PHILLIP ROAD SITE
POTABLE WATER MASTER PLAN

6382 PHILLIP ROAD
ROSEVILLE, CALIFORNIA
(PLANNING APPLICATION 24-1010)

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I. INTRODUCTION

The Phillip Road Site (Proposed Project) Potable Water Master Plan (Plan) has been prepared at the request of Panattoni Development Company, Inc. (PDC) to meet the City of Roseville's (City) utility demand planning requirements and in support of the Phillip Road Site environmental review process.

Proposed land uses, tributary areas, irrigation generation rates, and peaking factors are used to size the potable water facilities for the Proposed Project. The Proposed Project will connect to the existing potable water lines located at the intersection of Blue Oaks Boulevard and Westbrook Boulevard, Grass Creek Drive, and Benchmark Drive.

The purposes of this Potable Water Master Plan are as follows:

- Estimate the expected potable water system demand for the Proposed Project during Near Term (Phases 1 and 2) and complete build-out.
- Determine impacts on the neighboring Creekview Specific Plan Area (CVSP) and Amoruso Ranch Specific Plan Area (ARSP).
- Size potable water system main pipelines for the Proposed Project.

I.A. PROJECT VICINITY:

The Proposed Project is located in the northwest edge of the City of Roseville as shown on **Exhibit 1 – Project Location Plan**. Pleasant Grove Creek and the Pleasant Grove Bypass Channel dissect the Proposed Project.

The Proposed Project will advance in multiple phases. It is expected to be completed in 6 phases, see **Exhibit 2 – Master Phasing Plan**. The first 4 phases are intended to be single family residences, the fifth phase is higher density residential, and the final stage is a combination of commercial and light industrial.

The first and second phases will be located in the easterly half of the project site located south of the Pleasant Grove Bypass Channel. The first phase will include the northerly half of this area and include the main road through the center of the project site, stopping at the southerly boundary of the bypass channel. Connections will be made to the existing water lines at Grass Creek Drive and the intersection of Blue Oaks Boulevard and Westbrook Boulevard during the first phase.

The third and fourth phases are located to the north of Pleasant Grove Bypass Channel. The third phase will include construction of a bridge crossing the channel and connection to existing water line in Benchmark Drive.

The fifth phase will be high density residential, located along Blue Oaks Boulevard on the easterly half of the project site.

The final phase will include the commercial and light industrial buildings located on the westerly portion of the site, south of the Pleasant Grove Bypass Channel.

I.B. PRE-DEVELOPMENT CONDITIONS:

The Proposed Project site is an undeveloped agricultural parcel that was originally planted during the 1950's, maintained in rice production through the 1990's, and has been planted in irrigated crops until the present.

The Pleasant Grove Creek Bypass Channel was constructed south of Pleasant Grove Creek during the summer of 2019 to augment flood mitigation/control in this area.

A 10-foot to 15-foot escarpment runs in a southeasterly direction from the Phillip Road Site entrance of the property's southern portion of the site to its eastern boundary.

The portion of the property north of Pleasant Grove Creek is also currently actively cultivated and irrigated with water from a long-established irrigation canal along the northern boundary.

I.C. PROPOSED PROJECT AREA DEVELOPMENT OPPORTUNITIES & CONSTRAINTS:

The Proposed Project is influenced by several factors, including the physical setting, land use, circulation considerations, and public policies. Two significant aspects that influence the development of the Proposed Project are described below and depicted on **Exhibit 3 – Tentative Map.**

- PLACER PARKWAY

  The proposed Placer Parkway will bisect the northerly portion of the Proposed Project.

- PLEASANT GROVE CREEK AND PLEASANT GROVE CREEK BYPASS CHANNEL

  The existing Pleasant Grove Creek and newly constructed Pleasant Grove Creek Bypass Channel divides the Proposed Project. A bridge will be needed in the future to access the area to the north when it is developed.

II. POTABLE WATER MASTER PLAN PROCESS

The Potable Water Study is used to determine the demand and distribution pipelines for the Proposed Project. The methodology being used in this Master Plan is based on the City of Roseville's Environmental Utilities Department. The current City of Roseville Design Standards (January 2025) were also utilized.

The Proposed Project will consist of Community Commercial (CC), Light Industrial (M1), Low Density Residential (LDR), High Density Residential (HDR), Open Space (OS) and Public/Quasi Public (P/QP) land uses. The Proposed Project land uses are shown on **Exhibit 3 – Tentative Map.**

The average day demand for land use is based on the methods used in the City of Roseville Design Standards (January 2025) as shown in **Table 1 – City of Roseville Demand Factors**.

Table 1 – City of Roseville Demand Factors

Land Use Category		Average Day Unit Water Demand Factors
Residential	LDR (<3.5 DU's/Ac)	***728 gpd/DU***
	LDR (3.5 to 5.0 DU's/Ac)	***600 gpd/DU***
	LMDR (>5.0 to 6.0 DU's/Ac)	***521 gpd/DU***
	LMDR (>6.0 to 8.0 DU's/Ac)	***430 gpd/DU***
	MDR (>8.0 to 12.0 DU's/Ac)	***323 gpd/DU***
	HDR (>12.0 to 16.0 DU's/Ac	***288 gpd/DU***
	HDR (>16.0 DU's/Ac)	***177 gpd/DU***
Commercial/Other	Commercial/Retail	***2,598 gpd/ac***
	Business Professional	***2,598 gpd/ac***
	Light Industrial	***2,598 gpd/ac***
	Industrial	***2,562 gpd/ac***
	Railroad Yard	***109 gpd/ac***
	Elementary Schools	***3,454 gpd/ac***
	High Schools	***4,068 gpd/ac***
	Public (Fire Station, etc)	***1,780 gpd/ac***
	Park/Recreation	***2,988 gpd/ac***
	Open Space/Major ROW	-
	Vacant/Unassigned	-

*Factors assume a 30% F.A.R. 50% F.A.R. for senior living.

The estimated potable water demand is based on land use. **Table 2 – Potable Water Demand -** shows the potable water demand.

Parcel LL-5, as shown in **Exhibit 3 – Tentative Map**, is assumed to contain a potential 40MW data center, adding approximately 480,000 gpd of peak demand flow which, per the city, the recycle water system will be able to supply that water demand after the construction of two pipelines as discussed in the Recycle Water Master Plan.

Table 2 - Potable Water Demand

Location on Site	Dwelling Units (DU)	Water Demand Area (ac)	Land Use	Average Day Unit Water Demand Factor[a]	Unit-Factor Units	Average Day Demand (gpd)[b]	Annual Demand (ac-ft/yr)	Recycled Water Demand (ac-ft/yr)[c]	Water Conservation Savings (ac-ft/yr)[d]	Peaking Factor[e]	Maximum Day Demand (gpd)	Peaking Factor[f]	Peak Flow (gpd)[g]	Design Flow (gpm)	Design Flow+2% (gpm)
LL 1	-	4.139	CC, Community Commercial	2,598	gpd/acre	10,753	12.0	4.5	2.65	2.0	21,506	1.7	36,561	25	26
LL 2	-	3.774	CC, Community Commercial	2,598	gpd/acre	9,805	11.0	4.1	2.41	2.0	19,610	1.7	33,336	23	24
LL 3	-	9.180	M1, Light Industrial	2,598	gpd/acre	23,850	26.7	10.0	5.87	2.0	47,699	1.7	81,089	56	57
LL 4	-	1.033	PQP, Public Quasi Public	1,780	gpd/acre	1,839	2.1	1.9	0.66	2.0	3,677	1.7	6,252	4	4
LL 5	-	8.173	M1, Light Industrial[h]	2,598	gpd/acre	21,233	23.8	546.6	5.23	2.0	42,467	1.7	72,194	50	51
LL 6	-	7.588	M1, Light Industrial	2,598	gpd/acre	19,714	22.1	8.2	4.85	2.0	39,427	1.7	67,026	47	47
LL 7	-	7.252	M1, Light Industrial	2,598	gpd/acre	18,841	21.1	7.9	4.64	2.0	37,681	1.7	64,058	44	45
LL 8	-	7.508	M1, Light Industrial	2,598	gpd/acre	19,506	21.9	8.2	4.80	2.0	39,012	1.7	66,320	46	47
LL 9	-	7.494	M1, Light Industrial	2,598	gpd/acre	19,469	21.8	8.1	4.79	2.0	38,939	1.7	66,196	46	47
LL 10	-	8.949	M1, Light Industrial	2,598	gpd/acre	23,250	26.0	9.7	5.72	2.0	46,499	1.7	79,048	55	56
LL 11	-	0.396	PQP, Public Quasi Public	1,780	gpd/acre	705	0.8	0.7	0.25	2.0	1,410	1.7	2,397	2	2
LL 12	162	25.598	LMDR (>6 to 8.0 DU's/AC), Low Density Residential	430	gpd/DU	69,660	78.0	0.0	16.46	2.0	139,320	1.7	236,844	164	168
LL 13	156	23.604	LMDR (>6 to 8.0 DU's/AC), Low Density Residential	430	gpd/DU	67,080	75.1	0.0	15.85	2.0	134,160	1.7	228,072	158	162
LL 14	-	3.010	PR, Park	2,988	gpd/acre	8,994	10.1	9.8	1.92	2.0	17,988	1.7	30,579	21	22
LL 15	135	5.859	HDR (>16 DU's/AC), High Density Residential	177	gpd/DU	23,895	26.8	8.5	3.75	2.0	47,790	1.7	81,243	56	58
LL 16	-	13.878	OS, Open Space	-		-	-	0.0	8.88	-	-	-	-	-	
LL 17	105	24.257	LDR (>3.5 to 5.0 DU's/AC), Low Density Residential	600	gpd/DU	63,000	70.6	0.0	10.67	2.0	126,000	1.7	214,200	149	152
LL 18	-	1.904	PR, Park	2,988	gpd/acre	5,689	6.4	6.2	1.22	2.0	11,378	1.7	19,343	13	14
LL 19	106	20.714	LMDR (>5 to 6.0 DU's/AC), Low Density Residential	521	gpd/DU	55,226	61.9	0.0	10.77	2.0	110,452	1.7	187,768	130	133
LL 20	-	1.026	OS, Open Space	-		-	-	0.0	0.66	-	-	-	-	-	
Total	664	185.336				462,508	518.1	634.4	112.05		925,015		1,572,526	1,092	1,114

(a) From Table of Section 8-6 of the City of Roseville Design Standards (January, 2025) (gpd/ac or gpd/du).
(b) Average Day Demand (gallons per day) = Water Demand Area x Average Day Demand Unit Flow Factor.
(c) Recycled Water Annual Demand from the Phillip Road Site Recycled Water Master Plan, Table 5.
(d) Water Conservation of Potable Water by Turf Reduction, Smart Controllers Recirculating Hot Water, Table 9, in the Water Conservation Plan
(e) Peaking factor from average day demand to maximum day demand per Section 8-7 of the City of Roseville Design Standards (January, 2025).
(f) Peaking factor from maximum day demand to peak hour demand per Section 8-7 of the City of Roseville Design Standards (January, 2025).
(g) Peak Hour Demand = Peaking Factor * Maximum Day Demand.
(h) Assumes parcel LL-5 will contain a potential 40MW data center, adding approximately 480,000 gpd of peak demand flow to recycled water.

II.A. MAXIMUM DAY DEMAND:

The Maximum Day Demand (MDD) is based on applying a peaking factor of 2.0 to the Average Day Demand (ADD). The MDD will be used for sizing the supply mains. The peaking factor is from the City of Roseville Design Standards.

II.B. FIRE FLOW DEMAND:

The maximum fire flow required by the City of Roseville for a commercial project is 4,000 gpm for sprinklered buildings. Per City of Roseville Standards, each fire hydrant shall not exceed 1,000 gpm.

II.C. MINOR LOSSES:

The minor losses in the system are accounted for by increasing the flow rate by 2%.

II.D. BUILDOUT DEMAND:

The ultimate Buildout of the project will include a potable water demand of 367.7 ac-ft/yr down from 518.1 ac-ft/yr. The ultimate Buildout potable water demand is the calculated Annual Demand (518.1 ac-ft/yr) with the recycled irrigation water demand (96.6 ac-ft/yr) and potable water conservation (53.8 ac-ft/yr) amounts subtracted. The recycled irrigation water demand (96.6 ac-ft/yr) is the irrigation demand calculated by the city, however with recycled water available, all irrigation for the project except the medium density residential, will use the recycled water system. Therefore, the irrigation demand is removed from the potable water demand. The ultimate buildout does not include Fire Flows.

III. POTABLE WATER SYSTEM INFRASTRUCTURE

III.A. SYSTEM DESCRIPTION:

The potable water system is designed to serve the Proposed Project areas, as shown in **Exhibit 3 – Tentative Map**. The potable water system transmission lines, comprised of 12-inch pipes, have been designed to convey potable water flows within the Proposed Project as shown in **Exhibit 4 – Proposed Near-Term Site Plan and Exhibit 5 – Proposed Buildout Site Plan.** The Proposed Project's main transmission line connects to the existing City of Roseville water system at three locations.

The first connection is at the intersection of Blue Oaks Boulevard and Westbrook Drive. The City has stated that a 24-inch pipe will replace or run parallel to the existing 12-inch pipe in Blue Oaks Boulevard. The proposed 24-inch pipe will start at Westbrook Drive and continue west to Phillip Road. If the 24-inch pipe is not installed prior to the start of the project, the project will be responsible for constructing the pipe from Westbrook Drive to Street A with the proposed near-term phases, during Phase 1. The remaining portion of the 24-inch in Blue Oaks Boulevard from Street A to Phillip Road will be installed when construction begins on the Innovation Center, during Phase 6 as shown in **Exhibit 2 – Master Phasing Plan**. A 16-inch pipe continues to the north on Phillip Road and will be constructed as the Innovation Center develops to the north. A stub will be placed at the north end of Phillip Road for a future connection to the proposed City of Roseville Ops Center.

The City will need to confirm the sizing of the proposed pipeline in Blue Oaks Boulevard as part of the City's Potable Water Master Plan, and a maximum diameter of up to 36-inches may be needed.

The second connection is at the west end of Grasscreek Drive. As part of the CVSP project a stub was built to the Proposed Project's east property line. This connection will be included in proposed near term phases, during Phase 1, per **Exhibit 2 – Master Phasing Plan.**

The third connection will be in the future at Benchmark Drive, when the Proposed Project begins to develop north of Pleasant Grove Creek, during Phase 3 per **Exhibit 2 – Master Phasing Plan**.

The low-density residential subdivisions will have a network of 8-in and 12-inch water mains in the street. The water main piping size is based on the current City of Roseville Design Standards (January 2025). The high-density residential development will have a 12-inch loop through the site.

Each building within the Innovation Center in the Proposed Project will have a 12-inch water line loop around the building. The loops will be connected with a common 12-inch line within the main North-South access road.

III.B. SYSTEM DESIGN CRITERIA:

The potable water system will be operated and owned by the City of Roseville. The City is responsible for all maintenance and operations upstream of the water meter, including the water meters. Each individual property owner is responsible for all onsite maintenance and operations downstream of the water meter.

The City has established a set of design standards for the potable water systems that they will operate and maintain. Their goal is to maintain operations to all customers on a consistent basis. See **Table 3 – City of Roseville Operational Criteria** for the City of Roseville Potable Water Operational Criteria.

Table 3 – City of Roseville Operational Criteria

Condition	Operation Value
Normal Minimum Residual Pressure	50 psi
Normal Maximum Residual Pressure	100 psi
Minimum Pressure at Peak Domestic and Fire Demand	20 psi

IV. RECYCLED WATER SUPPLY

The Proposed Project anticipates receiving a commitment for recycled water from the City for the amount discussed in the Recycled Water Master Plan. The recycled water pipes for the project have been sized to handle the irrigation and proposed data center demands for the Proposed Project.

The Recycled Water Master Plan discusses the proposed and future improvements.

The city potable water demand includes irrigation water. The irrigation flows will be subtracted from the water demand calculated by using the City of Roseville's unit demands for modeling and pipe sizing.

During Phase 6, one possible use of light industrial buildings is for a data center. The data center requires water for the cooling systems. The city has stated that the City of Roseville Recycled Water system does have the capacity to meet this requirement, 480,000 gpd or 537.7 ac-ft/yr. The availability is dependent on the completion of the following two projects: (1) 24" pipeline in Blue Oaks Blvd between West Park Drive and Westbrook Blvd and (2) 12" pipeline located in Blue Oaks Blvd between Westbrook Blvd and Phillip Road Site. See the Recycled Water Master Plan for City of Roseville Recycled Water Improvements.

V. HYDRAULIC MODEL ANALYSIS

V.A. HYDRAULIC MODEL ANALYSIS CRITERIA:

The following procedure was used for the preliminary assumptions used for the modeling of the potable water system:

- A Hazen Williams "C" factor of 130 was used for all pipes in the potable water system.
- Steady state condition.
- Operation demand flows increased by 2% to account for system losses.
- Minimum pressure of 50 psi at service connections.
- Minimum Pressure of 20 psi during fire flow.
- Velocity in pipes shall not exceed 6 fps for normal operating conditions.
- Velocity in pipes shall not exceed 12 fps for a simulated fire flow conditions.
- All new pipelines are required to be a minimum of 8 inches, or 6 inches if located in cul-de-sacs..
- Where Pipe depth is unknown, assumed 4 feet of cover for transmission mains (16-inch or larger), 3 feet of cover for pipes smaller than 16-inch diameter.
- Project Datum (N.A.V.D. 88) = As-built Plans (N.G.V.D. 29) + (+/-) 2 feet.
- Modeling was conducted using Bentley OpenFlows WaterCAD® 2024

V.B. HYDRAULIC MODEL ASSUMPTIONS:

The Proposed Project was analyzed during different scenarios: 1) Near Term, 2) Buildout, and 3) Roseville Operations Center operational. Each scenario is discussed below.

- **Near-Term**: Demands in the model reflect Phase 1 and 2 of the Proposed Project, it includes Areas LL-11 to LL-14 as shown on **Exhibit 3 – Tentative Map**. **Exhibit 4 – Proposed Near-Term Site Plan,** shows development being completed through Phase 2. The near-term potable water demand is shown in **Table 4 – Near-Term Potable Water Demand**.

Table 4 – Near-Term Potable Water Demand				
Condition	**Design Flow Demand (gpm)**	**Design Flow Without Fire Flow +2% (gpm)**	**Fire Demand (gpm)**	**Design Flow with Fire Flow + 2% (gpm)**
Near-Term	345	354	1,500	1,884

The MDD is applied to the upper most service connection nodes for the Proposed Project's residences. See **Table 5 – Near-Term Potable Water Demand and Location** for flow demand applied at each point of connection and the corresponding node label.

Table 5 – Near-Term Potable Water Demand and Location		
Land Use Served	**Potable Water Design Flow (gpm)**	**Model Node**
Sewer Lift Station (LL-11)	2	J-66
Phase 1 (LL-12)	168	J-81
Phase 2 (LL-13)	162	J-19
South Park (LL-14)	22	J-41
Fire Hydrant	765	FH-2
Fire Hydrant	765	FH-25
Total	1,884	

The connection pressures are based off the City of Roseville Modeling Results sent to Laugenour and Meikle on December 12, 2025, in a Technical Memorandum by West Yost, **See Appendix A – City Potable Water Model Analysis.**

- **Buildout**: Demands in the model reflect complete buildout of the Proposed Project as shown in **Exhibit 3 – Tentative Map** and **Exhibit 5 – Proposed Buildout Site Plan.** The Buildout potable water demand is shown in **Table 6 – Buildout Potable Water Demand**.

Table 6 – Buildout Potable Water Demand				
Condition	**Design Flow (gpm)**	**Design Flow Without Fire Flow +2% (gpm)**	**Fire Demand (gpm)**	**Design Flow with Fire Flow + 2% (gpm)**
Buildout	1,092	1,114	4,000	5,194

The MDD is applied to the service connection nodes for the Proposed Project's buildings. See **Table 7 – Buildout Potable Water Demand and Location** for flow demand applied at each point of connection and the corresponding node label.

Table 7 – Buildout Potable Water Demand and Location		
Land Use Served	**Potable Water Design Flow + 2%(gpm)**	**Model Node**
Sewer Lift Station (LL-11)	2	J-66
Phase 1 (LL-12)	168	J-81
Phase 2 (LL-13)	162	J-19
Phase 3 (LL-17)	152	J-86
Phase 4 (LL-19)	133	J-115
Phase 6 (LL-15)	58	SERV-HDR-2
South Park (LL-14)	22	J-41
North Park Phase 3 (LL-18)	14	J-94
Buildings A-C (LL-1 to LL-3)	107	J-9
Buildings D-F (LL-5 to LL-7)	143	J-35
Building G-I (LL-8 to LL-10)	150	J-66
Substation (LL-4)	4	J-64
Fire Hydrant (Building C)	1,020	FH-44
Fire Hydrant (Building D)	1,020	FH-45
Fire Hydrant (Building E-South)	1,020	FH-46
Fire Hydrant (Building E-North)	1,020	FH-47
Total	5,194	

The connection pressures are based off the City of Roseville Modeling Results sent to Laugenour and Meikle on December 12, 2025, in a Technical Memorandum by West Yost, **See Appendix A – City Potable Water Model Analysis.** It is assumed that the Creekview project will be completed.

The point of connection was modeled using a reservoir with a water surface height set at the HGL shown in **See Appendix A – City Potable Water Model Analysis** to create constant pressure. The water surface height is the connection pressure supplied by the City of Roseville (**Appendix A – City Potable Water Model Analysis).** It is assumed that the existing potable water system can supply the needed volume of water at the constant pressure.

- **Roseville Operations Center:** The City of Roseville plans to construct an Operations Center located approximately two miles to the West of the Proposed Project Site. The domestic water demand is 50,000 gallons per day. Demands for the fire flow at the Roseville Operations Center were supplied as 4,000 gpm. To verify the Proposed Project can supply sufficient pressure for the future Operations Center, a scenario was modeled using the total water demand. The demand was applied at Node J-65.

V.C. HYDRAULIC MODEL RESULTS:

The near-term without fire flow model node, pipe and network exhibits are shown in **Appendix B - Potable Water Plan – Near Term Onsite Without Fire Flow Model Results**. The entire demand for Phase 1 was placed at the most northerly node, J-81. The demand for Phase 2 was placed at the mostly southerly node, J-19.

The near-term with fire flow model node, pipe and network exhibits are shown in **Appendix C - Potable Water Plan – Near-Term Onsite with Fire Flow Model Results**. Nodes were placed at junctions and fire hydrant locations throughout the Proposed Project. The two (2) fire hydrants (FH-2, and FH-25) are the farthest from the points of connection, each have a demand of 1,020 gpm.

The Buildout without fire flow model node, pipe and network exhibits are shown in **Appendix D - Potable Water Plan – Buildout Onsite Without Fire Flow Model Results**. It includes the water demands of the Near-Term model plus Nodes were placed at three locations that all nine buildings connect to the water main (J-9, J-35 and J-66) and Nodes for Phases 3, 4 and 5 residential (J-86, J-115, J-99 and SERV-HDR-2).

The buildout with fire flow model node, pipe and network exhibits are shown in **Appendix E – Potable Water Plan – Buildout Onsite with Fire Flow Model Results**. It includes the water demand from the Buildout without fire flow and added the fire hydrants. The four (4) fire hydrants (FH-45, FH-46, FH-47, and FH-48) are the farthest from the points of connection each have a demand of 1,020 gpm.

The Operation Center demand is made up of two components: potable water demand and fire demand. The potable water demand is 50,000 gpd, as supplied by the city. The potable water demand was evenly applied over an 8 hr work schedule. By applying the two peaking factors, 2.0 and 1.7, and adding the 2% results in a design demand of 361 gpm. The fire flow of 4,000 gpm was applied to the last Node (J-65) along Phillip Road, approximately 10,000 ft East of the proposed Operation Center, at the intersection of Phillip Road and Blue Oaks Boulevard. The potable water demand for the Proposed Phillip Road Site project remained, but the Fire Flow was removed from the Proposed Phillip Road Site project's fire hydrants. Both the Near-Term and Buildout conditions were modeled to determine feasibility due to a question of timing for the two projects. For node, pipe and network exhibits see Appendices **Appendix F – Potable Water Plan – Near-Term Onsite with Fire Flow To Operations Center Model Results** and **Appendix G – Potable Water Plan – Buildout Onsite With Fire Flow To Operations Center Model Results**.

The project will be served by the City's potable water system within Pressure Zone 4 (Zone 4). The data provided by the City of Roseville modeling for the buildout condition indicates the points of connection pressures varies from 49.5 psi to 52 psi. More recent modeling of near-term conditions indicates the buildout data provided may be overstated by as much as 9 psi. Since the minimum pressure per City of

Roseville standards is 50 psi, the city will be conducting a Pressure Reducing Station (PRS) optimization study for Zone 4 to address low-pressure conditions and define PRS improvements and timing, which will require cost sharing by the Project proponents.

VI. CONCLUSIONS

Based on the information contained within this Potable Water Master Plan and the model analysis of the system, the following conclusions are noted:

- The near-term system without fire flow meets the 50-psi pressure requirement throughout the system including the northerly node (J-81, 70 psi) and southerly node (J-19, 68 psi). The Proposed Project approximately matches the points of connections, and the slight variations are due to elevation changes in the project site.

- The near-term system with fire flow meets the 20-psi pressure at the lowest pressure fire hydrant (FH-2, 44 psi and FH-25, 66 psi).

- The buildout system without fire is slightly below the 50-psi pressure at the lowest pressure building connection (48 psi). There is very little loss in the system, but the project slopes up to the west, therefore the pressure decreases. The Proposed Project approximately matches the points of connection; the points of connection pressure vary 49.5 to 51-psi and the slight variations are due to elevation changes in the project site.

- The buildout system with fire flow meets the 20-psi pressure at the lowest pressure fire hydrant (43 psi).

- The pressure at the westerly bend in Phillip Road as it heads towards the City of Roseville Operations center for the Near-Term and Buildout state was found to be 63-psi and 42 psi, respectively.

- The proposed Phillip Road Site project has two connections through the existing neighboring subdivision, Creekview, at the westerly terminus of Benchmark Drive and Grasscreek Drive. Both of the connections are with a 12" water stub. The Creekview (CVSP) Potable Master Plan did not assume any potable water demands for the Phillip Road Site project. The master plan did include modeling that includes fire flow. Based off the modeling for Phillip Road, the maximum flow required from the Creekview subdivision at any one point of connection during buildout, is 371 gpm (Grasscreek Drive). **Table 8 – Potable Water Flows from Points of Connection** shows the flows from each point connection during regular demands, not including fire flow,

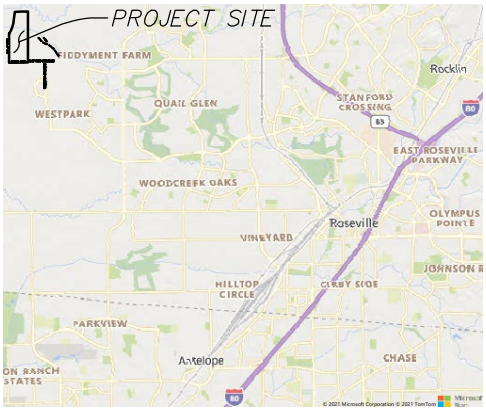
Table 8 – Potable Water Flows from Points of Connection

Flow Condition	Blue Oak 24" Pipe (gpm)	Creekview, Grasscreek Drive, 12" Pipe (gpm)	Creekview, Benchmark Drive, 12" Pipe (gpm)	Total
Near Term	159	195	0	354
Buildout	375	371	368	1,114

The flows coming from the points of connection are dictated by the original pressure supplied to the model and the headloss to the demand location. The three points of connection at Creekview has the highest pressure and the Blue Oaks Boulevard pipe has the lowest pressure all have the same hydraulic grade line. Therefore, the flows are based on the headloss in the system and when the flows are spread throughout the system, the flows are approximately even.

The CVSP Potable Water Master Plan did model a fire flow from two of the points of connection, Grasscreek Drive (CVSP model CV-20) and Benchmark Drive (CVSP model CV-01). The Grasscreek Drive fire flow was 2,000 gpm and the Benchmark Drive fire flow was 2,500 gpm and resulted in a pressure at the nodes of 55 psi and 58 psi, respectively. Based off the fire flow modeling, the piping network can handle the much lower demands of the Phillip Road project. By connecting to the Phillip Road Site project, Creekview Subdivision will also add additional loops to draw water from the 24" water main located in Blue Oaks Drive. Therefore, increasing the accessibility to potable water supply.

EXHIBITS



VICINITY

0 750 1500 3000

LM

SCALE: 1"=1,500'

EXHIBIT 1
PROJECT LOCATION PLAN
FOR
PHILLIP ROAD SITE

CITY OF ROSEVILLE,
PLACER COUNTY, CALIFORNIA
SHEET 1 OF 1 SEPTEMBER 26, 2025

LM LAUGENOUR AND MEIKLE
CIVIL ENGINEERING · LAND SURVEYING · PLANNING
608 COURT STREET, WOODLAND, CALIFORNIA 95695 · PHONE: (530) 662-1755
P.O. BOX 828, WOODLAND, CALIFORNIA 95776 · FAX: (530) 662-4602

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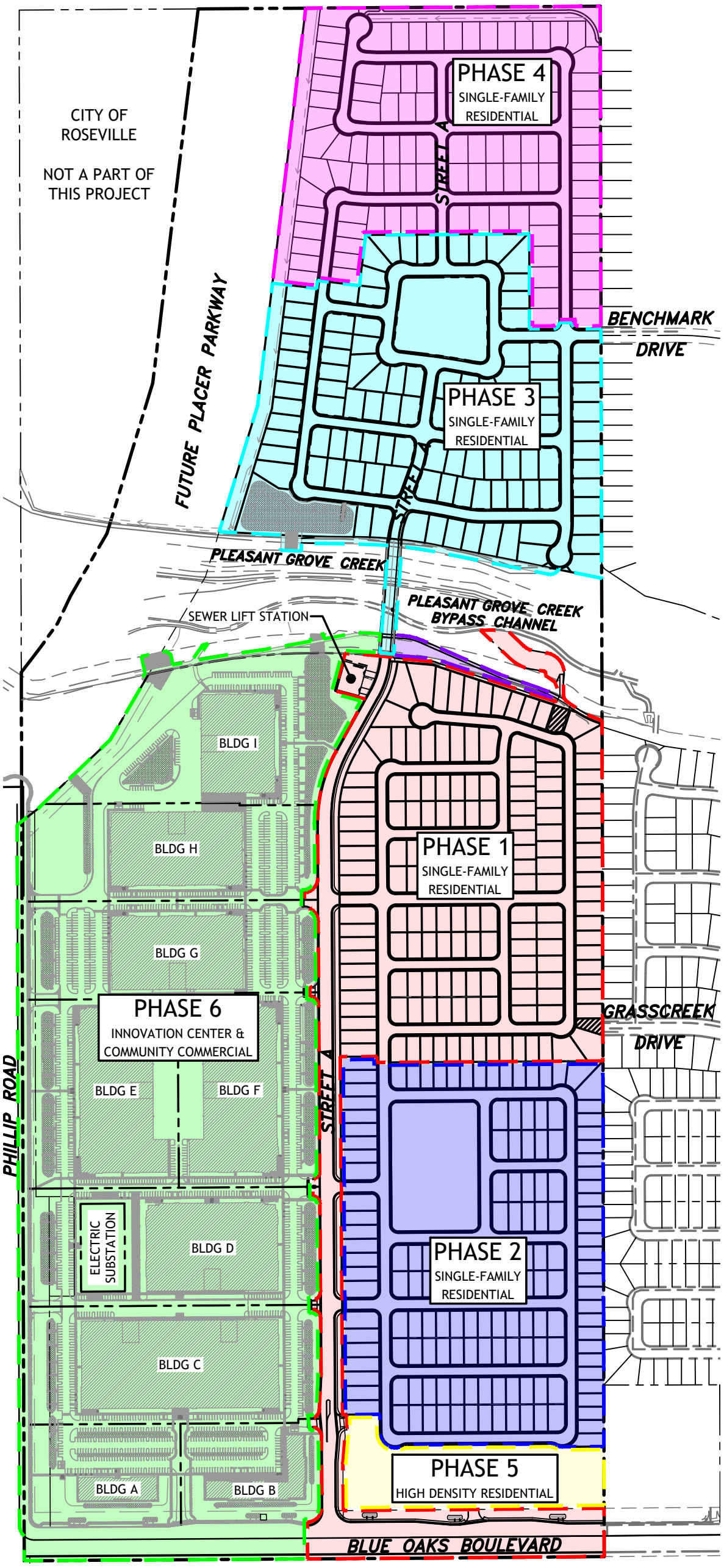

0 200 400 800

LM

SCALE: 1"=400'

EXHIBIT 2

MASTER PHASING PLAN

FOR

PHILLIP ROAD SITE

LOCATED IN A PORTION OF THE WEST HALF OF THE WEST HALF OF THE WEST HALF OF SECTION 14, AND A PORTION OF THE EAST HALF OF THE EAST HALF OF THE EAST HALF OF SECTION 15, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN, CITY OF ROSEVILLE, PLACER COUNTY, CALIFORNIA.

