Appendix L
Sewer Report

DEXTER WILSON ENGINEERING, INC.

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CONSULTING ENGINEERS

SEWER SYSTEM ANALYSIS
FOR THE 9407 JERICHO ROAD PROJECT
IN THE CITY OF LA MESA

August 10, 2023

2234 FARADAY AVENUE • CARLSBAD, CA • (760) 438-4422

SEWER SYSTEM ANALYSIS
FOR THE 9407 JERICHO ROAD PROJECT
IN THE CITY OF LA MESA

August 10, 2023

8-10-2023

Prepared by:
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Job No. 1043-003

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August 10, 2023

1043-003

MLC Holdings, Inc.
5 Peters Canyon Road, Suite 310
Irvine, CA 92606

Attention: Johanna Crooker, Director of Forward Planning

Subject: Sewer System Analysis for the 9407 Jericho Road Project in the City of La Mesa

Introduction and Purpose

The 9407 Jericho Road project is located in the City of La Mesa southwest of the Jericho Road and Broadmoor Drive intersection. Access to the project is also from the Jericho Road and Broadmoor Drive intersection. Sewer service for the 9407 Jericho Road project will be provided by the City of La Mesa.

The proposed 9407 Jericho Road project is a residential development on an approximately 3.48-acre parcel. It is situated within a previous church site. The proposed project would develop 73 townhome residential units. Elevations within the project range from a low of 642 feet to a high of 652 feet in elevation.

The purpose of this letter-report is to analyze the existing and proposed public sewer system for the 9407 Jericho Road project and determine if there are any sewer system deficiencies created by the proposed development of this property.

A Vicinity Map for the project is shown on Figure 1 and a preliminary site plan for the project is included in Appendix A.

Sewer System Design Criteria

The design criteria used for the evaluation of the offsite sewerage system impacts by the 9407 Jericho Road project are based on the City of La Mesa Wastewater Collection System Master Plan dated October 2008 (Master Plan) and the Water Agencies' Standards (WAS), unless otherwise indicated. A copy of the pertinent sections of the design criteria in the City's Master Plan is attached as Appendix B.

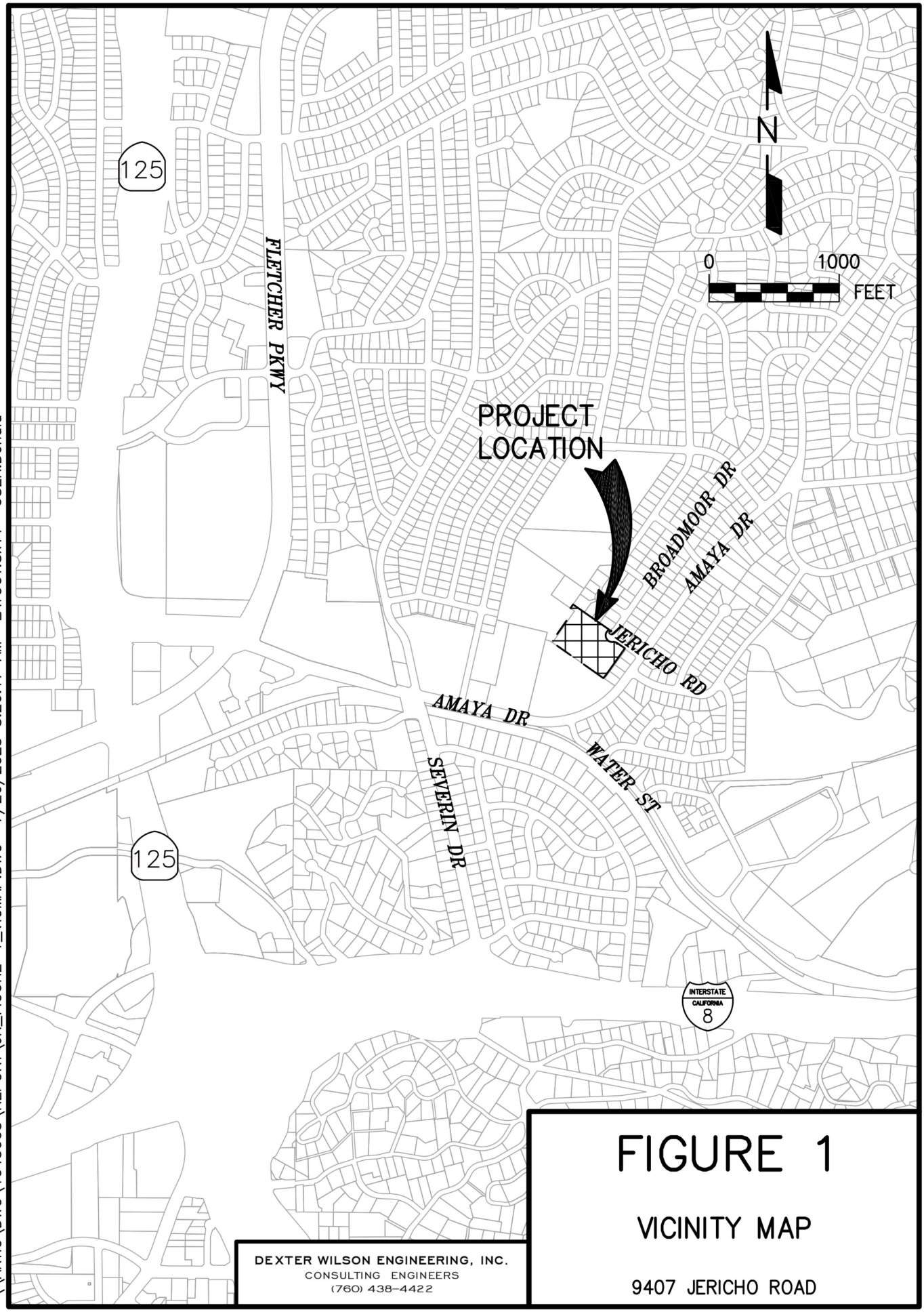
Sewer Generation Rates. The sewer generation rates for the project and surrounding area are presented as Table 1 below.

TABLE 1
9407 JERICHO ROAD PROJECT
CITY OF LA MESA SEWER GENERATION RATES

Land Use	Generation Rate
Low-Density (Single-Family) Residential	270 gpd/DU
Mid-Density (Multi-Family) Residential	180 gpd/DU
Commercial, Industrial, and Institutional	500 gpd/ac

Peaking Factor

The peaking factor for residential development is identified in the City's Master Plan. The peaking factor is given as a formula. The formula is stated: Peaking Factor = $7.9817/Q^{0.121}$, where Q equals average flow in gpd.



\\ARTIC\DWG\1043003\REPORT\JR_FIGURE-1_VICMAP.DWG 7/26/2023 8:26:17 AM LAYOUT:8x11 USER:Donald

FIGURE 1

VICINITY MAP

9407 JERICHO ROAD

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Manning's "n"

The gravity sewer analyses are prepared using a computer spreadsheet calculation which uses the Manning Equation for all of its calculations. The Manning's "n" used by the computer spreadsheet calculation is held as a constant for all depths in a circular conduit. The value of Manning's "n" used for this study is 0.013 for VCP and 0.011 for all other pipe material per WAS.

Depth and Velocity of Flow in Gravity Sewers

Gravity sewer lines are designed to convey peak flow. New sewer pipelines that are 12-inches in diameter and smaller are designed to convey this flow with a maximum depth-to-diameter (d/D) ratio of 0.50. New sewer pipelines that are larger than 12-inches in diameter are designed for a maximum d/D ratio of 0.75. Gravity sewer lines are designed to maintain a minimum velocity of 2.0 feet per second at peak flow to prevent the deposition of solids.

Onsite Gravity Sewer Lines

The onsite sewer facilities for the project are proposed to be private. These facilities will be formally designed in accordance with the California Plumbing Code and/or City's design standards and will be analyzed in a separate study/report.

Existing Sewer System

The existing gravity sewer line that is adjacent to the project site is an 8-inch diameter gravity in Jericho Road; this sewer line flows southeast to another existing 8-inch diameter gravity sewer line in Anaya Drive.

Figure 2 presents the existing public sewer facilities within the project area. Appendix B provides the As-Built Drawings.

Existing Sewer Flows. The sewer system analysis for the 9407 Jericho Road project will need to take into account sewage flows from existing development that is upstream of the project. Table 2 summarizes the projected sewage flows from existing development.

TABLE 2
EXISTING SEWER FLOWS TRIBUTARY TO JERICHO ROAD

Sewer Line	Average Sewage Flow[1]
PAQ046	2,160 gpd
PAQ041	810 gpd
PAQ042	1,080 gpd
PAQ043	0 gpd
PAQ045	1,728 gpd
PAQ044	270 gpd
PAQ034	0 gpd
Total Average Flow	**6,048 gpd**
Total Peak Flow	**16,832 gpd**

[1] Per City Master Plan

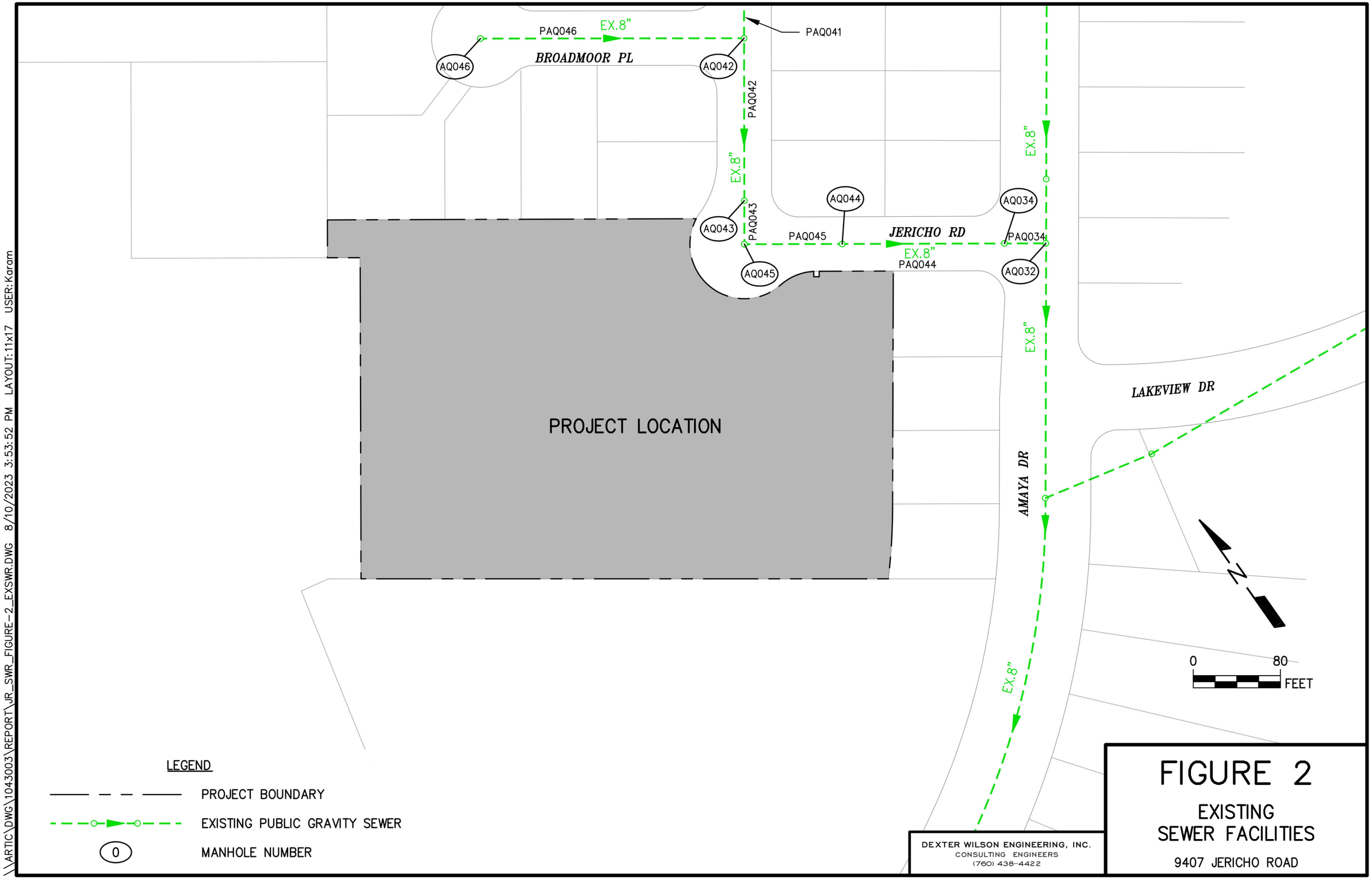

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FIGURE 2

EXISTING
SEWER FACILITIES

9407 JERICHO ROAD

Proposed Sewer Facilities

The projected sewer flow from the 9407 Jericho Road project is based on 73 townhome units and an average generation rate of 180 gpd per multi-family unit. Table 3 provides the summary of projected sewage flows for the project.

TABLE 3
9407 JERICHO ROAD
PROJECTED SEWAGE FLOWS

Description	Quantity	Generation Factor	Average Sewage Flow	Peak Sewage Flow[1]
Multi-Family Residential	73 DUs	180 gpd/DU	13,140 gpd (9 gpm)	33,292 gpd (23 gpm)

The project will construct a new private gravity collection system onsite that will all flow to two manholes in Jericho Road. Figure 3 presents the proposed sewer facilities for the proposed project.

Sewer System Capacity Analysis

To analyze the impact of the 9407 Jericho Road project on the existing sewer system, a hydraulic analysis was conducted up to the existing 8-inch sewer line in Amaya Drive per direction from the City.

Appendix C provides the hydraulic analysis output and Exhibit A provides the corresponding Sewer Manhole Diagram. To perform this analysis, we obtained As-Built Drawings of the existing sewer system so that the pipe sizes and slopes could be input into the spreadsheet. A key component of the hydraulic analysis is to estimate existing flows within the sewer lines that will be utilized to serve the 9407 Jericho Road project. Table 2 provided the summary of existing flows from existing offsite tributary development.

