County of Hawaii

Professional Services for Fiscal Year 2024-2025

Housing and Community Development

OH.2) Community Planning (Environmental Assessment)

Statement of Qualifications

June 30, 2024

Submitted by: Jacobs Engineering Group Inc.

Jacobs

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Jacobs

Challenging today.
Reinventing tomorrow.

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June 30, 2024

ATTN: Ms. Susan Kunz, Administrator
Housing and Community Development, County of Hawaii
1990 Kinoole Street, Suite 102
Hilo, Hawaii, 96720
Email: ohcdprofserv@hawaiicounty.gov

Subject: Statement of Qualifications - Professional Services for Fiscal Year 2024-2025

Dear Ms. Kunz,

Jacobs Engineering Group Inc. (Jacobs) brings over 45 years of experience providing innovative solutions to Hawaii. We value our partnerships with clients across the state and look forward to applying our depth of knowledge and dedicated staff to advance your mission and goals. Jacobs is committed to providing professional, financially responsible, and dependable service for the County of Hawaii and submit our Statement of Qualifications for **OH.2) Community Planning (Environmental Assessment)**.

For additional information, we are also submitting statement of qualification with the Planning Department for the following category:
OH.3) Community Planning (Grant Writer)

Jacobs leads the global professional services sector delivering solutions for a more connected, sustainable world. We offer a full spectrum of services including scientific, technical, professional, and construction and project management for business, industrial, commercial, government and infrastructure sectors. Jacobs provides:

- **Fully integrated local team with extensive reach-back capability into our global team.** We are a global organization of over 60,000 employees, including over 100 engineers, planners, and scientists based in Hawaii. One of our defining capabilities is to build a blended team of local and global experts to work closely and collaboratively with the County of Hawaii. We carefully select individuals with the optimum balance of local knowledge and experience in delivering similar services. The result is an experienced team of planners and engineering practitioners who will apply their knowledge to deliver your critical projects efficiently.

- **Unparalleled industry leadership.** As a leading provider of planning, design, and engineering services, we provide end-to-end solutions for our clients' most complex challenges related to climate change, energy transition, connected mobility, integrated water management, and smart cities. We aim higher and are dedicated to implementing necessary process changes, finding new methods and approaches to solving problems, or redeploying proven products or services to improve the lives of people everywhere. Our network of technical and program professionals provides you with direct access to innovative strategies and project approaches for successful delivery of your projects, reducing the overall risk to the County of Hawaii and to your stakeholders. Our engineering services range from permitting, feasibility, and planning studies to design, inspection, startup, construction management, and operation and maintenance. Jacobs has full in-house capabilities in port & harbor engineering, coastal engineering, civil engineering, general engineering, environmental engineering, and community planning, including expertise to complement our public works engineering services. We offer state-of-the-art dynamic decision support tools and integrated modeling methods that facilitate balanced decisions that consider cost and benefits and truly integrate infrastructure management recommendations.

- **We understand the County of Hawaii.** Jacobs has a long history of working with the County of Hawaii which dates to when we were CH2M Hill. Our comprehensive understanding of your objectives and challenges, combined with our technical resources, enables us to respond quickly, apply existing knowledge, and develop and implement expedited solutions.

- **Immediate availability of our key staff and depth of resources** translates into responsiveness and a commitment to delivering your wide array of projects efficiently. Our team is immediately available to the County of Hawaii to deliver specialized planning and design services to meet your specific needs and goals.

I am your point of contact responsible for responding to all your requests and concerns and will make sure resources are available when needed. We have proposed staff who bring the specific expertise necessary for your requested services and we will find additional resources to meet other needs that may arise. Please feel free to contact me at 808.440.0229 or by email at John.Padre@jacobs.com to further discuss our qualifications or opportunities to work together.

Yours sincerely,

Jacobs Engineering Group Inc.

John Padre, AICP
Principal-In-Charge

PART I:
CONTRACT SPECIFIC QUALIFICATIONS

SECTION A-D:

CONTRACT INFORMATION
ARCHITECT-ENGINEERING POINT OF CONTACT
PROPOSED TEAM
ORGANIZATIONAL CHART OF PROPOSED TEAM

ARCHITECT–ENGINEER QUALIFICATIONS

PART I – CONTRACT-SPECIFIC QUALIFICATIONS

A. CONTRACT INFORMATION

1. TITLE AND LOCATION (City and State)

Professional Services for Fiscal Year 2024-2025, County of Hawaii, Hawaii

2. PUBLIC NOTICE DATE	3. SOLICITATION OR PROJECT NUMBER
June 1, 2024	

B. ARCHITECT-ENGINEER POINT OF CONTACT

4. NAME AND TITLE

John Padre, AICP, Principal-In-Charge

5. NAME OF FIRM

Jacobs Engineering Group Inc.

6. TELEPHONE NUMBER	7. FAX NUMBER	8. E-MAIL ADDRESS
808.440.0229		John.Padre@jacobs.com

C. PROPOSED TEAM

(Complete this section for the prime contractor and all key subcontractors)

	(Check) PRIME	(Check) J-V PARTNER	(Check) SUB-CONTRACTOR	9. FIRM NAME	10. ADDRESS	11. ROLE IN THIS CONTRACT
a.	✓			**Jacobs Engineering Group Inc.*** ☒ CHECK IF BRANCH OFFICE	1003 Bishop Street, Pauahi Tower, Suite 1340, Honolulu, HI 96813	Prime Consultant

D. ORGANIZATIONAL CHART OF PROPOSED TEAM ☐ *(Attached)*

Upon selection, Jacobs will provide a project-specific organization chart.

* *In 2017, Jacobs Engineering Group Inc. (JEG) acquired CH2M, which became a wholly-owned subsidiary. Jacobs Government Services Company (JGSC) is a wholly owned subsidiary of Jacobs Engineering Group Inc. (JEG), and it is the legal contracting entity for US federal government projects located outside the continental United States (OCONUS). JEG is the corporate parent of JGSC. This SF330 proposal includes personnel resources from both JGSC and JEG, including acquired CH2M personnel resources.*

SECTION E:

RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
John Padre, AICP	Principal-In-Charge/Project Manager	24	24

15. FIRM NAME AND LOCATION (City and State)

Jacobs, Honolulu, Hawaii

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
MBA, Executive Management and Strategic Marketing BA, Botany	American Institute of Certified Planners (AICP): #33278

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

John has 24 years of management and technical experience in the fields of environmental asset and liabilities, geospatial and environmental data management, environmental planning, and natural resources. As a project manager, his primary responsibilities are to oversee the successful completion of environmental due diligence, hazardous waste remediation, environmental planning and permitting, and software application development projects. In a technical capacity, he specializes in performing as the environmental professional for property environmental due diligence projects, environmental planner for transportation-related and transit-oriented development projects, and as a senior technical advisor for species conservation or control projects. He is experienced in local, state, and federal permitting practices and regulatory policy with respect to hazardous waste and the environmental review process.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION (City and State)

Honolulu Rail Transit Project, Environmental Planning Services, Honolulu Authority for Rapid Transportation, Honolulu, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Ongoing	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Environmental Planner. Provide strategic HEPA and NEPA regulatory guidance and planning for the construction of HART 20-mile high-capacity rail transit project. Specific services include environmental impact assessments, compliance with NEPA, transportation planning, interface management, bus/rail integration, station access and modal interface, TOD, traffic analysis, parking study, and design management services including management of final design contracts, and review of final design submittals support.

b.

(1) TITLE AND LOCATION (City and State)

Hawaii Bridge Program, Federal Highway Administration (FHWA), Central Federal Lands Highway Division, Various Locations, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2016	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Project Manager/Environmental Scientist. Providing strategic HEPA and NEPA regulatory guidance and planning for the rehabilitation of 10 bridges on the islands of Hawaii, Kauai, and Oahu. Specific services include environmental impact assessments, compliance with NEPA, and transportation planning.

c.

(1) TITLE AND LOCATION (City and State)

Moderating Oahu's Traffic Conditions, City and County of Honolulu, Department of Transportation Services (DTS), Honolulu, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Ongoing	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Senior Planner. Providing programmatic planning support for environmental planning and compliance, travel forecasting and operations simulation, multi-modal programmatic planning, station access and modal interface planning, traffic impact analysis and transportation assessment reports, geographic information systems, graphical data analysis and mapping, and rail extension and multi-modal corridor planning support. Served as administrator of HOLO, the electronic revenue collection system used on bus and rail transportation modes.

d.

(1) TITLE AND LOCATION (City and State)

BMP Improvements at Various Refuse Transfer Stations, County of Kauai, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2021	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Environmental Planner. Coordinated and served as an environmental professional to evaluate environmental due diligence needs in preparation for National Environmental Policy Act (NEPA) environmental documentation and supporting technical reports for the engineering design improvements of four transfer stations within the County.

	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	Honolulu Rail Transit Project, Environmental Due Diligence of Real Property Acquisition Honolulu Authority for Rapid Transportation (HART), Honolulu, HI	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
		Ongoing	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☒ Check if project performed with current firm	
e.	**Project Manager.** Coordinates and serves as the environmental professional to perform environmental due diligence in accordance with the All-Appropriate Inquiries (AAI) rule and standards as set forth in the ASTM for parcel acquisitions prior to construction of the 20-mile high-capacity Honolulu Rail Transit Project. Specific tasks include the accounting of the AAI status of the proposed 272 acquisitions along the project; developing a prioritization strategy to perform the required AAI for required real properties in order to mitigate or minimize overall cost and schedule risks; and serving as the project manager and environmental professional for 100+ Phase I environmental site assessments.		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Abbey Mayer	**Project Manager/Environmental Scientist**	20	5

15. FIRM NAME AND LOCATION (City and State)

Jacobs, Honolulu, Hawaii

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
MA, English BA, Art Graduate Diploma, Accounting	American Institute of Certified Planners (AICP): #31479

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Abbey is experienced in community-based master planning and transit planning, multi-jurisdictional permitting strategies, and environmental compliance. As previous director of State Office of Planning, he served as an accepting authority for EAs and EISs prepared under HRS CH. 343, including the FEIS for the proposed Honolulu Seawater Air Conditioning Project. As former Director of Planning, Permitting, and Right-of-Way for the Honolulu for Rapid Transit (HART), Abbey administered, managed, and coordinated the Planning, Permitting, and Right-of-Way Division for Honolulu's $8.2 billion, 20-mile, 21-station, elevated guideway, light rail transit system (Honolulu Rail).

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Honolulu Rail Transit Project, Honolulu Authority for Rapid Transportation (HART), Honolulu, HI	2018	2018
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☐ Check if project performed with current firm	

Director of Planning, Permitting, and Right-of-Way (ROW). Administered, managed, and coordinated the Planning, Permitting, and Right-of-Way Division for Honolulu's $8.2 billion, 20-mile, 21-station, elevated guideway, light rail transit system (Honolulu Rail), which consists of planning, environmental, transit property acquisition and relocation, agency and permits, and grant management. Oversaw the preparation of documents to comply with the National Environmental Policy Act (NEPA), other federal environmental regulatory acts including the Endangered Species Act, the Clean Water Act, the Clean Air Acts, the National Historic Preservation Act (NHPA), and Section 4(f) of the Department of Transportation Act. Abbey led an organization of approximately 30 HART staff, along with over 50 project consultants. Administered an overall project budget of approximately $390 million.

b.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Kalaupapa Electrical System Rehabilitation, National Park Service, Molokai, HI	2021	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☒ Check if project performed with current firm	

Planning, Permitting, and Compliance Lead. Providing planning and permitting services for the electrical system rehabilitation project at the extremely sensitive and remote Kalaupapa National Historical Park. Providing detailed federal and state permitting and compliance plans for all proposed new facilities and rehabilitation of existing facilities. Federal permits and compliance evaluated for: National Environmental Protection Act; Clean Water Act; Rivers and Harbors Act; National Historic Preservation Act; Endangered Species Act; Coastal Zone Management Act; and the National Pollutant Discharge Elimination System (NPDES). State and local permits and compliance evaluated for: Hawaii Environmental Protection Act (Ch. 343, HRS), Hawaii Conservation District Use permits, Hawaii Historic Preservation Act, and Hawaii Endangered Species Act.

c.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2045 Oahu Regional Transportation Plan Support Program, Oahu Metropolitan Planning Organization (OahuMPO), Honolulu, HI	Ongoing	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☒ Check if project performed with current firm	

Project Manager and Sr. Planner. Managing eight individual task orders under this contract. Total value of $700,000. Task orders include projects such as the 2045 Oahu Regional Transportation Plan Update, 2045 Transportation Revenue Forecast and Alternative Financing Models, and the Congestion Management Process (CMP) Update.

d.

(1) TITLE AND LOCATION (City and State)

Moderating Oahu's Traffic Conditions, City and County of Honolulu, Department of Transportation Services, Oahu, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2020	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Right of Way and NEPA Specialist. The goal of the project is to implement proven techniques, modes, and strategies to stabilize travel time reliability and increase mobility in Honolulu. Overseeing the gathering, analyzing, and documenting transportation system performance data, re-evaluating methods to monitor the performance of the multimodal transportation system, and developing various possible growth scenarios. Abbey served as a NEPA and right of way specialist, facilitating strategic and critical land acquisitions and dispositions for current and future transit operations for the DTS, maintaining compliance with the Uniform Relocation Assistance and Real Property Acquisition Act (URA) and all associated Federal Transit Administration (FTA), State of Hawaii, and City and County of Honolulu real estate acquisition, disposition, and relocation regulations, laws, ordinances, and rules.

e.

(1) TITLE AND LOCATION (City and State)

2045 Oahu Regional Transportation Plan (ORTP), Oahu Metropolitan Planning Organization (OahuMPO), Honolulu, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2021	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Project Manager and Senior Planner. Managed eight individual task orders under this contract. Total value of $700,000. Task orders include projects such as the 2045 Oahu Regional Transportation Plan Update, 2045 Transportation Revenue Forecast and Alternative Financing Models, and the Congestion Management Process (CMP) Update.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Kristen Nishimura, AICP	**Project Manager/Environmental Planner**	22	2

15. FIRM NAME AND LOCATION (City and State)
Jacobs, Honolulu, Hawaii

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
BA, Asian Studies	American Institute of Certified Planners (AICP): #025368

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Kristen is a project manager with 22 years of experience in consulting and public planning. She has effectively spearheaded planning, design, and permitting projects for various levels of state and federal government in Hawaii, the continental US, and overseas. Kristen has a proven ability to plan and execute tasks ranging from small budget studies and quick turnaround tasks to multi-million-dollar, multi-disciplinary programs, always ensuring compliance with internal and external controls, meeting schedules and milestones, and completing projects within budget.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION (City and State)
Kona Open Space Network, County of Hawaii, Department of Planning, Kona, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Ongoing	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☐ Check if project performed with current firm

Project Manager. Kristen led the team to develop the project strategy for the County's inaugural open space network pilot program in the Kona district of Hawaii Island ("Big Island"). This strategy encompasses the design of methodologies for the establishment of criteria, the selection and ranking of sites, the formulation of plans, the involvement of stakeholders, the discovery of funding sources, and the program implementation. Leading a team of experts from various disciplines, Kristen is collaborating with a citizens group to formulate the project from its initial concept to a plan ready for execution.

b.

(1) TITLE AND LOCATION (City and State)
Hilea Bridge and Ninole Bridge Interpretive Sign Development, US DOT, FHWA, CFL, Kau, Hawaii

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2022-2023	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Senior Planner. Conducted community engagement and facilitation of input development on the interpretive sign development for the replaced bridges.

c.

(1) TITLE AND LOCATION (City and State)
Honolulu Rail Transit Project, General Engineering Consultant Support (GEC III), Honolulu Authority for Rapid Transportation (HART), Honolulu, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2022-2023	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Task Lead, Planning and Environmental Planning. Kristen successfully led a multi-disciplinary team to conduct a comprehensive environmental due diligence for Segment 3 design changes, ensuring that HART avoided the costly and time-consuming process of conducting a supplemental Environmental Impact Statement (EIS). As a result, the agency was able to save significant project costs and avoid program-wide delays, potentially affecting construction and procurement effort for the unbuilt segment. The team's effort resulted in helping HART secure project approval from both the Governor of the state and the Federal Transit Authority. This successful outcome enabled HART to reaffirm its commitment to receive $744 million in funding. Specific tasks include providing planning and environmental services to support updating and implementing NEPA EIS, ROD, Section 106 Programmatic Agreement, Mitigation Monitoring Program, and other federal, state, and local requirements. Lead technical teams performing studies and reports, provide advisement on feasibility, cost effectiveness, and regulatory conformance of transit-associated plans, proposals, special projects, transportation services, and ongoing programs.

d.

