OFFICES							257	3	
30R	21050003 Central Kakaako								3,500		OFF ENCL WAREHSE							211	3	
30R	21050003 Central Kakaako								20,500		WAREHOUSE							207	3	
30R	21050004 Central Kakaako								6,202		OFF ENCL WAREHSE							33	1	
30R	21050004 Central Kakaako								3,082		RETAIL STORE							48	1	
30R	21050004 Central Kakaako								12,241		WAREHOUSE							28	9	
30R	21050007 Central Kakaako								7,030		OFFICES							9	232	
30R	21050009 Central Kakaako								1,225		WAREHOUSE							211	3	
30R	21050011 Central Kakaako								1,200		OFFICES							207	3	
30R	21050011 Central Kakaako								14,550		WAREHOUSE							33	10	
30R	21050012 Central Kakaako								1,488		OFFICES							257	3	
28	21050012 Central Kakaako								320		PARKING PAR/ENCL							1	0	
28	21050016 Central Kakaako								6,816		WAREHOUSE							392	5	
28	21050017 Central Kakaako								5,150		WAREHOUSE							296	4	
28	21050018 Central Kakaako								6,300		OFFICES							1085	14	
28	21050019 Central Kakaako								2,436		AUTO PARTS/SERVICE							140	2	
28	21050020 Central Kakaako								2,772		AUTO PARTS/SERVICE							160	2	
28	21050021 Central Kakaako								1,609		WAREHOUSE							93	1	
28	21050022 Central Kakaako								2,500		AUTO PARTS/SERVICE							144	2	
28	21050023 Central Kakaako								5,000		AUTO PARTS/SERVICE							287	4	
28	21050024 Central Kakaako								320		OFFICES							56	1	
28	21050027 Central Kakaako								720		MEZZ DISPLAY SALES							58	1	
28	21050027 Central Kakaako								2,850		WAREHOUSE							164	2	
28	21050028 Central Kakaako								1,388		MEZZ DISPLAY SALES							112	1	
28	21050028 Central Kakaako								8,200		OFFICES							239	3	
28	21050030 Central Kakaako								9,750		WAREHOUSE							471	6	
28	21050030 Central Kakaako								8,000		LIGHT MANUFACTURING							560	7	
28	21050031 Central Kakaako								1,207		WAREHOUSE							460	6	
28	21050031 Central Kakaako								2,289		RETAIL STORE							97	1	
28	21050032 Central Kakaako								4,319		WAREHOUSE							132	2	
28	21050033 Central Kakaako								240		RETAIL STORE							348	4	
28	21050033 Central Kakaako								2,104		MEZZ ENCL OFFICE							42	1	
28	21050034 Central Kakaako								2,116		VETERINARIAN							121	2	
28	21050034 Central Kakaako								4,644		WAREHOUSE							375	5	
28	21050035 Central Kakaako								6,000		WAREHOUSE							267	3	
28	21050036 Central Kakaako								557		OFFICES							345	4	
28	21050036 Central Kakaako								6,422		WAREHOUSE							96	1	
28	21050037 Central Kakaako	1							3		APARTMENT							369	5	
28	21050037 Central Kakaako								760		OFFICES							240	3	
28	21050038 Central Kakaako								440		MEZZ ENCL OFFICE							131	2	
28	21050039 Central Kakaako								3,772		WAREHOUSE							76	1	
28	21050042 Central Kakaako								7,300		BENEATH BLDG PARK ENCL							217	3	
29	21050043 Central Kakaako								905		WAREHOUSE							15	0	
29	21050043 Central Kakaako								3,761		MEZZ ENCL OFFICE							25	2	
29	21050045 Central Kakaako								2,576		AUTO PARTS/SERVICE							419	5	
29	21050046 Central Kakaako								2,972		AUTO PARTS/SERVICE							156	2	
29	21050046 Central Kakaako								1,600		MEZZ ENCL OFFICE							276	3	
29	21050046 Central Kakaako								4,050		WAREHOUSE							233	3	
29	21050049 Central Kakaako	2							6		APARTMENT							480	6	
29	21050052 Central Kakaako								3,096		BANK/SAVINGS INST							534	7	
29	21050052 Central Kakaako								6,943		MEZZ ENCL OFFICE							1,196	15	
28	21050054 Central Kakaako								7,150		RETAIL STORE							575	7	
28	21050055 Central Kakaako								2,000		WAREHOUSE							115	1	

Table 2: Population and Utility Demands - Existing Condition

Development Name	Land Use: Existing Condition										Sewer																							
	Block	TMK	HCDA Neighborhood	SF Residential		MF Residential		Hotel		Civic / Office		Commercial / Retail		General / Light Industry		Other Use	cap/unit		cap/unit		cap/unit		cpa		cpa		cpa		cap		gpd		cap	
				units	units	units	SF	SF	SF	SF	SF	SF	SF	Other	Use	4	2.8	2	300	140	100	Other	Average Flow	Equivalent Population										
	29	21050056 Central Kakaako		units	units	units	SF	SF	SF	SF	SF	SF	SF	2,075	AUTO PARTS/SERVICE	cap/unit	-	-	-	-	5	120	2											
	28	21050057 Central Kakaako												3,000	WAREHOUSE	cap/unit	-	-	-	-	7	173	2											
	30R	21050058 Central Kakaako												5,677	LIGHT MANUFACTURING	cap/unit	-	-	-	-	13	326	4											
	28	21050059 Central Kakaako												2,900	LIGHT MANUFACTURING	cap/unit	-	-	-	-	7	167	2											
	28	21050060 Central Kakaako												960	WAREHOUSE	cap/unit	-	-	-	-	2	56	1											
	HH 5	21050061 Pauahi												12,800	RETAIL STORE	cap/unit	-	-	-	-	41	-	1,029	13										
	HH 5	21050061 Pauahi												15,429	WAREHOUSE	cap/unit	-	-	-	-	35	-	886	11										
	HH 5	21050062 Pauahi												4,808	RESTAURANT	cap/unit	-	-	-	-	11	-	1443	7,215	90									
	HH 5	21050062 Pauahi												4,808	WAREHOUSE	cap/unit	-	-	-	-	11	-	376	3										
KAUHALE Kaka'ako	30R	21050070 Central Kakaako	269											7,108	APARTMENT	cap/unit	754	-	-	-	-	89	-	60,320	754									
KAUHALE Kaka'ako	30R	21050070 Central Kakaako												3,763	SCHOOL	cap/unit	-	-	-	-	89	-	2,225	28										
KAUHALE Kaka'ako	30R	21050070 Central Kakaako												220	OFFICES	cap/unit	-	-	-	-	89	-	648	8										
KAUHALE Kaka'ako	30R	21050070 Central Kakaako												220	CONVENIENCE STORE	cap/unit	-	-	-	-	1	-	18	0										
KAUHALE Kaka'ako	30R	21050070 Central Kakaako												220	BENEATH BLDG PARK ENCL	cap/unit	-	-	-	-	1	-	25	0										
	44	21051001 Pauahi												9,128	MEZZ ENCL OFFICE	cap/unit	-	-	-	-	63	-	-	1,572	20									
	44	21051002 Pauahi												10,775	AUTO PARTS/SERVICE	cap/unit	-	-	-	-	25	-	619	8										
	44	21051002 Pauahi												16,000	OFFICES	cap/unit	-	-	-	-	110	-	-	2,755	34									
	44	21051002 Pauahi												15,916	WAREHOUSE	cap/unit	-	-	-	-	37	-	914	11										
	43	21051007 Pauahi												18,028	OFFICES	cap/unit	-	-	-	-	124	-	-	3,104	39									
	43	21051010 Pauahi												7,589	WAREHOUSE	cap/unit	-	-	-	-	17	-	436	5										
	43	21051011 Pauahi												17,000	WAREHOUSE	cap/unit	-	-	-	-	39	-	976	12										
	43	21051012 Pauahi												1,480	OFFICES	cap/unit	-	-	-	-	10	-	-	255	3									
	43	21051012 Pauahi												29,687	WAREHOUSE	cap/unit	-	-	-	-	68	-	-	1,704	21									
POHULANI	43	21051013 Pauahi	262											6,570	APARTMENT	cap/unit	734	-	-	-	-	38	-	58,720	734									
	43	21051018 Pauahi												2,592	MEZZ ENCL OFFICE	cap/unit	-	-	-	-	18	-	-	447	6									
	43	21051018 Pauahi												6,570	WAREHOUSE	cap/unit	-	-	-	-	14	-	-	378	5									
	43	21051031 Pauahi												3,259	OFF ENCL WAREHSE	cap/unit	-	-	-	-	22	-	-	562	7									
	43	21051033 Pauahi		3										47,715	APARTMENT	cap/unit	9	-	-	-	329	-	-	720	9									
	43	21051033 Pauahi		3										16,470	RACQUET BALL COURT	cap/unit	-	-	-	-	38	-	-	8,216	103									
NĀ LE HULU KŪPUNA	44	21051038 Pauahi	76											1,995	APARTMENT	cap/unit	213	-	-	-	-	41	-	-	17,040	213								
NĀ LE HULU KŪPUNA	44	21051038 Pauahi												18,000	WAREHOUSE	cap/unit	-	-	-	-	14	-	-	344	4									
LIBRARY WAREHOUSE / Haleakuwila Place	46	21051041 Pauahi	203											46	WAREHOUSE	cap/unit	569	-	-	-	-	41	-	-	1,034	13								
	48N (not HH)	21052001 Pauahi												4,340	MEZZ ENCL OFFICE	cap/unit	-	-	-	-	30	-	-	748	9									
	48N (not HH)	21052001 Pauahi												23,334	WAREHOUSE	cap/unit	-	-	-	-	54	-	-	1,340	17									
	48N (not HH)	21052002 Pauahi												405	OFF ENCL WAREHSE	cap/unit	-	-	-	-	3	-	-	70	1									
	48N (not HH)	21052002 Pauahi												3,080	WAREHOUSE	cap/unit	-	-	-	-	7	-	-	177	2									
	48N (not HH)	21052003 Pauahi												312	MEZZ ENCL OFFICE	cap/unit	-	-	-	-	2	-	-	54	1									
	48N (not HH)	21052003 Pauahi												1,968	WAREHOUSE	cap/unit	-	-	-	-	5	-	-	113	1									
	48N (not HH)	21052005 Pauahi												6,320	WAREHOUSE	cap/unit	-	-	-	-	15	-	-	363	5									
	48N (not HH)	21052007 Pauahi												280	OFF ENCL WAREHSE	cap/unit	-	-	-	-	2	-	-	49	1									
	48N (not HH)	21052007 Pauahi												6,222	WAREHOUSE	cap/unit	-	-	-	-	14	-	-	358	4									
	48N (not HH)	21052008 Pauahi												16,800	OFFICES	cap/unit	-	-	-	-	116	-	-	2,893	36									
	HH 5	21052010 Pauahi												4,992	OFFICES	cap/unit	-	-	-	-	34	-	-	860	11									
	HH 5	21052011 Pauahi												8,452	MINI-WAREHOUSE	cap/unit	-	-	-	-	19	-	-	486	6									
	HH 5	21052012 Pauahi												1,618	OFFICES	cap/unit	-	-	-	-	11	-	-	279	3									
	HH 5	21052012 Pauahi												32,998	WAREHOUSE	cap/unit	-	-	-	-	76	-	-	1,894	24									
	48N (not HH)	21052013 Pauahi												11,978	WAREHOUSE	cap/unit	-	-	-	-	27	-	-	688	9									
	HH 5	21052017 Pauahi												3,430	MEZZ ENCL OFFICE	cap/unit	-	-	-	-	24	-	-	608	8									
	HH 5	21052020 Pauahi												16,936	WAREHOUSE	cap/unit	-	-	-	-	10	-	-	250	3									
	HH 5	21052020 Pauahi												15,668	RETAIL STORE	cap/unit	-	-	-	-	117	-	-	2,916	36									
	HH 5	21052024 Pauahi												10,403	OFFICES	cap/unit	-	-	-	-	50	-	-	1,259	16									
	HH 5	21052027 Pauahi												4,936	OFFICES	cap/unit	-	-	-	-	34	-	-	650	11									
	HH 5	21052027 Pauahi												4,938	RESTAURANT	cap/unit	-	-	-	-	59	-	-	1,481	93									
	HH 5	21052028 Pauahi												8,571	OFFICES	cap/unit	-	-	-	-	8	-	-	1,476	18									
	HH 5	21052028 Pauahi												3,380	WAREHOUSE	cap/unit	-	-	-	-	71	-	-	194	2									
	HH 5	21052031 Pauahi												2,800	MEZZ ENCL OFFICE	cap/unit	-	-	-	-	19	-	-	483	6									
	HH 5	21052031 Pauahi																																

