

Hillside Master Plan for Housing Opportunity

SIGN IN SHEET

Feb 21, 2019 | 6:30 – 8:30 p.m.
 Ardenwald Elementary
 8950 SE 36th Ave
 Milwaukie, OR

10

Name	Affiliation	Email	Phone
Vera Gabor	resident	none	(503) 513-0124
LYUBOU GONCHAR			(503) 695 0763
Midoriya Phos	— " —	— " —	503-657-8310
Yelena KORDONETS	— " —	—	503-659-0029
Peter Khoma			503 853 6531
Sonya Souder	HACC	ssouder@clackamas.us	503-650-3134
Tarah DeGeorge	PGE	tarah.degeorge@pge.com	503-970-7535
Michael ARSONS	resident		503-652-2039
Karen Tillou	Ardenwald neighborhood	kbtillou@gmail.com	
Gene ZAHARIE	MACG	Zaharie@Comcast	503-786-8218

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Name	Affiliation	Email	Phone
Nate Embur	Resident	nate@inkbuilt design.com	
Sue Matranga Watts		SueM@hotmail.com	
Lisa Batley	City Council	—	

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Name	Affiliation	Email	Phone
Ivan Uzhva			
LUKE STRATT	MILWAU. P.D.	STRAITL@MILWAUKIEOR.PEON.GOV	971-583-2716
Nancy Wagenknecht	Community member	nancykwag@yahoo.com	
Ann Keenstra	MANOR	pdxgrammarann@gmail.com	503-248-2614
Kim Travis	Milwaukie Planning Commission	Kim.Travis75@gmail.com	
Angel Falconer	Milwaukie City Council		
Jemilahart	HACC	jemilahar@clackamas.us	503-702-1517

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Name	Affiliation	Email	Phone
Margaret Parsons	neighbor (manager)	—	503-652-2039
Brian Henderson	Hillside resident	—	—
Mike Andrews	consultant		
Kathy Hryz	CITY COUNCIL	—	—
Berki Hayes	CPAC member	—	—
DJ Helfernan	Murphy Property		
Ben Rousseau	Resident		
Mark A. Smith		mark-smith1972@yahoo.com	(503) 360-8781

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Name	Affiliation	Email	Phone
Elvis Clark	neighbor	ECLARKMilwOr@yahoo.com	
Matt Rinker	AJC NDA	MattRinker@hotmail.com	
Chris Riley	Hillside Resident		
Sandra Grzeskowiak	Hillside Steering Committee	sandra.grzeskowiak@comcast.net	
Mark Gamba	mayor	gambam@milwaukieOR.gov	
Rich Malloy	HACC Asset manager	rmalloy@clackamas.us	
Alma Flores	COM	alflores@milwaukie.org	
Till Smith	HACC	tsmith@clackamas.us	

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Name	Affiliation	Email	Phone
SUSAN HOSKINS	RESIDENT	_____	503-380-4068
Jane Cortez	resident	none	(503) 723-4355
Mary Spooner	Neighbor	m Spooner 56@gmail.com	503-679-1870
Donna Ryan	Resident	ryan9645@comcast.net	503 933 7876
MARBE LOCKHART	RESIDENT		503-839-4125
NINA Kaidalia	RESIDENT	+522A	503-659-7850
ARVOLD R. DICKER	RESIDENT	NO	
Allison Coe	Property Manager HACC	acoe@clackamas.us	503-794-8079
BEN BORTOLAZZO	DESIGN PROFESSIONAL	ben.bortolazzo@otak.com	503 415 2307
Cathy Berase	Manager #506	Ø	503 209 7348

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May 30, 2019 | 6:30 – 8:30 p.m.
 Providence Milwaukie Hospital
 Mother Gamelin Conference Room
 10150 SE 32nd Ave
 Milwaukie, OR 97222

