SIERRA VALLEY GROUNDWATER MANAGEMENT DISTRICT

GROUNDWATER RECHARGE PROJECT LITTLE LAST CHANCE CREEK

FEBRUARY 2025

MICHAEL J. WILHELM, P.E.



J-U-B ENGINEERS, INC.

5190 Neil Rd. Ste. 500. Reno. NV 89502 p 775 852 1440 wwww.jub.com



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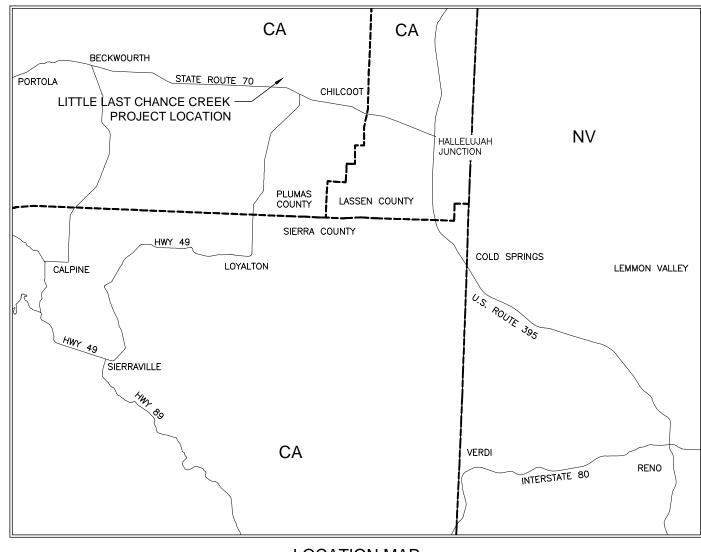


GATEWAY MAPPING



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LOCATION MAP

SIERRA VALLEY GROUNDWATER MANAGEMENT DISTRICT 18012 CA-89 CALPINE, CA 96124 (530) 414-6831

CIVIL ENGINEER/ SURVEY: MIKE WILHELM, PE (CA) BEN VOLK, PE (NV) J-U-B ENGINEERS, INC 5190 NEIL RD. STÉ. 500 RENO, NV 89502 (775) 852-1440

PRIME CONSULTANT:
BETSY ELZUFON, PROJECT MANAGER LARRY WALKER ASSOCIATES 148 DREW AVE. STE. 100 DAVIS, CA 95618 (530) 219-3693