(1) TITLE AND LOCATION (City and State)
Hilo Bayfront Roundabout EA, DOT Highways, Hilo, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2023	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Lead Environmental Planner. Kristen directed the environmental planning task on joint NEPA-HEPA EA activity for a roundabout conversion of the existing intersection at Hilo Bayfront Drive at Waianuenue Avenue. She identified permitting requirements. The project involvement occurred outside of employment at Jacobs.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Tony Ali, PE, PMP	**Project Manager**	37	35

15. FIRM NAME AND LOCATION (City and State)

Jacobs, Honolulu, Hawaii

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
BS, Environmental Engineering BS, Metallurgical Engineering and Materials Science BS, Chemistry	Professional Engineer (Civil): Hawaii #13879, Exp. 4/30/2026; Nevada #13682, Maine #9144; Ontario #90251597 Project Management Institute PMP #1417130 American Petrochemical Institute (API); Project Management Institute (PMP) U.S. Army Corps of Engineers QCM (POH1100074)

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Tony is a senior project manager with 37 years design and construction management and project management of public works facilities including water treatment and storage facilities and conveyance systems. He is experienced with the County of Maui as well as the City and County of Honolulu Standards and planning and permitting processes. He has performed engineering planning, design, construction, construction management operations in U.S. Department of Defense, municipal and industrial programs, and projects. He has a strong ability to adapt and operate in any cultural surrounding, providing leadership and organization to diverse, multi-cultural teams.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION (City and State): **Kamehameha Highway Wastewater Pump Station Force Main System Improvements, City and County of Honolulu, Honolulu, HI**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing; CONSTRUCTION (if applicable): 2021

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Project Manager. Assumed project manager role during construction closeout of facility improvements that provided for future hydraulic capacity during wet weather storm events as recommended by the Final Sewer I/I Plan submitted to the US Environmental Protection Agency (EPA). Services during construction is ongoing and includes construction punch list item completion, closing out permits and preparation of record drawings. Also, providing engineering support for follow-on design for wet well improvements and driveway grading.

b.

(1) TITLE AND LOCATION (City and State): **Waianae Wastewater Treatment Plant (WWTP) Improvements and Upgrades, City and County of Honolulu, Waianae, HI**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2016; CONSTRUCTION (if applicable): 2021

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Project Manager. Responsible for bid services and engineering services during construction for wastewater treatment including rehabilitation of the primary clarifiers and primary effluent boxes and piping, replacement of the headworks screens and associated equipment, and rehabilitation of the grit removal system and preparation tanks and channels.

c.

(1) TITLE AND LOCATION (City and State): **Waianae Wastewater Treatment Plant (WWTP) Improvements and Upgrades, City and County of Honolulu, Waianae, HI**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: 2016; CONSTRUCTION (if applicable): 2016

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Project Manager. Responsible for bid services and office services during construction for wastewater treatment including rehabilitation of the primary clarifiers and primary effluent boxes and piping, replacement of the headworks screens and associated equipment, and rehabilitation of the grit removal system and pre-aeration tanks and channels.

d.

(1) TITLE AND LOCATION (City and State): **Nuuanu Environmental Assessment, Honolulu Board of Water Supply, Honolulu, HI**

(2) YEAR COMPLETED — PROFESSIONAL SERVICES: Ongoing; CONSTRUCTION (if applicable):

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE — ☒ Check if project performed with current firm

Project Manager. The original 2-MG reservoir is connected to a watershed located on the former Queen's palace grounds. Due to the site's location near Department of Land and Natural Resources (DLNR) conservation lands, the Jacobs team is conducting additional due diligence studies (noise, biological, endangered species, flora and fauna, cultural surveys) to define the site and conduct wetland delineation to avoid impacts to the watershed during construction. This project involves extensive coordination with the public, which includes interviewing prominent community members and kupuna to protect this vital watershed.

	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	Honouliuli Wastewater Treatment Plant (WWTP) Secondary Upgrades, City and County of Honolulu, Ewa Beach, HI	PROFESSIONAL SERVICES: Ongoing	CONSTRUCTION (if applicable): Ongoing
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☒ Check if project performed with current firm	
e.	**Quality Control Manager.** Prepared quality management plans and facilitated quality reviews at 60%, 90% design stages for the design of a $650 million upgrade to the Honouliuli WWTP to meet the requirements of a USEPA- mandated consent decree and increase the plant capacity to 40 million gallons per day (mgd). Design elements include: incorporating the thermal hydrolysis process (THP) prior to digestion to increase volatile solids destruction, digester gas production, and dewatered solids concentrations; enhancing the existing anaerobic digestion process; a cake receiving and storage facility for trucked-in dewatered cake from other treatment plants; new dewatering and pre-THP dewatering facilities; low-temperature belt dryer facility to produce exceptional Class A biosolids product; digester gas treatment and storage facility; and a combined heat and power (CHP) facility.		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Jessica Burdick, PE, PMP	**Project Engineer**	25	25

15. FIRM NAME AND LOCATION (City and State)

Jacobs, Honolulu, Hawaii

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
MS, Civil and Environmental Engineering BS, Civil and Environmental Engineering	Professional Engineer (Civil): Hawaii, #11915-C, Exp. 4/30/2026 Project Management Professional (PMP): #1418334

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Jessica has provided civil and environmental engineering, project management, and construction services for more than 140 DoD, municipal, and commercial projects in Hawaii over the past 17 years. Her project experience includes planning document preparation; design and construction of water, wastewater, and electrical utilities; an aviation administration building; an explosives ordinance disposal (EOD) compound; a hazardous waste storage area and wash racks; and remedial action planning, design, and construction. She has managed contracts for programming, design-build, design, construction, permitting, and regulatory compliance projects.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION (City and State)

Statewide Freight Plan, Hawaii Department of Transportation (HDOT), Statewide, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2018	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Project Engineer. Project that addressed regional transportation issues and developed tools that helped conduct quick analysis of National Performance Management Research Data Set data to give a picture of truck bottlenecks (using methods we developed with FHWA funding) and traffic reliability. The final plan describes critical freight assets with special focus on freight connectors from port, aggregate freight flow information from multiple sources, and identified critical urban and rural corridors.

b.

(1) TITLE AND LOCATION (City and State)

Honolulu Rail Transit Project, General Engineering Consultant Support (GEC III), Honolulu Authority for Rapid Transportation (HART), Honolulu, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Ongoing	Ongoing

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Task Lead. Providing environmental and planning support to comply with the state, city, and Federal Transit Authority (FTA) for decision documents of the project. Reviewed contractor prepared National Environmental Policy Act (NEPA) and Hawaii Revised Statutes (HRS) Chapter 343 environmental documentation and supporting technical reports for any elements of the original 20-mile project. Assisting in all areas of environmental compliance with documented mitigation measures, decision documents for the project, permits, and all other commitments specified by the Final EIS/Record of Decision and Section 106 Programmatic Agreement.

c.

(1) TITLE AND LOCATION (City and State)

Kalaupapa National Historical Park (NHP) Electrical System Rehabilitation, National Park Service (NPS), Kalawao County, Molokai, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Ongoing	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Project Manager. Jacobs provided planning, compliance, environmental, and engineering design services to repair and rehabilitate the failing primary and secondary electrical system infrastructure for a 1,250-acre site at Kalaupapa NHP, consisting of 30,000 LF overhead cabling and 7,800 LF of new underground cable. Completed the predesign and schematic design for this $576,000 project, involving rehabilitation of the Kalaupapa's overhead distribution system, to add service to upgrade to a looped system, refurbish or replace existing overhead electric system poles, and evaluating replacement of a diesel operated pump station with electrical power to the water system pump house. Additional support services for the future preparation of an Environmental Assessment (EA) or Environmental Impact Statement (EIS) included completion of the determination of historic eligibility of the electrical system, an archaeological inventory survey of the area of potential effect, and the preparation of the jurisdictional waters report including documentation of identified wetlands.

d.

(1) TITLE AND LOCATION (City and State)

Facility/Infrastructure and Environmental Architect Engineering Services, Air Force Civil Engineering Center, Honolulu, HI and the Pacific

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Ongoing	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Project Manager/Engineer. Responsible for successful planning, studies and environmental compliance projects at remote island and overseas locations. Conducted preliminary assessment/site inspections at dozens of sites. Conducted multiple remedial investigation/feasibility study (RI/FS) projects leading to site closure/decision documents. Conducted all the planning and permitting necessary for the Resource Conservation and Recovery Act (RCRA) investigations and corrective actions. Multiple locations include Hickam AFM, Hawaii, Johnston Atoll, and Kadena Air Base, Japan.

e.

(1) TITLE AND LOCATION (City and State)

BMP Improvements at Various Refuse Transfer Stations, County of Kauai, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Ongoing	Ongoing

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Project Manager and Civil Engineer. Responsible for managing the detailed design of improvements at four refuse transfer stations: Hanapepe, Kapaa, Lihue, and Hanapepe, Kauai. The engineering, planning, and environmental services provided include revised conceptual designs, geotechnical and environmental soil sampling, land survey, initial environmental investigation and reporting, final transfer station improvement designs and bid packages, construction permitting support, and services during construction.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Sandy Hamura, PE, LEED AP	**Project Manager/Civil Engineer**	27	2

15. FIRM NAME AND LOCATION (City and State)

Jacobs, Honolulu, Hawaii

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
BS, Civil Engineering	Professional Engineer: Hawaii #PE-11100, Exp. 4/30/2026 LEED Legacy AP

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Sandy has experience in strategic program and project management. Her management responsibilities include assessing, developing, prioritizing, budgeting, scheduling, managing, and executing a capital improvement program for large and small deferred maintenance and future development projects. Executes timely and efficient completion of planned projects in accordance with established guidelines, specifications, and financial constraints. Manages the complete project lifecycle: from inception where the project objectives are determined, to planning the project and defining the scope of work, determining the budget and schedule, evaluating risks associated with the project, hiring the project team, reviewing project investigations and assessments, overseeing the design, and permitting process, involvement with contractor selection, coordinating with construction management firms and finally, aid with project completion.

19. RELEVANT PROJECTS

	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
a.	**Kamehameha Highway Wastewater Pump Station Upgrade Project, City and County of Honolulu, Honolulu, HI**	Ongoing	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☒ Check if project performed with current firm	
	Project Manager. Responsible for bid services and office services during construction for facility improvements to rehabilitate the concrete walls and concrete roof slab of the existing influent wet wells, provide new sump pumps and discharge piping, replace the fuel storage tank, replacement of asphalt pavement driveway and modifications to stormwater collection system of the pump station. For this project, Jacobs developed preliminary engineering report and completed detailed design and construction documents. Services during bidding and construction is ongoing and includes submittal reviews, site investigations, and responses to requests for information (RFIs).		
	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
b.	**Waianae Wastewater Treatment Plant (WWTP) Improvements and Upgrades Phase 2, City and County of Honolulu, Waianae, HI**	Ongoing	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☒ Check if project performed with current firm	
	Project Manager. Responsible for Phase 2 preliminary engineering services for technical memorandums on wastewater treatment including replacement of the trickling filter pumps, new effluent monitoring and sampling station, and condition assessment of the influent sewer manhole. Future services include detailed design and construction documents, preparation of permits and services during bidding. Phase 2 project includes demolition of the existing chlorine contact tank, new effluent flow measurement and sampling facility, new oil storage facility, improvements to the influent pump station building and influent manhole, restroom renovations in the Administration/Laboratory and Control buildings.		
	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
		PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
c.	**Kamehameha Highway Wastewater Pump Station Force Main System Bridge Demolition, City and County of Honolulu, Honolulu, HI**	Ongoing	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☒ Check if project performed with current firm	
	Project Manager. Leading the project team to develop bridge demolition alternatives report and review of potential required permits for the demolition of two utility bridges crossing Moanalua and Kalihi Streams and treatment of the abandoned 36" force main. Future services to include detailed design and construction documents, preparation of permits and drawings for bidding.		

d.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
Mauna Lani Sewage Pump Station 1a (SPS1a) Upgrades, Hawaii American Water, Mauna Lani Resort, Waikaloa, HI	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
	Ongoing	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☒ Check if project performed with current firm	

Project Manager. Leading multidiscipline engineering team in preparation of basis of design, detailed design, specifications, and drawings for bidding and permitting. Project consists of upgrades to the existing pump station with new submersible pumps, new standby generator and exterior fuel tank, improvements to the structure, modifications to the electrical systems, replacement of existing sanitary plumbing and potable water systems, and modifications to the facility to comply with NFPA 820 requirements for improved safety, operations, and reliability.

e.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
Mauna Lani Force Main 1A Replacement, Hawaii American Water, Mauna Lani Resort, Waikaloa, HI	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
	Ongoing	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☒ Check if project performed with current firm	

Project Manager. Leading engineering team in preparation of planning phase alternatives study and preliminary engineering report for the replacement of approximately 6,000 linear feet of 16-inch ductile iron sewer force main connection Mauna Lani Sewage Pump Station 1a to Hoohano Road. Current project planning phase services consists of identifying up to four project configurations to replace the force main, meet with stakeholder groups, assess the condition of the force main, coordinator the subconsultants surveying and boundary mapping and archaeology literature review and field inspection, identify potential permits requirement to complete the project and provide budgetary construction cost estimates. Future phases include detailed design, permit preparation and services during bidding and construction.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Miya Akiba	**Planner**	15	6

15. FIRM NAME AND LOCATION (City and State)

Jacobs, Honolulu, Hawaii

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
BS, Global Environmental Science	

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Miya is an Environmental Planner/Project Manager with 15 years of experience in environmental planning/permitting, site characterization, remedial investigations, feasibility studies, and long-term monitoring for a variety of projects throughout Hawaii and the Pacific region. She has prepared EAs, and land use permits for multiple state and federal infrastructure projects, conducted field investigations and data analysis, prepared technical reports, and prepared proposals for environmental investigation and planning projects for both state and federal clients.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Kamehameha Highway Wastewater Pump Station Force Main Replacement, City and County of Honolulu, Honolulu, HI	2021	2021
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☒ Check if project performed with current firm	

Environmental Planner. Responsible for preparation of permit applications in support of construction activities for installation of a new force main using horizontal directional drilling (HDD). Prepared permit applications for a Special Management Area Permit (SMP), Conservation District Use Permit (CDUP), US Army Corps of Engineers (USACE) Nationwide Permit under Section 10 Rivers and Harbors Act, and Clean Water Act (CWA) Section 401 Water Quality Certification (WQC).

b.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Honolulu Rail Transit Project, General Engineering Consultant Support (GEC III), Honolulu Authority for Rapid Transportation (HART), Honolulu, HI	Ongoing	Ongoing
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☒ Check if project performed with current firm	

Environmental Planner. Jacobs is performing GEC support for the Honolulu Rail Transit Project, a 20-mile elevated rail line with 21 stations, which features modern steel-wheel-on-steel-rail technology, fully automated (driverless) rail vehicles with capacity to serve an estimated ridership of more than 115,000 weekday rider trips by year 2030. This effort includes project scheduling, coordination and reporting, cost estimating and project control, interface management, environmental and planning, travel demand forecasting, bus/rail integration, station access, and modal interface, land use planning, transit-oriented design (TOD), traffic analysis, parking study, archaeological and cultural resources, and design management services, including management of final design contracts, review of final design submittals, system-wide signage, landscape, signal, and Intelligent Transportation System (ITS) operational support.

c.

(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Hawaii Memorial Reef Project, Maunalua Bay, Oahu, HI	2017	
(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☐ Check if project performed with current firm	

Environmental Planner. Responsible for preparation of a National Environmental Policy Act (NEPA) and Hawaii Revised Statutes (HRS) Chapter 343 compliant EA, and associated permit application documents for the proposed construction of an artificial memorial reef. Permits required for the proposed project include a CDUP, USACE Section 404/Section 10 permit, CWA Section 401 WQC, and Coastal Zone Management (CZM) Consistency Determination. Responsible for compiling a complete list of required permits for project implementation and coordinating and attending meetings with regulatory agencies to discuss project scope and permit requirements. Other tasks included preparing a cost proposal to complete the environmental permitting process for the project, preparing meeting documents for an open house event to introduce proposed project to potential stakeholders, and attending periodic client meetings and neighborhood board meetings.

d.

(1) TITLE AND LOCATION (City and State)

Honolulu Rail Transit Project, NEPA Post-Record of Decision (ROD) Environmental Reevaluation, Honolulu Authority for Rapid Transit (HART), Honolulu, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Ongoing	Ongoing

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Project Manager. The Jacobs team is providing environmental planning services support for the 20-mile Honolulu Rail Transit Project elevated rail line. This effort includes preparing, implementing, and reviewing various environmental evaluation documents, supplemental environmental documents, and related supporting technical studies. These documents, along with all project elements, must comply with applicable laws and requirements, such as NEPA, HRS Chapter 343, and Federal Transportation Authority environmental guidance.

e.

