



**City of West Hollywood  
Department of Public Works  
Engineering Division**

## **Sewer Capacity Study Requirements**

1. The sewer capacity study shall be certified by a California licensed Civil Engineer.
2. **Project Description:** The study should have a project description describing what is being proposed on the development site. The current land uses and proposed land uses of the development shall also be identified.
3. **Site Description:** The site description shall describe the project's location, the approximate acreage of the project site, and contain a vicinity map to identify the project's location.
4. **Existing Sewer Pipe Capacity Analysis:** This section shall identify any existing connections to the sewer system. A 7-day flow monitoring study will be required to obtain the existing flow capacity. This shall be done at the downstream sewer manhole, or at a location that makes sense to adequately determine existing flow capacity. Additional monitoring locations may be required to verify downstream capacity of the local sewer network as well as if the project will connect to a nearby trunk line. The City of Los Angeles sewers located downstream may be impacted by a proposed development project. Therefore, the sewer study may need to include monitoring locations in the City of Los Angeles. The existing average daily flow ( $Q_{\text{exist}}$ ) and peak flow shall be determined in cubic feet per second.
5. **Proposed Flow Generation:** This section shall include the proposed land use(s). Flow generation shall be determined by the user category that most closely matches the County Sanitation District No. 4 of Los Angeles County mean loading table. This will determine your average daily flow ( $Q_{\text{AF}}$ ) in gallons per day (gpd) that shall then be converted to cubic feet per second (cfs).

The City of West Hollywood was an unincorporated area of Los Angeles County until 1984; therefore the sewer system was designed to the County of Los Angeles Department of Public Works standards, where all pipes are designed for peak flow.

$$n = 0.013$$

$$D/d \leq 0.50 \text{ for } d \leq 15''$$

$$D/d \leq 0.75 \text{ for } d > 15''$$

These assumptions will determine the  $Q_{\text{cap}}$  = Sewer pipe capacity.

The peak flow ( $Q_{PF}$ ) for this study shall be calculated in cubic feet per second (cfs) by  $Q_{PF} = 2.5 \times Q_{AF}$  where 2.5 is the peaking factor used to determine the maximum peak flow rate for sewer diameters less than 15". The peaking factor shall be 2.0 for diameters greater than 15".

6. Conclusion: The conclusion shall identify the sewer capacity of the pipe as a flow rate ( $Q_{cap}$ ). The calculations shall demonstrate that the sewer mainline has the capacity for the existing flow and the added flow at average and peak conditions. If the sewer is found to be inadequate, recommendations shall be provided to handle the increase in sewer flow. If this is a large site that has several sewer connection options, the conclusion shall address those options and make a recommendation for the project. The recommendations will be incorporated into the mitigation measures for the project.

**AN ORDINANCE PRESCRIBING THE CONNECTION FEE RATE  
AND MEAN LOADINGS PER UNIT OF USAGE FOR  
COUNTY SANITATION DISTRICT NO. 4 OF LOS ANGELES COUNTY**

**THE BOARD OF DIRECTORS OF COUNTY SANITATION DISTRICT NO. 4 OF LOS ANGELES COUNTY ORDAINS AS FOLLOWS:**

**SECTION 1.0 - USER CATEGORIES AND MEAN LOADINGS**

Pursuant to Section 3.03(2) of the *Master Connection Fee Ordinance for County Sanitation District No. 4 of Los Angeles County*, the following shall constitute the User Categories and mean loadings per Unit of Usage for flow, Biochemical Oxygen Demand (BOD), and Suspended Solids:

