APPENDIX E
SEWER STUDY

SEWER AREA STUDY

FOR

Domain Apartments
7141 – 7155 Santa Monica Boulevard
West Hollywood, CA

Prepared for:

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October, 2012

10/26/2012

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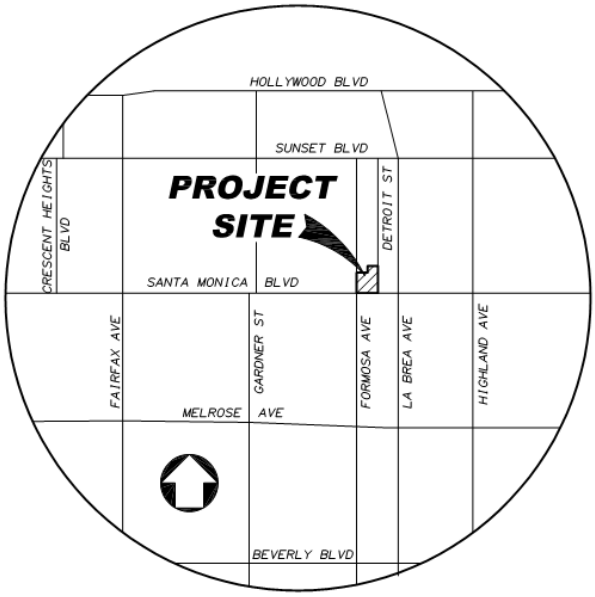
1.0 INTRODUCTION

The Domain Apartments project site is located on the north side of Santa Monica Boulevard between Formosa Avenue and Detroit Street. The existing site address spans over 7141 – 7155 Santa Monica Boulevard and 1107 – 1117 Detroit Street, West Hollywood, California. The existing site contains several two-story buildings and gated surface parking. The site is zoned Commercial, Arterial (CA) per the City of West Hollywood Zoning Map and General Land Use Plan. (See Appendix 4).



The Domain Apartments is a mixed-use project with proposed restaurant and retail space on the ground floor level. Approximately 166 residential units are proposed in the 6-story building. Two levels of subterranean parking are proposed, which will provide 214 residential parking spaces and the ground level parking will provide 46 commercial parking spaces.

2.0 ONSITE SEWER AREA STUDY

The existing project site sewer discharge was calculated using the City of West Hollywood "Sewer Capacity Study Requirements." Assumed to be "commercial" the sewer generation rate of 80 gallons per day per 1,000SF was used to calculate the existing site sewer discharge.

Land Use	**Area**	**Unit Flow (Gal/Day)**	**Q_{AF}**
CA	57,965 SF	80 GPD/1000 S.F.	4,637 GPD (0.007 CFS)

Sewer discharge for the proposed project has been calculated using the City of West Hollywood "Sewer Capacity Study Requirements." The project components and corresponding sewer generation rates are tabulated on the following sheet.

Proposed Sewer Discharge:

Land Use	**Area/Unit**	**Unit Flow (Gal/Day)**	**Q_{AF} (Avg Daily Flow)**
Residential: Apt-Studio	51 DU	80	4,080 GPD
Residential: Apt 1 Bedroom	77 DU	120	9,240 GPD
Residential: Apt-2 Bedroom	38 DU	160	6,080 GPD
Retail	6,787 SF	80/1000 SF	543 GPD
Restaurant: Full Service Indoor Seating	100 SEATS*	30/SEAT	3,000 GPD
		TOTAL	**22,943 GPD (0.035 CFS)**

*100 seats assumed based on 2,500 sf indoor space.

Project components are based on the current architectural plans and have been included in Appendix 4.

3.0 OFFSITE SEWER AREA STUDY

Existing flows beginning at the intersection of Santa Monica Boulevard and Formosa Avenue have been used from the existing sewer area study performed for the expansion of the Warner Studio Lot by The Keith Companies, March 1992. A sewer capacity analysis is shown for the existing 8-inch sewer along Formosa Avenue from the project site to the 15-inch main in Poinsettia Place.

The existing 8-inch sewer along Formosa is within the City of West Hollywood between Santa Monica Boulevard and Romaine Street. The sewer is within the City of Los Angeles for portions south of Romaine Street. Existing pipe diameters and slopes were found from As-Built data from the City of West Hollywood and from Navigate LA for areas in the City of Los Angeles.

Tributary areas are shown in the Sewer Area Study Exhibit in Appendix 1. The land use for each tributary area was found according to the City of West Hollywood and City of Los Angeles zoning and land use maps. The corresponding sewer generation rates are shown in Table 1. The sewer generation rates are used from the "Formosa Specific Plan Project" Sewer Study by Kimley-Horn and Associates, June 2008. The average daily flows were calculated and the peak factor was applied per the corresponding city guidelines. The City of West Hollywood uses a 2.5 peak factor for pipes less than 15-inch in diameter, and 2.0 peak factor for pipes greater than 15-inch in diameter. City of Los Angeles Peak Factor is based on average dry weather flow in cubic feet per second and can be found in Appendix 3.

The existing condition sewer study analysis is shown in Table 2. Existing conditions show the segments of the 8-inch main within the City of Los Angeles, just south of Willoughby Street, are deficient and flowing near to full capacity. It should also be noted that the segment just south of Romaine Street (Manhole #96 to #95) is flowing at approximately 62% full at peak flows. Table 3 presents the proposed condition with the addition of the Domain Apartment flows.

TABLE 1

SEWAGE LOADING FACTORS						
LAND USE DESCRIPTION					*AVERAGE DAILY FLOW*	
CITY OF W.H.	**CITY OF L.A**	**DENSITY**	**UNITS/ACRE**	**UNIT FLOW (GPD)**	**GPD PER ACRE**	**CFS PER ACRE**
CC1	(FAR 1.5)	65,000 SF/ACRE	65,000 SF/ACRE	100/1,000 SF	6,500	0.01
CR	(FAR 3.0)	131,000 SF/ACRE	131,000 SF/ACRE	100/1,000 SF	13,100	0.02
	PF-1	PUBLIC FACILITY*			3878	0.006
	MR1-2	LIGHT INDUSTRIAL			5170	0.008
	R1	1DU/5,000SF	8.7 DU/ACRE	330/DU	2871	0.004
	R2	1DU/2,500SF	17.42 DU/ACRE	330/DU	5749	0.009
	R3	1DU/800 SF	54DU/ACRE	330/DU	17820	0.03
	C4				3878	0.006

