



2.0 Development Design

The purpose of the “Palmdale Water District” (Guidelines) is to provide PWD customers and businesses with a guide to PWD procedures for handling the multitude of service requests received. The Guidelines also provide a listing of the general design criteria for domestic water systems.

2.2 General Project Design Requirements

2.2.1 Design

The developer shall employ, at its sole expense, a qualified professional engineering firm with an engineer licensed to practice in the State of California, to plan, design and prepare detailed water plans in full. All such planning, design work, and plans performed and prepared by the developer’s engineer shall be subject to review and approval by PWD prior to providing to contractors for bidding purposes. The plans shall conform to PWD Standards; refer to Section 3 Design Criteria for Water Facilities.

2.2.2 CEQA

The developer shall, at the developer’s sole cost and expense, be responsible for compliance with the CEQA, all other applicable state and federal environmental laws, all requirements of the Federal Endangered Species Act and the California Endangered Species Act arising out of or in connection with the design and construction of the standard and/or special facilities, and for compliance with all conditions and mitigation measures which must be satisfied in connection with the same. The developer shall cause the appropriate public agency of the State of California to act as lead agency for the purpose of complying with CEQA, or PWD may elect, but shall have no obligation, to act as lead agency. As part of its obligation to fund the CEQA process, the developer shall prepare or cause to be prepared all instruments, documents, reports, and other like or kind writings required to be prepared and/or filed by CEQA.

2.3 PWD Deposit and Fees

Information regarding fees for connection to PWD facilities, usage charges, and other administrative fees can be found in [Development Services](#) on the PWD website. All applicable fees shall be paid and agreements executed by the applicant prior to the pre-construction meeting, installation of individual services, or at other times as requested by PWD. The cost of rechecking plans will be paid by the developer as determined above.

2.4 Water Serviceability & Water Service Availability Letters

PWD provides domestic water service to nearly all properties within its service area boundaries. Refer PWD’s website for a detailed map of PWD service area boundaries for confirmation of service potential.



For proposed developments within the boundaries of PWD, the developer may request a Water Serviceability letter to determine the capacity of PWD to provide water to the development and the preliminary identification of water system improvements needed for the proposed development. The letter can be requested by contacting [PWD Engineering department](#). The Water Serviceability letter is a document that may be required by the local jurisdictional agencies for processing tentative maps, development reviews, and water supply assessments. A Water Service Availability Letter is issued once Water System Improvement Plans are in a “nearly approved” or “approved condition” meaning printed on mylars awaiting signature or mylars have been signed and approved. These letters are required for the local jurisdictional agencies to approve the final tract or parcel map. Water Service Availability Letters provide PWD’s conditional commitment to serve the proposed development and remain valid for six-months. If the water system improvements are not started within six-months, the conditional commitment lapses and a new Water Service Availability Letter must be requested.

2.5 General Development Project Review and Approval Process

2.5.1 Initial Contact with PWD

For information regarding projects already initiated at a previous date, the developer may contact the [PWD Engineering department](#) for any record requests.

It is recommended that the developer visit the PWD website for specific requirements for plan submittals. The PWD website contains a copy of PWD AutoCAD standard template for drawing plans format. The developer is expected to use this format for all water plan submittals. The developer shall visit the website for PWD’s Standard Specifications and Drawings, and General Plan Check Comment’s and Criteria Checklist.

The developer is responsible for a complete conceptual water plan submittal. The complete submittal shall include the following:

- Conceptual water plan
- Approved site plan with approved fire prevention requirements

The District will not accept or comment on an incomplete submittal.

The developer will take responsibility for all previous incomplete developments (prior to 2020) to be brought up to current PWD Standards. This includes but is not limited to, fees associated with offsite and onsite improvements as well as plan check fees.

If the Fire Department requires the developer to obtain a fire flow test, the developer must submit a [Fire Flow Test Application](#) along with the required fees to PWD Engineering for processing.