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Development Name	Land Use: Existing Condition										Sewer									
	Block	TMK	HCDA Neighborhood	SF Residential	MF Residential	Hotel	Civic / Office	Commercial / Retail	General / Light Industry	Other	Use	4	2.8	2	300	140	100	Other	Average Flow	Equivalent Population
				units	units	units	SF	SF	SF	SF	WAREHOUSE	cap/unit	cap/unit	-	-	-	10	255	3	
											SF HOME	4	-	-	-	-	-	320	4	
HH 5	21052053 Pauahi										WAREHOUSE	-	-	-	-	-	-	2,921	37	
HH 5	21052054 Pauahi		1								RETAIL STORE	-	-	-	-	-	-	1,388	17	
HH 5	21053001 Pauahi										OFFICES	-	-	-	-	-	-	2,427	30	
HH 5	21053030 Pauahi										WAREHOUSE	-	-	-	-	-	-	6,257	78	
HH 5	21053030 Pauahi										MEZZ DISPLAY SALES	-	-	-	-	-	-	1,607	20	
55 (KS D)	21053032 Pauahi										BAR LOUNGE	-	-	-	-	-	-	1,200	15	
55 (KS D)	21053032 Pauahi										MEZZ ENCL OFFICE	-	-	-	-	-	-	564	7	
55 (KS D)	21053032 Pauahi										WAREHOUSE	-	-	-	-	-	-	4,610	58	
55 (KS D)	21053032 Pauahi										OFF ENCL WAREHSE	-	-	-	-	-	-	759	9	
55 (KS D)	21053032 Pauahi										RETAIL STORE	-	-	-	-	-	-	3,290	41	
55 (KS D)	21053032 Pauahi										OFFICES	-	-	-	-	-	-	1,920	24	
ONE WATERFRONT TOWERS	52X	21054022 Pauahi									OFFICES	-	-	-	-	-	-	8,591	107	
ONE WATERFRONT TOWERS	52X	21054022 Pauahi		306							OFFICES	-	-	-	-	-	-			
											APARTMENT	-	857	-	-	-	-	68,560	857	
	52 (KS B)	21054025 Pauahi									WAREHOUSE	-	-	-	-	-	-	2,338	29	
	52 (KS B)	21054025 Pauahi									OFF ENCL WAREHSE	-	-	-	-	-	-	1,712	21	
	52 (KS B)	21054025 Pauahi									RETAIL STORE	-	-	-	-	-	-	1,477	18	
	52 (KS B)	21054027 Pauahi									SCHOOL	-	-	-	-	-	-	5,325	67	
	52 (KS B)	21054027 Pauahi									MEZZ ENCL OFFICE	-	-	-	-	-	-	517	6	
	52 (KS B)	21054028 Pauahi									WAREHOUSE	-	-	-	-	-	-	1,412	18	
	52 (KS B)	21054028 Pauahi									OFF ENCL WAREHSE	-	-	-	-	-	-	224	3	
	54 (KS C)	21054036 Pauahi									WAREHOUSE	-	-	-	-	-	-	3,210	40	
	59	21055001 Pauahi									RETAIL STORE	-	-	-	-	-	-	407	5	
	59	21055002 Pauahi									AUTO SHOWROOM/OFFICE	-	-	-	-	-	-	1,698	21	
	59	21055002 Pauahi									AUTO PARTS/SERVICE	-	-	-	-	-	-	148	2	
	58	21055003 Pauahi									RETAIL STORE	-	-	-	-	-	-	441	6	
	58	21055003 Pauahi									WAREHOUSE	-	-	-	-	-	-	503	6	
	58	21055003 Pauahi									MEZZ ENCL OFFICE	-	-	-	-	-	-	944	12	
THE COLLECTION	57	21055004 Pauahi		467							APARTMENT/COMMERCIAL	-	-	-	-	-	-	105,684	1,321	
	58	21055006 Pauahi									WAREHOUSE	-	-	-	-	-	-	401	5	
	58	21055006 Pauahi									OFFICES	-	-	-	-	-	-	1,240	16	
	58	21055021 Pauahi									OFFICES	-	-	-	-	-	-	3,810	48	
	58	21055026 Pauahi									RETAIL STORE	-	-	-	-	-	-	195	2	
	59	21055032 Pauahi									WAREHOUSE	-	-	-	-	-	-	276	3	
	59	21055032 Pauahi									OFFICES	-	-	-	-	-	-	35	0	
	59	21055033 Pauahi									WAREHOUSE	-	-	-	-	-	-	417	5	
	59	21055034 Pauahi									RETAIL STORE	-	-	-	-	-	-	399	5	
	59	21055035 Pauahi									WAREHOUSE	-	-	-	-	-	-	308	4	
	58	21055038 Pauahi									OFFICES	-	-	-	-	-	-	1,833	23	
	58	21055038 Pauahi									WAREHOUSE	-	-	-	-	-	-	1,169	15	
	58	21055038 Pauahi									OFFICES	-	-	-	-	-	-	332	4	
	58	21055038 Pauahi									MEZZ ENCL OFFICE	-	-	-	-	-	-	5,919	74	
HH 5	21056001 Pauahi										OFFICES	-	-	-	-	-	-	1,229	15	
HH 5	21056001 Pauahi										BANK/SAVINGS INST	-	-	-	-	-	-	905	11	
61	21056002 Pauahi										OFFICES	-	-	-	-	-	-	28	9	
61	21056002 Pauahi										WAREHOUSE	-	-	-	-	-	-	711	9	
60	21056003 Pauahi										RETAIL STORE	-	-	-	-	-	-	1,920	24	
60	21056004 Pauahi										WAREHOUSE	-	-	-	-	-	-	306	4	
60	21056004 Pauahi										OFF ENCL WAREHSE	-	-	-	-	-	-	210	3	
60	21056004 Pauahi										AUTO SHOWROOM/OFFICE	-	-	-	-	-	-	981	12	
60	21056004 Pauahi										AUTO PARTS/SERVICE	-	-	-	-	-	-	739	9	
61	21056007 Pauahi										OFFICES	-	-	-	-	-	-	3,584	45	
61	21056008 Pauahi										OFFICES	-	-	-	-	-	-	285	4	
61	21056008 Pauahi										AUTO PARTS/SERVICE	-	-	-	-	-	-	921	12	
64 (HS 2)	23001005 Auahi										MEZZ DISPLAY SALES	-	-	-	-	-	-	239	3	
64 (HS 2)	23001005 Auahi										MEZZ ENCL OFFICE	-	-	-	-	-	-	640	8	
64 (HS 2)	23001005 Auahi										PARK STRUCTURE	-	-	-	-	-	-	2,645	33	
64 (HS 2)	23001005 Auahi										RESTAURANT	-	-	-	-	-	-	1	0	
64 (HS 2)	23001005 Auahi										RETAIL STORE	-	-	-	-	-	-	1,225	140	
62 (HH 1)	23002001 Auahi										RETAIL STORE	-	-	-	-	-	-	8,864	111	
62 (HH 1)	23002001 Auahi										WAREHOUSE	-	-	-	-	-	-	6,685	82	
62 (HH 1)	23002001 Auahi										BENEATH BLDG PARK ENCL	-	-	-	-	-	-	4,640	58	
62 (HH 1)	23002002 Auahi										RESTAURANT	-	-	-	-	-	-	2245	140	
62 (HH 1)	23002057 Auahi										RETAIL STORE	-	-	-	-	-	-	1,894	24	
62 (HH 1)	23002058 Auahi										OFF ENCL WAREHSE	-	-	-	-	-	-	242	3	
62 (HH 1)	23002058 Auahi										WAREHOUSE	-	-	-	-	-	-	322	4	
62 (HH 1)	23002059 Auahi										DEPARTMENT STORE	-	-	-	-	-	-	11,116	139	
62 (HH 1)	23002059 Auahi										WAREHOUSE	-	-	-	-	-	-	40	13	
62 (HH 1)	23002066 Auahi										WAREHOUSE	-	-	-	-	-	-	6	2	
62 (HH 1)	23002069 Auahi										WAREHOUSE	-	-	-	-	-	-	9	3	
62 (HH 1)	23002104 Auahi										BENEATH BLDG PARK ENCL	-	-	-	-	-	-	25	0	
62 (HH 1)	23002104 Auahi										CINEMA	-	-	-	-	-	-	20,000	100,000	
62 (HH 1)	23002104 Auahi										RESTAURANT	-	-	-	-	-	-	11610	58,050	
62 (HH 1)	23002104 Auahi										RETAIL STORE	-	-	-	-	-	-	2,175	27	
34	2303004 Central Kakaako										MEZZ DISPLAY SALES	-	-	-	-	-	-	234	3	
34	2303004 Central Kakaako										OFFICES	-	-	-	-	-	-	500	6	
34	2303005 Central Kakaako										OFFICES	-	-	-	-	-	-	560	7	
34	2303005 Central Kakaako										WAREHOUSE	-	-	-	-	-	-	58	1	
34	2303006 Central Kakaako										WAREHOUSE	-	-	-	-	-	-	161	2	