CONNECTION POINT AT EXISTING PUBLIC MANHOLE

PAQ043
EX.8"

CONNECTION POINT AT PROPOSED PUBLIC MANHOLE

AQ044

AQ034

EX.8"

JERICHO RD

PAQ045

PAQ034

EX.8"
PAQ044

AQ045

AQ032

HIGHLIGHTED SEGMENTS AND MANHOLES TO BE IMPROVED PER TABLE 5

PROJECT LOCATION

BLDG 1

BLDG 2

BLDG 3

BLDG 4

BLDG 5

BLDG 6

BLDG 7

BLDG 8

BLDG 9

LAKEVIEW DR

AMAYA DR

EX.8"

EX.8"

EX.8"

N

0 60 FEET

LEGEND

PROJECT BOUNDARY

EXISTING PUBLIC GRAVITY SEWER

PROPOSED PRIVATE GRAVITY SEWER

0 MANHOLE NUMBER

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FIGURE 3

EXISTING AND PROPOSED SEWER FACILITIES

9407 JERICHO ROAD

\\ARTIC\DWG\1043003\REPORT\JR_SWR_FIGURE-3_EXPROSWR.DWG 8/10/2023 3:59:23 PM LAYOUT:11x17 USER:Karam

Sewer System Capacity Analysis Results

Appendix C presents the results of the hydraulic analysis for the 9407 Jericho Road project. The results indicate that the existing downstream system has adequate capacity to serve the project. With the additional sewer flow from the 9407 Jericho Road project, all sections of the existing 8-inch sewer lines will flow at, or less than, a 0.14 d/D ratio during peak flow conditions.

A summary of the impacts to the existing downstream gravity sewer by the proposed 9407 Jericho Road project is shown below in Table 4.

TABLE 4
9407 JERICHO ROAD PROJECT
EXISTING DOWNSTREAM SEWER IMPACTS

Existing Downstream Sewer Section	Maximum d/D Ratio		Minimum Velocity, fps	
	Existing Flow	Existing plus Project Flow	Existing Flow	Existing plus Project Flow
8-inch Diameter	0.08	0.14	2.0	2.4

Sewer System Condition Assessment

As requested by the City, a condition assessment of the existing offsite sewer facilities was conducted in Jericho Road from Manhole AQ045.00 downstream to Manhole AQ032.00. The inspection was conducted in July 2023 by San Diego Stormwater Solutions and included approximately 275 feet of 8-inch gravity sewer pipeline and four manholes. Dexter Wilson Engineering, Inc. evaluated the reports, pictures, and videos provided by San Diego Stormwater Solutions to determine whether improvements to the system are necessary. The resulting recommendations of improvements are summarized in Table 5 below. The inspection reports and pictures as received from San Diego Stormwater Solutions are provided in Appendix D; the CCTV videos can be made available to the City upon request.

TABLE 5
JERICHO ROAD GRAVITY SEWER INSPECTION RESULTS

COMPONENT	LENGTH	INSPECTION SUMMARY	DWEI RECOMMENDATIONS
Manhole AQ045.00	--	Manhole Sound.	None.
Pipeline AQ045.00 to AQ044.00	~90 feet	No Mainline Structural Defects.	Clean as part of routine City efforts.
Manhole AQ044.00	--	Manhole Sound.	None.
Pipeline AQ044.00 to AQ034.00	~152 feet	No Mainline Structural Defects.	Clean as part of routine City efforts.
Manhole AQ034.00	--	Manhole Sound. Frame offset.	Reset frame.
Pipeline AQ034.00 to AQ032.00	~34 feet	No Mainline Structural Defects.	Clean as part of routine City efforts.
Manhole AQ032.00	--	Manhole Sound. Some aggregate exposed.	Line Manhole per Greenbook.

Conclusions and Recommendations

The following conclusions have been made related to providing sewer service to the 9407 Jericho Road project.

1. The 73-unit 9407 Jericho Road project can receive sewer service by making two connections to the existing public 8-inch diameter gravity sewer line.

2. The development of the project is projected to result in an average sewage flow of 13,140 gpd.

3. The project will construct a private sewer collection system onsite. The onsite private collection system will convey flows via gravity to the existing sewer in Jericho Road.

4. A sewer system capacity analysis was conducted (see Appendix C) and indicates that all existing downstream sewer lines in the study area have adequate capacity to convey peak flows from existing development plus the 9407 Jericho Road project while maintaining the City required depth-to-diameter ratio of less than 0.50 d/D.

5. Offsite sewer capacity improvements are not required for the 9407 Jericho Road project.

6. Existing offsite sewer integrity improvements are recommended and summarized in Table 5.

7. Figure 3 presents the proposed sewer system for the project.

8. The proposed private onsite gravity sewer system will be designed according to the California Plumbing Code and/or City of La Mesa design standards to comply with all design criteria (depth, velocity, minimum slope, etc.). Proposed sewer lines for the project are recommended to be SDR-35 PVC.

Thank you for the opportunity to assist you with the sewer system planning for the 9407 Jericho Road project. If you have any questions regarding the information and conclusions presented in this report, please do not hesitate to call.

Dexter Wilson Engineering, Inc.

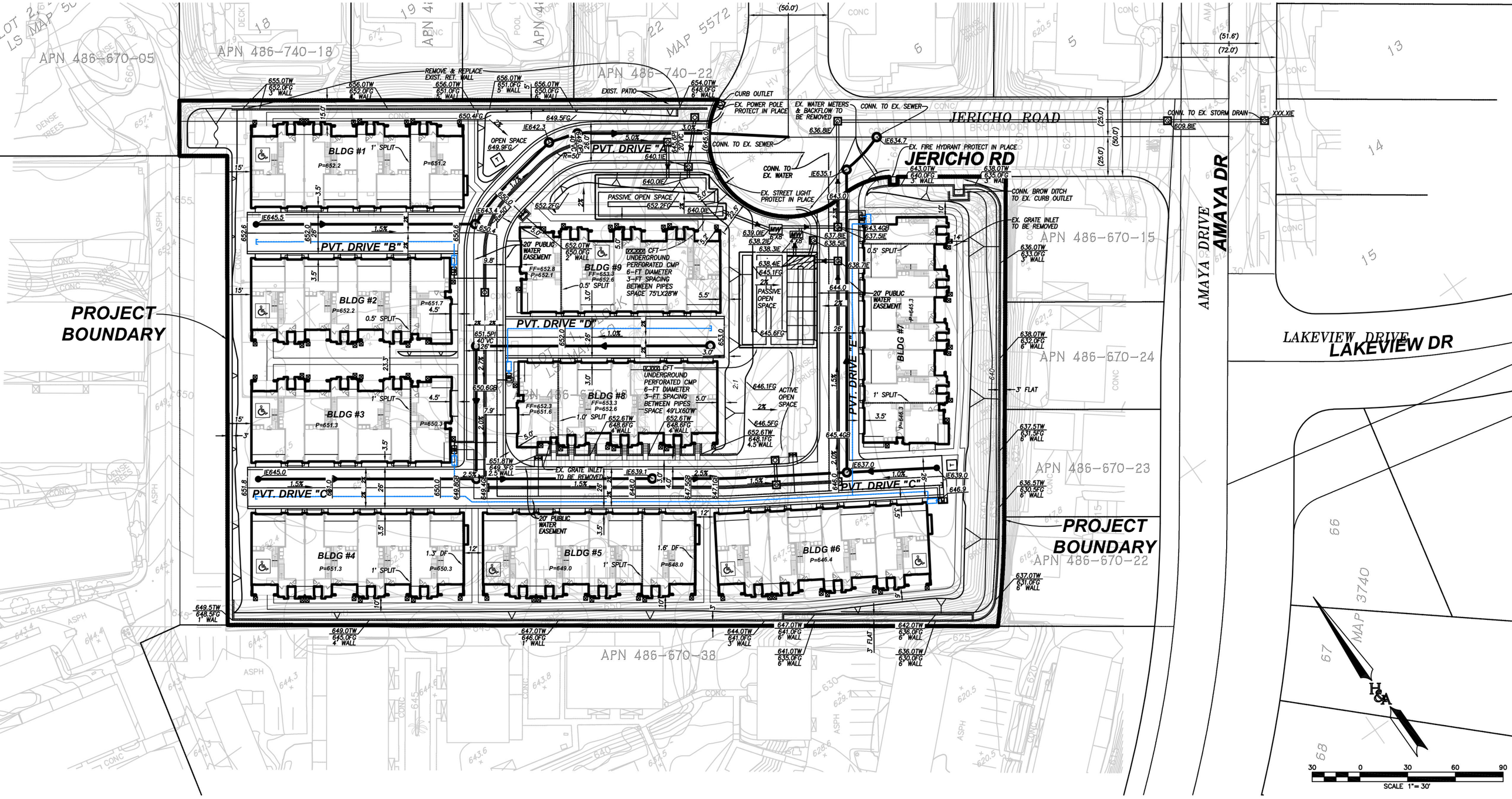
Steven Henderson, P.E.

Attachments

SH:NF:ah

APPENDIX A

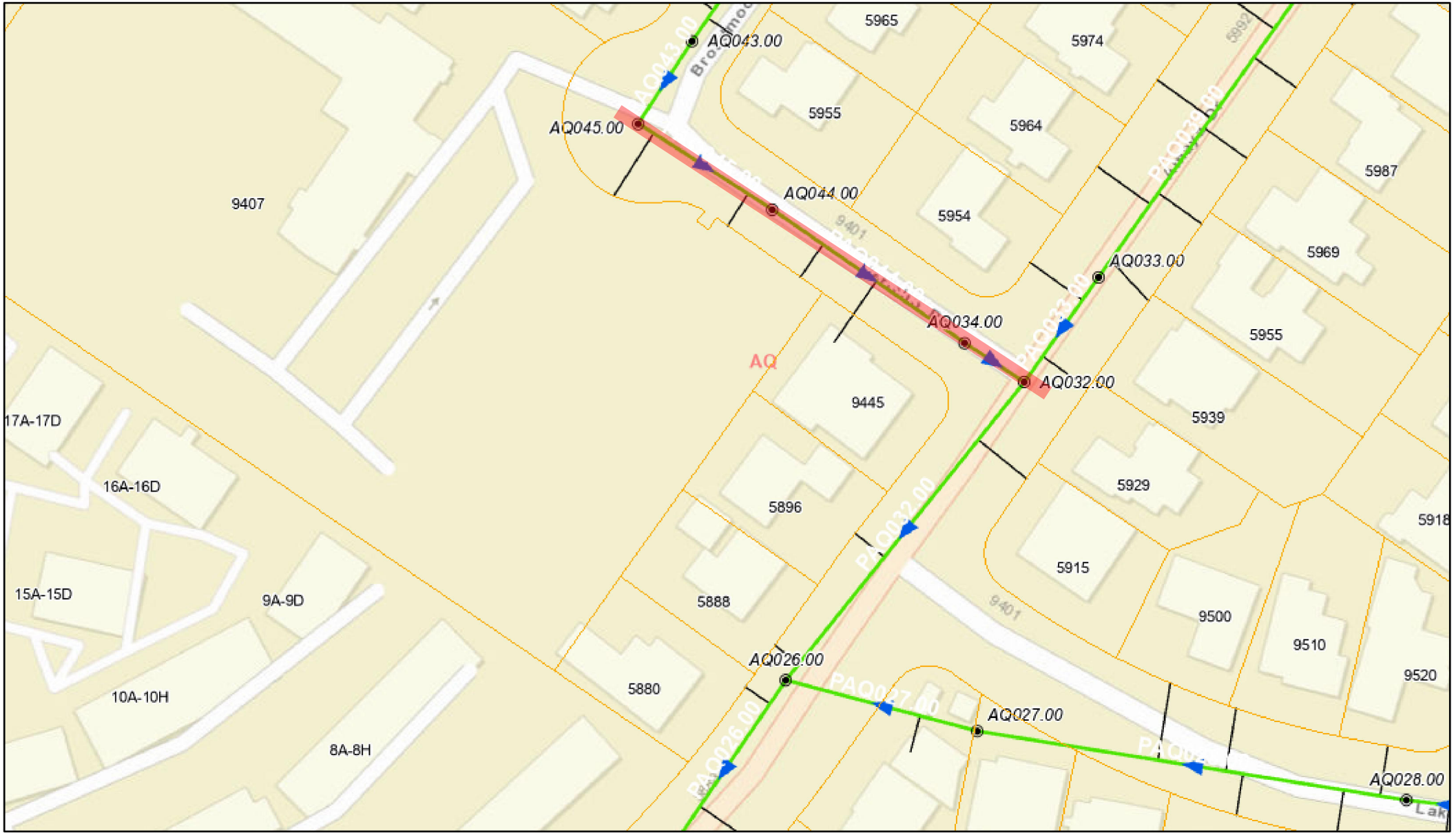
PRELIMINARY SITE PLAN


PROJECT BOUNDARY
APN 486-670-05
APN 486-740-18
APN 486-740-22
APN 486-670-15
APN 486-670-24
APN 486-670-23
APN 486-670-22
APN 486-670-38
MAP 5572
MAP 3740
JERICHO ROAD
JERICHO RD
AMAYA DRIVE
AMAYA DR
LAKEVIEW DRIVE
LAKEVIEW DR
BROADMOOR DR
PVT. DRIVE "A"
PVT. DRIVE "B"
PVT. DRIVE "C"
PVT. DRIVE "D"
PVT. DRIVE "E"
BLDG #1
BLDG #2
BLDG #3
BLDG #4
BLDG #5
BLDG #6
BLDG #7
BLDG #8
BLDG #9
REMOVE & REPLACE EXIST. RET. WALL
EXIST. PATIO
CURB OUTLET
EX. POWER POLE PROTECT IN PLACE
EX. WATER METERS & BACKFLOW TO BE REMOVED
CONN. TO EX. SEWER
CONN. TO EX. WATER
EX. STREET LIGHT PROTECT IN PLACE
EX. FIRE HYDRANT PROTECT IN PLACE
CONN. TO EX. STORM DRAIN
CONN. BROW DITCH TO EX. CURB OUTLET
EX. GRATE INLET TO BE REMOVED
OPEN SPACE
PASSIVE OPEN SPACE
PASSIVE OPEN SPACE
ACTIVE OPEN SPACE
20' PUBLIC WATER EASEMENT
20' PUBLIC WATER EASEMENT
XXXX CFT UNDERGROUND PERFORATED CMP 6-FT DIAMETER 3-FT SPACING BETWEEN PIPES SPACE 75'LX28'W
XXXX CFT UNDERGROUND PERFORATED CMP 6-FT DIAMETER 3-FT SPACING BETWEEN PIPES SPACE 49'LX60'W
(50.0')
(51.6')
(72.0')
(25.0')
(50.0')
SCALE 1"= 30'

