

**PUBLIC NOTICE
CITY OF VALLEJO
NOTICE OF FINDING OF NO SIGNIFICANT IMPACT
AND NOTICE OF INTENT TO REQUEST RELEASE OF FUNDS**

June 21, 2020
City of Vallejo
200 Georgia Street
Vallejo, CA 94590
(707) 648-4507

These Notices shall satisfy two separate but related procedural requirements for an activity to be undertaken by the City of Vallejo.

REQUEST FOR RELEASE OF FUNDS

On or about July 8, 2020 the City of Vallejo will submit a request to the U. S. Department of Housing and Urban Development (HUD) for the release of Community Development Block Grant (CDBG) Program funds in the amount of up to \$1.4 million for the construction of a public facility that will be used as a Homeless Navigation Center on a City-owned vacant parcel approximately two acres in size, located at 5 Midway Street, in Vallejo, California. The project will serve as a temporary location for very low-income persons looking to find a permanent place to live.

FINDING OF NO SIGNIFICANT IMPACT

The City of Vallejo has determined that this project will have no significant impact on the human environment. Therefore, an Environmental Impact Statement pursuant to the National Environmental Policy Act (NEPA) of 1969 is not required. Additional project information is contained in the Environmental Review Record (ERR), which may be reviewed on the City's Web Page at: <http://www.cityofvallejo.net>, "City Hall, Departments & Divisions, Housing & Community Development, Housing and Community Development Document Library, Public Notices, "Environmental Assessment, Homeless Navigation Center Project, June 2020".

RELEASE OF FUNDS

The City of Vallejo certifies to HUD that Greg Nyhoff, in his capacity as City Manager, consents to accept the jurisdiction of the Federal Courts if an action is brought to enforce responsibilities in relation to the environmental review process, and that these responsibilities have been satisfied. HUD's acceptance of the certification satisfies its responsibilities under NEPA and allows the City of Vallejo to use these funds.

OBJECTIONS TO RELEASE OF FUNDS

HUD will accept objections to its release of these funds and the City of Vallejo's certification for a period of fifteen (15) days following the anticipated submission date, or its actual receipt of the request, (whichever is later) only if it is on one of the following bases: (a) the certification was not executed by the Certifying Officer of the City of Vallejo; (b) the City of Vallejo has omitted a step or failed to make a decision or finding required by HUD regulations at 24 CFR 58; (c) the City of Vallejo has incurred costs not authorized by 24 CFR 58 before approval of a release of funds by HUD; or (d) another Federal agency acting pursuant to 40 CFR 1504 has submitted a written finding that the project is unsatisfactory from the standpoint of environmental quality. Objections must be prepared and submitted in accordance with the required procedures (24 CFR 58), and shall be addressed to: U. S. Department of Housing and Urban Development, One Sansome Street, San Francisco, CA 94104. Potential objectors should contact HUD to verify the actual last day of the objection period.

PUBLIC COMMENTS

Any individual, group, or agency disagreeing with this determination or wishing to comment on the project may submit written comments to the City of Vallejo at the following address, postmarked by June 12, 2020: City of Vallejo, Housing and Community Development Division, 200 Georgia Street, Vallejo, CA 94590, attention: Greg Nyhoff, City Manager. Comments may also be submitted by email to: Guy.Ricca@cityofvallejo.net. All written comments received **no later than 4:00 p. m. PST on Tuesday, July 7, 2020** will be considered by the City of Vallejo, and the City of Vallejo will not take any action on the proposal prior to this date.

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U.S. Department of Housing and Urban
Development

451 Seventh Street, SW
Washington, DC 20410
www.hud.gov

espanol.hud.gov

Environmental Assessment Determinations and Compliance Findings for HUD-assisted Projects 24 CFR Part 58

Project Information

Project Name: Homeless Navigation Center Project, 5 Midway Street

Responsible Entity: City of Vallejo, CA

Grant Recipient (if different than Responsible Entity):

State/Local Identifier: N/A

Preparer: Guy L. Ricca

Certifying Officer Name and Title: Greg Nyhoff, City Manager

Grant Recipient (if different than Responsible Entity):

Consultant (if applicable):

**Direct Comments to: Chari Barrera, Administrative Analyst II,
City of Vallejo, 200 Georgia Street, Vallejo, CA 94590, 707-553-7204,
Fax: 707-648-5249, Chari.Barrera@cityofvallejo.net**

Project Location: 5 Midway Street, Vallejo, CA

Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]: CDBG Program funds would be used to build a homeless navigation center on a City-owned vacant parcel to serve as a temporary location for people looking to find a permanent place to live. The center will be constructed on approximately two acres of land, using a prefabricated modular design referred to as a “sprung structure”. The sprung structure interior layout will include sleeping quarters for up to 125 beds in a dormitory room configured setting, common areas, community kitchen, offices, clinic, small area designated for dogs, storage lockers, and bike racks. It is anticipated that the center will intake over 500 vulnerable people who are living on the streets annually. The goal is to exit 75 percent of these individuals each year from the center to some type of permanent arrangement, including housing, reunification with family, transitional programs, etc..

Statement of Purpose and Need for the Proposal [40 CFR 1508.9(b)]: The purpose of this project is to provide a public facility that will function as a homeless navigation center for very low-income persons. The center will provide its clientele with the resources and services needed to assist them in transitioning to permanent housing.

Existing Conditions and Trends [24 CFR 58.40(a)]: This project is the proposed establishment of a homeless navigation center on a vacant parcel owned by the City, located in a non-residential area. The site is bounded by Midway Street to the north, the Vallejo Flood and Wastewater (VFWD) office to the east, a VFWD easement to the south, and a PG&E transformer center to the west. Related infrastructure will be required at the site, including installing a permanent foundation, and the relocation of a sewer line. The General Plan land use designation for the project site is Industrial. Where there is transient habitation, emergency shelter for the homeless, which will be a component of the project, is permitted subject to limitations.

Funding Information

Grant Number:	HUD Program:	Funding Amount:
B-19-MC-06-0029	CDBG	\$701,957
B-20-MC-06-0029	CDBG	\$664,227 (pending)

Estimated Total Project Cost (HUD and non-HUD funds) [24 CFR 58.32(d)]: \$2+ million.

Compliance with 24 CFR 50.4, 58.5, and 58.6 Laws and Authorities

Record below the compliance or conformance determinations for each statute, executive order, or regulation. Provide credible, traceable, and supportive source documentation for each authority. Where applicable, complete the necessary reviews or consultations and obtain or note applicable permits of approvals. Clearly note citations, dates/names/titles of contacts, and page references. Attach additional documentation as appropriate.

Compliance Factors: Statutes, Executive Orders, and Regulations listed at 24 CFR §58.5 and §58.6	Are formal compliance steps or mitigation required?	Compliance determinations
STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 and 58.6		
Airport Hazards 24 CFR Part 51 Subpart D	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	PRINTED, map attached. CITY OF VALLEJO PLANNING DIVISION. There are no airports within the City of Vallejo. The closest airports are in Napa (twelve miles), Concord (twenty miles), and Travis Air Force Base (twenty miles). Therefore, the project site is not subject to any potential airport hazards.
Coastal Barrier Resources Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	PRINTED. The project site is not located within a Coastal Barrier Resources System according to a map produced by the U. S. Fish and Wildlife Service, (map attached, http://www.fws.gov/CBRA/Documentation.html). The site is not within the CBRS buffer zone, prohibition zone, or otherwise protected area or system unit.
Flood Insurance Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	Yes No <input type="checkbox"/> <input checked="" type="checkbox"/>	PRINTED. The project site is not located within a 100-year or 500-year flood zone, as indicated on the applicable Flood Insurance Rate Map (FIRM) from the Federal Emergency Management Agency (FEMA).

STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR 50.4 & 58.5

<p>Clean Air</p> <p>Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93</p>	<p>Yes No <input type="checkbox"/> X</p>	<p>EXPERIENCE. Proposed project will conform to EPA-approved Site Implementation Plan (SIP); it will not require an installation permit, operating permit, or indirect source control permit under local control agency rules, nor is site located in vicinity of a monitoring station where any federal air quality violations have been registered. Guy L. Ricca, Temporary Senior Community Development Analyst, City of Vallejo, 30 years. PRINTED. "5 Midway Street Air Quality Constraints Site Assessment", Rincon Consultants, Inc., January 17, 2020 (attached).</p>
<p>Coastal Zone Management</p> <p>Coastal Zone Management Act, sections 307(c) & (d)</p>	<p>Yes No <input type="checkbox"/> X</p>	<p>PRINTED. San Francisco Bay Conservation and Development Commission, May 2012 Bay Jurisdictional Map attached. CITY OF VALLEJO PLANNING DIVISION. The Coastal Zone Management Act is administered by the San Francisco Bay Conservation and Development Commission (BCDC). Development of the site does not conflict with any policies or plans adopted by BCDC.</p>
<p>Contamination and Toxic Substances</p> <p>24 CFR Part 50.3(i) & 58.5(i)(2)</p>	<p>Yes No <input type="checkbox"/> X</p>	<p>WEBSITE(S), CITY OF VALLEJO PLANNING DIVISION. Hazardous materials if identified will be abated upon discovery. Project not located within one mile of a U. S. Environmental Protection Agency (EPA) National Priorities List (NPL) "Superfund" site, within 2,000 feet of a Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) site, nor adjacent to any other known or suspected sites contaminated with toxic chemicals or radioactive materials. The project site does not contain any known contamination or toxic substances according to the databases maintained by both the U. S.</p>

		Environmental Protection Agency (https://www.epa.gov/superfund/search-superfund-sites-where-you-live) , and the California Department of Toxic Substances Control (http://www.envirostor.dtsc.ca.gov/?surl+17dea) PRINTED. EnviroStor map attached.
Endangered Species Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	Yes No <input type="checkbox"/> X	CITY OF VALLEJO PLANNING DIVISION. The project site does not contain any known habitat for protected species identified as candidate, sensitive, or species of special status.
Explosive and Flammable Hazards 24 CFR Part 51 Subpart C	Yes No <input type="checkbox"/> X	FIELD. Site visit by G. Ricca, City of Vallejo, February 12, 2020. No above-ground containers in sight or documented.
Farmlands Protection Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	Yes No <input type="checkbox"/> X	PRINTED. CITY OF VALLEJO PLANNING DIVISION. The area surrounding the project site is largely developed with urban uses and no agricultural land, as observed by the City's Planning Division. No prime or unique farmland, and no farmland of State or local importance, is in the proposed project area. "Solano County Important Farmland 2016" map, attached.
Floodplain Management Executive Order 11988, particularly section 2(a); 24 CFR Part 55	Yes No <input type="checkbox"/> X	Refer to discussion under "Flood Insurance".
Historic Preservation National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	Yes No <input type="checkbox"/> X	PRINTED. The proposed project site is a vacant parcel, and is not historic. See attached correspondence to SHPO dated 2-6-2020, and SHPO response dated 3-2-2020 concurring with the City's Finding of No Historic Properties Affected.
Noise Abatement and Control Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B	Yes No <input type="checkbox"/> X	CITY OF VALLEJO PLANNING DIVISION. The project site will involve the development and operation of a public facility that will be used as a homeless navigation center. Operationally, this project is not a noise-sensitive use. Noise

		will be generated during the construction of the project, which is located in an industrial zone. However, construction activities are still prohibited during noise-sensitive hours, as a condition of approval. Construction is limited to 7:00 a.m. to 6:00 p.m., Monday to Saturday, and are expressly prohibited on Sunday and federal holidays. PRINTED. "5 Midway Street Noise Constraints Site Assessment", Rincon Consultants, Inc., January 17, 2020 (attached).
Sole Source Aquifers Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149	Yes No <input type="checkbox"/> X	WEBSITE. The project site does not contain a Sole Source Aquifer according to both a database and a map maintained by the U. S. Environmental Protection Agency. https://www.Epa.gov/dwssa/map-sole-source-aquifer-locations
Wetlands Protection Executive Order 11990, particularly sections 2 and 5	Yes No <input type="checkbox"/> X	WEBSITE. The project site is not located within or adjacent to a wetland. National Wetlands Inventory. https://www.Fws.gov/wetlands
Wild and Scenic Rivers Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	Yes No <input type="checkbox"/> X	PRINTED. The project site is not part of the National Wild and Scenic Rivers System, as detailed on a map administered by the U. S. Fish and Wildlife Service. https://www.rivers.gov
ENVIRONMENTAL JUSTICE		
Environmental Justice Executive Order 12898	Yes No <input type="checkbox"/> X	EXPERIENCE, FIELD. The proposed project is suitable for the proposed use and will not be adversely impacted by adverse environmental conditions. G. Ricca, City of Vallejo.

Environmental Assessment Factors [24 CFR 58.40; Ref. 40 CFR 1508.8 & 1508.27] Recorded below is the qualitative and quantitative significance of the effects of the proposal on the character, features and resources of the project area. Each factor has been evaluated and documented, as appropriate and in proportion to its relevance to the proposed action. Verifiable source documentation has been provided and described in support of each determination, as appropriate. Credible, traceable and supportive source documentation for each authority has been provided. Where applicable, the necessary reviews or

consultations have been completed and applicable permits of approvals have been obtained or noted. Citations, dates/names/titles of contacts, and page references are clear. Additional documentation is attached, as appropriate. **All conditions, attenuation or mitigation measures have been clearly identified.**

Impact Codes: Use an impact code from the following list to make the determination of impact for each factor.

- (1) Minor beneficial impact
- (2) No impact anticipated
- (3) Minor Adverse Impact – May require mitigation
- (4) Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement

Environmental Assessment Factor	Impact Code	Impact Evaluation
LAND DEVELOPMENT		
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	1	CITY OF VALLEJO PLANNING DIVISION. The General Plan 2040, Propel Vallejo (General Plan) land use designation is intended to facilitate industrial activities, including general industrial, heavy industrial, and manufacturing uses. This designation includes uses that may potentially generate more noise, hazards, and truck traffic than do light industrial uses. Uses in this designation may also utilize rail and ships to transport materials and manufactured goods. Some industrial uses may require exterior storage areas. The maximum permitted floor area ratio (FAR) in the (I) designation is 2.0, and the zoning designation is Intensive Use (IU); where there is transient habitation, emergency shelter for the homeless is permitted subject to limitations, (Vallejo Municipal Code, Chapter 16.34.030).
Soil Suitability/ Slope/ Erosion/ Drainage/ Storm Water Runoff	1	CITY OF VALLEJO PLANNING DIVISION. The project will contain a storm water control plan for which the City's Public Works Department must grant an approval prior to construction. Public Works Department staff will review the storm water control plan as well as project site drainage during the building permit phase. Additionally, the project will be subject to a detailed review during the building permit phase to ensure that there are no substantial issues related to soil suitability and erosion.
Hazards and Nuisances, including Site Safety and Noise	1	EXPERIENCE. The project site is not subject to any known special hazards, nor is it located in an area that will subject employees or residents to nuisances beyond what is typical in an urbanized area. G. Ricca, City of Vallejo.
Energy Consumption	1	EXPERIENCE. Project construction will require a temporary increase in energy consumption. The project will be subject to regulations to reduce energy consumption: California Code of Regulations (CCR) Title 24 – Part 6

	(Energy Efficiency Standards) and Title 24 – Part 11 (California Green Building Standards). These standards will be enforced by the City’s Building Division during the building permit phase. G. Ricca, City of Vallejo.
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Environmental Assessment Factor	Impact Code	Impact Evaluation
SOCIOECONOMIC		
Employment and Income Patterns	1	EXPERIENCE. The proposed project would develop City-owned property, and would not result in the loss or potential loss of jobs. G. Ricca, City of Vallejo.
Demographic Character Changes, Displacement	1	EXPERIENCE. The project will have no impacts on the demographic character of the immediate or surrounding area, nor will it result in the displacement of any persons. G. Ricca, City of Vallejo.

Environmental Assessment Factor	Impact Code	Impact Evaluation
COMMUNITY FACILITIES AND SERVICES		
Educational and Cultural Facilities	1	EXPERIENCE. The proposed project will serve clients age 25 and older, and therefore will not generate any impacts on school enrollment. G. Ricca, City of Vallejo.
Commercial Facilities	1	FIELD. Access to public transportation exists; adequate and relatively convenient access to retail services (by public transportation, car, or walking) exists. No adverse impacts by proposed project expected in existing retail/commercial services. No existing businesses will be placed at a competitive disadvantage, or displaced, by the proposed project. G. Ricca, City of Vallejo.
Health Care and Social Services	1	FIELD. Non-emergency and emergency health care services are located within a reasonable proximity to the proposed project. Ambulance trips to hospitals or other health care centers can be made within a reasonable period of time. The number of trained medical staff available is in realistic proportion to the anticipated increase in users. Clients utilizing the facility are not expected to require special medical services. G. Ricca, City of Vallejo.
Solid Waste Disposal / Recycling	1	FIELD. Sufficient landfill capacity is available. The proposed project will be conditioned to comply with all applicable federal, state, and local solid waste statutes and regulations. G. Ricca, City of Vallejo.
Waste Water / Sanitary Sewers	1	FIELD. The proposed project will be subject to the standard conditions of the Vallejo Flood and Wastewater District. Implementation of such standard conditions will

		prevent the proposed project from resulting in significant impacts relating to waste water treatment. G. Ricca, City of Vallejo.
Water Supply	1	FIELD. Sufficient water supply is available. G. Ricca, City of Vallejo.
Public Safety - Police, Fire and Emergency Medical	1	CITY OF VALLEJO PLANNING DIVISION. The project was reviewed by the City's Fire Department during the entitlement phase and will be subject to several fire safety requirements. The project provides adequate access for Fire Department and emergency medical response. The project will not require an increase in Police Department service based on scale, use, as this will be a relatively small infill development.
Parks, Open Space and Recreation	1	CITY OF VALLEJO PLANNING DIVISION. The project will not bear any significant impacts on parks, open space, or recreational facilities. Furthermore, the project will not require the construction of new recreational facilities.
Transportation and Accessibility	1	FIELD. Potential project impacts would be less than significant and require no mitigation. G. Ricca, City of Vallejo.

Environmental Assessment Factor	Impact Code	Impact Evaluation
NATURAL FEATURES		
Unique Natural Features, Water Resources	1	EXPERIENCE. The project site does not contain any known unique natural features or water resources. G. Ricca, City of Vallejo.
Vegetation, Wildlife	1	EXPERIENCE. The project site to be developed is in an urbanized area and does not contain substantial amounts of vegetation or any known wildlife. G. Ricca, City of Vallejo.
Other Factors	2	None.

Additional Studies Performed: No additional studies were performed other than those reference above.

Field Inspection (Date and completed by): February 12, 2020. Guy L. Ricca, Temporary Senior Community Development Analyst, City of Vallejo

List of Sources, Agencies, and Persons Consulted [40 CFR 1508.9(b)]: Referenced above, and shown in Attachments.

List of Permits Obtained: Not applicable.

Public Outreach [24 CFR 50.23 & 58.43]: Public notice, objection period at City and federal (HUD) level per federal guidelines will be completed.

Cumulative Impact Analysis [24 CFR 58.32]: The proposed project will be limited to the installation of a “sprung structure” public facility on a vacant, City-owned parcel that will be used to provide navigation services and resources to homeless persons to enable them to transition to permanent housing. Therefore, the cumulative impact on the human environment will not be significant.

Alternatives [24 CFR 58.40€; 40 CFR 1508.9] The construction of a temporary public facility for use as a coordinated homeless navigation center will significantly increase the level of services and resources in the community to this population in a central location. The proposed project would address this currently unmet need. The proposed project will have no significant adverse impacts on the human environment, and the use of the project site represents one of the few opportunities to provide navigation services to the homeless population in Vallejo.

No Action Alternative [24 CFR 58.40€]: A no action alternative has been considered, and rejected, because of the documented need for navigation center services for homeless persons, which are intended to enable them to transition to permanent housing. The City has deemed the site to be an appropriate location for installation of a public facility that will provide navigation center services and resources, including emergency shelter.

Summary of Findings and Conclusions: After a comprehensive review, City staff has determined that it is appropriate for the proposed navigation center project to be implemented.

Mitigation Measures and Conditions [40 CFR 1505.2(c)]

Summarize below all mitigation measures adopted by the Responsible Entity to reduce, avoid, or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements, and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan. **None.**

Law, Authority, or Factor	Mitigation Measure

Determination:

Finding of No Significant Impact [24 CFR 58.40(g)(1); 40 CFR 1508.27]
 The project will not result in a significant impact on the quality of the human environment.

Finding of Significant Impact [24 CFR 58.40(g)(2); 40 CFR 1508.27]
 The project may significantly affect the quality of the human environment.

Preparer Signature: Guy L. Ricca *Guy L. Ricca* Date: June 15, 2020

Name/Title/Organization: Guy L. Ricca, Temporary Senior Community Development Analyst, City of Vallejo

Certifying Officer Signature: Greg Nyhoff Digitally signed by Greg Nyhoff
 DN: cn=Greg Nyhoff, o=CITY Manager, City of Vallejo,
 email=greg.nyhoff@cityofvallejo.net,
 c=US
 Date: 2020.06.16 12:49:08 -0700 Date: 06-16-2020

Name/Title: Greg Nyhoff, City Manager

This original, signed document and related supporting material must be retained on file by the Responsible Entity in an Environmental Review Record (ERR) for the activity/project (ref: 24 CFR Part 58.38) and in accordance with recordkeeping requirements for the HUD program(s).

Map Where Vallejo CA - Bing images



AIRPORT HAZARDS

People interest

Vallejo High School

TO VALLEJO FROM:	Travel Time
San Francisco	35 minutes
Napa Valley	15 minutes
Oakland	30 minutes
Sacramento	60 minutes
San Jose	70 minutes

Coastal Barrier Resources System Map



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PUBLIC COMMENTS

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PROPERTIES/PROPERTY OWNERS WITHIN
A 5000-FOOT RADIUS OF S MEDWAY STREET.

First Name	Last Name	Address	City	State	Zip
Brenda Doldolea	Abella	339 Grant St	Vallejo	CA	94590
Brett	Benner	421 Grant St	Vallejo	CA	94590
Renee	Brunk	1030 Banbury Ct	Napa	CA	94558
California State	AUDITOR	Po Box 1019	Sacramento	CA	95812
Kurt	Camenzind	792 Montrose Ave	Palo Alto	CA	94303
Church Of God In Christ Inc		848 Sonoma Blvd	Vallejo	CA	94590
Gloria	Cordeiro	1543 Silver Trl	Napa	CA	94558
Cordeiro Vault Co Inc		495 Ryder St	Vallejo	CA	94590
Larry	Corso	Po Box 317	Geyserville	CA	95441
Eduardo	Cuevas	335 Grant St	Vallejo	CA	94590
Ian	Duncan	336 Grant St	Vallejo	CA	94590
Temple Fellowship	Evangelist	848 Sonoma Blvd	Vallejo	CA	94590
Filipino Community Of So Co		820 Sonoma Blvd	Vallejo	CA	94590
Jose & Elisa	Gonzalez	351 Kenyon Way	Vallejo	CA	94589
Andrew	Govan-Smith	1742 Yosemite Ave	San Francisco	CA	94124
Jeanette	Grant	3489 Midvale Ave #6	Oakland	CA	94602
Ricardo	Hernandez	817 Sonoma Blvd	Vallejo	CA	94590
Demetrious	Holbrook Sr.	427 Grant St	Vallejo	CA	94590
Ni Cristo	Iglesia	770 Airport Blvd	Burlingame	CA	94010
Kbl Investments LLC		3206 Montclair Ave	Napa	CA	94558
Samuel	Kukuruza	702 Casswall St	Napa	CA	94558
Son Du & Nhan	Lam	3324 Kerner Blvd	San Rafael	CA	94901
Roosevelt	Lee	4295 Rockville Hts	Fairfield	CA	94534
Hai	Lin	1251 Page Ct	Pinole	CA	94564
Malcom & Janice	Maher	124 Pajaro Way	Vallejo	CA	94591
Mark West LLC		836 Sonoma Blvd	Vallejo	CA	94590
Daniel	McDonald	Po Box 1796	Los Altos	CA	94023
G &	P	Po Box 770000	San Francisco	CA	94177
Rosa M L & James	Pacheco	Po Box 1182	Novato	CA	94948
W	Pan	35-8400 Forest Grove Drive			0
Martin Mercado	Ponce	403 Grant St	Vallejo	CA	94590
Redevelopment Agency Of VJO		555 Santa Clara St	Vallejo	CA	94590
Ryder Street Ltd		3320 Calvert Rd	Pasadena	CA	91107

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San Ramon Investments		1400 Doolittle Dr	San Leandro	CA	94577
Oscar	Sandoval	809 Sonoma Blvd	Vallejo	CA	94590
James & Tisha	Sibernagel	443 Grant St	Vallejo	CA	94590
Abla	Souri	218 Chadwick Ct	Benicia	CA	94510
Southern Pacific Co		1 Market St	San Francisco	CA	94105
Su Building LP		425 Chestnut St	Vallejo	CA	94590
Syar Industries Inc		Po Box 2540	Napa	CA	94558
Alien	Tiku	1753 Carswell Ct	Suisun City	CA	94585
Vallejo Anchor Self St Prt LLC		Po Box 699	Danville	CA	94526
Vallejo City		555 Santa Clara St	Vallejo	CA	94590
500 VALLEJO FLOOD AND WASTEWATER DISTRICT		450 Ryder St	Vallejo	CA	94590
Wang Brothers Investments LLC		2417 Mariner Square Loop #247	Alameda	CA	94501
Marja	Watt	502 McLANE ST	Vallejo	CA	94590
Thomas	White	1530 Grove Way	Concord	CA	94519
Richard & P	Williams	5150 Gordon Valley Rd	Fairfield	CA	94534
Angelo & Mary	Zucchero	224 Devonshire Street	Vallejo	CA	94591

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January 17, 2020
Project No: 19-08847

Judy Shepard-Hall, Housing & Community Development Manager
City of Vallejo, Housing & Community Development Division
200 Georgia Street
Vallejo, California 94590
Via email: Judy.Shepard-Hall@cityofvallejo.ne

**Subject: 5 Midway Street Air Quality Constraints Site Assessment
5 Midway Street, Vallejo, California 94590**

Dear Ms. Shepard-Hall:

This Air Quality Constraints Site Assessment summarizes the results of an air quality constraints site assessment prepared by Rincon Consultants for the proposed homeless navigation shelter structure at an approximately two-acre project site located at 5 Midway Street in Vallejo, California (herein referred to as “proposed project” or “project”). See Figure 1 for the project site location. The project is located in the San Francisco Bay Area Air Basin under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD). This assessment is based on significance thresholds and methodologies in the BAAQMD’s *CEQA Air Quality Guidelines*.¹ The health risk screening analysis evaluates the suitability of the existing environment for the proposed project based on the BAAQMD thresholds. As detailed in the analysis below, the project would not expose future workers or temporary residents to unacceptable cancer and non-cancer risks; concentrations of PM_{2.5} (particulate matter measuring 2.5 microns or less in diameter) in excess of regional standards; or elevated, localized concentrations of carbon monoxide (CO).

Air Quality Overview

The BAAQMD is required to monitor air pollutant levels for conformance with state and federal air quality standards and, if they are not met, to develop strategies to meet the standards. Air quality constraints assessments generally focus on exposure to localized air pollutants, such as PM_{2.5}, CO, and toxic air contaminants (TACs), which are discussed in detail below.

Suspended Particulates – PM_{2.5}

Fine particulate matter measuring no more than 2.5 microns in diameter is PM_{2.5}. PM_{2.5} is a by-product of fuel combustion and wind erosion of soil and unpaved roads and is directly emitted into the atmosphere through these processes. PM_{2.5} is also created in the atmosphere through chemical reactions. PM_{2.5} is generally associated with combustion processes, as well as formation in the atmosphere as a secondary pollutant through chemical reactions. PM_{2.5} can penetrate deeply into the lungs and poses a health threat to all groups, but particularly to the elderly, children, and those with

¹ BAAQMD. 2017. *California Environmental Quality Act Air Quality Guidelines*. May 2017. http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en (accessed December 2019).

Figure 1 Project Site Location



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respiratory problems. More than half of the fine particulate matter that is inhaled into the lungs remains there. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

Carbon Monoxide

Carbon monoxide is a local pollutant that is found in high concentrations only near fuel combustion equipment and other sources of CO. The primary source of CO, a colorless, odorless, poisonous gas, is automobile traffic. Elevated concentrations, therefore, are usually only found near areas of high traffic volumes. Carbon monoxide's health effects are related to its affinity for hemoglobin in the blood. At high concentrations, CO reduces the amount of oxygen in the blood, causing aggravation of some heart diseases, reduced tolerance for exercise, impairment of mental function, birth defects, and death at high levels of exposure.²

Toxic Air Contaminants

TACs are a diverse group of air pollutants that may cause or contribute to an increase in deaths or serious illness or that may pose a present or potential hazard to human health. TACs include both organic and inorganic chemical substances that may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. One of the main sources of TACs in California is diesel engines that emit exhaust containing solid material known as diesel particulate matter (DPM).³ TACs are different than the criteria pollutants previously discussed because ambient air quality standards have not been established for TACs. TACs occurring at extremely low levels may still cause health effects, and it is typically difficult to identify levels of exposure that do not produce adverse health effects. TAC impacts are described by carcinogenic (i.e., cancer versus non-cancer) risk and by chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health.

Sensitive Receptors

Sensitive receptors include facilities or land uses that house members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and the chronically ill. These facilities generally include residences, school playgrounds, child-care centers, retirement homes, and convalescent homes. As a homeless navigation shelter structure, the proposed project would be considered sensitive because the project would provide temporary housing to persons that may include these populations. However, due to the nature of the proposed project, future residents would only occupy the project site temporarily for short-term periods of time (e.g., days). Therefore, these receptors would have less exposure to potential health risks than traditional residential receptors, which the United States Environmental Protection Agency (U.S. EPA) and the California Office of Environmental Health Hazard Assessment (OEHHA) evaluates using a 30-year exposure period given that people tend to occupy residences for extended, long-term periods of time (i.e., years to lifetimes).

² BAAQMD. 2017. *California Environmental Quality Act Air Quality Guidelines*. May 2017. http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en (accessed December 2019).

³ California Air Resources Board. 2011. *Health Effects of Diesel Exhaust*. <http://www.arb.ca.gov/research/diesel/diesel-health.htm> (accessed December 2019).

Environmental Setting

Permitted Stationary Sources

There are six permitted emission sources identified within 1,000 feet of the project's fence-line using BAAQMD's *Permitted Stationary Source Risk Map*.⁴ Sources include the Vallejo Wastewater Treatment Plant, generators at the Vallejo Sanitation and Flood Control District facility, gasoline dispensing facilities at the Vallejo Sanitation and Flood Control District and M F Maher facilities, and industrial operations at TIMET.

Major Roadways

Major roadways that may affect the site are defined as freeways or arterial roadways with an average daily traffic (ADT) volume of 10,000 or more.⁵ Within 1,000 feet of the project fence-line, the only major roadway is SR 29, which experiences annual ADT (AADT) volumes of approximately 17,000 along the segment north of Lemon Street in the vicinity of the project site.⁶ SR 29 is located approximately 545 feet northeast of the project's eastern fence-line.

Railways

Railroad tracks owned and operated by the California Northern Railroad Company are located immediately east of the project site; however, trains have not run on these tracks in several years, and signal system upgrades and other improvements would be needed in order to put these tracks into service.⁷ Therefore, these tracks do not represent an existing source of air emissions and are not included in this analysis.

Regulatory Setting

The Air Toxic "Hot Spots" Information and Assessment Act of 1987 (Assembly Bill [AB] 2588) seeks to identify and evaluate risk from air toxics sources but does not directly regulate air toxics emissions. Under AB 2588, TAC emissions from individual facilities are quantified and prioritized. "High priority" facilities are required to perform a health risk assessment and, if specific thresholds are violated, are required to communicate the results to the public in the form of notices and public meetings. Although TACs and PM_{2.5} tend to be localized and are found in relatively low concentrations in ambient air, exposure to low concentrations over long periods can result in increased risk of cancer and/or adverse health effects in local communities. Because several communities within the Bay Area experience relatively high exposure to TACs compared with other communities, the BAAQMD established the Community Air Risk Evaluation (CARE) program in 2004 to identify impacted communities. Currently, the

⁴ BAAQMD. 2019. *Permitted Stationary Source Risk Map*.

<https://baaqmd.maps.arcgis.com/apps/webappviewer/index.html?id=2387ae674013413f987b1071715daa65> (accessed December 2019).

⁵ BAAQMD. 2017. *California Environmental Quality Act Air Quality Guidelines*. May 2017. http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en (accessed December 2019).

⁶ California Department of Transportation (Caltrans). 2019. "2017 Traffic Volumes." <https://dot.ca.gov/programs/traffic-operations/census/traffic-volumes/2017> (accessed December 2019).

⁷ Vallejo, City of. 2017. *Propel Vallejo: General Plan 2040*. Adopted August 29, 2017.

http://www.ci.vallejo.ca.us/city_hall/departments_divisions/planning_and_development_services/planning_division/general_plan_2040 (accessed December 2019).