Table 2: Population and Utility Demands - Existing Condition

Development Name	Land Use: Existing Condition										Sewer									
	Block	TMK	HCDA Neighborhood	SF Residential	MF Residential	Hotel	Civic / Office	Commercial / Retail	General / Light Industry	Other	Use	SF Residential	MF Residential	Hotel	Civic / Office	Retail	General / Light Industry	Other	Average Flow	Equivalent Population
	34	23003007 Central Kakaako		units	units	units	SF	SF	SF	SF	APARTMENT	cap/unit	cap/unit	6	-	-	-	480	6	
	34	23003008 Central Kakaako		2			21,888				MINI-WAREHOUSE	-	-	-	151	-	-	3,769	47	
	34	23003008 Central Kakaako					2,786				OFF ENCL WAREHSE	-	-	-	19	-	-	480	6	
	34	23003008 Central Kakaako						21,207			WAREHOUSE	-	-	-	-	49	1,218	15		
	34	23003011 Central Kakaako					1,732				OFF ENCL WAREHSE	-	-	-	12	-	-	299	4	
	34	23003011 Central Kakaako							3,000		RACQUET BALL COURT	-	-	-	-	-	7	175	2	
	34	23003012 Central Kakaako								2,784	WAREHOUSE	-	-	-	-	6	160	2		
	34	23003013 Central Kakaako					3,000				OFFICES	-	-	-	21	-	-	517	6	
	34	23003014 Central Kakaako										-	-	-	-	-	-	-	-	
	34	23003015 Central Kakaako					15,000				OFFICES	-	-	-	103	-	-	2,583	32	
KAMAKEE VISTA	34	23003018 Central Kakaako	226								APARTMENT	-	-	-	633	-	-	50,640	633	
KAMAKEE VISTA	34	23003018 Central Kakaako					736				MEZZ ENCL OFFICE	-	-	-	5	-	-	127	2	
KAMAKEE VISTA	34	23003018 Central Kakaako						15,285			OFFICES	-	-	-	105	-	-	2,632	33	
KAMAKEE VISTA	34	23003018 Central Kakaako							9,059		PARKING PAR/ENCL	-	-	-	-	-	-	-	-	
KAMAKEE VISTA	32	23003018 Central Kakaako					1,792				SCHOOL	-	-	-	-	114	2,850	36		
	32	23003020 Central Kakaako					969				WAREHOUSE	-	-	-	-	4	103	1		
	32	23003020 Central Kakaako						9,969			MEZZ ENCL OFFICE	-	-	-	7	-	-	167	2	
	32	23003021 Central Kakaako						3,500			WAREHOUSE	-	-	-	-	23	573	7		
	32	23003022 Central Kakaako					2,472				WAREHOUSE	-	-	-	-	8	201	3		
	32	23003022 Central Kakaako					948				MEZZ DISPLAY SALES	-	-	-	7	-	-	164	2	
	32	23003022 Central Kakaako					556				MEZZ ENCL OFFICE	-	-	-	4	-	-	96	1	
	32	23003022 Central Kakaako						7,120			OFF ENCL WAREHSE	-	-	-	-	16	409	5		
	32	23003023 Central Kakaako					8,455				WAREHOUSE	-	-	-	-	19	486	6		
	32	23003024 Central Kakaako					6,493				OFFICES	-	-	-	45	-	-	1,118	14	
	32	23003024 Central Kakaako						5,513			RETAIL STORE	-	-	-	18	-	-	443	6	
	32	23003026 Central Kakaako						4,018			LIGHT MANUFACTURING	-	-	-	-	9	231	3		
	32	23003026 Central Kakaako					690				MEZZ ENCL OFFICE	-	-	-	5	-	-	119	1	
	32	23003028 Central Kakaako						1,890			RESTAURANT	-	-	-	-	567	2,835	35		
	32	23003030 Central Kakaako	1					2,940			WAREHOUSE	-	-	-	-	7	169	2		
	32	23003031 Central Kakaako					312				SF HOME	4	-	-	-	-	320	4		
	32	23003031 Central Kakaako					572				MEZZ ENCL OFFICE	-	-	-	2	-	-	54	1	
	32	23003031 Central Kakaako						1,628			OFFICES	-	-	-	4	-	-	99	1	
	32	23003032 Central Kakaako	1								APARTMENT	-	-	-	-	1	240	3		
	32	23003032 Central Kakaako					2,526				BENEATH BLDG PARK ENCL	-	-	-	-	-	25	0		
	33	23003037 Central Kakaako						8,550			OFFICES	-	-	-	17	-	-	435	5	
	33	23003038 Central Kakaako					2,800				WAREHOUSE	-	-	-	-	20	491	6		
	33	23003038 Central Kakaako					2,800				MEZZ ENCL OFFICE	-	-	-	19	-	-	483	6	
	33	23003038 Central Kakaako						13,680			OFF ENCL WAREHSE	-	-	-	19	-	-	483	6	
	33	23003043 Central Kakaako					24,064				WAREHOUSE	-	-	-	-	31	786	10		
	33	23003043 Central Kakaako									OFFICES	-	-	-	166	-	-	4,144	52	
	33	23003046 Central Kakaako					4,414				WAREHOUSE	-	-	-	-	10	254	3		
	33	23003047 Central Kakaako					3,000				WAREHOUSE	-	-	-	7	-	-	173	2	
	33	23003048 Central Kakaako					3,800				WAREHOUSE	-	-	-	9	-	-	219	3	
	33	23003049 Central Kakaako					3,936				OFFICES	-	-	-	27	-	-	678	8	
	33	23003059 Central Kakaako						27,158			RETAIL STORE	-	-	-	13	-	-	317	4	
	31	23003061 Central Kakaako									WAREHOUSE	-	-	-	62	-	-	1,559	19	
	31	23003061 Central Kakaako					4,199				BENEATH BLDG PARK ENCL	-	-	-	-	1	26	0		
	31	23003061 Central Kakaako									OFFICES	-	-	-	-	-	723	9		
	31	23003061 Central Kakaako									RESTAURANT	-	-	-	29	-	-	423	26	
	31	23003062 Central Kakaako									BENEATH BLDG PARK ENCL	-	-	-	-	1	25	0		
	31	23003062 Central Kakaako					7,500				WAREHOUSE	-	-	-	-	17	431	5		
	31	23003063 Central Kakaako					480				OFF ENCL WAREHSE	-	-	-	3	-	-	83	1	
	31	23003063 Central Kakaako						1,920			WAREHOUSE	-	-	-	-	4	111	1		
	31	23003064 Central Kakaako					10,000				OFFICES	-	-	-	23	-	-	574	7	
	31	23003065 Central Kakaako	1,446								WAREHOUSE	-	-	-	10	-	-	249	3	
	31	23003066 Central Kakaako					2,644				OFFICES	-	-	-	-	6	152	2		
	31	23003066 Central Kakaako						6,500			WAREHOUSE	-	-	-	-	15	374	5		
	31	23003067 Central Kakaako					7,530				MEZZ ENCL OFFICE	-	-	-	52	-	-	1,297	16	
	31	23003067 Central Kakaako					2,244				OFF ENCL WAREHSE	-	-	-	15	-	-	387	5	
	31	23003067 Central Kakaako						12,504			WAREHOUSE	-	-	-	-	29	718	9		
	31	23003068 Central Kakaako					1,600				OFF ENCL WAREHSE	-	-	-	11	-	-	276	3	
	31	23003069 Central Kakaako						3,680			WAREHOUSE	-	-	-	-	8	212	3		
	31	23003069 Central Kakaako									MEZZ ENCL OFFICE	-	-	-	10	-	-	262	3	
	31	23003069 Central Kakaako					1,520				WAREHOUSE	-	-	-	-	8	205	3		
	31	23003069 Central Kakaako						3,560			MEZZ ENCL OFFICE	-	-	-	9	-	-	222	3	
	20	23003071 Kapiolani					1,287				MEZZ ENCL OFFICE	-	-	-	19	-	-	483	6	
	20	23003071 Kapiolani					2,803				WAREHOUSE	-	-	-	-	16	410	5		
	20	23003071 Kapiolani						7,127			OFF ENCL WAREHSE	-	-	-	-	-	51,120	639		
909 Kapiolani	20	23003073 Kapiolani	228								APARTMENT	-	639	-	-	-	-	-	-	
909 Kapiolani	20	23003073 Kapiolani					3,923				OFFICES	-	-	-	27	-	-	676	8	
909 Kapiolani	20	23003073 Kapiolani						4,838			WAREHOUSE	-	-	-	-	11	278	3		
909 Kapiolani	20	23003074 Kapiolani					1,680				AUTO PARTS/SERVICE	-	-	-	4	-	-	97	1	
909 Kapiolani	20	23003074 Kapiolani						1,000			OFFICES	-	-	-	7	-	-	173	2	
909 Kapiolani	20	23003075 Kapiolani					16,990				MINI-WAREHOUSE	-	-	-	117	-	-	2,926	37	
31	23003078 Central Kakaako					2,684				OFF ENCL WAREHSE	-	-	-	18	-	-	463	6		
31	23003078 Central Kakaako							9,200			WAREHOUSE	-	-	-	-	21	529	7		
32	23003081 Central Kakaako					2,016				OFFICES	-	-	-	14	-	-	348	4		
32	23003083 Central Kakaako					720				OFF ENCL WAREHSE	-	-	-	5	-	-	124	2		
	32	23003083 Central Kakaako						2,240			WAREHOUSE	-	-	-	-	5	129	2		