*PUBLIC FACILITY IS A DWP ELECTRICAL SUBSTATION-ASSUMED LIGHT COMMERCIAL

NOTE: LOADING FACTORS BASED ON FORMOSA SPECIFIC PLAN SEWER STUDY, KIMLEY-HORN AND ASSOC., 2008

PROJECT NAME: DOMAIN APARTMENTS
PROJECT NUMBER: 1GLJ010200
PREPARED BY: PSOMAS

10/25/2012

Table 2: Sewer Area Study Analysis for Domain Apartments - Existing Condition

Street Name	Segment		***Pipe		*Capacity		Area No.	Area (acres)	No. of Units or Zone	Zoning Coeff. (cfs/ac or cfs/unit)	Calculated Flow (cfs)	**Cumulative Calculated Flow (cfs)	Peak Factor (See Note 1)	Peak Flow	Comment	Flow Depth	0.5 Pipe Size or 0.75 Pipe Size	% Full		Mitigation		
	MH No.	MH No.	Size (in)	Slope (%)	1/2 Full (≤15") (cfs)	3/4 Full (>15") (cfs)												Flow Depth / Pipe Size	Calculated Flow / Capacity	Replace	Size (in)	1/2 Full Capacity (cfs)
Santa Monica Blvd							**								Existing flow based on 1992 Sewer							
	X	100	8	(2.40%)	0.94						0.188	0.188	2.50	0.470	Study "Warner Studios"	0.23	0.33	35%	50%	No	-	-
Formosa Ave	100	99	8	(1.28%)	0.68							0.188	2.50	0.470	City of West Hollywood	0.27	0.33	41%	69%	No	-	-
Formosa Ave	99	98	8	(1.28%)	0.68		A	1.2	CR	0.02	0.024	0.212	2.50	0.530	Data Per As-Built Records	0.29	0.33	44%	78%	No	-	-
Formosa Ave	98	97	8	(1.28%)	0.68		B	3.3	CC1	0.01	0.033	0.245	2.50	0.613		0.31	0.33	47%	90%	No	-	-
Formosa Ave (Romaine)	97	96	8	(2.36%)	0.86		C	2.8	CR	0.02	0.056	0.301	3.00	0.903	City of Los Angeles	0.34	0.33	51%	105%	No	-	-
Formosa Ave	96	95	8	(1.40%)	0.66		D	0.8	PF	0.006	0.005	0.306	3.00	0.917	Data Per Navigate LA							
							E	0.6	MR1	0.008	0.005	0.311	2.95	0.916		0.41	0.33	62%	139%	No	-	-
Formosa Ave (Willoughby)	95	94	8	(0.80%)	0.50		F	0.8	PF	0.006	0.005	0.315	2.95	0.930								
							G	2.7	MR1	0.008	0.022	0.337	2.95	0.994		0.54	0.33	81%	199%	Yes	12	1.48
Formosa Ave	94	93	8	(0.80%)	0.50		H	1.7	R3	0.003	0.005	0.342	2.95	1.009		0.55	0.33	83%	202%	Yes	12	1.48
Formosa Ave (Waring)	93	92	8	(2.28%)	0.85		I	1.6	R2	0.009	0.014	0.357	2.90	1.034		0.38	0.33	57%	122%	Yes	12	2.50
Formosa Ave	92	91	8	(1.32%)	0.65		J	0.7	R2	0.009	0.006	0.363	2.90	1.052		0.46	0.33	69%	162%	Yes	12	1.90
Alley	91	90	8	(0.44%)	0.37		K	0.7	R2	0.009	0.006	0.369	2.90	1.070		FULL	0.33	#VALUE!	289%	Yes	12	1.10
Alley	90	89	8	(0.40%)	0.36		L	0.3	C4	0.006	0.002	0.371	2.90	1.076		FULL	0.33	#VALUE!	299%	Yes	12	1.05
Alley (Alta Vista)	89	88	8	(0.41%)	0.36		M	0.4	C4	0.006	0.002	0.373	2.90	1.083								
							N	3.2	R1	0.004	0.013	0.386	2.90	1.120								
							O	3.7	R3	0.003	0.011	0.397	2.89	1.148		FULL	0.33	#VALUE!	319%	Yes	12	1.06
Alley	88	87	8	(1.20%)	0.62		P	0.3	C4	0.006	0.002	0.399	2.89	1.153								
							Q	0.4	C4	0.006	0.002	0.401	2.89	1.160		0.52	0.33	78%	187%	Yes	12	1.81

Note:
1. City of West Hollywood Sewer Capacity Study Requirements (2.5 Peak Factor <15" Diameter, 2.0 Peak Factor >15" Diameter)
   City of Los Angeles Sewer Capacity Study Peak Flows per Figure F235
2. Manning's n value 0.013 for City of West Hollywood, n=0.014 for City of Los Angeles

* Calculated using Kutter's Formula with n=0.013 (as in S-C4 graph in PC Procedure Manual)
** Based on current land use and coefficients per LA County (Attach supporting calculations)
*** Numbers in ( ) indicate existing sewer pipes

PROJECT NAME: DOMAIN APARTMENTS
PROJECT NUMBER: 1GLJ010200
PREPARED BY: PSOMAS

10/25/2012

Table 3: Sewer Area Study Analysis for Domain Apartments - Proposed Condition

Street Name	Segment		***Pipe		*Capacity		Area No.	Area (acres)	No. of Units or Zone	Zoning Coeff. (cfs/ac or cfs/unit)	Calculated Flow (cfs)	**Cumulative Calculated Flow (cfs)	Peak Factor (See Note 1)	Peak Flow	Comment	Flow Depth	0.5 Pipe Size or 0.75 Pipe Size	% Full		Mitigation		
	MH No.	MH No.	Size (in)	Slope (%)	1/2 Full (≤15") (cfs)	3/4 Full (>15") (cfs)												Flow Depth / Pipe Size	Calculated Flow / Capacity	Replace	Size (in)	1/2 Full Capacity (cfs)
Santa Monica Blvd							**					0.181	2.50	0.453	Existing flow based on 1992 Sewer							
	X	100	8	(2.40%)	0.94		DOMAIN APT FLOW				0.035	0.216	2.50	0.540	Study "Warner Studios"	0.24	0.33	36%	57%	No	-	-
Formosa Ave	100	99	8	(1.28%)	0.68							0.216	2.50	0.540	City of West Hollywood	0.29	0.33	44%	79%	No	-	-
Formosa Ave	99	98	8	(1.28%)	0.68		A	1.2	CR	0.02	0.023	0.239	2.50	0.598		0.31	0.33	47%	88%	No	-	-
Formosa Ave	98	97	8	(1.28%)	0.68		B	3.3	CC1	0.01	0.033	0.272	2.50	0.680		0.33	0.33	50%	100%	No	-	-
Formosa Ave (Romaine)	97	96	8	(2.36%)	0.86		C	2.8	CR	0.02	0.056	0.328	3.00	0.984	City of Los Angeles	0.36	0.33	54%	114%	No	-	-
Formosa Ave	96	95	8	(1.40%)	0.66		D	0.8	PF	0.006	0.005	0.333	3.00	0.998	Data Per Navigate LA							
							E	0.6	MR1	0.008	0.005	0.338	2.95	0.996		0.43	0.33	65%	151%	No	-	-
Formosa Ave (Willoughby)	95	94	8	(0.80%)	0.50		F	0.8	PF	0.006	0.005	0.342	2.95	1.010								
							G	2.7	MR1	0.008	0.022	0.364	2.95	1.074		0.60	0.33	90%	215%	Yes	12	1.48
Formosa Ave	94	93	8	(0.80%)	0.50		H	1.7	R3	0.003	0.005	0.369	2.95	1.089		FULL	0.33	#VALUE!	218%	Yes	12	1.48
Formosa Ave (Waring)	93	92	8	(2.28%)	0.85		I	1.6	R2	0.009	0.014	0.384	2.90	1.112		0.39	0.33	59%	131%	Yes	12	2.50
Formosa Ave	92	91	8	(1.32%)	0.65		J	0.7	R2	0.009	0.006	0.390	2.90	1.130		0.48	0.33	72%	174%	Yes	12	1.90
Alley	91	90	8	(0.44%)	0.37		K	0.7	R2	0.009	0.006	0.396	2.90	1.149		FULL	0.33	#VALUE!	310%	Yes	12	1.10
Alley	90	89	8	(0.40%)	0.36		L	0.3	C4	0.006	0.002	0.398	2.90	1.154		FULL	0.33	#VALUE!	321%	Yes	12	1.05
Alley (Alta Vista)	89	88	8	(0.41%)	0.36		M	0.4	C4	0.006	0.002	0.400	2.90	1.161								
							N	3.2	R1	0.004	0.013	0.413	2.88	1.190								
							O	3.7	R3	0.003	0.011	0.424	2.87	1.217		FULL	0.33	#VALUE!	338%	Yes	12	1.06
Alley	88	87	8	(1.20%)	0.62		P	0.3	C4	0.006	0.002	0.426	2.86	1.218								
							Q	0.4	C4	0.006	0.002	0.428	2.86	1.225		0.54	0.33	81%	198%	Yes	12	1.81

Note:
1. City of West Hollywood Sewer Capacity Study Requirements (2.5 Peak Factor <15" Diameter, 2.0 Peak Factor >15" Diameter)
City of Los Angeles Sewer Capacity Study Peak Flows per Figure F235
2. Manning's n value 0.013 for City of West Hollywood, n=0.014 for City of Los Angeles

* Calculated using Kutter's Formula with n=0.013 (as in S-C4 graph in PC Procedure Manual)
** Based on current land use and coefficients per LA County (Attach supporting calculations)
*** Numbers in ( ) indicate existing sewer pipes

4.0 DISCUSSION

As previously stated the existing conditions show the sewer in Formosa Street south of Willoughby Avenue is flowing over design capacity and suggest that mitigation may be required by the local authorities. However, the County has indicated that they are able to receive the flows from the Domain Apartments and only require a sewer connection fee to be paid (See Appendix 5) and the City of Los Angeles indicated in a Sewer Capacity Availability Request (SCAR) dated October 25, 2012 (See Appendix 6) that the existing system can accommodate the estimated project flows.

SCAR findings are only valid for a period of 180 days, which may prompt a new SCAR to be requested when the project is ultimately constructed and connected to the existing system. If at that time the SCAR finds the existing system has insufficient capacity, improvements to the sewer system will be required. Two improvements have been identified and the first more costly option would be the upsizing of the deficient 8" sewer along Formosa Avenue from Willoughby to Poinsettia Place, roughly 1,860ft. The second more cost effective option would be to deviate upstream flows at Willoughby to an existing trunk sewer in Detroit Street.