City of Vallejo is considered an impacted community based on the Bay Area TAC inventory developed in 2005.⁸

Methodology

BAAQMD provides community risk and hazards screening tools for agencies to use in deciding whether there should be further environmental review of a project when evaluated under the California Environmental Protection Act (CEQA). While the project is not a subject to CEQA, these guidelines provide useful tools for evaluating the siting of a project that includes potentially sensitive receptors. The screening tools provide conservative estimates, and a more refined analysis, including site-specific dispersion modeling, can be conducted for more accurate risk and hazard estimates.⁹ The screening tools provide estimates for PM_{2.5} concentrations, cancer risk, chronic hazard risk, and acute hazard risk from stationary and transportation sources. The risk and hazard screening analysis process includes the following steps:

1. **Source Identification.** Identify emissions sources (permitted sources, highways, major roadways, and railways) within 1,000 feet of the project's fence-line. If there are no sources within 1,000 feet of the project's fence-line, then the potential for unacceptable cancer risk and health hazards are low, and no further analysis is necessary. If emissions sources exist within 1,000 feet of the project's fence-line, the analysis should conduct initial screening.
2. **Initial Screening.** Initial screening compares each source's estimated cancer risk, PM_{2.5}, and hazard values to applicable limits. The screening tools allow the summation all of the sources' impacts for comparison to cumulative limits. If the risk and hazard estimates for an individual source and/or the cumulative levels are below BAAQMD's limits, then the potential for unacceptable cancer risks and or health hazards are low, and no further analysis is necessary. If estimated levels exceed the BAAQMD limits, then the analysis should conduct advanced screening.
3. **Advanced Screening.** Advanced screening scales the highway and roadway risk and PM_{2.5} values to reflect actual traffic and distances from the project's fence-line. If the refined risk and hazard estimates are below applicable thresholds, then the potential for unacceptable cancer risk and health hazards are low, and no further analysis is necessary. If the estimated levels exceed the BAAQMD limits, then conduct refined modeling analysis.
4. **Refined Modeling Analysis.** Refined modeling analysis uses local traffic and meteorology data to model cancer risks and health hazards.⁹ If the risk and hazard estimates with refined modeling are below BAAQMD's limits, then the potential for unacceptable cancer risks and chronic health hazards are low, and no further analysis is needed. If thresholds are exceeded, then risk reduction strategies should be implemented.

The BAAQMD Risk and Hazards Emissions Screening Calculator was used to conduct initial screening by calculating the cancer and non-cancer risks as well as the PM_{2.5} concentrations resulting from emissions generated by permitted stationary sources of TAC emissions within 1,000 feet of the project site's fence-line. The Risk and Hazards Emissions Screening Calculator was used to estimate carcinogenic health risks based on a lifetime residency period of 30 years (BAAQMD 2017). Due to the type of and purpose of the facility, no long-term residents are anticipated to be present; therefore, worker exposure is likely

⁸ BAAQMD. 2019. "Community Air Risk Evaluation Program." Last modified: December 26, 2019. <http://www.baaqmd.gov/community-health/community-health-protection-program/community-air-risk-evaluation-care-program> (accessed January 2020).

⁹ BAAQMD. 2012. *Recommended Methods for Screening and Modeling Local Risks and Hazards*. <http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf> (accessed December 2019).

to be greater than the exposure of future temporary residents. Worker exposure is calculated using OEHHA guidelines based on the relationship between the 30-year residential exposure and worker exposure at the same levels.¹⁰ Per OEHHA guidance, workers are assumed to have a 25-year exposure for eight hours a day with the working age bin where the worker age begins at 16 years. Additionally, it was conservatively assumed that emissions from surrounding sources are continuous; therefore, the workers' schedule would overlap with emissions from surrounding sources. The cancer sum also includes age sensitivity factors to account for the possibility of a woman in her third trimester.¹¹ See Attachment 1 for calculations.

Table 1 summarizes the permitted stationary sources located within 1,000 feet of the project site's fence-line and their respective pollutants. Pollutant emission levels input in the BAAQMD Risk and Hazards Emissions Screening Calculator for each facility were provided by the BAAQMD.¹²

Table 1 Permitted Stationary Sources and Associated Air Pollutants

Source ID ¹	Description	Distance to Project Site (feet)	Pollutants (CAS Number)
Permitted Stationary Sources			
13103	Vallejo Sanitation and Flood Control District Generators	20	<ul style="list-style-type: none"> ▪ Arsenic (all) (1030) ▪ Benzene (41) ▪ Beryllium (all) pollutant (1040) ▪ Cadmium (1070) ▪ Carbon Dioxide, non-biogenic CO₂ (6960) ▪ Carbon Monoxide (CO) pollutant (4990) ▪ Chromium (hexavalent) (1095) ▪ Diesel Engine Exhaust Particulate Matter (1350) ▪ Formaldehyde (124) ▪ Lead (all) pollutant (1140) ▪ Manganese (1160) ▪ Mercury (all) pollutant (1190) ▪ Methane (CH₄) (6970) ▪ Nickel pollutant (1180) ▪ Nitrogen Oxides (part not spec elsewhere) (2990) ▪ Nitrous Oxide (N₂O) (2030) ▪ Organics (other, including CH₄) (990) ▪ PAH (non-speciated) (1840) ▪ Sulfur Dioxide (SO₂) (3990)
3319	Vallejo Flood and Wastewater District	150	<ul style="list-style-type: none"> ▪ Ammonia (NH₃) pollutant (6990) ▪ Arsenic (all) (1030) ▪ Benzene (41) ▪ Beryllium (all) pollutant (1040) ▪ Cadmium (1070) ▪ Carbon Dioxide, non-biogenic CO₂ (6960) ▪ Carbon Monoxide (CO) pollutant (4990)

¹⁰ On-site employees are protected by the California Division of Occupational Safety and Health.

¹¹ California Office of Environmental Health Hazard Assessment. 2015. Air Toxics Hot Spots Program Risk Assessment Guidelines - The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments.

¹² Flores, Areana. 2019. Environmental Planner, Bay Area Air Quality Management District. Personal communication via email regarding stationary source information request with Annaliese Miller, Associate Environmental Planner, Rincon Consultants, Inc. December 17, 2019.

			<ul style="list-style-type: none"> ▪ Chloroform (390) ▪ Chromium (hexavalent) (1095) ▪ Dichlorobenzene (528) ▪ Diesel Engine Exhaust Particulate Matter (1350) ▪ Formaldehyde (124) ▪ Lead (all) pollutant (1140) ▪ Manganese (1160) ▪ Mercury (all) pollutant (1190) ▪ Methane (CH₄) (6970) ▪ Methylene chloride (396) ▪ Nickel pollutant (1180) ▪ Nitrogen Oxides (part not spec elsewhere) (2990) ▪ Nitrous Oxide (N₂O) (2030) ▪ Organics (other, excluding CH₄) (989) ▪ Organics (other, including CH₄) (990) ▪ PAH (non-speciated) (1840) ▪ Particulates (part not spec elsewhere) (1990) ▪ Perchloroethylene (210) ▪ Sulfur Dioxide (SO₂) (3990) ▪ Toluene (293) ▪ Trichloroethylene (295) ▪ Xylene (307)
109142	Vallejo Sanitation and Flood Control District Gasoline Dispensing Facility	435	<ul style="list-style-type: none"> ▪ Benzene (41) ▪ Ethylbenzene (333) ▪ Hexane (148) ▪ Precursor Organic Compounds (10007) ▪ Toluene (293) ▪ Xylene (307)
20249	Vallejo Sanitation and Flood Control District Generators	435	<ul style="list-style-type: none"> ▪ Arsenic (all) (1030) ▪ Benzene (41) ▪ Beryllium (all) pollutant (1040) ▪ Cadmium (1070) ▪ Carbon Dioxide, non-biogenic CO₂ (6960) ▪ Carbon Monoxide (CO) pollutant (4990) ▪ Chromium (hexavalent) (1095) ▪ Diesel Engine Exhaust Particulate Matter (1350) ▪ Formaldehyde (124) ▪ Lead (all) pollutant (1140) ▪ Manganese (1160) ▪ Mercury (all) pollutant (1190) ▪ Methane (CH₄) (6970) ▪ Nickel pollutant (1180) ▪ Nitrogen Oxides (part not spec elsewhere) (2990) ▪ Nitrous Oxide (N₂O) (2030) ▪ Organics (other, including CH₄) (990) ▪ PAH (non-speciated) (1840) ▪ Sulfur Dioxide (SO₂) (3990)

106322	M F Maher Gasoline Dispensing Facility	515	<ul style="list-style-type: none"> ▪ Particulates (part not spec elsewhere) (1990)
9633	TIMET – North American Operations – Vallejo	640	<ul style="list-style-type: none"> ▪ Benzene (41) ▪ Ethylbenzene (333) ▪ Hexane (148) ▪ Precursor Organic Compounds (10007) ▪ Toluene (293) ▪ Xylene (307)

Source: Flores, Areana. 2019. Environmental Planner, Bay Area Air Quality Management District. Personal communication via email regarding stationary source information request with Annalese Miller, Associate Environmental Planner, Rincon Consultants, Inc. December 17, 2019.

Per BAAQMD guidance, CARB’s speciation profile was used to determine the fraction of “particulates (part not spec elsewhere)” emissions that are PM_{2.5}.¹³ The Vallejo Flood and Wastewater District (source ID 3319) has six sources of particulate emissions – two natural-gas-fired engine generators, an emergency standby generator set, two lime storage silos, and a sulfuric acid storage tank. According to CARB, particulate emissions from these sources are composed of the following percentages of PM_{2.5}:

- Stationary internal combustion engine (natural gas) – 99.2 percent
- Backup generator diesel engines – 95.1 percent
- Lime manufacturing (assumed to be a proxy for lime storage silos) – 11.7 percent

Therefore, particulate matter emissions from the two engine generators, the emergency standby generator set, and the two lime storage silos were multiplied by 0.992, 0.951, and 0.117, respectively. CARB does not provide a proxy for the sulfuric acid storage tank; therefore, it was conservatively assumed that all particulate emissions from this source are PM_{2.5}. See Attachment 1 for calculations.

The TIMET facility (source ID 9633) has two sources of particulate emissions – a vacuum induction melting furnace and an electron beam cold hearth. For the purposes of this analysis, these sources were assumed to be equivalent to a “steel open hearth furnace.” According to CARB, particulate emissions generated by steel open hearth furnaces are composed of 93 percent PM_{2.5}. Therefore, particulate emissions from the TIMET facility were multiplied by 0.93. See Attachment 1 for calculations.

The BAAQMD Roadway Screening Analysis Calculator was used to calculate the cancer risk and PM_{2.5} concentration generated by vehicular traffic along SR 29.¹⁴ The exposure period for this tool was not adjusted to account for the nature of the proposed project; therefore, the calculated cancer risk and PM_{2.5} concentration conservatively reflect a 70-year lifetime exposure.¹⁵ See Attachment 2 for calculations.

¹³ California Air Resources Board. 2018. “Speciation Profiles Used in ARB Modeling.” Last modified January 29, 2018. <https://ww3.arb.ca.gov/ei/speciate/speciate.htm#specprof> (accessed January 2020).

¹⁴ Bay Area Air Quality Management District. 2019. “Roadway Screening Analysis Calculator.” <https://www.baaqmd.gov/plans-and-climate/callifornia-environmental-quality-act-ceqa/ceqa-tools> (accessed January 2020).

¹⁵ OEHHA (2015) guidance recommends evaluating exposure durations of 9, 30, and 70 years for residents. These exposure durations coincide with the U.S. EPA’s estimates of the average residence time (9 years), high-end estimates of residence time (30 years), and a lifetime residency (70 years). Use of the 70-year lifetime exposure duration, which is greater than the recommended 25-year exposure period for workers, is therefore a conservative approach.

Standards

Carbon Monoxide

The BAAQMD provides a preliminary screening methodology to conservatively determine whether specific volumes of traffic would generate CO emissions that would contribute to a violation of the State standards for CO (9.0 parts per million (ppm) averaged over 8 hours and 20 ppm over 1 hour) (i.e., a “CO hotspot”). A localized CO concentration may occur if:

1. Traffic volumes at an intersections exceed 44,000 vehicles per hour; or
2. Traffic volumes at an intersections where vertical and/or horizontal mixing is substantially limited (e.g., tunnel, parking garage, bridge underpass, natural or urban street canyon, below-grade roadway) exceed 24,000 vehicles per hour.

None of the intersections near the project site are located in areas where vertical and/or horizontal mixing is substantially limited. Therefore, a CO hotspot may exist if traffic volumes at intersections near the project site experience traffic volumes of more than 44,000 vehicles per hour or if roadways.¹⁶

Toxic Air Contaminants

BAAQMD’s *CEQA Air Quality Guidelines* include risk and hazard thresholds that are intended to apply to projects that would site new permitted or non-permitted sources in proximity to receptors and for projects that would site new sensitive receptors in proximity to permitted or non-permitted sources of TACs or PM_{2.5} emissions. While the project is not subject to CEQA, the BAAQMD guidelines provide reasonable methods for determining if the location of the proposed project would expose people residing or working at the site to unacceptable air pollutant concentrations or excess cancer risks.¹⁷ BAAQMD has established the following limits for assessing emissions from individual source related to local community risks and hazards associated with TACs and PM_{2.5}.¹⁸

- A cancer risk of greater than 10 in one million
- A non-cancer (i.e., Chronic or Acute) risk of greater than 1.0 Hazard Index
- Exposure to PM_{2.5} concentration of greater than 0.3 µg/m³ (micrograms/cubic meter) annual average

In addition, cumulative impacts would occur if the aggregate total of current and proposed TAC sources within a 1,000 feet radius of the project fence-line would exceed the following thresholds of significance:

- A cancer risk of greater than 100 in one million
- A non-cancer (i.e., Chronic or Acute) risk of greater than 10 Hazard Index
- Exposure to PM_{2.5} concentration of greater than 0.8 µg/m³ annual average

¹⁶ Solano Transportation Authority. 2015. *Solano County Congestion management Program*. December 2015. https://sta.ca.gov/documents_and_report/solano-congestion-management-program-cmp/ (accessed January 2020).

¹⁷ BAAQMD. 2012. *Recommended Methods for Screening and Modeling Local Risks and Hazards*. <http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/risk-modeling-approach-may-2012.pdf> (accessed December 2019).

¹⁸ BAAQMD. 2017. *California Environmental Quality Act Air Quality Guidelines*. May 2017. http://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf.pdf?la=en (accessed December 2019).

Non-carcinogenic health effects are expressed as a hazard index, which is the ratio of expected exposure levels to an acceptable reference exposure level. These thresholds are designed to provide maximum feasible protection against risks to human health from TACs.¹⁹

Analysis

Carbon Monoxide Hotspots

As discussed under *Environmental Setting*, SR 29 experiences daily traffic volumes of approximately 17,000 AADT along the segment north of Lemon Street, which runs in a northwest/southeast direction approximately 615 feet northeast of the project site. Given that daily traffic volumes on SR 29 near the project site are less than 44,000 vehicles per day, hourly traffic volumes at intersections at the SR 29/Ryder Street intersection would be less than 44,000 vehicles per hour. As a result, the project site is not at risk of exposure to elevated, localized concentrations of CO.

Toxic Air Contaminants

Based on the emissions data provided by BAAQMD for the permitted stationary sources and their associated pollutants as shown in Table 1, Table 2 presents the cancer risks and health hazards as well as the PM_{2.5} concentration generated by each of the six stationary sources located within 1,000 feet of the project site's fence-line for on-site workers. As shown therein, cancer risk, health hazards, and PM_{2.5} concentrations associated with individual sources would not exceed the BAAQMD individual source limits. Table 2 also presents the sum of the screening data for all individual emission sources within 1,000 feet of the project's fence-line and represents the potential maximum cumulative impact on future workers and temporary residents. As shown therein, cumulative cancer risks, health hazards, and PM_{2.5} concentrations would not exceed the BAAQMD cumulative limits.²⁰ As stated under *Methodology*, worker exposure is likely to be greater than the exposure of future temporary residents because no long-term residents are anticipated to be present. Therefore, individual source and cumulative cancer risks and health hazards experienced by future residents of the project would be less than those experienced by on-site workers and would also not exceed the BAAQMD individual source and cumulative limits.

¹⁹ Ibid.

²⁰ Calculations used in the screening analysis do not include source-specific exhaust information such as release height, exhaust gas exit velocity, exhaust gas temperature, nor do they account for specific distances from receptors. Therefore, the resulting values are based on worst-case assumptions. A more refined analysis using source-specific exhaust parameters, site-specific meteorological data, site-specific building dimensions and locations, and actual location of source and receptors would be expected to result in lower and more accurate values than the conservative values from the screening tools.

Table 2 Individual and Cumulative Cancer Risk and Particulate Matter Concentrations

Source ID ¹	Description	Distance to Project Site (feet)	Cancer Risk (in 1 million) ²	PM _{2.5} Concentration (µg/m ³)	Increased Non-Cancer Risk (Chronic Hazard Index)
Major Roadways					
N/A	SR 29 ³	545	1.36	0.02	N/A
Permitted Stationary Sources					
13103	Vallejo Sanitation and Flood Control District Generators	20	0.01	N/A	< 0.01
3319	Vallejo Flood and Wastewater District	150	3.46	0.05	0.05
109142	Vallejo Sanitation and Flood Control District Gasoline Dispensing Facility	435	0.02	N/A	< 0.01
20249	Vallejo Sanitation and Flood Control District Generators	435	0.16	N/A	< 0.01
106322	M F Maher Gasoline Dispensing Facility	515	0.02	N/A	< 0.01
9633	TIMET – North American Operations – Vallejo	640	N/A	0.28	N/A
Combined Total			5.03	0.35	0.05
BAAQMD Individual Source Screening Threshold			10	0.3	1
Individual Source Threshold Exceeded?			No	No	No
BAAQMD Cumulative Screening Threshold			100	0.8	10
Cumulative Threshold Exceeded?			No	No	No

¹ Source IDs are those used in the BAAQMD *Permitted Stationary Source Risk Map* and in source files provided by the BAAQMD.

² Cancer risk is the maximum excess cancer risk summed across all age groups for all reported carcinogenic pollutants.

³ The exposure period for the Roadway Screening Analysis Calculator was not adjusted to account for the nature of the proposed project; therefore, the calculated cancer risk and PM_{2.5} concentration for SR 29 conservatively reflect a 70-year lifetime exposure.

N/A = not applicable; data was not provided in the BAAQMD risk screening values

Note: Cancer and non-cancer risks and PM_{2.5} concentrations for permitted stationary sources were calculated using data on facility emissions provided by the BAAQMD.

See Attachment 1 for permitted stationary source emissions screening calculations and Attachment 2 for roadway emissions screening analysis calculations.

Conclusion

The project would not expose future workers and temporary residents to unacceptable cancer and non-cancer risks; concentrations of PM_{2.5} (particulate matter measuring 2.5 microns or less in diameter) in excess of regional standards; or elevated, localized concentrations of carbon monoxide (CO).

Thank you for the opportunity to assist with this assignment. Please do not hesitate to contact us if you have questions about this report.

Sincerely,
Rincon Consultants, Inc.

Annaliese Miller

Annaliese Miller
Associate Environmental Planner

Abe Leider

Abe Leider, AICP CEP
Principal

Attachments

Attachment 1 Risk and Hazards Emissions Screening Calculator Results

Attachment 2 Roadway Screening Analysis Calculator Results

Attachment 1

Risk and Hazards Emissions Screening Calculator Results

Roadway Screening Analysis Calculator

County specific tables containing estimates of risk and hazard impacts from roadways in the Bay Area.

INSTRUCTIONS:

Input the site-specific characteristics of your project by using the drop down menu in the "Search Parameter" box. We recommend that this analysis be used for roadways with 10,000 AADT and above.

- **County:** Select the County where the project is located. The calculator is only applicable for projects within the nine Bay Area counties.
- **Roadway Direction:** Select the orientation that best matches the roadway. If the roadway orientation is neither clearly north-south nor east-west, use the highest values predicted from either orientation.
- **Side of the Roadway:** Identify on which side of the roadway the project is located.
- **Distance from Roadway:** Enter the distance in feet from the nearest edge of the roadway to the project site. The calculator estimates values for distances greater than 10 feet and less than 1000 feet. For distances greater than 1000 feet, the user can choose to extrapolate values using a distribution curve or apply 1000 feet values for greater distances.
- **Annual Average Daily Traffic (ADT):** Enter the annual average daily traffic on the roadway. These data may be collected from the city or the county (if the area is unincorporated).

When the user has completed the data entries, the screening level PM2.5 annual average concentration and the cancer risk results will appear in the Results Box on the right. Please note that the roadway tool is not applicable for California State Highways and the District refers the user to the Highway Screening Analysis Tool at: <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx>.

Notes and References listed below the Search Boxes

Search Parameters	Results
County	Solano County
Roadway Direction	NORTH-SOUTH DIRECTIONAL ROADWAY
Side of the Roadway	
Distance from Roadway	PM2.5 annual average
Annual Average Daily Traffic (ADT)	0.020 (ug/m ³)
	Cancer Risk
	1.36 (per million)
	Data for Solano County based on meteorological data collected from Susan Sewage Treatment Plant in 2005

Notes and References

- 1 Emissions were developed using EMFAC2011 for fleet mix in 2014 assuming 10,000 AADT and includes impacts from diesel and gasoline vehicle exhaust, brake and tire wear, and resuspended dust.
- 2 Roadways were modeled using CALINE4 air dispersion model assuming a source length of one kilometer. Meteorological data used to estimate the screening values are noted at the bottom of the "Results" box
- 3 Cancer risks were estimated for 70 year lifetime exposure starting in 2014 that includes sensitivity values for early life exposures and OEHHA toxicity values adopted in 2013

Attachment 2

Roadway Screening Analysis Calculator Results

Print 3319
 Notes: N/A = not available for indicated pollutant; * = no risk factor for that pollutant
 red text means best calculation from cancer risk

Pollutant	Risk Factor	Cancer Risk (per 2 million)	BAAQMD Health Risk Calculator		Backsimplified		Worker Population				
			PM2.5 (u g/m ³)	Cancer Potency (mg/kg-d) ⁻¹	Chronic REI (u g/m ³ -y)	Chronic Risk (per 10 ⁶ -y)	Propagated Worker (per 10 ⁶ Worker)	16-70 yr	16-90 yr	Cancer Risk Sum	
Arsenic (M3) pollutant (8992)	0.01011316	0.00000128	0.01779606	0	0.00014	2.02278323	0.00011316	0.00000000	0.00000000	0.00000000	0.00000000
Benzene (41)	0.294834819	0.0108	0.006677879	180	0.1	2.49186E-06	0.00000000	1.34E-08	7.40E-08	2.85E-08	2.85E-08
Beryllium (all) pollutant (1040)	1.355133983	0.00000075	0.000000496	8.4	0.007	0.00000000	0.00000000	6.19E-08	1.10E-07	1.22E-07	1.22E-07
Cadmium (1070)	0.00000032	0.000000187	N/A	15	0.01	1.4747E-06	0.00000000	6.85E-11	6.57E-10	7.25E-10	7.25E-10
Carbon Dioxide, non-hydrocarbon CO2 (6860)	N/A	N/A	N/A	0	0	6.04789E-06	0.00000000	2.80E-09	5.00E-09	5.51E-09	5.51E-09
Carbon Monoxide (CO) pollutant (4990)	N/A	N/A	N/A	0	0	N/A	N/A	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chlorobenzene (190)	16.13341177	0.0664	0.00418324	0.019	0.019	1.254977172	0.00018314	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chloroform (non-hydrocarbon) (1025)	8.02E-08	0.04707842	8.25579E-07	0.04	0.2	1.25116E-07	0.00000000	1.37E-07	7.36E-07	1.31E-06	1.45E-06
Chlorobenzene (528)	0.127	6.99832576	0.000000032	0.04	0.00	0.240025634	0.00000000	4.08E-10	2.16E-09	3.86E-09	4.27E-09
Diethyl Ether (part not spec elsewhere) (2950)	0.0131	38.42758906	0.00495171	1.3	5	0.07475853	0.00000000	2.96E-07	5.39E-07	5.85E-07	6.43E-07
Formaldehyde (1141)	0.000132	0.0032763	2.58195E-05	0.021	0	0.000230076	0.00000000	1.57E-07	8.41E-07	1.50E-06	1.66E-06
Lead (all) pollutant (1140)	0.00000071	0.000000416	N/A	0	0	5.19344E-06	0.00000000	2.79E-11	1.50E-10	2.41E-10	2.65E-10
Manganese (1150)	0.00000005	0.000000005	0.000016744	0	0.0054	8.05125E-06	0.00000000	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Methanol (CH4) (6970)	18.3	N/A	0.00016744	0	0	1.71041E-06	0.00000000	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Methyl parathion (1180)	0.0000518	3.54065575	0.000379931	0.033	0.014	1.518774990	0.000379931	3.04E-08	1.63E-07	7.91E-07	1.22E-07
Methyl parathion (part not spec elsewhere) (2950)	0.0000518	0.00000034	0.0009921873	0.91	0.014	5.79000E-05	0.000992187	2.75E-09	4.91E-09	5.42E-09	5.96E-09
Nitrobenzene (1020)	1.11	N/A	N/A	0	0	N/A	N/A	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Organics (other, excluding CH4) (889)	0.133	N/A	N/A	0	0	N/A	N/A	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Organics (other, excluding CH4) (952)	14.9	N/A	N/A	0	0	N/A	N/A	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PAH's (non-specified) (1640)	0.00000075	N/A	N/A	0	0	N/A	N/A	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Perchlorates (part not spec elsewhere) (1950)	0.476458	N/A	N/A	0	0	N/A	N/A	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Perchloroethylene (1210)	0.273	7.331392649	0.014741732	0.021	0	0.515900014	0.014741732	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Perchloroethylene (1950)	0.411	N/A	N/A	0	0	N/A	N/A	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Toluene (191)	0.7	0.97572862	0.0040992	0	0	1.327975934	0.0040992	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Trichloroethylene (295)	0.109	0.000343344	0.000343344	0.007	0	0.206000000	0.000343344	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Xylene (192)	0.873	N/A	0.002357057	0	0	1.619930986	0.002357057	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Diurnal Adjustments (PM2.5) (160 feet)		84.77900119	0.077848336	0.467500007			3.7986E-02	4.5379E-07	2.4977E-06	4.7403E-06	4.9795E-06
Diurnal Adjustments (PM2.5) (160 feet)		88.654915	0.054812572	0.128185005			5.071E-01	2.4977E-06	4.7403E-06	4.9795E-06	5.1995E-06
Diurnal Adjustments (PM2.5) (160 feet)											

N/A = not available
 * = no risk

Notes: N/A = not available for indicated pollutant; * = no risk factor for that pollutant

Pollutant	Health Risk Calculator		Background		Cancer Risk (per 1 million)		PAH S (µg/m³)		Cancer Potency (mg/kg-d)¹		Chronic REL (µg/m³)		Concentration (µg/m³)		Chronic Risk		Worker Population		Cancer Risk Sum			
	Health	Cancer Risk	PAH S	Chronic REL	PAH S	Cancer Potency	Chronic REL	Chronic REL	Chronic REL	Chronic REL	Chronic REL	Chronic REL	Chronic REL	Chronic REL	Chronic REL	Chronic REL	Chronic REL	Chronic REL	Chronic REL	Chronic REL		
Benzene (41)	4.8E-03	0.39E+00	0.00349172	0.1	0.0087	0.0087	0.0087	0.0087	0.0087	0.0087	0.0087	0.0087	0.0087	0.0087	0.0087	0.0087	0.0087	0.0087	0.0087	0.0087	0.0087	
Ethylbenzene (53)	6.8E-03	0.07427489	6.30E-06	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Methane (148)	1.4E-03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Polycyclic Organic Compounds (10007)	2.1E-03	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Toluene (93)	4.8E-02	.	0.00282456	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Xylene (927)	3.7E-02	.	0.00210125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Sum			0.672951398	0.00314947	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Chronic Adjusted Sum (PAH S)			0.378514377	0.001640367	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<p>PAH S (µg/m³) = 16.70 µg/m³</p> <p>Chronic REL (µg/m³) = 2.71E-08</p> <p>Chronic Risk = 4.88E-08</p> <p>Worker Population = 5.09E+09</p> <p>Chronic Risk Sum = 5.38E-08</p> <p>Chronic Risk in One Million = 5.38E-08</p>																						

N/A = not available
 * = no risk

Notes: N/A = not available for indicated pollutant; "-" = no risk factor for that pollutant
 red text means back calculation from cancer risk

Pollutant	BAAQMD Health Risk Calculator										
	By/Day	Cancer Risk (per 1 million)	MSD	PM2.5 (µg/m³)	Cancer Priority (mg/kg-yr)	Chronic REI (µg/m³)	Concentration (µg/m³)	Chronic Risk	Permanant Worker (per 100,000)	Worker Population (1E+03)	2E+03
Arsenic (III) (1030)	2.02E-07	0.005704773	0.003366941	180	0.00014	4.57372E-07	0.003366941	4.74E-10	2.54E-09	4.54E-09	5.01E-09
Benzene (41)	2.78E-04	0.01550706	0.000171317	0.1	0.1	0.00031541	0.000171317	3.02E-10	1.67E-09	2.90E-09	3.30E-09
Chromium (VI) (1070)	6.06E-07	0.001631319	3.83393E-05	8.4	0.007	2.68375E-07	3.83393E-05	1.80E-11	6.96E-11	1.24E-10	1.37E-10
Carbon Dioxide, non-hydrocarbon (CO) (4990)	9.31E-05	0.011814443	0.00014532	15	0.01	1.14537E-06	0.00014532	9.84E-11	5.30E-10	9.47E-10	1.05E-09
Chromium (hexavalent) (1095)	2.44E-03	0.028951639	1.18123E-07	569	0.2	2.36246E-06	1.18123E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Diesel Engine Exhaust Particulate Matter (1350)	2.01E-03	4.234125425	0.001317759	1.1	5	0.006688787	0.001317759	3.60E-08	1.91E-07	7.29E-10	8.08E-10
Formaldehyde (124)	2.46E-05	0.00037663	4.81991E-06	0.021	0	4.34692E-05	4.81991E-06	5.15E-12	2.82E-11	5.03E-11	5.46E-11
Lead (II) (1140)	8.96E-07	-	1.89257E-05	0	0	1.57331E-06	1.89257E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Manganese (II) (1130)	1.71E-07	-	5.88496E-05	0	0.0054	3.21344E-07	5.88496E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nickel (Ni) (6970)	3.73E-04	0.01604389	0.00322976	0.91	0.014	1.85217E-05	0.00322976	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nitrogen Oxides (aver not spec. elements) (2990)	9.80E-06	-	0.001604389	-	-	-	-	9.70E-11	5.30E-10	9.29E-10	1.03E-09
Nitrogen Oxide (NO2) (2030)	7.44E-02	N/A	-	-	-	-	-	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Organics (other, including CH4) (1990)	2.58E-03	N/A	-	-	-	-	-	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PM10 (non-speciated) (1140)	1.28E-03	N/A	-	-	-	-	-	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Carbon Dioxide (CO2) (1390)	9.09E-05	-	-	0	0	-	-	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Unsummed Adjusted Worker PHE (per)		4.580164548	0.006137605	0	0	6.15346E-05	0.006137605	3.2071E-08	1.9897E-07	3.5530E-07	3.9237E-07
Unsummed Adjusted Worker PHE (per)		3.752779718	0.004647237	0	0	6.80364E-05	0.004647237	3.2071E-08	1.9897E-07	3.5530E-07	3.9237E-07

N/A = not available
 "-" = not risk

Note: N/A = not available for indicated pollutant; "-" = no risk factor for that pollutant
 red text means back calculation from cancer risk

6141040 Health Risk Calculator										
Pollutant	By Day	Cancer Risk (per 1 million)	Hazard	PM2.5 (µg/m ³)	Cancer Frequency (per 10 ⁶ yr)	Chronic RfD (µg/m ³)	Chronic RfD Concentration (µg/m ³)	Worker Population	Worker Population (per 10 ⁶ yr)	Cancer Risk Sum
Particulates (part not spec elsewhere) (1902)	3.6	N/A	N/A	6.32	N/A	N/A	0.0000E+00	16-30	0.0000E+00	0.0000E+00
SLM	0	0	0	6.320276879	0	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Exposure Adjustment (EAD per 1)	0	0	0	1.653912547	0	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00
Time Adjustment (TAD 1 Day)	0	0	0	0.275965424	0	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00	0.0000E+00

N/A = not available
 "-" = no risk

Plan Map 2

Carquinez Strait

PLAN MAP NOTES

Salt Ponds and Other Managed Wetlands - Large area, high-value wildlife habitat.

San Pablo Bay National Wildlife Refuge - The addition and restoration of land with high aquatic life and wildlife habitat value or good habitat restoration potential to the San Pablo Bay National Wildlife Refuge would be in accord with Bay Plan policies.

San Pablo Bay Wildlife Refuges - The California Department of Fish and Game and the U.S. Fish and Wildlife Service are carrying out a cooperative program to acquire, restore and manage areas of high aquatic life and wildlife habitat value in San Pablo Bay.