Table 2: Population and Utility Demands - Existing Condition

Development Name	Land Use: Existing Condition											Sewer																					
	Block	TMK	HCDA Neighborhood	SF Residential		MF Residential		Hotel		Civic / Office		Commercial / Retail		General / Light Industry		4 SF Residential		2.8 MF Residential		2 Hotel		300 Civic / Office		140 Retail		100 General / Light Industry		Other		Average Flow		Equivalent Population	
				units	units	units	SF	SF	SF	Other	Use	cap/unit	cap/unit	cap/unit	cpa	cpa	cpa	cap	gpd	cap	3	109,600	1,370	803	10	2,106	26	11,250	141				
	31	23003090 Central Kakaako		1,250								OFFICES											216	3									
	31	23003091 Central Kakaako										7,500 RESTAURANT											2250	11,250	141								
	31	23003092 Central Kakaako										WAREHOUSE											8	210	3								
	31	23003093 Central Kakaako										MEZZ ENCL OFFICE											6	144	2								
	31	23003093 Central Kakaako										WAREHOUSE											16	395	5								
	31	23003094 Central Kakaako										OFFICES											6	163	2								
	32	23003094 Central Kakaako										WAREHOUSE											7	166	2								
	32	23003094 Central Kakaako										WAREHOUSE											2	60	1								
	32	23003095 Central Kakaako										OFFICES												2,106	26								
	20	23003097 Kapiolani										OFFICES											84	-	-								
	20	23003098 Kapiolani										OFFICES											95	-	-								
	20	23003099 Kapiolani										BANK/SAVINGS INST										13	-	-									
	20	23003099 Kapiolani										OFFICES											106	-	-								
PACIFICA HONOLULU	20	23003105 Kapiolani		489								APARTMENT										1,370	-	-									
PACIFICA HONOLULU	20	23003105 Kapiolani										RETAIL STORE											32	-	-								
	21	23004002 Kapiolani										OFFICES											50	-	-								
	21	23004003 Kapiolani										OFFICES											12	-	-								
	21	23004003 Kapiolani										RETAIL STORE											1278	-	-								
	21	23004007 Kapiolani										RESTAURANT											14	-	-								
	21	23004007 Kapiolani										RETAIL STORE											-	-	-								
	21	23004010 Kapiolani										CAR WASH AUTOMATIC											4	112	1								
	21	23004010 Kapiolani										SERVICE STATION W/BAYS											20	-	-								
1133 WAIMANU	35	23004012 Kapiolani										WAREHOUSE											790	-	-								
	35	23004025 Central Kakaako		282								APARTMENT											1	25	0								
	35	23004029 Central Kakaako										BENEATH BLDG PARK ENCL												1,130	14								
	35	23004029 Central Kakaako										OFFICES											45	-	-								
	35	23004031 Central Kakaako										OFFICES											4	-	-								
	35	23004033 Central Kakaako										BENEATH BLDG PARK ENCL											1	25	0								
	35	23004033 Central Kakaako										MEZZ ENCL OFFICE											20	-	-								
	35	23004033 Central Kakaako										OFFICES											20	-	-								
	35	23004033 Central Kakaako										WAREHOUSE											18	448	6								
	35	23004034 Central Kakaako										RESTAURANT											599	2,995	37								
	36	23004035 Central Kakaako										OFF ENCL WAREHSE											40	-	-								
	36	23004035 Central Kakaako										OFFICES											50	-	-								
	36	23004035 Central Kakaako										WAREHOUSE											89	2,227	28								
	36	23004037 Kapiolani										OFFICES											1	-	-								
	21	23004039 Kapiolani										AUTO PARTS/SERVICE											3	72	1								
	36	23004044 Central Kakaako										OFF ENCL WAREHSE											15	-	-								
	36	23004044 Central Kakaako										WAREHOUSE											15	373	5								
	36	23004045 Central Kakaako										OFFICES											13	-	-								
	36	23004051 Central Kakaako										WAREHOUSE											6	155	2								
	36	23004069 Central Kakaako										OFF ENCL WAREHSE										6	-	-									
	36	23004069 Central Kakaako										WAREHOUSE											20	-	-								
	35	23004071 Central Kakaako										RETAIL STORE											2	-	-								
HOKUA AT 1288 ALA MOANA	63E	23005001 Auahi										OFFICES											222	-	-								
HOKUA AT 1288 ALA MOANA	65 (H4)	23005004 Auahi										APARTMENT											695	-	-								
	65 (H4)	23005004 Auahi										OFFICES											156	-	-								
	65 (H4)	23005005 Auahi										MEZZ DISPLAY SALES											13	-	-								
	65 (H4)	23005006 Auahi										MEZZ DISPLAY SALES										3	-	-									
	65 (H4)	23005006 Auahi										PARK STRUCTURE											374	-	-								
	65H (H3)	23005013 Auahi										RETAIL STORE											219	-	-								
	65H (H3)	23005013 Auahi										DEPARTMENT STORE											20	-	-								
	65H (H3)	23005013 Auahi										MEZZ DISPLAY SALES											489	-	-								
WARD VILLAGE SHOPS	63H (H3)	23005014 Auahi										PARK STRUCTURE											417	-	-								
	63H (H3)	23005019 Auahi										DEPARTMENT STORE											50	-	-								
1350 ALA MOANA	63E	23006003 Auahi										APARTMENT											989	-	-								
NAURU TOWER	63E	23006003 Auahi										WAREHOUSE											77	-	-								
NAURU TOWER	63E	23006003 Auahi										OFFICES											11	-	-								
NAURU TOWER	63E	23006003 Auahi										RESTAURANT											77	-	-								
HAWAIKI TOWER	63E	23006004 Auahi										APARTMENT											1,204	-	-								
KOOLANI	63E	23006014 Auahi										OFFICES											289	-	-								