<u>USER CATEGORY</u>	<u>UNIT OF USAGE</u>	<u>FLOW (Gallons per Day)</u>	<u>BOD (Pounds per Day)</u>	<u>SUSPENDED SOLIDS (Pounds per Day)</u>
Acupuncture Office/Clinic	1000 Sq.Ft.	150	0.16	0.10
Arcade - Video Games	1000 Sq.Ft.	80	0.10	0.10
Auditorium	Seat	4	0.01	0.01
Auto Parking	1000 Sq.Ft.	20	0.03	0.03
Auto Body/Mech. Repair Shop	1000 Sq.Ft.	80	0.12	0.19
Bakery	1000 Sq.Ft.	280	2.34	1.40
Bank: Headquarters	1000 Sq.Ft.	150	0.16	0.10
Bank: Branch	1000 Sq.Ft.	80	0.10	0.10
Banquet Room/Ballroom	1000 Sq.Ft.	800	6.67	4.00
Bar: Cocktail, Fixed Seat	Seat	18	0.03	0.03
Bar: Juice, No Baking Facilities	1000 Sq.Ft.	120	0.20	0.20
Bar: Juice, With Baking Facilities	1000 Sq.Ft.	280	2.34	1.40
Bar: Cocktail, Public Table Area	1000 Sq.Ft.	500	4.17	2.50
Barber Shop	1000 Sq.Ft.	100	0.13	0.13
Beauty Parlor	1000 Sq.Ft.	280	0.35	0.35
Bldg. Const/Field Office	Office	150	0.19	0.19
Bowling Alley: Alley, Lanes & Lobby Area	1000 Sq.Ft.	80	0.10	0.10
Cafeteria: Fixed Seat	Seat	30	0.25	0.15
Car Wash: Wand Type	1000 Sq.Ft.	700	3.00	1.58
Car Wash: Tunnel - Recycling Type	1000 Sq.Ft.	2700	11.74	6.16
Car Wash: Tunnel - Non-Recycling Type	1000 Sq.Ft.	3700	15.86	8.33
Chapel: Fixed Seat	Seat	4	0.01	0.01
Chiropractic Office	1000 Sq.Ft.	150	0.16	0.10

<u>USER CATEGORY</u>	<u>UNIT OF USAGE</u>	<u>FLOW (Gallons per Day)</u>	<u>BOD (Pounds per Day)</u>	<u>SUSPENDED SOLIDS (Pounds per Day)</u>
Church: Fixed Seat	Seat	4	0.01	0.01
Church School: Day Care/Elem	Occupant	8	0.01	0.01
Church School: One Day Use	1000 Sq.Ft.	200	0.22	0.17
Cocktail Lounge: Fixed Seat	Seat	18	0.03	0.03
Coffee House: No Pastry Baking & No Food Preparation	1000 Sq.Ft.	120	0.20	0.20
Coffee House: Pastry Baking Only	1000 Sq.Ft.	280	2.34	1.40
Coffee House: Serves Prepared Food	Seat	30	0.25	0.15
Cold Storage: No Sales	1000 Sq.Ft.	20	0.03	0.03
Cold Storage: Retail Sales	1000 Sq.Ft.	80	0.10	0.10
Comfort Station: Public	Fixture	100	0.13	0.13
Commercial Use	1000 Sq.Ft.	80	0.10	0.10
Community Center	Occupant	4	0.01	0.01
Counseling Center	1000 Sq.Ft.	150	0.16	0.10
Credit Union	1000 Sq.Ft.	150	0.19	0.19
Dairy: Retail Area	1000 Sq.Ft.	80	0.10	0.10
Dancing Area (of Bars or Nightclub)	1000 Sq.Ft.	600	1.00	1.00
Dance Studio	1000 Sq.Ft.	80	0.10	0.10
Dental Office/Clinic	1000 Sq.Ft.	250	0.27	0.17
Doughnut Shop	1000 Sq.Ft.	280	2.34	1.40
Drug Rehabilitation Center	1000 Sq.Ft.	150	0.16	0.10
Equipment Booth	1000 Sq.Ft.	20	0.03	0.03
Film Processing - 1 Hour Photo, Etc.	1000 Sq.Ft.	100	0.13	0.13
Gas Station: Self Service	Fixture	100	0.15	0.23
Gas Station: Four Bays Max	Station	430	0.65	1.00
Gymnasium - Basketball, Volleyball	1000 Sq.Ft.	250	0.31	0.31
Hanger (Aircraft)	1000 Sq.Ft.	80	0.12	0.19
Health Club/Spa	1000 Sq.Ft.	800	1.00	1.00
Homeless Shelter	Bed	75	0.13	0.13
Hospital: Convalescent	Bed	75	0.16	0.06
Hospital: Animal	1000 Sq.Ft.	280	0.35	0.35
Hotel: Use Guest Rooms Only	Room	130	0.34	0.13
Jail	Inmate	85	0.22	0.09
Kennel: Dog Kennel/Open	1000 Sq.Ft.	100	0.13	0.13
Laundromat	Machine	170	0.21	0.16
Library: Public Area	1000 Sq.Ft.	80	0.10	0.10