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GENERAL NOTES

- 1. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE CALTRANS STANDARD SPECIFICATIONS 2024 EDITION, "GREEN BOOK" AND THE 2022 HIGHWAY DESIGN MANUAL
- 2. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN ALL NECESSARY TRAFFIC CONTROL THROUGHOUT CONSTRUCTION, IN ACCORDANCE WITH APPLICABLE PARTS OF THE GREEN BOOK, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, (MUTCD, LATEST
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE GENERAL SAFETY DURING CONSTRUCTION, AND ALL WORK SHALL CONFORM TO PERTINENT SAFETY REGULATIONS AND CODES. THE CONTRACTOR SHALL FENCE AND OR BARRICADE THE CONSTRUCTION AREA AS REQUIRED TO PROTECT ADJACENT SITES, VEHICULAR TRAFFIC, AND PEDESTRIAN TRAFFIC. THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE PROVISIONS OF OSHA, IN THE CONSTRUCTION PRACTICES FOR ALL EMPLOYEES DIRECTLY ENGAGED IN THE CONSTRUCTION OF THIS PROJECT.
- 4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND/OR PROTECTION OF ALL EXISTING AND PROPOSED PIPING, UTILITIES, TRAFFIC SIGNAL EQUIPMENT (BOTH ABOVE GROUND AND BELOW GROUND), STRUCTURES ADJACENT TO STREETS, AND ALL OTHER EXISTING IMPROVEMENTS THROUGHOUT CONSTRUCTION.
- 5. THE CONTRACTOR SHALL PURSUE WORK IN A CONTINUOUS AND DILIGENT MANNER TO ENSURE A TIMELY COMPLETION OF THE PROJECT.
- 6. ALL CONSTRUCTION SHALL BE CLOSELY COORDINATED WITH THE OWNER SO THAT THE
- 7. THE CONTRACTOR SHALL INCORPORATE ADEQUATE DRAINAGE PROCEDURES DURING THE CONSTRUCTION PROCESS TO ELIMINATE EXCESSIVE PONDING AND/OR EROSION.
- 8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE SITE IN A NEAT AND ORDERLY MANNER THROUGHOUT THE CONSTRUCTION PROCESS. ALL MATERIALS SHALL BE STORED WITHIN APPROVED CONSTRUCTION AREAS.
- 9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTINUOUS DUST CONTROL THROUGHOUT THE CONSTRUCTION OF ALL ITEMS SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REGULAR CLEANING OF ALL MUD, DIRT, DEBRIS, ETC., FROM ANY AND ALL ADJACENT STREETS AND SIDEWALKS.
- 10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AS REQUIRED.
- 11. SHOULD ANY PREHISTORIC OR HISTORIC REMAINS OR ARTIFACTS BE DISCOVERED DURING SHOULD ANI TRENSIONE OR HISTORIC REMAINS OF ARTIFACTS BE DISCOVERED DURING SITE DEVELOPMENT, WORK SHALL BE TEMPORARILY HALTED AT THE SPECIFIC SITE AND THE STATE HISTORIC PRESERVATION OFFICE OF THE DEPARTMENT OF MUSEUMS, LIBRARY AND ARTS, SHALL BE NOTIFIED TO RECORD AND PHOTOGRAPH THE SITE. THE PERIOD OF TEMPORARY DELAY SHALL BE LIMITED TO A MAXIMUM OF TWO (2) WORKING DAYS FROM THE DATE OF NOTIFICATION.
- 12. A PRECONSTRUCTION CONFERENCE WILL BE HELD WITH OWNER & ENGINEER PRIOR TO
- 13. NO MATERIALS OF ANY KIND SHALL BE STOCKPILED OR CONSTRUCTION EQUIPMENT PARKED ON CONCRETE OR ASPHALT SURFACES.
- 14. CONSTRUCTION OF ALL IMPROVEMENTS MUST ALLOW FOR THE PERPETUATION OF ALL EXISTING LEGAL ACCESSES AND EXISTING DRIVEWAYS DURING & AFTER CONSTRUCTION. FOR RESIDENTIAL DRIVEWAYS AND/OR ROADWAYS THAT REQUIRE TEMPORARY CLOSURE, NOTICES SHALL BE GIVEN TO THE IMPACTED RESIDENTS 48 HOURS IN ADVANCE, AND AGAIN 1 HOUR BEFORE CLOSING ACCESS. TEMPORARY ACCESS SHALL BE RESTORED AT
- 15. THE CONTRACTOR SHALL FURNISH PRODUCT SUBMITTALS FOR IMPROVEMENTS INCLUDING MANUFACTURER'S SPECIFICATIONS, SHOP DRAWINGS, CONCRETE MIX DESIGNS, GRADATION CERTIFICATIONS, ETC. FOR REVIEW BY THE ENGINEER OF RECORD. SUBMITTALS SHALL BE FURNISHED PROMPTLY AFTER EXECUTION OF THE CONTRACT, BUT IN ALL CASES PRIOR TO DELIVERY OF SUCH MATERIALS.
- 16. THE CONTRACTOR SHALL CLOSELY COORDINATE CONSTRUCTION WITH OTHER TRADE CONTRACTORS, TO INSURE ADEQUATE ACCESS TO THE BUILDING SITE.
- 17. THE CONTRACTOR UPON COMPLETION OF THE PROJECT, SHALL PREPARE AND SUBMIT AS-BUILT DRAWINGS TO THE OWNER & ENGINEER. SUBMITTAL SHALL BE IN THE FORM OF A MULTIPAGE PDF FORMAT AND SINGLE HARD COPY.

UTILITY NOTES

- 1. UTILITIES MAY EXIST THAT ARE NOT SHOWN ON THE PLANS. HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY ACTUAL LOCATIONS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR SHALL CALL UNDERGROUND SERVICES ALERT, USA, AT "811" AND A PRIVATE
- 2. THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES WHICH MAY CONFLICT WITH THE NEW WORK PRIOR TO BEGINNING CONSTRUCTION. WATER LINES WHICH CONFLICT WITH THE NEW WORK SHALL BE REROUTED WITH APPLICABLE STANDARDS. REROUTING OF WATER LINES SHALL BE PERFORDED IN ACCORDANCE WITH APPLICABLE AWWA & TMWA STANDARDS. REROUTING SHALL BE INCIDENTAL TO OTHER BID ITEMS AND PAID PER THE
- 3. THE CONTRACTOR SHALL MAKE EVERY ATTEMPT TO AVOID SHUT OFF OR DISCONNECTION OF ACTIVE UTILITIES. IF SHUT OFFS ARE UNAVOIDABLE, THE CONTRACTOR SHALL COORDINATE THAT SHUT OFF WITH THE AFFECTED UTILITY COMPANIES AT LEAST 2 WEEKS IN ADVANCE OF THE DISRUPTION OF THE SERVICE.
- 4. THE CONTRACTOR IS TO PROVIDE ALL MISCELLANEOUS PIPE, FITTINGS AND APPURTENANCES AS REQUIRED TO
- 5. TRENCH EXCAVATION AND BACKFILL SHALL BE PERFORMED IN ACCORDANCE WITH THE GREEN BOOK AND GEOTECHNICAL REPORT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION AND SHORING PROCEDURES. CONDUIT PLACEMENT SHALL BE BY OPEN TRENCH UNLESS OTHERWISE SPECIFIED OR SHOWN ON THE PLAN. SHORING BRACING AND SHEETING SHALL BE AS SET FORTH IN THE RULES, ORDERS, AND REGULATIONS OF THE OCCUPATIONAL HEALTH AND SAFETY ADMINISTRATION (OSHA).
- 6. IRRIGATION PIPE, 8 INCHES AND SMALLER, SHALL BE BEDDED IN NATIVE MATERIAL. BEDDING MATERIAL SHALL BE COMPACTED WITH VIBRATORY COMPACTOR UNTIL MINIMUM DENSITY REQUIREMENTS ARE MET OR UNTIL NO FURTHER SETTLEMENT OCCURS, AS APPROVED BY THE ENGINEER. THE MAXIMUM LOOSE LIFT THICKNESS SHALL
- 7. TRENCH BACKFILL SHALL BE NATIVE EXCAYATED GRANULAR MATERIAL OR APPROVED IMPORT GRANULAR MATERIAL FREE FROM UNSUITABLE MATERIAL DEFINED HEREIN, AND AS PER THE GEOTECHNICAL REPORT
- 8. AGGREGATE BASE COURSE, ABC, SHALL MEET THE REQUIREMENTS OF THE GREEN BOOK, TYPE 2, CLASS 2. AGGREGATE BASE COURSE SHALL BE PLACED IN ACCORDANCE WITH THE GREEN BOOK
- 9. CONTRACTOR TO LOCATE ALL UTILITIES ON SITE BEFORE CONSTRUCTION.