Table 2: Population and Utility Demands - Existing Condition

Development Name	Land Use: Existing Condition										Sewer									
	Block	TMK	HCDA Neighborhood	SF Residential	MF Residential	Hotel	Civic / Office	Commercial / Retail	General / Light Industry	Other	Use	4	2.8	2	300	140	100	Other	Average Flow	Equivalent Population
				units	units	units	SF	SF	SF	SF	cap/unit	cap/unit	cap/unit	cpa	cpa	cpa	cap	gpd	cap	
	39	23007044 Central Kakaako					3,710		8,460		OFFICES	-	-	-	-	-	-	639	8	
	39	23007045 Central Kakaako						2,045		WAREHOUSE	-	-	-	-	-	-	486	6		
	39	23007049 Central Kakaako							18,240		RETAIL STORE	-	-	-	-	-	-	165	2	
	39	23007049 Central Kakaako								WAREHOUSE	-	-	-	-	-	-	42	1,047	13	
	38	23007054 Central Kakaako							1,288		WAREHOUSE	-	-	-	-	-	-	387	1,935	24
	38	23007054 Central Kakaako								RESTAURANT	-	-	-	-	-	-	4	96	1	
	38	23007054 Central Kakaako							1,664		WAREHOUSE	-	-	-	-	-	-	9	233	3
	38	23007056 Central Kakaako							4,051		WAREHOUSE	-	-	-	-	-	-	34	859	11
	38	23007057 Central Kakaako							14,960		MANUFACTURING	-	-	-	-	-	-	-	-	-
	38	23007057 Central Kakaako								28,140	RESTAURANT	-	-	-	-	-	-	8442	42,210	528
	38	23007061 Central Kakaako								BENEATH BLDG PARK ENCL	-	-	-	-	-	-	1	25	0	
	38	23007061 Central Kakaako				2,100				MEZZ ENCL OFFICE	-	-	-	-	-	-	-	362	5	
	38	23007061 Central Kakaako							4,500	WAREHOUSE	-	-	-	-	-	-	10	259	3	
	38	23007062 Central Kakaako					1,200			MEZZ DISPLAY SALES	-	-	-	-	-	-	4	97	1	
	38	23007062 Central Kakaako							8,228	WAREHOUSE	-	-	-	-	-	-	19	473	6	
	38	23007063 Central Kakaako							8,000	WAREHOUSE	-	-	-	-	-	-	18	460	6	
	37	23007064 Central Kakaako				1,584				AUTO SHOWROOM/OFFICE	-	-	-	-	-	-	11	-	273	3
	37	23007064 Central Kakaako							6,037	WAREHOUSE	-	-	-	-	-	-	14	347	4	
	37	23007066 Central Kakaako				1,144				OFF ENCL WAREHSE	-	-	-	-	-	-	8	197	2	
	37	23007066 Central Kakaako							6,608	WAREHOUSE	-	-	-	-	-	-	6	380	5	
	37	23007067 Central Kakaako				910				OFF ENCL WAREHSE	-	-	-	-	-	-	16	157	2	
	37	23007067 Central Kakaako							6,760	WAREHOUSE	-	-	-	-	-	-	2	388	5	
	37	23007069 Central Kakaako				360				MEZZ ENCL OFFICE	-	-	-	-	-	-	-	62	1	
	37	23007069 Central Kakaako				1,608				OFF ENCL WAREHSE	-	-	-	-	-	-	11	277	3	
	37	23007069 Central Kakaako							32,137	WAREHOUSE	-	-	-	-	-	-	74	1,845	23	
	37	23007078 Central Kakaako				2,577				OFFICES	-	-	-	-	-	-	18	444	6	
	37	23007078 Central Kakaako							11,332	WAREHOUSE	-	-	-	-	-	-	26	651	8	
	38	23007092 Central Kakaako							1,724	TAVERN/BAR	-	-	-	-	-	-	87	435	5	
	38	23007093 Central Kakaako				5,385				OFFICES	-	-	-	-	-	-	37	928	12	
	23	23007098 Kapiolani							5,385	RESTAURANT	-	-	-	-	-	-	1616	8,080	101	
	23	23007099 Kapiolani							2,030	RESTAURANT	PARK STRUCTURE	-	-	-	-	-	609	3,045	38	
	23	23007100 Kapiolani				4,823				OFFICES	-	-	-	-	-	-	1	25	0	
	23	23007107 Kapiolani				31,933				OFFICES	-	-	-	-	-	-	220	5,499	69	
	7B+C	23008002 Thomas Square							19,864	PARKING PAR/ENCL	PARK STRUCTURE	-	-	-	-	-	64	1,597	20	
MCKINLEY HIGH SCHOOL	7B+C	23008003 Thomas Square								RESTAURANT	SCHOOL	-	-	-	-	-	1	25	0	
	12	23010001 Sheridan		2						APARTMENT	-	-	-	-	-	-	480	6		
	12	23010002 Sheridan								SF HOME	6	-	-	-	-	-	320	4		
	12	23010003 Sheridan	1							SF HOME	4	-	-	-	-	-	320	4		
	12	23010004 Sheridan		4						APARTMENT	-	12	-	-	-	-	960	12		
	12	23010005 Sheridan		1						APARTMENT	-	3	-	-	-	-	240	3		
	12	23010006 Sheridan			1					SF HOME	4	-	-	-	-	-	320	4		
	12	23010007 Sheridan		2						APARTMENT	-	6	-	-	-	-	480	6		
HAWAIIANA APTS	12	23010008 Sheridan		1						SF HOME	4	-	-	-	-	-	320	4		
RYCROFT MANOR	12	23010009 Sheridan		14						APARTMENT	-	40	-	-	-	-	3,200	40		
	12	23010011 Sheridan		29						APARTMENT	-	82	-	-	-	-	6,560	82		
	12	23010012 Sheridan		2						APARTMENT	-	6	-	-	-	-	480	6		
	12	23010013 Sheridan		1						APARTMENT	-	4	-	-	-	-	320	4		
	13	23010014 Sheridan		4						APARTMENT	-	12	-	-	-	-	960	12		
	13	23010015 Sheridan		1						SF HOME	4	-	-	-	-	-	320	4		
	13	23010016 Sheridan		2						APARTMENT	-	6	-	-	-	-	480	6		
	13	23010017 Sheridan		3						APARTMENT	-	9	-	-	-	-	720	9		
	13	23010018 Sheridan		1						SF HOME	4	-	-	-	-	-	320	4		
	13	23010019 Sheridan		1						APARTMENT	-	6	-	-	-	-	320	4		
	13	23010020 Sheridan		2						APARTMENT	-	6	-	-	-	-	480	6		
	13	23010021 Sheridan		2						APARTMENT	-	6	-	-	-	-	480	6		
	13	23010022 Sheridan		1						SF HOME	4	-	-	-	-	-	320	4		
	13	23010023 Sheridan		2						APARTMENT	-	6	-	-	-	-	480	6		
	13	23010024 Sheridan		4						APARTMENT	-	12	-	-	-	-	960	12		
	13	23010025 Sheridan		4						APARTMENT	-	12	-	-	-	-	960	12		
	13	23010026 Sheridan		1						SF HOME	4	-	-	-	-	-	320	4		
	13	23010027 Sheridan		1						APARTMENT	-	3	-	-	-	-	240	3		
	22	23010028 Kapiolani		1,404						APARTMENT	-	3,932	-	-	-	-	314,560	3,932		
	13	23010083 Sheridan		1						SF HOME	4	-	-	-	-	-	320	4		
	13	23010092 Sheridan		1						SF HOME	4	-	-	-	-	-	320	4		
	13	23010093 Sheridan		2						APARTMENT	-	6	-	-	-	-	480	6		
	13	23010094 Sheridan		3						APARTMENT	-	6	-	-	-	-	720	9		
	13	23010096 Sheridan		2						APARTMENT	-	6	-	-	-	-	480	6		
	13	23010097 Sheridan		2						APARTMENT	-	6	-	-	-	-	480	6		
	13	23010098 Sheridan		2						APARTMENT	-	6	-	-	-	-	480	6		
	12	23010099 Sheridan		1						APARTMENT	-	3	-	-	-	-	240	3		
	12	23010100 Sheridan		1						SF HOME	4	-	-	-	-	-	320	4		
	12	23010101 Sheridan		2						APARTMENT	-	6	-	-	-	-	480	6		
	12	23010102 Sheridan		2						APARTMENT	-	6	-	-	-	-	480	6		
	12	23010103 Sheridan		2						APARTMENT	-	6	-	-	-	-	480	6		
	12	23010104 Sheridan		2						APARTMENT	-	6	-	-	-	-	480	6		
	12	23010105 Sheridan		1						SF HOME	4	-	-	-	-	-	320	4		
	12	23010106 Sheridan		1						SF HOME	4	-	-	-	-	-	320	4		

