

December 5, 2022

Ms. Sofia Recalde  
San Mateo Local Agency Formation Commission  
Management Analyst  
455 County Center  
Redwood City, CA 94063

Subject: Proposal for LAFCo Peer Review of City of East Palo Alto and East Palo Alto Sanitary District Sewer-Related Documents

Dear Ms. Recalde:

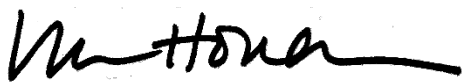
We are pleased to provide this proposal to complete a peer review of engineering documents, capital improvement plans, and budgets prepared by the City of East Palo Alto (City) and the East Palo Alto Sanitary District (District) and their consultants as related to the District's existing wastewater collection system conditions, areas for improvement, proposed capacity improvements, operational and maintenance plan, and associated costs.

This proposal summarizes the relevant experience of V. W. Housen & Associates, Inc. (VWHA), and provides our understanding of scope and estimated cost. I would be completing this work with assistance from a Project Engineer, and have approximately 20 percent availability through January 15, increasing to 30 percent through the first and second quarter of FY23.

I have over 30 years of experience completing the work that is involved in the LAFCo peer review. Several of our clients are located within San Mateo County, including the City of San Mateo (Sewer System Management Plan), West Bay Sanitary District (agency management and collection system planning, asset management, and CIP), City of Half Moon Bay (Sewer Engineer for capital and O&M needs), and Sewer Authority Mid-Coastside (interim agency management). We have also assisted agencies in Marin County with discussions related to consolidation and annexation, and understand the importance of having a clear and accurate representation of system needs and costs.

I appreciate the opportunity to assist the County with this peer review. Please contact me at (925) 518-3487 or [vhousen@housenassociates.com](mailto:vhousen@housenassociates.com) if you have questions or would like additional information.

Sincerely,  
V. W. Housen & Associates



Vivian Housen, P.E.  
Principal

# Proposal for LAFCo Peer Review of City of East Palo Alto and East Palo Alto Sanitary District Documents

## ABOUT V. W. HOUSEN & ASSOCIATES



V. W. Houseen & Associates, Inc. (VWHA) was established in 2012 to help public agencies to plan and implement strategic initiatives for improving infrastructure. We provide program management, agency management, infrastructure planning, design and construction management, lifecycle asset management, and O&M efficiencies support services. We specialize in helping our clients to anticipate and address change in a way that minimizes risk. VWHA has been recognized by the Regional and State Water Boards for our efforts in assisting water and wastewater agencies to substantially improve system performance. We bring decades of experience to our recommended solutions, creating programs that address the most critical needs within available budgets. A resume for Vivian Houseen, P.E. and our 2023 rate sheet are included at the end of this document. For this project, Vivian would invoice the County as a Principal.

## PROPOSED SCOPE OF SERVICES AND ESTIMATED FEE

East Palo Alto Sanitary District (District) has requested to become a subsidiary district of the City of East Palo Alto (City), as described in Section 8 of the June 2022 LAFCo Municipal Services Review (MSR). A number of studies and plans have been developed to support this request. Without knowing the extent of documents to be reviewed, we have prepared the following scope of services. We are flexible, and can adjust this scope and fee as needed to match the County's needs.

**Task 1. Review Existing Documents.** VWHA will review the following documents, if available, to understand their content and relevance to the peer review. The allocated time for review assumes that all documents are available in electronic, searchable format:

- From LAFCO: Final MSR and background documents prepared and/or provided by the City and EPASD during the completion of the MSR; additional documents prepared subsequent to completion of the MSR
- From the City: Budget and strategic plan; emergency response plans; mutual aid agreements
- From the District: Strategic Plan, budget, organization, equipment list; Finance Plan and documents related to the most recent adoption of rates (Prop 218); Sewer System Management Plan including emergency response plans and mutual aid agreements; List of hot spots and associated reason; SSO record for past 5 years; construction drawings for completed improvements; Standard Operating Procedures; maintenance records including access to (or downloads from) the District's computerized maintenance management system; GIS maps and other available asset data; pump station information including operating setpoints; closed circuit television inspection records; asset management plan

and recommendations for rehabilitation and replacement; capacity assurance plan/hydraulic model and recommendations for capacity upgrades.

VWHA will prepare a draft and final Technical Memorandum summarizing identified gaps in available data that could impede the assessment for Task 2. This task includes one 2-hour virtual meeting with City, District, and/or County staff to discuss any questions that we have on the various documents.

