



File: UP 13-04

DATE: March 30, 2016**TO:** PLANNING COMMISSION**FROM:** Mike Sawley, Associate Planner, 879-6812**RE:** Reconsideration of Chico Well Station 9-03 Project
Use Permit 13-04 (California Water Service Co.) and Conditional Noise Permit
515 Olive Street, APN 004-186-001

SUMMARY

On August 7, 2014, the Planning Commission approved Use Permit 13-04, authorizing construction of a new domestic water well and associated structures at an existing California Water Service Company (Cal Water) site, located at the southeasterly corner of East 5th Street and Olive Street. The approval included a request for a conditional noise permit to authorize overnight construction operations for one night and to temporarily exceed established noise thresholds during the construction of a temporary sound wall.

The applicant requests reconsideration of a condition/mitigation measure that describes the minimum standards to which the temporary sound wall must be constructed. The currently approved sound wall met these standards. A modified sound wall is now proposed. The proposed sound wall would be approximately 3 decibels less effective than the approved sound wall. Therefore, a revised Initial Study and Mitigated Negative Declaration were circulated for a 30-day public review period describing the effects anticipated by the newly proposed sound wall. All other aspects of the project would remain the same as previously approved.

Recommendation:

Planning staff recommends adoption of Resolution No. 16-05 (**Attachment A**), adopting the revised mitigated negative declaration and approving Use Permit 13-04 and a conditional noise permit for the project, subject to the conditions of approval contained therein.

Proposed Motion:

I move that the Planning Commission adopt Resolution No. 16-05, adopting the revised mitigated negative declaration and approving Use Permit 13-04 and a conditional noise permit for the project, based on the findings and subject to the conditions of approval contained therein.

BACKGROUND

The approved use permit authorizes construction of a new municipal water supply well at an existing well station located at the southeasterly corner of East 5th Street at Olive Street in Chico (see **Attachment B**, Location-Notification Map, and **Attachment A, Exhibit III**, Plat to Accompany Use Permit 13-04). The project site is situated in an older residential neighborhood several blocks east of Downtown Chico.

The 0.4-acre site is designated Low Density Residential on the City of Chico General Plan Land Use Diagram, and is located in an R1 (Low Density Residential) zoning district.

The project involves three primary components:

- Site Preparation
- Well Construction
- Site Improvements

Site Preparation

Site preparation involved extending City storm drainage facilities to the site from existing facilities located at the intersection of East 5th and Flume Streets and demolishing the pump former pump house building and drinking well. This step was completed in 2015 following the original approval of Use Permit 13-04.

Well Construction

The well construction process involves erecting a 20-24-foot temporary sound wall around the perimeter of the working area with a large, closable door facing the street for access (see Sound Wall Plans, **Attachment C**).

Within the walled working area, all of the drilling and underground pipe installation for the well would take place, as well as up to 6 days of pumping water out of the new well (i.e., “developing” the new well). Turbid water generated during the well development process would be pumped into large storage tanks where particulates would be allowed to settle until the water meets thresholds for discharge into the City’s sewer system. With pumping, water from the new well will improve in clarity until it can be directed to the City’s storm drain system. After the new well is capped, the sound wall will be removed and the above-ground improvement phase of the project will follow. For additional details regarding the drilling process, please refer to the step-by-step description contained in the Initial Study (**Attachment E**, pages 2-4).

The overnight construction operations would occur during installation of the steel well casing and gravel envelope steps of the process. After the borehole is drilled to the required width and depth, the casing and gravel pack envelope must be installed without delay to minimize the risk of borehole collapse or damage to water bearing formations. The casing and gravel envelope are anticipated to take a total of 30 hours of continuous work. To ensure that overnight construction only occurs for one night, a 1 p.m. deadline would be imposed for the commencement of casing installation.

Site Improvements

The site plan calls for a new driveway approach from Olive Street that would lead to a fenced area containing a new masonry block building that would house the new well head (see **Attachment A, Exhibit III, Plat to Accompany Use Permit 13-04**). Similar to other pump house stations in the City, the proposed beige and brown structure would have exposed beam ends and a pitched roof with fiberglass shingles (see **Attachment D**).

The new pump house and maintenance area would be enclosed by a six-foot, wrought iron fence with controlled-access pedestrian and vehicular gates for exclusive use by Cal Water operations staff. The fence style would be similar to that located at the elevated water tank

site at East 3rd and Orient Streets. The ground area inside the fence would be covered with gravel. Landscaping improvements include several trees and shrubs in open "yard" areas that extend across each street frontage and would remain unfenced.

Construction is estimated to take approximately six months, with well construction taking approximately 40 working days. Except for the well construction phase, work will generally take place during normal weekday working hours. The drilling and well development phase of the project will involve some daytime weekend work during hours when construction is permitted by the City's Noise Ordinance (between 7 am and 9 pm on Saturdays and 10 am to 6pm on Sundays or holidays), and will involve one night of overnight work, which requires the conditional noise permit.

Neighborhood Meeting

The applicant held a neighborhood meeting at the project site on 5/2/14. Approximately 15 neighbors attended, as well as several Cal Water staff members. The presentation included an overview of the history and use of the site, an outline for the overall project, a description of the construction process, and concluded with a question and answer period. The applicant team continued to share information after the presentation, as neighbors gathered around a table of exhibits. Primary items of concern included construction noise and duration, and the disposition of the site upon completion. Neighbors were informed that the open landscape areas along the street frontages would remain after project completion. Requests of the applicant were made to upgrade the fencing (chain link had been presented), and to consider a pump house building that is more aesthetically pleasing. Following the meeting, the applicant responded by changing the style of fencing to match the wrought iron fencing present at the water tank site at East 3rd and Orient Streets.

DISCUSSION

The new well would serve existing water service customers and increase fire suppression capabilities in the project vicinity. Constructed in 1939, the prior well had been taken off line due to sand content in its yield and reduced capacity. The prior well was constructed using an older technique that lacks the sanitary seal that would be included in the new well.

The site design is similar to the existing layout in that well facilities would be contained on a small portion of the site and would be surrounded by open landscape areas. The existing and future open nature of the site offers a park-like setting that is compatible with the residential neighborhood. The new well would have a capacity of 900-1,000 gpm, substantially similar to the design capacity of the existing well.

Use permit approval is required to authorize public utility facilities as a principal land use in the R1 zoning district pursuant to Chico Municipal Code (CMC) 19.42.020, and a conditional noise permit is required pursuant to CMC 9.38.070 to authorize two proposed activities:

- (1) Construction noise outside of normal daytime hours, and
- (2) Construction noise that exceeds certain daytime noise thresholds.

Construction noise, within certain parameters, is listed under CMC Section 9.38.060, among other "categorical exemptions" for which the City's general noise regulations do not apply. In this case, the term " Section 9.38.060(B) of the CMC specifically states:

“Notwithstanding any other provision of this chapter, between the hours of ten a.m. and six p.m. on Sundays and holidays, and seven a.m. and nine p.m. on other days, construction, alteration or repair of structures shall be subject to one of the following limits:

- 1. No individual device or piece of equipment shall produce a noise level exceeding eighty-three (83) dBA at a distance of twenty-five (25) feet from the source. If the device or equipment is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close as possible to twenty-five (25) feet from the equipment.*
- 2. The noise level at any point outside of the property plane of the project shall not exceed eighty-six (86) dBA.”*

As detailed in the Initial Study (pages 22-26), noise exposure to adjacent residents would exceed Municipal Code noise levels that are considered “categorically exempt” in two instances: during sound wall construction, and during overnight construction.

Sound Wall Construction

Once the temporary sound wall is in place, daytime noise levels would remain within acceptable ranges throughout project construction (decibel levels at nearby properties would be in the mid-70s). However, as the sound wall is being erected, there would be a brief period of time when noise levels at the property lines of adjacent residential uses will likely exceed the construction noise thresholds listed above. It is anticipated that maximum noise levels of 85-89 dBA may occur at the property line of the three closest adjacent properties when the closest portions of the sound wall are being installed. Construction of the sound wall is anticipated to take two working days. As construction of the sound wall progresses around the site, noise levels at adjacent properties would diminish, particularly as the constructed portions of the sound wall block noise from the equipment. Exposing neighboring residential uses to relatively brief periods of construction noise in excess of the exemption thresholds contained in CMC 9.38.060 is not considered a significant environmental impact, but the activity requires explicit approval under a conditional noise permit.

Nighttime Construction

As detailed above, approximately 30 hours of continuous work will be necessary to install the well casing and gravel envelope after the well is drilled. The impact on neighboring residential uses of conducting nighttime operations was addressed in the Initial Study and mitigation measures were identified to minimize the impacts. The measures are included as conditions of approval in Exhibit II of the resolution and are summarized below:

- (1) Construct the sound wall to meet certain criteria;
- (2) Stage materials and personnel to avoid delays;
- (3) Schedule the well casing installation to commence before 1 p.m. in order to ensure that the 30 hours of continuous operations only spans one night; and
- (4) Distribute hard-copy notifications to neighbors within 250 feet of the site contemporaneously informing them of the overnight construction at least 24 hours prior to the 1 p.m. deadline.

Other Environmental Issues

Mitigation measures were also identified in the Initial Study to address potential impacts to nesting migratory birds and previously unrecorded cultural resource sites, should either be encountered during construction. Based on staff consultation with a certified arborist and with a licensed landscape architect, ground disturbance associated with constructing the temporary sound wall and drilling the new well is not likely to affect the health of the existing large redwood tree located at the northeast corner of the project site.

All mitigation measures identified in the Initial Study and listed in the Mitigation Monitoring and Reporting Program are included as recommended conditions of approval (see **Attachment A, Exhibit II**).

General Plan Consistency

The General Plan provides the following guidance for this type of project:

Goal PPFS-5: Maintain a sustainable supply of high quality water, delivered through an efficient water system to support Chico's existing and future population, including fire suppression efforts.

Action H.3.6.1: Provide for infrastructure and service demands, including sanitary sewers, storm drainage, street and alley improvements, transit facilities, utilities, schools, and park facilities, generated by residential development as development occurs.

Policy N-1.6 (Construction Activity) - Maintain special standards in the Municipal Code to allow temporary construction activity to exceed the noise standards established in this element, with limits on the time of disturbance to nearby noise-sensitive uses.

The project is consistent with General Plan Goal PPFS-5 and Action H.3.6.1, as the project would provide infrastructure that supports residential uses and fire suppression capabilities in the vicinity. The construction aspects are consistent with Policy N-1.6, as the project largely adheres to the special standards for temporary construction noise found in the municipal code, and minimizes the time of disturbance to nearby sensitive uses when the special noise standards cannot be met.

ENVIRONMENTAL REVIEW

A revised IS/MND was prepared and circulated for public review from 03/01/16 to 03/30/16, and no comments were received on the revised document as of the date of this report. The Mitigated Negative Declaration constitutes Exhibit I of the attached resolution (**Attachment A**), and the Revised Initial Study is included with this report as **Attachment E**.

FINDINGS

Following a public hearing, the Planning Commission may approve the use permit with modified conditions, only if all of the following findings can be made:

- A. *The proposed use is allowed within the subject zoning district and complies with all of the applicable provisions of Chapter 19.24 (Use Permits).*

Chico Municipal Code (CMC) Section 19.42.020, Table 4-2, requires a use permit for public utility facilities. This use permit has been processed in accordance with the requirements of Chapter 19.24.

- B. *The proposed use would not be detrimental to the health, safety, and general welfare of persons residing or working in the neighborhood of the proposed use.*

As conditioned, the construction and operation of the proposed water supply facility will be compatible with adjacent uses, similar to other pump facilities constructed throughout the Chico urban area. No other health, safety, or welfare impacts have been identified.

- C. *The proposed use will not be detrimental and/or injurious to property and improvements in the neighborhood of the proposed use, as well as the general welfare of the City.*

The facility will be installed in accordance with City Building Division and Public Works Department requirements, as well as County Environmental Health and State Water Quality regulations. No aspects of the project have been deemed to be detrimental to the general welfare of the City.

- D. *The proposed use will be consistent with the policies, standards, and land use designations established by the General Plan.*

The proposed use is consistent with General Plan Goal PPFS-5 and Action H.3.6.1, as the project would provide infrastructure that supports residential uses and fire suppression capabilities in the vicinity. No aspects of the proposal have been identified as being inconsistent with General Plan policy.

- E. *The design, location, size, and operating characteristics of the proposed use are compatible with the existing and future land uses in the vicinity.*

The proposed building and site design is consistent with other similar facilities constructed by the applicant in the Chico urban area and will be compatible with the residential character of the area. The proposed fence design and screening vegetation will further increase compatibility with surrounding residential uses.

Additional Finding Pursuant to CMC 9.38.070 (Conditional Noise Permit)

1. *A conditional noise permit may be granted to temporarily exempt a particular source of noise from one or more provisions of this chapter if the applicant can show that, notwithstanding the application of all available noise abatement techniques, the immediate compliance by the applicant with one or more requirements of this chapter would be impractical or unreasonable. The term of a noise permit shall not exceed six months, provided that the term may be renewed upon a further showing of good*

cause and that any extension is conditioned upon a schedule of compliance with the requirements of this chapter, including the details of methods to effectuate that compliance.

Temporary exemptions from the noise levels permitted for typical construction are necessary to provide for the construction of a temporary sound wall, and to allow overnight construction for one night. The sound wall represents an application of the best available noise abatement techniques and would minimize noise exposure levels to residential uses during the majority of project construction. It would be impractical to avoid the use of mechanized equipment to construct the sound wall, or to locate the sound wall farther away from the affected property lines. Overnight construction is necessary to minimize the chance of borehole collapse prior to installation of the well casing, or partial collapse prior to placement of the gravel envelope which facilitates water flow into the casing. During each of these project components, the noise limitations for construction activities set forth by Chico Municipal Code Section 9.38.060(B) cannot be met. Each instance where permitted activities may not meet applicable construction noise thresholds would be less than 24-hours, and the term of the noise permit would therefore not exceed six months.

PUBLIC CONTACT

All landowners and occupants within 500 feet of the subject property were provided with a 30-day public hearing notice, and a legal notice was published in the *Chico Enterprise Record* on 03/01/16. Comments received as of 3/30/16 are included under **Attachment F**.

DISTRIBUTION:

PC Distribution
AP Sawley
File: UP 13-04

External (3)

Attn: Pete Bonacich, 2222 Dr. Martin Luther King Jr. Pkwy, Chico, CA 95928

Attn: Matt Meninga, 2222 Dr. Martin Luther King Jr. Pkwy, Chico, CA 95928

Attn: Luis Zamudio, 2222 Dr. Martin Luther King Jr. Pkwy, Chico, CA 95928

ATTACHMENTS:

- A. Resolution 16-05
 - I. Mitigated Negative Declaration
 - II. Conditions of Approval
 - III. Plat to Accompany Use Permit 13-04
- B. Location/Notification Map
- C. Sound Wall Plans
- D. Example Image of Pump House Structure
- E. Revised Initial Study
- F. Comments Received on Revised Initial Study

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RESOLUTION NO. 16-05

**RESOLUTION OF THE PLANNING COMMISSION
OF THE CITY OF CHICO ADOPTING A MITIGATED NEGATIVE
DECLARATION AND CONDITIONALLY APPROVING USE PERMIT 13-04
AND NOISE PERMIT FOR PROPERTY AT 515 OLIVE STREET
(CALIFORNIA WATER SERVICE COMPANY)**

WHEREAS, California Water Service Company has submitted a request to reconsider conditions placed on Use Permit 13-04 regarding construction of a new domestic water well on a 0.4-acre site located on the southeasterly corner of East 5th Street and Olive Street, and identified as Assessor's Parcel No. 004-186-001 (the "Project"); and

WHEREAS, the Planning Commission considered the Project, staff report, and comments submitted at a noticed public hearing held on April 7, 2016; and

WHEREAS, the Planning Commission has considered the Revised Initial Study and Mitigated Negative Declaration which conclude that the Project, with mitigation included, will not result in a significant impact on the environment.

NOW, THEREFORE, BE IT RESOLVED BY THE PLANNING COMMISSION OF THE CITY OF CHICO AS FOLLOWS:

1. With regard to the mitigated negative declaration the Planning Commission finds that:
 - A. There is no substantial evidence supporting a fair argument that the Project may have a significant effect on the environment;
 - B. The mitigated negative declaration has been prepared in conformance with the provisions of the California Environmental Quality Act and the Chico Municipal Code (CMC) , Chapter 1.40, "Environmental Review Guidelines; and
 - C. The mitigated negative declaration prepared for the Project reflects the independent judgment of the City of Chico.
2. With regard to the use permit the Planning Commission finds that:
 - A. Chico Municipal Code Section 19.42.020, Table 4-2, requires a use permit for public utility facilities. This use permit has been processed in accordance with the requirements of Chapter 19.24.
 - B. As conditioned, the construction and operation of the proposed water supply

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facility will be compatible with adjacent uses, similar to other pump facilities constructed throughout the Chico urban area. No other health, safety, or welfare impacts have been identified.

- C. The facility will be installed in accordance with City Building Division and Public Works Department requirements, as well as County Environmental Health and State water quality regulations. No aspects of the project have been deemed to be detrimental to the general welfare of the City.
- D. The proposed use is consistent with General Plan Goal PPFS-5 and Action H.3.6.1, as the project would provide infrastructure that supports residential uses and fire suppression capabilities in the vicinity. No aspects of the proposal have been identified as being inconsistent with General Plan policy.
- E. The proposed building and site design is consistent with other similar facilities constructed by the applicant in the Chico urban area and will be compatible with the residential character of the area. The proposed fence design and screening vegetation will further increase compatibility with surrounding residential uses.

3. With regard to the conditional noise permit the Planning Commission finds that:

- A. Temporary exemptions from the noise levels permitted for typical construction are necessary to provide for the construction of a sound wall, and to allow overnight construction for one night.
- B. The sound wall represents an application of the best available noise abatement techniques and would minimize noise exposure levels to residential uses during the majority of Project construction.
- C. It would be impractical to avoid the use of mechanized equipment to construct the sound wall, or to locate the sound wall farther away from the affected property lines. Overnight construction is necessary to minimize the chance of borehole collapse prior to installation of the well casing, or partial collapse prior to placement of the gravel envelope which supports water flow into the casing.
- D. During these two Project activities, the noise limitations for construction activities

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set forth by Chico Municipal Code Section 9.38.060(B) could not be met.

E. Each instance where permitted activities may not meet applicable construction noise thresholds would be less than 24-hours, and the term of the noise permit would not exceed six months.