Table 2: Population and Utility Demands - Existing Condition

Development Name	Block	TMK	HCDA Neighborhood	Land Use: Existing Condition							Sewer										
				SF Residential	MF Residential	Hotel	Civic / Office	Commercial / Retail	General / Light Industry	Other	Use	SF Residential	MF Residential	Hotel	Civic / Office	Retail	General / Light Industry	Other	Average Flow	Equivalent Population	
Honolulu Design Center	12	23010107 Sheridan		units 1	units	units	SF	SF	SF	SF	Use	cap/unit 4	cap/unit	-	-	-	cap	gpd	cap	4	
Honolulu Design Center	22	23010111 Kapiolani							19,751	SF HOME	19,751 RESTAURANT	-	-	-	-	-	5926	29,630	370		
	22	23010111 Kapiolani							60,112	RETAIL STORE	RETAIL STORE	-	-	-	-	193	-	4,830	60		
	10	23011002 Sheridan				460				LIBRARY	LIBRARY	-	-	3	-	-	-	80	1		
	10	23011002 Sheridan				969				MEZZ ENCL OFFICE	MEZZ ENCL OFFICE	-	-	7	-	-	-	167	2		
	10	23011002 Sheridan				2,766				OFFICES	OFFICES	-	-	19	-	-	-	477	6		
	10	23011002 Sheridan				5,207				RELIGIOUS INST	RELIGIOUS INST	-	-	-	-	-	36	900	11		
	10	23011002 Sheridan				28,573				SCHOOL	SCHOOL	-	-	-	-	-	358	8,950	112		
	10	23011002 Sheridan				7,058				SOCIAL/FRATERNAL HALL	SOCIAL/FRATERNAL HALL	-	-	49	-	-	-	1,216	15		
	8	23011003 Sheridan				955				OFFICES	OFFICES	-	-	7	-	-	-	165	2		
	8	23011003 Sheridan				3,215				RETAIL STORE	RETAIL STORE	-	-	-	-	10	-	259	3		
	8	23011004 Sheridan				2				APARTMENT	APARTMENT	-	-	6	-	-	-	480	6		
	8	23011005 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	8	23011006 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	8	23011007 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	8	23011008 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	8	23011009 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	8	23011010 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	8	23011011 Sheridan	2							APARTMENT	APARTMENT	-	-	6	-	-	-	480	6		
	8	23011012 Sheridan								PARKING PAR/ENCL	PARKING PAR/ENCL	-	-	-	-	-	1	25	0		
	8	23011012 Sheridan				5,228				RETAIL STORE	RETAIL STORE	-	-	-	-	17	-	421	5		
	8	23011013 Sheridan				5,041				RETAIL STORE	RETAIL STORE	-	-	-	-	16	-	406	5		
	8	23011014 Sheridan				1,138				RETAIL STORE	RETAIL STORE	-	-	-	-	4	-	92	1		
	8	23011015 Sheridan				1,920				OFFICES	OFFICES	-	-	-	-	13	-	331	4		
	8	23011016 Sheridan				2,400				RETAIL STORE	RETAIL STORE	-	-	-	-	5	-	116	1		
	8	23011017 Sheridan				1,650				RETAIL STORE	RETAIL STORE	-	-	-	-	8	-	193	2		
	8	23011018 Sheridan				1,281				RESTAURANT	RESTAURANT	-	-	-	-	-	-	495	2,475	31	
	8	23011018 Sheridan				3,294				OFFICES	OFFICES	-	-	-	-	9	-	221	3		
	8	23011019 Sheridan				2,500				RETAIL STORE	RETAIL STORE	-	-	-	-	11	-	265	3		
	8	23011019 Sheridan				2,800				OFFICES	OFFICES	-	-	-	-	17	-	431	5		
	9	23011021 Sheridan	4							RETAIL STORE	RETAIL STORE	-	-	-	-	9	-	225	3		
	9	23011022 Sheridan	1							APARTMENT	APARTMENT	-	-	12	-	-	-	960	12		
	9	23011023 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	9	23011024 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
ELMS	9	23011025 Sheridan	63							APARTMENT	APARTMENT	-	-	177	-	-	-	14,160	177		
	9	23011028 Sheridan	2							APARTMENT	APARTMENT	-	-	6	-	-	-	480	6		
	9	23011030 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	9	23011031 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	9	23011032 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	9	23011033 Sheridan	2							APARTMENT	APARTMENT	-	-	6	-	-	-	480	6		
	9	23011034 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	9	23011035 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	9	23011036 Sheridan	1							APARTMENT	APARTMENT	-	-	3	-	-	-	240	3		
	9	23011037 Sheridan	2							APARTMENT	APARTMENT	-	-	6	-	-	-	480	6		
	11	23011038 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	11	23011039 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	11	23011040 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	11	23011041 Sheridan	2							APARTMENT	APARTMENT	-	-	6	-	-	-	480	6		
	11	23011042 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	11	23011043 Sheridan	2							APARTMENT	APARTMENT	-	-	6	-	-	-	480	6		
	11	23011044 Sheridan	4							SF HOME	SF HOME	-	-	12	-	-	-	960	12		
	10	23011045 Sheridan	2							APARTMENT	APARTMENT	-	-	6	-	-	-	480	6		
	10	23011046 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	10	23011047 Sheridan	1							APARTMENT	APARTMENT	-	-	12	-	-	-	320	4		
	10	23011048 Sheridan	4							SF HOME	SF HOME	-	-	6	-	-	-	960	12		
	10	23011049 Sheridan	2							APARTMENT	APARTMENT	-	-	6	-	-	-	480	6		
	10	23011050 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	10	23011051 Sheridan	4							APARTMENT	APARTMENT	-	-	12	-	-	-	960	12		
	11	23011053 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
	10	23011054 Sheridan	1							SF HOME	SF HOME	-	-	4	-	-	-	320	4		
												180	25,864	-	14,127	3,644	5,000	3,355,522	41,944		
690 Pohukaina	46	21051041 Pauahi	851	19,000	76,000	APARTMENT				-	2,383	-	131	244	-	-	200,018				
Ward Entertainment Village	62 (HH 1)	23002104 Auahi															48000				

Table 3: Population and Utility Demands - Future Baseline

Table 4: Population and Utility Demands - TOD Alternative A

Block	Land Use: TOD												Water						Sewer						Average Flow	Equivalent Population
	Number of Buildings	Residential Units	Hotel Units	Residential SF	Hotel SF	Civic SF	Office SF	Retail SF	Industrial SF	Surface Parking SF	Garage Parking SF	MF Residential 400	Hotel 350	Civil / Office 69	Commercial 69	General / Light Industry 92	Average Daily Flow	MF Residential 2.8	Hotel 2	Civil / Office 300	Retail 140	General / Light Industry 100	Average Flow			
1	Civic Center	3	115	-	191,734	-	211,496	-	43,841	6,650	-	248,489	gal/unit	ga/unit	gal/1000 sf	gal/1000 sf	gal/1000 sf	gpd	cap/unit	cap/unit	cpa	cpa	cpa	gpd	cap	
2	Civic Center	5	369	-	507,690	-	124,100	9,136	62,636	-	15,390	242,632	46,072	-	14,594	3,026	612	64,304	323	-	1,457	141	16	66,190	827	
3	Civic Center	3	84	-	139,897	-	62,776	-	-	-	-	242,632	147,539	-	9,194	4,322	-	161,055	1,033	-	918	202	-	110,640	1,383	
4	Civic Center	4	33	-	55,451	-	7,154	101,375	-	-	-	183,233	33,616	-	4,332	-	-	37,948	236	-	433	-	-	29,705	371	
5	Civic Center	2	86	-	143,605	-	-	8,281	28,320	-	-	108,000	34,507	-	572	1,955	-	37,034	242	-	58	92	-	23,110	289	
6		1	407	-	-	-	-	86,000	-	-	-	162,800	33,517	-	2,730	-	-	168,734	1,140	-	277	-	-	98,125	1,227	
8	Sheridan	9	84	-	139,482	-	-	39,561	-	-	-	-	26,026	-	-	-	-	36,247	235	-	273	-	-	25,625	320	
9	Sheridan	6	65	-	108,311	-	-	-	-	-	-	18,940	15,990	-	5,098	-	-	21,088	112	-	509	-	-	14,640	183	
10	Sheridan	4	40	-	64,881	-	73,871	-	-	-	-	10,236	-	-	-	-	10,236	72	-	-	-	-	-	21,685	271	
11	Sheridan	7	26	-	42,600	-	-	-	-	-	-	29,886	-	-	-	-	29,886	210	-	-	-	-	-	5,760	72	
12	Sheridan	16	75	-	124,372	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	16,800	210	
13	Sheridan	2	147	-	244,849	-	-	-	10,078	-	-	156,317	58,836	-	-	696	-	59,532	412	-	-	33	-	-	33,785	422
14	Kapiolani	3	1,270	-	1,061,528	-	-	66,593	10,500	-	-	508,000	-	4,595	725	-	513,320	3,556	-	459	34	-	-	296,805	3,710	
15	Kapiolani	9	406	-	675,024	-	-	277,798	13,703	-	-	391,728	162,204	-	19,169	946	-	182,319	1,136	-	1,914	45	-	-	139,855	1,748
16	Kapiolani	2	-	-	-	-	41,898	245,254	-	-	-	-	19,814	-	-	19,814	-	-	-	1,978	-	-	-	49,450	618	
17	Kapiolani	1	176	-	166,007	-	-	3,470	38,164	71,720	-	245,892	70,400	-	240	2,634	6,599	79,873	493	-	24	123	165	-	47,240	591
18	Kapiolani	2	126	-	210,194	-	-	-	52,498	-	-	-	50,508	-	-	3,623	-	54,131	354	-	-	169	-	-	32,545	407
19	Kapiolani	13	449	-	748,181	-	-	319,088	14,732	-	-	337,200	179,783	-	22,018	1,017	-	202,818	1,259	-	2,198	48	-	-	156,870	1,961
20	Kapiolani	4	1,088	-	1,197,305	-	-	134,663	64,609	-	-	655,518	435,320	-	9,292	4,459	-	449,071	3,048	-	928	208	-	-	272,240	3,403
21	Kapiolani	14	452	-	751,729	-	-	36,172	20,539	-	-	262,478	180,635	-	2,496	1,418	-	184,549	1,265	-	250	67	-	-	109,125	1,364
22	Kapiolani	1	1,404	-	-	-	-	87,604	-	-	-	358,508	561,600	-	-	6,045	-	567,645	3,932	-	-	282	-	-	321,610	4,020
23	Kapiolani	1	-	-	-	-	159,447	50,583	-	-	169,460	-	-	11,002	3,491	-	14,493	-	-	1,099	163	-	-	31,550	394	
24	Central Kakaako	8	167	-	277,370	-	-	160,570	5,000	55,000	-	253,142	66,650	-	11,080	345	5,060	83,135	467	-	1,106	17	127	-	68,610	858
25	Central Kakaako	1	15	-	25,000	-	-	20,000	5,000	100,000	-	48,969	6,007	-	1,380	345	9,200	16,932	43	-	138	17	230	-	13,065	163
26	Central Kakaako	3	126	-	210,000	-	-	49,227	5,000	95,000	-	119,760	50,462	-	3,397	345	8,740	62,944	354	-	340	17	219	-	42,720	534
27	Central Kakaako	1	-	-	-	-	71,475	5,000	36,255	-	56,381	-	-	4,932	345	3,336	8,613	-	-	493	17	84	-	14,850	186	
28	Central Kakaako	4	24	-	40,000	-	9,590	62,420	27,010	95,000	-	96,449	9,612	-	4,969	1,864	8,740	25,185	68	-	496	87	219	-	25,490	319
29	Central Kakaako	1	-	-	-	-	-	-	10,000	90,000	-	32,432	-	-	690	8,280	8,970	-	-	-	33	207	-	-	6,000	75
31	Central Kakaako	2	64	-	106,836	-	-	43,577	10,000	65,756	-	84,286	25,672	-	3,007	690	6,050	35,419	180	-	301	33	151	-	26,525	332
32	Central Kakaako	3	135	-	224,156	-	-	-	-	10,000	74,202	-	58,741	53,863	-	690	6,827	61,380	378	-	33	33	171	-	35,340	442
33	Central Kakaako	2	118	-	195,674	-	-	103,323	10,000	69,471	-	149,405	47,019	-	7,130	690	6,392	61,231	330	-	712	33	160	-	49,025	613
34	Central Kakaako	2	226	-	181,976	-	209,391	42,436	15,664	-	112,032	90,400	-	17,377	1,081	-	108,858	633	-	1,735	51	-	-	95,290	1,191	
35	Central Kakaako	3	282	-	-	-	15,760	31,680	5,960	-	98,186	112,800	-	3,274	412	-	1									