Benicia State Recreation Area - Proposed park expansion should encompass principal overlooks and ridges on north side of strait, to preserve rugged and scenic character of hills, presently undeveloped.

West Benicia Waterfront - Detailed planning is needed to determine most desirable waterfront design west of West Second Street, emphasizing "urban" recreation uses with a minimum of Bay filling (and housing on existing private land).

Benicia Waterfront Special Area Plan - Special Area Plan was adopted by the Commission (April, 1977) and the City of Benicia to provide detailed planning and regulatory guidelines for the Benicia shoreline between West Second Street and the Benicia-Martinez Bridge. Refer to maps, policies, and recommendations of the Special Area Plan for specific information for this area.

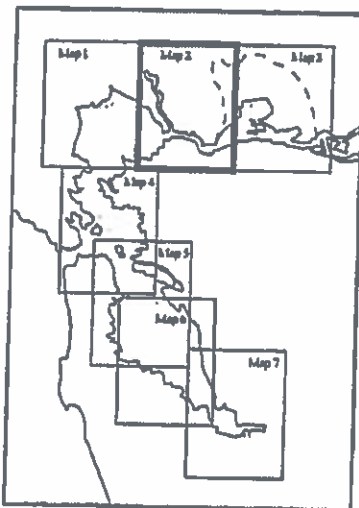
Scenic Area South Side of Carquinez Strait - The scenic area includes principal overlook ridges and scenic road between Crockett and Martinez. To preserve presently undeveloped rugged and scenic hills, zoning should provide for extremely sparse development with control over tree removal and location of all structures; scenic easements should be acquired by East Bay Regional Park District, county, or other public body as necessary to guarantee permanent protection. Some park development may be appropriate in valleys leading to Bay.

Areas diked from the Bay have high-value wildlife habitat and restoration potential.

Napa-Sonoma Marshes Wildlife Area (Napa River Unit) - The California Coastal Conservancy, U.S. Army Corps of Engineers, and California Department of Fish and Game propose to restore nearly 10,000 acres of salt ponds and adjacent tidal habitats on the west side of the Napa River to a mix of tidal and managed pond habitats. The proposed restoration use would be in accord with Bay Plan policies.

Napa Plant Site - The California Department of Fish and Game proposes to restore approximately 1,400 acres of salt ponds added to the Fagan Marsh Ecological Reserve, on the east side of the Napa River to a mix of tidal and managed pond habitats. The proposed restoration use would be in accord with Bay Plan policies.

San Francisco Bay Area Water Trail - Pursuant to state legislation, the Commission, in partnership with the State Coastal Conservancy, Association of Bay Area Governments and interested parties, is preparing a San Francisco Bay Area Water Trail plan. The Water Trail will provide a series of linked landing and launching sites around the Bay for human-powered boats and beachable sail craft, and provide for diverse, water-accessible overnight accommodations, including camping.



Amended September 2006

Plan Map 2

Bay Plan Policies and Commission Suggestions

BAY PLAN POLICIES

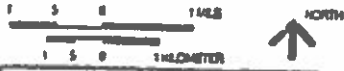
- 1 San Pablo Bay - Tidal marshes and extensive tidal flats are valuable wildlife habitat. Protect wildlife values.
- 2 Routes 37 - Evaluate design options if and when travel demand warrants. Provide public access in a manner protective of sensitive wildlife. Provide opportunities for wildlife compatible activities, such as wildlife observation and fishing.
- 3 Regional Restoration Goal for San Pablo Bay - Restore large areas of tidal marsh and enhance seasonal wetlands. Some of the inactive salt ponds should be managed to maximize their habitat functions for shorebirds and waterfowl, and others should be restored to tidal marsh. Shallow subtidal areas (including eelgrass beds) should be conserved or restored. See the Baylands Ecosystem Habitat Goals report for more information.
- 4 Mare Island Naval Shipyard - The Mare Island dredged material disposal ponds, which are located in historic baylands, should be retained in water-related industry priority use for dredged material disposal and used as a regional disposal and rehandling area for dredged material except the three northernmost ponds. The three northernmost ponds could be used to provide wetland habitat for the salt marsh harvest mouse in order to mitigate any potential adverse impacts resulting from the future use of the other seven ponds for dredged material disposal and rehandling. Restoration of the three northernmost ponds, if necessary for mitigation, should be managed by the U.S. Fish and Wildlife Service as part of the San Pablo Bay National Wildlife Refuge and the Service's program for environmental education.
- 5 Mare Island - Create waterfront park at south shore of Mare Island consistent with local base reuse plan and Chapter 588 of the Statutes of 2004.
- 6 Vallejo Water-Related Industrial Area - Some fill may be needed.
- 7 Carquinez Strait - Vallejo Shoreline - Continuous public access should be provided along the bluff top and where feasible the shoreline of Carquinez Strait and views of the water from shoreline vista points should be preserved.
- 8 Benicia State Recreation Area - No commercial uses except for convenience needs of park visitors. Develop multi-use trail along shoreline between Vallejo and Benicia. Provide non-motorized small boat launching facilities. Protect wetland habitats.
- 9 Benicia Waterfront Special Area Plan - See special area plan for detailed planning guidelines for the shoreline between West Second Street and the Benicia-Martinez Bridge. Preserve existing non-motorized small boat launches on City waterfront.
- 10 Benicia Industrial Park - Reserve area east of old Route 21 for waterfront industry. Preserve and provide access to vista points and historic buildings.
- 11 Regional Restoration Goal for Suisun Bay - Restore tidal marsh on the northern and southern sides of Suisun Bay, Grizzly Bay and Honker Bay; enhance managed marshes to increase their ability to support waterfowl. See the Baylands Ecosystem Habitat Goals report for more information.
- 12 Pipelines and piers may be built over marshes.
- 13 Port of Benicia - See Seaport Plan.
- 14 Martinez Regional Shoreline and Martinez Waterfront Park - Preserve mix of recreational uses for picnicking, wildlife viewing, wildlife habitat management and hiking in regional park and community facilities, including team sports in City park. Possible ferry terminal. Allow if compatible with park and marina use; serve with bus public transit to reduce traffic and parking needs. Complete Bay Trail and provide non-motorized small boat landing and launching.
- 15 Carquinez Strait Regional Shoreline - Preserve Eckley Fishing Pier, and panoramic views of Carquinez Strait from hiking trails, preserve and interpret cultural history of the site. Expand park where feasible. Complete Bay and Ridge Trails, maintain safe access across railroad tracks. Provide non-motorized small boat landing and launching. Provide signage regarding fish consumption advisories for anglers.
- 16 Selby - See Seaport Plan. Some fill may be needed for port use.
- 17 San Pablo Bay Regional Shoreline Park, Lone Tree Point to Wilson Point - Provide continuous shoreline access linking parks with safe pedestrian railroad crossings. Expand parks where feasible. Integrate with local parks in Hercules and Pinole. Protect wetland habitats and interpret historical and cultural resources. Link local and regional shoreline parks to Point Pinole Regional Shoreline Park. Complete Bay Trail and incorporate non-motorized small boat launching.
- 18 Hercules Point Park and Pinole Bayfront Park - Integrate with San Pablo Bay Regional Shoreline Park to provide continuous shoreline access. Provide safe pedestrian railroad crossings. Expand parks where feasible. Protect adjacent wetlands. Provide non-motorized small boat landing and launching. Possible ferry terminal near Hercules Point.

Plan Map 2

Bay Plan Policies and Commission Suggestions

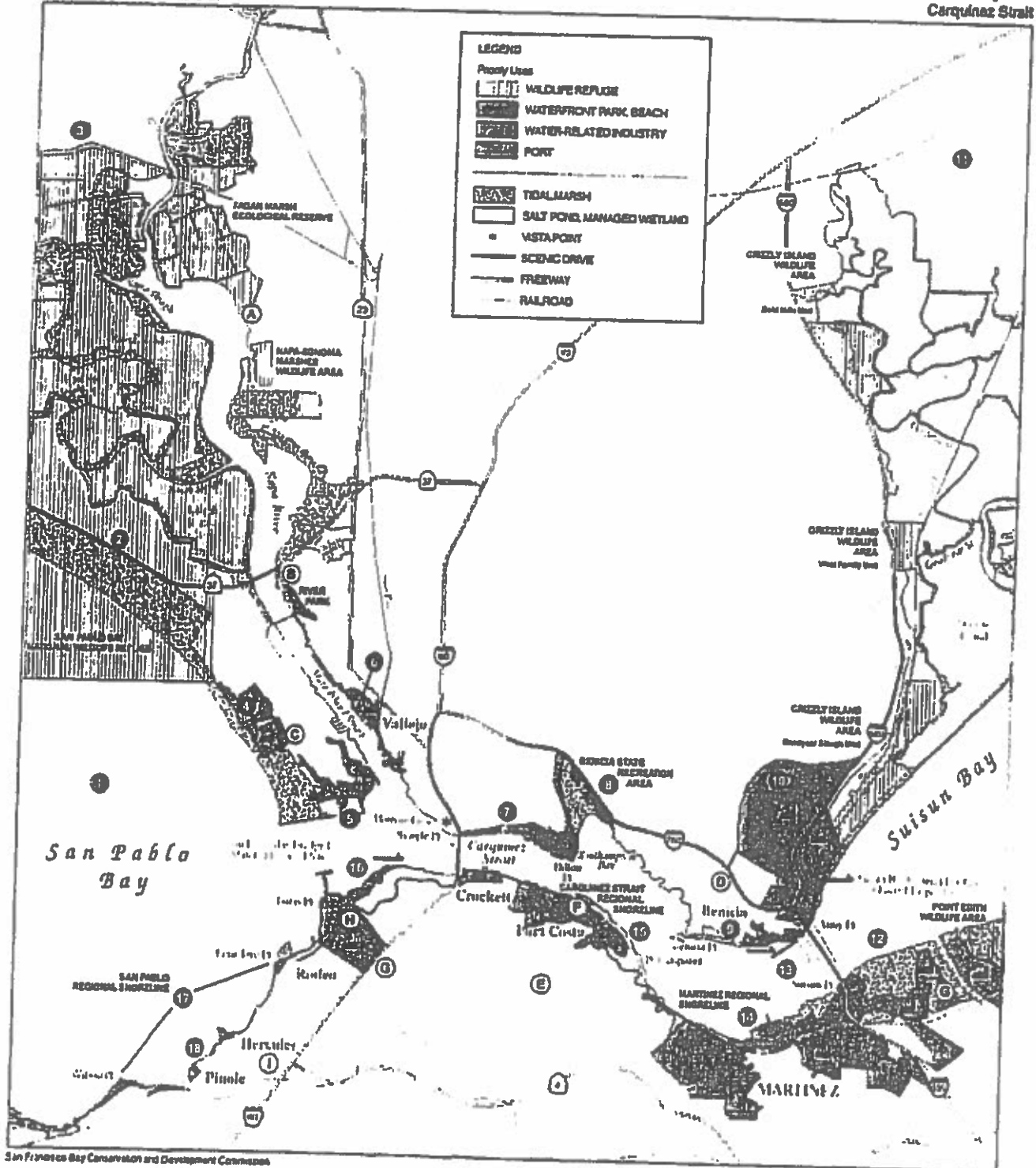
COMMISSION SUGGESTIONS

- (A) Napa Bay - Encourage recreational development of areas adjacent to shoreline. Provide continuous public access to shoreline.
- (B) Provide continuous public access to shoreline from Napa Bay to existing park. Protect views of strait from hills.
- (C) Potential park on hills overlooking the Bay.
- (D) Benicia - Prepare precise plan and development program for waterfront west of West Second Street. Structures near waterfront should be kept low and well-spaced to protect views from hills inland. Provide maximum possible public access, including paths, beaches and small parks.
- (E) Possible use of Praxis Pacheco as a dredged material confined disposal site.
- (F) Limit urban development; encourage cluster development to maximize Bay views and conserve natural landscape features.
- (G) Carquinez Strait, Bridge and Shoreline - Enhance scenic qualities, preserve views and increase public access.
- (H) Possible linked industry.
- (I) Possible use of Wickland Selby site as a regional dredged material rehandling facility.



Plan Map 2

Carquinez Strait



EnviroStar

My Environment | US Environment | 5 Midway St - Google Maps | EnviroStar Database

envirostar.sbc.ca.gov/mapi/map/myaddress=5+Midway+Street%2C+Vallejo+Ca

ENVIROSTAR

5 Midway Street Vallejo Ca

Map Satellite

Closest Sites

- Federal Superfund
- State Response
- Voluntary Cleanup
- School Cleanup
- Evaluation
- School Investigation
- Utility Evaluation
- Thermal Pollut
- Concrete Action
- Field Points

All Sites

Permitted Sites

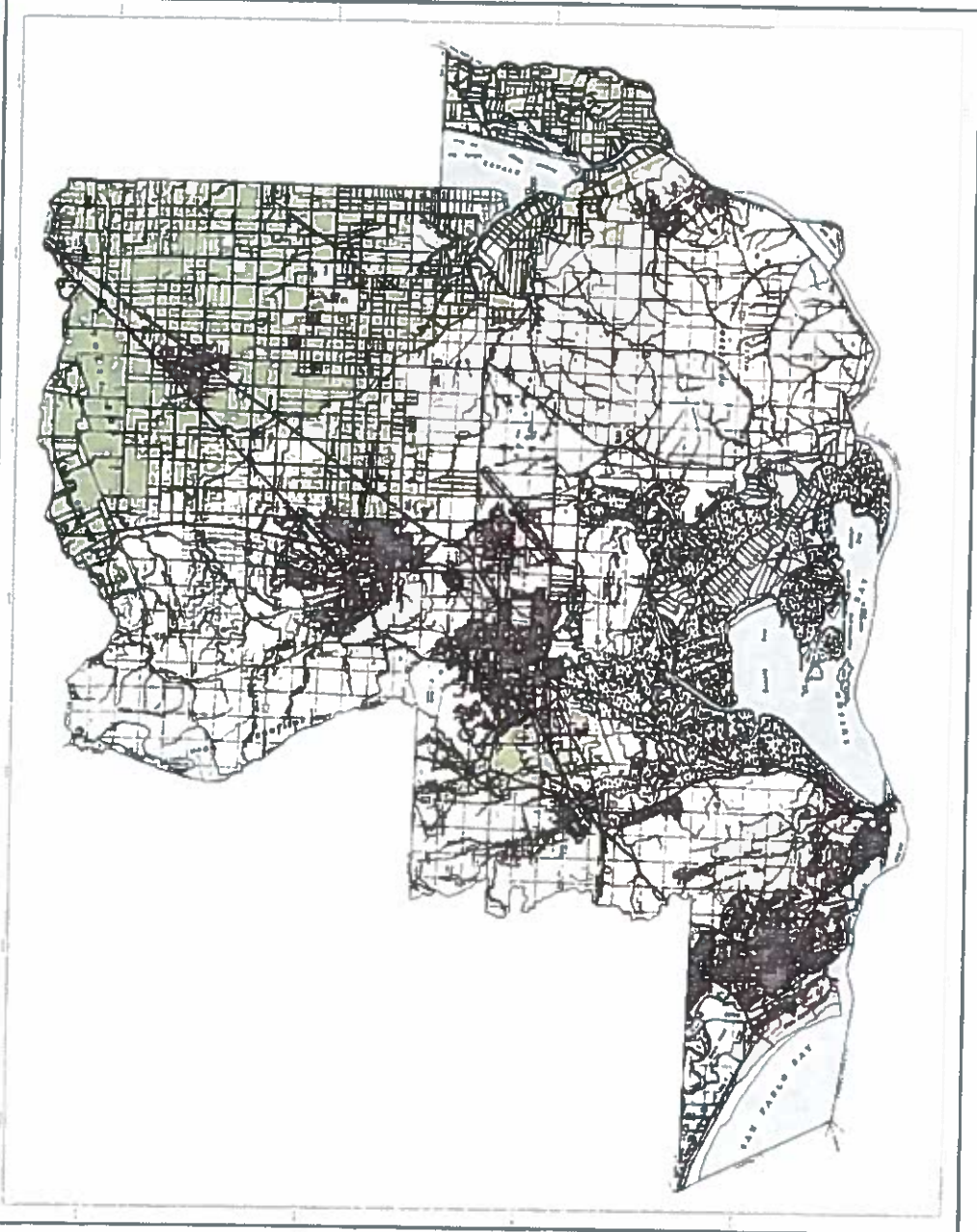
- Operating
- Post-Closure
- Non-Operating

Other Sites

OSR Sites

IMAA136 10/26/2012

SOLANO COUNTY IMPORTANT FARMLAND 2016



PREPARED BY: The Department of Planning and Economic Development, Solano County, California. This map was prepared for the purpose of identifying important farmland in Solano County, California. It is not intended to be used for any other purpose. The Department of Planning and Economic Development is not responsible for any errors or omissions in this map.

FARMLAND OF REGIONAL IMPORTANCE: This map identifies farmland of regional importance in Solano County, California. This farmland is considered to be of high agricultural value and is important to the regional economy. It is located in the following areas: [List of areas]

LOCAL IMPORTANCE: This map identifies farmland of local importance in Solano County, California. This farmland is considered to be of high agricultural value and is important to the local economy. It is located in the following areas: [List of areas]

GENERAL: This map identifies farmland of general importance in Solano County, California. This farmland is considered to be of high agricultural value and is important to the general economy. It is located in the following areas: [List of areas]

OTHER: This map identifies other farmland in Solano County, California. This farmland is considered to be of high agricultural value and is important to the local economy. It is located in the following areas: [List of areas]

LEGEND: [List of symbols and colors used on the map]

SCALE: [Scale bar]

DATE: [Date of map preparation]

CONTACT: [Contact information for the Department of Planning and Economic Development]



DEPARTMENT OF PARKS AND RECREATION
OFFICE OF HISTORIC PRESERVATION

Lisa Ann L. Mangat, Director

Julianne Polanco, State Historic Preservation Officer
1725 23rd Street, Suite 100, Sacramento, CA 95816-7100
Telephone: (916) 445-7000 FAX: (916) 445-7053
calshpo.ohp@parks.ca.gov www.ohp.parks.ca.gov

[VIA ELECTRONIC MAIL

March 2, 2020

Refer to HUD_2020_0207_002

Guy L. Ricca
Temporary Senior Community Development Analyst
City of Vallejo
200 Georgia Street
Vallejo, CA 94590

Re: Homeless Navigation Center Development Project at 5 Midway Street, Vallejo

Dear Mr. Ricca:

The California State Historic Preservation Officer received the project submittal for the above referenced undertaking for our review and comment pursuant to Section 106 of the National Historic Preservation Act and its implementing regulations found at 36 CFR Part 800. The regulations and advisory material are located at www.achp.gov.

Undertaking

Your recent letter informed us that the City of Vallejo intends to use Community Development Block Grant (CDBG) funding from the U.S. Department of Housing and Urban Development (HUD) for the develop a Navigation Center for up to 125 homeless persons on a vacant, approximately two-acre, parcel located at 5 Midway Street in Vallejo.

Area of Potential Effects (APE)

The County defined the APE for this undertaking as the subject parcel. Given the work associated with the undertaking, our office believes this is an adequate APE this project.

Identification of Historic Properties

In an effort to identify historic properties within the APE, the City and their consultants, Rincon Consultants, Inc., requested a records search from the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) for the project area. They also requested a Sacred Lands File search from the Native American Heritage Commission (NAHC), and contacted tribes with an interest in the area. Finally, site surveys was completed. No historic properties were identified through the City or their consultant's efforts.

Mr. Ricca
March 2, 2020
Page 2 of 2

Assessment of Effects

The City has determined that the subject property is "not historic." Based on the documentation provided for our review and comment, pursuant to 36 CFR Part 800.4(c)(2), the California SHPO does not object to the City's finding of *No historic properties affected*.

We appreciate the City of Vallejo's consideration of historic properties in the project planning process. If you have any questions, please do not hesitate to contact Shannon Lauchner Pries, State Historian II, with the Local Government Unit at (916)445-7013 or by email at shannon.pries@parks.ca.gov.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Julianne Polanco', with a long horizontal line extending to the right.

Julianne Polanco
State Historic Preservation Officer



Housing and Community Development Division · 200 Georgla Street · Vallejo · CA · 94590 · 707.648.4507

February 6, 2020

Julianne Polanco, State Historic Preservation Officer
Office of Historic Preservation
Department of Parks and Recreation
1725 – 23rd Street, Suite 100
Sacramento, CA 95816

**SUBJECT: City of Vallejo Environmental Review – Proposed Homeless Navigation Center Project
at 5 Midway Street, Vallejo, CA**

Dear Ms. Polanco:

The City of Vallejo's Housing and Community Development Division is preparing an environmental review for Fiscal Year (FY) 2019-20 for the above-referenced project. The City proposes to use federal Department of Housing and Urban Development (HUD) funds through the Community Development Block Grant (CDBG) Program for this activity. This project would include the establishment of a Navigation Center on a City-owned vacant parcel for up to 125 homeless persons.

The proposed project has been reviewed for compliance with "Protection of Historic Properties" (36 CFR € 800), and the "National Register Criteria for Evaluation" (36 CFR € 63) by the City of Vallejo's Planning Division (copy of memorandum attached), which has determined that this property is not historic. I have also attached a cultural resources technical study completed for the City by Rincon Consultants, Inc. to provide you with additional details on the proposed project area.

I am requesting that your office conduct an expedited review of the proposed project and, if at all possible, that we receive any comments from you regarding the City's determination for this project by Friday, February 21, 2020. If you need any further information, I can be reached at (707) 649-5417, or Guy.Ricca@cityofvallejo.net.

Sincerely,

GUY L. RICCA

Temporary Senior Community Development Analyst

cc: Judy Shepard-Hall, Housing and Community Development Manager



**MEMORANDUM
PLANNING DIVISION**

DATE: February 5, 2020

TO: Guy Ricca, Interim Senior Community Development Analyst

CC: Anne Cardwell, Assistant City Manager
Gillian Hayes, Planning and Development Services Director
Judy Shepard-Hall, Housing & Community Development Manager
Shannon Eckmeyer, Assistant City Attorney

FROM: Jonathan Atkinson, Senior Planner

SUBJECT: Section 106 Memo for 5 Midway Street

This memorandum shall serve to inform you that I have completed my review of the land located at 5 Midway Street (APN: 0058-100-070) in accordance with the National Register Criteria for Evaluation (36 CFR Part 60.4) and Protection of Historic Properties (36 CFR Part 800). The subject property will be developed as part of a planned homeless navigation center. The portion of the subject property that will be developed is currently vacant without any permanent structures.

The City of Vallejo Housing and Community Development Division retained Rincon Consultants, Inc. (Rincon) to prepare a cultural resources technical study for the subject property. The report is compliant with Section 106 of the National Historic Preservation Act; includes a delineation of an Area of Potential Effects (APE); cultural resources record searches; field survey findings; and consultation(s) with Native American tribes and local interested parties. Rincon did not identify any archeological resources within the APE nor did they identify any pre-historic resources within a 0.25 mile radius. The report concluded that the APE contains a low probability for containing intact, sub-surface archeological deposits and prehistoric archeological remains, and indicates that a Sacred Lands File search and outreach to the Native American tribes were negative in terms of tribal cultural resources.

Lastly, the subject property was reviewed in accordance with the Criteria for Evaluation to determine eligibility for inclusion in the National Register of Historic Places. Rincon recommends a finding of no historic properties affected. Thus, the subject property is not eligible for inclusion in the National Register in that it (a) is not associated with an event or series of events with significance to local, State, or national history; (b) is not associated with the lives of persons significant in history; (c) does not embody distinctive characteristics of a type, period, or method of construction nor does it represent the work of a master or possess high artistic value or represent a significant and distinguishable entity; and (d) is unlikely to yield information important in prehistory or history.

Rincon does not recommend any further cultural resources analysis for the project. They do recommend that the following measures be implemented in the event that cultural resources and/or human remains are discovered unexpectedly during ground-disturbing activities (noted in *italics*):

Unanticipated Discovery of Cultural Resources: *If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983) should be contacted immediately to evaluate the find. If the discovery proves to be significant under the National Historic*

Preservation Act, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any significant impacts/adverse effects.

***Human Remains:** The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the land owner shall reinter the remains in an area of the property secure from subsequent disturbance.*

In conclusion, this analysis does not identify any historic or archeological impacts with the development of the subject property.

STAFF CONTACT

Jonathan Atkinson, Senior Planner

(707) 648-4346

Jonathan.atkinson@cityofvallejo.net



Homeless Navigation Center Project

Cultural Resources Technical Study

prepared for

City of Vallejo | Housing & Community Development Division

200 Georgia Street

Vallejo, California 94590

Contact: Judy Shepard-Hall, Director

prepared by

Rincon Consultants, Inc.

449 15th Street, Suite 303

Oakland, California 94612

February 2020



RINCON CONSULTANTS, INC.

Environmental Scientists | Planners | Engineers

rinconconsultants.com

Please cite this report as follows:

Treffers, Steven, Hannah Haas, Susan Zamudio-Gurrola and James Williams

2020 *Cultural Resources Study for the Homeless Navigation Center Project, City of Vallejo, Solano County, California*. Rincon Consultants Project No. 20-09218. Report on file, Northwest Information Center, Sonoma State University.

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Appendix B Summary of Native American Consultation
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Executive Summary

Rincon Consultants, Inc. (Rincon) was retained by the City of Vallejo (City) to complete a cultural resources technical study for the Homeless Navigation Center Project in Vallejo, Solano County, California. The project is seeking federal funds from the U.S. Department of Housing and Urban Development (HUD) and is therefore considered a federal undertaking subject to Section 106 of the National Historic Preservation Act (Section 106). HUD is the Lead Federal Agency and the City is the Responsible Entity for the undertaking. This report was prepared to document the undertaking's compliance with Section 106; it includes the delineation of an Area of Potential Effects (APE), a cultural resources records search, an intensive-level survey of the APE, cultural resource documentation and evaluation, consultation with local interested parties and Native American tribes, and the preparation of this report.

Dates of Investigation

A cultural resources records search was conducted at the Northwest Information Center (NWIC) at Sonoma State University on January 29, 2020. An intensive-level survey of the APE was conducted on January 30, 2020. The archival research summarized in this study, along with Native American and interested party consultation, was ongoing throughout late January and early February 2020.

Summary of Findings

The APE for the project was developed in consultation with City staff and limited to the direct project footprint. The cultural resources records search identified two previously conducted cultural resources studies within a 0.25-mile radius of the APE; neither of which included any portion of the APE. No previously recorded cultural resources were identified within 0.25 mile of the APE. A search of the Sacred Lands File at the Native American Heritage Commission returned negative results. Rincon also conducted consultation with local Native American groups to obtain information on known Native American resources that may be located in the APE or its vicinity. Section 106 consultation was also conducted with local government and historic groups. As of February 3, 2020, two responses have been received. Rincon discussed the project with Aaron Sage, Principal Planner at the City of Vallejo, who did not voice any concerns relating to cultural resources. In addition, in a phone call on February 3, 2020, Anna Starky of the United Auburn Indian Community of the Auburn Rancheria stated the APE was outside of their area of interest and the tribe would not request consultation for the project.

An assessment of archaeological sensitivity indicates that the APE contains a relatively low sensitivity for containing intact, subsurface archaeological deposits. According to NWIC, the APE was located within Fisherman's Cove and then occupied by marshland from 1863 until the area was filled and constructed with housing in 1919. Based on these findings, the area appears to have a low potential to contain prehistoric archaeological remains. A review of historical topographic maps, Sanborn maps, and aerial photographs indicate that the APE was developed with residences from 1919 to 1950. After the residences were demolished, the APE appears to have undergone several episodes of dumping, along with grading and the construction of a canal through the APE in 1993.

The lack of reported prehistoric or historical archaeological remains within a quarter-mile radius of the APE and the developmental history of the APE indicate that the property is not sensitive for archaeological resources.

As a result of the findings summarized above, Rincon recommends a finding of *no historic properties affected* under Section 106 for the proposed undertaking. As standard best management practices, the following measures are recommended in the event of an unanticipated discovery of cultural resources during project construction.

Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983) should be contacted immediately to evaluate the find. If the discovery proves to be significant under the National Historic Preservation Act, additional work such as data recovery excavation and Native American consultation may be warranted to mitigate any significant impacts/adverse effects.

Human Remains

The discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the land owner shall reinter the remains in an area of the property secure from subsequent disturbance.

1 Introduction

Rincon Consultants, Inc. (Rincon) was retained by the City of Vallejo (City) to complete a cultural resources technical study for the Homeless Navigation Center in Vallejo, Solano County, California. The project is seeking federal funds from the U.S. Department of Housing and Urban Development (HUD) and is therefore considered a federal undertaking subject to Section 106 of the National Historic Preservation Act (Section 106). This report was prepared to document the undertaking's compliance with Section 106; it includes the delineation of an Area of Potential Effects (APE), a cultural resources records search, an intensive-level survey of the APE, cultural resource documentation and evaluation, consultation with local interested parties and Native American tribes, and the preparation of this report.

1.1 Description of Proposed Undertaking

The proposed undertaking is located in Section 24 of Township 03N, Range 04W of the United States Geological Survey 2019 *Benicia* 7.5-minute quadrangle (Figure 1). The APE is located on an irregularly-shaped parcel that totals approximately two acres and is bounded by Midway Street to the north, the Vallejo Flood and Wastewater District office to the east, the Vallejo Flood and Wastewater District easement to the south, and a Pacific Gas and Electric transformer center to the west. The APE is currently vacant land that with no structures or improvements. The proposed undertaking involves the development of a homeless navigation center which will serve as a transitional location for people looking to find a permanent place to live. The center would be constructed using a prefabricated modular design referred to as a "sprung structure". Its interior layout will include sleeping quarters for up to 125 beds in a dorm room configured setting, common areas, a community kitchen, offices, clinic, a small area designated for dogs, storage lockers and bike racks. It is anticipated the center will intake over 500 people annually who were living on the streets. Access would be provided from Midway Street. All project activities would occur within APN 0058-100-070, northwest of the channelized creek, which was completed in its current alignment circa 1990.

1.2 Area of Potential Effects

The APE for an undertaking is defined in 36 Code of Federal Regulations (CFR) 800.16(d) as the "geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such property exists." The APE for the proposed undertaking was determined through analysis of the undertaking's geographic area, its scale and nature, and its potential for direct and indirect effects to archaeological and built-environment resources. Located in an area that has been extensively developed for many decades, the potential for indirect impacts to occur as a result of the proposed undertaking is unlikely. In consultation with City staff, the APE is confined the boundaries of the direct project footprint within APN 0058-100-070 (Figure 2). Although a maximum depth of disturbance has not yet been defined for the undertaking, it is anticipated it will extend no more than 8 feet below the ground surface which accounts for construction-related excavation and utility connections. Therefore, the vertical APE for the proposed undertaking extends from approximately 8 below ground surface, to 25 feet above ground to account for the height of the navigation center structure.

Figure 2 Area of Potential Effects Map



1.3 Personnel

This cultural resources study was managed by Rincon Senior Architectural Historian, Steven Treffers, MHP, and Senior Archaeologist and Principal Investigator, Hannah Haas, MA, Registered Professional Archaeologist (RPA), both of whom meet the Secretary of the Interior's Professional Qualification Standards in their respective fields. Under the direction of Mr. Treffers and Ms. Haas, the cultural resources field survey was performed by Cultural Resources Specialist Elaine Foster and archival research and report preparation by Architectural Historians James Williams, MA and Susan Zamudio-Gurrola, MHP. Under the direction of Ms. Haas, Archaeologist Sydni Kitchel, BA, conducted the cultural resources records search. Ms. Haas performed the Native American outreach. Figures included in this report were prepared by Rincon GIS Analyst Annette Tran. Additional quality assurance/quality control was completed by Senior Archaeologist Tiffany Clark PhD, RPA, and Rincon Principal and Architectural History Program Manager Shannon Carmack.

2 Regulatory Framework

2.1 Federal Regulations

National Historic Preservation Act

The proposed undertaking is subject to Section 106 of the NHPA (Section 106). The definition of a federal undertaking in 36 CFR 800.16(y) includes projects requiring a federal permit, license, or approval. Cultural resources are considered during federal undertakings chiefly under Section 106 (as amended) through one of its implementing regulations, 36 CFR 800 (Protection of Historic Properties), and National Environmental Policy Act. Properties of traditional, religious, and cultural importance to Native Americans are considered under both Section 101 (d)(6)(A) and Section 106 36 CFR 800.3-800.10 of NHPA. Other federal laws include the Archaeological Data Preservation Act of 1974, the American Indian Religious Freedom Act of 1978, the Archaeological Resources Protection Act of 1979, and the Native American Graves Protection and Repatriation Act of 1989, among others.