SHEET 1 OF 1 NOVEMBER 13, 2025

LM LAUGENOUR AND MEIKLE
CIVIL ENGINEERING · LAND SURVEYING · PLANNING
608 COURT STREET, WOODLAND, CALIFORNIA 95695 · PHONE: (530) 662-1755
P.O. BOX 828, WOODLAND, CALIFORNIA 95776 · FAX: (530) 662-4602

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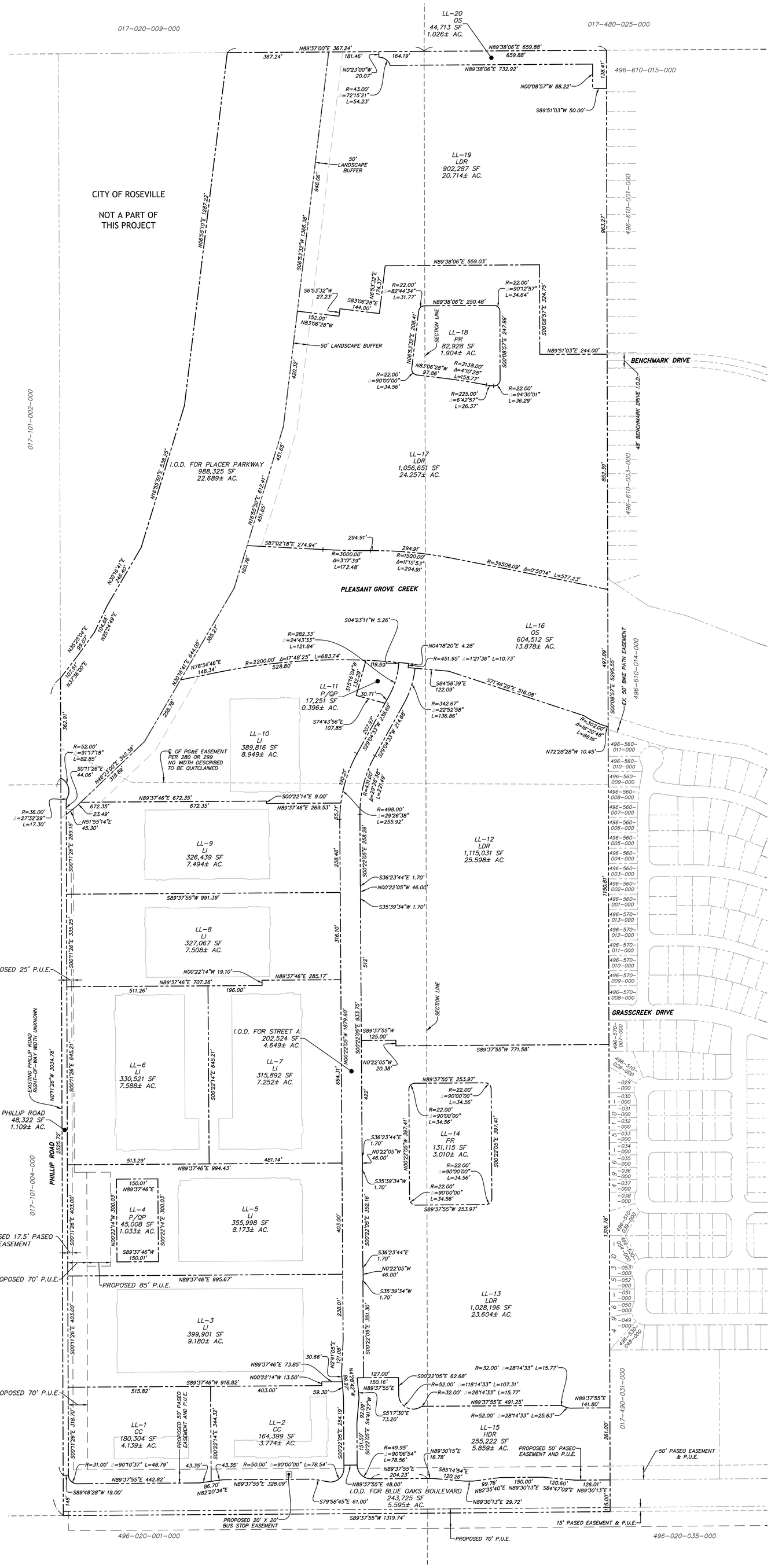

LOT	PROPOSED USE	GENERAL PLAN DESIGNATION	ZONINING	GROSS ACRES±	DWELLING UNITS	DENSITY
LL-1	BUILDING A	CC	C-PD	4.139	–	–
LL-2	BUILDING B	CC	C-PD	3.774	–	–
LL-3	BUILDING C	LI	ITP-PD	9.180	–	–
LL-4	ROSEVILLE ELECTRIC SUBSTATION	P/QP	P/QP	1.033	–	–
LL-5	BUILDING D	LI	ITP-PD	8.173	–	–
LL-6	BUILDING E	LI	ITP-PD	7.588	–	–
LL-7	BUILDING F	LI	ITP-PD	7.252	–	–
LL-8	BUILDING G	LI	ITP-PD	7.508	–	–
LL-9	BUILDING H	LI	ITP-PD	7.494	–	–
LL-10	BUILDING I	LI	ITP-PD	8.949	–	–
LL-11	SANITARY SEWER LIFT STATION	P/QP	P/QP	0.396	–	–
LL-12	VILLAGE 1	LDR	RS/DS	25.598	162	6.33 DU/AC.
LL-13	VILLAGE 2	LDR	RS/DS	23.604	156	6.61 DU/AC.
LL-14	PARK (SOUTH)	PR	PR	3.010	–	–
LL-15	VILLAGE 5	HDR	R3	5.859	135	23.04 DU/AC.
LL-16	PLEASANT GROVE CREEK AND BYPASS CHANNEL	OS	OS	13.878	–	–
LL-17	VILLAGE 3	LDR	RS/DS	24.257	105	4.33 DU/AC.
LL-18	PARK (NORTH)	PR	PR	1.904	–	–
LL-19	VILLAGE 4	LDR	RS/DS	20.714	106	5.12 DU/AC.
LL-20	BIKE TRAIL	OS	OS	1.026	–	–
BLUE OAKS BOULEVARD				5.595	–	–
PHILLIP ROAD				1.109	–	–
STREET A				4.649	–	–
PLACER PARKWAY				22.689	–	–
TOTAL				219.38	664	

NOTE:
SEE SHEET 4 FOR ADDITIONAL UTILITY EASEMENTS.

REGISTERED PROFESSIONAL ENGINEER
BRYAN P. BOYNTON
No. 41804
CIVIL
STATE OF CALIFORNIA

LARGE LOT SUBDIVISION
EXHIBIT 3
TENTATIVE MAP
FOR
PHILLIP ROAD SITE

LOCATED IN A PORTION OF THE WEST HALF OF THE WEST HALF OF THE WEST HALF OF SECTION 14, AND A PORTION OF THE EAST HALF OF THE EAST HALF OF THE EAST HALF OF SECTION 15, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN, CITY OF ROSEVILLE, PLACER COUNTY, CALIFORNIA.

LM LAUGENOUR AND MEIKLE
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P.O. BOX 828, WOODLAND, CALIFORNIA 95776 · FAX: (530) 662-4602

SEPTEMBER 26, 2025

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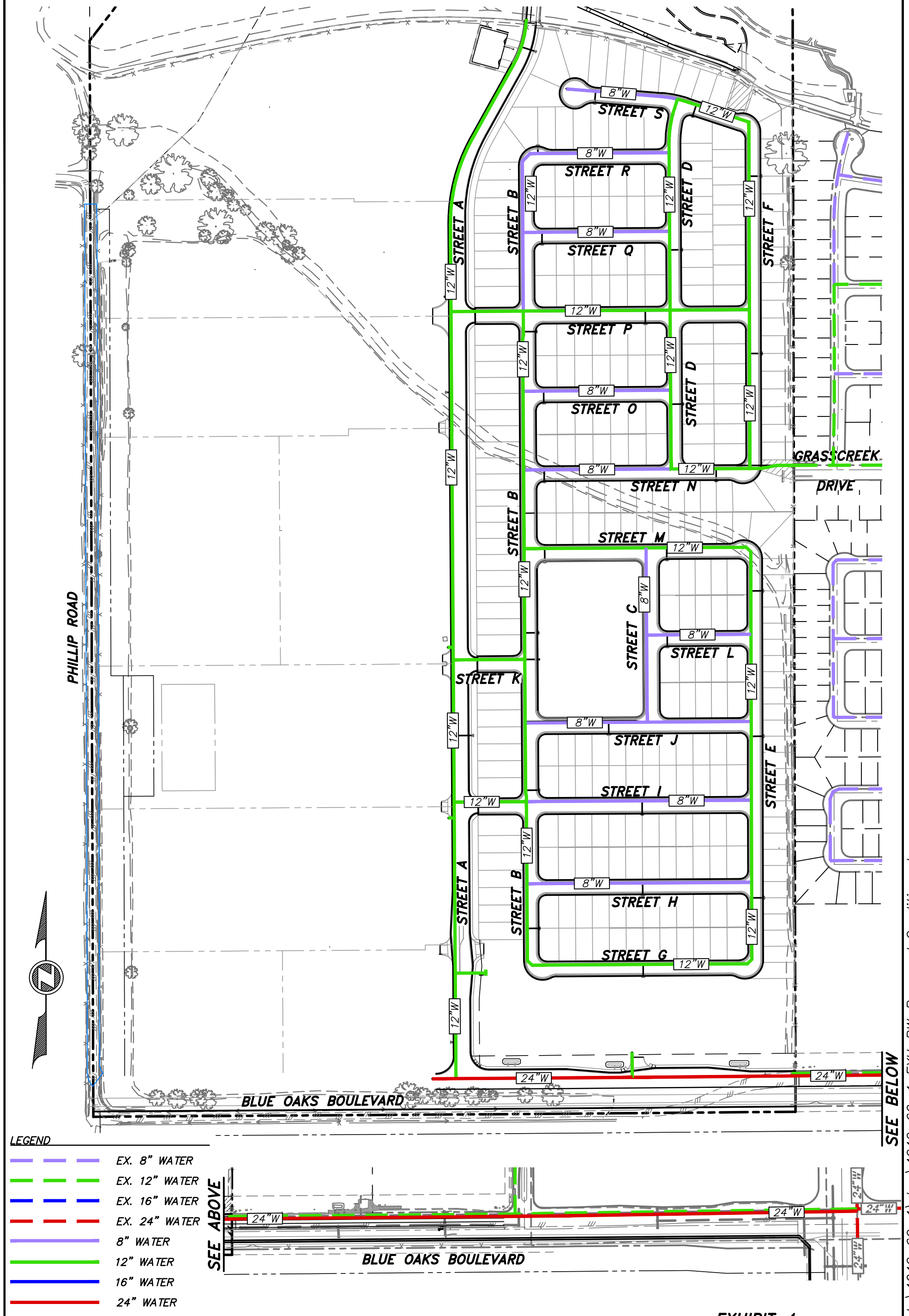

EXHIBIT 4
PROPOSED NEAR-TERM SITE PLAN
FOR
PHILLIP ROAD SITE
PHILLIP ROAD,
CITY OF ROSEVILLE, CALIFORNIA
SHEET 1 OF 1 DECEMBER 16, 2025

SCALE: 1"=250'

LM LAUGENOUR AND MEIKLE
CIVIL ENGINEERING · LAND SURVEYING · PLANNING
608 COURT STREET, WOODLAND, CALIFORNIA 95695 · PHONE: (530) 662-1755
P.O. BOX 828, WOODLAND, CALIFORNIA 95776 · FAX: (530) 662-4602

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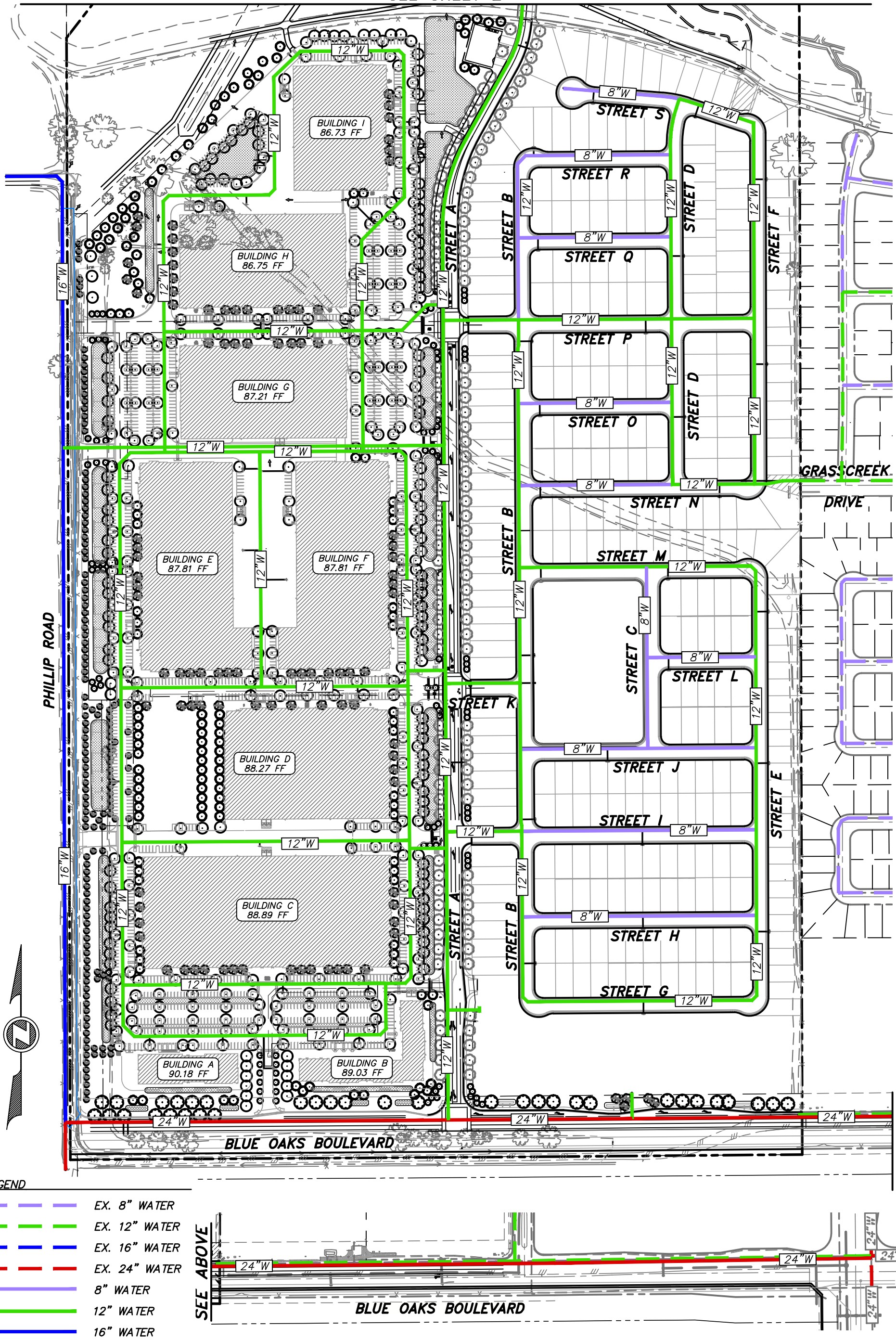
SEE SHEET 2



LEGEND

- EX. 8" WATER
- EX. 12" WATER
- EX. 16" WATER
- EX. 24" WATER
- 8" WATER
- 12" WATER
- 16" WATER
- 24" WATER

EXHIBIT 5
PROPOSED BUILDOUT SITE PLAN
FOR
PHILLIP ROAD SITE
PHILLIP ROAD,
CITY OF ROSEVILLE, CALIFORNIA
SHEET 1 OF 2 DECEMBER 16, 2025

SCALE: 1"=250'

LM LAUGENOUR AND MEIKLE
CIVIL ENGINEERING · LAND SURVEYING · PLANNING
608 COURT STREET, WOODLAND, CALIFORNIA 95695 · PHONE: (530) 662-1755
P.O. BOX 828, WOODLAND, CALIFORNIA 95776 · FAX: (530) 662-4602

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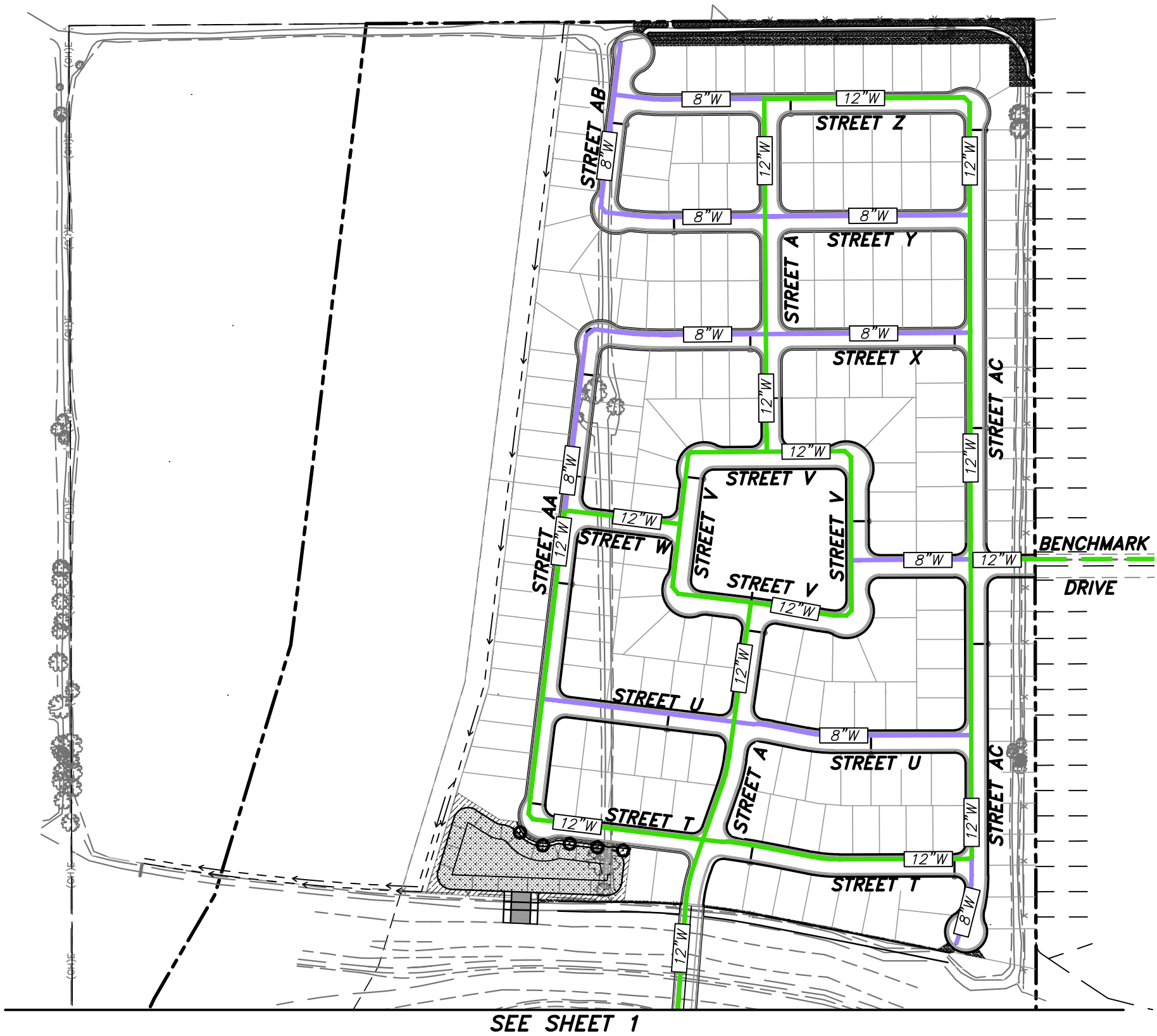

LEGEND

- EX. 8" WATER
- EX. 12" WATER
- EX. 16" WATER
- EX. 24" WATER
- 8" WATER
- 12" WATER
- 16" WATER
- 24" WATER

LM LAUGENOUR AND MEIKLE
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608 COURT STREET, WOODLAND, CALIFORNIA 95695 · PHONE: (530) 662-1755
P.O. BOX 828, WOODLAND, CALIFORNIA 95776 · FAX: (530) 662-4602

0 125 250 500

SCALE: 1"=250'

EXHIBIT 5
PROPOSED BUILDOUT SITE PLAN
FOR
PHILLIP ROAD SITE
PHILLIP ROAD,
CITY OF ROSEVILLE, CALIFORNIA
SHEET 2 OF 2 DECEMBER 16, 2025

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APPENDIX A

CITY POTABLE WATER MODEL ANALYSIS

Prepared by:

WEST YOST

Prepared for:

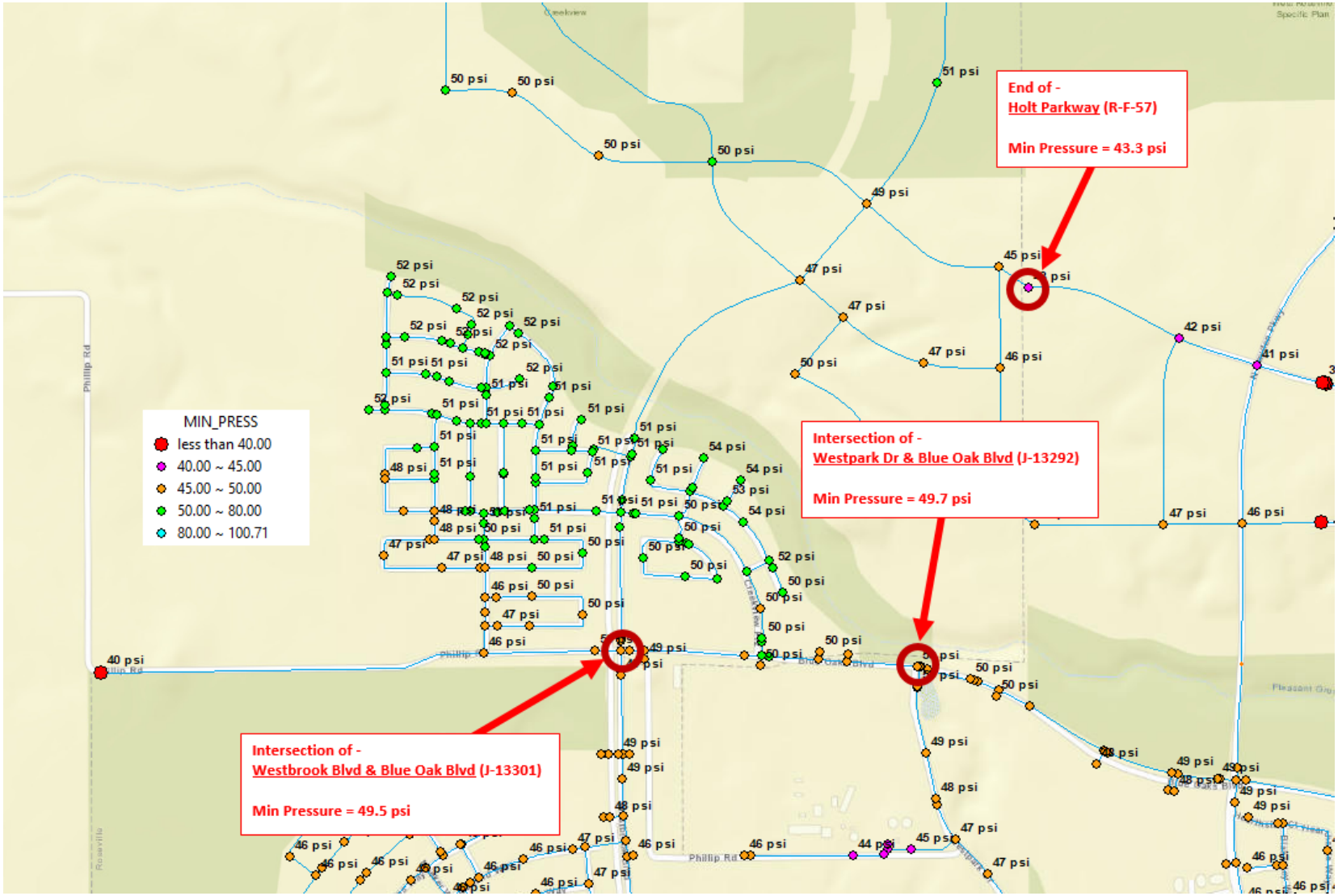
City of Roseville

Peer Review of Phillip Road Site Potable Water Master Plan Report

Minimum Pressure and Hydraulic Grade Line Under Peak Hour Demand Scenario

Figure 1

City of Roseville Potable Water Model Results - Buildout



APPENDIX B

POTABLE WATER PLAN – NEAR-TERM ONSITE WITHOUT FIRE FLOW MODEL RESULTS

FlexTable: Junction Table

ID	Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
31	J-1	81.00	0	241.00	69
32	J-2	87.00	0	241.00	67
33	J-3	89.00	0	240.99	66
39	J-51	76.00	0	241.00	71
44	J-5	87.00	0	240.99	67
46	J-6	88.00	0	240.99	66
48	J-7	88.00	0	240.99	66
50	J-64	85.00	0	240.99	67
52	J-65	80.00	0	240.99	70
54	J-8	82.00	0	240.98	69
56	J-9	82.00	0	240.97	69
58	J-15	82.00	0	240.97	69
60	J-34	82.00	0	240.97	69
62	J-35	83.50	0	240.97	68
64	J-63	78.00	0	240.97	71
66	J-62	77.00	0	240.97	71
68	J-66	77.00	2	240.97	71
83	SERV-HDR-2	84.00	0	240.98	68
87	J-16	81.50	0	240.96	69
89	J-17	82.00	0	240.95	69
91	J-18	82.00	0	240.95	69
93	FH-1	87.20	0	240.95	67
95	J-19	83.00	162	240.94	68
97	FH-2	89.00	0	240.94	66
99	J-20	84.00	0	240.95	68
101	FH-3	89.00	0	240.95	66
103	J-21	83.00	0	240.95	68
106	J-23	82.00	0	240.96	69
108	J-24	82.00	0	240.96	69
110	FH-5	87.10	0	240.96	67
113	J-25	81.00	0	240.96	69
115	FH-6	86.40	0	240.96	67
117	J-26	80.90	0	240.96	69
119	J-27	82.00	0	240.96	69
121	FH-7	86.60	0	240.96	67
123	J-28	83.00	0	240.96	68
125	J-29	84.00	0	240.96	68
127	J-30	83.50	0	240.96	68
129	FH-8	88.60	0	240.96	66
132	J-42	82.50	0	240.96	69
134	J-44	81.50	0	240.96	69
136	FH-11	86.00	0	240.96	67
138	J-45	79.70	0	240.96	70
140	FH-12	84.50	0	240.96	68
142	J-40	79.50	0	240.96	70
144	J-41	80.50	22	240.96	69
147	J-43	80.60	0	240.96	69
149	FH-10	85.60	0	240.96	67

FlexTable: Junction Table

ID	Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
152	J-36	80.00	0	240.97	70
155	J-37	79.80	0	240.97	70
157	FH-8	85.30	0	240.97	67
159	J-38	78.90	0	240.97	70
161	J-39	79.20	0	240.96	70
163	FH-9	84.20	0	240.96	68
166	J-46	78.30	0	240.97	70
168	J-47	78.50	0	240.97	70
170	FH-13	83.50	0	240.97	68
172	J-48	77.30	0	240.97	71
174	J-49	77.00	0	240.98	71
176	FH-14	81.60	0	240.98	69
178	J-50	76.90	0	240.98	71
181	J-56	75.70	0	240.97	72
183	FH-17	80.70	0	240.97	69
185	J-57	76.00	0	240.97	71
187	J-58	76.30	0	240.97	71
189	J-59	76.00	0	240.97	71
191	FH-18	81.00	0	240.97	69
193	J-60	77.40	0	240.97	71
196	J-61	77.40	0	240.97	71
198	FH-19	82.40	0	240.97	69
200	J-52	77.20	0	240.97	71
203	J-53	77.50	0	240.97	71
205	FH-15	82.50	0	240.97	69
207	J-54	76.00	0	240.97	71
209	J-55	76.00	0	240.97	71
211	FH-16	80.80	0	240.97	69
215	J-71	77.20	0	240.96	71
217	J-79	77.50	0	240.96	71
219	FH-24	82.30	0	240.96	69
221	J-78	76.30	0	240.96	71
223	J-73	76.00	0	240.96	71
225	J-72	77.50	0	240.96	71
227	FH-20	82.40	0	240.96	69
230	J-74	76.00	0	240.96	71
232	FH-21	80.90	0	240.96	69
235	J-75	75.30	0	240.96	72
237	FH-22	80.35	0	240.96	69
239	J-76	76.00	0	240.95	71
241	FH-23	81.00	0	240.95	69
243	J-77	75.80	0	240.95	71
246	J-80	76.50	0	240.80	71
248	FH-25	81.25	0	240.80	69
250	J-81	77.80	168	240.74	70
252	J-22	83.00	0	240.95	68
255	FH-4	88.20	0	240.95	66
398	J-4	87.00	0	240.99	67

FlexTable: Junction Table

ID	Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
401	SERV-HDR-1	87.00	0	240.99	67

FlexTable: Pipe Table

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
P-1	J-1	J-2	24.0	PVC	130.0	159	0.11	0.000	964	0.00
P-2	J-2	J-3	24.0	PVC	130.0	159	0.11	0.000	788	0.00
POC-1	R-1	J-1	60.0	PVC	130.0	159	0.02	0.000	1	0.00
POC-2	R-2	J-51	60.0	PVC	130.0	195	0.02	0.000	1	0.00
P-6	J-5	J-6	24.0	PVC	130.0	63	0.04	0.000	1,034	0.00
P-7	J-6	J-7	24.0	PVC	130.0	0	0.00	0.000	108	0.00
P-11	J-6	J-64	16.0	PVC	130.0	63	0.10	0.000	1,818	0.01
P-82	J-64	J-65	16.0	PVC	130.0	0	0.00	0.000	880	0.00
P-8	J-5	J-8	12.0	PVC	130.0	95	0.27	0.000	371	0.01
P-10	J-8	J-9	12.0	PVC	130.0	95	0.27	0.000	358	0.01
P-19	J-9	J-15	12.0	PVC	130.0	95	0.27	0.000	55	0.00
P-42	J-15	J-34	12.0	PVC	130.0	14	0.04	0.000	400	0.00
P-43	J-34	J-35	12.0	PVC	130.0	-33	0.09	0.000	26	0.00
P-80	J-35	J-63	12.0	PVC	130.0	-33	0.09	0.000	609	0.00
P-79	J-63	J-62	12.0	PVC	130.0	30	0.09	0.000	338	0.00
P-83	J-62	J-66	12.0	PVC	130.0	2	0.01	0.000	42	0.00
P-9	J-8	SERV-HDR-2	12.0	PVC	130.0	0	0.00	0.000	20	0.00
P-20	J-15	J-16	12.0	PVC	130.0	81	0.23	0.000	208	0.01
P-21	J-16	J-17	12.0	PVC	130.0	96	0.27	0.000	232	0.01
P-22	J-17	J-18	12.0	PVC	130.0	85	0.24	0.000	126	0.00
FP-1	J-18	FH-1	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-23	J-18	J-19	12.0	PVC	130.0	85	0.24	0.000	423	0.01
FP-2	J-19	FH-2	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-24	J-19	J-20	12.0	PVC	130.0	-77	0.22	0.000	485	0.01
FP-3	J-20	FH-3	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-25	J-20	J-21	12.0	PVC	130.0	-77	0.22	0.000	44	0.00
P-28	J-21	J-23	12.0	PVC	130.0	-66	0.19	0.000	232	0.00
P-29	J-23	J-24	8.0	PVC	130.0	-18	0.11	0.000	308	0.00
FP-5	J-24	FH-5	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-30	J-24	J-16	8.0	PVC	130.0	-18	0.11	0.000	326	0.00
P-31	J-16	J-25	12.0	PVC	130.0	-32	0.09	0.000	32	0.00
FP-6	J-25	FH-6	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-32	J-25	J-26	12.0	PVC	130.0	-32	0.09	0.000	190	0.00
P-33	J-26	J-27	8.0	PVC	130.0	19	0.12	0.000	235	0.00
FP-7	J-27	FH-7	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-34	J-27	J-28	8.0	PVC	130.0	19	0.12	0.000	103	0.00
P-35	J-28	J-29	8.0	PVC	130.0	13	0.08	0.000	299	0.00
P-36	J-29	J-30	12.0	PVC	130.0	48	0.14	0.000	42	0.00
FP-8	J-30	FH-8	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-37	J-30	J-23	12.0	PVC	130.0	48	0.14	0.000	180	0.00
P-53	J-29	J-42	12.0	PVC	130.0	-36	0.10	0.000	246	0.00
P-56	J-42	J-44	12.0	PVC	130.0	-34	0.10	0.000	123	0.00
FP-11	J-44	FH-11	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-57	J-44	J-45	12.0	PVC	130.0	-34	0.10	0.000	363	0.00
FP-12	J-45	FH-12	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-58	J-45	J-40	12.0	PVC	130.0	-34	0.10	0.000	54	0.00