Name	Affiliation	Email	Phone
Aris ³ BZ Estupinian	Hillside Manor 304.		503-652-3984
SUSAN HOSKINS	HILLSIDE MANOR 906		
Jane Cortez	10043 SE 32nd Ave		
Sharon Ferguson	2889 S.E. Hillside Ct Apt 812		
Karen Ducham	2874 SE Hillside Ct.		
John Kingston	2889 SE Hillside #803		
Alan Rumpfolt	2889 SE HILLSIDE CT #40)		
Brian Henderson	manor #804		
Lizbva Ivan J.	10005 SE Street # " " Milwaukie		
Vera Gabor	10319 SE B St.		
Laura, Susanna	Milwaukie OR 97222. 10244 SE D ST.		
Dottie O'Sell	10144 SE "B" St		
Tatyana Kistol	10047 SE A St.		
Nellie AUBER	2889 SE Hillside Ct #603		
ARND RePacker	10103 SE C ST		

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 10150 SE 32nd Ave
 Milwaukie, OR 97222

Name	Affiliation	Email	Phone
I. Hernandez	Hillside Tenant	irisahernandez2@gmail.com	503-367-7654
Elena Sizmin	HACC		503-655-8202
Nadia Kirilchuk	Hillside tenant		
Peter Khoma	Hillside tenant		
Anfiq Khoma	Hillside resident.		
John Russell	Manor		
Elis Clark	Ardenwald NA	EClarkmilwood@yahoo.com	
Devin Eliu	HACC		
Pam Stoltz	Hillside Res.		
Becky Dresselhaus	Ardenwald NA	beckyd44@mac.com	503 451-9912
Nina Kaidalina	Hillside		503-659-7860
Andriya Chornaya	Hillside		503-654-8310
Bradley Bondy		bradleybondy@bradleybondy.com	503-919-5451
RANDY MC TIMMONDS	Hillside Ct.		971-232-0849
Cathy Haase	Hillside Manor	CathyTyrrell52@gmail.com	503-209-7348

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Name	Affiliation	Email	Phone
Zhanna Mitchell	interpreter		503-916-9237
Erin Maxey	City of Milwaukie	maxey.e@milwaukieoregon.gov	706-280-8487
Matt Rinker	AJC NDA	Matt.Rinker@hotmail.com	971 336 8663
Lisa Gunion-Rinker	AJC NDA	astrantialgr@gmail.com	503-754-1655
Emily Gilchrist	none (affected neighbor)	emilygilchrist.jd@gmail.com	503-853-4553
Johanna Aleek	affected neighbor	strikeregil@yahoo.com	971-400-7118
KATY HYZY	City of Milwaukie	Nyzyk@MILWAUKIEOREGON.GOV	
Lisa Batey	City of Milwaukie	BateyL@milwaukieoregon.gov	
MIKE ANDREWS	STRUCTURE DEVELOPMENT ADVISORS	MIKE@STRUCTUREPOX.COM	503-249-5658
James Knight	Local Resident	j365K@yahoo.com	
Jane Berlin	NWFS.	jberlin@nwfs-org.	503 309-2096.
Ann Ober	City of Milwaukie	obera@milwaukieoregon.gov	503-753-6608
Isaac Barrow	PGE	isaac.barrow@pge.com	503 593 2132
Jamie Zentner	Clack Co Public Health	jzentner@clackamas.us	503 742 5939

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Name	Affiliation	Email	Phone
Enoc Alvarez	Interpreter		
Carrie Bush	Hillside Park		
Cindy Rose	Hillside Park		
Allison Coe	HACC	acoec@clackamas.us	
Manner Smith	Hillside		
Joy Davidson	Manner		
Rich Malloy	HACC	rmalloy@clackamas.us	
Szabolcs Farkas; Ersebet		szfarkas@gmail.com	
April Bravo	hillside	AprilBravo70@gmail.com	
Beth Byrne	Clackamas County	bbyrne@clackamas.us	
Mark Gumber	Milwaukie	mark@markgumber.com	
Linda Ricketts	Hillside Manor	lmricketts2017@gmail.com	

