SERVICE PROVIDER AGREEMENT

This SERVICE PROVIDER AGREEMENT ("Agreement") is entered into this ____ day of September, 2022 ("Effective Date"), by and between the CITY OF ALAMEDA, a municipal corporation ("the City"), and NICHOLS CONSULTING ENGINEERS (NCE), CHTD, a Nevada corporation, whose address is 5253 COLLEGE AVENUE, SUITE B, OAKLAND, CALIFORNIA 94618 ("Provider"), in reference to the following facts and circumstances:

RECITALS

- A. The City is a municipal corporation duly organized and validly existing under the laws of the State of California with the power to carry on its business as it is now being conducted under the statutes of the State of California and the Charter of the City.
- B. The City is in need of the following services: On-Call Complete Streets Engineering Services. City staff issued an RFP on June 23, 2022, and after a submittal period of twenty-six days received Twelve timely submitted proposals. Staff reviewed the proposals, interviewed qualified firms and selected the service provider that best meets the City's needs.
- C. Provider possesses the skill, experience, ability, background, certification and knowledge to provide the services described in this Agreement on the terms and conditions described herein.
- D. The City and Provider desire to enter into an agreement for On-Call Complete Streets Engineering Services, upon the terms and conditions herein.

AGREEMENT

NOW, THEREFORE, in consideration of the forgoing, which are incorporated herein by reference, and for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the City and Provider agree as follows:

1. TERM:

The term of this Agreement shall commence on the ____ day of September 2022, and shall terminate on the ____ day of September 2027, unless terminated earlier as set forth herein.

2. SERVICES TO BE PERFORMED:

Provider agrees to do all necessary work at its own cost and expense, to furnish all labor, tools, equipment, materials, except as otherwise specified, and to do all necessary work included in Exhibit A as requested. Provider acknowledges that the work plan included in Exhibit A is tentative and does not commit the City to request Provider to perform all tasks included therein.

3. COMPENSATION TO PROVIDER:

a. By the 7th day of each month, Provider shall submit to the City an invoice for the total amount of work done the previous month. Pricing and accounting of charges are to be

according to the fee schedule as set forth in <u>Exhibit B</u> and incorporated herein by this reference. Extra work must be approved in writing by the City Manager or their designee prior to performance and shall be paid on a Time and Material basis as set forth in <u>Exhibit B</u>.

The total five-year compensation for this Agreement shall not exceed \$2,500,000.

4. TIME IS OF THE ESSENCE:

Provider and the City agree that time is of the essence regarding the performance of this Agreement.

5. **STANDARD OF CARE**:

Provider agrees to perform all services hereunder in a manner commensurate with the prevailing standards of like professionals or service providers, as applicable, in the San Francisco Bay Area and agrees that all services shall be performed by qualified and experienced personnel who are not employed by the City.

6. <u>INDEPENDENT PARTIES</u>:

Provider hereby declares that Provider is engaged as an independent business and Provider agrees to perform the services as an independent contractor. The manner and means of conducting the services and tasks are under the control of Provider except to the extent they are limited by statute, rule or regulation and the express terms of this Agreement. No civil service status or other right of employment will be acquired by virtue of Provider's services. None of the benefits provided by the City to its employees, including but not limited to unemployment insurance, workers' compensation plans, vacation and sick leave, are available from the City to Provider, its employees or agents. Deductions shall not be made for any state or federal taxes, FICA payments, PERS payments, or other purposes normally associated with an employer-employee relationship from any compensation due to Provider. Payments of the above items, if required, are the responsibility of Provider.

7. IMMIGRATION REFORM AND CONTROL ACT (IRCA):

Provider assumes any and all responsibility for verifying the identity and employment authorization of all of its employees performing work hereunder, pursuant to all applicable IRCA or other federal, or state rules and regulations. Provider shall indemnify, defend, and hold the City harmless from and against any loss, damage, liability, costs or expenses arising from any noncompliance of this provision by Provider.

8. **NON-DISCRIMINATION:**

Consistent with the City's policy and state and federal law that harassment and discrimination are unacceptable conduct, Provider and its employees, contractors, and agents shall not harass or discriminate against any job applicant, City employee, or any other person on the basis of any kind of any statutorily (federal, state or local) protected class, including but not limited to: race, religious creed, color, national origin, ancestry, disability (both mental and physical) including HIV and AIDS, medical condition (e.g. cancer), genetic information, marital status, sex, gender, gender identity, gender expression, age, sexual orientation, pregnancy,

political affiliation, military and veteran status or legitimate union activities. Provider agrees that any violation of this provision shall constitute a material breach of this Agreement.

9. <u>HOLD HARMLESS</u>:

- a. To the fullest extent permitted by law, Provider shall indemnify, defend (with counsel acceptable to the City) and hold harmless the City, its City Council, boards, commissions, officials, employees, agents and volunteers ("Indemnitees") from and against any and all loss, damages, liability, obligations, claims, suits, judgments, costs and expenses whatsoever, including reasonable attorney's fees and costs of litigation ("Claims"), arising from or in any manner connected to Provider's performance of its obligations under this Agreement or out of the operations conducted by Provider even if the City is found to have been negligent. If the Claims filed against Indemnitees allege negligence, recklessness or willful misconduct on the part of Provider, Provider shall have no right of reimbursement against Indemnitees for the costs of defense even if negligence, recklessness or willful misconduct is not found on the part of Provider. Provider shall not have any obligations to indemnify Indemnitees if the loss or damage is found to have resulted solely from the negligence or the willful misconduct of the City. The defense and indemnification obligations of this Agreement are undertaken in addition to, and shall not in any way be limited by, the insurance obligations contained in this Agreement.
- b. As to Claims for professional liability only, Provider's obligation to indemnify and defend Indemnitees (as set forth above) is limited as provided in California Civil Code Section 2782.8.
- c. Provider's obligation to indemnify, defend and hold harmless Indemnities shall expressly survive the expiration or early termination of this Agreement.

10. <u>INSURANCE</u>:

a. On or before the commencement of the terms of this Agreement, Provider shall furnish the City's Risk Manager with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of insurance coverage in compliance with Sections 10.b. (1) through (4) Such certificates, which do not limit Provider's indemnification, shall also contain substantially the following statement:

"Should any of the above insurance covered by this certificate be canceled or coverage reduced before the expiration date thereof, the insurer affording coverage shall provide thirty (30) days' advance written notice to the City of Alameda. Attention: Risk Manager."

Provider shall maintain in force at all times during the performance of this Agreement all appropriate coverage of insurance required by this Agreement with an insurance company licensed to offer insurance business in the State of California with a current A.M. Best's rating of no less than A:VII or Standard & Poor's Rating (if rated) of at least BBB unless otherwise acceptable to the City. Provider shall deliver updated insurance certificates to the City at the address described in Section 17.f. prior to the expiration of the existing insurance certificate for the duration of the term of Agreement. Endorsements naming the City, its City Council, boards,

commissions, officials, employees, agents, and volunteers as additional insured shall be submitted with the insurance certificates.

Provider Initials

b. COVERAGE REQUIREMENTS:

Provider shall maintain insurance coverage and limits at least as broad as:

(1) Workers' Compensation:

Statutory coverage as required by the State of California.

(2) Liability:

Commercial general liability coverage in the following minimum limits:

Bodily Injury: \$1,000,000 each occurrence

\$2,000,000 aggregate - all other

Property Damage: \$1,000,000 each occurrence

\$2,000,000 aggregate

If submitted, combined single limit policy with per occurrence limits in the amounts of \$2,000,000 and aggregate limits in the amounts of \$4,000,000 will be considered equivalent to the required minimum limits shown above. Additional Insured Endorsement naming the City, its City Council, boards, commissions, officials, employees, agents, and volunteers is required.

(3) Automotive:

Comprehensive automobile liability coverage (any auto) in the following minimum limits:

Bodily injury: \$1,000,000 each occurrence Property Damage: \$1,000,000 each occurrence

or

Combined Single Limit: \$2,000,000 each occurrence

Additional Insured Endorsement naming the City, its City Council, boards, commissions, officials, employees, agents, and volunteers is required.

(4) <u>Professional Liability</u>:

Professional liability insurance which includes coverage appropriate for the professional acts, errors and omissions of Provider's profession and work hereunder, including, but not limited to, technology professional liability errors and omissions if the services being provided are technology-based, in the following minimum limits:

\$2,000,000 each occurrence

Technology professional liability errors and omissions shall include, or be endorsed to include, property damage liability coverage for damage to, alteration of, loss of, or destruction of electronic data and/or information "property" of the City in the care, custody, or control of Provider. If not covered under Provider's liability policy, such "property" coverage of the City may be endorsed onto Provider's Cyber Liability Policy as covered property as follows: cyber liability coverage in an amount sufficient to cover the full replacement value of damage to, alteration of, loss of, or destruction of electronic data and/or information "property" of the City that will be in the care, custody, or control of Provider.

As to commercial general liability and automobile liability insurance, such insurance will provide that it constitutes primary insurance with respect to claims insured by such policy, and, except with respect to limits, that insurance applies separately to each insured against whom claim is made or suit is brought. Such insurance is not additional to or contributing with any other insurance carried by or for the benefit of the City.

c. SUBROGATION WAIVER:

Provider hereby agrees to waive rights of subrogation that any insurer of Provider may acquire from Provider by virtue of the payment of any loss. Provider agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether the City has received a waiver of subrogation endorsement from the insurer. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by Provider, its employees, agents and subcontractors.

d. FAILURE TO SECURE:

If Provider at any time during the term hereof should fail to secure or maintain the foregoing insurance, the City shall be permitted to obtain such insurance in Provider's name or as an agent of Provider and shall be compensated by Provider for the costs of the insurance premiums at the maximum rate permitted by law and computed from the date written notice is received that the premiums have not been paid.

e. ADDITIONAL INSUREDS:

The City, its City Council, boards, commissions, officials, employees, agents, and volunteers shall be named as additional insured(s) under all insurance coverages, except workers' compensation and professional liability insurance. The naming of an additional insured shall not affect any recovery to which such additional insured would be entitled under this policy if not named as such additional insured. An additional insured named herein shall not be held liable for any premium, deductible portion of any loss, or expense of any nature on this policy or any extension thereof. Any other insurance held by an additional insured shall not be required to contribute anything toward any loss or expense covered by the insurance provided by this policy. Additional Insured coverage under Provider's policy shall be primary and non-contributory and will not seek contribution from the City's insurance or self-insurance. Any available insurance proceeds broader than or in excess of the specified minimum insurance coverage requirements and/or limits shall be available to the additional insured(s).

E. <u>SUFFICIENCY OF INSURANCE</u>:

The insurance limits required by the City are not represented as being sufficient to protect Provider. Provider is advised to consult Provider's insurance broker to determine adequate coverage for Provider. The coverage and limits shall be (1) the minimum coverage and limits specified in this Agreement; or (2) the broader coverage and maximum limits of the coverage carried by or available to Provider; whichever is greater.

11. <u>CONFLICT OF INTEREST</u>:

Provider warrants that it is not a conflict of interest for Provider to perform the services required by this Agreement. Provider may be required to fill out a conflict of interest form if the services provided under this Agreement require Provider to make certain governmental decisions or serve in a staff capacity as defined in Title 2, Division 6, Section 18700 of the California Code of Regulations.

12. PROHIBITION AGAINST TRANSFERS:

- a. Provider shall not assign, sublease, hypothecate, or transfer this Agreement, or any interest therein, directly or indirectly, by operation of law or otherwise, without prior written consent of the City Manager. Provider shall submit a written request for consent to transfer to the City Manager at least thirty (30) days in advance of the desired transfer. The City Manager or their designee may consent or reject such request in their sole and absolute discretion. Any attempt to do so without said consent shall be null and void, and any assignee, sublessee, hypothecate or transferee shall acquire no right or interest by reason of such attempted assignment, hypothecation or transfer. However, claims for money against the City under this Agreement may be assigned by Provider to a bank, trust company or other financial institution without prior written consent.
- b. The sale, assignment, transfer or other disposition of any of the issued and outstanding capital stock, membership interest, partnership interest, or the equivalent, which shall result in changing the control of Provider, shall be construed as an assignment of this Agreement. Control means fifty percent or more of the voting power of Provider.

13. <u>APPROVAL OF SUB-PROVIDERS</u>:

- a. Only those persons and/or businesses whose names and resumés are attached to this Agreement shall be used in the performance of this Agreement. However, if after the start of this Agreement, Provider wishes to use sub-providers, at no additional costs to the City, then Provider shall submit a written request for consent to add sub-providers including the names of the sub-providers and the reasons for the request to the City Manager at least five (5) days in advance. The City Manager may consent or reject such requests in their sole and absolute discretion.
- b. Each sub-provider shall be required to furnish proof of workers' compensation insurance and shall also be required to carry general, automobile and professional liability insurance (as applicable) in reasonable conformity to the insurance carried by Provider.

- c. In addition, any tasks or services performed by sub-providers shall be subject to each provision of this Agreement. Provider shall include the following language in their agreement with any sub-provider: "Sub-providers hired by Provider agree to be bound to Provider and the City in the same manner and to the same extent as Provider is bound to the City."
- d. The requirements in this Section 13 shall <u>not</u> apply to persons who are merely providing materials, supplies, data or information that Provider then analyzes and incorporates into its work product.

14. **PERMITS AND LICENSES:**

Provider, at its sole expense, shall obtain and maintain during the term of this Agreement, all appropriate permits, certificates and licenses, including a City business license that may be required in connection with the performance of the services and tasks hereunder.

15. REPORTS:

- a. Each and every report, draft, work product, map, record and other document produced, prepared or caused to be prepared by Provider pursuant to or in connection with this Agreement shall be the exclusive property of the City.
- b. No report, information or other data given to or prepared or assembled by Provider pursuant to this Agreement shall be made available to any individual or organization by Provider without prior approval of the City Manager or their designee.
- c. Provider shall, at such time and in such form as City Manager or their designee may require, furnish reports concerning the status of services and tasks required under this Agreement.

16. <u>RECORDS</u>:

- a. Provider shall maintain complete and accurate records with respect to the services, tasks, work, documents and data in sufficient detail to permit an evaluation of Provider's performance under the Agreement, as well as maintain books and records related to sales, costs, expenses, receipts and other such information required by the City that relate to the performance of the services and tasks under this Agreement (collectively the "**Records**").
- b. All Records shall be maintained in accordance with generally accepted accounting principles and shall be clearly identified and readily accessible. Provider shall provide free access to the Records to the representatives of the City or its designees during regular business hours upon reasonable prior notice. The City has the right to examine and audit the Records, and to make copies or transcripts therefrom as necessary, and to allow inspection of all proceedings and activities related to this Agreement. Such Records, together with supporting documents, shall be kept separate from other documents and records and shall be maintained by Provider for a period of three (3) years after receipt of final payment.
- c. If supplemental examination or audit of the Records is necessary due to concerns raised by the City's preliminary examination or audit of records, and the City's supplemental

examination or audit of the records discloses a failure to adhere to appropriate internal financial controls, or other breach of this Agreement or failure to act in good faith, then Provider shall reimburse the City for all reasonable costs and expenses associated with the supplemental examination or audit.

17. NOTICES:

- a. All notices shall be in writing and delivered: (i) by hand; or (ii) sent by registered, express, or certified mail, with return receipt requested or with delivery confirmation requested from the U.S. postal service; or (iii) sent by overnight or same day courier service at the party's respective address listed in this Section.
- b. Each notice shall be deemed to have been received on the earlier to occur of: (x) actual delivery or the date on which delivery is refused; or (y) three (3) days after notice is deposited in the U.S. mail or with a courier service in the manner described above (Sundays and City holidays excepted).
- c. Either party may, at any time, change its notice address (other than to a post office box address) by giving the other party three (3) days prior written notice of the new address.
- d. All notices, demands, requests, or approvals from Provider to the City shall be addressed to the City at:

City of Alameda Public Works Department 950 West Mall Square, Room 110 Alameda, CA 94501

ATTENTION: Tawfic N. Halaby, Supervising Civil Engineer

Ph: (510) 747-7937 / Cell: (510) 381-8963

Email: thalaby@alamedaca.gov

e. All notices, demands, requests, or approvals from the City to Provider shall be addressed to Provider at:

Nichols Consulting Engineers (NCE), CHTD Infrastructure Engineering Group 5253 College Avenue, Suite B Oakland, CA 94618

ATTENTION: J. Ryan Shafer, Principal

Phone: (510) 215-3620 / Email: RShafer@ncenet.com

f. All updated insurance certificates from Provider to the City shall be addressed to the City at:

City of Alameda Public Works Department 950 West Mall Square, Room 110 Alameda, CA 94501 ATTENTION: Jeanette Navarro, Engineering Office Assistant

Ph: (510) 747-7932 / Email: jnavarro@alamedaca.gov

SAFETY:

- a. Provider will be solely and completely responsible for conditions of all vehicles owned or operated by Provider, including the safety of all persons and property during performance of the services and tasks under this Agreement. This requirement will apply continuously and not be limited to normal working hours. In addition, Provider will comply with all safety provisions in conformance with U.S. Department of Labor Occupational Safety and Health Act, any equivalent state law, and all other applicable federal, state, county and local laws, ordinances, codes, and any regulations that may be detailed in other parts of the Agreement. Where any of these are in conflict, the more stringent requirements will be followed. Provider's failure to thoroughly familiarize itself with the aforementioned safety provisions will not relieve it from compliance with the obligations and penalties set forth herein.
- b. Provider will immediately notify the City within 24 hours of any incident of death, serious personal injury or substantial property damage that occurs in connection with the performance of this Agreement. Provider will promptly submit to the City a written report of all incidents that occur in connection with this Agreement. This report must include the following information: (i) name and address of injured or deceased person(s); (ii) name and address of Provider's employee(s) involved in the incident; (iii) name and address of Provider's liability insurance carrier; (iv) a detailed description of the incident; and (v) a police report.

19. TERMINATION:

- a. In the event Provider fails or refuses to perform any of the provisions hereof at the time and in the manner required hereunder, Provider shall be deemed in default in the performance of this Agreement. If such default is not cured within two (2) business days after receipt by Provider from the City of written notice of default, specifying the nature of such default and the steps necessary to cure such default, the City may thereafter immediately terminate the Agreement forthwith by giving to Provider written notice thereof.
- b. The foregoing notwithstanding, the City shall have the option, at its sole discretion and without cause, of terminating this Agreement by giving seven (7) days' prior written notice to Provider as provided herein.
- c. Upon termination of this Agreement either for cause or for convenience, each party shall pay to the other party that portion of compensation specified in this Agreement that is earned and unpaid prior to the effective date of termination. The obligation of the parties under this Section 19.c. shall survive the expiration or early termination of this Agreement.

20. ATTORNEYS' FEES:

In the event of the bringing of any action or suit by a party hereto against the other party by reason of any breach of any covenants, conditions, obligation or provision arising out of this Agreement, the prevailing party shall be entitled to recover from the non-prevailing party all of its costs and expenses of the action or suit, including reasonable attorney's fees, experts' fees, all court costs and other costs of action incurred by the prevailing party in connection with the prosecution or defense of such action and enforcing or establishing its rights hereunder (whether or not such action is prosecuted to a judgment). For the purposes of this Agreement, reasonable fees of attorneys of the Alameda City Attorney's office shall be based on the fees regularly charged by private attorneys with the equivalent number of years of experience in the subject matter area of the law for which the services were rendered who practice in Alameda County in law firms with approximately the same number of attorneys as employed by the Alameda City Attorney's Office.

21. <u>HEALTH AND SAFETY REQUIREMENTS.</u>

Provider acknowledges that the City shall have the right to impose, at the City's sole discretion, requirements that it deems are necessary to protect the health and safety of the City employees, residents, and visitors. Provider agrees to comply with all such requirements, including, but not limited to, mandatory vaccinations, the use of personal protective equipment (e.g. masks), physical distancing, and health screenings. Provider also agrees to make available to the City, at the City's request, records to demonstrate Provider's compliance with this Section. [See Certification of Compliance attached.]

22. <u>COMPLIANCE WITH ALL APPLICABLE LAWS:</u>

During the term of this Agreement, Provider shall keep fully informed of all existing and future state and federal laws and all municipal ordinances and regulations of the City of Alameda which affect the manner in which the services or tasks are to be performed by Provider, as well as all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same. Provider shall comply with all applicable laws, state and federal and all ordinances, rules and regulations enacted or issued by the City.

23. <u>CONFLICT OF LAW:</u>

This Agreement shall be interpreted under, and enforced by the laws of the State of California without regard to any choice of law rules which may direct the application of laws of another jurisdiction. The Agreement and obligations of the parties are subject to all valid laws, orders, rules, and regulations of the authorities having jurisdiction over this Agreement (or the successors of those authorities). Any suits brought pursuant to this Agreement shall be filed with the courts of the County of Alameda, State of California.

24. WAIVER:

A waiver by the City of any breach of any term, covenant, or condition contained herein shall not be deemed to be a waiver of any subsequent breach of the same or any other term, covenant, or condition contained herein, whether of the same or a different character.

25. INTEGRATED CONTRACT:

Subject to the language of Section 30, the Recitals and exhibits are a material part of this Agreement and are expressly incorporated herein. This Agreement represents the full and complete understanding of every kind or nature whatsoever between the parties hereto, and all preliminary negotiations and agreements of whatsoever kind or nature are merged herein. No verbal agreement or implied covenant shall be held to vary the provisions hereof. Any modification of this Agreement will be effective only by written execution signed by both the City and Provider.

<u>CAPTIONS</u>:

The captions in this Agreement are for convenience only, are not a part of the Agreement and in no way affect, limit or amplify the terms or provisions of this Agreement.

27. <u>COUNTERPARTS</u>:

This Agreement may be executed in any number of counterparts (including by fax, PDF, DocuSign, or other electronic means), each of which shall be deemed an original, but all of which shall constitute one and the same instrument.

28. SIGNATORY:

By signing this Agreement, signatory warrants and represents that they executed this Agreement in their authorized capacity and that by their signature on this Agreement, they or the entity upon behalf of which they acted, executed this Agreement.

29. <u>CONTROLLING AGREEMENT</u>:

In the event of a conflict between the terms and conditions of this Agreement (as amended, supplemented, restated or otherwise modified from time to time) and any other terms and conditions wherever contained, including, without limitation, terms and conditions included within exhibits, the terms and conditions of this Agreement shall control and be primary.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties have each caused this Agreement to be duly executed on its behalf as of the Effective Date.

NICHOLS CONSULTING ENGINEERS, CHTD a Nevada Corporation

CITY OF ALAMEDA a municipal corporation

Margot Yapp President

Nancy Bronstein
Interim City Manager

Gregory L. Fasiano Principal and Secretary RECOMMENDED FOR APPROVAL

—Docusigned by: Evin Smith

Public Works Director

APPROVED AS TO FORM: City Attorney

- DocuSigned by:

765D25E39B18464..

Assistant City Attorney

Certification of Compliance With the City of Alameda's Vaccination Requirement

The City of Alameda ("City") requires all individuals who perform work for the City to be fully vaccinated against COVID-19. All service providers and contractors for the City must sign the following statement certifying compliance with this requirement.

By signing below, I certify that all of our personnel who are performing work for the City are fully vaccinated against COVID-19. I also acknowledge that the City reserves the right to review any relevant records to demonstrate our compliance with this requirement. I declare under penalty of perjury that the foregoing is true and correct.

Date: 8-29-2022

Nichols Consulting Engineers (NCE), CHTD

By: Margot Yapp
Its President

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¹ For the purposes of this Certification of Compliance, an individual is considered to be fully vaccinated if two weeks have passed since their second dose in a 2-dose series (such as the Pfizer or Moderna vaccines) or if two weeks have passed since receiving their single-dose vaccine (such as Johnson & Johnson's Janssen vaccine).



PROPOSAL TO PROVIDE Complete Streets Engineering Services July 18, 2022





Submitted By:

NCE

5253 College Avenue, Suite B Oakland, CA 94618 (510) 215-9189



Collaboration. Commitment, Confidence.