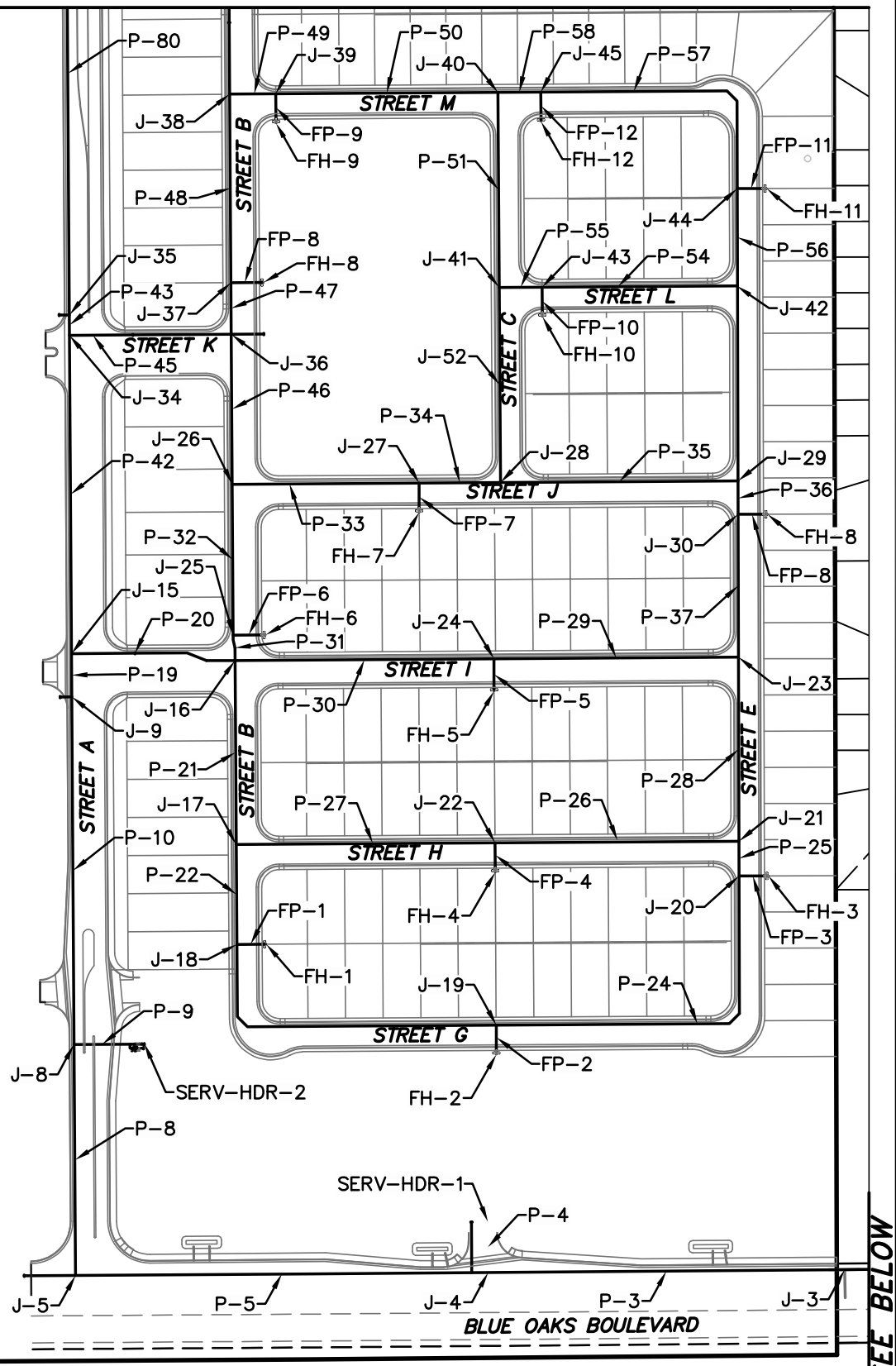
FlexTable: Pipe Table

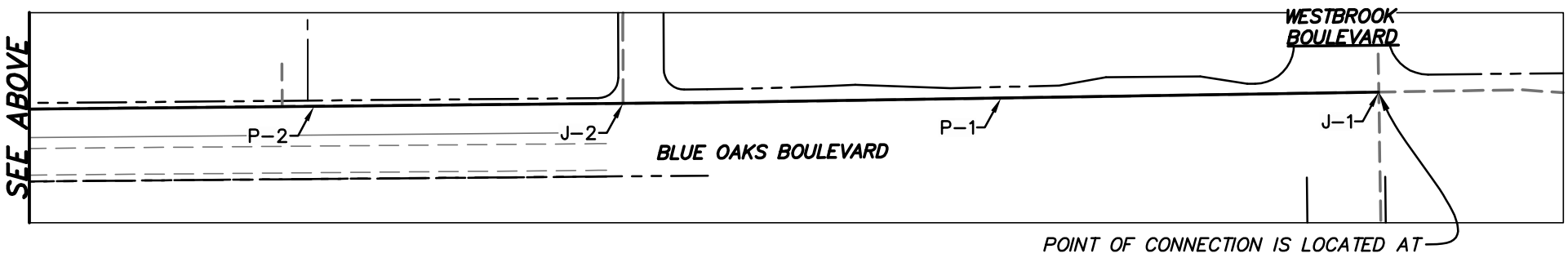
Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
P-51	J-40	J-41	8.0	PVC	130.0	18	0.11	0.000	246	0.00
P-52	J-41	J-28	8.0	PVC	130.0	-6	0.04	0.000	246	0.00
P-55	J-41	J-43	8.0	PVC	130.0	2	0.01	0.000	54	0.00
FP-10	J-43	FH-10	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-54	J-43	J-42	8.0	PVC	130.0	2	0.01	0.000	246	0.00
P-45	J-34	J-36	12.0	PVC	130.0	47	0.13	0.000	204	0.00
P-46	J-36	J-26	12.0	PVC	130.0	51	0.14	0.000	189	0.00
P-47	J-36	J-37	12.0	PVC	130.0	-4	0.01	0.000	65	0.00
FP-8	J-37	FH-8	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-48	J-37	J-38	12.0	PVC	130.0	-4	0.01	0.000	238	0.00
P-49	J-38	J-39	12.0	PVC	130.0	52	0.15	0.000	58	0.00
FP-9	J-39	FH-9	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-50	J-39	J-40	12.0	PVC	130.0	52	0.15	0.000	280	0.00
P-59	J-38	J-46	12.0	PVC	130.0	-56	0.16	0.000	222	0.00
P-60	J-46	J-47	12.0	PVC	130.0	-50	0.14	0.000	58	0.00
FP-13	J-47	FH-13	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-61	J-47	J-48	12.0	PVC	130.0	-50	0.14	0.000	358	0.00
P-62	J-48	J-49	12.0	PVC	130.0	-108	0.30	0.000	127	0.01
FP-14	J-49	FH-14	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-63	J-49	J-50	12.0	PVC	130.0	-108	0.30	0.000	95	0.00
P-64	J-50	J-51	12.0	PVC	130.0	-195	0.55	0.000	155	0.02
P-70	J-50	J-56	12.0	PVC	130.0	88	0.25	0.000	324	0.01
FP-17	J-56	FH-17	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-71	J-56	J-57	12.0	PVC	130.0	88	0.25	0.000	124	0.00
P-72	J-57	J-58	8.0	PVC	130.0	14	0.09	0.000	224	0.00
P-74	J-58	J-59	8.0	PVC	130.0	-7	0.05	0.000	70	0.00
FP-18	J-59	FH-18	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-75	J-59	J-60	8.0	PVC	130.0	-7	0.05	0.000	344	0.00
P-78	J-60	J-62	12.0	PVC	130.0	-28	0.08	0.000	206	0.00
P-76	J-60	J-61	12.0	PVC	130.0	-3	0.01	0.000	58	0.00
FP-19	J-61	FH-19	6.0	Ductile Iron	130.0	0	0.00	0.000	37	0.00
P-77	J-61	J-52	12.0	PVC	130.0	-3	0.01	0.000	168	0.00
P-65	J-52	J-46	12.0	PVC	130.0	6	0.02	0.000	222	0.00
P-66	J-52	J-53	8.0	PVC	130.0	-9	0.06	0.000	58	0.00
FP-15	J-53	FH-15	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-67	J-53	J-54	8.0	PVC	130.0	-9	0.06	0.000	358	0.00
P-68	J-54	J-55	12.0	PVC	130.0	-58	0.16	0.000	39	0.00
FP-16	J-55	FH-16	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-69	J-55	J-48	12.0	PVC	130.0	-58	0.16	0.000	183	0.00
P-73	J-54	J-58	12.0	PVC	130.0	49	0.14	0.000	226	0.00
P-92	J-60	J-71	8.0	PVC	130.0	24	0.15	0.000	222	0.00
P-102	J-71	J-79	8.0	PVC	130.0	17	0.11	0.000	253	0.00
FP-24	J-79	FH-24	6.0	Ductile Iron	130.0	0	0.00	0.000	23	0.00
P-103	J-79	J-78	8.0	PVC	130.0	17	0.11	0.000	370	0.00
P-101	J-78	J-73	12.0	PVC	130.0	-77	0.22	0.000	222	0.00

FlexTable: Pipe Table

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
P-94	J-73	J-72	8.0	PVC	130.0	-7	0.05	0.000	360	0.00
FP-20	J-72	FH-20	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-93	J-72	J-71	8.0	PVC	130.0	-7	0.05	0.000	54	0.00
P-95	J-73	J-74	12.0	PVC	130.0	-70	0.20	0.000	52	0.00
FP-21	J-74	FH-21	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-96	J-74	J-58	12.0	PVC	130.0	-70	0.20	0.000	170	0.00
P-97	J-57	J-75	12.0	PVC	130.0	74	0.21	0.000	376	0.01
FP-22	J-75	FH-22	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-98	J-75	J-76	12.0	PVC	130.0	74	0.21	0.000	309	0.01
FP-23	J-76	FH-23	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-99	J-76	J-77	12.0	PVC	130.0	74	0.21	0.000	55	0.00
P-100	J-77	J-78	12.0	PVC	130.0	-94	0.27	0.000	154	0.00
P-104	J-77	J-80	8.0	PVC	130.0	168	1.07	0.001	232	0.16
FP-25	J-80	FH-25	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-105	J-80	J-81	8.0	PVC	130.0	168	1.07	0.001	82	0.06
P-26	J-21	J-22	8.0	PVC	130.0	-11	0.07	0.000	307	0.00
P-27	J-22	J-17	8.0	PVC	130.0	-11	0.07	0.000	326	0.00
FP-4	J-22	FH-4	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-81	J-63	J-64	12.0	PVC	130.0	-63	0.18	0.000	1,028	0.02
P-3	J-3	J-4	24.0	PVC	130.0	159	0.11	0.000	244	0.00
P-5	J-4	J-5	24.0	PVC	130.0	159	0.11	0.000	520	0.00
P-4	J-4	SERV-HDR-1	12.0	PVC	130.0	0	0.00	0.000	20	0.00

SEE SHEET 2





POINT OF CONNECTION IS LOCATED AT THE INTERSECTION OF BLUE OAK AND WESTBROOK BOULEVARD. NODE J-1, PIPE POC-1 AND RESERVIOR R-1 MAKE UP THE CONNECTION AT THE INTERSECTION.

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0 100 200 400
SCALE: 1"=200'

NEAR-TERM FIRE SYSTEM EXHIBIT

FOR

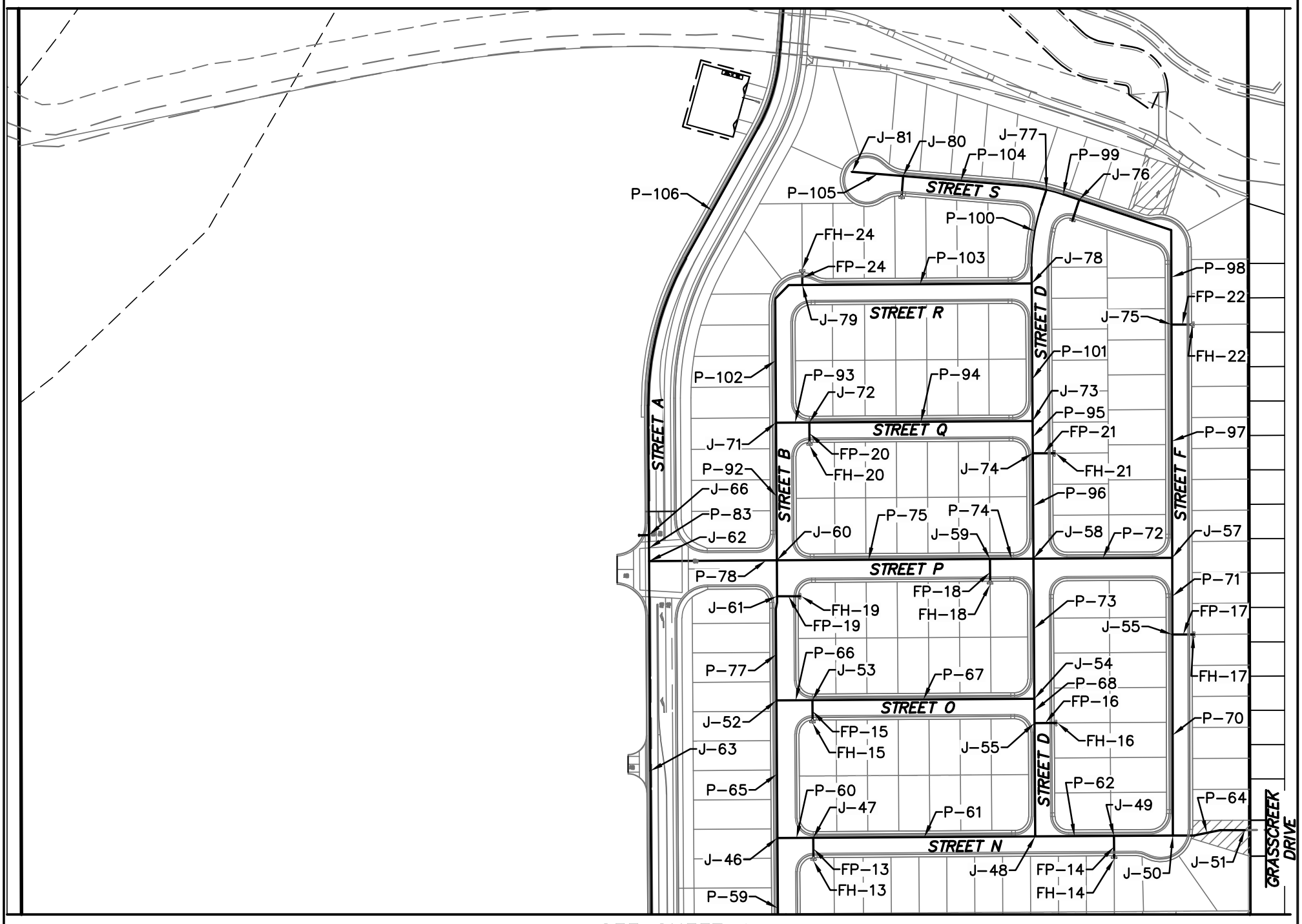
PHILLIP ROAD SITE

CITY OF ROSEVILLE, PLACER COUNTY, CALIFORNIA

SHEET 1 OF 3 APRIL 2, 2025

X:\Land Projects\4042-60-4\dwg\4042-60-4_EXH_Fire Site Plan- Near-Term.dwg

SEE SHEET 3



SEE SHEET 1

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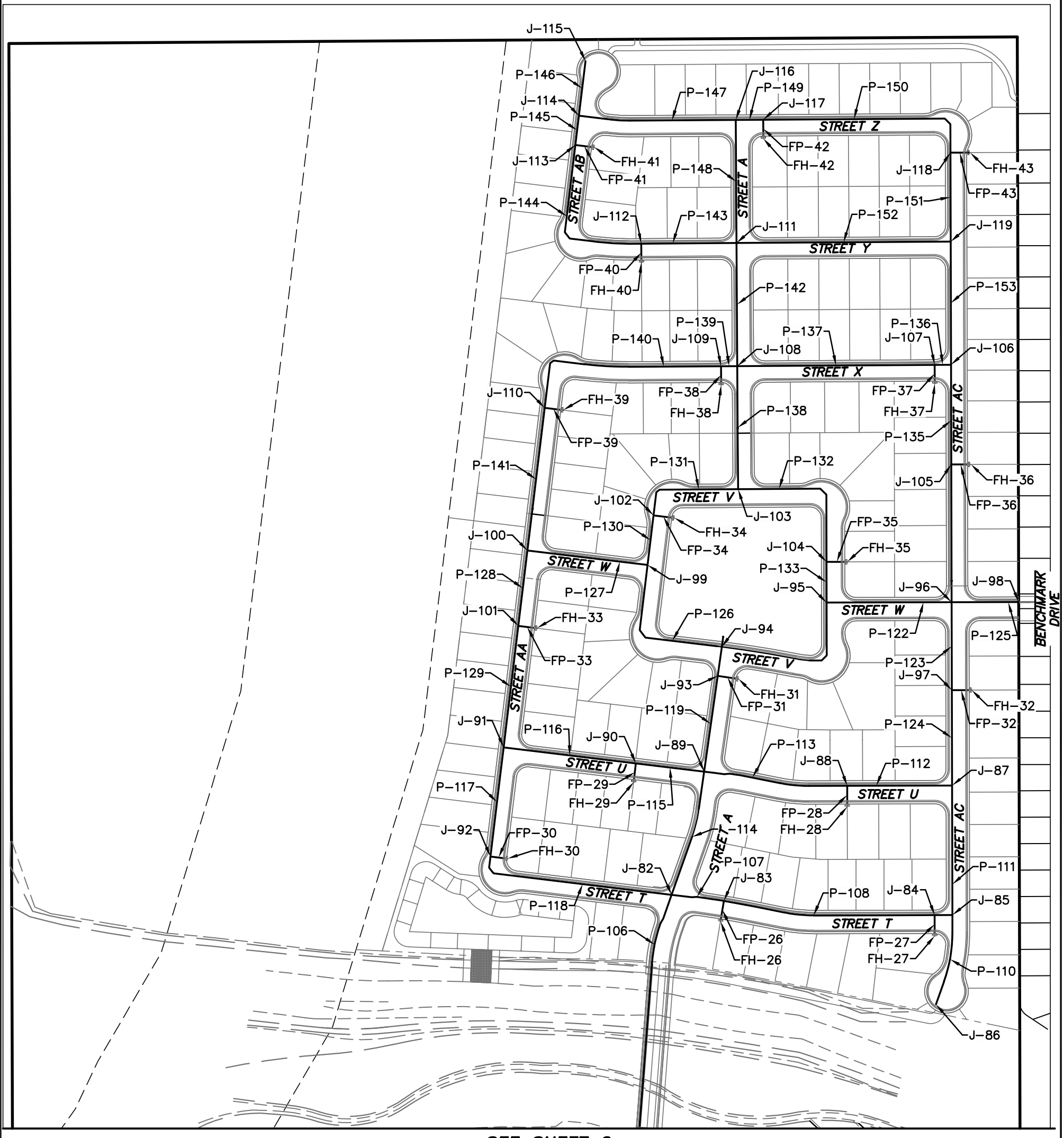

SEE SHEET 2

0 100 200 400

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APPENDIX C

POTABLE WATER PLAN – NEAR-TERM ONSITE WITH FIRE FLOW MODEL RESULTS

FlexTable: Junction Table

ID	Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
31	J-1	81.00	0	241.00	69
32	J-2	87.00	0	240.94	67
33	J-3	89.00	0	240.89	66
39	J-51	76.00	0	241.00	71
44	J-5	87.00	0	240.84	67
46	J-6	88.00	0	240.83	66
48	J-7	88.00	0	240.83	66
50	J-64	85.00	0	240.68	67
52	J-65	80.00	0	240.68	70
54	J-8	82.00	0	240.58	69
56	J-9	82.00	0	240.32	68
58	J-15	82.00	0	240.28	68
60	J-34	82.00	0	240.28	68
62	J-35	83.50	0	240.28	68
64	J-63	78.00	0	240.34	70
66	J-62	77.00	0	240.31	71
68	J-66	77.00	2	240.31	71
83	SERV-HDR-2	84.00	0	240.58	68
87	J-16	81.50	0	240.17	69
89	J-17	82.00	0	239.98	68
91	J-18	82.00	0	239.90	68
93	FH-1	87.20	0	239.90	66
95	J-19	83.00	162	239.63	68
97	FH-2	89.00	765	238.04	64
99	J-20	84.00	0	239.90	67
101	FH-3	89.00	0	239.90	65
103	J-21	83.00	0	239.93	68
106	J-23	82.00	0	240.03	68
108	J-24	82.00	0	240.10	68
110	FH-5	87.10	0	240.10	66
113	J-25	81.00	0	240.17	69
115	FH-6	86.40	0	240.17	67
117	J-26	80.90	0	240.20	69
119	J-27	82.00	0	240.16	68
121	FH-7	86.60	0	240.16	66
123	J-28	83.00	0	240.14	68
125	J-29	84.00	0	240.09	68
127	J-30	83.50	0	240.08	68
129	FH-8	88.60	0	240.08	66
132	J-42	82.50	0	240.13	68
134	J-44	81.50	0	240.14	69
136	FH-11	86.00	0	240.14	67
138	J-45	79.70	0	240.17	69
140	FH-12	84.50	0	240.17	67
142	J-40	79.50	0	240.18	70
144	J-41	80.50	22	240.14	69
147	J-43	80.60	0	240.14	69
149	FH-10	85.60	0	240.14	67

FlexTable: Junction Table

ID	Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
152	J-36	80.00	0	240.24	69
155	J-37	79.80	0	240.24	69
157	FH-8	85.30	0	240.24	67
159	J-38	78.90	0	240.24	70
161	J-39	79.20	0	240.23	70
163	FH-9	84.20	0	240.23	68
166	J-46	78.30	0	240.29	70
168	J-47	78.50	0	240.30	70
170	FH-13	83.50	0	240.30	68
172	J-48	77.30	0	240.38	71
174	J-49	77.00	0	240.49	71
176	FH-14	81.60	0	240.49	69
178	J-50	76.90	0	240.57	71
181	J-56	75.70	0	240.37	71
183	FH-17	80.70	0	240.37	69
185	J-57	76.00	0	240.29	71
187	J-58	76.30	0	240.26	71
189	J-59	76.00	0	240.27	71
191	FH-18	81.00	0	240.27	69
193	J-60	77.40	0	240.29	70
196	J-61	77.40	0	240.29	70
198	FH-19	82.40	0	240.29	68
200	J-52	77.20	0	240.29	71
203	J-53	77.50	0	240.29	70
205	FH-15	82.50	0	240.29	68
207	J-54	76.00	0	240.31	71
209	J-55	76.00	0	240.32	71
211	FH-16	80.80	0	240.32	69
215	J-71	77.20	0	240.19	71
217	J-79	77.50	0	240.13	70
219	FH-24	82.30	0	240.13	68
221	J-78	76.30	0	240.05	71
223	J-73	76.00	0	240.16	71
225	J-72	77.50	0	240.18	70
227	FH-20	82.40	0	240.18	68
230	J-74	76.00	0	240.19	71
232	FH-21	80.90	0	240.19	69
235	J-75	75.30	0	240.10	71
237	FH-22	80.35	0	240.10	69
239	J-76	76.00	0	239.96	71
241	FH-23	81.00	0	239.96	69
243	J-77	75.80	0	239.93	71
246	J-80	76.50	0	236.20	69
248	FH-25	81.25	765	234.62	66
250	J-81	77.80	168	236.15	69
252	J-22	83.00	0	239.95	68
255	FH-4	88.20	0	239.95	66
398	J-4	87.00	0	240.87	67

FlexTable: Junction Table

ID	Label	Elevation (ft)	Demand (gpm)	Hydraulic Grade (ft)	Pressure (psi)
401	SERV-HDR-1	87.00	0	240.87	67

FlexTable: Pipe Table

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
P-1	J-1	J-2	24.0	PVC	130.0	839	0.60	0.000	964	0.06
P-2	J-2	J-3	24.0	PVC	130.0	839	0.60	0.000	788	0.05
POC-1	R-1	J-1	60.0	PVC	130.0	839	0.10	0.000	1	0.00
POC-2	R-2	J-51	60.0	PVC	130.0	1,045	0.12	0.000	1	0.00
P-6	J-5	J-6	24.0	PVC	130.0	335	0.24	0.000	1,034	0.01
P-7	J-6	J-7	24.0	PVC	130.0	0	0.00	0.000	108	0.00
P-11	J-6	J-64	16.0	PVC	130.0	335	0.53	0.000	1,818	0.15
P-82	J-64	J-65	16.0	PVC	130.0	0	0.00	0.000	880	0.00
P-8	J-5	J-8	12.0	PVC	130.0	505	1.43	0.001	371	0.26
P-10	J-8	J-9	12.0	PVC	130.0	505	1.43	0.001	358	0.26
P-19	J-9	J-15	12.0	PVC	130.0	505	1.43	0.001	55	0.04
P-42	J-15	J-34	12.0	PVC	130.0	69	0.19	0.000	400	0.01
P-43	J-34	J-35	12.0	PVC	130.0	-172	0.49	0.000	26	0.00
P-80	J-35	J-63	12.0	PVC	130.0	-172	0.49	0.000	609	0.06
P-79	J-63	J-62	12.0	PVC	130.0	163	0.46	0.000	338	0.03
P-83	J-62	J-66	12.0	PVC	130.0	2	0.01	0.000	42	0.00
P-9	J-8	SERV-HDR-2	12.0	PVC	130.0	0	0.00	0.000	20	0.00
P-20	J-15	J-16	12.0	PVC	130.0	436	1.24	0.001	208	0.11
P-21	J-16	J-17	12.0	PVC	130.0	537	1.52	0.001	232	0.19
P-22	J-17	J-18	12.0	PVC	130.0	480	1.36	0.001	126	0.08
FP-1	J-18	FH-1	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-23	J-18	J-19	12.0	PVC	130.0	480	1.36	0.001	423	0.28
FP-2	J-19	FH-2	6.0	Ductile Iron	130.0	765	8.68	0.045	35	1.58
P-24	J-19	J-20	12.0	PVC	130.0	-447	1.27	0.001	485	0.28
FP-3	J-20	FH-3	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-25	J-20	J-21	12.0	PVC	130.0	-447	1.27	0.001	44	0.03
P-28	J-21	J-23	12.0	PVC	130.0	-390	1.11	0.000	232	0.10
P-29	J-23	J-24	8.0	PVC	130.0	-92	0.59	0.000	308	0.07
FP-5	J-24	FH-5	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-30	J-24	J-16	8.0	PVC	130.0	-92	0.59	0.000	326	0.07
P-31	J-16	J-25	12.0	PVC	130.0	-193	0.55	0.000	32	0.00
FP-6	J-25	FH-6	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-32	J-25	J-26	12.0	PVC	130.0	-193	0.55	0.000	190	0.02
P-33	J-26	J-27	8.0	PVC	130.0	77	0.49	0.000	235	0.04
FP-7	J-27	FH-7	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-34	J-27	J-28	8.0	PVC	130.0	77	0.49	0.000	103	0.02
P-35	J-28	J-29	8.0	PVC	130.0	82	0.53	0.000	299	0.05
P-36	J-29	J-30	12.0	PVC	130.0	298	0.84	0.000	42	0.01
FP-8	J-30	FH-8	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-37	J-30	J-23	12.0	PVC	130.0	298	0.84	0.000	180	0.05
P-53	J-29	J-42	12.0	PVC	130.0	-216	0.61	0.000	246	0.04
P-56	J-42	J-44	12.0	PVC	130.0	-171	0.48	0.000	123	0.01
FP-11	J-44	FH-11	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-57	J-44	J-45	12.0	PVC	130.0	-171	0.48	0.000	363	0.03
FP-12	J-45	FH-12	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-58	J-45	J-40	12.0	PVC	130.0	-171	0.48	0.000	54	0.01