Hillside Master Plan

S|EA

10/23/2020

BUILDING	USE	Area (SF)	# of Floors	Total units	Parking Provided (On Site)	Parking Ratio	UNIT MIX				SITE INFO.					PHASING FAR				
							1BD	2BD	3BD	4BD	du/AC	Lot SF	Lot Acres	Bldg. Coverage	Lot Coverage %	FAR	Bldg. SF Phase I	FAR	Bldg. SF Phase II	FAR
A1							Shared Surface Lot													
1 BD Walk-ups	Commercial	0	0		0		24	0	0	0	75	58,421	1.34	17,700	30%	5.5	118,447	2.6	67,640	1.2
	Residential	5,280	3	24	30	0.30														
	Total	15,840	3	24	30	0.30														
A2							Shared Surface Lot													
1 & 2 BD Apts	Commercial	12,420	1				77													
	Residential	69,183	3	77																
	Total	81,603	4	77																
B1							Shared Surface Lot													
2 BD Apts	Commercial	0	0		0		0	44	0	0	78	60,026	1.38	28,438	47%	4.0				
	Residential	12,687	4	44	38	0.35														
	Total	50,748	4	44	38	0.35														
B2							Shared Surface Lot													
1 & 2 BD Apts	Commercial	0	0				25	39	0	0										
	Residential	15,751	4	64																
	Total	63,004	4	64																
C1							Shared Surface Lot													
1 BD Apts	Residential	16,910	4	65	66	1.02	65	0	0	0	50	56,407	1.29	24,590	44%	3.7				
	Total	67,640	4	65	66	1.02														
D1							Shared Surface Lot													
2 BD Walk-ups	Commercial	0	0		0		0	20	0	0	39	60,641	1.39	18,240	30%	3.0				
	Residential	7,680	3	20	43	0.80														
	Total	23,040	3	20	43	0.80														
D2							Shared Surface Lot													
1&2 BD Walk-ups	Commercial	0	0				12	22	0	0										
	Residential	10,560	3	34																
	Total	31,680	3	34																

						Shared Surface Lot										
BUILDING	USE	Area (SF)	# of Floors	Total units	Parking Provided (On Site)	Parking Ratio	1BD	2BD	3BD	4BD	du/AC	Lot SF	Lot Acres	Bldg. Coverage	Lot Coverage %	FAR
E1						Shared Surface Lot										
1 BD Apts	Commercial	13,816	1													
	Residential	46,546	3	69	31	0.33										
	Total	60,362	4	69	31	0.33	69	0	0	0	67	60,540	1.39	19,096	32%	4.3
E2						Shared Surface Lot										
1 BD Walk-ups	Commercial	0	0													
	Residential	5,280	4	24												
	Total	21,120	4	24			24	0	0	0						
F1						Shared Surface Lot										
2 BD Walk-ups	Commercial	0	0													
	Residential	7,680	3	24	40	1.00										
	Total	23,040	3	24	40	1.00	0	24	0	0	40	43,154	0.99	13,180	31%	3.0
F2						Shared Surface Lot										
1&2 BD Walk-ups	Commercial	0	0													
	Residential	5,500	3	16												
	Total	16,500	3	16			6	10	0	0						
Unit Mix																
Site Info.																
BUILDING	USE	Area (SF)	# of Floors	Total units	Parking Provided (On Site)	Parking Ratio	1BD	2BD	3BD	4BD	du/AC	Lot SF	Lot Acres	Bldg. Coverage	Lot Coverage %	FAR
G1						Shared Surface Lot										
Townhouses	Commercial	0	0													
	Residential	3,072	2	4	18	1.13										
	Total	6,144	2	4	18	1.13	0	0	4	0	18	66,079	1.52	23,288	35%	2.5
G2						Shared Surface Lot										
Townhouses	Commercial	0	0													
	Residential	3,072	2	4												
	Total	6,144	2	4			0	0	4	0						
G3						Shared Surface Lot										
Townhouses	Commercial	0	0													
	Residential	3,072	2	4												
	Total	6,144	2	4			0	0	4	0						
G4						Shared Surface Lot										
Townhouses	Commercial	0	0													
	Residential	3,072	2	4												
	Total	6,144	2	4			0	0	4	0						
G5						Shared Surface Lot										
Townhouses	Commercial	0	0													
	Residential	6,000	3	6	6	1.00										
	Total	18,000	3	6	6	1.00	0	0	0	6						
G6						Shared Surface Lot										
Townhouses	Commercial	0	0													
	Residential	5,000	3	5	5	1.00										
	Total	15,000	3	5	5	1.00	0	0	0	5						
H1						Shared Surface Lot										
Manor (existing)	Common Area (1)	8,033	1													
	Residential (2)	8,033	1													
	Residential (3-9)	8,033	7	100	59	0.59										
	Total	72,297	9	100	59	0.59				n/a	37	106,725	2.45			
J						Shared Surface Lot										
Open Space (existing)	Open Space	84,942	0	-												
	Total	84,942	0	-						n/a	0	77,979	1.79			