<u>USER CATEGORY</u>	<u>UNIT OF USAGE</u>	<u>FLOW (Gallons per Day)</u>	<u>BOD (Pounds per Day)</u>	<u>SUSPENDED SOLIDS (Pounds per Day)</u>
Library: Stacks, Storage	1000 Sq.Ft.	25	0.03	0.03
Lobby Of Retail Area	1000 Sq.Ft.	80	0.10	0.10
Lodge Hall	Seat	4	0.01	0.01
Lounge	1000 Sq.Ft.	80	0.13	0.13
Machine Shop	1000 Sq.Ft.	80	0.10	0.10
Manufacturing (Dry) Facility	1000Gr.Sq.Ft.	80	0.10	0.10
Massage Parlor	1000 Sq.Ft.	275	0.34	0.34
Medical Building	1000 Sq.Ft.	250	0.27	0.17
Medical: Lab In Hospital	1000 Sq.Ft.	250	0.69	0.31
Medical Office/Clinic	1000 Sq.Ft.	250	0.27	0.17
Mini-Mall	1000 Sq.Ft.	80	0.40	0.27
Mortuary: Chapel	Seat	4	0.01	0.01
Mortuary: Embalming	1000 Sq. Ft.	715	4.77	4.77
Mortuary: Living Area	1000 Sq.Ft.	80	0.14	0.14
Motel: Use Guest Rooms Only	Room	130	0.34	0.13
Museum: All Area	1000 Sq.Ft.	20	0.03	0.03
Museum: Office Over 15%	1000 Sq.Ft.	150	0.19	0.19
Museum: Sales Area	1000 Sq.Ft.	80	0.10	0.10
Office Building	1000 Sq.Ft.	150	0.16	0.10
Office Bldg W/ Cooling Tower	1000 Sq.Ft.	180	0.16	0.10
Pool Hall (No Alcohol)	1000 Sq.Ft.	80	0.10	0.10
Post Office: Full Service	1000 Sq.Ft.	150	0.19	0.19
Post Office: Private Mail Box Rental	1000 Sq.Ft.	80	0.10	0.10
Prisons	Inmate	175	0.45	0.18
Residential Dorm: College Or Residential	Student	75	0.13	0.13
Residential: Boarding House	Bed	75	0.13	0.13
Residential: Apt - Bachelor	Dwelling Unit	80	0.14	0.14
Residential: Apt - 1 Bedroom	Dwelling Unit	120	0.22	0.21
Residential: Apt - 2 Bedroom	Dwelling Unit	160	0.29	0.27
Residential: Apt - 3 Bedroom	Dwelling Unit	200	0.36	0.34
Residential: Apt - >3 Bedroom	Additional Bedroom	40	0.07	0.07
Residential: Condo - 1 Bedroom	Dwelling Unit	120	0.22	0.21
Residential: Condo - 2 Bedroom	Dwelling Unit	160	0.29	0.27
Residential: Condo - 3 Bedroom	Dwelling Unit	200	0.36	0.34

<u>USER CATEGORY</u>	<u>UNIT OF USAGE</u>	<u>FLOW (Gallons per Day)</u>	<u>BOD (Pounds per Day)</u>	<u>SUSPENDED SOLIDS (Pounds per Day)</u>
Residential: Condo - >3 Bedroom	Additional Bedroom	40	0.07	0.07
Residential: Duplex/Townhouse/SFD - 1 Bedroom	Dwelling Unit	130	0.23	0.22
Residential: Duplex/Townhouse/SFD - 2 Bedroom	Dwelling Unit	180	0.32	0.31
Residential: Duplex/Townhouse/SFD - 3 Bedroom	Dwelling Unit	230	0.41	0.39
Residential: Duplex/Townhouse/SFD - >3 Bedroom	Additional Bedroom	50	0.09	0.09
Residential Room Addition: Bedroom	Bedroom	50	0.09	0.09
Residential Room Conversion: Into A Bedroom	Bedroom	50	0.09	0.09
Residential: Mobile Home	Dwelling Unit	160	0.29	0.27
Residential: Artist (2/3 Area)	Dwelling Unit	250	0.45	0.43
Residential: Artist Residence	Dwelling Unit	80	0.14	0.14
Residential: Guest Home w/ Kitchen	Same as Residential Apt			
Residential: Guest Home w/o Kitchen	Bedroom	50	0.06	0.06
Rest Home	Bed	75	0.16	0.06
Restaurant: Drive-In	Stall	40	0.33	0.20
Restaurant: Drive-In	Seat	20	0.17	0.10
Restaurant: Fast Food - Indoor Seat	Seat	20	0.17	0.10
Restaurant: Fast Food - Outdoor Seat	Seat	12	0.10	0.06
Restaurant: Full Service - Indoor Seat	Seat	30	0.25	0.15
Restaurant: Full Service - Outdoor Seat	Seat	18	0.15	0.09
Restaurant: Take-Out	1000 Sq.Ft.	300	2.50	1.50
Retail Area	1000 Sq.Ft.	80	0.10	0.10
Rifle Range: Shooting Stalls, Shooting Lanes, Lobby Area	1000 Sq.Ft.	80	0.10	0.10
School: Arts/Dancing/Music	1000 Sq.Ft.	80	0.09	0.07
School: Day Care Center	Child	8	0.01	0.01
School: Elementary/Jr. High	Student	8	0.01	0.01
School: High School	Student	12	0.01	0.01
School: Kindergarten	1000 Sq.Ft.	200	0.22	0.17
School: Martial Arts	1000 Sq.Ft.	80	0.09	0.07
School: Nursery-Day Care	Child	8	0.01	0.01