July 18, 2022

Mr. Tawfic Halaby Supervising Civil Engineer City of Alameda 950 West Mall Square, Room 110 Alameda, CA 94501

Proposal sent via email to: thalaby@alamedaca.gov, and pw@alamedaca.gov

Proposal to Provide Complete Streets Engineering Services

Dear Mr. Halaby and Members of the Selection Committee:

The City of Alameda (City) is experiencing an exciting period of growth with redevelopment of the Naval base and waterfront areas, housing infill projects, and key investments in retail centers and tourism. As the City grows and evolves so do the needs of the City's street system. The City has taken complete street approach with street rehabilitation and maintenance projects that focuses on rethinking and balancing vehicular travel with bicycles pedestrian safety as part of the Cities Vision Zero, ADA access, and transit riders. These street improvements also provide with smooth, reliable, and safe riding/walking surfaces to support multi-modal transportation, commerce, recreation, the general needs of the community, and adaptation to climate change.

The NCE team sees our primary role for this on-call service area to be a partner with the City on pavement management/street selection and initial planning to pavement design, civil and traffic engineering design, all the way through construction support. These projects will include preventive maintenance, rehabilitation, and reconstruction projects that can include bicycle and pedestrian facilities, ADA compliance, green infrastructure and stormwater improvements, landscaping, traffic calming, roundabouts, traffic signals, site grading and utility repairs/replacement. We know that City staff are busy therefore need a consultant team that is highly responsive and self-initiating and is capable of moving design projects forward with less effort and time from City staff.

NCE is a client-focused professional consulting firm integrating the disciplines of civil engineering, pavement engineering, landscape architecture, science, and regulatory compliance and environmental services firm, and is well-known for expertise in developing and designing pavement maintenance and resurfacing/rehabilitation and complete street projects for public agencies all throughout California.

As a resident, Ryan Shafer, our Principal and proposed Project Manager for this oncall contract, has a close connection with the City, its staff, and projects in Alameda. Having lived in Alameda for over 17-years, Ryan knows the local issues, has children in Alameda schools, is an avid bicyclists and runner in the City, is working currently with City staff on safe route to schools, complete streets, and park facilities, and is always looking for ways to help the City in any way he can. The NCE team provides the following benefits and distinguishing features to deliver the City's projects:

Existing proven collaborative relationship with City of Alameda (City) staff on complete streets, pedestrian pathways, safe route to schools, and green infrastructure and Bay Area Municipal Regional Permit (MRP) compliance.

- A. Entity Information:
 Nichols Consulting Engineers,
 Chtd. (NCE)
 5253 College Avenue, #B
 Oakland, CA 94618
 Telephone: (510) 215-9189
 Facsimile: (510) 215-2898
 Corporation providing civil engineering, environmental, and landscape architecture consulting services.
- B. Availability: NCE's key personnel will be committed and available as projects arise throughout this contract.
- C. Minimum qualifications: Firm founded in 1990; exceeds the minimum qualifications. NCE is registered with the California Secretary of State and is in good standing.
- D. Adhere to RFP provisions: NCE intends to adhere to the scope of work outlined in the RFP.
- Service provider agreement: Please see next page.
- F. Legal representative of NCE:
 J. Ryan Shafer, PE, GE, Principal
 Telephone: (510) 333-7684
 Email: RShafer@ncenet.com
 This proposal is valid for
 90 calendar days from the
 date of its submittal.

Oakland, CA 5253 College Avenue, Suite 8 Oakland, CA 94618 (510) 250-9189

- Experience designing thousands of roadways including complete street design throughout California.
- Tailored designs that balance practical and buildable solutions, sustainability and green infrastructure, multimodal transportation needs, safety, and community needs.
- Integrated landscape architecture practice distinguished by multi-disciplinary approach.
- Experience with infrastructure design and maintenance along shorelines with sea level rise considerations.
- Delivered more than 20 federally-funded projects obtaining E-76 for Construction.
- Interdisciplinary approach integrating in-house pavement management, civil and pavement design, regulatory compliance, and environmental services.

E. Service provider agreement:

NCE has reviewed the City of Alameda standard service provider agreement and insurance requirements provided as Attachment B to your request for qualifications for on-call complete streets engineering services. NCE meets the insurance requirements. After careful consideration, we would appreciate the opportunity to discuss the changes noted below. The proposed indemnification changes are requested to meet the requirements of SB496. Additionally, if the services being provided are technology-based, NCE is not aware of a Cyber Liability insurance requirement in agreement article 10.b.(4), Cyber Liability, with the many other public agency contracts that NCE has reviewed. NCE would request clarification as to nature of the Cyber Liability requirement from the City and then we can evaluate with our insurance provider if this is covered within our existing insurance and if necessary, modify existing and/or obtain this insurance if warranted and required.

9. HOLD HARMLESS: a. To the fullest extent permitted by law, Provider shall indemnify, reimburse apportioned costs to defend (with counsel acceptable to the City) and hold harmless the City, its City Council, boards, commissions, officials, and employees, agents and volunteers ("Indemnitees") from and against pure economic any and all loss, damages, liability, obligations, claims, suits, judgments, costs and expenses whatsoever, including reasonable attorney's fees and costs of litigation ("Claims"), arising from or in any manner connected to the extent caused by the gross negligence or willful misconduct during Provider's performance of its obligations under this Agreement or out of the operations conducted by Provider even If the City is found to have been negligent. If the Claims filed against Indemnitees allege negligence, recklessness or willful misconduct on the part of Provider, Provider shall have no right of reimbursement against Indemnitees for the costs of defense even If negligence, recklessness or willful misconduct is not found on the part of Provider. Provider shall not have any obligations to indemnify Indemnitees if the loss or damage is found to have resulted solely from the negligence or the willful misconduct of the City. The defense and indemnification obligations of this Agreement are undertaken in addition to, and shall not in any way be limited by, the insurance obligations contained in this Agreement.

Closing:

NCE acknowledges receipt of Addendum No. 1, dated July 12th, 2022, which has been reviewed, signed and included as an attachment to Appendix A. The NCE team is prepared to deliver on the City's capital improvement projects. As a Principal with NCE, I am authorized to sign contracts on behalf of NCE and will be the point of contact should you have questions, as well as the person who will receive task orders and correspondence. I can be reached via phone at (510) 250-9189 or email at RShafer@ncenet.com. NCE looks forward to your favorable review of our qualifications and the opportunity to continue working with the City of Alameda.

Sincerely,

J. Ryan Shife

J. Ryan Shafer, PE, GE

Principal

City of Alameda Proposal to Provide Complete Streets Engineering Services July 18, 2022



Relevant Experience of Key Personnel and the Firm

Key Personnel Experience

NCE brings a collaborative and problem-solving mentality, serving as partners with Cities to improve community streets. As Project Manager and resident of Alameda, Ryan Shafer, PE, GE, will continue to be the primary point of contact, and his style of management is to communicate regularly with the City on projects. As a resident of Alameda since 2005, Alameda is

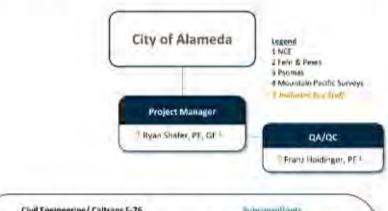
particularly special to Ryan and is ready and willing to assist the City. Ryan is very familiar with the transportation network; traffic demands and conditions on and off the island and need for modernization of infrastructure to meet City Vision Zero policies. He is also aware of the opportunities and challenges with maintaining streets and infrastructure particularly at the former Naval Base, how to effectively manage the City's pavements with new treatment strategies balancing cost and performance, addressing multi-modal design, and the City vulnerabilities to sea level rise, tides, wave run-up, and general drainage and stormwater treatment issues.



Ryan has over 22 years of civil design and project management experience, including engineering projects related to complete streets, street maintenance and rehabilitation, infrastructure asset management, bike and pedestrian facilities, trails, parking areas, recreation areas and parks, ADA compliance, drainage, site development, and utilities. Ryan is an experienced Principal and Project Manager that is highly skilled in managing interdisciplinary teams of engineers, scientists, and planners.

We have assembled a team of professionals with demonstrated experience providing the services for similar for similar and relevant types of projects including civil design, landscape architecture, pavement asset management, pavement testing and design, hydrology and hydraulics for stormwater assessment and design, environmental documents (CEQA/NEPA) including Caltrans NEPA Clearance and E-76, regulatory compliance and permitting, as well as hazardous materials and contamination of groundwater and soils from past land uses.

We have also as you might say kept the band together and maintained the same dedicated team, we have been working on the Grand Street Rehabilitation and Complete Street Project with Fehr & Peers as our traffic engineer who can assist with all traffic engineering elements on complete street projects from planning to design. NCE has worked successfully on numerous street rehabilitation and complete street projects with Fehr & Peers over the last 12+ years and hold their staff in high regard and they work seamlessly as an extension of our staff.



Civil Engineering/Caltrans E-75

Victor Lemus, PE - Divil Engineering Lead 1 Sara Dowling, EIT - Civil Engineering Lead V

Pavement Engineering

James Signorg, PhD, PE - Flexible Pavement 1 T Tom Van Dam, PhD, PE - Rigid Pavement 1 Mel Hui Lee, PhD, PE - Pavement Management and Design

Landscape Architecture Matthew Gaber, PLA.

Hydrology and Hydraulics/ Stormwater Mary Horvath, PE, CFM, QSP1

CEQA/NEPA

Gall Fivin, PhD - CEQA/NEPA Lead !

Regulatory Compliance/ Permitting Debra Lemke, PWS, CPESC 1

Bubs principlants

Traffic and Electrical Engineering

Febr & Peers ? Nate Levine, PE

Ryan McClain, PE. 11

Subsurface Utility Detection Promas

Tom Pilarski, PLS

Surveying and Mapping

Mountain Pacific Surveys Charles Weakley, PLS

Additional Technical Resources

Engineers, CAD Designers, Riplogists, Scientists, Cultural Resource Specialists, Planners, Landscape Architects, Hazardous Materials Specialists, and Geologists

Our key personnel will be available as projects arise throughout this contract. In addition to our key personnel, the NCE team includes a variety of technical professionals who will support our key staff in delivering multidisciplinary projects. The organization chart directly above shows our overall team structure and defines relationships among disciplines and tasks. Qualification summaries for key personnel follow and their resumes are provided in the Resumes section of this document.



Proposal to Provide Complete Streets Engineering Services

July 18, 2022

City of Alameda

I. Ryan Shafer, PE, GE - Project Manager



Years of Experience: 22 Highest Degree: MS, Geotechnical Eng. Licenses/Registrations: Professional Engineer -Civil, CA #62349 Professional Geotechnical Engineer - CA #2713

Qualifications:

- · Experienced leader of large, complex multidisciplinary infrastructure, roadway and complete street projects.
- · Adds value by helping clients manage and maintain their streets/roads trails, bicycle and pedestrian facilities, and recreational areas.
- Extensive experience managing a range of public and private projects, including vertical development; understands working with diverse project types.
- Develops creative design solutions and approaches to value engineer projects and bring construction costs back within budgets.
- Provides value to clients by acting as a steward and partner on public projects and finding ways to improve the communities he lives and works.

Relevant Experience:

- Grand Street OBAG Z Rehabilitation Project, City of Alameda, CA
- Safe Routes to School, Fehr & Peers/City of Alameda, CA
- Annual Overlay/Rehabilitation, Pavement Design and PS&E, City of San Leandro, CA
- Rumrill Boulevard Complete Streets and Green Infrastructure, City of San Pablo, CA
- University/Marina/Spinnaker Street Improvement Project and CEQA, City of Berkeley, CA

Franz Haidinger, PE - Quality Assurance & Quality Control (QA/QC) Manager



Years of Experience; 22 Highest Degree: MS, Civil Engineering Licenses/Registrations: Professional Engineer -Civil, CA #64725; NV #19430

Qualifications:

- Serves as Principal/Chief Engineer responsible for overseeing, managing, and developing designs and PS&Es for various roadway and complete street improvement projects.
- Specializes in pavement and roadway design, pavement rehabilitation projects, complete streets, sustainable pavement technologies, and low-impact development features.
- Ensures quality assurance and quality control is implemented throughout each project.
- Provides QA/QC, develops engineering standards for NCE and oversees the firm's quality assurance program, critically reviews for constructability, and focuses on making construction documents practical and clear for bidding.

Relevant Experience:

- Grand Street OBAG Z Rehabilitation Project, City of Alameda, CA
- University/Marina/Spinnaker Street Improvement Project and CEQA, City of Berkeley, CA
- Yellow Brick Road Complete Streets Project, City of Richmond, CA
- Pavement Rehabilitation/Maintenance and Bikeway Improvements, Presidio Trust, CA
- Castro Ranch Road Rehab and Complete Streets Improvements, City of Richmond, CA

Victor Lemus, PE - Civil Engineering Lead/Caltrans E-76



Years of Experience: 7 Highest Degree: BS, Civil & Env. Engineering Licenses/Registrations: Professional Engineer -Civil, CA #89769

Qualifications:

- Serves as Project Manager as well as Civil Design Lead on large, multi-discipline street rehabilitation/resurfacing projects, particularly on projects requiring complete street elements and complicated ADA improvements.
- Expertise with ADA design with curb ramp and bulb-outs as part of significant roadway rehabilitation projects on streets throughout Northern California that often include difficult grades, utility issues, tight ROW constraints, and in some cases require consideration of design exceptions.
- Experience preparing E-76 for Construction including NEPA clearance with Preliminary Environmental Study and Field Review, ROW Certification, and E-76 Documents.

Relevant Experience:

- Rumrill Boulevard Complete Streets and Green Infrastructure, City of San Pablo, CA
- · Yellow Brick Road Complete Streets Project, City of Richmond, CA
- 2017/22 Street Surface Seal and Rehabilitation Projects, City of South San Francisco, CA
- Castro Ranch Road Rehab and Complete Streets Improvements, City of Richmond, CA

Sara Dowling - Civil Engineering Lead



Years of Experience: 5 Highest Degree: BS, Civil Engineering Licenses/Registrations: Engineer-in-Training, CA #158072

Qualifications

- Involved as both Lead and Staff Civil Designer for roadway rehabilitation and complete
 projects including bike and pedestrian facilities and striping, ADA compliant sidewalks and
 curb ramps, bus stops and platforms, roundabouts, complete streets, drainage and green
 infrastructure facilities, curb and gutter replacement, and roadway widening.
- Effective communicator involved with community outreach on street rehabilitation and complete street projects
- Expertise in civil and CAD design, knowledge of applicable design guidelines and requirements, consistent follow-up, and high level of responsiveness.

Relevant Experience:

- Grand Street OBAG 2 Rehabilitation Project, City of Alameda, CA
- Yellow Brick Road Complete Streets, City of Richmond, CA
- . Rumrill Boulevard Complete Streets and Green Infrastructure, City of San Pablo, CA
- · Annual Overlay/Rehabilitation, Pavement Design and PS&E, City of San Leandro, CA
- · Pavement Rehabilitation/Maintenance and Bikeway Improvements, Presidio Trust, CA

James Signore, PhD, PE - Flexible Pavement Design



Years of Experience: 25 Highest Degree: PhD, Civil Engineering Licenses/Registrations: Professional Engineer — Civil, CA #62647

Qualifications:

- Principal Pavement Engineer with experience in pavement design and evaluation, rehabilitation and maintenance, materials assessment, training, and technical report review for complex pavement engineering projects.
- Brings practical research experience and technical knowledge to develop an understanding
 of client needs for pavement design and rehabilitation strategies.
- Expertise in designing pavements for many local agencies and is well versed in state and local pavement practices and specifications.
- Taught graduate courses in pavement engineering at California State University at San Jose.
 Relevant Experience:
- Grand Street OBAG 2 Rehabilitation Project, City of Alameda, CA
- On-Call Pavement Engineering, Caltrans, Statewide, CA.
- Castro Ranch Road Rehab and Complete Streets Improvements, City of Richmond, CA
- . Annual Overlay/Rehabilitation, Pavement Design and PS&E, City of San Leandro, CA
- Measure M Street Rehabilitation Program, City of Berkeley, CA

Thomas (Tom) Van Dam, PhD, PE, FACI, LEED AP - Rigid Pavement Design



Years of Experience: 35 Highest Degree: PhD, Civil Engineering Licenses/Registrations: Professional Engineer— Civil, CA #23424 LEED Accredited Professional

Qualifications:

- Principal Engineer leading the way by working with the Federal Highway Administration to guide more sustainable pavement practices and applying his expertise on various projects.
- Specializes in pavement design and evaluation, materials assessment, and sustainability;
 specializes in concrete.
- Major areas of expertise include highway pavement performance, durability, training, and sustainable civil engineering infrastructure.
- Authored more than 75 publications and has given more than 100 presentations on pavements, concrete materials and sustainability.
- Has served as Associate Professor at Michigan Technological University (Michigan Tech) in the areas of construction materials and pavement evaluation, design, and performance.

Relevant Experience:

- 2022 West Highway 101 Pavement Rehabilitation Project, City of South San Francisco, CA
- · Almond Grove District Street Reconstruction, Town of Los Gatos, CA
- · Measure M Street Rehabilitation Program, City of Berkeley, CA
- · On-Call Pavement Engineering, Caltrans, Statewide, CA
- Implementation of Best Practices for Concrete Pavements, FHWA, Nationwide, U.S.

Mei-Hul Lee, PhD, PE - Pavement Management and Design



Years of Experience: 12 Highest Degree: PhD, ClvII Engineering Licenses/Registrations: Professional Engineer – CivII, CA #87635

Qualifications:

- Over 12 years of extensive experience in pavement management and design, evaluation, and maintenance projects.
- Serves as Project Manager and Associate Engineer for a variety of complex pavement and civil design and pavement management projects at NCE.
- Experience includes numerous turnkey implementations and updates of pavement management systems for cities, counties, cand airports throughout California.
- Well-versed with the Metropolitan Transportation Commission's (MTC) StreetSaver® program and has conducted the training workshops for many cities and counties.

Relevant Experience:

- Annual Overlay/Rehabilitation, Pavement Design and PS&E, City of San Leandro, CA
- 2017/22 Street Surface Seal and Rehabilitation Projects, City of South San Francisco, CA
- 2022 West Highway 101 Pavement Rehabilitation Project, City of South San Francisco, CA
- FY20/21 and FY21/22 Pavement Resurfacing Program, City of Pacifica, CA
- Measure M Street Rehabilitation Program, City of Berkeley, CA

Matthew Gaber, PLA - Landscape Architecture



Years of Experience: 32 Highest Degree: MA, Landscape Architecture Licenses/Registrations: Professional Landscape Architect, CA #3740

Qualifications:

- 30+ years of experience in landscape design and visualization for infrastructure projects.
- Provides full-service landscape architecture, urban design, and planning to assist clients in phases of the design and construction process.
- Has a wide perspective on traditional and emerging areas of practice, and is recognized for the creation of bold, thoughtful solutions to complex problems for varied clientele.
- · Works with civil engineering professionals to integrate landscape and infrastructure design.
- Specializes in complex urban projects that require patience, vision, and an ability to listen closely to clients.

Relevant Experience:

- . Bay Ship and Yacht Bay Trall, City of Alameda, CA
- . Hillcrest Park Green Infrastructure and Trash Capture, City of Concord, CA
- Castro Ranch Road Rehabilitation Median Landscape Design, City of Richmond, CA
- South San Francisco Green Infrastructure Study, City of South San Francisco, CA
- 13th Street Complete Streets, City of Richmond, CA
- . Wildcat Creek Trail, City of San Pablo, CA

Mary Horvath, PE, CFM, QSP - Hydrology and Hydraulics/Storm Drainage



Years of Experience: 24 Highest Degree: MS, Hydrology Licenses/Registrations: Prof. Engineer — Civil, CA #74433, NV #016269 CFM, ASFPM: USOS-01731; QSP, CA #22855

Qualifications:

- 24+ years of experience in water resources and floodplain management type projects.
- Serves as Project Manager or Technical Lead on many local multi-discipline projects involving hydrologic and hydraulic analyses and drainage improvements.
- Conducts hydrologic and hydraulic modeling of the storm drain system to identify priority capital improvement projects and infrastructure needs.
- Completes hydrologic and hydraulic analyses to evaluate drainage and storm water conveyance and size bioretention areas for C.3 compliance.

Relevant Experience:

- . University/Marina/Spinnaker Street Improvement Project and CEQA, City of Berkeley, CA
- Updates to Kirker Creek Watershed Stormwater Management Plan, City of Pittsburg, CA
- Hillcrest Park Regional Green Infrastructure, City of Concord, CA
- · Rumrill Boulevard Complete Streets and Green Infrastructure, City of San Pablo, CA.
- Yellow Brick Road Complete Streets Project, City of Richmond, CA
- GIS Storm Drain Network and Drainage Master Plan (and Update), City of Richmond, CA
- Los Gatos Stormwater Master Plan, Town of Los Gatos, CA

Gail Ervin, PhD - CEQA/NEPA Lead



Years of Experience: 35 Highest Degree: PhD, Human Sciences

Qualifications:

- Over 35 years of experience with CEQA, NEPA, environmental assessment and planning, facilitation, and public dispute resolution, specializing in municipal infrastructure, adaptive reuse of historic buildings, and brownfield development, with special expertise in downtown and neighborhood revitalization.
- Thorough understanding of project analysis for both locally (CEQA) and federally funded (NEPA)
- Extensive experience preparing CEQA and NEPA documents for Caltrans, roadway, trail, and infrastructure projects.

Relevant Experience:

- Grand Street OBAG 2 Rehabilitation Project, City of Alameda, CA
- University/Marina/Spinnaker Street Improvement Project and CEQA, City of Berkeley, CA
- . I-80/Central Avenue Interchange Improvement, City of Richmond, CA

Debra Lemke, PWS, CPESC - Regulatory Compliance/Permitting



Years of Experience: 20 Highest Degree: BS, Environmental Science Licenses/Registrations: Prof. Wetland Scientist #1722; CPESC #2574

Qualifications:

- Experience managing interdisciplinary teams on development, restoration, and public works projects.
- Provides permit management through compliance inspections, monitoring, and agency reporting.
- Prepares, secures, and manages environmental permits so that project completion and environmental protection are in balance.
- Conducts environmental surveys for wetlands, creeks, marshes, and drainages, native/nonnative vegetation, soils, and groundwater and surface water.

Relevant Experience:

- San Francisco Bay Trail at Point Molate, East Bay Regional Park District, Richmond, CA
- Via Verdi Slope Stabilization, City of Richmond, CA
- Tilden Nature Area Restoration, EBRPD, Oakland, CA
- · Point Molate Beach Park Erosion Assessment, City of Richmond, CA

Subconsultant Key Personnel Qualifications

The matrix below summarizes the qualifications for subconsultant key personnel, and their resumes are below in the document.

Name/Firm and Role	Yrs. Exp.	Yrs. w/ Firm	High. Deg.	Sampling of Relevant Experience		
Nate Levine, PE (Fehr & Peers) Traffic Engineering	9	1.5	BS	City of Alameda Grand Street Rehabilitation PS&E City of Oakland East Bay Greenway PS&E		
Ryan McClain, PE, TE (Fehr & Peers) Traffic Engineering	20	15	BS	City of Alameda Grand Street Rehabilitation PS&E City of Oakland Telegraph Ave, Complete Streets/PS&E		
Tom Pilarski, PLS (Psomas) Subsurface Utility Engineering	27	14	MS	City of San Leandro Street Rehabilitation Program City of Richmond 13 th Street Complete Streets Program		
Charles Weakley, PLS (Mountain Pacific Surveys) Surveying & Mapping	36	31	N/A	Complete Street and Pavement Rehabilitation Projects for over 20 jurisdictions in the San Francisco Bay Area		

Firm Experience

NCE can offer our experience designing thousands of roads throughout California, including recently in Alameda, Oakland, Berkeley, Davis, Pacifica, Richmond, San Pablo, San Leandro, Belmont, Walnut Creek, Pittsburg, Oakley, Santa Rosa, San Mateo, Moraga, South San Francisco, Los Gatos, The Presidio, Sunnyvale, Martinez, Daly City, Los Gatos, and Capitola. NCE has a proven record of success in delivering projects within the established construction budget and on-time as shown in the "Cost Estimating Accuracy" table below that summarizes a list of similar projects completed within the last five years.