		<u>Total Area</u> <u>(SF)</u>	<u>Total</u> <u>units</u>	<u>Parking Provided (On Site)</u>	<u>On-Site</u> <u>Parking Ratio</u>	<u>On-</u> <u>Street</u> <u>Parking*</u>	<u>Total</u> <u>stalls</u>	<u>Overall</u> <u>Parking</u> <u>Ratio</u>	<u>Total Lot Area</u> <u>(SF)</u>	<u>Lot Acres</u>	<u>Total Bldg.</u> <u>Coverage (SF)</u>	<u>Overall</u> <u>Coverage %</u>	<u>FAR</u>
K1													
Townhouses	Commercial	0	0										
	Residential	3,072	2										
	Total	6,144	2										
									16	1.33			
									0	0	4	0	
									11	46,380	1.06	9,216	20%
													2.7
K2													
Townhouses	Commercial	0	0										
	Residential	3,072	3										
	Total	9,216	3										
									0	0	4	0	
K3													
Townhouses	Commercial	0	0										
	Residential	3,072	3										
	Total	9,216	3						0	0	4	0	
GRAND TOTAL		560,846	600	352	0.59	137	489	0.82	636,352	14.61	153,748	24%	n/a

* Does NOT include parking on 32nd Ave.

EXHIBIT D - HILLSIDE MASTER PLAN PARKING BY BUILDING

From Master Plan				Floors	Number of Bedrooms*				Est. Unit Count		Parking	
Bld.	Use	Units	Area (SF)		1 BD	2BD	3BD	4BD	<=800 SF	>800 SF	Spaces Provided	Ratio
A1	Multi Mid	24	21,120	4	24				24	0	30	0.30
A2	Multi w/ Com	77	69,183	3	77				77	0		
B1	Multi Mid	44	38,061	3		44			44	0	38	0.35
B2	Multi Mid	64	63,004	4	25	39			64	0		
C1	Multi Mid	65	50,730	3	65				65	0	66	1.02
D1	Multi Mid	20	23,040	3		20			20	0	43	0.80
D2	Multi Mid	34	31,680	3	12	22			34	0		
E1	Multi w/ Com	69	46,546	3	69				69	0	31	0.33
E2	Multi Mid	24	21,120	4	24				24	0		
F1	Multi Mid	24	23,040	3		24			24	0	40	1.00
F2	Multi Mid	16	16,500	3	6	10			16	0		
G1	Multi Low	4	6,144	2			4		0	4	29	1.07
G2	Multi Low	4	6,144	2			4		0	4		
G3	Multi Low	4	6,144	2			4		0	4		
G4	Multi Low	4	6,144	2			4		0	4		
G5	Multi Low	6	18,000	3			6		0	6		
G6	Multi Low	5	15,000	3			5		0	5		
K1	Multi Low	4	6,144	2			4		0	4	16	1.33
K2	Multi Low	4	6,144	2			4		0	4		
K3	Multi Low	4	6,144	2			4		0	4		
New	Subtotal	500	480,032		302	159	28	11	461	39	293	0.59
H1 (Manor)	Multi Mid	100	72,297	10							59	0.59
Resid.	Subtotal	600	552,329								352	0.59

*The standards of OHCS Table N13.01 dictate minimum unit size for units qualifying for affordable housing tax credits (1 bedroom = 600 sq. ft. minimum; 2 bedroom = 800 sq. ft. minimum; 3 bedroom = 1000 sq. ft. minimum). All units with over 2 bedrooms are assumed to be greater than 800 sq. ft.

