

appendix D

UTILITIES ANALYSIS

Opportunity Areas	Parcel Identifier	Developable Land Area (sf)	Proposed Retail Floor Area (sf)	Proposed Office Floor Area (sf)	Proposed Residential (sf)	Proposed Live/Work (groundfloor) (sf)	Proposed Hotel (sf)	Proposed Floor Area (sf)	Peak Power Demand (kw)	Gas Demand (btu)
A	1	37,946	18,973					18,973	114	588
	2	14,842		11,131	11,131			22,263	234	657
B	3	56,095	3,500	38,571	56,095			98,166	936	2,927
	4	56,095	3,500	38,571	56,095			98,166	936	2,927
C	5	4,687		3,510				3,510	53	98
	6	4,874		2,437				2,437	37	68
	7	4,744		1,706				1,706	26	48
	8	4,744		4,744	2,372			7,116	85	206
	9	5,798		5,798	2,899			8,697	104	252
	10	6,804		1,842				1,842	28	52
D	11	9,433			8,018			8,018	48	249
	12	6,526		4,568	9,137			13,705	123	411
	13	9,433		9,433				9,433	141	264
E	14	26,255	13,128	13,128				26,255	276	775
	15	5,736			5,736			5,736	34	178
	16	5,736			5,736			5,736	34	178
F	17	4,916			4,916			4,916	29	152
	18	144,980	50,743		25,372			76,115	457	2,360
	19		50,743		25,372			76,115	457	2,360
G	20		50,743		25,372			76,115	457	2,360
	21	2,937	2,056	2,056				4,112	43	121
	22	70,457	98,640		197,280			295,919	1,776	9,174
H	23	10,639	10,639	10,639				21,278	223	628
	24	8,069						0	0	0
I	25	24,420	12,210	12,210	12,210			36,630	330	1,099
	26	8,732	10,241	20,481				30,722	369	891
J	27	7,559	5,291		5,291			10,582	63	328
	28	14,582	10,208		10,208			20,415	122	633
K	29	9,437	3,775	3,775				7,550	79.27	223
	30	4,477	1,791	1,791				3,582	37.61	106
	31	23,172	9,269					9,269	55.61	287
	32	4,081	1,632	1,632				3,265	34	96
	33	6,779	2,712	2,712				5,423	57	160
	34	25,902	3,238		6,475			9,713	58	301
L	35	17,748	8,874	8,874				17,748	186	524
	36	54,539						0	0	0
M	37	121,622	12,162	18,243	15,203			45,608	438	1,359
	38		12,162	18,243	15,203			45,608	438	1,359
	39		12,162	18,243	15,203			45,608	438	1,359
N	40	8,482	6,361	6,361				12,723	134	375

Opportunity Areas	Parcel Identifier	Developable Land Area (sf)	Proposed Retail Floor Area (sf)	Proposed Office Floor Area (sf)	Proposed Residential (sf)	Proposed Live/Work (groundfloor) (sf)	Proposed Hotel (sf)	Proposed Floor Area (sf)	Peak Power Demand (kw)	Gas Demand (btu)
	41	3,036	2,277	2,277				4,554	48	134
	42	7,258	5,444	5,444				10,887	114	321
	43	2,559	1,919	1,919				3,838	40	113
O	44	3,354	1,677	3,354				5,030	60	146
	45		1,677	3,354				5,030	60	146
P	46	52,275	36,593		36,593			73,185	439	2,269
	460	26,100						0	0	0
	47	13,528	3,382					3,382	20	105
	48	20,291	5,073					5,073	30	157
Q	49	8,613	8,613	17,226				25,839	310	749
	51	14,622	4,874	9,748				14,622	175	424
	52		4,874	9,748				14,622	175	424
	53		4,874	9,748				14,622	175	424
R	54	12,988	11,193		11,193			22,385	134	694
	55							0	0	0
S	56	5,750	2,875	5,750				8,625	104	250
	57		2,875	5,750				8,625	104	250
T	58	65,360		78,432				78,432	1,176	2,196
	59	28,011		33,613				33,613	504	941
U	60	9,217		4,608	4,608			9,217	97	272
	61	9,158		4,579	4,579			9,158	96	270
	62	9,589		4,795	4,795			9,589	101	283
V	63	15,397		7,698	7,698			15,397	162	454
	64	6,626		3,313	3,313			6,626	70	195
	65	5,731		2,866	2,866			5,731	60	169
	66	3,422		855	855			1,711	18	50
	67			855	855			1,711	18	50
	68	5,626		2,813	2,813			5,626	59	166
W	69	15,397	7,698		7,698			15,397	92	477
	70	8,023	4,012		4,012			8,023	48	249
	71	34,294	8,573		8,573			17,147	103	532
X	72	13,106	3,277		3,277			6,553	39	203
	73		3,277		3,277			6,553	39	203
	74	7,604	3,802		3,802			7,604	46	236
Y	75	47,419		23,710				23,710	356	664
	76			23,710				23,710	356	664
	77			23,710				23,710	356	664
Z	78	4,427	2,213	4,427				6,640	80	193
	79		2,213	0				2,213	13	69
AA	80	9,064	2,266	4,532				6,798	82	197