4. Based on all of the above, the Planning Commission hereby adopts the revised mitigated negative declaration and mitigation monitoring program as set forth in Exhibit I, re-approves Use Permit 13-04 (California Water Service Company), and re-approves a conditional noise permit for the Project, subject to compliance with the conditions set forth in Exhibit II and substantial conformance with the Plat to Accompany Use Permit 13-04, set forth in Exhibit III.

5. The Planning Commission hereby specifies that the materials and documents which constitute the record of proceedings upon which its decision is based are located at and under the custody of the City of Chico Community Development Department.

THE FOREGOING RESOLUTION WAS ADOPTED at a meeting of the Planning Commission of the City of Chico held on April 7, 2016, by the following vote:

- AYES:
- NOES:
- ABSENT:
- ABSTAINED:
- DISQUALIFIED:
- ATTEST:

APPROVED AS TO FORM:

MARK WOLFE
Planning Commission Secretary

ANDREW L. JARED
Assistant City Attorney



MITIGATED NEGATIVE DECLARATION & MITIGATION MONITORING PROGRAM CITY OF CHICO PLANNING DIVISION

Based upon the analysis and findings contained within the attached Revised Initial Study, a Mitigated Negative Declaration (MND) is proposed by the City of Chico Planning Division for:

PROJECT NAME AND NUMBER: Chico Well Station 9-03 Project (UP 13-04 and Conditional Noise Permit)

APPLICANT'S NAME: California Water Service Company, Attn: Pete Bonacich
2222 Dr. Martin Luther King Jr. Pkwy, Chico, CA 95928

PROJECT LOCATION: 515 Olive Street; AP No. 004-186-001

Important: An MND for this project was previously circulated for public review from 6/26/14 to 7/25/14 (SCH# 2014052005). This revised document reflects changes to the temporary sound wall to be installed during construction, affecting Mitigation Measure J.2 below.

PROJECT DESCRIPTION:

A proposed new domestic water well and associated structures at an existing Cal Water site located at the southeasterly corner of East 5th Street and Olive Street. The proposal includes a request for a conditional noise permit to authorize overnight construction operations for one night.

The project involves three primary components:

1. Site preparation: extension of storm drainage facilities two blocks to tie into existing facilities located at East 5th and Flume Streets, and demolition of the existing pump building and well (*now completed*);
2. Well Construction: drilling and developing the new well; and
3. Site Improvements: construction of distribution piping and new pump house; installation of fencing and landscaping.

The well construction process involves erecting a 20-24 foot sound wall around the perimeter of the working area with a large, closable door facing the street for access. Within the walled area, all of the drilling and well construction would take place, followed by up to 6 days of pumping water out of the new well (aka "developing" the new well). Turbid water generated during the well development process would be pumped into large storage tanks where particulates would be allowed to settle until the water meets thresholds for discharge into the City sewer system. With pumping, water from the new well will improve in clarity until it can be directed into the City storm drain system. After the new well is capped, the sound wall will be removed and the above-ground improvement phase of the project will follow.

The proposed site plan calls for a new driveway approach from Olive Street that would lead to a fenced area containing a new masonry block building that would house the new well head. Similar to other pump house stations in the City, the proposed beige and brown structure would have exposed beam ends and a pitched roof with fiberglass shingles.

The new building and maintenance area would be enclosed by a six-foot, wrought iron fence with controlled-access pedestrian and vehicular gates for exclusive use by Cal Water operations staff. The fence style would be similar to that located at the elevated water tank site at 3rd and Orient Streets. The exterior ground area inside the fence would be covered with gravel and kept available for future maintenance needs. Landscaping improvements include planting several trees and shrubs in broad, open "yard" areas on each street frontage that would remain unfenced.

Overall construction is estimated to take approximately six months, with drilling and well development taking approximately 40 working days. Except for the drilling and well development phase, the majority of work will only involve weekday working hours. The drilling and well development phase of the project will involve some daytime weekend work during hours when construction is generally permitted (between 7 am and 9 pm on Saturdays and 10 am to 6pm on Sundays or holidays), and will involve one night of overnight work.

FINDING: As supported by the attached Revised Initial Study there is no substantial evidence, in light of the whole record before the agency, that the project will have a significant effect on the environment if the following mitigation measure is adopted and implemented for the project:

Mitigation Measure C.1: Ground-disturbing activities and/or tree removal/pruning shall occur during the non-breeding season for migratory birds (September 1 through February 28), or the developer shall hire a qualified biologist to conduct a field survey to determine the presence of nesting migratory birds. The results of the survey shall be communicated to Planning staff in writing, and shall include any recommendations necessary to avoid nesting migratory birds, if active nests are present. Tree removal or ground-disturbing activities shall only commence between March 1 and August 31 upon written concurrence from Planning staff that the survey is adequate and if no active nests will be impacted by the tree removal. If active nests are found during the surveys, construction activities shall be prohibited within a specified buffer zone or postponed until after the breeding season, as determined by a qualified biologist in coordination with Planning staff.

Mitigation Monitoring C.1: Community Development Department and/or Public Works Department staff will require submittal of the bird survey prior to issuance of any permits for the project unless the work will commence during the non-breeding season.

Mitigation Measure D.1: If during ground disturbing activities, any bones, pottery fragments or other potential cultural resources are encountered, the developer or their supervising contractor shall cease all work within the area of the find and notify Planning staff at 879-6800. A professional archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology and who is familiar with the archaeological record of Butte County, shall be retained by the applicant to evaluate the significance of the find. Planning staff shall notify all local tribes on the consultation list maintained by the State of California Native American Heritage Commission, to provide local tribes the opportunity to monitor evaluation of the site. Site work shall not resume until the archaeologist conducts sufficient research, testing and analysis of the archaeological evidence to make a determination that the resource is either not cultural in origin or not potentially significant. If a potentially significant resource is encountered, the archaeologist shall prepare a mitigation plan for review and approval by the City Community Development Department, including recommendations for total data recovery, Tribal monitoring, disposition protocol, or avoidance, if applicable. All measures determined by the Community Development Director to be appropriate shall be implemented pursuant to the terms of the archaeologist's report. The preceding requirement shall be incorporated into construction contracts and documents to ensure contractor knowledge and responsibility for proper implementation.

Mitigation Monitoring D.1: Community Development Department and/or Public Works Department staff will verify that the above wording is included on project grading and construction plans. Should cultural resources be encountered, the supervising contractor shall be responsible for reporting any such findings to the Community Development Department, and contacting a professional archaeologist to evaluate the find.

Mitigation Measure J.1: The pump motor shall be 75 horsepower or less, and located within a pump house building. The pump house building shall be constructed using concrete block walls, plywood roof with fiberglass shingles, and acoustical louvered vents (IAC Slimshield 6" depth Quiet-Vent Louver, or equivalent). The finished building walls shall be continuous along their length with no gaps in the construction, with the exception of the designed acoustical louvered openings and opening for the roof ventilation fan. Use of a larger pump motor or substitution of materials shall require further noise analysis to ensure compliance, unless manufacturer specifications of the replacement component(s) demonstrate that equivalent or lesser noise levels would result from the change.

Mitigation Monitoring J.1: Community Development Department staff will review building plans for compliance with the construction details specified by Mitigation Measure J.1 and the building permit will only be issued once compliance is demonstrated by the applicant. Community Development Department staff will conduct a final inspection to ensure compliance with the construction details specified by Mitigation Measure J.1 and will only issue a permit final if the project is in conformance with the specified construction details.

Mitigation Measure J.2: The proposed sound wall to attenuate noise generated during the well drilling and development phases of the project shall meet the following specifications:

- 1) The wall shall be 20-24 feet in height, referenced to the ground elevation on the project site.
- 2) The wall assembly shall, at minimum, consist of a double layer of batt insulation sewn between vinyl laminates (approximately 2 lbs/sq. ft.).
- 3) The wall shall be continuous along its length and height with no gaps, including at the ground.
- 4) The wall shall fully encircle the project area and equipment during operation, opened only to move equipment, materials, and/or personnel in and out between tasks.

Mitigation Monitoring J.2: Community Development Department staff will review building plans for compliance with the construction details specified by Mitigation Measure J.2 and the building permit will only be issued once compliance is demonstrated by the applicant. Community Development Department staff will conduct a field visit prior to drilling operations to inspect the completed sound wall and confirm compliance with the construction details specified by Mitigation Measure J.2 prior to commencement of drilling.

Mitigation Measure J.3: To minimize the need for overnight operations, the applicant shall direct the drilling contractor to schedule, prepare, and stage work crews, materials, and equipment in such a manner to complete well casing and gravel envelope installation operations as efficiently as possible. Construction operations for the installation of well casing and gravel envelope shall only commence after it is contemporaneously demonstrated to Community Development Department staff that:

- 1) All materials (casing, gravel, etc.) are on site and prepared for installation
- 2) All equipment necessary for casing installation is onsite, functioning properly, and prepared for use
- 3) All necessary work crew members are onsite and prepared for work
- 4) Availability of replacement work crew members is confirmed

Further, the contractor will only begin well casing installation if the operation is able to commence before 1pm on the same day the preparation criteria above are met. All preceding work, including caliper logging, cleaning out the borehole, removing drilling tools, etcetera, shall be completed by the 1pm deadline in order to proceed with the well casing installation that day.

Mitigation Monitoring J.3: The applicant shall direct the Construction Engineer to coordinate one or more timely site inspections with Community Development Department staff to confirm that the elements listed in Mitigation Measure J.3 are in place prior to 1pm on the day of commencing well casing installation. Community Development Department staff will document compliance with Mitigation Measure J.3 via electronic mail to the applicant.

Mitigation Measure J.4: The applicant shall provide at least two hard copy notifications to all residents within 250 feet of the project site, and to the Community Development Director or designee, as follows:

- 1) The first required notification shall provide the estimated dates for drilling, casing installation, and other project milestones, and shall be served prior to the mobilization step of the drilling process (roughly one week before construction of the sound wall). This first notice shall also include the typical work day hours when construction activity is anticipated.
- 2) The second required notification shall inform residents of the anticipated date of overnight construction. This second notification shall be provided at least 24 hours prior to the 1pm deadline set forth by Mitigation Measure J.3. If a delay occurs after the second notice is delivered and the overnight construction must be rescheduled then a subsequent notice for the new date shall be distributed as soon as practicable, however no later than 7pm on the evening before the rescheduled deadline. Additional notices shall be provided, as applicable, should any further rescheduling of overnight construction become necessary.

The applicant shall also establish an electronic mailing list of neighbors/interested parties and provide weekly updates of the construction progress, noting any relevant adjustments to the schedules disseminated pursuant to the hard copy notices required by this mitigation measure.

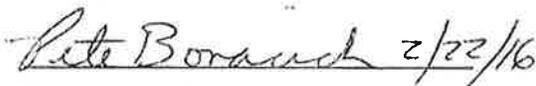
Mitigation Monitoring J.4: Community Development Department staff will receive the notices and other communications required by Mitigation Measure J.4 and retain them in the project file. CDD staff will conduct periodic site inspections and seek compliance or issue stop work orders if necessary to attain compliance.

APPLICANT'S INCORPORATION OF MITIGATION INTO THE PROPOSED PROJECT:

I have reviewed the REVISED Initial Study for Chico Well Station 9-03 Project (UP 13-04), and the mitigation measures identified herein. I hereby modify the project on file with the City of Chico to include and incorporate all mitigation set forth in this document.

Project Applicant:

Document Prepared by:

 2/22/16

 2/24/16

Pete Bonacich
Acting District Manager
California Water Service Company

Mike Sawley
Associate Planner
Community Development Department

Date

Adopted via: Resolution No: _____
City of Chico Planning Commission

Date

EXHIBIT II
CONDITIONS OF APPROVAL
Use Permit 13-04 (California Water Service Co.) and Conditional Noise Permit

1. Use Permit 13-04 (California Water Service Co.) authorizes a domestic water well and pump station for water consumption and fire protection in the R1 (Low Density Residential) zoning district in substantial accord with the "Plat to Accompany Use Permit 13-04 (California Water Service Co.)", and a Conditional Noise Permit pursuant to Chico Municipal Code Section 9.38.070, in compliance with all other conditions of approval.
2. The applicant shall comply with all other State and local Code provisions, including those of the Building and Fire Departments. The permittee is responsible for contacting these offices to verify the need for permits.
3. With the exception of the installation of the well casing and gravel envelope, all construction noise from the project shall be limited to the hours of 7 a.m. to 9 p.m. Monday through Saturday, and 10 a.m. to 6 p.m. on Sundays and holidays.
4. With the exception of the construction of the sound wall construction noise levels shall not exceed 86 dBA (a-weighted decibels) at the property line.
5. During construction the applicant shall ensure that onsite contractor(s) apply all available noise abatement techniques practicable. These shall include but are not limited to: constructing a sound wall consistent with Mitigation Measure J.2, below; using air compressors with "whisper" technology, or equal; and ensuring that all gas or diesel powered equipment is equipped with proper mufflers that minimize noise emissions.
6. The pump house building shall be subject to administrative architectural review and approval. All building plans shall be reviewed by Planning staff to ensure compliance with the approved site plan, architectural elevations, and landscape plan.
7. Any testing of the back-up power generator shall be conducted during weekday, daytime hours to reduce the chance for nuisance-related noise impacting nearby residences.
8. **Mitigation Measure C.1:** Ground-disturbing activities and/or tree removal/pruning shall occur during the non-breeding season for migratory birds (September 1 through February 28), or the developer shall hire a qualified biologist to conduct a field survey to determine the presence of nesting migratory birds. The results of the survey shall be communicated to Planning staff in writing, and shall include any recommendations necessary to avoid nesting migratory birds, if active nests are present. Tree removal or ground-disturbing activities shall only commence between March 1 and August 31 upon written concurrence from Planning staff that the survey is adequate and if no active nests will be impacted by the tree removal. If active nests are found during the surveys, construction activities shall be prohibited within a specified buffer zone or postponed until after the breeding season, as determined by a qualified biologist in coordination with Planning staff.

Mitigation Monitoring C.1: Community Development Department and/or Public Works Department staff will require submittal of the bird survey prior to issuance of any permits for the project unless the work will commence during the non-breeding season.

9. **Mitigation Measure D.1:** If during ground disturbing activities, any bones, pottery fragments or other potential cultural resources are encountered, the developer or their supervising contractor shall cease all work within the area of the find and notify Planning staff at 879-6800. A professional archaeologist who meets the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeology and who is familiar with the archaeological record of Butte County, shall be retained by the applicant to evaluate the significance of the find. Planning staff shall notify all local tribes on the consultation list maintained by the State of California Native American Heritage Commission, to provide local tribes the opportunity to monitor evaluation of the site. Site work shall not resume until the archaeologist conducts sufficient research, testing and analysis of the archaeological evidence to make a determination that the resource is either not cultural in origin or not potentially significant. If a potentially significant resource is encountered, the archaeologist shall prepare a mitigation plan for review and approval by the City Community Development Department, including recommendations for total data recovery, Tribal monitoring, disposition protocol, or avoidance, if applicable. All measures determined by the Community Development Director to be appropriate shall be implemented pursuant to the terms of the archaeologist's report. The preceding requirement shall be incorporated into construction contracts and documents to ensure contractor knowledge and responsibility for proper implementation.

Mitigation Monitoring D.1: Community Development Department and/or Public Works Department staff will verify that the above wording is included on project grading and construction plans. Should cultural resources be encountered, the supervising contractor shall be responsible for reporting any such findings to the Community Development Department, and contacting a professional archaeologist to evaluate the find.

10. **Mitigation Measure J.1:** The pump motor shall be 75 horsepower or less, and located within a pump house building. The pump house building shall be constructed using concrete block walls, plywood roof with fiberglass shingles, and acoustical louvered vents (IAC Slimshield 6" depth Quiet-Vent Louver, or equivalent). The finished building walls shall be continuous along their length with no gaps in the construction, with the exception of the designed acoustical louvered openings and opening for the roof ventilation fan. Use of a larger pump motor or substitution of materials shall require further noise analysis to ensure compliance, unless manufacturer specifications of the replacement component(s) demonstrate that equivalent or lesser noise levels would result from the change.

Mitigation Monitoring J.1: Community Development Department staff will review building plans for compliance with the construction details specified by Mitigation Measure J.1 and the building permit will only be issued once compliance is demonstrated by the applicant. Community Development Department staff will conduct a final inspection to ensure

compliance with the construction details specified by Mitigation Measure J.1 and will only issue a permit final if the project is in conformance with the specified construction details.

11. **Mitigation Measure J.2:** The proposed sound wall to attenuate noise generated during the well drilling and development phases of the project shall meet the following specifications:
- 1) The wall shall be 20-24 feet in height, referenced to the ground elevation on the project site.
 - 2) The wall assembly shall, at minimum, consist of a double layer of batt insulation sewn between vinyl laminates (approximately 2 lbs/sq. ft.).
 - 3) The wall shall be continuous along its length and height with no gaps, including at the ground.
 - 4) The wall shall fully encircle the project area and equipment during operation, opened only to move equipment, materials, and/or personnel in and out between tasks.

Mitigation Monitoring J.2: Community Development Department staff will review building plans for compliance with the construction details specified by Mitigation Measure J.2 and the building permit will only be issued once compliance is demonstrated by the applicant. Community Development Department staff will conduct a field visit prior to drilling operations to inspect the completed sound wall and confirm compliance with the construction details specified by Mitigation Measure J.2 prior to commencement of drilling.

12. **Mitigation Measure J.3:** To minimize the need for overnight operations, the applicant shall direct the drilling contractor to schedule, prepare, and stage work crews, materials, and equipment in such a manner to complete well casing and gravel envelope installation operations as efficiently as possible. Construction operations for the installation of well casing and gravel envelope shall only commence after it is contemporaneously demonstrated to Community Development Department staff that:
- 1) All materials (casing, gravel, etc.) are on site and prepared for installation;
 - 2) All equipment necessary for casing installation is onsite, functioning properly, and prepared for use;
 - 3) All necessary work crew members are onsite and prepared for work; and
 - 4) Availability of replacement work crew members is confirmed.

Further, the contractor will only begin well casing installation if the operation is able to commence before 1pm on the same day the preparation criteria above are met. All preceding work, including caliper logging, cleaning out the borehole, removing drilling tools, etcetera, shall be completed by the 1pm deadline in order to proceed with the well casing installation that day.

Mitigation Monitoring J.3: The applicant shall direct the Construction Engineer to coordinate one or more timely site inspections with Community Development Department staff to confirm that the elements listed in Mitigation Measure J.3 are in place prior to 1pm on the day of commencing well casing installation. Community Development Department staff will document compliance with Mitigation Measure J.3 via electronic mail to the applicant.

