

**INDEX FOR ENCROACHMENT PERMIT REGULATIONS -
INITIAL STATEMENT OF REASONS**

TITLE 23: WATERS

DIVISION 2: DEPARTMENT OF WATER RESOURCES

Page No.

I. EXECUTIVE SUMMARY	1
II. INTRODUCTION AND BACKGROUND	2
III. ENCROACHMENT PERMIT REGULATIONS	4
CHAPTER 6: ENCROACHMENTS	4
Article 1: General Provisions	
Section 600: Authority	4
Section 600.1: Purpose and Scope	4
Section 600.2: Intent	5
Section 600.3: Definitions	7
Section 600.4: Delegations	10
Article 2: Encroachment Permit General Provision	
Section 601: General Prohibition of Unauthorized Encroachments by the Public	10
Section 602: Requirement of the Public to Submit an Encroachment Permit Application	10
Section 603: Department's Authority to Issue an Encroachment Permit	11
Section 603.5: Department's Authority to Deny an Encroachment Permit Application	11
Section 604: Department is Not Responsible for Construction of Encroachment	11
Section 605: Activities Requiring Encroachment Permits	12
Section 606: Encroachment Permits within FERC Boundaries	12
Article 3: Encroachment Permit Exemptions –Section 607 (607.1 - 607.3)	13
Article 4: Existing Encroachments Section 608	
Section 608.1: Unauthorized Encroachments	14
Section 608.2: Authorized Encroachments	16
Article 5: Encroachment Permit Process	
Section 610.1: General Application Requirements	16
Section 610.2: Temporary Entry Permit	19
Section 610.3: General Provisions of an Encroachment Permit	20
Section 610.4: Encroachment Permit Revisions, Modifications, Revocations	22

INDEX FOR ENCROACHMENT REGULATIONS

Section 610.5: Removal or Relocation of Encroachment	22
Section 610.6: Encroachment Permit Fees	23
Section 610.7: Proof of Insurance	24
Section 610.8: Bonds	24
Section 610.9: Pre-Construction Requirements	25
Section 610.10: Construction Requirements	26
Section 610.11: Post-Construction Requirements	27
Article 6: Requirements for Specific Types of Encroachments	
Section 612.1: Bridge Encroachments	28
Section 612.2: Landscaping Encroachments	31
Section 612.3: Longitudinal Encroachments	33
Section 612.4: Road, Parking Areas, and Recreational Trails Encroachments	35
Section 612.5: Subdivision Encroachments	37
Section 612.6: Utility Encroachments	41
Sub-Division 612.61: Utility Crossing SWP Open Aqueduct (Canal)	41
Sub-Division 612.62: Overhead Electrical and Communication Utilities	43
Sub-Division 612.63: Casing Requirements	44
Sub-Division 612.64: Hazardous Material Carrier Requirements	45
Sub-Division 612.65: Attaching Utilities to Bridges and Overshutes	45
Section 612.70: Utility Crossing the State Water Project Underground Pipelines	46
Sub-Division 612.71: General Requirements	46
Sub-Division 612.72: Overhead Electrical and Communication Utilities	49
Section 612.80: Utility Crossing Under the State Water Project Roads	50
Article 7: Corrosion Protection Requirements	51
Section 615: Cathodic Protection Requirements	51
Sub-Division 615.1: Cathodically Protected Metallic Pipelines	51
Sub-Division 615.2: Steel Casing Pipelines Crossing Above the State Water Project's Open Canals and Pipelines	51
Sub-Division 615.3: Protective Coatings for Corrosion Control	51

INDEX FOR ENCROACHMENT REGULATIONS

Article 8: Encroachment Permit Evaluation Process

- Section 618: Departmental Determination of Application Completeness52**
- Section 620: Notice of Application Deficiency53**

Article 9: Unauthorized Encroachments – Section 625, et seq.

