Appendix K

Utilities Report

Kimley»Horn

WARE MALCOMB

architecture | planning | interiors | branding | civil

WET UTILITIES REPORT

FOR:
525 South Virgil Ave
Los Angeles, CA 90057

Prepared for:
Shatto EMET Q0ZB LP
2219 Main Street, Suite 260
Santa Monica, CA 90405

Project No: LAX25-0037-00



Prepared by: _____ 03/12/2026

Signature Date

Engineer: Keith Malloy
Registration No. 84456

Ware Malcomb
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Los Angeles, CA 90017
Phone: (310) 903-4019

Prepare Date: March 12, 2026
Revised:

Introduction

The purpose of this report is to provide an analysis of the existing and proposed wet utilities to support the design of the project and to understand if there may exist any adverse impacts as a result of the proposed development.

The project is located at 525 S Virgil Ave, Los Angeles, CA 90020. The total project area, after dedications is 0.97 +/- acres. The project will consist of a 252, 876 SF Self-Storage building.

The Project Site is bounded by a 2 to 3-story medical building and a paved parking lot to the north, S. Virgil Avenue to the east, paved parking lots to the south, and S. Westmoreland Avenue to the west.

See Appendix A for the site Vicinity Map

FEMA Floodplain Identification & Considerations

Per FEMA Flood Map FIRMette, the site project is located in Zone X; area of minimal flood hazard.

See Appendix B for the FEMA maps.

Sewer

According to Navigate LA digital Parcel Sewer WYE plan 135B197, there is an existing 8-inch vitrified clay pipe (VCP) main line sewer in Virgil Avenue with Pipe ID 4931610949316142A and 4931609849316109A, and an 8-inch VCP main in Westmoreland Avenue with Pipe ID 4931609749316140A. Each are City of Los Angeles owned and maintained lines. The sewer lines in the area gravity flow from north to south. Project sewage is proposed to enter the 8- inch line in Virgil Avenue in Manhole structure ID 49316109.

City of Los Angeles Sewage Generation Factors list a self-storage building as generating 30 GPD/1,000 SF which results in 7,586 GPD and equates to .012 CFS.

The existing building consists of 52,764 sf of office space. Office space has a sewage generation factor of 120 GPD/1,000 SF which results in 6,331.68 GPD and equates to .010 CFS.

While this is an increase in sewage generated from the project, per the SCARs received from the city, the existing lines have capacity to serve the proposed project.

A will-serve letter and Sewer Capacity Availability Request (SCAR) were obtained from LA City for both sewer lines (refer to Attachment "A" City of Los Angeles SCAR IDs #75-7939-1225 and #75-7945-1225 respectively). The purpose of the SCAR is for the City of Los Angeles to evaluate the existing public sewer systems to determine if adequate capacity is available to safely convey sewage from proposed development projects. The SCARs approve 100% of the anticipated sewer flow which is estimated to be 7,586 GPD into either pipe.

See Appendix C for Sewer maps, Sewer Generation factors, and SCAR.

Storm Drain

Stormwater drains to the south via sheet flow on both Virgil Avenue and Westmoreland Avenue. Virgil Avenue has catch basins that connect to an underground storm drainpipe 12-inches in diameter along. Virgil Avenue and Westmoreland Avenue do not have a storm drain and all stormwater surface flows in the gutter to the catch basin in Virgil Avenue. The line connects to a 12-inch diameter along 6th Street where gravity flows from west to east. Record drawings have been obtained from Navigate LA. The existing storm drain pipes are owned by the City of Los Angeles.

The proposed project will convey stormwater through a proposed curb drain that will enter the gutter within Virgil Ave and surface flow into the existing Catch Basins to enter the City of Los Angeles storm drain system.

See Appendix D for Storm Drain Maps.

Water

The project site is currently serviced by the Los Angeles Department of Water and Power (LADWP). There is an existing 6-inch water main in Virgil Avenue and an 8-inch in Westmoreland Avenue. These are connected by a 24-inch water main in 6th Street. Additionally, there are four fire hydrants located in the vicinity of the site.

Per City of Los Angeles Fire Code Section 507.3.1, the required Fire Flow for the Building is 6,000-9,000 GPM from 4 adjacent fire hydrants running simultaneously. All portions of the building shall be within 300' of a hydrant.

There are four existing hydrants within the vicinity of the building at the following locations:

- Northwest of the at the intersection of W 5th Street and Westmoreland Ave, approximately 180' from the northwest corner of the property
- Northeast of the at the intersection of W 5th Street and Virgil Ave, approximately 120' from the northeast corner of the property
- Southeast of the at the intersection of W 6th Street and Virgil Ave, approximately 250' from the southeast corner of the property
- Southwest of the at the intersection of W 6th Street and Westmoreland Ave, approximately 310' from the southwest corner of the property

Based on the location of the existing hydrants, the entire ground floor level is not within 300' of a fire hydrant. It is likely that the Fire Department will require the installation of a two new public hydrants along the project frontage in both Westmoreland Ave and Virgil Ave.

A Service Advisory Request (SAR) was submitted to the Los Angeles Department of Water and Power (LADWP) for each water main adjacent to the property.

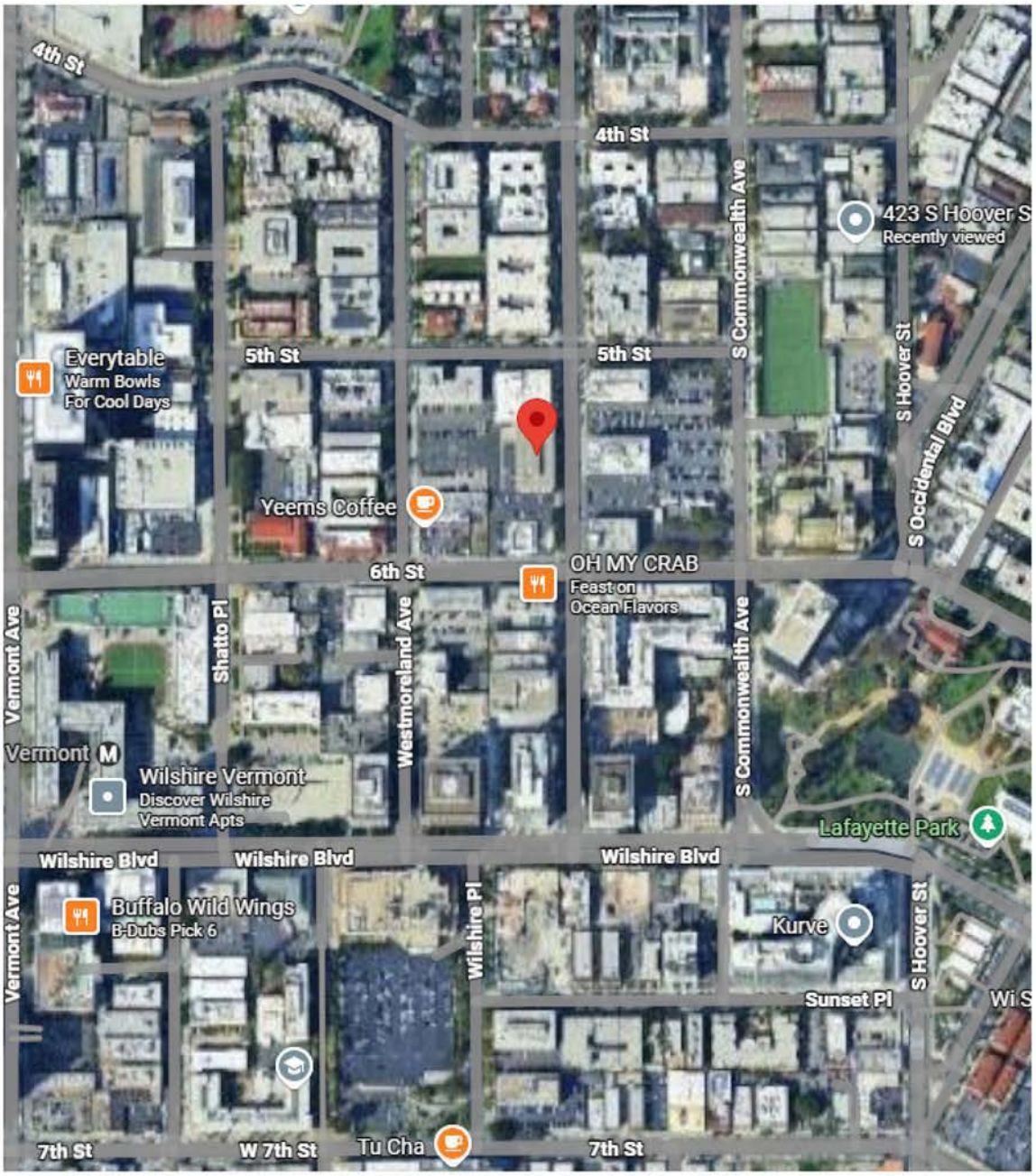
SAR results are as follows:

- SAR113868 – 6" service off Virgil Ave– 1,400 GPM @ 32 PSI
- SAR115502 – 8" service off Westmoreland– 2,500 GPM @ 35 PSI

These results are sufficient to meet domestic water demand. For fire water demand, there's potential for a tank to be required on site if the existing surrounding hydrants do not meet the required demand.

Refer to Attachment "E" Los Angeles Department of Water and Power -Water Map 134-198, SAR 113868, SAR 115502, Fire Hydrant Locations, and Fire Code Excerpts.

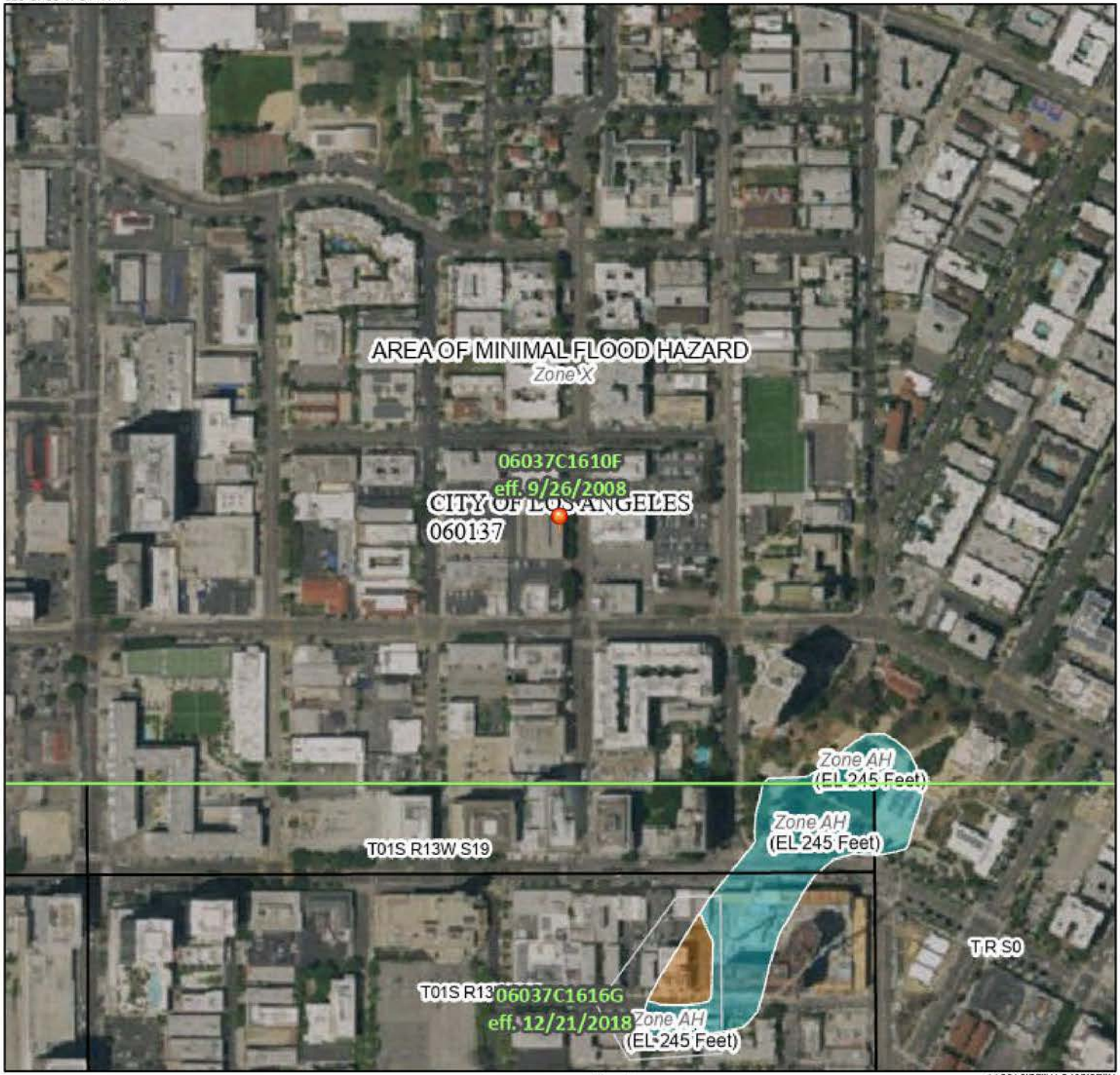
Appendix A – Vicinity Map



Appendix B – FEMA Maps

National Flood Hazard Layer FIRMette

FEMA



Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 11/21/2025 at 6:27 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

NOTES TO USERS

This map is for use in administering the National Flood Insurance Program. It does not necessarily identify all areas subject to flooding, particularly from local drainage sources of small size. The **community map repository** should be consulted for possible updated or additional flood hazard information.

To obtain more detailed information in areas where **Base Flood Elevations** (BFEs) and/or **floodways** have been determined, users are encouraged to consult the Flood Profiles and Floodway Data and/or Summary of Stillwater Elevations tables contained within the Flood Insurance Study (FIS) report that accompanies this FIRM. Users should be aware that BFEs shown on the FIRM represent rounded whole-foot elevations. These BFEs are intended for flood insurance rating purposes only and should not be used as the sole source of flood elevation information. Accordingly, flood elevation data presented in the FIS report should be utilized in conjunction with the FIRM for purposes of construction and/or floodplain management.

Coastal Base Flood Elevations shown on this map apply only landward of 0.0' North American Vertical Datum of 1988 (NAVD 88). Users of this FIRM should be aware that coastal flood elevations are also provided in the Summary of Stillwater Elevations table in the Flood Insurance Study report for this jurisdiction. Elevations shown in the Summary of Stillwater Elevations table should be used for construction and/or floodplain management purposes when they are higher than the elevations shown on this FIRM.

Boundaries of the **floodways** were computed at cross sections and interpolated between cross sections. The floodways were based on hydraulic considerations with regard to requirements of the National Flood Insurance Program. Floodway widths and other pertinent floodway data are provided in the Flood Insurance Study report for this jurisdiction.

Certain areas not in Special Flood Hazard Areas may be protected by **flood control structures.** Refer to Section 2.4 "Flood Protection Measures" of the Flood Insurance Study report for information on flood control structures for this jurisdiction.

The **projection** used in the preparation of this map was Universal Transverse Mercator (UTM) zone 11. The **horizontal datum** was NAD83, GRS1980 spheroid. Differences in datum, spheroid, projection or UTM zones used in the production of FIRMs for adjacent jurisdictions may result in slight positional differences in map features across jurisdiction boundaries. These differences do not affect the accuracy of this FIRM.

Flood elevations on this map are referenced to the North American Vertical Datum of 1988. These flood elevations must be compared to structure and ground elevations referenced to the same **vertical datum.** For information regarding conversion between the National Geodetic Vertical Datum of 1929 and the North American Vertical Datum of 1988, visit the National Geodetic Survey website at http://www.ngs.noaa.gov/ or contact the National Geodetic Survey at the following address:

NGS Information Services
NOAA, N/NGS12
National Geodetic Survey
SSMC-3, #9202
1315 East-West Highway
Silver Spring, MD 20910-3282

To obtain current elevation, description, and/or location information for **bench marks** shown on this map, please contact the Information Services Branch of the National Geodetic Survey at **(301) 713-3242,** or visit its website at http://www.ngs.noaa.gov/.