2.5.2 Plan Check Submittal Requirements

First Plan Check Submittal Requirements

For processing of the first plan check, the developer shall have an approved conceptual water plan and paid required plan check fees or deposits.

The developer shall submit a complete formal submittal of Water System Improvement Plans or the first plan check process will be delayed.

The developer/engineer shall submit an electronic copy of the plans in PDF and CAD for review and comments. The plans can be emailed to the assigned PWD plan checker.

In general, submittals for Water Improvement Plans shall include the following:

- A. A revised Conceptual Plan showing how the project will be served;
- B. One (1) print of an approved tentative map;
- C. Full name, address, and telephone number of the developer or owner;
- D. Name, address, and telephone number of the tract engineer of record and the name of the project engineer representing the firm on the subject project;
- E. A plan check fee determined in accordance with the “Palmdale Water District Rules and Regulations”;
- F. Show all proposed connections to existing PWD distribution system
- G. Show all existing and proposed utilities in the proposed project site
- H. Copies of any other maps, plans, surveys, fire department requirements, improvements, etc. that will help expedite the preliminary plan check and which will be required by Palmdale Water District prior to approving plans.

Second Plan Check Submittal Requirements

The developer/engineer shall submit the following items for second check for any residential, commercial, or industrial subdivision:

- A. Electronic submittal of Revised Water Improvement Plans and tract/parcel map
- B. PWD Engineering request developer to pothole fire hydrant, large meter services, and fire service connection points. If the developer/engineer chooses to wait until construction and horizontal and vertical locations are different than shown on plans then developer/engineer are required to make revisions on plans and resubmit for approval before construction continues.
- C. Engineer’s forecasted demands for domestic and irrigation connections.



If the plans are substantially complete, with only minor revisions remaining, PWD may elect to bypass the third plan check phase to final approval of Water Improvement Plans where the final design plans shall be signed by the developer's Engineer of Record. One electronic (1) redlined set of plan check comments will be returned to the developer's engineer for corrections upon completion of any plan check.

Third and Subsequent Plan Check Submittal Requirements

If significant corrections to the drawings are still needed at the third plan check phase, revisions will be repeated. Minor corrections will be addressed on a case by-case basis and may not require re-submittal.

Additional Plan Check Submittal Requirements

If significant corrections are still required past the third Plan Check Review, additional fees may be charged.

Final Approval of Design Documents

If the development review items are satisfactorily completed, the PWD Engineering Department will notify the developer by telephone and/or email that the final design plans can be produced, and the developer has their Engineer of Record sign the final design plans. The final design plans shall be on bond paper and submitted for District approval by a District Engineer. Once the District Engineer signs the approved plans, it is required of the developer/representative to obtain a licensed and bonded blue printer to submit 3 stapled copies back to the District.

After plans have been approved and filed, changes may be made only upon approval of the District. In order to obtain such approval, the private engineer shall contact the Engineering department to schedule proposed changes. After approval of changes, three prints of the approved revised plans shall be submitted to the District.

If construction operations are not started within twelve (12) months of the date of approval, the plans must be re-submitted for plan check prior to construction. The re-submitted plans will be checked for conformance with the criteria current at the time of re-submittal. The cost of rechecking plans will be paid by the developer as determined above.

The private engineer shall prepare "RECORD DRAWINGS" on prints of the latest revised plans showing clearly all changes in location and elevation of constructed improvement prior to the project being considered complete. These drawings shall show the configuration, manufacturer, and date of manufacture of all valves.



The private engineer shall submit the "RECORD DRAWINGS" to the Engineering department for final inspection and approval. Upon receipt of such approval, the private engineer shall correct and deliver the "as-built" original tracings to the District's Engineering Manager not later than thirty (30) days after receipt of such approval.