APPENDIX B

CITY OF LA MESA DESIGN CRITERIA, BASE MAPS, AND AS-BUILT DRAWINGS

La Mesa Web Map



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City Boundary

Parcels

Address Labels

Manhole Label

Lateral

Sewer Basin

Sewer Pipe

Active, City of La Mesa; Active, <Null>

Manhole

Standard, Active

1:1,128

0 0.01 0.01 0.03 mi

0 0.01 0.03 0.05 km

City of El Cajon, SanGIS, Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, NGA, USGS

Web AppBuilder for ArcGIS

City of El Cajon, SanGIS, Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, NGA, USGS | City of La Mesa |

CITY OF LA MESA
WASTEWATER COLLECTION SYSTEM
MASTER PLAN

October 2008

Prepared For:

CITY OF LA MESA
JEWEL of the HILLS

City of La Mesa
8130 Allison Avenue
La Mesa, CA 91941

Prepared By:

PBS&J

9275 Sky Park Court, Suite 200
San Diego, CA 92123
858.874.1810

PBS&J Project No.: 491261

Dean Gipson, P.E.

Mark B. Elliott, P.E.

Table ES-2
SSMP Elements

Mandatory SSMP Elements		Elements in the Master Plan	Elements to be Completed
(i)	Goals		X
(ii)	Organization		X
(iii)	Legal Authority	X	
(iv)	Operations & Maintenance Program		X
(v)	Design and Performance Provisions	X	
(vi)	Overflow Emergency Response Plan	X	
(vii)	Fats, Oils, and Grease Control Program	X	
(viii)	System Evaluation and Capacity Assurance Plan	X	
(ix)	Monitoring, Measurement, and Plan Modifications		X
(x)	SSMP Program Audits		X
(xi)	Communication Program		X

Wastewater Generation Projections

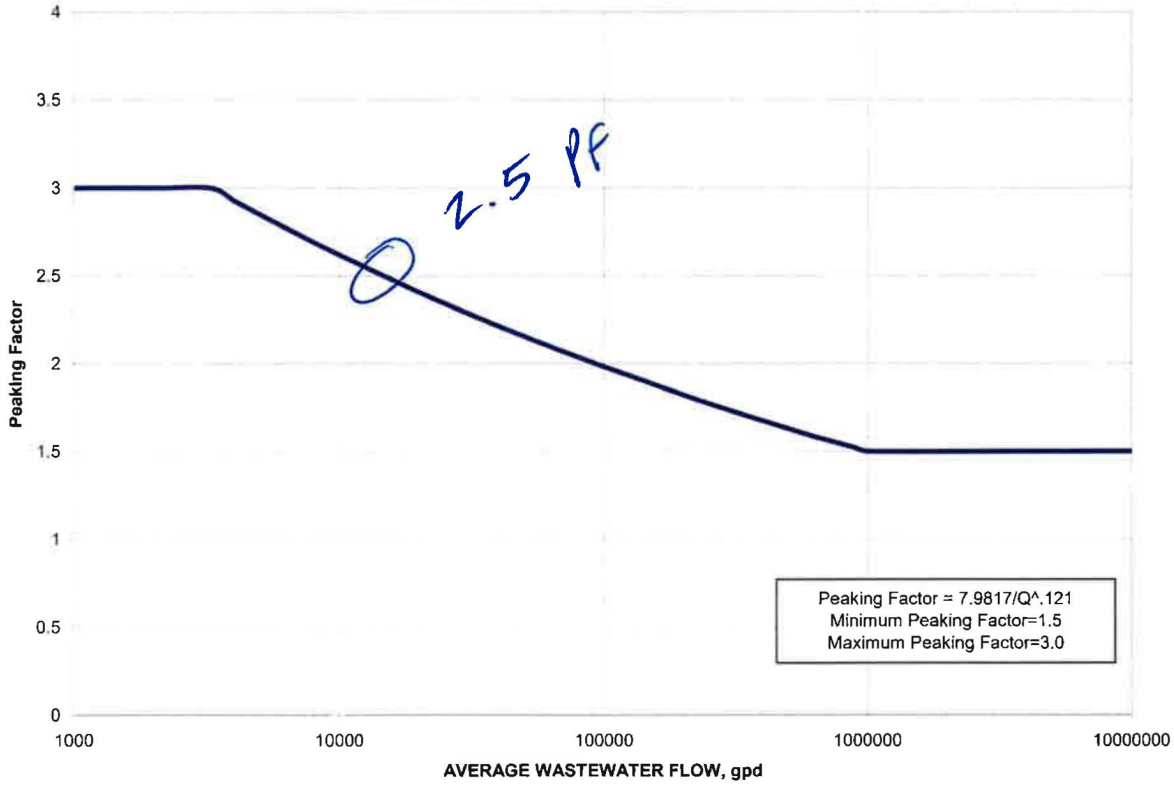
Unit wastewater generation rates were developed using two sources: 1) the City's current land use data; and 2) population projections compiled by SANDAG (Series 7), by comparison to the City's Metro flow meters at seven (7) locations. Table ES-3 summarizes the recommended unit generation rates for estimating future wastewater flows.

Table ES-3
Recommended Unit Wastewater Generation Rate

Land Use / Population	Recommended Unit Generation Rate	
Land Use		
Single-Family Residential	270	gpd/DU
Multi-Family Residential	180	gpd/DU
Commercial	500	gpd/AC
Industrial	500	gpd/AC
Institutional	500	gpd/AC
Population		
Single-Family Residential	90	gpdc
Multi-Family Residential	15	gpdc

× 77
13860 gpd
+ 2.5
34,650 gpd

Figure 4-2
Peaking Factor Curve



4.4 Inflow and Infiltration

Infiltration is water that enters sewers from the ground through such means as defective pipes, pipe joints, connections, and manhole walls. Inflow is water that enters the sewer through roof, yard, and other drains (usually illicit connections), cross connections with storm drains, and manhole covers. Depending on the local groundwater and soil conditions, infiltration into the sewer system may occur for relatively long periods following rainfall events as water percolates through the soil. In some instances, high water tables may result in a constant base flow comprised of groundwater that has infiltrated into the system. Inflow is usually directly associated with rainfall events, and may result in large, rapid flow increases or "spikes" in the collection system.

An assessment of inflow and infiltration in the City's collection system was made by comparing flow records collected at Metro metering sites between the months of September, 2005 and February, 2007. As shown in Figure 4-3, these months are representative of dry weather and wet weather conditions within the City. The metering period in February included a large storm event that occurred on February 19, 2007 with total precipitation recorded at the City of La Mesa, of 0.91 inch over six hours and 1.85 inches over 24 hours. These readings are slightly lower than the two-year design storms for San Diego County.