Section 106 (16 United States Code 470f) requires federal agencies to account for the effects of their undertakings on any district, site, building, structure, or object included in or eligible for inclusion in the NRHP and to afford the Advisory Council on Historic Preservation a reasonable opportunity to comment on such undertakings (36 CFR 800.1). Under Section 106, the significance of any adversely affected historic property is assessed and mitigation measures are proposed to reduce any impacts to an acceptable level. Historic properties are those significant cultural resources listed in or are eligible for listing in the NRHP per the criteria listed below (36 CFR 60.4):

The quality of significance in American, state, and local history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that meet one or more of the following criteria:

- Criterion A:** Are associated with events that have made a significant contribution to the broad patterns of our history
- Criterion B:** Are associated with the lives of persons significant in our past
- Criterion C:** Embody the distinctive characteristics of a type, period, or method of installation, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction
- Criterion D:** Have yielded, or may be likely to yield, information important in prehistory or history

In addition to meeting at least one of the above designation criteria, resources must also retain integrity. The National Park Service recognizes seven aspects or qualities that, considered together, define historic integrity. To retain integrity, a property must possess several, if not all, of these seven qualities, defined in the following manner:

- Location:** The place where the historic property was constructed or the place where the historic event occurred
- Design:** The combination of elements that create the form, plan, space, structure, and style of a property

City of Vallejo
Homeless Navigation Center Project

- Setting:** The physical environment of a historic property
- Materials:** Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property
- Workmanship:** The physical evidence of the crafts of a particular culture or people during any given period in history or prehistory
- Feeling:** A property's expression of the aesthetic or historic sense of a particular period of time
- Association:** The direct link between an important historic event or person and a historic property

3 Setting

Cultural Setting

The cultural setting for the project is presented broadly in three overviews: Prehistoric, Ethnographic, and Historic. The prehistoric and historic overviews describe human occupation before and after European contact, while the ethnographic overview provides a synchronic “snapshot” of traditional Native American culture.

3.1 Prehistory

The proposed project lies in the San Francisco Bay Area archaeological region (Milliken et al. 2007, Moratto 1984). Following Milliken et al. (2007), the prehistoric cultural chronology for the Bay Area can be generally divided into five periods: The Early Holocene (8,000-3,500 BC), Early (3,500-500 BC), Lower Middle (500 BC to AD 430), the Upper Middle (AD 430-1050), and the Late Period (AD 1050-contact).

It is presumed that early Paleoindian groups lived in the area prior to 8,000 BC; however, no evidence for that period has been discovered in the Bay Area to date (Milliken et al. 2007). For this reason, the terminal Pleistocene Period (ca. 11,700-8,000 BC) is not discussed here.

The earliest intensive study of the archaeology of the San Francisco Bay Area began with N. C. Nelson of the University of California, Berkeley, between 1906 and 1908. He documented over 400 shell mounds throughout the area. Nelson was the first to identify the Bay Area as a discrete archaeological region (Moratto 1984).

Early Holocene (8,000-3,500 BC)

Archaeological evidence from the early Holocene is limited as many sites dating to this period are likely buried under Holocene alluvial deposits (Moratto 1984; Ragir 1972). The available data suggest that the Early Holocene in the San Francisco Bay Area is characterized by a mobile forager pattern and the presence of millingslabs, handstones, and a variety of leaf-shaped projectile points. Two archaeological sites (CA-CCO-696 and CA-CCO-637) that date to this period have been identified in Contra Costa County. The earliest date for the Early Holocene comes from the CA-CCO-696 at Los Vaqueros Reservoir (Milliken et al. 2007).

Early Period (3,500-600 BC)

The Early Period saw increased sedentism with the introduction of new ground stone technologies (i.e., mortar and pestle), an increase in regional trade, and the first cut shell beads. The earliest evidence for the use of the mortar and pestle dates to 3,800 BC and comes from CA-CCO-637 in the Los Vaqueros Reservoir area. By 1,500 BC, mortars and pestles had almost completely replaced millingslabs and handstones. The advent of the mortar and pestle indicates a greater reliance on processing nuts such as acorns. Faunal evidence from various sites indicates a diverse faunal exploitation pattern based on mussel and other shellfish, marine mammals, terrestrial mammals, and birds (D’Oro 2009).

The earliest cut bead horizon is also associated with this period. Rectangular *Haliotis* (abalone) and *Olivella* (snail) beads have been identified at several Early Period sites, including CA-CCO-637, CA-SCL-832 in Sunnyvale, and CA-ALA-307 in Berkeley (Milliken et al. 2007). These early examples of cut beads were recovered from mortuary contexts.

Lower Middle Period (500 BC-AD 430)

The Lower Middle Period saw numerous changes from the previous period. Rectangular shell beads, common during the Early Period, disappear completely and are replaced by split-beveled and saucer *Olivella* beads. In addition to the changes in beads, *Haliotis* ornaments, bone tools and ornaments, and basketry awls indicating the development of coiled basketry technology. Mortars and pestles continued to be the dominant grinding tool (Milliken et al. 2007).

Evidence for the Lower Middle Period in the Bay Area comes from sites such as the Emeryville shell mound (CA-ALA-309) and Ellis Landing (CA-CCO-295). CA-ALA-309 is one of the largest shell mounds in the Bay Area and contains multiple cultural sequences. The lower levels of the site, which date to the Middle Period, contain flexed burials with bone implements, chert bifaces, charmstones, and oyster shells (Moratto 1984).

Upper Middle Period (AD 430-1050)

Around AD 430, *Olivella* saucer bead trade networks that had been established during earlier periods collapsed and over half of known sites occupied during the Lower Middle Period were abandoned. *Olivella* saucer beads were replaced with *Olivella* saddle beads. New types of material culture appear at sites, including elaborate, decorative blades, fishtail charmstones, new *Haliotis* ornament forms, and mica ornaments. Sea otter bones became more abundant, suggesting changes in faunal exploitation patterns from earlier periods (Milliken et al. 2007). Excavations at CA-ALA-309 indicate that a shift from oysters to clams may have occurred. Subsistence analyses at various sites dating to this period indicate a diverse diet that included numerous species of fish, mammal species, bird species, shellfish, and plant resources that varied by location in the Bay Area (Hylkema 2002).

Late Period (AD 1050-contact)

The Late Period saw an increase in social complexity, indicated by differences in burials, and an increased level of sedentism relative to preceding periods. Small, finely worked projectile points associated with bow and arrow technology appear around AD 1250. *Olivella* shell beads disappeared and were replaced with clamshell disk beads. The toggle harpoon, hopper mortar, and magnesite tube beads also appeared during this period (Milliken et al. 2007). This period saw an increase in the intensity of resource exploitation that correlates with an increase in population (Moratto 1984). Many of the well-known sites of earlier periods, such as the Emeryville shell mound (CA-ALA-309) and the West Berkeley site (CA-ALA-307), were abandoned, as indicated by the lack of Late Period elements. Researchers have suggested that the abandonment of these sites may result from fluctuating climates and drought that occurred throughout the Late Period (Lightfoot and Luby 2002).

3.2 Ethnographic Overview

The APE is located in the traditional tribal territory of the Patwin, members of the larger Wintun subgroup of the Penutian language family inhabiting the northern half of the western California valley (Johnson 1978). Patwin subsistence practices centered on the use of acorns and of seeds as

primary plant food sources and on hunting of deer, tule elk, antelope, bear, turtles, and various species of waterfowl. Hunting was done typically with a sinew-backed bow and arrow. Fishing was a particularly important activity for the Patwin, using gates and pens to catch salmon and sturgeon while pike, steelhead, trout, and smaller salmon were caught with nets. Additionally, tobacco was collected from along the river and dried for smoking but not cultivated (Johnson 1978).

The Patwin made both twined and coiled basketry, usually from willow and redbud. Baskets were an important tool in their daily lives for transporting, preparing, and storing foods, as well as burial remains. They utilized animal hides for bedding, floor mats, skirts, burial robes, and tobacco sacks. Tule balsa rafts were crafted and used to navigate rivers. Bone, mussel shell, and stone tools were used as knives to cut into food (Johnson 1978).

Patwin structures typically were earth-covered, elliptical or circular semi-subterranean structures. The earth covering was imported from outside the villages. Villages often consisted of family homes, a ceremonial dance house, menstrual hut, and a sweat lodge. The women wore skirts or aprons while the men often went without adornment aside from a bone hairpin or hair net (Johnson 1978).

Political organization centered on small tribelets and several satellite settlements. A chief headed each tribelet to direct activities. The chief's main purpose was to govern ceremonial and economic activities of the village. This administration included tree grove and fishing ownership, how food would be distributed among the village, and what ceremonies would be held and who would be invited to join (Johnson 1978).

3.3 Historic Context

The Post-European contact history of California is generally divided into three periods: the Spanish Period (1769–1822), the Mexican Period (1822–1848), and the American Period (1848–present). Each of these periods is briefly described below.

Spanish Period (1769 – 1822)

For more than 200 years, Cabrillo and other Spanish, Portuguese, British, and Russian explorers sailed the Alta (upper) California coast and made limited inland expeditions, but they did not establish permanent settlements (Bean 1968; Rolie 2003). Explorers such as Francis Drake and Sebastian Cermeno explored the San Francisco Bay area in the late 1500s (Bean 1968). Gaspar de Portolá and the Franciscan Father Junípero Serra established the first Spanish settlement in Alta California at Mission San Diego de Alcalá in 1769, the first of 21 missions erected by the Spanish. Portolá continued north, reaching the San Francisco Bay and project vicinity later that year. Pedro Fages' expedition also explored the region in 1772 (Cook 1957). Mission San Francisco de Asis and the San Francisco presidio (military fort) were founded in 1776, and Mission San Rafael Arcangel was built in 1817, all within 25 miles of the project site (Presidio Trust 2020; California Missions Foundation, N.D.).

Mexican Period (1822 – 1848)

The Mexican Period commenced when news of the success of the Mexican Revolution (1810-1821) against the Spanish crown reached California in 1822. This period saw the federalization of mission lands in California with the passage of the Secularization Act of 1833. This Act enabled Mexican governors in California to distribute former mission lands to individuals in the form land grants. Successive Mexican governors made more than 700 land grants between 1822 and 1846, putting

most of the state's lands into private ownership for the first time (Shumway 2007). The approximately 80,000-acre Rancho Suscol or Soscol was acquired by General Vallejo in 1843; the project site is located within the former rancho lands (City of Sonoma, N.D.).

The Mexican Period saw an increased importance of sea trade and an influx of American settlers which motivated the United States to expand their territory into California. The United States supported a small group of insurgents from Sonoma during the Bear Flag Revolt. The Bear Flaggers captured Sonoma in June of 1846. The next month, Commodore John Drake Sloat landed in Monterey and proceeded to take Yerba Buena, Sutter's Fort, Bodega Bay, and Sonoma. Fighting between American and Mexican forces continued until Mexico surrendered in 1847 (Rolle 2003).

American Period (1848 – Present)

The American Period began with the signing of the Treaty of Guadalupe Hidalgo in 1848, in which the United States agreed to pay Mexico \$15 million for the conquered territory, including California, Nevada, Utah, and parts of Colorado, Arizona, New Mexico, and Wyoming. Settlement of California continued to increase during the early American Period. Many ranchos were sold or otherwise acquired by Americans, and most were subdivided into agricultural parcels or towns. Thanks to the discovery of gold in 1848, California's population grew exponentially. San Francisco grew from a population of 812 to 25,000 in only a few years and became California's first true city (Rolle 2003).

The City of Vallejo was founded on what was once General Vallejo's rancho land, and thus was named after him. After the state of California was admitted to the Union, he donated 156 acres of land and offered funding to establish a new state capital. The town of Vallejo briefly became the site of the state capitol in 1852, and it served as the capital again in 1853 for approximately one month. Vallejo's son-in-law, John B. Frisbie, is generally credited with the founding of the city and helping to establish its government (Vallejo Convention and Visitors Bureau 2019a; Vallejo Chamber of Commerce 2020).

Although the town lost the government center, a naval shipyard was established there in 1854 which furthered development of the town. Mare Island Naval Shipyard became the first United States Navy installation on the Pacific Coast, and Vallejo developed into an important shipping center with ferry transportation serving passengers, railroads and the Pony Express (Vallejo Convention and Visitors Bureau 2019a). The city formally incorporated in 1867 in part due to John B. Frisbie's lobbying in Washington D.C. Frisbie encouraged settlement of the area, selling lots for the development of residential and commercial uses. He strongly supported the wheat and shipping industries and founded the White Sulphur (Blue Rock) Springs Resort (Vallejo Chamber of Commerce 2020; Vallejo Convention and Visitors Bureau 2019a).

The Mare Island Naval Shipyard had an immense impact on the development of Vallejo and surrounding areas. It was known in the 1920s for the development of submarines, and its peak production period for shipbuilding, repair and maintenance occurred during World War II. Correspondingly, Vallejo's population grew from 26,000 people to nearly 100,000 during the war years. Mare Island continued to be a primary station for the construction and development of the Navy's pacific fleet of submarines in the years that followed. At the time, the base encompassed 5,200 acres (Vallejo Chamber of Commerce 2020). The city of Vallejo flourished as well, in part due to the Navy's presence which attracted countless military and civilian personnel from various parts. Vallejo began forming as a multi-cultural community earlier than many other California cities. In the 1920s many Filipinos settled in the area following the Spanish-American War and the Filipino Insurrection. Vallejo became one of the most culturally diverse cities in Northern California (Vallejo Chamber of Commerce 2020).

Ferries' importance as a form of local transportation decreased with the popularity of the automobile. By the mid-twentieth century Vallejo had expanded with all the amenities needed to support a navy town, and grew eastward to accommodate its larger population. However, its downtowns suffered as a result and were in disrepair. Starting in the 1960s a wave of redevelopment occurred in its historic downtown and waterfront, affecting 24 blocks of the city center and considerably changing the character of the city (Felix 2013; Vallejo Convention and Visitors Bureau 2019b).

With the end of the Cold War, Mare Island Naval Shipyard's budget was reduced, and the shipyard was closed in 1996, dramatically affecting the city. The municipality underwent a bankruptcy in 2008, and efforts afterwards focused on drawing new investment to the city (Felix 2013). Various industrial, educational, recreational and historical areas have been developed as part of evolving the property for new uses (Gase 2019). The waterfront area has also become a focus for redevelopment to generate economic growth (City of Vallejo 2018). Today, Vallejo is a transportation and commuter hub for San Francisco and the North Bay with high-speed catamaran ferries that transport thousands of passengers every week (City of Vallejo 2018; Vallejo Convention and Visitors Bureau 2019a). Its location between the major cities of San Francisco and Sacramento makes it a prime residential and commercial community, and it is also home to various recreational facilities and the California Maritime academy (Vallejo Chamber of Commerce 2020).

Historical Development of the APE

United States Geological Survey topographical maps show that, as late as 1932, the area comprising the APE remained a tidal marshland (Figure 3). By the early 1940s, however, the area had been filled with earth to accommodate development. A review of aerial imagery and Sanborn maps shows that by 1948, the APE and nearby areas to the north and east of Midway Street were developed as the Victory Defense Housing Project (Figure 4). Similar to today, a waterway ran through the southern portion of the APE, the railroad right-of-way was located slightly to the east, and a large undeveloped area existed adjacent on the west, with the Napa River further to the west. By 1958 the buildings that made up the housing project were no longer extant, the APE and its immediate surroundings remained undeveloped and dotted with trees through 1968. By 1980 structures were built immediately to the west and east of the APE and a channelized creek realigned to pass through the APE (Figure 5). The channelized creek was again realigned and widened to its current configuration at some point between 1987 and 1993. By 2009 the structure to the west had been removed/demolished and the presently existing basin had been developed. The APE remained undeveloped with several mature trees. Presently, the amount of trees has decreased but the APE remains undeveloped (Nationwide Environmental Title Research, USGS 1932; 1942; LLC 1999-2020; ProQuest 1950; UCSB Map and Imagery Lab 1980).

Figure 3 1932 USGS Napa, CA Topographical Map



Figure 4 1950 Sanborn Fire Insurance Map



Figure 5 1980 Aerial Photograph



4 Background Research

4.1 Cultural Resources Records Search

A non-confidential search of the California Historical Resources Information System (CHRIS) was completed by the Northwest Information Center (NWIC) on December 17, 2019. This search confirmed no previous cultural resources studies have been completed which cover the APE, and that there are no previously recorded cultural resources within the APE (Appendix A). The summary indicated the APE is located along northeastern shores of Mare Island Strait and currently contains artificial fill over estuarine mud. The summary concluded there is a moderate potential for Native American archaeological resources and a moderate to high potential for historic-period archaeological resources to be within the project area.

On January 29, 2020, Rincon Archaeologist Sydni Kitchel, BA, performed a search of CHRIS at the NWIC located at Sonoma State University, in Rohnert Park, California. The purpose of the records search was to identify all previously recorded cultural resources, as well as previously conducted cultural resources studies within the APE and a 0.25-mile radius. The records search included a review of the NRHP, the California Register of Historical Resources (CRHR), the Archaeological Determination of Eligibility list, the California Points of Historical Interest list, and the California Historical Landmarks list. Non-confidential results from the records search can be found in Appendix A of this report.

The CHRIS records search identified two previously conducted cultural resources studies within a 0.25-mile radius of the APE, neither of which include any portion of the APE (Table 1). No previously recorded cultural resources were identified within a 0.25-mile radius of the APE.

Table 1 Previous Cultural Resources Studies Within 0.25-Mile of the APE

Report Number	Author	Year	Title	Relationship to APE
S-000899	Fredrickson, David A.	1978	<i>An Archaeological Survey of Proposed Route 141 Highway Construction Project, Vallejo, Solano County, California</i>	Outside
S-022817	Nelson, Wendy, Maureen Carpenter, and Julia G. Costello	2000	<i>Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project, Segment WS01: Sacramento to Oakland</i>	Outside

Source: Northwest Information Center 2020

4.2 Archival and Historical Background Research

Archival research for this study was completed throughout January 2020. Research methodology focused on the review of primary and secondary source materials relating to the history and development of the area surrounding the APE. Sources included, but were not limited to historic-era maps, aerial photographs, and written histories of the area.

4.3 Native American Outreach

As part of the process of identifying cultural resources for this project, Rincon contacted the Native American Heritage Commission (NAHC) January 28, 2020 and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project APE (Appendix B). On January 30, 2020 the NAHC emailed a response stating that the SLF search was returned with negative results. Prior to receiving the SLF results, Rincon sent anticipatory letters to following tribal groups or individuals on January 29, 2020 and January 30, 2020 to the following tribal groups or individuals who are known to Rincon to have affiliations to the project APE and surrounding area:

- Charlie Wright, Chairperson Cortina Rancheria – Kletsel Dehe Band of Wintun Indians
- Corrina Gould, Chairperson, The Confederated Villages of Lisjan
- Gene Whitehouse, Chairperson, United Auburn Indian Community of the Auburn Rancheria
- Anthony Roberts, Chairperson, Yocha Dehe Wintun Nation

Follow-up phone calls were made on February 3, 2020, with voicemails left for the Confederated Villages of Lisjan and Deb Jones of the Yocha Dehe Wintun Nation. Rincon spoke with Chairperson Wright of the Cortina Rancheria – Kletsel Dehe Band of Wintun Indians asked for a letter to be emailed to him directly. Rincon also spoke with Anna Starky of the United Auburn Indian Community of the Auburn Rancheria who stated the project is not located within their area of interest and as such, they would not be consulting for the project. As of February 3, 2020, no additional responses had been received.

Additionally, on December 10, 2019, the City of Vallejo sent a project notification letter under California Assembly Bill 52 of 2014 (AB 52) to the Yocha Dehe Wintun Nation. The Tribal Historic Preservation Officer responded on January 7, 2020 stating the project falls within their aboriginal territory and they therefore have a cultural interest in the project. The Tribe reviewed the project information and responded to state they are not aware of any known cultural resources near the project APE and a cultural monitor is not needed for the project, but requested to be notified if any cultural items are found. They also stated they recommend cultural sensitivity training for any project personnel. Although this consultation with the Yocha Dehe Wintun Nation did not constitute consultation under Section 106, we anticipate a similar response to the current outreach effort.

4.4 Interested Party Consultation

On January 29 and January 30, 2020 Rincon Architectural Historian Susan Zamudio-Gurrola sent letters to parties who may have knowledge of, or an interest in historical and cultural resources in the area of the APE, specifically: the Vallejo Architectural Heritage Foundation, the Vallejo Naval and Historical Museum, the Solano County Historical Society, and Aaron Sage, Principal Planner at the City of Vallejo. The letters, which were sent via U.S. Mail and email, requested input on known or potential historical resources within the APE or its vicinity. Steven Treffers spoke with Mr. Sage at the City of Vallejo on January 31, 2020 who confirmed the City did not have any concerns relating to potential cultural resources impacts. Ms. Zamudio-Gurrola conducted follow-up calls on January 31, 2020, leaving messages for the three remaining organizations. As of February 3, 2020, no additional responses had been received. Documentation of the interested party consultation can be found in Appendix C of this report.

5 Field Survey

5.1 Methods

Rincon cultural resources specialist Elaine Foster conducted an intensive-level cultural resources survey of the APE on January 30, 2020. The purpose of the survey was to identify and photograph any cultural resources that exist within the project area that may be impacted by the proposed undertaking. Ms. Foster examined all exposed ground surface for the following: artifacts (e.g., flaked stone tools, tool-making debris, stone milling tools, ceramics, fire-affected rock), ecofacts (marine shell and bone), soil discoloration that might indicate the presence of a cultural midden, soil depressions, and features indicative of the former presence of structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramics). Ground disturbances such as burrows and drainages were inspected visually. The archaeologist prepared survey notes and these are available upon request. Digital cameras were used to capture photographs of the project site; these are maintained electronically at the Rincon Oakland office.

5.2 Results

Ground visibility throughout the APE was poor (approximately 10 to 30 percent visibility) due to the presence of dense vegetation and several large piles of woodchips and mulch dumped in the APE (Figure 6 and Figure 7). Where soils were visible, they consisted of a loosely to moderately compacted brown loam. Rincon documented modern refuse throughout the project APE. No historic or prehistoric cultural resources were identified in the APE during the field survey.

Figure 6 Overview of Project APE, Facing East



Figure 7 Overview of the Project APE, Facing West



6 Findings and Recommendations

The City retained Rincon to complete a cultural resource assessment of the Homeless Navigation Center Project in the City of Vallejo, Solano County. The assessment included development of the APE, a CHRIS records search, Native American and historic group consultation, and a field survey. The study was conducted in accordance with the requirements of Section 106.

The results of the study confirmed there are no historic-age built-environment properties within the APE. The CHRIS records and SLF searches were also negative for previously recorded cultural resources in or near the APE. An assessment of archaeological sensitivity indicates that the APE contains a relatively low sensitivity for containing intact, subsurface archaeological deposits. According to NWIC, the APE was located within Fisherman's Cove which was occupied by marshland from 1863 until the area was filled and constructed with housing in 1919. A review of historical topographic maps, Sanborn maps, and aerial photographs indicate that the APE was developed with residences from 1919 to circa 1950. After the residences were demolished, the APE appears to have undergone several episodes of dumping, along with grading and the realignment of an adjacent canal through the APE circa 1990. The lack of reported prehistoric or historical archaeological remains within a 0.25-mile radius of the APE and the developmental history of the APE indicate that the property is not sensitive for archaeological resources.

Based on the results of the cultural resource assessment, Rincon recommends a finding of *no historic properties affected* under Section 106. Rincon recommends the following best management practice in the event of an unanticipated discovery of cultural resources during project construction.

Unanticipated Discovery of Cultural Resources

If cultural resources are encountered during ground-disturbing activities, work in the immediate area must halt and an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) should be contacted immediately to evaluate the find. If the discovery proves to be eligible for the National Register of Historic Places, additional work such as data recovery excavation, Native American consultation, and archaeological monitoring may be warranted to mitigate any adverse effects under the National Historic Preservation Act.

The discovery of human remains is always a possibility during ground disturbing activities. Below is a summary of existing regulations concerning the unanticipated discovery of human remains.

Unanticipated Discovery of Human Remains

If human remains are found, existing regulations outlined in the State of California Health and Safety Code Section 7050.5 state that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code § 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site within 48 hours of being granted access and provide recommendations as to the treatment of the remains to the landowner.

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City of Vallejo
Homeless Navigation Center Project

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Appendix A

Records Search Results



ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE

HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO

SAN FRANCISCO
SAN MATEO
SANTA CLARA
SANTA CRUZ
SOLANO
SONOMA
YOLO

Northwest Information Center
Sonoma State University
150 Professional Center Drive, Suite E
Rohnert Park, California 94928-3609
Tel: 707.588.8455
nwic@sonoma.edu
<http://www.sonoma.edu/nwic>

ACCESS AGREEMENT SHORT FORM

File Number:

I, the the undersigned, have been granted access to historical resources information on file at the Northwest Information Center of the California Historical Resources Information System.

I understand that any CHRIS Confidential Information I receive shall not be disclosed to individuals who do not qualify for access to such information, as specified in Section III(A-E) of the CHRIS Information Center Rules of Operation Manual, or in publicly distributed documents without written consent of the Information Center Coordinator.

I agree to submit historical Resource Records and Reports based in part on the CHRIS information released under this Access Agreement to the Information Center within sixty (60) calendar days of completion.

I agree to pay for CHRIS services provided under this Access Agreement within sixty (60) calendar days of receipt of billing.

I understand that failure to comply with this Access Agreement shall be grounds for denial of access to CHRIS Information.

Print Name: Date:

Signature:

Affiliation:

Address: City/State/ZIP:

Billing Address (if different from above):

Special Billing Information

Telephone: Email:

Purpose of Access:

Reference (project name or number, title of study, and street address if applicable):

County: USGS 7.5' Quad:

Sonoma State University Customer ID:

Sonoma State University Invoice No.:

Total Cost:

****This is not an invoice. Sonoma State University will send separate Invoice****

CALIFORNIA
HISTORICAL
RESOURCES
INFORMATION
SYSTEM



ALAMEDA
COLUSA
CONTRA COSTA
DEL NORTE

HUMBOLDT
LAKE
MARIN
MENDOCINO
MONTEREY
NAPA
SAN BENITO

SAN FRANCISCO
SAN MATEO
SANTA CLARA
SANTA CRUZ
SOLANO
SONOMA
YOLO

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December 17, 2019

NWIC File No.: 19-0974

Judy Shepard-Hall
Housing and Community Development Manager
City of Vallejo
200 Georgia Street
Vallejo, CA 94590

Re: Record search results for the proposed Homeless Navigation Center at
5 Midway Street, Vallejo, CA.

Dear Judy Shepard-Hall:

Per your request received by our office on December 11, 2019, a rapid response records search was conducted for the above referenced project by reviewing pertinent Northwest Information Center (NWIC) base maps that reference cultural resources records and reports, historic-period maps, and literature for Solano County. An Area of Potential Effects (APE) map was not provided; in lieu of this, the location map provided depicting the 5 Midway Street project area will be used to conduct this records search. Please note that use of the term cultural resources includes both archaeological resources and historical buildings and/or structures.

Review of this information indicates that there have been no cultural resource studies that cover the 5 Midway Street project area. This 5 Midway Street project area contains no recorded archaeological resources. The State Office of Historic Preservation Historic Property Directory (OHP HPD) (which includes listings of the California Register of Historical Resources, California State Historical Landmarks, California State Points of Historical Interest, and the National Register of Historic Places) lists no recorded buildings or structures within or adjacent to the proposed 5 Midway Street project area. In addition to these inventories, the NWIC base maps show no recorded buildings or structures within the proposed 5 Midway Street project area.

At the time of Euroamerican contact, the Native Americans that lived in the area were speakers of the Southern Patwin language, part of the Southern Wintuan language family (Johnson 1978: 350 and Kroeber 1932). There are no Native American resources in or adjacent to the proposed 5 Midway Street project area referenced in the ethnographic

literature (Johnson 1978: 350, Nelson 1909, and Kroeber 1932).

Based on an evaluation of the environmental setting and features associated with known sites, Native American resources in this part of Solano County have been found in areas marginal to Mare Island and Carquinez Straits, and inland near creeks and ecotones. The 5 Midway Street project area is located along the northeastern shores of Mare Island Strait and currently contains artificial fill over estuarine mud. Given the similarity of one or more of these environmental factors, there is a moderate potential for unrecorded Native American resources to be within the proposed 5 Midway Street project area.

Review of historical literature and maps indicated historic-period activity within the 5 Midway Street project area. The General Land Office Plat Map for Township 3 North Range 3 West indicated the project area was located within Fisherman's Cove from 1863 to 1877. The Sanborn Fire Insurance Maps indicated the project area was located within marshland in 1919, then within the area of Victory Defense Housing Project from 1919-1950. In addition, the 1940(b) Carquinez Strait USGS 15-minute topographic quadrangle indicates one building within the project area. With this in mind, there is a moderate to high potential for unrecorded historic-period archaeological resources to be within the proposed 5 Midway Street project area.

The 1959 (photorevised 1980) Benicia USGS 7.5-minute topographic quadrangle fails to depict any buildings or structures within the 5 Midway Street project area; therefore, there is a low potential for any buildings or structures 45 years or older to be within the 5 Midway Street project area.

RECOMMENDATIONS:

1) There is a moderate potential for Native American archaeological resources and a moderate to high potential for historic-period archaeological resources to be within the project area. The depth of proposed ground disturbance, coupled with the depth of prior disturbance, is unknown. If the proposed ground disturbance does not have the potential to impact non-disturbed soils, then no further study for archaeological resources is recommended at this time. If the proposed ground disturbance does have the potential to impact non-disturbed soils, then further study for archaeological resources is recommended. Field study may include, but is not limited to, pedestrian survey, hand auger sampling, shovel test units, or geoarchaeological analyses as well as other common methods used to identify the presence of archaeological resources. Please refer to the list of consultants who meet the Secretary of Interior's Standards at <http://www.chrisinfo.org>

2) No historic properties were located in either the 5 Midway Street project area. If, in a later process, buildings or structures are identified that meet the minimum age requirement, we recommend that the agency responsible for Section 106 compliance consult with the Office of Historic Preservation regarding potential impacts to these buildings or structures:

Project Review and Compliance Unit
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816
(916) 445-7000

3) Review for possible historic-period buildings or structures has included only those sources listed in the attached bibliography and should not be considered comprehensive.

4) We recommend the lead agency contact the local Native American tribes regarding traditional, cultural, and religious heritage values. For a complete listing of tribes in the vicinity of the project, please contact the Native American Heritage Commission at (916)373-3710.

5) If archaeological resources are encountered **during construction**, work should be temporarily halted in the vicinity of the discovered materials and workers should avoid altering the materials and their context until a qualified professional archaeologist has evaluated the situation and provided appropriate recommendations. **Project personnel should not collect cultural resources**. Native American resources include chert or obsidian flakes, projectile points, mortars, and pestles; and dark friable soil containing shell and bone dietary debris, heat-affected rock, or human burials. Historic-period resources include stone or adobe foundations or walls; structures and remains with square nails; and refuse deposits or bottle dumps, often located in old wells or privies.

6) It is recommended that any identified cultural resources be recorded on DPR 523 historic resource recordation forms, available online from the Office of Historic Preservation's website: http://ohp.parks.ca.gov/default.asp?page_id=1069.

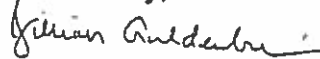
Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the California Historical Resources Information System (CHRIS)

Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

Thank you for using our services. Please contact this office if you have any questions, (707) 588-8455.

Sincerely,



Jillian Guldenbrein
Researcher

LITERATURE REVIEWED

In addition to archaeological maps and site records on file at the Northwest Information Center of the Historical Resources Information System, the following literature was reviewed:

General Land Office

1863, 1869, 1877 Survey Plat for Township 3 North/Range 3 West.

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Hoover, Mildred Brooke, Hero Eugene Rensch, and Ethel Rensch, revised by William N. Abeloe

1966 *Historic Spots in California*. Third Edition. Stanford University Press, Stanford, CA.

Hoover, Mildred Brooke, Hero Eugene Rensch, and Ethel Rensch, William N. Abeloe, revised by Douglas E. Kyle

1990 *Historic Spots in California*. Fourth Edition. Stanford University Press, Stanford, CA.

Johnson, Patti J.

1978 Patwin. In *California*, edited by Robert F. Heizer, pp. 350-360. Handbook of North American Indians, vol. 8, William C. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Kroeber, A.L.

1925 *Handbook of the Indians of California*. Bureau of American Ethnology, Bulletin 78, Smithsonian Institution, Washington, D.C. (Reprint by Dover Publications, Inc., New York, 1976)

1932 *The Patwin and their Neighbors*. University of California Publications in American Archaeology and Ethnology 35(2):15-22. University of California Press, Berkeley. (Reprint by Kraus Reprint Corp., New York, 1965)

Milliken, Randall

1995 *A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area 1769-1810*. Ballena Press Anthropological Papers No. 43, Menlo Park, CA.

Nichols, Donald R., and Nancy A. Wright

1971 Preliminary Map of Historic Margins of Marshland, San Francisco Bay, California. U.S. Geological Survey Open File Map. U.S. Department of the Interior, Geological Survey in cooperation with the U.S. Department of Housing and Urban Development, Washington, D.C.

State of California Department of Parks and Recreation

1976 *California Inventory of Historic Resources*. State of California Department of Parks and Recreation, Sacramento.