Table 5: Flow Computation - Existing Condition

Discharge SMH	Average Flow (mgd)	Dry Weather I/I (mgd)	Design Average Flow (mgd)
340032	0.0025	0.0011	0.0069
340260	0.0341	0.0149	0.0955
340287	0.0061	0.0027	0.0171
340479	0.0051	0.0022	0.0142
340496	0.0196	0.0086	0.0549
340497	0.0178	0.0078	0.0499
340578	0.0082	0.0036	0.0230
340654	0.2458	0.1075	0.6882
340663	0.0113	0.0050	0.0317
340746	0.0005	0.0002	0.0013
340787	0.0001	0.0001	0.0004
340801	0.0007	0.0003	0.0020
340822	0.0000	0.0000	0.0000
340995	0.0005	0.0002	0.0014
341082	0.0283	0.0124	0.0793
341034	0.0012	0.0005	0.0034
341127	0.0011	0.0005	0.0030
341183	0.0667	0.0292	0.1868
341308	0.0056	0.0025	0.0157
341331	0.1450	0.0634	0.4059
341339	0.0594	0.0260	0.1664
341360	0.0006	0.0003	0.0018
341402	0.0041	0.0018	0.0114
341407	0.0522	0.0228	0.1462
341418	0.0359	0.0157	0.1004
341438	0.0215	0.0094	0.0601
341491	0.0010	0.0004	0.0028
341498	0.0046	0.0020	0.0128
341527	0.2011	0.0880	0.5629
341557	0.0031	0.0014	0.0087
341588	0.0072	0.0031	0.0200
341601	0.0000	0.0000	0.0000
341619	0.0081	0.0036	0.0228
341634	0.0107	0.0047	0.0300
341656	0.0000	0.0000	0.0000
341660	0.0005	0.0002	0.0015
341729	0.0002	0.0001	0.0005
341730	0.0009	0.0004	0.0025
341764	0.0104	0.0046	0.0292

Table 5: Flow Computation - Existing Condition

Discharge SMH	Average Flow (mgd)	Dry Weather I/I (mgd)	Design Average Flow (mgd)
341787	0.0050	0.0022	0.0140
341803	0.0002	0.0001	0.0006
341812	0.0014	0.0006	0.0040
341826	0.0006	0.0003	0.0017
341852	0.0361	0.0158	0.1011
341934	0.0047	0.0021	0.0132
341945	0.0031	0.0013	0.0086
341967	0.0100	0.0044	0.0281
341970	0.0106	0.0046	0.0296
341976	0.0179	0.0078	0.0501
342026	0.0038	0.0017	0.0106
342039	0.0032	0.0014	0.0090
342049	0.0017	0.0007	0.0046
342056	0.0014	0.0006	0.0039
342081	0.0015	0.0007	0.0042
342093	0.0025	0.0011	0.0070
342111	0.0644	0.0282	0.1804
342114	0.0014	0.0006	0.0038
342145	0.0037	0.0016	0.0104
342150	0.0033	0.0014	0.0092
342154	0.0007	0.0003	0.0021
342162	0.0024	0.0011	0.0067
342199	0.0006	0.0003	0.0017
342202	0.0046	0.0020	0.0130
342207	0.0008	0.0004	0.0024
342208	0.0027	0.0012	0.0076
342210	0.0020	0.0009	0.0057
342248	0.0006	0.0002	0.0016
342249	0.0024	0.0010	0.0067
342258	0.0163	0.0071	0.0455
342261	0.0037	0.0016	0.0104
342283	0.0088	0.0039	0.0247
342308	0.0005	0.0002	0.0014
342348	0.0020	0.0009	0.0057
342353	0.0025	0.0011	0.0069
342356	0.0042	0.0018	0.0117
342357	0.0092	0.0040	0.0256
342367	0.0018	0.0008	0.0050
342385	0.0024	0.0010	0.0066

Table 5: Flow Computation - Existing Condition

Discharge SMH	Average Flow (mgd)	Dry Weather I/I (mgd)	Design Average Flow (mgd)
342394	0.0030	0.0013	0.0083
342402	0.0096	0.0042	0.0270
351789	0.0085	0.0037	0.0238
352086	0.0194	0.0085	0.0542
352390	0.0077	0.0034	0.0215
352759	0.0010	0.0004	0.0027
352769	0.0118	0.0052	0.0330
352864	0.0078	0.0034	0.0220
352940	0.0019	0.0008	0.0054
352972	0.0067	0.0029	0.0188
379475	0.0004	0.0002	0.0011
379729	0.0003	0.0001	0.0008
379737	0.0042	0.0018	0.0117
379754	0.0030	0.0013	0.0084
379756	0.0038	0.0017	0.0107
379764	0.0029	0.0013	0.0082
379765	0.0026	0.0011	0.0073
379771	0.0057	0.0025	0.0160
379782	0.0450	0.0197	0.1260
379810	0.0087	0.0038	0.0245
379812	0.0084	0.0037	0.0234
379870	0.0001	0.0000	0.0003
379875	0.0067	0.0029	0.0189
379894	0.0048	0.0021	0.0135
379904	0.0016	0.0007	0.0045
379943	0.0042	0.0018	0.0117
379948	0.0005	0.0002	0.0014
379950	0.0112	0.0049	0.0314
380002	0.0121	0.0053	0.0339
380025	0.0036	0.0016	0.0100
380104	0.0046	0.0020	0.0128
380113	0.0124	0.0054	0.0348
380133	0.0018	0.0008	0.0051
380189	0.0005	0.0002	0.0013
380234	0.0007	0.0003	0.0021
380249	0.0013	0.0006	0.0035
380351	0.0095	0.0041	0.0265
380404	0.0791	0.0346	0.2215
381340	0.0106	0.0047	0.0298

Table 5: Flow Computation - Existing Condition

Discharge SMH	Average Flow (mgd)	Dry Weather I/I (mgd)	Design Average Flow (mgd)
381642	0.0000	0.0000	0.0000
381994	0.0117	0.0051	0.0328
382153	0.0064	0.0028	0.0179
384244	0.0004	0.0002	0.0011
683634	0.0133	0.0058	0.0373
683689	0.0980	0.0429	0.2744
683693	0.0011	0.0005	0.0031
683714	0.0051	0.0022	0.0141
683750	0.0002	0.0001	0.0005
683760	0.0005	0.0002	0.0014
683865	0.0000	0.0000	0.0000
683899	0.0058	0.0026	0.0164
683930	0.0016	0.0007	0.0046
683960	0.0055	0.0024	0.0155
684074	0.1090	0.0477	0.3052
684110	0.0019	0.0008	0.0053
684192	0.0018	0.0008	0.0052
684209	0.0056	0.0025	0.0158
684321	0.0010	0.0005	0.0029
1004956	0.0044	0.0019	0.0122
2023413	0.0562	0.0246	0.1575
3010699	0.0059	0.0026	0.0165
3010701	0.0004	0.0002	0.0010
3010712	0.0004	0.0002	0.0012
3013634	0.0041	0.0018	0.0114
3420121	0.0004	0.0002	0.0011
4013626	0.0011	0.0005	0.0032
4013730	0.0742	0.0324	0.2076
4013760	0.1779	0.0778	0.4982
4014276	0.0112	0.0049	0.0314