(1) TITLE AND LOCATION (City and State)

Statewide Freight Plan, Hawaii Department of Transportation (HDOT), Statewide, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2020	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Environmental Planner. Assisted with research and data collection and inventory. Attended stakeholder meetings held to gather input on goals and objectives as well as freight issues and opportunities to be included in the plan. Assisted with meeting preparation, summarizing project needs identified during stakeholder meetings, classifying project needs, and drafting the plan. This $400,000 project involved developing an intermodal statewide plan for freight movement. The plan included the development of a vision for freight in Hawaii that meets the state's broader transportation vision and 10 national freight policy goals.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Selena Qiu	**Environmental Planner**	13	1

15. FIRM NAME AND LOCATION (City and State)

Jacobs, Honolulu, Hawaii

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
Professional Certificate, Urban and Regional Planning Graduate Certificate, Global Leadership and Sustainable Development MS, Marnie Science BS, Biological Science	Certified Geographic Information Systems Professional (GISP) LEED Green Associates (lapsed)

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Selena is an environmental scientist and planner with 13 years of private consulting and public sector experiences throughout Hawaii and the Pacific region. She has a wide range of expertise, from HEPA/NEPA planning, environmental permitting, urban planning, to 2D/3D data analyses and visualization across numerous software platforms. Her additional work experience includes site design, campus planning, military planning, field (soil, stormwater) sampling. She also has management experiences in being task lead and Deputy Project Manager for various environmental and planning projects.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION (City and State)

Puunene Avenue Improvements, Kamehameha Avenue to Kuihelani Highway, Maui, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2023	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Environmental Planner. In response to unforeseen staff availability changes, Selena assumed the role of task lead and technical reviewer for the Environmental Assessment document. Despite tight deadlines and no prior knowledge of the project, Selena dedicated approximately 60 continuous hours to prepare for client meetings and to meet project milestones. As a result of her efforts, the deliverable was submitted on time.

b.

(1) TITLE AND LOCATION (City and State)

Full-time planning support for State of Hawaii Department of Education (HIDOE), Office of Facilities and Operations, Facilities Development Branch (FDB), Planning Section, Honolulu, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2023	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Consultant and embedded planner. As a consultant and planner, Selena managed a diverse range of planning responsibilities. Notable achievements include revising the 'Draft Comprehensive Exemption List for the State of Hawaii DOE' in alignment with Hawaii Administrative Rules, Section 11-200.1-15; preparing numerous Declarations of Exemption letters for school projects; updating and reviewing School Impact Fee policies; and ensuring schools' ADA compliance. Selena's additional duties involved collaborating with principals and officials to strategize on school enhancement or maintenance initiatives, gathering information for allotment requests, conducting GIS analytical procedures for optimal school property utilization, and developing comprehensive trackers to monitor environmental compliance in school projects. Her tenure was marked by outstanding evaluations and a strong rapport with the Department of Education Planning Section staff.

c

(1) TITLE AND LOCATION (City and State)

Dimond Head Reservoir 180 Security Fencing SMA Major Permit Application/Environmental Assessment, Honolulu, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2021	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Environmental Planner. The Board of Water Supply constructed security fencing around the Diamond Head 180 Reservoir, located on the slopes of the Diamond Head State Monument, to prevent unauthorized access to the key source of potable water. Following community concerns about the visual impacts of the fence, Selena supported the preparation of the after-the-fact EA and Special Management Area Use Permit Application to address the physical and visual impacts of the fence.

d.

(1) TITLE AND LOCATION (City and State)

Neal S. Blaisdell Center Master Plan, Honolulu, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2019	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☐ Check if project performed with current firm

Environmental Planner. Selena served as the subject matter expert (SME) for the air quality, climate, park, and open space sections of the Environmental Assessment (EA). Additionally, she led the GIS and graphic design aspects of the EA report.

e.

(1) TITLE AND LOCATION (City and State)

Honolulu Rapid Transit - Airport Guideway Section Final Design & Honolulu Rail Transit-City Center Guideway & Utilities Design, Honolulu, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2014	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Environmental Planner. Selena served as an environmental planner in the design contract for the Airport section and City Center guideway segments of the Honolulu Rail Transit project. Her responsibilities included providing permitting support by preparing comprehensive permit application packages (including FAA 7460-1, NPDES, noise permits, and variances). Her dedication to learning AutoCAD at the project's outset allowed her to better assist the engineering team and senior planners. By effectively utilizing AutoCAD and ArcGIS software, she bridged the gap between the engineering and planning teams, significantly enhancing the efficiency of permit application preparation.

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Eric Chen, PE	**Transportation/Traffic Engineer**	8	8

15. FIRM NAME AND LOCATION (City and State)

Jacobs, Honolulu, Hawaii

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
BS, Civil Engineering	Professional Engineer: Hawaii #19658, Exp. 4/30/2026

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Eric assists with designs, plan rendering, and other tasks as needed. He has experience using MicroStation and Civil 3D to create plans and perform studies. He also works on the design of water pipe alignment, electrical duct alignment, curb ramps, driveways, traffic control design, and different alternatives to crosswalk placements.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION (City and State)

Honolulu Rail Transit Project, Honolulu Authority for Rapid Transportation (HART), Honolulu, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Ongoing	Ongoing

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Traffic Engineering Support. Assisting in environmental compliance to comply with documented mitigation measures, decision documents for the project, permits, and all other commitments specified by the Final Environmental Impact Statement (EIS)/Record of Decision (ROD) and Section 106 Programmatic Agreement. Assisted with taking noise readings in the field and conducted site-specific studies of testing impacts in the day and at night.

b.

(1) TITLE AND LOCATION (City and State)

Kamehameha Highway Wastewater Pump Station Force Main Replacement, City and County of Honolulu, Honolulu, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Ongoing	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Micro Station Design Support. Planning of a flow diversion system for the Kamehameha Highway WWPS in the event of disruption of service of the primary force main. This project will address requirements of the 2010 Wastewater Consent Decree. Preparing the environmental assessment and discretionary permit applications.

c.

(1) TITLE AND LOCATION (City and State)

Honolulu Rail Transit Project, General Engineering Consultant Support (GEC III), Honolulu Authority for Rapid Transportation (HART), Honolulu, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Ongoing	Ongoing

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☐ Check if project performed with current firm

Civil Engineer | Traffic Engineering Support. Jacobs was selected by HART to provide GEC support for the Honolulu Rail Transit Project, a 20-mile elevated rail line with 21 stations. The system features modern steel-wheel-on-steel-rail technology and fully automated (driverless) rail vehicles with the capacity to carry hundreds of passengers, with an estimated ridership of more than 115,000 weekday rider trips by the year 2030. This effort includes project scheduling, coordination and reporting, cost estimating, and project control, interface management, environmental planning, travel demand forecasting, bus/rail integration, station access, and modal interface, land use planning, transit-oriented design (TOD), traffic analysis, parking study, archaeological and cultural resources, and design management services, including management of final design contracts, review of final design submittals, system wide signage, landscape, signal, and intelligent transportation system (ITS) operational support.

d.

(1) TITLE AND LOCATION (City and State)

Statewide Freight Plan, Hawaii Department of Transportation (HDOT), Statewide, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2020	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Civil Engineer. Providing MicroStation design support for the developing an intermodal statewide plan for freight movement. The plan will include developing a vision for freight in Hawaii that meets the state's broader transportation vision and 10 national freight policy goals. FHWA has developed a data source called the National Performance Measurement Research Data Set (NPMRDS) built from actual truck GPS data, providing information on truck speeds by time and date over time; the data can be used to look at both recurrent congestion and speed variability. Developed tools to conduct quick analysis of NPMRDS data to give a picture of truck bottlenecks (using methods developed with FHWA funding) and traffic reliability.

	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	Bike Program Update, Hawaii Department of Transportation (HDOT), Statewide, HI	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
		Ongoing	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☒ Check if project performed with current firm	
e.	**Transportation Engineering Support.** Jacobs is working with the HDOT to develop method for the 2020 update of order-of-magnitude costs (or cost estimates) for the Bike Plan Hawaii projects. The method and opinion of costs will conform to the practices set by the Association for the Advancement of Cost Estimating (AACE) Recommended Practice No. 17R-97 for Class 5 at a 1-2% project definition design level. Jacobs is applying the method to all uncompleted proposed projects (state facilities only) from the 2003 Bike Plan Hawaii and recent Oahu Bike Plan. We will also include a feasibility analysis to identify low-cost, easy-to-implement projects (e.g., quick-build) for each island.		

E. RESUMES OF KEY PERSONNEL PROPOSED FOR THIS CONTRACT

(Complete one Section E for each key person.)

12. NAME	13. ROLE IN THIS CONTRACT	14. YEARS EXPERIENCE	
		a. TOTAL	b. WITH CURRENT FIRM
Daniel Pitzler	**Economist**	40	38

15. FIRM NAME AND LOCATION (City and State)

Jacobs, Bellevue, Washington

16. EDUCATION (DEGREE AND SPECIALIZATION)	17. CURRENT PROFESSIONAL REGISTRATION *(STATE AND DISCIPLINE)*
MA, Economics BA, Economics	Professional Certificate, Strategic Decisions and Risk Management

18. OTHER PROFESSIONAL QUALIFICATIONS (Publications, Organizations, Training, Awards, etc.)

Dan has 40 years of experience in helping clients make better decisions about infrastructure development. He uses structured decision methods to help clients in many different industries decide on the best course of action for major infrastructure upgrades. In executing this work, he develops and facilitates structured decision processes with stakeholder groups and applies decision tools such as risk matrixes, influence diagrams, decision trees, Monte Carlo simulation, and multi-objective decision analysis to assess and manage risk and help clients make better decisions about investments in infrastructure. In the solid waste field, his areas of expertise include solid waste management planning, transfer systems, collection efficiency, feasibility analysis, waste composition, procurement, financial management and analysis, rate design, computer modeling, and forecasting. In transportation, Dan leads studies investigating the economics of proposed transportation investments throughout the United States. He has expertise in project selection and prioritization, benefit-cost analysis, and National Environmental Policy Act (NEPA) analysis of economic effects for highway, transit, and multi-modal projects.

19. RELEVANT PROJECTS

a.

(1) TITLE AND LOCATION (City and State)

Statewide and Regional Federal-Aid Highway 2035 Transportation Plans for the Districts of Maui, Hawaii, and Kauai, and Transportation Asset Management Plan, Statewide, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2014	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Economics Task Lead. Prepared the financial element for the plans that included an assessment of historical transportation revenues and expenditures and future funding strategies. The major performance criteria and assessment included reviewing funding allocation for each of the state's programs, identifying transportation needs addressed by the identified projects, and assessing the programmed funds and schedules to actual implementation.

b.

(1) TITLE AND LOCATION (City and State)

Honolulu Rail Transit Project, NEPA Post-Record of Decision (ROD) Environmental Reevaluation, Honolulu Authority for Rapid Transportation (HART), Honolulu, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Ongoing	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Economics Task Lead. Serves as the economics task lead for environmental planning services, including the preparation, implementation, and review of various environmental evaluation documents, supplemental environmental documents, and related supporting technical studies. These documents, along with all project elements, must be compliant with applicable laws and requirements, such as NEPA, Hawaii Revised Statute (HRS) Chapter 343, and Federal Transit Administration (FTA) environmental guidance.

c.

(1) TITLE AND LOCATION (City and State)

Mid-Range Transportation Plan (MRTP) Prioritization, Hawaii Department of Transportation (HDOT), HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Ongoing	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Prioritization Lead. Led development of a multi-objective decision analysis (MODA) approach for prioritizing projects targeted for inclusion in the HDOT's 10-year MRTP. He developed a tool that the HDOT can use to prioritize projects, helped develop the criteria and measurement scales, reviewed an initial trial run of the method, and conducted the first data-driven prioritization of projects in the mid-range plan.

d.

(1) TITLE AND LOCATION (City and State)

Honolulu Rail Transit Project, General Engineering Consultant Support (GEC III), Honolulu Authority for Rapid Transit (HART), Honolulu, HI

(2) YEAR COMPLETED

PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
2020	

(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE

☒ Check if project performed with current firm

Senior Economist. Reviewed an economic impact study of HART for the University of Hawaii.

	(1) TITLE AND LOCATION (City and State)	(2) YEAR COMPLETED	
	Districts of Maui, Hawaii, and Kauai, and Transportation Asset Management Plan, Statewide, HI	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
		2014	
	(3) BRIEF DESCRIPTION (Brief scope, size, cost, etc.) AND SPECIFIC ROLE	☒ Check if project performed with current firm	
e.	**Economics Task Lead.** Prepared the financial element for the plans that included an assessment of historical transportation revenues and expenditures and future funding strategies. The major performance criteria and assessment included reviewing funding allocation for each of the state's programs, identifying transportation needs addressed by the identified projects, and assessing the programmed funds and schedules to actual implementation.		

SECTION F:

EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	20. EXAMPLE PROJECT KEY NUMBER 1

21. TITLE AND LOCATION (City and State)	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Honolulu Rail Transit Project, Honolulu, Hawaii	Ongoing	Ongoing

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Honolulu Authority for Rapid Transportation (HART)	Vance Tsuda, Project Director	808.768.8943

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

KEY RELEVANCE

Cost: $98.7 million (All Contracts)

Relevant Services:

- Environmental compliance with federal, state, and local regulatory permits and procedures
- Permitting
- Post-ROD environmental reassessment
- Environmental engineering
- Environmental consulting
- Integrated GIS platform development and data management
- Phase I and Phase II ESAs
- Environmental hazard evaluation and environmental hazard management plans
- Environmental release reporting and responses
- Testing and/or screening services on potentially contaminated soil and/or groundwater
- Stockpiling, segregating, containing, and/or transporting potentially contaminated soil and/or groundwater, and store, treating, recycling, and/or disposing of as needed
- Program management
- Scheduling and estimating
- Interface management and coordination
- Environmental services and planning
- Design management services
- Management of traffic during construction
- Travel demand forecasting
- Access management, modal interface
- Transit Oriented Development (TOD)
- Parking study and pedestrian access
- Roadway design, new and reconstruction
- Utility design and relocation
- Signal and Intelligent Transportation System (ITS) support

Performance Highlights:

- Providing program management services, including the management of the work breakdown structure, budget staffing plan, risk register, monthly progress and status reports, and contract administration through the design, construction, and implementation
- Using time impact analysis to realize cost savings and on-island contractor estimating to develop more accurate cost forecasts
- Leading the development of procurement strategy, bid documents, and independent cost estimates for major contracts
- Supporting administration of the Rapid Transit Stabilization Agreement (RTSA) to ensure labor compliance on construction contracts
- Assisting in the oversight of technical coordination, interface management and configuration management for each design and construction stage
- Providing environmental and planning support to ensure compliance with the state, city, and Federal Transit Authority (FTA) for decision documents of the project
- Implementing and/or reviewing contractor-prepared National Environmental Policy Act (NEPA) and Hawaii Revised Statutes (HRS) Chapter 343 environmental documentation and supporting technical reports for any elements of the original 20-mile
- Assisting in all areas of environmental compliance to comply with documented mitigation measures, decision documents for the project, permits, and all other commitments specified by the final Environmental Impact Statement (EIS)/Record of Decision and Section 106 Programmatic Agreement
- Supporting engineering and architectural design management services through design management, design services, quality reviews, and procurement through each design phase
- Supporting the reduction in costs, shortening of construction time, improved safety, and minimizing impacts to the public by providing design modifications to improve rail alignment

- Facilitating third-party collaborations to address design and construction issues

General Engineering Consultant Support (GEC III)

We were selected by HART to provide GEC support for the project scheduling, coordination and reporting, cost estimating and project control, interface management, environmental and planning, travel demand forecasting, bus/rail integration, station access, and modal interface, land use planning, transit-oriented development, traffic analysis, parking study, archaeological and cultural resources, and design management services including management of final design contracts, review of final design submittals, system-wide signage, landscape, signal, and ITS operational support. In 2021, Jacobs was awarded a five-year extension of the GEC contract.

Scheduling and Estimating

We are providing scheduling and estimating services through design, construction, and project implementation. We are using the Oracle Primavera P6 software to establish contract baseline scopes, schedules, and budgets consistent with Federal Transit Administration (FTA) requirements; monitor and report on contractor progress against baselines using data collection, collation, and analysis; and perform project wide and contract-level trend analyses relative to cost and schedule.