Base map information shown on this FIRM was derived from U.S. Geological Survey Digital Orthophoto Quadrangles produced at a scale of 1:12,000 from photography dated 1994 or later and from National Geospatial Intelligence Agency imagery produced at a scale of 1:4,000 from photography dated 2003 or later.

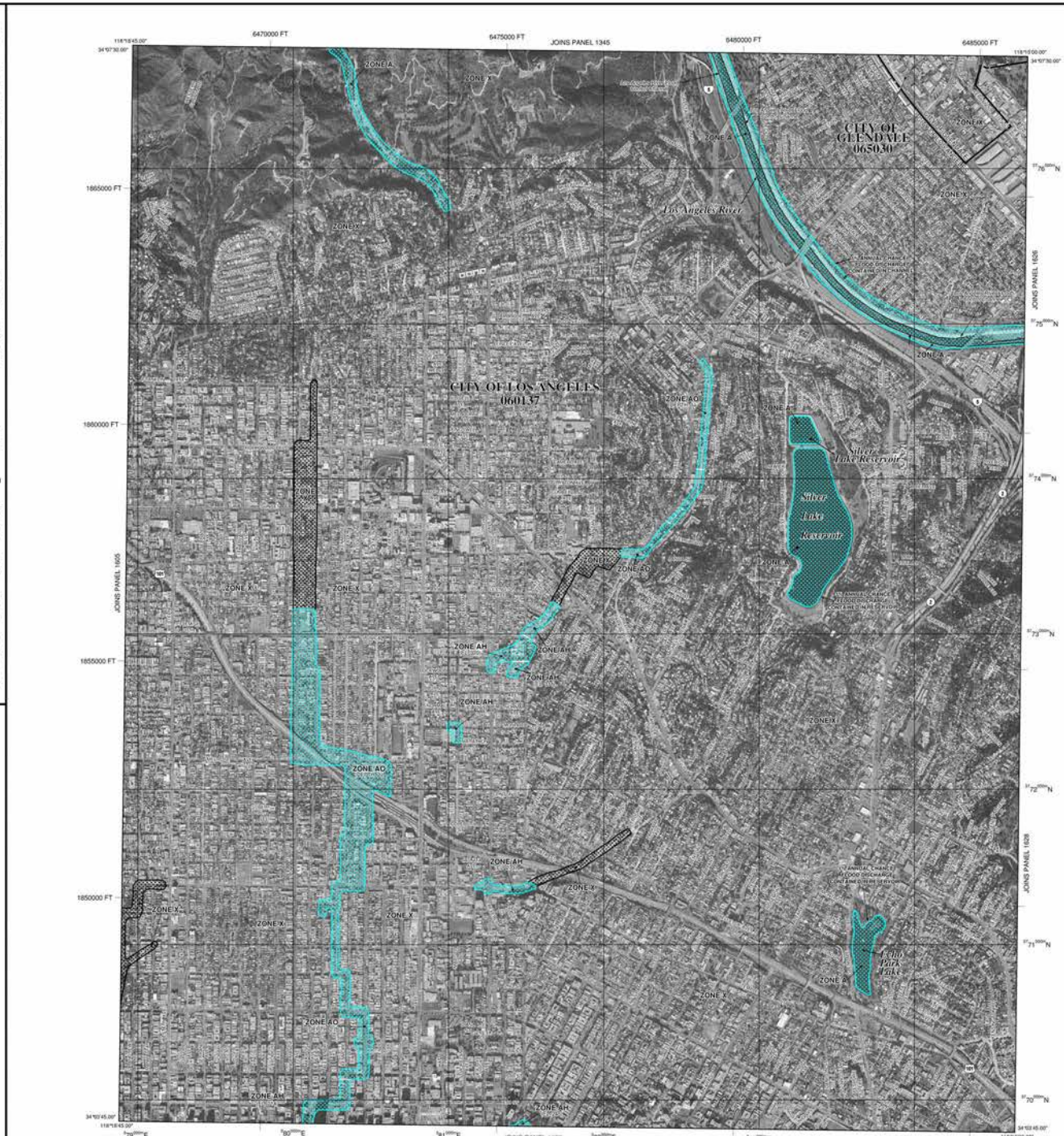
This map reflects more detailed and up-to-date **stream channel configurations** than those shown on the previous FIRM for this jurisdiction. The floodplains and floodways that were transferred from the previous FIRM may have been adjusted to conform to these new stream channel configurations. As a result, the Flood Profiles and Floodway Data tables *in the Flood Insurance Study report* (which contains authoritative hydraulic data) may reflect stream channel distances that differ from what is shown on this map.

Corporate limits shown on this map are based on the best data available at the time of publication. Because changes due to annexations or de-annexations may have occurred after this map was published, map users should contact appropriate community officials to verify current corporate limit locations.

Please refer to the separately printed **Map Index** for an overview map of the county showing the layout of map panels; community map repository addresses; and a Listing of Communities table containing National Flood Insurance Program dates for each community as well as a listing of the panels on which each community is located.

Contact the **FEMA Map Service Center** at 1-800-358-9616 for information on available products associated with this FIRM. Available products may include previously issued Letters of Map Change, a *Flood Insurance Study* report, and/or digital versions of this map. The FEMA Map Service Center may also be reached by Fax at 1-800-358-9620 and its website at http://www.msc.fema.gov/.

If you have **questions about this map** or questions concerning the National Flood Insurance Program in general, please call **1-877-FEMA MAP** (1-877-336-2627) or visit the FEMA website at http://www.fema.gov/.



LEGEND

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual chance flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V and VE. The Base Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A No Base Flood Elevations determined.

ZONE AE Base Flood Elevations determined.

ZONE AH Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.

ZONE AO Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.

ZONE AR Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.

ZONE A99 Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.

ZONE V Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.

ZONE VE Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X Areas determined to be outside the 0.2% annual chance floodplain.

ZONE D Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

1% annual chance floodplain boundary
0.2% annual chance floodplain boundary
Floodway boundary
Zone D boundary
CBRS and OPA boundary
Boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
513 Base Flood Elevation line and value; elevation in feet*
(EL 987) Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988 (NAVD 88)

A — A Cross section line
23 — 23 Transect line
97°07'30", 32°22'30" Geographic coordinates referenced to the North American Datum of 1983 (NAD 83)
4275,000mN 1000-meter Universal Transverse Mercator grid values, zone 11
6000000 FT 5000-foot grid ticks: California State Plane coordinate system, V zone (FIPSZONE 0405), Lambert Conformal Conic
DX5510 Bench mark (see explanation in Notes to Users section of this FIRM panel)
M1.5 River Mile

MAP REPOSITORIES
Refer to Map Repositories list on Map Index

EFFECTIVE DATE OF COUNTYWIDE FLOOD INSURANCE RATE MAP
September 26, 2008
EFFECTIVE DATE(S) OF REVISION(S) TO THIS PANEL

For community map revision history prior to countywide mapping, refer to the Community Map History table located in the Flood Insurance Study report for this jurisdiction.

To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

MAP SCALE 1" = 1000'
500 0 1000 2000 FEET
300 0 300 600 METERS

NFIP
NATIONAL FLOOD INSURANCE PROGRAM

PANEL 1610F

FIRM
FLOOD INSURANCE RATE MAP
LOS ANGELES COUNTY, CALIFORNIA
AND INCORPORATED AREAS

PANEL 1610 OF 2350
(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:

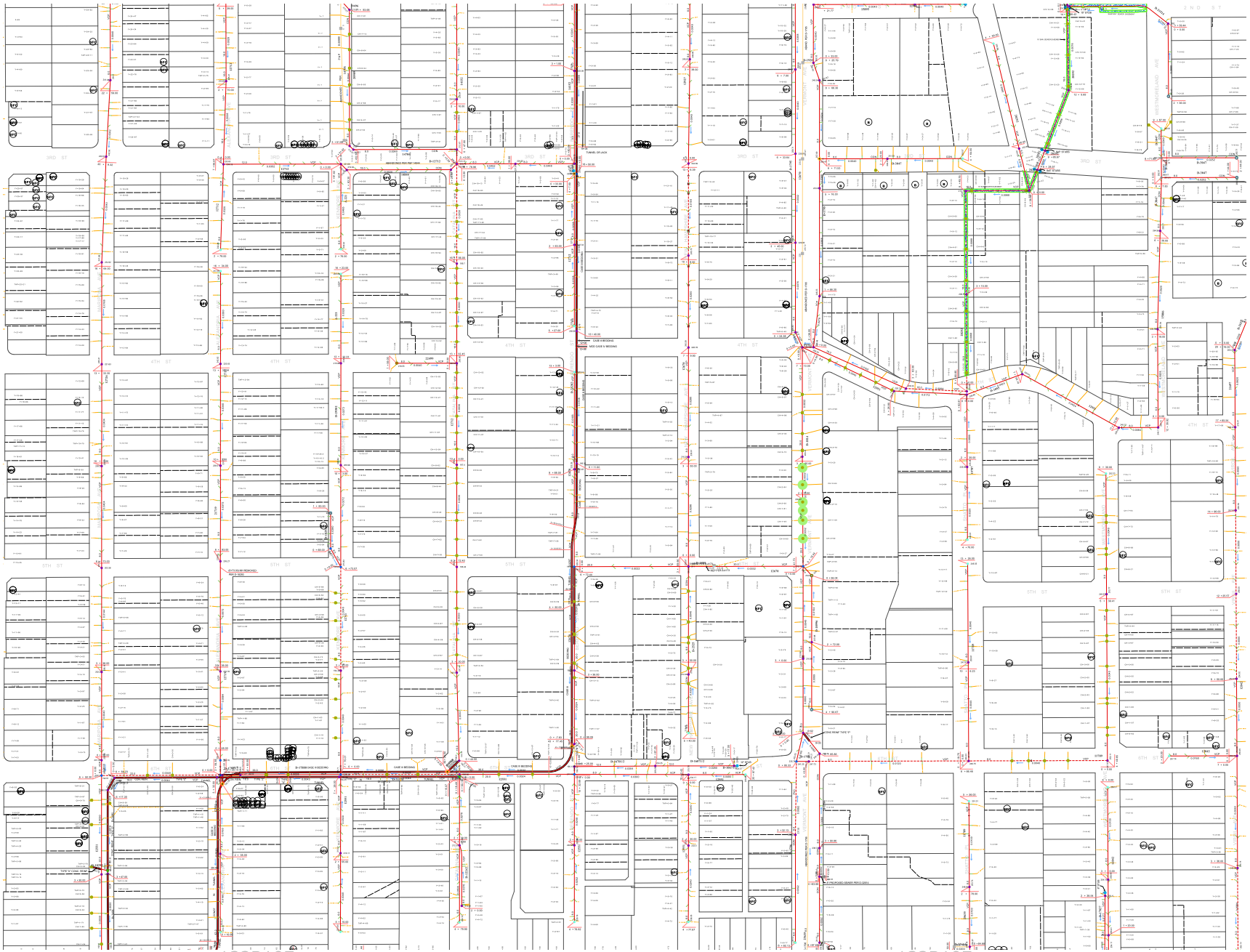
COMMUNITY	NUMBER	PANEL	SUFFIX
GLENDALE, CITY OF	065030	1610	F
LOS ANGELES, CITY OF	060137	1610	F

Notice to User: The **Map Number** shown below should be used when placing map orders; the **Community Number** shown above should be used on insurance applications for the subject community.

MAP NUMBER
06037C1610F
EFFECTIVE DATE
SEPTEMBER 26, 2008

Federal Emergency Management Agency

Appendix C – Sewer Plans, Generation Factors, and SCARs



0 37.5 75 150 225 300
Feet

N
W E
S

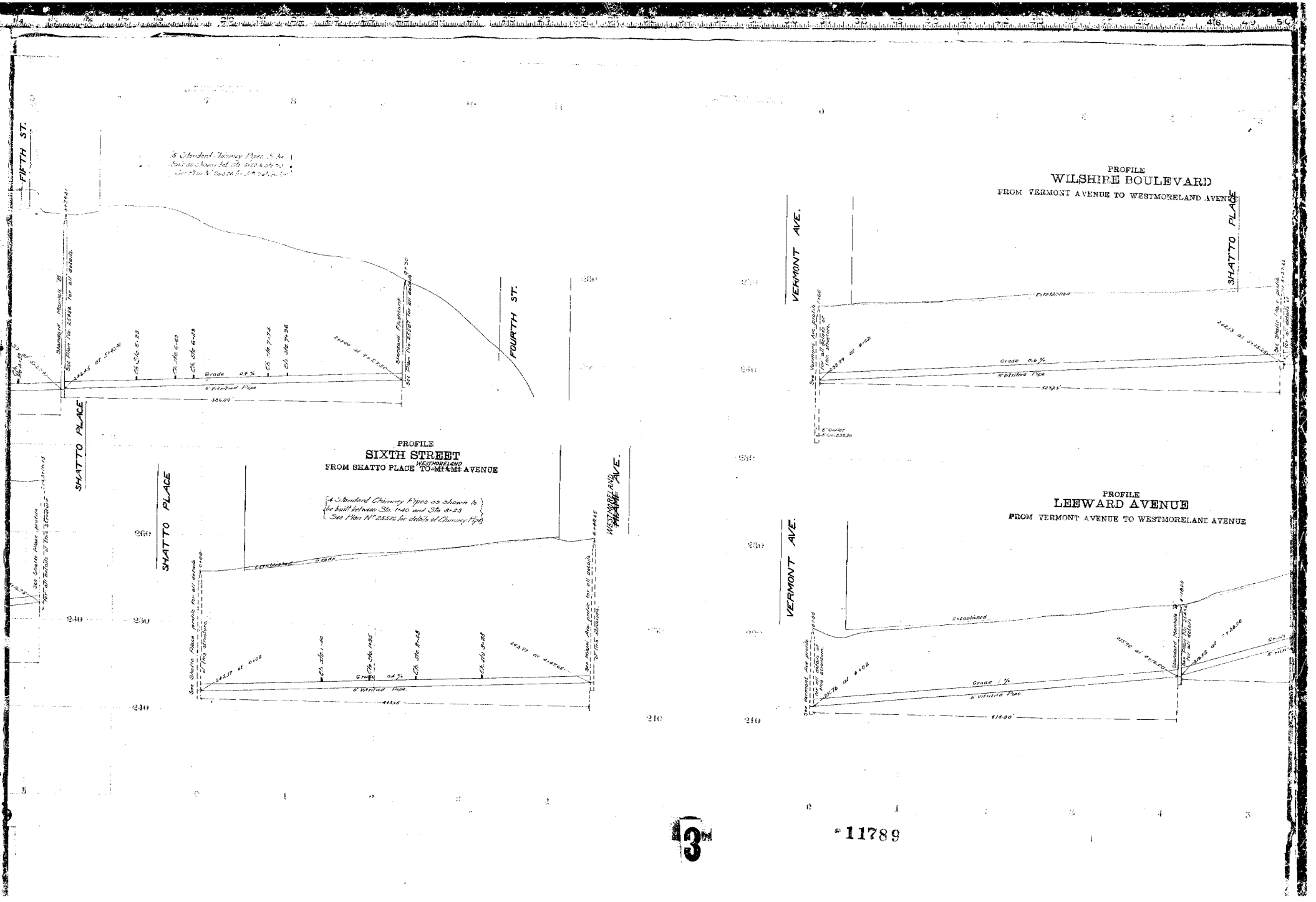
Notes:

LA DPW ENGINEERING
TRANSFORMING LOS ANGELES

CENTRAL DISTRICT SEWER WYE MAP

Plotted Date: **10/20/2014**
Revised :