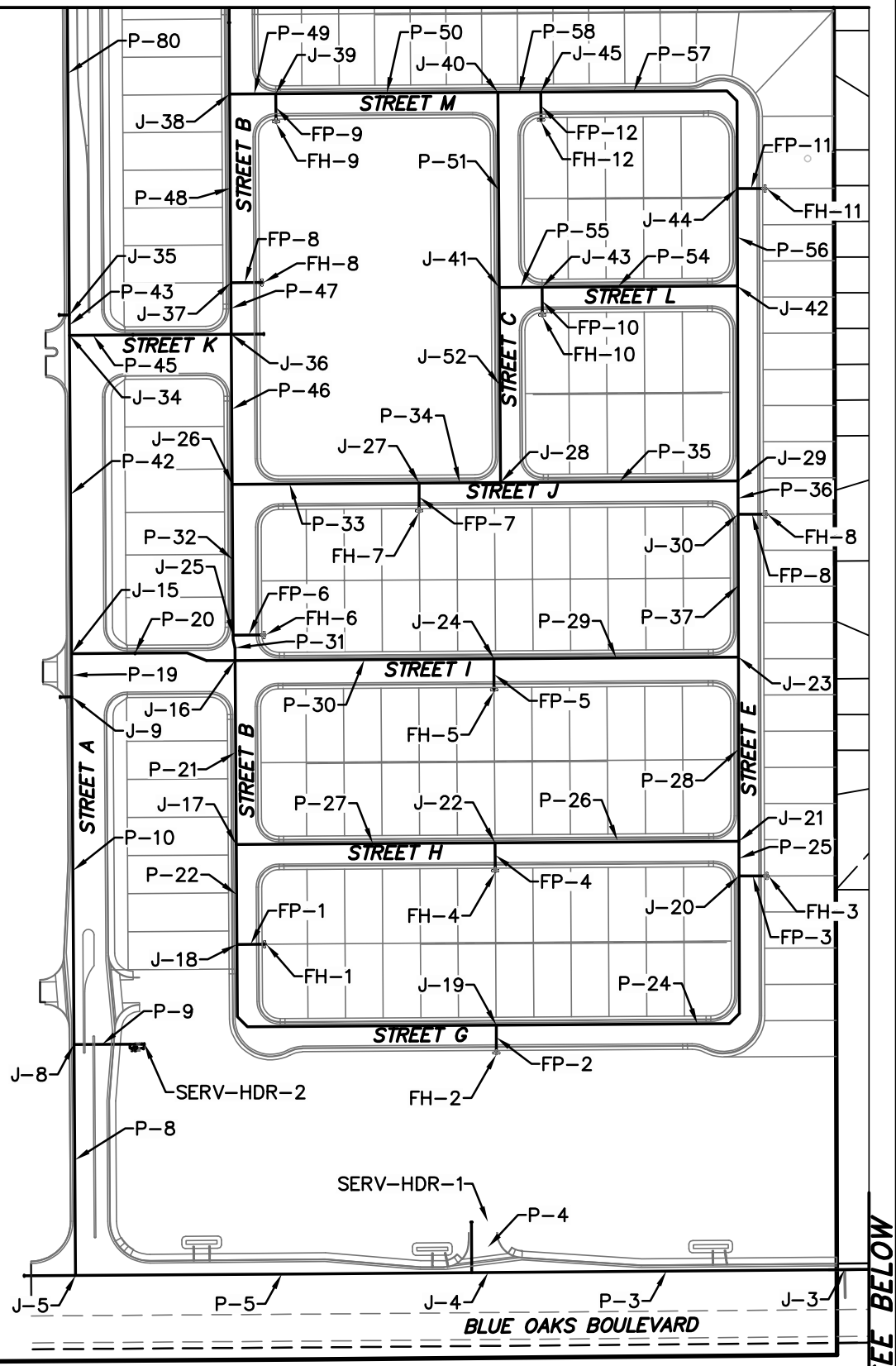
FlexTable: Pipe Table

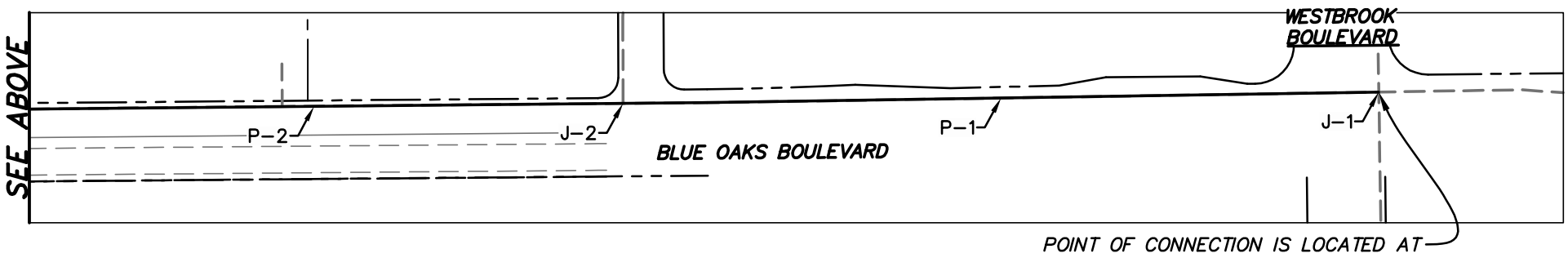
Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
P-51	J-40	J-41	8.0	PVC	130.0	72	0.46	0.000	246	0.03
P-52	J-41	J-28	8.0	PVC	130.0	5	0.03	0.000	246	0.00
P-55	J-41	J-43	8.0	PVC	130.0	45	0.29	0.000	54	0.00
FP-10	J-43	FH-10	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-54	J-43	J-42	8.0	PVC	130.0	45	0.29	0.000	246	0.01
P-45	J-34	J-36	12.0	PVC	130.0	241	0.68	0.000	204	0.04
P-46	J-36	J-26	12.0	PVC	130.0	270	0.77	0.000	189	0.04
P-47	J-36	J-37	12.0	PVC	130.0	-30	0.08	0.000	65	0.00
FP-8	J-37	FH-8	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-48	J-37	J-38	12.0	PVC	130.0	-30	0.08	0.000	238	0.00
P-49	J-38	J-39	12.0	PVC	130.0	243	0.69	0.000	58	0.01
FP-9	J-39	FH-9	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-50	J-39	J-40	12.0	PVC	130.0	243	0.69	0.000	280	0.05
P-59	J-38	J-46	12.0	PVC	130.0	-272	0.77	0.000	222	0.05
P-60	J-46	J-47	12.0	PVC	130.0	-258	0.73	0.000	58	0.01
FP-13	J-47	FH-13	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-61	J-47	J-48	12.0	PVC	130.0	-258	0.73	0.000	358	0.07
P-62	J-48	J-49	12.0	PVC	130.0	-569	1.61	0.001	127	0.11
FP-14	J-49	FH-14	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-63	J-49	J-50	12.0	PVC	130.0	-569	1.61	0.001	95	0.08
P-64	J-50	J-51	12.0	PVC	130.0	-1,045	2.96	0.003	155	0.43
P-70	J-50	J-56	12.0	PVC	130.0	476	1.35	0.001	324	0.21
FP-17	J-56	FH-17	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-71	J-56	J-57	12.0	PVC	130.0	476	1.35	0.001	124	0.08
P-72	J-57	J-58	8.0	PVC	130.0	66	0.42	0.000	224	0.03
P-74	J-58	J-59	8.0	PVC	130.0	-50	0.32	0.000	70	0.00
FP-18	J-59	FH-18	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-75	J-59	J-60	8.0	PVC	130.0	-50	0.32	0.000	344	0.02
P-78	J-60	J-62	12.0	PVC	130.0	-161	0.46	0.000	206	0.02
P-76	J-60	J-61	12.0	PVC	130.0	-26	0.08	0.000	58	0.00
FP-19	J-61	FH-19	6.0	Ductile Iron	130.0	0	0.00	0.000	37	0.00
P-77	J-61	J-52	12.0	PVC	130.0	-26	0.08	0.000	168	0.00
P-65	J-52	J-46	12.0	PVC	130.0	15	0.04	0.000	222	0.00
P-66	J-52	J-53	8.0	PVC	130.0	-41	0.26	0.000	58	0.00
FP-15	J-53	FH-15	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-67	J-53	J-54	8.0	PVC	130.0	-41	0.26	0.000	358	0.02
P-68	J-54	J-55	12.0	PVC	130.0	-311	0.88	0.000	39	0.01
FP-16	J-55	FH-16	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-69	J-55	J-48	12.0	PVC	130.0	-311	0.88	0.000	183	0.05
P-73	J-54	J-58	12.0	PVC	130.0	270	0.77	0.000	226	0.05
P-92	J-60	J-71	8.0	PVC	130.0	137	0.88	0.000	222	0.10
P-102	J-71	J-79	8.0	PVC	130.0	93	0.60	0.000	253	0.06
FP-24	J-79	FH-24	6.0	Ductile Iron	130.0	0	0.00	0.000	23	0.00
P-103	J-79	J-78	8.0	PVC	130.0	93	0.60	0.000	370	0.08
P-101	J-78	J-73	12.0	PVC	130.0	-430	1.22	0.001	222	0.12

FlexTable: Pipe Table

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
P-94	J-73	J-72	8.0	PVC	130.0	-44	0.28	0.000	360	0.02
FP-20	J-72	FH-20	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-93	J-72	J-71	8.0	PVC	130.0	-44	0.28	0.000	54	0.00
P-95	J-73	J-74	12.0	PVC	130.0	-386	1.10	0.000	52	0.02
FP-21	J-74	FH-21	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-96	J-74	J-58	12.0	PVC	130.0	-386	1.10	0.000	170	0.07
P-97	J-57	J-75	12.0	PVC	130.0	409	1.16	0.000	376	0.18
FP-22	J-75	FH-22	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-98	J-75	J-76	12.0	PVC	130.0	409	1.16	0.000	309	0.15
FP-23	J-76	FH-23	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-99	J-76	J-77	12.0	PVC	130.0	409	1.16	0.000	55	0.03
P-100	J-77	J-78	12.0	PVC	130.0	-524	1.49	0.001	154	0.12
P-104	J-77	J-80	8.0	PVC	130.0	933	5.96	0.016	232	3.73
FP-25	J-80	FH-25	6.0	Ductile Iron	130.0	765	8.68	0.045	35	1.58
P-105	J-80	J-81	8.0	PVC	130.0	168	1.07	0.001	82	0.06
P-26	J-21	J-22	8.0	PVC	130.0	-57	0.36	0.000	307	0.03
P-27	J-22	J-17	8.0	PVC	130.0	-57	0.36	0.000	326	0.03
FP-4	J-22	FH-4	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-81	J-63	J-64	12.0	PVC	130.0	-335	0.95	0.000	1,028	0.34
P-3	J-3	J-4	24.0	PVC	130.0	839	0.60	0.000	244	0.02
P-5	J-4	J-5	24.0	PVC	130.0	839	0.60	0.000	520	0.03
P-4	J-4	SERV-HDR-1	12.0	PVC	130.0	0	0.00	0.000	20	0.00

SEE SHEET 2





POINT OF CONNECTION IS LOCATED AT THE INTERSECTION OF BLUE OAK AND WESTBROOK BOULEVARD. NODE J-1, PIPE POC-1 AND RESERVIOR R-1 MAKE UP THE CONNECTION AT THE INTERSECTION.

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0 100 200 400
SCALE: 1"=200'

NEAR-TERM FIRE SYSTEM EXHIBIT

FOR

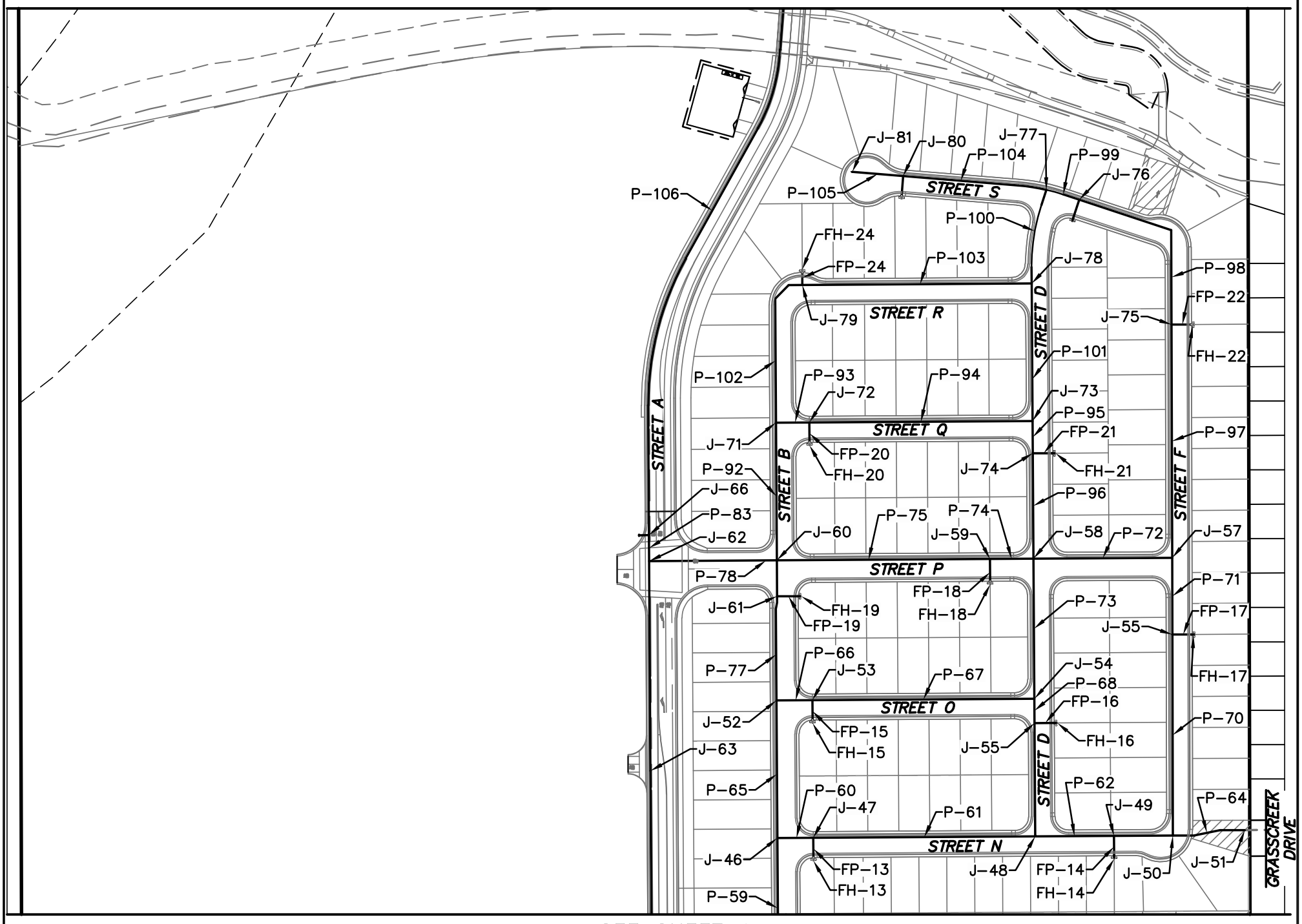
PHILLIP ROAD SITE

CITY OF ROSEVILLE, PLACER COUNTY, CALIFORNIA

SHEET 1 OF 3 APRIL 2, 2025

X:\Land Projects\4042-60-4\dwg\4042-60-4_EXH_Fire Site Plan- Near-Term.dwg

SEE SHEET 3



SEE SHEET 1

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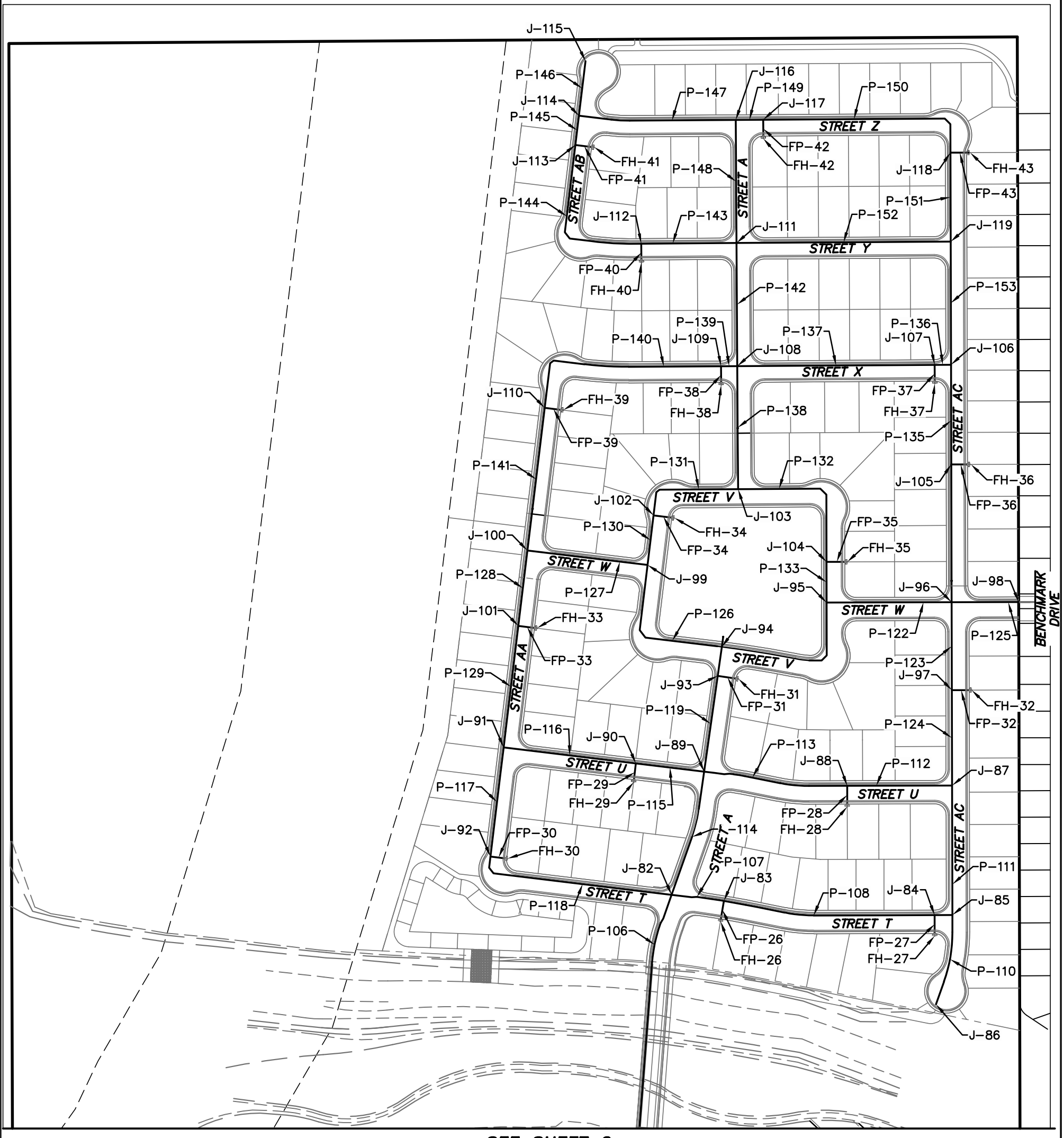
X:\Land Projects\4042–60–4\dwg\4042–60–4_EXH_Fire Site Plan–Near–Term.dwg



SEE SHEET 2

0 100 200 400

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X:\Land Projects\4042–60–4\dwg\4042–60–4_EXH_Fire Site Plan– Near–Term.dwg

APPENDIX D

POTABLE WATER PLAN – BUILDOUT ONSITE WITHOUT FIRE FLOW MODEL RESULTS

FlexTable: Junction Table

ID	Label	Demand (gpm)	Elevation (ft)	Hydraulic Grade (ft)	Pressure (psi)
31	J-1	0	81.00	196.03	50
32	J-2	0	87.00	196.03	47
33	J-3	0	89.00	196.03	46
39	J-51	0	76.00	196.12	52
42	J-98	0	83.00	198.50	50
44	J-5	0	87.00	196.03	47
46	J-6	0	88.00	196.04	47
48	J-7	0	88.00	196.04	47
50	J-64	5	85.00	196.05	48
52	J-65	0	80.00	196.05	50
54	J-8	0	82.00	196.02	49
56	J-9	107	82.00	196.02	49
58	J-15	0	82.00	196.02	49
60	J-34	0	82.00	196.03	49
62	J-35	143	83.50	196.03	49
64	J-63	0	78.00	196.09	51
66	J-62	0	77.00	196.16	52
68	J-66	150	77.00	196.19	52
70	J-82	0	79.50	197.83	51
72	J-89	0	76.50	197.89	53
74	J-93	0	76.70	197.91	52
76	J-94	14	76.30	197.92	53
78	J-95	0	77.70	197.95	52
80	J-96	0	81.50	198.19	50
83	SERV-HDR-2	58	84.00	196.02	48
85	J-10	0	82.00	196.19	49
87	J-16	0	81.50	196.02	50
89	J-17	0	82.00	196.02	49
91	J-18	0	82.00	196.01	49
93	FH-1	0	87.20	196.01	47
95	J-19	162	83.00	196.00	49
97	FH-2	0	89.00	196.00	46
99	J-20	0	84.00	196.01	48
101	FH-3	0	89.00	196.01	46
103	J-21	0	83.00	196.02	49
106	J-23	0	82.00	196.02	49
108	J-24	0	82.00	196.02	49
110	FH-5	0	87.10	196.02	47
113	J-25	0	81.00	196.02	50
115	FH-6	0	86.40	196.02	47
117	J-26	0	80.90	196.03	50
119	J-27	0	82.00	196.03	49
121	FH-7	0	86.60	196.03	47
123	J-28	0	83.00	196.03	49
125	J-29	0	84.00	196.03	48
127	J-30	0	83.50	196.02	49
129	FH-8	0	88.60	196.02	46
132	J-42	0	82.50	196.03	49
134	J-44	0	81.50	196.03	50

FlexTable: Junction Table

ID	Label	Demand (gpm)	Elevation (ft)	Hydraulic Grade (ft)	Pressure (psi)
136	FH-11	0	86.00	196.03	48
138	J-45	0	79.70	196.04	50
140	FH-12	0	84.50	196.04	48
142	J-40	0	79.50	196.04	50
144	J-41	22	80.50	196.03	50
147	J-43	0	80.60	196.03	50
149	FH-10	0	85.60	196.03	48
152	J-36	0	80.00	196.03	50
155	J-37	0	79.80	196.04	50
157	FH-8	0	85.30	196.04	48
159	J-38	0	78.90	196.05	51
161	J-39	0	79.20	196.05	51
163	FH-9	0	84.20	196.05	48
166	J-46	0	78.30	196.09	51
168	J-47	0	78.50	196.09	51
170	FH-13	0	83.50	196.09	49
172	J-48	0	77.30	196.10	51
174	J-49	0	77.00	196.10	52
176	FH-14	0	81.60	196.10	50
178	J-50	0	76.90	196.11	52
181	J-56	0	75.70	196.10	52
183	FH-17	0	80.70	196.10	50
185	J-57	0	76.00	196.10	52
187	J-58	0	76.30	196.10	52
189	J-59	0	76.00	196.10	52
191	FH-18	0	81.00	196.10	50
193	J-60	0	77.40	196.12	51
196	J-61	0	77.40	196.12	51
198	FH-19	0	82.40	196.12	49
200	J-52	0	77.20	196.10	51
203	J-53	0	77.50	196.10	51
205	FH-15	0	82.50	196.10	49
207	J-54	0	76.00	196.10	52
209	J-55	0	76.00	196.10	52
211	FH-16	0	80.80	196.10	50
215	J-71	0	77.20	196.11	51
217	J-79	0	77.50	196.10	51
219	FH-24	0	82.30	196.10	49
221	J-78	0	76.30	196.09	52
223	J-73	0	76.00	196.10	52
225	J-72	0	77.50	196.10	51
227	FH-20	0	82.40	196.10	49
230	J-74	0	76.00	196.10	52
232	FH-21	0	80.90	196.10	50
235	J-75	0	75.30	196.09	52
237	FH-22	0	80.35	196.09	50
239	J-76	0	76.00	196.09	52
241	FH-23	0	81.00	196.09	50
243	J-77	0	75.80	196.09	52

FlexTable: Junction Table

ID	Label	Demand (gpm)	Elevation (ft)	Hydraulic Grade (ft)	Pressure (psi)
246	J-80	0	76.50	195.93	52
248	FH-25	0	81.25	195.93	50
250	J-81	168	77.80	195.88	51
252	J-22	0	83.00	196.02	49
255	FH-4	0	88.20	196.02	47
257	J-11	0	83.00	196.19	49
259	J-12	0	83.00	196.19	49
262	J-13	0	83.00	196.19	49
264	J-14	0	82.00	196.19	49
267	J-32	0	83.00	196.19	49
269	J-31	0	82.00	196.19	49
272	J-33	0	82.00	196.19	49
277	J-68	0	82.00	196.19	49
280	J-67	0	83.00	196.19	49
282	J-70	0	82.50	196.19	49
284	J-69	0	82.00	196.19	49
290	FH-31	0	81.70	197.91	50
292	J-83	0	79.40	197.83	51
294	FH-26	0	84.50	197.83	49
296	J-84	0	81.00	197.89	51
298	FH-27	0	86.00	197.89	48
300	J-85	0	81.00	197.89	51
302	J-86	152	82.00	197.79	50
304	J-87	0	80.60	197.99	51
306	J-88	0	78.75	197.95	52
308	FH-28	0	83.80	197.95	49
311	J-90	0	76.70	197.89	52
313	FH-29	0	81.80	197.89	50
315	J-91	0	76.50	197.88	53
317	J-92	0	76.50	197.86	53
319	FH-30	0	82.00	197.86	50
322	J-97	0	81.50	198.09	50
324	FH-32	0	86.44	198.09	48
327	J-104	0	77.80	197.95	52
329	FH-35	0	82.80	197.95	50
331	J-103	0	76.40	197.95	53
333	J-102	0	76.60	197.93	52
335	FH-34	0	81.80	197.93	50
337	J-99	0	77.00	197.93	52
340	J-100	0	76.20	197.92	53
342	J-101	0	76.70	197.90	52
344	FH-33	0	81.70	197.90	50
347	J-108	0	76.30	197.96	53
349	J-109	0	76.30	197.96	53
351	FH-38	0	81.30	197.96	50
353	J-110	0	76.90	197.93	52
355	FH-39	0	81.90	197.93	50
358	J-105	0	81.00	198.11	51
360	FH-36	0	86.10	198.11	48

FlexTable: Junction Table

ID	Label	Demand (gpm)	Elevation (ft)	Hydraulic Grade (ft)	Pressure (psi)
362	J-106	0	80.30	198.06	51
364	J-107	0	80.30	198.05	51
366	FH-37	0	85.30	198.05	49
369	J-119	0	80.50	198.02	51
371	J-111	0	76.60	197.97	53
374	J-112	0	77.40	197.96	52
376	FH-40	0	82.00	197.96	50
378	J-113	0	78.50	197.93	52
380	FH-41	0	83.50	197.93	50
382	J-114	0	78.90	197.92	51
384	J-115	133	79.50	197.88	51
386	J-116	0	77.90	197.98	52
389	J-117	0	78.00	197.98	52
391	FH-42	0	83.00	197.98	50
393	J-118	0	80.00	198.01	51
395	FH-43	0	85.00	198.01	49
398	J-4	0	87.00	196.03	47
401	SERV-HDR-1	0	87.00	196.03	47

FlexTable: Pipe Table

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
P-1	J-1	J-2	24.0	PVC	130.0	0	0.00	0.000	964	0.00
P-2	J-2	J-3	24.0	PVC	130.0	0	0.00	0.000	788	0.00
POC-1	R-1	J-1	60.0	PVC	130.0	0	0.00	0.000	1	0.00
POC-2	R-2	J-51	60.0	PVC	130.0	158	0.02	0.000	1	0.00
POC-3	R-3	J-98	60.0	PVC	130.0	956	0.11	0.000	1	0.00
P-6	J-5	J-6	24.0	PVC	130.0	-94	0.07	0.000	1,034	0.00
P-7	J-6	J-7	24.0	PVC	130.0	0	0.00	0.000	108	0.00
P-11	J-6	J-64	16.0	PVC	130.0	-94	0.15	0.000	1,818	0.01
P-82	J-64	J-65	16.0	PVC	130.0	0	0.00	0.000	880	0.00
P-8	J-5	J-8	12.0	PVC	130.0	94	0.27	0.000	371	0.01
P-10	J-8	J-9	12.0	PVC	130.0	36	0.10	0.000	358	0.00
P-19	J-9	J-15	12.0	PVC	130.0	-71	0.20	0.000	55	0.00
P-42	J-15	J-34	12.0	PVC	130.0	-74	0.21	0.000	400	0.01
P-43	J-34	J-35	12.0	PVC	130.0	-23	0.06	0.000	26	0.00
P-80	J-35	J-63	12.0	PVC	130.0	-166	0.47	0.000	609	0.06
P-79	J-63	J-62	12.0	PVC	130.0	-265	0.75	0.000	338	0.07
P-83	J-62	J-66	12.0	PVC	130.0	-507	1.44	0.001	42	0.03
P-106	J-66	J-82	12.0	PVC	130.0	-657	1.86	0.001	1,405	1.64
P-114	J-82	J-89	12.0	PVC	130.0	-283	0.80	0.000	252	0.06
P-119	J-89	J-93	12.0	PVC	130.0	-210	0.60	0.000	190	0.03
P-120	J-93	J-94	12.0	PVC	130.0	-210	0.60	0.000	58	0.01
P-121	J-94	J-95	12.0	PVC	130.0	-172	0.49	0.000	316	0.03
P-122	J-95	J-96	8.0	PVC	130.0	-205	1.31	0.001	246	0.24
P-125	J-96	J-98	12.0	PVC	130.0	-956	2.71	0.002	132	0.31
P-9	J-8	SERV-HDR-2	12.0	PVC	130.0	58	0.16	0.000	20	0.00
P-12	J-9	J-10	12.0	PVC	130.0	0	0.00	0.000	98	0.00
P-20	J-15	J-16	12.0	PVC	130.0	3	0.01	0.000	208	0.00
P-21	J-16	J-17	12.0	PVC	130.0	82	0.23	0.000	232	0.01
P-22	J-17	J-18	12.0	PVC	130.0	80	0.23	0.000	126	0.00
FP-1	J-18	FH-1	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-23	J-18	J-19	12.0	PVC	130.0	80	0.23	0.000	423	0.01
FP-2	J-19	FH-2	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-24	J-19	J-20	12.0	PVC	130.0	-82	0.23	0.000	485	0.01
FP-3	J-20	FH-3	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-25	J-20	J-21	12.0	PVC	130.0	-82	0.23	0.000	44	0.00
P-28	J-21	J-23	12.0	PVC	130.0	-80	0.23	0.000	232	0.01
P-29	J-23	J-24	8.0	PVC	130.0	-4	0.03	0.000	308	0.00
FP-5	J-24	FH-5	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-30	J-24	J-16	8.0	PVC	130.0	-4	0.03	0.000	326	0.00
P-31	J-16	J-25	12.0	PVC	130.0	-84	0.24	0.000	32	0.00
FP-6	J-25	FH-6	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-32	J-25	J-26	12.0	PVC	130.0	-84	0.24	0.000	190	0.00
P-33	J-26	J-27	8.0	PVC	130.0	-3	0.02	0.000	235	0.00
FP-7	J-27	FH-7	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-34	J-27	J-28	8.0	PVC	130.0	-3	0.02	0.000	103	0.00
P-35	J-28	J-29	8.0	PVC	130.0	13	0.08	0.000	299	0.00
P-36	J-29	J-30	12.0	PVC	130.0	75	0.21	0.000	42	0.00

FlexTable: Pipe Table

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
FP-8	J-30	FH-8	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-37	J-30	J-23	12.0	PVC	130.0	75	0.21	0.000	180	0.00
P-53	J-29	J-42	12.0	PVC	130.0	-63	0.18	0.000	246	0.00
P-56	J-42	J-44	12.0	PVC	130.0	-65	0.18	0.000	123	0.00
FP-11	J-44	FH-11	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-57	J-44	J-45	12.0	PVC	130.0	-65	0.18	0.000	363	0.01
FP-12	J-45	FH-12	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-58	J-45	J-40	12.0	PVC	130.0	-65	0.18	0.000	54	0.00
P-51	J-40	J-41	8.0	PVC	130.0	35	0.22	0.000	246	0.01
P-52	J-41	J-28	8.0	PVC	130.0	15	0.10	0.000	246	0.00
P-55	J-41	J-43	8.0	PVC	130.0	-3	0.02	0.000	54	0.00
FP-10	J-43	FH-10	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-54	J-43	J-42	8.0	PVC	130.0	-3	0.02	0.000	246	0.00
P-45	J-34	J-36	12.0	PVC	130.0	-51	0.15	0.000	204	0.00
P-46	J-36	J-26	12.0	PVC	130.0	81	0.23	0.000	189	0.00
P-47	J-36	J-37	12.0	PVC	130.0	-133	0.38	0.000	65	0.00
FP-8	J-37	FH-8	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-48	J-37	J-38	12.0	PVC	130.0	-133	0.38	0.000	238	0.01
P-49	J-38	J-39	12.0	PVC	130.0	100	0.28	0.000	58	0.00
FP-9	J-39	FH-9	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-50	J-39	J-40	12.0	PVC	130.0	100	0.28	0.000	280	0.01
P-59	J-38	J-46	12.0	PVC	130.0	-232	0.66	0.000	222	0.04
P-60	J-46	J-47	12.0	PVC	130.0	-92	0.26	0.000	58	0.00
FP-13	J-47	FH-13	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-61	J-47	J-48	12.0	PVC	130.0	-92	0.26	0.000	358	0.01
P-62	J-48	J-49	12.0	PVC	130.0	-93	0.26	0.000	127	0.00
FP-14	J-49	FH-14	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-63	J-49	J-50	12.0	PVC	130.0	-93	0.26	0.000	95	0.00
P-64	J-50	J-51	12.0	PVC	130.0	-158	0.45	0.000	155	0.01
P-70	J-50	J-56	12.0	PVC	130.0	65	0.18	0.000	324	0.01
FP-17	J-56	FH-17	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-71	J-56	J-57	12.0	PVC	130.0	65	0.18	0.000	124	0.00
P-72	J-57	J-58	8.0	PVC	130.0	-2	0.02	0.000	224	0.00
P-74	J-58	J-59	8.0	PVC	130.0	-41	0.26	0.000	70	0.00
FP-18	J-59	FH-18	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-75	J-59	J-60	8.0	PVC	130.0	-41	0.26	0.000	344	0.02
P-78	J-60	J-62	12.0	PVC	130.0	-243	0.69	0.000	206	0.04
P-76	J-60	J-61	12.0	PVC	130.0	153	0.43	0.000	58	0.00
FP-19	J-61	FH-19	6.0	Ductile Iron	130.0	0	0.00	0.000	37	0.00
P-77	J-61	J-52	12.0	PVC	130.0	153	0.43	0.000	168	0.01
P-65	J-52	J-46	12.0	PVC	130.0	141	0.40	0.000	222	0.01
P-66	J-52	J-53	8.0	PVC	130.0	12	0.08	0.000	58	0.00
FP-15	J-53	FH-15	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-67	J-53	J-54	8.0	PVC	130.0	12	0.08	0.000	358	0.00