Interface Management and Coordination

We are assisting with the oversight of technical coordination and interface management between contracts. Our tasks include preparing, maintaining, and updating the Project Interface Plan, and assisting in conflict resolution and processing change orders, etc.

Typical rail guideway section under construction from East Kapolei. Jacobs managing the environmental compliance and coordinating activities under the historic preservation program.

Environmental Planning Services

Services include preparation, implementation, and review of various environmental evaluation documents, supplemental environmental documents, and related supporting technical studies in compliance with applicable laws and requirements, such as the NEPA, HRS Chapter 343, and FTA environmental guidance etc., and support for State Department of Health (HDOH) section 401 Water Quality Certifications, HDOH Community Noise, US Army Corps of Engineers Section 404, National Pollutant Discharge Elimination System, and other environmental permits.

Environmental Compliance

Environmental compliance tasks include identifying and assisting in all areas of environmental compliance with documented mitigation requirements, decision documents for the project, permits, and all other commitments specified by the final EIS/Record of Decision and Section 106 Programmatic Agreement.

General Planning Support

We provide transportation and land use planning support. Activities include:

Travel demand modeling and analysis to determine projections of travel demand

- Traffic analysis (parking study, left-turn median opening study etc.)
- GIS and mapping, and graphic design support, including 3D modeling and photo simulations
- FTA coordination and New Starts support

Archaeological and Cultural Resources

We also coordinate necessary and required archaeological and cultural resources, including items required by HRS Chapter 6E.

On-call Design Support for Right-of-Way, Utilities, and Environmental Planning

We prepare concept plans or exhibits for use in preparing for stakeholder coordination, environmental documentation, and transit planning.

Design Management Services

We are providing support to manage the day-to-day aspects of the final design contracts, including the overseeing of scope, design criteria compliance, schedule, and budget and assisting in resolution of design issues that arise. We provide coordination support and assist with third parties and other public agencies coordination and lead the design review process involving multiple design disciplines.

Program Management

We are providing program management services, which include work breakdown structure, budget staffing plan, monthly progress and status reports, risk register, and contract administration support.

National Environmental Policy Act (NEPA) Post-Record of Decision (ROD) Environmental Reevaluations

Jacobs provides environmental planning services including the preparation, implementation, and review of various environmental evaluation documents, supplemental environmental documents, and related supporting technical studies. These documents, along with all project elements, must be in compliance with applicable laws and requirements, such as NEPA, HRS Chapter 343, and FTA environmental guidance.

Environmental reevaluations are prepared for design changes proposed after the NEPA ROD. In support of the HRTP, Jacobs has performed the following limited supplemental environmental assessments (EAs) as post-ROD environmental reevaluations

Rendering of a future rail station

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
a.	Jacobs	Honolulu, Hawaii; Bellevue, Washington	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	20. EXAMPLE PROJECT KEY NUMBER 2

21. TITLE AND LOCATION (City and State)	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Hawaii Bridge Program, Various Locations, Hawaii	2019	2022

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Federal Highway Administration (FHWA), Central Federal Lands Highway Division	Tom Kubicz	202.981.4183

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

KEY RELEVANCE

Cost: $550,000 to $10 million maximum

Relevant Services:

- Program/project management
- Interdisciplinary coordination involving multiple subconsultant partners
- Coordination of multiple stakeholder (federal, state, and local agencies)
- Resource-specific environmental compliance and coordination

Performance Highlights:

Programmatic delivery of nine concurrent HDOT projects

PROJECT DESCRIPTION

This indefinite delivery, indefinite quantity contract provides architect-engineer project development services, design and planning services, and related plans, specifications, and estimates. It also involved post-design services during construction for multiple bridge rehabilitation/replacement projects located in the State of Hawaii. Throughout the term of the contract, we are providing various types of services, including:

- Program/project management
- Highway engineering and design
- Environmental planning and assessment (HRS Chap 343 and NEPA)
- Resource-specific environmental compliance and coordination (Sec 106, NHPA and HRS Chapter 6E; Sec 7, Endangered Species Act and HRS Chapter 195D; essential fish habitat consultation, Magnuson-Stevens Act; Sec 4(f), U.S. Department of Transportation Act; Sec 6(f) Land and Water Conservation Act; Federal Consistency Review, Coastal Zone Management Act)

Hanapepe River Bridge is one of the 10 bridges evaluated for improvements under the current task order

- Highway, geotechnical, bridge and other structural, hydraulic, and hydrologic, pavement, traffic, and electrical engineering and design
- Surveying, mapping, right-of-way, and utility services
- Construction management
- Environmental and land use permitting (Department of the Army Permit (Sec 404/Sec 10); Sec 401 Water Quality Certification; Stream Channel Alteration Permit; U.S. Coast Guard Bridge Permit/Advance Notice; Special Management Area Permit; Conservation District Use Permit)
- Innovative contracting support to assist in the development of procurement packages
- Public engagement (including outreach to environmental justice populations)

The work is associated with the Hawaii Department of Transportation (HDOT) Highways Division, requiring ongoing coordination. Our current task order is to provide post-design services, including implementation of Section 106 Memoranda of Agreement.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
a.	Jacobs	Honolulu, Hawaii; Englewood, Colorado	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	20. EXAMPLE PROJECT KEY NUMBER 3	
21. TITLE AND LOCATION (City and State)	22. YEAR COMPLETED	
Kamehameha Highway Wastewater Pump Station Force Main Replacement and Utility Bridge Demolition, Honolulu, Hawaii	PROFESSIONAL SERVICES: Ongoing	CONSTRUCTION (if applicable): 2021 (Force Main)

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City and County of Honolulu	Kim Suzuki	808.768.8410

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

KEY RELEVANCE

Cost:

$3.3 million (Force Main Replacement)

TBD (Utility Bridge Demolition)

Relevant Services:

- Civil engineering
- Structural engineering
- Environmental engineering
- Environmental planning
- Horizontal directional drilling

Performance Highlights:

- Developed a Preliminary Engineering Report, including review of closed-circuit television (CCTV) inspection footage of sewer force main and evaluation of rehabilitation technologies
- Inspected bridge superstructure and pipe exterior, and developed recommendations and cost estimates for full-length rehabilitation and comparison to trenchless installation of a new sewer force main
- Performed geotechnical investigation and prepared geotechnical data report including Horizontal Directional Drilling (HDD) calculations
- Prepared HDD contractor prequalification solicitation to allow the City and County to prequalify HDD contractors prior to bidding
- Prepared bid documents including drawings and specifications for the work
  Provided engineering services during construction, prepared operations and maintenance manual and spills contingency plan update, and facilitated metes and bounds survey for new pipeline alignment

PROJECT DESCRIPTION

FORCE MAIN REPLACEMENT

The Kamehameha Highway Wastewater Pump Station (WWPS) force main system improvements project involved the design of a flow diversion system using the original, abandoned force main in the event of disruption of service to the primary Kamehameha Highway force main as recommended by the Kamehameha Highway Force Main Flow Diversion Plan (2011), submitted to the US EPA.

Jacobs maintained operation of the WWPS while constructing a major pipeline through reclaimed land and coordinated with ongoing construction along the alignment.

The original Kamehameha Highway Force Main was constructed in 1959 and made from approximately 2,800 linear feet (LF) of 36-inch-diameter concrete cylinder pipe (CCP). The original force main was abandoned in place and disconnected in 1997, when the new force main was placed into service.

Jacobs prepared a preliminary engineering report (PER) on the current condition and proposed rehabilitation of the force main. An internal condition assessment of the force main was performed using a CCTV camera. The video records show the pipe has corroded extensively in the highest sections, which are the pipe bridges that cross over Moanalua and Kalihi Streams. The remainder of the pipe alignment appears to be in relatively good condition.

The four trenchless pipe rehabilitation options evaluated were cured-in-place pipeline (CIPP), segmental sliplining, continuous sliplining, and spiral-wound sliplining. The PER provided a description of the rehabilitation alternatives, cost estimates, and a comprehensive evaluation of alternatives using design matrices and the evaluation of advantages and disadvantages of each alternative. The alternatives evaluation was used to select the most feasible approach of rehabilitating the force main.

Pump Station and Wet Wells

Additional investigations of the bridge structure and of the external condition of buried sections of pipe resulted in a recommendation to address the pipe bridge deterioration and to rehabilitate the entire length of pipe. Jacobs completed a feasibility study of the full-length rehabilitation in comparison to HDD installation of a new pipeline.

The rehabilitation and replacement evaluation resulted in a design to replace the existing pipeline with a 36-inch-diameter HDPE pipeline on a separate alignment through challenging subsurface conditions including poor soils, high groundwater, and tidal influence. Key attributes of the project include maintaining operation of the WWPS while constructing a major pipeline through reclaimed land, coordinating with ongoing construction along the alignment, dewatering in high groundwater influenced by tidal surge, surge analysis of existing pump stations connected to the pipeline, easement and right-of-way acquisitions, and a significant public involvement effort prior to and during future construction. Provided a detailed discussion of key issues and project challenges associated with the rehabilitation and replacement of aging infrastructure from the viewpoint of the Owner and Engineer.

Jacobs prepared a Hawaii Revised Statute (HRS) Chapter 343-required environmental assessment for the construction of the replacement force main. Archeological and biological field studies were performed, and potential impacts to all resource areas were evaluated. A Finding of No Significant Impact was obtained and published in the Office of Environmental Quality Control Environmental Notice 7 months from the start of early consultation with agency and community stakeholders.

Jacobs obtained the following other permits and approvals for the project:

- HRS Chapter 6E concurrence
- Building permit
- Grading permit
- CCH Construction Dewatering Permit for Discharge into the City and County Separate Storm Sewer System
- Industrial Wastewater Discharge Permit (IWDP) for Temporary Discharge into the City Sewer System (for dewatering)
- NPDES discharge permit(s) to the State of Hawaii Department of Transportation (DOT) Highways Division Storm Drain System (for general construction activities, hydrotesting, and dewatering)
- Noise Variance
- Special Management Area (SMA) Use permit
- Conservation District Use permit
- U.S. Army Corps of Engineers Nationwide Permit 12 (Utility Lines)
- Clean Water Act Section 401 Water Quality Certification (WQC)
- Community Noise permit
- Right-of-Entry (Department of Parks and Recreation [DPR])
- Right-of-Entry (Department of Land and Natural Resources [DLNR])
- DOT Highways Land Use/Occupancy permit

UTILITY BRIDGE DEMOLITION

Jacobs (formerly CH2M Hill) performed a condition assessment of the Moanalua and Kalihi Streams pipe bridges in 2015 to summarize the visible of condition of the force main pipe stream crossings. Concrete deterioration of the pipe bridges as observed and follow-on evaluation and costs estimates were prepared for cost comparison between repair or demolition of the bridges. The two bridge structures contain the previously abandoned, fully encased 36-inch force main pipe. External visual inspection in 2023 indicated additional cracking and spalling along the bridge parapet walls and abutments. The City decided to proceed with the demolition of the bridges. A technical memorandum describing potential demolition alternatives and methods was prepared.

Upcoming phases for the project included conducting additional investigations, obtaining required regulatory permits and clearances, coordination with other utility providers, including the relocation of a gas transmission main, and engineering design services.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
a.	Jacobs	Honolulu, Hawaii	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	20. EXAMPLE PROJECT KEY NUMBER 4	
21. TITLE AND LOCATION (City and State)	22. YEAR COMPLETED	
Statewide Freight Plan, Statewide, Hawaii	PROFESSIONAL SERVICES 2020	CONSTRUCTION (if applicable)

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Hawaii Department of Transportation (HDOT)	Ken Tatsuguchi	808.587.1830

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

KEY RELEVANCE

Cost: $400,000 (Phase 1)

Relevant Services:

- Transportation planning and evaluation
- Conform with the Fast Act of 2015: deadline 12/4/17
- Meet and support all FHWA goals and policies
- Address regional transportation issues
- Gap analysis

Performance Highlights:

- Identified critical freight assets that connect to ports and airports
- Estimated future freight flows by reviewing and comparing cargo source locations and employment concentrations
- Developed tools to identify truck bottlenecks and traffic reliability using GPS data

PROJECT DESCRIPTION

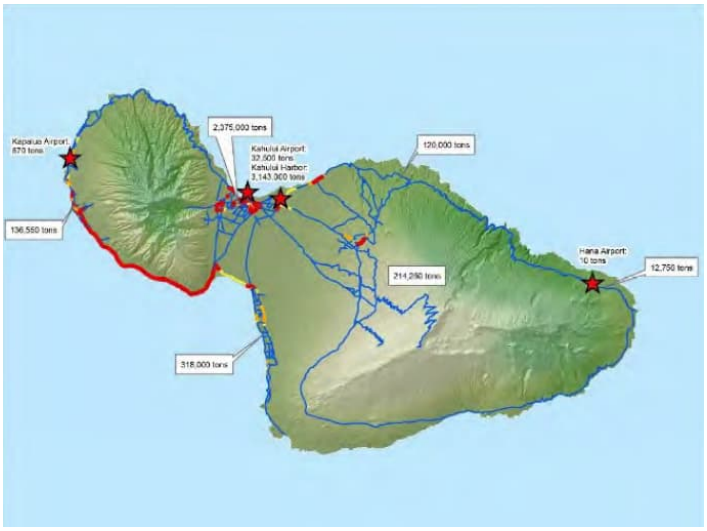
HDOT has tasked Jacobs with developing an intermodal statewide plan for movement of freight. The plan will include developing a vision for freight in Hawaii that meets both the State's broader transportation vision and the ten national freight policy goals.

Intermodal connectors to the ports and airports are particularly important in Hawaii and we will use methods we developed for FHWA in the recent intermodal connector condition and performance report to evaluate Hawaii's connectors.

Jacobs' expertise reflects nearly 20 years of experience developing state freight plans, where we have seen an increasing focus on understanding how freight system demand is linked to the economy of a state.

Our overall approach to the various components of the project will follow context sensitive solutions (CSS) philosophies in working with a comprehensive group of stakeholders to build consensus on what is needed and build trust with the community and endorsement when there is meaningful input. In service of that, Jacobs will perform the following tasks:

- Develop team charter
- Identify key stakeholders
- Review policies and previous studies



Cargo shipments and distribution expected for Maui in 2035

Data collection will occur as both a review of regulatory requirements and existing information, and direct assessment of the freight infrastructure and flow in Hawaii, as follows:

- Describe critical freight assets with special focus on freight connectors from port
- Aggregate freight flow information from multiple sources
- Identify critical urban and rural corridors

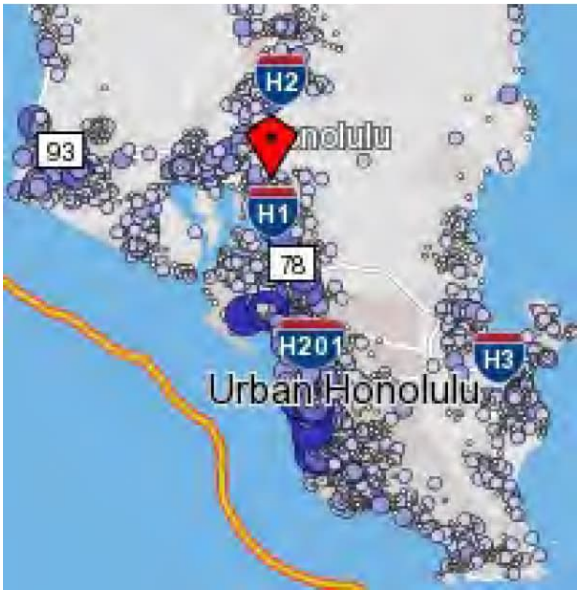
A major project task is providing economic context for that freight assessment and current and forecasted freight flows. Jacobs will estimate current and future freight flows and provide a high-level view of how these maps to the multi-modal infrastructure that will be inventoried. Truck routes and volumes, for example, can be estimated by the total cargo shipments and by mapping employment concentrations by industry to understand the origin and destination pairs, as shown below.

A final outcome of the freight assessment task is understanding how the freight system is performing. From the perspective of truckers and shippers, system reliability is a critical metric. FHWA has developed a data source called the National Performance Measurement Research Data Set (or NPMRDS) built from actual truck GPS data that provides information on truck speeds by time and date over time and this can be used to look at both recurrent congestion and speed variability.

We developed tools that help us conduct quick analysis of NPMRDS data to give a picture of truck bottlenecks (using methodologies we developed with FHWA funding) and traffic reliability.

The final plan will describe critical freight assets with special focus on freight connectors from port, aggregate freight flow information from multiple sources, and identify critical urban and rural corridors.

With information about major truck routes and their users, Jacobs will be able to help HDOT target investments in high freight growth areas and identify and evaluate targeted operational strategies, such as off-peak delivery and truck parking management.