13. **Mitigation Measure J.4:** The applicant shall provide at least two hard copy notifications to all residents within 250 feet of the project site, and to the Community Development Director or designee, as follows:

The first required notification shall provide the estimated dates for drilling, casing installation, and other project milestones, and shall be served prior to the mobilization step of the drilling process (roughly one week before construction of the sound wall). This first notice shall also include the typical work day hours when construction activity is anticipated.

The second required notification shall inform residents of the anticipated date of overnight construction. This second notification shall be provided at least 24 hours prior to the 1pm deadline set forth by Mitigation Measure J.3. If a delay occurs after the second notice is delivered and the overnight construction must be rescheduled then a subsequent notice for the new date shall be distributed as soon as practicable, however no later than 7pm on the evening before the rescheduled deadline. Additional notices shall be provided, as applicable, should any further rescheduling of overnight construction become necessary.

The applicant shall also establish an electronic mailing list of neighbors/interested parties and provide weekly updates of the construction progress, noting any relevant adjustments to the schedules disseminated pursuant to the hard copy notices required by this mitigation measure.

Mitigation Monitoring J.4: Community Development Department staff will receive the notices and other communications required by Mitigation Measure J.4 and retain them in the project file. CDD staff will conduct periodic site inspections and seek compliance or issue stop work orders if necessary to attain compliance.

14. Public notifications required under pursuant to Mitigation Measure J.4, under Condition #13, above, shall be provided to all residents within 500 feet of the project site.



REVISIONS:
 01 UPDATE PLAN VIEW AND ELEVATION VIEWS
 02 UPDATE PROPERTY LINES
 03 INCLOSURE TO PROPERTY LINES AND WALL AND TREES TO BE REMOVED
 04 UPDATE DATE: 6/19/14 RU

DATE: 11/07/11
 DRAWN BY: R. ULEP
 DESIGNED BY: L. ZAMUDIO
 CHECKED BY: DATE:
 APPROVED BY: DATE:

PLAT SHEET NO.: CH-36-26, 37-26

SCALE: AS SHOWN

DRAWN BY: R. ULEP

DESIGNED BY: L. ZAMUDIO

CHECKED BY: DATE:

APPROVED BY: DATE:



TITLE:

CHICO
 STATION 09
 REGISTERED PROFESSIONAL ENGINEER
 PLOT PLAN AND ELEVATION

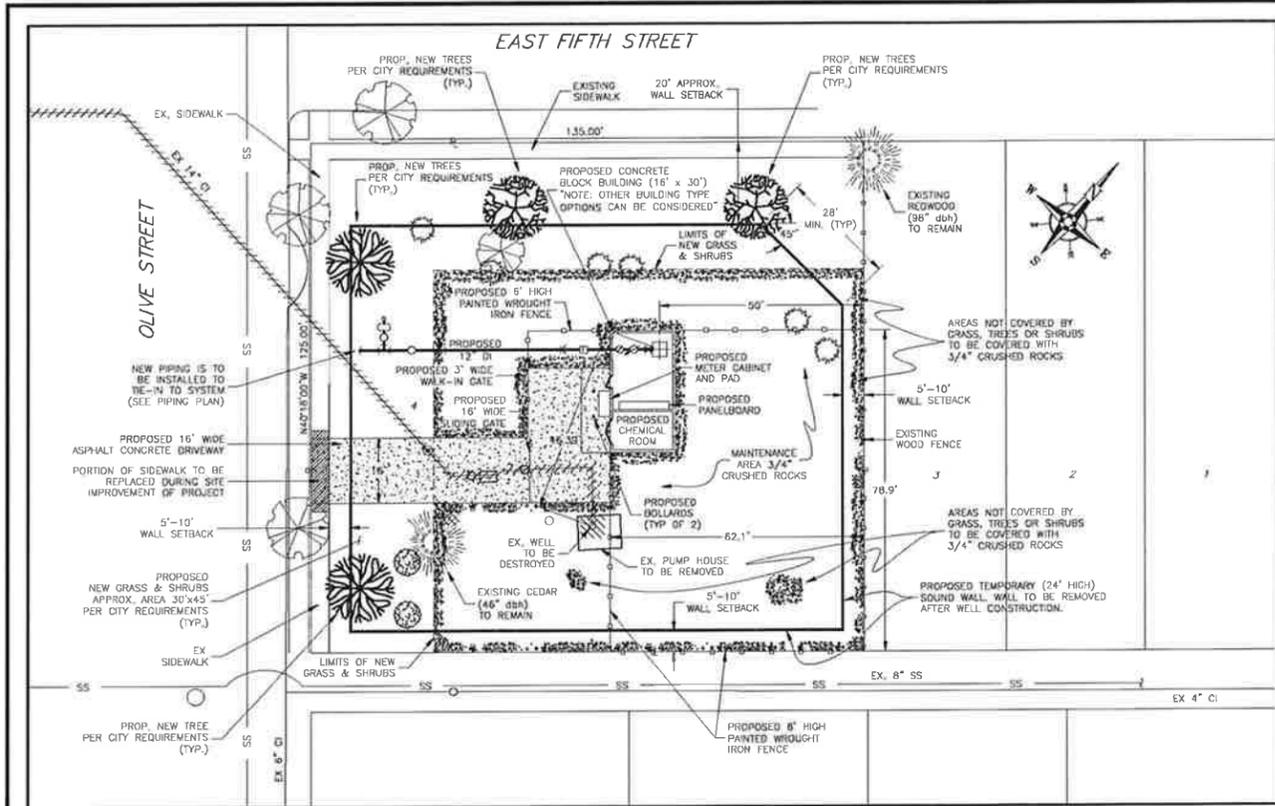
DISTRICT: CHICO

DATE: 11/07/11

PROJECT ID: 20519

DRAWING NO: CH-5318 R3

SHEET 1 OF 1

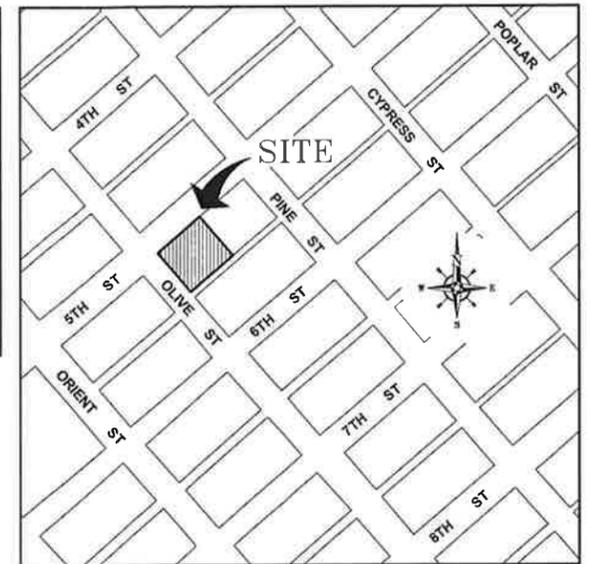


PROPOSED FACILITIES:

- WELL & PUMP
- CONCRETE BLOCK BUILDING
- CHAIN LINK FENCE
- ELECTRICAL PANELBOARD
- METER CABINET AND PAD

LEGEND:

- 1 1/2" = TEE
- 1 1/2" = ELBOW, 45°
- 1 1/2" = ELBOW, 90°
- 1 1/2" = BLOWOFF (PROPOSED)
- 1 1/2" = BLOWOFF (EXISTING)
- 1 1/2" = GATE VALVE (PROPOSED)
- 1 1/2" = GATE VALVE (EXISTING)
- 1 1/2" = REDUCER (PROPOSED)
- 1 1/2" = REDUCER (EXISTING)
- 1 1/2" = SOLID PLUG
- 1 1/2" = PROPOSED WATER MAIN
- 1 1/2" = EXISTING WATER MAIN
- 1 1/2" = WALL
- 1 1/2" = SANITARY SEWER
- 1 1/2" = STORM DRAIN
- 1 1/2" = FIRE HYDRANT (PROPOSED)
- 1 1/2" = FIRE HYDRANT (EXISTING)
- 1 1/2" = BUTTERFLY VALVE
- 1 1/2" = CHECK VALVE
- 1 1/2" = FLEX C/PLG.
- 1 1/2" = ALTITUDE VALVE
- 1 1/2" = CATCH BASIN
- 1 1/2" = ELEVATION
- 1 1/2" = FINISH GRADE
- 1 1/2" = FINISH FLOOR
- 1 1/2" = FLOW SENSOR

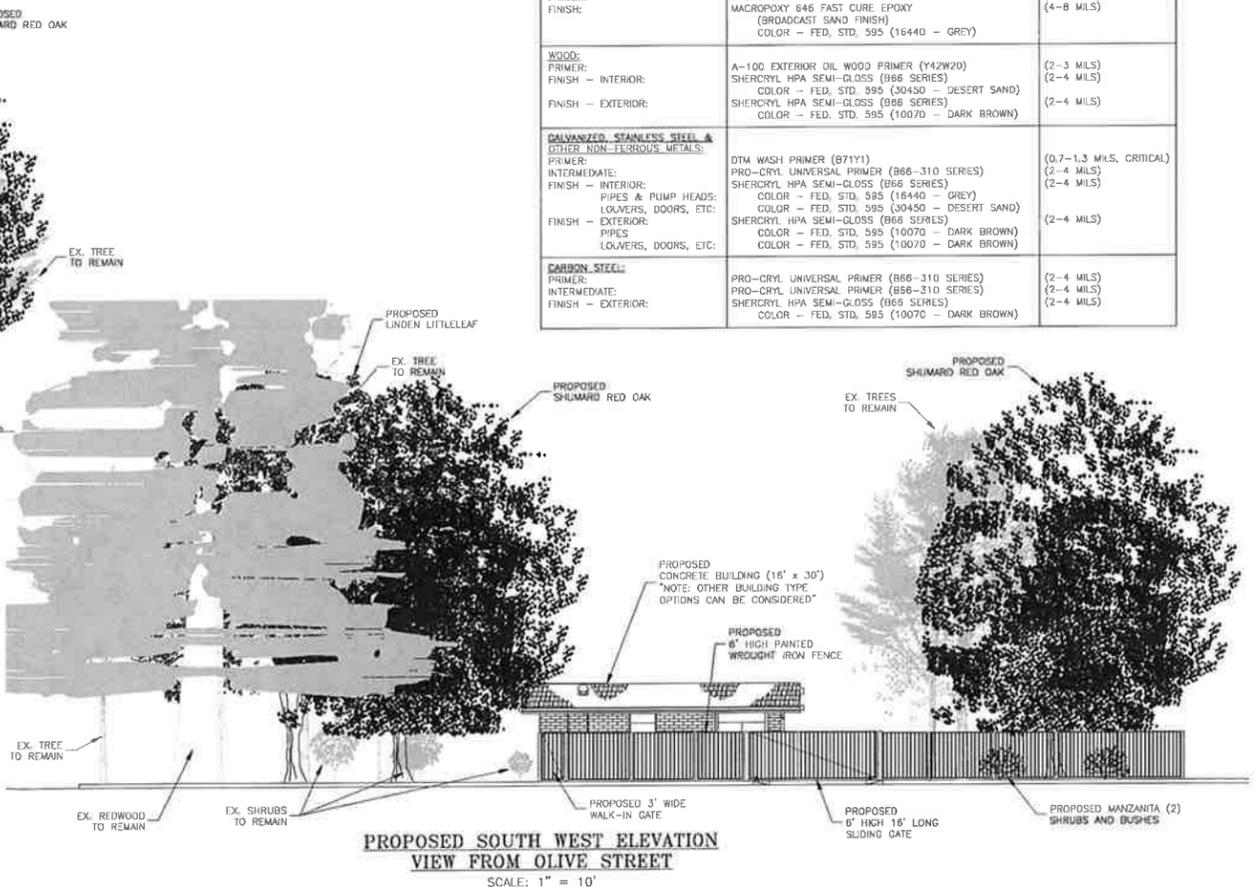
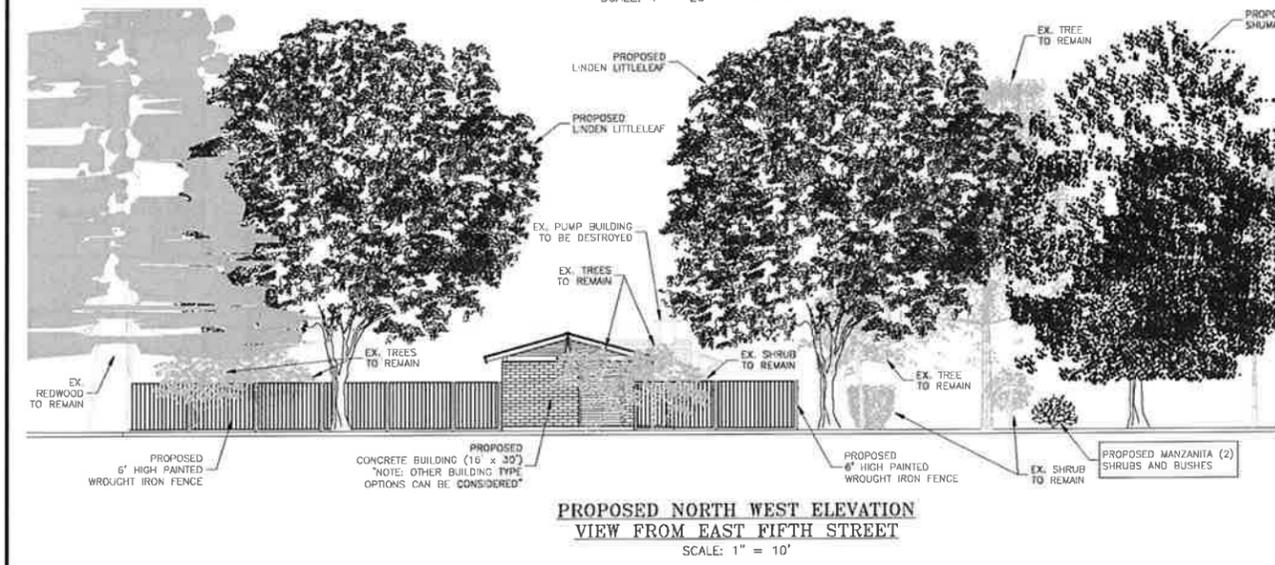


Plat to Accompany Use Permit 13-04 (California Water Service Co.)

SITE & GRADING NOTES:

1. C.W.S. STATION IS LOCATED ON SE CORNER OF OLIVE AND 5TH ST., CITY OF CHICO, APR 004-186-001-000
2. NO GRADING IS PROPOSED OTHER THAN FOUNDATION EXCAVATION AND SLOPING FOR SURFACE DRAINAGE.
3. PAINTING SPECIFICATIONS: (SEE TABLE BELOW)
 a) ALL BLOCKS SHALL BE ADOBE COLOR SLUMPSTONE UNITS UNLESS NOTED OTHERWISE.

ITEM SPECIFIED	SHERWIN WILLIAMS	DFT (MILS)
CONCRETE WALLS, MASONRY UNITS		
FINISH - INTERIOR & EXTERIOR:	2 COATS SEAL-CRETE	(2 FLOOD COATS)
CONCRETE FLOOR:		
PRIMER:	MACROPOXY 646 FAST CURE EPOXY	(2-5 MILS)
FINISH:	MACROPOXY 646 FAST CURE EPOXY (BROADCAST SAND FINISH) COLOR - FED. STD. 595 (16440 - GREY)	(4-8 MILS)
WOOD:		
PRIMER:	A-100 EXTERIOR OIL WOOD PRIMER (Y42W20)	(2-3 MILS)
FINISH - INTERIOR:	SHERCRYL HPA SEMI-GLOSS (866 SERIES)	(2-4 MILS)
FINISH - EXTERIOR:	SHERCRYL HPA SEMI-GLOSS (866 SERIES) COLOR - FED. STD. 595 (10070 - DARK BROWN)	(2-4 MILS)
GALVANIZED, STAINLESS STEEL & OTHER NON-FERROUS METALS:		
PRIMER:	DTM WASH PRIMER (871Y1)	(0.7-1.3 MILS, CRITICAL)
INTERMEDIATE:	PRO-CRYL UNIVERSAL PRIMER (866-310 SERIES)	(2-4 MILS)
FINISH - INTERIOR:	SHERCRYL HPA SEMI-GLOSS (866 SERIES)	(2-4 MILS)
FINISH - EXTERIOR:	SHERCRYL HPA SEMI-GLOSS (866 SERIES) COLOR - FED. STD. 595 (16440 - GREY)	(2-4 MILS)
PIPES & PUMP HEADS:	COLOR - FED. STD. 595 (30450 - DESERT SAND)	(2-4 MILS)
LOUVERS, DOORS, ETC.:	SHERCRYL HPA SEMI-GLOSS (866 SERIES) COLOR - FED. STD. 595 (10070 - DARK BROWN)	(2-4 MILS)
PIPES:	COLOR - FED. STD. 595 (10070 - DARK BROWN)	(2-4 MILS)
LOUVERS, DOORS, ETC.:	COLOR - FED. STD. 595 (10070 - DARK BROWN)	(2-4 MILS)
CARBON STEEL:		
PRIMER:	PRO-CRYL UNIVERSAL PRIMER (866-310 SERIES)	(2-4 MILS)
INTERMEDIATE:	PRO-CRYL UNIVERSAL PRIMER (866-310 SERIES)	(2-4 MILS)
FINISH - EXTERIOR:	SHERCRYL HPA SEMI-GLOSS (866 SERIES) COLOR - FED. STD. 595 (10070 - DARK BROWN)	(2-4 MILS)



Plat to Accompany Use Permit 13-04 (California Water Service Co.)