City of Alameda

Contracting Agency and Project Title	Date	Engineer's Estimate (\$M)	Construction Cost (SM)
City of South San Francisco 2022 Pavement Rehabilitation (West Package)	2022	\$10.9	\$9.5
City of South San Francisco 2022 Pavement Rehabilitation (East Package)	2022	\$6.8	\$6.5
City of San Leandro Annual Street Overlay/Rehabilitation Phase 1	2022	\$4.7	\$4.9
City of San Mateo Smooth Streets Program Phase 4 and 5	2022	\$7.9	To Be Bid
City of Pacifica 2022/23 Pavement Resurfacing Project	2022	\$1.2	1.2
City of Richmond Yellow Brick Road Complete Street	2021	\$7.2	\$6.8
City of San Pablo Rumrill Boulevard Complete Streets & Green Infrastructure	2021	\$14.6	\$15.0
City of Belmont Street Reconstruction Project	2021	\$2.1	\$2.1
City of Richmond Castro Ranch Road Rehabilitation Project	2021	\$3.4	\$3.1
Presidio Trust Pavement Rehabilitation and Maintenance Project	2021	\$4.8	\$4.8
City of South San Francisco 2019/20 Surface Seal Project	2020	\$2.5	\$2.2
City of South San Francisco 2020 Pavement Rehabilitation Project	2020	\$2.2	\$2.2
City of South San Francisco OBAG 2 Street Rehabilitation Project	2020	\$1.2	\$1.3
City of Walnut Creek Parkside and Broadway Rehabilitation Project	2020	\$1.9	\$1.8
Town of Moraga 2020 Pavement Rehabilitation Project	2020	\$1.5	\$1.4
City of Berkeley Measure M Street Rehabilitation 2019	2019	\$5.4	\$5.2
City of Sunnyvale Pavement Rehabilitation 2019	2019	\$1.4	\$1.1
City of San Leandro Annual Street Overlay/Rehabilitation 2018/19	2019	\$10.1	\$10.2
City of Berkeley Measure M Street Rehabilitation 2018	2019	\$3.9	\$3.2
City of South San Francisco Surface Seal Project 2018	2018	\$1.2	\$1.2
City of South San Francisco Surface Seal Project 2017	2017	\$0.92	\$0.75

Examples of Similar Work

NCE works with many cities and counties in the San Francisco Bay Area, including the City of Alameda. The following pages provide examples of recent, relevant projects successfully delivered by NCE and NCE key personnel, as well as subconsultants.

On-Call Civil and Environmental Services for the City of Alameda, CA: The City of Alameda retained NCE to provide on-call engineering and environmental services since 2015. These services have included civil engineering, pavement engineering,

environmental review, CEQA/NEPA, hazardous materials, and preliminary biological resources screening. A few projects are described in the following paragraphs.

Grand Street OBAG 2 Rehabilitation Project: The NCE team has been working closely with public works and planning staff to complete pavement and civil design and E-76 documents for the Grand Street Rehabilitation Project (Project). The section of Grand Street from Encinal Avenue to Shoreline Drive is an important major collector street that serves as a north-south connector for



neighborhood streets, schools, recreational sports fields, shoreline beach access, and South Shore Center. The project evolved from a street rehabilitation project into a very comprehensive complete project that now includes parking protected separated bike lanes and two-way cycle tracks, ADA compliant curb ramps and pedestrian crossings, new lighted pedestrian crossings, minor drainage improvements, transit islands, and curb and gutter repairs. NCE has worked closely with City staff presenting safety improvements to the local community, Transportation Commission, and City Council.



Municipal Regional Permit Compliance: The City of Alameda is a Phase I Small Municipal Separate Storm Sewer System (MS4) permittee under the Bay Area Municipal Regional Permit (MRP). The City's Clean Water Program is currently administered by a small number of staff who are responsible for managing the program and all MRP requirements. NCE has been the City's on call stormwater consultant since 2015 working on a variety of stormwater planning, compliance, and reporting priority needs. Our work has included assisting the City to comply with MRP Provisions C.10 (Trash Load Reduction) and C.3.j (Green Infrastructure Planning and

Implementation). NCE worked with the City to prepare and successfully implemented a Proposition 218 compliant property related fee to meet the funding needs of the Clean Water Program.



City of Alameda ts Engineering Services

Proposal to Provide Complete Streets Engineering Services July 18, 2022



Green Infrastructure Framework and Green Infrastructure Plan: NCE used our knowledge of the City as an organization, its local priorities and infrastructure to make achievable recommendations on how the City would comply with the green infrastructure requirements in the MRP. NCE developed the City's Green Infrastructure Framework and Green Infrastructure Plan.

Sweeney Park Trail Connectors Project: NCE was recently retained by the City of Alameda Parks
Department to develop construction documents for key north-south connectors for Sweeney Park and the Cross Alameda Trail
to provide access for residents in neighborhoods and the Marina Village Business Park. This will include civil engineering design
of the new trail alignments along with drainage improvements and street improvements. We are also assisting the City with
the assessment of hazardous material given the former railroad use as well as limited biological resource assessments including
delineation of wetlands to better inform trail alignment selection. NCE Key Personnel on the NCE team for the above City
Projects: Ryan Shafer, Franz Haidinger, James Signore, Sara Dowling, Gail Ervin, Fehr & Peers, and Mountain Pacific Surveys.

2018-2022 Annual Overlay/Rehabilitation, Pavement Design, and PS&E, City of San Leandro, CA: NCE prepared pavement



design and construction documents for their annual overlay/rehabilitation program including complete street elements, typically with construction ranging from \$7 to \$10 million. Pavement design solutions included conventional and RHMA overlays, full-depth asphalt reconstruction, full-depth reclamation (FDR), and a pilot project for cold central plant recycling on an arterial street based on recommendations provided by NCE. Other design elements have included drainage improvements, design of 100's of ramps, traffic calming with bulbouts and improvements to striping and pavement markings with the addition of Class II and Class IV bike

lanes. NCE also submitted and managed three encroachment permit applications with Caltrans. NCE Key Personnel: Ryan Shafer, Franz Haidinger, Matthew Gaber, Mei-Hui Lee, James Signore, Tom Van Dam, Psomas, and Mountain Pacific Surveys.

Rumrill Boulevard Complete Streets and Green Infrastructure, City of San Pablo, CA: This project was funded by a variety of federal and state funding sources is under construction and modifies Rumrill Boulevard with a road diet and to add Class IV bikeways in both directions of travel, while reducing the number of through travel lanes in both directions and adding left or

right turn pockets along the corridor. Related improvements include widened sidewalks, crosswalks with rapid flashing beacons, landscape buffers, widened bus stop landings with bus shelters, lighting, ADA access, drainage improvements, green infrastructure, landscaping, medians, asphalt regrading and reconstruction,



buffered bike lanes, increasing parking, and video detection at traffic signals for vehicles and bicycles. We also designed 14,000 sf of bioretention basins throughout the street corridor treating approximately 9 acres of development focused on reducing pollutants of concern including PCBs, mercury and trash to achieve targets set by the Municipal Regional Permit. The project also included significant tree plantings in accordance with the California Natural Resources Agency Urban Green grant. NCE was responsible for civil design, pavement design, hydraulic design, community outreach, bidding and construction support, and E-76 for construction including extensive ROW certification coordination with utility relocation. NCE Key Personnel: Ryan Shafer, Franz Haidinger, Victor Lemus, Sara Dowling, James Signore, Fehr & Peers, and Psomas.

Yellow Brick Road Complete Streets, City of Richmond, CA: The Yellow Brick Road Complete Streets Project proposes to address key community-identified barriers, issues, and opportunities in the community in order to design and implement



complete streets improvements along roadways in the community-identified Yellow Brick Road network. The ATP grant funded project routes would connect the key assets in the neighborhood, including local elementary schools, parks, and transit. NCE completed civil design, pavement design, and community outreach for the project which included Class II bicycle facilities, extended sidewalks, decorative crosswalks, pedestrian and bicycle wayfinding signs, pedestrian-scale lighting, landscaping, curb extensions, roundabouts and traffic circles, ADA curb ramps, speed tables, raised intersections and crosswalks, rectangular rapid flashing

beacons, median refuges, back-in angled parking, green painted bicycle lanes, landscaped median refuges, and trail crossings.

NCE Key Personnel: Ryan Shafer, Franz Haidinger, Victor Lemus, Sara Dowling, Mary Horvath, Fehr & Peers, Psomas, and Mountain Pacific Surveys.



City of Alameda Proposal to Provide Complete Streets Engineering Services July 18, 2022

University/Marina/Spinnaker Street Improvement Project and CEQA, City of Berkeley, CA: NCE completed civil design and environmental review and permitting for realignment of University Avenue just west of I-80 to move the eastbound lanes off

the old Berkeley pier structure, a roundabout connection at Marina Boulevard, resurfacing of Marina Boulevard with parking improvements, reconstruction of Spinnaker Way using full-depth reclamation, with pedestrian circulation and safety enhancements (RRFB), sidewalks, green infrastructure, and pervious parking improvements to reduce stormwater runoff to the bay. The alignment is within a sensitive habitat corridor, and within San Francisco Bay Conservation and Development Commission jurisdiction, which NCE's scientists and resource specialists assessed biological resources, sea level rise and resiliency, and



cultural resources. NCE Key Personnel: Ryan Shafer, Franz Haidinger, Debra Lemke, Mary Horvath, and Gall Ervin.

Pavement Rehabilitation/Maintenance and Bikeway Improvements, Presidio Trust of San Francisco, CA: NCE designed the



Presidio Trust's pavement rehabilitation and maintenance project throughout the Presidio Trust campus including a substantial portion of the bicycle lane network. Design elements of the project include pavement design, a roundabout, extensive modification to existing striping and markings to introduce class II and III bikeways and an advisory bike lane, roadway grading, drainage solutions and design, and design of minor concrete including bus platforms and curb and gutter. As part of this project, NCE introduced cost-effective and sustainable pavement treatment alternatives, such as cold in-place recycling (CIR) that allows the asphalt concrete to

be recycled in-place, reduces costly truck trips for import of asphalt paving materials, and reduces greenhouse gases and energy usage. NCE Key Personnel: Ryan Shafer, Victor Lemus, James Signore, Sara Dowling, and Mountain Pacific Surveys.

Experience with Community and Stakeholder Outreach. NCE has successfully provided clients with a variety of community outreach and stakeholder facilitation services on the organizational, programmatic, and project levels and on many of rehabilitation and complete projects that we have worked on for various public agencies throughout California. This process starts with an engagement plan to define objectives, roles, and responsibilities. NCE's experience includes working with agency staff, transit agencies, utilities, interested stakeholders, landowners, and the general public. NCE has successfully conducted public workshops, coordinated public service announcements on television and radio, designed and maintained stakeholder databases, facilitated stakeholder interviews, prepared meeting materials, developed program and project advertisements and distributed the material, facilitated technical workgroups and public meetings, and developed high quality presentations.

General Firm Information



Founded in 1990, NCE, a local Alameda and Contra Costa County firm, is a client-focused professional consulting firm integrating the disciplines of engineering, science, and planning to address the infrastructure and resources challenges facing our communities today and in the future. Over 85% of NCE's work is on public works projects with local public entities. This contract will be managed and primarily conducted from our Oakland office and Point Richmond offices, of which the Oakland office is located about 7 miles from the City's office. Our Point Richmond office is also very close to the City's offices and has 28 staff to help facilitate projects. In addition, NCE has over 110 employees available on an as-needed basis depending on service disciplines required from our Oakland, Richmond, Sacramento, and Fountain Valley, California offices, as well as from our Reno (headquarters), Lake Tahoe, and Las Vegas, Nevada offices.

Complete Streets. We understand the importance of incorporating and designing complete streets elements, such as bulbouts, landscaping, green infrastructure (e.g., bioretention), bus transit improvements, lighting, restriping, road diet, buffered and separated bike lanes, and dedicated bike lanes, into street improvement projects – making them safe for multi-modal users, including transit riders, motorists, bicyclists, and pedestrians. We are working on complete street designs for the City of Alameda (Grand Street), City of Richmond, City of San Leandro, and City of South San Francisco as part of the many rehabilitation projects that we are leading including recently the MLK Junior Way Vision Zero Quick Build Project with Fehr & Peers for safety improvements at 9 intersections. When rehabilitating or designing complete streets, NCE meets with our clients to discuss options to improve safety and overall user experience, whether it is crossing the street, bicycling to work, or calming/slowing traffic.



City of Alameda Proposal to Provide Complete Streets Engineering Services July 18, 2022

Civil Design. NCE's civil and pavement design engineers and technicians are experienced in developing plans, specifications, and engineer's cost estimates (PS&E) for many City, County, and State rehabilitation and complete street projects. The benefit of this experience to the City is that we thoroughly understand the cost and community impacts of our recommended designs. NCE staff pride themselves in thinking about how construction will impact a neighborhood, a busy arterial, or pedestrian bicycle traffic and access. Our civil engineers are well versed in civil design elements that include bike and pedestrian safety improvements, drainage improvements such as stormwater run-off reduction with bio-retention basins, landscape and planter improvements, ADA curb ramps and sidewalks, curb and gutter, traffic striping and signs, and utility relocation and have expertise in the latest guidelines from Caltrans, FHWA, and NACTO.

Pavement Design. Pavement design and PS&Es for maintenance, rehabilitation, and reconstruct ion are NCE's specialty. We offer unrivaled experience and expertise with pavement treatment alternatives. We have designed thousands of roads and trails throughout California. Our expertise in pavement treatment alternatives includes, but is not limited to, cost saving, cutting edge, and green/sustainable paving technologies, such as warm mix asphalt and in-place recycling technologies. We consider many factors during pavement design, including cost, performance, future maintenance, traffic, access, pavement section properties, geometric constraints, and climate, including shaded areas and drip lines. NCE has comprehensive knowledge of both the Greenbook and Caltrans Standard Plans and Specifications, which are most commonly referenced throughout California towns and cities.

Knowledge of Concrete Materials and Infrastructure. One of the key decisions the City of Alameda will need to make is on rehabilitation strategies of concrete streets and slabs that are throughout the former Naval Base streets, runways, and hangar aprons. Removal and replacement of these concrete pavements is an involved endeavor not to mention costly considering removal and disposal, constructing a new pavement section, and potential for contaminated soils issues and disposal. Our concrete pavement design experience and latest research will be leveraged to preserve these concrete pavements and extend the pavement life with a variety of less costly treatment strategies based on structural analysis of the pavements and pavement design.

Pavement Management. NCE has extensive experience evaluating and implementing pavement management systems for numerous public agencies throughout California and the west coast. We are a nationally recognized pavement specialty firm, with broad capabilities and expertise in pavement management. We provide pavement management services and are proficient with most software currently in use, including PAVER™, StreetSaver™, and Cartegraph, which account for 76% of all California agencies. We have successfully implemented PMP for numerous cities and can assist the City to plan a regional multi-year capital improvement program more effectively. We are active in over 10 pavement-related (including pavement and asset management) committees at the Transportation Research Board, a national research organization. NCE's prior project experience with hundreds of other cities on PMP and pavement design allows us to deliver accurate, reliable, consistent pavement data that may then be used by the City to develop pavement strategies and make future funding decisions.

Landscape Architecture. NCE's staff of licensed landscape architects provide landscape architectural, urban design, presentation graphics, renderings, and planning services to our clients during the design phase, permitting, and construction. NCE's landscape staff specialize in complex urban projects that require patience, vision, and an ability to listen closely to the community, park users, funders, agency staff and elected officials combined with an extensive knowledge of the policies, building codes and legislation.

Green Infrastructure. NCE's Engineers and Landscape Architects incorporate Green Infrastructure elements into their projects to provide communities with healthier public spaces, visually appealing streetscapes, enhanced pedestrian experience, storm water quality/management, reduced impervious pavements and minimize the impacts of climate change. Specific techniques include the adaptive reuse of tires as a component of rubberized cape seals and hot mix asphalt, reducing heat island impacts with the use of light aggregate and replacing impervious pavements with permeable pavers within parkways. With an innovative approach, NCE's landscape architects worked with South San Francisco on its 2021 Green Infrastructure Program to study opportunities to integrate a range of green infrastructure elements..

Hydrologic and Hydraulic Analysis. Our hydrologists and hydraulic engineers are practiced with the latest methods and modeling software and have assisted our clients with drainage analysis, hydraulic modeling, water quality modeling, infrastructure planning, and storm drain design. NCE has a depth of knowledge in performing hydrologic, hydraulic, and

City of Alameda

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sediment transport analyses and modeling for the design and maintenance of storm drain and flood control improvements and systems, roadways, bridges, and culverts.

Experience Working with Caltrans on Federally-Funded Projects. NCE delivered more than 20 federally-funded projects that required obtaining Caltrans' Authorization to Proceed with Construction (E-76), including recent projects for the Cities of Alameda, Pittsburg, Richmond, San Pablo, Capitola, Sunnyvale, Pleasant Hill, Pittsburg, San Ramon, South San Francisco, Oakley, and Orinda. NCE has extensive experience with encroachment permits, right-of-way, and PS&E certification phases of the E-76 process and obtaining environmental clearance.

CEQA/NEPA. NCE staff bring over 30 years of experience completing the full range of CEQA/NEPA documentation throughout the state, no matter the setting - small towns, big cities, rural areas, and counties. Our diverse Northern California projects include municipal infrastructure, infill/brownfields redevelopment, affordable housing, Caltrans-assisted roadway, parks and trails projects, habitat restoration, downtown high-rise, historic adaptive reuse, and master and specific plans.

Regulatory Compliance. NCE has established, long-term relationships with local, state, and federal regulatory agencies. We are fluent in the Caltrans Highway Design Manual, Caltrans Local Assistance Procedures, Caltrans 2018 Standard Specifications and Plans (including the latest Standard Special Provisions), California DTSC, California Regional Water Quality Control Board (RWQCB), State Water Resources Control Board, U.S. Environmental Protection Agency (USEPA) Region 9, OSHA, U.S. Army Corps of Engineers, San Francisco Bay Conservation and Development Commission (BCDC), city and county utility departments, California Department of Fish & Wildlife, U.S. Fish & Wildlife, CERCLA, NEPA, and CEQA procedures.

Hazardous Materials. NCE has provided environmental services for many public agencies in the Bay Area. These projects have included bridge, roadway, and other infrastructure related projects with issues, including aerially deposited lead, asbestos in building materials, PCBs, fuels, solvents, underground storage tanks, and heavy metals. NCE's depth of experience includes supporting permitting and negotiations with County environmental departments, California Department of Toxic Substances Control, Bay Area Air Quality Management District, and California Regional Water Quality Control Board (RWQCB). NCE manages and performs environmental engineering projects that include site remediation and monitoring, knowledge of leading-edge techniques and emerging laws, and understanding of municipal agencies and their regulatory compliance and permitting needs for complex projects.

Subconsultants

NCE will serve as the prime consultant, and we have very carefully and intentionally identified our teaming partners to continue to offer the same team working successfully on projects in the City as follows:

Fehr & Peers will provide traffic engineering and electrical engineering services. They are a team of nationally recognized experts on the latest guidelines, best practices, and innovations in Complete Streets Planning and Engineering. Fehr & Peers has a dedicated Complete Streets Design Discipline Group to develop consistent guidance for multimodal corridor design, including intersection and signal design along protected bikeways, bus/bike interface at transit stops, "quick-build" strategies, and before/after evaluation of complete streets projects. The firm is also committed to pushing the state of the practice and incorporates the latest best practice resources (from the FHWA Separated Bike Lane Guide to Caltrans DIB 89, to the NACTO Urban Streets Guide). Fehr & Peers has had the privilege to work closely with City of Alameda staff on a variety of Safety, Traffic Calming, Complete Street projects for many years and have recently been working on Grand Street Rehabilitation, Safe Routes to School Improvements, and Park and Webster Parklets.

Psomas with over 70 years of experience is a trusted teaming partner on our street projects and will provide subsurface utility detection services on all street sections given the potential for streets to require reconstruction or improvements in potential conflict with utilities. Psomas is a firm with noted expertise in subsurface utility engineering, mapping, and locating to complete locate utilities with non-invasive geophysical techniques such as ground penetrating radar (GPR). Psomas will also provide utility potholing in the event there are key location where critical utility facilities require greater accuracy or verification.

Mountain Pacific Surveys (MPS) will provide land surveying services. MPS is a trusted partner of NCE and will complete topographic surveys on all street sections. MPS is a professional survey services firm providing boundary surveying and mapping, design surveys, right-of-way engineering, construction surveys, environmental surveys, monitor surveys, and photogrammetric engineering services to the public and private sector. MPS has teamed with NCE on various roadway projects.



City of Alameda Proposal to Provide Complete Streets Engineering Services July 18, 2022



Resumes

NCE and Subconsultant Key Personnel



J. Ryan Shafer, PE, GE - Project Manager

Ryan is an experienced Principal and Project Manager that is highly skilled in managing interdisciplinary teams of engineers, scientists, and planners for complex projects requiring civil engineering, geotechnical engineering, pavement engineering, structural engineering, transportation and traffic engineering, hydrology and hydraulics, coastal engineering, regulatory permits, technical studies and resource assessments, and environmental documents. In addition, he has managed and provided civil and geotechnical engineering on a wide range of public and private projects, including vertical development, municipal roads, trails, drainage infrastructure, landfills, public transit, recreation areas and parks, industrial facilities including refineries, and waterfront structures giving him an understanding of how to work with diverse project types. His clients provide feedback that NCE is an effective partner and steward, understanding what is important to each community. Additionally, having worked for many municipal clients throughout California, Ryan adds value by helping cities and counties manage and maintain their streets, roads, bicycle and pedestrian facilities, and recreation parks and trails. He applies his expertise in geotechnical and pavement engineering to infrastructure projects and paving programs from the early stages of condition surveys to providing support during construction.

Representative Projects

Grand Street OBAG 2 Rehabilitation Project, City of Alameda, CA. Principal. The City of Alameda (City) has requested that NCE complete pavement and civil design and E-76 documents for the Grand Street Rehabilitation Project (Project). The section of Grand Street from Encinal Avenue to Shoreline Drive is an important major collector street that serves as a north-south connector for access to neighborhood streets schools, and to a local shopping center. NCE is exploring cost efficient pavement rehabilitation strategies based on coring and pavement deflection testing with consideration of conventional and innovative paving materials (e.g., HMA, WMA) and alternative recycle in-place pavement treatment technologies such as Cold In-Place Recycling (CIR). The project will include the design Class II and buffered bike lanes,



Education
MS, Geotechnical Engineering,
University of California, Berkeley,

BS, Geological Engineering, Colorado School of Mines, 1996

Registrations and Certifications Professional Engineer – Civil,

CA #62349 Professional Engineer –

Geotechnical, CA #2713

Affiliations

American Society of Civil Engineers American Public Works

Association

Joined NCE

22 years

2005 Years of Experience

ADA compliant curb ramps and pedestrian crossings, new lighted pedestrian crossings, minor drainage improvements, consideration of a roundabout, and curb and gutter repairs.

2017 to 2022 Street Surface Seal and Rehabilitation Projects, City of South San Francisco, CA. Project Manager/Principal Engineer. NCE has been providing to the City a full range of pavement management services including development of a 5-year Paving Work Plan, updating the City's maintenance and rehabilitation decision tree, evaluating alternative pavement treatment technologies, and development of construction documents for bidding. To date we have developed pavement design and civil design for rehabilitation and preventive maintenance of 48 miles (more than 200 street sections) of City streets with a construction cost of over \$14 million. Starting in 2017 to present for the City's Pavement Management Program NCE has provided pavement and civil design services for preventive maintenance on City streets with scrub, slurry, and cape seals and rehabilitation of City streets with mill and overlays as well as surface reconstruction. NCE civil and pavement engineering design services included pavement coring, curb/gutter replacement, utility coordination, curb ramp design, drainage improvements, sidewalk replacement, pavement design recommendations, PS&Es, and bidding and construction support services.