- Section 625.1: Department's Authority to Remove Unauthorized Encroachments55**
- Section 625.2: Department's Unauthorized Encroachment Notification, General55**
- Section 625.3: Non-Emergency Situations Notification and Removal of Unauthorized Encroachment55**
- Section 625.4: Imminent Threat Situations Notification and Removal of Unauthorized Encroachment56**
- Section 625.5: Emergency Situations Notification and Removal of Unauthorized Encroachment57**
- Section 625.6: Diversion, Drainage, Seepage, or Overflow of Water Onto Departmental Right-Of-Way58**
- Section 625.7: Criminal Prosecution of Unauthorized Encroachers59**

Article 10: Jointly- Owned State and Federal Facilities: Section 63060

Article 11: General Encroachment Permit for Maintenance by Public Agencies: Section 63560

IV. ECONOMIC IMPACTS OF THE REGULATIONS60

- A. Creation or Elimination of Jobs within the State60**
- B. Creation of New Businesses or the Elimination of Existing Businesses within the State.61**
- C. Competitive Advantages or Disadvantages for Businesses Currently Doing Business within the State61**
- D. Increase or Decrease of Investment in the State61**
- E. Impact on Government Revenue62**
- F. Small Business Economic Effect62**
- G. Fiscal Impacts62**
 - 1. Impact on Government Revenue62**
 - 2. Impact on Government Expenditures62**
- H. Reasonable Alternatives to the Amendments63**
- I. Description of Reasonable Alternatives Considered that Would Lessen Impact on Small Business63**

INDEX FOR ENCROACHMENT REGULATIONS

V. No Conflict With Other Regulatory Schemes.63

VI. Environmental Justice64

APPENDIX A – DOCUMENTS RELIED UPON

 1. DWR Special Terms and Conditions To Be Accepted By All Permit Applicants64

 2. ASTM Standard for Compaction Characteristics of Soil64

INITIAL STATEMENT OF REASONS FOR ENCROACHMENT PERMIT REGULATIONS

TITLE 23: WATERS

DIVISION 2: DEPARTMENT OF WATER RESOURCES

CHAPTER 6: ENCROACHMENTS

I. EXECUTIVE SUMMARY

Water Code section 12899 was enacted in 2005 under Senate Bill 543, to provide the Department of Water Resources (“DWR,” or the “department”) with specific statutory authority to control the activities within the right-of-way along the State Water Resources Development System, otherwise referred to as the State Water Project, or SWP. Historically, DWR entered into negotiated contractual agreements with landowners who sought to use a portion of the SWP right-of-way for their own purposes. DWR required an application and supporting documentation, including detailed construction plans that are signed off by a licensed engineer, as well as related environmental clearances and permit requirements. DWR charged the applicant a fee based on the number of hours DWR staff devoted to reviewing the proposal and related documentation.

DWR submits these regulations to provide guidance and procedures for use of the department’s right-of-way along the State Water Project and for submittal of an application for an Encroachment Permit. The regulations will implement Senate Bill 543 (2005) and the corresponding Water Code section 12899, *et seq.* SB 543 authorized the department to issue Encroachment Permits under specified conditions and adopt regulations to allow for Encroachment Permits to be issued while protecting the access, operations, maintenance and control of the SWP. The statute also allows, and the regulations will implement, the conditions under which the department may seek removal of unauthorized encroachments if the

department determines that the encroachment will interfere with the department's rights with regard to access, inspection, repair, or the operation and maintenance of the SWP facilities.

The proposed regulations will add a new Chapter 6, "Encroachments", to Title 23, Division 2 of the California Code of Regulations. The regulations will add Sections 600 through 630, setting forth the requirements for obtaining an Encroachment Permit pursuant to the authority conferred by Water Code Section 12899.9. The regulations will outline the DWR review process, associated costs to the applicant, and will implement the enforcement provisions of Water Code section 12899, so that DWR can limit unauthorized encroachments and control access to the right-of-way.