GENERAL NOTES

WIND DESIGN LOADS

2013 California Building Code & SEI/ASCE 37-02
 110 mph Basic Wind Speed x 0.75 = 82.5 mph (Temporary, less than 6 weeks)
 Exposure C
 25 psf Max. Wind Pressure (LRFD)

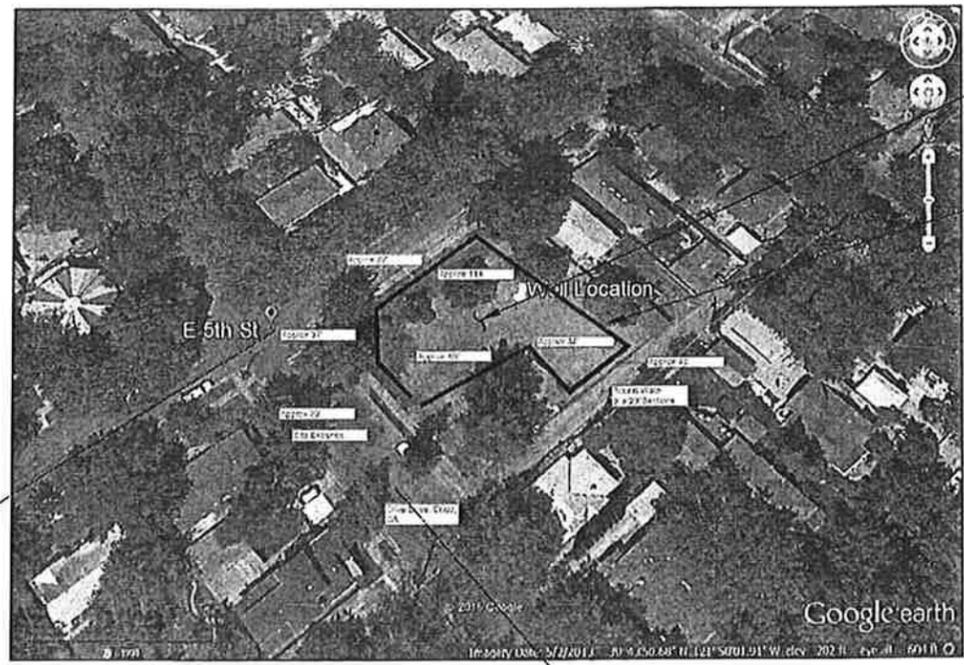
STRUCTURAL STEEL

	Min. Fy	A.S.T.M. NO.
I Wide Flanges	50 ksi	A992 or Equal
Round Pipes	35 ksi	A53, Grade B
Steel Tubing for Sound Panels	46 ksi	A500, Grade B
Other Rolled Shapes, Plates, Bars, etc.	36 ksi	A36 or Equal
Weld Electrodes	A.W.S. D1.1	E70XX (U.N.O.)

Fabrication & Erection: Conform to A.I.S.C. Specifications
Welding: By electric shielded metal-arc process.
Welders: Shall be certified and work done in accordance with the Structural Welding Code A.W.S. D1.1.
Painting: All steel shall receive one shop coat of fabricator's standard rust-inhibiting primer after power tool cleaning. In addition, steel exposed to weather shall receive two finish coats of paint.

GENERAL NOTES

Where No Detail is Shown, construction shall be as shown for other similar work.
 No Deviations from the Design Drawings are permitted without the permission of the Engineer.



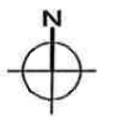
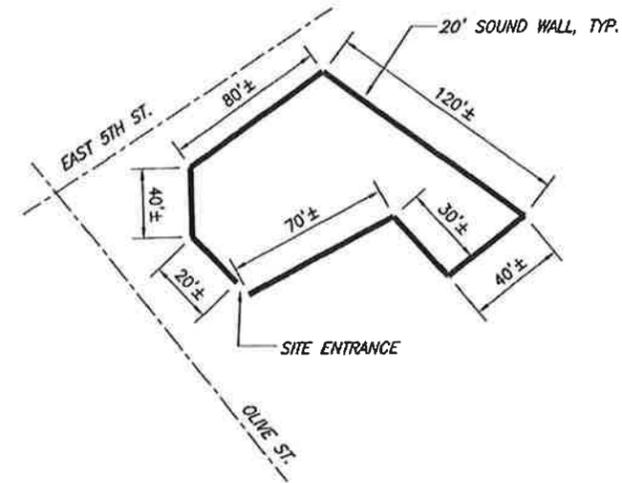
PROJECT SITE FOR CALIFORNIA WATER SERVICE CO. CHICO WELL STATION 9-03 (SEE ENLARGED PLAN BELOW)

20' SOUND WALL, TYP.

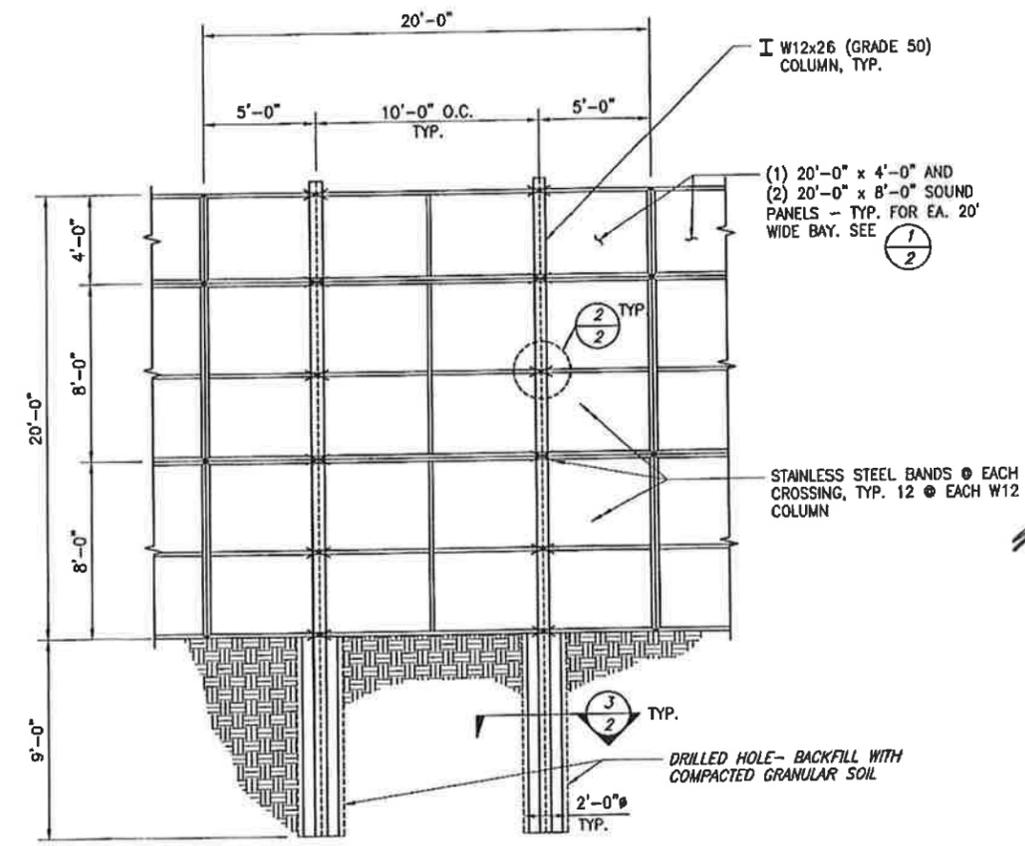


SOUND WALL LOCATION PLAN N.T.S.
 CHICO WELL STATION 9-03, CHICO, CALIFORNIA

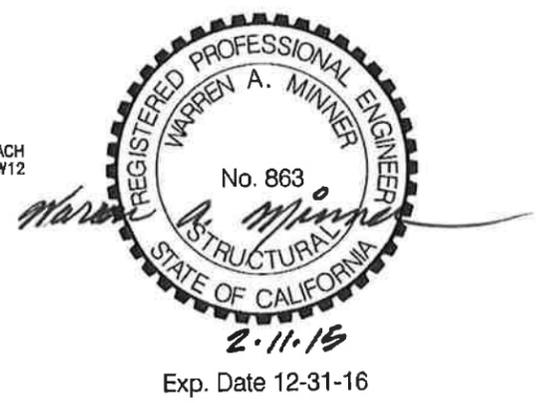
NOTE: OVERLAP SOUND PANELS AS NECESSARY TO OBTAIN REQUIRED WALL LENGTHS. MAINTAIN MAXIMUM 10' SPACING BETWEEN VERTICAL COLUMNS AND MAXIMUM 5' OVERHANG OF SOUND PANELS BEYOND COLUMNS.



SOUND WALL ENCLOSURE ARRANGEMENT N.T.S.



ELEVATION - TYPICAL PANEL 1/8"=1'-0"
 20' SOUND WALL

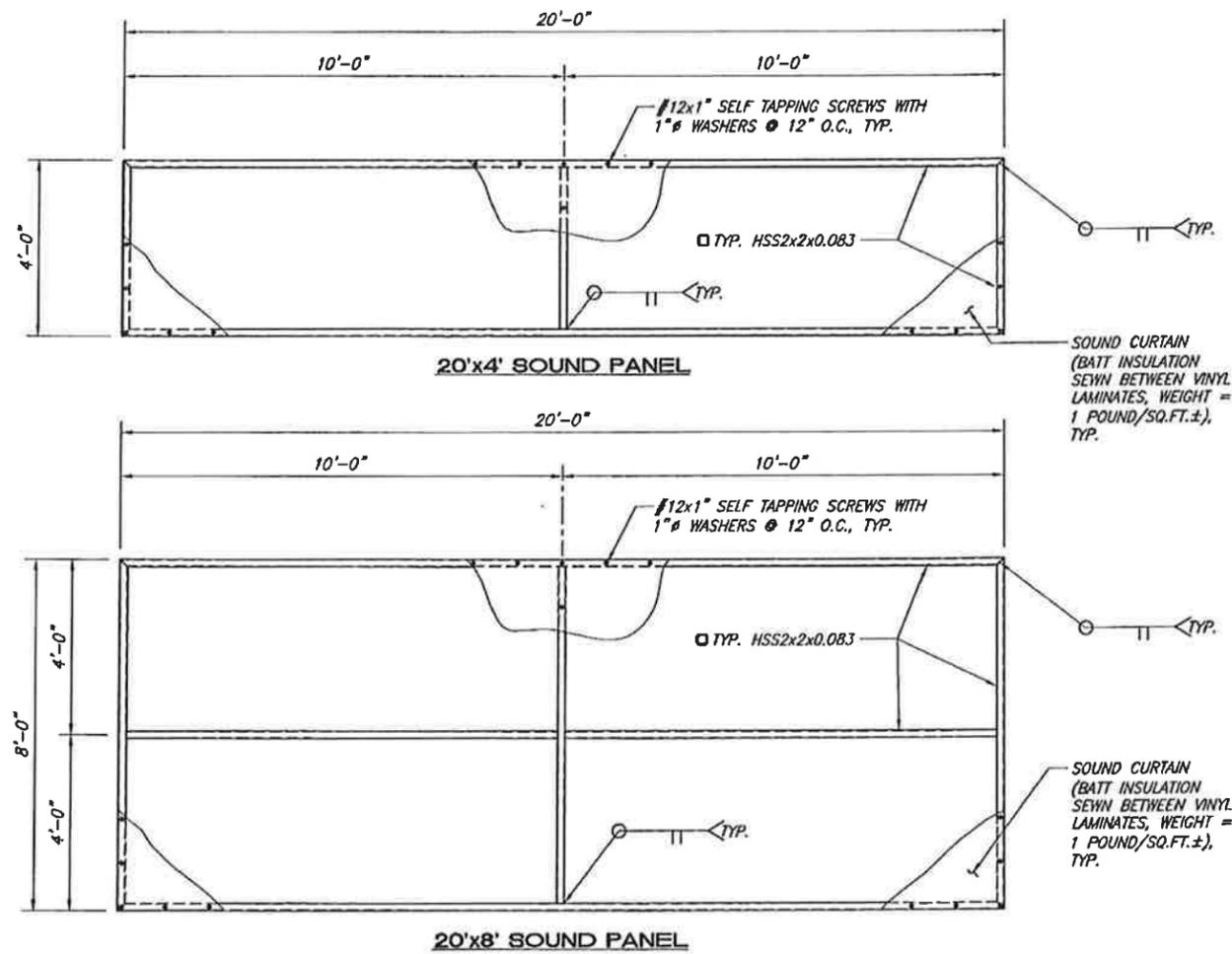


SOUND WALL - PLANS, ELEVATION & GENERAL NOTES

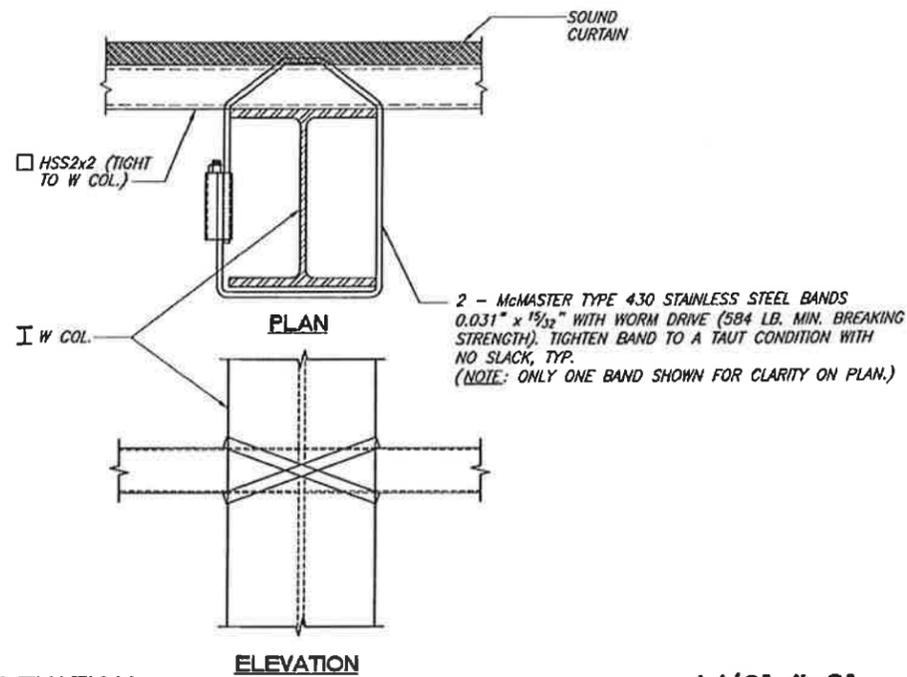
MINNER & ASSOCIATES
 STRUCTURAL & CIVIL ENGINEERS
 1716 OAK STREET, BAKERSFIELD, CALIFORNIA 93301
 PHONE (881) 324-9724 FAX (881) 324-3416

NOISE BLANKETS AND MORE
 TEMPORARY 20' SOUND WALL
 CALIFORNIA WATER SERVICE CO.
 CHICO WELL STATION 9-03
 EAST 5TH ST. & OLIVE ST., CHICO, CA

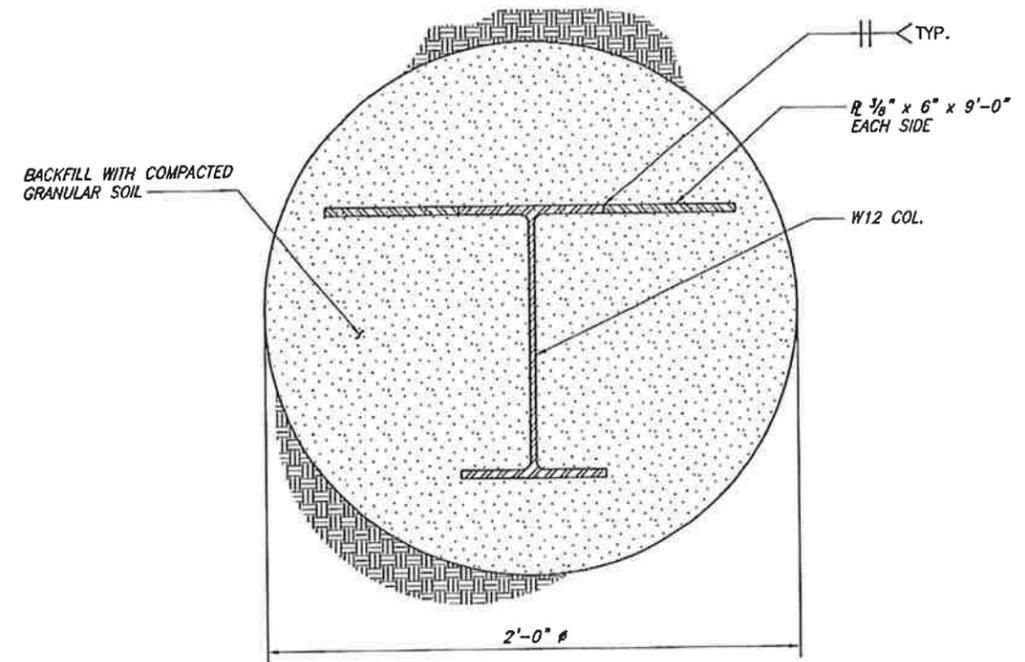
FOR:
NOISE BLANKETS AND MORE
 624 24th STREET, SUITE C
 BAKERSFIELD, CA 93301



1/2 ELEVATION
TYPICAL SOUND PANELS 1/4"=1'-0"



2/2 SECTION AND ELEVATION
ATTACHMENT DETAIL 1 1/2"=1'-0"



3/2 PLAN / SECTION -
DRILLED HOLE FOUNDATION 1 1/2"=1'-0"