The second option would install a12-inch sewer along Willoughby Avenue between Formosa Avenue and Detroit Street, roughly 330 linear feet. The 12-inch extension would join an existing manhole at the intersection of Detroit Street. The Formosa Avenue flows would bypass the deficient segments downstream of Willoughby Avenue.

Although shown flowing slightly over the typical 50% design capacity, the segment of pipe in Formosa Avenue between Romaine Street and Willoughby Avenue need not be replaced as it is capable of handling peak flows without any surcharge.

5.0 CONCLUSION

Based on the results received from the current City of Los Angeles SCAR no mitigation is necessary.

Since SCAR results are only valid for 180 days a new SCAR may be required in the future and would trigger the need for improvement or not at that time. If the need for improvements is triggered, the addition of a 12-inch sewer line along Willoughby Avenue, from the Formosa sewer to the 21-inch sewer trunk line in Detroit Street will provide adequate mitigation.

6.0 REFERENCES

City of West Hollywood Department of Public Works, Engineering Division, *Sewer Capacity Study Requirements*

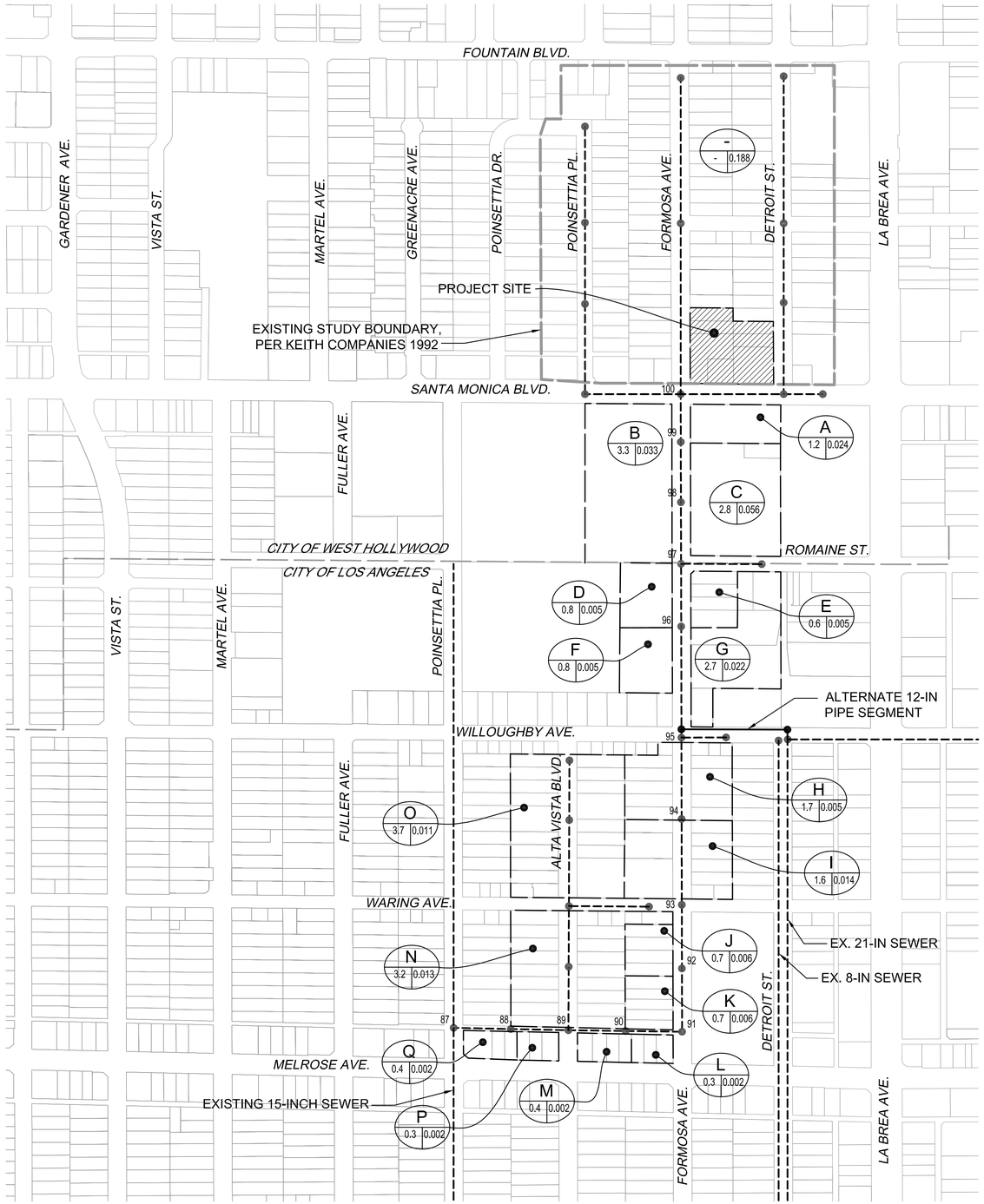
Los Angeles County Department of Public Works, *Guidelines for Wastewater Pump Station Design and Plan Submittal Procedures* (LACDPW Waterworks and Sewer Maintenance Division, June 2005)

Bentley Flowmaster, Service Pack 3, Bentley Systems, 2005

Sewer Study Formosa Specific Plan Project, 7141-7155 Santa Monica Boulevard and 1107-1117 Detroit Street, West Hollywood, California, 90046
(Kimley-Horn and Associates June 30, 2008)

Appendix 1

SEWER AREA STUDY MAP



LEGEND:

- CITY BOUNDARY
- PORTION OF EXISTING SEWER STUDY BOUNDARY,1992
- SEWER AREA BOUNDARY
- EXISTING SEWER MAIN
- PROPOSED SEWER MAIN
- 100 EXISTING SEWER MANHOLE
- 100 PROPOSED SEWER MANHOLE
- SEWER FLOW DIRECTION

A — SUBAREA
AREA (ACRES) — 10.2 | 0.001 — AVG. DAILY FLOW (CFS)

200' 100' 0' 200' 400'
GRAPHIC SCALE
Note: For reduced sized prints, original scale is in inches

Domain Apartments

Domain Apartments
Sewer Area Study Exhibit

PSOMAS

DATE: 10-05-12 REVISED ON:
JOB No:1GLJ010200

SHEET 1 OF 1
DOM 01

Oct. 05, 2012 - 14:20:50 DWG Name: V:\1GLJ010200\Engr\DOCS\Sewer Area Study\Domain Sewer Area.dwg Updated By: rrgarcia

Appendix 2

FLOWMASTER CALCULATIONS

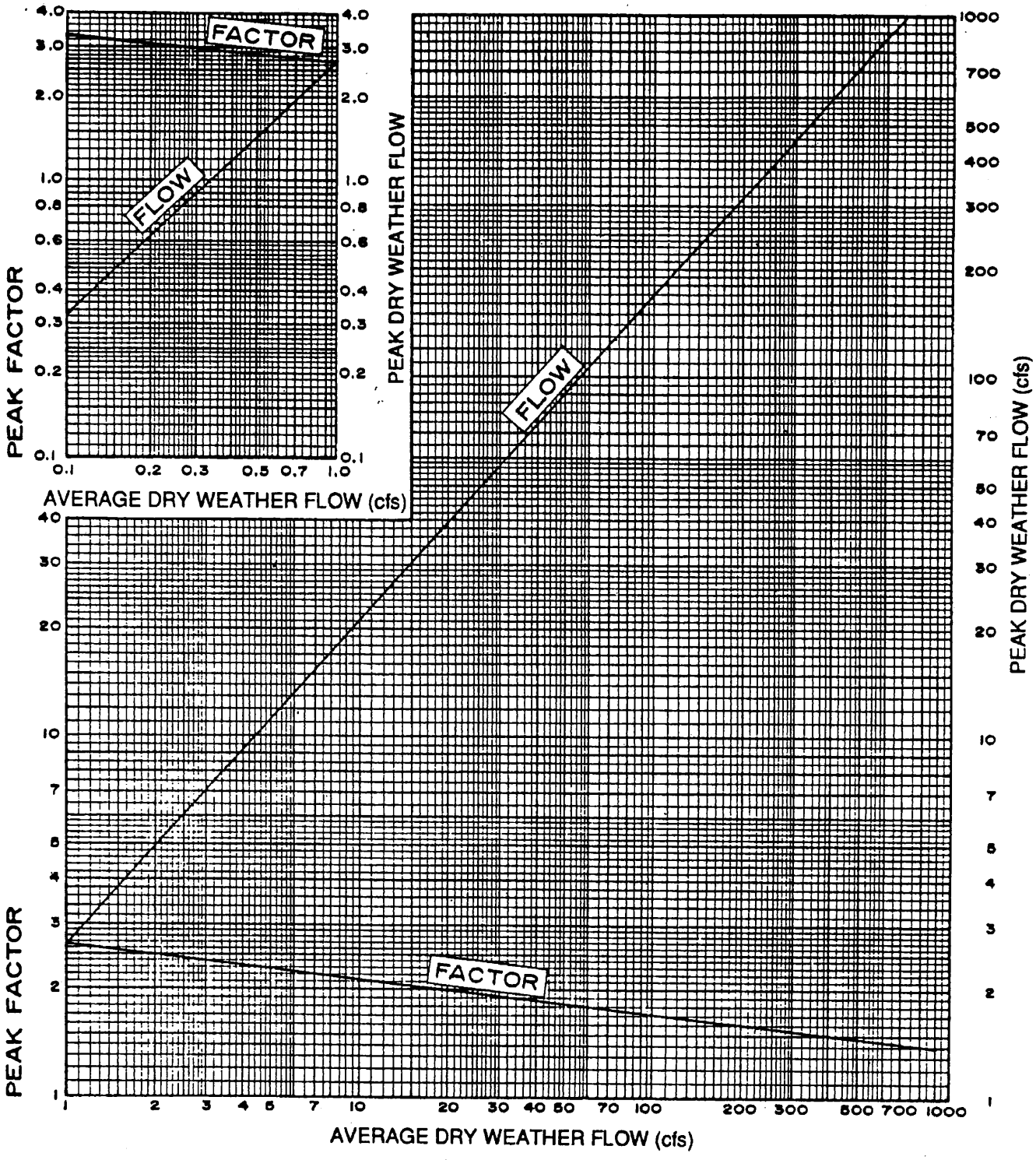
Existing, Proposed and Capacity Calculations