State of California Department of Parks and Recreation and Office of Historic Preservation
1988 *Five Views: An Ethnic Sites Survey for California*. State of California Department of
Parks and Recreation and Office of Historic Preservation, Sacramento.

State of California Office of Historic Preservation **
2012 *Historic Properties Directory*. Listing by City (through April 2012). State of California
Office of Historic Preservation, Sacramento.

Williams, James C.
1997 *Energy and the Making of Modern California*. The University of Akron Press, Akron,
OH.

Works Progress Administration
1984 *The WPA Guide to California*. Reprint by Pantheon Books, New York. (Originally
published as *California: A Guide to the Golden State in 1939* by Books, Inc.,
distributed by Hastings House Publishers, New York.)

**Note that the Office of Historic Preservation's *Historic Properties Directory* includes National
Register, State Registered Landmarks, California Points of Historical Interest, and the California
Register of Historical Resources as well as Certified Local Government surveys that have
undergone Section 106 review.

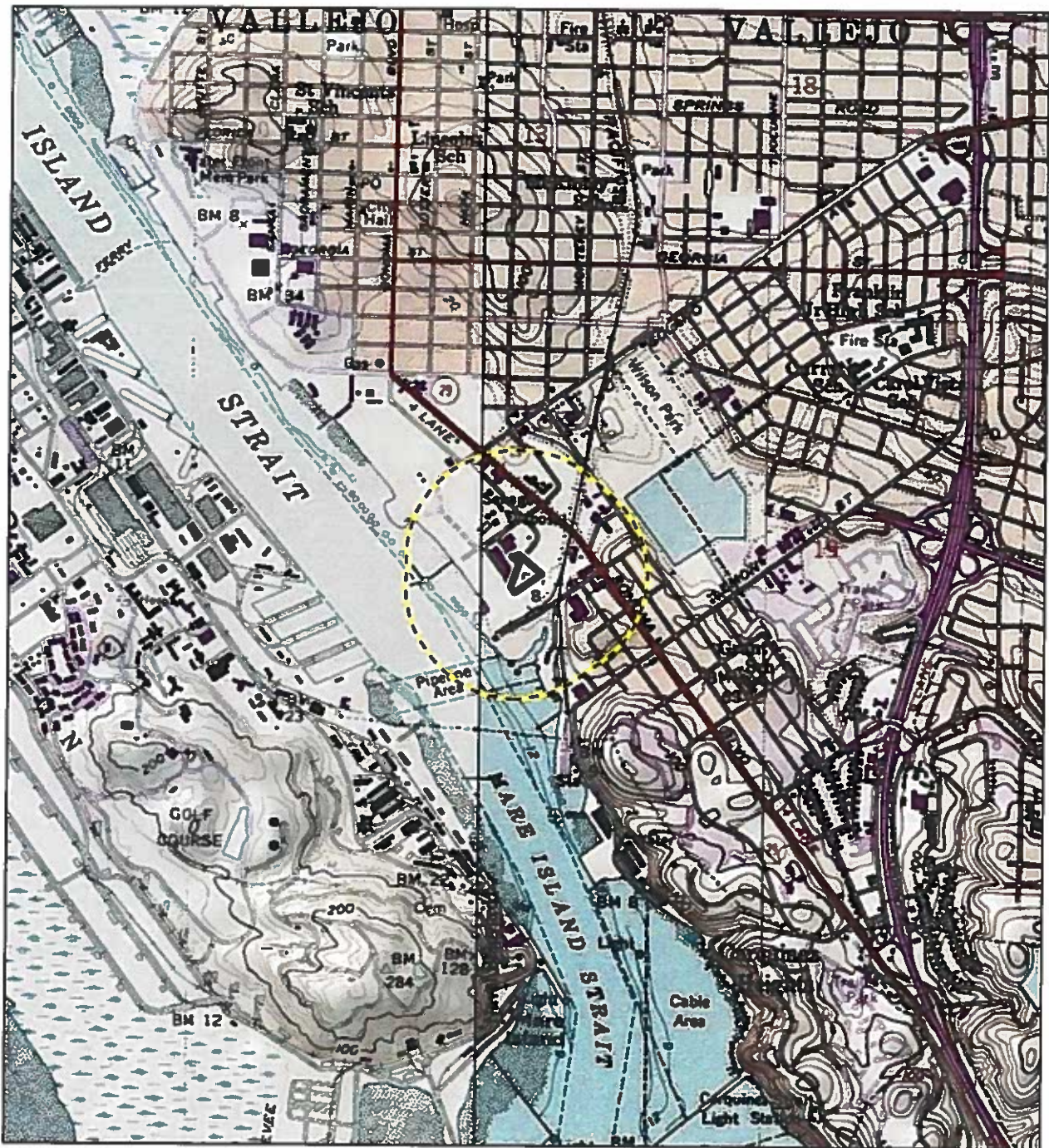
Report List

Report No.	Other IDs	Year	Author(s)	Title	Affiliation	Resources
S-000899		1978	David A. Fredrickson	An Archaeological Survey of Proposed Route 141 Highway Construction Project, Vallejo, Solano County, California	Sonoma State College	
S-022817	Submitter - Project Number 27101	2000	Wendy J. Nelson, Maureen Carpenter, and Julia G. Costello	Cultural Resources Survey for the Level (3) Communications Long Haul Fiber Optics Project, Segment WS01: Sacramento to Oakland	Far Western Anthropological Research Group, Inc.; Foothill Resources, Ltd.	01-000084, 01-000120, 07-000137, 07-000138, 07-000149, 07-000184, 48-000072, 48-000081, 48-000211, 48-000441, 48-000549, 57-000198



Appendix B

Summary of Native American Consultation

Figure 2



Imagery provided by National Geographic Society, Esri and its licensors © 2020. Mare Island and Benicia Quadrangles. T03N R04W S24 & T03N R03W S19. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

-  Quarter-Mile Buffer
-  Area of Potential Effects



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Homeless Navigation Center



NATIVE AMERICAN HERITAGE COMMISSION

January 30, 2020

Courtney Montgomery, Archaeologist
Rincon Consultants, Inc.

Via Email to: cmontgomery@rinconconsultants.com

Re: Homeless Navigation Center Project, Solano County

Dear Ms. Montgomery:

A record search of the Native American Heritage Commission (NAHC) Sacred Lands File (SLF) was completed for the information you have submitted for the above referenced project. The results were negative. However, the absence of specific site information in the SLF does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Attached is a list of Native American tribes who may also have knowledge of cultural resources in the project area. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated; if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call or email to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from tribes, please notify me. With your assistance, we can assure that our lists contain current information.

If you have any questions or need additional information, please contact me at my email address: Sarah.Fonseca@nahc.ca.gov.

Sincerely,



Sarah Fonseca
Associate Governmental Program Analyst

Attachment



CHAIRPERSON
Laura Miranda
Luiseño

VICE CHAIRPERSON
Reginald Pagaling
Chumash

SECRETARY
Meri Lopez-Keifer
Luiseño

PARLIAMENTARIAN
Russell Atebery
Karuk

COMMISSIONER
Marshall McKay
Wintun

COMMISSIONER
William Mungary
Paiute/White Mountain
Apache

COMMISSIONER
Joseph Myers
Pomo

COMMISSIONER
Julie Tumamait-
Stenslie
Chumash

COMMISSIONER
[Vacant]

EXECUTIVE SECRETARY
Christina Snider
Pomo

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

**Native American Heritage Commission
Native American Contacts List
January 30, 2020**

Cortina Rancheria - Kletsel Dehe Band of Wintun Indians
Charlie Wright, Chairperson
P.O. Box 1630 Wintun / Patwin
Williams CA 95987
(530) 473-3274 Office
(530) 473-3301 Fax

The Confederated Villages of Lisjan
Corrina Gould, Chairperson
10926 Edes Avenue Ohlone/Costanoan
Oakland CA 94603
corrinagould@gmail.com
(510) 575-8408

United Auburn Indian Community of the Auburn Rancheria
Gene Whitehouse, Chairperson
10720 Indian Hill Road Maidu
Auburn CA 95603 Miwok
wguth@auburnrancheria.com
(530) 883-2390 Office
(530) 883-2380 Fax

Yocha Dehe Wintun Nation
Anthony Roberts, Chairperson
P.O. Box 18 Wintun (Patwin)
Brooks CA 95606
aroberts@yochadehe-nsn.gov
(530) 796-3400
(530) 796-2143 Fax

This list is current as of the date of this document and is based on the information available to the Commission on the date it was produced.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code, or Section 5097.98 of the Public Resources Code.

This list is only applicable for contacting local Native Americans Tribes for the proposed: Homeless Navigation Center Project, Solano County.



Rincon Consultants, Inc.

449 15th Street, Suite 303
Oakland, California 94612

510 834 4455 OFFICE

info@rinconconsultants.com
www.rinconconsultants.com

January 29, 2020

Cortina Rancheria – Kletsel Dehe Band of Wintun Indians
Charlie Wright, Chairperson
P.O. Box 1630
Williams, CA 95987

Subject: Cultural Resources Technical Study for 2118 and 2134-36 Sacramento Street (Permanent Supportive Housing Project), 5 Midway Street (Homeless Navigation Center), and 759 Sonoma Boulevard (Sonoma Estates Project) Projects, Vallejo, Solano County, California

Dear Chairperson Wright,

Rincon Consultants, Inc. (Rincon) has been retained to complete a Cultural Resources Technical Study for three City of Vallejo projects, including: Permanent Supporting Housing Projects at 2118 and 2134-36 Sacramento Street, the Homeless Navigation Center at 5 Midway Street, and the Sonoma Estates Project at 759 Sonoma Boulevard. Each of these projects will be funded by the Department of Housing and Urban Development and are therefore subject to Section 106 of the National Historic Preservation Act.

The Permanent Supporting Housing Project consists of the demolition of existing buildings and the construction of new apartment units. The project is located at 2118 and 2134-36 Sacramento Street and encompasses Assessor's Parcel Numbers (APNs) 0051-190-390 and 0051-080-540 (see attached Figure 1). The project parcels currently contain two extant buildings.

The Homeless Navigation Center Project consists the construction of a navigation center. The project is located at 5 Midway Street and encompasses APN 0058-100-007 (see attached Figure 2). The project parcel is currently vacant.

The Sonoma Estates Project consists the construction of new housing units. The project is located at 759 Sonoma Boulevard and encompasses APN 0061-051-010 (see attached Figure 3). The project parcel is currently vacant.

As part of the process of identifying cultural resources issues for this project, Rincon anticipates contacting the Native American Heritage Commission (NAHC) and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project area. Rincon has yet to receive results of the SLF search. This letter serves to inform you of our understanding of the project, and to inquire about your knowledge of potential cultural resources that may be impacted by this project.

If you have knowledge or concerns about cultural resources that may exist within or near the project site, please contact me at 916-706-1374, extension 230, or at hhaas@rinconconsultants.com. Thank you for your assistance.



Rincon Consultants, Inc.

449 15th Street, Suite 303
Oakland, California 94612

510 834 4455 OFFICE

info@rinconconsultants.com
www.rinconconsultants.com

Sincerely,
Rincon Consultants, Inc.

A handwritten signature in cursive script that reads "Hannah Haas".

Hannah Haas, M.A., RPA
Archaeologist

Enclosed: Figures 1, 2, and 3 (Project Location Maps)



Rincon Consultants, Inc.

449 15th Street, Suite 303
Oakland, California 94612

510 834 4455 OFFICE

info@rinconconsultants.com
www.rinconconsultants.com

January 29, 2020

The Confederated Villages of Lisjan
Corrina Gould, Chairperson
10926 Edes Avenue
Oakland, CA 94603

Subject: Cultural Resources Technical Study for 2118 and 2134-36 Sacramento Street (Permanent Supportive Housing Project), 5 Midway Street (Homeless Navigation Center), and 759 Sonoma Boulevard (Sonoma Estates Project) Projects, Vallejo, Solano County, California

Dear Chairperson Gould,

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Oakland, California 94612

510 834 4455 OFFICE

info@rinconconsultants.com
www.rinconconsultants.com

Sincerely,
Rincon Consultants, Inc.

A handwritten signature in cursive script that reads "Hannah Haas".

Hannah Haas, M.A., RPA
Archaeologist

Enclosed: Figures 1, 2, and 3 (Project Location Maps)



Rincon Consultants, Inc.

449 15th Street, Suite 303
Oakland, California 94612

510 834 4455 OFFICE

info@rinconconsultants.com
www.rinconconsultants.com

January 29, 2020

United Auburn Indian Community of the Auburn Rancheria
Gene Whitehouse, Chairperson
10720 Indian Hill Road
Auburn, CA 95603

Subject: Cultural Resources Technical Study for 2118 and 2134-36 Sacramento Street (Permanent Supportive Housing Project), 5 Midway Street (Homeless Navigation Center), and 759 Sonoma Boulevard (Sonoma Estates Project) Projects, Vallejo, Solano County, California

Dear Chairperson Whitehouse,

Rincon Consultants, Inc. (Rincon) has been retained to complete a Cultural Resources Technical Study for three City of Vallejo projects, including: Permanent Supporting Housing Projects at 2118 and 2134-36 Sacramento Street, the Homeless Navigation Center at 5 Midway Street, and the Sonoma Estates Project at 759 Sonoma Boulevard. Each of these projects will be funded by the Department of Housing and Urban Development and are therefore subject to Section 106 of the National Historic Preservation Act.

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Rincon Consultants, Inc.

449 15th Street, Suite 303
Oakland, California 94612

510 834 4455 OFFICE

info@rinconconsultants.com
www.rinconconsultants.com

Sincerely,
Rincon Consultants, Inc.

A handwritten signature in black ink that reads "Hannah Haas". The signature is written in a cursive, flowing style.

Hannah Haas, M.A., RPA
Archaeologist

Enclosed: Figures 1, 2, and 3 (Project Location Maps)



Rincon Consultants, Inc.

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Oakland, California 94612

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www.rinconconsultants.com

January 29, 2020

Yocha Dehe Wintun Nation
Anthony Roberts, Chairperson
P.O. Box 18
Brooks, CA 95606

Subject: Cultural Resources Technical Study for 2118 and 2134-36 Sacramento Street (Permanent Supportive Housing Project), 5 Midway Street (Homeless Navigation Center), and 759 Sonoma Boulevard (Sonoma Estates Project) Projects, Vallejo, Solano County, California

Dear Chairperson Roberts,

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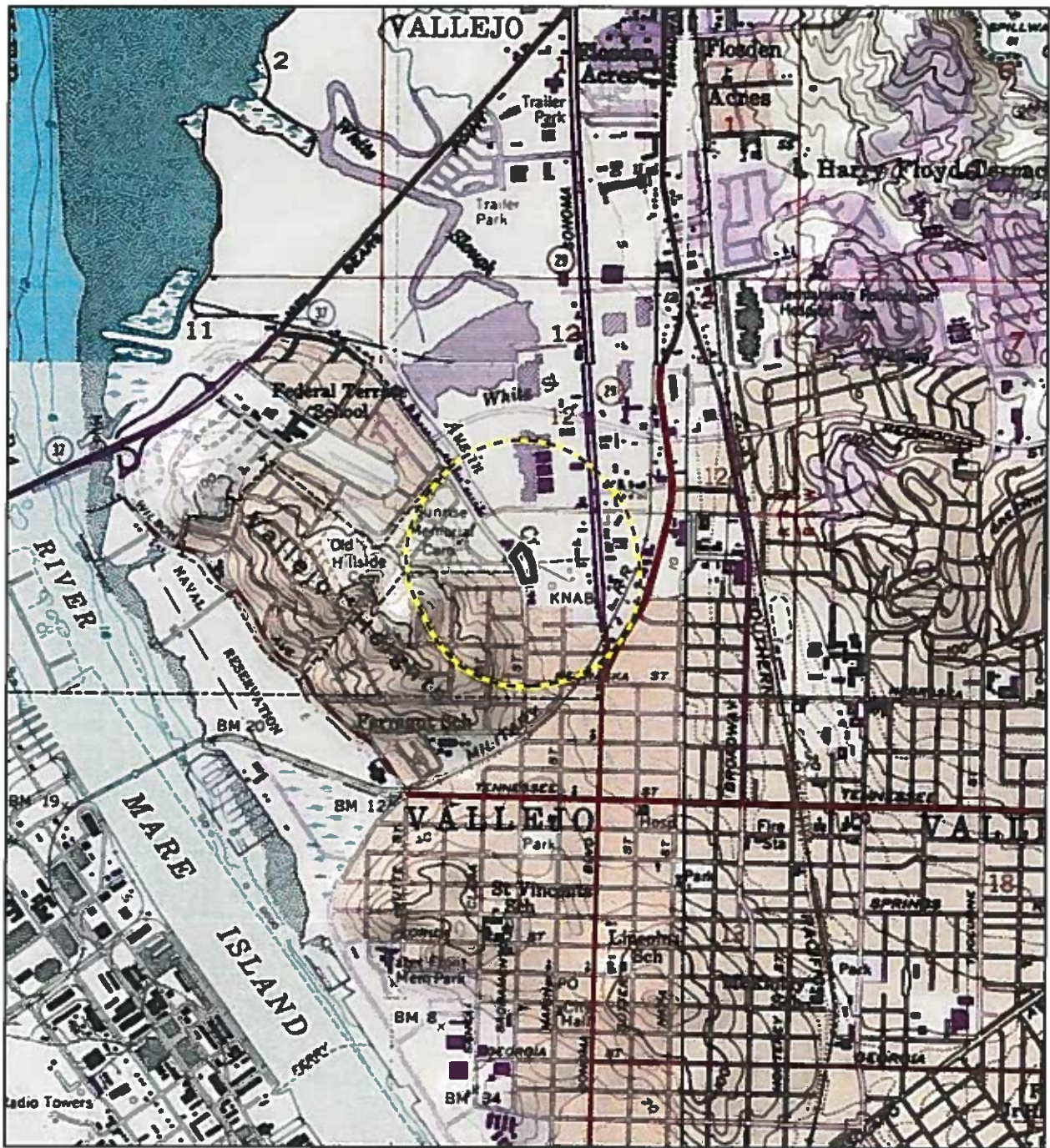
Sincerely,
Rincon Consultants, Inc.

A handwritten signature in cursive script that reads "Hannah Haas".

Hannah Haas, M.A., RPA
Archaeologist

Enclosed: Figures 1, 2, and 3 (Project Location Maps)

Figure 1



Imagery provided by National Geographic Society, Esri and its licensors © 2020. Mare Island Quadrangle, T03N R04W S12. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

-  Quarter-Mile Buffer
-  Area of Potential Effects



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Permanent Supportive Housing

Figure 2



Imagery provided by National Geographic Society, Esri and its licensors © 2020. Mare Island and Benicia Quadrangles, T03N R04W S24 & T03N R03W S19. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

-  Quarter-Mile Buffer
-  Area of Potential Effects



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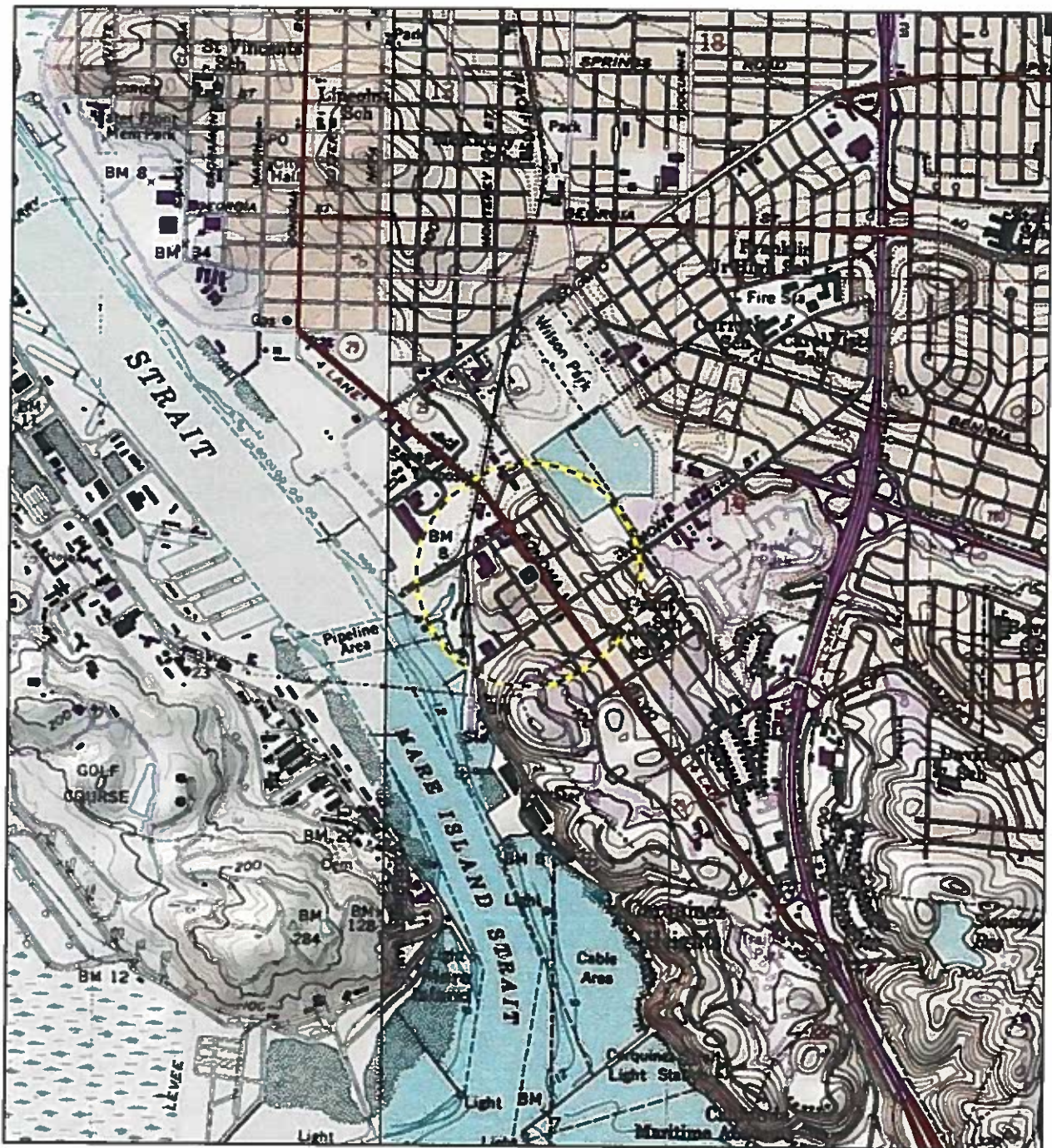
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Homeless Navigation Center



Figure 3



Imagery provided by National Geographic Society, Esri and its licensors © 2020. Benicia Quadrangle, T03N R04W S24 & T03N R03W S19. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

-  Quarter-Mile Buffer
-  Area of Potential Effects



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Housing and Community Development Division · 200 Georgia Street · Vallejo · CA · 94590 · 707.648.4507

December 10, 2019

Marilyn Delgado, Director of Cultural Resources
Yocha Dehe Cultural Resources
Yocha Dehe Wintun Nation
P. O. Box 18
Brooks, CA 95606

SUBJECT: City of Vallejo Environmental Review – Proposed Construction of Homeless Navigation Center

Dear Ms. Delgado:

The City of Vallejo hereby notifies you that a project has been proposed in a geographic area that may have been traditionally and culturally affiliated with the Yocha Dehe Wintun Nation, (please see an attached project description, sit map, and site plan). State law under Assembly Bill 52 (Public Resources Code Section 21080.3.1) allows California Native American tribes 30 days to request consultation regarding possible significant effects that implementation of the proposed project may have on tribal cultural resources. The request must be in writing to the City of Vallejo and must identify a lead contact person. The City of Vallejo will begin the consultation process within 30 days of receiving the tribe's request for consultation. The consultation may include a discussion concerning the type of environmental review necessary for the project, the significance of the project's impacts on tribal cultural resources and, if necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend.

The City is in the process of completing an historical review of the proposed site for a Homeless Navigation Center, which is currently a vacant parcel owned by the City. However, should this project proceed and if, in the course of the project, archaeological features, such as concentrations of artifacts or culturally modified soils deposits including trash pits older than 50 years of age are discovered at any time during grading, scraping, or excavation within the property, all work shall be halted in the vicinity of the find, the City's Planning Division shall be notified, and a qualified archaeologist shall be contacted immediately to make an evaluation. If warranted by the concentration of artifacts or soils deposits, further work in the discovery area shall be monitored by an archaeologist.

If human remains are encountered during grading or any future construction, all work shall stop in the immediate vicinity of the discovered remains and both the County Coroner and a qualified archaeologist shall be notified immediately so that an evaluation can be performed. If the remains are deemed to be Native American and prehistoric, the Coroner shall contact the Native American Heritage Commission so that a "Most Likely Descendant" can be designated.

The consultation does not limit the ability of the tribe to submit information to the City of Vallejo regarding the significance of the tribal cultural resources, the significance of the project's impact on tribal cultural resources, or any appropriate measures to mitigate the potential impacts. If you wish to submit information informally, written comments may be sent to my attention at: Housing and Community Development Division, City of Vallejo, 200 Georgia Street, Vallejo, CA 94590, (707) 649-5417. General comments may also be submitted to me via email at Guy.Ricca@cityofvallejo.net; however, transmittal of confidential information, such as the specific location of a cultural resource, is not recommended. In such instances, please notify the City of Vallejo via formal letter, in person, or by telephone, as the confidentiality of information transmitted via email cannot be ensured.

Please feel free to contact me if you have any questions concerning this proposed project, or what is being requested in this letter.

Sincerely,



GUY L. RICCA

Temporary Senior Community Development Analyst

cc: Judy Shepard-Hall, Housing and Community Development Manager



YOCHA DEHE
CULTURAL RESOURCES

RECEIVED
City of Vallejo - Housing and
Community Development Division

JAN 21 2020

Referred to _____

January 7, 2020

City of Vallejo - Housing & Community Development Division
Judy Shepard-Hall, Housing & Community Development Manager
200 Georgia Street
Vallejo, CA 94590

RE: 5 Midway Vallejo Homeless Shelter

Dear Ms. Shepard-Hall:

Thank you for the project notification dated, December 10, 2019, regarding cultural information on the proposed 5 Midway Vallejo Homeless Shelter, Vallejo, Solano County. We appreciate your effort to contact us and wish to respond.

The Cultural Resources Department has reviewed the project and concluded that it is within the ancestral territories of the Yocha Dehe Wintun Nation. Therefore, we have a cultural interest and authority in the proposed project area.

Based on the information provided, Yocha Dehe Wintun Nation is not aware of any known cultural resources near this project site and a cultural monitor is not needed. However, if any new information or cultural items are found, please contact the Cultural Resources Department. In addition, we recommend cultural sensitivity training for any pre-project personnel. Please contact the individual below to schedule the cultural sensitivity training, prior to the start of the project.

Laverne Bill, Cultural Resources Manager
Yocha Dehe Wintun Nation
Office: (530) 723-3891
Email: lbill@yochadehe-nsn.gov

Please refer to identification number YD-12112019-01 in any correspondence concerning this project.

Thank you for providing us the opportunity to comment.

Sincerely,

Tribal Historic Preservation Officer

Appendix C

Interested Party Consultation



Rincon Consultants, Inc.

449 15th Street, Suite 303
Oakland, California 94612

510 834 4455 OFFICE

info@rinconconsultants.com
www.rinconconsultants.com

January 29, 2020

Rincon Project No: 20-09218

Vallejo Architectural Heritage Foundation
P.O. Box 1129
Vallejo, CA 94590

Subject: Interested Party Consultation for Three HUD Projects in Vallejo, Solano County, CA

To Whom it May Concern:

Rincon Consultants, Inc. (Rincon) has been retained to complete cultural resources studies for three projects funded by Housing and Urban Development (HUD) in the City of Vallejo (proposed undertakings). These include the following:

- Permanent Supportive Housing Project – which involves the demolition of two existing buildings built in the 1960s, and construction of new apartments at 2118 and 2134-2136 Sacramento Street (APNs 0051-190-390 and 0051-080-540).
- Homeless Navigation Center - which involves the construction of a navigation center at 5 Midway Street (APN 0058-100-070).
- Sonoma Estates Project – which involves the construction of new housing on a vacant lot at 759 Sonoma Boulevard (APN 0061-051-010).

The proposed undertakings will be completed in part using federal funding administered by the U.S. Department of Housing and Urban Development (HUD); they are therefore subject to Section 106 of the National Historic Preservation Act (NHPA). In support of this, Rincon is consulting with potentially interested parties to request input on potential or known historic resources or other cultural resources in the project area or vicinity. We are in the initial phase, "identify[ing] historic properties potentially affected by the undertaking" (36 Code of Federal Regulations Part 800.1) and are writing to provide you with an opportunity to be involved in the Section 106 process as a consulting party. If you or your organization has any knowledge of, or specific concerns regarding cultural resources in the area of the undertaking, please respond by telephone at 805-644-4455 ext. 76 or by email to szgurrola@rinconconsultants.com.

Thank you for your assistance.

Sincerely,
Rincon Consultants, Inc.

A handwritten signature in blue ink, appearing to read "Susan Zamudio-Gurrola".

Susan Zamudio-Gurrola, MHP
Architectural Historian

Enclosure: *Project Location Map*



Rincon Consultants, Inc.

449 15th Street, Suite 303
Oakland, California 94612

510 834 4455 OFFICE

info@rinconconsultants.com
www.rinconconsultants.com

January 29, 2020

Rincon Project No: 20-09218

Vallejo Naval & Historical Museum
734 Marin Street
Vallejo, CA 94590

Subject: Interested Party Consultation for Three HUD Projects in Vallejo, Solano County, CA

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Thank you for your assistance.

Sincerely,
Rincon Consultants, Inc.

A handwritten signature in blue ink, appearing to read "Susan Zamudio-Gurrola".

Susan Zamudio-Gurrola, MHP
Architectural Historian

Enclosure: *Project Location Map*



Rincon Consultants, Inc.

449 15th Street, Suite 303
Oakland, California 94612

510 834 4455 OFFICE

info@rinconconsultants.com
www.rinconconsultants.com

January 29, 2020

Rincon Project No: 20-09218

Solano County Historical Society
P.O. Box 3009
Fairfield, CA 94533-0309

Subject: Interested Party Consultation for Three HUD Projects in Vallejo, Solano County, CA

To Whom it May Concern:

Rincon Consultants, Inc. (Rincon) has been retained to complete cultural resources studies for three projects funded by Housing and Urban Development (HUD) in the City of Vallejo (proposed undertakings). These include the following:

- Permanent Supportive Housing Project – which involves the demolition of two existing buildings built in the 1960s, and construction of new apartments at 2118 and 2134-2136 Sacramento Street (APNs 0051-190-390 and 0051-080-540).
- Homeless Navigation Center - which involves the construction of a navigation center at 5 Midway Street (APN 0058-100-070).
- Sonoma Estates Project – which involves the construction of new housing on a vacant lot at 759 Sonoma Boulevard (APN 0061-051-010).

The proposed undertakings will be completed in part using federal funding administered by the U.S. Department of Housing and Urban Development (HUD); they are therefore subject to Section 106 of the National Historic Preservation Act (NHPA). In support of this, Rincon is consulting with potentially interested parties to request input on potential or known historic resources or other cultural resources in the project area or vicinity. We are in the initial phase, "identify[ing] historic properties potentially affected by the undertaking" (36 Code of Federal Regulations Part 800.1) and are writing to provide you with an opportunity to be involved in the Section 106 process as a consulting party. If you or your organization has any knowledge of, or specific concerns regarding cultural resources in the area of the undertaking, please respond by telephone at 805-644-4455 ext. 76 or by email to szgurrola@rinconconsultants.com.

Thank you for your assistance.

Sincerely,
Rincon Consultants, Inc.

A handwritten signature in black ink, appearing to read "Susan Zamudio-Gurrola", written in a cursive style.

Susan Zamudio-Gurrola, MHP
Architectural Historian

Enclosure: *Project Location Map*



Rincon Consultants, Inc.

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January 30, 2020

Rincon Project No: 20-09218

Aaron Sage, AICP, Principal Planner
City of Vallejo Planning Division
555 Santa Clara Street (Second Floor)
Vallejo, California 94590

Subject: Interested Party Consultation for Three HUD Projects in Vallejo, Solano County, CA

Dear Mr. Sage:

Rincon Consultants, Inc. (Rincon) has been retained to complete cultural resources studies for three projects funded by Housing and Urban Development (HUD) in the City of Vallejo (proposed undertakings). These include the following:

- Permanent Supportive Housing Project – which involves the demolition of two existing buildings built in the 1960s, and construction of new apartments at 2118 and 2134-2136 Sacramento Street (APNs 0051-190-390 and 0051-080-540).
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Thank you for your assistance.

Sincerely,
Rincon Consultants, Inc.