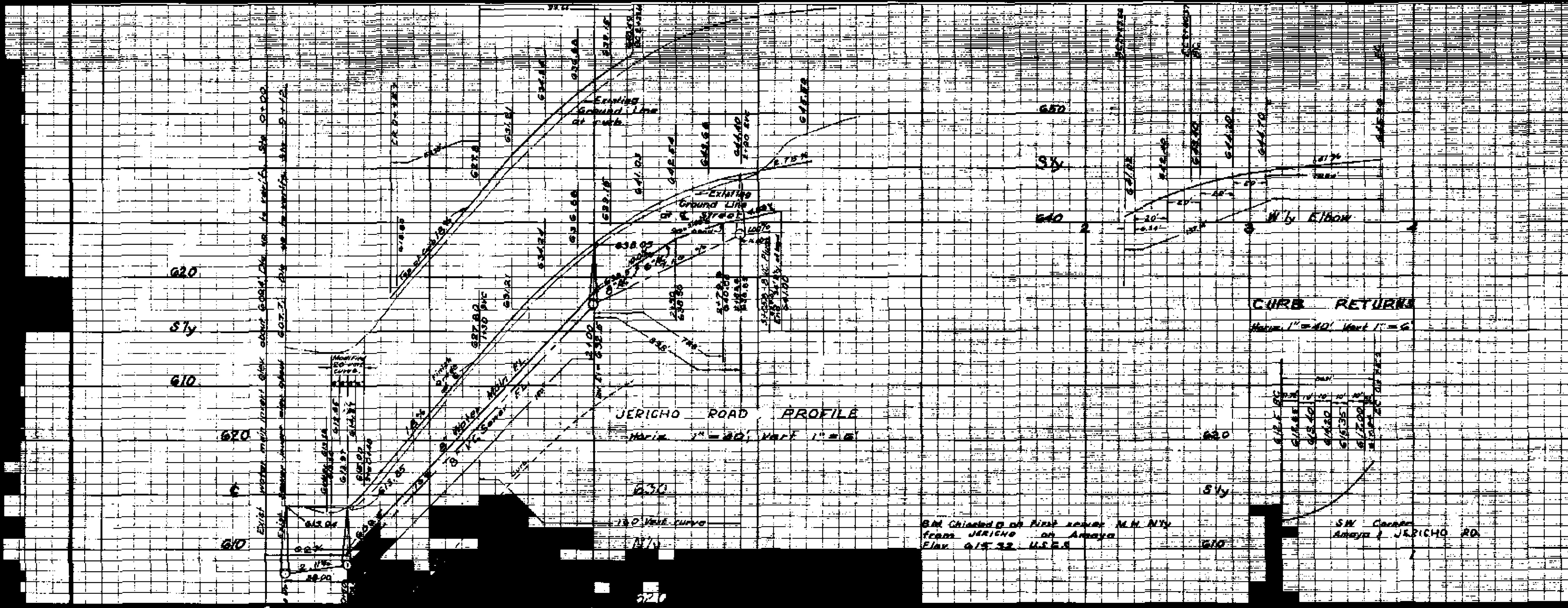
TABLE E-SS-1

STEADY STATE CALCULATIONS
EXISTING DRY WEATHER CONDITION

9/18/2007

Line No.	From MH	To MH	Tributary Avg. Flow (gpd)	(cfs)	Cumulative Avg. Flow (gpd)	(cfs)	Peak/Ave Ratio	Peak Design Flow (gpd)	(cfs)	Line Size (inches)	Design Slope (%)	dn (feet)	dn/D	Velocity (fps)	Notes	Model	Comments
PUX083.00	UX083.00	UX082.00	780	0.001	12,705	0.020	2.54	32,271	0.050	6	3.024	0.08	0.15	2.61	0	Steady-State	
PUX082.00	UX082.00	UX081.00	585	0.001	13,290	0.021	2.53	33,624	0.052	6	12.597	0.06	0.11	4.35	0	Steady-State	
PUX081.00	UX081.00	UX081.01	0	0.000	13,290	0.021	2.53	33,624	0.052	6	8.033	0.06	0.12	3.71	0	Steady-State	
PUX081.01	UX081.01	UX081.03	0	0.000	741,922	1.148	1.56	1,157,399	1.791	15	16.330	0.22	0.18	12.18	IDSIEASB	XP-SWMM	
PUX081.03	UX081.03	UX081.04	0	0.000	741,922	1.148	1.56	1,157,399	1.791	15	0.487	0.55	0.44	3.46	ASB	XP-SWMM	
PUX081.04	UX081.04	UX081.05	0	0.000	741,922	1.148	1.56	1,157,399	1.791	15	0.344	0.60	0.48	3.04	ASB	XP-SWMM	
PUX081.05	UX081.05	UX081.07	0	0.000	741,922	1.148	1.56	1,157,399	1.791	15	0.599	0.52	0.41	3.74	ASB	XP-SWMM	
PUX081.07	UX081.07	UX081.10	0	0.000	741,922	1.148	1.56	1,157,399	1.791	15	0.589	0.52	0.42	3.71	ASB	XP-SWMM	
PUX081.10	UX081.10	UX081.08	0	0.000	741,922	1.148	1.56	1,157,399	1.791	15	2.685	0.35	0.28	6.42	ASB	XP-SWMM	
PUX081.10	UX081.10	UX081.08	0	0.000	741,922	1.148	1.56	1,157,399	1.791	15	2.685	0.35	0.28	6.42	ASB	XP-SWMM	
PUX081.08	UX081.08	UX081.09	0	0.000	741,922	1.148	1.56	1,157,399	1.791	15	1.287	0.42	0.34	4.93	ASB	XP-SWMM	
PU0001.02	U0001.02	UW001.01	0	0.000	770,734	1.193	1.55	1,194,638	1.848	24	2.423	0.31	0.16	5.93	DIV	XP-SWMM	
PUW001.01	UW001.01	UW001.02	0	0.000	789,004	1.221	1.54	1,215,066	1.880	24	1.302	0.37	0.18	4.79	ASB	XP-SWMM	
PUW001.02	UW001.02	UW001.03	0	0.000	789,004	1.221	1.54	1,215,066	1.880	24	1.228	0.37	0.19	4.69	ASB	XP-SWMM	
PD1006.00	D1006.00	D1005.00	810	0.001	810	0.001	3.00	2,430	0.004	8	4.911	0.02	0.03	1.27	0	Steady-State	
PD1005.00	D1005.00	D1004.00	540	0.001	1,350	0.002	3.00	4,050	0.006	8	5.152	0.03	0.04	1.68	0	Steady-State	
PD1004.00	D1004.00	D1003.00	1,350	0.002	2,700	0.004	3.00	8,100	0.013	8	6.833	0.03	0.05	2.18	0	Steady-State	
PD1003.00	D1003.00	D1002.00	1,080	0.002	3,780	0.006	2.95	11,151	0.017	8	10.755	0.03	0.05	2.81	0	Steady-State	
PD1002.00	D1002.00	D1001.00	270	0.000	4,050	0.006	2.92	11,826	0.018	8	12.488	0.03	0.05	3.02	0	Steady-State	
PAQ108.00	AQ108.00	AQ109.00	1,890	0.003	1,890	0.003	3.00	5,670	0.009	8	5.151	0.03	0.04	1.81	0	Steady-State	
PAQ109.00	AQ109.00	AQ110.00	1,080	0.002	2,970	0.005	3.00	8,910	0.014	8	5.402	0.03	0.05	2.06	0	Steady-State	
PAQ110.00	AQ110.00	AQ111.00	1,890	0.003	4,860	0.008	2.86	13,900	0.022	8	3.746	0.05	0.07	2.10	0	Steady-State	
PAQ111.01	AQ111.01	AQ111.00	270	0.000	270	0.000	3.00	810	0.001	8	-2775.684	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ111.00	AQ111.00	AQ112.00	540	0.001	5,670	0.009	2.80	15,876	0.025	8	5.456	0.04	0.07	2.49	0	Steady-State	
PAQ112.00	AQ112.00	AQ097.00	270	0.000	5,940	0.009	2.79	16,573	0.026	8	5.415	0.04	0.07	2.51	0	Steady-State	
PAQ106.01	AQ106.01	AQ106.00	810	0.001	810	0.001	3.00	2,430	0.004	8	-711.387	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ106.00	AQ106.00	AQ100.00	2,430	0.004	3,240	0.005	3.00	9,720	0.015	8	11.490	0.03	0.04	2.77	0	Steady-State	
PAQ100.00	AQ100.00	AQ099.00	1,350	0.002	4,590	0.007	2.88	13,219	0.020	8	11.541	0.03	0.05	3.02	0	Steady-State	
PAQ099.00	AQ099.00	AQ098.00	1,890	0.003	6,480	0.010	2.76	17,885	0.028	8	3.289	0.05	0.08	2.15	0	Steady-State	
PAQ098.00	AQ098.00	AQ097.00	540	0.001	7,020	0.011	2.73	19,165	0.030	8	0.574	0.08	0.12	1.20	0	Steady-State	
PAQ097.00	AQ097.00	AQ096.01	810	0.001	13,770	0.021	2.52	34,700	0.054	8	5.711	0.06	0.09	3.20	0	Steady-State	
PAQ096.01	AQ096.01	AQ096.00	1,080	0.002	14,850	0.023	2.50	37,125	0.057	8	3.515	0.07	0.11	2.76	0	Steady-State	
PAQ094.01	AQ094.01	AQ094.00	1,350	0.002	1,350	0.002	3.00	4,050	0.006	8	-437.224	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ094.00	AQ094.00	AQ095.00	1,350	0.002	2,700	0.004	3.00	8,100	0.013	8	2.916	0.04	0.05	1.61	0	Steady-State	
PAQ095.00	AQ095.00	AQ096.00	0	0.000	2,700	0.004	3.00	8,100	0.013	8	2.193	0.04	0.06	1.51	0	Steady-State	
PAQ096.00	AQ096.00	AQ084.00	810	0.001	18,360	0.028	2.43	44,615	0.069	8	4.070	0.08	0.12	3.07	0	Steady-State	
PAQ084.00	AQ084.00	AQ083.00	810	0.001	19,170	0.030	2.42	46,391	0.072	8	2.484	0.09	0.13	2.61	0	Steady-State	
PAQ083.00	AQ083.00	AQ082.00	2,970	0.005	22,140	0.034	2.38	52,693	0.082	8	2.716	0.09	0.14	2.80	0	Steady-State	
PAQ082.00	AQ082.00	AQ069.00	1,620	0.003	23,760	0.037	2.36	56,074	0.087	8	0.618	0.14	0.20	1.69	0	Steady-State	
PAQ069.00	AQ069.00	AQ068.00	0	0.000	23,760	0.037	2.36	56,074	0.087	8	2.811	0.09	0.14	2.89	0	Steady-State	
PAQ072.01	AQ072.01	AQ072.00	810	0.001	810	0.001	3.00	2,430	0.004	8	-544.710	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ072.00	AQ072.00	AQ071.00	1,620	0.003	2,430	0.004	3.00	7,290	0.011	8	1.098	0.05	0.07	1.14	0	Steady-State	
PAQ071.00	AQ071.00	AQ070.00	1,890	0.003	4,320	0.007	2.90	12,528	0.019	8	1.920	0.05	0.07	1.60	0	Steady-State	
PAQ070.00	AQ070.00	AQ067.00	2,430	0.004	6,750	0.010	2.75	18,563	0.029	8	4.886	0.05	0.07	2.50	0	Steady-State	
PAQ057.01	AQ057.01	AQ057.00	1,890	0.003	1,890	0.003	3.00	5,670	0.009	6	-438.231	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ057.00	AQ057.00	AQ058.00	1,350	0.002	3,240	0.005	3.00	9,720	0.015	6	2.721	0.05	0.09	1.78	0	Steady-State	
PAQ058.00	AQ058.00	AQ059.00	1,890	0.003	5,130	0.008	2.84	14,569	0.023	6	0.694	0.07	0.15	1.21	0	Steady-State	
PAQ059.00	AQ059.00	AQ067.00	1,350	0.002	6,480	0.010	2.76	17,885	0.028	6	1.053	0.08	0.15	1.52	0	Steady-State	
PAQ067.00	AQ067.00	AQ068.00	0	0.000	13,230	0.020	2.53	33,472	0.052	8	22.965	0.04	0.07	5.15	0	Steady-State	
PAQ068.00	AQ068.00	AQ066.00	0	0.000	36,990	0.057	2.24	82,858	0.128	8	3.136	0.11	0.17	3.37	0	XP-SWMM	
PAQ066.89	AQ066.90	AQ066.00	810	0.001	810	0.001	3.00	2,430	0.004	8	-484.830	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ066.00	AQ066.00	AQ065.00	270	0.000	38,070	0.059	2.23	84,896	0.131	8	3.171	0.11	0.17	3.41	0	XP-SWMM	
PAQ085.00	AQ085.00	AQ081.00	2,700	0.004	2,700	0.004	3.00	8,100	0.013	8	2.873	0.04	0.05	1.60	0	Steady-State	
PAQ081.00	AQ081.00	AQ080.00	1,620	0.003	4,320	0.007	2.90	12,528	0.019	8	2.843	0.05	0.07	1.84	0	Steady-State	
PAQ080.00	AQ080.00	AQ073.00	1,350	0.002	5,670	0.009	2.80	15,876	0.025	8	3.161	0.05	0.07	2.05	0	Steady-State	
PAQ073.00	AQ073.00	AQ074.00	0	0.000	5,670	0.009	2.80	15,876	0.025	8	0.597	0.07	0.11	1.14	0	Steady-State	
PAQ074.01	AQ074.01	AQ074.00	1,350	0.002	1,350	0.002	3.00	4,050	0.006	6	-447.297	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ074.00	AQ074.00	AQ064.00	2,160	0.003	9,180	0.014	2.65	24,327	0.038	6	7.961	0.05	0.11	3.36	0	Steady-State	
PAQ064.00	AQ064.00	AQ065.00	0	0.000	9,180	0.014	2.65	24,327	0.038	6	4.255	0.06	0.12	2.70	0	Steady-State	
PAQ065.00	AQ065.00	AQ060.00	2,700	0.004	49,950	0.077	2.16	107,892	0.167	8	4.272	0.12	0.17	4.06	0	XP-SWMM	
PAQ060.00	AQ060.00	AQ055.00	1,890	0.003	51,840	0.080	2.15	111,456	0.172	8	3.121	0.13	0.19	3.67	0	XP-SWMM	
PAQ105.00	AQ105.00	AQ104.00	1,620	0.003	1,620	0.003	3.00	4,860	0.008	8	5.733	0.03	0.04	1.77	0	Steady-State	
PAQ104.00	AQ104.00	AQ101.00	1,350	0.002	2,970	0.005	3.00	8,910	0.014	8	5.508	0.03	0.05	2.07	0	Steady-State	
PAQ101.00	AQ101.00	AQ092.00	2,160	0.003	5,130	0.008	2.84	14,569	0.023	8	9.920	0.04	0.06	2.98	0	Steady-State	
PAQ092.00	AQ092.00	AQ088.00	2,160	0.003	7,290	0.011	2.72	19,829	0.031	8	5.166	0.05	0.07	2.60	0	Steady-State	
PAQ103.01	AQ103.01	AQ103.00	1,890	0.003	1,890	0.003	3.00	5,670	0.009	8	-389.215	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ103.00	AQ103.00	AQ102.00	1,620	0.003	3,510	0.005	2.97	10,425	0.016	8	3.219	0.04	0.06	1.83	0	Steady-State	
PAQ102.00	AQ102.00	AQ091.00	1,890	0.003	5,400	0.008	2.82	15,228	0.024	8	3.221	0.05	0.07	2.04	0	Steady-State	
PAQ091.00	AQ091.00	AQ090.00	2,160	0.003	7,560	0.012	2.71	20,488	0.032	8	2.902	0.06	0.09	2.15	0	Steady-State	
PAQ090.01	AQ090.01	AQ090.00	1,890	0.003	1,890	0.003	3.00	5,670	0.009	8	-523.326	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ090.00	AQ090.00	AQ089.00	0	0.000	9,450	0.015	2.64	24,948	0.039	8	14.764	0.04	0.06	4.04	0	Steady-State	
PAQ089.00	AQ089.00	AQ088.00	0	0.000	9,450	0.015	2.64	24,948	0.039	8	0.765	0.09	0.13	1.43	0	Steady-State	
PAQ093.01	AQ093.01	AQ093.00	1,620	0.003	1,620	0.003	3.00	4,860	0.008	8	-372.871	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ093.00	AQ093.00	AQ086.00	2,700	0.004	4,320	0.007	2.90	12,528	0.019	8	2.823	0.05	0.07	1.84	0	Steady-State	
PAQ086.01	AQ086.01	AQ086.00	2,160	0.003	2,160	0.003	3.00	6,480	0.010	8	-434.724	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ086.00	AQ086.00	AQ087.00	0	0.000	6,480	0.010	2.76	17,885	0.028	8	10.601	0.04	0.06	3.24	0	Steady-State	
PAQ087.00	AQ087.00	AQ088.00	0	0.000	6,480	0.010	2.76	17,885	0.028	8	6.445	0.04	0.07	2.73	0	Steady-State	
PAQ088.00	AQ088.00	AQ079.00	1,620	0.003	24,840	0.038	2.35	58,374	0.090	8	10.125	0.07	0.11	4.58	0	Steady-State	
PAQ079.00	AQ079.00	AQ077.00	540	0.001	25,380	0.039	2.34	59,389	0.092	8	1.592	0.11	0.17	2.40	0	Steady-State	
PAQ078.01	AQ078.01	AQ078.00	6,320	0.010	6,320	0.010	2.77	17,506	0.027	6	-436.073	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ078.00	AQ078.00	AQ077.00	1,350	0.002	7,670	0.012	2.70	20,709	0.032	6	4.261	0.06	0.11	2.57	0	Steady-State	
PAQ077.01	AQ077.01	AQ077.00	1,350	0.002	1,350	0.002	3.00	4,050	0.006	6	-431.093	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ077.00	AQ077.00	AQ076.00	0	0.000	34,400	0.053	2.26	77,744	0.120	8	1.065	0.14	0.21	2.26	0	Steady-State	
PAQ076.00	AQ076.00	AQ075.00	1,890	0.003	36,290	0.056	2.24	81,290	0.126	8	2.629	0.11	0.17	3.14	0	XP-SWMM	
PAQ075.00	AQ075.00	AQ062.00	2,160	0.003	38,450	0.059	2.22	85,359	0.132	8	2.456	0.12	0.18	3.12	0	XP-SWMM	
PAQ051.01	AQ051.01	AQ051.00	6,750	0.010	6,750	0.010	2.75	18,563	0.029	6	-708.850	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ051.00	AQ051.00	AQ062.00	2,970	0.005	9,720	0.015	2.63	25,564	0.040	6	4.823	0.06	0.12	2.86	0	Steady-State	
PAQ062.00	AQ062.00	AQ061.00	0	0.000	48,170	0.075	2.17	104,529	0.162	8	5.295	0.11	0.16	4.34	0	XP-SWMM	
PAQ040.00	AQ040.00	AQ052.00	1,080	0.002	1,080	0.002	3.00	3,240	0.005	6	-434.623	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ052.90	AQ052.90	AQ052.00	1,080	0.002	1,080	0.002	3.00	3,240	0.005	6	-343.830	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ052.00	AQ052.00	AQ053.00	1,620	0.003	3,780	0.006	2.95	11,151	0.017	6	1.852	0.05	0.10	1.59	0	Steady-State	
PAQ053.00	AQ053.00	AQ061.00	1,620	0.003	5,400	0.008	2.82	15,228	0.024	6	2.062	0.06	0.12	1.82	0	Steady-State	
PAQ063.01	AQ063.01	AQ063.00	1,620	0.003	1,620	0.003	3.00	4,860	0.008	6	-508.801	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ063.00	AQ063.00	AQ061.00	2,700	0.004	4,320	0.007	2.90	12,528	0.019	6	8.100	0.04	0.08	2.74	0	Steady-State	
PAQ061.00	AQ061.00	AQ054.00	0	0.000	57,890	0.090	2.12	122,727	0.190	8	5.320	0.12	0.18	4.55	0	XP-SWMM	
PAQ054.00	AQ054.00	AQ055.00	0	0.000	57,890	0.090	2.12	122,727	0.190	8	4.332	0.12	0.19	4.24	0	XP-SWMM	
PAQ055.00	AQ055.00	AQ039.00	2,700	0.004	112,430	0.174	1.95	219,239	0.339	8	2.638	0.19	0.28	4.21	0	XP-SWMM	
PAQ039.00	AQ039.00	AQ033.00	3,780	0.006	116,210	0.180	1.95	226,610	0.351	8	2.059	0.20	0.31	3.89	0	XP-SWMM	
PAQ033.00	AQ033.00	AQ032.00	540	0.001	116,750	0.181	1.95	227,663	0.352	8	1.874	0.21	0.31	3.77	0	XP-SWMM	
PAQ046.00	AQ046.00	AQ042.00	2,160	0.003	2,160	0.003	3.00	6,480	0.010	8	8.437	0.03	0.04	2.15	0	Steady-State	
PAQ041.00	AQ041.00	AQ042.00	810	0.001	810	0.001	3.00	2,430	0.004	8	-910.197	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ042.00	AQ042.00	AQ043.00	1,080	0.002	4,050	0.006	2.92	11,826	0.018	8	5.819	0.04	0.06	2.30	0	Steady-State	
PAQ043.00	AQ043.00	AQ045.00	0	0.000	4,050	0.006	2.92	11,826	0.018	8	1.225	0.05	0.08	1.34	0	Steady-State	
PAQ045.00	AQ045.00	AQ044.00	1,728	0.003	5,778	0.009	2.80	16,178	0.025	8	6.683	0.04	0.06	2.70	0	Steady-State	
PAQ044.00	AQ044.00	AQ034.00	270	0.000	6,048	0.009	2.78	16,813	0.026	8	17.059	0.03	0.05	3.76	0	Steady-State	
PAQ034.00	AQ034.00	AQ032.00	0	0.000	6,048	0.009	2.78	16,813	0.026	8	0.725	0.07	0.11	1.25	0	Steady-State	
PAQ032.00	AQ032.00	AQ026.00	810	0.001	123,608	0.191	1.93	238,563	0.369	8	2.263	0.20	0.31	4.08	0	XP-SWMM	
PAQ056.00	AQ056.00	AQ037.00	3,780	0.006	3,780	0.006	2.95	11,151	0.017	8	7.121	0.03	0.05	2.41	0	Steady-State	
PAQ037.00	AQ037.00	AQ036.00	810	0.001	4,590	0.007	2.88	13,219	0.020	8	1.185	0.06	0.09	1.38	0	Steady-State	
PAQ036.00	AQ036.00	AQ030.01	2,430	0.003	6,750	0.010	2.75	18,563	0.029	8	3.661	0.05	0.08	2.25	0	Steady-State	
PAQ030.01	AQ030.01	AQ030.00	1,350	0.002	8,100	0.013	2.69	21,789	0.034	8	1.971	0.07	0.10	1.92	0	Steady-State	
PAQ030.00	AQ030.00	AQ029.00	1,890	0.003	9,990	0.015	2.62	26,174	0.040	8	2.117	0.07	0.10	2.08	0	Steady-State	
PAQ038.01	AQ038.01	AQ038.00	1,080	0.002	1,080	0.002	3.00	3,240	0.005	8	-1403.080	N/A	N/A	N/A	MUSIE	Steady-State	
PAQ038.00	AQ038.00	AQ035.00	2,430	0.004	3,510	0.005	2.97	10,425	0.016	8	5.122	0.04	0.05	2.11	0	Steady-State	
PAQ035.00	AQ035.00	AQ031.00	2,430	0.004	5,940	0.009	2.79	16,573	0.026	8	5.294	0.05	0.07	2.49	0	Steady-State	
PAQ031.00	AQ031.00	AQ029.00	270	0.000	6,210	0.010	2.77	17,202	0.027	8	3.226	0.05	0.08	2.11	0	Steady-State	
PAQ029.00	AQ029.00	AQ028.00	270	0.000	16,470	0.025	2.47	40,681	0.063	8	2.447	0.08	0.12	2.49	0	Steady-State	
PAQ028.00	AQ028.00	AQ027.00	1,890	0.003	18,360	0.028	2.43	44,615	0.069	8	5.838	0.07	0.11	3.48	0	Steady-State	
PAQ027.00	AQ027.00	AQ026.00	270	0.000	18,630	0.029	2.43	45,271	0.070	8	7.844	0.07	0.10	3.88	0	Steady-State	
PAQ026.00	AQ026.00	AQ025.00	540	0.001	142,778	0.221	1.90	271,278	0.420	8	2.621	0.21	0.31	4.46	0	XP-SWMM	