Reach	Friction Method	Roughness Coefficient	Channel Slope (ft/ft)	Normal Depth (ft)	Diameter (ft)	Discharge (ft³/s)	Percent Full (%)	Velocity (ft/s)	Maximum Discharge (ft³/s)	Discharge Full (ft³/s)	Flow Type
X-100_EXIST	Manning Formula	0.013	0.024	0.23	0.67	0.47	34.2	4.46	2.02	1.87	SuperCritical
100-99_EXIST	Manning Formula	0.013	0.0128	0.27	0.67	0.47	40.4	3.56	1.47	1.37	SuperCritical
99-98_EXIST	Manning Formula	0.013	0.0128	0.29	0.67	0.53	43.1	3.67	1.47	1.37	SuperCritical
98-97_EXIST	Manning Formula	0.013	0.0128	0.31	0.67	0.61	46.9	3.81	1.47	1.37	SuperCritical
97-96_EXIST	Manning Formula	0.014	0.0236	0.34	0.67	0.9	51.4	5	1.86	1.73	SuperCritical
96-95_EXIST	Manning Formula	0.014	0.014	0.41	0.67	0.92	61	4.11	1.43	1.33	SuperCritical
95-94_EXIST	Manning Formula	0.014	0.008	0.54	0.67	0.99	81	3.28	1.08	1	SubCritical
94-93_EXIST	Manning Formula	0.014	0.008	0.55	0.67	1.01	82.3	3.28	1.08	1	SubCritical
93-92_EXIST	Manning Formula	0.014	0.0228	0.38	0.67	1.03	56.4	5.09	1.82	1.7	SuperCritical
92-91_EXIST	Manning Formula	0.014	0.0132	0.46	0.67	1.05	68.6	4.12	1.39	1.29	SuperCritical
91-90_EXIST	Manning Formula	0.014	0.0044	0.33	0.67	1.07	49.5	2.12	0.8	0.75	SubCritical
90-89_EXIST	Manning Formula	0.014	0.004	0.34	0.67	1.08	51.1	2.05	0.76	0.71	SubCritical
89-88_EXIST	Manning Formula	0.014	0.0041	0.34	0.67	1.15	50.5	2.23	0.83	0.77	SubCritical
88-87_EXIST	Manning Formula	0.014	0.012	0.52	0.67	1.16	77.2	4.01	1.32	1.23	SubCritical
X-100_PROP	Manning Formula	0.013	0.024	0.24	0.67	0.54	36.7	4.64	2.02	1.87	SuperCritical
100-99_PROP	Manning Formula	0.013	0.0128	0.29	0.67	0.54	43.6	3.69	1.47	1.37	SuperCritical
99-98_PROP	Manning Formula	0.013	0.0128	0.31	0.67	0.6	46.2	3.79	1.47	1.37	SuperCritical
98-97_PROP	Manning Formula	0.013	0.0128	0.33	0.67	0.68	49.8	3.91	1.47	1.37	SuperCritical
97-96_PROP	Manning Formula	0.014	0.0236	0.36	0.67	0.98	54.1	5.1	1.86	1.73	SuperCritical
96-95_PROP	Manning Formula	0.014	0.014	0.43	0.67	1	64.6	4.17	1.43	1.33	SuperCritical
95-94_PROP	Manning Formula	0.014	0.008	0.6	0.67	1.07	90.6	3.23	1.08	1	SubCritical
94-93_PROP	Manning Formula	0.014	0.008	0.57	0.67	1.09	85.6	3.52	1.16	1.08	SubCritical
93-92_PROP	Manning Formula	0.014	0.0228	0.39	0.67	1.11	59.1	5.18	1.82	1.7	SuperCritical
92-91_PROP	Manning Formula	0.014	0.0132	0.48	0.67	1.13	72.5	4.17	1.39	1.29	SuperCritical
91-90_PROP	Manning Formula	0.014	0.0044	0.35	0.67	1.15	52.2	2.17	0.8	0.75	SubCritical
90-89_PROP	Manning Formula	0.014	0.004	0.36	0.67	1.15	54	2.1	0.76	0.71	SubCritical
89-88_PROP	Manning Formula	0.014	0.0041	0.35	0.67	1.21	53.1	2.27	0.83	0.77	SubCritical
88-87_PROP	Manning Formula	0.014	0.012	0.54	0.67	1.22	81.2	4.02	1.32	1.23	SubCritical
X-100_CAP-50%	Manning Formula	0.013	0.024	0.33	0.67	0.94	50	5.36	2.02	1.87	SuperCritical
100-99_CAP-50%	Manning Formula	0.013	0.0128	0.33	0.67	0.68	50	3.92	1.47	1.37	SuperCritical
99-98_CAP-50%	Manning Formula	0.013	0.0128	0.33	0.67	0.68	50	3.92	1.47	1.37	SuperCritical
98-97_CAP-50%	Manning Formula	0.013	0.0128	0.33	0.67	0.68	50	3.92	1.47	1.37	SuperCritical
97-96_CAP-50%	Manning Formula	0.014	0.0236	0.33	0.67	0.86	50	4.94	1.86	1.73	SuperCritical
96-95_CAP-50%	Manning Formula	0.014	0.014	0.33	0.67	0.66	50	3.8	1.43	1.33	SuperCritical
95-94_CAP-50%	Manning Formula	0.014	0.008	0.33	0.67	0.5	50	2.88	1.08	1	SubCritical
94-93_CAP-50%	Manning Formula	0.014	0.008	0.33	0.67	0.5	50	2.88	1.08	1	SubCritical
93-92_CAP-50%	Manning Formula	0.014	0.0228	0.33	0.67	0.85	50	4.86	1.82	1.7	SuperCritical
92-91_CAP-50%	Manning Formula	0.014	0.0132	0.33	0.67	0.65	50	3.69	1.39	1.29	SuperCritical
91-90_CAP-50%	Manning Formula	0.014	0.0044	0.33	0.67	0.37	50	2.13	0.8	0.75	SubCritical
90-89_CAP-50%	Manning Formula	0.014	0.004	0.33	0.67	0.36	50	2.03	0.76	0.71	SubCritical
89-88_CAP-50%	Manning Formula	0.014	0.0041	0.34	0.67	0.36	50	2.06	0.77	0.72	SubCritical
88-87_CAP-50%	Manning Formula	0.014	0.012	0.34	0.67	0.62	50	3.53	1.32	1.23	SuperCritical
95-94_CAP-50%-MITIGATE	Manning Formula	0.014	0.008	0.5	1	1.48	50	3.77	3.18	2.96	SuperCritical
94-93_CAP-50%-MITIGATE	Manning Formula	0.014	0.008	0.5	1	1.48	50	3.77	3.18	2.96	SuperCritical
93-92_CAP-50%-MITIGATE	Manning Formula	0.014	0.0228	0.5	1	2.5	50	6.36	5.37	5	SuperCritical
92-91_CAP-50%-MITIGATE	Manning Formula	0.014	0.0132	0.5	1	1.9	50	4.84	4.09	3.8	SuperCritical
91-90_CAP-50%-MITIGATE	Manning Formula	0.014	0.0044	0.5	1	1.1	50	2.79	2.36	2.19	SubCritical
90-89_CAP-50%-MITIGATE	Manning Formula	0.014	0.004	0.5	1	1.05	50	2.66	2.25	2.09	SubCritical
89-88_CAP-50%-MITIGATE	Manning Formula	0.014	0.0041	0.5	1	1.06	50	2.7	2.28	2.12	SubCritical
88-87_CAP-50%-MITIGATE	Manning Formula	0.014	0.012	0.5	1	1.81	50	4.61	3.9	3.62	SuperCritical