**SOUND WALL-ELEVATIONS,
SECTIONS AND DETAILS**

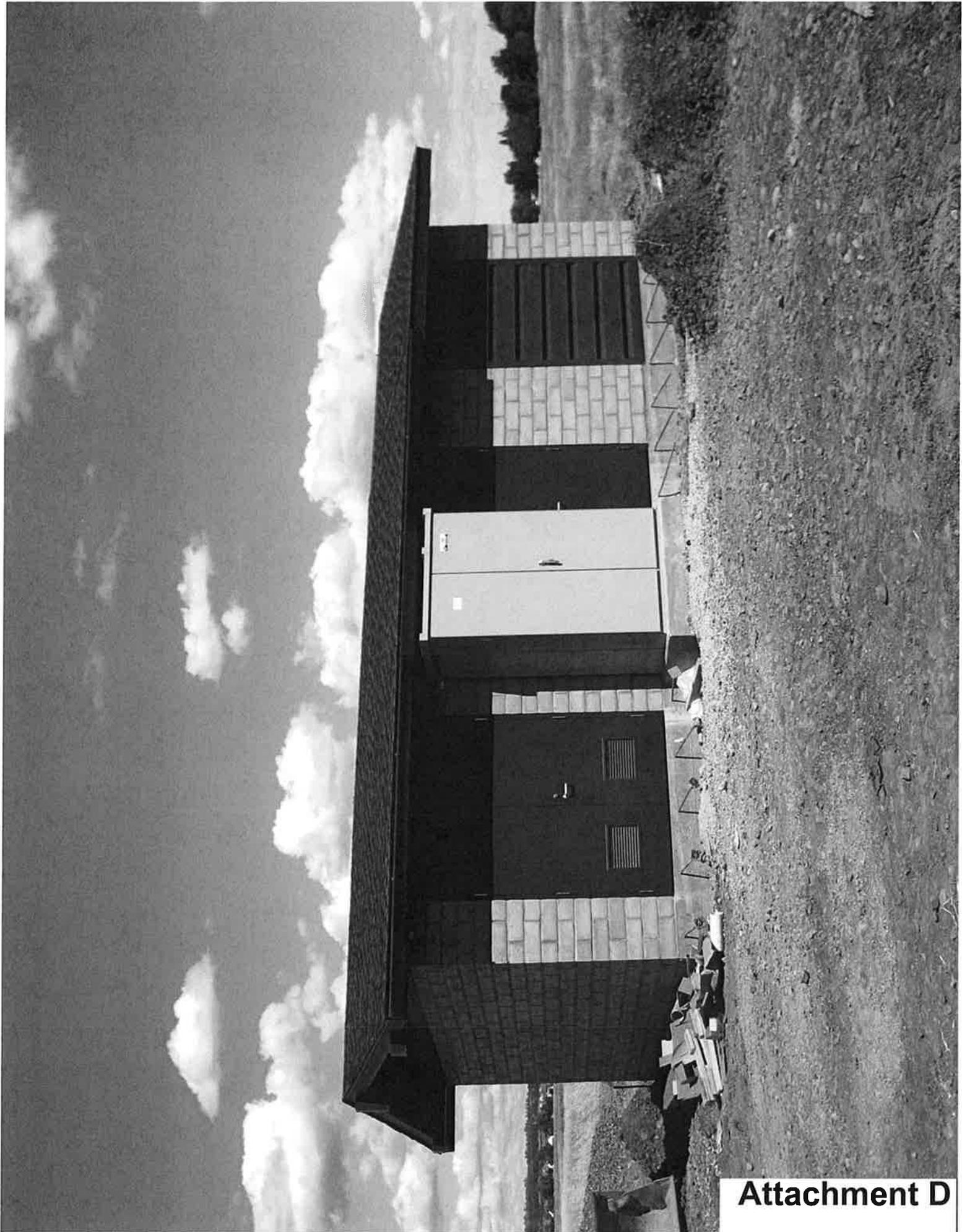
MINNER & ASSOCIATES
STRUCTURAL & CIVIL ENGINEERS
1716 OAK STREET, BAKERSFIELD, CALIFORNIA 93301
PHONE (861) 324-9724 FAX (861) 324-3416

NOISE BLANKETS AND MORE
TEMPORARY 20' SOUND WALL
CALIFORNIA WATER SERVICE CO.
CHICO WELL STATION 9-03
EAST 5TH ST. & OLIVE ST., CHICO, CA

FOR:
NOISE BLANKETS AND MORE
624 24th STREET, SUITE C
BAKERSFIELD, CA 93301

Attachment C

SHEET
2
OF 2



Attachment D

REVISED Initial Study
City of Chico
Environmental Coordination and Review

Important: This document is a revision of an Initial Study previously circulated for public review from 6/26/14 to 7/25/14 (SCH# 2014052005). A revised document is necessary due to changes to the temporary sound wall to be installed during construction, affecting section "J.5 Noise," below. Also, the "Site Preparation" activities described below under the Project Description (extension of storm drainage facilities and demolition of existing pump building) are now complete.

I. PROJECT DESCRIPTION

A. Project Name: Chico Well Station 9-03 Project

B. Project Location: 515 Olive Street. Southeast corner of East 5th Street and Olive Street

C. Application(s): Use Permit 13-04

Assessor's Parcel Numbers: 004-186-001

D. City of Chico Zoning: R1 – Low Density Residential

E. General Plan Designation: Low Density Residential

F. Environmental Setting:

The California Water Service Company (Cal Water) intends to construct a new municipal water supply well at its existing well station located on the corner of East Fifth and Olive Streets in Chico. The 0.4-acre project site is located in a residential neighborhood several blocks east of Downtown Chico. Existing improvements on the site consist of an inactive domestic water well and small pump house (85 square feet, constructed in 1939), surrounded by a landscaped area comprised of turf, shrubs, a large cedar tree in the southwestern corner, and a large redwood tree on the property line in the northeastern corner. Inactive since the mid-1990s, the existing well was constructed with a design capacity of 900 gallons per minute. Before the current well was constructed, an earlier municipal well had existed on the site, dating back to the late 1800s. The nearest City storm drain facilities are located two blocks away, at the intersection of East 5th Street and Flume Street.

G. Project Description:

The project would replace an existing domestic water supply well, pump house, and associated surface and subsurface utilities with similar new facilities. The new well is anticipated to have a design capacity of approximately 1,000 gallons per minute, though water would only be pumped in response to demand resulting from use of the system.

The project involves three primary components:

- **Site preparation** - extension of storm drainage facilities to tie into existing City facilities, and demolition of existing pump building and well;
- **Well Construction** - drilling and developing the new well (details below); and
- **Site Improvements** - construction of distribution piping and new pump house; installation of fencing and landscaping.

The proposed site plan calls for a new driveway approach from Olive Street that would lead to a fenced area containing a new masonry block building that would house the new well head (see Site Plan, page 5). Similar to other pump house stations in the City, the proposed beige and brown structure would have exposed beam ends and a pitched roof with fiberglass shingles.

The new building and maintenance area would be enclosed by a six-foot, wrought iron fence with controlled-access pedestrian and vehicular gates for exclusive use by Cal Water operations staff. The fence style would be similar to that located at the elevated water tank site at 3rd and Orient Streets. The exterior ground area inside the fence would be covered with gravel and kept

available for future maintenance needs. Landscaping improvements include planting several trees and shrubs in broad, open "yard" areas on each street frontage that would remain unfenced.

Overall construction is estimated to take approximately six months, with drilling and well development taking approximately 40 working days. Except for the drilling and well development phase, the majority of work will only involve weekday working hours. The drilling and well development phase of the project will involve some daytime weekend work during hours when construction is generally permitted (between 7 am and 9 pm on Saturdays and 10 am to 6pm on Sundays or holidays), and will involve one night of overnight work as explained in detail, below.

Drilling and development of the new drinking-water well entails a series of steps, as follows:

1. **Mobilization**: This step involves bringing the drilling rig, and other equipment and materials to the project site. As part of mobilization, the contractor will install approximately 450 feet of sound wall around the work area using a high-reach forklift or boom truck and a bobcat with drilling attachment. The sound wall would completely surround the working area, with variable setbacks from the property boundaries. The sound wall would be 20-24 feet tall and would also provide worksite security. Low-hanging branches on the existing cedar tree and on shrubs located adjacent to the sound wall alignment may be removed, as necessary, to install the sound wall. Also as part of the mobilization, measures will be put in place to prevent rainfall or surface runoff that may occur during the period of construction from leaving the site. This step is anticipated to take 5-7 days to complete.
2. **Conductor Casing Installation**: The conductor casing is a 36-inch diameter steel casing that will be set to a depth of 50 feet in a 48-inch diameter hole. The annulus between the conductor casing and the inside of the borehole wall will be filled with cement. The conductor casing provides surface stability during subsequent well drilling and also meets California Department of Public Health (CDPH) requirements for sanitary seal. Drilling the borehole for the conductor casing is typically done with a bucket auger drill rig and the conductor casing is set with either the bucket rig or a boom truck. This step is anticipated to take 2 days to complete.
3. **Pilot Hole Drilling and Analysis**: An 18-inch diameter pilot hole will be drilled to collect site-specific lithologic and geophysical data for the full profile depth of the new well. Drill cuttings will be collected at a minimum interval of every 10 feet and, following drilling of the pilot hole, down-hole geophysical surveys shall be conducted. The data will be reviewed and used to construct a stratigraphic column delineating the depth and nature of subsurface materials which will be used to finalize the design (depth, screen locations, screen slot size, and seal location) of the new well.

Cuttings generated as part of the conductor casing installation and pilot hole drilling will be stored onsite until a heavy metals analysis can be performed on the cuttings. Based on the results of the heavy metals analysis, cuttings will be appropriately disposed offsite. Drilling the pilot hole is expected to take 5 days to complete. Additional work may be necessary to stabilize the pilot hole by filling it with gravel prior to the next step.
4. **Production Borehole Drilling**: The production borehole is established by reaming (widening) the pilot hole out to the design diameter of 28-inches. This step will not commence until all well casing and gravel pack material is brought to the site. Each day during this step, drill pipe will be installed in the borehole, additional depth will be drilled out to 28-inches in diameter, and the drill pipe will be removed from the borehole before the end of the working day. Once the borehole has been drilled to the design depth, a caliper survey will be run in the borehole. This step is anticipated to take 5 days to complete.
5. **Well Casing Installation**: This step includes installation of the gravel fill pipe, the well casing, and the sounding tube. After the borehole is drilled to the final design depth, construction of the well casing needs to be completed as quickly as possible to minimize the risk of borehole collapse and to minimize damage to the water-bearing formations. Once construction of the well casing has begun, it cannot be interrupted until gravel has been placed to a level above the shallowest screen section (per Step 6, below).

After it is determined that the borehole is ready for the well construction, a two-inch tremie pipe will be installed to a depth below the final depth of the well casing. (Tremie pipe is a temporary device used to deliver gravel, and subsequently annular sealant, to the bottom of the hole in a controlled manner.) Next, a 4-inch gravel fill pipe, 16-inch well casing, and 2-

inch sounding tube will be installed. (The sounding tube is used for water level measurements.) This step is expected to take up to 20 hours of continuous work to complete.

6. Gravel Pack/Envelope Installation: Immediately after the well casing is installed, gravel will be pumped into the well via the tremie pipe. Gravel envelope installation is expected to take 10 hours of continuous work to complete.

Discussion Regarding Scheduling of Steps 5 and 6:

To minimize overnight operations, Cal Water will require its drilling contractor to schedule the work in a manner that leads to completion of the operations as quickly as possible. It is anticipated that well casing and gravel envelope installation will take up to 30 hours to complete, requiring overnight work for at least one night. The drilling contractor will be allowed to begin construction operations for the installation of well casing and gravel envelope only after: (1) all materials are on site and prepared for installation, (2) all equipment necessary for the construction of the well is onsite, functioning properly, and prepared for use, (3) all necessary work crew members are onsite and prepared for work, and (4) availability of replacement work crew members is confirmed.

Further, the contractor will only begin construction activities for the well casing installation if the operation is able to commence before 1 pm, thus allowing for a 30 hour continuous construction window which only involves one overnight operation. All preceding work, including caliper logging, cleaning out the borehole, removing drilling tools, etcetera, shall be completed by the 1 pm deadline in order to proceed with the well casing installation that day. The contractor will also be directed to consider and implement strategies that would accelerate operations on the day of well construction. For example, if the integrity of the borehole is such that the tremie pipe can be installed the day before construction operations, the contractor may be directed to do so.

Cal Water's onsite engineering inspectors will monitor the progress of the construction effort and identify any measures that may be implemented, if necessary, to ensure construction is completed in the specified time frame. If at any time it appears that well construction cannot be completed in the specified time frame, Cal Water will immediately notify the City of the situation, provide a plan to remedy the situation, and provide a new estimate for completion of the well construction activities.

Except for the installation of the well casing and gravel envelope, all on site activities will be limited to between the hours of 7:00 am and 9:00 pm. Casing and gravel installation are expected to require overnight operations for one night.

7. Annular Seal Placement: The annular seal provides a redundant sanitary seal between the top of gravel pack and the ground surface. The annular seal material shall be a minimum 10.3 sack sand/cement grout slurry. The annular seal material will be pumped through the tremie pipe. Placement of the annular seal is expected to take 3-4 hours and must be followed by at least 24 hours of curing time.
8. Swab Air Lift Development: The purpose of swab-airlift development is to remove the drilling fluids and other loose materials from the well casing, gravel envelope, and near-bore formation. ("Air lifting" is a process of releasing compressed air at the bottom of the well to lift particles up the column of water inside the well casing.) Excess water produced during swab-airlift operations will be directed through a series of tanks that will allow solids to settle out before discharge to the sanitary sewer system.

It is anticipated that it will take 5 days of swab-airlifting to develop the well, however, this process can take up to 8 days in less typical cases. After completion of swab-airlift operations, the drill rig and all associated equipment will be demobilized from the project site and a temporary, deep turbine pump installed into the well. Demobilization and site cleanup may continue during pump development and testing. Sound walls will remain in place during pump development and testing.

9. Pump Development: The purpose of pump development is to clean any residual drilling fluids left in the borehole after swab-airlifting operations. Pump development is conducted at discharge rates of up to 175% of the anticipated well yield. During pump development, the well is frequently surged in order to mobilize any remaining sand, silt, and clay in the gravel envelope, on the borehole wall, or in the near bore formation. Pump development will continue until the water produced meets sand content and turbidity requirements for municipal water systems and the specific capacity of the well ceases to improve.

All water produced during pump development operations will be directed to the storm drain system. The Contractor will provide all piping, signage, and traffic control necessary to convey the fluid from the tanks to the designated storm sewer discharge point. Maximum discharge rate shall not exceed the rate allowed on the discharge permit. Sand content, turbidity, and general water quality field parameters will be monitored during all discharges to the storm drain system. Pump development is anticipated to take 6 days to complete; however, this step can take 9 days in some locations. Assuming that development does take 60 hours to develop, operations would be ongoing for 6 days.

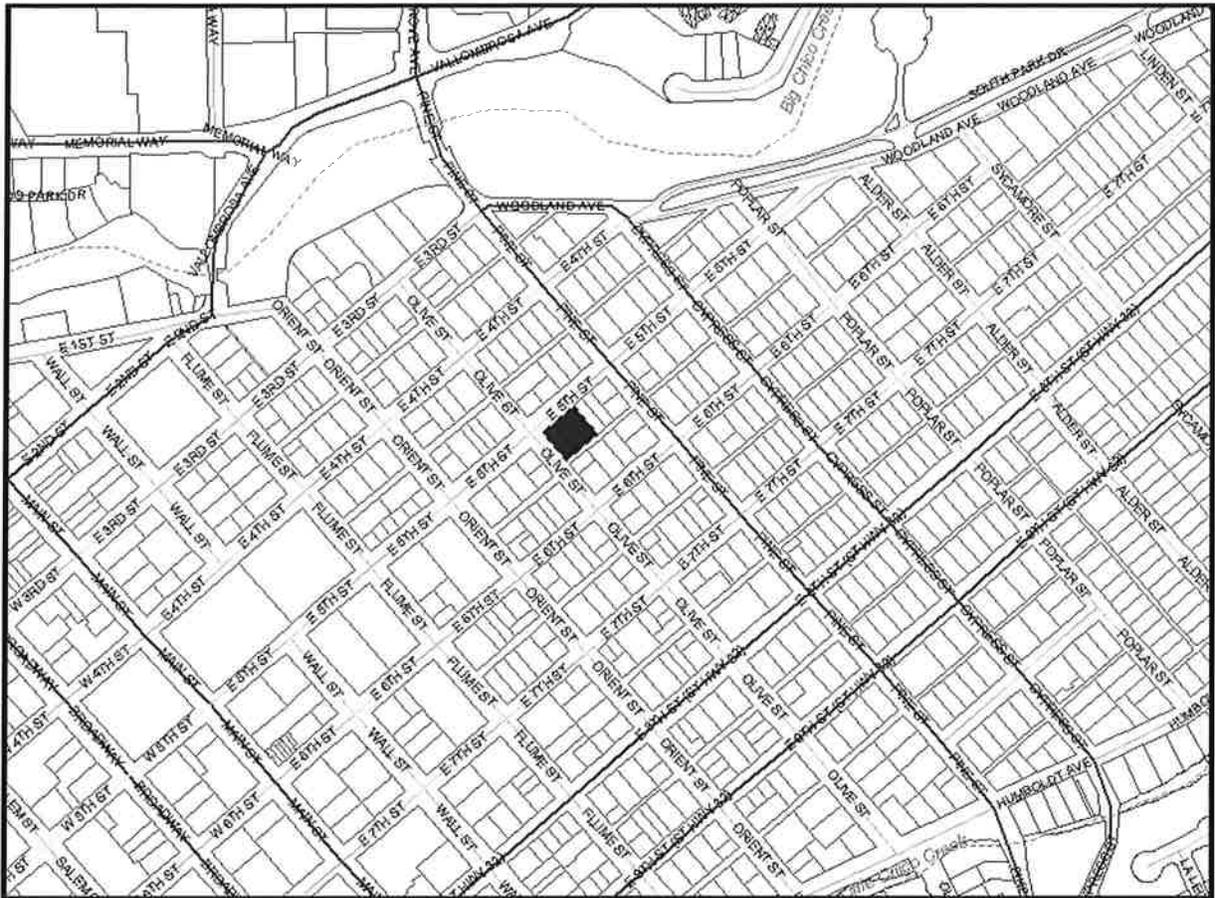
10. **Pump Testing**: Pump testing will be conducted over two days. The first day of testing will consist of pumping the well at increasing rates over a 10 hour period (step tests). The second day of testing will include a 10 hour, constant rate test at the design capacity of the well. Water samples will be collected for analysis during the long term test. As with pump development, all water generated during testing will be directed to the storm sewer system. This step will take two days.
11. **Final Well Inspection and Securing**: Final well inspection will include a video survey of the well and digital gyroscopic survey to determine its precise alignment. After the surveys have been completed, a steel plate will be welded on top of the well casing and accessory pipes to seal them. This step is anticipated to take one day to complete.