Employment concentrations from onthemap.ces.census.gov

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
a.	Jacobs	Honolulu, Hawaii	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	20. EXAMPLE PROJECT KEY NUMBER 5

21. TITLE AND LOCATION (City and State)	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Ala Wai Comprehensive Watershed Planning and Environmental Impact Statement, Honolulu, Hawaii	2016	

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
U.S. Army Corps of Engineers (USACE)	Michael Wyatt	808.835.4031

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

KEY RELEVANCE

Cost: $808,000

Relevant Services:

- Planning
- Environmental assessment and impact analysis
- Regulatory compliance
- Aquatic habitat mitigation
- Public involvement
- Cost analysis
- Hydrologic and hydraulic modeling
- Biological resource assessments
- Stakeholder engagement

Performance Highlights:

- Developed a successful plan by performing extensive technical analysis and vetting various approaches in a series of workshops

PROJECT DESCRIPTION

On behalf of the Hawaii Department of Land and Natural Resources (DNLR), Jacobs conducted a feasibility study and prepared an Environmental Impact Statement (EIS) for the Ala Wai Watershed flood risk reduction National Priority Project, in partnership with the USACE Honolulu District. The project goal was to improve the overall quality of the watershed, with a focus on reducing riverine flood hazards while restoring aquatic ecosystem habitat and function.

For this integrated water resources planning project, we identified flood-related challenges and opportunities to formulate and evaluate plan alternatives that meet specified project objectives and comply with federal, state, and local regulations. We:

- Applied master planning principles and guidelines and the USACE specific, measurable, attainable, risk-informed, and timely (SMART) planning process to develop and assess the feasibility study alternatives, with cost effectiveness and incremental cost analysis as key process components
- Used an interdisciplinary technical team to integrate hydrologic and hydraulic modeling performed by USACE; prepare the design plans and specifications, cost estimates, and economic analysis; and evaluate options based on comprehensive screening criteria

Ala Wai Canal

- Developed and refined alternative screening criteria and a detailed plan and evaluation process through a workshop with participating agencies
- Conducted the detailed EIS to analyze baseline conditions and potential impacts, including aquatic habitat mitigation plans involving biological resource assessments to meet the no-net loss of habitat function required by the Clean Water Act; and assessment of cultural and historic, geotechnical, endangered species, air and water quality, socioeconomic, and other potential impacts
- Documented the recommended alternative selected by USACE and compiled the results into an Integrated Feasibility Report and EIS

Stakeholder engagement was a key component of successful implementation and engagement activities; we met with stakeholders in multiple forums, including public meetings, open houses, and ethnographic interviews.

Specialized Experience/Complexity. In response to flood-related challenges, we identified various measures, combining them into alternatives that were subsequently evaluated through a screening and reformulation process to result in a tentatively selected plan (TSP). This was a particularly complicated and time-consuming effort due to the size of the watershed, the extent of urban development within it, the goal of minimizing adverse impacts to residential and commercial properties, and the numerous flood control-related features and location options that were able to be able to be combined into a cost-effective and integrated flood-control solution. Nevertheless, we developed a successful TSP by performing extensive technical analysis and workshopping various approaches. The TSP involved constructing a series of detention basins in the upper reaches of the Makiki, Manoa, and Palolo streams; additional detention basins near the Ala Wai Canal; debris catchment in the developed watershed; floodwalls along the Ala Wai Canal; and non-structural measures (e.g., floodproofing). Combining these features mitigated flood damage while improving water quality and habitat in the streams and reducing sediment loading into the Ala Wai Canal.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
a.	Jacobs	Honolulu, Hawaii	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	20. EXAMPLE PROJECT KEY NUMBER 6

21. TITLE AND LOCATION (City and State)	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Statewide and Regional Federal-Aid Highway 2035 Transportation Plans for the Districts of Maui, Hawaii, and Kauai, and Transportation Asset Management Plan, Statewide, Hawaii	2014	

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Hawaii Department of Transportation (HDOT)	Ken Tatsuguchi	808.587.1830

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

KEY RELEVANCE

Cost: $2.6 million

Relevant Services:

- Statewide and Regional Long-Range Land Transportation Plan updates
- Regional travel demand model update
- Regional mid-range plan component
- Asset Management

Performance Highlights:

- Be consistent with federal, state, and local requirements and goals.
- Established specific statewide and regional land transportation goals and objectives.
- Analyzed land use and transportation system data.
- Addressed federal long-range comprehensive planning requirements.
- Analyzed the social, economic, energy, and environmental effects of transportation.
- Identified intermodal land transportation solutions.
- Defined a multi-source financial plan.
- Executed a public involvement plan that provided continuing participation opportunities and incorporated the needs of those traditionally underserved by existing transportation systems

PROJECT DESCRIPTION

Jacobs worked with the State of Hawaii Department of Transportation (HDOT) to develop the first Statewide long-range transportation plan and update the Regional long-range transportation plans for the Districts of Maui, Hawaii, and Kauai.

The Statewide Plan is the overarching land transportation plan that sets the structure to integrate the individual district plans into a comprehensive, multimodal statewide plan. The Plan assessed the state's transportation system's facilities and programs and outlined policies and investment strategies to proactively address projected future needs.

The Statewide Plan enveloped the regional planning projects and strategies, including the Oahu Regional Transportation Plan 2035 (developed by the Oahu MPO in April 2011), into aggregate statewide program summaries.

Hawaii's first Statewide and Regional long-range transportation plans

The district Plans defined goals, identify needs, and set the direction for system improvements for the districts, and allow for priorities and funding to be developed. An analysis of recent past and existing conditions, as well as mid-term and long-term forecast year, is presented in the plans to assess performance and develop the strategic path forward.

Jacobs facilitated an extensive public involvement and stakeholder outreach process as part of the project. Stakeholders included citizen and technical advisory groups, agencies, and policy/decision makers. Stakeholders were engaged throughout the project development process to ensure an open, engaged, and defendable process that yields a consensus outcome.

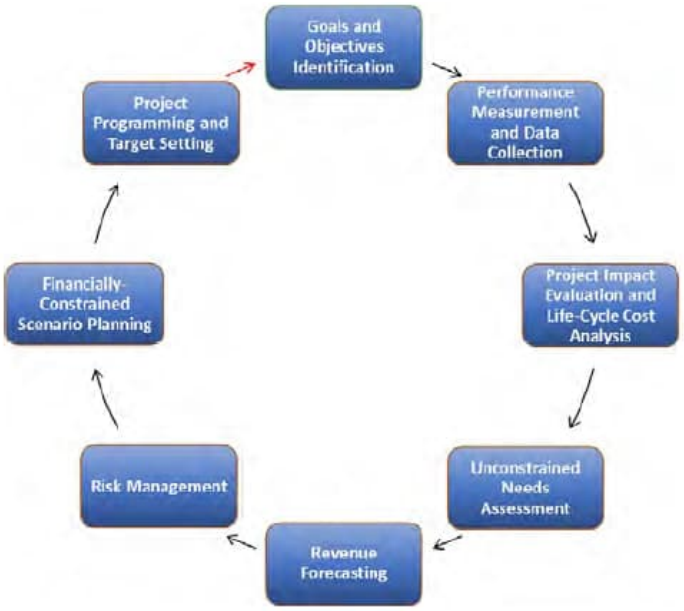
Jacobs reviewed existing asset management requirements, guidance, and new rulemaking released by the U.S. DOT, and coordinated with the HDOT Highways Division programs to

determine which assets to include in the Asset Management Plan and the resources available and needed for each asset. After that, Jacobs developed asset management methodology and integrated it with the Statewide and Regional Federal-Aid Highways 2035 Transportation Plans.

The Asset Management Plan included a summary listing of the asset, objectives and measures, performance gap identification, lifecycle cost and risk management analysis, a financial plan, and investment strategies.

The Asset Management Plan, to be updated and recertified every four years, describes the asset management processes implemented by HDOT including a summary listing of the asset, objectives and measures, performance gap identification, lifecycle cost and risk management analysis, a financial plan, and investment strategies.

The figure adjacent shows the primary components of the transportation asset management framework. It's a continuous feedback loop whereby (1) observed outcomes are evaluated against predicted outcomes to validate or further refine predictive tools and methodologies, (2) performance expectations (expressed as targets) are iteratively adjusted based on budget constraints or to achieve the most desired outcomes upon consideration of tradeoffs, and (3) risk strategies are updated per observed effectiveness in mitigating threats and seizing opportunities.



25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
a.	Jacobs	Honolulu, Hawaii; Bellevue, Washington	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	20. EXAMPLE PROJECT KEY NUMBER 7

21. TITLE AND LOCATION (City and State)	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Statewide Pedestrian Master Plan, Statewide, Hawaii	2013	

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
Hawaii Department of Transportation (HDOT)	Rachel Roper	808.587.1830

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

KEY RELEVANCE

Cost: $1.5 million

Relevant Services:

- Pedestrian policy, guidelines, and design standards development
- Continuous stakeholder and public involvement
- Pedestrian facilities CIP list development
- CIP project funding strategy development
- Comprehensive pedestrian design guidelines (Hawaii Pedestrian Toolbox)
- Statewide pedestrian master plan development
- Sustainability in Transportation workshop

Performance Highlights:

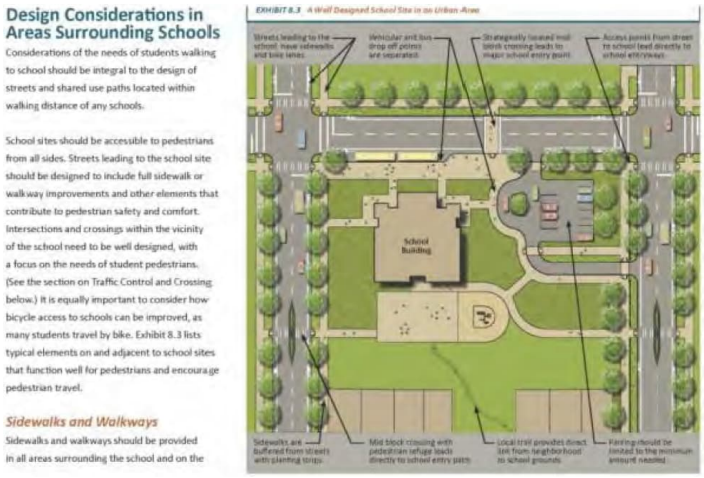
- Winner of the 2014 National Planning Excellence Award for Transportation Planning, from the American Planning Association (APA)
  Complete Streets policy development and standards recommendations

PROJECT DESCRIPTION

The goals of the Statewide Pedestrian Master Plan (Plan) are to increase pedestrian safety, reduce pedestrian related traffic fatalities and promote and support a multimodal transportation system. The Plan provides guidance on the most efficient and effective use of federal, state, and local resources to implement pedestrian initiatives.

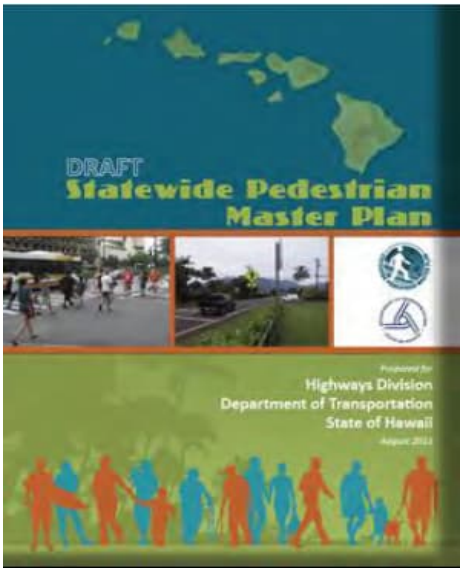
The Plan was developed within a formalized and extensive public involvement process. This process involved facilitation of comprehensive stakeholder committees throughout the definition and development of the Plan, allowing for an open and defensible decision-making structure. The development of the Plan occurred in a stepped manner, working closely with stakeholders to do the following:

- Establish statewide pedestrian policy and design guidelines
- Conduct a physical and map-based inventory of existing conditions
- Identify locations that are potential areas of concern
- Establish a categorized project list



Sample Page from the Hawaii Pedestrian Toolbox Chapter 8 location and site design for a school in a community can make a difference on whether children can walk to school or not.

The framework included methods to ensure ongoing involvement by decision makers and two-way information flow with the stakeholders via stakeholder meetings and other communication venues. The project included a comprehensive set of pedestrian best practice design guidelines. There are eleven chapters of guidelines from accessibility to site planning for pedestrians to intersection crossings and developing effective education programs.



Hawaii's Statewide Pedestrian Master Plan

Complete Streets Task Force

A concurrent component of this project included the process of facilitating a Complete Streets Task Force. The goals and composition of the task force are based on Legislative Act 54, and include the following:

- Creating a statewide complete streets policy
- Determining standards and guidelines for all highway users
- Proposing changes to state and county highway design standards and guidelines
- Making recommendations for restructuring procedures and design manuals and creating new measures

To ensure a well-rounded, comprehensive group of roadway users, various stakeholders were represented. We had to ensure that each category was represented (mode representation), as well as ensuring the geographical representation (statewide – all islands) and age representation (from students to seniors). To help bring this diverse group of task force members together, a partnering agreement was discussed at the very first meeting.

The purpose of the Partnering Agreement was to help the group decide how they will make internal decisions and come to agreement on recommendations. A series of six meetings were held (all subject to the Sunshine Law) and neighbor island participants attended via video conference.

The result was a comprehensive Legislative Report that contained a recommended statewide Complete Streets Policy, design standards recommendations, performance measures recommendations, and implementation and funding strategies.

Complete Streets policies help to improve safety and mobility for all users

Sustainability in Transportation Workshop

Additionally, to set the stage for the development of various statewide efforts, a full-day Sustainability in Transportation workshop was given for transportation professionals and advocate groups. The objectives were to provide an understanding of sustainability as it relates to transportation, how to apply sustainability to transportation projects, and how to apply sustainability to Complete Streets. The workshop was attended by over 70 people and included breakout sessions with practical applications and collaboration with the workshop participants.

The Sustainability in Transportation workshop demonstrated how sustainability applies to transportation projects and Complete Streets

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
a.	Jacobs	Honolulu, Hawaii; Portland, Oregon	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	20. EXAMPLE PROJECT KEY NUMBER 8

21. TITLE AND LOCATION (City and State)	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Maalaea Small Boat Harbor Project, Maui, Hawaii	2012	

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
U.S. Army Corps of Engineers (USACE) and State of Hawaii Department of Land and Natural Resources (DLNR)	Cindy S. Barger	808.438.6940

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

KEY RELEVANCE

Cost: $225,000

Relevant Services:

- Project management
- Public involvement and public meeting facilitation
- Baseline conditions analysis, inclusive of resilience objectives and potential climate change impacts
- Stakeholder involvement
- Regulatory compliance (local, state, federal)

Performance Highlights:

- Review and recommendations for compliance with a wide variety of federal, state, and local regulations
- Development and implementation of a detailed stakeholder involvement plan, and incorporated a wide variety of stakeholder concerns and interests into planning process
- Assessment of project conditions, as needed to support

PROJECT DESCRIPTION

The Maalaea Small Boat Harbor is located on the southwest shore of the island of Maui, on the western end of the Maalaea Bay shoreline. The harbor is one of three small boat harbors on Maui. It was first developed by the Territory of Hawaii in 1952 and later modified by the Territory and State of Hawaii in 1955, 1959, and 1979. During south swell events, ingress and egress from Maalaea Harbor is impaired. In addition, south swells create conditions within the harbor that have resulted in documented damage to vessels and harbor facilities. In response to these problems, improvements to the harbor were investigated as part of the Maalaea Small Boat Harbor Project (project). The U.S. Army Corps of Engineers (USACE) was the federal sponsor of the project, and the non-federal sponsor was the State of Hawaii Department of Land and Natural Resources (DLNR) Division of Boating and Ocean Recreation (DOBOR).

The project was originally authorized in 1968, and over the course of time, a variety of alternative project designs, including both external and internal breakwater structures were proposed to address the navigational safety and surge-related problems.

However, concerns over impacts to adjacent surf breaks and biological resources have been repeatedly raised, resulting in delays and several interludes in the planning process.

Maalaea Small Boat Harbor

USACE and DOBOR re-initiated the project in late 2009, with a focus on identifying critical stakeholder and agency concerns and developing a baseline condition analysis in compliance with the requirements of the National Environmental Policy Act (NEPA). A detailed stakeholder involvement plan was developed to ensure that all stakeholders were represented through the different stages of project development.

Stakeholders include harbor tenants, recreational users, cultural practitioners, community and public advocate groups, adjacent businesses, residents, and government agencies.