Annual Overlay/Rehabilitation, 2017-2018 and 2020-2021 Pavement Design and PS&E, City of San Leandro, CA. Project Manager. NCE prepared construction documents and pavement rehabilitation and reconstruction design for 23 arterial, collector, and residential streets (5 miles). NCE's scope of work included pavement investigation and design and preparation of civil design PS&Es for construction. Pavement design solutions included conventional and rubberized hot mix asphalt overlays, full-depth asphalt reconstruction, FDR in lieu of more expensive conventional reconstruction, and a pilot project for cold central plant recycling (CCPR) on an arterial street based on recommendations provided by NCE. Visible drainage issues were



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addressed, such as localized ponding in the gutter pan, the design of over 100 ADA ramps, curb and gutter repairs, and improvements to striping and pavement markings with the addition of class II and class IV bike lanes. NCE submitted and managed three encroachment permit applications with Caltrans as the project encroached on three state routes. NCE's engineer's estimate matched that of the winning contractor bid, indicating that NCE was able to anticipate the value of the scope of work and contractor climate.

Pavement Rehabilitation/Maintenance and Bikeway Improvements, Presidio Trust, San Francisco, CA. Project Manager. NCE is designing the Presidio Trust's pavement rehabilitation and maintenance project with redesign of the bicycle land network, cope for this project includes preparing PS&Es for bidding purposes. Design elements of the project include pavement design, a roundabout, extensive modification to existing striping and markings to introduce class II and III bikeways and an advisory bike lane, roadway grading, drainage solutions and design, and a bus platform. As part of this project, NCE introduced cost-effective and sustainable pavement treatment alternatives, such as cold in-place recycling (CIR) that allows the asphalt concrete to be recycled in-place offering up a green technology that recycles existing onsite materials, reduces costly truck trips for import of asphalt paving materials, and reduces greenhouse gases and energy usage. The pavement design considered a number of different factors, including medians, curb reveal, depth to underlying concrete, previous overlays and fabric materials, AB thickness, and other buried obstructions, such as rail lines and recommended an appropriate pavement treatment.

OBAG 2 Street Rehabilitation, City of South San Francisco, CA. Project Manager. NCE provided pavement and civil engineering design, including Caltrans E-76 authorization for construction, utility coordination, pavement and curb/gutter condition survey, pavement deflection testing, pavement coring, pavement design recommendations, PS&Es, bidding and construction support services, and Caltrans encroachment permit. It is an OBAG 2 funded program to preserve local streets and roads within the City's priority development area. Selected streets were based on the City's criteria of the construction budget limited to the grant amount, location within the City's priority development area, and candidates for rehabilitation.

Castro Ranch Road Rehabilitation and Complete Streets Improvements, City of Richmond, CA. Principal/Project Manager. NCE completed civil engineering, pavement engineering, hydrology and hydraulic engineering, and special environmental studies for the Castro Ranch Road Rehabilitation Project. This project involved a significant redesign and rehabilitation of rural roadway corridor to provide new buffered bike lanes to address a missing bicycle lane link along the Three Bears Loop, improved traffic flow and calming, new pedestrian crossing with rectangular rapid flashing beacons, median landscaping, construction of new sidewalk, replacement of curb ramps, assessment of drainage structures and improvements, and addressing other roadway deficiencies including subgrade damage at a retaining wall and repair of guard rail systems. NCE developed a cost saving pavement treatment alternative using CIR with both foam and emulsion technologies resulting in over \$500,000 in cost savings over conventional mill and overlay pavement treatments.

Measure M Street Rehabilitation Program, City of Berkeley, CA. Project Manager. NCE implemented the City's \$30 million, multi-year street surface seal, rehabilitation and reconstruction project, one of the City's largest projects to date. As Project Manager, Ryan managed the development of pavement design and PS&Es for more than 30 miles (150 street sections) of surface seal, street rehabilitation, and reconstruction. Complete street elements included new bike lanes, intersection reconfigurations, new pedestrian crosswalks, storm drain improvements, and design of nearly 600 curb ramps, including pedestrian safety improvement bulbouts. NCE's pavement design solutions offered cost savings and environmental benefits using rubberized paving products diverting tires away from landfills, use of longer lasting pavement materials, and using recycle in-place technologies.

Yellow Brick Road Complete Streets, City of Richmond, CA. Lead Civil Engineer. The project proposes to address key community-identified barriers, issues, and opportunities in the community in order to design and implement complete streets improvements along roadways in the community-identified Yellow Brick Road network. Improvements include Class II bicycle facilities, extended sidewalks, decorative crosswalks, pedestrian and bicycle wayfinding signs, pedestrian-scale lighting, landscaping, curb extensions, roundabouts and traffic circles, ADA curb ramps, speed tables, raised intersections and crosswalks, rectangular rapid flashing beacons, median refuges, back-in angled parking, green painted bicycle lanes, landscaped median refuges, and trail crossings.



Franz Haidinger, PE - QA/QC Manager

Franz is a Principal and Chief Engineer at NCE responsible for overseeing, managing, and developing designs and PS&Es for roadway improvement projects in addition to implementing sustainable technologies. In his role at NCE, he enjoys the opportunity to improve the built environment, whether it's implementing sustainable pavement technologies, creating storm water pollution prevention plans, assessing drinking water sources, or remediating contaminated soil. His clients value his ability to understand their needs, evaluate alternatives and determine the most appropriate solutions. According to Sean Rose, Public Works Director of the Town of Woodside, "Franz is a detail-oriented engineer that does a very thorough job preparing plans and specifications. He did a great job listening to our needs and specific comments and provided thorough and concise responses. Ultimately, he provided a high-quality design, and he was a pleasure to work with."

Representative Projects

Grand Street OBAG 2 Rehabilitation Project, City of Alameda, CA. QA/QC Manager. The City of Alameda (City) has requested that NCE complete pavement and civil design and E-76 documents for the Grand Street Rehabilitation Project (Project). The section of Grand Street from Encinal Avenue to Shoreline Drive is an important major collector street that serves as a north-south connector for access to neighborhood streets schools, and to a local shopping center. NCE is exploring cost efficient pavement rehabilitation strategies based on coring and pavement deflection testing with consideration of conventional and innovative paving materials (e.g., HMA, WMA) and alternative recycle in-place pavement treatment technologies such as Cold In-Place Recycling (CIR). The project will include the design Class II and buffered bike lanes, ADA compliant curb ramps and pedestrian crossings, new lighted pedestrian crossings, minor drainage improvements, consideration of a roundabout, and curb and gutter repairs.

Water Quality and Flood Protection Fee Initiative, City of Alameda, CA. QA/QC Manager. The City is actively pursuing a Proposition 218 compliant ballot initiative to



Education

Diplom-Ingenieur (Equivalent of MS degree), Civil Engineering, University of Natural Resources and Life Sciences, Vienna, Austria, 1997

Registrations and Certifications Professional Engineer – Civil, CA #64725

Affiliations

American Society of Civil Engineers American Public Works Association

Joined NCE 2004

Years of Experience 22 years

fund its Clean Water Program. As an island and beach community the City's Program faces many challenges including an aging storm drain infrastructure system and addressing the impacts of sea level rise. Project work included assessing the program, documenting the financial need, community engagement and the Proposition 218 compliant ballot initiative. NCE was responsible for developing the political strategy and executing strategic community engagement. NCE also assisted in completing the financial analysis and supporting the Rate Study.

2017 to 2022 Street Surface Seal and Rehabilitation Projects, City of South San Francisco, CA. QA/QC Manager/Principal Engineer. NCE has been providing to the City a full range of pavement management services including development of a 5-year Paving Work Plan, updating the City's maintenance and rehabilitation decision tree, evaluating alternative pavement treatment technologies, and development of construction documents for bidding. To date we have developed pavement design and civil design for rehabilitation and preventive maintenance of 48 miles (more than 200 street sections) of City streets with a construction cost of over \$14 million. Starting in 2017 to present for the City's Pavement Management Program NCE has provided pavement and civil design services for preventive maintenance on City streets with scrub, slurry, and cape seals and rehabilitation of City streets with mill and overlays as well as surface reconstruction. NCE civil and pavement engineering design services included pavement coring, curb/gutter replacement, utility coordination, curb ramp design, drainage improvements, sidewalk replacement, pavement design recommendations, PS&Es, and bidding and construction support services.

OBAG 2 Street Rehabilitation, City of South San Francisco, CA. QA/QC Manager. NCE was selected to provide pavement and civil engineering design, including Caltrans E-76 authorization for construction, utility coordination, pavement and curb/gutter condition survey, pavement deflection testing, pavement coring, pavement design recommendations, PS&Es, bidding and

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construction support services, and Caltrans encroachment permit. It is an OBAG 2 funded program to preserve local streets and roads within the City's priority development area. Selected streets were based on the City's criteria of the construction budget limited to the grant amount, location within the City's priority development area, and candidates for rehabilitation.

2022 West Highway 101 Pavement Rehabilitation Project, City of South San Francisco, CA. QA/QC Manager. NCE is providing engineering and design services to facilitate a rehabilitation project of all eligible streets west of 101. The 2022 West of 101 Pavement Rehabilitation Project's goal is to perform deferred maintenance west of 101, outside of the annual surface seal program. The City is responsible for the maintenance and repair of approximately 140 centerline miles, comprised of 33 arterial miles, 39 collector miles, and 68 residential miles. The City utilizes a program of slurry seals, overlays and surface reconstruction as maintenance and rehabilitation strategies. West of US101 there are approximately 123 centerline miles, comprised of 23 arterial miles, 35 collector miles, and 65 residential miles. Every two years the City surveys the streets and enters the data into the South San Francisco Pavement Management Program (PMP) StreetSaver® database program. NCE is responsible for project management, pavement rehabilitation design, PS&E, and bidding and construction support services.

University/Marina/Spinnaker Street Improvement Project and CEQA, City of Berkeley, CA. Project Manager. NCE was retained by the City to provide engineering and design services for the realignment and reconstruction of University Avenue between the frontage road at I-80 and Marina Blvd. at the Berkeley Marina. The eastbound lanes, featuring numerous undulation due to a settled roadbed, will be moved north to the current median, while the westbound lanes will stay in their current location. The intersection between University Avenue and Marina Blvd. will be modified to a roundabout. The road reconstruction includes full-depth reclamation of the onsite soils and pavement to be overlaid by an 8-inch thick hot-mix asphalt pavement. The project design includes LID features like bio-detention basins, new street lighting, new infrastructure including a sewer and water service for a future kiosk, landscaping, irrigation, and striping. NCE also provided permitting services for a BCDC permit and prepared the CEQA document for the project.

Civil Design and Measure K Paving Program, Town of Moraga, CA. Project Manager and Lead Civil Engineer. Responsible for the preparation of construction documents to reconstruct three streets (totaling approximately 200,000 square feet) in the Town of Moraga. FDR was chosen as the reconstruction alternative based on a comprehensive pavement and subgrade investigation. The design plans included grading plans and profiles and included drainage improvements and the design and construction of a retaining wall (soldier piles and lagging) to protect an eroding storm drain culvert outfall. The project included comprehensive regulatory compliance and permitting services, as well as coordination with adjacent property owners (St. Mary's College) as some of the design elements were sited in biological sensitive areas. Key to the project success was the tight collaboration with staff responsible for the permitting and regulatory compliance tasks, incorporation of permitting requirements and mitigation measures into the design documents, and communication with Town staff and stakeholders. After passing a 1 percent sales tax in 2012 to raise approximately \$8 million for streets and roads, Measure K, the Town selected NCE for a three-year, on-call contract to provide a variety of pavement-related services for this significant community project.

Rumrill Boulevard Complete Streets and Green Infrastructure, City of San Pablo, CA. QA/QC Manager. NCE is designing an approximately \$15 million in construction value, 2.5-mile-long complete streets project along Rumrill Boulevard. This is a Community-based design process focused on transforming the street into a safe and friendly place for people and business by improving conditions for walking, bicycling, and transit. This street corridor will receive a road diet and to add Class IV bikeways in both directions of travel. Additional key project elements include landscape buffers, widened bus stop landings, increasing parking, and video detection at traffic signals for vehicles and bicycles. In addition, the project will include LID design and bioretention basins, landscaping improvements, curb extensions/bulbouts, sidewalk widening, crosswalk improvements with rectangular rapid flashing beacons, median refuges bus stop shelters, expanded street lighting, ADA concrete and roadway improvements (curb ramps, sidewalks, driveways, medians, and regrading pedestrian roadway crossings), storm drainage improvements, trail crossings, wayfinding signs, pedestrian and street lighting.

Yellow Brick Road Complete Streets, City of Richmond, CA. Lead Civil Engineer. This complex complete streets project involved various improvements which included Class II bicycle facilities, extended sidewalks, decorative crosswalks, pedestrian and bicycle wayfinding signs, pedestrian-scale lighting, landscaping, curb extensions, roundabouts and traffic circles, ADA curb ramps, speed tables, raised intersections and crosswalks, rectangular rapid flashing beacons, median refuges, back-in angled parking, green painted bicycle lanes, landscaped median refuges, and trail crossings.



Victor Lemus, PE - Civil Engineering/Caltrans E-76

Victor is well-experienced serving as Project Manager as well as Civil Design Lead on large, multi-discipline street rehabilitation and resurfacing projects, particularly on projects requiring complete street elements and complicated ADA improvements at NCE. He is notably recognized for his ADA design expertise with curb ramp and bulbouts as part of significant roadway rehabilitation projects on streets throughout Northern California that often include difficult grades, utility issues, tight ROW constraints, and in some cases require consideration of design exceptions. Victor is also proficient at street layout plan and profile design, striping plans, and civil design details for street improvement projects. He has extensive field data experience and has led teams of engineers on field data collection on roadway for curb and gutters, sidewalk, digouts or base repairs, ADA curb ramps, crosswalks, striping, and drainage improvements.

Representative Projects

2017 to 2022 Street Surface Seal and Rehabilitation Projects, City of South San Francisco, CA. Co-Project Manager/Civil Design Lead. NCE has been providing to the City a various of pavement management services including development of a multi-year Paving Work Plan, updating the City's maintenance and rehabilitation decision tree, evaluating alternative pavement treatment technologies, and development of construction documents for bidding. In 2017 to 2022 pavement management programs, we have developed pavement design and civil design for surface seal and rehabilitation of 64 centerline miles (more than 200 sections) of City streets with a construction cost over \$30 million. In addition, NCE has modified City's Street Saver database and updated historical maintenance and rehabilitation records to perform budget analyses and develop multi-year work plan. Recently, City's 6-Year Work Plan was updated based on City's budget, rehabilitation strategy and candidate streets are



Education
BS, Civil and Environmental
Engineering, University of
California, Davis, 2014

Registrations and Certifications Professional Engineer – Civil, CA #89769

Affiliations Chi Epsilon

Joined NCE 2014

Years of Experience 7 years

grouped by maintenance zone for efficiency of design, construction (less mobilization), future maintenance, and to be able to resurface more streets with a limited pavement resurfacing annual budget. NCE has provided pavement and civil design services for preventive maintenance on City streets with scrub, slurry, and cape seals and rehabilitation of City streets with mill and overlays and surface reconstruction.

2022 West Highway 101 Pavement Rehabilitation Project, City of South San Francisco, CA. Co-Project Manager/Civil Design Lead. NCE is providing engineering and design services to facilitate a rehabilitation project of all eligible streets west of 101. The 2022 West of 101 Pavement Rehabilitation Project's goal is to perform deferred maintenance west of 101, outside of the annual surface seal program. The City is responsible for the maintenance and repair of approximately 140 centerline miles, comprised of 33 arterial miles, 39 collector miles, and 68 residential miles. The City utilizes a program of slurry seals, overlays and surface reconstruction as maintenance and rehabilitation strategies. West of US101 there are approximately 123 centerline miles, comprised of 23 arterial miles, 35 collector miles, and 65 residential miles. Every two years the City surveys the streets and enters the data into the South San Francisco Pavement Management Program (PMP) StreetSaver® database program. NCE is responsible for project management, pavement rehabilitation design, PS&E, and bidding and construction support services.

FY 2020/21 and FY 2021/22 Pavement Resurfacing Program and 5-Year Work Plan, City of Pacifica, CA. Co-Project Manager/Civil Design Lead. NCE has developed 5-Year work plan for the City with surface seal and rehabilitation projects based on City's SB1 funding, as well as pavement management database review and unit cost update. Field reviews were performed to verify pavement condition and treatments to finalize the work plan. NCE then scheduled field calibration meeting with City staff to discuss various surface seal applications and base repair criteria. Cost effective cape seal with leveling courses were designed on residential streets with lower PCI to prevent water from damaging pavement and help resisting reflective cracking. As part of this project, NCE civil and pavement engineering design services included pavement coring, curb/gutter replacement, utility coordination, curb ramp design, drainage improvements, pavement design recommendations, PS&Es, and bidding and construction support services.



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OBAG 2 Street Rehabilitation, City of South San Francisco, CA. Project Engineer. The City retained NCE to provide pavement and civil engineering design, including Caltrans E-76 authorization for construction, utility coordination, pavement and curb/gutter condition survey, pavement deflection testing, pavement coring, pavement design recommendations, PS&Es, bidding and construction support services, and Caltrans encroachment permit. It is an OBAG 2 funded program to preserve local streets and roads within the City's priority development area. Selected streets were based on the City's criteria of the construction budget limited to the grant amount, location within the City's priority development area, and candidates for rehabilitation.

Castro Ranch Road Rehabilitation and Complete Streets Improvements, City of Richmond, CA. Civil Design Lead. NCE completed civil engineering, pavement engineering, hydrology and hydraulic engineering, and special environmental studies for the Castro Ranch Road Rehabilitation Project. This project involved a significant redesign and rehabilitation of rural roadway corridor to provide new buffered bike lanes to address a missing bicycle lane link along the Three Bears Loop, improved traffic flow and calming, new pedestrian crossing with rectangular rapid flashing beacons, median landscaping, construction of new sidewalk, replacement of curb ramps, assessment of drainage structures and improvements, and addressing other roadway deficiencies including subgrade damage at a retaining wall and repair of guard rail systems. NCE developed a cost saving pavement treatment alternative using CIR with both foam and emulsion technologies resulting in over \$500,000 in cost savings over conventional mill and overlay pavement treatments.

2017 Berkeley Rehabilitation/PCC Work and Surface Seal, City of Berkeley, CA. Staff Engineer. Measure "M" was a \$30 million bond passed to accelerate street improvements in Berkeley. NCE was tasked to consider cost effective treatments that extended paving dollars and offered recycling or environmental benefits. Victor's involvement included field data collection, marking concrete and base repairs in the field and mapping them onto a GPS unit for import into CAD. Victor was also involved in the civil design aspect of the project, most notably regrading reconstruction streets to ensure drainage and eliminate high street cross slopes.

2020/21 Pavement Rehabilitation, Town of Moraga, CA. Project Manager/Project Engineer. NCE performed civil and limited pavement design services to develop the project plans, technical specifications, and engineer's estimate on behalf of the Town. Staff quality controlled the base repair locations and updated final markings in white paint. Final locations were collected electronically with GPS along with the updated dimensions. The project included improvements for nine curb ramps, with one requiring a custom detail in the plans. Staff performed QC on the Town's preliminary curb ramp designs and prepare final edits, as needed. NCE and Town staff also conducted a site walk to review existing conditions to confirm pavement design treatments and curb ramp designs, based on visual assessment. NCE was asked to provide support services during construction. Services include attendance at the pre-construction meeting, reviewing Contractor material submittals, responding to Contractor requests for information, field marking and verifying measurement of base repair (digout) areas, providing recommendations for any necessary construction changes due to unforeseen field conditions, assisting with the review of Contract Change Orders, and Prepare and submit record drawings based upon the Contractor's representation of actual construction (one printed copy and one electronic copy in AutoCAD and PDF formats).

2019 SB1 Pavement Rehabilitation, City of Sunnyvale, CA. Project Engineer. The City of Sunnyvale sought assistance from a licensed Engineering firm to provide professional services for design and preparation of bid documents and construction support for the Pavement Rehabilitation 2019 SB1 project. The scope of work included preparation of preliminary design, design development, bid documents, and bidding/construction support for Public Works competitive bidding. Ancillary work included construction cost estimating, schedule monitoring, preparation of reports and recommendations, and project management. Victor was responsible for field data collection, coordination with utilities and VTA, pavement design review, PS&E production, bidding and construction support.

Yellow Brick Road Complete Streets, City of Richmond, CA. Project Engineer and E76 Coordinator. The project proposes to address key community-identified barriers, issues, and opportunities in the community in order to design and implement complete streets improvements along roadways in the community-identified Yellow Brick Road network. Improvements include Class II bicycle facilities, extended sidewalks, decorative crosswalks, pedestrian and bicycle wayfinding signs, pedestrian-scale lighting, landscaping, curb extensions, roundabouts and traffic circles, ADA curb ramps, speed tables, raised intersections and crosswalks, rectangular rapid flashing beacons, median refuges, back-in angled parking, green painted bicycle lanes, landscaped median refuges, and trail crossings.



Sara Dowling, EIT - Civil Engineering/Caltrans E-76

Sara has been involved as the lead and staff civil designer for numerous roadway rehabilitation and complete projects including conventional preventive maintenance and roadway rehabilitation, bike and pedestrian facilities and striping, ADA compliant sidewalks and curb ramps, bus stops and platforms, roundabouts, drainage and green infrastructure facilities, curb and gutter replacement, and roadway widening. Sara's attention to detail, expertise in civil and CAD design, knowledge of applicable design guidelines and requirements, consistent follow-up, and level of responsiveness bring value to every project. Sara has experience in AutoCAD 3D, ArcGIS, Microsoft Office, Microsoft Project Technical Writing, Literature Review, EverFE, and C++.

Representative Projects

Grand Street OBAG 2 Rehabilitation Project, City of Alameda, CA. Lead Staff Engineer. The City of Alameda (City) has requested that NCE complete pavement and civil design and E-76 documents for the Grand Street Rehabilitation Project (Project). The section of Grand Street from Encinal Avenue to Shoreline Drive is an important major collector street that serves as a north-south connector for access to neighborhood streets schools, and to a local shopping center. NCE is exploring cost efficient pavement rehabilitation strategies based on coring and pavement deflection testing with consideration of conventional and innovative paving materials (e.g., HMA, WMA) and alternative recycle in-place pavement treatment technologies such as Cold In-Place Recycling (CIR). The project will include the design Class II and buffered bike lanes, ADA compliant curb ramps and pedestrian crossings, new lighted pedestrian crossings, minor drainage improvements, consideration of a roundabout, and curb and gutter repairs.



Education BS, Civil Engineering, University of California, Davis, 2016

Registrations and Certifications Engineer-in-Training, CA #158072

Affiliations

American Society of Civil Engineers (ASCE) Institute of Transportation Engineers

Joined NCE 2017

Years of Experience 5 years

Pavement Rehabilitation/Maintenance and Bikeway Improvements, Presidio Trust, San Francisco, CA. Lead Civil Designer. NCE designed the Presidio Trust's pavement rehabilitation and maintenance project throughout the Presidio Trust campus including a substantial portion of the bicycle lane network. The scope for this project included preparing PS&Es for bidding purposes. Design elements of the project include pavement design, a roundabout, extensive modification to existing striping and markings to introduce class II and III bikeways and an advisory bike lane, roadway grading, drainage solutions and design, and a bus platform. As part of this project, NCE introduced cost-effective and sustainable pavement treatment alternatives, such as cold in-place recycling (CIR) that allows the asphalt concrete to be recycled in-place offering up a green technology that recycles existing onsite materials, reduces costly truck trips for import of asphalt paving materials, and reduces greenhouse gases and energy usage. The pavement design considered a number of different factors, including medians, curb reveal, depth to underlying concrete, previous overlays and fabric materials, AB thickness, and other buried obstructions, such as rail lines and recommended an appropriate pavement treatment.