H. Public Agency Approvals:

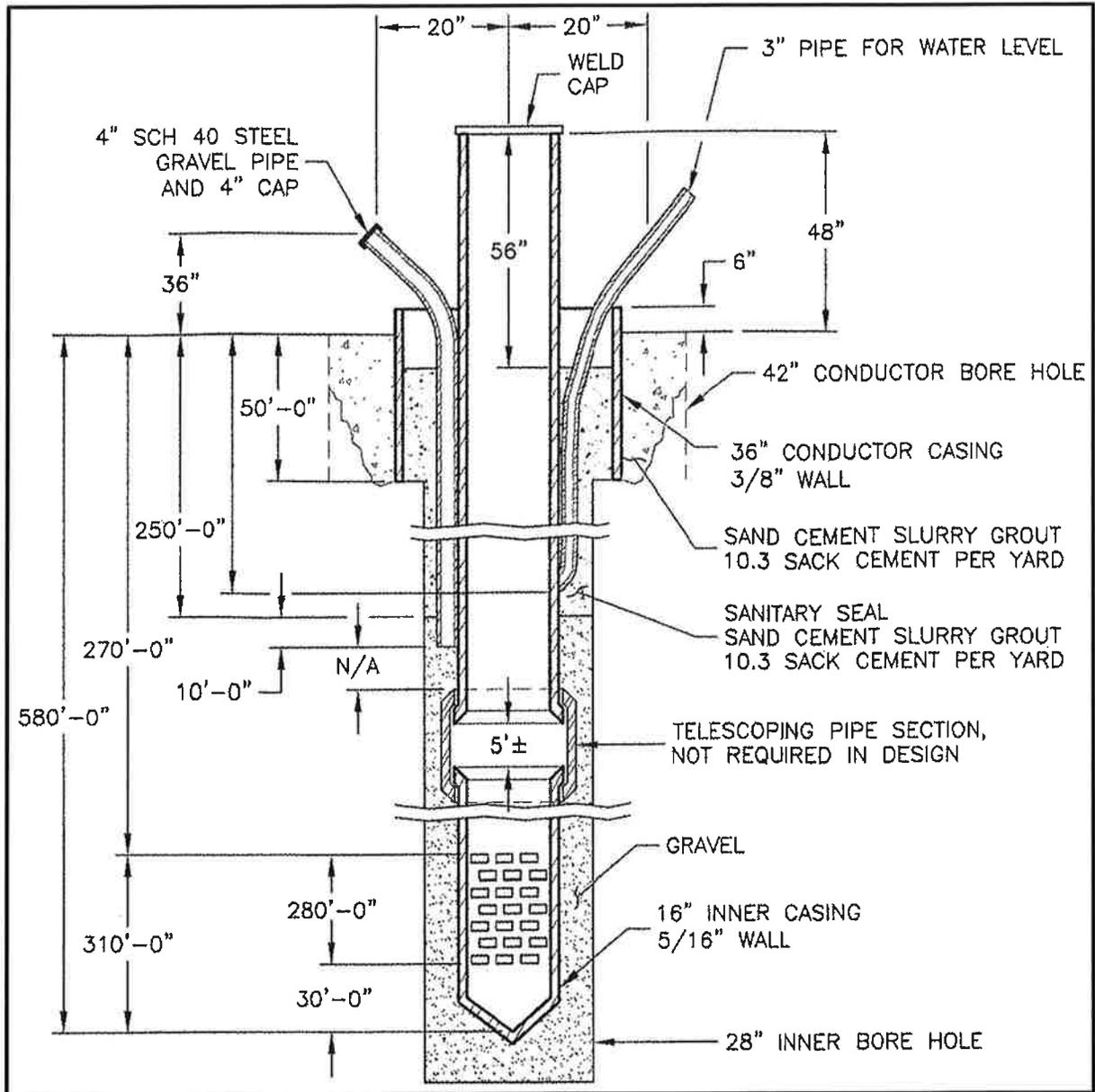
- a. Use Permit/Conditional Noise Permit (City of Chico)
- b. Building Permit/Encroachment Permit (City of Chico)
- c. Sanitary Sewer Discharge Permit (City of Chico)
- d. Drinking Water Permit Amendment (California Department of Public Health)
- e. NPDES Enrollment (Central Valley Regional Water Quality Control Board)
- f. Well Drilling Permit (Butte County Environmental Health Department)

I. Applicant: California Water Service Company, Attn: Kim Gregory
2222 Dr. Martin Luther King, JR. Pkwy, Chico, CA 95928

J. Prepared By: Mike Sawley, Associate Planner, City of Chico, 411 Main Street, Chico, CA 95928
Phone: (530) 879-6812, Email: mike.sawley@chicoca.gov



PROJECT LOCATION



Cross Section Design for New Well

II. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|--|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Hazards /Hazardous Materials | <input type="checkbox"/> Population/ Housing |
| <input type="checkbox"/> Air Quality | <input type="checkbox"/> Hydrology/ Water Quality | <input type="checkbox"/> Public Services |
| <input checked="" type="checkbox"/> Biological Resources | <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Transportation/Circulation |
| <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Utilities |
| <input type="checkbox"/> Geology /Soils | <input type="checkbox"/> Open Space/ Recreation | |

III. PLANNING DIRECTOR DETERMINATION

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a potentially significant impact or have a potentially significant impact unless mitigated, but at least one effect has been adequately analyzed in an earlier document pursuant to applicable legal standards, and has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, there WILL NOT be a significant effect in this case because all potentially significant effects have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards and have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION including revisions or mitigation measures that are imposed upon the proposed project. No further study is required.



Signature

2/24/16

Date

Mike Sawley, Associate Planner

Printed Name (for Mark Wolfe, Community Development Director)

IV. EVALUATION OF ENVIRONMENTAL IMPACTS

- Responses to the following questions and related discussion indicate if the proposed project will have or potentially have a significant adverse impact on the environment.
- A brief explanation is required for all answers except "No Impact" answers that are adequately supported by referenced information sources. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g. the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors or general standards.
- All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- Once it has been determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there is at least one "Potentially Significant Impact" entry when the determination is made an EIR is required.
- Negative Declaration: "Less than Significant with Mitigation Incorporated" applies when the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less than Significant Impact." The initial study will describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section 4, "Earlier Analysis," may be cross-referenced).
- Earlier analyses may be used where, pursuant to tiering, a program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration [Section 155063(c)(3)(D)].
- Initial studies may incorporate references to information sources for potential impacts (e.g. the general plan or zoning ordinances, etc.). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated. A source list attached, and other sources used or individuals contacted are cited in the discussion.
- The explanation of each issue should identify:
 - a. The significance criteria or threshold, if any, used to evaluate each question; and
 - b. The mitigation measure identified, if any, to reduce the impact to less than significant.

A. Aesthetics	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Will the project or its related activities:				
1. Have a substantial adverse effect on a scenic vista, including scenic roadways as defined in the General Plan, or a Federal Wild and Scenic River?			X	
2. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
3. Affect lands preserved under a scenic easement or contract?			X	
4. Substantially degrade the existing visual character or quality of the site and its surroundings including the scenic quality of the foothills as addressed in the General Plan?			X	
5. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	

DISCUSSION

A.1-4 The residential streets adjacent to the project area are not designated scenic roadways. The site is not affected or preserved by any scenic easement or contract. The project site is not located in the vicinity of a designated Wild and Scenic River. The project includes replacing existing chain-link fencing with wrought iron fencing, as well as landscape improvements that would enhance compatibility between the aesthetics of the site and the existing residential neighborhood.

Because the project would not impact any designated scenic resources and would not significantly degrade the existing visual character or quality of the site and its surroundings, aesthetic impacts would be **Less Than Significant**. No mitigation for aesthetic impacts is required.

A5. No exterior lighting is proposed. Any exterior lighting installed in the future will be required to adhere to existing Chico Municipal Code standards regarding full-cut off designs and downward orientation to minimize glare. The project would have **Less Than Significant Impact** on light or glare that would affect daytime or nighttime views.

Mitigation: None Required.

B. Air Quality	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Will the project or its related activities:				
1. Conflict with or obstruct implementation of the applicable air quality plans (e.g. Northern Sacramento Valley Air Basin 1994 Air Quality Attainment Plan, Chico Urban Area CO Attainment Plan, and Butte County Air Quality Management District Indirect Source Review Guidelines)?			X	
2. Violate any air quality standard or contribute substantially to an existing or projected air quality violation.			X	
3. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?			X	
4. Expose sensitive receptors to substantial pollutant concentrations?			X	
5. Create objectionable odors affecting a substantial number of people?				X

DISCUSSION:

B.1-B.4:

Construction

Currently, most of the effort to improve air quality in the United States and California is directed toward the control of five pollutants, called "criteria" air pollutants: photochemical oxidants (ozone), carbon monoxide (CO), nitrogen dioxide (NO2), sulfur dioxide (SO2), and inhalable particulate matter (PM10 and PM2.5). Pollutants subject to federal ambient standards are referred to as "criteria" pollutants because the United States Environmental Protection Agency (EPA) publishes criteria documents to justify the choice of standards.

One of the primary reasons for air quality standards is the protection of those members of the population who are most sensitive to the adverse health effects of air pollution, termed "sensitive receptors". The term sensitive receptors refers to specific population groups as well as the land uses where they would reside for long periods. Commonly identified sensitive population groups are children, the elderly, the acutely ill, and the chronically ill. Commonly identified sensitive land uses are residences, schools, playgrounds, child care centers, retirement homes or convalescent homes, hospitals, and clinics. Areas sensitive to air pollutants in or near the project area may include residential areas, schools, and elderly care facilities. Other sensitive areas include the nearest right-of-way where children and the elderly have continuous access to areas such as sidewalk areas or parks.

Construction-related activities such as grading and operation of construction vehicles would create a temporary increase in dustfall on the project site and within the immediate vicinity of the project site. According to the BCAQMD, Butte County is classified as a nonattainment area for ozone and particulate matter, including particulates 10 micron in size or less and 2.5 microns in size or less, as set forth in the following table adapted from the BCAQMD website.

BUTTE COUNTY AMBIENT AIR QUALITY ATTAINMENT STATUS		
<i>POLLUTANT</i>	<i>STATE</i>	<i>FEDERAL</i>
1-hour Ozone	Nonattainment	--
8-hour Ozone	Nonattainment	Nonattainment
Carbon Monoxide	Attainment	Attainment
Nitrogen Dioxide	Attainment	Attainment
Sulfur Dioxide	Attainment	Attainment
Inhalable Particulates (PM10)	Nonattainment	Attainment
Inhalable Particulates (PM2.5)	Nonattainment	Nonattainment

Most of the dust generated should be large enough to quickly settle. Pursuant to Chico Municipal Code requirements and Butte County Air Quality Management District Rule 205, Fugitive Dust Emissions, the project will be required to implement Best Available Control Measures during construction to minimize dust emissions (BCAQMD 2010) until all surfaces are landscaped or otherwise stabilized:

- During clearing, grading, earth-moving, or excavation operations, fugitive dust emissions shall be controlled by regular watering, paving of construction roads, or other dust-preventative measures.
- All material excavated or graded shall be sufficiently watered to prevent excessive amounts of dust. Watering, with complete coverage, shall occur at least twice daily, preferably in the late morning or after work is done for the day.
- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 15 mph averaged over 1 hour.
- All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust.
- The area disturbed by demolition, clearing, grading, earth-moving, or excavation operations shall be minimized at all times.
- Portions of the construction site to remain inactive longer than a period of 3 months shall be seeded and watered until grass cover is grown.
- All on site roads shall be paved as soon as feasible or watered periodically or chemically stabilized.

Existing City regulations require all grading plans to include a dust suppression plan specifying standard Best Management Practices (BMPs) which reduce the incidence of fugitive dust to a less than significant level. All demolition work is required to comply with National Emission Standard for Hazardous Air Pollutants (NESHAPS) regulations.

Long-term impacts

Following construction electric pumps will be used to draw water into the domestic water distribution system, and a backup diesel generator will be used in emergencies and during periodic testing to verify operability. Very little traffic or other air pollutant generation would result from the operational aspects of the project. Therefore the project is considered to have a **Less Than Significant Impact**.

B5. The project is not of a nature that might create objectionable odors. **No Impact**

Mitigation: None Required.

C. Biological Resources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Will the project or its related activities result in:				
1. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species as listed and mapped in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		
2. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.				X
3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				X
4. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?		X		
5. Result in the fragmentation of an existing wildlife habitat, such as blue oak woodland or riparian, and an increase in the amount of edge with adjacent habitats.				X
6. Conflict with any local policies or ordinances, protecting biological resources?				X

DISCUSSION:

C.1-C.6: The proposed well drilling project is located in an existing urban setting with minimal biological resource value. The project site does not contain any special habitat or wetlands, and the project would not conflict with any local ordinance regarding wildlife. With regard to questions C.2, C.3, C.5 and C.6, the project would have **No Impact**.

No tree removal is proposed, however, some branch trimming may be necessary to accommodate the installation of the 20-24 foot tall sound wall. If the removal of tree branches or the drilling operation takes place during the migratory bird nesting season, then there is a potential to disturb or destroy active migratory bird nests (including special status raptor species). Such disturbance or destruction of active migratory bird nests during construction activities is considered a potentially significant impact subject to mitigation. Requiring compliance with Mitigation Measure C.1, below, will reduce the potential for impacting migratory birds to a level that is **Less Than Significant with Mitigation Incorporated**.

Regarding potential root disturbance of existing trees, the applicant will be required to provide a Tree Protection Plan under existing City regulations found under Municipal Code sections 16.66 and 19.68.060. These code sections require a detailed plan, prepared by a certified arborist, that ensures proper protections are in place prior to site disturbance and includes protocols to minimize potential damage to tree root systems. Examples of the types of measures typically included in a Tree Protection Plan include fencing off sensitive areas around trees, adhering to ANSI pruning standards, and using special excavation methods (such as hand tools or water) when excavating in the root zones of trees.

With implementation of the existing City requirements, requiring preparation of a Tree Protection Plan, the potential impact to the health of existing trees is considered **Less Than Significant**.

Mitigation:

Mitigation Measure C.1: Ground-disturbing activities and/or tree removal/pruning shall occur during the non-breeding season for migratory birds (September 1 through February 28), or the developer shall hire a qualified biologist to conduct a field survey to determine the presence of nesting migratory birds. The results of the survey shall be communicated to Planning staff in writing, and shall include any recommendations necessary to avoid nesting migratory birds, if active nests are present. Tree removal or ground-disturbing activities shall only commence between March 1 and August 31 upon written concurrence from Planning staff that the survey is adequate and if no active nests will be impacted by the tree removal. If active nests are found during the surveys, construction activities shall be prohibited within a specified buffer zone or postponed until after the breeding season, as determined by a qualified biologist in coordination with Planning staff.

Mitigation Monitoring C.1: Community Development Department and/or Public Works Department staff will require submittal of the bird survey prior to issuance of any permits for the project unless the work will commence during the non-breeding season.

D. Cultural Resources	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Will the project or its related activities:				
1. Cause a substantial adverse change in the significance of an historical resource as defined in PRC Section 15064.5?			X	
2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to PRC Section 15064.5?			X	
3. Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?			X	
4. Disturb any human remains, including those interred outside of formal cemeteries?			X	

DISCUSSION:

D.1: The existing pump house structure that would be demolished as part of the project dates back to 1939 when the existing well was established. The project, and specifically the demolition of the pump house building was referred to the Chico Heritage Association (CHA) in January, 2014. No written comments were returned but City staff followed up with two telephone conversations with Mr. Richard Macias, a CHA member who often comments on development projects. Mr. Macias informed staff that he had reviewed the proposed demolition with several colleagues and that the pump house building did not appear to be historically significant. Other examples of the same type of pump house are located elsewhere in the City, including the station located at 315 West 16th Street. Since the existing pump house appears to be of routine interest, demolishing it as part of the project is considered **Less Than Significant**.

D.2 – D.4: Like much of the City, the project site is considered an area of high archaeological sensitivity as designated by the Northeast Information Center and the Chico 2030 General Plan Environmental Impact Report. The site has been previously disturbed as a result of being occupied by two different domestic drinking wells. The results of a records search by the Northeast Information Center (June 2014) were negative for prehistoric or historic resources within the project area. However, two prehistoric sites and eight historic sites have been recorded within one mile of the project site. In addition, a local Mechoopda Tribe representative was consulted and raised no concerns about this project, but did ask to be contacted if prehistoric sites or features are unexpectedly discovered during ground moving activities.

Although no known cultural resources exist at the site, there is a potential that site-disturbing activities will uncover previously unrecorded cultural resources. Halting construction work and observing standard protocols for contacting City staff and arranging for an evaluation of cultural resources in the case of a discovery is a standard practice, typically noted on all grading and building plans. Mitigation Measure D.1, below, would minimize the potential damage to previously unrecorded cultural resources in the event that such resources are unearthed during construction and would reduce this potential impact to a level that is **Less Than Significant With Mitigation Incorporated**.

Mitigation:

Mitigation Measure D.1: If during ground disturbing activities, any bones, pottery fragments or other potential cultural resources are encountered, the developer or their supervising contractor shall cease all work within the area of the find and notify Planning staff at 879-6800. A professional archaeologist who meets the Secretary of the Interior’s Professional Qualification Standards for prehistoric and historic archaeology and who is familiar with the archaeological record of Butte County, shall be retained by the applicant to evaluate the significance of the find. Planning staff shall notify all local tribes on the consultation list maintained by the State of California Native American Heritage Commission, to provide local tribes the opportunity to monitor evaluation of the site. Site work shall not resume until the archaeologist conducts sufficient research, testing and analysis of the archaeological evidence to make a determination that the resource is either not cultural in origin or not potentially significant. If a potentially significant resource is encountered, the archaeologist shall prepare a mitigation plan for review and approval by the City Community Development Department, including recommendations for total data recovery, Tribal monitoring, disposition protocol, or avoidance, if applicable. All measures determined by the Community Development Director to be appropriate shall be implemented pursuant to the terms of the archaeologist’s report. The preceding requirement shall be incorporated into construction contracts and documents to ensure contractor knowledge and responsibility for proper implementation.

Mitigation Monitoring D.1: Community Development Department and/or Public Works Department staff will verify that the above wording is included on project grading and construction plans. Should cultural resources be encountered, the supervising contractor shall be responsible for reporting any such findings to the Community Development Department, and contacting a professional archaeologist to evaluate the find.

E. Geology /Soils	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Will the project or its related activities:				
1. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:			X	
a. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Div. of Mines & Geology Special Publication 42)			X	
b. Strong seismic ground shaking?			X	
c. Seismic-related ground failure/liquefaction?			X	
d. Landslides?			X	
2. Result in substantial soil erosion or the loss of topsoil?			X	

E. Geology /Soils	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Will the project or its related activities:				
3. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
4. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
5. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water, or is otherwise not consistent with the Chico Nitrate Action Plan or policies for sewer service control?				X

DISCUSSION:

E.1: The City of Chico is located in one of the least active seismic regions in California and contains no active faults. Currently, there are no designated Alquist-Priolo Special Studies Zones within the Planning Area, nor are there any known or inferred active faults. Thus, the potential for ground rupture within the Chico area is considered very low. Under existing regulations, all future structures will incorporate CBC standards into the design and construction, which will adequately minimize potential impacts associated with ground-shaking during an earthquake. The potential for seismically-related ground failure or landslides is considered **Less Than Significant**.