135B197



PROFILE
SIXTH STREET
FROM SHATTO PLACE TO ~~MIAMI~~ WESTMORELAND AVENUE

PROFILE
WILSHIRE BOULEVARD
FROM VERMONT AVENUE TO WESTMORELAND AVENUE

PROFILE
LEEWARD AVENUE
FROM VERMONT AVENUE TO WESTMORELAND AVENUE

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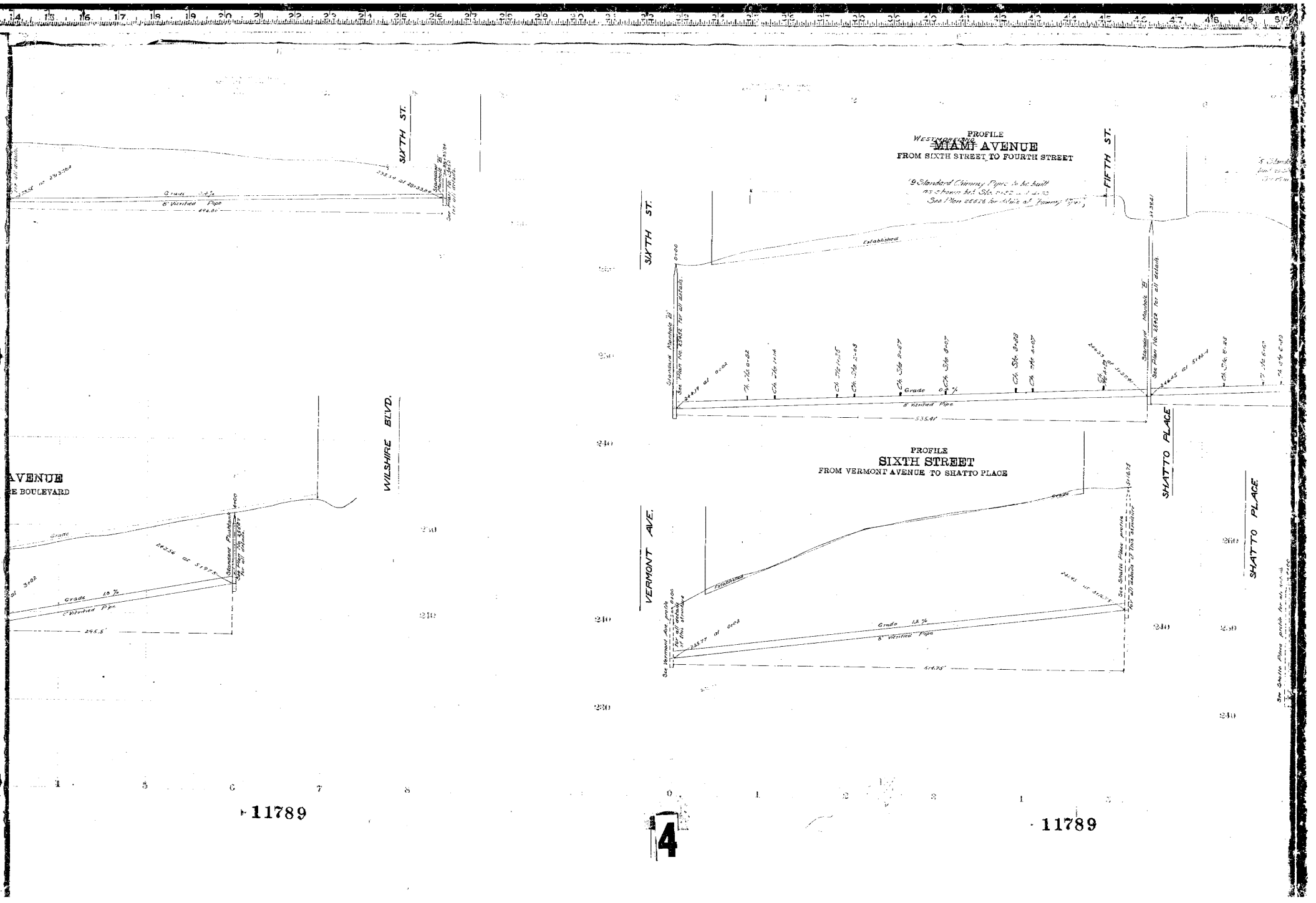

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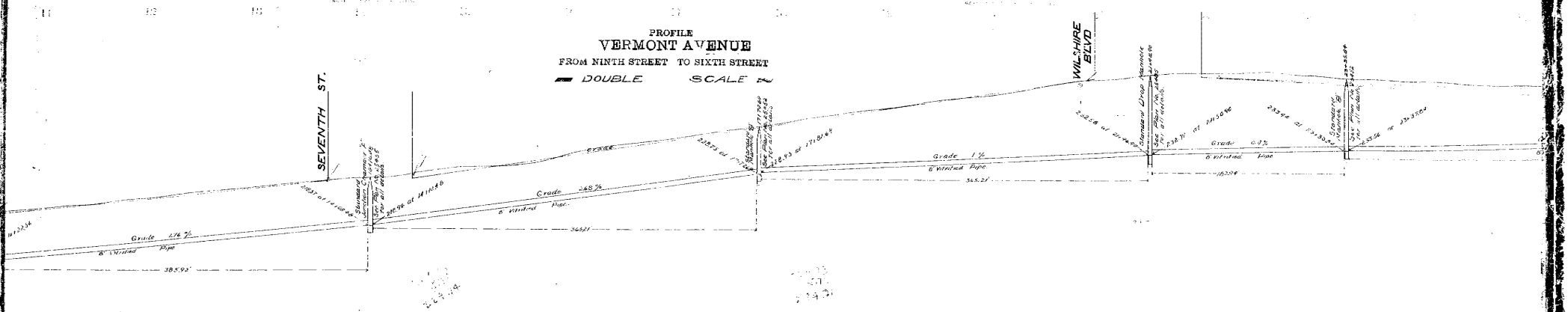
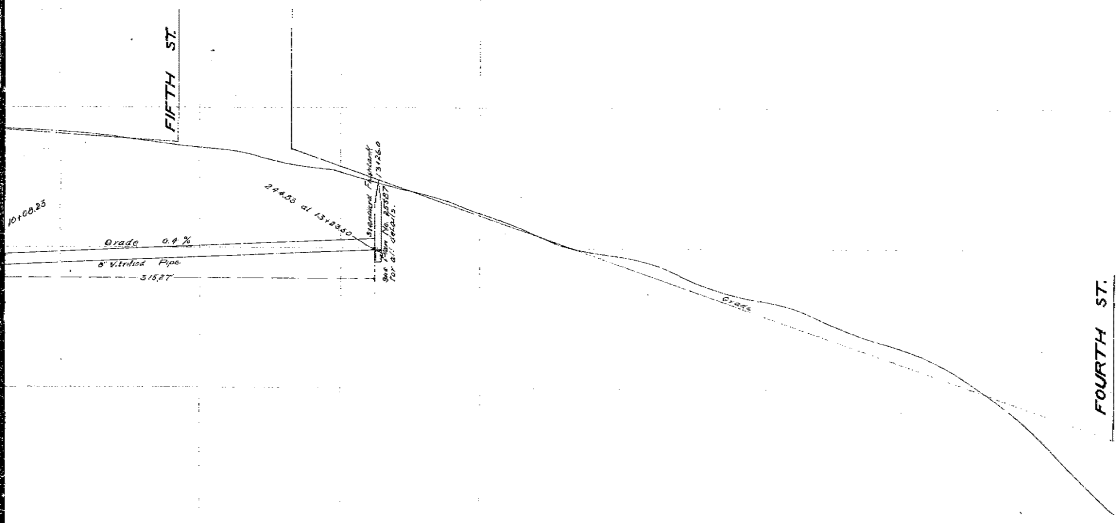
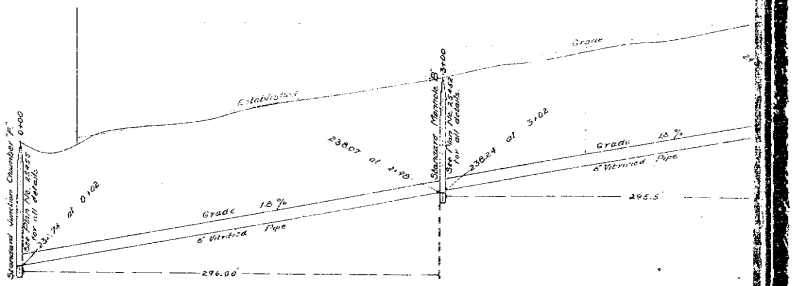
PROFILE
VERMONT AVENUE
FROM NINTH STREET TO SIXTH STREET
DOUBLE SCALE





PROFILE
WESTMORELAND AVENUE
FROM SEVENTH STREET TO WILSHIRE BOULEVARD



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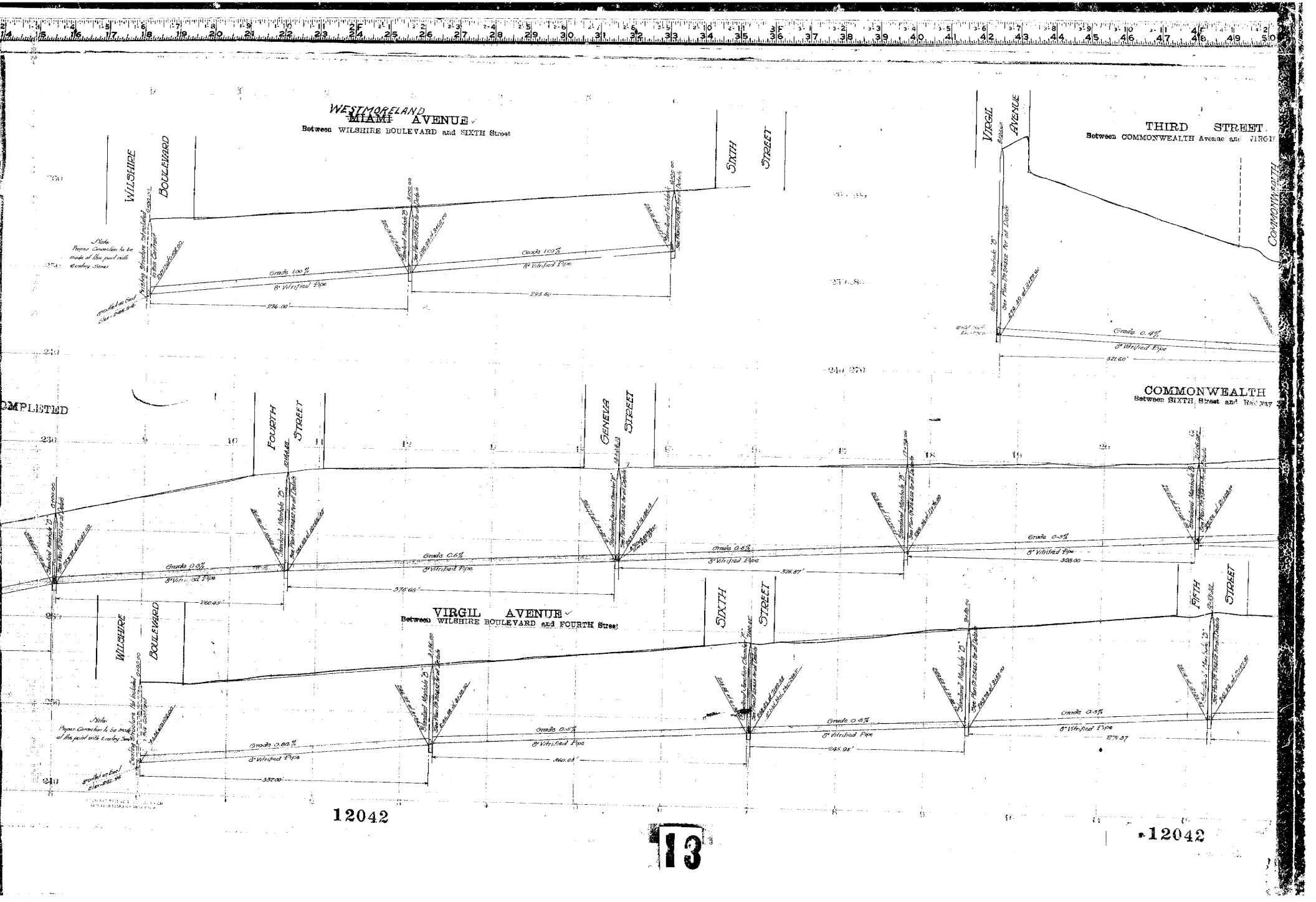

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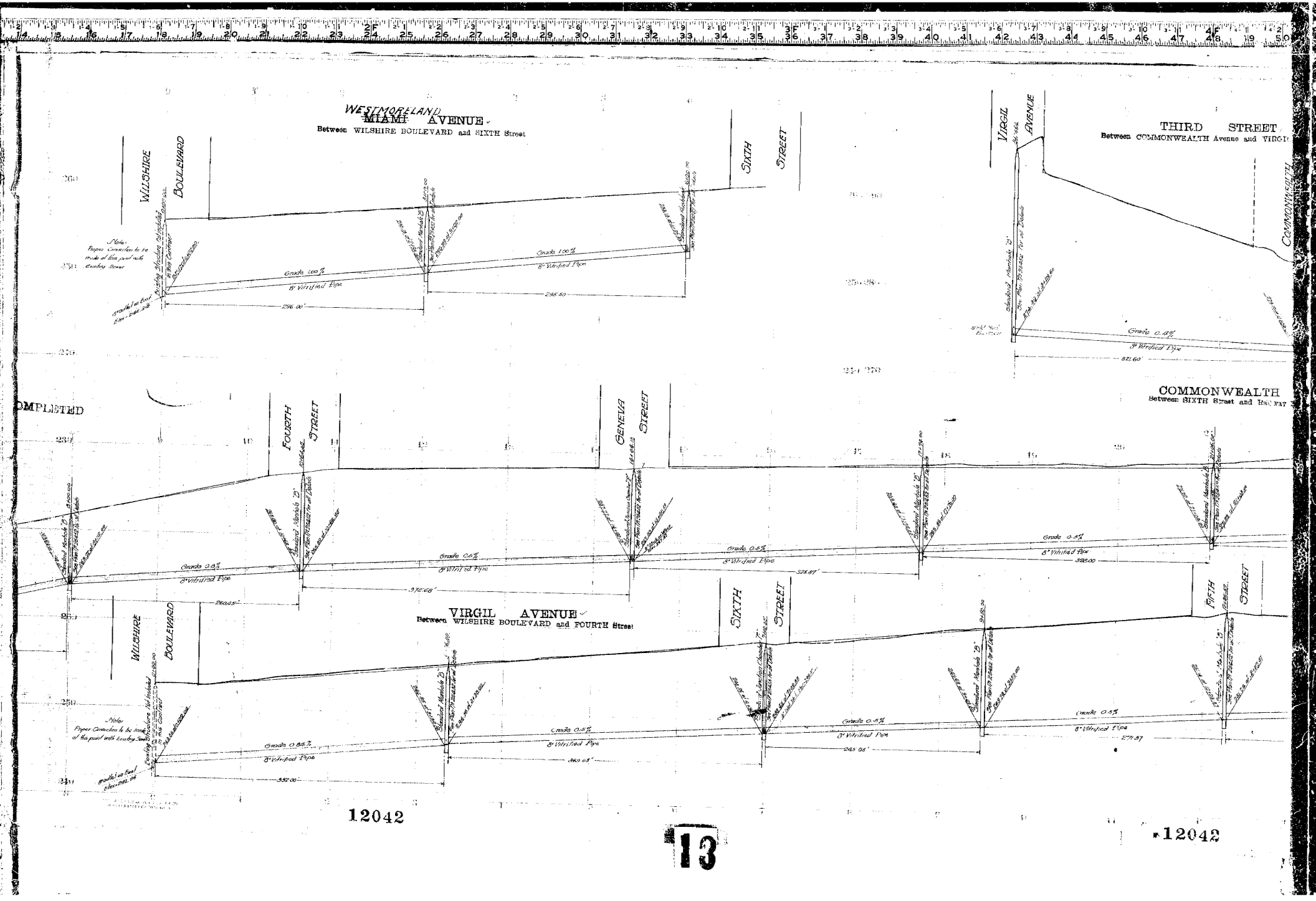