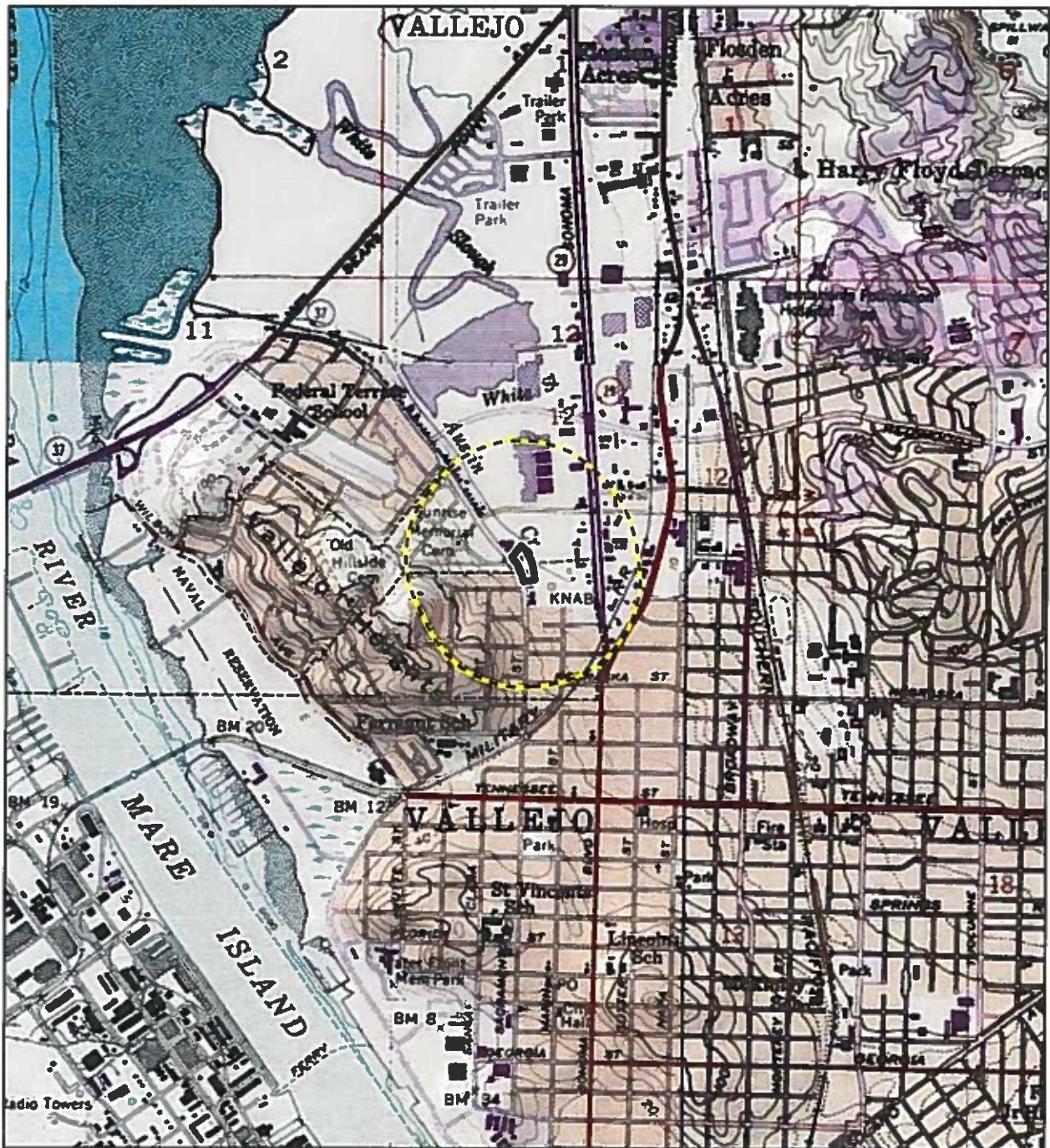
A handwritten signature in blue ink, appearing to read "Sharon J. Gurd".



Susan Zamudio-Gurrola, MHP
Architectural Historian

Enclosure: *Project Location Map*

Figure 1



Imagery provided by National Geographic Society, Esri and its licensors © 2020. Mare Island Quadrangle. T03N R04W S12. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

-  Quarter-Mile Buffer
-  Area of Potential Effects



0 1,000 2,000 Feet

0 250 500 Meters


1:24,000

Permanent Supportive Housing

Figure 2



Imagery provided by National Geographic Society, Esri and its licensors © 2020. Mare Island and Benicia Quadrangles. T03N R04W S24 & T03N R03W S19. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

-  Quarter-Mile Buffer
-  Area of Potential Effects



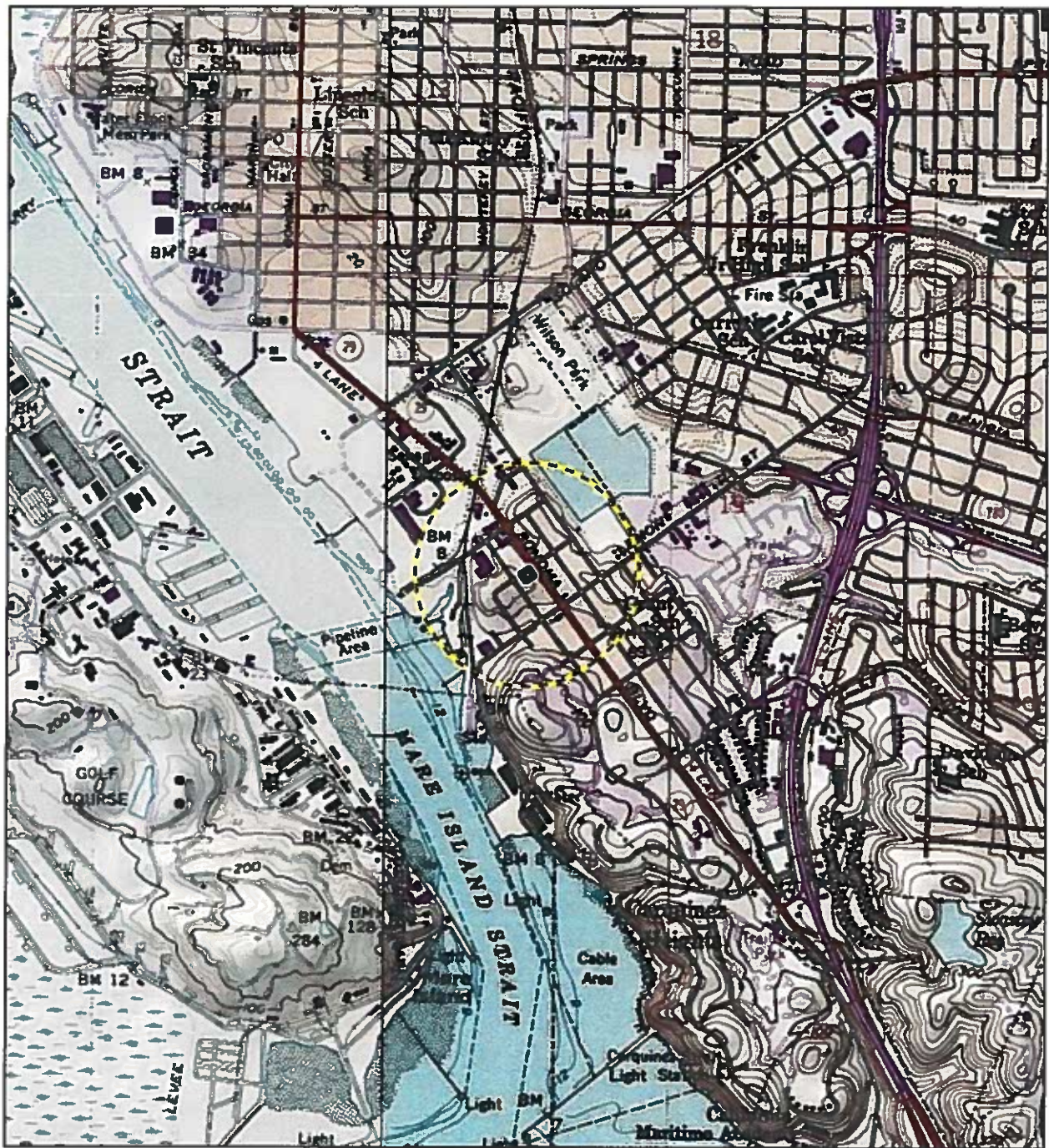
0 1,000 2,000 Feet

0 250 500 Meters


1:24,000

Homeless Navigation Center

Figure 3



Imagery provided by National Geographic Society, Esri and its licensors © 2020. Benicia Quadrangle, T03N R04W S24 & T03N R03W S19. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

-  Quarter-Mile Buffer
-  Area of Potential Effects



0 1,000 2,000 Feet

0 250 500 Meters

1:24,000



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January 17, 2020
Project No: 19-08847

Judy Shepard-Hall, Housing & Community Development Manager
City of Vallejo, Housing & Community Development Division
200 Georgia Street
Vallejo, California 94590
Via email: Judy.Shepard-Hall@cityofvallejo.net

**Subject: 5 Midway Street Noise Constraints Site Assessment
5 Midway Street, Vallejo, California 94590**

Dear Ms. Shepard-Hall:

This Noise Constraints Site Assessment summarizes the results of a noise/land use compatibility site assessment prepared by Rincon Consultants for the proposed homeless navigation shelter structure on an approximately two-acre project site located at 5 Midway Street in Vallejo, California (herein referred to as "proposed project" or "project"). See Figure 1 for a map of the project site location. The noise/land use compatibility site assessment evaluates the suitability of the existing on-site ambient noise environment for the proposed project based on the City of Vallejo's noise/land use compatibility standards. As detailed in the analysis below, the proposed project would be compatible with the existing noise environment.

Noise Overview

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs (e.g., the human ear). Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment.¹

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response, which is most sensitive to frequencies around 4,000 Hertz (Hz) and less sensitive to frequencies around and below 100 Hz.² Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake

¹ Crocker, Malcolm J. (Editor). 2007. Handbook of Noise and Vibration Control Book, ISBN: 978-0-471-39599-7, Wiley-VCH, October.

² Kinsler, Lawrence E., Austin R. Frey, Alan B. Coppens, and James V. Sanders. 1999. Fundamentals of Acoustics, 4th Edition. ISBN 0-471-84789-5. Wiley-VCH, December 1999.

Figure 1 Project Site Location





magnitudes. A doubling of the energy of a noise source, such as a doubling of traffic volume, would increase the noise level by 3 dB; similarly, dividing the energy in half would result in a decrease of 3 dB.³

Human perception of noise has no simple correlation with acoustical energy. The perception of noise is not linear in terms of dBA or in terms of acoustical energy. Two equivalent noise sources combined do not sound twice as loud as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease; that a change of 5 dBA is readily perceptible; and that an increase (decrease) of 10 dBA sounds twice (half) as loud.⁴

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important. In addition, most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors has been developed. The noise descriptors used for this analysis are the one-hour equivalent noise level ($L_{eq(1h)}$) and the community noise equivalent level (CNEL).

- The L_{eq} is the level of a steady sound that, in a stated time period and at a stated location, has the same A-weighted sound energy as the time-varying sound. For example, $L_{eq(1h)}$ is the equivalent noise level over a 1-hour period and is a common metric for limiting nuisance noise. Unless otherwise noted in this report, L_{eq} represents a one hour noise level equivalent.
- The L_{10} is the noise level that is exceeded for 10 percent of the time period of a noise measurement and is typically used to provide an indication of the upper limit of fluctuating noise and is used as an indicator of intrusive noise.⁵
- The L_{90} is the noise level that is exceeded for 90 percent of the time period of a noise measurement and is typically used to quantify background noise levels.⁶
- The CNEL is a 24-hour equivalent sound level. The CNEL calculation applies an additional 5 dBA penalty to noise occurring during evening hours (i.e., 7:00 p.m. to 10:00 p.m.) and an additional 10 dBA penalty is added to noise occurring during nighttime hours (i.e., 10:00 p.m. to 7:00 a.m.). These increases for certain times are intended to account for the added sensitivity of humans to noise during the evening and nighttime periods.

Sound from a small, localized source (approximating a “point” source) decreases or drops off at a rate of 6 dBA for each doubling of the distance from the source. Sound from a “line” source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance. These attenuation rates can increase by up to 1.5 dBA per doubling of distance when disturbed earth, snow, or vegetation are present.

Existing Noise Setting

The most prevalent sources of noise on-site are vehicular traffic on State Route (SR) 29 to the north and industrial operations at several properties surrounding the project site. Railroad tracks owned and operated by the California Northern Railroad Company are located immediately east of the project site;

³ Crocker, Malcolm J. (Editor). 2007. Handbook of Noise and Vibration Control Book, ISBN: 978-0-471-39599-7, Wiley-VCH, October.

⁴ California Department of Transportation (Caltrans). 2013a. Technical Noise Supplement to the Traffic Noise Analysis Protocol. (CT-HWANP-RT-13-069.25.2) September. http://www.dot.ca.gov/hq/env/noise/pub/TeNS_Sept_2013B.pdf (accessed August 2019).

⁵ Castle Group. 2019. “Percentile Values (L_n Values) in Noise.” <https://www.castlegroup.co.uk/guidance/environmental-noise/percentile-levels/> (accessed January 2020).

⁶ Ibid.



however, trains have not run on these tracks in several years, and signal system upgrades and other improvements would be needed in order to put these tracks into service.⁷ Therefore, these tracks do not represent an existing noise source and are not included in this analysis.

To characterize the ambient noise environment, two short-term measurements and a 24-hour sound level measurement were conducted at the project site on December 19 to 20, 2019. An Exttech Model 407780A ANSI Type 2 integrating sound level meter was used to conduct the measurements. Table 1 summarizes the results of the short-term noise measurements, and Table 2 summarizes the results of the long-term noise measurement. Detailed sound level measurement data are included in Attachment 2. See Figure 2 for noise measurement locations. As shown in Table 2, ambient noise levels at the project site were measured as 63 CNEL with a 24-hour L_{10} of 57 dBA and a 24-hour L_{90} of 48 dBA.

Table 1 Short-Term Sound Level Monitoring Results

Measurement Location	Sample Times	Approximate Distance to Primary Noise Source	$L_{eq(15)}$ (dBA)
ST-1 SR 29, south of Ryder Street intersection	2:13 – 2:28 p.m.	25 feet to centerline of Ryder Street	65
ST-2 Ryder Street, east of Midway Street intersection	2:36 – 2:51 p.m.	35 feet to centerline of SR 29	53

L_{eq} = average noise level equivalent; dBA = A-weighted decibel

See Attachment 1 for noise monitoring data. See Figure 2 for noise measurement locations.

⁷ Vallejo, City of. 2017. Propel Vallejo: General Plan 2040. Adopted August 29, 2017. http://www.ci.vallejo.ca.us/city_hall/departments_divisions/planning_and_development_services/planning_division/general_plan_2040 (accessed December 2019).



Table 2 Long-Term Sound Level Monitoring Results

Measurement Location	Sample Date	Sample Time	$L_{eq [1h]}$ (dBA) ¹
LT-1 Northern boundary of project site			
	December 19, 2019	3:00 p.m.	51
	December 19, 2019	4:00 p.m.	49
	December 19, 2019	5:00 p.m.	49
	December 19, 2019	6:00 p.m.	50
	December 19, 2019	7:00 p.m.	49
	December 19, 2019	8:00 p.m.	50
	December 19, 2019	9:00 p.m.	50
	December 19, 2019	10:00 p.m.	50
	December 19, 2019	11:00 p.m.	50
	December 20, 2019	12:00 a.m.	53
	December 20, 2019	1:00 a.m.	50
	December 20, 2019	2:00 a.m.	53
	December 20, 2019	3:00 a.m.	56
	December 20, 2019	4:00 a.m.	57
	December 20, 2019	5:00 a.m.	57
	December 20, 2019	6:00 a.m.	57
	December 20, 2019	7:00 a.m.	55
	December 20, 2019	8:00 a.m.	52
	December 20, 2019	9:00 a.m.	54
	December 20, 2019	10:00 a.m.	52
	December 20, 2019	11:00 a.m.	57
	December 20, 2019	12:00 p.m.	57
	December 20, 2019	1:00 p.m.	55
	December 20, 2019	2:00 p.m.	51
24-hour L_{10}			57
24-hour L_{90}			48
24-hour L_{eq}			54
CNEL			63

¹ L_{eq} = average noise level equivalent; dBA = A-weighted decibel, CNEL = Community Noise Equivalent Level

See Attachment 1 for noise monitoring data. See Figure 2 for noise measurement locations.

Source: Rincon Consultants, field measurements on December 19 – 20, 2019, using ANSI Type II integrating sound level meter.

Figure 2 Noise Measurement Locations





Regulatory Setting

City of Vallejo General Plan

The City of Vallejo General Plan Nature & Built Environment (NBE) Element contains policies and actions that are designed to include noise control in the planning process in order to maintain compatible land uses with acceptable environmental noise levels. The NBE Element contains the following policies and actions that would be applicable to the proposed project:

- Policy NBE-5.15 Noise Compatibility Standards.** Apply the General Plan noise and land use compatibility standards [reproduced herein as Table 3] to all new residential, commercial, and mixed-use development and redevelopment.
- Action NBE-5.15F** Require acoustical studies with appropriate mitigation measures for projects that are likely to be exposed to noise levels that exceed the 'normally acceptable' standard and for any other projects that are likely to generate noise in excess of these standards.

Methodology

The suitability of the existing on-site ambient noise environment for the proposed project was evaluated by comparing the 24-hour noise level measured on December 19 to 20, 2019 (see Table 2) to the City's noise/land use compatibility standards for transient lodging land uses (see Table 3). In addition, the contribution of traffic along SR 29 and Ryder Street to ambient on-site noise levels was estimated using the Federal Highway Administration's Traffic Noise Model (TNM) traffic noise-reference levels and algorithms from SoundPLAN. Traffic noise-model inputs to SoundPLAN include the three-dimensional coordinates of the roadways, noise receivers, and topographic features or existing barriers that would affect noise propagation; vehicle volumes and speeds by type of vehicle; and absorption factors.

SR 29 is a four-lane highway with a posted speed limit of 30 miles per hour (mph). Existing traffic volumes on SR 29 were based on 2017 traffic volume data from the California Department of Transportation for the segment of SR 29 between Lemon and Maine Streets. The peak hour traffic volume north of the SR 29/Lemon Street intersection is approximately 2,400 vehicles.⁸ To determine the vehicle classification mix on SR 29 for modeling, the mix for the 2017 Caltrans data for the SR 29/Maine Street intersection (the nearest intersection with available data), located approximately 0.6 mile north of the project site, was used. The mix from this data is 96 percent automobiles, 2 percent medium trucks, and 2 percent heavy trucks.^{9, 10} For the purposes of modeling, the peak hour traffic volume was input into the model to determine the peak hour L_{eq} . The CNEL is estimated to be equivalent to the peak hour L_{eq} .

⁸ California Department of Transportation. 2019. "2017 Traffic Volumes: Route 22-33." <https://dot.ca.gov/programs/traffic-operations/census/traffic-volumes/2017/route-22-33> (accessed January 2020).

⁹ Automobiles include all vehicles with two axles and four tires and are primarily designed to carry nine or fewer people (passenger cars, vans) or cargo (vans, light trucks). Automobiles generally have a gross vehicle weight less than 4,500 kilograms (9,900 pounds). Medium trucks include all cargo vehicles with two axles and six tires and generally have a gross vehicle weight between 4,500 kilograms (9,900 pounds) and 12,000 kilograms (26,400 pounds). Heavy trucks include all cargo vehicles with three or more axles and generally have a gross vehicle weight more than 12,000 kilograms (26,400 pounds).

¹⁰ California Department of Transportation. 2018. *2016 Annual Average Daily Truck Traffic on the California State Highway System*. <https://dot.ca.gov/-/media/dot-media/programs/traffic-operations/documents/f0017681-2016-aadt-truck-a11y.pdf> (accessed January 2020).



Table 3 Land Use Compatibility for Community Noise Environments

Land Use	Community Noise Equivalent Level (CNEL)			
	Normally Acceptable ¹	Conditionally Acceptable ²	Normally Unacceptable ³	Clearly Unacceptable ⁴
Residential – Low-Density Single Family, Duplex, Mobile Homes	50 – 60	55 – 70	70 – 75	75+
Residential – Multiple Family	50 – 65	60 – 70	70 – 75	75+
Transient Lodging , Motels, Hotels	50 – 65	60 – 70	70 – 80	80+
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 – 70	60 – 70	70 – 80	80+
Auditoriums, Concert Halls, Amphitheaters	–	50 – 70	–	65+
Sports Arena, Outdoor Spectator Sports	–	50 – 75	–	70+
Playgrounds, Neighborhood Parks	50 – 70	–	67 – 75	72+
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 – 75	–	70 – 80	80+
Office Buildings, Businesses, Commercial ,and Professional	50 – 70	67 – 77	75+	–
Industrial, Manufacturing, Utilities, Agriculture	50 – 75	70 – 80	75+	–

¹ Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

² Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and the needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

³ Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.

⁴ Clearly Unacceptable: New construction or development generally should not be undertaken.

Source: Vallejo, City of. 2017. Propel Vallejo: General Plan 2040. Adopted August 29, 2017.

http://www.ci.vallejo.ca.us/city_hall/departments_divisions/planning_and_development_services/planning_division/general_plan_2040 (accessed December 2019).

Ryder Street is a two-lane, dead-end roadway with no posted speed limit. Given the nature of this roadway, it was assumed that vehicles typically travel at 25 mph. Existing traffic volumes and the vehicle classification mix on Ryder Street were estimated using a 15-minute traffic count taken during Noise Measurement 2. This traffic count observed nine vehicles, including seven automobiles, one medium truck, and one heavy truck. Therefore, hourly traffic volumes on Ryder Street are approximately 36 vehicles with 77.8 percent automobiles, 11.1 percent medium trucks, and 11.1 percent heavy trucks. For the purposes of modeling, the estimated hourly traffic volume was input into the model to determine the hourly L_{eq} . The CNEL is estimated to be equivalent to the hourly L_{eq} .



Noise/Land Use Compatibility Standards

As shown in Table 3, the City has adopted noise/land use compatibility guidelines that provide the normally acceptable, conditionally acceptable, normally unacceptable, and clearly unacceptable noise levels for different land uses. The proposed project includes a homeless navigation shelter structure. For transient lodging, exterior ambient noise levels up to 65 CNEL are considered normally acceptable, and exterior ambient noise levels up to 70 CNEL are considered conditionally acceptable (see Table 3).

Analysis

Following the methodology discussed under *Methodology*, peak hour noise level contours from SR 29 and Ryder Street were modeled and are presented in Figure 3. As shown therein, existing noise levels at the project site (Receiver R1) due to roadway noise are approximately 45 CNEL, assuming that the CNEL is equivalent to the peak hour L_{eq} . However, other noise sources are present in the immediate vicinity of the project site, including generators, a substation, and industrial/warehouse operations. As shown in Table 2, the 24-hour noise measurement taken on-site measured an ambient noise level of 63 CNEL. This noise level falls within the City's "normally acceptable" range of 50 to 65 CNEL for transient lodging land uses (see Table 3).

Conclusion

Per the City of Vallejo noise/land use compatibility standards, the proposed project would be compatible with the existing noise environment. No noise/land use compatibility conflicts would occur.

Thank you for the opportunity to assist with this assignment. Please do not hesitate to contact us if you have questions about this report.

Sincerely,
Rincon Consultants, Inc.

Annaliese Miller

Annaliese Miller
Associate Environmental Planner

Abe Leider

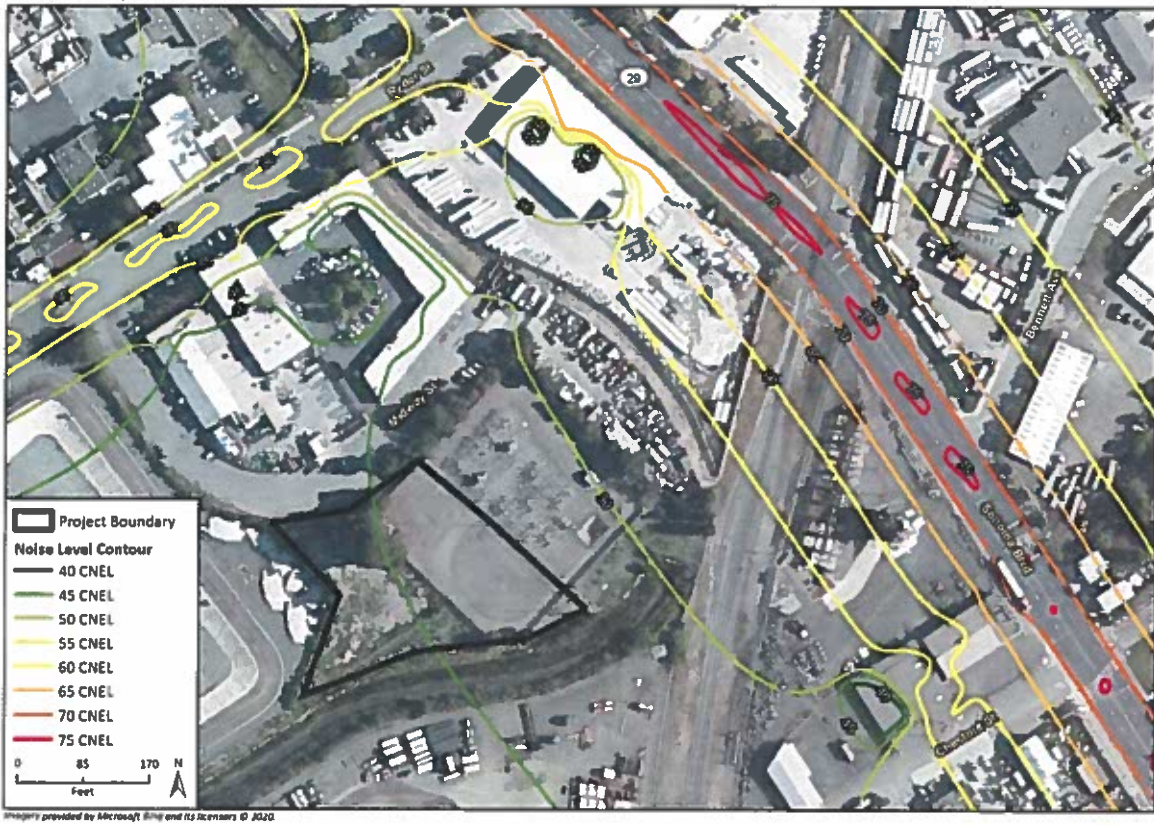
Abe Leider, AICP CEP
Principal

Attachments

Attachment 1 Noise Measurement Data



Figure 3 Roadway Noise Level Contours



Attachment 1

Noise Measurement Data

28	12/19/2019 14:14	63	5985786.945
29	12/19/2019 14:14	58.8	2275732.725
30	12/19/2019 14:14	61.9	4646449.857
31	12/19/2019 14:14	52	475467.9577
32	12/19/2019 14:14	49.8	286497.7758
33	12/19/2019 14:14	56.1	1222140.833
34	12/19/2019 14:14	57.1	1538584.152
35	12/19/2019 14:14	56.2	1250608.15
36	12/19/2019 14:14	72.6	54591025.76
37	12/19/2019 14:14	65.9	11671354.35
38	12/19/2019 14:15	62.4	5213402.486
39	12/19/2019 14:15	59.8	2864977.758
40	12/19/2019 14:15	58.5	2123837.353
41	12/19/2019 14:15	63.9	7364126.747
42	12/19/2019 14:15	53.2	626788.8393
43	12/19/2019 14:15	56.5	1340050.776
44	12/19/2019 14:15	60.2	3141385.644
45	12/19/2019 14:15	64.3	8074604.412
46	12/19/2019 14:15	72.3	50947309.57
47	12/19/2019 14:15	76.7	140320542.4
48	12/19/2019 14:15	64.6	8652094.509
49	12/19/2019 14:15	63.2	6267888.393
50	12/19/2019 14:15	62.4	5213402.486
51	12/19/2019 14:15	54.2	789080.3976
52	12/19/2019 14:15	50.7	352469.2665
53	12/19/2019 14:15	54	753565.9295
54	12/19/2019 14:15	54.9	927088.6298
55	12/19/2019 14:15	67.5	16870239.76
56	12/19/2019 14:15	45	94868.32981
57	12/19/2019 14:15	42.4	52134.02486
58	12/19/2019 14:16	45.3	101653.2468
59	12/19/2019 14:16	51.2	395477.0216
60	12/19/2019 14:16	62.4	5213402.486
61	12/19/2019 14:16	75.8	114056818.9
62	12/19/2019 14:16	61.7	4437325.165
63	12/19/2019 14:16	63.2	6267888.393
64	12/19/2019 14:16	61.8	4540683.745
65	12/19/2019 14:16	72.4	52134024.86
66	12/19/2019 14:16	68.5	21238373.53
67	12/19/2019 14:16	67	15035617.01
68	12/19/2019 14:16	69	23829847.04
69	12/19/2019 14:16	68.9	23287413.5
70	12/19/2019 14:16	74	75356592.95
71	12/19/2019 14:16	71.3	40468886.48
72	12/19/2019 14:16	70.6	34444608.64
73	12/19/2019 14:16	65	9486832.981
74	12/19/2019 14:16	54.5	845514.8794

75	12/19/2019 14:16	52	475467.9577
76	12/19/2019 14:16	52.8	571638.2154
77	12/19/2019 14:16	47.9	184978.5006
78	12/19/2019 14:17	52.1	486543.0292
79	12/19/2019 14:17	58.1	1936962.687
80	12/19/2019 14:17	59.8	2864977.758
81	12/19/2019 14:17	69.4	26128907.7
82	12/19/2019 14:17	55.7	1114605.687
83	12/19/2019 14:17	63.8	7196498.757
84	12/19/2019 14:17	53	598578.6945
85	12/19/2019 14:17	59.5	2673752.814
86	12/19/2019 14:17	62.6	5459102.576
87	12/19/2019 14:17	57.1	1538584.152
88	12/19/2019 14:17	52.7	558626.141
89	12/19/2019 14:17	50.3	321455.7916
90	12/19/2019 14:17	52.3	509473.0957
91	12/19/2019 14:17	63.8	7196498.757
92	12/19/2019 14:17	64.4	8262686.11
93	12/19/2019 14:17	67.1	15385841.52
94	12/19/2019 14:17	66.7	14032054.24
95	12/19/2019 14:17	56	1194321.512
96	12/19/2019 14:17	51.5	423761.2634
97	12/19/2019 14:17	46.8	143589.0277
98	12/19/2019 14:18	41.4	41411.52794
99	12/19/2019 14:18	38.8	22757.32725
100	12/19/2019 14:18	38.1	19369.62687
101	12/19/2019 14:18	38.6	21733.0788
102	12/19/2019 14:18	42	47546.79577
103	12/19/2019 14:18	41	37767.76235
104	12/19/2019 14:18	54.9	927088.6298
105	12/19/2019 14:18	51.9	464644.9857
106	12/19/2019 14:18	68.5	21238373.53
107	12/19/2019 14:18	59	2382984.704
108	12/19/2019 14:18	70	30000000
109	12/19/2019 14:18	69.6	27360325.18
110	12/19/2019 14:18	60.7	3524692.665
111	12/19/2019 14:18	55.7	1114605.687
112	12/19/2019 14:18	51.9	464644.9857
113	12/19/2019 14:18	53.4	656328.4872
114	12/19/2019 14:18	52.9	584953.3799
115	12/19/2019 14:18	69.7	27997629.02
116	12/19/2019 14:18	69.9	29317116.63
117	12/19/2019 14:18	69.5	26737528.14
118	12/19/2019 14:19	62.3	5094730.957
119	12/19/2019 14:19	74	75356592.95
120	12/19/2019 14:19	59.4	2612890.77
121	12/19/2019 14:19	51.7	443732.5165

122	12/19/2019 14:19	48.8	227573.2725
123	12/19/2019 14:19	48.5	212383.7353
124	12/19/2019 14:19	61.4	4141152.794
125	12/19/2019 14:19	58.5	2123837.353
126	12/19/2019 14:19	49.5	267375.2814
127	12/19/2019 14:19	47.8	180767.8758
128	12/19/2019 14:19	49.3	255341.4115
129	12/19/2019 14:19	45	94868.32981
130	12/19/2019 14:19	55.4	1040210.551
131	12/19/2019 14:19	62.4	5213402.486
132	12/19/2019 14:19	51.8	454068.3745
133	12/19/2019 14:19	49	238298.4704
134	12/19/2019 14:19	61.7	4437325.165
135	12/19/2019 14:19	54.8	905985.5161
136	12/19/2019 14:19	51.4	414115.2794
137	12/19/2019 14:19	69.2	24952913.13
138	12/19/2019 14:20	53.4	656328.4872
139	12/19/2019 14:20	50.9	369080.6312
140	12/19/2019 14:20	62.2	4978760.722
141	12/19/2019 14:20	63.6	6872602.958
142	12/19/2019 14:20	57.4	1648622.622
143	12/19/2019 14:20	63.8	7196498.757
144	12/19/2019 14:20	62.7	5586261.41
145	12/19/2019 14:20	57.2	1574422.381
146	12/19/2019 14:20	49.3	255341.4115
147	12/19/2019 14:20	41.8	45406.83745
148	12/19/2019 14:20	49.9	293171.1663
149	12/19/2019 14:20	51.1	386474.8655
150	12/19/2019 14:20	45.1	97078.09708
151	12/19/2019 14:20	61.1	3864748.655
152	12/19/2019 14:20	49.8	286497.7758
153	12/19/2019 14:20	60.4	3289434.588
154	12/19/2019 14:20	58.4	2075492.913
155	12/19/2019 14:20	48.5	212383.7353
156	12/19/2019 14:20	49.9	293171.1663
157	12/19/2019 14:20	56.2	1250608.15
158	12/19/2019 14:21	60.4	3289434.588
159	12/19/2019 14:21	66.2	12506081.5
160	12/19/2019 14:21	56.1	1222140.833
161	12/19/2019 14:21	53.8	719649.8757
162	12/19/2019 14:21	62.9	5849533.799
163	12/19/2019 14:21	60.2	3141385.644
164	12/19/2019 14:21	63.1	6125213.834
165	12/19/2019 14:21	64.9	9270886.298
166	12/19/2019 14:21	67.5	16870239.76
167	12/19/2019 14:21	71.6	43363193.12
168	12/19/2019 14:21	59.5	2673752.814