Opportunity Areas	Parcel Identifier	Developable Land Area (sf)	Proposed Retail Floor Area (sf)	Proposed Office Floor Area (sf)	Proposed Residential (sf)	Proposed Live/Work (groundfloor) (sf)	Proposed Hotel (sf)	Proposed Floor Area (sf)	Peak Power Demand (kw)	Gas Demand (btu)
	81		2,266	4,532				6,798	82	197
	82		2,266	4,532				6,798	82	197
	83		2,266	4,532				6,798	82	197
BB	84	16,007	4,002	4,002				8,004	84	236
	85		4,002	4,002				8,004	84	236
	86		4,002	4,002				8,004	84	236
	87		4,002	4,002				8,004	84	236
CC	88	15,195	10,637	10,637				21,273	223	628
DD	89	86,861	20,267	40,535				60,802	730	1,763
	90		20,267	40,535				60,802	730	1,763
	91		20,267	40,535				60,802	730	1,763
EE	92	23,179	16,226	16,226				32,451	341	957
FF	93	6,119				3,060		3,060	46	86
	94	103,356				51,678		51,678	775	1,447
	95	33,340						0	0	0
	96	20,873						0	0	0
	97	5,199				2,600		2,600	39	73
	98	168,428				84,214		84,214	1,263	2,358
	99	336,758					404,110	0	4,849	14,144
GG	100	2,507	1,253	1,253				2,507	26	74
	101	16,431	1,643	1,643				3,286	35	97
	102		1,643	1,643				3,286	35	97
	103		1,643	1,643				3,286	35	97
	104		1,643	1,643				3,286	35	97
	105		1,643	1,643				3,286	35	97
									0	0
Long Term Opp	106	31,856	11,149	22,299	22,299			55,747	535	1,661
	107		11,149	22,299	22,299			55,747	535	1,661

Power Demands

Retail	6 watts per square foot
Office	15 watts per square foot
Residential	6 watts per square foot
Hotel	12 watts per square foot

Gas Demands	Domestic Hot Water (btu/sf)	Heating (btu/sf)
Retail	3	28
Office	3	25
Residential	6	25
Hotel	10	25