Appendix 3

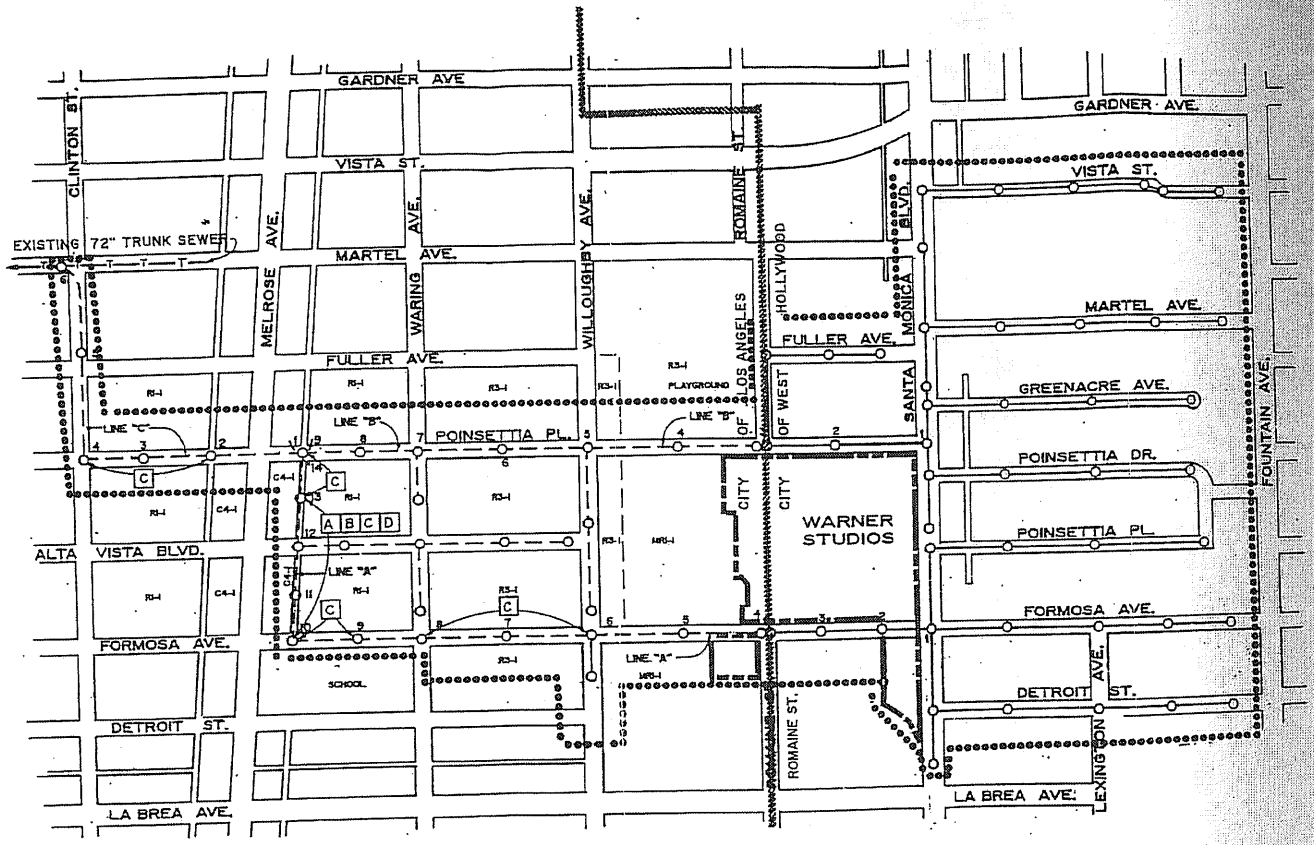
DESIGN CRITERIA

-Peak Factor City of Los Angeles
-Keith Companies, 1992 Sewer Study Exhibit & Flow Calculations



Average Dry Weather Flow - Peak Dry Weather Flow Chart
Figure F235

FIGURE 39



LEGEND

- A –EXISTING DEFICIENT CAPACITY
- B –ULTIMATE DEVELOPMENT (NO STUDIO) DEFICIENT CAPACITY
- C –ULTIMATE DEVELOPMENT + PHASE 4 STUDIO EXPANSION DEFICIENT CAPACITY
- D –ULTIMATE DEVELOPMENT + PHASES 1,2,AND 3 STUDIO EXPANSION DEFICIENT CAPACITY

EXISTING AND PROJECTED SEWER DEFICIENCIES

NORTH
No Scale

Source: The Keith Companies (March 1992)

FORMOSA AVENUE & POINSETTIA PLACE SEWERS
WITH OPTION A STUDIO EXPANSION
ULTIMATE SEWER FLOWS TO ROMAINE STREET

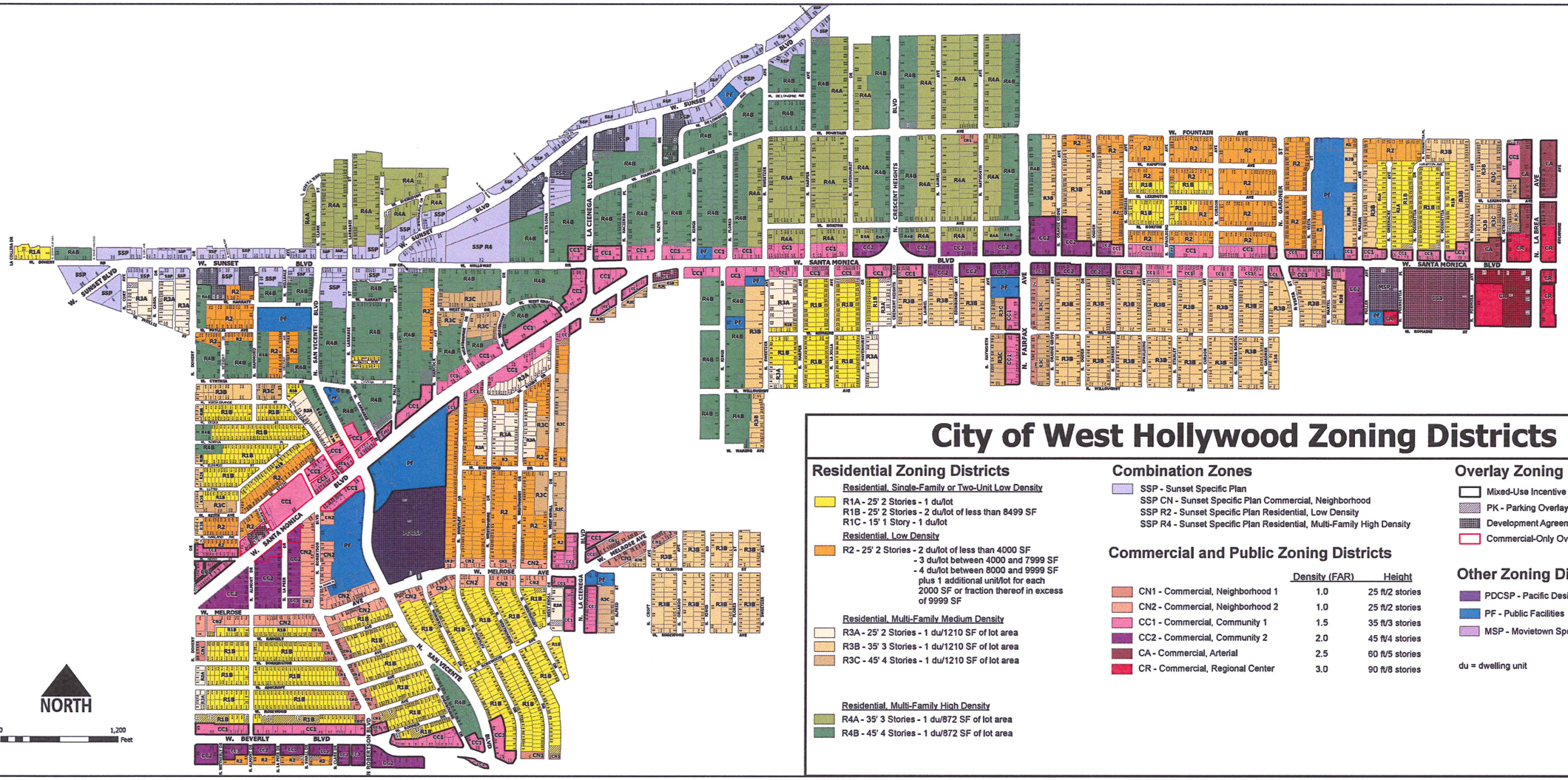
	Land Use G.P. Code	Area (Acres)	Load Factor (GPD/Acre)	A.D.F. (GPD)
"B" LINE - POINSETTIA PLACE				
	R1.1	4.12	2,870	11,824
	R1.2	4.40	4,500	19,800
	R2	7.32	6,300	46,116
	R3.2	5.54	5,400	29,916
	C2.1A	4.08	6,500	26,520
• Total at Santa Monica Boulevard				134,176
	C2.1A	1.86	6,500	12,090
	C2.1B	1.45	6,500	9,425
	Warner Studio			10,469
• Total at Romaine Street				166,160
"A" LINE - FORMOSA AVENUE				
	R1.2	4.65	4,500	20,925
	R3.2	6.32	5,400	34,128
	R3.3	8.77	5,400	47,358
	C2.1A	2.18	6,500	14,170
	C3A	.55	8,700	4,785
• Total at Santa Monica Boulevard				121,366
	C2.1B	2.76	6,500	17,940
	Warner Studio			94,522
• Total at Romaine Street				233,828