*Estimated hours and cost: 40 hours Principal, 20 hours Project Engineer | \$16,350*

### **Task 2. Complete Peer Review**

VWHA will review engineering documents produced by City and District as described above, as well as proposed budgets and capital improvement plans. We will consider industry standards and best management practices, and recommend changes or additions, and recommend additional studies and information if needed. VWHA will prepare a draft and final peer review memo that summarizes the information reviewed, findings, and recommendations. The peer review memo will discuss the expected effectiveness of the proposed capital improvement plan in meeting regulatory requirements and addressing identified issues within the system, and the feasibility of implementing the proposed capital improvement plan given the timeline and budget allocated for this work. This task includes one 90-minute virtual meeting with the City, District, and/or County staff to discuss findings and recommendations.

Estimated hours and cost:

- 30 hours Principal, 20 hours Project Engineer to prepare for review meeting
- 20 hours Principal and 16 hours Project Engineer to complete review based on meeting discussions
- 8 hours Principal, 12 hours Project Engineer and 8 hours Principal to prepare peer review memo.

*Total estimated hours and cost: 106 hours | \$26,900*

### **Task 3. Meetings**

VWHA will prepare materials for and attend two public meetings. We assume that the meetings will be in person and will be 2 hours in duration plus travel time for each meeting. VWHA will prepare notes to document discussions from each meeting.

*Estimated hours and cost: 12 hours Principal, 16 hours Project Engineer | \$6,600*

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**Total Hours, all Tasks: 194**

**Total Estimated Cost, all Tasks: \$49,850**

# Vivian Housen, PE, ENV SP



Vivian Housen has over 30 years of experience in the planning, design, and management of wet infrastructure projects. She is a hands-on manager for programs involving wastewater facility improvements, hydraulic modeling, master planning, utility asset management, and regulatory compliance. Vivian also assists agencies with interim management needs and improving O&M efficiencies. She is strategic and forward-thinking, and is recognized for her ability to build consensus among diverse organizations. She has demonstrated success delivering controversial programs significantly under budget.

## EXPERIENCE

**Project Manager for Risk Assessment and Capital Replacement Programs.** Vivian has assisted water and wastewater agencies with systemwide asset management involving the establishment of Level of Service objectives, creation of computerized risk models that calculate Risk based on Likelihood and Consequence of Failure, and development of prioritized pipeline rehabilitation and replacement programs. Vivian's clients have included the Town of Los Altos Hills; City of Half Moon Bay; Veolia Water / City of Richmond; West Bay Sanitary District (Menlo Park); Ross Valley Sanitary District (San Rafael); Delta Diablo (Antioch); Ironhouse Sanitary District (Oakley); and Mt. View Sanitary District (Martinez).

**Project Manager for Hydraulic Model Development, Updates, and Analyses.** Vivian has developed wastewater collection system hydraulic models using Infoworks CS, Infosewer, and InfoSWMM. Model development has included capturing real-time flow data, estimating flows, building digital representations of system assets, predicting sources of inflow and infiltration, and model calibration. Vivian has utilized these models to identify and proposed projects to address capacity needs. Many of these hydraulic models are used to assist in addressing regulatory mandates for spill reduction. Vivian maintains the hydraulic models and uses the models to assist with capital replacement program updates. Vivian's clients have included City of Half Moon Bay; City of Sausalito, City of Millbrae, Veolia Water / City of Richmond; West Bay Sanitary District (Menlo Park); Ross Valley Sanitary District (San Rafael); Ironhouse Sanitary District (Oakley), and CV San (Castro Valley).

**Project Manager for Collection System of the Future Initiative.** Vivian assisted West Bay Sanitary District, as the lead agency, in a series of workshops over 18 months to conduct information sharing and benchmarking, brainstorm future challenges and obstacles, and develop strategies to prepare for and address challenges facing sewer collection system agencies. The project involved nine leading Bay Area agencies, including West Bay Sanitary District (Menlo Park), Union Sanitary District (Union City), West Valley Sanitation District (Cupertino), CV San (Castro Valley), Ross Valley Sanitary District (San Rafael), West County Wastewater District (Richmond), Novato Sanitary District (Novato), and

## Professional Registration

- Professional Civil Engineer, California No. C46324

## Education

- MS, Structural Engineering, Stanford University
- BS, Civil Engineering, Regent's Scholar, University of California at Berkeley

## Professional Affiliations

- American Water Works Association
- Bay Area Water Works Association
- Water Environment Federation
- California Water Environment Association
- California Association of Sanitation Agencies (Prior Associates Committee Chair and Executive Board Member)
- American Society of Civil Engineers American Society of Civil Engineers
- Institute for Sustainable Infrastructure



V.W. HOUSEN  
& ASSOCIATES

the City of Livermore. Topics spanned from operations and maintenance issues to larger, management topics. The final product was a comprehensive summary document and roadmap that was presented at the 2016 CWEA Annual Conference, and is available for reference by other collection system agencies.