Highlighted Sections are Analyzed in Sewer Study



WORK TO BE DONE

The improvements consist of the following work to be done in accordance with these plans, the specifications of the City of La Mesa, and the Helix Irrigation District.

The grading of the portions of the streets shown thus:
The preparation of subgrade and paving of the portions of streets shown thus:
The construction of 6" type 'G' curb shown thus:
The construction of sidewalk shown thus:

The construction of 8" vitrified clay pipe sewer main shown thus: 8" V.C.
The construction of sewer manholes shown thus: MH
The construction of 4" vitrified clay sewer laterals shown thus:
The construction of copper water services shown thus:
The construction of 6" standard fire hydrant assembly shown thus: 6" FH
The construction of gatevalves shown thus: 6" GV

NOTES

All street improvements shall be done in accordance with the Standard Specifications Doc No. 1285 and 1288 and to the satisfaction of the City Engineer of La Mesa, California.

Minimum of 95% Compaction required in fill area within streets.

All water system work shall be performed in accordance with the Standard Specifications of Helix Irrigation District.

Contractor to install three ¾"x1" copper services as shown on Amaya Drive on existing main; District will make the 3 required wet taps after contractor has performed required excavation. Termination of services in meter box will conform to location and grades of approved street improvement Dwg No. 1568.

The waterline shall have a minimum cover of 36".

Trench grade shall be 5" below bottom of pipe grade of water line.

Contractor to excavate at gas and sewer locations in advance of trenching to permit adjusting pipeline grades if necessary.

HELIX IRRIGATION DISTRICT

Approved [signature] RE 9695
Chief Engineer

Date 5/18/60
Subject to Revision in 90 days.

IMPROVEMENT PLANS FOR JERICHO ROAD

PORTION OF LOT 11, BLOCK 30, EL CAJON HEIGHTS MAP NO. 593

CITY OF LA MESA
ENGINEERING DEPARTMENT

SHEET 1 OF 1 SHEETS

W.O. NO.

PLAN REVISION

CHANGE	BY	DATE	APPROVAL
AS BUILT	T.C.	1-27-61	

[signature] CITY ENGINEER — 5-4-60 DATE

ASS'T CITY ENGINEER AND OFFICE ENGINEER

APPROVALS FOR

WATER DEPT	SEWERAGE
PLANNING DEPT	DRAINAGE
ELECTRICAL	
STRUCTURAL	
TRAFFIC	

SUPERVISOR

CHECKED

DESIGNED

CONSTRUCTION RECORD

DATE STARTED — DATE COMPLETED

CONTR. — INSP.

1750

APPENDIX C

SEWER SYSTEM CAPACITY ANALYSIS RESULTS

The following conditions were modeled for the 9407 Jericho Road Project:

1. Existing Flows

2. Existing Plus Project Flows

- Exhibit A – Manhole Diagram

DATE: 8/10/2023

SEWER STUDY SUMMARY

JOB NUMBER: 1043-003

FOR: 9407 Jericho Road Project City of La Mesa, Existing Flow in Jericho Road

BY: Dexter Wilson Engineering, Inc.

SHT 1 OF 2

REFER TO PLAN SHEET: EXHIBIT A

FROM	TO	LINE	IN-LINE FLOW	AVG. DRY WEATHER FLOW (gpd)	PEAKING FACTOR	PEAK FLOW (gpd)	COMBINED PEAK FLOW (DESIGN FLOW)		LINE SIZE (inches)	AS-BUILT SLOPE (%)	DEPTH K' [1]	dn (feet)	dn/D[2]	C_a for Velocity[3]	VELOCITY (f.p.s.)	COMMENTS
							M.G.D.	C.F.S.								
AQ043	AQ045	PAQ043	4,050	4,050	2.92	11,832	0.012	0.018	8	1.00	0.007017	0.06000	0.09	0.0350	1.18	
AQ045	AQ044	PAQ045	1,728	5,778	2.80	16,170	0.016	0.025	8	7.16	0.003584	0.04000	0.06	0.0192	2.93	
AQ044	AQ034	PAQ044	270	6,048	2.78	16,832	0.017	0.026	8	16.00	0.002496	0.03333	0.05	0.0147	3.99	
AQ034	AQ032	PAQ034	0	6,048	2.78	16,832	0.017	0.026	8	2.11	0.006872	0.05333	0.08	0.0294	1.99	

JOB NUMBER: 1043-003

FOR: 9407 Jericho Road Project City of La Mesa, Existing plus Project Flow in Jericho Road

BY: Dexter Wilson Engineering, Inc.

SHT 2 OF 2

REFER TO PLAN SHEET: EXHIBIT A

FROM	TO	LINE	IN-LINE FLOW	AVG. DRY WEATHER FLOW (gpd)	PDWF PEAKING FACTOR	PDWF (gpd)	COMBINED PEAK FLOW (DESIGN FLOW)		LINE SIZE (inches)	DESIGN SLOPE (%)	DEPTH K' [1]	dn (feet)	dn/D[2]	C_a for Velocity[3]	VELOCITY (f.p.s.)	COMMENTS
							M.G.D.	C.F.S.								
AQ043	AQ045	PAQ043	4,050	4,050	2.92	11,832	0.012	0.018	8	1.00	0.007017	0.06000	0.09	0.0350	1.18	
AQ045	AQ044	PAQ045	14,868	18,918	2.42	45,864	0.046	0.071	8	7.16	0.010165	0.06667	0.10	0.0409	3.90	Project P.O.C.
AQ044	AQ034	PAQ044	270	19,188	2.42	46,439	0.046	0.072	8	16.00	0.006885	0.06000	0.09	0.0350	4.62	
AQ034	AQ032	PAQ034	0	19,188	2.42	46,439	0.046	0.072	8	2.11	0.018960	0.09333	0.14	0.0668	2.42	

1 K' based on n = 0.013
2 dn/D using K' in Brater King Table 7-14
3 From Brater King Table 7-4 based on dn/D

CONNECTION POINT AT EXISTING PUBLIC MANHOLE

CONNECTION POINT AT PROPOSED PUBLIC MANHOLE

PROJECT LOCATION

PAQ043 EX.8"

EX.8"

AQ044

AQ034

JERICHO RD

PAQ045

PAQ034

EX.8" PAQ044

AQ045

AQ032

BLDG 1

BLDG 2

BLDG 3

BLDG 4

BLDG 5

BLDG 6

BLDG 7

BLDG 8

BLDG 9

2:1

LAKEVIEW DR

AMAYA DR

EX.8"

EX.8"

EX.8"

N

0 60 FEET

LEGEND

PROJECT BOUNDARY

EXISTING PUBLIC GRAVITY SEWER

PROPOSED PRIVATE GRAVITY SEWER

0 MANHOLE NUMBER

DEXTER WILSON ENGINEERING, INC.
CONSULTING ENGINEERS
(760) 438-4422

EXHIBIT A

MANHOLE DIAGRAM

9407 JERICHO ROAD

\\ARTIC\DWG\1043003\REPORT\JR_SWR_EXHIBIT-A_MH.DWG 8/4/2023 4:35:08 PM LAYOUT:11x17 USER:Karam

APPENDIX D

SEWER SYSTEM CONDITION ASSESSMENT

MANHOLE INSPECTIONS

Project

Surveyed By	Jason Bingham	**Certificate Number**	U-0417-07007758
Date / Time	7/3/2023 14:59	**Owner**	
Customer		**Sheet Number**	
PO Number		**Is Imperial**	True
Purpose	Sewer System Evaluation Survey		
Comments			

Manhole

Inspection Status	Surface Inspection	**Drainage Area**	
Manhole Number	AQ045	**Manhole Use**	Sanitary
Weather (Ground Conditions)		**Street**	Jericho Rd
City	La Mesa	**Location Details**	
Location Code	Local Rural Streets - Light traffic, town and city back streets, estate streets and curbside parking areas	**Additional Info**	

Manhole 2

Rim To Invert		**Grade To Invert**	
Rim To Grade		**Year Constructed**	
Year Renewed		**Pre-Cleaning**	
Date Cleaned		**Evidence of Surcharge**	No
Additional Component Information		**Media Label**	

Surface / Steps

Surface Type Asphalt	No	**Surface Type Concrete Pavement**	Yes
Surface Type Concrete Collar	No	**Surface Type Grass Dirt**	No
Surface Type Gravel	No	**Surface Type Other**	No
Inflow Potential For Runoff	Ponding	**Access Type**	Manhole
Step Number	2	**Step Material**	Metal

Cover 1

Cover Shape		**Cover Size**	
Cover Material		**Cover Type Solid**	No

Cover Type Vented	No	**Cover Type Gasketed**	No
Cover Type Bolted	No	**Cover Type Inner Cover**	No
Cover Type Locking	No	**Cover Size Width**	

Cover 2

Cover Bearing Surface Diameter		**Cover Frame Fit**	
Cover Condition Sound	Yes	**Cover Condition Cracked**	No
Cover Condition Broken	No	**Cover Condition Corroded**	No
Cover Condition Bolts Missing	No	**Cover Condition Missing**	No
Cover Insert Type	None	**Cover Bearing Surface Width**	