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12042

SEWERAGE FACILITIES CHARGE
SEWAGE GENERATION FACTOR FOR
RESIDENTIAL AND COMMERCIAL CATEGORIES

EFFECTIVE DATE: April 6, 2012

Line No.	FACILITY DESCRIPTION	PROPOSED SGF IN GPD	BOD (mg/l)	SS (mg/l)
1	Acupuncture Office/Clinic	120/1,000 Gr SF	265	275
2	Arcade - Video Games	50/1,000 Gr SF	265	275
3	Auditorium (a)	3/Seat	265	275
4	Auto Parking (a)	20/1,000 Gr SF	265	275
5	Auto Mfg., Service Maintenance (b)	Actual	1,260	1,165
6	Bakery	280/1,000 Gr SF	3,020	2,540
7	Bank: Headquarters	120/1,000 Gr SF	265	275
8	Bank: Branch	50/1,000 Gr SF	265	275
9	Ballroom	350/1,000 Gr SF	265	275
10	Banquet Room	350/1,000 Gr SF	265	275
11	Bar: Cocktail, Fixed Set (a) (c)	15/Seat	265	275
12	Bar: Juice, No Baking Facilities (d)	720/1,000 Gr SF	265	275
13	Bar: Juice, with Baking Facilities (d)	720/1,000 Gr SF	265	275
14	Bar: Cocktail, Public Table Area (c)	720/1,000 Gr SF	265	275
15	Barber Shop	120/1,000 Gr SF	265	275
16	Barber Shop (s)	15/Stall	265	275
17	Beauty Parlor	425/1,000 Gr SF	265	275
18	Beauty Parlor (s)	50/Stall	265	275
19	Bldg. Const/Field Office (e)	120/Office	265	275
20	Bowling Alley: Alley, Lanes & Lobby Area	50/1,000 Gr SF	265	275
21	Bowling Facility: Arcade/Bar/Restaurant/Dancing	Total	Average	Average
22	Cafeteria: Fixed Seat	30/Seat	1,000	600
23	Car Wash: Automatic (b)	Actual	265	285
24	Car Wash: Coin Operated Bays (b)	Actual	265	285
25	Car Wash: Hand Wash (b)	Actual	265	285
26	Car Wash: Counter & Sales Area	50/1,000 Gr SF	265	275
27	Chapel: Fixed Seat	3/Seat	265	275
28	Chiropractic Office	120/1,000 Gr SF	265	275
29	Church: Fixed Seat	3/Seat	265	275
30	Church School: Day Care/Elem	9/Occupant	265	275
31	Church School: One Day Use (s)	9/Occupant	265	275
32	Cocktail Lounge: Fixed Seat (f)	15/Seat	265	275
33	Coffee House: No Food Preparation (d)	720/1,000 Gr SF	265	275
34	Coffee House: Pastry Baking Only (d)	720/1,000 Gr SF	265	275
35	Coffee House: Serves Prepared Food (d)	25/Seat	1,000	600
36	Cold Storage: No Sales (g)	30/1,000 Gr SF	265	275
37	Cold Storage: Retail Sales (g)	50/1,000 Gr SF	265	275
38	Comfort Station: Public	80/Fixture	265	275
39	Commercial Use (a)	50/1,000 Gr SF	265	275

SEWERAGE FACILITIES CHARGE
SEWAGE GENERATION FACTOR FOR
RESIDENTIAL AND COMMERCIAL CATEGORIES

EFFECTIVE DATE: April 6, 2012

Line No.	FACILITY DESCRIPTION	PROPOSED SGF IN GPD	BOD (mg/l)	SS (mg/l)
40	Community Center	3/Occupant	265	275
41	Conference Room of Office Bldg.	120/1,000 Gr SF	265	275
42	Counseling Center (h)	120/1,000 Gr SF	265	275
43	Credit Union	120/1,000 Gr SF	265	275
44	Dairy	Average Flow	1,510	325
45	Dairy: Barn	Average Flow	1,510	325
46	Dairy: Retail Area	50/1,000 Gr SF	265	275
47	Dancing Area (of Bars or Nightclub) (c)	350/1,000 Gr SF	265	275
48	Dance Studio (i)	50/1,000 Gr SF	265	275
49	Dental Office/Clinic	250/1,000 Gr SF	265	275
50	Doughnut Shop	280/1,000 Gr SF	1,000	600
51	Drug Rehabilitation Center (h)	120/1,000 Gr SF	265	275
52	Equipment Booth	30/1,000 Gr SF	265	275
53	Film Processing (Retail)	50/1,000 Gr SF	265	275
54	Film Processing (Industrial)	Actual	265	275
55	Food Processing Plant (b)	Actual	2,210	1,450
56	Gas Station: Self Service	100/W.C.	265	275
57	Gas Station: Four Bays Max	430/Station	1,950	1,175
58	Golf Course Facility: Lobby/Office/Restaurant/Bar	Total	700	450
59	Gymnasium: Basketball, Volleyball (k)	200/1,000 Gr SF	265	275
60	Hanger (Aircraft)	50/1,000 Gr SF	265	275
61	Health Club/Spa (k)	650/1,000 Gr SF	265	275
62	Homeless Shelter	70/Bed	265	275
63	Hospital	70/Bed	820	1,230
64	Hospital: Convalescent (a)	70/Bed	265	275
65	Hospital: Animal	300/1,000 Gr SF	820	1,230
66	Hospital: Psychiatric	70/Bed	265	275
67	Hospital: Surgical (a)	360/Bed	265	275
68	Hotel: Use Guest Rooms Only (a)	120/Room	265	275
69	Jail	85/Inmate	265	275
70	Kennel: Dog Kennel/Open	100/1,000 Gr SF	265	275
71	Laboratory: Commercial	250/1,000 Gr SF	265	275
72	Laboratory: Industrial	Actual	265	275
73	Laundromat	185/Machine	550	370
74	Library: Public Area	50/1,000 Gr SF	265	275
75	Library: Stacks, Storage	30/1,000 Gr SF	265	275
76	Lobby of Retail Area (l)	50/1,000 Gr SF	265	275
77	Lodge Hall	3/Seat	265	275
78	Lounge (l)	50/1,000 Gr SF	265	275

SEWERAGE FACILITIES CHARGE
SEWAGE GENERATION FACTOR FOR
RESIDENTIAL AND COMMERCIAL CATEGORIES

EFFECTIVE DATE: April 6, 2012

Line No.	FACILITY DESCRIPTION	PROPOSED SGF IN GPD	BOD (mg/l)	SS (mg/l)
79	Machine Shop (No Industrial Waste Permit Required) (b)	50/1,000 Gr SF	265	275
80	Machine Shop (Industrial)	Actual	265	275
81	Mfg or Industrial Facility (No IW Permit Required) (b)	50/1,000 Gr SF	265	275
82	Mfg or Industrial Facility (Industrial)	Actual	265	275
83	Massage Parlor	250/1,000 Gr SF	265	275
84	Medical Building (a)	225/1,000 Gr SF	265	275
85	Medical: Lab in Hospital	250/1,000 Gr SF	340	275
86	Medical Office/Clinic	250/1,000 Gr SF	265	275
87	Mini-Mall (No Food)	50/1,000 Gr SF	265	275
88	Mortuary: Chapel	3/Seat	265	275
89	Mortuary: Embalming	300/1,000 Gr SF	800	800
90	Mortuary: Living Area	50/1,000 Gr SF	265	275
91	Motel: Use Guest Room Only (a)	120/Room	265	275
92	Museum: All Area	30/1,000 Gr SF	265	275
93	Museum: Office Over 15%	120/1,000 Gr SF	265	275
94	Museum: Sales Area	50/1,000 Gr SF	265	275
95	Office Building (a)	120/1,000 Gr SF	265	275
96	Office Bldg w/Cooling Tower	170/1,000 Gr SF	265	275
97	Plating Plant (No IW Permit Required) (b)	50/1,000 Gr SF	265	275
98	Plating Plant (Industrial) (b)	Actual	265	275
99	Pool Hall (No Alcohol)	50/1,000 Gr SF	265	275
100	Post Office: Full Service (m)	120/1,000 Gr SF	265	275
101	Post Office: Private Mail Box Rental	50/1,000 Gr SF	265	275
102	Prisons	175/Inmate	265	275
103	Residential Dorm: College or Residential (n)	70/Student	265	275
104	Residential: Boarding House	70/Bed	265	275
105	Residential: Apt - Bachelor (a)	75/DU	265	275
106	Residential: Apt - 1 BDR (a) (o)	110/DU	265	275
107	Residential: Apt - 2 BDR (a) (o)	150/DU	265	275
108	Residential: Apt - 3 BDR (a) (o)	190/DU	265	275
109	Residential: Apt - >3 BDR (o)	40/BDR	265	275
110	Residential: Condo - 1 BDR (o)	110/DU	265	275
111	Residential: Condo - 2 BDR (o)	150/DU	265	275
112	Residential: Condo - 3 BDR (o)	190/DU	265	275
113	Residential: Condo - >3 BDR (o)	40/BDR	265	275
114	Residential: Duplex/Townhouse - 1 BR (o)	110/DU	265	275
115	Residential: Duplex/Townhouse - 2 BR (o)	150/DU	265	275
116	Residential: Duplex/Townhouse - 3 BR (o)	190/DU	265	275
117	Residential: Duplex/Townhouse - >3 BR (o)	40/BDR	265	275

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EFFECTIVE DATE: April 6, 2012

Line No.	FACILITY DESCRIPTION	PROPOSED SGF IN GPD	BOD (mg/l)	SS (mg/l)
118	Residential: SFD - 1 BR (o)	140/DU	265	275
119	Residential: SFD - 2 BR (o)	185/DU	265	275
120	Residential: SFD - 3 BR (o)	230/DU	265	275
121	Residential: SFD - >3 BR (o)	45/BDR	265	275
122	Residential Room Addition: Bedroom (o)	45/BDR	265	275
123	Residential Room Conversion: Into a Bedroom (o)	45/BDR	265	275
124	Residential: Mobile Home	Same as Apt	265	275
125	Residential: Artist (2/3 Area)	75/DU	265	275
126	Residential: Artist Residence	75/DU	265	275
127	Residential: Guest Home w/ Kitchen	Same as Apt	265	275
128	Residential: Guest Home w/o Kitchen	45/BDR	265	275
129	Rest Home	70/Bed	555	490
130	Restaurant: Drive-In	50/Stall	1000	600
131	Restaurant: Drive-In Seating Area	25/Seat	1000	600
132	Restaurant: Fast Food Indoor Seat	25/Seat	1000	600
133	Restaurant: Fast Food Outdoor Seat	25/Seat	1000	600
134	Restaurant: Full Service Indoor Seat (a)	30/Seat	1000	600
135	Restaurant: Full Service Outdoor Seat	30/Seat	1000	600
136	Restaurant: Take Out	300/1,000 Gr SF	1000	600
137	Retail Area (greater than 100,000 SF)	50/1,000 Gr SF	265	275
138	Retail Area (less than 100,000 SF)	25/1,000 Gr SF	265	275
139	Rifle Range: Shooting Stalls/Lanes, Lobby	50/1,000 Gr SF	265	275
140	Rifle Range Facility: Bar/Restaurant	Total	Average	Average
141	School: Arts/Dancing/Music (i)	11/Student	265	275
142	School: Elementary/Jr. High (a) (p)	9/Student	265	275
143	School: High School (a) (p)	11/Student	265	275
144	School: Kindergarten (s)	9/Student	265	275
145	School: Martial Arts (i)	9/Student	265	275
146	School: Nursery-Day Care (p)	9/Child	265	275
147	School: Special Class (p)	9/Student	265	275
148	School: Trade or Vocational (p)	11/Student	265	275
149	School: Training (p)	11/Student	265	275
150	School: University/College (a) (p)	16/Student	265	275
151	School: Dormitory (a) (n)	70/Student	265	275
152	School: Stadium, Pavilion	3/Seat	265	275
153	Spa/Jacuzzi (Commercial with backwash filters)	Total	265	275
154	Storage: Building/Warehouse	30/1,000 Gr SF	265	275
155	Storage: Self-Storage Bldg	30/1,000 Gr SF	265	275
156	Store: Ice Cream/Yogurt	25/1,000 Gr SF	1000	600

SEWERAGE FACILITIES CHARGE
SEWAGE GENERATION FACTOR FOR
RESIDENTIAL AND COMMERCIAL CATEGORIES

EFFECTIVE DATE: April 6, 2012

Line No.	FACILITY DESCRIPTION	PROPOSED SGF IN GPD	BOD (mg/l)	SS (mg/l)
157	Store: Retail (l)	50/1,000 Gr SF	265	275
158	Studio: Film/TV - Audience Viewing Room (q)	3/Seat	265	275
159	Studio: Film/TV - Regular Use Indoor Filming Area (q)	50/1,000 Gr SF	265	275
160	Studio: Film/TV - Ind. Use Film Process/Machine Shop (q)	50/1,000 Gr SF	265	275
161	Studio: Film/TV - Ind. Use Film Process/Machine Shop	Total	265	275
162	Studio: Recording	50/1,000 Gr SF	265	275
163	Swimming Pool (Commercial with backwash filters)	Total	265	275
164	Tanning Salon: Independent, No Shower (r)	50/1,000 Gr SF	265	275
165	Tanning Salon: Within a Health Spa/Club	640/1,000 Gr SF	265	275
166	Theater: Drive-In	6/Vehicle	265	275
167	Theater: Live/Music/Opera	3/Seat	265	275
168	Theater: Cinema	3/Seat	265	275
169	Tract: Commercial/Residential	1/Acre	265	275
170	Trailer: Const/Field Office (e)	120/Office	265	275
171	Veterinary Clinic/Office	250/1,000 Gr SF	265	275
172	Warehouse	30/1,000 Gr SF	265	275
173	Warehouse w/ Office	Total	265	275
174	Waste Dump: Recreational	400/Station	2650	2750
175	Wine Tasting Room: Kitchen	200/1,000 Gr SF	265	275
176	Wine Tasting Room: All Area	50/1,000 Gr SF	265	275

SEWERAGE FACILITIES CHARGE GUIDE
RESIDENTIAL AND COMMERCIAL CATEGORIES

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EFFECTIVE DATE: April 6, 2012

Line No.	**FACILITY DESCRIPTION**	**FEE RATE**
1	Acupuncture Office/Clinic	$495/1000 GR.SQ.FT.
2	Arcade - Video Games	$206/1000 GR.SQ.FT.
3	Auditorium (a)	$12/SEAT
4	Auto Parking (a)	$83/1000 GR.SQ.FT.
5	Auto Mfg., Service Maintenance (b)	Actual
6	Bakery	$2956/1000 GR.SQ.FT.
7	Bank: Headquarters	$495/1000 GR.SQ.FT.
8	Bank: Branch	$206/1000 GR.SQ.FT.
9	Ballroom	$1445/1000 GR.SQ.FT.
10	Banquet Room	$1445/1000 GR.SQ.FT.
11	Bar: Cocktail, Fixed Seat (a) (c)	$62/SEAT
12	Bar: Juice, No Baking Facilities (d)	$2973/1000 GR.SQ.FT.
13	Bar: Juice, with Baking Facilities (d)	$2973/1000 GR.SQ.FT.
14	Bar: Cocktail, Public Table Area (c)	$2973/1000 GR.SQ.FT.
15	Barber Shop	$495/1000 GR.SQ.FT.
16	Barber Shop (s)	$62/STALL.
17	Beauty Parlor	$1755/1000 GR.SQ.FT.
18	Beauty Parlor (s)	$206/STALL.
19	Bldg. Const/Field Office (e)	$495/OFFICE
20	Bowling Alley: Alley, Lanes & Lobby Area	$206/1000 GR.SQ.FT.
21	Bowling Facility: Arcade/Bar/Restaurant/Dancing	Total
22	Cafeteria: Fixed Seat	$165/SEAT
23	Car Wash: Automatic (b)	Actual
24	Car Wash: Coin Operated Bays (b)	Actual
25	Car Wash: Hand Wash (b)	Actual
26	Car Wash: Counter & Sales Area	$206/1000 GR.SQ.FT.
27	Chapel: Fixed Seat	$12/SEAT
28	Chiropractic Office	$495/1000 GR.SQ.FT.
29	Church: Fixed Seat	$12/SEAT
30	Church School: Day Care/Elem	$37/OCCUPANT
31	Church School: One Day Use (s)	$37/OCCUPANT
32	Cocktail Lounge: Fixed Seat (f)	$62/SEAT
33	Coffee House: No Food Preparation (d)	$2973/1000 GR.SQ.FT.
34	Coffee House: Pastry Baking Only (d)	$2973/1000 GR.SQ.FT.
35	Coffee House: Serves Prepared Food (d)	$138/SEAT
36	Cold Storage: No Sales (g)	$124/1000 GR.SQ.FT.
37	Cold Storage: Retail Sales (g)	$206/1000 GR.SQ.FT.