**Project Manager for System Operations and Maintenance Support.** Vivian has provided operations and maintenance support to over a dozen agencies. Examples of work completed include reviewing opportunities for resource sharing; restructuring of asset, cleaning, inspection, and repair data; regulatory compliance support; technical reviews and evaluations; preparing loan and grant applications; managing maintenance contracting; and developing lateral replacement ordinances.

**Project Manager for the Development of Sewer System Management Plans and Overflow Emergency Response Plans.** Vivian has developed Sewer System Management Plans and has completed required bi-annual audits of these plans for over a dozen agencies. All but one of these agencies were within the jurisdiction of the San Francisco Bay Regional Board. Each of the SSMPs addresses eleven SSMP elements as needed to meet SWRQB Region 2 and State WDR requirements. Vivian has also developed materials for and conducted SSMP and OERP training. Following adoption or re-adoption of the SSMPs, Vivian has provided management support to many of these agencies to ensure that ongoing maintenance activities meet or exceed SSMP requirements.

**Program Management and Owner's Representative Support.** Vivian has served as the Program Manager or Owner's Representative for large infrastructure projects including the \$40 million City of Rialto Facilities Improvement Program, \$18 million City of Richmond Wet Weather Storage Facility Project, City of Richmond Wastewater and Stormwater Program, \$80 million City of Modesto Biological Nutrient Removal/Tertiary Treatment Expansion Project and Interceptor Replacement Projects, \$218 million Livermore Amador Valley Water Management Export Pipeline Facilities Program, and East Bay Municipal Utilities District multi-year Wet Weather Program, Seismic Improvement Program, and Collections Facility Program.

**Agency Management Support.** Vivian has served in interim agency management roles on an as-needed basis, including assignments as Principal Engineer for Delta Diablo (Antioch), General Manager for Sewer Authority Mid-Coastside (Half Moon Bay), District Manager for West Bay Sanitary District (Menlo Park), Sewer Engineer for City of Half Moon Bay, Sewer Engineer for Town of Los Altos Hills, District Engineer for Ironhouse Sanitary District (Oakley), District Engineer for Crockett Community Services District (Crockett), District Manager for Ross Valley Sanitary District (San Rafael), and General Manager for Livermore-Amador Valley Water Management Agency (Dublin).

**Principal in Charge and/or Project Manager for Pipeline Planning and Design Projects.** Vivian led multi-disciplinary teams to prepare feasibility plans or biddable plans and specifications for wastewater pipeline projects including the 13<sup>th</sup> Street Capacity Improvements (Richmond); Hoffman Boulevard Capacity Improvements (Richmond); Cutting and Carlson Boulevard Capacity Improvements (Richmond); First Street Pipeline Rehabilitation Project (Richmond); Macdonald and Virginia Pipeline Replacement Project (Richmond); Barrett Avenue Relief Sewer and Hensley Avenue Storage Evaluation (Richmond); 2011 Priority Pipeline Replacement Project (Richmond); 2010 Citywide Sewer Main Replacement Project (Sunnyvale); Priority Sewer Rehabilitation Projects (Sausalito); and Master Plan Priority 2 Sewers Project (Castro Valley).



2023 Standard Billing Rates

Classification	Hourly Billing Rate
Program Manager	\$340
Principal/Project Director	\$325
Supervising Project Manager	\$282
Senior Project Manager	\$235
Project Manager	\$214
Senior Engineer	\$197
Senior CADD Designer	\$197
Project Engineer III	\$179
Project Engineer II	\$167
Project Engineer I/Project Planner	\$154
CADD Operator/CADD Designer	\$154
Project Analyst	\$122
Administrative Support	\$103

Hourly rates include overhead and profit. Other direct costs (ODCs) include major reproduction services, mileage (rates per current IRS guidelines), and pre-approved travel expenses. ODCs will be billed at actual cost. Subconsultants will be billed at actual cost plus 10%. Expert witness will be billed at Rate X 2. VWHA reserves the right to adjust its hourly rate structure at the beginning of the calendar year for all ongoing contracts.