Hole / Insert

Hole Diameter		**Hole Number**	0
Insert Condition Sound	No	**Insert Condition Poorly Fitting**	No
Insert Condition Cracked	No	**Insert Condition Leaking**	No
Insert Condition Insert Fell	No	**Insert Condition Corroded**	No

Ring

Adjustment Ring Type	None	**Adjustment Ring Height**	
Ring Condition Sound	No	**Ring Condition Cracked**	No
Ring Condition Broken	No	**Ring Condition Corroded**	No
Ring Condition Leaking	No	**Ring Condition Poor Install**	No
Adjustment Ring Material			

Frame

Frame Material		**Frame Bearing Surface Width**	
Frame Bearing Surface Depth		**Frame Clear Open Diameter**	
Frame Condition Sound	Yes	**Frame Condition Cracked**	No
Frame Condition Broken	No	**Frame Condition Missing**	No

Frame Condition Corroded	No	**Frame Condition Coated**	No

Frame / Seal			
Frame Offset Distance		**Frame Seal Inflow**	
Frame Depth	0	**Seal Condition Sound**	No
Seal Condition Cracked	No	**Seal Condition Loose**	No
Seal Condition Offset	No	**Seal Condition Missing**	No
		Frame Clear Open Width	

Chimney			
Chimney Material 1		**Chimney Material 2**	
Chimney Ini		**Chimney Clear Opening**	
Chimney Depth		**Chimney Lining Interior**	
Chimney Lining Exterior		**Chimney Present**	
Chimney Condition	Sound		

Cone			
Cone Type		**Cone Material**	
Cone Depth		**Cone Lining Interior**	
Cone Lining Exterior		**Cone Condition**	Sound

Wall			
Wall Diameter	0	**Wall By Size**	0
Wall Material		**Wall Depth**	
Wall Lining Interior		**Wall Lining Exterior**	
Wall Condition	Sound		

Bench / Channel			
Bench Present		**Bench Material**	
Bench Lining		**Channel Installed**	
Channel Material		**Channel Type**	
Channel Exposure		**Work Order**	
Project			

Custom			
Custom 1		**Custom 2**	
Custom 3		**Custom 4**	
Custom 5		**Custom 6**	
Custom 7		**Custom 8**	

Custom 9		Custom 10	
Cover 3			
Cover Type Hatch Single	No	**Cover Type Hatch Double**	No
Cover Type Lamphole	No	**Cover Type Removable Center**	No
		Cover Condition Restraint Missing	No
Cover Condition Restraint Defective	No		
Center Cover Size			
QA / QC			
Reviewed By		**Reviewer Certificate Number**	
		Consequence of Failure	
		Rim to Grade Exposed	
Bench Condition	Sound	**Channel Condition**	Sound

MANHOLE AQ045

Project

Surveyed By	Jason Bingham	**Certificate Number**	U-0417-07007758
Date / Time	7/3/2023 14:59	**Owner**	
Customer		**Sheet Number**	
PO Number		**Is Imperial**	True
Purpose	Sewer System Evaluation Survey		
Comments			

Manhole

Inspection Status	Surface Inspection	**Drainage Area**	
Manhole Number	AQ044	**Manhole Use**	Sanitary
Weather (Ground Conditions)		**Street**	Jericho Rd
City	La Mesa	**Location Details**	
Location Code	Local Rural Streets - Light traffic, town and city back streets, estate streets and curbside parking areas	**Additional Info**	

Manhole 2

Rim To Invert		**Grade To Invert**	
Rim To Grade		**Year Constructed**	
Year Renewed		**Pre-Cleaning**	
Date Cleaned		**Evidence of Surcharge**	No
Additional Component Information		**Media Label**	

Surface / Steps

Surface Type Asphalt	No	**Surface Type Concrete Pavement**	Yes
Surface Type Concrete Collar	No	**Surface Type Grass Dirt**	No
Surface Type Gravel	No	**Surface Type Other**	No
Inflow Potential For Runoff	Ponding	**Access Type**	Manhole
Step Number	2	**Step Material**	Metal

Cover 1

Cover Shape		**Cover Size**	
Cover Material		**Cover Type Solid**	No

Cover Type Vented	No	**Cover Type Gasketed**	No
Cover Type Bolted	No	**Cover Type Inner Cover**	No
Cover Type Locking	No	**Cover Size Width**	

Cover 2

Cover Bearing Surface Diameter		**Cover Frame Fit**	
Cover Condition Sound	Yes	**Cover Condition Cracked**	No
Cover Condition Broken	No	**Cover Condition Corroded**	No
Cover Condition Bolts Missing	No	**Cover Condition Missing**	No
Cover Insert Type	None	**Cover Bearing Surface Width**	

Hole / Insert

Hole Diameter		**Hole Number**	0
Insert Condition Sound	No	**Insert Condition Poorly Fitting**	No
Insert Condition Cracked	No	**Insert Condition Leaking**	No
Insert Condition Insert Fell	No	**Insert Condition Corroded**	No

Ring

Adjustment Ring Type	None	**Adjustment Ring Height**	
Ring Condition Sound	No	**Ring Condition Cracked**	No
Ring Condition Broken	No	**Ring Condition Corroded**	No
Ring Condition Leaking	No	**Ring Condition Poor Install**	No
Adjustment Ring Material			

Frame

Frame Material		**Frame Bearing Surface Width**	
Frame Bearing Surface Depth		**Frame Clear Open Diameter**	
Frame Condition Sound	Yes	**Frame Condition Cracked**	No
Frame Condition Broken	No	**Frame Condition Missing**	No

Frame Condition Corroded	No	**Frame Condition Coated**	No

Frame / Seal			
Frame Offset Distance		**Frame Seal Inflow**	
Frame Depth	0	**Seal Condition Sound**	No
Seal Condition Cracked	No	**Seal Condition Loose**	No
Seal Condition Offset	No	**Seal Condition Missing**	No
		Frame Clear Open Width	

Chimney			
Chimney Material 1		**Chimney Material 2**	
Chimney Ini		**Chimney Clear Opening**	
Chimney Depth		**Chimney Lining Interior**	
Chimney Lining Exterior		**Chimney Present**	
Chimney Condition	Sound		

Cone			
Cone Type		**Cone Material**	
Cone Depth		**Cone Lining Interior**	
Cone Lining Exterior		**Cone Condition**	Sound

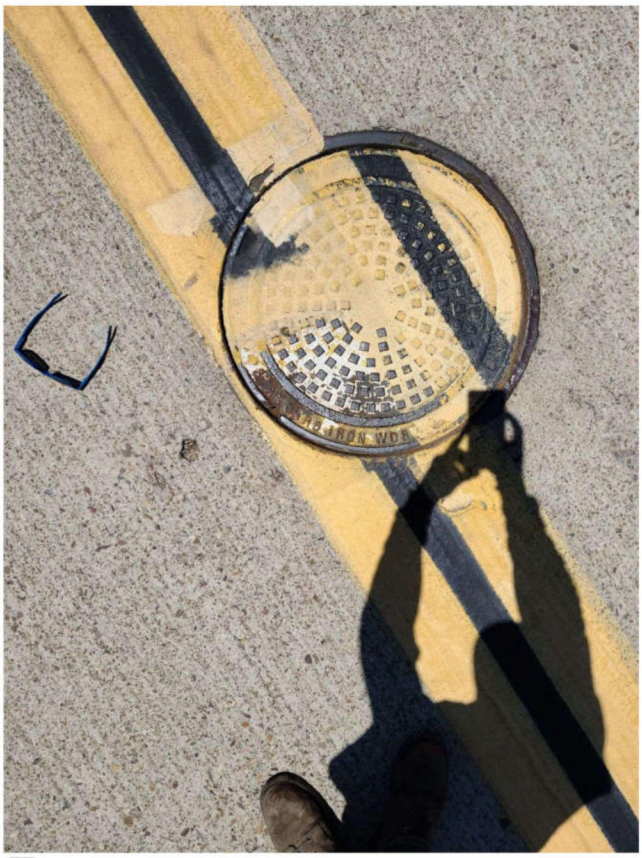
Wall			
Wall Diameter	0	**Wall By Size**	0
Wall Material		**Wall Depth**	
Wall Lining Interior		**Wall Lining Exterior**	
Wall Condition	Sound		

Bench / Channel			
Bench Present		**Bench Material**	
Bench Lining		**Channel Installed**	
Channel Material		**Channel Type**	
Channel Exposure		**Work Order**	
Project			

Custom			
Custom 1		**Custom 2**	
Custom 3		**Custom 4**	
Custom 5		**Custom 6**	
Custom 7		**Custom 8**	

Custom 9		Custom 10	
Cover 3			
Cover Type Hatch Single	No	**Cover Type Hatch Double**	No
Cover Type Lamphole	No	**Cover Type Removable Center**	No
		Cover Condition Restraint Missing	No
Cover Condition Restraint Defective	No		
Center Cover Size			
QA / QC			
Reviewed By		**Reviewer Certificate Number**	
		Consequence of Failure	
		Rim to Grade Exposed	
Bench Condition	Sound	**Channel Condition**	Sound

MANHOLE AQ044



Project

Surveyed By	Jason Bingham	**Certificate Number**	U-0417-07007758
Date / Time	7/3/2023 14:59	**Owner**	
Customer		**Sheet Number**	
PO Number		**Is Imperial**	True
Purpose	Sewer System Evaluation Survey		
Comments			

Manhole

Inspection Status	Surface Inspection	**Drainage Area**	
Manhole Number	AQ034	**Manhole Use**	Sanitary
Weather (Ground Conditions)		**Street**	Jericho Rd
City	La Mesa	**Location Details**	
Location Code	Local Rural Streets - Light traffic, town and city back streets, estate streets and curbside parking areas	**Additional Info**	Start of Chimney is offset from frame opening.

Manhole 2

Rim To Invert		**Grade To Invert**	
Rim To Grade		**Year Constructed**	
Year Renewed		**Pre-Cleaning**	
Date Cleaned		**Evidence of Surcharge**	No
Additional Component Information		**Media Label**	

Surface / Steps

Surface Type Asphalt	No	**Surface Type Concrete Pavement**	Yes
Surface Type Concrete Collar	No	**Surface Type Grass Dirt**	No
Surface Type Gravel	No	**Surface Type Other**	No
Inflow Potential For Runoff	Ponding	**Access Type**	Manhole
Step Number	3	**Step Material**	Metal

Cover 1

Cover Shape		**Cover Size**	
Cover Material		**Cover Type Solid**	No
Cover Type Vented	No	**Cover Type Gasketed**	No
Cover Type Bolted	No	**Cover Type Inner Cover**	No
Cover Type Locking	No	**Cover Size Width**	

Cover 2

Cover Bearing Surface Diameter		**Cover Frame Fit**	
Cover Condition Sound	Yes	**Cover Condition Cracked**	No
Cover Condition Broken	No	**Cover Condition Corroded**	No
Cover Condition Bolts Missing	No	**Cover Condition Missing**	No
Cover Insert Type	None	**Cover Bearing Surface Width**	

Hole / Insert

Hole Diameter		**Hole Number**	0
Insert Condition Sound	No	**Insert Condition Poorly Fitting**	No
Insert Condition Cracked	No	**Insert Condition Leaking**	No
Insert Condition Insert Fell	No	**Insert Condition Corroded**	No

Ring

Adjustment Ring Type	None	**Adjustment Ring Height**	
Ring Condition Sound	No	**Ring Condition Cracked**	No
Ring Condition Broken	No	**Ring Condition Corroded**	No
Ring Condition Leaking	No	**Ring Condition Poor Install**	No
Adjustment Ring Material			

Frame

Frame Material		**Frame Bearing Surface Width**	
Frame Bearing Surface Depth		**Frame Clear Open Diameter**	
Frame Condition Sound	Yes	**Frame Condition Cracked**	No
Frame Condition Broken	No	**Frame Condition Missing**	No
Frame Condition Corroded	No	**Frame Condition Coated**	No

Frame / Seal

Frame Offset Distance		**Frame Seal Inflow**	
Frame Depth	0	**Seal Condition Sound**	No
Seal Condition Cracked	No	**Seal Condition Loose**	No
Seal Condition Offset	No	**Seal Condition Missing**	No
		Frame Clear Open Width	

Chimney

Chimney Material 1		**Chimney Material 2**	
Chimney Ini		**Chimney Clear Opening**	
Chimney Depth		**Chimney Lining Interior**	
Chimney Lining Exterior		**Chimney Present**	
Chimney Condition	Sound		

Cone

Cone Type		**Cone Material**	
Cone Depth		**Cone Lining Interior**	
Cone Lining Exterior		**Cone Condition**	Sound

Wall

Wall Diameter	0	**Wall By Size**	0
Wall Material		**Wall Depth**	
Wall Lining Interior		**Wall Lining Exterior**	
Wall Condition	Sound		

Bench / Channel

Bench Present		**Bench Material**	
Bench Lining		**Channel Installed**	
Channel Material		**Channel Type**	
Channel Exposure		**Work Order**	
Project			

Custom

Custom 1		**Custom 2**	
Custom 3		**Custom 4**	
Custom 5		**Custom 6**	
Custom 7		**Custom 8**	
Custom 9		**Custom 10**	

Cover 3

Cover Type Hatch Single	No	**Cover Type Hatch Double**	No
Cover Type Lamphole	No	**Cover Type Removable Center**	No
		Cover Condition Restraint Missing	No
Cover Condition Restraint Defective	No		
Center Cover Size			

QA / QC

Reviewed By		**Reviewer Certificate Number**	
		Consequence of Failure	
		Rim to Grade Exposed	
Bench Condition	Sound	**Channel Condition**	Sound

Created with the POSM report generator

MANHOLE AQ034

Project

Surveyed By	Jason Bingham	**Certificate Number**	U-0417-07007758
Date / Time	7/3/2023 14:59	**Owner**	
Customer		**Sheet Number**	
PO Number		**Is Imperial**	True
Purpose	Sewer System Evaluation Survey		
Comments			