EXIST. FLOW
USED IN STUDY
0.188 CFS

Appendix 4

SUPPORTING DOCUMENTATION

-Land Use Maps
-Architectural Plans



City of West Hollywood Zoning Districts

Residential Zoning Districts

Residential, Single-Family or Two-Unit Low Density

- R1A - 25' 2 Stories - 1 du/lot
- R1B - 25' 2 Stories - 2 du/lot of less than 8499 SF
- R1C - 15' 1 Story - 1 du/lot

Residential, Low Density

- R2 - 25' 2 Stories - 2 du/lot of less than 4000 SF
  - 3 du/lot between 4000 and 7999 SF
  - 4 du/lot between 8000 and 9999 SF plus 1 additional unit/lot for each 2000 SF or fraction thereof in excess of 9999 SF

Residential, Multi-Family Medium Density

- R3A - 25' 2 Stories - 1 du/1210 SF of lot area
- R3B - 35' 3 Stories - 1 du/1210 SF of lot area
- R3C - 45' 4 Stories - 1 du/1210 SF of lot area

Residential, Multi-Family High Density

- R4A - 35' 3 Stories - 1 du/872 SF of lot area
- R4B - 45' 4 Stories - 1 du/872 SF of lot area

Combination Zones

- SSP - Sunset Specific Plan
- SSP CN - Sunset Specific Plan Commercial, Neighborhood
- SSP R2 - Sunset Specific Plan Residential, Low Density
- SSP R4 - Sunset Specific Plan Residential, Multi-Family High Density

Commercial and Public Zoning Districts

	Density (FAR)	Height
CN1 - Commercial, Neighborhood 1	1.0	25 ft/2 stories
CN2 - Commercial, Neighborhood 2	1.0	25 ft/2 stories
CC1 - Commercial, Community 1	1.5	35 ft/3 stories
CC2 - Commercial, Community 2	2.0	45 ft/4 stories
CA - Commercial, Arterial	2.5	60 ft/5 stories
CR - Commercial, Regional Center	3.0	90 ft/8 stories

Overlay Zoning Districts

- Mixed-Use Incentive Overlay Zone
- PK - Parking Overlay
- Development Agreement Overlay
- Commercial-Only Overlay Zone

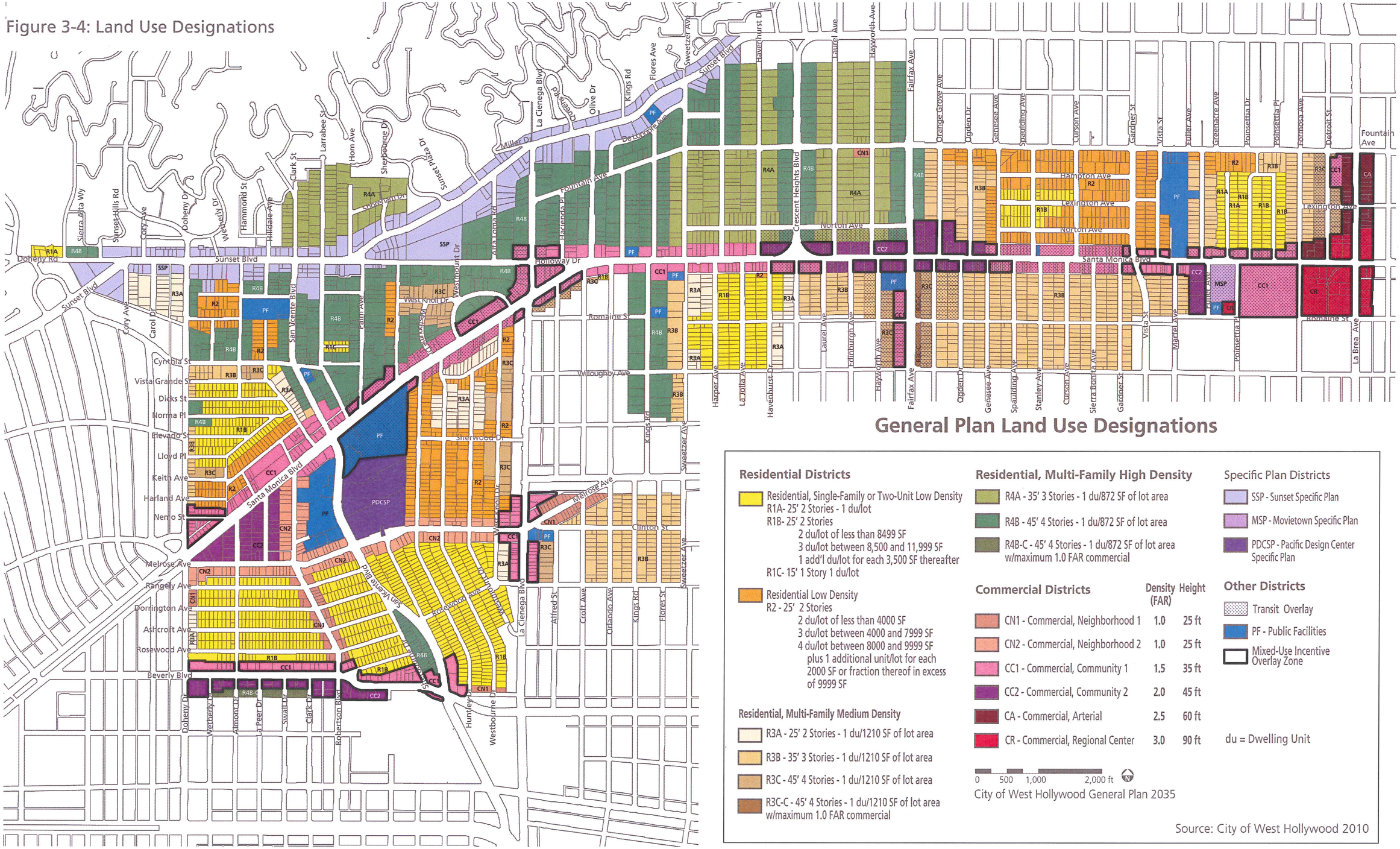
Other Zoning Districts

- PDCSP - Pacific Design Center Specific Plan
- PF - Public Facilities
- MSP - Movietown Specific Plan

du = dwelling unit

Map Date: November 3, 2011

Figure 3-4: Land Use Designations



General Plan Land Use Designations

Residential Districts

- Residential, Single-Family or Two-Unit Low Density
  - R1A- 25' 2 Stories - 1 du/lot
  - R1B- 25' 2 Stories
    - 2 du/lot of less than 8499 SF
    - 3 du/lot between 8,500 and 11,999 SF
    - 1 add'l du/lot for each 3,500 SF thereafter
  - R1C- 15' 1 Story 1 du/lot
- Residential Low Density
  - R2 - 25' 2 Stories
    - 2 du/lot of less than 4000 SF
    - 3 du/lot between 4000 and 7999 SF
    - 4 du/lot between 8000 and 9999 SF plus 1 additional unit/lot for each 2000 SF or fraction thereof in excess of 9999 SF