Rumrill Boulevard Complete Streets and Green Infrastructure Project, City of San Pablo, CA. Lead Staff Engineer. NCE is designing an approximately \$15 million in construction value, 2.5-mile-long complete streets project along Rumrill Blvd. This is a Community-based design process focused on transforming the street into a safe and friendly place for people and business by improving conditions for walking, bicycling, and transit. This street corridor will receive a road diet and to add Class IV bikeways in both directions of travel. Additional key project elements include landscape buffers, widened bus stop landings, increasing parking, and video detection at traffic signals for vehicles and bicycles. In addition, the project will include LID design and bioretention basins, landscaping improvements, curb extensions/bulbouts, sidewalk widening, crosswalk improvements with rectangular rapid flashing beacons, median refuges bus stop shelters, expanded street lighting, ADA concrete and roadway improvements (curb ramps, sidewalks, driveways, medians, and regrading pedestrian roadway crossings), storm drainage improvements, trail crossings, wayfinding signs, pedestrian and street lighting.

Yellow Brick Road Complete Streets, City of Richmond, CA. Lead Staff Engineer. The project proposes to address key community-identified barriers, issues, and opportunities in the community in order to design and implement complete streets



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improvements along roadways in the community-identified Yellow Brick Road network. Improvements include Class II bicycle facilities, extended sidewalks, decorative crosswalks, pedestrian and bicycle wayfinding signs, pedestrian-scale lighting, landscaping, curb extensions, roundabouts and traffic circles, ADA curb ramps, speed tables, raised intersections and crosswalks, rectangular rapid flashing beacons, median refuges, back-in angled parking, green painted bicycle lanes, landscaped median refuges, and trail crossings.

13th Street Complete Streets, City of Richmond, CA. Lead Staff Engineer. The City of Richmond has undertaken a street rehabilitation project to transform a dangerous 4-lane roadway into a multi-modal and multi-benefit corridor. NCE is leading the conceptual design, community engagement and construction documentation process, guiding a team of landscape architects and civil engineers. Based on community input and in-depth analysis of existing conditions NCE will lead the visioning of multiple studies for the reconfiguration of the street focusing on pedestrian safety, reducing travel speeds, creating class 2 bicycle lanes, incorporating green infrastructure/shade trees and designing broad sidewalks to create a vibrant pedestrian orientated streetscape. Upon the completion of the project 13th Street will become one of the City of Richmond's first complete street projects and will transform an underserved neighborhood.

Measure M Street Rehabilitation, City of Berkeley, CA. Staff Engineer. Sara is responsible for designing one of the valley gutters to be installed at the intersection of Jones Street and 5th Street. The design required use of Civil 3D. NCE is implementing the City's \$30 million, multi-year street surface seal, rehabilitation and reconstruction project, one of the City's largest projects to date. The scope includes development of pavement design and plans, specifications and estimate. Projects involve street rehabilitation/reconstruction, surface seal street sections and replacement or retrofit of curb ramps and other improvements.

Overlay Project, Town of Moraga, CA. Staff Engineer. Sara worked with Town staff to mark repairs (e.g., base repair, curb and gutter and sidewalk) in the field, reviewed plans prepared by the Town and prepared the engineer's estimate for the design. NCE worked with the Town to plan and prepare for paving residential and collector streets. The pavement treatments were based on recommendations developed by NCE from pavement coring and deflection data and included the use of rubberized hot mix asphalt (RHMA). To assist in reducing costs for up-front design efforts, the project plans used vicinity maps, quantity schedules and details. Additional tasks include public outreach to better inform local residents impacted by the construction, which is spread throughout the Town limits.

2021 Pavement Project, Town of Moraga, CA. Staff Engineer. NCE performed civil and limited pavement design services to develop the project plans, technical specifications, and engineer's estimate on behalf of the Town. Staff quality controlled the base repair locations and updated final markings in white paint. Final locations were collected electronically with GPS along with the updated dimensions. The project included improvements for nine curb ramps, with one requiring a custom detail in the plans. Staff performed QC on the Town's preliminary curb ramp designs and prepare final edits, as needed. NCE and Town staff also conducted a site walk to review existing conditions to confirm pavement design treatments and curb ramp designs, based on visual assessment. NCE was asked to provide support services during construction. Services include attendance at the pre-construction meeting, reviewing Contractor material submittals, responding to Contractor requests for information, field marking and verifying measurement of base repair (digout) areas, providing recommendations for any necessary construction changes due to unforeseen field conditions, assisting with the review of Contract Change Orders, and Prepare and submit record drawings based upon the Contractor's representation of actual construction (one printed copy and one electronic copy in AutoCAD and PDF formats).

Point Molate Beach Park Erosion Assessment, City of Richmond, CA. Staff Engineer. The Point Molate area is a key coastal resource for the City of Richmond. A section of coastline at a City park began to erode at a rate that undermined a City road, created a public safety issue and could lead to delays for a planned bike path unless addressed. NCE is completing the planning, permitting and design for the coastal erosion and park improvements. NCE completed technical studies to support CEQA, consultations (ESA Section 7 and NHPA Section 10) and Clean Water Act (CWA) Section 404/401, Rivers and Harbors Act Section 10, and Bay Conservation and Development Commission permits. NCE is proactively working with regulatory and permitting agencies to provide the appropriate design that can be implemented at the earliest possible time to stop the erosion and restore footing for the planned bike path.



James Signore, PhD, PE - Flexible Pavement Design

James is a Principal Pavement Engineer with 25+ years of experience in the pavement field. He specializes in pavement design and evaluation, rehabilitation and maintenance, materials assessment, and training. He has experience in designing pavements for many local agencies, Caltrans and for heavy vehicle loading applications at airfields and ports. He has spent years researching various types of pavement materials, having directed a state-of-the-art AMRL certified and Superpave mix design equipped research laboratory and is well versed in state and local pavement practices and specifications. James has taught NHI's and ASCE's "Techniques for Pavement Rehabilitation" (including best practices for utility cuts and patches) seminars to practicing engineers for 20 years. He taught graduate courses in pavement engineering at San Jose State University and many of his former students are civil engineers at local agencies. He uses his practical and research experience, technical knowledge and teaching skills to develop an understanding of client needs and the creation of design and rehabilitation strategies that offer the client agency the leading-edge in methods and materials for their pavements. In addition, James is a Member of the Transportation Research Board Committee AFD70, Pavement Rehabilitation, AFD70-1, Pavement Interlayer Systems and the FAA Airport Pavement Technical Working Group.

Representative Projects

Grand Street OBAG 2 Rehabilitation Project, City of Alameda, CA. Lead Pavement Engineer. The City of Alameda (City) has requested that NCE complete pavement and civil design and E-76 documents for the Grand Street Rehabilitation Project (Project). The section of Grand Street from Encinal Avenue to Shoreline Drive is an important major collector street that serves as a north-south connector for access to neighborhood streets schools, and to a local shopping center. NCE is exploring cost efficient pavement rehabilitation strategies based on coring and pavement deflection testing with consideration of conventional and innovative paving materials (e.g., HMA, WMA) and alternative recycle in-place pavement treatment technologies such as Cold In-Place Recycling (CIR). The project will include the design Class II and buffered bike lanes, ADA compliant curb ramps and pedestrian crossings, new lighted pedestrian crossings, minor drainage improvements, consideration of a roundabout, and curb and gutter repairs.

I-80/Central Avenue Interchange Improvements, City of Richmond, CA. Pavement Engineer. The City of Richmond is serving as the lead agency for the I-80/Central



Education

PhD, Civil Engineering, University of Illinois, Urbana-Champaign, 1998

MS, Civil Engineering, University of Illinois – Urbana-Champaign, 1994

BS, Electrical Engineering, Clarkson University, 1985

Registrations and Certifications Professional Engineer – Civil, CA #62647

Affiliations

TRB Committee AFD70,
Pavement Rehabilitation
TRB Committee AFD70-1,
Pavement Interlayer Systems
ASCE Airfield Pavement
Committee
FAA Pavement Technical Working
Group
American Society of Civil
Engineers

Joined NCE 2014

Years of Experience 25 years

Avenue interchange that will improve traffic conditions. The project will increase spacing between the signalized intersections east of I-80 by connecting Pierce Street and San Mateo Street, restricting Pierce Street access at Central Avenue to "right in, right out" only, and relocating the traffic signal at Pierce Street/Central Avenue to the San Mateo Street/Central Avenue intersection. NCE is providing civil and is the environmental lead responsible for CEQA compliance, including working with the Caltrans Local Assistance Division to address potential environmental impacts. NCE will prepare the complete initial site investigations and technical studies necessary to develop a concept design for public outreach, starting right-of-way acquisition communications and discussions, and determining the level of NEPA and CEQA compliance required to obtain the necessary environmental clearance for the project. NCE will complete additional investigations, the NEPA and CEQA documents, and construction documents for bidding and construction.

Measure M Street Rehabilitation, City of Berkeley, CA. Pavement Engineer. NCE implemented the City's \$30 million, multiyear street surface seal, rehabilitation and reconstruction project, one of the City's largest projects to date. The project included the development of pavement design and PS&Es for more than 30 miles (150 street sections) of surface seal, street rehabilitation, and reconstruction. Complete street elements included new bike lanes, intersection reconfigurations, new



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pedestrian cross-walks, storm drain improvements, and design of nearly 600 curb ramps, including pedestrian safety improvement bulbouts. NCE's pavement design solutions offered cost savings and environmental benefits using rubberized paving products diverting tires away from landfills, use of longer lasting pavement materials, and using recycle in-place technologies.

West Leland Road and Loveridge Road Rehabilitation Phase I and Phase II, City of Pittsburg, CA. Lead Pavement Engineer. NCE provided pavement and civil engineering design services for the West Leland Road and Loveridge Road Rehabilitation Project. NCE explored with the City a wide range of pavement treatment technologies for addressing the pavement conditions. This included recycling asphalt materials in place with Cold In-place Recycling (CIR) providing there was adequate pavement section and stable subgrade as an alternative to conventional asphalt paving. On streets with greater levels of distress and unstable subgrade, we also evaluated the merits of using FDR in lieu of more costly conventional reconstruction as well as the use of materials to better resist reflective cracking including RHMA. The Project also included Curb Ramp improvements. NCE prepared Bid PS&E Documents, Caltrans E76 Documents, and provided bidding services as well as construction services.

OBAG 2 Street Rehabilitation, City of South San Francisco, CA. Pavement Engineer. The City retained NCE to provide pavement and civil engineering design, including Caltrans E-76 authorization for construction, utility coordination, pavement and curb/gutter condition survey, pavement deflection testing, pavement coring, pavement design recommendations, PS&Es, bidding and construction support services, and Caltrans encroachment permit. It is an OBAG 2 funded program to preserve local streets and roads within the City's priority development area. Selected streets were based on the City's criteria of the construction budget limited to the grant amount, location within the City's priority development area, and candidates for rehabilitation.

Annual Overlay/Rehabilitation, 2017-2018 and 2020-2021 Pavement Design and PS&E, City of San Leandro, CA. Associate/Pavement Engineer. NCE prepared construction documents and pavement rehabilitation and reconstruction design for 23 arterial, collector, and residential streets (5 miles). NCE's scope of work included pavement investigation and design and preparation of civil design PS&Es for construction. Pavement design solutions included conventional and rubberized hot mix asphalt overlays, full-depth asphalt reconstruction, FDR in lieu of more expensive conventional reconstruction, and a pilot project for cold central plant recycling (CCPR) on an arterial street based on recommendations provided by NCE. Visible drainage issues were addressed, such as localized ponding in the gutter pan, the design of over 100 ADA ramps, curb and gutter repairs, and improvements to striping and pavement markings with the addition of class II and class IV bike lanes. NCE submitted and managed three encroachment permit applications with Caltrans as the project encroached on three state routes, NCE's engineer's estimate matched that of the winning contractor bid, indicating that NCE was able to anticipate the value of the scope of work and contractor climate.

Castro Ranch Road Rehabilitation and Complete Streets Improvements, City of Richmond, CA. Associate/Pavement Engineer. NCE prepared civil engineering, pavement engineering, hydrology and hydraulic engineering, and special environmental studies for the Castro Ranch Road Rehabilitation Project. This project involved a significant redesign and rehabilitation of rural roadway corridor to provide new buffered bike lanes to address a missing bicycle lane link along the Three Bears Loop, improved traffic flow and calming, new pedestrian crossing with rectangular rapid flashing beacons, median landscaping, construction of new sidewalk, replacement of curb ramps, assessment of drainage structures and improvements, and addressing other roadway deficiencies including subgrade damage at a retaining wall and repair of guard rail systems. NCE developed a cost saving pavement treatment alternative using CIR with both foam and emulsion technologies resulting in over \$500,000 in cost savings over conventional mill and overlay pavement treatments.

On-Call Pavement Engineering, Caltrans, Statewide, CA. Contract Manager/Task Order Manager. James manages this multiyar pavement on-call contract with Caltrans and is responsible for the contractual and project management activities. Major task orders emphasize asphalt and concrete pavement performance and evaluation for various types of pavement issues such as a comparison of ARHM and conventional HMA performance, HMA smoothness specifications, and polyester inlay materials evaluation. He provided technical guidance on the selection and testing of joint filler and spall repair materials and acted as a construction methods assessor on the installation of precast concrete slabs. He wrote, reviewed, or edited numerous interim and final reports including those dealing with continuously reinforced concrete, rapid set concrete, concrete inlay hardeners, and concrete flexural strength.



Thomas (Tom) Van Dam, PhD, PE, FACI, LEED AP – Rigid Pavement Design

In the rapidly evolving field of civil engineering, sustainability is increasingly important. Tom is leading the way by working with the Federal Highway Administration to guide more sustainable pavement practices and applying his expertise on a variety of projects.

One of NCE's five pavement professionals with a PhD, Tom is proud of the level of expertise that exists within the firm. He enjoys working with clients and the public and has the ability to effectively communicate the importance and applicability of highly technical information. He feels that NCE's clients "know they can rely on us to bring them the latest technological knowledge as it relates to pavements and pavement materials." Tom brings a range of expertise to his projects. He has authored more than 75 publications and has given more than 100 presentations on pavements, concrete materials and sustainability. An active researcher, he has led projects for agencies, foundations, departments of transportations and private entities. He has been a professor, Director of the USDOT-funded University Transportation Center for Materials in Sustainable Transportation Infrastructure and Director of the Michigan DOT Transportation Materials Research Center.

Representative Projects

2022 West Highway 101 Pavement Rehabilitation Project, City of South San Francisco, CA. Lead Pavement Engineer. NCE is providing engineering and design services to facilitate a rehabilitation project of all eligible streets west of 101. The 2022 West of 101 Pavement Rehabilitation Project's goal is to perform deferred maintenance west of 101, outside of the annual surface seal program. The City is responsible for the maintenance and repair of approximately 140 centerline miles, comprised of 33 arterial miles, 39 collector miles, and 68 residential miles. The City utilizes a program of slurry seals, overlays and surface reconstruction as maintenance and rehabilitation strategies. West of US101 there are approximately 123 centerline miles, comprised of 23 arterial miles, 35 collector miles, and 65 residential miles. Every two years the City surveys the streets and enters the data into the South San Francisco Pavement Management Program (PMP) StreetSaver® database program. NCE is responsible for project management, pavement rehabilitation design, PS&E, and bidding and construction support services.

Pavement Engineering On-Call Services, San Francisco International Airport, City and County of San Francisco, CA. Forensic Evaluator. As the Airport's On-Call Pavement Consultant, NCE has multiple responsibilities, including maintaining the



Education
PhD, Civil Engineering, University
of Illinois, Urbana, 1995
MS, Civil Engineering, University
of Illinois, Urbana, 1986
BS, Civil Engineering, University
of Illinois, Urbana, 1984

Registrations and Certifications Professional Engineer – Civil, NV #23424

LEED Accredited Professional

Affiliations

American Concrete Institute American Society of Civil Engineers

Transportation Research Board International Society of Concrete Pavements

American Concrete Institute Delmar L. Bloem Distinguished Service Award (2018)

Joined NCE 2013

Years of Experience 35 years

MicroPAVER® APMS including automated distress surveys, determining the ACN/PCN for all runways and taxiways, conducting numerous forensic analyses to investigate development of distress on airside pavements, developing construction guidelines for long-lasting longitudinal joints for asphalt pavements and conducting pavement designs for runway rehabilitation and taxiway construction. Tom has provided technical support throughout this project, guiding the forensic evaluations and reviewing pavement design reports.

On-Call Pavement Engineering, Statewide, Caltrans, CA. Subject Matter Expert. This is a multi-year on-call contract to provide technical solutions and assist with implementing new strategies and policies that will improve the State's highway network. Key elements include sustainability, forensics, design tools, performance modeling, data analysis, and asphalt and concrete materials.

Almond Grove District Street Reconstruction, Town of Los Gatos, CA. Pavement Engineer. The Town of Los Gatos contracted NCE to prepare pavement design and PS&E to replace 100-year-old concrete streets in the historic Almond Grove District. The



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purpose of the project was to address the deteriorated PCC pavements and ADA compliance issues, while preserving the historical and cultural identity of the neighborhood. The concept design phase for this high-profile community project included evaluation of complete streets principles, including street design, typical sections, intersection design, stormwater management, and surface treatment concepts, for incorporation into the project. This project was highly visible and required continued community outreach and consideration of construction impacts due to the highly visible nature, public expectations, historical aspects, and potential impacts to parking and home access.

Measure M Street Rehabilitation, City of Berkeley, CA. Pavement Engineer. NCE implemented the City's \$30 million, multiyear street surface seal, rehabilitation and reconstruction project, one of the City's largest projects to date. The project included the development of pavement design and PS&Es for more than 30 miles (150 street sections) of surface seal, street rehabilitation, and reconstruction. Complete street elements included new bike lanes, intersection reconfigurations, new pedestrian cross-walks, storm drain improvements, and design of nearly 600 curb ramps, including pedestrian safety improvement bulbouts. NCE's pavement design solutions offered cost savings and environmental benefits using rubberized paving products diverting tires away from landfills, use of longer lasting pavement materials, and using recycle in-place technologies.

Sustainable Pavements Program, Federal Highway Administration (FHWA). Co-Principal Investigator. This ten-year (Phase I and Phase II), multi-task order IDIQ contract issued by the FHWA to promote the sustainability of pavements is a major initiative with the overarching goal of advancing the knowledge and implementation of sustainability considerations in pavements and pavement materials. The Sustainable Pavements Technical Working Group (SPTWG) is comprised of 20 representatives from key stakeholder groups, including federal and state government, academia, industry and research institutions. The SPTWG provides technical input to the FHWA—specific to sustainability and environmental aspects of pavements and materials—and to serve as a forum for information sharing and exchange. The Sustainable Pavements Reference Manual (http://www.fhwa.dot.gov/pavement/sustainability/hif15002/hif15002.pdf), of which Tom is the first author, is a 450-page manual on implementation strategies to improve pavement sustainability.

Implementation of Best Practices for Concrete Pavements, Federal Highway Administration (FHWA). Co-Principal Investigator. This is a multi-year, multi-task order IDIQ contract issued by the FHWA to promote concrete pavement technology. To, is one of the lead authors on the creation of the Concrete Pavement Notebook. The notebook addresses all elements of concrete pavement materials, design, construction, preservation, rehabilitation and is to be a compilation of updated current FHWA technical briefs, technical advisories and new stand-alone documents that are to facilitate implementation of best practices by FHWA and State DOT engineers. The entire notebook will also be web-based for easy access.

Technology Transfer of Concrete Pavement Technologies, Federal Highway Administration (FHWA). Technical Expert. This is a multi-year, multi-task order IDIQ contract issued by the FHWA to support the National Center for Concrete Pavement Technology. Tom has multiple roles in this project including instructor for concrete overlay and concrete preservation workshops, preparation of commentary to support the development of an AASHTO Guide Document on Performance Engineered Concrete Mixtures, development of a new manual of concrete pavement distress, revision of the Integrate Materials and Construction Practices for Concrete Pavement: A State-of-the-Practice Manual, and other outreach activities.

NCHRP 1-61: Evaluation of Bonded Concrete Overlays on Asphalt Pavements, National Cooperative Highway Research Program, Nationwide. Co-Principal Investigator. Bonded concrete overlays on asphalt (BCOA) design, materials, construction, and performance were documented through a thorough literature review and agency survey. In addition, site investigations were conducted on 19 in-service BCOA projects and included automated condition surveys, ground penetrating radar surveys, and detailed site investigations (e.g., visual distress survey, FWD testing, coring, unbound material sampling). Information obtained from site investigations was incorporated into BCOA design procedures and outcomes were compared to in-field conditions. Study results showed in-service BCOA projects are performing in good or better condition. BCOA-ME, Colorado DOT, and Illinois DOT thickness design recommendations were found to be statistically different than as-constructed conditions. In these procedures, slab size, concrete strength, synthetic macrofibers, and asphalt layer thickness influenced the design procedure thickness recommendations the most. For AASHTOWare Pavement ME Design⁷⁴, longitudinal cracking performance prediction correlates well with field-observed values.



Mei-Hui Lee, PhD, PE - Pavement Management and Design

Mei-Hui has a PhD in civil and pavement engineering and over 12 years of extensive experience in pavement design, evaluation and maintenance projects. Currently, Mei-Hui serves as Project Manager and Senior Engineer for various pavement and civil design and pavement management projects at NCE. Her clients include the Counties of Siskiyou, Mendocino, Lake, Trinity, Mariposa and Sacramento as well as multiple cities including South San Francisco, Pacifica, Belmont Sacramento, Davis, Stockton, Elk Grove, Lincoln, and Folsom. Mei-Hui is certified by the MTC inspector certification testing program. She was also involved in trench cut study for City of Sacramento and Pacifica.

Representative Projects

2017 to 2022 Street Surface Seal and Rehabilitation Projects, City of South San Francisco, CA. Project Manager/Senior Engineer. NCE has been providing to the City a various of pavement management services including development of a multi-year Paving Work Plan, updating the City's maintenance and rehabilitation decision tree, evaluating alternative pavement treatment technologies, and development of construction documents for bidding. In 2017 to 2021 pavement management programs, we have developed pavement design and civil design for surface seal and rehabilitation of 48 centerline miles (more than 200 sections) of City streets with a construction cost over \$14 million.

In addition, NCE has modified City's Street Saver database and updated historical maintenance and rehabilitation records to perform budget analyses and develop multi-year work plan. Recently, City's 6-Year Work Plan was updated based on City's budget, rehabilitation strategy and candidate streets are grouped by maintenance zone for efficiency of design, construction (less mobilization), future maintenance, and to be able to resurface more streets with a limited pavement resurfacing annual budget. NCE has provided pavement and civil design services for preventive maintenance on City streets with scrub, slurry, and cape seals and rehabilitation of City streets with mill and overlays as well as surface reconstruction.

2022 West Highway 101 Pavement Rehabilitation Project, City of South San

Francisco, CA. Project Manager, NCE is providing engineering and design services to facilitate a rehabilitation project of all eligible streets west of 101. The 2022 West of 101 Pavement Rehabilitation Project's goal is to perform deferred maintenance west of 101, outside of the annual surface seal program. The City is responsible for the maintenance and repair of approximately 140 centerline miles, comprised of 33 arterial miles, 39 collector miles, and 68 residential miles, The City utilizes a program of slurry seals, overlays and surface reconstruction as maintenance and rehabilitation strategies. West of US101 there are approximately 123 centerline miles, comprised of 23 arterial miles, 35 collector miles, and 65 residential miles. Every two years the City surveys the streets and enters the data into the South San Francisco Pavement Management Program (PMP) StreetSaver* database program. NCE is responsible for project management, pavement rehabilitation design, PS&E, and bidding and construction support services.

FY20/21 and FY21/22 Pavement Resurfacing Program, City of Pacifica, CA. Project Manager. NCE has developed 5-Year work plan for the City with surface seal and rehabilitation projects based on City's SB1 funding, as well as pavement management database review and unit cost update. Field reviews were performed to verify pavement condition and treatments to finalize the work plan. NCE then scheduled field calibration meeting with City staff to discuss various surface seal applications and base repair criteria. Cost effective cape seal with leveling courses were designed on residential streets with lower PCI to prevent water from damaging pavement and help resisting reflective cracking. As part of this project, NCE civil and pavement engineering design services included pavement coring, curb/gutter replacement, utility coordination, curb ramp design, drainage improvements, pavement design recommendations, PS&Es, and bidding and construction support services.