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38	Comfort Station: Public	$330/FIXTURE
39	Commercial Use (a)	$206/1000 GR.SQ.FT.
40	Community Center	$12/OCCUPANT
41	Conference Room of Office Bldg.	$495/1000 GR.SQ.FT.
42	Counseling Center (h)	$495/1000 GR.SQ.FT.
43	Credit Union	$495/1000 GR.SQ.FT.
44	Dairy	Average Flow
45	Dairy: Barn	Average Flow
46	Dairy: Retail Area	$206/1000 GR.SQ.FT.
47	Dancing Area (of Bars or Nightclub) (c)	$1445/1000 GR.SQ.FT.
48	Dance Studio (i)	$206/1000 GR.SQ.FT.
49	Dental Office/Clinic	$1032/1000 GR.SQ.FT.
50	Doughnut Shop	$1540/1000 GR.SQ.FT.
51	Drug Rehabilitation Center (h)	$495/1000 GR.SQ.FT.
52	Equipment Booth	$124/1000 GR.SQ.FT.
53	Film Processing (Retail)	$206/1000 GR.SQ.FT.
54	Film Processing (Industrial)	Actual
55	Food Processing Plant (b)	Actual
56	Gas Station: Self Service	$413/W.C.
57	Gas Station: Four Bays Max	$3211/STATION
58	Golf Course Facility: Lobby/Office/Restaurant/Bar	Total
59	Gymnasium: Basketball, Volleyball (k)	$826/1000 GR.SQ.FT.
60	Hanger (Aircraft)	$206/1000 GR.SQ.FT.
61	Health Club/Spa (k)	$2684/1000 GR.SQ.FT.
62	Homeless Shelter	$289/BED
63	Hospital	$422/BED
64	Hospital: Convalescent (a)	$289/BED
65	Hospital: Animal	$1811/1000 GR.SQ.FT.
66	Hospital: Psychiatric	$289/BED
67	Hospital: Surgical (a)	$1486/BED
68	Hotel: Use Guest Rooms Only (a)	$495/ROOM
69	Jail	$351/INMATE
70	Kennel: Dog Kennel/Open	$413/1000 GR.SQ.FT.
71	Laboratory: Commercial	$1032/1000 GR.SQ.FT.
72	Laboratory: Industrial	Actual
73	Laundromat	$855/MACHINE
74	Library: Public Area	$206/1000 GR.SQ.FT.
75	Library: Stacks, Storage	$124/1000 GR.SQ.FT.
76	Lobby of Retail Area (l)	$206/1000 GR.SQ.FT.

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77	Lodge Hall	$12/SEAT
78	Lounge (l)	$206/1000 GR.SQ.FT.
79	Machine Shop (No Industrial Waste Permit Required) (b)	$206/1000 GR.SQ.FT.
80	Machine Shop (Industrial)	Actual
81	Mfg or Industrial Facility (No IW Permit Required) (b)	$206/1000 GR.SQ.FT.
82	Mfg or Industrial Facility (Industrial)	Actual
83	Massage Parlor	$1032/1000 GR.SQ.FT.
84	Medical Building (a)	$929/1000 GR.SQ.FT.
85	Medical: Lab in Hospital	$1057/1000 GR.SQ.FT.
86	Medical Office/Clinic	$1032/1000 GR.SQ.FT.
87	Mini-Mall (No Food)	$206/1000 GR.SQ.FT.
88	Mortuary: Chapel	$12/SEAT
89	Mortuary: Embalming	$1644/1000 GR.SQ.FT.
90	Mortuary: Living Area	$206/1000 GR.SQ.FT.
91	Motel: Use Guest Room Only (a)	$495/ROOM
92	Museum: All Area	$124/1000 GR.SQ.FT.
93	Museum: Office Over 15%	$495/1000 GR.SQ.FT.
94	Museum: Sales Area	$206/1000 GR.SQ.FT.
95	Office Building (a)	$495/1000 GR.SQ.FT.
96	Office Bldg w/Cooling Tower	$702/1000 GR.SQ.FT.
97	Plating Plant (No IW Permit Required) (b)	$206/1000 GR.SQ.FT.
98	Plating Plant (Industrial) (b)	Actual
99	Pool Hall (No Alcohol)	$206/1000 GR.SQ.FT.
100	Post Office: Full Service (m)	$495/1000 GR.SQ.FT.
101	Post Office: Private Mail Box Rental	$206/1000 GR.SQ.FT.
102	Prisons	$722/INMATE
103	Residential Dorm: College or Residential (n)	$289/STUDENT
104	Residential: Boarding House	$289/BED
105	Residential: Apt - Bachelor (a)	$310/DU
106	Residential: Apt - 1 BDR (a) (o)	$454/DU
107	Residential: Apt - 2 BDR (a) (o)	$619/DU
108	Residential: Apt - 3 BDR (a) (o)	$784/DU
109	Residential: Apt - >3 BDR (o)	$165 PER ADDITIONAL BEDROOM
110	Residential: Condo - 1 BDR (o)	$454/DU
111	Residential: Condo - 2 BDR (o)	$619/DU
112	Residential: Condo - 3 BDR (o)	$784/DU
113	Residential: Condo - >3 BDR (o)	$165 PER ADDITIONAL BEDROOM
114	Residential: Duplex/Townhouse - 1 BR (o)	$454/DU
115	Residential: Duplex/Townhouse - 2 BR (o)	$619/DU

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116	Residential: Duplex/Townhouse - 3 BR (o)	$784/DU
117	Residential: Duplex/Townhouse - >3 BR (o)	$165 PER ADDITIONAL BEDROOM
118	Residential: SFD - 1 BR (o)	$578/DU
119	Residential: SFD - 2 BR (o)	$764/DU
120	Residential: SFD - 3 BR (o)	$950/DU
121	Residential: SFD - >3 BR (o)	$186/BDR
122	Residential Room Addition: Bedroom (o)	$186/BDR
123	Residential Room Conversion: Into a Bedroom (o)	$186/BDR
124	Residential: Mobile Home	Same as Apt
125	Residential: Artist (2/3 Area)	$310/DU
126	Residential: Artist Residence	$310/DU
127	Residential: Guest Home w/ Kitchen	Same as Apt
128	Residential: Guest Home w/o Kitchen	$186/BDR
129	Rest Home	$334/BED
130	Restaurant: Drive-In	$275/STALL
131	Restaurant: Drive-In Seating Area	$138/SEAT
132	Restaurant: Fast Food Indoor Seat	$138/SEAT
133	Restaurant: Fast Food Outdoor Seat	$138/SEAT
134	Restaurant: Full Service Indoor Seat (a)	$165/SEAT
135	Restaurant: Full Service Outdoor Seat	$165/SEAT
136	Restaurant: Take Out	$1650/1000 GR.SQ.FT.
137	Retail Area (greater than 100,000 SF)	$206/1000 GR.SQ.FT.
138	Retail Area (less than 100,000 SF)	$103/1000 GR.SQ.FT.
139	Rifle Range: Shooting Stalls/Lanes, Lobby	$206/1000 GR.SQ.FT.
140	Rifle Range Facility: Bar/Restaurant	Total
141	School: Arts/Dancing/Music (i)	$45/1000 GR.SQ.FT.
142	School: Elementary/Jr. High (a) (p)	$37/STUDENT
143	School: High School (a) (p)	$45/STUDENT
144	School: Kindergarten (s)	$37/STUDENT
145	School: Martial Arts (i)	$37/STUDENT
146	School: Nursery-Day Care (p)	$37/CHILD
147	School: Special Class (p)	$37/STUDENT
148	School: Trade or Vocational (p)	$45/STUDENT
149	School: Training (p)	$45/STUDENT
150	School: University/College (a) (p)	$66/STUDENT
151	School: Dormitory (a) (n)	$289/STUDENT
152	School: Stadium, Pavilion	$12/SEAT
153	Spa/Jacuzzi (Commercial with backwash filters)	Total
154	Storage: Building/Warehouse	$124/1000 GR.SQ.FT.

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155	Storage: Self-Storage Bldg	$124/1000 GR.SQ.FT.
156	Store: Ice Cream/Yogurt	$138/1000 GR.SQ.FT.
157	Store: Retail (l)	$206/1000 GR.SQ.FT.
158	Studio: Film/TV - Audience Viewing Room (q)	$12/SEAT
159	Studio: Film/TV - Regular Use Indoor Filming Area (q)	$206/1000 GR.SQ.FT.
160	Studio: Film/TV - Ind. Use Film Process/Machine Shop (q)	$206/1000 GR.SQ.FT.
161	Studio: Film/TV - Ind. Use Film Process/Machine Shop	Total
162	Studio: Recording	$206/1000 GR.SQ.FT.
163	Swimming Pool (Commercial with backwash filters)	Total
164	Tanning Salon: Independent, No Shower (r)	$206/1000 GR.SQ.FT.
165	Tanning Salon: Within a Health Spa/Club	$2642/1000 GR.SQ.FT.
166	Theater: Drive-In	$25/VEHICLE
167	Theater: Live/Music/Opera	$12/SEAT
168	Theater: Cinema	$12/SEAT
169	Tract: Commercial/Residential	$4/ACRE
170	Trailer: Const/Field Office (e)	$495/OFFICE
171	Veterinary Clinic/Office	$1032/1000 GR.SQ.FT.
172	Warehouse	$124/1000 GR.SQ.FT.
173	Warehouse w/ Office	Total
174	Waste Dump: Recreational	$4130/STATION
175	Wine Tasting Room: Kitchen	$826/1000 GR.SQ.FT.
176	Wine Tasting Room: All Area	$206/1000 GR.SQ.FT.

City of Los Angeles
Bureau of Engineering

Sewer Capacity Availability Request (SCAR)

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 the capacity exists at the requested location for the proposed developments shown below. The results are good for 180 days from the date the sewer capacity approval from the Bureau of Sanitation. Lateral connection of development shall adhere to Bureau of Engineering Sewer Design Manual Section F 480. **If not listed in the Proposed Facility Description section of the SCAR, sewer ejector use is prohibited.**

Job Address:	**525 S VIRGIL AVE 90020**	Sanitation Scar ID:	**75-7945-1225**
Date Submitted	12/17/2025	Request Will Serve Letter?	Yes
BOE District:	Central District		
Applicant:	Keith Malloy		
Address:	915 Wilshire Boulevard #2150	City :	LOS ANGELES
State:	CA	Zip:	90017
Phone:	310.903.4019	Fax:	
Email:	kmalloy@waremalcomb.com	BPA No.	
S-Map:		Wye Map:	135A197-D

SIMM Map - Maintenance Hole Locations

No.	Street Name	U/S MH	D/S MH	Diam. (in)	Approved Flow %	Notes
1	VIRGIL AVE	49316098	49316142	8	100.00	

Proposed Facility Description

No.	Proposed Use Description	Sewage Generation (GPD)	Unit	Qty	GPD
1	STORAGE: SELF STORAGE BLDG.	30	KGSF	252,876	7,586
				Proposed Total Flow (gpd):	**7,586**

Remarks: Approved for the maximum allowable capacity of 7,586 GPD (5.27 gpm)

Note: Results are good for 180 days from the date of approval by the Bureau of Sanitation

Date Processed: 12/24/2025 Expires On: 06/22/2026

Processed by: Brett Perry
Bureau of Sanitation
Phone: 323-342-6207
Sanitation Status: Approved
Reviewed by: Ahmad Ghanem
on 12/24/2025

Submitted by: Adrian Sanchez
Bureau of Engineering
Central District
Phone:

Fees Collected	Yes	SCAR FEE	$0.00
Date Collected	12/17/2025	SCAR Status:	**Completed**

Scar Request Number: 6870

City of Los Angeles
Bureau of Engineering

SEWER CAPACITY AVAILABILITY REVIEW FEE (SCARF) - Frequently Asked Questions

SCAR stands for Sewer Capacity Availability Review that is performed by the Department of Public Works, Bureau of Sanitation. This review evaluates the existing sewer system to determine if there is adequate capacity to safely convey sewage from proposed development projects, proposed construction projects, proposed groundwater dewatering projects and proposed increases of sewage from existing facilities. The SCAR Fee (SCARF) recovers the cost, incurred by the City, in performing the review for any SCAR request that is expected to generate 10,000 gallons per day (gpd) of sewage.

The SCARF is based on the effort required to perform data collection and engineering analysis in completing a SCAR. A brief summary of that effort includes, but is not limited to, the following:

1. Research and trace sewer flow levels upstream and downstream of the point of connection.
2. Conduct field surveys to observe and record flow levels. Coordinate with maintenance staff to inspect sewer maintenance holes and conduct smoke and dye testing if necessary.
3. Review recent gauging data and in some cases closed circuit TV inspection (CCTV) videos.
4. Perform gauging and CCTV inspection if recent data is not available.
5. Research the project location area for other recently approved SCARs to evaluate the cumulated impact of all known SCARs on the sewer system.
6. Calculate the impact of the proposed additional sewage discharge on the existing sewer system as it will be impacted from the approved SCARs from Item 6 above. This includes tracing the cumulative impacts of all known SCARs, along with the subject SCAR, downstream to insure sufficient capacity exist throughout the system.
7. Correspond with the applicant for additional information and project and clarification as necessary.
8. Work with the applicant to find alternative sewer connection points and solutions if sufficient capacity does not exist at the desired point of connection.

Questions and Answers:

1. **When is the SCARF applied, or charged?**
   It applies to all applicants seeking a Sewer Capacity Availability Review (SCAR). SCARs are generally required for Sewer Facility Certificate applications exceeding 10,000 gpd, or request from a property owner seeking to increase their discharge thru their existing connection by 10,000 gpd or more, or any groundwater related project that discharges 10,000 gpd or more, or any proposed or future development for a project that could result in a discharge of 10,000 gpd.
2. **Why is the SCARF being charged now when it has not been in the past?**
   The City has seen a dramatic increase in the number of SCARs over 10,000 gpd in the last few years and has needed to increase its resources, i.e., staff and gauging efforts, to respond to them. The funds collected thru SCARF will help the City pay for these additional resources and will be paid by developers and property owners that receive the benefit from the SCAR effort.
3. **Where does the SCARF get paid?**
   The Department of Public Works, Bureau of Engineering (BOE) collects the fee at its public counters. Once the fee is paid then BOE prepares a SCAR request and forwards it to the BOS where it is reviewed and then returned to BOE. BOE then informs the applicant of the result. In some cases, BOS works directly with the applicant during the review of the SCAR to seek additional information and work out alternative solutions

Scar Request Number: 6870

City of Los Angeles
Bureau of Engineering

Sewer Capacity Availability Request (SCAR)

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 the capacity exists at the requested location for the proposed developments shown below. The results are good for 180 days from the date the sewer capacity approval from the Bureau of Sanitation. Lateral connection of development shall adhere to Bureau of Engineering Sewer Design Manual Section F 480. **If not listed in the Proposed Facility Description section of the SCAR, sewer ejector use is prohibited.**

Job Address:	**525 S VIRGIL AVE 90020**	Sanitation Scar ID:	**75-7939-1225**
Date Submitted	12/17/2025	Request Will Serve Letter?	Yes
BOE District:	Central District		
Applicant:	Keith Malloy		
Address:	915 Wilshire Boulevard #2150	City :	LOS ANGELES
State:	CA	Zip:	90017
Phone:	3109034019	Fax:	
Email:	kmalloy@waremalcomb.com	BPA No.	
S-Map:		Wye Map:	135A197-D

SIMM Map - Maintenance Hole Locations

No.	Street Name	U/S MH	D/S MH	Diam. (in)	Approved Flow %	Notes
1	WESTMORELAND AVE	49316097	49316140	8	100.00	

Proposed Facility Description

No.	Proposed Use Description	Sewage Generation (GPD)	Unit	Qty	GPD
1	STORAGE: SELF STORAGE BLDG.	30	KGSF	252,876	7,586
				Proposed Total Flow (gpd):	**7,586**

Remarks: Approved for the maximum allowable capacity of 7,586 GPD (5.26 gpm)

Note: Results are good for 180 days from the date of approval by the Bureau of Sanitation

Date Processed: 12/24/2025 Expires On: 06/22/2026

Processed by: Brett Perry
Bureau of Sanitation
Phone: 323-342-6207
Sanitation Status: Approved
Reviewed by: Ahmad Ghanem
on 12/24/2025

Submitted by: Adrian Sanchez
Bureau of Engineering
Central District
Phone:

Fees Collected	Yes	SCAR FEE	$0.00
Date Collected	12/17/2025	SCAR Status:	**Completed**

Scar Request Number: 6869

City of Los Angeles
Bureau of Engineering

SEWER CAPACITY AVAILABILITY REVIEW FEE (SCARF) - Frequently Asked Questions

SCAR stands for Sewer Capacity Availability Review that is performed by the Department of Public Works, Bureau of Sanitation. This review evaluates the existing sewer system to determine if there is adequate capacity to safely convey sewage from proposed development projects, proposed construction projects, proposed groundwater dewatering projects and proposed increases of sewage from existing facilities. The SCAR Fee (SCARF) recovers the cost, incurred by the City, in performing the review for any SCAR request that is expected to generate 10,000 gallons per day (gpd) of sewage.