II. INTRODUCTION AND BACKGROUND.

The California State Water Resources Development System, otherwise known as the State Water Project, or SWP, is the nation's largest state-built water and power development and conveyance system. It includes many facilities - pumping and power plants; reservoirs, lakes, and storage tanks; and canals, tunnels, and pipelines - that capture, store, and convey water to 29 water agencies across the state. It extends for more than 600 miles, two-thirds the length of California. Its main purpose is to store water and distribute it to 29 urban and agricultural water suppliers in Northern California, the San Francisco Bay Area, the San Joaquin Valley, the Central Coast, and Southern California. Of the contracted water supply, 70 percent goes to urban users and 30 percent goes to agricultural users, more than 25 million Californians, or two-thirds of California's population. The SWP is also operated to improve water quality in the Delta, control Feather River flood waters, provide recreation, and enhance fish and wildlife. The SWP is maintained and operated by the California Department of Water Resources. Planned, constructed, and operated by DWR, the SWP also provides flood control, power generation, recreation, fish and wildlife protection, and water quality improvements in the Sacramento-San Joaquin Delta.

In 1951, the Legislature authorized what is now the State Water Project. Construction began on facilities at Oroville in 1957, and work began on the California Aqueduct in 1963. By 1968, the SWP was able to deliver water to the San Joaquin Valley. By 1973, the initial facilities were completed to allow water delivery to Lake Perris in Riverside County, the southernmost point in the system. Costs for water development and delivery are paid by the SWP water supply contractors, 29 local and regional water agencies. By the end of 2001, about \$5.2 billion had been spent to construct SWP facilities.

Today, the SWP includes 34 storage facilities, reservoirs and lakes, 20 pumping plants, 4 pumping-generating plants, 5 hydroelectric power plants and more than 600 miles of open canals and pipelines. Adjacent to the aqueducts, pipelines and related facilities, DWR has a recorded right-of-way to ensure that it can fulfill its statutory obligation to inspect, repair, operate and maintain the SWP facilities. Generally, the right-of-way extends about 300 feet along the aqueduct and 60-100 feet along the pipelines. The set-back from these facilities within the right-of-way is generally 15-60 feet from the center lines. Encroachments into this restricted space must be strictly controlled so that the integrity of these critical facilities can be maintained.

Initially, most of the SWP was constructed in areas of open land containing very little development. Over the years, land use has changed dramatically along with the population of the state. Farming has increased in areas where the SWP delivers water. Cities and subdivisions have edged closer and closer to the SWP aqueduct and pipeline facilities. While this evolution was anticipated from the beginning, encroaching development has created many problems for DWR. Access to the facilities has been gradually limited by new towns and subdivisions. Farmland and orchards have expanded to the limits of the SWP right-of-way. Increasing development of adjacent properties has created a need for protection of this critical facility.

In 2005, the Legislature recognized the State Water Resources Development System as serving a “critical public infrastructure function by providing water to California’s residents, businesses, farms, environment, and other users.” At the same time, with Senate Bill 543, the Legislature formally conferred upon the Department of Water Resources the legal authority to control encroachments in the right-of-way and provided DWR the authority to remove unauthorized encroachments. Water Code section 12899 was enacted for this purpose. These proposed regulations seek to implement that authority.

III. ENCROACHMENT PERMIT REGULATIONS

Article 1: General Provisions

Section 600: Authority

Water Code section 12899-12899.11 authorize the Department of Water Resources to control access and activities in and around the right-of-way adjacent to the State Water Project and its related facilities by way of an Encroachment Permit. Section 12899.9 specifically permits the department to adopt regulations to establish the process and procedures for issuance of an Encroachment Permit.

Section 600.1: Purpose and Scope

The purpose of these regulations is to interpret, implement and comply with the provisions of Water Code Sections 12899 -12899.11. These Sections authorize the department to establish, administer, maintain and enforce a formal permit program for encroachments on the State Water Resources Development Project right-of-way; to control and regulate existing encroachments, to prevent, remove and abate unauthorized encroachments, activities or use of the department’s right-of-way, and to protect its integrity from damage or injury, while respecting the rights of others. The encroachment permit serves as the primary means for monitoring the orderly and controlled construction, operations and

maintenance of encroachments, use and activities within the department's right-of-way, and assuring the maximum protection of the State Water Resources Development Project.