EXHIBIT E - HILLSIDE MASTER PLAN PARKING REDUCTIONS

Master Plan Lot	Parking Provided	Code Required Minimum Parking*				Comparison to Minimum	Affordable Housing Reduction +		Revised Parking Req.++	Comparison to Minimum
		Spaces for Units > 800	Spaces for Units > 800	Comm.	Total					
A	30	101	0	29	130	-100	0%	0	130	-100
B	38	108	0	0	108	-70	25%	-27	81	-43
C	66	65	0	0	65	1	25%	-16	49	17
D	43	54	0	0	54	-11	25%	-14	40	3
E	31	93	0	32	125	-94	0%	0	125	-94
F	40	40	0	0	40	0	25%	-10	30	10
G	29	0	34	0	33	-4	0	0	33	-4
K	16	0	15	0	15	1	0	0	15	1
All	293	461	48	61	570	-277	-	-67	503	-210
H	59	59	0	0	59	0	n/a	n/a	59	0
Total	352				629	-277			562	-210

* Assumed average commercial parking rate of 3 spaces/1000 GSF

+ ITE Parking Manual, 5th Edition shows average parking rate for Affordable Housing (Income Limits) is ~75% of Multifamily Mid-Rise Housing

++ Revised parking requirement with reduction in parking rate for affordable housing

^ Assumes that all commercial parking will be shared with residential parking based on combined hourly parking demand rates from the ITE Parking Generation Manual, 5th Edition.

^^ Revised parking requirement with shared parking

Applies parking reduction of 20% to dwelling units within 500 feet of a high-frequency transit stop per MMC 19.605.3.B.2.b. Applies parking reduction of 10% to commercial development within

Revised parking requirement with shared parking & transit reduction.

@ On-street parking total excludes new spaces on 32nd Avenue. Total on-street parking is 156 if spaces on 32nd Avenue are included.

Shared Parking [^]	Revised Parking Req. ^{^^}	Comparison to Minimum	Proximity to Transit Reduction#		Revised Parking Req.##	Comparison to Minimum	On-Street Parking @	Comparison to Minimum
			Vehicles	%				
-29	101	-71	-20	-20%	81	-51	51	0
	81	-43	-16	-20%	65	-27	40	13
	49	17	-10	-20%	39	27	3	30
	40	3	-8	-20%	32	11		11
-32	93	-62	-19	-20%	74	-43	43	0
	30	10	-6	-20%	24	16		16
	33	-4	0	0	33	-4		-4
	15	1	0	0	15	1		1
-61	442	-149	-79	0%	363	-70	137	67
	59	0	n/a	n/a	59	0		0
	501	-149			422	-70		67

500 feet of a high-frequency transit stop per MMC 19.605.3.B.2.a.