The plans outlined specific techniques to be used to involve those stakeholders in the planning process, including development of a project website, stakeholder interviews, agency consultation, and a public meeting. The focus of the stakeholder meetings was to obtain input from stakeholders on the constraints and design considerations to be considered as part of project development.

In addition, a series of meetings with the relevant resource agencies were held to review specific agency concerns, present and obtain feedback on the project planning process and develop appropriate mitigation strategies. Additional constraints and considerations for the harbor layout design were identified as part of this process.

Given the extent of previous stakeholder and agency concerns, as well as the potential effect of the current economic climate on funding for state projects, an incremental planning process was developed, wherein the project sponsors could integrate stakeholder input and updated technical information as it was obtained to determine the most prudent path forward for the project relative to the project objectives.

Potential options that were identified relative to the path forward included (1) proceeding with the project as defined in the previous feasibility study documents, (2) redefining the project (either with or without a federal component), or (3) terminating the project. Through this process, DOBOR made the decision to terminate the project.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
a.	Jacobs	Honolulu, Hawaii	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	20. EXAMPLE PROJECT KEY NUMBER 9

21. TITLE AND LOCATION (City and State)	22. YEAR COMPLETED	
	PROFESSIONAL SERVICES	CONSTRUCTION (if applicable)
Windward Transit Center, Kailua, Hawaii	2012	

23. PROJECT OWNER'S INFORMATION

a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
City and County of Honolulu	Irvin Higashi	808.768.8375

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

KEY RELEVANCE

Cost: $350,000

Relevant Services:

- Public Involvement and Stakeholder Partnering
- Transportation Planning

Performance Highlights:

- Using a partnering approach public involvement process with Neighborhood Boards, Public Agencies, and other project teams to investigate and analyze siting options for a new community bus transit center

PROJECT DESCRIPTION

Jacobs worked with the City and County Department of Transportation Services to define a site and facility design for a new Windward community transit center. The project was performed in two stages, a scope definition stage and a design stage.

The scope definition stage engaged stakeholders in investigation and site selection of a new community transit center. The site and facility was intended to meet the needs and requirements of the various stakeholders, including the Windward Oahu residents, businesses and property owners, the City and County of Honolulu DOT, and the Oahu Transit Service, Inc.

Stakeholders were engaged in partnering sessions to voice their concerns and collaborate on defining project criteria and evaluation based on identified community and environment concerns as well as permit/agency requirements.

Project Study Area

The result of the partnering meetings with stakeholders was intended to identify a facility site that met the needs and requirements of all stakeholders.

The design stage of the project will be based upon the recommendations of the scope definition stage. Plans, specifications, and estimates will be prepared for the construction of the new facility.

After further consultations with stakeholders on alternative sites and design concepts, the City decided not to pursue the project at this time.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT

	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
a.	Jacobs	Honolulu, Hawaii	Prime Consultant

F. EXAMPLE PROJECTS WHICH BEST ILLUSTRATE PROPOSED TEAM'S QUALIFICATIONS FOR THIS CONTRACT	20. EXAMPLE PROJECT KEY NUMBER 10	
21. TITLE AND LOCATION (City and State)	22. YEAR COMPLETED	
Kawailoa Wind Farm, Oahu, Hawaii	PROFESSIONAL SERVICES 2011	CONSTRUCTION (if applicable) 2012

23. PROJECT OWNER'S INFORMATION		
a. PROJECT OWNER	b. POINT OF CONTACT NAME	c. POINT OF CONTACT TELEPHONE NUMBER
First Wind LLC	Wren W. Wescoatt, Development Manager	808.780.1000

24. BRIEF DESCRIPTION OF PROJECT AND RELEVANCE TO THIS CONTRACT (Include scope, size, and cost)

KEY RELEVANCE

Cost: $1 million

Relevant Services:

- Planning and permitting

Performance Highlights:

- Prepare studies in support of Chapter 343 of the Hawaii Revised Statutes
- Evaluate and prepare other permit applications which included a Special Use Permit, a Special Management Area permit, and County Easement
- Prepare and evaluate archaeological, flora/fauna, avian, invertebrate, and visual resources due diligence studies

PROJECT DESCRIPTION

The Kawailoa Wind Farm Project was a 70-megawatt (MW) renewable energy (wind power) facility developed by First Wind LLC on Kamehameha Schools' Kawailoa Plantation lands, approximately 4 miles northeast of Haleiwa Town, on the north shore of the island of Oahu, Hawaii. The project involved construction, operation, and maintenance of 30 wind turbine generators, electrical collector lines, an electrical substation, interconnection facilities, communication towers, an operations and maintenance (O&M) building, and meteorological monitoring equipment.

As part of the project development process, Jacobs completed the environmental planning and permitting work required for development of this facility. This included an Environmental Impact Statement (EIS), pursuant to Chapter 343 of the Hawaii Revised Statutes (HRS), which evaluated the impacts to cultural and historic resources, visual resources, biological resources, and other environmental resources. Jacobs also obtained permits required for construction and operation of the project. Applicable permits included a Conditional Use Permit (CUP), and a Special Management Area (SMA) permit from the City and County of Honolulu. The required permits were successfully obtained, and project construction was initiated in 2011 and completed in 2012.

25. FIRMS FROM SECTION C INVOLVED WITH THIS PROJECT			
	(1) FIRM NAME	(2) FIRM LOCATION (City and State)	(3) ROLE
a.	Jacobs	Honolulu, Hawaii	Planning

SECTION G:
KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS

G. KEY PERSONNEL PARTICIPATION IN EXAMPLE PROJECTS

26. NAMES OF KEY PERSONNEL *(From Section E, Block 12)*	27. ROLE IN THIS CONTRACT *(From Section E, Block 13)*	28. EXAMPLE PROJECTS LISTED IN SECTION F *(Fill in "Example Projects Key" section below before completing table. Place "✓" under project key number for participation in same or similar role.)*									
		1	2	3	4	5	6	7	8	9	10
John Padre, AICP	Principal-In-Charge/Project Manager	✓	✓								
Abbey Mayer, AICP	Project Manager/Environmental Scientist	✓									
Kristen Nishimura, AICP	Project Manager/Environmental Planner	✓									
Tony Ali, PE, PMP	Project Manager			✓							
Jessica Burdick, PE, PMP	Project Engineer				✓						
Sandy Hamura, PE, LEEP AP	Project Manager/Civil Engineer			✓							
Miya Akiba	Planner	✓		✓							
Selena Qiu	Environmental Planner										
Eric Chen, PE	Transportation/Traffic Engineer	✓		✓	✓						
Daniel Pitzler	Economist						✓				

29. EXAMPLE PROJECTS KEY

NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)	NO.	TITLE OF EXAMPLE PROJECT (FROM SECTION F)
1	Honolulu Rail Transit Project, Honolulu Authority for Rapid Transportation (HART), Honolulu, Hawaii	6	Statewide and Regional Federal-Aid Highway 2035 Transportation Plans for the Districts of Maui, Hawaii, and Kauai, and Transportation Asset Management Plan, Hawaii Department of Transportation (HDOT), Statewide, Hawaii
2	Hawaii Bridge Program, Federal Highway Administration (FHWA), Central Federal Lands Highway Division, Various Locations, Hawaii	7	Statewide Pedestrian Master Plan, Hawaii Department of Transportation (HDOT), Statewide, Hawaii
3	Kamehameha Highway Wastewater Pump Station Force Main Replacement and Utility Bridge Demolition, Honolulu, Hawaii	8	Maalaea Small Boat Harbor Project, U.S. Army Corps of Engineers (USACE) and State of Hawaii Department of Land and Natural Resources (DLNR), Maui, Hawaii
4	Statewide Freight Plan, Hawaii Department of Transportation (HDOT), Statewide, Hawaii	9	Windward Transit Center, City and County of Honolulu, Kailua, Hawaii
5	Ala Wai Comprehensive Watershed Planning and Environmental Impact Statement, U.S. Army Corps of Engineers (USACE), Honolulu, Hawaii	10	Kawailoa Wind Farm, First Wind LLC, Oahu, Hawaii

SECTION H-I:
ADDITIONAL INFORMATION AND AUTHORIZED REPRESENTATIVE

H. ADDITIONAL INFORMATION

30. PROVIDE ANY ADDITIONAL INFORMATION REQUIRED BY THE AGENCY. ATTACH ADDITIONAL SHEETS AS NEEDED.

1 | FIRM INFORMATION

ABOUT JACOBS

Jacobs is committed to global sustainability, which is exemplified in how we operate our business, how we perform our work, how we partner with clients and other organizations, and how we continue to look at ways to make a positive environmental, societal, and economic difference for businesses, governments, and communities locally and around the world.

Jacobs is invested in making the world a better place—from addressing water scarcity and aging infrastructure to ensuring access to life-saving therapies and protecting against sophisticated cyberattacks—what we do is more than a job, it's an investment in the success of our clients, communities, and future generations. Therefore, we bring a thoughtful and collaborative approach to every one of our partnerships and help our partners make a positive impact on the world. Regardless of project size, we use best practices to provide a comprehensive and proactive approach to any project and deliver our clients' vision of success.

Jacobs Operations: Leadership on Climate Change

In April 2020, we published our first Climate Action Plan, committing to 100% renewable energy for our operations in 2020 and net zero carbon for our operations and business travel by 2030. Alongside achieving our 2020 targets, we developed science-based carbon-reduction targets for our direct and indirect emissions, approved by the Science-Based Targets Initiative.

In FY20, we saw a 33% reduction in total, calculated carbon emissions (Scopes 1 and 2 and a portion of Scope 3) to 116,466 tCO2e, as well as a 50% reduction in our travel-related carbon emissions—compared to our updated FY19 baseline. Most of these emissions reductions directly resulted from changes in operations due to the pandemic. We also outlined how we will start to bring climate uncertainty into the mainstream as part of our enterprise level risk assessment process, in line with recommendations made by the Task Force for Climate-related Financial Disclosure (TCFD).

Our ESG Disclosures Report provides supplementary information regarding our environmental, social, and governance (ESG) performance, organized according to the Sustainability Accounting Standards Board (SASB) framework.

Our Commitment

Jacobs provides several online reports detailing our policies and plans related to sustainable business practices, including:

- **Jacobs Climate Action Plan** captures the shared passion and pride of our people as we work to preserve our planet for future generations
- **Jacobs Sustainability Strategy** (2018-2020) sets out our plans for integrating sustainability into our business
- **Jacobs Sustainability Reports** detail our progress toward our goals, going back to 2009

Sustainable Solutions for Clients

Together with our clients, we craft solutions that affect the way people live. From accelerating the next generation of innovators to developing the world's first ultra-low emission zone, and from helping communities recover to protecting public health by monitoring water quality, we solve for better, never losing sight of our responsibility to each other. For example:

- Alongside Shell Pipeline Company, we turned more than 96,000 plastic bottles into a natural infrastructure solution helping protect Louisiana's shrinking coastline and serving as a model for balancing coastal infrastructure integrity and an evolving natural environment
- Transforming space waste into building blocks for future exploration and sustainability, our innovative solution for beneficial reuse of heat-resistant materials also eliminated $50,000 in disposal costs at Kennedy Space Center
- Employing digital twin technology and simulations, we helped one confidential, private-sector client reduce energy consumption by 33% using control-logic operational improvements
- Through safely managing one of the world's-largest remediation programs, the Central Plateau at the U.S. Department of Energy's Hanford Site, we've cleaned up more than 19.3 billion gallons of groundwater to date—supporting the overall mission of protecting the Columbia River

DIVERSITY, EQUITY, & INCLUSION

At Jacobs, we do things right, we challenge the accepted, we aim higher, and we live inclusion. In the face of these challenging times, we must focus on resilience, strength, and connection to emerge stronger, together. We, like you, are committed to diversity in employment and to increasing contracting opportunities for certified Disadvantaged, Minority-Owned, Women Owned, Emerging Small Business (D/M/W/ESB) enterprises. In addition to meeting requirements for subcontracting, we work closely with our D/M/W/ESB partners to identify appropriate, meaningful, and significant roles—with a commitment to truly deliver value on those scope assignments and promote a more inclusive workforce for future generations.

Our Cultural Competency/Diversity Training Efforts

Jacobs is committed to improving our talent management and development processes by distributing training, professional development, career advancement, and mentoring equitably across the company. A sampling of how we achieve this includes:

Jacobs Employee Networks (JENs). Our eight, active networks represent more than 23,000 employees, working to promote inclusion and equality companywide. These employee-led and organized groups are centered around offering opportunities to collaborate with others around the world and continuously develop a safe workplace where employees can be their authentic selves. A few examples include our Women's Network, Prism, Harambee, and Careers Network JENs' collaboration with human resources to appoint the first female executive vice president in the company's history; install gender-neutral bathroom facilities in offices; provide leadership development programs to accelerate advancement for black employees to mid- and senior-level leadership; and increase hiring to total 959 interns and 873 graduates globally.

Diversity in Succession Planning. We're developing all our talent to confirm we have broadly diverse candidate and succession pools and preparing our globally talent for more senior roles. Our Women's Network and Harambee JENs play a strong role in providing monthly career development presentations, regularly posting internal leadership positions, and being a constant advocate for diversity at all career levels, companywide.

Employee and Leadership Development Training. Jacobs offers more than 30 new Inclusion & Diversity eLearning courses for all employees to help advance awareness. Nearly all our employees (98%) have completed conscious inclusion training to develop the skills necessary to foster a more inclusive and diverse workplace. We also annually offer executive internships where young employees can partner with executive leaders to increase their business acumen and broaden their professional expertise across all career types.

Professional, Executive, and/or Technical Staff Comprising Women and/or Minorities

Having a culture of belonging where everyone can join in and thrive allows us to recruit and retain the best global talent and drive innovative solutions for our business, clients, and communities. That's why in a company of more than 60,000 professionals, our diversity counts are at:

Companywide		Jacobs' Northwest Region (including Hawaii)	
60%	**55%**	**31%**	**17%**
Executive Team	Board	Women	Minorities

We are continuously striving to increase our diversity counts by setting a goal to achieve a 40-40-20 gender-balanced workforce around the globe (40% men, 40% women and 20% open to any gender) over the next five years.

Processes used to Recruit Women and Minorities. Jacobs actively recruits woman, minority, disabled, and veteran applicants at all levels. This is achieved by posting promotional opportunities; assisting employees in identifying promotional opportunities, tuition reimbursement, training, and educational programs to enhance promotions and opportunities for job rotation or transfer; and evaluating job requirements for promotion.

A Culture of Service

Jacobs is an Industry Liaison with the Better Business Bureau (BBB), where we partner with local agencies and firms to foster STEAM career paths in Hawaii. Jacobs has partnered with the City and County of Honolulu, University of Hawaii, Department of Education, and local firms to outreach to K-12 students.

Company Initiatives to Promote Opportunities and Encourage Community Inclusion and Outreach Efforts

Company Initiatives to Advance Community Inclusion. Over the last year, we have seen tangible examples of progress from our approach to inclusion, the most remarkable being the launch of our global Action Plan for Advancing Justice and Equality. Driven by members of our Black employee network, Harambee, in partnership with our executive leadership team and Jacobs' board of directors, the plan sets out actionable initiatives and measurable objectives to address embedded and systemic racial inequalities both within Jacobs and in comm unities across the world. Other recent diversity and inclusion achievements include:

Jacobs Equality Matching Campaign. Launched the Jacobs Equality Matching Campaign, matching up to $100,000 of employee donations to eligible causes dedicated to inclusion, equality, and justice around the world.

Incentivize and Reward Inclusive Leadership. Created the global TogetherBeyond Inclusive Leader of the Year Award to incentivize and reward inclusive leadership.

Joined the Business Coalition. This group of more than 270 leading U.S. employers—including many of our clients—support passing federal legislation providing the same basic protections to LGBTI+ people as those afforded to other protected groups under U.S. federal law.

Position on the NSBE Board of Corporate Affiliates. We have a goal to strengthen our commitment to developing and hiring the best diverse talent with organizations like the U.S. National Society of Black Engineers (NSBE), the U.S. Society of Hispanic Professional Engineers (SHPE) and Building Equality, the U.K. construction industry's leading LGBTI+ alliance. This year, we were proud to take our place on the NSBE Board of Corporate Affiliates—their top national support level—and we are proud to have one of our leaders, Freddie Fuller, currently serving as National Chair of the Community of Minority Transportation Officials (COMTO).

The Valuable 500. We joined the Valuable 500, an organization seeking to place and keep disability inclusion on business leadership agendas across the globe.

Outreach Efforts for Underserved Communities. Successful team inclusion relies on developing relationships within the consultant community. Inclusion begins when individuals build rapport, understand each other's strengths and experiences, and identify mutually beneficial opportunities to pursue. We believe the strength of Jacobs' inclusion strategy and plan is centered around continuously building these relationships, which all begins with outreach—networking to make those initial connections that eventually lead to successful project delivery.