Opportunity Areas	Parcel Identifier	Developable Land Area (sf)	Proposed Retail Floor Area	Proposed Office Floor Area	Proposed Residential	Proposed Floor Area (sf)	Construction Type	Fire Flow (gpm)	Projected Average Daily Water Demand (gpd)	Projected Average Daily Dry Weather Sewer Flow (gpd)
A	1	37,946	18,973			18,973	3A	2,000	2,395	1,916
	2	14,842		11,131	11,131	22,263	1A/1B	1,500	3,446	2,757
B	3	56,095	3,500	38,571	56,095	98,166	1A/1B	3,500	15,596	12,476
	4	56,095	3,500	38,571	56,095	98,166	1A/1B	3,500	15,596	12,476
C	5	4,687		3,510		3,510	5B	1,500	443	355
	6	4,874		2,437		2,437	5B	1,500	308	246
	7	4,744		1,706		1,706	5B	1,500	215	172
	8	4,744		4,744	2,372	7,116	5B	2,250	1,034	827
	9	5,798		5,798	2,899	8,697	5B	2,500	1,263	1,011
	10	6,804		1,842		1,842	5B	1,500	233	186
	11	9,433				8,018	5B	2,500	1,470	1,176
D	12	6,526		4,568	9,137	13,705	1A/1B	1,500	2,252	1,801
	13	9,433			9,433	9,433	3A	1,500	1,729	1,383
	14	26,255	13,128		13,128	26,255	3A	2,500	4,064	3,251
E	15	5,736			5,736	5,736	3A	1,500	1,052	841
	16	5,736			5,736	5,736	3A	1,500	1,052	841
	17	4,916			4,916	4,916	3A	1,500	901	721
F	18	144,980	50,743		25,372	76,115	1A/1B	3,000	11,058	8,846
	19		50,743		25,372	76,115	1A/1B	3,000	11,058	8,846
	20		50,743		25,372	76,115	1A/1B	3,000	11,058	8,846
G	21	2,937	2,056	2,056		4,112	3A	1,500	519	415
H	22	70,457	98,640		197,280	295,919	3A	6,000	48,621	38,897
	23	10,639	10,639	10,639		21,278	3A	2,000	2,686	2,149
	24	8,069				0	3A	1,500	0	0
I	25	24,420	12,210		24,420	36,630	1A/1B	2,000	6,018	4,815
	26	8,732	10,241		20,481	30,722	3A	2,500	5,048	4,038
J	27	7,559	5,291		5,291	10,582	3A	1,500	1,638	1,310
	28	14,582	10,208		10,208	20,415	3A	2,000	3,160	2,528
K	29	9,437	3,775	3,775		7,550	3A	1,500	953.14	762.51
	30	4,477	1,791	1,791		3,582	3A	1,500	452.18	361.74
	31	23,172	9,269			9,269	3A	1,500	1,170.19	936.15
	32	4,081	1,632		1,632	3,265	3A	1,500	505	404
	33	6,779	2,712		2,712	5,423	3A	1,500	839	672
	34	25,902	3,238		6,475	9,713	3A	1,500	1,596	1,277
L	35	17,748	8,874		8,874	17,748	3A	2,000	2,747	2,198
	36	54,539				0	1A/1B	1,500	0	0
M	37	121,622	12,162	18,243	15,203	45,608	3A	3,000	6,626	5,301
	38		12,162	18,243	15,203	45,608	3A	3,000	6,626	5,301
	39		12,162	18,243	15,203	45,608	3A	3,000	6,626	5,301
N	40	8,482	6,361		6,361	12,723	3A	1,750	1,969	1,576
	41	3,036	2,277	2,277		4,554	3A	1,500	575	460

Opportunity Areas	Parcel Identifier	Developable Land Area (sf)	Proposed Retail Floor Area	Proposed Office Floor Area	Proposed Residential	Proposed Floor Area (sf)	Construction Type	Fire Flow (gpm)	Projected Average Daily Water Demand (gpd)	Projected Average Daily Dry Weather Sewer Flow (gpd)
	42	7,258	5,444	5,444		10,887	3A	1,500	1,375	1,100
	43	2,559	1,919	1,919		3,838	3A	1,500	485	388
O	44	3,354	1,677	3,354		5,030	1A/1B	1,500	635	508
	45		1,677	3,354		5,030	1A/1B	1,500	635	508
P	46	26,175	18,323		18,323	36,645	3A	2,750	5,672	4,538
	460	26,100				0	3A	1,500	0	0
	47	13,528	3,382			3,382	3A	1,500	427	342
	48	20,291	5,073			5,073	3A	1,500	640	512
Q	49	8,613	8,613		17,226	25,839	3A	2,500	4,245	3,396
	51	14,622	4,874	9,748		14,622	3A	1,750	1,846	1,477
	52		4,874	9,748		14,622	3A	1,750	1,846	1,477
	53		4,874	9,748		14,622	3A	1,750	1,846	1,477
R	54	12,988	11,193		11,193	22,385	3A	2,250	3,465	2,772
	55					0	3A	1,500	0	0
S	56	5,750	2,875	5,750		8,625	3A	1,500	1,089	871
	57		2,875	5,750		8,625	3A	1,500	1,089	871
T	58	65,360		26,144	52,288	78,432	3A	4,000	12,887	10,309
	59	28,011		11,204	22,409	33,613	3A	2,750	5,523	4,418
U	60	9,217		4,608	4,608	9,217	3A	1,500	1,427	1,141
	61	9,158		4,579	4,579	9,158	3A	1,500	1,418	1,134
	62	9,589		4,795	4,795	9,589	3A	1,500	1,484	1,187
V	63	15,397		7,698	7,698	15,397	3A	1,750	2,383	1,907
	64	6,626		3,313	3,313	6,626	1A/1B	1,500	1,026	820
	65	5,731		2,866	2,866	5,731	1A/1B	1,500	887	710
	66	3,422		855	855	1,711	1A/1B	1,500	265	212
	67			855	855	1,711	1A/1B	1,500	265	212
	68	5,626		2,813	2,813	5,626	3A	1,500	871	697
W	69	15,397			15,397	15,397	3A	1,750	2,823	2,258
	70	8,023			4,012	4,012	1A/1B	1,500	735	588
	71	34,294			17,147	17,147	3A	2,000	3,144	2,515
X	72	13,106	3,277		3,277	6,553	3A	1,500	1,014	811
	73		3,277		3,277	6,553	3A	1,500	1,014	811
	74	7,604	3,802		3,802	7,604	1A/1B	1,500	1,177	942
Y	75	47,419		23,710		23,710	1A/1B	1,750	2,993	2,395
	76			23,710		23,710	1A/1B	1,750	2,993	2,395
	77			23,710		23,710	1A/1B	1,750	2,993	2,395
Z	78	2,427	2,427	2,427		4,854	3A	1,500	613	490
	79		0	0		0	3A	1,500	0	0
AA	80	9,064	2,266	4,532		6,798	3A	1,500	858	687
	81		2,266	4,532		6,798	3A	1,500	858	687
	82		2,266	4,532		6,798	3A	1,500	858	687