<u>USER CATEGORY</u>	<u>UNIT OF USAGE</u>	<u>FLOW (Gallons per Day)</u>	<u>BOD (Pounds per Day)</u>	<u>SUSPENDED SOLIDS (Pounds per Day)</u>
School: Special Class	Student	8	0.01	0.01
School: Trade Or Vocational	Student	12	0.01	0.01
School: Training	Student	12	0.01	0.01
School: University/College	Student	18	0.02	0.02
School: Dormitory	Student	75	0.13	0.13
School: Stadium, Pavilion	Seat	4	0.01	0.01
Storage: Building/Warehouse	1000 Sq.Ft.	20	0.03	0.03
Storage: Self Storage Bldg.	1000 Sq.Ft.	20	0.03	0.03
Store: Ice Cream/Yogurt	1000 Sq.Ft.	80	0.67	0.40
Store: Retail	1000 Sq.Ft.	80	0.10	0.10
Studio: Film/TV - Audience Viewing Room	Seat	4	0.01	0.01
Studio: Film/TV - Regular Use - Indoor Filming Area	1000 Sq.Ft.	80	0.10	0.10
Studio: Film/TV - Industrial Use (Domestic)	1000 Sq.Ft.	80	0.00	0.00
Studio: Recording	1000 Sq.Ft.	80	0.10	0.10
Tanning Salon: Independent, No Shower	1000 Sq.Ft.	80	0.10	0.10
Tanning Salon: Within A Health Spa/Club	1000 Sq.Ft.	800	1.00	1.00
Theater: Drive-In	Vehicle	10	0.01	0.01
Theater: Live/Music/Opera	Seat	4	0.01	0.01
Theater: Cinema	Seat	4	0.01	0.01
Tract: Commercial/Residential	Acre	1	0.00	0.00
Trailer - Const/Field Office	Office	150	0.19	0.19
Veterinary Clinic/Office	1000 Sq.Ft.	280	0.30	0.19
Warehouse	1000 Sq.Ft.	20	0.03	0.03
Waste Dump: Recreational	Station	430	0.54	0.54
Wine Tasting Room: Kitchen	1000 Sq.Ft.	215	0.27	0.27
Wine Tasting Room: All Area	1000 Sq.Ft.	80	0.10	0.10

**SECTION 2.0 - CONNECTION FEE RATE**

Pursuant to Section 3.02 of the *Master Connection Fee Ordinance for County Sanitation District No. 4 of Los Angeles County*, the Connection Fee Rate shall be \$1,710.00 per capacity unit.

**SECTION 3.0 - COST ALLOCATION FACTORS**

Pursuant to Section 3.03(2) of the *Master Connection Fee Ordinance for County Sanitation District No. 4 of Los Angeles County*, the proportions of the capital improvement component of the connection fee rate which are attributable to flow, BOD, and Suspended Solids, designated as X, Y, and Z, respectively, shall be:

$$X = 0.6567$$

$$Y = 0.1992$$

$$Z = 0.1441$$

**SECTION 4.0 - BASIC RESIDENTIAL UNIT**

Pursuant to Section 3.03(2) of the *Master Connection Fee Ordinance for County Sanitation District No. 4 of Los Angeles County*, the loadings from a basic residential unit shall be:

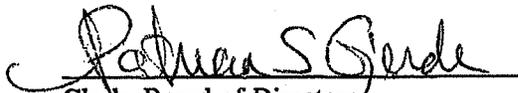
- Flow<sub>bru</sub> = 260 gallons per day of Wastewater flow
- BOD<sub>bru</sub> = 0.466 pounds per day of BOD
- SS<sub>bru</sub> = 0.445 pounds per day of Suspended Solids.

**SECTION 5.0 - EFFECTIVE DATE**

This Ordinance shall become effective on July 1, 1999.

  
Chairperson, Board of Directors  
County Sanitation District No. 4  
of Los Angeles County

ATTEST:

  
Clerk, Board of Directors  
County Sanitation District No. 4  
of Los Angeles County