FlexTable: Pipe Table

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
P-68	J-54	J-55	12.0	PVC	130.0	-1	0.00	0.000	39	0.00
FP-16	J-55	FH-16	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-69	J-55	J-48	12.0	PVC	130.0	-1	0.00	0.000	183	0.00
P-73	J-54	J-58	12.0	PVC	130.0	14	0.04	0.000	226	0.00
P-92	J-60	J-71	8.0	PVC	130.0	49	0.31	0.000	222	0.02
P-102	J-71	J-79	8.0	PVC	130.0	25	0.16	0.000	253	0.00
FP-24	J-79	FH-24	6.0	Ductile Iron	130.0	0	0.00	0.000	23	0.00
P-103	J-79	J-78	8.0	PVC	130.0	25	0.16	0.000	370	0.01
P-101	J-78	J-73	12.0	PVC	130.0	-76	0.22	0.000	222	0.00
P-94	J-73	J-72	8.0	PVC	130.0	-24	0.15	0.000	360	0.01
FP-20	J-72	FH-20	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-93	J-72	J-71	8.0	PVC	130.0	-24	0.15	0.000	54	0.00
P-95	J-73	J-74	12.0	PVC	130.0	-52	0.15	0.000	52	0.00
FP-21	J-74	FH-21	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-96	J-74	J-58	12.0	PVC	130.0	-52	0.15	0.000	170	0.00
P-97	J-57	J-75	12.0	PVC	130.0	67	0.19	0.000	376	0.01
FP-22	J-75	FH-22	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-98	J-75	J-76	12.0	PVC	130.0	67	0.19	0.000	309	0.01
FP-23	J-76	FH-23	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-99	J-76	J-77	12.0	PVC	130.0	67	0.19	0.000	55	0.00
P-100	J-77	J-78	12.0	PVC	130.0	-101	0.29	0.000	154	0.01
P-104	J-77	J-80	8.0	PVC	130.0	168	1.07	0.001	232	0.16
FP-25	J-80	FH-25	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-105	J-80	J-81	8.0	PVC	130.0	168	1.07	0.001	82	0.06
P-26	J-21	J-22	8.0	PVC	130.0	-2	0.01	0.000	307	0.00
P-27	J-22	J-17	8.0	PVC	130.0	-2	0.01	0.000	326	0.00
FP-4	J-22	FH-4	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-13	J-10	J-11	12.0	PVC	130.0	1	0.00	0.000	424	0.00
P-14	J-11	J-12	12.0	PVC	130.0	1	0.00	0.000	963	0.00
P-15	J-12	J-11	12.0	PVC	130.0	0	0.00	0.000	711	0.00
P-16	J-12	J-13	12.0	PVC	130.0	1	0.00	0.000	380	0.00
P-17	J-13	J-14	12.0	PVC	130.0	0	0.00	0.000	778	0.00
P-18	J-14	J-10	12.0	PVC	130.0	1	0.00	0.000	15	0.00
P-39	J-13	J-32	12.0	PVC	130.0	0	0.00	0.000	424	0.00
P-40	J-32	J-31	12.0	PVC	130.0	1	0.00	0.000	777	0.00
P-38	J-31	J-14	12.0	PVC	130.0	0	0.00	0.000	424	0.00
P-41	J-31	J-33	12.0	PVC	130.0	1	0.00	0.000	42	0.00
P-44	J-35	J-33	12.0	PVC	130.0	0	0.00	0.000	99	0.00
P-81	J-63	J-64	12.0	PVC	130.0	99	0.28	0.000	1,028	0.04
P-86	J-33	J-68	12.0	PVC	130.0	1	0.00	0.000	702	0.00
P-85	J-68	J-67	12.0	PVC	130.0	1	0.00	0.000	310	0.00
P-90	J-67	J-70	12.0	PVC	130.0	0	0.00	0.000	536	0.00
P-87	J-68	J-69	12.0	PVC	130.0	0	0.00	0.000	536	0.00
P-88	J-69	J-32	12.0	PVC	130.0	1	0.00	0.000	742	0.00
P-89	J-70	J-69	12.0	PVC	130.0	1	0.00	0.000	310	0.00
P-84	J-66	J-67	12.0	PVC	130.0	0	0.00	0.000	252	0.00
P-91	J-67	J-70	12.0	PVC	130.0	1	0.00	0.000	2,182	0.00

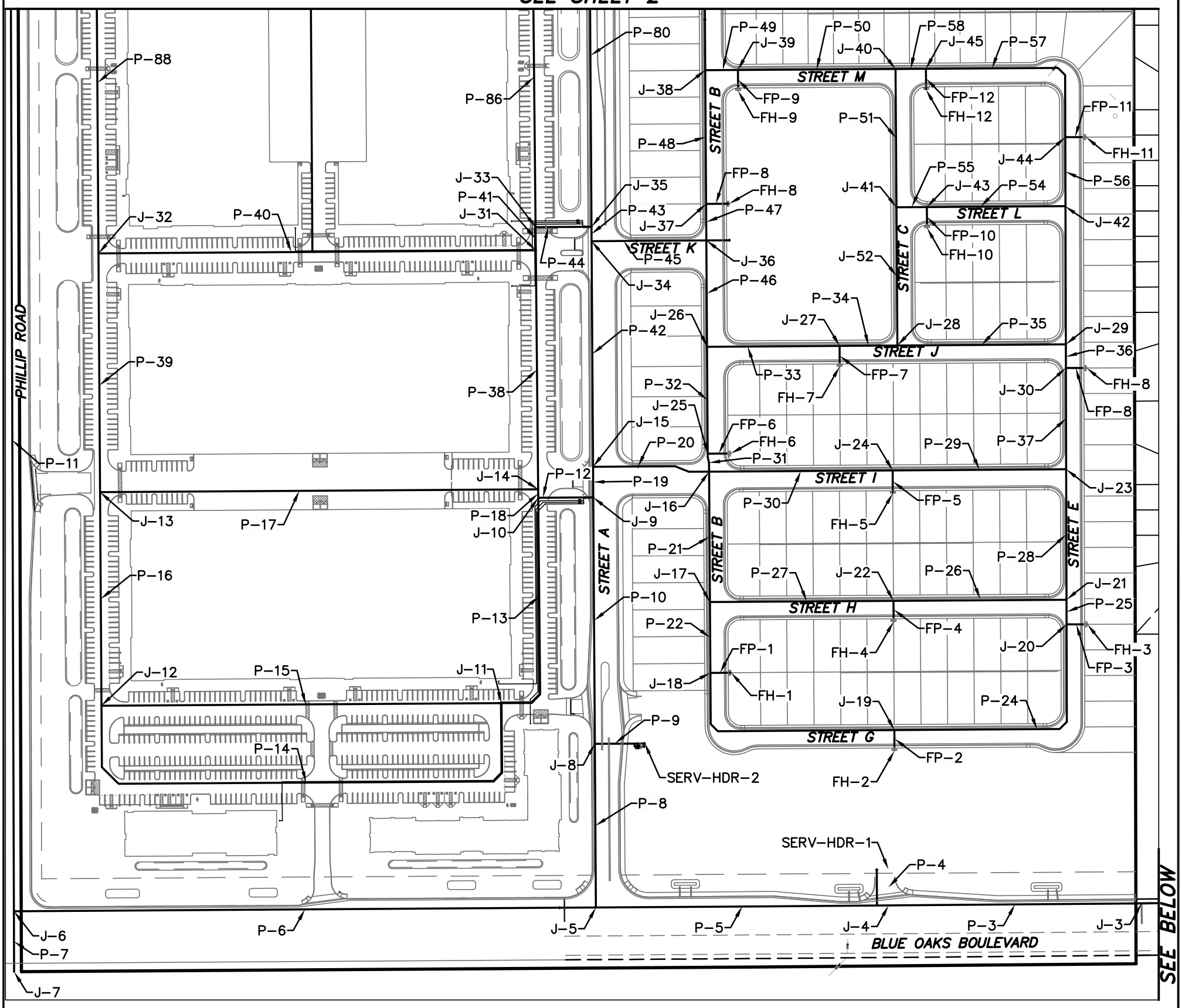
FlexTable: Pipe Table

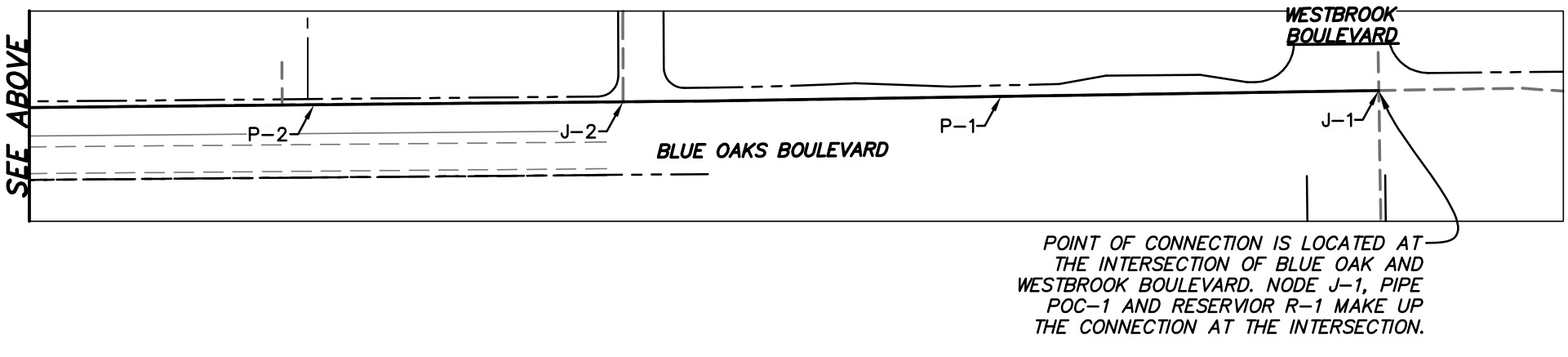
Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
FP-31	J-93	FH-31	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-107	J-82	J-83	12.0	PVC	130.0	-203	0.58	0.000	59	0.01
FP-26	J-83	FH-26	6.0	Ductile Iron	130.0	0	0.00	0.000	36	0.00
P-108	J-83	J-84	12.0	PVC	130.0	-203	0.58	0.000	417	0.06
FP-27	J-84	FH-27	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-109	J-84	J-85	12.0	PVC	130.0	-203	0.58	0.000	35	0.00
P-110	J-85	J-86	8.0	PVC	130.0	152	0.97	0.001	180	0.10
P-111	J-85	J-87	12.0	PVC	130.0	-355	1.01	0.000	255	0.10
P-112	J-87	J-88	8.0	PVC	130.0	89	0.57	0.000	206	0.04
FP-28	J-88	FH-28	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-113	J-88	J-89	8.0	PVC	130.0	89	0.57	0.000	284	0.06
P-115	J-89	J-90	8.0	PVC	130.0	16	0.10	0.000	135	0.00
FP-29	J-90	FH-29	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-116	J-90	J-91	8.0	PVC	130.0	16	0.10	0.000	262	0.00
P-117	J-91	J-92	12.0	PVC	130.0	171	0.49	0.000	216	0.02
FP-30	J-92	FH-30	6.0	Ductile Iron	130.0	0	0.00	0.000	32	0.00
P-118	J-92	J-82	12.0	PVC	130.0	171	0.49	0.000	389	0.04
P-124	J-87	J-97	12.0	PVC	130.0	-444	1.26	0.001	188	0.11
FP-32	J-97	FH-32	6.0	Ductile Iron	130.0	0	0.00	0.000	37	0.00
P-123	J-97	J-96	12.0	PVC	130.0	-444	1.26	0.001	173	0.10
P-133	J-95	J-104	12.0	PVC	130.0	33	0.09	0.000	80	0.00
FP-35	J-104	FH-35	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-132	J-104	J-103	12.0	PVC	130.0	33	0.09	0.000	311	0.00
P-131	J-103	J-102	12.0	PVC	130.0	159	0.45	0.000	209	0.02
FP-34	J-102	FH-34	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-130	J-102	J-99	12.0	PVC	130.0	159	0.45	0.000	98	0.01
P-126	J-99	J-94	12.0	PVC	130.0	52	0.15	0.000	299	0.00
P-127	J-99	J-100	12.0	PVC	130.0	108	0.31	0.000	238	0.01
P-128	J-100	J-101	12.0	PVC	130.0	156	0.44	0.000	150	0.01
FP-33	J-101	FH-33	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-129	J-101	J-91	12.0	PVC	130.0	156	0.44	0.000	241	0.02
P-138	J-103	J-108	12.0	PVC	130.0	-127	0.36	0.000	242	0.01
P-139	J-108	J-109	8.0	PVC	130.0	48	0.31	0.000	32	0.00
FP-38	J-109	FH-38	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-140	J-109	J-110	8.0	PVC	130.0	48	0.31	0.000	427	0.03
FP-39	J-110	FH-39	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-141	J-110	J-100	8.0	PVC	130.0	48	0.31	0.000	282	0.02
P-134	J-96	J-105	12.0	PVC	130.0	308	0.87	0.000	271	0.08
FP-36	J-105	FH-36	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-135	J-105	J-106	12.0	PVC	130.0	308	0.87	0.000	196	0.06
P-136	J-106	J-107	8.0	PVC	130.0	93	0.59	0.000	32	0.01
FP-37	J-107	FH-37	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00

FlexTable: Pipe Table

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
P-137	J-107	J-108	8.0	PVC	130.0	93	0.59	0.000	388	0.09
P-153	J-106	J-119	12.0	PVC	130.0	215	0.61	0.000	242	0.04
P-152	J-119	J-111	8.0	PVC	130.0	68	0.43	0.000	421	0.05
P-142	J-111	J-108	12.0	PVC	130.0	82	0.23	0.000	242	0.01
P-143	J-111	J-112	8.0	PVC	130.0	54	0.34	0.000	187	0.02
FP-40	J-112	FH-40	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-144	J-112	J-113	8.0	PVC	130.0	54	0.34	0.000	330	0.03
FP-41	J-113	FH-41	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-145	J-113	J-114	8.0	PVC	130.0	54	0.34	0.000	58	0.00
P-146	J-114	J-115	8.0	PVC	130.0	133	0.85	0.000	108	0.05
P-147	J-114	J-116	8.0	PVC	130.0	-79	0.50	0.000	309	0.05
P-148	J-116	J-111	12.0	PVC	130.0	68	0.19	0.000	242	0.00
P-149	J-116	J-117	12.0	PVC	130.0	-147	0.42	0.000	54	0.00
FP-42	J-117	FH-42	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-150	J-117	J-118	12.0	PVC	130.0	-147	0.42	0.000	429	0.03
FP-43	J-118	FH-43	6.0	Ductile Iron	130.0	0	0.00	0.000	36	0.00
P-151	J-118	J-119	12.0	PVC	130.0	-147	0.42	0.000	175	0.01
P-3	J-3	J-4	24.0	PVC	130.0	0	0.00	0.000	244	0.00
P-5	J-4	J-5	24.0	PVC	130.0	0	0.00	0.000	520	0.00
P-4	J-4	SERV-HDR-1	12.0	PVC	130.0	0	0.00	0.000	20	0.00

SEE SHEET 2





POINT OF CONNECTION IS LOCATED AT THE INTERSECTION OF BLUE OAK AND WESTBROOK BOULEVARD. NODE J-1, PIPE POC-1 AND RESERVIOR R-1 MAKE UP THE CONNECTION AT THE INTERSECTION.

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0 100 200 400
SCALE: 1"=200'

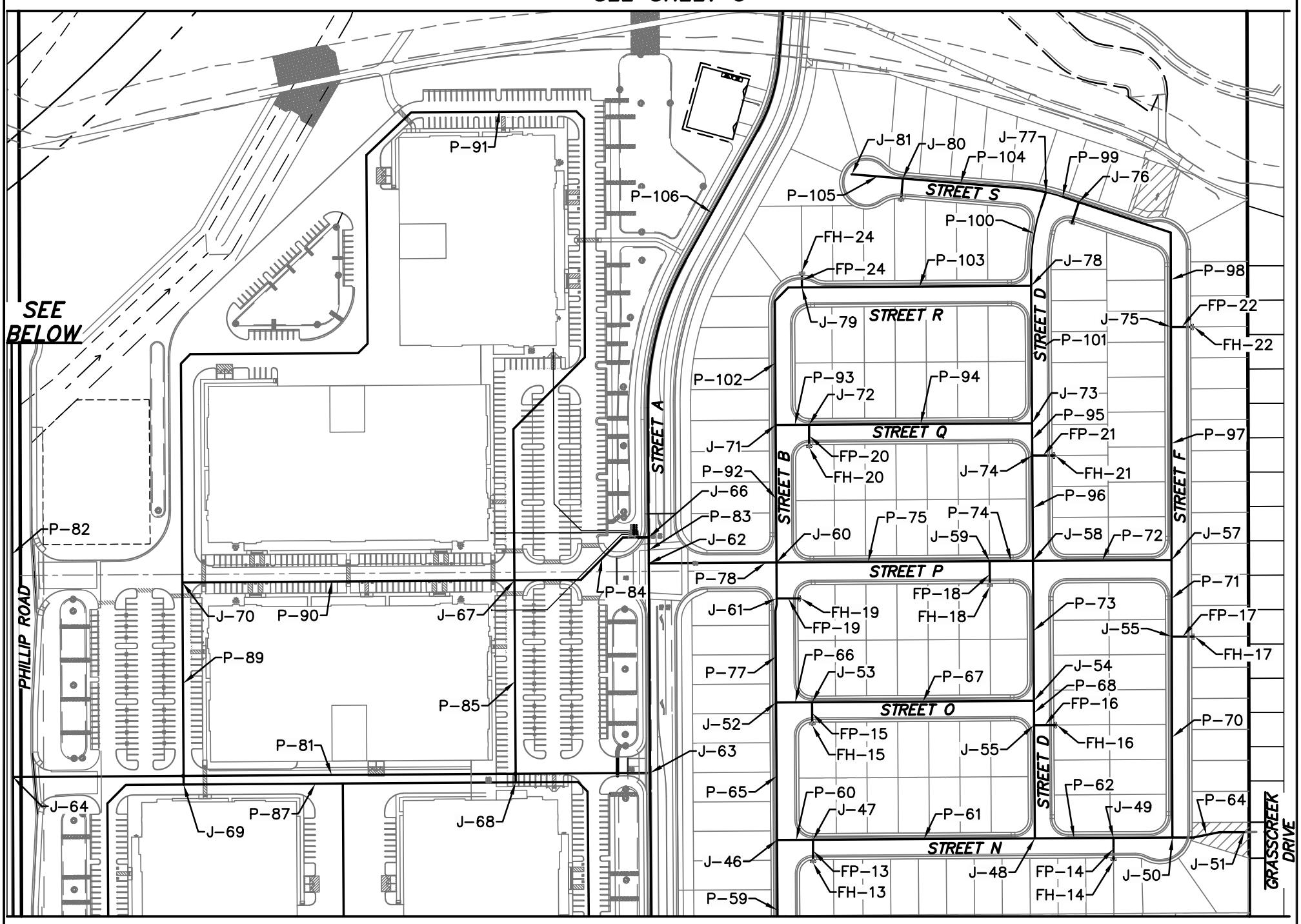
FIRE SYSTEM EXHIBIT
FOR
PHILLIP ROAD SITE

CITY OF ROSEVILLE, PLACER COUNTY, CALIFORNIA

SHEET 1 OF 3 APRIL 2, 2025

X:\Land Projects\4042-60-4\dwg\4042-60-4_EXH_Fire Site Plan- Buildout.dwg

SEE SHEET 3



SEE SHEET 1

LM LAUGENOUR AND MEIKLE
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LM
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CITY OF ROSEVILLE, PLACER COUNTY, CALIFORNIA

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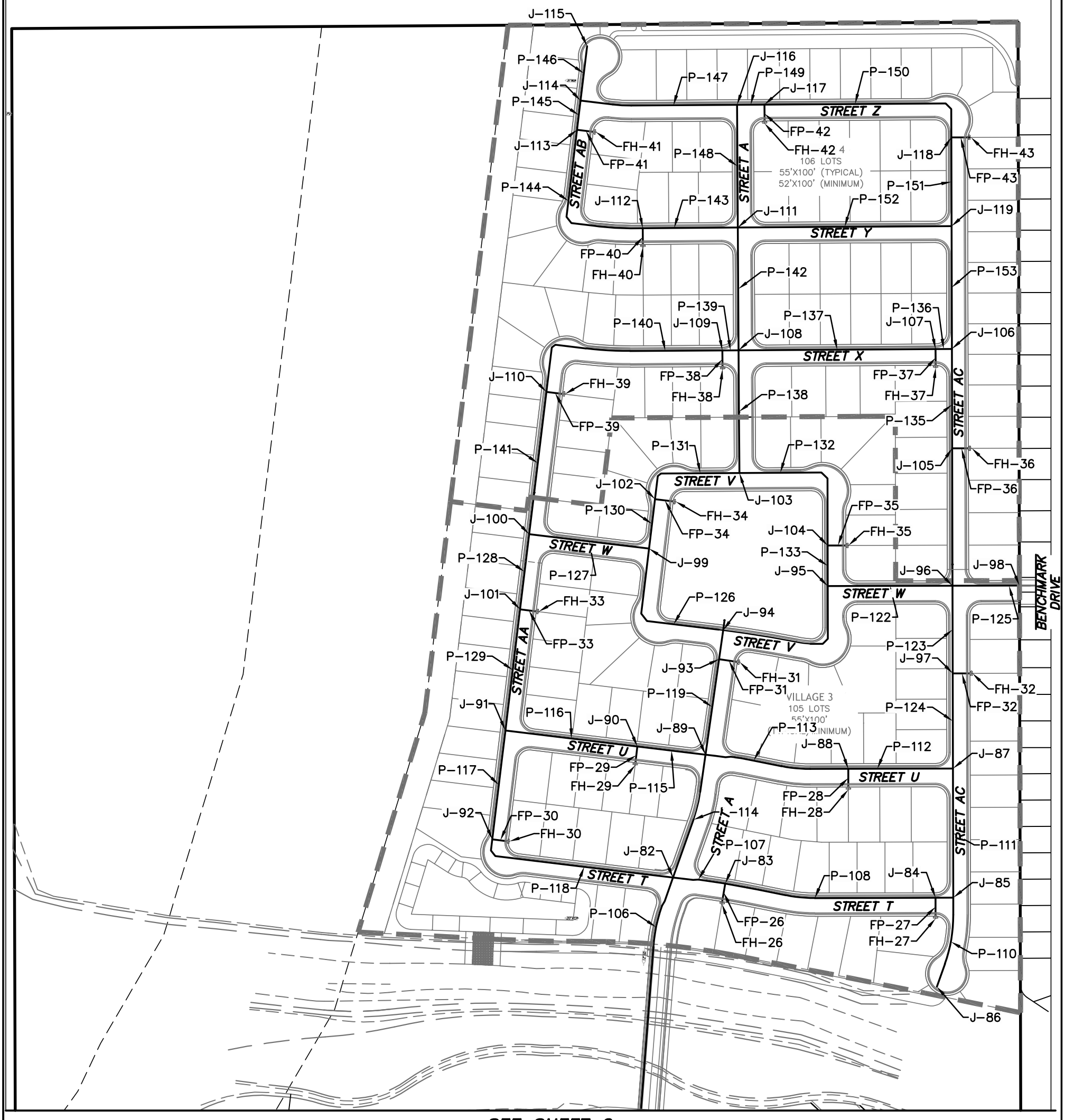

SEE SHEET 2

0 100 200 400

SCALE: 1"=200'

FIRE SYSTEM EXHIBIT

FOR

PHILLIP ROAD SITE

CITY OF ROSEVILLE, PLACER COUNTY, CALIFORNIA

SHEET 3 OF 3 APRIL 2, 2025

LAUGENOUR AND MEIKLE
CIVIL ENGINEERING · LAND SURVEYING · PLANNING
608 COURT STREET, WOODLAND, CALIFORNIA 95695 · PHONE: (530) 662-1755
P.O. BOX 828, WOODLAND, CALIFORNIA 95776 · FAX: (530) 662-4602

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APPENDIX E

POTABLE WATER PLAN – BUILDOUT ONSITE WITH FIRE FLOW MODEL RESULTS

FlexTable: Junction Table

ID	Label	Demand (gpm)	Elevation (ft)	Hydraulic Grade (ft)	Pressure (psi)
31	J-1	0	81.00	195.72	50
32	J-2	0	87.00	195.43	47
33	J-3	0	89.00	195.19	46
39	J-51	0	76.00	196.12	52
42	J-98	0	83.00	198.50	50
44	J-5	0	87.00	194.95	47
46	J-6	0	88.00	194.91	46
48	J-7	0	88.00	194.91	46
50	J-64	5	85.00	194.36	47
52	J-65	0	80.00	194.36	49
54	J-8	0	82.00	193.44	48
56	J-9	107	82.00	192.09	48
58	J-15	0	82.00	192.11	48
60	J-34	0	82.00	192.11	48
62	J-35	143	83.50	192.09	47
64	J-63	0	78.00	193.12	50
66	J-62	0	77.00	193.14	50
68	J-66	150	77.00	193.11	50
70	J-82	0	79.50	197.14	51
72	J-89	0	76.50	197.28	52
74	J-93	0	76.70	197.34	52
76	J-94	14	76.30	197.36	52
78	J-95	0	77.70	197.43	52
80	J-96	0	81.50	197.90	50
83	SERV-HDR-2	58	84.00	193.44	47
85	J-10	0	82.00	191.57	47
87	J-16	0	81.50	192.20	48
89	J-17	0	82.00	192.20	48
91	J-18	0	82.00	192.20	48
93	FH-1	0	87.20	192.20	45
95	J-19	162	83.00	192.20	47
97	FH-2	0	89.00	192.20	45
99	J-20	0	84.00	192.24	47
101	FH-3	0	89.00	192.24	45
103	J-21	0	83.00	192.24	47
106	J-23	0	82.00	192.28	48
108	J-24	0	82.00	192.24	48
110	FH-5	0	87.10	192.24	45
113	J-25	0	81.00	192.21	48
115	FH-6	0	86.40	192.21	46
117	J-26	0	80.90	192.25	48
119	J-27	0	82.00	192.30	48
121	FH-7	0	86.60	192.30	46
123	J-28	0	83.00	192.33	47
125	J-29	0	84.00	192.33	47
127	J-30	0	83.50	192.32	47
129	FH-8	0	88.60	192.32	45
132	J-42	0	82.50	192.39	48
134	J-44	0	81.50	192.41	48

FlexTable: Junction Table

ID	Label	Demand (gpm)	Elevation (ft)	Hydraulic Grade (ft)	Pressure (psi)
136	FH-11	0	86.00	192.41	46
138	J-45	0	79.70	192.49	49
140	FH-12	0	84.50	192.49	47
142	J-40	0	79.50	192.50	49
144	J-41	22	80.50	192.39	48
147	J-43	0	80.60	192.39	48
149	FH-10	0	85.60	192.39	46
152	J-36	0	80.00	192.26	49
155	J-37	0	79.80	192.35	49
157	FH-8	0	85.30	192.35	46
159	J-38	0	78.90	192.65	49
161	J-39	0	79.20	192.63	49
163	FH-9	0	84.20	192.63	47
166	J-46	0	78.30	193.31	50
168	J-47	0	78.50	193.42	50
170	FH-13	0	83.50	193.42	48
172	J-48	0	77.30	194.10	51
174	J-49	0	77.00	194.55	51
176	FH-14	0	81.60	194.55	49
178	J-50	0	76.90	194.89	51
181	J-56	0	75.70	194.51	51
183	FH-17	0	80.70	194.51	49
185	J-57	0	76.00	194.37	51
187	J-58	0	76.30	194.01	51
189	J-59	0	76.00	193.90	51
191	FH-18	0	81.00	193.90	49
193	J-60	0	77.40	193.34	50
196	J-61	0	77.40	193.34	50
198	FH-19	0	82.40	193.34	48
200	J-52	0	77.20	193.34	50
203	J-53	0	77.50	193.44	50
205	FH-15	0	82.50	193.44	48
207	J-54	0	76.00	194.02	51
209	J-55	0	76.00	194.03	51
211	FH-16	0	80.80	194.03	49
215	J-71	0	77.20	193.75	50
217	J-79	0	77.50	193.86	50
219	FH-24	0	82.30	193.86	48
221	J-78	0	76.30	194.02	51
223	J-73	0	76.00	194.01	51
225	J-72	0	77.50	193.79	50
227	FH-20	0	82.40	193.79	48
230	J-74	0	76.00	194.01	51
232	FH-21	0	80.90	194.01	49
235	J-75	0	75.30	194.20	51
237	FH-22	0	80.35	194.20	49
239	J-76	0	76.00	194.06	51
241	FH-23	0	81.00	194.06	49
243	J-77	0	75.80	194.04	51

FlexTable: Junction Table

ID	Label	Demand (gpm)	Elevation (ft)	Hydraulic Grade (ft)	Pressure (psi)
246	J-80	0	76.50	193.88	51
248	FH-25	0	81.25	193.88	49
250	J-81	168	77.80	193.83	50
252	J-22	0	83.00	192.22	47
255	FH-4	0	88.20	192.22	45
257	J-11	0	83.00	190.67	47
259	J-12	0	83.00	190.18	46
262	J-13	0	83.00	190.20	46
264	J-14	0	82.00	191.55	47
267	J-32	0	83.00	190.33	46
269	J-31	0	82.00	191.62	47
272	J-33	0	82.00	191.74	47
277	J-68	0	82.00	191.67	47
280	J-67	0	83.00	191.94	47
282	J-70	0	82.50	191.47	47
284	J-69	0	82.00	190.92	47
290	FH-31	0	81.70	197.34	50
292	J-83	0	79.40	197.16	51
294	FH-26	0	84.50	197.16	49
296	J-84	0	81.00	197.31	50
298	FH-27	0	86.00	197.31	48
300	J-85	0	81.00	197.32	50
302	J-86	152	82.00	197.22	50
304	J-87	0	80.60	197.50	51
306	J-88	0	78.75	197.41	51
308	FH-28	0	83.80	197.41	49
311	J-90	0	76.70	197.28	52
313	FH-29	0	81.80	197.28	50
315	J-91	0	76.50	197.27	52
317	J-92	0	76.50	197.22	52
319	FH-30	0	82.00	197.22	50
322	J-97	0	81.50	197.71	50
324	FH-32	0	86.44	197.71	48
327	J-104	0	77.80	197.43	52
329	FH-35	0	82.80	197.43	50
331	J-103	0	76.40	197.43	52
333	J-102	0	76.60	197.39	52
335	FH-34	0	81.80	197.39	50
337	J-99	0	77.00	197.37	52
340	J-100	0	76.20	197.35	52
342	J-101	0	76.70	197.32	52
344	FH-33	0	81.70	197.32	50
347	J-108	0	76.30	197.47	52
349	J-109	0	76.30	197.46	52
351	FH-38	0	81.30	197.46	50
353	J-110	0	76.90	197.39	52
355	FH-39	0	81.90	197.39	50
358	J-105	0	81.00	197.76	51
360	FH-36	0	86.10	197.76	48

FlexTable: Junction Table

ID	Label	Demand (gpm)	Elevation (ft)	Hydraulic Grade (ft)	Pressure (psi)
362	J-106	0	80.30	197.65	51
364	J-107	0	80.30	197.64	51
366	FH-37	0	85.30	197.64	49
369	J-119	0	80.50	197.59	51
371	J-111	0	76.60	197.49	52
374	J-112	0	77.40	197.48	52
376	FH-40	0	82.00	197.48	50
378	J-113	0	78.50	197.45	51
380	FH-41	0	83.50	197.45	49
382	J-114	0	78.90	197.45	51
384	J-115	133	79.50	197.40	51
386	J-116	0	77.90	197.50	52
389	J-117	0	78.00	197.51	52
391	FH-42	0	83.00	197.51	50
393	J-118	0	80.00	197.56	51
395	FH-43	0	85.00	197.56	49
398	J-4	0	87.00	195.11	47
401	SERV-HDR-1	0	87.00	195.11	47
403	FH-44	1,020	88.50	187.49	43
405	FH-45	1,020	88.50	187.51	43
407	FH-46	1,020	88.50	187.63	43
409	FH-47	1,020	87.50	188.22	44

FlexTable: Pipe Table

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
P-1	J-1	J-2	24.0	PVC	130.0	1,971	1.40	0.000	964	0.29
P-2	J-2	J-3	24.0	PVC	130.0	1,971	1.40	0.000	788	0.24
POC-1	R-1	J-1	60.0	PVC	130.0	1,971	0.22	0.000	1	0.00
POC-2	R-2	J-51	60.0	PVC	130.0	1,856	0.21	0.000	1	0.00
POC-3	R-3	J-98	60.0	PVC	130.0	1,367	0.16	0.000	1	0.00
P-6	J-5	J-6	24.0	PVC	130.0	676	0.48	0.000	1,034	0.04
P-7	J-6	J-7	24.0	PVC	130.0	0	0.00	0.000	108	0.00
P-11	J-6	J-64	16.0	PVC	130.0	676	1.08	0.000	1,818	0.55
P-82	J-64	J-65	16.0	PVC	130.0	0	0.00	0.000	880	0.00
P-8	J-5	J-8	12.0	PVC	130.0	1,295	3.67	0.004	371	1.52
P-10	J-8	J-9	12.0	PVC	130.0	1,237	3.51	0.004	358	1.35
P-19	J-9	J-15	12.0	PVC	130.0	-363	1.03	0.000	55	0.02
P-42	J-15	J-34	12.0	PVC	130.0	17	0.05	0.000	400	0.00
P-43	J-34	J-35	12.0	PVC	130.0	539	1.53	0.001	26	0.02
P-80	J-35	J-63	12.0	PVC	130.0	-803	2.28	0.002	609	1.03
P-79	J-63	J-62	12.0	PVC	130.0	-133	0.38	0.000	338	0.02
P-83	J-62	J-66	12.0	PVC	130.0	469	1.33	0.001	42	0.03
P-106	J-66	J-82	12.0	PVC	130.0	-1,068	3.03	0.003	1,405	4.02
P-114	J-82	J-89	12.0	PVC	130.0	-447	1.27	0.001	252	0.14
P-119	J-89	J-93	12.0	PVC	130.0	-334	0.95	0.000	190	0.06
P-120	J-93	J-94	12.0	PVC	130.0	-334	0.95	0.000	58	0.02
P-121	J-94	J-95	12.0	PVC	130.0	-266	0.75	0.000	316	0.07
P-122	J-95	J-96	8.0	PVC	130.0	-296	1.89	0.002	246	0.47
P-125	J-96	J-98	12.0	PVC	130.0	-1,367	3.88	0.005	132	0.60
P-9	J-8	SERV-HDR-2	12.0	PVC	130.0	58	0.16	0.000	20	0.00
P-12	J-9	J-10	12.0	PVC	130.0	1,493	4.24	0.005	98	0.52
P-20	J-15	J-16	12.0	PVC	130.0	-380	1.08	0.000	208	0.09
P-21	J-16	J-17	12.0	PVC	130.0	-46	0.13	0.000	232	0.00
P-22	J-17	J-18	12.0	PVC	130.0	3	0.01	0.000	126	0.00
FP-1	J-18	FH-1	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-23	J-18	J-19	12.0	PVC	130.0	3	0.01	0.000	423	0.00
FP-2	J-19	FH-2	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-24	J-19	J-20	12.0	PVC	130.0	-159	0.45	0.000	485	0.04
FP-3	J-20	FH-3	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-25	J-20	J-21	12.0	PVC	130.0	-159	0.45	0.000	44	0.00
P-28	J-21	J-23	12.0	PVC	130.0	-208	0.59	0.000	232	0.03
P-29	J-23	J-24	8.0	PVC	130.0	67	0.43	0.000	308	0.04
FP-5	J-24	FH-5	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-30	J-24	J-16	8.0	PVC	130.0	67	0.43	0.000	326	0.04
P-31	J-16	J-25	12.0	PVC	130.0	-266	0.76	0.000	32	0.01
FP-6	J-25	FH-6	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-32	J-25	J-26	12.0	PVC	130.0	-266	0.76	0.000	190	0.04
P-33	J-26	J-27	8.0	PVC	130.0	-97	0.62	0.000	235	0.06
FP-7	J-27	FH-7	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-34	J-27	J-28	8.0	PVC	130.0	-97	0.62	0.000	103	0.02
P-35	J-28	J-29	8.0	PVC	130.0	0	0.00	0.000	299	0.00
P-36	J-29	J-30	12.0	PVC	130.0	276	0.78	0.000	42	0.01