E.2-4: Drilling and development of the new well, and the ensuing construction will be subject to existing City regulations, which require the inclusion of appropriate erosion control and sediment transport best management practices (BMPs) as standard conditions of building permit issuance. The applicant possesses a special water discharge permit pursuant to the National Pollution Discharge Elimination Permit (NPDES) from the Regional Water Quality Control Board (RWQCB) per §402 of the Clean Water Act, and will be required to amend that permit to cover the activities associated with the project.

Additionally, the city has developed a Storm Water Management Program (SWMP) per the Phase II requirements established by §402 of the Clean Water Act. All projects within the city’s jurisdiction must adhere to the applicable standards of the SWMP, which includes both construction activity and post-construction storm water discharge BMPs.

Furthermore, the City and Air Quality District require implementation of all applicable fugitive dust control measures, which further reduces the potential for construction-generated erosion. The new building will also be required to meet all requirements of the California Building Code which will address potential issues of ground shaking, soil swell/shrink, and the potential for liquefaction.

As a result, potential future impacts relating to geology and soils are considered to be **Less Than Significant**.

E.5: No septic tanks or alternative waste water disposal systems are proposed. Therefore the proposal is considered to have **No Impact**.

Mitigation: None Required.

F. Greenhouse Gas Emissions	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Will the project or its related activities:				

1. Generate greenhouse gas (GHG) emissions, either directly or indirectly, that may have a significant impact on the environment?	X
2. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	X

DISCUSSION:

F.1-2: In 2012, the Chico City Council adopted a Climate Action Plan (CAP), which sets forth objectives and actions that will be undertaken to meet the City's GHG emission reduction target of 25 percent below 2005 levels by the year 2020. This target is consistent with the State Global Warming Solutions Act of 2006 (AB 32, Health & Safety Code, Section 38501[a]).

Creation and maintenance of the CAP are directed by a number of goals, policies and actions in the City's General Plan (SUS-6, SUS-6.1, SUS-6.2, SUS-6.2.1, SUS-6.2.2, SUS-6.2.3, S-1.2 and OS-4.3). Growth and development assumptions used for the CAP are consistent with the level of development anticipated in the General Plan Environmental Impact Report (EIR). The actions in the CAP, in most cases, mirror adopted General Plan policies calling for energy efficiency, water conservation, waste minimization and diversion, reduction of vehicle miles traveled, and preservation of open space and sensitive habitat.

Section 15183.5(b) of Title 14 of the California Code of Regulations states that a GHG Reduction Plan, or a Climate Action Plan, may be used for tiering and streamlining the analysis of GHG emissions in subsequent CEQA project evaluation provided that the CAP does the following:

- A. Quantify greenhouse gas emissions, both existing and projected over a specified time period, resulting from activities within a defined geographic area;
- B. Establish a level, based on substantial evidence, below which the contribution to greenhouse gas emissions from activities covered by the plan would not be cumulatively considerable;
- C. Identify and analyze the greenhouse gas emissions resulting from specific actions or categories of actions anticipated within the geographic area;
- D. Specify measures or a group of measures, including performance standards, that substantial evidence demonstrates, if implemented on a project-by-project basis, would collectively achieve the specified emissions level;
- E. Establish a mechanism to monitor the plan's progress toward achieving the level and to require amendment if the plan is not achieving specified levels; and
- F. Be adopted in a public process following environmental review.

Chico's CAP, in conjunction with the General Plan, meet the criteria listed above. Therefore, to the extent that a development project is consistent with CAP requirements, potential impacts with regard to GHG emissions for that project are considered to be less than significant.

New development and redevelopment must adhere to a number of City policy documents, building code requirements, development standards, design guidelines, and standard practices that collectively further the goals and, in many cases, directly implement specific actions required by the CAP. Below is a list of measures found in the CAP which are applied on a project-by-project basis, and which aid in implementing the CAP:

- Consistency with key General Plan goals, policies, and actions that address sustainability, smart growth principles, multi-modal circulation improvements, and quality community design
- Compliance with California's Title 24 Building Energy Efficiency Standards for Residential and Non-Residential Buildings
- Compliance with the City's tree preservation ordinance
- Incorporation of street trees and landscaping consistent with the City's Municipal Code
- Consistency with the City's Design Guidelines Manual
- Consistency with the State's Water Efficient Landscape Ordinance (AB 1881)
- Compliance with the City's Residential Energy Conservation Ordinance, which requires energy and water efficiency upgrades at the point-of-sale, prior to transfer of ownership (e.g., attic insulation, programmable thermostats, water heater insulation, hot water pipe insulation, etc.)

- Provision of bicycle facilities and infrastructure pursuant to the City’s Bicycle Master Plan
- Installation of bicycle and vehicle parking consistent with the City’s Municipal Code
- Coordination with the Butte County Association of Governments to provide high quality transit service and infrastructure, where appropriate
- Consistency with the Butte County Air Quality Management District’s CEQA Handbook
- Adherence to Butte County Air Quality Management District mitigation requirements for construction sites (e.g., dust suppression measures, reducing idling equipment, maintenance of equipment per manufacturer specs, etc.)
- Requirement for new employers of 100+ employees to submit a Transportation Demand Management Plan
- Diversion of fifty percent (50%) of construction waste
- Compliance with the City’s Capital Improvement Plan, which identifies new multi-modal facilities and connections
- Option to incorporate solar arrays in parking areas in lieu of tree shading requirements
- Consistency with the City’s Storm Drainage Master Plan

As part of the City’s land use entitlement and building plan check review processes, development projects in the City are required to include and implement applicable measures identified in the City’s CAP. As the proposed project is consistent with the City’s General Plan, entails provision of water service as directed by General Plan policy, and is subject to measures identified in the City-adopted CAP, it is therefore considered to be **Less Than Significant**.

Mitigation: None Required.

G. Hazards /Hazardous Materials	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Will the project or its related activities:				
1. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?				X
2. Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				X
3. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?				X
4. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
5. For a project located within the airport land use plan, would the project result in a safety hazard for people residing or working in the Study Area?				X
6. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the Study Area?				X
7. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X

G. Hazards /Hazardous Materials	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Will the project or its related activities:				
8. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X

DISCUSSION:

G.1 – G.8: Once construction is completed, normal operation of the pump station will include storage of sodium hypochlorite (chlorine bleach), within the chemical room of the pump building. Sodium hypochlorite is used for water disinfection prior to introduction to the distribution system. The chemical room will be locked at all times, except during maintenance visits by trained Cal Water staff.

Sodium hypochlorite is classified as a hazardous material by the California Occupational Safety and Health Administration (Cal OSHA) under Title 8 of the California Code of Regulations (8 CCR 339). California's Regional Certified Unified Program Agencies (CUPAs) are the regional governmental agencies tasked with compliance oversight of hazardous materials in storage. The Butte County Public Health Department is the overseeing CUPA for Butte County. Under the CUPA program Cal Water will be required to update and maintain a Hazardous Materials Business Plan that addresses proper storage management, employee training, and emergency response planning associated with keeping sodium hypochlorite at the proposed facility. In addition, the City will verify that the building construction complies with State Fire Code requirements for the storage of large amounts of sodium hypochlorite. Proper storage management of this material will follow in accordance with these existing regulations, and potential impacts from the storage of hazardous materials is considered to have **No Impact**.

The project site is not listed as a state or federal hazardous waste site (pursuant to Governmental Code Section 65962.5) or identified as a hazardous site in the General Plan EIR. Construction of the property would not interfere with an adopted emergency response plan or emergency evacuation plan. The property is not near a wild land fire area. Because the project will not introduce hazards or exposed persons to hazardous materials, the project is considered to have **No Impact** with regard to hazardous materials.

Mitigation: None Required.

H. Hydrology/ Water Quality	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Will the project or its related activities:				
1. Violate any water quality standards or waste discharge requirements?			X	
2. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted?			X	
3. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	

H. Hydrology/ Water Quality	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Will the project or its related activities:				
4. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-or off-site?			X	
5. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
6. Otherwise substantially degrade water quality?			X	
7. Place real property within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
8. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?				X
9. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
10. Inundation by seiche, tsunami, or mudflow?				X

DISCUSSION:

H.1, H.3-H.6: The project is not expected to violate any water quality standards or degrade water quality. Necessary discharges to waste water systems will occur during the initial well development (purging) phase, and infrequently in the future for maintenance or water quality testing. A Wastewater Discharge Permit will be obtained from the City of Chico for discharges of initial well development waters that do not meet standards for discharge into the City’s storm drain system. These waters will be directed to the sanitary sewer system after being directed through a series of settling tanks to allow for settling of solid particles before discharge. After water clarity improves then further discharges from development of the well will be directed into the storm drain system.

The project will be added to the applicant’s existing Regional Water Quality Control Board’s National Pollution Discharge Elimination System (NPDES) permit to cover these secondary discharges and, in the future, pump testing and long-term operational maintenance discharges to the storm drain system. All future (operational, infrequent) discharges from the well to the distribution system and storm drain system are expected to meet or surpass Federal and California Department of Public Health (CDPH) drinking water standards promulgated under Title 22 of the California Code of Regulations.

With regard to storm water runoff, the majority of the site would remain unpaved and landscaped in a manner that would intercept and allow infiltration of surface runoff. Storm water quality and quantity treatment will be required in accordance with State regulations prior to development of the site as part of building permit review and approval. With implementation of these existing regulations the potential impacts to water quality, changing drainage patterns and increasing surface runoff would be **Less Than Significant Impact**.

H.2: The proposed new well would accommodate the water demands of existing nearby development as well as planned future development that will be connected to the same water distribution system. Although the new well design capacity will be approximately 1,000 gpm, groundwater pumping will not be 24 hours per day. The well will only pump water when the pressure level in the local distribution system drops below a certain threshold as a result of use by customers. As such, the proposed well will

not increase the amount of groundwater used by residents, but would rather serve to maintain localized water pressures that are typically expected by customers.

The new well, by itself, would not substantially deplete groundwater supplies, but it will be part of a larger system that warrants an impact discussion in the context of cumulative effects. Therefore, the following discussion addresses drawing groundwater in general to serve the Chico urban area.

The Cal Water wells in the Chico area pump groundwater primarily from the Vina and West Butte sub-basins of the Sacramento Valley Groundwater Basin. Historical data indicates that water level decreases in the groundwater basin are seasonal and that the groundwater basin typically recharges during the winter months. Therefore, although long-term historical data shows that well levels seasonally and annually fluctuate, there is no significant difference in the well levels over the long term (CDM, 2005a).

According to the California Water Service Company's 2010 Urban Water Management Plan (UWMP), the groundwater level in the Chico District has proven fairly resilient over the last 37 years, despite the fact that the greatest growth increases in water demand have occurred during the past 20+ years (Cal Water, 2010). In addition to the seasonal variations outlined above, longer periods of groundwater elevation decline and recovery have occurred during this period. For example, a multi-year drought from 1987-1992 reduced the availability of replenishment water and resulted in a 15-foot decline in static groundwater elevation. Recovery from this drought period primarily occurred from 1995-2000, when the average static groundwater elevation rose by 15-feet, back to pre-drought levels.

In 2008, an in-depth Water Supply and Facility Master Plan (WSFMP) was completed for the Chico District by West Yost Associates (WSFMP 2008). The WSFMP analyzed historical water level trend data from 1988 to 2005, to assess the effects of Cal Water's pumping of groundwater supplies. The WSFMP utilized the definition and criteria for overdraft conditions set forth by Department of Water Resources Bulletin 118 and found that the rate of water level decline within the Chico district that would be indicative of overdraft conditions would probably be greater than 1 to 2 feet per year (ft/yr). Overdraft in this context means pumping out more water than can be recharged into the basin over a period of years that approximate average conditions.

The WSFMP analysis of Cal Water wells in the Vina and West Butte sub-basins showed average water level declines ranging from 0.09 ft/yr to 0.10 ft/yr, with some variations attributable to rainfall (WSFMP 2008). This equates to approximately 1/10th to 1/20th the amount estimated to result in potential overdraft conditions using the methodology from the Department of Water Resources. Based on these levels of groundwater elevation change, the potential impact of groundwater depletion is considered **Less Than Significant**.

H.7-H.10: According to the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps, the site is located in unshaded "Zone X," which means that is in an area that has been determined to be outside the 500 year floodplain. The project would not otherwise cause flooding or be subject to flooding, seiche, tsunami, or mudflow. Therefore, potential impacts from flooding is considered **No Impact**.

Mitigation: None required.

I. Land Use and Planning	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Will the project or its related activities:				
1. Conflict with General Plan or Specific Plan policies or zoning regulations?				X
2. Results in a physically divide an established community?				X
3. Results in a conflict with any applicable Resource Management or Resource Conservation Plan?				X

4. Result in substantial conflict with the established character, aesthetics or functioning of the surrounding community?	X
5. Result in a project that is a part of a larger project involving a series of cumulative actions?	X
6. Result in displacement of people or business activity?	X
7. Convert viable prime agricultural land and/or land under agricultural contract to non-agricultural use, or substantially conflict with existing agricultural operations?	X

DISCUSSION:

I.1: The site is zoned residential where utility production uses such as the proposed well require use permit approval. Domestic water wells are common features in residential areas throughout the city. The proposed use is consistent with the City’s General Plan and will be required to adhere to applicable zoning regulations through the use permit and building permit processes. Therefore, with regard to General Plan and zoning consistency, there would be **No Impact**.

I.2: The proposed project is not of a nature that could divide an established community. The project is therefore considered to have **No Impact**.

I.3: There are no resource management or resource conservation plans for the area. The project is therefore considered to have **No Impact**.

I.4: Re-establishing an active well at the pre-existing pump station site, to be used for the same purpose of potable water supply to the surrounding area, will not result in substantial conflicts with the surrounding community and is considered to have a **Less Than Significant Impact**.

I.5: Development of additional wells in the urban area is anticipated by the General Plan herein and re-establishing an active well on the project site is considered to have a **Less Than Significant Impact**.

I.6: The site is an existing Cal Water pump station, and no people will be displaced as a result of re-establishing and active well. **No Impact**.

I.7: The subject site is not located on prime agricultural soils as identified by the California Dept. of Conservation’s Farmland Mapping and Monitoring Program, which identifies the site as “Urban and Built-up Land.” Regarding farmland conversion the project is considered to have **No Impact**.

Mitigation: None Required.

J. Noise Will the project or its related activities:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Exposure of residents in new hotels, motels, apartment houses, and dwellings (other than single-family dwellings) to interior noise levels (CNEL) higher than 45 dBA in any habitable room with windows closed?		X		
2. Exposure of sensitive receptors (residential, parks, hospitals, schools) to exterior noise levels (CNEL) of 65 dBA or higher?		X		
3. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			X	

4. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	X	
5. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	X	
6. For a project located within the airport land use plan, would the project expose people residing or working in the Study Area to excessive noise levels?		X
7. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the Study Area to excessive noise levels?		X

DISCUSSION:

J.1, J.2 and J.4: Based on the results of a noise study prepared for the project the ongoing operational noise levels that can be anticipated for the pump facility will not exceed 30 dBA at nearby property lines (AEC, 2014). The future noise levels will therefore meet all indoor and outdoor noise criteria for daytime and nighttime noise generation as outlined in the City’s General Plan Noise Element. Temporary construction noise and vibration impacts are discussed under items J.3 and J.5, below. It was assumed for the noise study that the pump used for the well will be 75 horsepower or less, and will be housed within a masonry block building with acoustical louvered venting. Mitigation Measure J.1, below, will ensure that City staff verifies the assumptions made for the permanent water pump and building at the time of building permit issuance and later upon project completion. The mitigation provides for alternative building construction to be used if noise attenuation below applicable thresholds can be demonstrated through an updated acoustical analysis or by submitting manufacturer specifications demonstrating that the replacement components would result in equivalent or lesser noise levels.

With the application of Mitigation Measure J.1, operational noise impacts associated with the project are considered to be **Less Than Significant with Mitigation Incorporated.**

J.5: The noise study was updated in March of 2015 to specifically model a temporary sound wall with different construction. Based on the updated study the newer sound wall is anticipated to be 3 decibels less effective than the previous wall (AEC, 2015).

Construction noise, within certain parameters, is listed under Section 9.38.060 of the Chico Municipal Code (CMC), among other “categorical exemptions” for which the City’s general noise regulations do not apply. Section 9.38.060 of the CMC specifically states:

“Notwithstanding any other provision of this chapter, between the hours of ten a.m. and six p.m. on Sundays and holidays, and seven a.m. and nine p.m. on other days, construction, alteration or repair of structures shall be subject to one of the following limits:

- 1. No individual device or piece of equipment shall produce a noise level exceeding eighty-three (83) dBA at a distance of twenty-five (25) feet from the source. If the device or equipment is housed within a structure on the property, the measurement shall be made outside the structure at a distance as close as possible to twenty-five (25) feet from the equipment.*
- 2. The noise level at any point outside of the property plane of the project shall not exceed eighty-six (86) dBA.”*

For construction activities where it is impractical or unreasonable to meet the exemption criteria above, CMC 9.38.070 provides for City issuance of a “conditional noise permit,” for an initial period of up to six months.

During certain, specific phases of the project, construction activities are anticipated to (1) exceed the noise levels allowed for exempt construction, or (2) occur outside of the daytime hours allowed pursuant

to the exemption criteria above. As a result, a conditional noise permit will be required and will be considered in conjunction with the conditional use permit for the well. The following discussion addresses each aspect in greater detail.

Construction noise that exceeds "exempt" noise levels: During the mobilization phase of the project, which would occur prior to drilling operations, the applicant proposes to construct a sound wall, twenty-four feet in height, around the perimeter of the site. The sound wall would have special construction and would encompass the entire well-drilling operation. The noise study indicates that, once the sound wall is in place, daytime noise levels would remain within acceptable ranges throughout the remainder of construction (decibel levels at nearby properties would range between 71-79 dB). However, there would be a period of time *during the construction of the sound wall* when noise levels at the property lines of adjacent residential uses will likely exceed the construction noise thresholds listed above. The noise exposure levels provided by the study for properties adjacent to the project site are as follows:

Address of Adjacent Property (and affected yard area)	L _{eq} Decibel Level at Property Line	L _{max} Decibel Level at Property Line
577 E. 5 th Street (side)	84	89
535 Olive Street (side) and 568 E. 6 th Street (rear)	80	85

Note: L_{eq} and L_{max} descriptors represent average and maximum decibel levels, respectively, assuming all relevant pieces of construction equipment operating simultaneously. AEC 2015.