Opportunity Areas	Parcel Identifier	Developable Land Area (sf)	Proposed Retail Floor Area	Proposed Office Floor Area	Proposed Residential	Proposed Floor Area (sf)	Construction Type	Fire Flow (gpm)	Projected Average Daily Water Demand (gpd)	Projected Average Daily Dry Weather Sewer Flow (gpd)
	83		2,266	4,532		6,798	3A	1,500	858	687
BB	84	16,007	4,002	4,002		8,004	3A	1,500	1,010	808
	85		4,002	4,002		8,004	3A	1,500	1,010	808
	86		4,002	4,002		8,004	3A	1,500	1,010	808
	87		4,002	4,002		8,004	3A	1,500	1,010	808
CC	88	15,195	10,637	10,637		21,273	3A	2,000	2,686	2,149
DD	89	86,861	11,581	23,163		34,744	3A	2,750	4,386	3,509
	90		11,581	23,163		34,744	3A	2,750	4,386	3,509
	91		11,581	23,163		34,744	3A	2,750	4,386	3,509
EE	92	23,179	16,226	16,226		32,451	3A	2,500	4,097	3,278
FF	93	6,119				3,060	1A/1B	1,500	561	449
	94	103,356				51,678	1A/1B	2,500	9,474	7,579
	95	33,340				0	3A	1,500	0	0
	96	20,873				0	1A/1B	1,500	0	0
	97	5,199				2,600	1A/1B	1,500	477	381
	98	168,428				84,214	1A/1B	3,250	15,439	12,351
	99	336,758				0	1A/1B	1,500	0	0
GG	100	2,507	1,253	1,253		2,507	3A	1,500	316	253
	101	16,431	1,643	1,643		3,286	3A	1,500	415	332
	102		1,643	1,643		3,286	3A	1,500	415	332
	103		1,643	1,643		3,286	3A	1,500	415	332
	104		1,643	1,643		3,286	3A	1,500	415	332
	105		1,643	1,643		3,286	3A	1,500	415	332
Long Term Opp	106	31,856	11,149	22,299	22,299	55,747	1A/1B	2,500	8,311	6,649
	107		11,149	22,299	22,299	55,747	1A/1B	2,500	8,311	6,649
TOTAL Developable Land		2,139,131	Retail 597,056	Office 557,753	Residential 790,882					

Sewer Demands

Office/Retail 101 gallons per day per 1000 square foot
 Residential 176 gallons per day per dwelling unit

Water Demand Multiplier

1.25

Water Demand

Office/Retail 126.25 gallons per day per 1000 square foot
 Residential 220 gallons per day per dwelling unit 330,209 264,167
 1200 square feet per dwelling units

Proposed Sewer Flow Assumptions

- Proposed square footage provided by MIG
- Residential units are assumed to be 1200 sf/du.

Opportunity Areas	Parcel Identifier	Developable Land Area (sf)	Proposed Retail Floor Area	Proposed Office Floor Area	Proposed Residential	Proposed Floor Area (sf)	Construction Type	Fire Flow (gpm)	Projected Average Daily Water Demand (gpd)	Projected Average Daily Dry Weather Sewer Flow (gpd)
-------------------	-------------------	----------------------------	----------------------------	----------------------------	----------------------	--------------------------	-------------------	-----------------	--------------------------------------------	------------------------------------------------------

Peaking Factor 2.5
 Wet Weather Flow 500 gal/ac/day