FlexTable: Pipe Table

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
FP-8	J-30	FH-8	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-37	J-30	J-23	12.0	PVC	130.0	276	0.78	0.000	180	0.04
P-53	J-29	J-42	12.0	PVC	130.0	-276	0.78	0.000	246	0.06
P-56	J-42	J-44	12.0	PVC	130.0	-260	0.74	0.000	123	0.03
FP-11	J-44	FH-11	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-57	J-44	J-45	12.0	PVC	130.0	-260	0.74	0.000	363	0.08
FP-12	J-45	FH-12	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-58	J-45	J-40	12.0	PVC	130.0	-260	0.74	0.000	54	0.01
P-51	J-40	J-41	8.0	PVC	130.0	135	0.86	0.000	246	0.11
P-52	J-41	J-28	8.0	PVC	130.0	97	0.62	0.000	246	0.06
P-55	J-41	J-43	8.0	PVC	130.0	16	0.10	0.000	54	0.00
FP-10	J-43	FH-10	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-54	J-43	J-42	8.0	PVC	130.0	16	0.10	0.000	246	0.00
P-45	J-34	J-36	12.0	PVC	130.0	-521	1.48	0.001	204	0.15
P-46	J-36	J-26	12.0	PVC	130.0	169	0.48	0.000	189	0.02
P-47	J-36	J-37	12.0	PVC	130.0	-691	1.96	0.001	65	0.08
FP-8	J-37	FH-8	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-48	J-37	J-38	12.0	PVC	130.0	-691	1.96	0.001	238	0.30
P-49	J-38	J-39	12.0	PVC	130.0	395	1.12	0.000	58	0.03
FP-9	J-39	FH-9	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-50	J-39	J-40	12.0	PVC	130.0	395	1.12	0.000	280	0.13
P-59	J-38	J-46	12.0	PVC	130.0	-1,086	3.08	0.003	222	0.66
P-60	J-46	J-47	12.0	PVC	130.0	-856	2.43	0.002	58	0.11
FP-13	J-47	FH-13	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-61	J-47	J-48	12.0	PVC	130.0	-856	2.43	0.002	358	0.68
P-62	J-48	J-49	12.0	PVC	130.0	-1,200	3.40	0.004	127	0.45
FP-14	J-49	FH-14	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-63	J-49	J-50	12.0	PVC	130.0	-1,200	3.40	0.004	95	0.34
P-64	J-50	J-51	12.0	PVC	130.0	-1,856	5.26	0.008	155	1.23
P-70	J-50	J-56	12.0	PVC	130.0	655	1.86	0.001	324	0.38
FP-17	J-56	FH-17	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-71	J-56	J-57	12.0	PVC	130.0	655	1.86	0.001	124	0.14
P-72	J-57	J-58	8.0	PVC	130.0	266	1.70	0.002	224	0.35
P-74	J-58	J-59	8.0	PVC	130.0	271	1.73	0.002	70	0.11
FP-18	J-59	FH-18	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-75	J-59	J-60	8.0	PVC	130.0	271	1.73	0.002	344	0.56
P-78	J-60	J-62	12.0	PVC	130.0	602	1.71	0.001	206	0.20
P-76	J-60	J-61	12.0	PVC	130.0	-41	0.11	0.000	58	0.00
FP-19	J-61	FH-19	6.0	Ductile Iron	130.0	0	0.00	0.000	37	0.00
P-77	J-61	J-52	12.0	PVC	130.0	-41	0.11	0.000	168	0.00
P-65	J-52	J-46	12.0	PVC	130.0	230	0.65	0.000	222	0.04
P-66	J-52	J-53	8.0	PVC	130.0	-270	1.73	0.002	58	0.09
FP-15	J-53	FH-15	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-67	J-53	J-54	8.0	PVC	130.0	-270	1.73	0.002	358	0.58

FlexTable: Pipe Table

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
P-68	J-54	J-55	12.0	PVC	130.0	-345	0.98	0.000	39	0.01
FP-16	J-55	FH-16	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-69	J-55	J-48	12.0	PVC	130.0	-345	0.98	0.000	183	0.06
P-73	J-54	J-58	12.0	PVC	130.0	74	0.21	0.000	226	0.00
P-92	J-60	J-71	8.0	PVC	130.0	-291	1.86	0.002	222	0.41
P-102	J-71	J-79	8.0	PVC	130.0	-130	0.83	0.000	253	0.11
FP-24	J-79	FH-24	6.0	Ductile Iron	130.0	0	0.00	0.000	23	0.00
P-103	J-79	J-78	8.0	PVC	130.0	-130	0.83	0.000	370	0.16
P-101	J-78	J-73	12.0	PVC	130.0	91	0.26	0.000	222	0.01
P-94	J-73	J-72	8.0	PVC	130.0	160	1.02	0.001	360	0.22
FP-20	J-72	FH-20	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-93	J-72	J-71	8.0	PVC	130.0	160	1.02	0.001	54	0.03
P-95	J-73	J-74	12.0	PVC	130.0	-70	0.20	0.000	52	0.00
FP-21	J-74	FH-21	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-96	J-74	J-58	12.0	PVC	130.0	-70	0.20	0.000	170	0.00
P-97	J-57	J-75	12.0	PVC	130.0	389	1.10	0.000	376	0.17
FP-22	J-75	FH-22	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-98	J-75	J-76	12.0	PVC	130.0	389	1.10	0.000	309	0.14
FP-23	J-76	FH-23	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-99	J-76	J-77	12.0	PVC	130.0	389	1.10	0.000	55	0.02
P-100	J-77	J-78	12.0	PVC	130.0	221	0.63	0.000	154	0.02
P-104	J-77	J-80	8.0	PVC	130.0	168	1.07	0.001	232	0.16
FP-25	J-80	FH-25	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-105	J-80	J-81	8.0	PVC	130.0	168	1.07	0.001	82	0.06
P-26	J-21	J-22	8.0	PVC	130.0	50	0.32	0.000	307	0.02
P-27	J-22	J-17	8.0	PVC	130.0	50	0.32	0.000	326	0.02
FP-4	J-22	FH-4	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-13	J-10	J-11	12.0	PVC	130.0	909	2.58	0.002	424	0.90
P-14	J-11	J-12	12.0	PVC	130.0	417	1.18	0.001	963	0.48
P-15	J-12	J-11	12.0	PVC	130.0	-492	1.39	0.001	711	0.48
P-16	J-12	J-13	12.0	PVC	130.0	-111	0.31	0.000	380	0.02
P-17	J-13	J-14	12.0	PVC	130.0	-816	2.32	0.002	778	1.35
P-18	J-14	J-10	12.0	PVC	130.0	-584	1.66	0.001	15	0.01
P-39	J-13	J-32	12.0	PVC	130.0	-315	0.89	0.000	424	0.13
P-40	J-32	J-31	12.0	PVC	130.0	-799	2.27	0.002	777	1.30
P-38	J-31	J-14	12.0	PVC	130.0	232	0.66	0.000	424	0.07
P-41	J-31	J-33	12.0	PVC	130.0	-1,031	2.92	0.003	42	0.11
P-44	J-35	J-33	12.0	PVC	130.0	1,199	3.40	0.004	99	0.35
P-81	J-63	J-64	12.0	PVC	130.0	-671	1.90	0.001	1,028	1.24
P-86	J-33	J-68	12.0	PVC	130.0	168	0.48	0.000	702	0.07
P-85	J-68	J-67	12.0	PVC	130.0	-560	1.59	0.001	310	0.27
P-90	J-67	J-70	12.0	PVC	130.0	564	1.60	0.001	536	0.47
P-87	J-68	J-69	12.0	PVC	130.0	728	2.07	0.001	536	0.75
P-88	J-69	J-32	12.0	PVC	130.0	536	1.52	0.001	742	0.59
P-89	J-70	J-69	12.0	PVC	130.0	828	2.35	0.002	310	0.55
P-84	J-66	J-67	12.0	PVC	130.0	1,388	3.94	0.005	252	1.17
P-91	J-67	J-70	12.0	PVC	130.0	264	0.75	0.000	2,182	0.47

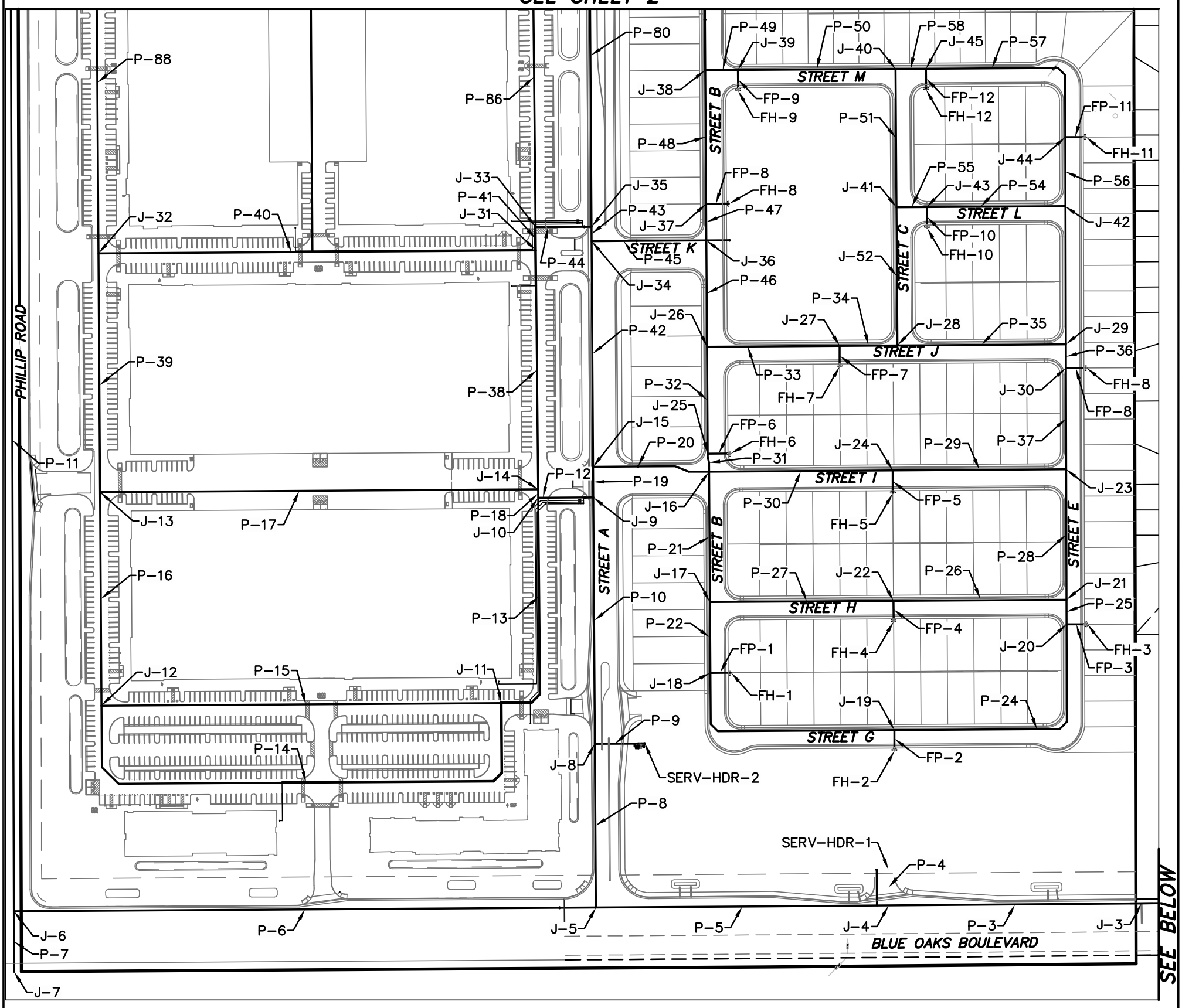
FlexTable: Pipe Table

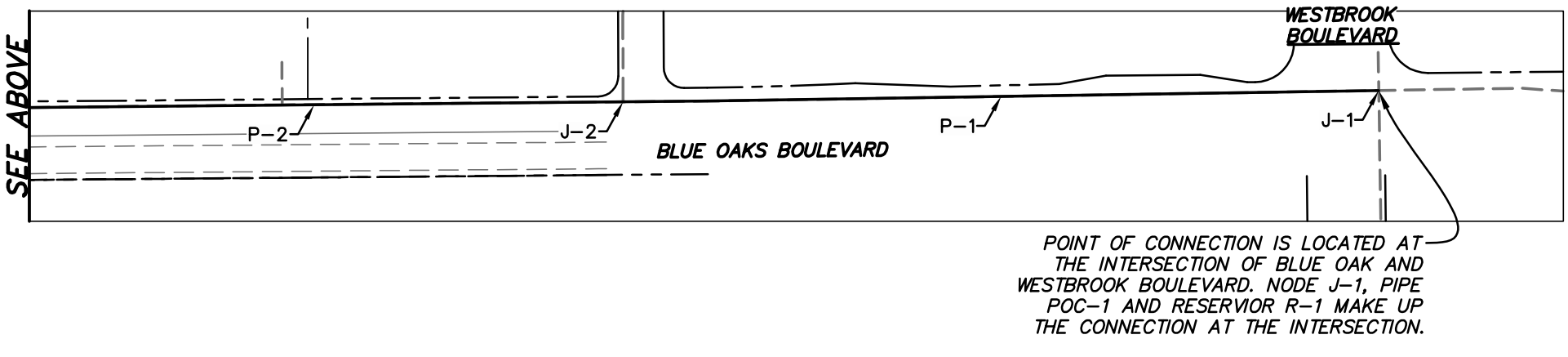
Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
FP-31	J-93	FH-31	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-107	J-82	J-83	12.0	PVC	130.0	-351	1.00	0.000	59	0.02
FP-26	J-83	FH-26	6.0	Ductile Iron	130.0	0	0.00	0.000	36	0.00
P-108	J-83	J-84	12.0	PVC	130.0	-351	1.00	0.000	417	0.15
FP-27	J-84	FH-27	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-109	J-84	J-85	12.0	PVC	130.0	-351	1.00	0.000	35	0.01
P-110	J-85	J-86	8.0	PVC	130.0	152	0.97	0.001	180	0.10
P-111	J-85	J-87	12.0	PVC	130.0	-503	1.43	0.001	255	0.18
P-112	J-87	J-88	8.0	PVC	130.0	136	0.87	0.000	206	0.09
FP-28	J-88	FH-28	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-113	J-88	J-89	8.0	PVC	130.0	136	0.87	0.000	284	0.13
P-115	J-89	J-90	8.0	PVC	130.0	24	0.15	0.000	135	0.00
FP-29	J-90	FH-29	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-116	J-90	J-91	8.0	PVC	130.0	24	0.15	0.000	262	0.00
P-117	J-91	J-92	12.0	PVC	130.0	271	0.77	0.000	216	0.05
FP-30	J-92	FH-30	6.0	Ductile Iron	130.0	0	0.00	0.000	32	0.00
P-118	J-92	J-82	12.0	PVC	130.0	271	0.77	0.000	389	0.09
P-124	J-87	J-97	12.0	PVC	130.0	-639	1.81	0.001	188	0.21
FP-32	J-97	FH-32	6.0	Ductile Iron	130.0	0	0.00	0.000	37	0.00
P-123	J-97	J-96	12.0	PVC	130.0	-639	1.81	0.001	173	0.19
P-133	J-95	J-104	12.0	PVC	130.0	30	0.09	0.000	80	0.00
FP-35	J-104	FH-35	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-132	J-104	J-103	12.0	PVC	130.0	30	0.09	0.000	311	0.00
P-131	J-103	J-102	12.0	PVC	130.0	251	0.71	0.000	209	0.04
FP-34	J-102	FH-34	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-130	J-102	J-99	12.0	PVC	130.0	251	0.71	0.000	98	0.02
P-126	J-99	J-94	12.0	PVC	130.0	82	0.23	0.000	299	0.01
P-127	J-99	J-100	12.0	PVC	130.0	169	0.48	0.000	238	0.02
P-128	J-100	J-101	12.0	PVC	130.0	247	0.70	0.000	150	0.03
FP-33	J-101	FH-33	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-129	J-101	J-91	12.0	PVC	130.0	247	0.70	0.000	241	0.05
P-138	J-103	J-108	12.0	PVC	130.0	-221	0.63	0.000	242	0.04
P-139	J-108	J-109	8.0	PVC	130.0	78	0.50	0.000	32	0.01
FP-38	J-109	FH-38	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-140	J-109	J-110	8.0	PVC	130.0	78	0.50	0.000	427	0.07
FP-39	J-110	FH-39	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-141	J-110	J-100	8.0	PVC	130.0	78	0.50	0.000	282	0.05
P-134	J-96	J-105	12.0	PVC	130.0	432	1.23	0.001	271	0.15
FP-36	J-105	FH-36	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-135	J-105	J-106	12.0	PVC	130.0	432	1.23	0.001	196	0.10
P-136	J-106	J-107	8.0	PVC	130.0	134	0.86	0.000	32	0.01
FP-37	J-107	FH-37	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00

FlexTable: Pipe Table

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
P-137	J-107	J-108	8.0	PVC	130.0	134	0.86	0.000	388	0.17
P-153	J-106	J-119	12.0	PVC	130.0	298	0.84	0.000	242	0.07
P-152	J-119	J-111	8.0	PVC	130.0	95	0.61	0.000	421	0.10
P-142	J-111	J-108	12.0	PVC	130.0	165	0.47	0.000	242	0.02
P-143	J-111	J-112	8.0	PVC	130.0	51	0.33	0.000	187	0.01
FP-40	J-112	FH-40	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-144	J-112	J-113	8.0	PVC	130.0	51	0.33	0.000	330	0.02
FP-41	J-113	FH-41	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-145	J-113	J-114	8.0	PVC	130.0	51	0.33	0.000	58	0.00
P-146	J-114	J-115	8.0	PVC	130.0	133	0.85	0.000	108	0.05
P-147	J-114	J-116	8.0	PVC	130.0	-82	0.52	0.000	309	0.05
P-148	J-116	J-111	12.0	PVC	130.0	121	0.34	0.000	242	0.01
P-149	J-116	J-117	12.0	PVC	130.0	-203	0.57	0.000	54	0.01
FP-42	J-117	FH-42	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-150	J-117	J-118	12.0	PVC	130.0	-203	0.57	0.000	429	0.06
FP-43	J-118	FH-43	6.0	Ductile Iron	130.0	0	0.00	0.000	36	0.00
P-151	J-118	J-119	12.0	PVC	130.0	-203	0.57	0.000	175	0.02
P-3	J-3	J-4	24.0	PVC	130.0	1,971	1.40	0.000	244	0.07
P-5	J-4	J-5	24.0	PVC	130.0	1,971	1.40	0.000	520	0.16
P-4	J-4	SERV-HDR-1	12.0	PVC	130.0	0	0.00	0.000	20	0.00
FP-44	J-12	FH-44	6.0	Ductile Iron	130.0	1,020	11.57	0.077	35	2.69
FP-45	J-13	FH-45	6.0	Ductile Iron	130.0	1,020	11.57	0.077	35	2.69
FP-46	J-32	FH-46	6.0	Ductile Iron	130.0	1,020	11.57	0.077	35	2.69
FP-47	J-69	FH-47	6.0	Ductile Iron	130.0	1,020	11.57	0.077	35	2.69

SEE SHEET 2





POINT OF CONNECTION IS LOCATED AT THE INTERSECTION OF BLUE OAK AND WESTBROOK BOULEVARD. NODE J-1, PIPE POC-1 AND RESERVIOR R-1 MAKE UP THE CONNECTION AT THE INTERSECTION.

LAUGENOUR AND MEIKLE
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P.O. BOX 828, WOODLAND, CALIFORNIA 95776 · FAX: (530) 662-4602

0 100 200 400
SCALE: 1"=200'

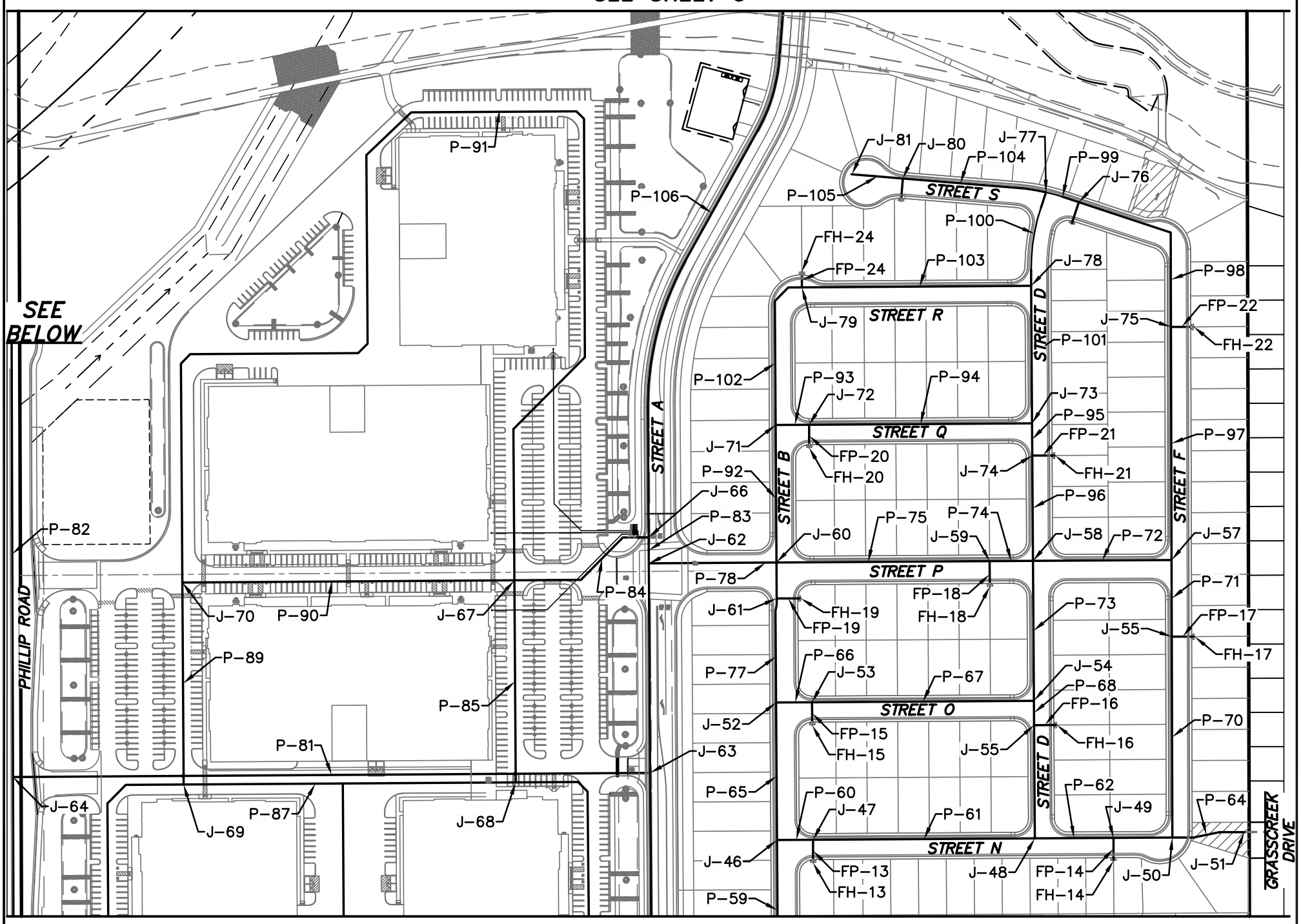
FIRE SYSTEM EXHIBIT
FOR
PHILLIP ROAD SITE

CITY OF ROSEVILLE, PLACER COUNTY, CALIFORNIA

SHEET 1 OF 3 APRIL 2, 2025

X:\Land Projects\4042-60-4\dwg\4042-60-4_EXH_Fire Site Plan- Buildout.dwg

SEE SHEET 3



SEE SHEET 1

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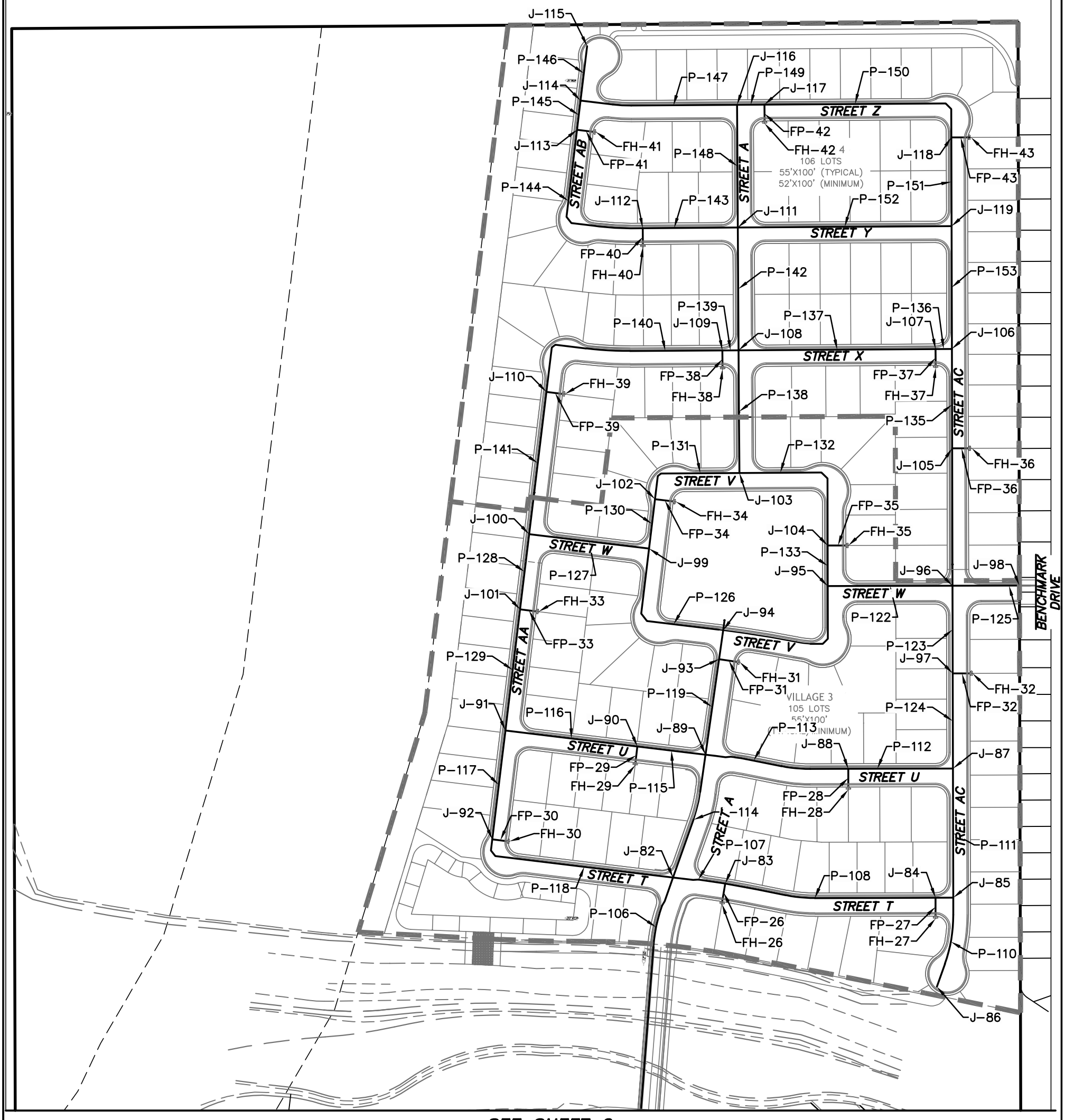

SEE SHEET 2

0 100 200 400

SCALE: 1"=200'

FIRE SYSTEM EXHIBIT

FOR

PHILLIP ROAD SITE

CITY OF ROSEVILLE, PLACER COUNTY, CALIFORNIA

SHEET 3 OF 3 APRIL 2, 2025

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APPENDIX F

POTABLE WATER PLAN – NEAR-TERM ONSITE WITH FIRE FLOW TO OPERATIONS CENTER MODEL RESULTS

FlexTable: Junction Table

ID	Label	Demand (gpm)	Elevation (ft)	Hydraulic Grade (ft)	Pressure (psi)
31	J-1	0	81.00	241.00	69
32	J-2	0	87.00	240.28	66
33	J-3	0	89.00	239.69	65
39	J-51	0	76.00	241.00	71
44	J-5	0	87.00	239.12	66
46	J-6	0	88.00	238.52	65
48	J-7	0	88.00	238.52	65
50	J-64	0	85.00	230.99	63
52	J-65	4,441	80.00	226.09	63
54	J-8	0	82.00	238.93	68
56	J-9	0	82.00	238.74	68
58	J-15	0	82.00	238.72	68
60	J-34	0	82.00	238.59	68
62	J-35	0	83.50	238.55	67
64	J-63	0	78.00	237.66	69
66	J-62	0	77.00	238.38	70
68	J-66	2	77.00	238.38	70
83	SERV-HDR-2	0	84.00	238.93	67
87	J-16	0	81.50	238.71	68
89	J-17	0	82.00	238.70	68
91	J-18	0	82.00	238.70	68
93	FH-1	0	87.20	238.70	66
95	J-19	162	83.00	238.69	67
97	FH-2	0	89.00	238.69	65
99	J-20	0	84.00	238.71	67
101	FH-3	0	89.00	238.71	65
103	J-21	0	83.00	238.71	67
106	J-23	0	82.00	238.71	68
108	J-24	0	82.00	238.71	68
110	FH-5	0	87.10	238.71	66
113	J-25	0	81.00	238.71	68
115	FH-6	0	86.40	238.71	66
117	J-26	0	80.90	238.71	68
119	J-27	0	82.00	238.72	68
121	FH-7	0	86.60	238.72	66
123	J-28	0	83.00	238.72	67
125	J-29	0	84.00	238.72	67
127	J-30	0	83.50	238.72	67
129	FH-8	0	88.60	238.72	65
132	J-42	0	82.50	238.74	68
134	J-44	0	81.50	238.74	68
136	FH-11	0	86.00	238.74	66
138	J-45	0	79.70	238.76	69
140	FH-12	0	84.50	238.76	67
142	J-40	0	79.50	238.76	69
144	J-41	22	80.50	238.74	68
147	J-43	0	80.60	238.74	68
149	FH-10	0	85.60	238.74	66
152	J-36	0	80.00	238.70	69