Manhole

Inspection Status	Surface Inspection	**Drainage Area**	
Manhole Number	AQ032	**Manhole Use**	Sanitary
Weather (Ground Conditions)		**Street**	Jericho Rd
City	La Mesa	**Location Details**	
Location Code	Local Rural Streets - Light traffic, town and city back streets, estate streets and curbside parking areas	**Additional Info**	

Manhole 2

Rim To Invert		**Grade To Invert**	
Rim To Grade		**Year Constructed**	
Year Renewed		**Pre-Cleaning**	
Date Cleaned		**Evidence of Surcharge**	No
Additional Component Information		**Media Label**	

Surface / Steps

Surface Type Asphalt	Yes	**Surface Type Concrete Pavement**	No
Surface Type Concrete Collar	No	**Surface Type Grass Dirt**	No
Surface Type Gravel	No	**Surface Type Other**	No
Inflow Potential For Runoff	Ponding	**Access Type**	Manhole
Step Number	3	**Step Material**	Metal

Cover 1

Cover Shape		**Cover Size**	
Cover Material		**Cover Type Solid**	No

Cover Type Vented	No	**Cover Type Gasketed**	No
Cover Type Bolted	No	**Cover Type Inner Cover**	No
Cover Type Locking	No	**Cover Size Width**	

Cover 2

Cover Bearing Surface Diameter		**Cover Frame Fit**	
Cover Condition Sound	Yes	**Cover Condition Cracked**	No
Cover Condition Broken	No	**Cover Condition Corroded**	No
Cover Condition Bolts Missing	No	**Cover Condition Missing**	No
Cover Insert Type	None	**Cover Bearing Surface Width**	

Hole / Insert

Hole Diameter		**Hole Number**	0
Insert Condition Sound	No	**Insert Condition Poorly Fitting**	No
Insert Condition Cracked	No	**Insert Condition Leaking**	No
Insert Condition Insert Fell	No	**Insert Condition Corroded**	No

Ring

Adjustment Ring Type	None	**Adjustment Ring Height**	
Ring Condition Sound	No	**Ring Condition Cracked**	No
Ring Condition Broken	No	**Ring Condition Corroded**	No
Ring Condition Leaking	No	**Ring Condition Poor Install**	No
Adjustment Ring Material			

Frame

Frame Material		**Frame Bearing Surface Width**	
Frame Bearing Surface Depth		**Frame Clear Open Diameter**	
Frame Condition Sound	Yes	**Frame Condition Cracked**	No
Frame Condition Broken	No	**Frame Condition Missing**	No

Frame Condition Corroded	No	**Frame Condition Coated**	No

Frame / Seal			
Frame Offset Distance		**Frame Seal Inflow**	
Frame Depth	0	**Seal Condition Sound**	No
Seal Condition Cracked	No	**Seal Condition Loose**	No
Seal Condition Offset	No	**Seal Condition Missing**	No
		Frame Clear Open Width	

Chimney			
Chimney Material 1		**Chimney Material 2**	
Chimney Ini		**Chimney Clear Opening**	
Chimney Depth		**Chimney Lining Interior**	
Chimney Lining Exterior		**Chimney Present**	
Chimney Condition	Sound		

Cone			
Cone Type		**Cone Material**	
Cone Depth		**Cone Lining Interior**	
Cone Lining Exterior		**Cone Condition**	Sound

Wall			
Wall Diameter	0	**Wall By Size**	0
Wall Material		**Wall Depth**	
Wall Lining Interior		**Wall Lining Exterior**	
Wall Condition	Sound		

Bench / Channel			
Bench Present		**Bench Material**	
Bench Lining		**Channel Installed**	
Channel Material		**Channel Type**	
Channel Exposure		**Work Order**	
Project			

Custom			
Custom 1		**Custom 2**	
Custom 3		**Custom 4**	
Custom 5		**Custom 6**	
Custom 7		**Custom 8**	

Custom 9		Custom 10	
Cover 3			
Cover Type Hatch Single	No	**Cover Type Hatch Double**	No
Cover Type Lamphole	No	**Cover Type Removable Center**	No
		Cover Condition Restraint Missing	No
Cover Condition Restraint Defective	No		
Center Cover Size			
QA / QC			
Reviewed By		**Reviewer Certificate Number**	
		Consequence of Failure	
		Rim to Grade Exposed	
Bench Condition	Sound	**Channel Condition**	Defective

MANHOLE AQ032

PIPELINE INSPECTIONS

PIPELINE
AQ045-AQ044

Project Information

Surveyor Name	Jason Bingham	Certificate Number	U-0417-07007758
Owner		Customer	Dexter Wilson Engineering inc.
Drainage Area		PO Number	
Pipe Segment Reference		Date	7/19/2023 11:42
Street	Jericho Rd	City	La Mesa
Comments			

Manhole

Upstream MH	AQ045	Rim to Invert (U)	
Grade to Invert (U)		Rim to Grade (U)	
Downstream MH	AQ044	Rim to Invert (D)	
Grade to Invert (D)		Rim to Grade (D)	
Pipe Use	Sanitary Sewage Pipe	Direction of Survey	Downstream

Pipe

Height (Diameter)	8	Width	
Shape	Circular	Material	Vitrified Clay Pipe
Lining Method		Pipe Joint Length	
Total Length		Length Surveyed	86.4
Year Constructed		Year Renewed	

Misc

Flow Control		Media Label	DVD
Purpose	Sewer System Evaluation Survey (SSES)	Consequence of Failure	
Pre-Cleaning	Not Known	Date Cleaned	
Weather	Dry - No Precipitation During Survey	Location Code	Primary major arterial roads, interstates, numbered roads or town/city center roads for heavy vehicles.
Additional Info		Location Details	

Custom

Custom 1		Custom 2	
Custom 3		Custom 4	
Custom 5		Custom 6	
Custom 7		Custom 8	
Custom 9		Custom 10	

Project

Reverse Setup ID		Sheet (Group) Number	
Imperial Units (US)	True	Pressure Value	
Work Order		Project	Dexter Wilson Engineering
Coating Method		Completed	Yes

Insp Tech Used

CCTV	Yes	Laser	No
Sidewall	No	Sonar	No
Zoom	No	Other	No

Inspection

Inspection Status	Complete Inspection		
Reviewed By		Reviewer Certificate Number	

Count Groups

Taps	2	Roots	0
Cracks / Fractures	0	Broken / Holes / Collapse	0
Deposits	0	Obstruction	0
Abandoned Survey	0		

Scores

Structure Peak Score	0	Structure Peak Grade	1

Structure Mean Score	0	Structure Mean Grade	1
Service Peak Score	3	Service Peak Grade	5.8
Service Mean Score	0.03	Service Mean Grade	1

PIPELINE
AQ045-AQ044

Created with the  **report generator** Back

Project: Dexter Wilson Engineering

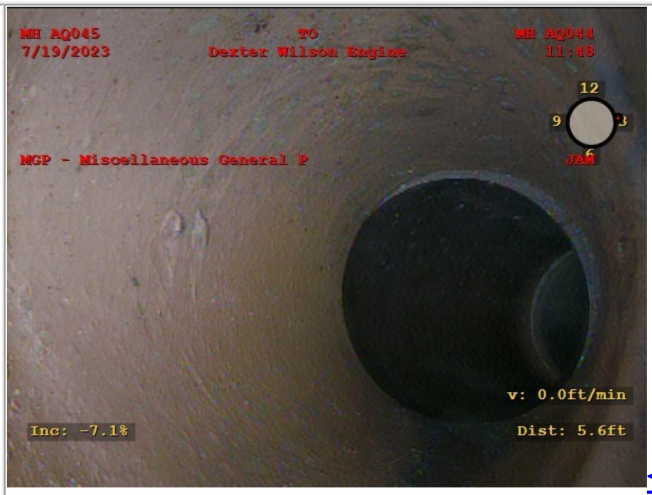
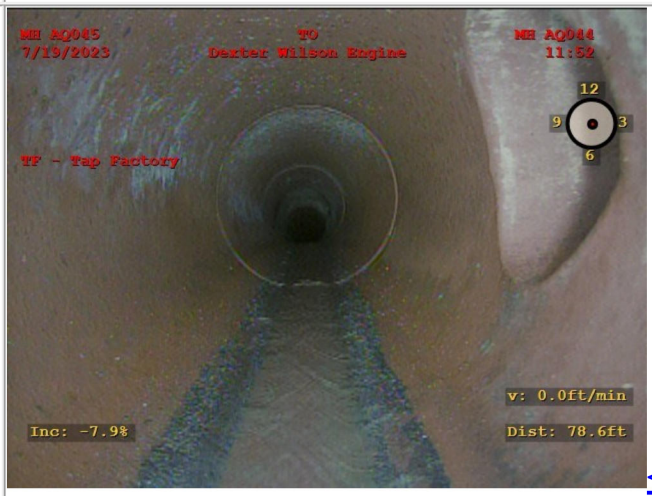
Date: 7/19/2023 11:42:00 AM
Street: Jericho Rd
Length Surveyed: 86.4
Run Number:
Height (Diameter): 8

Pipe Segment Reference:
Upstream MH: AQ045
Downstream MH: AQ044
Direction of Survey: Downstream
Material: Vitrified Clay Pipe

Distance	Fault Observation	Time	Picture
0.0	Access Point Manhole Severity: None Remarks: AQ045	00:00:00 00:00:00	 <="" a="">
0.0	Miscellaneous Water Level Severity: None Percent: 5	00:00:00 00:00:00	 <="" a="">

5.4	Tap Factory Defective Position: 2 Severity: None Size: 4 Remarks: JAM Maint Weight: 3	00:00:00 00:00:00	 <="" a="">

Distance	Fault Observation	Time	Picture
5.4	Picture Number: 2 Tap Factory Defective Position: 2	00:00:00	 <="" a="">

5.6	**Miscellaneous General Photo Severity: None Remarks: JAM**	**00:00:00 00:00:00**	 <="" a="">
78.6	**Tap Factory Position: 2 Severity: None Size: 4 Joint**	**00:00:00 00:00:00**	 <="" a="">

Distance	Fault Observation	Time	Picture

86.4	**Access Point Manhole Severity: None Remarks: AQ044**	**00:00:00 00:00:00**	 <="" a="">

Nassco C.C.T.V. Defect Code Information

Grade	Structural	O&M	Overall
5	0	0	0
4	0	0	0
3	0	3	3
2	0	0	0
1	0	0	0
Overall	0	3	3
Number of Defects	0	1	1
Pipe Rating	0000	3100	3100
Pipe Ratings Index	0	3	3

Nassco C.C.T.V. Defect Code Information

Distance	Video Ref	Code	Cont Defect	Value			Joint	Circumferential Location	
				Dimension		%		At / From	To
				1st	2nd				
0	00:00:00	AMH - Access Point Manhole							
		AQ045							
0	00:00:00	MWL - Miscellaneous Water Level				5			
5.4	00:00:00	TFD - Tap Factory Defective		4				2	
		JAM							
5.6	00:00:00	MGP - Miscellaneous General Photo							
		JAM							
78.6	00:00:00	TF - Tap Factory		4			X	2	
86.4	00:00:00	AMH - Access Point Manhole							
		AQ044							

Project Information			
Surveyor Name	Jason Bingham	**Certificate Number**	U-0417-07007758
Owner		**Customer**	Dexter Wilson Engineering inc.
Drainage Area		**PO Number**	
Pipe Segment Reference		**Date**	7/19/2023 11:53
Street	Jericho Rd	**City**	La Mesa
Comments			

Manhole			
Upstream MH	AQ044	**Rim to Invert (U)**	
Grade to Invert (U)		**Rim to Grade (U)**	
Downstream MH	AQ034	**Rim to Invert (D)**	
Grade to Invert (D)		**Rim to Grade (D)**	
Pipe Use	Sanitary Sewage Pipe	**Direction of Survey**	Downstream

Pipe			
Height (Diameter)	8	**Width**	
Shape	Circular	**Material**	Vitrified Clay Pipe
Lining Method		**Pipe Joint Length**	
Total Length		**Length Surveyed**	149
Year Constructed		**Year Renewed**	

Misc			
Flow Control		**Media Label**	DVD
Purpose	Sewer System Evaluation Survey (SSES)	**Consequence of Failure**	
Pre-Cleaning	Not Known	**Date Cleaned**	
Weather	Dry - No Precipitation During Survey	**Location Code**	Primary major arterial roads, interstates, numbered roads or town/city center roads for heavy vehicles.
Additional Info		**Location Details**	

Custom			
Custom 1		**Custom 2**	
Custom 3		**Custom 4**	
Custom 5		**Custom 6**	
Custom 7		**Custom 8**	

Custom 9		**Custom 10**	
Project			
Reverse Setup ID		**Sheet (Group) Number**	
Imperial Units (US)	True	**Pressure Value**	
Work Order		**Project**	Dexter Wilson Engineering
Coating Method		**Completed**	Yes
Insp Tech Used			
CCTV	Yes	**Laser**	No
Sidewall	No	**Sonar**	No
Zoom	No	**Other**	No

Inspection			
Inspection Status	Complete Inspection		
Reviewed By		**Reviewer Certificate Number**	

Count Groups			
Taps	3	**Roots**	0
Cracks / Fractures	0	**Broken / Holes / Collapse**	0
Deposits	0	**Obstruction**	0
Abandoned Survey	0		