EARTHWORK NOTES

- CLEARING AND GRUBBING, SUBGRADE PREPARATION AND EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH THE GREEN BOOK.
- 2. UNSUITABLE SOIL OR MATERIALS NOT TO BE INCLUDED IN THE WORK INCLUDE:
 A. ORGANIC MATERIALS SUCH AS PEAT, MULCH, ORGANIC SILT OR SOD,
 B. SOILS CONTAINING EXPANSIVE CLAYS,

 - MATERIAL CONTAINING EXCESSIVE MOISTURE, POORLY GRADED COARSE MATERIAL, PARTICLE SIZE IN EXCESS OF 6 INCHES,

 - MATERIAL WHICH WILL NOT ACHIEVE DENSITY AND/OR BEARING REQUIREMENTS.
- 3. FINE GRADING ELEVATIONS, SLOPES, AND OTHER ELEVATIONS NOT SHOWN SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD TO OBTAIN DRAINAGE IN THE DIRECTION AND TO THE DRAINAGE WAY'S INDICATED. ALL GRADING ELEVATIONS SHALL BE APPROVED BY THE ENGINEER.

4. DRAINAGE:

- A. CONTRACTOR SHALL MAINTAIN ALL EXISTING DRAINAGE FACILITIES WITHIN THE CONSTRUCTION AREA UNTIL NEW DRAINAGE IMPROVEMENTS ARE IN PLACE AND
- NO FENCE OR OTHER OBSTRUCTION WHICH INTERFERES WITH DISCHARGE SHALL BE CONSTRUCTED WITHIN THE DRAINAGE OR STORM DRAIN EASEMENTS.
- 5. ALL EXCESS OR UNSUITABLE MATERIAL SHALL BE DISPOSED ONSITE.
- 6. MECHANICAL SLOPE STABILIZATION IS TO BE USED FOR SLOPES STEEPER THAN 3:1. WHEN ROCK RIP RAP IS USED FOR SLOPE STABILIZATION, IT SHALL CONTAIN A MINIMUM OF FOUR FRACTURED FACES AND BE PLACED TO A MINIMUM DEPTH OF 12 INCHES. A MINIMUM OF 75% OF THE RIP RAP SHALL BE SPECIFIED DIAMETER ROCK

CALIFORNIA BUILDING STANDARD CODE (CBSC) 2023 EDITION "GREEN BOOK'

INSPECTION AND TESTING

1. THE CONTRACTOR IS RESPONSIBLE TO COORDINATE WITH ENGINEER AND INSPECTOR FOR INSPECTIONS OF WORK AT APPROPRIATE INTERVALS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PAY FOR ADDITIONAL INSPECTIONS THAT ARE THE RESULT OF HIS WORKMANSHIP.



CONCRETE & PAVEMENT NOTES

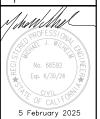
1. REFERENCE DETAILS FOR PORTLAND CEMENT CONCRETE SPECIFICATIONS.

DEMOLITION NOTES

- EXISTING IMPROVEMENTS, ADJACENT PROPERTY, FENCING, WALLS, UTILITIES AND OTHER FACILITIES, TREES AND PLANTS THAT ARE NOT TO BE REMOVED SHALL BE PROTECTED FROM INJURY OR DAMAGE RESULTING FROM THE CONTRACTORS OPERATIONS.
- 2. ALL EXISTING FEATURES IN CONFLICT WITH PROPOSED SHALL BE REMOVED, RELOCATED AND/OR REPLACED. CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER AND THE GOVERNING AGENCIES PRIOR TO SUCH REMOVAL, RELOCATION AND/OR REPLACEMENT.

J-U-B ENGINEERS, INC

1-B ENGINEERS, IN 5190 Neil Road Suite 500 Reno, NV 89502



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