FlexTable: Junction Table

ID	Label	Demand (gpm)	Elevation (ft)	Hydraulic Grade (ft)	Pressure (psi)
155	J-37	0	79.80	238.72	69
157	FH-8	0	85.30	238.72	66
159	J-38	0	78.90	238.80	69
161	J-39	0	79.20	238.79	69
163	FH-9	0	84.20	238.79	67
166	J-46	0	78.30	238.96	70
168	J-47	0	78.50	239.03	69
170	FH-13	0	83.50	239.03	67
172	J-48	0	77.30	239.48	70
174	J-49	0	77.00	239.82	70
176	FH-14	0	81.60	239.82	68
178	J-50	0	76.90	240.07	71
181	J-56	0	75.70	239.78	71
183	FH-17	0	80.70	239.78	69
185	J-57	0	76.00	239.67	71
187	J-58	0	76.30	239.40	71
189	J-59	0	76.00	239.30	71
191	FH-18	0	81.00	239.30	68
193	J-60	0	77.40	238.83	70
196	J-61	0	77.40	238.86	70
198	FH-19	0	82.40	238.86	68
200	J-52	0	77.20	238.93	70
203	J-53	0	77.50	239.00	70
205	FH-15	0	82.50	239.00	68
207	J-54	0	76.00	239.41	71
209	J-55	0	76.00	239.42	71
211	FH-16	0	80.80	239.42	69
215	J-71	0	77.20	239.18	70
217	J-79	0	77.50	239.27	70
219	FH-24	0	82.30	239.27	68
221	J-78	0	76.30	239.40	71
223	J-73	0	76.00	239.39	71
225	J-72	0	77.50	239.20	70
227	FH-20	0	82.40	239.20	68
230	J-74	0	76.00	239.39	71
232	FH-21	0	80.90	239.39	69
235	J-75	0	75.30	239.54	71
237	FH-22	0	80.35	239.54	69
239	J-76	0	76.00	239.43	71
241	FH-23	0	81.00	239.43	69
243	J-77	0	75.80	239.41	71
246	J-80	0	76.50	239.26	70
248	FH-25	0	81.25	239.26	68
250	J-81	168	77.80	239.20	70
252	J-22	0	83.00	238.71	67
255	FH-4	0	88.20	238.71	65
398	J-4	0	87.00	239.51	66
401	SERV-HDR-1	0	87.00	239.51	66

FlexTable: Pipe Table

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
P-1	J-1	J-2	24.0	PVC	130.0	3,202	2.27	0.001	964	0.72
P-2	J-2	J-3	24.0	PVC	130.0	3,202	2.27	0.001	788	0.59
POC-1	R-1	J-1	60.0	PVC	130.0	3,202	0.36	0.000	1	0.00
POC-2	R-2	J-51	60.0	PVC	130.0	1,593	0.18	0.000	1	0.00
P-6	J-5	J-6	24.0	PVC	130.0	2,780	1.97	0.001	1,034	0.59
P-7	J-6	J-7	24.0	PVC	130.0	0	0.00	0.000	108	0.00
P-11	J-6	J-64	16.0	PVC	130.0	2,780	4.44	0.004	1,818	7.54
P-82	J-64	J-65	18.0	PVC	130.0	4,441	5.60	0.006	880	4.90
P-8	J-5	J-8	12.0	PVC	130.0	422	1.20	0.001	371	0.19
P-10	J-8	J-9	12.0	PVC	130.0	422	1.20	0.001	358	0.18
P-19	J-9	J-15	12.0	PVC	130.0	422	1.20	0.001	55	0.03
P-42	J-15	J-34	12.0	PVC	130.0	320	0.91	0.000	400	0.12
P-43	J-34	J-35	12.0	PVC	130.0	746	2.12	0.001	26	0.04
P-80	J-35	J-63	12.0	PVC	130.0	746	2.12	0.001	609	0.90
P-79	J-63	J-62	12.0	PVC	130.0	-915	2.60	0.002	338	0.73
P-83	J-62	J-66	12.0	PVC	130.0	2	0.01	0.000	42	0.00
P-9	J-8	SERV-HDR-2	12.0	PVC	130.0	0	0.00	0.000	20	0.00
P-20	J-15	J-16	12.0	PVC	130.0	102	0.29	0.000	208	0.01
P-21	J-16	J-17	12.0	PVC	130.0	66	0.19	0.000	232	0.00
P-22	J-17	J-18	12.0	PVC	130.0	76	0.22	0.000	126	0.00
FP-1	J-18	FH-1	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-23	J-18	J-19	12.0	PVC	130.0	76	0.22	0.000	423	0.01
FP-2	J-19	FH-2	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-24	J-19	J-20	12.0	PVC	130.0	-86	0.24	0.000	485	0.01
FP-3	J-20	FH-3	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-25	J-20	J-21	12.0	PVC	130.0	-86	0.24	0.000	44	0.00
P-28	J-21	J-23	12.0	PVC	130.0	-96	0.27	0.000	232	0.01
P-29	J-23	J-24	8.0	PVC	130.0	17	0.11	0.000	308	0.00
FP-5	J-24	FH-5	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-30	J-24	J-16	8.0	PVC	130.0	17	0.11	0.000	326	0.00
P-31	J-16	J-25	12.0	PVC	130.0	54	0.15	0.000	32	0.00
FP-6	J-25	FH-6	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-32	J-25	J-26	12.0	PVC	130.0	54	0.15	0.000	190	0.00
P-33	J-26	J-27	8.0	PVC	130.0	-44	0.28	0.000	235	0.01
FP-7	J-27	FH-7	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-34	J-27	J-28	8.0	PVC	130.0	-44	0.28	0.000	103	0.01
P-35	J-28	J-29	8.0	PVC	130.0	-3	0.02	0.000	299	0.00
P-36	J-29	J-30	12.0	PVC	130.0	113	0.32	0.000	42	0.00
FP-8	J-30	FH-8	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-37	J-30	J-23	12.0	PVC	130.0	113	0.32	0.000	180	0.01
P-53	J-29	J-42	12.0	PVC	130.0	-117	0.33	0.000	246	0.01
P-56	J-42	J-44	12.0	PVC	130.0	-117	0.33	0.000	123	0.01
FP-11	J-44	FH-11	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-57	J-44	J-45	12.0	PVC	130.0	-117	0.33	0.000	363	0.02
FP-12	J-45	FH-12	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-58	J-45	J-40	12.0	PVC	130.0	-117	0.33	0.000	54	0.00

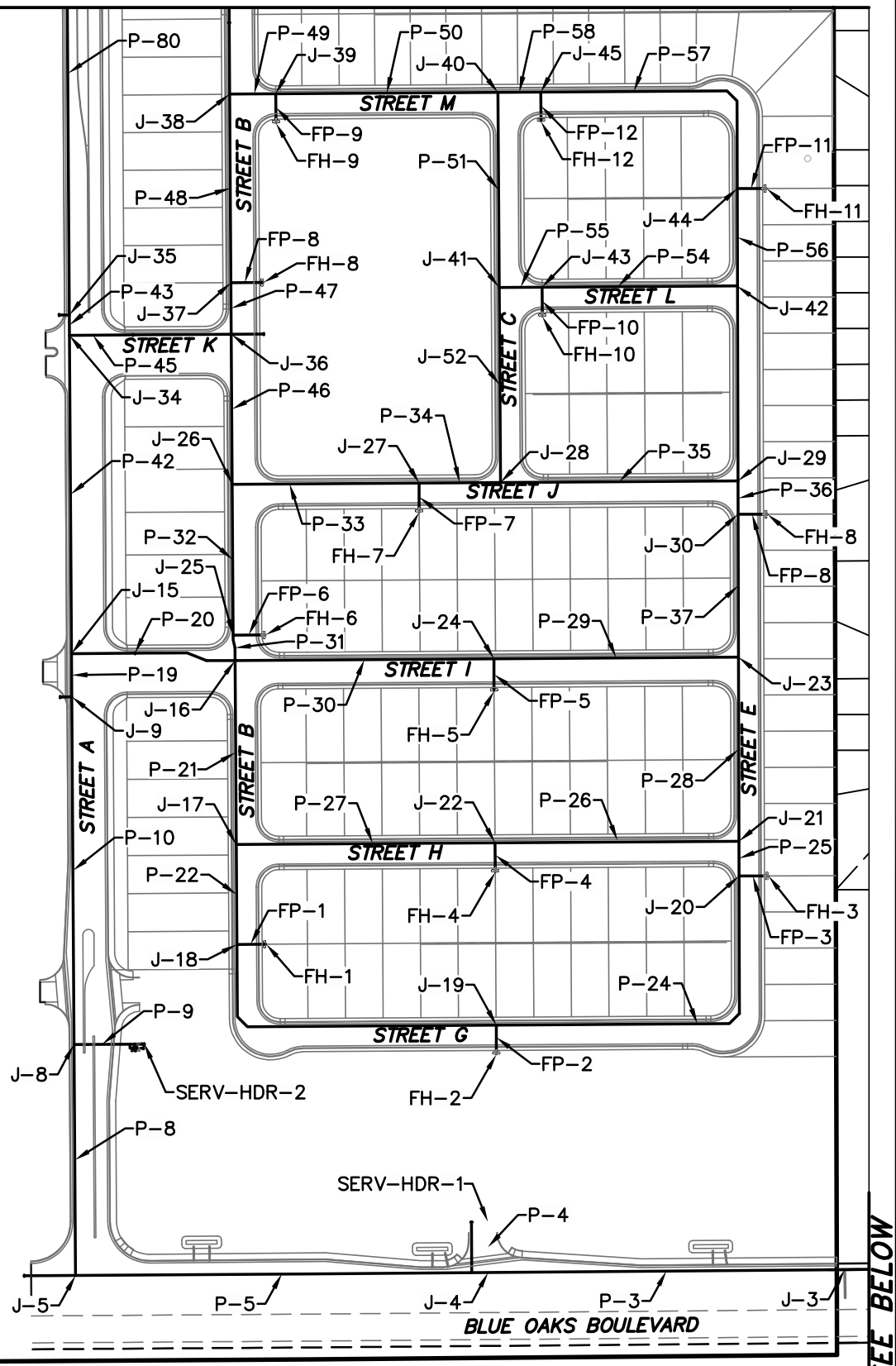
FlexTable: Pipe Table

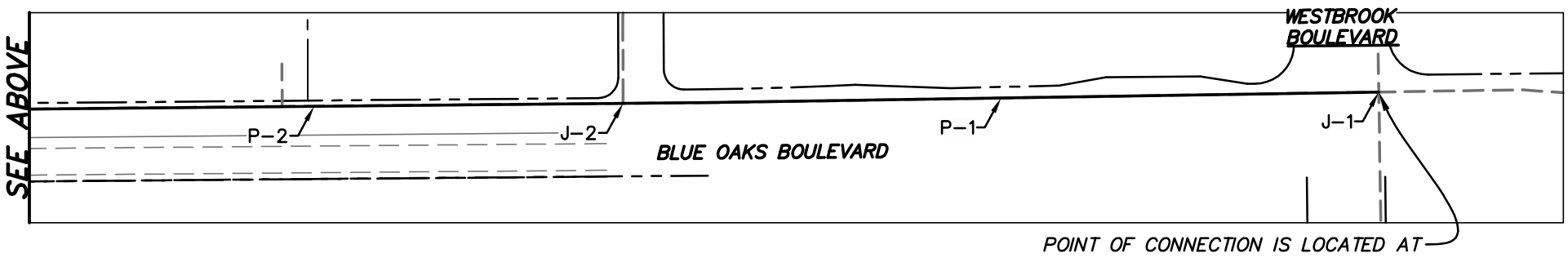
Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
P-51	J-40	J-41	8.0	PVC	130.0	62	0.39	0.000	246	0.03
P-52	J-41	J-28	8.0	PVC	130.0	40	0.26	0.000	246	0.01
P-55	J-41	J-43	8.0	PVC	130.0	-1	0.00	0.000	54	0.00
FP-10	J-43	FH-10	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-54	J-43	J-42	8.0	PVC	130.0	-1	0.00	0.000	246	0.00
P-45	J-34	J-36	12.0	PVC	130.0	-426	1.21	0.001	204	0.11
P-46	J-36	J-26	12.0	PVC	130.0	-97	0.28	0.000	189	0.01
P-47	J-36	J-37	12.0	PVC	130.0	-329	0.93	0.000	65	0.02
FP-8	J-37	FH-8	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-48	J-37	J-38	12.0	PVC	130.0	-329	0.93	0.000	238	0.08
P-49	J-38	J-39	12.0	PVC	130.0	179	0.51	0.000	58	0.01
FP-9	J-39	FH-9	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-50	J-39	J-40	12.0	PVC	130.0	179	0.51	0.000	280	0.03
P-59	J-38	J-46	12.0	PVC	130.0	-508	1.44	0.001	222	0.16
P-60	J-46	J-47	12.0	PVC	130.0	-687	1.95	0.001	58	0.07
FP-13	J-47	FH-13	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-61	J-47	J-48	12.0	PVC	130.0	-687	1.95	0.001	358	0.45
P-62	J-48	J-49	12.0	PVC	130.0	-1,022	2.90	0.003	127	0.34
FP-14	J-49	FH-14	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-63	J-49	J-50	12.0	PVC	130.0	-1,022	2.90	0.003	95	0.25
P-64	J-50	J-51	12.0	PVC	130.0	-1,593	4.52	0.006	155	0.93
P-70	J-50	J-56	12.0	PVC	130.0	571	1.62	0.001	324	0.29
FP-17	J-56	FH-17	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-71	J-56	J-57	12.0	PVC	130.0	571	1.62	0.001	124	0.11
P-72	J-57	J-58	8.0	PVC	130.0	229	1.46	0.001	224	0.27
P-74	J-58	J-59	8.0	PVC	130.0	248	1.58	0.001	70	0.10
FP-18	J-59	FH-18	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-75	J-59	J-60	8.0	PVC	130.0	248	1.58	0.001	344	0.48
P-78	J-60	J-62	12.0	PVC	130.0	917	2.60	0.002	206	0.44
P-76	J-60	J-61	12.0	PVC	130.0	-403	1.14	0.000	58	0.03
FP-19	J-61	FH-19	6.0	Ductile Iron	130.0	0	0.00	0.000	37	0.00
P-77	J-61	J-52	12.0	PVC	130.0	-403	1.14	0.000	168	0.08
P-65	J-52	J-46	12.0	PVC	130.0	-179	0.51	0.000	222	0.02
P-66	J-52	J-53	8.0	PVC	130.0	-224	1.43	0.001	58	0.07
FP-15	J-53	FH-15	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-67	J-53	J-54	8.0	PVC	130.0	-224	1.43	0.001	358	0.41
P-68	J-54	J-55	12.0	PVC	130.0	-335	0.95	0.000	39	0.01
FP-16	J-55	FH-16	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-69	J-55	J-48	12.0	PVC	130.0	-335	0.95	0.000	183	0.06
P-73	J-54	J-58	12.0	PVC	130.0	111	0.31	0.000	226	0.01
P-92	J-60	J-71	8.0	PVC	130.0	-266	1.70	0.002	222	0.35
P-102	J-71	J-79	8.0	PVC	130.0	-119	0.76	0.000	253	0.09
FP-24	J-79	FH-24	6.0	Ductile Iron	130.0	0	0.00	0.000	23	0.00
P-103	J-79	J-78	8.0	PVC	130.0	-119	0.76	0.000	370	0.13
P-101	J-78	J-73	12.0	PVC	130.0	55	0.16	0.000	222	0.00

FlexTable: Pipe Table

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
P-94	J-73	J-72	8.0	PVC	130.0	147	0.94	0.001	360	0.19
FP-20	J-72	FH-20	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-93	J-72	J-71	8.0	PVC	130.0	147	0.94	0.001	54	0.03
P-95	J-73	J-74	12.0	PVC	130.0	-92	0.26	0.000	52	0.00
FP-21	J-74	FH-21	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-96	J-74	J-58	12.0	PVC	130.0	-92	0.26	0.000	170	0.01
P-97	J-57	J-75	12.0	PVC	130.0	342	0.97	0.000	376	0.13
FP-22	J-75	FH-22	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-98	J-75	J-76	12.0	PVC	130.0	342	0.97	0.000	309	0.11
FP-23	J-76	FH-23	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-99	J-76	J-77	12.0	PVC	130.0	342	0.97	0.000	55	0.02
P-100	J-77	J-78	12.0	PVC	130.0	174	0.49	0.000	154	0.02
P-104	J-77	J-80	8.0	PVC	130.0	168	1.07	0.001	232	0.16
FP-25	J-80	FH-25	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-105	J-80	J-81	8.0	PVC	130.0	168	1.07	0.001	82	0.06
P-26	J-21	J-22	8.0	PVC	130.0	10	0.07	0.000	307	0.00
P-27	J-22	J-17	8.0	PVC	130.0	10	0.07	0.000	326	0.00
FP-4	J-22	FH-4	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-81	J-63	J-64	12.0	PVC	130.0	1,661	4.71	0.006	1,028	6.67
P-3	J-3	J-4	24.0	PVC	130.0	3,202	2.27	0.001	244	0.18
P-5	J-4	J-5	24.0	PVC	130.0	3,202	2.27	0.001	520	0.39
P-4	J-4	SERV-HDR-1	12.0	PVC	130.0	0	0.00	0.000	20	0.00

SEE SHEET 2





POINT OF CONNECTION IS LOCATED AT THE INTERSECTION OF BLUE OAK AND WESTBROOK BOULEVARD. NODE J-1, PIPE POC-1 AND RESERVIOR R-1 MAKE UP THE CONNECTION AT THE INTERSECTION.

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0 100 200 400
SCALE: 1"=200'

NEAR-TERM FIRE SYSTEM EXHIBIT

FOR

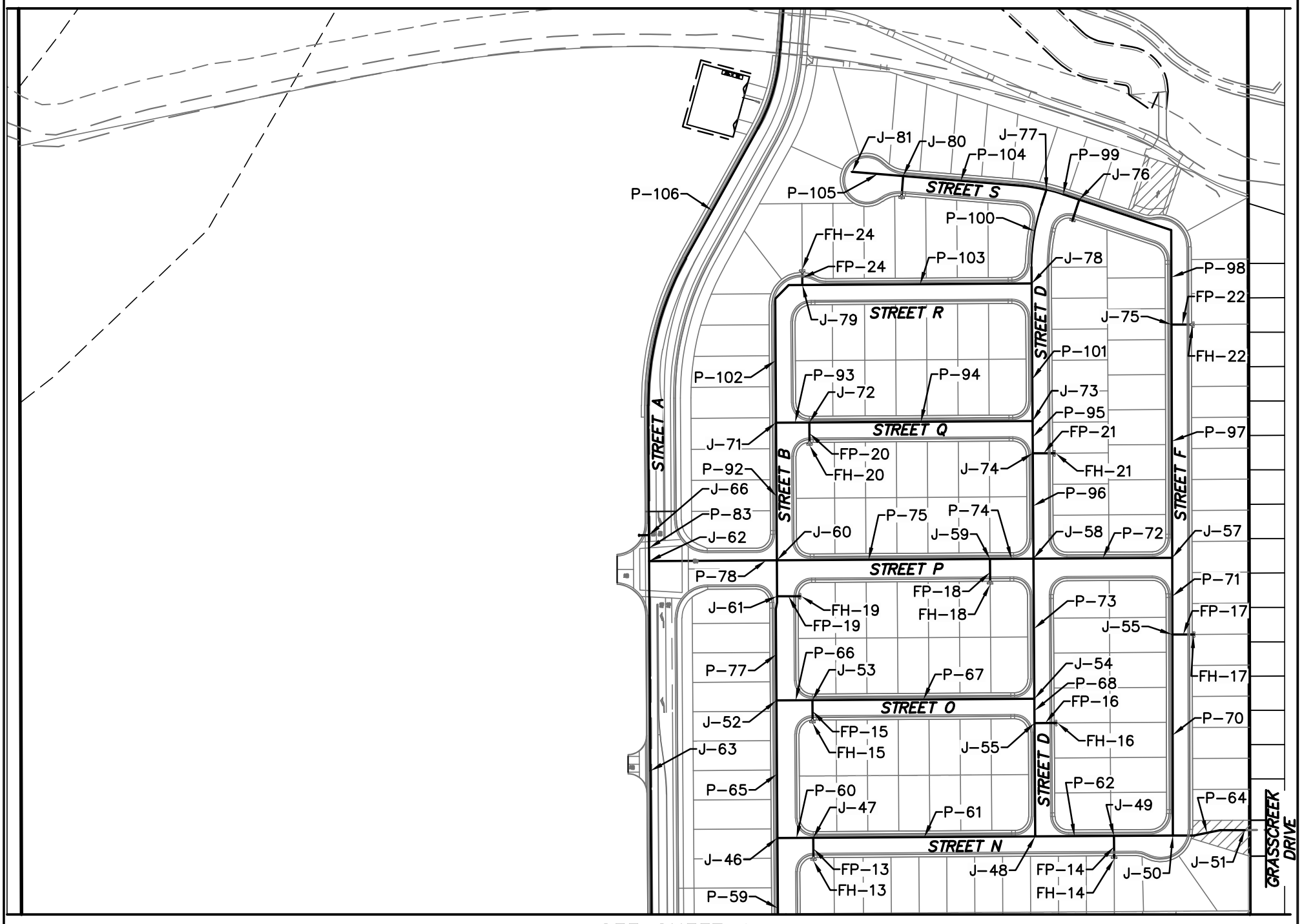
PHILLIP ROAD SITE

CITY OF ROSEVILLE, PLACER COUNTY, CALIFORNIA

SHEET 1 OF 3 APRIL 2, 2025

X:\Land Projects\4042-60-4\dwg\4042-60-4_EXH_Fire Site Plan- Near-Term.dwg

SEE SHEET 3



SEE SHEET 1

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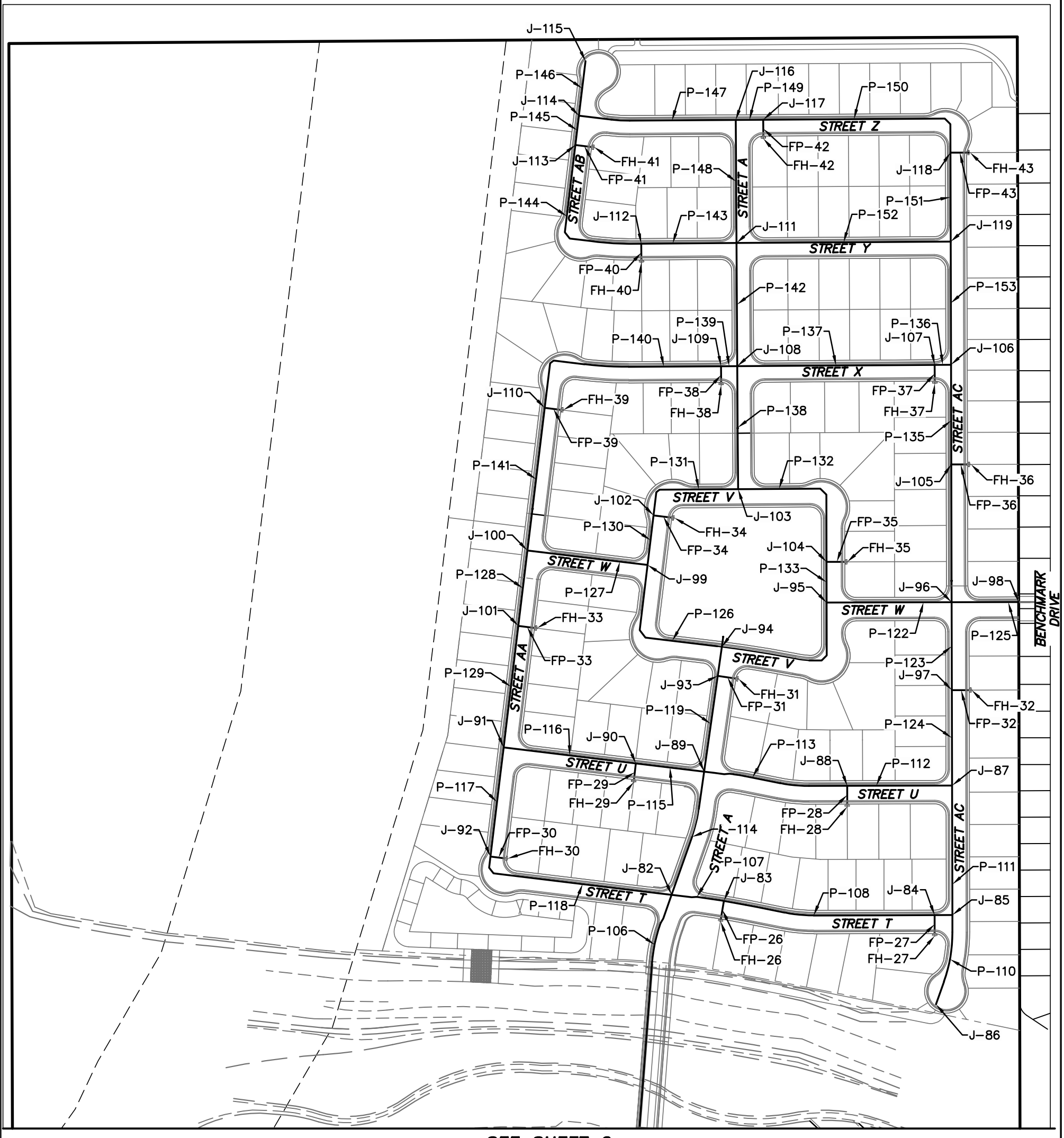
X:\Land Projects\4042–60–4\dwg\4042–60–4_EXH_Fire Site Plan–Near–Term.dwg



SEE SHEET 2

0 100 200 400

SCALE: 1"=200'

NEAR–TERM
FIRE SYSTEM EXHIBIT
FOR
PHILLIP ROAD SITE

CITY OF ROSEVILLE, PLACER COUNTY, CALIFORNIA
SHEET 3 OF 3 APRIL 2, 2025

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APPENDIX G

POTABLE WATER PLAN – BUILDOUT ONSITE WITH FIRE FLOW TO OPERATIONS CENTER MODEL RESULTS

FlexTable: Junction Table

ID	Label	Demand (gpm)	Elevation (ft)	Hydraulic Grade (ft)	Pressure (psi)
31	J-1	0	81.00	195.72	50
32	J-2	0	86.00	195.09	47
33	J-3	0	88.00	194.57	46
39	J-51	0	76.00	196.12	52
42	J-98	0	83.00	198.50	50
44	J-5	0	86.00	194.07	47
46	J-6	0	87.00	193.49	46
48	J-7	0	87.00	193.49	46
50	J-64	4	84.00	186.22	44
52	J-65	4,441	79.00	177.53	43
54	J-8	0	82.00	193.99	48
56	J-9	107	82.00	193.94	48
58	J-15	0	82.00	193.94	48
60	J-34	0	82.00	193.86	48
62	J-35	143	83.50	193.83	48
64	J-63	0	78.00	193.32	50
66	J-62	0	77.00	194.46	51
68	J-66	150	77.00	194.52	51
70	J-82	0	79.50	197.45	51
72	J-89	0	76.50	197.55	52
74	J-93	0	76.70	197.60	52
76	J-94	14	76.30	197.61	52
78	J-95	0	77.70	197.67	52
80	J-96	0	81.50	198.03	50
83	SERV-HDR-2	58	84.00	193.99	48
85	J-10	0	82.00	194.52	49
87	J-16	0	81.50	193.96	49
89	J-17	0	82.00	193.96	48
91	J-18	0	82.00	193.96	48
93	FH-1	0	87.20	193.96	46
95	J-19	162	83.00	193.95	48
97	FH-2	0	89.00	193.95	45
99	J-20	0	84.00	193.97	48
101	FH-3	0	89.00	193.97	45
103	J-21	0	83.00	193.98	48
106	J-23	0	82.00	193.99	48
108	J-24	0	82.00	193.98	48
110	FH-5	0	87.10	193.98	46
113	J-25	0	81.00	193.96	49
115	FH-6	0	86.40	193.96	47
117	J-26	0	80.90	193.97	49
119	J-27	0	82.00	194.00	48
121	FH-7	0	86.60	194.00	46
123	J-28	0	83.00	194.02	48
125	J-29	0	84.00	194.02	48
127	J-30	0	83.50	194.01	48
129	FH-8	0	88.60	194.01	46
132	J-42	0	82.50	194.05	48
134	J-44	0	81.50	194.06	49

FlexTable: Junction Table

ID	Label	Demand (gpm)	Elevation (ft)	Hydraulic Grade (ft)	Pressure (psi)
136	FH-11	0	86.00	194.06	47
138	J-45	0	79.70	194.10	49
140	FH-12	0	84.50	194.10	47
142	J-40	0	79.50	194.11	50
144	J-41	22	80.50	194.05	49
147	J-43	0	80.60	194.05	49
149	FH-10	0	85.60	194.05	47
152	J-36	0	80.00	193.97	49
155	J-37	0	79.80	194.02	49
157	FH-8	0	85.30	194.02	47
159	J-38	0	78.90	194.19	50
161	J-39	0	79.20	194.17	50
163	FH-9	0	84.20	194.17	48
166	J-46	0	78.30	194.54	50
168	J-47	0	78.50	194.60	50
170	FH-13	0	83.50	194.60	48
172	J-48	0	77.30	194.97	51
174	J-49	0	77.00	195.23	51
176	FH-14	0	81.60	195.23	49
178	J-50	0	76.90	195.42	51
181	J-56	0	75.70	195.20	52
183	FH-17	0	80.70	195.20	50
185	J-57	0	76.00	195.12	52
187	J-58	0	76.30	194.92	51
189	J-59	0	76.00	194.86	51
191	FH-18	0	81.00	194.86	49
193	J-60	0	77.40	194.57	51
196	J-61	0	77.40	194.57	51
198	FH-19	0	82.40	194.57	49
200	J-52	0	77.20	194.57	51
203	J-53	0	77.50	194.62	51
205	FH-15	0	82.50	194.62	49
207	J-54	0	76.00	194.92	51
209	J-55	0	76.00	194.93	51
211	FH-16	0	80.80	194.93	49
215	J-71	0	77.20	194.78	51
217	J-79	0	77.50	194.83	51
219	FH-24	0	82.30	194.83	49
221	J-78	0	76.30	194.91	51
223	J-73	0	76.00	194.91	51
225	J-72	0	77.50	194.80	51
227	FH-20	0	82.40	194.80	49
230	J-74	0	76.00	194.91	51
232	FH-21	0	80.90	194.91	49
235	J-75	0	75.30	195.02	52
237	FH-22	0	80.35	195.02	50
239	J-76	0	76.00	194.94	51
241	FH-23	0	81.00	194.94	49
243	J-77	0	75.80	194.92	52

FlexTable: Junction Table

ID	Label	Demand (gpm)	Elevation (ft)	Hydraulic Grade (ft)	Pressure (psi)
246	J-80	0	76.50	194.77	51
248	FH-25	0	81.25	194.77	49
250	J-81	168	77.80	194.71	51
252	J-22	0	83.00	193.97	48
255	FH-4	0	88.20	193.97	46
257	J-11	0	83.00	194.52	48
259	J-12	0	83.00	194.52	48
262	J-13	0	83.00	194.52	48
264	J-14	0	82.00	194.52	49
267	J-32	0	83.00	194.52	48
269	J-31	0	82.00	194.52	49
272	J-33	0	82.00	194.52	49
277	J-68	0	82.00	194.52	49
280	J-67	0	83.00	194.52	48
282	J-70	0	82.50	194.52	48
284	J-69	0	82.00	194.52	49
290	FH-31	0	81.70	197.60	50
292	J-83	0	79.40	197.46	51
294	FH-26	0	84.50	197.46	49
296	J-84	0	81.00	197.57	50
298	FH-27	0	86.00	197.57	48
300	J-85	0	81.00	197.58	50
302	J-86	152	82.00	197.48	50
304	J-87	0	80.60	197.72	51
306	J-88	0	78.75	197.65	51
308	FH-28	0	83.80	197.65	49
311	J-90	0	76.70	197.55	52
313	FH-29	0	81.80	197.55	50
315	J-91	0	76.50	197.55	52
317	J-92	0	76.50	197.51	52
319	FH-30	0	82.00	197.51	50
322	J-97	0	81.50	197.88	50
324	FH-32	0	86.44	197.88	48
327	J-104	0	77.80	197.67	52
329	FH-35	0	82.80	197.67	50
331	J-103	0	76.40	197.66	52
333	J-102	0	76.60	197.63	52
335	FH-34	0	81.80	197.63	50
337	J-99	0	77.00	197.62	52
340	J-100	0	76.20	197.60	53
342	J-101	0	76.70	197.58	52
344	FH-33	0	81.70	197.58	50
347	J-108	0	76.30	197.69	53
349	J-109	0	76.30	197.69	53
351	FH-38	0	81.30	197.69	50
353	J-110	0	76.90	197.64	52
355	FH-39	0	81.90	197.64	50
358	J-105	0	81.00	197.92	51
360	FH-36	0	86.10	197.92	48