Education PhD, Civil Engineering, National Taiwan University, Taiwan, 2009 MS, Civil Engineering, Columbia University, New York, 2012 BS, Civil Engineering, National Taiwan University, Taiwan, 2002

Registrations and Certifications Professional Engineer – Civil, CA #87635 MTC StreetSaver® Rater Certification Program

Affiliations

American Society of Civil Engineers American Concrete Pavement Association

Joined NCE 2014

Years of Experience 12 years



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Annual Overlay/Rehabilitation, 2017-2018 and 2020-2021 Pavement Design and PS&E, City of San Leandro, CA. Senior Engineer. NCE prepared construction documents and pavement rehabilitation and reconstruction design for 23 arterial, collector, and residential streets (5 miles). NCE's scope of work included pavement investigation and design and preparation of civil design PS&Es for construction. Pavement design solutions included conventional and rubberized hot mix asphalt overlays, full-depth asphalt reconstruction, FDR in lieu of more expensive conventional reconstruction, and a pilot project for cold central plant recycling (CCPR) on an arterial street based on recommendations provided by NCE. Visible drainage issues were addressed, such as localized ponding in the gutter pan, the design of over 100 ADA ramps, curb and gutter repairs, and improvements to striping and pavement markings with the addition of class II and class IV bike lanes. NCE submitted and managed three encroachment permit applications with Caltrans as the project encroached on three state routes. NCE's engineer's estimate matched that of the winning contractor bid, indicating that NCE was able to anticipate the value of the scope of work and contractor climate.

2015 to 2020 Transportation Infrastructure Rehabilitation Capital Improvement Project, City of Davis, CA. Project Engineer/Senior Engineer. This project involved producing pavement rehabilitations for 698 street sections in Davis from 2015 to 2020 with a construction cost over \$18.5 million. The project involved non-destructive pavement deflection testing, pavement corring, pavement condition surveys and base repair location identification. Following the collection of the field data, rehabilitative recommendations were made based on each street segment's structural integrity and performance. Recommendations for each section were summarized in a pavement design report and submitted to the City. In addition, NCE has updated City's pavement management program in 2015 and 2018. 3-Year work plan for City's capital improvement project was developed in 2017 with annual paving budget \$3.5 million per year.

2015 Street Reconstruction Project, Town of Moraga, CA. Project Engineer. In order to effectively spend funds to be collected from a recent sales tax measure passed by Town residents, NCE worked with Town of Moraga to plan and prepare for the aggressive and cost-effective treatments for the three phase projects. In phase III, a total 13 streets of residential and collector streets are designated for reconstruction or overlay. Mei-Hui served as Project Engineer in preparation of the field data collection, including identifying localized pavement repairs and curb and gutter repairs and pavement design analysis. Pavement reconstruction recommendations were summarized in the report and submitted to the Town.

Main Street Rehabilitation, City of Oakley, CA. Project Engineer. This project included rehabilitation recommendations for a one-mile stretch of Main Street in Oakley. The project involved non-destructive pavement deflection testing, pavement coring, pavement condition surveys and base repair location identification, all reviewed by Mei-Hui. The subject section of Main Street last received an overlay about 20 years ago and the only maintenance that had been completed since was the repair of the worst base failure areas in 2009 by Caltrans prior to being relinquished to City. The street asphalt surface is visibly aged and in need of pavement rehabilitation to address low to medium severity longitudinal and transverse cracking, as well as block cracking and potentially accommodate increased traffic from future development. Recommended treatment is thin mill and overlay with rubber hot mix asphalt to control reflecting cracking.

Pavement Management System Updates, Various Cities and Counties. Project Engineer. Mei-Hui has been involved with updating Pavement Management Systems (PMS) for many Cities and Counties throughout California. She is responsible for the analysis and quality control of pavement distress data collection, updating maintenance and rehabilitation decision trees and the treatment unit costs, and the development of budget scenarios and summary reports. She has developed cost-effective maintenance treatments and strategies, prepared custom multiple-year detailed street maintenance plans and budget option reports, and linked GIS maps with management sections in the PMS database.

2015 Street Resurfacing Program, City of San Bruno, CA. Project Engineer. This project included 16 sections in the City's pavement rehabilitation design and seal program. Mei-Hui served as Project Engineer in preparation of the field data collection, including identifying localized pavement coring plan, FWD testing, pavement condition survey and pavement design analysis. She also conducted budgetary analysis on City's StreetSaver® database by different maintenance strategies and funding level. Summary of analysis result were submitted to the City.



Matthew Gaber, PLA - Landscape Architecture

Over a 32-year career, Matthew has developed a wide perspective on traditional and emerging areas of practice. He is recognized for the creation of bold, thoughtful solutions to complex problems for varied clientele across a spectrum of sites. Throughout his career Matthew has sought work which is environmentally and socially responsible, with a strong focus on client service and relationships. He brings this approach and passion to each new project. Matthew has focused his career on providing professional services to public agencies and non-profit developers, working on a wide range of sites and housing types from single family residential, to townhouses to apartments and multi-story residential towers. Most recently for the Habitat for Humanity apartments in San Bruno, California.

Representative Projects

Bay Ship and Yacht Bay Trail, City of Alameda, CA. Landscape Architect. Located along the historic Oakland-Alameda estuary on a brown field site with an active shipyard next door, this trail provides trail users and ferry passengers with exceptional views of cargo ships and the San Francisco Bay. Along the length of the trail interpretative elements such as propellors, anchors and wenches are placed to allow trail users to see, touch and learn about the workings of ships and marine infrastructure. Key services provided included complete landscape design, permitting services and sea level rise adaption planning.

Cherryland Community Center, Noll and Tam Architects, Hayward, CA. Principal Landscape Architect. Matthew provided complete design, community engagement, and construction documentation services for a new community center located within a historic neighborhood of Alameda County. Working closely with the underserved Cherryland community, Matthew assisted the County and Community with the creation of multiple studies exploring a range of site plans and programming options. The final site plan includes a range of flexible spaces which celebrate historic agriculture character of the area and provide the community with a satellite library, childcare facilities, meeting rooms, classrooms and patios for special events.



MA, Landscape Architecture, Harvard Graduate School of Design, Cambridge, MA, 1995

Design, Cambridge, MA, 1995 BA, Landscape Architecture, University of California, Berkeley, 1987

Registrations and Certifications Professional Landscape Architect, CA #3740

Registered Landscape Architect, Nevada #1045

Affiliations

Council of Landscape Architects – Certified Landscape Architect

Joined NCE 2019

Years of Experience 32 years

Hillcrest Park Renovation and Green Infrastructure, City of Concord, CA. Principal Landscape Architect. The City of Concord received a grant from Caltrans to incorporate green infrastructure into Hillcrest Park to mitigate stormwater impacts from the expansion of Highway 4 and 242 in Concord CA. Matthew Gaber is leading the site planning and construction documentation for the integration of stormwater trash capture devices and bioretention facilities into this multi-use community park. The focus is on seamlessly integrating the bioretention and stormwater infrastructure into the park while maintaining and enhancing existing activities, the character and features of the park such as sports fields, play areas and regional trails within the framework of Caltrans grant requirements.

South San Francisco Green Infrastructure Study, City of South San Francisco, CA. Landscape Architect. NCE evaluated the feasibility of—and potential locations for—installing green infrastructure as part of the City's planned pavement rehabilitation projects. Focusing on ADA ramps and reconstruction of curbs and gutters. Mr. Gaber led through the phases of the project from the conceptualization of an approach to stormwater management, establishing criteria for the evaluation of potential sites, creating graphic standards for the presentation of the findings/recommendations and the construction documents with a specific focus on detailing, material selection and layout of the proposed improvements.

13th Street Complete Streets, City of Richmond, CA. Principal Landscape Architect. The City of Richmond has undertaken a street rehabilitation project to transform a dangerous 4-lane roadway into a multi-modal and multi-benefit corridor. Matthew Gaber is leading the conceptual design, community engagement and construction documentation process, guiding a team of landscape architects and civil engineers. Based on community input and in-depth analysis of existing conditions Matthew will lead the visioning of multiple studies for the reconfiguration of the street focusing on pedestrian safety, reducing travel speeds,



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creating class 2 bicycle lanes, incorporating green infrastructure/shade trees and designing broad sidewalks to create a vibrant pedestrian orientated streetscape. Upon the completion of the project 13th street will become one of the City of Richmond's first complete street projects and will transform an underserved neighborhood.

Piedmont Avenue ADA Improvements, University of California, Berkeley, CA. Landscape Architect. The International House, Berkeley is a multi-cultural residence and program center serving students at the University of California, Berkeley. Over the last two years the International House has undertaken a master planning process to address a multitude of public safety, ADA compliance, operational constraints, maintenance issues and code violations that currently exist within the Public Right of Way for this historic property located along the landmarked Piedmont Avenue. Project goals include creating a more welcoming entry; providing informal outdoor gathering spaces; integrating ADA access more gracefully; undergrounding utilities; creating wider sidewalks and increasing pedestrian safety; reducing maintenance costs; and enhancing the aesthetic appearance of the landscape. Matthew's responsibilities include project management, site planning, schematic design, permitting and approvals through multiple agencies, historic landscape research, community outreach, ADA compliance and landscape architecture.

Earl Glen View Park, City of San Bruno, CA. Principal-in-Charge/Principal Landscape Architect. Matthew led the Community Engagement, Conceptual Design and Construction Documents for a new 1-acre neighborhood park in San Bruno CA. Matthew's primary focus was on client service, the community was still recovering from the catastrophic effects of a gas line explosion and empathy was a critical aspect of a successful project.

Three Creeks Trail, City of San Jose, CA. Landscape Architect. Sited along a historic, abandoned railroad line and bordered by residential neighborhoods, the Three Creeks Trail is a signature rails to trails project for the City of San Jose. Matthew Gaber provided complete landscape design and permitting services for this multi-use catalytic trail, providing alternative routes of transportation for the bicyclists and pedestrians traveling through the neighborhood. To celebrate and explain the agricultural history of the Santa Clara Valley, interpretive elements were placed along the length of the trail. Key features of the project include a new accessible multi-modal trail, interpretative signage and seating elements, gateways, custom site furnishings, and drought tolerant tree groves.

Guadalupe River Trail, City of San Jose, CA. Landscape Architect. Sited along the shoreline of the San Francisco Bay and Guadalupe River in San Jose CA the Guadalupe River Trail is a vital gap closure of the SF Bay Trail. Working closely with Valley Water, the State Lands Commission, the Bay Trail and the BCDC, Matthew guided the project from conceptualization to permitting to implementation. Specific features included revegetation with contract grown locally harvested native plant species, seamless integration of the restoration plantings, an accessible multi-use trail and interpretative site furnishings which are inspired by and reflective of the natural history of the site.

Wildcat Creek Trail, City of San Pablo, CA. Landscape Architect. Wildcat Creek was a substantially degraded creek located within a highly urbanized neighborhood. Specific tasks involved trail design, restoration of portions of the creek bank along a 1,000-foot section of the creek bank, the design of a new trail, interpretative signage, pedestrian bridge and creek bank stabilization. Native plantings, permeable pavements and stormwater energy dissipating structures were key features of the plan. provided included complete landscape design, permitting services and sea level rise adaption planning.

Mariposa Design Engineering for Town Renovation, Mariposa County, CA. Principal Landscape Architect. Mariposa County received Disaster Resiliency Grant funds to transform the existing streetscape to improve ADA accessibility, install wayfinding elements, replace aging infrastructure, increase pedestrian safety and provide environmental comfort in the downtown district of Mariposa. Matthew Gaber is leading the visioning and construction documentation process ensuring that the proposed improvements, including the rehabilitation of the sanitary sewer infrastructure and pavement do not negatively impact historic features such as stone walls, wooden sidewalks and building entries. Challenges include designing ADA ramps and paths of travel on steeply sloped streets, avoiding conflicts with historic architectural features such as canopies and integrating the improvements into the Highway 49 roadway rehabilitation designed by Caltrans.

SR-89 Tahoe Trail Feasibility Study, Tahoe Regional Planning Agency, Stateline, NV. Principal Landscape Architect. Matthew will be defining the vision for the trail, creating conceptual alignments, lead the site analysis/inventory efforts, guiding the creation photorealistic visualizations and participating in agency and community outreach. Additional tasks will include review of agency's standards, preparation of the final feasibility report, cost estimates, defining evaluation criteria and quality control.



Mary Horvath, PE, CFM, QSP – Hydrology and Hydraulics/ Storm Drainage

Mary is an Associate Engineer and Lead Hydrologic and Hydraulic Analysis Specialist for NCE. For the past 24 years, Mary has focused on assisting clients throughout Northern California and Nevada with water resources and floodplain management technical services. She has the unique ability to blend her expert understanding of storm drain systems hydraulics with her knowledge of urban watershed management; to deliver thoughtful and practical recommendations as part of drainage studies, flood control analysis, green infrastructure planning, and storm drain master plans. Mary has been the Project Manager or Technical Lead for a variety of water resource projects during her career, including numerous storm drain master plans. One of Mary's best attributes is her ability to distill and then present highly technical information to a diverse audience, including managers, elected officials, and the public.

Representative Projects

University/Marina/Spinnaker Street Improvement Project and CEQA, City of Berkeley, Berkeley, CA. Lead Hydrologist/Hydraulic Engineer. The streets that service the Berkeley Marina, a popular public amenity, are dilapidated and frequently flood with stormwater. To counter this, the City of Berkeley is conducting a series of improvement projects to address the structural, aesthetic and drainage issues of the roadways. NCE is leading the integrated civil design and environmental review and permitting for these projects that include the realignment/reconstruction of University Avenue, Marina Boulevard, and Spinnaker Way, construction of a roundabout connection at the intersection of University Avenue with Marina Boulevard, parking improvements, pedestrian circulation and safety enhancements, new drainage facilities, and green infrastructure and pervious parking treatment to reduce stormwater runoff to the bay. The design addressed sea level rise and resiliency, cultural resources, green infrastructure, and public access. Mary led the analysis and design of drainage improvements and storm water facilities including the infiltration features.

I-80/Central Avenue Interchange Improvement, City of Richmond, CA. Lead Hydraulic Engineer. Improvements will be completed as two separate projects in an effort to improve traffic congestion in the I-580/I-80 Central Avenue area. Through the use of multiple electronic variable message signs, the first project will redirect I-80 westbound on-ramp traffic during weekend peak periods to I-580. The second



Education
MS, Hydrology, University of
Nevada, Reno, 1996
BA, Geology, Smith College, 1990
Registrations and Certifications

Professional Engineer – Civil, NV #016269 Professional Engineer – Civil, CA #74433 Certified Floodplain Manager (ASFPM: US05-01731) Qualified Stormwater Pollution Prevention Plan Preparer (QSP) – CA #22855

Affiliations

American Society of Civil Engineers Floodplain Management Association Association of State Floodplain Managers

Joined NCE 2017

Years of Experience 24 years

project will improve signalized intersection spacing along Central Avenue by connecting Pierce Street and San Mateo Street, converting Pierce Street access at Central Avenue to "right-in, right-out," and relocating the traffic signal at Pierce Street/Central Avenue to the San Mateo Street/Central Avenue intersection. Mary is responsible for the analysis of the hydrologic and hydraulic conditions of the site in order to inform the design for storm water management.

Updates to Kirker Creek Watershed Stormwater Management Plan, City of Pittsburg, CA. Technical Task Lead. The City of Pittsburg selected NCE to provide an update to the 1999 Stormwater Management Plan (SWMP) for the Kirker Creek Watershed. The watershed for Kirker Creek included in the study includes the area draining to Kirker Creek within the City from just upstream of Buchanan Road to its outlet at the San Joaquin River. The 1999 SWMP included a hydrologic/hydraulic model analysis to assess flood potential by evaluating peak flow rates in the existing drainage system, accounting for future land use conditions. The study evaluated various project mitigation alternatives to improve undersized pipes, culverts, and channels and to provide additional storage in detention basins. Some of the improvements proposed in the SWMP were constructed, but most were not. The update to the SWMP will model the constructed improvements and other changes in the Creek and



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watershed to update peak flows and floodplain extents in Kirker Creek and determine what additional improvements are required to comply with Contra Costa County drainage standards and reduce flood risk to the community.

Rumrill Boulevard Complete Streets and Green Infrastructure, City of San Leandro, CA. Stormwater Design Lead. NCE designed a 2.5-mile-long complete streets project along Rumrill Boulevard with an estimated construction value of \$15 million. This Community-based design process focused on transforming the street into a safe and friendly place for people and business by improving conditions for walking, bicycling, and transit. The project adds Class IV bikeways in both directions of travel. Additional key project elements include landscape buffers, widened bus stop landings, increased parking, and video detection at traffic signals for vehicles and bicycles. In addition, the project includes LID design and bioretention basins, landscaping improvements, curb extensions/bulbouts, sidewalk widening, crosswalk improvements with rectangular rapid flashing beacons, median refuges bus stop shelters, expanded street lighting, ADA concrete and roadway improvements (curb ramps, sidewalks, driveways, medians, and regrading pedestrian roadway crossings), drainage improvements, trail crossings, wayfinding signs, pedestrian and street lighting. Mary led the design of the stormwater and drainage facilities.

Vellow Brick Road Complete Streets, City of Richmond, CA. Drainage Design Lead. The project proposes to address key community-identified barriers, issues, and opportunities in the community in order to design and implement complete streets improvements along roadways in the community-identified Yellow Brick Road network. Improvements include Class II bicycle facilities, extended sidewalks, decorative crosswalks, pedestrian and bicycle wayfinding signs, pedestrian-scale lighting, landscaping, curb extensions, roundabouts and traffic circles, ADA curb ramps, speed tables, raised intersections and crosswalks, rectangular rapid flashing beacons, median refuges, back-in angled parking, green painted bicycle lanes, landscaped median refuges, and trail crossings.

Sierra Boulevard Complete Streets Project, City of South Lake Tahoe, CA. Hydraulic Lead. Mary is overseeing the hydraulic and water quality analysis for this improvement project in South Lake Tahoe. The project consists of planning, public outreach, design and permitting for full rehabilitation of Sierra Boulevard, an approximately 0.63-mile arterial road. The design elements integrate the needs of a diverse group of users and include stormwater treatment and conveyance, bike lanes, multi-use paths, pavement rehabilitation, landscaping and path lighting.

Drainage Master Plan Update, City of Richmond, CA. Project Manager. The City of Richmond contracted NCE to develop a comprehensive storm drain master plan update to evaluate the current state of its complex storm drain system. Mary led a detailed analysis of the storm drain system to develop a comprehensive capital improvement project list, assist the City with trash compliance requirements in the Municipal Regional Permit, and integrate green infrastructure.

Storm Drainage Master Plan, City of Scotts Valley, CA. Project Manager. Mary is leading this effort to evaluate the drainage conditions of Scotts Valley and assemble improvements to address drainage and water quality issues. The project includes hydrologic and hydraulic modeling of the storm drain system to identify priority capital improvement projects and infrastructure needs. The storm drain master plan addresses storm water regulatory requirements for trash control.

Stormwater Master Plan, City of San Pablo, CA. Technical Advisor. The City of San Pablo was faced with numerous drainage, flooding and stormwater compliance challenges. The City lacked the storm drain data, system modeling, and compliance recommendations necessary to overcome these challenges. NCE worked collaboratively with the City to deliver a project that allowed the City to efficiently tackle these challenges. Project deliverables included a complete and accurate citywide GIS storm drain network, a comprehensive storm drain master plan, recommendations for development and creek setback standards, and NPDES permit and trash compliance recommendations. Mary performed quality control and technical guidance on the storm drain modeling.

Los Gatos Stormwater Master Plan, Town of Los Gatos, Los Gatos, CA. Technical Lead. The Stormwater Master Plan (SWMP) Update, which NCE prepared for the Town in early 2021, included the delineation of priority areas, a data collection effort to inventory the Town's drainage infrastructure, an update of the Town's existing geodatabase with the collected data, a hydrologic and hydraulic analysis analyses to characterize drainage deficiencies in the priority areas, and the identification, conceptual design and cost estimates for CIP projects to address drainage issues. Mary was the main point of contact with the Town and led the technical aspects of the project including data collection, hydrologic and hydraulic analysis, and the preparation of the Stormwater Master Plan Update.



Gail Ervin, PhD - CEQA/NEPA Lead

Gail has more than 35 years of experience in environmental assessment and planning, facilitation, and public dispute resolution, as both agency staff and consultant. She specializes in transportation and municipal infrastructure projects, downtown commercial and affordable housing development, adaptive reuse of historic buildings, and brownfield development, with special expertise in downtown and neighborhood revitalization. Additionally, Gail has served in numerous community and international positions, including as a Sacramento County Project Planning Commissioner, Association of Environmental Professionals State Board member, and US Representative to the World Mediation Forum. This professional experience uniquely complemented by her active civic involvement provides a thorough understanding of project analysis for both locally (CEQA) and federally funded (NEPA) projects, public dispute resolution, public policy development, project management, public outreach, and development review from all perspectives.

Representative Projects

Grand Street OBAG 2 Rehabilitation Project, City of Alameda, CA. Environmental Lead. The City of Alameda (City) has requested that NCE complete pavement and civil design and E-76 documents for the Grand Street Rehabilitation Project (Project). The section of Grand Street from Encinal Avenue to Shoreline Drive is an important major collector street that serves as a north-south connector for access to neighborhood streets schools, and to a local shopping center. NCE is exploring cost efficient pavement rehabilitation strategies based on coring and pavement deflection testing with consideration of conventional and innovative paving materials (e.g., HMA, WMA) and alternative recycle in-place pavement treatment technologies such as Cold In-Place Recycling (CIR). The project will include the design Class II and buffered bike lanes, ADA compliant curb ramps and pedestrian crossings, new lighted pedestrian crossings, minor drainage improvements, consideration of a roundabout, and curb and gutter repairs.

I-80/Central Avenue Interchange Improvement Project, City of Richmond, CA. CEQA/NEPA Task Manager. The City of Richmond is serving as the lead agency for the I-80/Central Avenue interchange that will improve traffic conditions. The project will increase spacing between the signalized intersections east of I-80 by connecting Pierce Street and San Mateo Street, restricting Pierce Street access at Central Avenue to "right in, right out" only, and relocating the traffic signal at Pierce Street/Central Avenue to the San Mateo Street/Central Avenue intersection. Gail is managing



Education PhD, Human Sciences, Specialization in Transformative Social Change/International Peace and Conflict Resolution, Saybrook University, 2015 MA, Environmental Planning, Consortium of the California State University, 1988 BA, Social Ecology, University of California, Irvine, 1978

Registrations and Certifications Certificate, Environmental Planning, University of California, Irvine Extension, 1977

Affiliations Association of Environmental Professionals American Evaluation Association Alliance for Peacebuilding Association for Conflict Resolution Northern California

Joined NCE 2018

Years of Experience 35 years

preparation of technical documents to meet Caltrans Local Agency Project Manual requirements (Extended Phase I Cultural Resources investigation, Phase II Environmental Site Assessment, Air Quality and Noise reports), and an Initial Study/Mitigated Negative Declaration. The project will increase spacing between the signalized intersections east of I-80 by adding a new roadway connection between Pierce Street and San Mateo Street, restricting Pierce Street access at Central Avenue to "right in, right out" only and relocating the traffic signal at Pierce Street/Central Avenue to the San Mateo Street/Central Avenue intersection. Key issues involve right of way acquisition, cultural sensitivity, and soil contamination.