The SCARF is based on the effort required to perform data collection and engineering analysis in completing a SCAR. A brief summary of that effort includes, but is not limited to, the following:

1. Research and trace sewer flow levels upstream and downstream of the point of connection.
2. Conduct field surveys to observe and record flow levels. Coordinate with maintenance staff to inspect sewer maintenance holes and conduct smoke and dye testing if necessary.
3. Review recent gauging data and in some cases closed circuit TV inspection (CCTV) videos.
4. Perform gauging and CCTV inspection if recent data is not available.
5. Research the project location area for other recently approved SCARs to evaluate the cumulated impact of all known SCARs on the sewer system.
6. Calculate the impact of the proposed additional sewage discharge on the existing sewer system as it will be impacted from the approved SCARs from Item 6 above. This includes tracing the cumulative impacts of all known SCARs, along with the subject SCAR, downstream to insure sufficient capacity exist throughout the system.
7. Correspond with the applicant for additional information and project and clarification as necessary.
8. Work with the applicant to find alternative sewer connection points and solutions if sufficient capacity does not exist at the desired point of connection.

Questions and Answers:

1. **When is the SCARF applied, or charged?**
   It applies to all applicants seeking a Sewer Capacity Availability Review (SCAR). SCARs are generally required for Sewer Facility Certificate applications exceeding 10,000 gpd, or request from a property owner seeking to increase their discharge thru their existing connection by 10,000 gpd or more, or any groundwater related project that discharges 10,000 gpd or more, or any proposed or future development for a project that could result in a discharge of 10,000 gpd.
2. **Why is the SCARF being charged now when it has not been in the past?**
   The City has seen a dramatic increase in the number of SCARs over 10,000 gpd in the last few years and has needed to increase its resources, i.e., staff and gauging efforts, to respond to them. The funds collected thru SCARF will help the City pay for these additional resources and will be paid by developers and property owners that receive the benefit from the SCAR effort.
3. **Where does the SCARF get paid?**
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Scar Request Number: 6869

BOARD OF PUBLIC WORKS MEMBERS
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JENNY CHAVEZ
VICE PRESIDENT
JOHN GRANT
PRESIDENT PRO TEMPORE
FAITH I. MITCHELL
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COMMISSIONER
ELYSE MATSON
EXECUTIVE OFFICER

CITY OF LOS ANGELES

CALIFORNIA

KAREN BASS
MAYOR

DEPARTMENT OF PUBLIC WORKS

BUREAU OF ENGINEERING

ALFRED MATA, PE
INTERIM CITY ENGINEER

1149 S BROADWAY, SUITE 700
LOS ANGELES, CA 90015-2213

http://engineering.lacity.gov

12/24/2025

KEITH MALLOY
915 WILSHIRE BOULEVARD #2150
LOS ANGELES, CA, 90017

Dear Keith Malloy,

SEWER AVAILABILITY: 525 S VIRGIL AVE 90020

The Bureau of Sanitation has reviewed your request of 12/17/2025 for sewer availability at **525 S VIRGIL AVE 90020**. Based on their analysis, it has been determined on 12/24/2025 that there is capacity available to handle the anticipated discharge from your proposed project(s) as indicated in the attached copy of the Sewer Capacity Availability Request (SCAR) .

This determination is valid for 180 days from the date shown on the Sewer Capacity Availability request (SCAR) approved by the Bureau of Sanitation.

While there is hydraulic capacity available in the local sewer system at this time, availability of sewer treatment capacity will be determined at the Bureau of Engineering Public Counter upon presentation of this letter. A Sewer Connection Permit may also be obtained at the same counter provided treatment capacity is available at the time of application.

A Sewerage Facilities Charge is due on all new buildings constructed within the City. The amount of this charge will be determined when application is made for your building permit and the Bureau of Engineering has the opportunity to review the building plans. To facilitate this determination a preliminary set of plans should be submitted to Bureau of Engineering District Office, Public Counter.

Provision for a clean out structure and/or a sewer trap satisfactory to the Department of Building and Safety may be required as part of the sewer connection permit.

Lateral connection of development shall adhere to Bureau of Engineering Sewer Design Manual Section F 480. **If not listed in the Proposed Facility Description section of the SCAR, sewer ejector use is prohibited.**

Scar Request Number: 6870

Sincerely,

Adrian Sanchez
CE A
Central District, Bureau of Engineering

City of Los Angeles
Bureau of Engineering

SEWER CAPACITY AVAILABILITY REVIEW FEE (SCARF) - Frequently Asked Questions

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12/24/2025

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Scar Request Number: 6869

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Adrian Sanchez
CE A
Central District, Bureau of Engineering

City of Los Angeles
Bureau of Engineering

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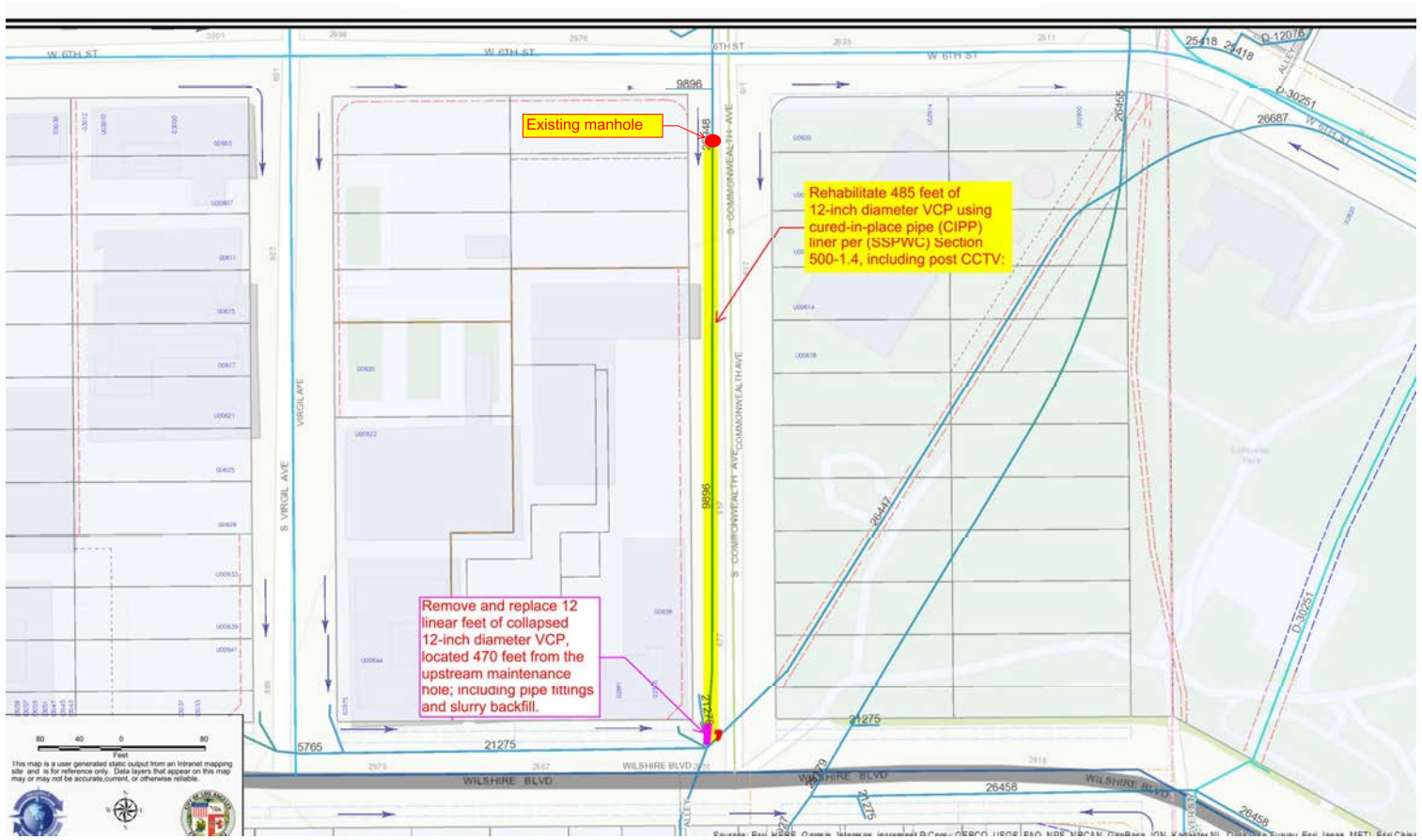
Appendix D – Storm Drain Plans

"AS-BUILT"

NOTE:
THIS PLAN MODIFIES PART OF
UNL-21275 AND UNL-9896



NOT TO SCALE

ENGINEERING
CITY OF LOS ANGELES
Street and Stormwater Division

REGISTERED PROFESSIONAL ENGINEER
TUNG K LEE
Exp 3-31-22
CIVIL
STATE OF CALIFORNIA

THE CITY OF LOS ANGELES OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF ELECTRONIC COPIES OF THIS PLAN SHEET.

REVISION DATES (DESIGN STAGE ONLY)

Sheet Version 4.0

BUREAU OF ENGINEERING

VERTICAL CONTROL:
HORIZONTAL CONTROL:
SHEET TITLE: PLAN
PROJECT: 639 S COMMONWEALTH AVE
EMERGENCY STORM DRAIN REPAIR
ADDRESS: 639 S COMMONWEALTH AVE

DEPARTMENT OF PUBLIC WORKS

NO	REVISIONS	DATE	BY

CIP NO.

INDEX NO. **E-6912**

CITY OF LOS ANGELES

GARY LEE MOORE P.E. ENV SP

		LIC. NO. C-34687	DATE
ENGINEER:	TUNG K LEE		
DESIGNED BY:	TUNG K LEE		
DRAWN BY:	TUYEN LE		
CHECKED BY:	CHANG LIN		
APPROVED BY:	SUSAN SHU		3-26-2020

WORK ORDER NO.
SZS11678

SHEET NAME
SD-1
SHEET 1 OF 1 SHEETS

Q:\SWG\EMERGENCY\FY 17-18 EMERG\18. 639 S COMMONWEALTH AVE - SZS11678\8 PROJECT CLOSE-OUT\AS-BUILT\639 S COMMONWEALTH AVE ESDR- SZS11678_AS-BUILT.DWG 3/25/2020 10:06 AM

XXXXX ENGINEER

STORM DRAINS

STATE STREET

FROM COMMONWEALTH AVENUE TO VIRGIL AVENUE

CITY OF LOS ANGELES

SYD. L. ERICH, CITY ENGINEER

DATUM NO. [illegible]

EFFECTIVE JULY 1, 1929

[illegible] STAR FEET SEA DATUM TO CONFORM AS NEARLY AS MAY BE PRIOR TO SAID DATE.

BENCH MARKS

[illegible]

NOTICE TO CONTRACTORS

THIS IMPROVEMENT, INCLUDING ALL WORK CALLED FOR BY THE FOLLOWING SPECIAL PLANS AND PROFILES

STREET AND PROFILE [illegible]

SEWER PLANS [illegible]

STORM DRAIN PLANS [illegible]

[illegible]

SHALL BE CARRIED OUT IN ACCORDANCE WITH THE [illegible] AND IN CONFORMANCE WITH SPECIFICATIONS NO. [illegible] INCLUDING ALL AMENDMENTS THERETO WHICH WERE ADOPTED PRIOR TO THE DATE OF THE NOTICE INVITING BIDS, AND INCLUDING STD. PLAN DWGS. [illegible]

EXISTING ORNAMENTAL LIGHTING [illegible] SHALL BE REMOVED BY THE Contractor, [illegible] IN IMPROVEMENT. WHERE SUCH WORK, THEY SHALL BE REPLACED BY THE CONTRACTOR IN ACCORDANCE WITH STANDARD PLANS NO. [illegible] WHERE CONDUIT IS NOT SHOWN ON THESE PLANS, THE CONTRACTOR MAY USE THE PLANS OF ORNAMENTAL LIGHTING SYSTEMS AS [illegible] OF THE CHIEF LIGHTING ENGINEER, BOARD OF [illegible]

ALL PIPE NOT OTHERWISE SPECIFIED SHALL BE [illegible] STANDARD STRENGTH

SUMMARY

[illegible]

STORM DRAIN STANDARD PLANS

[illegible]

RESURFACING SCHEDULE

Scale 1" = 400'

AC-2 = Class AC-2 Resurfacing

To be done by the City

COMMONWEALTH AVENUE

APPROVALS		
DIVISION OF CITY [illegible]	ENGINEER	STATUS
STREET OPENING		
STREET AND PARKWAY	[illegible]	[illegible]
SANITARY SEWERS	[illegible]	[illegible]
ST. IRR. DRAIN		
BRIDGES DESIGN		
STREET LIGHTS	[illegible]	[illegible]
WATER DELIVERY	[illegible]	[illegible]
RIGHT OF WAY & LAND		

SUBMITTED [illegible] 19[illegible]

BY [illegible]

DEPUTY ENGINEER IN CHARGE

APPROVED [illegible]

CITY ENGINEER

[illegible]	DATE	ORDER No.
[illegible]		
[illegible]		
[illegible]		
[illegible]		
[illegible]		

DRAWN BY [illegible]

TRACED BY [illegible]

CHECKED BY [illegible]

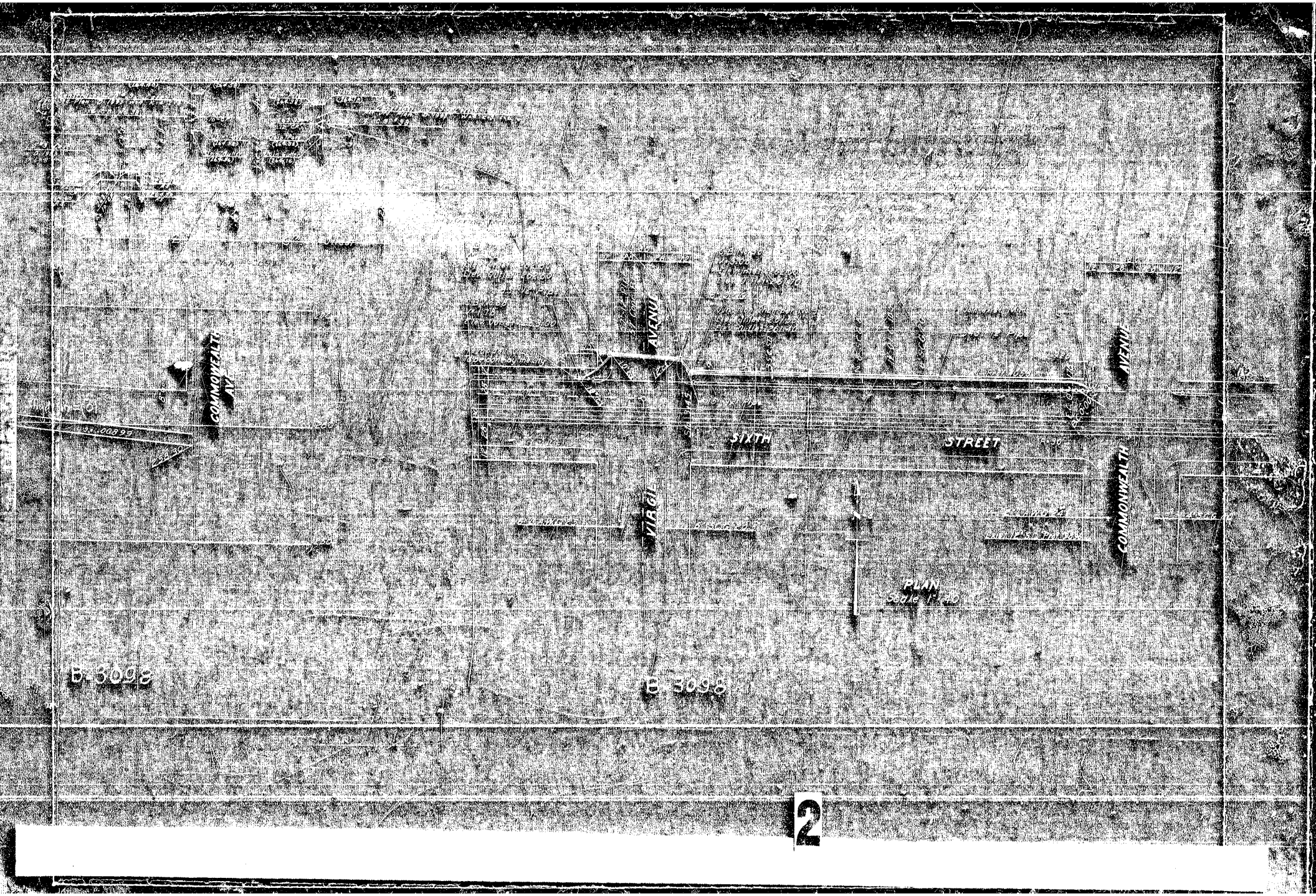
SUPERVISED BY [illegible]