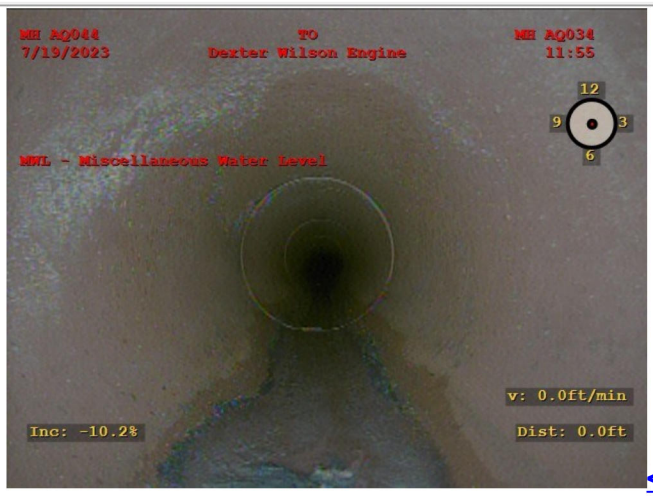
Scores			
Structure Peak Score	0	**Structure Peak Grade**	1
Structure Mean Score	0	**Structure Mean Grade**	1
Service Peak Score	6	**Service Peak Grade**	2
Service Mean Score	0.04	**Service Mean Grade**	1

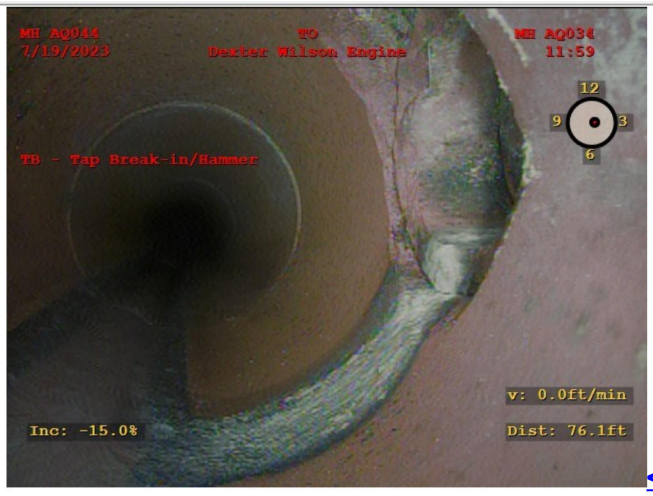
PIPELINE AQ044-AQ034

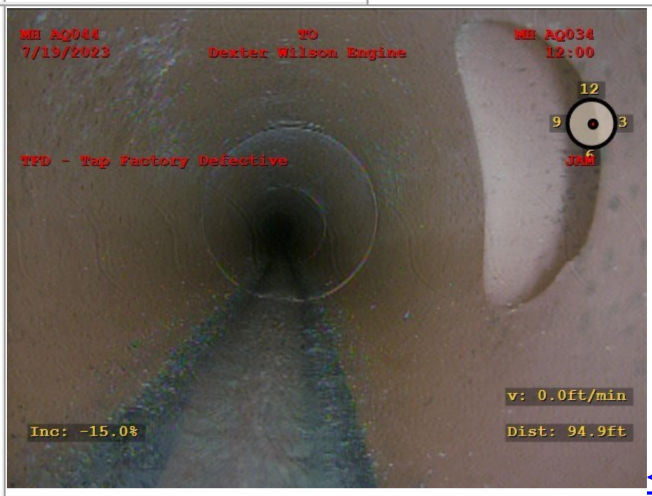
Project: Dexter Wilson Engineering

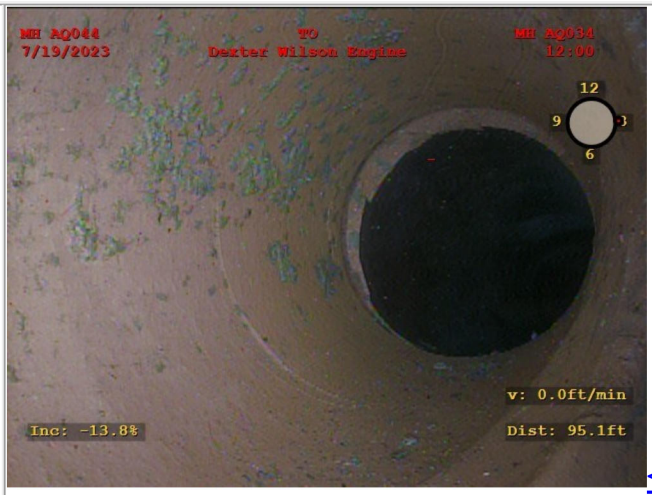
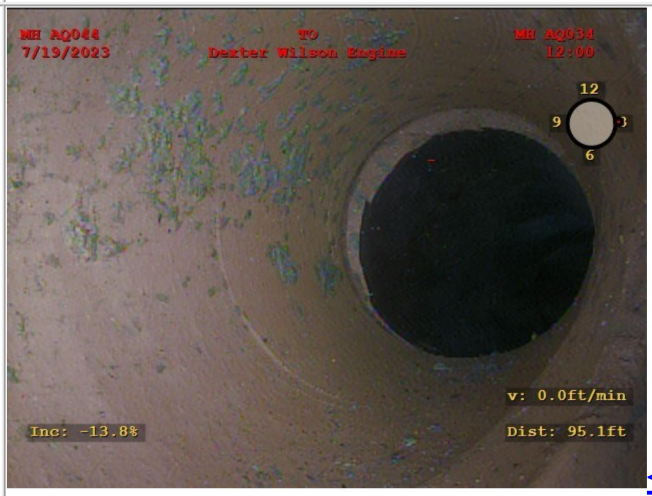
Date: 7/19/2023 11:53:00 AM
Street: Jericho Rd
Length Surveyed: 149
Run Number:
Height (Diameter): 8

Pipe Segment Reference:
Upstream MH: AQ044
Downstream MH: AQ034
Direction of Survey: Downstream
Material: Vitrified Clay Pipe

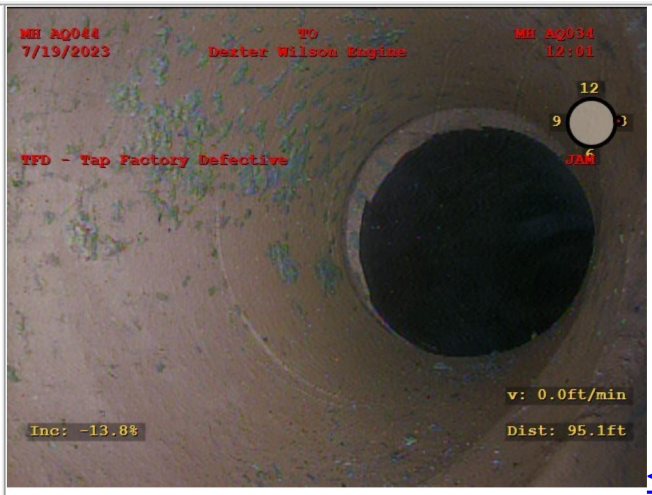
Distance	Fault Observation	Time	Picture
0.0	Access Point Manhole Severity: None Remarks: AQ044	00:00:00 00:00:00	 <="" a="">
0.0	Miscellaneous Water Level Severity: None Percent: 5	00:00:00 00:00:00	 <="" a="">

76.1	Tap Break-in/Hammer Position: 2 Severity: None Size: 4	00:00:00 00:00:00	 <="" a="">

Distance	Fault Observation	Time	Picture
94.9	Tap Factory Defective Position: 2 Severity: None Size: 4 Remarks: JAM Maint Weight: 3	00:00:00 00:00:00	 <="" a="">

94.9	**Picture Number: 2 Tap Factory Defective Position: 2**	**00:00:00**	 <="" a="">
94.9	**Picture Number: 3 Tap Factory Defective Position: 2**	**00:00:00**	 <="" a="">

Distance	Fault Observation	Time	Picture

95.1	**Tap Factory Defective Position: 2 Severity: None Size: 4 Remarks: JAM Maint Weight: 3**	00:00:00 00:00:00	 <="" a="">
149.0	**Access Point Manhole Severity: None Remarks: AQ034**	00:00:00 00:00:00	 <="" a="">

Nassco C.C.T.V. Defect Code Information

Grade	Structural	O&M	Overall
5	0	0	0
4	0	0	0
3	0	6	6
2	0	0	0
1	0	0	0
Overall	0	6	6
Number of Defects	0	2	2
Pipe Rating	0000	3200	3200
Pipe Ratings Index	0	3	3

Nassco C.C.T.V. Defect Code Information

Distance	Video Ref	Code	Cont Defect	Value			Joint	Circumferential Location	
				Dimension		%		At / From	To
				1st	2nd				
0	00:00:00	AMH - Access Point Manhole							
		AQ044							
0	00:00:00	MWL - Miscellaneous Water Level				5			
76.1	00:00:00	TB - Tap Break-in/Hammer		4				2	
94.9	00:00:00	TFD - Tap Factory Defective		4				2	
		JAM							
95.1	00:00:00	TFD - Tap Factory Defective		4				2	
		JAM							
149	00:00:00	AMH - Access Point Manhole							
		AQ034							

PIPELINE AQ034-AQ032

Project Information			
Surveyor Name	Jason Bingham	**Certificate Number**	U-0417-07007758
Owner		**Customer**	Dexter Wilson Engineering inc.
Drainage Area		**PO Number**	
Pipe Segment Reference		**Date**	7/19/2023 12:05
Street	Jericho Rd	**City**	La Mesa
Comments			

Manhole			
Upstream MH	AQ034	**Rim to Invert (U)**	
Grade to Invert (U)		**Rim to Grade (U)**	
Downstream MH	AQ032	**Rim to Invert (D)**	
Grade to Invert (D)		**Rim to Grade (D)**	
Pipe Use	Sanitary Sewage Pipe	**Direction of Survey**	Downstream

Pipe			
Height (Diameter)	8	**Width**	
Shape	Circular	**Material**	Vitrified Clay Pipe
Lining Method		**Pipe Joint Length**	
Total Length		**Length Surveyed**	35.2
Year Constructed		**Year Renewed**	

Misc			
Flow Control		**Media Label**	DVD
Purpose	Sewer System Evaluation Survey (SSES)	**Consequence of Failure**	
Pre-Cleaning	Not Known	**Date Cleaned**	
Weather	Dry - No Precipitation During Survey	**Location Code**	Primary major arterial roads, interstates, numbered roads or town/city center roads for heavy vehicles.
Additional Info		**Location Details**	

Custom			
Custom 1		**Custom 2**	
Custom 3		**Custom 4**	
Custom 5		**Custom 6**	
Custom 7		**Custom 8**	

Custom 9		**Custom 10**	
Project			
Reverse Setup ID		**Sheet (Group) Number**	
Imperial Units (US)	True	**Pressure Value**	
Work Order		**Project**	Dexter Wilson Engineering
Coating Method		**Completed**	Yes
Insp Tech Used			
CCTV	Yes	**Laser**	No
Sidewall	No	**Sonar**	No
Zoom	No	**Other**	No

Inspection			
Inspection Status	Complete Inspection		
Reviewed By		**Reviewer Certificate Number**	

Count Groups			
Taps	0	**Roots**	0
Cracks / Fractures	0	**Broken / Holes / Collapse**	0
Deposits	2	**Obstruction**	0
Abandoned Survey	0		

Scores			
Structure Peak Score	2	**Structure Peak Grade**	5.8
Structure Mean Score	0.11	**Structure Mean Grade**	1
Service Peak Score	2	**Service Peak Grade**	1
Service Mean Score	0.11	**Service Mean Grade**	1

Project: Dexter Wilson Engineering

Date: 7/19/2023 12:05:00 PM
Street: Jericho Rd
Length Surveyed: 35.2
Run Number:
Height (Diameter): 8

Pipe Segment Reference:
Upstream MH: AQ034
Downstream MH: AQ032
Direction of Survey: Downstream
Material: Vitrified Clay Pipe

Distance	Fault Observation	Time	Picture
0.0	Access Point Manhole Severity: None Remarks: AQ034	00:00:00 00:00:00	 <="" a="">
0.0	Miscellaneous Water Level Severity: None Percent: 5	00:00:00 00:00:00	 <="" a="">

2.7	Deposits Attached Grease Position: 5 To 7 Severity: None Cont Defect: S01 Percent: 0 Maint Weight: 2	00:00:00 00:00:00	 <="" a="">

Distance	Fault Observation	Time	Picture
13.9	Miscellaneous Water Level Sag Severity: None Cont Defect: S02 Percent: 15 Struct Weight: 2	00:00:00 00:00:00	 <="" a="">

35.1	**Deposits Attached Grease Position: 5 To 7 Severity: None Cont Defect: F01 Percent: 0 Maint Weight: 2**	**00:00:00 00:00:00**	 <="" a="">
35.2	**Miscellaneous Water Level Sag Severity: None Cont Defect: F02 Percent: 15 Struct Weight: 2**	**00:00:00 00:00:00**	 <="" a="">

Distance	Fault Observation	Time	Picture

35.2	**Access Point Manhole Severity: None Remarks: AQ032**	**00:00:00 00:00:00**	 <="" a="">"

Created with the POSM report generator

Nassco C.C.T.V. Defect Code Information

Grade	Structural	O&M	Overall
5	0	0	0
4	0	0	0
3	0	0	0
2	8	12	20
1	0	0	0
Overall	8	12	20
Number of Defects	4	6	10
Pipe Rating	2400	2600	2A00
Pipe Ratings Index	2	2	2

Nassco C.C.T.V. Defect Code Information

Distance	Video Ref	Code	Cont Defect	Value			Joint	Circumferential Location	
				Dimension		%		At / From	To
				1st	2nd				
0	00:00:00	AMH - Access Point Manhole							
		AQ034							
0	00:00:00	MWL - Miscellaneous Water Level				5			
2.7	00:00:00	DAGS - Deposits Attached Grease	S01			0		5	7
13.9	00:00:00	MWLS - Miscellaneous Water Level Sag	S02			15			
35.1	00:00:00	DAGS - Deposits Attached Grease	F01			0		5	7
35.2	00:00:00	MWLS - Miscellaneous Water Level Sag	F02			15			
35.2	00:00:00	AMH - Access Point Manhole							
		AQ032							