University/Marina/Spinnaker Street Improvement Project and CEQA, City of Berkeley, CA. Project Manager. NCE is leading the integrated civil design and environmental review (CEQA) and permitting for this high visibility local road improvement project. The project includes the realignment of University Avenue to move off the old pier structure, with a roundabout connection at Marina, resurfacing, and potential realignment of Marina with potential parking improvements, resurfacing of Spinnaker with pedestrian enhancements, and potential green infrastructure parking improvements. Although the City initially requested three separate scopes of work, based on public understanding of the project, NCE recommended a merged environmental review that protects the City, provides comprehensive information and greater transparency for decision



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makers and the public, provides greater flexibility for construction timing, and is saving the City tens of thousands of dollars. Once technical studies and an initial study were coordinated with design to ensure no environmental impacts would occur in this sensitive location, the project was able to be categorically exempted from CEQA.

Richmond Bay Trail Bicyclist and Pedestrian Safe Connections Quick-Build Project, City of Richmond, CA. CEQA/NEPA Lead. This project involved a Quick-Build, bidirectional, protected bikeway along Hoffman Boulevard and Cutting Boulevard between Hoffman Boulevard and Garrard Boulevard, while also making pedestrian safety improvements. The project will quick-build 1.0 miles of 12-foot-wide two-way bikeway protected from traffic by a 3-foot-wide buffer containing bollards and armadillos, including perpendicular or nearly perpendicular bikeway approaches at two railroad grade crossings, and 0.35-miles of 12-foot wide, Class I multi-use trail that pedestrians can use where no sidewalk exists on Cutting Boulevard. The alignment was assessed for potential biological, cultural and hazards issues, and determined to be exempt from CEQA. Gail guided preparation of a Notice of Exemption and administrative record for the City.

Via Verdi Slope Stabilization Project, City of Richmond, CA. Environmental Compliance Lead. After the sole access road to a residential community started to collapse at Via Verdi—impacting access to residences, street infrastructure, utilities, and San Pablo Creek—NCE's emergency response included designing a temporary bypass road to provide access until a permanent solution for the slope failure could be designed. The final project includes repair and replacement of the culvert with a modern, reinforced concrete box culvert, slope stabilization, and reconstruction of the road. Gail's role as task lead includes managing the completion of technical studies and preparation of CEQA and NEPA (USACE Lead) environmental documents and permitting.

Poplar Beach Gateways Plan and Program Environmental Impact Report, City of Half Moon Bay, CA. Project Manager. NCE is evaluating alternative alignments to a section of The Coastal Trail alignment and helping the City of Half Moon Bay establish a long-term plan for managing coastal bluff erosion at Poplar Beach Park. The Coastal Trail is a key asset for the City given its proximity to the coast, scenic value, and frequent and multi-modal use. The current trail alignment is at risk due to erosion caused by unmanaged trail and beach access, stormwater runoff and coastal erosion, and the bluff is receding 2-3 feet per year. NCE is currently partnering with Gates and Associates to prepare the Poplar Beach Gateway Plan that will manage access and restore native vegetation, provide low impact park amenities, redesign the coastal trail to accommodate a 2050 bluff edge, and meet the vision and goals of the community through community outreach. Design, environmental review, and construction of an alternative alignment and park amenities such as restrooms, parking and access will be required to comply with the California Coastal Commission regulations and the City of Half Moon Bay's local coastal program. Gail's role as Project Manager includes managing the completion of the public outreach, plan development, and environmental documents.

Stockton Waterfront Promenade and Marina MND/EA, City of Stockton, CA. CEQA/NEPA Lead. Gail evaluated the environmental effects of the rehabilitation and expansion of the Stockton Waterfront Promenade and Marina in downtown Stockton. The promenade would provide pedestrian and bicycle access and waterfront public space amenities along the north and south sides of the Stockton Channel, construct a parking lot and restroom facilities, and construct both permanent covered docks and guest docks in the Channel. Key issues included archaeological impacts due to discovery of nearby Native American burials, soil contamination, water quality, and safety. Both a Mitigated Negative Declaration (CEQA) and an Environmental Assessment (NEPA) were prepared, requiring coordination with permitting agencies to provide the necessary analysis for agency NEPA compliance.

Docks Riverfront Parkway Promenade, City of Sacramento, CA. CEQA/NEPA Lead. Gail led a team evaluating the environmental impacts of constructing the Docks Riverfront Parkway Promenade that is approximately 5,000 linear feet long in the City of Sacramento. The project included assessment of 30% construction documents for a parkway promenade and park space along the Sacramento River Levee and historic rail corridor from O Street to Miller Park/Marina, sharing the levee with the Old Sacramento Excursion Train and local freight. A combined Initial Study/Mitigated Negative Declaration/Environmental Assessment was prepared to analyze a range of issues in the context of a complex urban core area with multiple land use strategies and plans, cultural/archaeological resources, such as the historic levee and National Register-listed rail line along the top of the levee, hazardous materials, biological, hydrological/floodplain, noise, pedestrian/cyclist safety issues regarding the rail line and roadways, traffic, urban design/aesthetics, air quality and public services/utilities issues. The project involved extensive local, state and federal agency coordination for riverfront issues, as well as coordination with Redevelopment Agency and City staff.



Debra Lemke, PWS, CPESC – Regulatory Compliance/ Permitting

With her knowledge in federal and state permitting, environmental surveying experience and relationships with regulatory agencies, Debra helps clients move their projects from the feasibility and design phases into reality. Once permits are secured, she provides permit management through compliance inspections, monitoring and agency reporting. Debra enjoys "preparing, securing and managing environmental permits so that project completion and environmental protection are in balance." A Professional Wetland Scientist, Debra also has certification and extensive experience in erosion and sediment control. Debra has the ability to address the most complex challenges in a calm, yet creative manner. Her clients appreciate her desire to share knowledge that benefits their projects, her ability to engage in productive dialogue and her respect for budgets and deadlines.

Representative Projects

San Francisco Bay Trail at Point Molate, East Bay Regional Park District, Richmond, CA. Senior Scientist. The East Bay Regional Park District (EBRPD) is proposing to construct a 2.5-mile section of the San Francisco Bay Trail, a non-motorized Class I trail, which connects at the Richmond-San Rafael Bridge and runs through Castro Point to the Point Molate Beach Park. The mission of creating the Bay Trail is to provide the community with an exceptional recreational experience along the scenic coastline and its habitats. NCE is leading the planning, design, environmental compliance, and permitting for this important project. Our work included completing a detailed feasibility analysis to identify potential trail alignments, consider engineering and landscape constraints, assess environmental considerations, and complete technical studies. The scope of regulatory compliance and permitting work is extensive and ongoing. Permit applications to the U.S. Army Corps of Engineers (404), San Francisco Regional Water Quality Control Board (401), and the San



Education BS, Environmental Science, Slippery Rock University, Slippery Rock, PA, 1994

Registrations and Certifications Professional Wetland Scientist (PWS), #1722 Certified Professional in Erosion Control and Sediment Control (CPESC), #2574

Affiliations Nevada Water Resources Association (NWRA)

Joined NCE 2016

Years of Experience 20 years

Francisco Bay Conservation and Development Commission have been submitted and we anticipate final permits in Fall 2021. Due to a variety of landowners within the project area along with sensitive habitats and unique cultural resources, thoughtful coordination with private landowners, resource agencies, and Native American Tribes has been a focus on the project. NCE worked closely with EBRPD staff to meaningfully engage stakeholders and agencies early in the process and communicate the Projects goals and needs to landowners in order to obtain critical easements and access agreements, and approval for the proposed project design. Debra conducted a WOUS delineation and assisted with the required regulatory permit applications to conduct work in sensitive habitats.

Point Molate Beach Park Erosion Assessment, City of Richmond, CA. Project Manager. The Point Molate area is a key coastal resource for the City of Richmond. A section of coastline at a City park began to erode at a rate that undermined a City road, created a public safety issue and could lead to delays for a planned bike path unless addressed. The NCE team prepared an erosion assessment and alternatives study to determine cost-effective shore restoration measures that could be permitted that identified a rock revetment as the preferred alternative. Additionally, NCE is completing the planning, permitting and design for the coastal erosion and park improvements. NCE completed technical studies to support CEQA, consultations (ESA Section 7 and NHPA Section 10) and Clean Water Act (CWA) Section 404/401, Rivers and Harbors Act Section 10, and Bay Conservation and Development Commission permits. NCE is proactively working with regulatory and permitting agencies to provide the appropriate design that can be implemented at the earliest possible time to stop the erosion and restore footing for the planned bike path. Debra conducted the WOUS delineation field work and reporting.

Via Verdi Slope Stabilization, City of Richmond, CA. Senior Scientist. The Via Verdi Neighborhood in the City of Richmond, CA was impacted by a landslide adjacent to San Pablo Creek and Via Verdi (local road). The landslide created public safety and public access issues, impacted utilities and street infrastructure, and created risk for the conveyance of creek flows and upstream dam releases. The City proclaimed a local emergency and secured Federal Emergency Management Agency (FEMA)

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funding for temporary emergency repairs/measures and permanent improvements. NCE initially focused on rapidly completing field investigations, evaluating slide mass characteristics, and monitoring ongoing movement to design and construct an emergency access road. NCE then quickly transitioned to completing a full alternatives analysis, conducting regulatory agency consultations, and initiating design. Project design included roadway, slope stabilization, drainage, fish passage including the design of a meandering engineered streambed and skylights within the culvert with detailed review and oversight by the San Francisco Bay Regional Water Quality Control Board (SFRWQCB) and California Department of Fish and Wildlife (CDFW), and utility elements. NCE completed all environmental tasks including agency consultations, technical studies, permitting, CEQA, and NEPA support. NCE is currently supporting the City with all regulatory permit management, biological and paleontological monitoring, and post-construction monitoring. The site has potential California red-legged frog and Alameda whipsnake habitat and NCE's qualified biologist and biological monitors are on site daily to ensure the City maintains compliance with project permits. Debra conducted the WOUS delineation field work and reporting.

Tilden Nature Area In-Stream Sediment Basin and Pond Wetland Restoration, EBRPD, Oakland, CA. Senior Scientist. NCE conducted environmental and biological assessments in the project area to develop a list of possible designs for maintenance and restoration in Wildcat Creek and pond wetland habitats. NCE assessed hydraulics and hydrology, geomorphic properties, biological habitats, waters of the U.S., and water quality in the project area. These assessments were done to complete CEQA, obtain environmental permits, and inform a list of possible maintenance and restoration actions that balanced opportunities and constraints at this popular public park. NCE then completed design and specifications for the preferred restoration action. The final design included fish passage, sediment excavation to restore capacity, revegetation and landscape plantings along the creek and ponds, landscape features for California red-legged frog, and a boardwalk and trail system to support recreation and educational events at the restoration site. Debra conducted the USACE aquatic resources delineation and assisted with the required regulatory permit applications to conduct this work in sensitive habitats.

Sierra Boulevard Complete Streets, City of South Lake Tahoe, CA. Environmental Technical Studies. This project consists of planning, public outreach, design, and permitting for full rehabilitation of Sierra Boulevard, an approximately 0.63-mile arterial road. Sierra Boulevard will incorporate design features meant to enable safe, convenient, and comfortable travel access for multiple users, including pedestrians, bicyclists, and motorists. The design elements integrate the needs of a diverse group of users and include stormwater treatment and conveyance, bike lanes, multi-use paths, pavement rehabilitation, landscaping, and path lighting. A NEPA Categorical Exclusion and CEQA MND will be prepared along with technical studies for hydrology and hydraulics, drainage facilities design, civil PS&Es, geotechnical report, traffic study and alternatives assessment, utility coordination, Section 106 compliance, Native American consultation, Section 4(f) compliance, visual assessment memo, natural environment study (NES), 30%, 60%, and 100% designs, constructability review, liaison to Caltrans throughout the E-76 process, and bld assistance. A complete Caltrans E-76 package will be prepared, including the final NEPA documents, right-of-way certification, and the PS&E certification.

Kennefick Road Flood Control Project, San Joaquin County, CA. Senior Scientist. The project reconstructs Kennefick Road and replaces temporary culvert repairs that were required due to flood damage with a series of three precast box culverts. The project is needed in response to a heavy rain event in February of 2017 causing flooding that washed out several small diameter CMP pipe culverts, destroyed over 100 feet of Kennefick Road, and eliminated the only access to residences, farms, and businesses to the north. Three reinforced concrete box culverts will be installed at the reconstructed roadway, consisting of six modular sections, a cutoff wall, headwalls at both ends, and four wingwalls. The culverts will be placed at streambed depth of the water course with minimal impact to the water surface elevation level at the design storm event. NCE's scope of services includes aquatic resources delineation, cultural, botanical, and biological surveys and technical reports, determination of temporary and permanent aquatic resources impacts, coordination with agencies, support for tribal consultation, preparation of a CEQA MND, compliance with the National Historic Preservation Act, and preparation and submittal of USACE Section 404, Central Valley RWQCB Section 401, and CDFW Section 1600 permit applications.



Exhibit A FEHR PEERS



Nate Levine, P.E.

Associate

EDUCATION

Bachelor of Science in Transportation Cal Poly San Luis Obispo, 2012

REGISTRATIONS

Licensed Civil Engineer, State of California No. 89636

AFFILIATIONS

Institute of Transportation Engineers (ITE) San Francisco Bay Area Chapter

LEADERSHIP

Town of Moraga Local Sales Tax Oversight Committee – Measure K Transportation Projects, 2021-2023

EXPERTISE

- Traffic Signal Design
- Intersection Design
- Traffic Calming
- Complete Streets
- Lighting Design
- Signing & Striping Design
- Roundabout Design
- Traffic Control/Handling Design
- AutoCAD
- · PS&Es
- Ramp Metering Design
- · Caltrans Permitting & Delivery

ABOUT

Nate is an Associate at Fehr & Peers with over nine years of experience in the transportation consulting industry. Through his work, Nate hopes to be able to provide creative solutions to transportation barriers to equitably and serve the communities he lives and works with. In his role as Technical Design and Project Manager for our Oakland office, Nate seeks to bring his proven track record for project delivery to enhance our Complete Streets project work. Nate's experience in transportation efforts includes a myriad of design work for Complete Streets including intersections improvements, traffic signals, roundabouts, and signing & striping. Nate has extensive experience delivering local through Caltrans' Project Development. Procedures Manual, working on both PEER and Oversight Projects

PROJECT EXPERIENCE

Grand Street Rehabilitation PS&E (Alameda, CA)

Nate is managing this transportation engineering design and support project to improve bicycle and pedestrian access along Grand Street, between Shoreline Drive and San Antonio Ave, in the City of Alameda as part of the pavement re-habilitation project being designed by NCE. We focused on pedestrian crossing treatments along the Grand Street project extents and separated bikeways on Grand Street, between Shoreline Drive and Enginal Ave.

East Bay Greenway PS&E (Oakland, CA)

The City of Oakland, Department of Transportation (OakDOT) has been awarded an Affordable Housing and Sustainable Communities (AHSC) grant to improve safety for bicyclists and pedestrians by designing and constructing over half a mile of the East Bay Greenway multi-use path, from Seminary Avenue to 69th Avenue. Project work includes data & utility collection, 35%, 65%, and 95% PS&E, as well as review of construction submittals. Nate provided design oversight for the final Fehr & Peers PS&E package.

Apple Campus 2, Highway Design & Caltrans Permitting (Cupertino, CA)

Working with a team of engineers and designers with this previous employer, Nate led the Caltrans design and permitting effort and completed plans, specifications (SSP and NSSP), and cost estimates for signal, roadway/layout, and signing and striping improvements associated with the Apple Campus. Nate also helped to design a new ramp metering system and modifications to existing Traffic Operation Systems (TOS) equipment at the Lawrence Expressway and I-280 on-ramp. This project was the first to be designed by a consultant through the Caltrans oversight and PEER process and

tunded by private sources. In total, Nate worked on four separate on/off ramps/intersection improvements along I-280 during a three-year penod.

Lakeside Lake Merritt Cycle Track

The project proposed a road diet on Lakeside Drive reducing the existing two-lane one-way street to one-lane one-way street to accommodate two-way protected cycletrack on the lake side of the roadway and other elements, in addition, a class IV bike lane on south side and a two-way protected cycletrack on lake side are proposed on Lake Merritt Boulevard. In total, project will provide 3,500° of cycletrack. The project is fast tracked to provided final PS&E documents so construction can begin in 2022. Nate is currently leading the signal and lighting design for the seven project intersections, working closely with City of OakDOT staff and local stake holders.

PS&E EXPERIENCE

San Leandro Repaying PS&E (San Leandro, CA)

Fehr & Peers is providing transportation engineering support on bicycle and pedestrian access improvements as part of the 2019 Annual Street Overlay & Rehab project being designed by NCF Work will focus on new Rectangular Rapid Flashing Beacons (RRFBs), a Pedestrian Hybrid Beacon (PHB), and Class IV separated bikeways on Bancroft Avenue; RRFBs and road diet on Grand Avenue; RRFBs on Manor Boulevard; and RRFBs, pedestrian push button relocations, and Class IV separated bikeways on Hesperian Boulevard. Nate is currently working with the design team to develop 70% PS&E package.

Potrero Avenue Bikeway PS&E (El Cerrito, CA)

Fehr & Peers is preparing signing & striping plans for the proposed restriping of Potrero Avenue between South 53rd Street and San Pablo Avenue. Project work includes preparation of 95% and final plans for the design, generally consisting of one travel lane, a bike lane, cross-directional parking, and two travel lanes. Nate prepared the final construction documents that will be used for construction of the improvements.

Ashbury Bikeway PS&E (El Cerrito, CA)

Fehr & Peers is preparing a cross-section for the proposed restriping of Ashbury Avenue between Fairmount Avenue and the city limit. Project work includes preparation of 95% and final plans for the design, generally consisting of one travel lane, a buffered bike lane, and parking in each direction. Nate prepared the final construction documents that will be used for construction of the improvements.

Agnews Campus Roadway Improvements (San Jose, CA)

Santa Clara Unified School District is developing state-of-the-art facilities for a 600-student elementary school, 1,000 student middle school, and 1,600 student high school on a 55-acre site located at 3500 Zanker Road in San Jose. While with a previous

Exhibit A

employer. Nate led the design team in preparing roadway, signal, and striping improvements for the Agnews Campus frontage along Zanker. This included curb extensions, bulb outs, and a buffered bike lane along a 2,000' section of frontage as well as traffic signal modification at two intersections.

DESIGN EXPERIENCE

I-280/Wolfe Road Interchange Improvement (Cupertino, CA)

As part of the I-280/Wolfe Road Interchange Improvement Project, Fehr & Peers is providing the electrical plans, estimates, and specifications. This design includes two traffic signals, city street lighting, highway traffic monitoring and lighting, signal interconnect, two temporary traffic signals, and four temporary ramp metering locations. Nate is completing the design of the temporary signal and ramp metering systems for the project.

Ardenwood Complete Streets (Fremont, CA)

While with a previous employer, Nate and his team worked with the City of Fremont and a private developer to deliver complete streets improvements along Paseo Padre and the future Dumbarton bikeway. Roadway improvements include a separated bike path, protected intersection, and a roundabout. Nate worked directly with the City of Fremont to utilize their design standards and industry standards to meet the multimodal goals in the region. This required coordination with City staff, community stakeholders, and Caltrans. After months of coordination, Nate developed the preliminary design to meet stakeholders' needs, which is being advanced to PS&Es despite unique project site constraints.

Ninth Street DSDC Project (Berkeley, CA)

Fehr & Peers is providing transportation and design support during construction for the Ninth Street Pathway Phase 2 Project as part of a continued effort to support the City of Berkeley through construction of proposed improvements. Project workincludes review of requests for information, contractor submittals, and troubleshooting any issues identified during construction or in relation to project plans. Nate has been responding to design and construction related questions from Caltrans and the contractor.

14th Avenue Streetscape Improvements (Oakland, CA)

The project's four lane streetscape improvements along 14th Avenue included traffic signalization and modification (at four intersections), roadway restriping, sidewalks enhancement and new bulbouts, adjustment/realignment of bus stop locations, minor storm drain improvements, and the conversion of existing medians to planted medians. As project manager while with a previous employer, Nate worked closely with the City of Oakland, outreach groups, and subconsultants to provide functional and inclusive designs for the community.

Exhibit A FEHR PEERS



EDUCATION

Bachelor of Science in Civil Engineering, Cal Poly, San Luis Obispo, 2001

REGISTRATIONS

Civil Engineer, State of California (#67002) Traffic Engineer, State of California (#2714)

AWARDS

Telegraph Avenue Complete Street Design and Implementation: America's Best New Bikeway of 2016 (ranked #6), People for Bikes.

http://peopleforbikes.org/blog/americasbest-new-bike-lanes-of-2016/

PUBLICATIONS & PRESENTATIONS

- McClain, Ryan (2017). "Quick Build Strategies for Complete Streets Implementation." Presented at the 2017 ITE Annual Meeting, Toronto, ON.
- McClain, Ryan: Nielson Modl, Carrie (2017), "Building on Complete Streets Momentum from Studies to On-the-Ground Solutions," ITE Journal.
- Nielson, Carrie; McClain, Ryan; Hennessey.
 Dan (2016), "Engineering Interim Design and Tactical Urbanism: From Cost-Effective, Quick Improvements to Powerful Public Outreach Tools," ITE Journal.
- Guest Lecturer. "Pedestrian Design and Human Behavior" and "Bike Design," UC Berkeley
- Instructor: "Complete Streets Implementation Training" Metropolitan Transportation Commission

Ryan McClain, PE, TE

ABOUT

Ryan is a principal with over 20 years of expenence in the transportation planning and engineering field, focusing on multimodal transportation analysis and design. He regularly manages or oversees complex multi-jurisdictional corridor projects, multimodal safety plans and designs, and citywide and countywide planning efforts. Ryan leads the Fehr & Peers companywide Complete Streets Design Group and is the vice chair of the international ITE Complete Streets Council. He frequently teaches courses on complete streets design, including recent classes for MTC throughout the Bay Area and lectures at UC Berkeley for the pedestrian/bicycle graduate class. Ryan works closely with agency staff, stakeholders, and the community to develop engineering solutions that work for all users.

RELEVANT PROJECT EXPERIENCE

Grand Street Rehabilitation PS&E (Alameda, CA)

Ryan is overseeing this transportation engineering design and support project to improve bicycle and pedestrian access along Grand Street, between Shoreline Drive and San Antonio Ave, in the City of Alameda as part of the pavement re-habilitation project being designed by NCE. We focused on pedestrian crossing treatments along the Grand Street project extents and separated bikeways on Grand Street, between Shoreline Drive and Enginal Ave.

Telegraph Avenue Complete Streets Plan and PS&E (Oakland, CA)

Ryan managed the Fehr & Peers team for this planning study turned design project to identify potential complete streets treatments along the entire length of Telegraph Avenue through Oakland. Recommendations included pedestrian crossing enhancements, vehicle lane reduction, buffered bike lanes, cycle tracks, transit islands, and transit priority systems. Fehr & Peers provided operational analysis, pedestrian and bicycle level of traffic stress evaluation, concept design and cost estimation, and public meeting support. Fehr & Peers continued work into the implementation phase of the project and developed construction documents for parking protected one-way cycle tracks coupled with lane reductions and crosswalk enhancements that were constructed as part of the City's repaying program.

Caltrans Pedestrian Safety Countermeasure Toolbox, and Staff Training (Part of the Smart Mobility Implementation)

Ryan co-authored a pedestrian safety countermeasures toolbox for Caltrans, which provides a set of tools for improving pedestrian safety on the State Highway System

in line with national best practice and innovations. It was designed to be used to address issues identified during traffic safety investigations conducted while evaluating high collision concentration locations and systemic safety locations. However, these tools may be used more generally to improve pedestrian safety. Fehr & Peers initially contracted to teach three courses to Caltrans staff based on this toolbox. With strong reviews and high interest, Caltrans requested another three, with a total of over 250 Caltrans staffing having now completed this two-day course.

Broadway-Keith Signal and Lighting (Oakland, CA)

Project Manager. Fehr & Peers developed a signal modification plan and street lighting plans for the intersection of Broadway and Keith Avenue in Oakland, as part of the larger Broadway-Keith to Golden Gate Way Bike/Pedestrian Improvement project. The plans upgraded the existing signal controller, cabinet, ITS equipment, and poles, modified the signal layout and phasing, and added pedestrian push buttons and countdown signal heads.