Our Plan to Obtain Maximum Utilization of Small Businesses

As a prime consultant, our responsibility is to share work won through large contracts with smaller firms. To that end, we continue to nurture our partnerships with the small, diverse businesses who can provide the experience and resources we need to deliver our projects. Our strategy is focused on building valuable partnerships and capacity for our partner firms. We develop an inclusion plan specific to each project, balancing the project's needs with inclusion goals. Jacobs has a long history of supporting and serving as mentors for small businesses in Hawaii.

Mentoring, Technical, or Other Business Development Services We Provide to Previous or Current Small Business Subcontractors or Partners

For Jacobs, inclusion is about more than meeting percentage goals. Mentoring is simply the natural progression of our relationships with our subconsultants, which builds their expertise, broadens their network, and strengthens their business acumen. Ee customize our approach to the unique needs of each relationship based on the specific challenges and desired outcomes. For each task order, we collaborate with the appropriate subcontractors to develop a technical approach and establish budget and schedule controls. We assess each subcontractor's workload and availability to deliver quality work products within the schedule. We develop staffing plans for each assignment, drawing on our D/M/W/ESB team members to provide meaningful growth opportunities for future work, reflecting our understanding and commitment to client's small business goals. We create opportunities using these and other approaches:

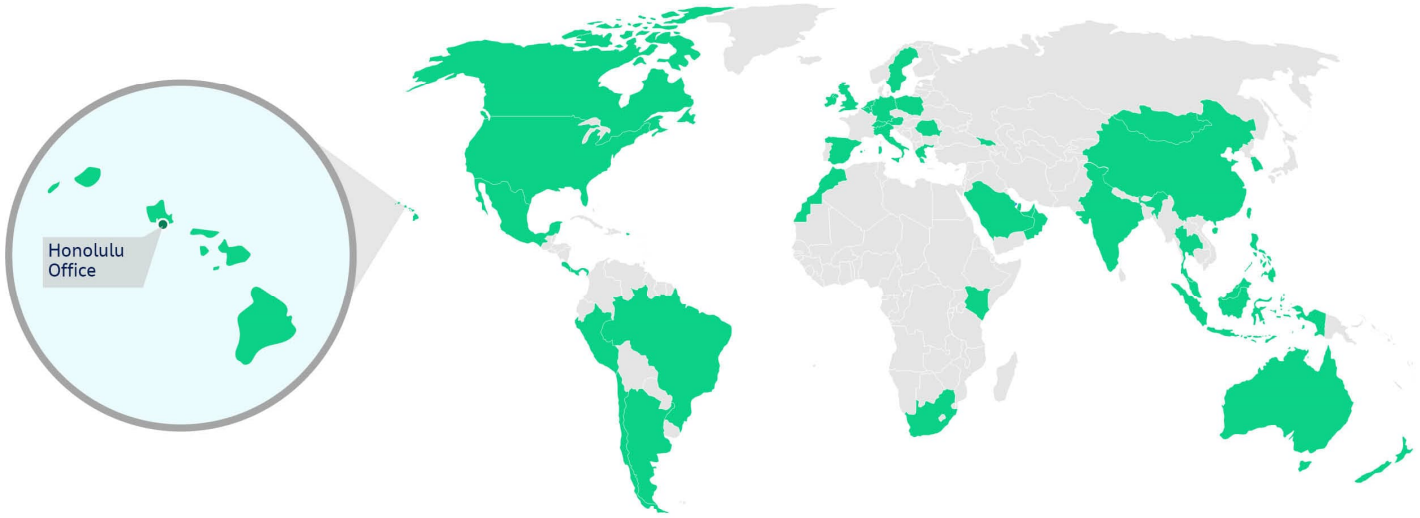
- Mentor D/M/W/ESB staff by delegating project management duties for small projects to our partner firms. In addition, production and senior technical staff across all partner firms are available for quality control and mentoring roles
- Provide meaningful and substantial roles on all work orders or contracts to leverage and develop our partner's capabilities
- Provide opportunities for thought leadership. Our D/M/W/ESB partners bring unique perspectives, and we capitalize on this to deliver broadly informed projects, plans, and policy to our clients

PRINCIPAL PLACE OF BUSINESS AND OFFICE LOCATIONS

Jacobs first project in Hawaii started with the design of the new Kihei Sewer Treatment Plant and Kihei Sewerage system in 1971. Since then, we have been dedicated to delivering complex projects and providing world-class expertise to our Hawaii clients. We primarily serve our clients with locally-based engineers, planners, and scientists in our Honolulu office, who provide a vast range of specialized expertise in transportation, water, wastewater, and environmental engineering, in all project phases—from planning to construction. Our full-service capabilities allow us to provide holistic and comprehensive professional services that can be customized and scaled to deliver projects large or small. Our local teams are frequently supported by industry experts, who bring best practices and lessons learned from delivering projects around the world.

Jacobs' first office in Hawaii was opened in Maui, located behind the old Kahului Railroad Station. The Maui office hosted OMI's Contract No. 1 in collaboration with former Mayor Arakawa.

Jacobs Office Locations



400 offices in **40+** countries **60,000+** employees worldwide **100+** local employees

2 | AGE OF THE FIRM AND AVERAGE NUMBER OF EMPLOYEES

Founded in 1947, Jacobs leads the global professional services sector delivering solutions for a more connected, sustainable world. With more than 60,000 professionals worldwide, we provide a full spectrum of services including scientific, technical, professional, and construction and project management for business, industrial, commercial, government and infrastructure sectors. Over the past five years, we have had **approximately 54,716 employees on average**.

3 | EDUCATION, TRAINING, AND QUALIFICATIONS OF KEY MEMBERS

Please refer to **Section E** for the education, training, and qualifications of our key members proposed for this contract. Upon project award, we will collaborate to provide a comprehensive team with the skills and understanding of island environments necessary to successfully deliver high quality work products.

4 | CLIENT REFERENCES

Our goal is to meet or exceed the expectations of our clients, collaborating to deliver high quality work products and services that achieve our clients' goals and visions.

Recent notable Hawaii projects we are involved in include, but are not limited to:

- ✓ Honouliuli WWTP Phase 1A, 1B, 1C, and Biogas Upgrades, City and County of Honolulu (Ongoing)
- ✓ Kamehameha Highway Wastewater Pump Station Upgrade and Wetwell Improvements Projects, City and County of Honolulu (Ongoing)
- ✓ Kamehameha Highway Wastewater Pump Station Force Main Replacement and Utility Bridge Demolition, City and County of Honolulu (Ongoing)
- ✓ Waimea WWTP Clarifier Modification, Hawaii American Water (Ongoing)
- ✓ Mauna Lani Sewage Pump Station 1a Upgrades and Force Main 1A Replacement, Hawaii American Water (Ongoing)
- ✓ NPDES Storm Water Technical Training, City and County of Honolulu (Ongoing)
- ✓ Strategic Planning, Environmental, and Permitting Services, Hawaiian Electric Company (Ongoing)
- ✓ Facility/Infrastructure and Environmental Architect Engineering Services, Air Force Center for Engineering and the Environment (Ongoing)
- ✓ Construction Management Services for Airfield Maintenance and Repair Projects Statewide, HDOT (Ongoing)
- ✓ Kahului Airport Apron Pavement Structural Improvements Phase II, Kahului Airport, HDOT (Ongoing)
- ✓ Hawaii Statewide Transportation Plan, HDOT (Ongoing)
- ✓ Oahu Regional Transportation Plan, Oahu Metropolitan Planning Organization (Ongoing)
- ✓ Interstate H1 Eastbound (EB) Improvements Ola Lane Overpass to Likelike Highway Off-Ramp, HDOT (Ongoing)
- ✓ Honolulu Rail Transit Project, Multiple Contracts, HART (Ongoing)
- ✓ Moderating Oahu's Traffic Conditions, City and County of Honolulu (Ongoing)
- ✓ Integrated Solid Waste Management Plan, County of Kauai (Ongoing)
- ✓ Construction Management Services for Runway 8L Widening and Miscellaneous Improvements, Phase 2, Daniel K. Inouye International Airport, HDOT (Ongoing)
- ✓ Hawaii Bridge Program, Central Federal Lands Highway Division (2022)
- ✓ Lahaina Wastewater Reclamation Facility Modifications, Stage 1A, County of Maui (2021)
- ✓ Waianae WWTP Improvements and Upgrade, City and County of Honolulu (2021)
- ✓ Honouliuli WWTP Outfall Condition Assessment, City and County of Honolulu (2020)
- ✓ Kalaupapa National Historical Park (NHP) Electrical System Rehabilitation, National Park Service (2020)
- ✓ National Environmental Policy Act (NEPA) Compliance for Construction of a Distributed Common Ground Station Pacific Hub at Joint Base Pearl Harbor-Hickam, USACE Honolulu District (2020)
- ✓ Lahaina WWRF Odor Control Project, County of Maui (2019)
- ✓ Integrated Solid Waste Management Plan, City and County of Honolulu (2019)
- ✓ Construction Management Services for Runway 8L Widening and Miscellaneous Improvements, Phase 1, Daniel K. Inouye International Airport, HDOT (2019)

We are proud of the services we have delivered to our valued Hawaii clients since 1971. For more information, we encourage contacting our current client references:

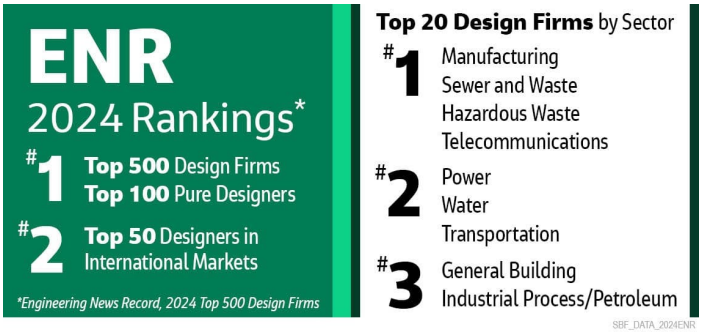
Client Name/Title/Organization	Organization	Contact Information
Ken Tatsuguchi * Head Planning Engineer	Hawaii Department of Transportation (HDOT), Highways Division	808.587.1830
Jon Nouchi * Deputy Director	City and County of Honolulu, Department of Transportation Services (DTS)	808.768.8304
Vance Tsuda * Project Director	Honolulu Authority for Rapid Transportation (HART)	808.768.8943
Kim Suzuki * Wastewater Engineering & Construction Division Assistant Chief	City and County of Honolulu, Department of Environmental Services (ENV)	808.768.8410
Benton Ho * Facilities Maintenance Section Head	Hawaii Department of Transportation (HDOT), Airports Division	808.836.6411

* Currently rendering services for

5 | PROMOTIONAL OR DESCRIPTIVE LITERATURE

The following pages highlight a selection of services we can provide. Further information on included or additional services is available upon request. This section contains details on the following services:

- Environmental Compliance
- Climate Change, Sustainability, and Resiliency



ENVIRONMENTAL COMPLIANCE

Environmental engineering and compliance services have been an integral part of Jacobs' business for almost 60 years. Jacobs is well-versed in and experienced with both national and local environmental laws and regulations. On the federal side, Jacobs has extensive experience preparing environmental review documents that document compliance with the National Environmental Policy Act, the Clean Water Act (including Department of the Army permits and NPDES compliance), the Clean Air Act, the Resource Conservation and Recovery Act, CERCLA, the Toxic Substances Control Act, the Safe Drinking Water Act, the Endangered Species Act, the Native Graves Protection and Repatriation Act, the Federal Insecticide, Fungicide, and Rodenticide Act.

For state, county, and city environmental compliance, we understand the intricacies of the Hawaii Environmental Policy Act (Hawaii Revised Statutes Chapter 343) and permit requirements for Special Management Areas, Conservation Districts, Special Districts, and Shoreline Setbacks. Our local team regularly prepares construction-related permit applications, including zone changes and variances and building, trenching, and grading permit applications.

Our Honolulu office has over 25 years of experience in:

- Environmental Planning and Permitting
- Phase I and Phase II Environmental Site Assessments
- Site Characterization
- Field Investigations and Long-Term Monitoring
- Remedial Action Planning and Design
- Remedial System Operations
- Emerging Contaminants

This extensive experience includes a wide range of projects from site assessment to complete site closures and remedial actions.

Our scope of environmental services includes:

ENVIRONMENTAL STUDIES/SURVEYS
NEPA/SEPA Documentation
Natural Resources Assessment
Environmental Planning/Permitting
Environmental Risk Assessment
Visual Impact Analysis
Indirect/Cumulative Impact Analysis
Traffic/Transportation Analysis
Emergency Response
CEVP/VE Study Support
Inter-agency MOA/MOUs
Alternatives Analysis
GIS
Feasibility Studies
Watershed Planning
Technical Editing

MITIGATION/JURISDICTIONAL REVIEWS
Environmental Permitting
Wetland/Stream Mitigation/Restoration
Post-Construction Mitigation

HAZARDOUS MATERIALS
Hazardous Materials Management
Phase I/II Environmental Assessments
Sediment Remediation

CONSTRUCTION MONITORING/COMPLIANCE
NPDES Compliance
Groundwater Monitoring
RCRA and MTCA Compliance
Soil, Water, and Air Sampling/analysis
Waste Management Plans
Asbestos Sampling
Contaminated Soil Disposal and Permitting
Construction Management Environmental Compliance
Spill Prevention, Control and Countermeasures (SPCC) Plans
SWPPP/TESCP
401 Water Quality Compliance

AIR/ NOISE
Air Quality Analysis/Permits
Air Quality Modeling
Traffic Noise Analysis
Traffic Noise Abatement
Noise Variances/Exemptions

SOCIAL, EJ, LAND USE ASSESSMENT
Socioeconomic Analysis
Land Use Planning/Analysis
Farmland Conversion
EJ/LEP Outreach/Analysis
Section 4(f)/6(f) Evaluation
Public Services/Utilities

CULTURAL RESOURCES
Section 106 Review/Compliance
Section 110 Compliance
GEO 05-05 Review/Compliance
MOA Development/Implementation
Data Recovery
Curation
Tribal/Agency Consultation
Tribal U&A Strategy

PUBLIC INVOLVEMENT
Public Involvement Planning
Public Engagement/Outreach
Strategic Communications
Business/Community Surveys
Interactive Visual Media

STORMWATER/WATER QUALITY
Stormwater Management
Surface Water Management
Floodplain Management
Hydraulics/Hydrology
Water Quality Analysis/Permits
Low Impact Development Design (LID)
Drainage Engineering and Design
River Engineering and Design
Geomorphology/Bioengineering
Watershed Planning

BIOLOGY SUPPORT
ESA/EFH Documentation
Aquatic/Terrestrial Biology
Habitat Management/Conservation Plans
Wildlife Habitat Evaluation
Wetland/Stream Assessment
Wildlife Crossing Design
Ecological Connectivity Design/Monitoring
Marine Mammal Monitoring

GREENHOUSE GAS (GHG)/CLIMATE CHANGE
GHG Analysis
Climate Change Planning
Sustainability Analysis
Envision

FISH PASSAGE ASSESSMENTS
Fish Passage Structure Design
Instream Habitat Design
Large Woody Debris (LWD) Analysis/Design
Hydraulics/Hydrology

LANDSCAPE ARCHITECTURE
Landscape Plans
Roadside Restoration
Arboriculture
Wetland/Stream Mitigation Plans

Environmental Planning and Permitting

A variety of federal, state, and local rules and regulations require preparation and implementation of plans, and maintenance of supporting documentation. This is applicable to both operating and planned facilities, as well as remediation sites. On behalf of our clients, Jacobs:

- Conducts due diligence studies associated with biological, archaeological, and cultural resources
- Prepares environmental planning documents, including Environmental Assessments, Environmental Impact Statements, and Habitat Conservation Plans
- Prepares permit applications ensuring compliance with federal, state, and local regulations
- Provides planning and permitting services for alternative energy facilities (e.g., permitting consultancy services for a wind energy facility on the island of Maui)
- Prepares supporting documentation required under recordkeeping and reporting or training requirements
- Provides tools for managing and visualizing information (such as GIS and numerical modeling)

Jacobs has performed hundreds of studies and designs and developed plans for hazardous waste management. Based on this experience, we apply lessons learned to each new project to continually improve our accuracy and efficiency, while minimizing the impacts on an installation's operations.