FlexTable: Junction Table

ID	Label	Demand (gpm)	Elevation (ft)	Hydraulic Grade (ft)	Pressure (psi)
362	J-106	0	80.30	197.83	51
364	J-107	0	80.30	197.82	51
366	FH-37	0	85.30	197.82	49
369	J-119	0	80.50	197.78	51
371	J-111	0	76.60	197.70	52
374	J-112	0	77.40	197.69	52
376	FH-40	0	82.00	197.69	50
378	J-113	0	78.50	197.66	52
380	FH-41	0	83.50	197.66	49
382	J-114	0	78.90	197.66	51
384	J-115	133	79.50	197.61	51
386	J-116	0	77.90	197.71	52
389	J-117	0	78.00	197.72	52
391	FH-42	0	83.00	197.72	50
393	J-118	0	80.00	197.76	51
395	FH-43	0	85.00	197.76	49
398	J-4	0	86.00	194.41	47
401	SERV-HDR-1	0	87.00	194.41	46
403	FH-44	0	88.50	194.52	46
405	FH-45	0	88.50	194.52	46
407	FH-46	0	88.50	194.52	46
409	FH-47	0	87.50	194.52	46

FlexTable: Pipe Table

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
P-1	J-1	J-2	24.0	PVC	130.0	2,987	2.12	0.001	964	0.63
P-2	J-2	J-3	24.0	PVC	130.0	2,987	2.12	0.001	788	0.52
POC-1	R-1	J-1	60.0	PVC	130.0	2,987	0.34	0.000	1	0.00
POC-2	R-2	J-51	60.0	PVC	130.0	1,369	0.16	0.000	1	0.00
POC-3	R-3	J-98	60.0	PVC	130.0	1,198	0.14	0.000	1	0.00
P-6	J-5	J-6	24.0	PVC	130.0	2,727	1.93	0.001	1,034	0.57
P-7	J-6	J-7	24.0	PVC	130.0	0	0.00	0.000	108	0.00
P-11	J-6	J-64	16.0	PVC	130.0	2,727	4.35	0.004	1,818	7.27
P-82	J-64	J-65	16.0	PVC	130.0	4,441	7.09	0.010	880	8.69
P-8	J-5	J-8	12.0	PVC	130.0	260	0.74	0.000	371	0.08
P-10	J-8	J-9	12.0	PVC	130.0	202	0.57	0.000	358	0.05
P-19	J-9	J-15	12.0	PVC	130.0	95	0.27	0.000	55	0.00
P-42	J-15	J-34	12.0	PVC	130.0	253	0.72	0.000	400	0.08
P-43	J-34	J-35	12.0	PVC	130.0	693	1.97	0.001	26	0.03
P-80	J-35	J-63	12.0	PVC	130.0	550	1.56	0.001	609	0.51
P-79	J-63	J-62	12.0	PVC	130.0	-1,168	3.31	0.003	338	1.14
P-83	J-62	J-66	12.0	PVC	130.0	-749	2.13	0.001	42	0.06
P-106	J-66	J-82	12.0	PVC	130.0	-899	2.55	0.002	1,405	2.92
P-114	J-82	J-89	12.0	PVC	130.0	-379	1.08	0.000	252	0.11
P-119	J-89	J-93	12.0	PVC	130.0	-283	0.80	0.000	190	0.05
P-120	J-93	J-94	12.0	PVC	130.0	-283	0.80	0.000	58	0.01
P-121	J-94	J-95	12.0	PVC	130.0	-227	0.64	0.000	316	0.05
P-122	J-95	J-96	8.0	PVC	130.0	-258	1.65	0.001	246	0.37
P-125	J-96	J-98	12.0	PVC	130.0	-1,198	3.40	0.004	132	0.47
P-9	J-8	SERV-HDR-2	12.0	PVC	130.0	58	0.16	0.000	20	0.00
P-12	J-9	J-10	12.0	PVC	130.0	0	0.00	0.000	98	0.00
P-20	J-15	J-16	12.0	PVC	130.0	-158	0.45	0.000	208	0.02
P-21	J-16	J-17	12.0	PVC	130.0	18	0.05	0.000	232	0.00
P-22	J-17	J-18	12.0	PVC	130.0	49	0.14	0.000	126	0.00
FP-1	J-18	FH-1	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-23	J-18	J-19	12.0	PVC	130.0	49	0.14	0.000	423	0.00
FP-2	J-19	FH-2	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-24	J-19	J-20	12.0	PVC	130.0	-113	0.32	0.000	485	0.02
FP-3	J-20	FH-3	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-25	J-20	J-21	12.0	PVC	130.0	-113	0.32	0.000	44	0.00
P-28	J-21	J-23	12.0	PVC	130.0	-144	0.41	0.000	232	0.02
P-29	J-23	J-24	8.0	PVC	130.0	43	0.28	0.000	308	0.02
FP-5	J-24	FH-5	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-30	J-24	J-16	8.0	PVC	130.0	43	0.28	0.000	326	0.02
P-31	J-16	J-25	12.0	PVC	130.0	-133	0.38	0.000	32	0.00
FP-6	J-25	FH-6	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-32	J-25	J-26	12.0	PVC	130.0	-133	0.38	0.000	190	0.01
P-33	J-26	J-27	8.0	PVC	130.0	-71	0.45	0.000	235	0.03
FP-7	J-27	FH-7	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-34	J-27	J-28	8.0	PVC	130.0	-71	0.45	0.000	103	0.01
P-35	J-28	J-29	8.0	PVC	130.0	-4	0.03	0.000	299	0.00
P-36	J-29	J-30	12.0	PVC	130.0	187	0.53	0.000	42	0.00

FlexTable: Pipe Table

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
FP-8	J-30	FH-8	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-37	J-30	J-23	12.0	PVC	130.0	187	0.53	0.000	180	0.02
P-53	J-29	J-42	12.0	PVC	130.0	-192	0.54	0.000	246	0.03
P-56	J-42	J-44	12.0	PVC	130.0	-184	0.52	0.000	123	0.01
FP-11	J-44	FH-11	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-57	J-44	J-45	12.0	PVC	130.0	-184	0.52	0.000	363	0.04
FP-12	J-45	FH-12	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-58	J-45	J-40	12.0	PVC	130.0	-184	0.52	0.000	54	0.01
P-51	J-40	J-41	8.0	PVC	130.0	96	0.62	0.000	246	0.06
P-52	J-41	J-28	8.0	PVC	130.0	67	0.43	0.000	246	0.03
P-55	J-41	J-43	8.0	PVC	130.0	7	0.05	0.000	54	0.00
FP-10	J-43	FH-10	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-54	J-43	J-42	8.0	PVC	130.0	7	0.05	0.000	246	0.00
P-45	J-34	J-36	12.0	PVC	130.0	-440	1.25	0.001	204	0.11
P-46	J-36	J-26	12.0	PVC	130.0	62	0.17	0.000	189	0.00
P-47	J-36	J-37	12.0	PVC	130.0	-501	1.42	0.001	65	0.05
FP-8	J-37	FH-8	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-48	J-37	J-38	12.0	PVC	130.0	-501	1.42	0.001	238	0.17
P-49	J-38	J-39	12.0	PVC	130.0	281	0.80	0.000	58	0.01
FP-9	J-39	FH-9	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-50	J-39	J-40	12.0	PVC	130.0	281	0.80	0.000	280	0.07
P-59	J-38	J-46	12.0	PVC	130.0	-782	2.22	0.002	222	0.36
P-60	J-46	J-47	12.0	PVC	130.0	-614	1.74	0.001	58	0.06
FP-13	J-47	FH-13	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-61	J-47	J-48	12.0	PVC	130.0	-614	1.74	0.001	358	0.37
P-62	J-48	J-49	12.0	PVC	130.0	-881	2.50	0.002	127	0.25
FP-14	J-49	FH-14	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-63	J-49	J-50	12.0	PVC	130.0	-881	2.50	0.002	95	0.19
P-64	J-50	J-51	12.0	PVC	130.0	-1,369	3.88	0.005	155	0.70
P-70	J-50	J-56	12.0	PVC	130.0	488	1.38	0.001	324	0.22
FP-17	J-56	FH-17	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-71	J-56	J-57	12.0	PVC	130.0	488	1.38	0.001	124	0.08
P-72	J-57	J-58	8.0	PVC	130.0	195	1.24	0.001	224	0.20
P-74	J-58	J-59	8.0	PVC	130.0	191	1.22	0.001	70	0.06
FP-18	J-59	FH-18	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-75	J-59	J-60	8.0	PVC	130.0	191	1.22	0.001	344	0.29
P-78	J-60	J-62	12.0	PVC	130.0	419	1.19	0.001	206	0.10
P-76	J-60	J-61	12.0	PVC	130.0	-24	0.07	0.000	58	0.00
FP-19	J-61	FH-19	6.0	Ductile Iron	130.0	0	0.00	0.000	37	0.00
P-77	J-61	J-52	12.0	PVC	130.0	-24	0.07	0.000	168	0.00
P-65	J-52	J-46	12.0	PVC	130.0	168	0.48	0.000	222	0.02
P-66	J-52	J-53	8.0	PVC	130.0	-192	1.22	0.001	58	0.05
FP-15	J-53	FH-15	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-67	J-53	J-54	8.0	PVC	130.0	-192	1.22	0.001	358	0.31

FlexTable: Pipe Table

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
P-68	J-54	J-55	12.0	PVC	130.0	-267	0.76	0.000	39	0.01
FP-16	J-55	FH-16	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-69	J-55	J-48	12.0	PVC	130.0	-267	0.76	0.000	183	0.04
P-73	J-54	J-58	12.0	PVC	130.0	75	0.21	0.000	226	0.00
P-92	J-60	J-71	8.0	PVC	130.0	-204	1.30	0.001	222	0.21
P-102	J-71	J-79	8.0	PVC	130.0	-91	0.58	0.000	253	0.05
FP-24	J-79	FH-24	6.0	Ductile Iron	130.0	0	0.00	0.000	23	0.00
P-103	J-79	J-78	8.0	PVC	130.0	-91	0.58	0.000	370	0.08
P-101	J-78	J-73	12.0	PVC	130.0	34	0.10	0.000	222	0.00
P-94	J-73	J-72	8.0	PVC	130.0	113	0.72	0.000	360	0.12
FP-20	J-72	FH-20	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-93	J-72	J-71	8.0	PVC	130.0	113	0.72	0.000	54	0.02
P-95	J-73	J-74	12.0	PVC	130.0	-79	0.22	0.000	52	0.00
FP-21	J-74	FH-21	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-96	J-74	J-58	12.0	PVC	130.0	-79	0.22	0.000	170	0.00
P-97	J-57	J-75	12.0	PVC	130.0	293	0.83	0.000	376	0.10
FP-22	J-75	FH-22	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-98	J-75	J-76	12.0	PVC	130.0	293	0.83	0.000	309	0.08
FP-23	J-76	FH-23	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-99	J-76	J-77	12.0	PVC	130.0	293	0.83	0.000	55	0.01
P-100	J-77	J-78	12.0	PVC	130.0	125	0.36	0.000	154	0.01
P-104	J-77	J-80	8.0	PVC	130.0	168	1.07	0.001	232	0.16
FP-25	J-80	FH-25	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-105	J-80	J-81	8.0	PVC	130.0	168	1.07	0.001	82	0.06
P-26	J-21	J-22	8.0	PVC	130.0	31	0.20	0.000	307	0.01
P-27	J-22	J-17	8.0	PVC	130.0	31	0.20	0.000	326	0.01
FP-4	J-22	FH-4	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-13	J-10	J-11	12.0	PVC	130.0	2	0.01	0.000	424	0.00
P-14	J-11	J-12	12.0	PVC	130.0	2	0.01	0.000	963	0.00
P-15	J-12	J-11	12.0	PVC	130.0	0	0.00	0.000	711	0.00
P-16	J-12	J-13	12.0	PVC	130.0	2	0.01	0.000	380	0.00
P-17	J-13	J-14	12.0	PVC	130.0	0	0.00	0.000	778	0.00
P-18	J-14	J-10	12.0	PVC	130.0	2	0.01	0.000	15	0.00
P-39	J-13	J-32	12.0	PVC	130.0	3	0.01	0.000	424	0.00
P-40	J-32	J-31	12.0	PVC	130.0	2	0.00	0.000	777	0.00
P-38	J-31	J-14	12.0	PVC	130.0	3	0.01	0.000	424	0.00
P-41	J-31	J-33	12.0	PVC	130.0	-1	0.00	0.000	42	0.00
P-44	J-35	J-33	12.0	PVC	130.0	0	0.00	0.000	99	0.00
P-81	J-63	J-64	12.0	PVC	130.0	1,718	4.87	0.007	1,028	7.10
P-86	J-33	J-68	12.0	PVC	130.0	-1	0.00	0.000	702	0.00
P-85	J-68	J-67	12.0	PVC	130.0	-2	0.01	0.000	310	0.00
P-90	J-67	J-70	12.0	PVC	130.0	-3	0.01	0.000	536	0.00
P-87	J-68	J-69	12.0	PVC	130.0	1	0.00	0.000	536	0.00
P-88	J-69	J-32	12.0	PVC	130.0	-1	0.00	0.000	742	0.00
P-89	J-70	J-69	12.0	PVC	130.0	-2	0.01	0.000	310	0.00
P-84	J-66	J-67	12.0	PVC	130.0	0	0.00	0.000	252	0.00
P-91	J-67	J-70	12.0	PVC	130.0	1	0.00	0.000	2,182	0.00

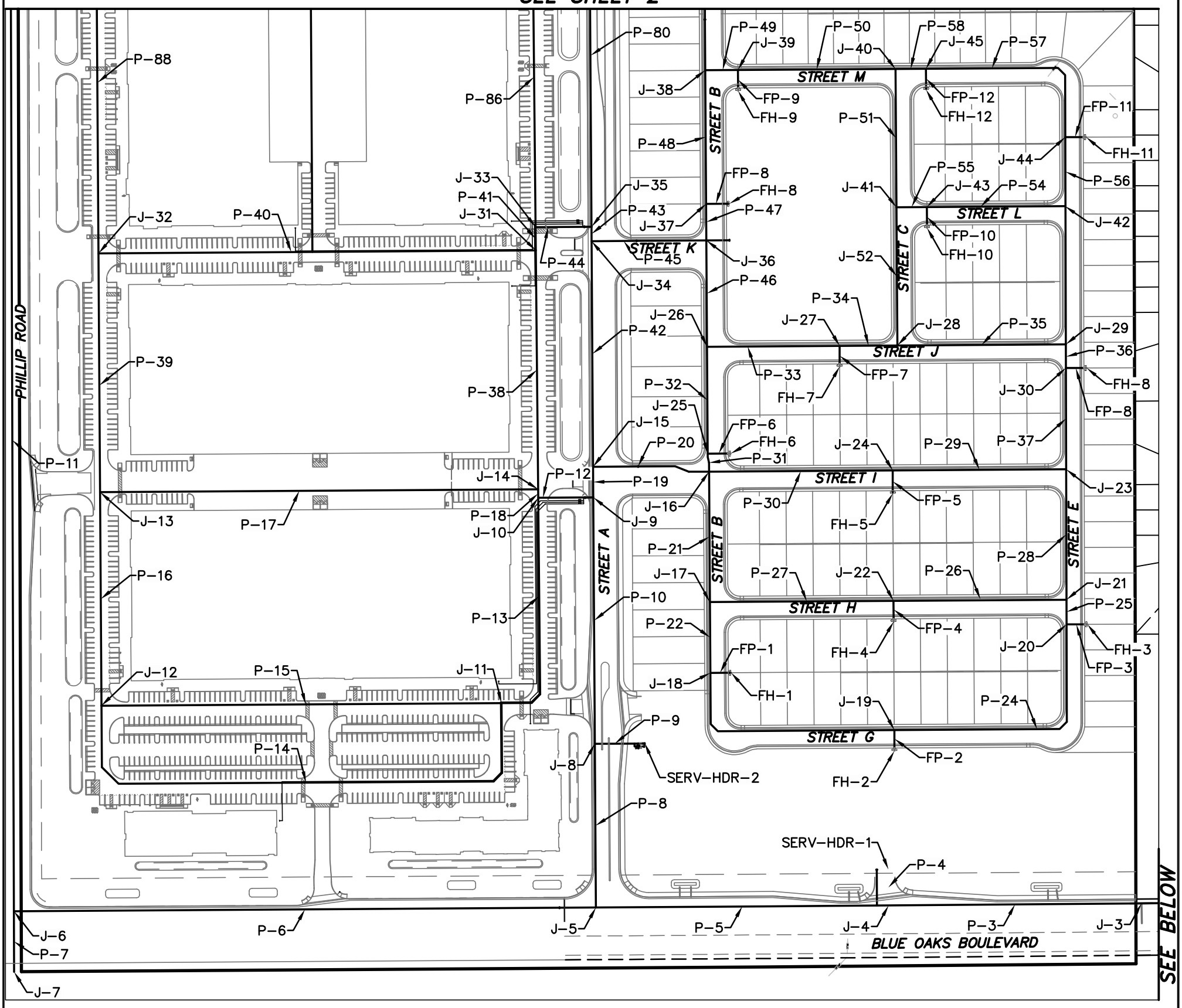
FlexTable: Pipe Table

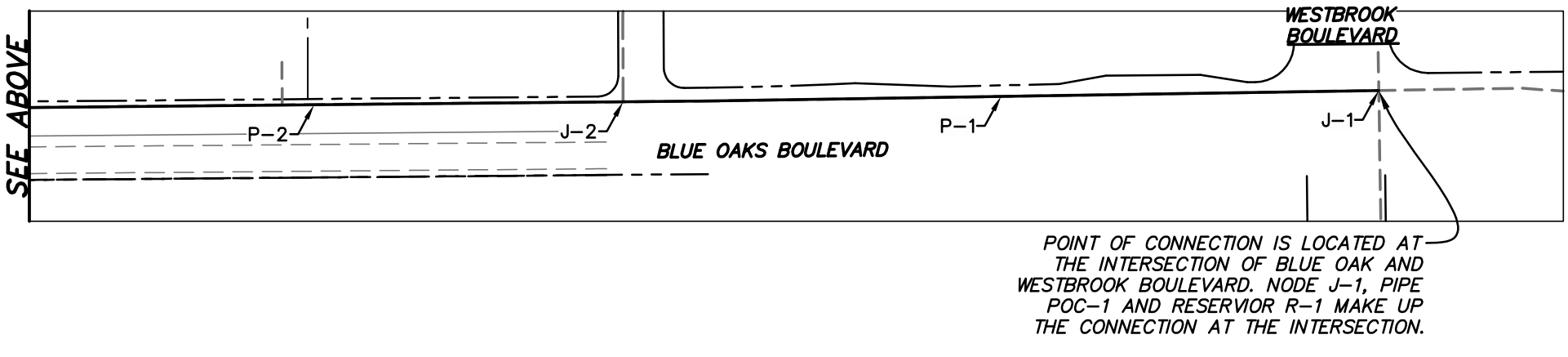
Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
FP-31	J-93	FH-31	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-107	J-82	J-83	12.0	PVC	130.0	-290	0.82	0.000	59	0.02
FP-26	J-83	FH-26	6.0	Ductile Iron	130.0	0	0.00	0.000	36	0.00
P-108	J-83	J-84	12.0	PVC	130.0	-290	0.82	0.000	417	0.11
FP-27	J-84	FH-27	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-109	J-84	J-85	12.0	PVC	130.0	-290	0.82	0.000	35	0.01
P-110	J-85	J-86	8.0	PVC	130.0	152	0.97	0.001	180	0.10
P-111	J-85	J-87	12.0	PVC	130.0	-442	1.25	0.001	255	0.14
P-112	J-87	J-88	8.0	PVC	130.0	117	0.74	0.000	206	0.07
FP-28	J-88	FH-28	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-113	J-88	J-89	8.0	PVC	130.0	117	0.74	0.000	284	0.10
P-115	J-89	J-90	8.0	PVC	130.0	20	0.13	0.000	135	0.00
FP-29	J-90	FH-29	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-116	J-90	J-91	8.0	PVC	130.0	20	0.13	0.000	262	0.00
P-117	J-91	J-92	12.0	PVC	130.0	230	0.65	0.000	216	0.04
FP-30	J-92	FH-30	6.0	Ductile Iron	130.0	0	0.00	0.000	32	0.00
P-118	J-92	J-82	12.0	PVC	130.0	230	0.65	0.000	389	0.06
P-124	J-87	J-97	12.0	PVC	130.0	-559	1.59	0.001	188	0.16
FP-32	J-97	FH-32	6.0	Ductile Iron	130.0	0	0.00	0.000	37	0.00
P-123	J-97	J-96	12.0	PVC	130.0	-559	1.59	0.001	173	0.15
P-133	J-95	J-104	12.0	PVC	130.0	31	0.09	0.000	80	0.00
FP-35	J-104	FH-35	6.0	Ductile Iron	130.0	0	0.00	0.000	39	0.00
P-132	J-104	J-103	12.0	PVC	130.0	31	0.09	0.000	311	0.00
P-131	J-103	J-102	12.0	PVC	130.0	213	0.61	0.000	209	0.03
FP-34	J-102	FH-34	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-130	J-102	J-99	12.0	PVC	130.0	213	0.61	0.000	98	0.01
P-126	J-99	J-94	12.0	PVC	130.0	70	0.20	0.000	299	0.01
P-127	J-99	J-100	12.0	PVC	130.0	144	0.41	0.000	238	0.02
P-128	J-100	J-101	12.0	PVC	130.0	209	0.59	0.000	150	0.02
FP-33	J-101	FH-33	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-129	J-101	J-91	12.0	PVC	130.0	209	0.59	0.000	241	0.03
P-138	J-103	J-108	12.0	PVC	130.0	-182	0.52	0.000	242	0.03
P-139	J-108	J-109	8.0	PVC	130.0	66	0.42	0.000	32	0.00
FP-38	J-109	FH-38	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-140	J-109	J-110	8.0	PVC	130.0	66	0.42	0.000	427	0.05
FP-39	J-110	FH-39	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-141	J-110	J-100	8.0	PVC	130.0	66	0.42	0.000	282	0.03
P-134	J-96	J-105	12.0	PVC	130.0	381	1.08	0.000	271	0.11
FP-36	J-105	FH-36	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-135	J-105	J-106	12.0	PVC	130.0	381	1.08	0.000	196	0.08
P-136	J-106	J-107	8.0	PVC	130.0	117	0.75	0.000	32	0.01
FP-37	J-107	FH-37	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00

FlexTable: Pipe Table

Label	Start Node	Stop Node	Diameter (in)	Material	Hazen-Williams C	Flow (gpm)	Velocity (ft/s)	Headloss Gradient (ft/ft)	Length (User Defined) (ft)	Headloss (Friction) (ft)
P-137	J-107	J-108	8.0	PVC	130.0	117	0.75	0.000	388	0.13
P-153	J-106	J-119	12.0	PVC	130.0	264	0.75	0.000	242	0.05
P-152	J-119	J-111	8.0	PVC	130.0	84	0.54	0.000	421	0.08
P-142	J-111	J-108	12.0	PVC	130.0	131	0.37	0.000	242	0.01
P-143	J-111	J-112	8.0	PVC	130.0	52	0.33	0.000	187	0.01
FP-40	J-112	FH-40	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-144	J-112	J-113	8.0	PVC	130.0	52	0.33	0.000	330	0.03
FP-41	J-113	FH-41	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-145	J-113	J-114	8.0	PVC	130.0	52	0.33	0.000	58	0.00
P-146	J-114	J-115	8.0	PVC	130.0	133	0.85	0.000	108	0.05
P-147	J-114	J-116	8.0	PVC	130.0	-81	0.51	0.000	309	0.05
P-148	J-116	J-111	12.0	PVC	130.0	99	0.28	0.000	242	0.01
P-149	J-116	J-117	12.0	PVC	130.0	-180	0.51	0.000	54	0.01
FP-42	J-117	FH-42	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
P-150	J-117	J-118	12.0	PVC	130.0	-180	0.51	0.000	429	0.05
FP-43	J-118	FH-43	6.0	Ductile Iron	130.0	0	0.00	0.000	36	0.00
P-151	J-118	J-119	12.0	PVC	130.0	-180	0.51	0.000	175	0.02
P-3	J-3	J-4	24.0	PVC	130.0	2,987	2.12	0.001	244	0.16
P-5	J-4	J-5	24.0	PVC	130.0	2,987	2.12	0.001	520	0.34
P-4	J-4	SERV-HDR-1	12.0	PVC	130.0	0	0.00	0.000	20	0.00
FP-44	J-12	FH-44	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
FP-45	J-13	FH-45	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
FP-46	J-32	FH-46	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00
FP-47	J-69	FH-47	6.0	Ductile Iron	130.0	0	0.00	0.000	35	0.00

SEE SHEET 2





POINT OF CONNECTION IS LOCATED AT THE INTERSECTION OF BLUE OAK AND WESTBROOK BOULEVARD. NODE J-1, PIPE POC-1 AND RESERVIOR R-1 MAKE UP THE CONNECTION AT THE INTERSECTION.

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0 100 200 400
SCALE: 1"=200'

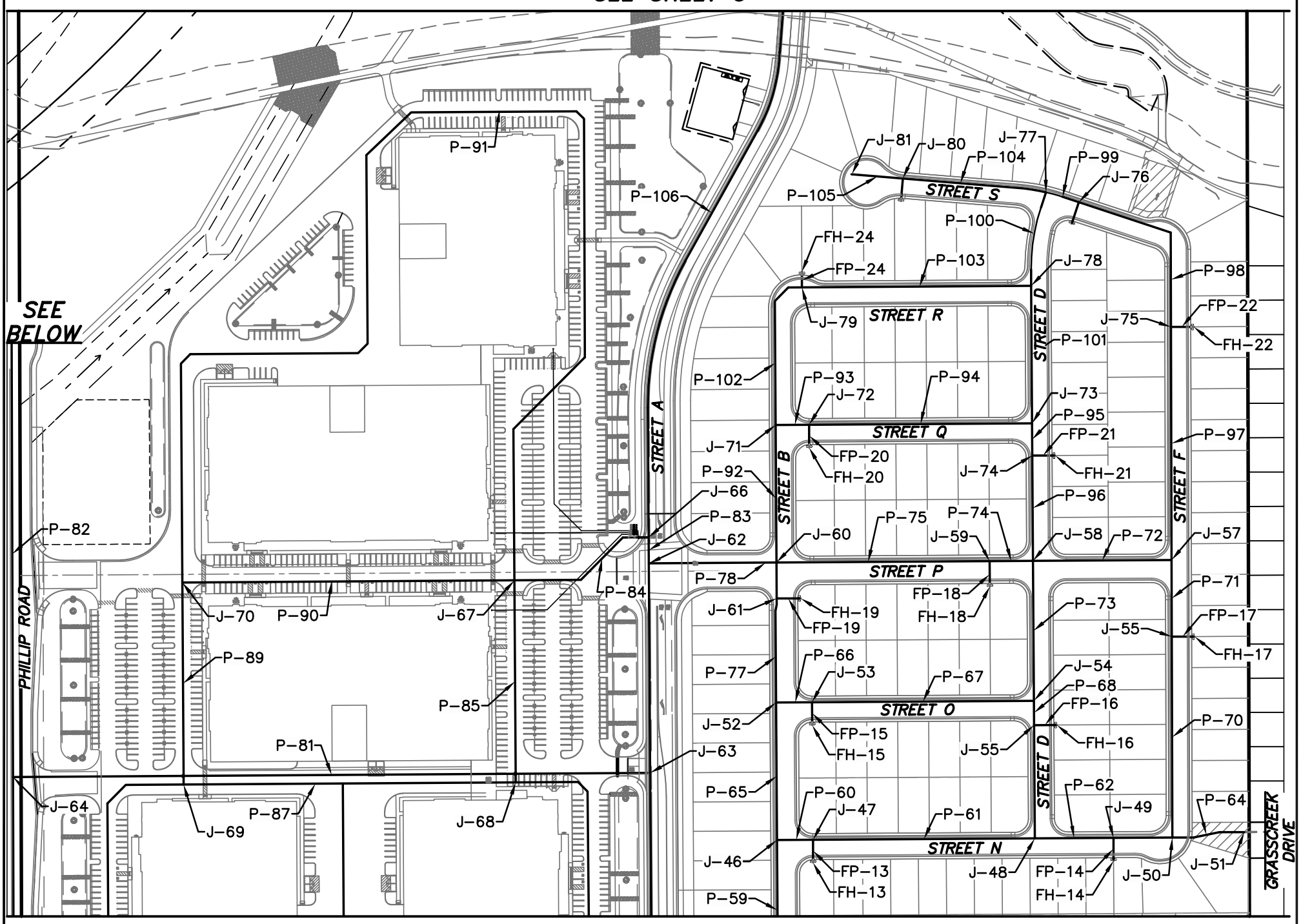
FIRE SYSTEM EXHIBIT
FOR
PHILLIP ROAD SITE

CITY OF ROSEVILLE, PLACER COUNTY, CALIFORNIA

SHEET 1 OF 3 APRIL 2, 2025

X:\Land Projects\4042-60-4\dwg\4042-60-4_EXH_Fire Site Plan- Buildout.dwg

SEE SHEET 3



SEE SHEET 1

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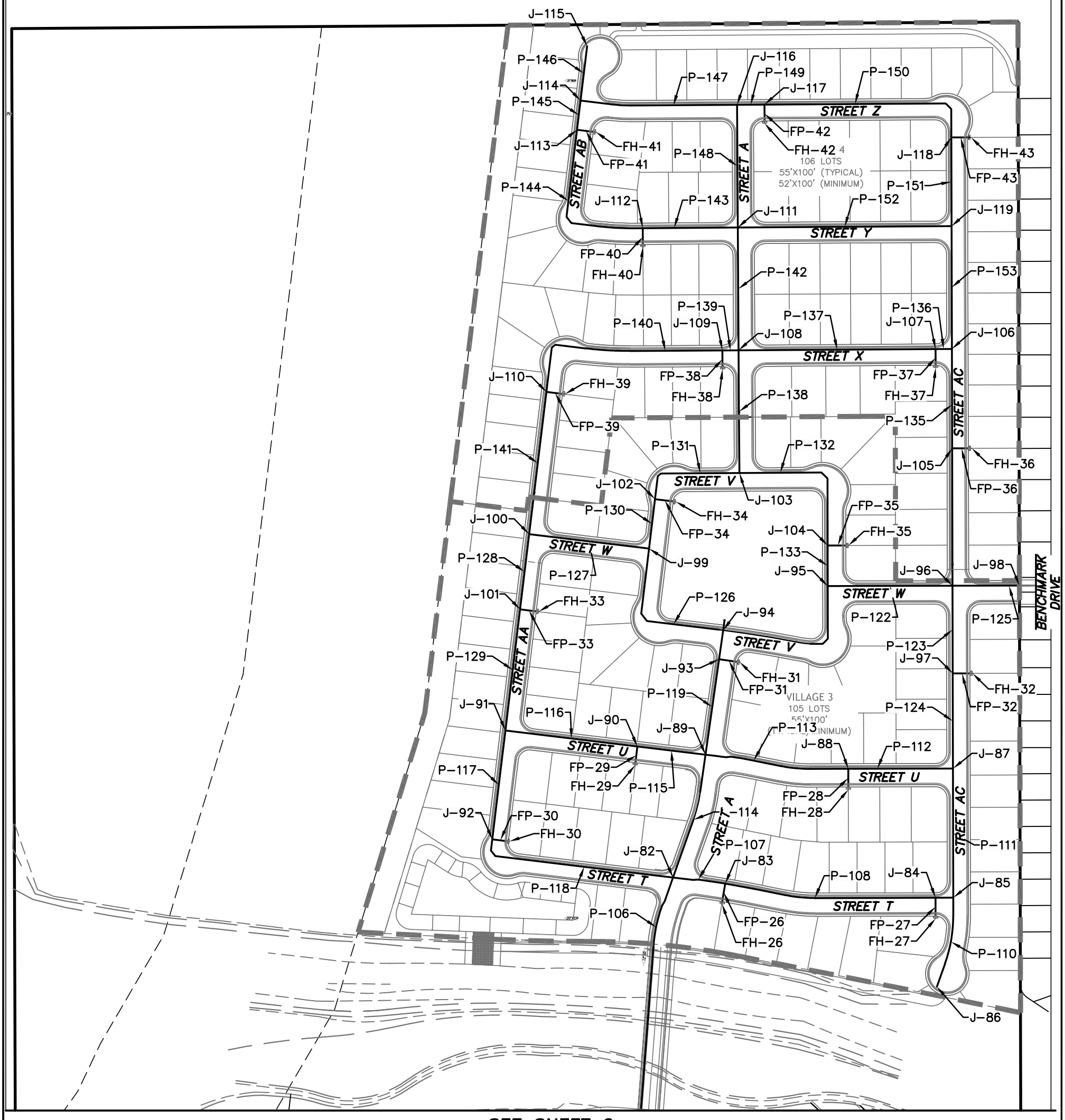

SEE SHEET 2

0 100 200 400

SCALE: 1"=200'

FIRE SYSTEM EXHIBIT

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