A Water Agreement, Performance and Labor and Materials bond might be required for all water improvements that will be considered public after PWD acceptance. The developer executes (signs) the Water Agreement, prepares the bonds, and submits (by mail or hand delivers) the original executed documents to PWD offices located at 2029 East Avenue Q, Palmdale, CA 93550. (Note: This process should be done concurrently when the final design plans are approved and ready to be signed by the developer's Engineer of Record.) The Water Agreement will be signed by PWD officials after the PWD Board approves the Water Agreement and bonds.

2.5.3 Water Meter Installation Process

The customer must complete the [Water Meter Application](#), refer to the District's website, and submit the form along with the fees to PWD Engineering. The meter fees can be paid either by check or credit card. Fees shall be collected before installation occurs. One Water Meter Application is required per account.

PWD furnishes meters but not meter boxes. Meter boxes and lids shall conform to the [PWD Standards and Specifications](#), and be submitted and approved by PWD prior to installation. Refer to PWD List of Approved Materials. Once all required forms are approved and the costs for the meters are paid, the applicant may pick up the material at PWD. A receipt of payment must be provided to pick up meter from PWD. The completed meter installation will include three (3) inspections by PWD: first - meter box; second - meter installation and third - Certificate of Occupancy. If satisfactory, the job will be considered complete. Installation of meter and meter boxes must be performed by a State of California licensed contractor or PWD. If the meter is to be installed by the contractor, the contractor must conform to licensing requirements as defined under Division III, Chapter 9, of the Business and Professions Code of the State of California.

2.5.4 Construction Requirements

After approval of the plans, all fees must be paid prior to scheduling the pre-construction conference, the developer/engineer must forward Materials Submittals to the PWD Engineering Department for review and approval. Submittals can be sent electronically to project manager.

Next, the developer's contractor shall schedule a pre-construction conference with the PWD Engineering department. The developer/contractor must provide certification that the contractor is properly licensed in California and that the developer has adequate



insurance. If the contractor plans to remove asbestos cement pipe (ACP), the contractor must be licensed to handle ACP and provide a proper abatement plan for disposal.

All new public infrastructures will be constructed under direct PWD inspection. See Chapter 4 for detailed inspection requirements.

2.5.5 Project Completion & Acceptance

The water system can be approved for service after the water system has been pressure tested and bacteriological samples have been taken in accordance with AWWA and PWD Standards. When construction has been successfully completed and the final inspections have been performed, the PWD Inspector will notify the developer. The contractor shall submit as-built drawings upon completion of the project (refer to Section 5.10 for details regarding as-built drawings).

Upon the satisfactory completion of construction, acceptance by the PWD Inspector, and submission and acceptance of completed as-built drawings, the facilities shall be conveyed to PWD by means of a properly executed Bill of Sale (BOS.) The BOS shall be accompanied by Cost of Construction Statement (CCS) reporting the actual cost of construction supplied by the developer. Completed items should be submitted to PWD within thirty (30) calendar days of the completion of the final inspection and prior to the release of the final dwelling units along with one (1) "RECORD" set of drawings for the improvement plans and CAD plans on approved electronic media for water plans per PWD CAD Standards. Upon receipt of these items, PWD will approve the release of the bonds posted for construction of the water facilities.

For large tract developments, with long lead times between phases, partial releases of bonds may be allowed after completion of entire phase or tract, solely at the discretion of the PWD under these, or similar circumstances. Requests for a partial release of bonds shall be submitted in writing. Refer to Section 1-21 of the PWD Standard Specifications for additional information regarding the release of bonds.

2.5.6 Expiration of Approved Plans and Plans in Review

Plans will be valid for a period of one (1) year from the date of PWD approval. If construction has not begun within that one-year period, the approval of the plans becomes null and void. In addition, if plans are in review but it takes longer than one (1) year to address redlines by PWD, the plan check process must be reinitiated. In these events, PWD will require that the plans be re-checked, and additional plan check fees be collected. No modifications will be allowed to the development that increases the number of units to be served by the system without prior approval by PWD. Water Service Availability letters will be valid for a period of six (6) months from the date of PWD issuance.