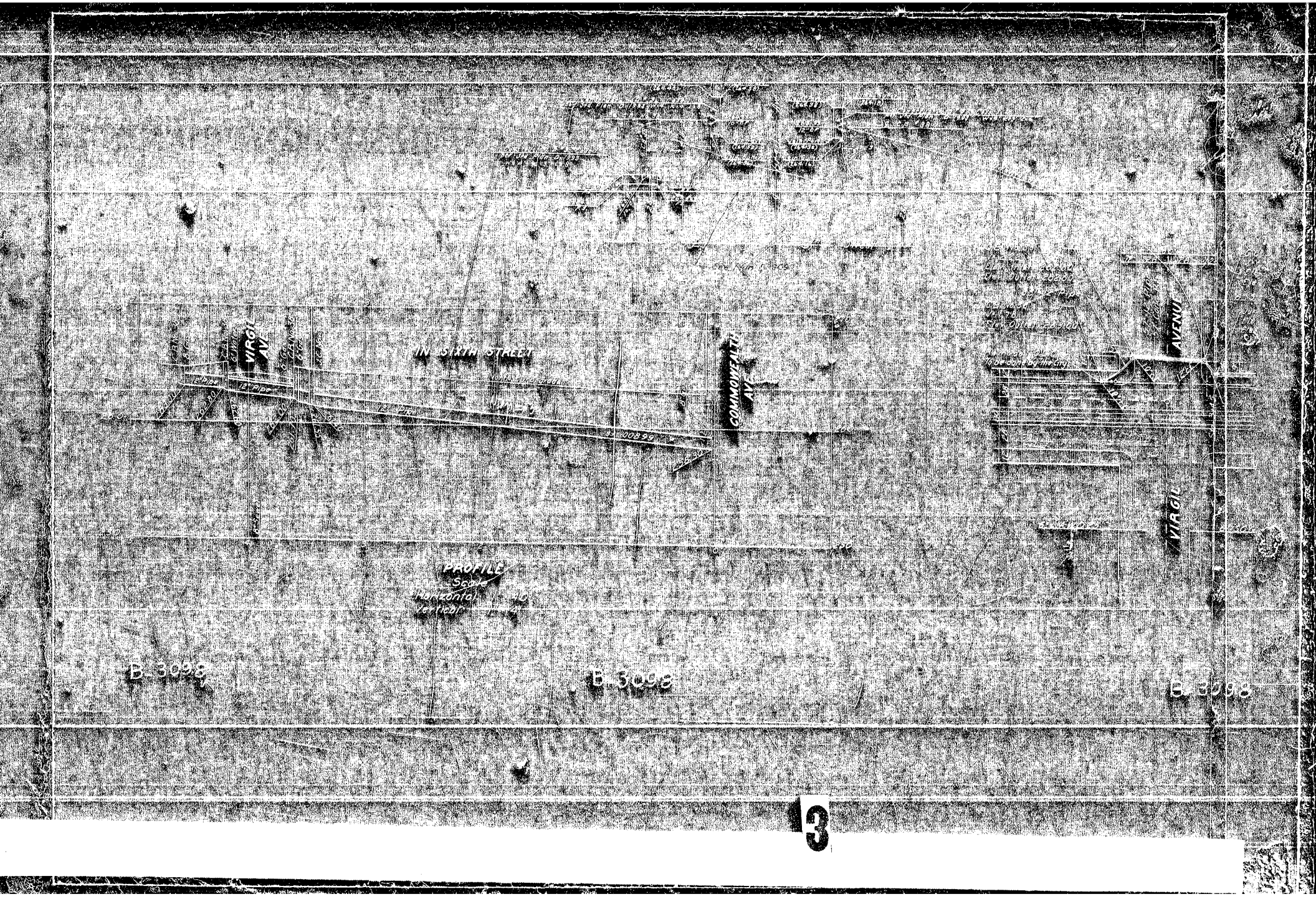
PLAN OF STATE ST. - COMMONWEALTH AVE. TO VIRGIL AVE. STORM DRAIN AC-6 & 6.1

B-3052

B-3098

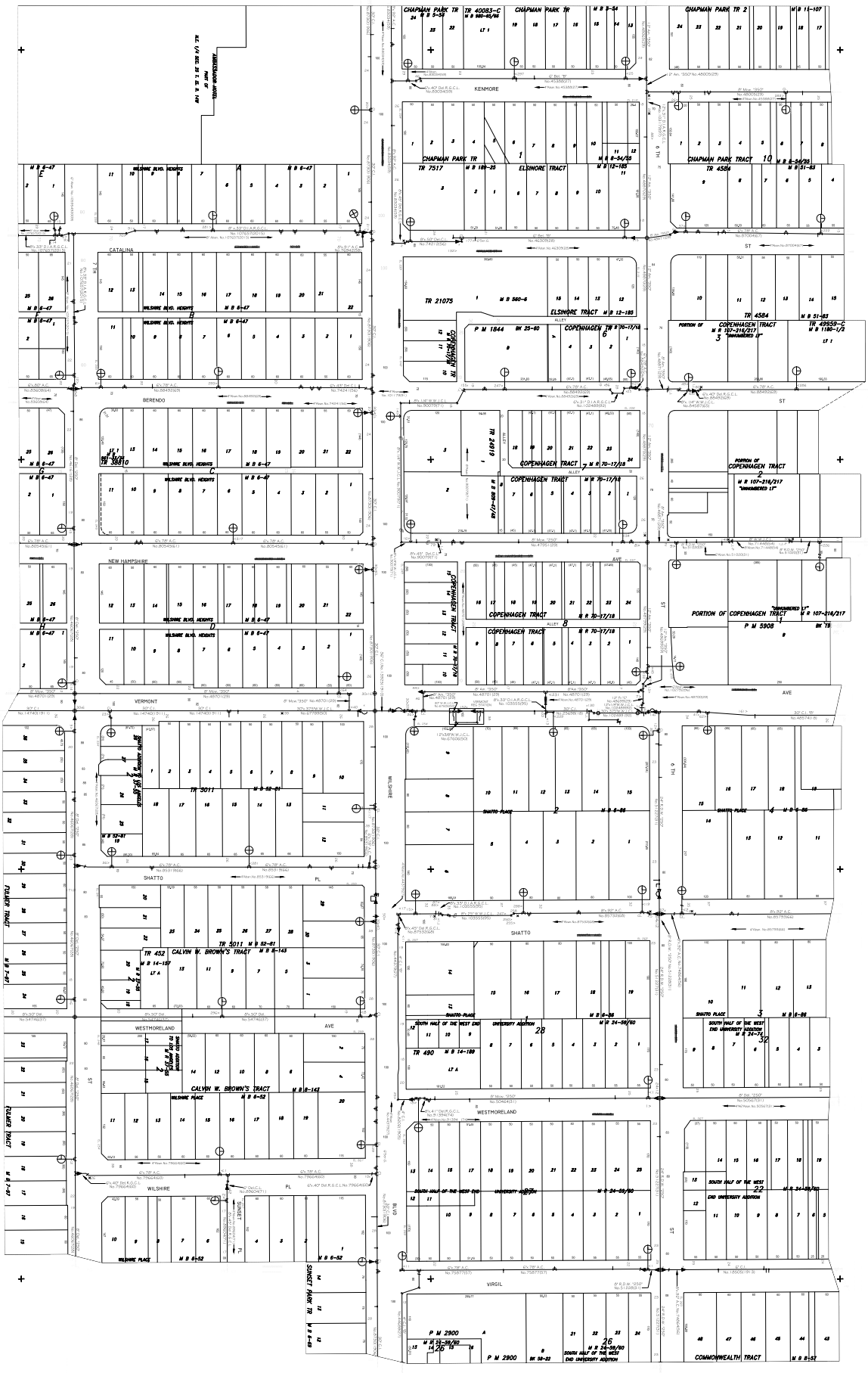
[illegible]


COMMONWEALTH AV
AVENUE
SIXTH
STREET
VIRGIL
AVENUE
COMMONWEALTH
PLAN
Scale 1:40
B-309.8
B-309.8
2



VIRGIL AV
IN SIXTH STREET
COMMONWEALTH AVE
AVENUE
VIRGIL
PROFILE
Scale
Horizontal
Vertical
B-3098
B-3098
B-3098
3

Appendix E – Water Plans, SARs, Fire Hydrants, and Fire Code



Questions or Comments, contact: WaterGIS Group, (fm: 1439, JF8)

WaterGIS

LEGEND MAP
SCALE: 1"=1000'

SYMBOLS AND NOTATIONS

REVISIONS

NO	DESCRIPTION	SCALE	PLOTTED	DATE	ENGR	DATE
	CONVERTED SERVICES	1"=100'				
	MISC					

	NAME	DATE
DRAWN		
CHECKED		
APPROVED		

FIRE DEPARTMENT

2 1/2" SINGLE
2 1/2" DOUBLE
4"
4" S. BUILT UP
4" DOUBLE
2 1/2"+4" DOUBLE

REFERENCES

SEWER MAP NO.
STORM DRAIN MAP NO.
WATER MAP NO.
GRID NO.

DEPARTMENT OF WATER AND POWER
WATER DISTRIBUTION SYSTEM & CAPITY DIVISION

WATER SERVICE MAP

SERVICE ZONE: ELEVATION:
DRAWING NO.:
DESIGNER:

DATE PLOTTED:
6/26/2013 8:53:01 AM

134-198

This Los Angeles Department of Water and Power (LADWP) assumes no responsibility for the accuracy of the substructure information herein provided. The user assumes responsibility for verifying substructure locations. The user agrees to notify LADWP of any discrepancies found. LADWP facilities as a result of such excavation. Call Underground Service alert on 1-800-227-2600 two (2) days before excavating.

6/26/2013 8:53:01 AM rptgrid

City of Los Angeles

Los Angeles Department of Water and Power - Water System

SAR NUMBER **113868**

Fire Service Pressure Flow Report

SERVICE NUMBER **647723**

For: **525 S VIRGIL AVE** Approved Date: **12-15-2025**

Proposed Service **6 INCH** off of the

6 inch main in **VIRGIL AVE** on the **WEST** side approximately

270 feet **NORTH** of **NORTH** of **6TH ST** The System maximum pressure is

80 psi based on street curb elevation of **270** feet above sea level at this location.

The distance from the DWP street main to the property line is **24** feet

System maximum pressure should be used only for determining class of piping and fittings.

Residual Flow/Pressure Table for water system street main at this location

Flow (gpm)	Press. (psi)	Flow (gpm)	Press. (psi)	Flow (gpm)	Press. (psi)
0	58	1150	40		
240	57	1180	39		
350	56	1215	38		
435	55	1250	37		
510	54	1280	36		
575	53	1310	35		
635	52	1340	34		
690	51	1370	33		
740	50	1400	32		
790	49				
835	48				
880	47				
920	46				
965	45				
1000	44				
1040	43				
1075	42				
1115	41				

These values are subject to change due to changes in system facilities or demands.

Meter Assembly Capacities

Domestic Meters	
1 inch =	56 gpm
1-1/2 inch =	96 gpm
2 inch =	160 gpm
3 inch =	220 gpm
4 inch =	400 gpm
6 inch =	700 gpm
8 inch =	1500 gpm
10 inch =	2500 gpm

Fire Service	
2 inch =	250 gpm
4 inch =	600 gpm
6 inch =	1400 gpm
8 inch =	2500 gpm
10 inch =	5000 gpm

FM Services	
8 inch =	2500 gpm
10 inch =	5000 gpm

Notes: 6-inch fire service and 2-inch domestic combo service approved.

This information will be sent to the Department of Building and Safety for plan checking.

This SAR is valid for one year from 12-15-25. Once the SAR expires, the applicant needs to re-apply and pay applicable processing fee.

For additional information contact the Water Distribution Services Section **CENTRAL (213) 367-1216**

PERLA PINEDA-LEON	**PERLA PINEDA-LEON**	**134-198**
Prepared by	**Approved by**	**Water Service Map**

City of Los Angeles

Los Angeles Department of Water and Power - Water System

SAR NUMBER **115502**

Fire Service Pressure Flow Report

SERVICE NUMBER **648129**

For: **525 S VIRGIL AVE** Approved Date: **3-10-2026**

Proposed Service **8 INCH** off of the

8 inch main in **WESTMORELAND AVE** on the **EAST** side approximately

270 feet **NORTH** of **NORTH** of **6TH ST** The System maximum pressure is

78 psi based on street curb elevation of **274** feet above sea level at this location.

The distance from the DWP street main to the property line is **55** feet

System maximum pressure should be used only for determining class of piping and fittings.

Residual Flow/Pressure Table for water system street main at this location

Flow (gpm)	Press. (psi)	Flow (gpm)	Press. (psi)	Flow (gpm)	Press. (psi)
0	57	2245	39		
470	56	2310	38		
685	55	2375	37		
850	54	2440	36		
995	53	2500	35		
1125	52				
1240	51				
1345	50				
1450	49				
1545	48				
1635	47				
1720	46				
1800	45				
1880	44				
1960	43				
2035	42				
2105	41				
2175	40				

These values are subject to change due to changes in system facilities or demands.

Meter Assembly Capacities

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Fire Service	
2 inch =	250 gpm
4 inch =	600 gpm
6 inch =	1400 gpm
8 inch =	2500 gpm
10 inch =	5000 gpm

FM Services	
8 inch =	2500 gpm
10 inch =	5000 gpm

Notes: 8-inch fire service and 2-inch domestic combo service approved.

This information will be sent to the Department of Building and Safety for plan checking.

This SAR is valid for one year from 03-10-26. Once the SAR expires, the applicant needs to re-apply and pay applicable processing fee.

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PERLA PINEDA-LEON	**PERLA PINEDA-LEON**	**134-198**
Prepared by	**Approved by**	**Water Service Map**

507.3 Fire-flow.

Fire-flow requirements for buildings or portions of buildings and facilities shall be determined by an approved method as set forth in Sections 507.3.1 through 507.3.3.

507.3.1 Fire-flow requirements.

Fire-flows shall comply with Table 507.3.1 for any structures, group of structures or facilities by the type of land development, or as otherwise determined by the Chief.

1. Where street alignments mandate the installation of dead-end mains, the fire-flow in gallons per minute may be adjusted downward, depending on the type of land development.
2. A minimum residual water pressure of 20 pounds per square inch (138 kPa) is to remain in the system with the required gallons per minute flowing.