169	12/19/2019 14:21	52.7	558626.141
170	12/19/2019 14:21	46.1	122214.0833
171	12/19/2019 14:21	45.5	106444.0168
172	12/19/2019 14:21	40.2	31413.85644
173	12/19/2019 14:21	39.1	24384.91548
174	12/19/2019 14:21	40.2	31413.85644
175	12/19/2019 14:21	37.6	17263.19812
176	12/19/2019 14:21	39.8	28649.77758
177	12/19/2019 14:21	39.6	27360.32518
178	12/19/2019 14:22	40.6	34444.60864
179	12/19/2019 14:22	45.5	106444.0168
180	12/19/2019 14:22	52.9	584953.3799
181	12/19/2019 14:22	56	1194321.512
182	12/19/2019 14:22	68.1	19369626.87
183	12/19/2019 14:22	67.9	18497850.06
184	12/19/2019 14:22	54.8	905985.5161
185	12/19/2019 14:22	51.9	464644.9857
186	12/19/2019 14:22	50.1	306987.8977
187	12/19/2019 14:22	54.2	789080.3976
188	12/19/2019 14:22	60.5	3366055.363
189	12/19/2019 14:22	70.1	30698789.77
190	12/19/2019 14:22	70	30000000
191	12/19/2019 14:22	71.4	41411527.94
192	12/19/2019 14:22	57.6	1726319.812
193	12/19/2019 14:22	66	11943215.12
194	12/19/2019 14:22	56.6	1371264.569
195	12/19/2019 14:22	49.7	279976.2902
196	12/19/2019 14:22	65.3	10165324.68
197	12/19/2019 14:22	49.8	286497.7758
198	12/19/2019 14:23	46.7	140320.5424
199	12/19/2019 14:23	44.9	92708.86298
200	12/19/2019 14:23	46.6	137126.4569
201	12/19/2019 14:23	53.4	656328.4872
202	12/19/2019 14:23	60.9	3690806.312
203	12/19/2019 14:23	61.9	4646449.857
204	12/19/2019 14:23	64.5	8455148.794
205	12/19/2019 14:23	56.2	1250608.15
206	12/19/2019 14:23	65.7	11146056.87
207	12/19/2019 14:23	58.1	1936962.687
208	12/19/2019 14:23	52.6	545910.2576
209	12/19/2019 14:23	51.4	414115.2794
210	12/19/2019 14:23	65	9486832.981
211	12/19/2019 14:23	55.1	970780.9708
212	12/19/2019 14:23	55.1	970780.9708
213	12/19/2019 14:23	66.1	12221408.33
214	12/19/2019 14:23	69.6	27360325.18
215	12/19/2019 14:23	68.1	19369626.87

216	12/19/2019 14:23	75.8	114056818.9
217	12/19/2019 14:23	64.6	8652094.509
218	12/19/2019 14:24	63	5985786.945
219	12/19/2019 14:24	71.8	45406837.45
220	12/19/2019 14:24	53.9	736412.6747
221	12/19/2019 14:24	48.2	198208.0344
222	12/19/2019 14:24	53.5	671616.3416
223	12/19/2019 14:24	51.1	386474.8655
224	12/19/2019 14:24	61.6	4336319.312
225	12/19/2019 14:24	56.4	1309547.497
226	12/19/2019 14:24	50.1	306987.8977
227	12/19/2019 14:24	44.5	84551.48794
228	12/19/2019 14:24	45.6	108923.4164
229	12/19/2019 14:24	47.7	176653.0966
230	12/19/2019 14:24	53.6	687260.2958
231	12/19/2019 14:24	53.3	641388.6269
232	12/19/2019 14:24	53.7	703268.6446
233	12/19/2019 14:24	54.3	807460.4412
234	12/19/2019 14:24	58.5	2123837.353
235	12/19/2019 14:24	59.9	2931711.663
236	12/19/2019 14:24	59	2382984.704
237	12/19/2019 14:24	55.7	1114605.687
238	12/19/2019 14:25	66.6	13712645.69
239	12/19/2019 14:25	68.3	20282489.26
240	12/19/2019 14:25	57	1503561.701
241	12/19/2019 14:25	57.3	1611095.389
242	12/19/2019 14:25	68	18928720.33
243	12/19/2019 14:25	68.1	19369626.87
244	12/19/2019 14:25	64.3	8074604.412
245	12/19/2019 14:25	68	18928720.33
246	12/19/2019 14:25	66	11943215.12
247	12/19/2019 14:25	68.9	23287413.5
248	12/19/2019 14:25	71.7	44373251.65
249	12/19/2019 14:25	57.9	1849785.006
250	12/19/2019 14:25	52.5	533483.823
251	12/19/2019 14:25	51.9	464644.9857
252	12/19/2019 14:25	48.4	207549.2913
253	12/19/2019 14:25	45.1	97078.09708
254	12/19/2019 14:25	46.7	140320.5424
255	12/19/2019 14:25	54	753565.9295
256	12/19/2019 14:25	52.6	545910.2576
257	12/19/2019 14:25	65.4	10402105.51
258	12/19/2019 14:26	50.6	344446.0864
259	12/19/2019 14:26	61.1	3864748.655
260	12/19/2019 14:26	50.8	360679.3304
261	12/19/2019 14:26	64.2	7890803.976
262	12/19/2019 14:26	46.1	122214.0833

263	12/19/2019 14:26	42.5	53348.3823
264	12/19/2019 14:26	42.3	50947.30957
265	12/19/2019 14:26	42	47546.79577
266	12/19/2019 14:26	43.1	61252.13834
267	12/19/2019 14:26	46.2	125060.815
268	12/19/2019 14:26	53.3	641388.6269
269	12/19/2019 14:26	58.2	1982080.344
270	12/19/2019 14:26	74.5	84551487.94
271	12/19/2019 14:26	65.5	10644401.68
272	12/19/2019 14:26	67.4	16486226.22
273	12/19/2019 14:26	70	30000000
274	12/19/2019 14:26	65.8	11405681.89
275	12/19/2019 14:26	61.4	4141152.794
276	12/19/2019 14:26	61	3776776.235
277	12/19/2019 14:26	64.7	8853627.68
278	12/19/2019 14:27	53.1	612521.3834
279	12/19/2019 14:27	52	475467.9577
280	12/19/2019 14:27	51	377677.6235
281	12/19/2019 14:27	54	753565.9295
282	12/19/2019 14:27	58.3	2028248.926
283	12/19/2019 14:27	59.2	2495291.313
284	12/19/2019 14:27	54.9	927088.6298
285	12/19/2019 14:27	67.5	16870239.76
286	12/19/2019 14:27	70.7	35246926.65
287	12/19/2019 14:27	61.9	4646449.857
288	12/19/2019 14:27	54.3	807460.4412
289	12/19/2019 14:27	61.1	3864748.655
290	12/19/2019 14:27	63.8	7196498.757
291	12/19/2019 14:27	64.7	8853627.68
292	12/19/2019 14:27	68.9	23287413.5
293	12/19/2019 14:27	65.1	9707809.708
294	12/19/2019 14:27	68.9	23287413.5
295	12/19/2019 14:27	67	15035617.01
296	12/19/2019 14:27	67	15035617.01
297	12/19/2019 14:27	64.5	8455148.794
298	12/19/2019 14:28	55.2	993393.3644
299	12/19/2019 14:28	53.7	703268.6446
300	12/19/2019 14:28	63.2	6267888.393

Noise Measurement 2

Data Logger 2

Duration (seconds)	3
Weighting	A
Response	FAST
Range	40-100
L05	55.4
L10	53.3
L50	48.4
L90	46.3
L95	45.6
Lmax	71.2
Time	12/19/2019 14:40
SEL	82.3
Leq	52.8

Leq (Manual)

52.8

No.s	Date Time	dB	Sound Energy
1	12/19/2019 14:36	49.2	249529.1313
2	12/19/2019 14:36	48.3	202824.8926
3	12/19/2019 14:36	51.5	423761.2634
4	12/19/2019 14:36	50.2	314138.5644
5	12/19/2019 14:36	53.2	626788.8393
6	12/19/2019 14:36	55.4	1040210.551
7	12/19/2019 14:36	56.6	1371264.569
8	12/19/2019 14:36	58.2	1982080.344
9	12/19/2019 14:36	49.5	267375.2814
10	12/19/2019 14:36	51.9	464644.9857
11	12/19/2019 14:36	48.7	222393.0724
12	12/19/2019 14:36	49	238298.4704
13	12/19/2019 14:36	48.1	193696.2687
14	12/19/2019 14:36	47.2	157442.2381
15	12/19/2019 14:36	46.3	127973.8556
16	12/19/2019 14:36	47.2	157442.2381
17	12/19/2019 14:36	47	150356.1701
18	12/19/2019 14:37	48.8	227573.2725
19	12/19/2019 14:37	58.8	2275732.725
20	12/19/2019 14:37	49.7	279976.2902
21	12/19/2019 14:37	48.3	202824.8926
22	12/19/2019 14:37	47.9	184978.5006
23	12/19/2019 14:37	47	150356.1701
24	12/19/2019 14:37	47.9	184978.5006
25	12/19/2019 14:37	49.2	249529.1313
26	12/19/2019 14:37	48.2	198208.0344
27	12/19/2019 14:37	48.7	222393.0724

28	12/19/2019 14:37	48.2	198208.0344
29	12/19/2019 14:37	48.2	198208.0344
30	12/19/2019 14:37	49.4	261289.077
31	12/19/2019 14:37	57.5	1687023.976
32	12/19/2019 14:37	48.8	227573.2725
33	12/19/2019 14:37	49	238298.4704
34	12/19/2019 14:37	49.9	293171.1663
35	12/19/2019 14:37	49	238298.4704
36	12/19/2019 14:37	48.6	217330.788
37	12/19/2019 14:37	48.9	232874.135
38	12/19/2019 14:38	48.2	198208.0344
39	12/19/2019 14:38	49.5	267375.2814
40	12/19/2019 14:38	47.3	161109.5389
41	12/19/2019 14:38	48.5	212383.7353
42	12/19/2019 14:38	57.7	1766530.966
43	12/19/2019 14:38	48.3	202824.8926
44	12/19/2019 14:38	48	189287.2033
45	12/19/2019 14:38	47.4	164862.2622
46	12/19/2019 14:38	48.2	198208.0344
47	12/19/2019 14:38	55.4	1040210.551
48	12/19/2019 14:38	47	150356.1701
49	12/19/2019 14:38	48	189287.2033
50	12/19/2019 14:38	47.2	157442.2381
51	12/19/2019 14:38	47.9	184978.5006
52	12/19/2019 14:38	49.8	286497.7758
53	12/19/2019 14:38	49.2	249529.1313
54	12/19/2019 14:38	52.4	521340.2486
55	12/19/2019 14:38	57.5	1687023.976
56	12/19/2019 14:38	64.3	8074604.412
57	12/19/2019 14:38	50.2	314138.5644
58	12/19/2019 14:39	50.1	306987.8977
59	12/19/2019 14:39	48.6	217330.788
60	12/19/2019 14:39	47.9	184978.5006
61	12/19/2019 14:39	48.4	207549.2913
62	12/19/2019 14:39	47.6	172631.9812
63	12/19/2019 14:39	47.4	164862.2622
64	12/19/2019 14:39	48.5	212383.7353
65	12/19/2019 14:39	46.9	146933.6458
66	12/19/2019 14:39	47	150356.1701
67	12/19/2019 14:39	47.6	172631.9812
68	12/19/2019 14:39	47.6	172631.9812
69	12/19/2019 14:39	48.4	207549.2913
70	12/19/2019 14:39	48.1	193696.2687
71	12/19/2019 14:39	48.1	193696.2687
72	12/19/2019 14:39	47	150356.1701
73	12/19/2019 14:39	47.6	172631.9812
74	12/19/2019 14:39	47.7	176653.0966

75	12/19/2019 14:39	47.7	176653.0966
76	12/19/2019 14:39	47.6	172631.9812
77	12/19/2019 14:39	46.6	137126.4569
78	12/19/2019 14:40	46.7	140320.5424
79	12/19/2019 14:40	46.5	134005.0776
80	12/19/2019 14:40	48.5	212383.7353
81	12/19/2019 14:40	47.6	172631.9812
82	12/19/2019 14:40	47.5	168702.3976
83	12/19/2019 14:40	48.7	222393.0724
84	12/19/2019 14:40	47.6	172631.9812
85	12/19/2019 14:40	47.4	164862.2622
86	12/19/2019 14:40	49.5	267375.2814
87	12/19/2019 14:40	47.7	176653.0966
88	12/19/2019 14:40	46	119432.1512
89	12/19/2019 14:40	49.9	293171.1663
90	12/19/2019 14:40	49	238298.4704
91	12/19/2019 14:40	49.3	255341.4115
92	12/19/2019 14:40	53.5	671616.3416
93	12/19/2019 14:40	58.7	2223930.724
94	12/19/2019 14:40	71.2	39547702.16
95	12/19/2019 14:40	62.1	4865430.292
96	12/19/2019 14:40	54	753565.9295
97	12/19/2019 14:40	51.5	423761.2634
98	12/19/2019 14:41	52.3	509473.0957
99	12/19/2019 14:41	49.9	293171.1663
100	12/19/2019 14:41	49.1	243849.1548
101	12/19/2019 14:41	46.8	143589.0277
102	12/19/2019 14:41	47.5	168702.3976
103	12/19/2019 14:41	47.1	153858.4152
104	12/19/2019 14:41	47	150356.1701
105	12/19/2019 14:41	46.6	137126.4569
106	12/19/2019 14:41	47.4	164862.2622
107	12/19/2019 14:41	48.2	198208.0344
108	12/19/2019 14:41	51	377677.6235
109	12/19/2019 14:41	48.1	193696.2687
110	12/19/2019 14:41	47.7	176653.0966
111	12/19/2019 14:41	47.9	184978.5006
112	12/19/2019 14:41	48.7	222393.0724
113	12/19/2019 14:41	47.9	184978.5006
114	12/19/2019 14:41	48	189287.2033
115	12/19/2019 14:41	47.1	153858.4152
116	12/19/2019 14:41	47.2	157442.2381
117	12/19/2019 14:41	47.9	184978.5006
118	12/19/2019 14:42	48.1	193696.2687
119	12/19/2019 14:42	48.8	227573.2725
120	12/19/2019 14:42	50.5	336605.5363
121	12/19/2019 14:42	57.3	1611095.389

122	12/19/2019 14:42	55.9	1167135.435
123	12/19/2019 14:42	57.5	1687023.976
124	12/19/2019 14:42	48.8	227573.2725
125	12/19/2019 14:42	46.8	143589.0277
126	12/19/2019 14:42	47.1	153858.4152
127	12/19/2019 14:42	48	189287.2033
128	12/19/2019 14:42	46.4	130954.7497
129	12/19/2019 14:42	48.4	207549.2913
130	12/19/2019 14:42	51.2	395477.0216
131	12/19/2019 14:42	59	2382984.704
132	12/19/2019 14:42	49.2	249529.1313
133	12/19/2019 14:42	48.5	212383.7353
134	12/19/2019 14:42	47.8	180767.8758
135	12/19/2019 14:42	48.1	193696.2687
136	12/19/2019 14:42	48	189287.2033
137	12/19/2019 14:42	47.7	176653.0966
138	12/19/2019 14:43	47.9	184978.5006
139	12/19/2019 14:43	47.7	176653.0966
140	12/19/2019 14:43	49.4	261289.077
141	12/19/2019 14:43	49.1	243849.1548
142	12/19/2019 14:43	48.7	222393.0724
143	12/19/2019 14:43	49.3	255341.4115
144	12/19/2019 14:43	49.2	249529.1313
145	12/19/2019 14:43	50.6	344446.0864
146	12/19/2019 14:43	52.7	558626.141
147	12/19/2019 14:43	55.1	970780.9708
148	12/19/2019 14:43	53.4	656328.4872
149	12/19/2019 14:43	48.3	202824.8926
150	12/19/2019 14:43	48.2	198208.0344
151	12/19/2019 14:43	47.1	153858.4152
152	12/19/2019 14:43	47.9	184978.5006
153	12/19/2019 14:43	47.7	176653.0966
154	12/19/2019 14:43	48.7	222393.0724
155	12/19/2019 14:43	48.7	222393.0724
156	12/19/2019 14:43	48.2	198208.0344
157	12/19/2019 14:43	48.1	193696.2687
158	12/19/2019 14:44	49.8	286497.7758
159	12/19/2019 14:44	51.9	464644.9857
160	12/19/2019 14:44	57.6	1726319.812
161	12/19/2019 14:44	66.1	12221408.33
162	12/19/2019 14:44	60.3	3214557.916
163	12/19/2019 14:44	51.8	454068.3745
164	12/19/2019 14:44	51.2	395477.0216
165	12/19/2019 14:44	48.6	217330.788
166	12/19/2019 14:44	47.5	168702.3976
167	12/19/2019 14:44	48.8	227573.2725
168	12/19/2019 14:44	48.3	202824.8926

169	12/19/2019 14:44	47.8	180767.8758
170	12/19/2019 14:44	47.9	184978.5006
171	12/19/2019 14:44	47.4	164862.2622
172	12/19/2019 14:44	47	150356.1701
173	12/19/2019 14:44	47.9	184978.5006
174	12/19/2019 14:44	47.9	184978.5006
175	12/19/2019 14:44	47.8	180767.8758
176	12/19/2019 14:44	47.8	180767.8758
177	12/19/2019 14:44	47.4	164862.2622
178	12/19/2019 14:45	47.1	153858.4152
179	12/19/2019 14:45	46.2	125060.815
180	12/19/2019 14:45	46.1	122214.0833
181	12/19/2019 14:45	46.4	130954.7497
182	12/19/2019 14:45	45.8	114056.8189
183	12/19/2019 14:45	45.9	116713.5435
184	12/19/2019 14:45	48.6	217330.788
185	12/19/2019 14:45	53.9	736412.6747
186	12/19/2019 14:45	53.1	612521.3834
187	12/19/2019 14:45	50	300000
188	12/19/2019 14:45	47.2	157442.2381
189	12/19/2019 14:45	47	150356.1701
190	12/19/2019 14:45	47.4	164862.2622
191	12/19/2019 14:45	47.7	176653.0966
192	12/19/2019 14:45	48.7	222393.0724
193	12/19/2019 14:45	51.1	386474.8655
194	12/19/2019 14:45	49.1	243849.1548
195	12/19/2019 14:45	47.8	180767.8758
196	12/19/2019 14:45	50.5	336605.5363
197	12/19/2019 14:45	50.4	328943.4588
198	12/19/2019 14:46	49.3	255341.4115
199	12/19/2019 14:46	50.9	369080.6312
200	12/19/2019 14:46	48.9	232874.135
201	12/19/2019 14:46	47.8	180767.8758
202	12/19/2019 14:46	48.8	227573.2725
203	12/19/2019 14:46	49.9	293171.1663
204	12/19/2019 14:46	47.7	176653.0966
205	12/19/2019 14:46	48.2	198208.0344
206	12/19/2019 14:46	48.2	198208.0344
207	12/19/2019 14:46	46.9	146933.6458
208	12/19/2019 14:46	48.9	232874.135
209	12/19/2019 14:46	51.1	386474.8655
210	12/19/2019 14:46	48.4	207549.2913
211	12/19/2019 14:46	48.2	198208.0344
212	12/19/2019 14:46	51.3	404688.8648
213	12/19/2019 14:46	51.6	433631.9312
214	12/19/2019 14:46	52.9	584953.3799
215	12/19/2019 14:46	49.7	279976.2902

216	12/19/2019 14:46	50	300000
217	12/19/2019 14:46	49.6	273603.2518
218	12/19/2019 14:47	53.1	612521.3834
219	12/19/2019 14:47	57.8	1807678.758
220	12/19/2019 14:47	51.2	395477.0216
221	12/19/2019 14:47	49.2	249529.1313
222	12/19/2019 14:47	49.8	286497.7758
223	12/19/2019 14:47	49.2	249529.1313
224	12/19/2019 14:47	52.1	486543.0292
225	12/19/2019 14:47	55.3	1016532.468
226	12/19/2019 14:47	60.2	3141385.644
227	12/19/2019 14:47	58.2	1982080.344
228	12/19/2019 14:47	52.7	558626.141
229	12/19/2019 14:47	54.7	885362.768
230	12/19/2019 14:47	54.4	826268.611
231	12/19/2019 14:47	53.3	641388.6269
232	12/19/2019 14:47	49.9	293171.1663
233	12/19/2019 14:47	51.8	454068.3745
234	12/19/2019 14:47	53.3	641388.6269
235	12/19/2019 14:47	53.4	656328.4872
236	12/19/2019 14:47	50.2	314138.5644
237	12/19/2019 14:47	51.4	414115.2794
238	12/19/2019 14:48	49.3	255341.4115
239	12/19/2019 14:48	53.2	626788.8393
240	12/19/2019 14:48	48.7	222393.0724
241	12/19/2019 14:48	51.6	433631.9312
242	12/19/2019 14:48	50.1	306987.8977
243	12/19/2019 14:48	47.7	176653.0966
244	12/19/2019 14:48	49	238298.4704
245	12/19/2019 14:48	49.4	261289.077
246	12/19/2019 14:48	47.3	161109.5389
247	12/19/2019 14:48	48.3	202824.8926
248	12/19/2019 14:48	47.2	157442.2381
249	12/19/2019 14:48	48.9	232874.135
250	12/19/2019 14:48	48.6	217330.788
251	12/19/2019 14:48	48.3	202824.8926
252	12/19/2019 14:48	50.3	321455.7916
253	12/19/2019 14:48	48.3	202824.8926
254	12/19/2019 14:48	50.4	328943.4588
255	12/19/2019 14:48	48.8	227573.2725
256	12/19/2019 14:48	49.9	293171.1663
257	12/19/2019 14:48	48	189287.2033
258	12/19/2019 14:49	49.8	286497.7758
259	12/19/2019 14:49	49.5	267375.2814
260	12/19/2019 14:49	48	189287.2033
261	12/19/2019 14:49	49	238298.4704
262	12/19/2019 14:49	49.1	243849.1548

263	12/19/2019 14:49	49.1	243849.1548
264	12/19/2019 14:49	48.3	202824.8926
265	12/19/2019 14:49	48.1	193696.2687
266	12/19/2019 14:49	46	119432.1512
267	12/19/2019 14:49	44.8	90598.55161
268	12/19/2019 14:49	47.7	176653.0966
269	12/19/2019 14:49	45.2	99339.33644
270	12/19/2019 14:49	46.1	122214.0833
271	12/19/2019 14:49	46.4	130954.7497
272	12/19/2019 14:49	46.1	122214.0833
273	12/19/2019 14:49	45.8	114056.8189
274	12/19/2019 14:49	46.7	140320.5424
275	12/19/2019 14:49	55.8	1140568.189
276	12/19/2019 14:49	48.4	207549.2913
277	12/19/2019 14:49	46	119432.1512
278	12/19/2019 14:50	44.8	90598.55161
279	12/19/2019 14:50	45.4	104021.0551
280	12/19/2019 14:50	44.8	90598.55161
281	12/19/2019 14:50	45.8	114056.8189
282	12/19/2019 14:50	46	119432.1512
283	12/19/2019 14:50	47.4	164862.2622
284	12/19/2019 14:50	47.2	157442.2381
285	12/19/2019 14:50	46.7	140320.5424
286	12/19/2019 14:50	46.7	140320.5424
287	12/19/2019 14:50	52	475467.9577
288	12/19/2019 14:50	47.6	172631.9812
289	12/19/2019 14:50	48.4	207549.2913
290	12/19/2019 14:50	47.2	157442.2381
291	12/19/2019 14:50	47.5	168702.3976
292	12/19/2019 14:50	48.7	222393.0724
293	12/19/2019 14:50	52.4	521340.2486
294	12/19/2019 14:50	51.5	423761.2634
295	12/19/2019 14:50	49.2	249529.1313
296	12/19/2019 14:50	51.2	395477.0216
297	12/19/2019 14:50	54.3	807460.4412
298	12/19/2019 14:51	52.8	571638.2154
299	12/19/2019 14:51	52.6	545910.2576
300	12/19/2019 14:51	51.5	423761.2634

Noise Measurement 3

Data Logger 2

Duration (seconds) 3
 Weighting A
 Response FAST
 Range 40-100
 L05 57.7
 L10 56.9
 L50 50.5
 L90 48.3
 L95 48
 Lmax 80.2
 Time 12/19/2019 11:37
 SEL 119.3

No.s	Date Time	dB	Sound Energy
1	12/19/2019 15:10	48.4	207549.2913
2	12/19/2019 15:14	45.5	106444.0168
3	12/19/2019 15:18	50.6	344446.0864
4	12/19/2019 15:22	50.1	306987.8977
5	12/19/2019 15:26	48	189287.2033
6	12/19/2019 15:30	47.3	161109.5389
7	12/19/2019 15:34	47.7	176653.0966
8	12/19/2019 15:38	57.9	1849785.006
9	12/19/2019 15:42	49.2	249529.1313
10	12/19/2019 15:46	49	238298.4704
11	12/19/2019 15:50	48	189287.2033
12	12/19/2019 15:54	49.1	243849.1548
13	12/19/2019 15:58	48.1	193696.2687
14	12/19/2019 16:02	49.4	261289.077
15	12/19/2019 16:06	49.2	249529.1313
16	12/19/2019 16:10	50.9	369080.6312
17	12/19/2019 16:14	49.5	267375.2814
18	12/19/2019 16:18	49	238298.4704
19	12/19/2019 16:22	48.2	198208.0344
20	12/19/2019 16:26	47.1	153858.4152
21	12/19/2019 16:30	47.9	184978.5006
22	12/19/2019 16:34	50.4	328943.4588
23	12/19/2019 16:38	48.2	198208.0344
24	12/19/2019 16:42	49.4	261289.077
25	12/19/2019 16:46	48.1	193696.2687
26	12/19/2019 16:50	47.8	180767.8758
27	12/19/2019 16:54	47.8	180767.8758
28	12/19/2019 16:58	48.6	217330.788
29	12/19/2019 17:02	48.6	217330.788

30	12/19/2019 17:06	48.8	227573.2725
31	12/19/2019 17:10	49	238298.4704
32	12/19/2019 17:14	48.3	202824.8926
33	12/19/2019 17:18	48.8	227573.2725
34	12/19/2019 17:22	48.2	198208.0344
35	12/19/2019 17:26	49.5	267375.2814
36	12/19/2019 17:30	49.2	249529.1313
37	12/19/2019 17:34	50	300000
38	12/19/2019 17:38	49.8	286497.7758
39	12/19/2019 17:42	48.8	227573.2725
40	12/19/2019 17:46	50.1	306987.8977
41	12/19/2019 17:50	50.1	306987.8977
42	12/19/2019 17:54	48	189287.2033
43	12/19/2019 17:58	48.8	227573.2725
44	12/19/2019 18:02	47.6	172631.9812
45	12/19/2019 18:06	48.8	227573.2725
46	12/19/2019 18:10	48	189287.2033
47	12/19/2019 18:14	50	300000
48	12/19/2019 18:18	54.2	789080.3976
49	12/19/2019 18:22	49.5	267375.2814
50	12/19/2019 18:26	48.3	202824.8926
51	12/19/2019 18:30	49.6	273603.2518
52	12/19/2019 18:34	48.1	193696.2687
53	12/19/2019 18:38	48.1	193696.2687
54	12/19/2019 18:42	49	238298.4704
55	12/19/2019 18:46	51.2	395477.0216
56	12/19/2019 18:50	48.6	217330.788
57	12/19/2019 18:54	49.7	279976.2902
58	12/19/2019 18:58	48.3	202824.8926
59	12/19/2019 19:02	48.5	212383.7353
60	12/19/2019 19:06	50.2	314138.5644
61	12/19/2019 19:10	48.2	198208.0344
62	12/19/2019 19:14	49	238298.4704
63	12/19/2019 19:18	49.4	261289.077
64	12/19/2019 19:22	48.2	198208.0344
65	12/19/2019 19:26	47.8	180767.8758
66	12/19/2019 19:30	48.4	207549.2913
67	12/19/2019 19:34	49.1	243849.1548
68	12/19/2019 19:38	48.3	202824.8926
69	12/19/2019 19:42	48.3	202824.8926
70	12/19/2019 19:46	49.5	267375.2814
71	12/19/2019 19:50	48.8	227573.2725
72	12/19/2019 19:54	48.9	232874.135
73	12/19/2019 19:58	48.2	198208.0344
74	12/19/2019 20:02	49.4	261289.077
75	12/19/2019 20:06	49.9	293171.1663
76	12/19/2019 20:10	50.1	306987.8977

77	12/19/2019 20:14	48.4	207549.2913
78	12/19/2019 20:18	49.9	293171.1663
79	12/19/2019 20:22	50.1	306987.8977
80	12/19/2019 20:26	49.4	261289.077
81	12/19/2019 20:30	50.4	328943.4588
82	12/19/2019 20:34	50	300000
83	12/19/2019 20:38	49.5	267375.2814
84	12/19/2019 20:42	49.9	293171.1663
85	12/19/2019 20:46	49	238298.4704
86	12/19/2019 20:50	49.2	249529.1313
87	12/19/2019 20:54	49.1	243849.1548
88	12/19/2019 20:58	49.4	261289.077
89	12/19/2019 21:02	49.1	243849.1548
90	12/19/2019 21:06	49.1	243849.1548
91	12/19/2019 21:10	50.3	321455.7916
92	12/19/2019 21:14	49	238298.4704
93	12/19/2019 21:18	50.3	321455.7916
94	12/19/2019 21:22	49.2	249529.1313
95	12/19/2019 21:26	49.2	249529.1313
96	12/19/2019 21:30	49.8	286497.7758
97	12/19/2019 21:34	50.3	321455.7916
98	12/19/2019 21:38	50.3	321455.7916
99	12/19/2019 21:42	49.7	279976.2902
100	12/19/2019 21:46	49.8	286497.7758
101	12/19/2019 21:50	49.5	267375.2814
102	12/19/2019 21:54	49.4	261289.077
103	12/19/2019 21:58	49.3	255341.4115
104	12/19/2019 22:02	53.1	612521.3834
105	12/19/2019 22:06	49.3	255341.4115
106	12/19/2019 22:10	49.6	273603.2518
107	12/19/2019 22:14	50.1	306987.8977
108	12/19/2019 22:18	49.3	255341.4115
109	12/19/2019 22:22	51.8	454068.3745
110	12/19/2019 22:26	51.7	443732.5165
111	12/19/2019 22:30	50.4	328943.4588
112	12/19/2019 22:34	49.7	279976.2902
113	12/19/2019 22:38	51.1	386474.8655
114	12/19/2019 22:42	49.8	286497.7758
115	12/19/2019 22:46	49.5	267375.2814
116	12/19/2019 22:50	49.6	273603.2518
117	12/19/2019 22:54	49.4	261289.077
118	12/19/2019 22:58	49.1	243849.1548
119	12/19/2019 23:02	49.4	261289.077
120	12/19/2019 23:06	50.2	314138.5644
121	12/19/2019 23:10	49.6	273603.2518
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123	12/19/2019 23:18	50.7	352469.2665