Table 5: Flow Computation - Existing Condition

Discharge SMH	Average Flow (mgd)	Dry Weather I/I (mgd)	Design Average Flow (mgd)
4014278	0.0480	0.0210	0.1344
4020187	0.0016	0.0007	0.0044
4020189	0.0043	0.0019	0.0120
4025647	0.0772	0.0338	0.2160
4025653	0.0030	0.0013	0.0085
4026536	0.0004	0.0002	0.0012
4026538	0.0010	0.0004	0.0027
4026546	0.0036	0.0016	0.0100
4026564	0.0005	0.0002	0.0014
4026568	0.0166	0.0073	0.0466
4026586	0.0024	0.0010	0.0067
4026599	0.0016	0.0007	0.0044
4038809	0.0654	0.0286	0.1831
4038813	0.0864	0.0378	0.2419
4046385	0.0632	0.0277	0.1770
4047055	0.0012	0.0005	0.0032
4047061	0.0030	0.0013	0.0085
4047071	0.0015	0.0007	0.0042
4055477	0.0798	0.0349	0.2235
4065246	0.0345	0.0151	0.0965
4065260	0.3146	0.1376	0.8807
4065989	0.0521	0.0228	0.1458
4070282	0.1146	0.0502	0.3210
4070522	0.0205	0.0090	0.0574
4073046	0.0089	0.0039	0.0248
4038817	0.0164	0.0072	0.0459
4075372	0.1104	0.0483	0.3091
4075957	0.0016	0.0007	0.0044
4075961	0.0011	0.0005	0.0031
4075964	0.0001	0.0000	0.0003
4076088	0.0110	0.0048	0.0309
4079921	0.0043	0.0019	0.0119
4079929	0.0477	0.0209	0.1336

3.3978 &lt;- Avg Flow

42472 &lt;- Equivalent Population

2.362377 &lt;- Flow Factor

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683930    0.2000    0.0875    0.6792

Table 6: Flow Computation -Future Baseline and TOD Alternative A

	Future Baseline			TOD Overlay		
Discharge SMH	Average	DWII	Design Max	Average	DWII	Design Max
339739			12676.0			12676.0
340340			1945.2			1945.2
340475			617037.2			617037.2
340482	5947.0	2601.8	15692.6	5947.0	2601.8	15224.6
340496			395538.0			395538.0
340578	15236.0	6665.8	40203.8	15236.0	6665.8	39004.9
340654	245786.0	107531.4	648564.3	245786.0	107531.4	629224.5
340787			50261.2			50261.2
340789	99923.0	43716.3	263670.4	99923.0	43716.3	255807.9
340822	23110.0	10110.6	60981.2	23110.0	10110.6	59162.8
341080			15963860.0			15963860.0
341082			30241.4			30241.4
341183	118343.0	51775.1	312275.9	118343.0	51775.1	302964.0
341263	41182.0	18017.1	108668.4	41182.0	18017.1	105428.0
341270			78134.3			78134.3
341283			40632.5			40632.5
341331	144975.0	63426.6	382550.7	144975.0	63426.6	371143.3
341498	130670.0	57168.1	344803.6	130670.0	57168.1	334521.7
341557	94795.0	41472.8	250139.0	209935.0	91846.6	537444.1
341588	466730.0	204194.4	1231577.1	446290.0	195251.9	1142524.8
341599	24785.0	10843.4	65401.1	56705.0	24808.4	145167.6
341625	75745.0	33138.4	199871.0	156870.0	68630.6	401595.1
341787	68210.0	29841.9	179988.2	68210.0	29841.9	174621.0
341794	175.0	76.6	461.8	175.0	76.6	448.0
341797	76675.0	33545.3	202325.1	244526.0	106980.1	625998.8
341798	98125.0	42929.7	258925.9	98125.0	42929.7	251204.9
341852	68610.0	30016.9	181043.7	68610.0	30016.9	175645.0
341964	93440.0	40880.0	246563.5	203705.0	89120.9	521495.0
342056	32599.0	14262.1	86020.1	32599.0	14262.1	83455.1
342088	13065.0	5715.9	34475.1	13065.0	5715.9	33447.1
342157	14850.0	6496.9	39185.2	14850.0	6496.9	38016.7
342161	110255.0	48236.6	290933.8	94455.0	41324.1	241809.5
342244	6000.0	2625.0	15832.4	6000.0	2625.0	15360.3
342402	144085.0	63037.2	380202.2	90635.0	39652.8	232030.1
351590			9054.1			9054.1
351869			622276.6			622276.6
352389	40265.0	17615.9	106248.7	40265.0	17615.9	103080.4
352864	21685.0	9487.2	57221.0	21685.0	9487.2	55514.7
352864	5760.0	2520.0	15199.1	5760.0	2520.0	14745.9
352864	27445.0	12007.2	72420.1	27445.0	12007.2	70260.6
352912			4597681.0			4597681.0
352965	33785.0	14780.9	89149.7	33785.0	14780.9	86491.3
353106	16800.0	7350.0	44330.8	16800.0	7350.0	43008.8
379476			4932.2			4932.2
379736	88745.0	38825.9	234174.6	88745.0	38825.9	227191.6
379795	19500.0	8531.3	51455.3	35340.0	15461.3	90472.2
379830	27847.0	12183.1	73480.9	27847.0	12183.1	71289.7
379875	59820.0	26171.3	157849.2	109125.0	47742.2	279365.5
380047	36300.0	15881.3	95786.1	66770.0	29211.9	170934.5
380133	26690.0	11676.9	70427.9	52375.0	22914.1	134082.6
380254	70025.0	30635.9	184777.5	108170.0	47324.4	276920.6
380398	114631.0	50151.1	302480.9	114631.0	50151.1	293461.1
380402			24201320.0			24201320.0
380962			3630.0			3630.0
381780	31550.0	13803.1	83252.1	31550.0	13803.1	80769.6
382153	40050.0	17521.9	105681.4	47950.0	20978.1	122754.4
<b>683689</b>	<b>97988.0</b>	<b>42869.8</b>	<b>258564.4</b>	<b>97988.0</b>	<b>42869.8</b>	<b>250854.2</b>
683693	47626.0	20836.4	125672.4	47626.0	20836.4	121924.9
683930	245560.0	107432.5	647967.9	245560.0	107432.5	628645.9
684015	41840.0	18305.0	110404.7	41840.0	18305.0	107112.5
684074	105690.0	46239.4	278888.0	105690.0	46239.4	270571.7
684110	73625.0	32210.9	194276.9	73625.0	32210.9	188483.7
684244	81820.0	35796.3	215901.4	180095.0	78791.6	461052.2

Table 6: Flow Computation -Future Baseline and TOD Alternative A

	Future Baseline			TOD Overlay		
Discharge SMH	Average	DWII	Design Max	Average	DWII	Design Max
684291	61510.0	26910.6	162308.6	61510.0	26910.6	157468.7
684321	52845.0	23119.7	139444.0	52845.0	23119.7	135285.8
3010712	56506.0	24721.4	149104.4	56506.0	24721.4	144658.2
4020189	51455.0	22511.6	135776.1	103830.0	45425.6	265810.0
4025647	55249.0	24171.4	145787.5	55249.0	24171.4	141440.2
4026534	85740.0	37511.3	226245.2	189115.0	82737.8	484143.9
4026568	16635.0	7277.8	43895.4	16635.0	7277.8	42586.4
4026599	79710.0	34873.1	210333.6	139855.0	61186.6	358035.8
4047061	8675.0	3795.3	22891.0	8675.0	3795.3	22208.4
4055477	79812.0	34917.8	210602.8	79812.0	34917.8	204322.7
4065260	314560.0	137620.0	830040.7	314560.0	137620.0	805289.4
4065985			6336451.0			6336451.0
4065988	26525.0	11604.7	69992.5	26525.0	11604.7	67905.3
4070522	77445.0	33882.2	204356.9	103935.0	45471.6	266078.8
4073046	8851.0	3872.3	23355.4	8851.0	3872.3	22659.0
4075961	49025.0	21448.4	129364.0	49025.0	21448.4	125506.5
4075963	100356.0	43905.8	264813.0	100356.0	43905.8	256916.4
9000001						
9000002	HHG provided peak flow values only. These values were assigned directly at each discharge manhole.					
9000003						
9000004						
9000005						
9000006						
9000007						
9000008						
9000009						
9000010						
9000011						
9000012						
9000013						
9000014						
9000015						
9000016						
48N	110255.0	48236.6	290933.8	94455.0	41324.1	241809.5
55 (KSD)	33830.0	14800.6	89268.4	90636.0	39653.3	232032.7
	60466.8 <- equiv population			72537.1 <- equiv population		
	2.2 <- flow factor			2.1 <- flow factor		