Upper Broadway Road Diet (Oakland, CA)

The Upper Broadway Road Diet Project continued the City of Oakland's commitment to providing bicycle facilities on Broadway. The project included a four to three lane reduction between College Avenue and Keith Avenue along with new bike lanes and enhanced pedestrian accessibility that tie into improvements we previously designed at the Broadway/Keith Avenue intersection. Ryan managed this project, including design of a pedestrian hybrid beacon (PHB) at Lawton Avenue, a rectangular rapid flash beacon at Taft Avenue, and a signal modification at Manila Avenue.

Yellow Brick Road Iron Triangle Walkable Neighborhood Plan and Design (Richmond, CA)

Ryan served as project engineer and technical expert for complete streets improvements in Richmond's Iron Triangle neighborhood. This project required close collaboration with grassroots group Pogo Park, Local Government Commission, and the City of Richmond to create a walkable vision for the Iron Triangle neighborhood. The project proposes walking and biking improvements throughout the Iron Triangle to connect key destinations, including schools, parks, employers, transit, and the Richmond Greenway. A key element of the project was a "living preview" that included a temporary roundabout, traffic circle, bicycle lanes, and other complete streets improvements demonstrated over a two-day community event. Ryan oversaw development of the temporary plans and set up of traffic control elements. Ryan also oversaw design and implementation of a grant funded interim design project that provided short-term traffic calming elements such as a traffic circle and comer bulbs. Continuing from our extensive planning and community engagement process, Fehr & Peers is supporting the design team with innovative bicycle and pedestrian features including a pedestrian hybrid beacon, pedestrian scale lighting, and traffic

calming elements to make Richmond's Iron Triangle Neighborhood a more walkable, bikeable place. Ryan is the principal-in-charge for the design portion of the project.

Richmond/San Rafael Bridge to Ferry/BART Complete Streets Design (Richmond, CA)

With the much anticipated opening of the Richmond-San Rafael Bridge Trail rapidly approaching, implementing a safe, comfortable bicycle connection to key destinations in Richmond became a priority for the City and Contra Costa Transportation Authority (CCTA). The City engaged NCE and Fehr & Peers to develop quick-build solutions to attract a range of bicyclists and connect the Richmond Greenway, the Richmond Ferry Terminal, and the Richmond BART Station through south Richmond to the bridge. Time was of the essence given the desire to have the connection made at the time of the bridge opening. The project included a mix of Class I, II, III, and IV bicycle facilities with paint, signs, channelizers, and modest curb work; curb extensions/bulbouts; sidewalk;, ADA curb ramps and bike ramps; trail crossings; speed humps; wayfinding signs; back-in angled parking; and 6,500 linear feet of Class IV cycle tracks featuring a buffer with K71 bollards and Armadillo road dividers. Longer term improvements will be considered later in time with the goal of allowing more space for bicycle facilities and pedestrians. NCE led the project, developing plans, specifications, and cost estimates. Fehr & Peers served as the bicycle/pedestrian design expert, attending design workshops, public forums, and reviewing all plans. Ryan was project manager and principal-in-charge.

Central Avenue/Bay Trail Quick Build PS&E (Richmond, CA)

As a quick build technical expert, Ryan helped refine bicycle improvements for the Bay Trail connection at the I-580 Ramps/Central Avenue intersection, as an add-on to a much larger operations project. CCTA and the City of Richmond wanted to install a quick build project to improve Bay Trail Access through this busy intersection with heavy CA-legal truck traffic. At this location, the Bay Trail alignment switches from the west side of the street to the east side, so bicyclists and pedestrians must cross the intersection twice. Fehr & Peers worked with the City and CCTA to modify their initial design to create a protected corner to support the two-stage turn for bicyclists and shorten pedestrian crossing distances. The bikeways were painted green and crosswalks were striped with continental markings to clearly designate how trail users should navigate the intersection.



REGISTRATION 2010/CA/Professional Land Surveyor/8732

EDUCATION

2008/Diploma/M.Dlv./Religious Studies/The Master's University/Santa Clarita

1990/BA/Political Science/University of California, Los Angeles

PROFESSIONAL AFFILIATIONS

California Land Surveyors Association

American Society of Civil Engineers

American Council of Engineering Companies

Utility Engineering and Surveying Institute

YEARS OF EXPERIENCE

With Psomas for 14 years; with other firms for 13 years

Tom Pilarski, PLS

Team Leader/Subsurface Utility Detection Director

Tom Pilarski has 27 years of experience in surveying and mapping. He oversees Psomas' ASCE Standard 38-02 Utility Detection and Mapping team. Psomas expanded its suite of services to include a subsurface utility locating and mapping business line with Tom providing oversight on projects that involve utility location where little or no as-built data exists. He serves as a valuable resource and provides a second opinion when Psomas utility detection crews follow the 811 Dig Alert locator to verify the utilities detected.

Experience

City of San Leandro Street Rehabilitation Program, San Leandro, CA: Utilities Detection Manager overseeing Subsurface Utility Detection over several locations within the City for the purposes of locating utilities within the areas of pavement rehabilitation. This project involved the use of multiple utility detection equipment to detect and mark multiple utilities that were known and unknown.

City of Richmond 13th Street Complete Streets Program, Richmond, CA: Utility Detection Manager overseeing subsurface utility detection services for the widening and improvements on 13th Street. This project involved the use of multiple utility detection equipment to detect and mark multiple utilities.

City of San Mateo Complete Streets Program, San Mateo, CA: Utility Detection Manager overseeing Subsurface Utility Detection over several locations within the City for the purposes of locating utilities within the areas of pavement rehabilitation. This project involved the use of multiple utility detection equipment to detect and mark multiple utilities that were known and unknown.

City of Elk Grove Comcast/XNET 2020 Improvements Project, Elk Grove, CA: Utilities Detection Manager for the \$20 million Comcast/XNET Phase 1 service upgrade program covering various areas throughout Elk Grove. Work consisted of conduit boring, trench work, vault installation, aerial maintenance work, restoration of pavement, concrete, and landscaped areas, slurry sealing, traffic control, and BMP installation.

Pacific Gas and Electric (PG&E) 2019-2022 On-Call Contract, CA: Utilities Detection Manager overseeing subsurface utility detection for design of both gas and electric projects. Oversees and provides second opinion (verifying the location and completeness of the utility paint marks left by 811 Dig Alert) of work prior to potholing and construction excavation.



CHARLES M. WEAKLEY

Principal
California Registered Professional Surveyor #6421

Professional Experience

Mr. Weakley is the manager in charge of all survey work undertaken by Mountain Pacific Surveys. This work is managed on a day-to-day basis by Mr. Weakley or Project Managers reporting directly to Mr. Weakley. His experience in land surveying includes construction layout of subdivision improvement and public roadways, photogrammetric control, precision as-built surveys, cadastral surveys, boundary determinations, and right-of-way calculations.

Representative Projects

Street and Pavement Rehabilitation Projects, (over 20 jurisdictions, including Berkeley, Moraga, Orinda, San Leandro, Capitola, and others throughout the bay area) – Working as a sub-consultant to NCE, over the course of the past fifteen years, Mr. Weakley has either overseen or acted as the Project Manager for numerous detailed topographic and utility surveys, ADA ramp surveys, and Right of Way determination, including over 100 miles of streets and over 2000 ramps in support of these various City's pavement maintenance programs.

Mare Island Naval Shipyard, Vallejo, California – Served as the photogrammetric engineering manager directing the preparation of design level aerial topographic mapping for an approximately 1,200 acre portion of the former shipyard. This project was completed as a sub-consultant to the civil engineering design firm.

One Marina Development, Redwood City, California - Project Manager for all surveys performed for the development of the One-Marina residential condominium development. Performed or supervised aerial control and photogrammetric mapping, supplemental field topographic surveys, private ownership boundary and Cal-Trans Right-of-Way resolution, legal description and record map preparation, mapping of the Highway 101 overcrossing (top and underside), Redwood Creek bank surveys, and construction staking for all new improvements.

San Benito County - Utilizing a combination of traditional photogrammetric techniques and leading edge LiDAR technology, successfully completed planning level 100 scale mapping of this 10,000 acre project area. Mapping was compiled with a two foot contour interval and included color digital orthophotos for an approximate 200 square mile area.

Fairfield-Vacaville Train Station Project - Fairfield, CA - Mountain Pacific Surveys performed extensive surveying and mapping functions to assist the City during design and the make-ready phases of the project, which included construction staking of various utility systems for this \$35,000,000 train station project. Mr. Weakley's responsibilities included planning and executing control network surveys, managing topographic data collection and map production, boundary and right of way determination, preparation of plats and legal descriptions for numerous fee and easement acquisitions, and preparation of a Parcel Map to create the final parcel configuration.

City of Alameda Proposal to Provide Complete Streets Engineering Services July 18, 2022



Fee Schedule(s)

NCE Hourly Rates

Professional Services		Technical Services						
Classification	Hourly Rate	Classification	Hourly Rate	Classification	Hourly Rate			
Principal \$285		Sr. Construction Manager*	\$150	Senior Field Scientist	\$125			
Associate	\$225	Senior Designer	\$160	Field Scientist	\$105			
Senior II	\$195	CADD Designer	\$140	Field/Eng. Technician*	\$105			
Senior I	\$185	Senior Technician*	\$130	Project Administrator	\$115			
Project II	\$175	Construction Inspector*	\$130	Technical Editor	\$105			
Project I	\$165	CADD Technician	\$125	Clerical	\$95			
Staff II	\$155							
Staff I	\$145							

^{*} A surcharge of \$25/hour applied for technicians and construction inspectors to comply with Prevailing Wage (PW) per requirements of California Department of Industrial Relations.

Contract Labor – From time to time, NCE retains outside professional and technical labor on a temporary basis to meet peak workload demands. Such contract labor will be charged at regular Schedule charges.

Litigation Support - Engineer/Scientist at \$345/hour; and Court Appearances and Depositions at \$575/hour.

Equipment

Plotter Usage	(separate fee schedule)		
Truck	\$105/day		
Automobile	IRS Standard Mileage Rate+15%		
Falling Weight Deflectometer Testing	\$4,000/Day		
Coring	\$5,000/Day		
Environmental Equipment	(separate fee schedule)		

Outside Services — Rental of equipment not ordinarily furnished by NCE and all other costs such as special printing, photographic work, travel by common carrier, subsistence, subcontractors, etc. cost + 15%

Communication/Reproduction - In-house costs for postage, printing, and copying:

project labor charges x 5%

Terms – Billings are payable upon presentation and are past due 30 days from invoice date. A finance charge of 1.5% per month, or the maximum amount allowable by law, will be charged on past-due accounts. NCE makes no warranty, either expressed or implied, as to its findings, recommendations, specifications, or professional advice except that they are prepared and issued in accordance with generally accepted professional practice.



^{**} Rates are effective for 2022 and will be adjusted annually.

Proposal to Provide Complete Streets Engineering Services July 18, 2022



2022-2023

(July 2022 through June 2023)

Hourly Billing Rates

Classification	Hou	rly R	ate
Principal	\$240.00	+	\$375.00
Senior Associate	\$205.00	4	\$300.00
Associate	\$175.00	7	\$255.00
Senior Engineer/Planner	\$160.00	i.	\$215.00
Engineer/Planner	\$130.00	-	\$175.00
Senior Engineering Technician	\$150.00	2	\$215.00
Senior Project Accountant	\$170.00	-	\$190.00
Senior Project Coordinator	\$130.00	-	\$180.00
Project Coordinator	\$120.00	4	\$170.00
Technician	\$150.00		\$170.00
Intern	\$95.00		\$140.00

- Other Direct Costs/Reimbursable expenses are invoiced at cost plus 10% for handling.
- Personal auto mileage is reimbursed at the then current IRS approved rate (58.5 cents per mile as of Jan 2022).
- Voice & Data Communications (Telephone, fax, computer, e-mail, etc.) are invoiced at cost as a percentage of project labor.

Fehr & Peers reserves the right to change these rates at any time with or without advance notice.



Hourly Rates Effective January 2022

Classification	Hourly Rate
Principal Land Surveyor	\$180.00
Project Manager	\$160.00
Survey Technician	\$145.00
Clerical	\$70.00
1-Man Crew (including robotic equipment)	\$200.00
2-Man Crew (including conventional equipment)	\$300.00
2-Man GPS Crew (including up to 4 receivers)	\$300.00

Other Services

Consultants, Special Equipment, Reproductions, Materials, and other outside charges....Cost + 10%

Mileage....50.54 per mile

Mountain Pacific Surveys will freeze our 2022 fee schedule rates throughout 2022 for this project. Anticipate a maximum 3% fee increase per year thereafter for the balance of the on-call contract.



July 18, 2022

City of Alameda Proposal to Provide Complete Streets Engineering Services



Substructure Utility Detection (SUE) Fee Schedule Utility Detection and CCTV Rates

Hourly Rates

Rates are Effective from January 1, 2022 – December 31, 2022

Office Services	
Classification	Hourly Rate
Principal	\$235.00
SUE Manager	\$215.00
Project Assistant	\$95.00

Field Services	2.313143
Classification	Hourly Rate
One Person SUE Crew	\$215.00
Two Person SUE Crew	\$325.00
Two Person CCTV Crew	\$325.00
Field Supervisor	\$215.00

Hourly rates for SUE crews include normal usage of field equipment and are fully equipped rates.

Special Equipment and Other Costs

For survey office and field rates please consult the Survey and Geospatial Services Fee Schedule Standard computer and technology costs are incorporated into the hourly rates shown above.

The above schedule is for straight time. Overtime will be charged at 135 percent of the standard hourly rates. Sundays and holidays will be charged at 170 percent of the standard hourly rates.

Minimum of four (4) hours will be charged per SUE crew deployment.







CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 5/5/2022

MCCOWANA

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER. AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

	(-)					
PRODUCER License # 0E67768	CONTACT Erica Wilson					
IOA Insurance Services 4370 La Jolla Village Drive	PHONE (A/C, No, Ext): (858) 754-0063 50233	FAX (A/C, No): (619) 5	74-6288			
Suite 600	E-MAIL ADDRESS: Erica.Wilson@ioausa.com					
San Diego, CA 92122	INSURER(S) AFFORDING COVERAGE		NAIC#			
	INSURER A: RLI Insurance Company	13056				
INSURED	INSURER B : Interstate Fire & Casualty Comp	22829				
Nichols Consulting Engineers, CHTD	INSURER C:					
1885 S. Arlington Ave., #111	INSURER D:					
Reno, NV 89509	INSURER E :					
	INSURER F:					

COVERAGES **CERTIFICATE NUMBER:** REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES, LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	OLC	TYPE OF INSURANCE	ADDL	SUBR		POLICY FFF	POLICY EXP (MM/DD/YYYY)	LIMIT	s	
A	Х	COMMERCIAL GENERAL LIABILITY				(IIIIII)	(11111/20/1111/	EACH OCCURRENCE	\$	1,000,000
		CLAIMS-MADE X OCCUR	X	Х	PSB0003222	5/17/2022	5/17/2023	DAMAGE TO RENTED PREMISES (Ea occurrence)	\$	1,000,000
	X	Cont Liab/Sev of Int						MED EXP (Any one person)	\$	10,000
								PERSONAL & ADV INJURY	\$	1,000,000
	GEN	I'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	\$	2,000,000
		POLICY X PRO- JECT LOC						PRODUCTS - COMP/OP AGG	\$	2,000,000
		OTHER:						Ded	\$	0
Α	AUT	OMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	\$	1,000,000
	X	ANY AUTO	X	х	PSA0001184	5/17/2022	5/17/2023	BODILY INJURY (Per person)	\$	
		OWNED SCHEDULED AUTOS						BODILY INJURY (Per accident)	\$	
		HIRED NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	\$	
	X	Comp.: \$500 X Coll.: \$500							\$	
Α		UMBRELLA LIAB X OCCUR						EACH OCCURRENCE	\$	5,000,000
	X	EXCESS LIAB CLAIMS-MADE			PSE0003030	5/17/2022	5/17/2023	AGGREGATE	\$	5,000,000
		DED X RETENTION\$ 0							\$	
Α	WOR	KERS COMPENSATION EMPLOYERS' LIABILITY						X PER OTH-		
	ANY PROPRIETOR/PARTNER/EXECUTIVE		N/A	X	PSW0001955	5/17/2022	5/17/2023	E.L. EACH ACCIDENT	\$	1,000,000
	OFFICER/MEMBER EXCLUDED? (Mandatory in NH)		N/A					E.L. DISEASE - EA EMPLOYEE	\$	1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below							E.L. DISEASE - POLICY LIMIT	\$	1,000,000
В	B Prof. / Poll. Liab.				USF00807822	5/17/2022	5/17/2023	Per Claim		5,000,000
В	B Ded.: \$50k Per Claim				USF00807822	5/17/2022	5/17/2023	Aggregate		5,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required) Re: All Operations

City of Alameda, its City Council, boards, commissions, officials, employees, and volunteers are Additional Insureds with respect to General and Auto Liability per the attached endorsements as required by written contract. Insurance is Primary and Non-Contributory. Waiver of Subrogation applies to General Liability, Auto Liability and Workers' Compensation.

30 Days Notice of Cancellation with 10 Days Notice for Non-Payment of Premium in accordance with the policy provisions.

CERTIFICATE HOLDER	CANCELLATION
	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
City of Alameda	AUTHORIZED REPRESENTATIVE
Public Works Department 950 West Mall Square, Room 110	T. Kelly Howell
Alameda, CA 94501-7575	U.

CANCELL ATION

ACORD 25 (2016/03)

CEDTIFICATE HOLDED

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BUSINESS AUTO COVERAGE FORM

A. Broad Form Named Insured

The following is added to the **SECTION II – LIABILITY Coverage**, Paragraph **A.1. Who is An Insured** Provision:

Any business entity newly acquired or formed by you during the policy period, provided you own fifty percent (50%) or more of the business entity and the business entity is not separately insured for Business Auto Coverage. Coverage is extended up to a maximum of one hundred eighty (180) days following the acquisition or formation of the business entity.

This provision does not apply to any person or organization for which coverage is excluded by endorsement.

B. Employees As Insureds

The following is added to the **SECTION II – LIABILITY COVERAGE**, Paragraph **A.1. Who is An Insured** Provision:

Any "employee" of yours is an "insured" while using a covered "auto" you don't own, hire or borrow in your business or your personal affairs.

C. Blanket Additional Insured

The following is added to the SECTION II – LIABILITY COVERAGE, Paragraph A.1. Who is An Insured Provision:

Any person or organization that you are required to include as an additional insured on this coverage form in a contract or agreement that is executed by you before the "bodily injury" or "property damage" occurs is an "insured" for liability coverage, but only for damages to which this insurance applies and only to the extent that person or organization qualifies as an "insured" under the Who Is An Insured provision contained in **SECTION II**—LIABILITY COVERAGE.

The insurance provided to the additional insured will be on a primary and non-contributory basis to the additional insured's own business auto coverage if you are required to do so in a contract or agreement that is executed by you before the "bodily injury" or "property damage" occurs.

D. Blanket Waiver Of Subrogation

The following is added to the SECTION IV – BUSINESS AUTO CONDITIONS, A. Loss Conditions, 5. Transfer Of Rights Of Recovery Against Others To Us:

We waive any right of recovery we may have against any person or organization to the extent required of you by a contract executed prior to any "accident" or "loss", provided that the "accident" or "loss" arises out of the operations contemplated by such contract. The waiver applies only to the person or organization designated in such contract.

Policy Number: PSA0001184

E. Employee Hired Autos

 The following is added to the SECTION II — LIABILITY COVERAGE, Paragraph A.1. Who Is An Insured Provision:

An "employee" of yours is an "insered" white operating an "auto" hired or rented under a contract or agreement in that "employee's" name, with your permission; white performing duties related to the conduct of your business.

2. Changes in General Conditions:

Paragraph 5.b. of the Other Insurance Condition in the BUSINESS AUTO CONDITIONS is deleted and replaced with the following:

- b. For Hired Auto Physical Damage Coverage, the following are deemed to be covered "autoe" you own:
 - (1) Any covered "auto" you lease, hire, rent or borrow; and
 - (2) Any covered "auto" hired or rented by your "employee" under a contract in that individual "employee's" name, with your permission, while performing duties related to the conduct of your business. However, any "auto" that is leased, hired, rented or borrowed with a driver is not a covered "auto".

F. Fellow Employee Coverage

SECTION II – LIABILITY COVERAGE, Exclusion B.5. does not apply if you have workers compensation insurance in-force covering all of your employees.

G. Auto Loan Lease Gap Coverage

SECTION III - PHYSICAL DAMAGE COVERAGE, C. Limit Of Insurance, is amended by the addition of the following:

In the event of a total "loss" to a covered "auto" shown in the Schedule of Declarations, we will pay any unpaid amount due on the lease or loan for a covered "auto", less:

Named Insured: Nichols Consulting Engineers, CHTD

WORKERS' COMPENSATION AND EMPLOYERS LIABILITY INSURANCE POLICY

Policy Number: PSW0001955

WC 04 03 06

(Ed. 04-84)

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT -- CALIFORNIA

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

You must maintain payroll records accurately segregating the remuneration of your employees while engaged in the work described in the Schedule.

The additional premium for this endorsement shall be _____% of the California workers' compensation premium otherwise due on such remuneration.

Schedule

Person or Organization

All persons or organizations that are party to a contract that requires you to obtain this agreement, provided you executed the contract before the loss

Job Description

Jobs performed for an person or organization that you have agreed with in a written contract to provide this agreement Named Insured: Nichols Consulting Engineers, CHTD

Policy Number: PSB0003222

THIS ENDORSEMENT CHANGES THE POLICY, PLEASE READ IT CAREFULLY.

RLIPack® FOR PROFESSIONALS BLANKET ADDITIONAL INSURED ENDORSEMENT

This endorsement modifies insurance provided under the following:

BUSINESSOWNERS COVERAGE FORM - SECTION II - LIABILITY

- 1. C. WHO IS AN INSURED is amended to include as an additional insured any person or organization that you agree in a contract or agreement requiring insurance to include as an additional insured on this policy, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused in whole or in part by you or those acting on your behalf:
 - a. In the performance of your ongoing operations;
 - In connection with premises owned by or rented to you; or
 - c. In connection with "your work" and included within the "product-completed operations hazard".
- The insurance provided to the additional insured by this endorsement is limited as follows:
 - a. This insurance does not apply on any basis to any person or organization for which coverage as an additional insured specifically is added by another endorsement to this policy.
 - b. This insurance does not apply to the rendering of or failure to render any "professional services".
 - c. This endorsement does not increase any of the limits of insurance stated in D. Liability And Medical Expenses Limits of Insurance.
- The following is added to SECTION III H.2. Other Insurance – COMMON POLICY CONDITIONS (BUT APPLICABLE ONLY TO SECTION II – LIABILITY)

However, if you specifically agree in a contract or agreement that the insurance provided to an

additional insured under this policy must apply on a primary basis, or a primary and non-contributory basis, this insurance is primary to other insurance that is available to such additional insured which covers such additional insured as a named insured, and we will not share with that other insurance, provided that:

RLI Insurance Company

- a. The "bodily injury" or "property damage" for which coverage is sought occurs after you have entered into that contract or agreement; or
- b. The "personal and advertising injury" for which coverage is sought arises out of an offense committed after you have entered into that contract or agreement.
- The following is added to SECTION III K. 2.
 Transfer of Rights of Recovery Against Others to Us COMMON POLICY CONDITIONS (BUT APPLICABLE TO ONLY TO SECTION II LIABILITY)

We waive any rights of recovery we may have against any person or organization because of payments we make for "bodily injury", "property damage" or "personal and advertising injury" arising out of "your work" performed by you, or on your behalf, under a contract or agreement with that person or organization. We waive these rights only where you have agreed to do so as part of a contract or agreement with such person or organization entered into by you before the "bodily injury" or "property damage" occurs, or the "personal and advertising injury" offense is committed.

ALL OTHER TERMS AND CONDITIONS OF THIS POLICY REMAIN UNCHANGED.

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