Phase I and Phase II Environmental Site Assessments

Jacobs has extensive experience conducting and preparing Phase I and Phase II environmental site assessments (ESAs), to evaluate a property's environmental conditions and assessing potential liability for contamination as part of real property transfers or acquisitions, while meeting American Society for Testing and Material (ASTM) standards. These standards meet the requirements of All Appropriate Inquiries (AAI) under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) for federal, industrial, and municipal clients.

We are a leader in developing innovative and cost-effective approaches for our clients requiring Phase I ESAs as part of the acquisition of a high volume of properties. The configuration of large-scale data processing methods and analysis tasks allows Jacobs to utilize workflows that automate as many components as possible for Phase I ESA analysis and development. This data management and automation approach allows for the compilation of enterprise data warehouses and development of turn-key report production, resulting in production efficiencies and schedule enhancements.

Site Characterization

We plan our site characterization efforts by focusing on our clients' business objectives. We develop site closure strategies that meet regulatory requirements, conform to long-term management goals, and accommodate technology constraints. We understand that effective and timely communication among the key decision makers—who represent the technical and regulatory aspects of the project—is a critical success factor.

We help clients save money and time by focusing site characterization efforts on the goal of rapidly moving toward cost-effective site closure through:

- Using innovative characterization strategies that focus the investigation toward only the data needed to support remedial decision making
- Acting as our client's advocate while providing effective regulatory interaction and negotiation
- Using innovative field-testing methods to streamline investigations and reduce analytical costs

We have prepared hundreds of feasibilities and corrective measure studies to support remedial planning and engineering work. We have developed streamlined approaches to save our clients time and money in the evaluation of alternatives and the preparation of regulatory documents.

Our approach to conducting feasibility studies focuses on developing the most cost-effective approach to site closure that is acceptable to stakeholders, while protecting human health and the environment. We accomplish these savings with innovative technical approaches and legal, regulatory, and stakeholder knowledge and advocacy; then integrating these approaches with value engineering, constructability, and life-cycle cost principles provides further savings.

Our experience with feasibility studies ranges from simple, streamlined evaluations to full USEPA-required studies, including alternatives incorporating existing plant facilities at no capital cost to remediation costs that exceed $100 million. Our personnel have evaluated, pilot-tested, designed, or implemented virtually every remedial technology available to date. This allows us to focus on cost-effective solutions based on previous, successful results.

Our characterization experience is multimedia in nature and includes extensive experience with a range of contaminants, from chemicals introduced by commercial, government, and agricultural sources to naturally occurring materials and radionuclides.

We implement cost-effective field investigations by using technical approaches, investigation strategies, and procedures that support decision making with reduced analytical or sampling requirements. We make extensive use of field screening methods,where applicable, to reduce analytical costs and improve decision making in the field. We also use both "down-hole" and surface geophysical methods to understand subsurface site conditions in a cost-effectively manner. Jacobs has experience in classic data-collection methods and in using state-of-the-art techniques such as membrane interface probes, ROST™, and similar tools. These approaches provide real-time data evaluation, greatly reducing the need for multiple investigations. Statistically based sampling methodologies have been effectively used to reduce the number of samples needed to reach an agreed upon confidence level.

Field Investigations and Long-Term Monitoring

Jacobs has conducted field investigations at locations throughout Hawaii, including studies at Hickam AFB, Fort Shafter Flats, Bellows Air Force Station, US Army installations, Hawaii Air National Guard facilities, as well as various State and County sites. Field programs have ranged from short, focused sampling efforts to complex, multi-phased investigations. As a part of many of our projects we have been involved in identifying and selecting facility sites.

Additional investigations performed in Hawaii and throughout the West include:

- Ecological investigations
- Petroleum spills
- Remedial investigations (RIs)
- Human health and environmental risk assessments
- Site release investigations
- Underground storage tank (UST) investigations
- Tidal studies and groundwater flow modeling
- Installation of shallow and deep monitoring wells

Demonstrated capability:

- Preliminary Assessment/Site Investigation (PA/SI), U.S. Army, Helemano Military Reservation, Dillingham Military Reservation and Kahuku Training Area, Oahu, Hawaii
- Environmental Site Investigations at Multiple Sites on Hickam Air Force Base, Bellows Air Force Station, Kaena and Kokee, Hawaii
- Remedial Investigation and Treatability Study Oversight at Waikakalaua and Kipapa Fuel Storage Annexes (FSAs), Hawaii

Jacobs also has extensive experience in performing groundwater long-term monitoring program at a variety of sites, including municipal landfills. Demonstrated capability includes:

- Groundwater Long-Term Monitoring at Central Maui and Hana Landfills, in compliance with Federal and state regulations, Hawaii
- Preliminary Assessment/Site Investigation (PA/SI), U.S. Army, Helemano Military Reservation, Dillingham Military Reservation and Kahuku Training Area, Oahu, Hawaii
- Environmental Site Investigations at Multiple Sites on Hickam Air Force Base, Bellows Air Force Station, Kaena and Kokee, Hawaii
- Remedial Investigation and Treatability Study Oversight at Waikakalaua and Kipapa Fuel Storage Annexes (FSAs), Hawaii

By using innovative technologies, alternative investigation approach, and regulatory negotiations, Jacobs has been able to achieve process optimizations, efficiencies, and cost savings for their clients. As an example, the Groundwater and Leachate Monitoring Plan recently approved by the regulator for the Central Maui Landfill includes an optimized analytical plan, reduced sampling frequency, and optimized sampling procedures that will result in significant long-term cost savings.

Remedial Action Planning and Design

Jacobs has extensive experience preparing general scientific, technical, and planning studies for our federal, industrial, and municipal clients. These studies cover all aspects of environmental planning, from site investigations and characterizations (such as soil sampling, groundwater sampling, geologic evaluations, and surveying), to biological and cultural resource evaluations and cost-benefit analyses.

We are a leader in developing innovative and cost-effective approaches for performing site/facility evaluations and response planning. We have guided our customers as site characterization and remediation regulatory requirements have been initiated and evolved worldwide. Our understanding of local field and regulatory conditions, access to globally interconnected staff who capitalize on lessons learned worldwide, and a focus on site closure help reduce the time and cost of planning and delivering field investigations. Our holistic approach considers future land use, potential exposure pathways, and remedial technologies.

Remedial System Operations

We have performed mitigation, abatement, and remedial actions on jobs as small as $50,000 and on large-scale remediation programs valued at more than $7 billion. Jacobs is a world leader in using innovative, cost-effective technical approaches to mitigation, abatement, and remedial actions. We have conceptualized, engineered, and implemented multiple remedial systems operations projects. We work closely with our clients to confirm that each project meets all objectives, whether operational, economic, or environmental.

Emerging Contaminants

Jacobs provides a wide variety of solutions for emerging contaminants (for example, the per- and poly-fluoroalkyl substances or PFAS, 1,4-dioxane, etc.) to clients worldwide. Jacobs plans and develops cost-effective, regulatory-compliant management strategies, focusing on the mitigation of high-impact sources and protection of sensitive receptors. Our highly experienced technical and management teams have performed emerging contaminants work for municipalities, federal governments (U.S. Air Force, Australia Defense, Canada Defense), as well as for private sector clients around the world, actively participating in preparation of guidance documents (for example, the Interstate Technology and Regulatory Council Technical/Regulatory Guidance on PFAS). Our team has designed and continues to research innovative characterization and remediation approaches and technologies to address this new and challenging sector of emerging contaminants. Jacobs has been leading the industry with PFAS and emerging contaminants assessment and research for over a decade. Our research projects, often conducted in conjunction with government environmental, science and technology programs/agencies, include multiple aspects of characterization, fate & transport, risk assessment, and treatment of PFAS in soil, groundwater, drinking water, wastewater, biosolids, and landfill leachate.

CLIMATE CHANGE, SUSTAINABILITY, AND RESILIENCY

The recent Intergovernmental Panel on Climate Change (IPCC) Special Report on the Ocean and Cryosphere in a Changing Climate (SROCC), and NOAA report as well as the recent literature in which they are based, continue to point to the importance of incorporating climate resilience into public infrastructure planning. Actionable climate science is required to drive decision making in infrastructure decisions as well as a clear application of that science onto local conditions, for local solutions. Jacobs' global team of experts can help cities, utilities and communities respond to the localized effects and impacts of higher sea levels:

- **Forecasting & Scenario Planning:** defining appropriate planning horizon and climate scenarios according to level of service goals and risk tolerance
- **Vulnerability and Risk Assessment**: defining exposure to hazards with different probabilities and quantifying vulnerability and risk for assets, facilities as well societal and economic impacts
- **Planning, Evaluating, Designing, and Implementing Adaptation Measures**: from evaluation of costs and risk reduction benefits of multiple solutions to design, construction and implementation of those solutions and appropriate emergency response plans
- **Financial Assistance Support Services**: identifying and applying for grants available for assessment of risk, hazard mitigation, hazard prevention and disaster recovery

Increasing climate uncertainty has serious implications for our water, infrastructure, and ecosystems. Such uncertainty also challenges the ability of planners, resource managers, engineers, and scientists to make risk-smart decisions. The long-term sustainability of our water supplies, flood management systems, infrastructure, and food systems all rely on the ability to make defensible, science-based assessments of climate-related risk.

Jacobs works with clients to assess climate risk as part of an overall risk profile, determine climate risk tolerance, and develop sound, incremental adaptation actions that balance climate risk with other priorities. Our services help clients identify and manage climate related risks to industry, agriculture, power, water, and transportation infrastructure, flooding and drainage, and water supplies.

Creating Climate Resilience

We help clients develop Climate Resilience strategies using a tested scenario planning process. The outcome: management plans with balanced, step-by-step responses to potential change—sequenced to meet community needs and constraints. Armed with these strategies, planners and managers have the tools to support flexible, reliable, and sustainable services through coming decades.

Helping Clients Manage Water Resources to Protect Our People, Infrastructure, and the Environment

Our clients face many challenges centered around water security and infrastructure resiliency. Flooding, drought, sea level rise, and erosion threaten our infrastructure, ecosystems, and way of life. Our clients need to prepare for these challenges so that critical services and infrastructure—such as water supply, power, and transportation networks—are protected, maintained, and restored. We apply state-of-the-art modeling and analytical techniques to understand the probabilities of these hazards occurring and we develop responses to protect vulnerable assets. Jacobs manages the complete built and natural water cycle to enable water security in times of drought, as well as integrated stormwater management and green solutions to improve water quality and minimize flooding risks. Similarly, we plan and design the restoration of habitats to deliver a range of environmental, social, and economic benefits. Our work includes climate change adaptation, flood protection plans, flood infrastructure engineering, integrated water resources management plans, coastal protection and restoration programs, irrigation projects, and blue-green infrastructure designs.

Our sustainability and resiliency projects require integrated solutions to help our clients address complex issues like permitting, competing water demands, climate change, extreme weather events, environmental improvements, aging infrastructure, and funding. Whether it helps clients manage water resources, mitigate flooding risks, protect, and restore the water environment, or modernize their infrastructure, Jacobs delivers tailored solutions worldwide.

Example Projects

- ✓ **Kiribati Island Adaptation Plan**, South Pacific. Land reclamation project, with land use and urban development plan to address rapid urbanization, limited water supply, and risk of flooding from king tides.
- ✓ **TEAM2100**, United Kingdom. Leading delivery of the first 10 years of the 100-year program to inspect, maintain, and upgrade flood defenses to London.
- ✓ **Colorado River Basin Study**, Wyoming, Colorado, Utah, New Mexico, Arizona, and California, USA. Comprehensive study and roadmap to improve water supply security considering municipal, industrial, and agricultural water conservation and reuse and water transfers.
- ✓ **Seawall Resiliency Project**, San Francisco, California, USA. A 10-year, $40 million project to reduce seismic and flood vulnerability, protecting infrastructure and historic city assets.
- ✓ **Northern Victorian Irrigation Modernization Program**, Australia. A modern, efficient, real-time, low-energy, automated irrigation system.
- ✓ **Coastal Hardening Adaptation Planning and Design**, New York City, New York, USA. Developed resilience designs and guidelines for wastewater infrastructure to address impacts of future climate change and population growth.
- ✓ **Active, Beautiful and Clean Waters Program**, Singapore. Innovative approach to stormwater control, creating flood resiliency projects with social, economic, and environmental benefits.
- ✓ **Mississippi River Mid-Basin Sediment Diversion Program Management**, Louisiana, USA. Diverting sediment to build and sustain land that has been lost due to erosion in coastal Louisiana.
- ✓ **Onondaga County Green Infrastructure Program**, Syracuse, New York, USA. Nine-year Green Infrastructure Capital Improvement Program to reduce 250 million gallons of combined sewer overflows annually.

I. AUTHORIZED REPRESENTATIVE *The foregoing is a statement of facts.*	
31. SIGNATURE 	32. DATE June 30, 2024
33. NAME AND TITLE John Padre, AICP, Principal-In-Charge	

PART II:
GENERAL QUALIFICATIONS

ARCHITECT–ENGINEER QUALIFICATIONS

1. SOLICITATION NUMBER *(If any)*:

PART II – GENERAL QUALIFICATIONS
(If a firm has branch offices, complete for each specific branch office seeking work.)

2a. FIRM (OR BRANCH OFFICE) NAME Jacobs Jacobs Engineering Group Inc.		3. YEAR ESTABLISHED 1947	4. UNIQUE ENTITY IDENTIFIER 623838237
2b. STREET 1003 Bishop Street, Pauahi Tower, Suite 1340		5. OWNERSHIP a. TYPE Corporation	
2c. CITY Honolulu	2d. STATE HI	2e. ZIP CODE 96813	b. SMALL BUSINESS STATUS
6a. POINT OF CONTACT NAME AND TITLE John Padre, AICP, Principal-In-Charge		7. NAME OF FIRM (If block 2a is branch office) ***Jacobs Engineering Group Inc.*** DUNS# 074103508	
6b. TELEPHONE NUMBER 808.440.0229	6c. E-MAIL ADDRESS John.Padre@jacobs.com		

8a. FORMER FIRM NAME(S) (If any)	8b. YR. ESTABLISHED	8c. UNIQUE ENTITY IDENTIFIER

9. EMPLOYEES BY DISCIPLINE*

a. Function Code	b. Discipline	c. No. of Employees (1) FIRM	c. No. of Employees (2) BRANCH
002	Administrative	6322	9
006	Architect	1291	5
007	Biologist	221	9
012	Civil Engineer	1989	2
016	Construction Manager	1448	7
018	Cost Engineer/Estimator	572	2
021	Electrical Engineer	1834	2
024	Environmental Scientist	733	7
025	Fire Protection Engineer	119	1
029	Geographic Information System Specialist	351	2
030	Geologist	267	3
047	Planner: Urban/Regional	1031	4
048	Project Manager	5099	5
915	Project Controls	1350	19
914	QA/QC Specialist	999	8
939	Technologist	1066	2
060	Transportation Engineer	1870	2
062	Water Resources Engineer	902	6
	OTHER EMPLOYEES	33452	14
	Total	**60916****	**109**

10. PROFILE OF FIRM'S EXPERIENCE AND ANNUAL REVENUE FOR LAST 5 YEARS*

a. Profile Code	b. Experience	c. Revenue Index Number *(see below)*
B02	Bridges	10
C15	Construction Management	10
E11	Environmental Planning	10
E12	Environmental Remediation	10
H07	Highways; Streets; Airfield Paving; Parking Lots	10
U01	Unexploded Ordnance Remediation	2
R03	Railroad; Rapid Transit	10
S04	Sewage Collection, Treatment and Disposal	10
S13	Storm Water Handling & Facilities	10
T03	Traffic & Transportation Engineering	10
W02	Water Resources; Hydrology; Ground Water	10
S07	Solid Wastes; Incineration; Landfill	10

11. ANNUAL AVERAGE PROFESSIONAL SERVICES REVENUES OF FIRM FOR LAST 3 YEARS*
(Insert revenue index number shown at right)

a. Federal Work	10
b. Non-Federal Work	10
c. Total Work	10

PROFESSIONAL SERVICES REVENUE INDEX NUMBER

1. Less than $100,000	6. $2 million to less than $5 million
2. $100,000 to less than $250,000	7. $5 million to less than $10 million
3. $250,000 to less than $500,000	8. $10 million to less than $25 million
4. $500,000 to less than $1 million	9. $25 million to less than $50 million
5. $1 million to less than $2 million	10. $50 million or greater

12. AUTHORIZED REPRESENTATIVE
The foregoing is a statement of facts.

a. SIGNATURE	b. DATE June 30, 2024
c. NAME AND TITLE John Padre, AICP, Principal-In-Charge	

**The resources presented in this Part II represent the Jacobs Engineering Group Inc. family of companies inclusive of all Jacobs legal entities mentioned in this submittal.*
***The total employee metrics were last updated in April 2023.*

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