ITE PARKING GENERATION MANUAL, 5TH EDITION

PARKING DEMAND BY TIME OF DAY												
Time of Day	Affordable Housing (223)		Multifamily -Mid (221)		Small Office (712)		Coffee/Donut w/o Drive-Thru (936)		Fast Casual Restaurant (930)		Shopping Center (820)	
	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
12:00 AM			100%	100%								
5:00 AM			94%	99%								
6:00 AM			83%	97%					2%			
7:00 AM			71%	95%			73%	100%	2%			
8:00 AM			61%	88%	27%		100%	90%	5%	3%	15%	27%
9:00 AM			55%	83%	69%		63%	80%	14%	7%	32%	46%
10:00 AM			54%	75%	88%		57%	65%	17%	7%	54%	67%
11:00 AM			53%	71%	100%		42%	62%	18%	27%	71%	85%
12:00 PM			50%	68%	81%		39%	40%	100%	70%	99%	95%
1:00 PM			49%	66%	81%		27%	32%	75%	80%	100%	100%
2:00 PM			49%	70%	84%				45%	100%	90%	98%
3:00 PM			50%	69%	86%				31%	57%	83%	92%
4:00 PM			58%	72%	92%				23%	43%	81%	86%
5:00 PM			64%	74%	85%				49%	60%	84%	79%
6:00 PM			67%	74%	4%				77%	87%	86%	71%
7:00 PM			70%	73%					69%	53%	80%	69%
8:00 PM			76%	75%					28%	43%	63%	60%
9:00 PM			83%	78%					20%	33%	42%	51%
10:00 PM			90%	82%					11%	20%	15%	38%
11:00 PM			93%	88%								
Supply	1.3 spaces/DU		1.7 spaces/DU		3.9 spaces/KSF		7.1 spaces/KSF		11 spaces/KSF		5.1 spaces/KSF	
Average Demand	per DU (Income Limits)		per DU		per KSF GFA		per DU		per KSF GFA		per KSF GFA	
	0.99	0.79	1.31	1.22	2.56	NA	10.49	14.44	9.92	8.75	1.98	2.91
	76%	65%	Affordable as % of MF M									

Time of Day	LOT A - Estimated Parking Demand Using ITE Rates						LOT E - Estimated Parking Demand Using ITE Rates					
	Multifamily -Mid (221)		Shopping Center (820)		Combined Demand		Multifamily -Mid (221)		Shopping Center (820)		Combined Demand	
	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
Demand	132	123	179	263	Weekday	Saturday	193	179	134	197	Weekday	Saturday
12:00 AM	132	123	0	0	132	123	193	179	0	0	193	179
5:00 AM	124	122	0	0	124	122	181	177	0	0	181	177
6:00 AM	110	119	0	0	110	119	160	174	0	0	160	174
7:00 AM	94	117	0	0	94	117	137	170	0	0	137	170
8:00 AM	81	108	27	71	108	179	118	158	20	53	138	211
9:00 AM	73	102	57	121	130	223	106	149	43	91	149	240
10:00 AM	71	92	97	176	168	268	104	134	72	132	176	266
11:00 AM	70	87	127	224	197	311	102	127	95	167	197	294
12:00 PM	66	84	177	250	243	334	97	122	133	187	230	309
1:00 PM	65	81	179	263	244	344	95	118	134	197	229	315
2:00 PM	65	86	161	258	226	344	95	125	121	193	216	318
3:00 PM	66	85	149	242	215	327	97	124	111	181	208	305
4:00 PM	77	89	145	226	222	315	112	129	109	169	221	298
5:00 PM	84	91	150	208	234	299	124	132	113	156	237	288
6:00 PM	88	91	154	187	242	278	129	132	115	140	244	272
7:00 PM	92	90	143	181	235	271	135	131	107	136	242	267
8:00 PM	100	92	113	158	213	250	147	134	84	118	231	252
9:00 PM	110	96	75	134	185	230	160	140	56	100	216	240
10:00 PM	119	101	27	100	146	201	174	147	20	75	194	222
11:00 PM	123	108	0	0	123	108	179	158	0	0	179	158
			MAX		344				MAX		318	

Conclusion: Combined site use with shared parking does not exceed weekday residential parking demand at night based on ITE demand