Residential, Multi-Family Medium Density

- R3A - 25' 2 Stories - 1 du/1210 SF of lot area
- R3B - 35' 3 Stories - 1 du/1210 SF of lot area
- R3C - 45' 4 Stories - 1 du/1210 SF of lot area
- R3C-C - 45' 4 Stories - 1 du/1210 SF of lot area w/maximum 1.0 FAR commercial

Residential, Multi-Family High Density

- R4A - 35' 3 Stories - 1 du/872 SF of lot area
- R4B - 45' 4 Stories - 1 du/872 SF of lot area
- R4B-C - 45' 4 Stories - 1 du/872 SF of lot area w/maximum 1.0 FAR commercial

Commercial Districts

	Density (FAR)	Height
CN1 - Commercial, Neighborhood 1	1.0	25 ft
CN2 - Commercial, Neighborhood 2	1.0	25 ft
CC1 - Commercial, Community 1	1.5	35 ft
CC2 - Commercial, Community 2	2.0	45 ft
CA - Commercial, Arterial	2.5	60 ft
CR - Commercial, Regional Center	3.0	90 ft

0 500 1,000 2,000 ft

City of West Hollywood General Plan 2035

Specific Plan Districts

- SSP - Sunset Specific Plan
- MSP - Movietown Specific Plan
- PDCSP - Pacific Design Center Specific Plan

Other Districts

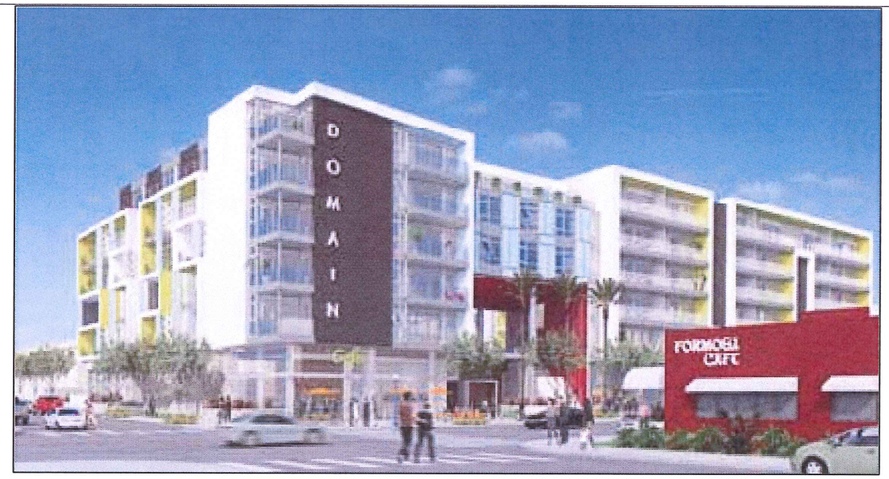
- Transit Overlay
- PF - Public Facilities
- Mixed-Use Incentive Overlay Zone

du = Dwelling Unit

Source: City of West Hollywood 2010

DOMAIN

PROJECT ADDRESS:
7141 - 7155 SANTA MONICA BOULEVARD
WEST HOLLYWOOD, CA



SANTA MONICA + FORMOSA VIEW

DOMAIN - WEST HOLLYWOOD		
ZONING		
	CA (Commercial, Arterial)	
SETBACKS - WHMC 19.10.040 Table 2-6		
CA Zone	**ALLOWABLE**	**PROPOSED**
Front	none	0'-0"
Side & Rear	10 ft. if adjacent to a parcel in a residential zoning district, or more as necessary to provide a minimum separation of 15 ft. between commercial and residential structures; none required otherwise.	Varies - See Sheet A6.01
Street side, corner lot	No minimum required; a maximum of 25 ft. is allowed.	0'-0"
Mixed-Use Incentive Overlay Zone Adjacency (19.10.050 Commercial Development Incentives)	If the proposed project is adjacent to an R-1, R-2, R-3, or R-4 residential zoning district, the 25 feet of the structure located closest to the residential zoning district shall be limited to 35 ft. in height, and the impact of the structure shall be mitigated to the satisfaction of the Commission with architectural, or additional landscape treatment.	Height Varies - See Sheet A6.01
BUILDABLE AREA AND DENSITY BONUS		
LOT AREA - CA Zone		**57,965 (1.33 AC)**
TOTAL		**57,965**

CA ZONE ALLOWABLE DENSITY	**FAR**	**ALLOWABLE AREA (SF)**
CA Base FAR	2.50	144,912.5
+Mixed Use FAR	0.50	28,982.5
FAR Before Affordable	3.00	173,895.0
+Affordable Housing Density bonus (25% x 3.0) [1]	0.75	43,473.75
Total Allowable Project FAR	3.75	217,368.75
		217,368.75

ALLOWABLE HEIGHT		
CA ZONE ALLOWABLE HEIGHT		
	5-ST, 60'-0"	
	Affordable Housing Height Bonus: 1 Story, 10'-0" (Concession 1)	70'-0" Max (Varies)
	Total Allowable Height	70'-0" (6 Stories)

INCLUSIONARY HOUSING W.H.M.C. 19.22.030

**Projects of forty-one units or more. Twenty percent of the unit count provided as units of comparable size and finish quality to the non-inclusionary units, or if it would result in additional inclusionary units and units that better serve the affordable housing needs of the City, 20 percent of the gross residential floor area of all non-inclusionary units. If the floor area calculation is used, units provided shall be a minimum of one bedrom and a minimum interior area of 650 square feet with finishes and appliances of "builder's quality" or better.

		# UNITS PROPOSED
	Low Income Units Proposed	16 [2] (10%)
	Moderate Income Units Proposed	17 [2] (10%)
	TOTAL INCLUSIONARY HOUSING UNITS PROPOSED	**33 (20%)**
	TOTAL MARKET RATE UNITS PROPOSED	**133 (80%)**
	TOTAL PROJECT UNITS	**166**

PROGRAM/AREA		
SUMMARY OF PROPOSED FLOOR AREA INCLUDED IN FAR		SF
Basement Parking (-2)	Residential Parking	0
Basement Parking (-1)	Residential Parking	0
First Floor (01)	Commercial Uses, Commercial Parking, Residential	24,535
Second Floor (02)	Residential	34,510
Third Floor (03)	Residential	34,780
Fourth Floor (04)	Residential	31,862
Fifth Floor (05)	Residential	30,865
Sixth Floor (06)	Residential	27,574
	TOTAL ZONING FLOOR AREA PROPOSED	**184,126**
	FAR	**3.18**

SUMMARY OF PROPOSED LEASABLE AREA		SF
Residential		140,844
Restaurant		2,495
Retail		6,787
	TOTAL LEASABLE FLOOR AREA PROPOSED	**150,126**

1 10% Low Income Units = 20% density bonus + 10% Moderate Income Units = 5% density bonus. Total density bonus = 25% (19.22.050 Affordable Housing Incentives)

2 10% Low Income Units = 1 concession; 10% Moderate Income Units = 1 concession; Total = 2 concessions (19.22.050 Affordable Housing Incentives)

PROPOSED FLOOR AREA		
FLOOR LEVEL	PROGRAM	SF
BASEMENT PARKING (-2)		
Area Not Included in FAR	Parking Level -2	17,157
	TOTAL FLOOR AREA (NOT INCLUDED IN FAR)	**17,157**
BASEMENT PARKING (-1)		
Area Not Included in FAR	Parking Level -1	55,817
	TOTAL FLOOR AREA (NOT INCLUDED IN FAR)	**55,817**
FLOOR (01)		
Area Not Included in FAR	Parking Level 1	
Floor Area Included in FAR	Retail	9,305
	Residential Amenity	2,015
	Commercial Circulation (includes stairs, elevators, corr.)	4,422
	Residential Units	8,793
	TOTAL INCLUDED IN FAR CALC.	**24,535**
FLOOR (02)		
Floor Area Included in FAR	Residential Amenity	1,600
	Residential Units	27,391
	Residential Circulation (includes stairs, elev., corr., trash)	5,519
	TOTAL INCLUDED IN FAR CALC.	**34,510**
FLOOR (03)		
Floor Area Included in FAR	Residential Units	29,020
	Residential Circulation (includes stairs, elev., corr., trash)	5,760
	TOTAL INCLUDED IN FAR CALC.	**34,780**
FLOOR (04)		
Floor Area Included in FAR	Residential Units	27,216
	Residential Circulation (includes stairs, elev., corr., trash)	4,646
	TOTAL INCLUDED IN FAR CALC.	**31,862**
FLOOR (05)		
Floor Area Included in FAR	Residential Units	26,221
	Residential Circulation (includes stairs, elev., corr., trash)	4,644
	TOTAL INCLUDED IN FAR CALC.	**30,865**
FLOOR (06)		
Floor Area Included in FAR	Residential Units	22,341
	Residential Circulation (includes stairs, elev., corr., trash)	4,565
	Residential Amenity	668
	TOTAL INCLUDED IN FAR CALC.	**27,574**
	TOTAL FLOOR AREA PROPOSED	**184,126**
	TOTAL ALLOWABLE FLOOR AREA	**217,368.75**