The noise levels provided in the table above are only anticipated to occur at the given locations while the nearest portions of the sound wall are being constructed – which is a matter of a few hours in each case. As construction of the sound wall progresses around the site, noise levels at adjacent properties would diminish, particularly as the constructed portions of the sound wall block noise from the equipment. Constructing the sound wall before commencing the drilling operation represents the primary manner of applying "Best Management Practices" (or BMPs) to minimize noise impacts associated with the drilling operation. The impact of exposing neighbors to relatively brief periods of construction noise that moderately exceed the exemption thresholds for construction noise is considered less than significant.

Regardless, Mitigation Measure J.2 provided below, will ensure that the assumptions made in the noise study regarding construction details for the sound wall are implemented and the time of exposure of noise that exceeds the exemption thresholds for construction noise is minimized. With the inclusion of Mitigation Measure J.2 the potential impact is **Less Than Significant Impact with Mitigation Incorporated.**

Construction noise occurring outside "exempt" hours for construction noise: As detailed in the *Construction Methods* discussion found in the Project Description section above, installing the well casing and gravel pack envelope ("Steps 5 and 6") must proceed as a continuous, uninterrupted operation immediately following a determination by the Construction Engineer that the borehole is sufficiently wide and clear of drilling cuttings. It is estimated that these continuous operations will take 30 hours to complete, necessitating overnight operations for one night. The installation of the casing will only commence if everything needed to complete the operation is in place and the work can begin before 1pm on the given day (resulting in an estimated completion time of 7pm the following day for the ensuing gravel envelope installation). The noise study provides the following noise levels for the casing installation step that would occur during overnight hours:

Address of Adjacent Property (and affected yard area)	L _{eq} Decibel Level at Property Line	L _{max} Decibel Level at Property Line
577 E. 5 th Street (side)	78	78
535 Olive Street (side) and 568 E. 6 th Street (rear)	73	73

Note: L_{eq} and L_{max} descriptors represent average and maximum decibel levels, respectively, assuming all relevant pieces of construction equipment operating simultaneously. AEC 2015.

The table above represents outdoor noise levels, and it is anticipated that affected neighbors can sleep with windows closed on the night of construction. Typical residential buildings provide noise attenuation of 30 dB or more, though single-pane windows can provide attenuation as low as 26 dB. Therefore, indoor noise levels during the night of well casing installation are anticipated to fall in the range of 44-49 dB.

The primary concern for night time noise is sleep disturbance, particularly chronic awakenings that can damage the receptor's health and wellbeing over time. An interior noise level of 45 dB is the lower end of the range that tends to produce sleep disturbance in the general population, and it is the threshold used in the Chico General Plan for new (permanent) transportation sources. While the night time noise levels for the project may exceed 45 dB at nearby residential interior spaces and potentially result in sleep disturbance for certain neighbors, the short duration (one night) renders the impact a temporary inconvenience as opposed to a health hazard.

To support the basis on which the impact of overnight construction is considered to be a less than significant, Mitigation Measure J.3 will require confirmation by City staff that all necessary elements needed to complete the well casing installation and gravel pack envelope installation is in place and the work will begin before 1pm on the day when casing installation is commenced. With the inclusion of Mitigation Measure J.3, the duration of nighttime noise for the project is expected to be limited to one evening and the impact is considered **Less Than Significant with Mitigation Incorporated**.

Although the inconvenience of potentially experiencing sleep disturbance for one night is not considered a significant environmental impact, notifying nearby residents of when the overnight construction will occur and of the construction schedule in general would serve to minimize the inconvenience they experience. Mitigation Measure J.4 provided below requires the applicant to notify neighbors of the general construction schedule prior to commencement and then again shortly before the overnight operation when that date becomes known (See Mitigation Measure J.4, below).

J.3: No noticeable ground vibration is expected as part of the ongoing well and pump facility operations, however, low magnitude ground vibrations are likely to occur during various aspects of the construction. Running large motors on the ground surface and engaging the subsurface geology with drilling equipment will produce droning vibrations that are likely to be heard and felt at nearby residences. While perceptible, the vibrations from construction equipment and drilling will not cause structural or cosmetic damage to nearby residential structures. Vibrations and noise from construction activities are therefore considered a temporary nuisance which does not constitute a significant environmental impact.

Regardless, again, Mitigation Measure J.4 below, requiring notification of nearby neighbors in advance of general construction and again just prior to overnight drilling operations, will reduce the uncertainty associated with the timing of construction and the corresponding noise and vibrations. Other mitigation notwithstanding, potential impacts associated with vibration are considered **Less Than Significant**.

J.6 – J.7: The project site is not located within close proximity to either of Chico's two airports, and therefore this impact is considered **Less Than Significant**.

MITIGATION:

Mitigation Measure J.1: The pump motor shall be 75 horsepower or less, and located within a pump house building. The pump house building shall be constructed using concrete block walls, plywood roof with fiberglass shingles, and acoustical louvered vents (IAC Slimshield 6" depth Quiet-Vent Louver, or equivalent). The finished building walls shall be continuous along their length with no gaps in the construction, with the exception of the designed acoustical louvered openings and opening for the roof ventilation fan. Use of a larger pump motor or substitution of materials shall require further noise analysis to ensure compliance, unless manufacturer specifications of the replacement component(s) demonstrate that equivalent or lesser noise levels would result from the change.

Mitigation Monitoring J.1: Community Development Department staff will review building plans for compliance with the construction details specified by Mitigation Measure J.1 and the building permit will only be issued once compliance is demonstrated by the applicant. Community Development Department staff will conduct a final inspection to ensure compliance with the construction details specified by Mitigation Measure J.1 and will only issue a permit final if the project is in conformance with the specified construction details.

Mitigation Measure J.2: The proposed sound wall to attenuate noise generated during the well drilling and development phases of the project shall meet the following specifications:

- 1) The wall shall be 20-24 feet in height, referenced to the ground elevation on the project site.
- 2) The wall assembly shall, at minimum, consist of a double layer of batt insulation sewn between vinyl laminates (approximately 2 lbs/sq. ft.).
- 3) The wall shall be continuous along its length and height with no gaps, including at the ground.
- 4) The wall shall fully encircle the drilling area and equipment during operation, opened only to move equipment, materials, and/or personnel in and out between tasks.

Mitigation Monitoring J.2: Community Development Department staff will review building plans for compliance with the construction details specified by Mitigation Measure J.2 and the building permit will only be issued once compliance is demonstrated by the applicant. Community Development Department staff will conduct a field visit prior to drilling operations to inspect the completed sound wall and confirm compliance with the construction details specified by Mitigation Measure J.2 prior to commencement of drilling.

Mitigation Measure J.3: To minimize the need for overnight operations, the applicant shall direct the drilling contractor to schedule, prepare, and stage work crews, materials, and equipment in such a manner to complete well casing and gravel envelope installation operations as efficiently as possible. Construction operations for the installation of well casing and gravel envelope shall only commence after it is contemporaneously demonstrated to Community Development Department staff that:

- 1) All materials (casing, gravel, etc.) are on site and prepared for installation
- 2) All equipment necessary for casing installation is onsite, functioning properly, and prepared for use
- 3) All necessary work crew members are onsite and prepared for work
- 4) Availability of replacement work crew members is confirmed

Further, the contractor will only begin well casing installation if the operation is able to commence before 1pm on the same day the preparation criteria above are met. All preceding work, including caliper logging, cleaning out the borehole, removing drilling tools, etcetera, shall be completed by the 1pm deadline in order to proceed with the well casing installation that day.

Mitigation Monitoring J.3: The applicant shall direct the Construction Engineer to coordinate one or more timely site inspections with Community Development Department staff to confirm that the elements listed in Mitigation Measure J.3 are in place prior to 1pm on the day of commencing well casing installation. Community Development Department staff will document compliance with Mitigation Measure J.3 via electronic mail to the applicant.

Mitigation Measure J.4: The applicant shall provide at least two hard copy notifications to all residents within 250 feet of the project site, and to the Community Development Director or designee, as follows:

- 1) The first required notification shall provide the estimated dates for drilling, casing installation, and other project milestones, and shall be served prior to the mobilization step of the drilling process (roughly one week before construction of the sound wall). This first notice shall also include the typical work day hours when construction activity is anticipated.
- 2) The second required notification shall inform residents of the anticipated date of overnight construction. This second notification shall be provided at least 24 hours prior to the 1pm deadline set forth by Mitigation Measure J.3. If a delay occurs after the second notice is delivered and the overnight construction must be rescheduled then a subsequent notice for the new date shall be distributed as soon as practicable, however no later than 7pm on the evening before the rescheduled deadline. Additional notices shall be provided, as applicable, should any further rescheduling of overnight construction become necessary.

The applicant shall also establish an electronic mailing list of neighbors/interested parties and provide weekly updates of the construction progress, noting any relevant adjustments to the schedules disseminated pursuant to the hard copy notices required by this mitigation measure.

Mitigation Monitoring J.4: Community Development Department staff will receive the notices and other communications required by Mitigation Measure J.4 and retain them in the project file. CDD staff will

conduct periodic site inspections and seek compliance or issue stop work orders if necessary to attain compliance.

With the application of Mitigation Measures J.1 through J.4, noise impacts from the project are considered to be **Less Than Significant with Mitigation Incorporated**.

K. Open Space/ Recreation	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Will the project or its related activities:				
1. Affect lands preserved under an open space contract or easement?				X
2. Affect an existing or potential community recreation area?				X
3. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?				X
4. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X

DISCUSSION:

K.1 - K.4: The project site is private property that is not in an open space contract, nor does it contain an open space easement, or affect potential community recreation areas. Therefore, with respect to open space and recreation the proposed project would have **No Impact**.

Mitigation: None Required.

L. Population/ Housing	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Will the project or its related activities:				
1. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
2. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
3. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X

DISCUSSION:

L.1-L.3: The project would result in continued reliable potable water service to an existing residential neighborhood, and would not cause population growth or displacement of people or housing. Regarding population and housing the project is considered to have **No Impact**.

Mitigation: None Required.

M. Public Services	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Will the project or its related activities have an effect upon or result in a need for altered governmental services in any of the following areas:				
1. Fire protection?				X

2. Police protection?	X
3. Schools?	X
4. Parks and recreation facilities? (See Section J Open Space/Recreation)	X
5. Maintenance of public facilities, including roads, canals, etc.?	X
6. Other government services?	X

DISCUSSION:

M.1: The project would enhance fire protection capabilities in the project area by providing a boost in water pressure in the distribution system around the project site. Since the effect is beneficial it is considered to have the lowest impact level: **No Impact.**

M.2-M.6: Adding an active well at a pre-existing pump station will generally have no adverse impact on governmental services. Therefore, impacts to government services are considered to have **No Impact.**

Mitigation: None Required.

N. Transportation/Circulation Will the project or its related activities:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?			X	
2. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?			X	
3. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?			X	
4. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			X	
5. Result in inadequate emergency access?			X	
6. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			X	

(see next page for discussion)

DISCUSSION:

N.1–N.6: Adding an active well at a pre-existing pump station will generally have no adverse impact on air or vehicle traffic in the area. There will be a noticeable amount of increased traffic during construction, including delays and possible detours associated with construction in the public right of way. Proper traffic controls will be required as a standard condition of encroachment permit approval for work in the public right of way. Following construction and under normal operation of the station, a very small amount of traffic is anticipated for routine operational and maintenance site visits. Therefore, traffic impacts are considered to be **Less Than Significant**.

Mitigation: None Required.

O. Utilities Will the project or its related activities have an effect upon or result in a need for new systems or substantial alterations to the following utilities:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Water for domestic use and fire protection?				X
2. Natural gas, electricity, telephone, or other communications?				X
3. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	
4. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
5. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			X	
6. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?			X	
7. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?			X	
8. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
9. Comply with federal, state, and local statutes and regulations related to solid waste?			X	

DISCUSSION:

O.1-O.2: Constructing a new well on the project site would enhance water service for domestic and fire protection purposes in the project vicinity, and would have no impact on power or communications utilities. Therefore, with regard to these issues the project is considered to have **No Impact**.

O.3-O.7: Developing a new well on the project site would require obtaining permits from the City and State as mentioned above. To maintain compliance for all local and regional discharge permits the applicant will be required to test water quality to ensure applicable standards are met prior to discharging waste water into the sanitary sewer system or storm drain system. Part of the project includes extending a storm drain line approximately two blocks to the site to ensure that infrastructure

capacity is available during development of the new well. This work will be done within the public right of way, under an encroachment permit. In the future, the new storm drain line will be available during maintenance work for the well and will enhance conveyance of surface storm water runoff from streets in the immediate vicinity. This combination of beneficial effects and minor temporary burden of the sewer and storm drainage systems is considered to be **Less Than Significant**.

O.8 and O.9: Available capacity exists at the Neal Road landfill to accommodate waste generated by the project. This impact would be **Less Than Significant**.

Mitigation: None Required.

V. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
A. The project has the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.				X
B. The project has possible environmental effects which are individually limited but cumulatively considerable. (Cumulatively considerable means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past, current and probable future projects).			X	
C. The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.				X

DISCUSSION:

A-C: Mitigation has been included that will avoid potentially significant impacts related to noise during construction and future operation of the new well. Based on the preceding environmental analysis, the application of existing regulations will ensure that all potentially significant environmental impacts from the proposed project, including those related to water quality, air quality and cultural resources, would be minimized or avoided, and that the project will not result in direct or indirect adverse effects on human beings or the environment, nor result in significant cumulative impacts. **Less Than Significant Impact.**

VI. REFERENCES

- AEC. 2014. Acoustical Engineering Consultants. Noise Impact Assessment for Chico 9-03 Well Drilling Project in Chico, California. Prepared by Brian R. Smith, Principal. INCE Board Certified. February 21, 2014.
- AEC. 2015. Acoustical Engineering Consultants. Revised Sound Wall Plan for Chico 9-03 Well Drilling Project in Chico, California. Prepared by Brian R. Smith, Principal. INCE Board Certified. March 31, 2015.
- Butte County. 2000. The Butte County Airport Land Use Compatibility Plan, Shutt Moen, February, 2000.
- BCAQMD. 2010. Rule 205, Fugitive Dust Emissions. Butte County Air Quality Management District . Online resource. http://www.bcaqmd.org/page/_files/Final-StrikeThrough-Rule-205-Adopted-05-20-10.pdf. 2010.
- Cal Water. 2010. California Water Service Company, 2010 Urban Water Management Plan, Chico-Hamilton District, Final Draft. California.
- California Department of Conservation. 2012. Farmland Mapping and Monitoring Program. Online resource ftp <http://maps.conservation.ca.gov/ciff/ciff.html>.
- CDM. 2005a. Butte County Groundwater Management Plan. Camp Dresser and McKee. Oroville, California.
- CDM. 2005b. Integrated Water Resources Plan, Butte County. Camp Dresser and McKee. Department of Water and Resource Conservation. Oroville, California.
- Chico General Plan. 2011. City of Chico General Plan, adopted April 12, 2011.
- Chico GP EIR. 2011. City of Chico General Plan Environmental Impact Report. State Clearinghouse Number 2008122038. Adopted April 12, 2011.
- Chico Municipal Code. http://www.ci.chico.ca.us/government/municipal_code.asp. 2014.
- DTSC. 2011. California Department of Toxic Substances Control. Hazardous Waste and Substances Sites List. www.envirostar.dtsc.ca.gov. 2011.
- EPA. 2011. Groundwater Division of the Water Program of the Southwest Pacific Region. United States Environmental Protection Agency. Online resource. <http://www.epa.gov/region9/water/groundwater/ssa.html>. 2011.
- FEMA. 2011. Flood Insurance Rate Maps 06007C0502E. <http://map1.msc.fema.gov/>. 2014.
- NRCS. 2006. Soil Survey of Butte Area, California, Parts of Butte and Plumas Counties. Natural Resources Conservation Service. 2006.
- Sawley. 2014. General professional knowledge of Mike Sawley, Associate Planner (Document Preparer). City of Chico. 2014.
- SWRCB. 2011. State Water Resources Control Board. <http://geotracker.swrcb.ca.gov>. 2011.
- USFWS Wetlands. 2011. Wetlands Mapper from the U.S. Fish and Wildlife Service. Interactive online resource. <http://137.227.242.85/wetland/wetland.html>. 2011.
- USFWS Rivers. 2011. National Wild and Scenic Rivers System. U.S. Fish and Wildlife Service. Online resource. <http://www.rivers.gov/maps/conus-200.pdf>. 2011
- WSFMP. 2008. Water Supply and Facility Master Plan, Chico-Hamilton. West Yost Associated. 2008

March 28, 2016

City of Chico Planning Commission
401 Main Street
Chico, CA 95928

Re: Noise impacts of Chico Well Station 9-03 Project - Use Permit 13-04

Dear Planning Commissioners;

We will be on vacation when the public hearing is held for this revised project - April 7, 2016. Therefore, we have gathered our concerns within this correspondence.

One of our concerns is that potential noise impact analysis has focused on only the noise generated during the temporary construction period. Little analysis and no set maximum decibel level has been recommended to address the on-going noise generation of the permanent pumping station on the surrounding residential neighborhood.

With regard to the noise levels of the pumping operation, the City has relied on Acoustical Engineering Consultants (AEC) assumption that "the ongoing operational noise levels that can be anticipated for the pump facility will not exceed 30 dBA at nearby property lines (AEC, 2014)."

Noise level impacts from construction activity will be disruptive and potentially hazardous due to ground vibrations, and sensitive noise receptors (residential neighborhood with several senior citizens living in proximity). Yes, we understand that this noise/vibration will be temporary and we appreciate the efforts to mitigate those impacts.

The ongoing pumping operation; however, is an activity that will occur at all hours of the day and night continuously and for many years. It is imperative that the pump station noise be prohibited from spilling over into the existing residential neighborhood especially during nighttime sleeping hours.

Neighbors are relying on the City of Chico to safeguard the public interest in this matter. We urge the Commission to direct staff to include a noise impact mitigation in the initial study that has a measurable performance standard. AEC's estimated 30dBA should be included as a mitigation measure as a quantifiable, enforceable maximum permissible noise level on pump motor operations.

We also remain adamant that the aesthetic design of the structure be consistent and compatible with the surrounding historic neighborhood. This is the first new Cal-Water project ever constructed in an existing Chico neighborhood. Additionally, that special monitoring of potential construction impacts to the existing 28-foot diameter redwood tree (*Sequoia sempervirens*) be diligently enforced.

Thank you for including our concerns in your deliberations



Steve Scarborough and Pam Figge
583 E. 5th Street
Chico, CA 95928

cc: Pete Bonacich, District Director, California Water Company

Attachment F