Time of Day	OT A - Estimated Parking Demand Using Milwaukee Code						OT E - Estimated Parking Demand Using Milwaukee Code					
	Multifamily -Mid (221)		Shopping Center (820)		Combined Demand		Multifamily -Mid (221)		Shopping Center (820)		Combined Demand	
	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday	Weekday	Saturday
Demand	101	101	29	29	Weekday	Saturday	93	93	32	32	Weekday	Saturday
12:00 AM	101	101	0	0	101	101	93	93	0	0	93	93
5:00 AM	95	100	0	0	95	100	87	92	0	0	87	92
6:00 AM	84	98	0	0	84	98	77	90	0	0	77	90
7:00 AM	72	96	0	0	72	96	66	88	0	0	66	88
8:00 AM	62	89	4	8	66	97	57	82	5	9	62	91
9:00 AM	56	84	9	13	65	97	51	77	10	15	61	92
10:00 AM	55	76	16	19	71	95	50	70	17	21	67	91
11:00 AM	54	72	21	25	75	97	49	66	23	27	72	93
12:00 PM	51	69	29	28	80	97	47	63	32	30	79	93
1:00 PM	49	67	29	29	78	96	46	61	32	32	78	93
2:00 PM	49	71	26	28	75	99	46	65	29	31	75	96
3:00 PM	51	70	24	27	75	97	47	64	27	29	74	93
4:00 PM	59	73	23	25	82	98	54	67	26	28	80	95
5:00 PM	65	75	24	23	89	98	60	69	27	25	87	94
6:00 PM	68	75	25	21	93	96	62	69	28	23	90	92
7:00 PM	71	74	23	20	94	94	65	68	26	22	91	90
8:00 PM	77	76	18	17	95	93	71	70	20	19	91	89
9:00 PM	84	79	12	15	96	94	77	73	13	16	90	89
10:00 PM	91	83	4	11	95	94	84	76	5	12	89	88
11:00 PM	94	89	0	0	94	89	86	82	0	0	86	82
			MAX		101				MAX		96	

Conclusion: Combined site use with shared parking does not exceed weekday residential parking demand at night based on parking requirements in Milwaukee Code but combined Saturday demand on Lot E would exceed residential demand by 3 spaces.

Hillside Master Plan - Water System Loads

SEA011

** Based on City of Milwaukie 2010 Water Master Plan (WMP)

Lot	Units	Average per capita demand (gpcd) WMP Sec. 4.1.4	ADD (gpd)	Max Day Demand (MDD), gpd Peak Factor = 1.9	Peak Hour Demand (PHD), gpd Peak Factor = 2.7	Remarks
A-units	113	116	13108	24905	35392	
A-Commercial (12,420sf)			375	713	1013	Commerical = to 1317 gpd/acre (normalized) per COM 2010 Water MP, Table 4-6
B	100	116	11600	22040	31320	
C	75	116	8700	16530	23490	
D	48	116	5568	10579	15034	
E-units	105	116	12180	23142	32886	
E-Commercial (13,816sf)			418	794	1129	Commerical = to 1317 gpd/acre (normalized) per COM 2010 Water MP, Table 4-6
F	34	116	3944	7494	10649	
G	20	116	2320	4408	6264	
H	100	116	11600	22040	31320	
K	12	116	1392	2645	3758	
Total	607					
Totals			71205	135290	192254	

Totals by Lot	ADD (gpd)	MDD (gpd)	PHD (gpd)
A	13483	25618	36404
B	11600	22040	31320
C	8700	16530	23490
D	5568	10579	15034
E	12598	23936	34015
F	3944	7494	10649
G	2320	4408	6264
H	11600	22040	31320
K	1392	2645	3758
Totals	71205	135290	192254

Hillside Master Plan -Sanitary System Loads

SEA011

** Based on City of Milwaukie 2010 Sanitary Sewer Master Plan (SMP)

Lot	Units	Average multifamily residence flow per day (gpd/unit)	Average Daily Flow (gpd)	Daily Flow Peaking Factor = 2.5 (gpd)	Remarks
A-units	113	80	9040	22600	
A-Commercial (12,420sf)	8	80	640	1600	Commercial = to 8 residences (2010 Sewer MP, p. 4-3)
B	100	80	8000	20000	
C	75	80	6000	15000	
D	48	80	3840	9600	
E-units	105	80	8400	21000	
E-Commercial (13,816sf)	8	80	640	1600	Commercial = to 8 residences (2010 Sewer MP, p. 4-3)
F	34	80	2720	6800	
G	20	80	1600	4000	
H	100	80	8000	20000	
K	12	80	960	2400	
Total	623				

Totals	49840	124600
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Totals by Lot	Avg Flow with 2.5 peaking factor (gpd)
A	24200
B	20000
C	15000
D	9600
E	22600
F	6800
G	4000
H	20000
K	2400
	124600