OPEN SPACE REQUIRED W.H.M.C. 19.36.280		
COMMON OPEN SPACE		
Common Open Space required for 166 units; Min. dimension 15', 100% open to the sky		
LOCATION		TOTAL SF
Ground Level Open Space		4,631
Second Floor Open Space		9,609
Sixth Floor Open Space		1,778
	TOTAL REQUIRED	**2,000**
	COMMON OPEN SPACE PROVIDED	**16,018**
	*** SURPLUS OPEN SPACE PROVIDED**	**14,018**

PRIVATE OPEN SPACE			
120 SF Private Open Space required for each unit (19.28.280), Min. dimension 7', 33% open perimeter			
UNIT TYPE	**# UNITS**	**AREA**	**TOTAL SF**
Studio	51	120	6,120
1 Bedroom	67	120	8,040
1 Bedroom + Den	10	120	1,200
Small 2 Bedroom	5	120	600
2 Bedroom	33	120	3,960
		TOTAL REQUIRED	**19,920**
		PRIVATE OPEN SPACE PROVIDED	**14,798**
		AVERAGE PRIVATE OPEN SPACE PROVIDED/UNIT	**89**
		*** DEFICIT (CONCESSION 2)**	**5,122**

PROJECT TEAM

OWNER
GLJ PARTNERS
9034 WEST SUNSET BOULEVARD
WEST HOLLYWOOD, CA 90069
ATTN: MARK GABAY
TEL:(310) 247-0900
FAX:(310) 247-1525

ARCHITECT
STUDIO ONE ELEVEN
A DIVISION OF PERKOWITZ + RUTH ARCHITECTS
111 WEST OCEAN BOULEVARD, 20TH FLOOR
LONG BEACH, CA 90802
ATTN: ALAN PULLMAN
TEL:(562) 901-1500
FAX:(562) 901-1501

LANDSCAPE ARCHITECT
EPT DESIGN
844 EAST GREEN ST., SUITE 201
PASADENA, CA 91101
ATTN: BEN MCCOY
TEL: (626) 795-2008
FAX: (626) 795-2547

LAND USE CONSULTANT
JEFFREY SEYMOUR
SEYMOUR CONSULTING GROUP
2815 TOWNSGATE ROAD, SUITE 140
WESTLAKE VILLAGE, CA 91361

SHEET INDEX

studio one eleven
at Perkowitz+Ruth Architects
111 West Ocean Boulevard (562) 901-1500 (t)
20th Floor (562)901-1501 (f)
Long Beach, CA 90802

DOMAIN APARTMENTS

WEST HOLLYWOOD, CALIFORNIA

#	Date	Issue
1	05.25.12	Development Permit Package

Job No. 12.038.00

Date: 05.25.2012
Scale: no scale

TITLE SHEET

TS.01
NOT ISSUED FOR CONSTRUCTION

Appendix 5

COUNTY SANITATION DISTRICTS WILL SERVE LETTER

--Domain West Hollywood, May 14, 2012

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON CHAN
Chief Engineer and General Manager

May 14, 2012

Ref. File No: 2238480

Ms. Christina Leeper
Development Services Coordinator
GLJ Partners
5780 Fleet Street, Suite 130
Carlsbad, CA 92008

Dear Ms. Leeper:

Domain West Hollywood

This is in reply to your request for a will serve letter for the subject project, which was received by the County Sanitation Districts of Los Angeles County (Districts) on May 4, 2012. The proposed development is located within the jurisdictional boundaries of District No. 4. We offer the following comments regarding sewerage service:

1. Wastewater generated by the proposed project will be treated by the City of Los Angeles Hyperion Treatment System. Questions regarding sewerage service for the proposed project should also be directed to the City of Los Angeles' Department of Public Works.

2. The expected increase in average wastewater flow from the project site is 21,174 gallons per day. For a copy of the Districts' average wastewater generation factors, go to www.lacsd.org, Information Center, Will Serve Program/Buildover Procedures, Obtain Will Serve Letter, and click on the appropriate link on page 2.

3. The Districts are authorized by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System or increasing the strength or quantity of wastewater attributable to a particular parcel or operation already connected. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project. Payment of a connection fee will be required before a permit to connect to the sewer is issued. For a copy of the Connection Fee Information Sheet, go to www.lacsd.org, Information Center, Will Serve Program/Buildover Procedures, Obtain Will Serve Letter, and click on the appropriate link on page 2. For more specific information regarding the connection fee application procedure and fees, please contact the Connection Fee Counter at extension 2727.

4. In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the design capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into

clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CAA. All expansions of Districts' facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels that are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Grace Robinson Chan

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR: ar

Appendix 6

SEWER CAPACITY AVAILABILITY REVIEW

-City of Los Angeles, October 25, 2012

1 2 pages

DPW ENGINEERING
CENTRAL
CR 25 75 087491 10/15/12 09:38AM

City of Los Angeles
Bureau of Engineering

30-1842-1012

5% 704 SCARF 10,000-50,000
1.00 X $1,300.00 $1,300.00

Sewer Capacity Availability Request (SCAR)

34 502 DPW BOS PERMIT CENTER MIN FEE
1.00 X $26.00 $26.00

To: Bureau of Sanitation

The following request is submitted to you on behalf of the applicant requesting to connect to the public sewer system. Please verify that capacity exists at the requested location for the proposed developments shown below. The results are good for 180 days from the date of sewer capacity approval from the Bureau of Sanitation.

34 502 EQUIP & TRAINING SURCHARGE MIN
1.00 X $91.00 $91.00

Job Address: 7141 - 7155 SANTA MONICA BLVD, CA. 90046

SCARF FOR 7141 - 7155 SANTA MONICA BLVD. ID:

Date Submitted: 10/15/12 Request Will Serve Letter:

Applicant: Jeremy Johnson - Psomas Phone: (661) 705-4410 Fee Due: $1,417.00

Address: 28460 Avenue Stanford Suite 200 Fax: (661) 775-2718 Make A Check Payable To: S-Map: 492-04

City: Valencia State CA Zip: 91355 Wye Map: (703W-2)

Email: jjohnson@psomas.com BPA No. (WEST Hollywood) PIN 144B181-4 144B181-472

SIMMS Map - Maintenance Hole Locations

	Street Name	U/S MH	D/S MH	Diameter
1.	ROMAINE AND			inch
2.	FORMOSA	492 04 559	492 04 060	8 inch
3.				inch

HL Ø S=0.0128

MIXED USE:

Proposed Project Description: Apartments w/ restaurant, retail (166 units, 2,495 ft² restaurant, 6,787 ft² retail)

	Proposed Use Description	Quantity	Flow
1.	APARTMENTS (S-51, R-1=77, R-2=38)	= 166 UNITS	18,080 GPD
2.	RESTAURANT SPACE	2,500 SQFT	750 GPD
3.	RETAIL	6,800 SQFT	170 GPD
4.			GPD
5			GPD

IWP Required

PROPOSED TOTAL FLOW: 19,000 GPD ≈ 13.19 gpm

Remarks: SCARF $1,417.00 PAID, 10/15/2012. WEST HOLLYWOOD CITY. SEWER MAIN OPERATED BY COUNTY OR WH CITY. STC DUE. * NEED SEWER PERMIT PRIOR TO CONNECTION. NEED BOS CLEARANCE.

CAPACITY AVAILABLE: ☑ YES ☐ NO

Permanent Connections Notes: Results are good for 180 days from date of approval by the Bureau of Sanitation.
Conditional/Temporary Connections: Refer to Remarks.

* Only analyzed for LA City pipes

Date Approved: Mario Aceves 10/23/12 Revena Lam 10/24/12

Approved by: [signature] 10/25/12

Bureau of Sanitation
Phone: 323-342-1562

Submitted by: V PUEBLOS, TONY

Bureau of Engineering
District: Central
Phone: (213) 482-7030
Fax: (213) 482-7007

* WEST HOLLYWOOD CITY. SEWER FEES AND CONTRACTS CONTACT LISA MOWERY, OR DAVID CHEUNG.

SCARF PAID, 10/15/12

A