TABLE 507.3.1FIRE-FLOW BY TYPE OF LAND DEVELOPMENT

TYPE OF LAND DEVELOPMENT	FIRE-FLOW IN GALLONS PER MINUTE
Low-density residential	2,000 gpm from three adjacent fire hydrants flowing simultaneously
High-density residential and neighborhood commercial	4,000 gpm from four adjacent fire hydrants flowing simultaneously
Industrial and commercial	6,000 to 9,000 gpm from four to six fire hydrants flowing simultaneously
High-density industrial and commercial (Principal business districts or centers)	12,000 gpm available to any block (where local conditions indicate that consideration must be given to simultaneous fires, and additional 2,000 to 8,000 gpm will be required).

For SI: 1 gallon per minute = 3.785 L/min.

507.3.2 Fire hydrant spacing.

Fire hydrant spacing and type of hydrant, by type of land development. See Table 507.3.2.

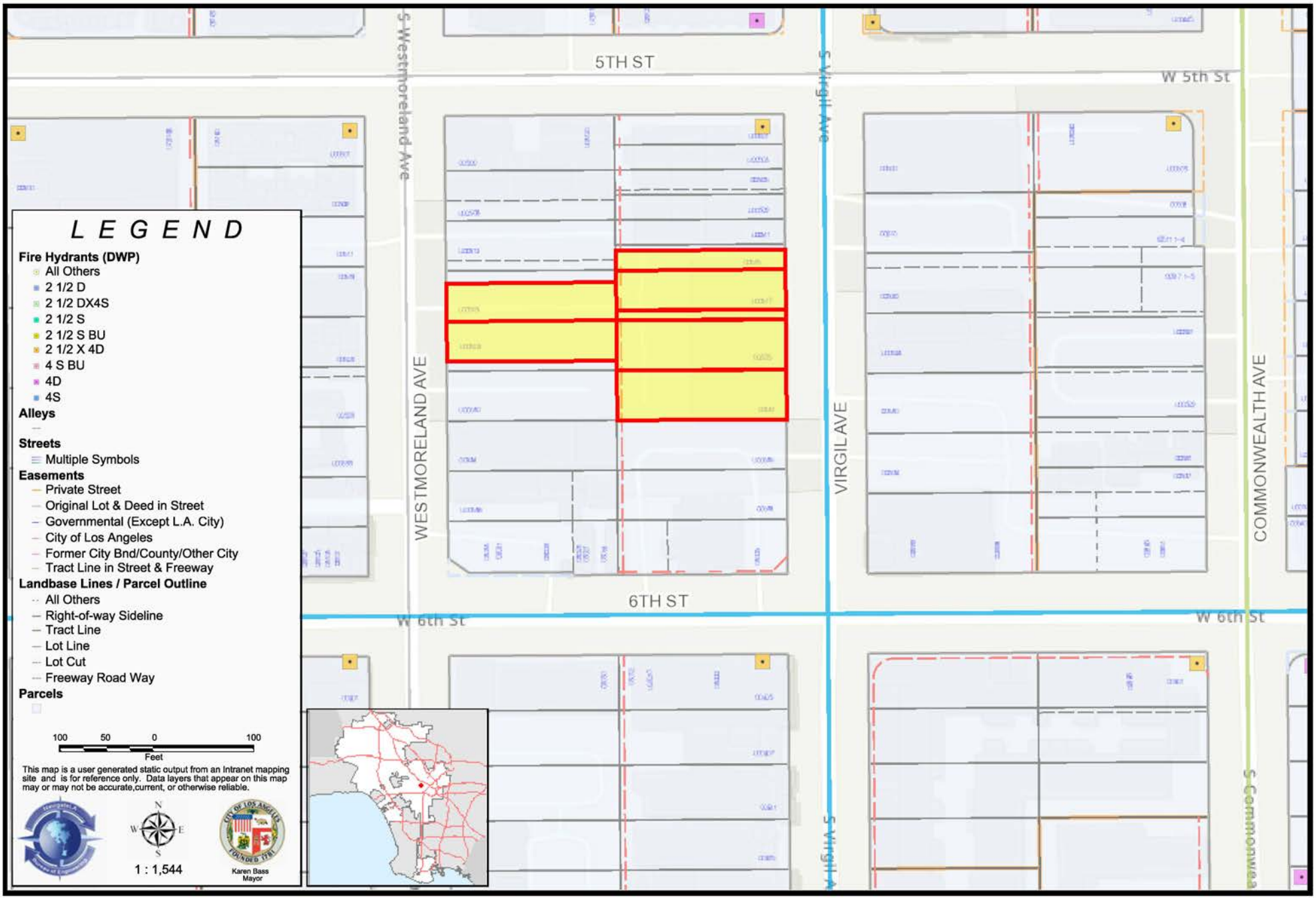
1. Every first-story dwelling unit, first-story guestroom, and all first-story portions of any commercial or industrial building must be within 300 feet (91 m) of an approved fire hydrant.
2. All fire hydrants shall have $2^1/_2$-inch by 4-inch (64 mm × 102 mm) outlets or 4-inch by 4-inch (102 mm × 102 mm) outlets and conform to the minimum standards of the American Water Works Association for wet barrel hydrants. A minimum of one fire hydrant is to be provided at each intersection. "Built-up" type single $2^1/_2$-inch (64 mm) outlet hydrants [6-inch (152 mm) pipe surmounted by an angle valve] shall be used in areas having a static water pressure of 210 psi (1448 kPa) or more.
3. Streets with raised median center dividers, excessive traffic loads or more than 80 feet (24 m) in dedicated width require the installation of hydrants on both sides of the street. Additional intermediate hydrants are required in areas where restricted access, depth of lots or blocks exceeding the maximum hydrant spacing intervals exist.

TABLE 507.3.2FIRE HYDRANT SPACING

TYPE OF LAND DEVELOPMENT	NET LAND AREA SERVED PER HYDRANT (square feet)	DISTANCE BETWEEN HYDRANTS ON ROADS AND FIRE LANES (feet)	TYPE OF HYDRANT
Low-density residential	150,000	600	$2^1/_2$-inch × 4-inch double fire hydrant
High-density residential & Neighborhood commercial	100,000	300–450	$2^1/_2$-inch × 4-inch double fire hydrant
Industrial & commercial	80,000*	300	$2^1/_2$-inch × 4-inch double fire hydrant or 4-inch × 4-inch double fire hydrant
High-density industrial & commercial	40,000	300	4-inch × 4-inch double fire hydrant

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 square foot = 0.093 m^2.
* This figure will be systematically reduced where greater fire-flow is required due to restricted access, depth of lots, length of blocks, or additional hazards.

Fire Hydrants



L E G E N D

Fire Hydrants (DWP)
- All Others
- 2 1/2 D
- 2 1/2 DX4S
- 2 1/2 S
- 2 1/2 S BU
- 2 1/2 X 4D
- 4 S BU
- 4D
- 4S

Alleys

Streets
- Multiple Symbols

Easements
- Private Street
- Original Lot & Deed in Street
- Governmental (Except L.A. City)
- City of Los Angeles
- Former City Bnd/County/Other City
- Tract Line in Street & Freeway

Landbase Lines / Parcel Outline
- All Others
- Right-of-way Sideline
- Tract Line
- Lot Line
- Lot Cut
- Freeway Road Way

Parcels

100 50 0 100
Feet

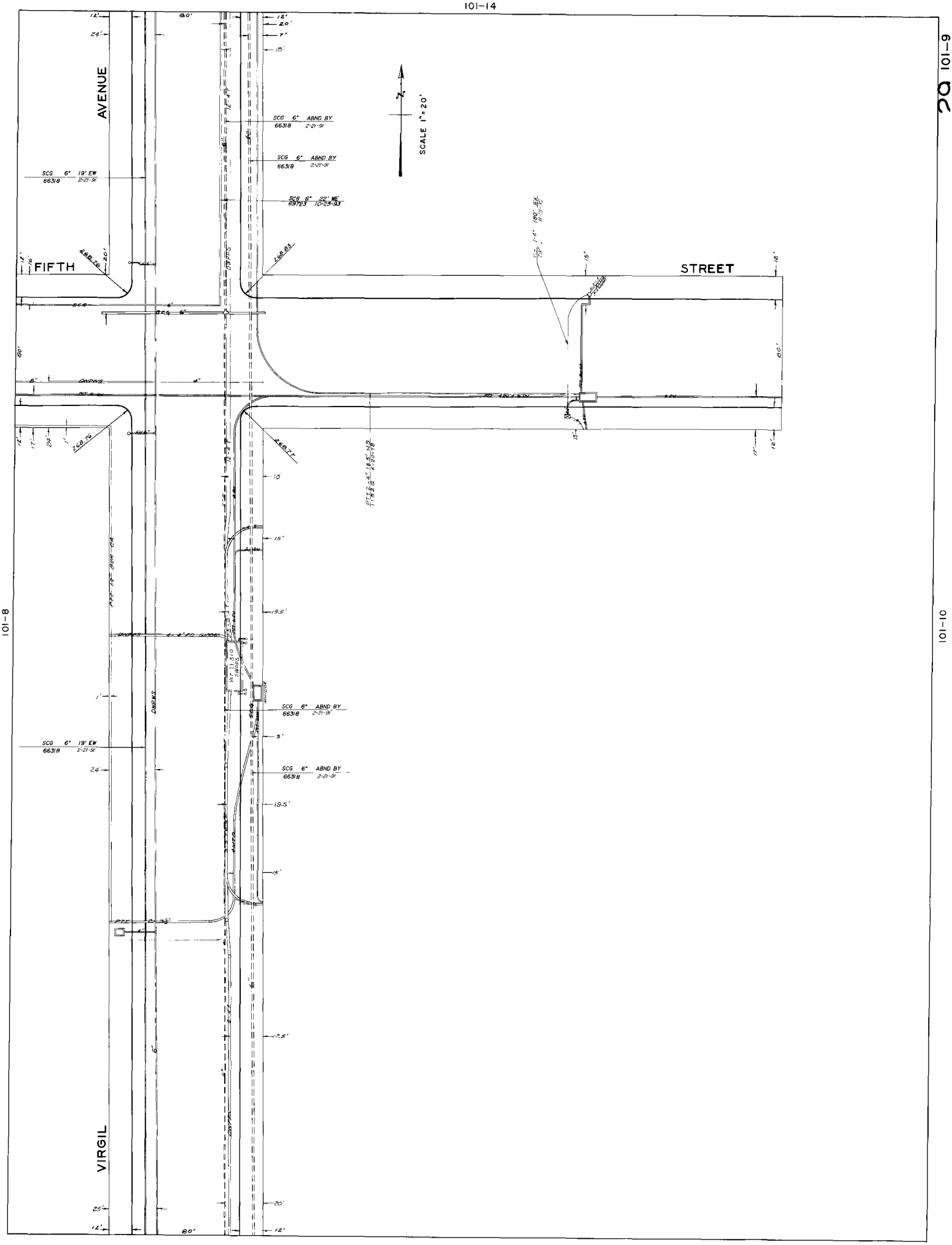
This map is a user generated static output from an Intranet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate,current, or otherwise reliable.

N W E S

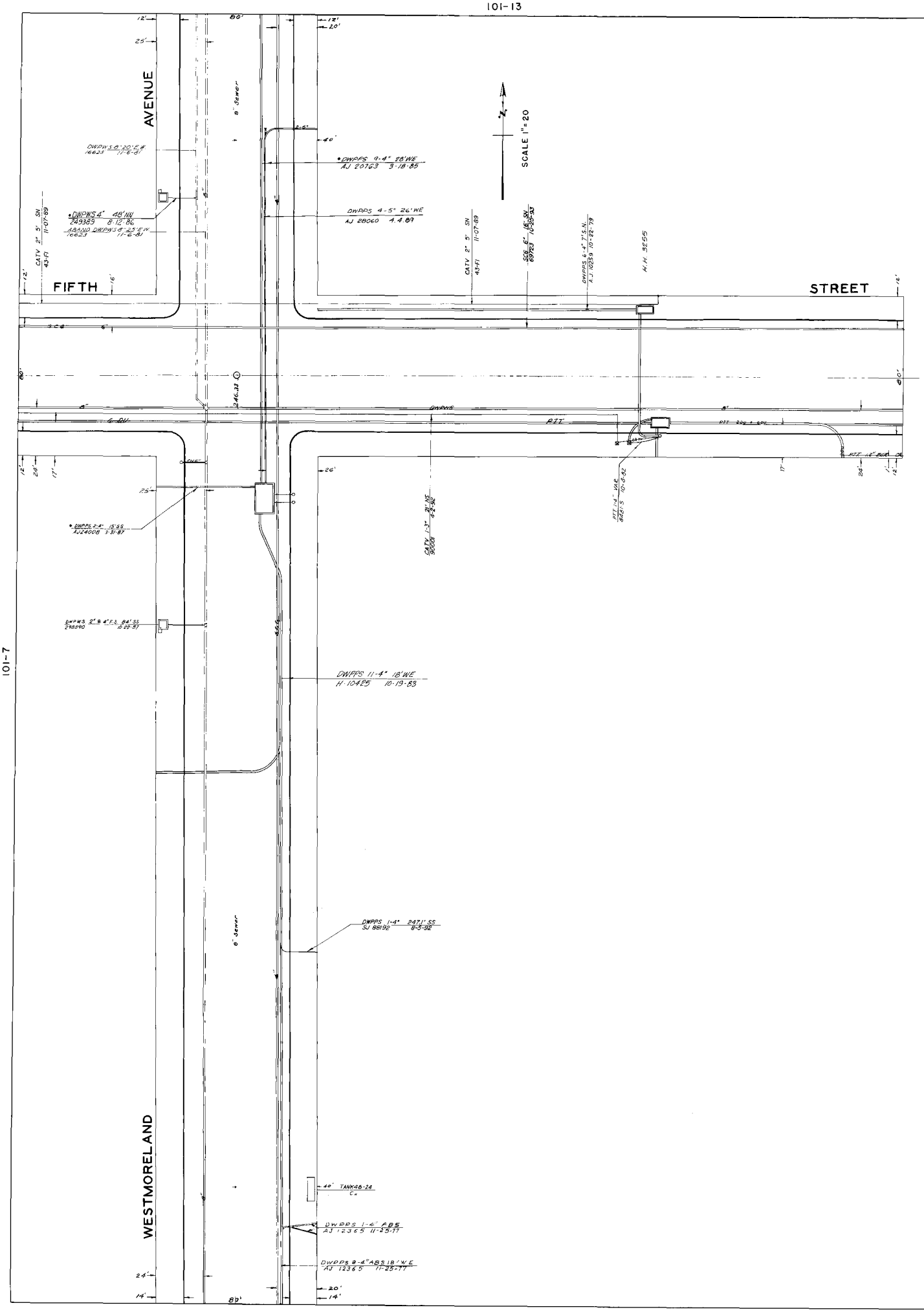
1 : 1,544

Karen Bass
Mayor

Appendix F – Substructure Map



101-9
101-8
101-10


AVENUE
FIFTH
STREET
WESTMORELAND
SCALE 1"=20
8" Sewer
6" Sewer
DWPWS 4" 48' NW
249389 8-12-86
ABAND DWPWS 4" 25' E/W
16623 11-6-81
DWPWS 9-4" 28' WE
AJ 20763 3-18-85
DWPPS 4-5" 26' WE
AJ 28060 4-4-89
CATV 2" 5' SW
43-F1 11-07-89
SCE 6" UE SW
69723 10-22-79
DWPPS 6-4" 7' S.W.
AJ 10259 10-22-79
H.H. 36555
DWPPS 2-4" 19' SS
AJ24008 3-31-87
DWPWS 2" & 4" F.3, 84' SS
298990 8-28-87
DWPPS 11-4" 18' WE
H-10425 10-19-83
DWPPS 1-4" 247' 11" SS
SJ 88192 8-5-92
40' TANK 48-24
DWPPS 1-4" ABS
AJ 12365 11-25-77
DWPPS 8-4" ABS 18' W.E
AJ 12365 11-25-77
CATV 1-3" 21' NE
90000 4-2-92
PTT 1-4" VAR
6451-S 10-5-82
PTT 12W + 6PV
PTT 12" DUCT
246.33
DWPWS
PTT