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125	12/19/2019 23:26	49.3	255341.4115
126	12/19/2019 23:30	51.1	386474.8655
127	12/19/2019 23:34	49.4	261289.077
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129	12/19/2019 23:42	49.8	286497.7758
130	12/19/2019 23:46	50.3	321455.7916
131	12/19/2019 23:50	49.6	273603.2518
132	12/19/2019 23:54	49.3	255341.4115
133	12/19/2019 23:58	51.4	414115.2794
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139	12/20/2019 0:22	49.9	293171.1663
140	12/20/2019 0:26	49	238298.4704
141	12/20/2019 0:30	49.5	267375.2814
142	12/20/2019 0:34	49.2	249529.1313
143	12/20/2019 0:38	48.9	232874.135
144	12/20/2019 0:42	48.5	212383.7353
145	12/20/2019 0:46	50.4	328943.4588
146	12/20/2019 0:50	49.7	279976.2902
147	12/20/2019 0:54	48.6	217330.788
148	12/20/2019 0:58	48.7	222393.0724
149	12/20/2019 1:02	50.1	306987.8977
150	12/20/2019 1:06	48.4	207549.2913
151	12/20/2019 1:10	48.2	198208.0344
152	12/20/2019 1:14	49.6	273603.2518
153	12/20/2019 1:18	47.8	180767.8758
154	12/20/2019 1:22	48.7	222393.0724
155	12/20/2019 1:26	48.5	212383.7353
156	12/20/2019 1:30	49.1	243849.1548
157	12/20/2019 1:34	49	238298.4704
158	12/20/2019 1:38	49.4	261289.077
159	12/20/2019 1:42	50.8	360679.3304
160	12/20/2019 1:46	49.6	273603.2518
161	12/20/2019 1:50	49.5	267375.2814
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164	12/20/2019 2:02	48.7	222393.0724
165	12/20/2019 2:06	48.5	212383.7353
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167	12/20/2019 2:14	49	238298.4704
168	12/20/2019 2:18	49.8	286497.7758
169	12/20/2019 2:22	51.8	454068.3745
170	12/20/2019 2:26	50.1	306987.8977

171	12/20/2019 2:30	49.6	273603.2518
172	12/20/2019 2:34	50.1	306987.8977
173	12/20/2019 2:38	49.7	279976.2902
174	12/20/2019 2:42	56.3	1279738.556
175	12/20/2019 2:46	55.9	1167135.435
176	12/20/2019 2:50	55.5	1064440.168
177	12/20/2019 2:54	56.4	1309547.497
178	12/20/2019 2:58	56.1	1222140.833
179	12/20/2019 3:02	55.5	1064440.168
180	12/20/2019 3:06	56.1	1222140.833
181	12/20/2019 3:10	57.3	1611095.389
182	12/20/2019 3:14	56.5	1340050.776
183	12/20/2019 3:18	56	1194321.512
184	12/20/2019 3:22	56	1194321.512
185	12/20/2019 3:26	56.7	1403205.424
186	12/20/2019 3:30	56.6	1371264.569
187	12/20/2019 3:34	56.3	1279738.556
188	12/20/2019 3:38	55.6	1089234.164
189	12/20/2019 3:42	56.4	1309547.497
190	12/20/2019 3:46	56.3	1279738.556
191	12/20/2019 3:50	56.2	1250608.15
192	12/20/2019 3:54	55.6	1089234.164
193	12/20/2019 3:58	55.4	1040210.551
194	12/20/2019 4:02	56.1	1222140.833
195	12/20/2019 4:06	56.5	1340050.776
196	12/20/2019 4:10	56.6	1371264.569
197	12/20/2019 4:14	56.6	1371264.569
198	12/20/2019 4:18	56.7	1403205.424
199	12/20/2019 4:22	56	1194321.512
200	12/20/2019 4:26	56.4	1309547.497
201	12/20/2019 4:30	56	1194321.512
202	12/20/2019 4:34	56.2	1250608.15
203	12/20/2019 4:38	56.3	1279738.556
204	12/20/2019 4:42	56.4	1309547.497
205	12/20/2019 4:46	56.8	1435890.277
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209	12/20/2019 5:02	59	2382984.704
210	12/20/2019 5:06	56.9	1469336.458
211	12/20/2019 5:10	56.6	1371264.569
212	12/20/2019 5:14	56.8	1435890.277
213	12/20/2019 5:18	57.6	1726319.812
214	12/20/2019 5:22	57.5	1687023.976
215	12/20/2019 5:26	58.1	1936962.687
216	12/20/2019 5:30	57.2	1574422.381
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218	12/20/2019 5:38	56.9	1469336.458
219	12/20/2019 5:42	56.3	1279738.556
220	12/20/2019 5:46	56.3	1279738.556
221	12/20/2019 5:50	56.2	1250608.15
222	12/20/2019 5:54	56	1194321.512
223	12/20/2019 5:58	56.8	1435890.277
224	12/20/2019 6:02	57.7	1766530.966
225	12/20/2019 6:06	58.6	2173307.88
226	12/20/2019 6:10	57	1503561.701
227	12/20/2019 6:14	56.9	1469336.458
228	12/20/2019 6:18	57.1	1538584.152
229	12/20/2019 6:22	59.2	2495291.313
230	12/20/2019 6:26	56.5	1340050.776
231	12/20/2019 6:30	58.1	1936962.687
232	12/20/2019 6:34	57.1	1538584.152
233	12/20/2019 6:38	56.9	1469336.458
234	12/20/2019 6:42	57.2	1574422.381
235	12/20/2019 6:46	56.2	1250608.15
236	12/20/2019 6:50	57.6	1726319.812
237	12/20/2019 6:54	56.9	1469336.458
238	12/20/2019 6:58	56.4	1309547.497
239	12/20/2019 7:02	58.8	2275732.725
240	12/20/2019 7:06	57.3	1611095.389
241	12/20/2019 7:10	57.3	1611095.389
242	12/20/2019 7:14	56.2	1250608.15
243	12/20/2019 7:18	56.9	1469336.458
244	12/20/2019 7:22	51.1	386474.8655
245	12/20/2019 7:26	51.6	433631.9312
246	12/20/2019 7:30	52.7	558626.141
247	12/20/2019 7:34	52.2	497876.0722
248	12/20/2019 7:38	50.8	360679.3304
249	12/20/2019 7:42	51.8	454068.3745
250	12/20/2019 7:46	49.6	273603.2518
251	12/20/2019 7:50	51.6	433631.9312
252	12/20/2019 7:54	51.9	464644.9857
253	12/20/2019 7:58	56.6	1371264.569
254	12/20/2019 8:02	52.5	533483.823
255	12/20/2019 8:06	50.9	369080.6312
256	12/20/2019 8:10	52.5	533483.823
257	12/20/2019 8:14	50	300000
258	12/20/2019 8:18	50.1	306987.8977
259	12/20/2019 8:22	52.9	584953.3799
260	12/20/2019 8:26	54.2	789080.3976
261	12/20/2019 8:30	50.4	328943.4588
262	12/20/2019 8:34	53	598578.6945
263	12/20/2019 8:38	50.7	352469.2665
264	12/20/2019 8:42	50	300000

265	12/20/2019 8:46	50.7	352469.2665
266	12/20/2019 8:50	50.7	352469.2665
267	12/20/2019 8:54	50.7	352469.2665
268	12/20/2019 8:58	50.3	321455.7916
269	12/20/2019 9:02	50.7	352469.2665
270	12/20/2019 9:06	50.6	344446.0864
271	12/20/2019 9:10	57.1	1538584.152
272	12/20/2019 9:14	52.7	558626.141
273	12/20/2019 9:18	52.5	533483.823
274	12/20/2019 9:22	54.5	845514.8794
275	12/20/2019 9:26	50.1	306987.8977
276	12/20/2019 9:30	49.7	279976.2902
277	12/20/2019 9:34	58.4	2075492.913
278	12/20/2019 9:38	59.8	2864977.758
279	12/20/2019 9:42	50.2	314138.5644
280	12/20/2019 9:46	53.6	687260.2958
281	12/20/2019 9:50	54.1	771118.7348
282	12/20/2019 9:54	54.4	826268.611
283	12/20/2019 9:58	49.8	286497.7758
284	12/20/2019 10:02	50.9	369080.6312
285	12/20/2019 10:06	51.4	414115.2794
286	12/20/2019 10:10	51.1	386474.8655
287	12/20/2019 10:14	51.2	395477.0216
288	12/20/2019 10:18	50.5	336605.5363
289	12/20/2019 10:22	54.8	905985.5161
290	12/20/2019 10:26	50.1	306987.8977
291	12/20/2019 10:30	52.3	509473.0957
292	12/20/2019 10:34	50.2	314138.5644
293	12/20/2019 10:38	50.5	336605.5363
294	12/20/2019 10:42	51.6	433631.9312
295	12/20/2019 10:46	49.9	293171.1663
296	12/20/2019 10:50	50.1	306987.8977
297	12/20/2019 10:54	50.8	360679.3304
298	12/20/2019 10:58	58.1	1936962.687
299	12/20/2019 11:02	52.9	584953.3799
300	12/20/2019 11:06	54.4	826268.611
301	12/20/2019 11:10	53.5	671616.3416
302	12/20/2019 11:14	51.4	414115.2794
303	12/20/2019 11:18	50.2	314138.5644
304	12/20/2019 11:22	56.7	1403205.424
305	12/20/2019 11:26	55.6	1089234.164
306	12/20/2019 11:30	55	948683.2981
307	12/20/2019 11:34	58.7	2223930.724
308	12/20/2019 11:38	58.5	2123837.353
309	12/20/2019 11:42	59.5	2673752.814
310	12/20/2019 11:46	58	1892872.033
311	12/20/2019 11:50	58.1	1936962.687

312	12/20/2019 11:54	57.2	1574422.381
313	12/20/2019 11:58	58.9	2328741.35
314	12/20/2019 12:02	61	3776776.235
315	12/20/2019 12:06	62.5	5334838.23
316	12/20/2019 12:10	53.7	703268.6446
317	12/20/2019 12:14	56.4	1309547.497
318	12/20/2019 12:18	54	753565.9295
319	12/20/2019 12:22	55	948683.2981
320	12/20/2019 12:26	57.7	1766530.966
321	12/20/2019 12:30	55.9	1167135.435
322	12/20/2019 12:34	55.2	993393.3644
323	12/20/2019 12:38	55.3	1016532.468
324	12/20/2019 12:42	55	948683.2981
325	12/20/2019 12:46	56	1194321.512
326	12/20/2019 12:50	54.7	885362.768
327	12/20/2019 12:54	55.6	1089234.164
328	12/20/2019 12:58	51.8	454068.3745
329	12/20/2019 13:02	53	598578.6945
330	12/20/2019 13:06	58.2	1982080.344
331	12/20/2019 13:10	56.1	1222140.833
332	12/20/2019 13:14	55.7	1114605.687
333	12/20/2019 13:18	55.5	1064440.168
334	12/20/2019 13:22	55.2	993393.3644
335	12/20/2019 13:26	56.1	1222140.833
336	12/20/2019 13:30	56	1194321.512
337	12/20/2019 13:34	50.4	328943.4588
338	12/20/2019 13:38	50.1	306987.8977
339	12/20/2019 13:42	51.1	386474.8655
340	12/20/2019 13:46	53.1	612521.3834
341	12/20/2019 13:50	54.1	771118.7348
342	12/20/2019 13:54	50.5	336605.5363
343	12/20/2019 13:58	53.3	641388.6269
344	12/20/2019 14:02	52.4	521340.2486
345	12/20/2019 14:06	52.9	584953.3799
346	12/20/2019 14:10	51.5	423761.2634
347	12/20/2019 14:14	51.8	454068.3745
348	12/20/2019 14:18	51.3	404688.8648
349	12/20/2019 14:22	51.7	443732.5165
350	12/20/2019 14:26	51.9	464644.9857
351	12/20/2019 14:30	51.5	423761.2634
352	12/20/2019 14:34	50.4	328943.4588
353	12/20/2019 14:38	50	300000
354	12/20/2019 14:42	50.4	328943.4588
355	12/20/2019 14:46	51	377677.6235
356	12/20/2019 14:50	49.7	279976.2902
357	12/20/2019 14:54	49.7	279976.2902
358	12/20/2019 14:58	50.5	336605.5363

359	12/20/2019 15:02	50.6	344446.0864
360	12/20/2019 15:06	51.9	464644.9857

24-Hour Noise Measurement Avg Leq, CNEL, and Ldn Calculation Spreadsheet

Instructions

1. Open meter data in Excel
2. Copy and paste values for into highlighted cells in spreadsheet.
3. Fill in the Actual Start time if your meter wasn't properly set to the actual time. Times should be in the fo

Results	
24-hour average Leq	53.5
CNEL	63.1
Ldn	63.1

Time Adjustment	
Actual Start time	3:10:00 PM
Difference (Meter Time - Actual Time)	3:09:39 PM

Duration (seconds) 240

No.s	Date	Actual Time	dB
1	12/19/2019	3:10:00 PM	48.4
2	12/19/2019	3:14:00 PM	45.5
3	12/19/2019	3:18:00 PM	50.6
4	12/19/2019	3:22:00 PM	50.1
5	12/19/2019	3:26:00 PM	48
6	12/19/2019	3:30:00 PM	47.3
7	12/19/2019	3:34:00 PM	47.7
8	12/19/2019	3:38:00 PM	57.9
9	12/19/2019	3:42:00 PM	49.2
10	12/19/2019	3:46:00 PM	49
11	12/19/2019	3:50:00 PM	48
12	12/19/2019	3:54:00 PM	49.1
13	12/19/2019	3:58:00 PM	48.1
14	12/19/2019	4:02:00 PM	49.4
15	12/19/2019	4:06:00 PM	49.2
16	12/19/2019	4:10:00 PM	50.9
17	12/19/2019	4:14:00 PM	49.5
18	12/19/2019	4:18:00 PM	49
19	12/19/2019	4:22:00 PM	48.2
20	12/19/2019	4:26:00 PM	47.1
21	12/19/2019	4:30:00 PM	47.9
22	12/19/2019	4:34:00 PM	50.4
23	12/19/2019	4:38:00 PM	48.2
24	12/19/2019	4:42:00 PM	49.4
25	12/19/2019	4:46:00 PM	48.1
26	12/19/2019	4:50:00 PM	47.8

27	12/19/2019	4:54:00 PM	47.8
28	12/19/2019	4:58:00 PM	48.6
29	12/19/2019	5:02:00 PM	48.6
30	12/19/2019	5:06:00 PM	48.8
31	12/19/2019	5:10:00 PM	49
32	12/19/2019	5:14:00 PM	48.3
33	12/19/2019	5:18:00 PM	48.8
34	12/19/2019	5:22:00 PM	48.2
35	12/19/2019	5:26:00 PM	49.5
36	12/19/2019	5:30:00 PM	49.2
37	12/19/2019	5:34:00 PM	50
38	12/19/2019	5:38:00 PM	49.8
39	12/19/2019	5:42:00 PM	48.8
40	12/19/2019	5:46:00 PM	50.1
41	12/19/2019	5:50:00 PM	50.1
42	12/19/2019	5:54:00 PM	48
43	12/19/2019	5:58:00 PM	48.8
44	12/19/2019	6:02:00 PM	47.6
45	12/19/2019	6:06:00 PM	48.8
46	12/19/2019	6:10:00 PM	48
47	12/19/2019	6:14:00 PM	50
48	12/19/2019	6:18:00 PM	54.2
49	12/19/2019	6:22:00 PM	49.5
50	12/19/2019	6:26:00 PM	48.3
51	12/19/2019	6:30:00 PM	49.6
52	12/19/2019	6:34:00 PM	48.1
53	12/19/2019	6:38:00 PM	48.1
54	12/19/2019	6:42:00 PM	49
55	12/19/2019	6:46:00 PM	51.2
56	12/19/2019	6:50:00 PM	48.6
57	12/19/2019	6:54:00 PM	49.7
58	12/19/2019	6:58:00 PM	48.3
59	12/19/2019	7:02:00 PM	48.5
60	12/19/2019	7:06:00 PM	50.2
61	12/19/2019	7:10:00 PM	48.2
62	12/19/2019	7:14:00 PM	49
63	12/19/2019	7:18:00 PM	49.4
64	12/19/2019	7:22:00 PM	48.2
65	12/19/2019	7:26:00 PM	47.8
66	12/19/2019	7:30:00 PM	48.4
67	12/19/2019	7:34:00 PM	49.1
68	12/19/2019	7:38:00 PM	48.3
69	12/19/2019	7:42:00 PM	48.3
70	12/19/2019	7:46:00 PM	49.5
71	12/19/2019	7:50:00 PM	48.8
72	12/19/2019	7:54:00 PM	48.9
73	12/19/2019	7:58:00 PM	48.2

74	12/19/2019	8:02:00 PM	49.4
75	12/19/2019	8:06:00 PM	49.9
76	12/19/2019	8:10:00 PM	50.1
77	12/19/2019	8:14:00 PM	48.4
78	12/19/2019	8:18:00 PM	49.9
79	12/19/2019	8:22:00 PM	50.1
80	12/19/2019	8:26:00 PM	49.4
81	12/19/2019	8:30:00 PM	50.4
82	12/19/2019	8:34:00 PM	50
83	12/19/2019	8:38:00 PM	49.5
84	12/19/2019	8:42:00 PM	49.9
85	12/19/2019	8:46:00 PM	49
86	12/19/2019	8:50:00 PM	49.2
87	12/19/2019	8:54:00 PM	49.1
88	12/19/2019	8:58:00 PM	49.4
89	12/19/2019	9:02:00 PM	49.1
90	12/19/2019	9:06:00 PM	49.1
91	12/19/2019	9:10:00 PM	50.3
92	12/19/2019	9:14:00 PM	49
93	12/19/2019	9:18:00 PM	50.3
94	12/19/2019	9:22:00 PM	49.2
95	12/19/2019	9:26:00 PM	49.2
96	12/19/2019	9:30:00 PM	49.8
97	12/19/2019	9:34:00 PM	50.3
98	12/19/2019	9:38:00 PM	50.3
99	12/19/2019	9:42:00 PM	49.7
100	12/19/2019	9:46:00 PM	49.8
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102	12/19/2019	9:54:00 PM	49.4
103	12/19/2019	9:58:01 PM	49.3
104	12/19/2019	10:02:01 PM	53.1
105	12/19/2019	10:06:01 PM	49.3
106	12/19/2019	10:10:01 PM	49.6
107	12/19/2019	10:14:01 PM	50.1
108	12/19/2019	10:18:01 PM	49.3
109	12/19/2019	10:22:01 PM	51.8
110	12/19/2019	10:26:01 PM	51.7
111	12/19/2019	10:30:01 PM	50.4
112	12/19/2019	10:34:01 PM	49.7
113	12/19/2019	10:38:01 PM	51.1
114	12/19/2019	10:42:01 PM	49.8
115	12/19/2019	10:46:01 PM	49.5
116	12/19/2019	10:50:01 PM	49.6
117	12/19/2019	10:54:01 PM	49.4
118	12/19/2019	10:58:01 PM	49.1
119	12/19/2019	11:02:01 PM	49.4
120	12/19/2019	11:06:01 PM	50.2

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124	12/19/2019	11:22:01 PM	49.5
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126	12/19/2019	11:30:01 PM	51.1
127	12/19/2019	11:34:01 PM	49.4
128	12/19/2019	11:38:01 PM	50.2
129	12/19/2019	11:42:01 PM	49.8
130	12/19/2019	11:46:01 PM	50.3
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132	12/19/2019	11:54:01 PM	49.3
133	12/19/2019	11:58:01 PM	51.4
134	12/19/2019	12:02:01 AM	49.2
135	12/19/2019	12:06:01 AM	48.5
136	12/19/2019	12:10:01 AM	50
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138	12/19/2019	12:18:01 AM	49.4
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146	12/19/2019	12:50:01 AM	49.7
147	12/19/2019	12:54:01 AM	48.6
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149	12/19/2019	1:02:01 AM	50.1
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159	12/19/2019	1:42:01 AM	50.8
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219	12/19/2019	5:42:01 AM	56.3
220	12/19/2019	5:46:01 AM	56.3
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223	12/19/2019	5:58:01 AM	56.8
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233	12/19/2019	6:38:01 AM	56.9
234	12/19/2019	6:42:01 AM	57.2
235	12/19/2019	6:46:01 AM	56.2
236	12/19/2019	6:50:01 AM	57.6
237	12/19/2019	6:54:01 AM	56.9
238	12/19/2019	6:58:01 AM	56.4
239	12/19/2019	7:02:01 AM	58.8
240	12/19/2019	7:06:01 AM	57.3
241	12/19/2019	7:10:01 AM	57.3
242	12/19/2019	7:14:01 AM	56.2
243	12/19/2019	7:18:01 AM	56.9
244	12/19/2019	7:22:01 AM	51.1
245	12/19/2019	7:26:01 AM	51.6
246	12/19/2019	7:30:01 AM	52.7
247	12/19/2019	7:34:01 AM	52.2
248	12/19/2019	7:38:01 AM	50.8
249	12/19/2019	7:42:01 AM	51.8
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251	12/19/2019	7:50:01 AM	51.6
252	12/19/2019	7:54:01 AM	51.9
253	12/19/2019	7:58:01 AM	56.6
254	12/19/2019	8:02:01 AM	52.5
255	12/19/2019	8:06:01 AM	50.9
256	12/19/2019	8:10:01 AM	52.5
257	12/19/2019	8:14:01 AM	50
258	12/19/2019	8:18:01 AM	50.1
259	12/19/2019	8:22:01 AM	52.9
260	12/19/2019	8:26:01 AM	54.2
261	12/19/2019	8:30:01 AM	50.4

262	12/19/2019	8:34:01 AM	53
263	12/19/2019	8:38:01 AM	50.7
264	12/19/2019	8:42:01 AM	50
265	12/19/2019	8:46:01 AM	50.7
266	12/19/2019	8:50:01 AM	50.7
267	12/19/2019	8:54:01 AM	50.7
268	12/19/2019	8:58:01 AM	50.3
269	12/19/2019	9:02:01 AM	50.7
270	12/19/2019	9:06:01 AM	50.6
271	12/19/2019	9:10:01 AM	57.1
272	12/19/2019	9:14:01 AM	52.7
273	12/19/2019	9:18:01 AM	52.5
274	12/19/2019	9:22:01 AM	54.5
275	12/19/2019	9:26:01 AM	50.1
276	12/19/2019	9:30:01 AM	49.7
277	12/19/2019	9:34:01 AM	58.4
278	12/19/2019	9:38:01 AM	59.8
279	12/19/2019	9:42:01 AM	50.2
280	12/19/2019	9:46:01 AM	53.6
281	12/19/2019	9:50:01 AM	54.1
282	12/19/2019	9:54:01 AM	54.4
283	12/19/2019	9:58:01 AM	49.8
284	12/19/2019	10:02:01 AM	50.9
285	12/19/2019	10:06:01 AM	51.4
286	12/19/2019	10:10:01 AM	51.1
287	12/19/2019	10:14:01 AM	51.2
288	12/19/2019	10:18:01 AM	50.5
289	12/19/2019	10:22:01 AM	54.8
290	12/19/2019	10:26:01 AM	50.1
291	12/19/2019	10:30:01 AM	52.3
292	12/19/2019	10:34:01 AM	50.2
293	12/19/2019	10:38:01 AM	50.5
294	12/19/2019	10:42:01 AM	51.6
295	12/19/2019	10:46:01 AM	49.9
296	12/19/2019	10:50:01 AM	50.1
297	12/19/2019	10:54:01 AM	50.8
298	12/19/2019	10:58:01 AM	58.1
299	12/19/2019	11:02:01 AM	52.9
300	12/19/2019	11:06:01 AM	54.4
301	12/19/2019	11:10:01 AM	53.5
302	12/19/2019	11:14:02 AM	51.4
303	12/19/2019	11:18:02 AM	50.2
304	12/19/2019	11:22:02 AM	56.7
305	12/19/2019	11:26:02 AM	55.6
306	12/19/2019	11:30:02 AM	55
307	12/19/2019	11:34:02 AM	58.7
308	12/19/2019	11:38:02 AM	58.5

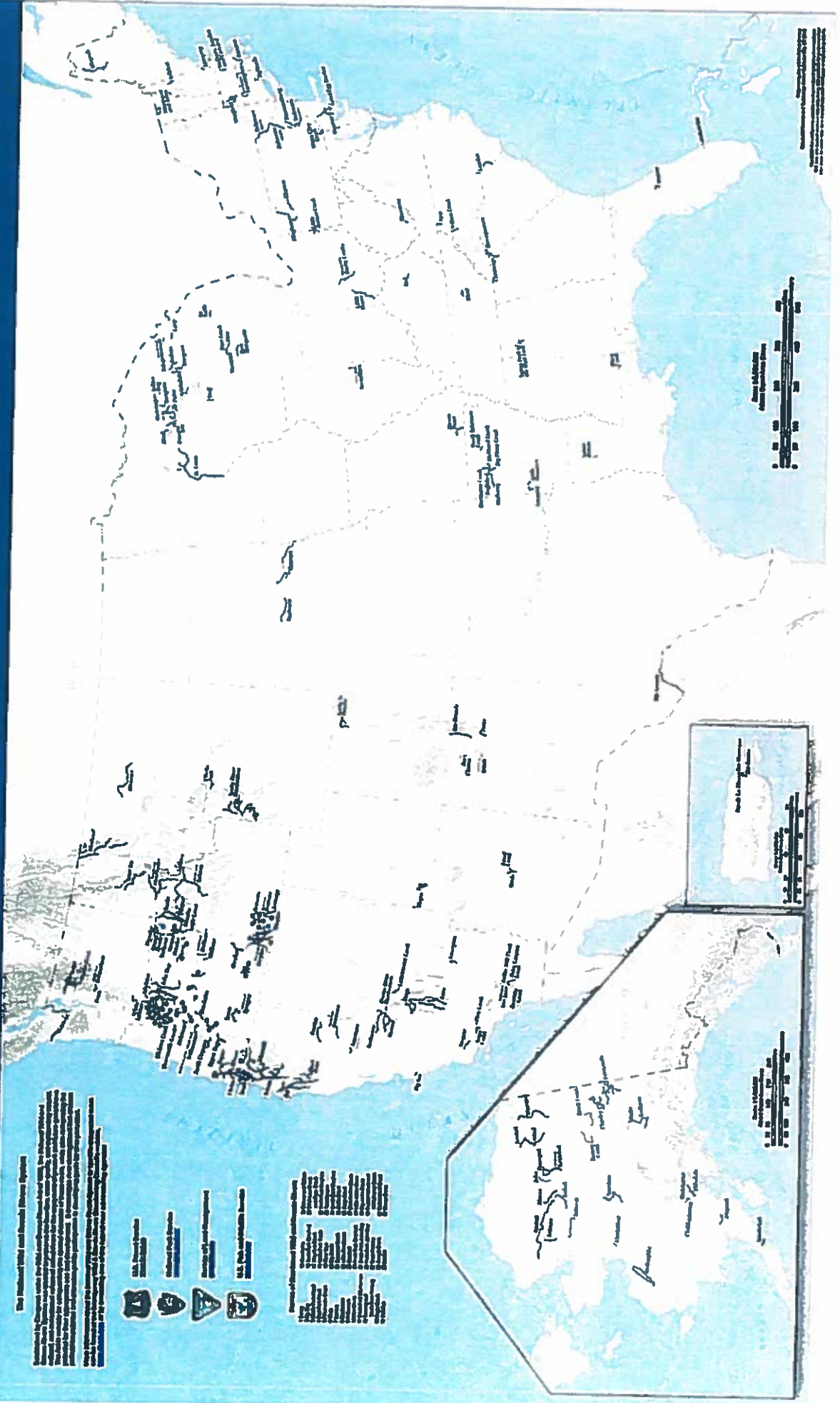
309	12/19/2019	11:42:02 AM	59.5
310	12/19/2019	11:46:02 AM	58
311	12/19/2019	11:50:02 AM	58.1
312	12/19/2019	11:54:02 AM	57.2
313	12/19/2019	11:58:02 AM	58.9
314	12/19/2019	12:02:02 PM	61
315	12/19/2019	12:06:02 PM	62.5
316	12/19/2019	12:10:02 PM	53.7
317	12/19/2019	12:14:02 PM	56.4
318	12/19/2019	12:18:02 PM	54
319	12/19/2019	12:22:02 PM	55
320	12/19/2019	12:26:02 PM	57.7
321	12/19/2019	12:30:02 PM	55.9
322	12/19/2019	12:34:02 PM	55.2
323	12/19/2019	12:38:02 PM	55.3
324	12/19/2019	12:42:02 PM	55
325	12/19/2019	12:46:02 PM	56
326	12/19/2019	12:50:02 PM	54.7
327	12/19/2019	12:54:02 PM	55.6
328	12/19/2019	12:58:02 PM	51.8
329	12/19/2019	1:02:02 PM	53
330	12/19/2019	1:06:02 PM	58.2
331	12/19/2019	1:10:02 PM	56.1
332	12/19/2019	1:14:02 PM	55.7
333	12/19/2019	1:18:02 PM	55.5
334	12/19/2019	1:22:02 PM	55.2
335	12/19/2019	1:26:02 PM	56.1
336	12/19/2019	1:30:02 PM	56
337	12/19/2019	1:34:02 PM	50.4
338	12/19/2019	1:38:02 PM	50.1
339	12/19/2019	1:42:02 PM	51.1
340	12/19/2019	1:46:02 PM	53.1
341	12/19/2019	1:50:02 PM	54.1
342	12/19/2019	1:54:02 PM	50.5
343	12/19/2019	1:58:02 PM	53.3
344	12/19/2019	2:02:02 PM	52.4
345	12/19/2019	2:06:02 PM	52.9
346	12/19/2019	2:10:02 PM	51.5
347	12/19/2019	2:14:02 PM	51.8
348	12/19/2019	2:18:02 PM	51.3
349	12/19/2019	2:22:02 PM	51.7
350	12/19/2019	2:26:02 PM	51.9
351	12/19/2019	2:30:02 PM	51.5
352	12/19/2019	2:34:02 PM	50.4
353	12/19/2019	2:38:02 PM	50
354	12/19/2019	2:42:02 PM	50.4
355	12/19/2019	2:46:02 PM	51

356	12/19/2019	2:50:02 PM	49.7
357	12/19/2019	2:54:02 PM	49.7
358	12/19/2019	2:58:02 PM	50.5
359	12/19/2019	3:02:02 PM	50.6
360	12/19/2019	3:06:02 PM	51.9



NATIONAL WILD AND SCENIC RIVERS SYSTEM

Department of the Interior
Bureau of Land Management



The National Wild and Scenic Rivers System is a program of the Department of the Interior, Bureau of Land Management, that identifies and protects certain rivers with outstanding natural, cultural, and historic values. The program is authorized by the National Wild and Scenic Rivers Act of 1968, as amended. The Act provides for the designation of rivers as wild, scenic, or recreational. Wild rivers are those that are free from dams, obstructions, and other artificial modifications. Scenic rivers are those that have outstanding scenic, historic, or prehistoric values. Recreational rivers are those that are suitable for floating and other outdoor recreation. The Act also provides for the establishment of river management plans to guide the development and use of the rivers.

- Wild River
- Scenic River
- Recreational River
- Wild and Scenic River
- Wild and Scenic River (with dam)
- Wild and Scenic River (with dam and dam removal)
- Wild and Scenic River (with dam and dam removal and dam removal)
- Wild and Scenic River (with dam and dam removal and dam removal and dam removal)

- State of Alaska
- State of Arizona
- State of California
- State of Colorado
- State of Connecticut
- State of Delaware
- State of Florida
- State of Georgia
- State of Hawaii
- State of Idaho
- State of Illinois
- State of Indiana
- State of Iowa
- State of Kansas
- State of Kentucky
- State of Louisiana
- State of Maine
- State of Maryland
- State of Massachusetts
- State of Michigan
- State of Minnesota
- State of Missouri
- State of Montana
- State of Nebraska
- State of Nevada
- State of New Hampshire
- State of New Jersey
- State of New Mexico
- State of New York
- State of North Carolina
- State of North Dakota
- State of Ohio
- State of Oklahoma
- State of Oregon
- State of Pennsylvania
- State of Rhode Island
- State of South Carolina
- State of South Dakota
- State of Tennessee
- State of Texas
- State of Utah
- State of Vermont
- State of Virginia
- State of Washington
- State of West Virginia
- State of Wisconsin
- State of Wyoming

- State of Alaska
- State of Arizona
- State of California
- State of Colorado
- State of Connecticut
- State of Delaware
- State of Florida
- State of Georgia
- State of Hawaii
- State of Idaho
- State of Illinois
- State of Indiana
- State of Iowa
- State of Kansas
- State of Kentucky
- State of Louisiana
- State of Maine
- State of Maryland
- State of Massachusetts
- State of Michigan
- State of Minnesota
- State of Missouri
- State of Montana
- State of Nebraska
- State of Nevada
- State of New Hampshire
- State of New Jersey
- State of New Mexico
- State of New York
- State of North Carolina
- State of North Dakota
- State of Ohio
- State of Oklahoma
- State of Oregon
- State of Pennsylvania
- State of Rhode Island
- State of South Carolina
- State of South Dakota
- State of Tennessee
- State of Texas
- State of Utah
- State of Vermont
- State of Virginia
- State of Washington
- State of West Virginia
- State of Wisconsin
- State of Wyoming

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- State of Delaware
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- State of Georgia
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- State of Idaho
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- State of Michigan
- State of Minnesota
- State of Missouri
- State of Montana
- State of Nebraska
- State of Nevada
- State of New Hampshire
- State of New Jersey
- State of New Mexico
- State of New York
- State of North Carolina
- State of North Dakota
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- State of Oregon
- State of Pennsylvania
- State of Rhode Island
- State of South Carolina
- State of South Dakota
- State of Tennessee
- State of Texas
- State of Utah
- State of Vermont
- State of Virginia
- State of Washington
- State of West Virginia
- State of Wisconsin
- State of Wyoming