The area of the department's jurisdiction is the State Water Resources Development Project right-of-way, property, property interests, works, facilities and any parts thereof.

This regulation does not apply to the Sacramento and San Joaquin Drainage District or any areas under the jurisdiction of the Central Valley Flood Protection Board.

Section 600.2: Intent

The department built, operates, manages and maintains the State Water Resources Development Project and continues to repair, rehabilitate, enlarge and improve it to meet the continually expanding and increasing needs of California residents, businesses, farms and other users. To carry out this critical public infrastructure function, it is vital for the department to protect the State Water Resources Development Project from encroachments, activities and uses that may threaten its integrity, interfere with its operation and maintenance or obstruct, hinder or delay the repair, rehabilitation, relocation, installation, enlargement or improvement of its facilities.

This chapter intends to establish regulations, policies and procedures to protect the State's water supply and conveyance system and ultimately secure the health and safety of the public.

The department intends to control encroachments, while respecting the rights of others, by establishing a formal encroachment permit program. The department recognizes that certain unauthorized uses, encroachments or activities exist within its right-of-way that are incompatible with the department's rights with regard to access, inspection, repair, or the operation and maintenance of any SWP facility and may need to be removed or abated. These regulations establish an enforcement process to control, prevent, abate or remove such

unauthorized activities, uses and encroachments that threaten the integrity of the system or interfere with the department's ability to protect its critical infrastructure.

Nothing in the regulations is intended to grant, alter, expand, or limit any title or interest in any department property interest.

Encroachment permits issued pursuant to the regulations shall not grant any title or interest in department property, or create any agency or independent contractor relationship between the department and any person.

In developing these regulations, the department has made every effort to incorporate generally accepted industry standards, where applicable, for the various types of improvements that, in the extensive experience of the department, are the most common improvements in and around the right-of-way. The regulations are organized in consideration of the public and to facilitate ease of locating requirements specific to the various improvements that may require an Encroachment Permit.

Section 600.3: Definitions

- a) **"Abatement"** means action as may be necessary to remove, terminate, or alleviate an unauthorized encroachment, including but not limited to demolition, removal, or restoration of property.
- b) **"Applicant"** means person or entity who has applied for an Encroachment Permit from the department.
- c) **"ASTM"** means American Society for Testing and Materials, a globally recognized leader in the development and delivery of international voluntary consensus standards.
- d) **"Business Days"** means those days when the department offices are open to the public for business transactions. Weekends, along with State and federal holidays, are not business days. "Days" in these regulations mean calendar days unless, referred to as "business days."

- e) **“CEQA”** means the California Environmental Quality Act, Division 13 of the Public Resources Code, Sections 21000-21174.
- f) **“Department”** means the Department of Water Resources of The Natural Resources Agency of the State of California as provided in Water Code Section 120.
- g) **“Electrolier”** means wooden, concrete or steel pole supporting lamps or other lights, such as street lamps or traffic signals.
- h) **“Embankment”** means the raised compacted-earth structures that retain water and support operating roads at the crest.
- i) **“Emergency”** means any lawfully declared emergency or any circumstance determined to be an emergency by the department which is a sudden, unexpected occurrence that poses a clear and imminent danger, requiring immediate action to prevent or mitigate the loss or impairment of life, health, property, or essential public services.
- j) **“Encroachment”** means installation of any tower, pole, pipe, fence, building, structure, object, or improvement of any kind or character that is placed in, on, under, or over any portion of the State Water Project or other use of the department’s right-of-way, including the alteration of the ground surface elevation by more than one foot, or the planting of trees, vines, or other vegetation on the department’s right-of-way that may pose a threat to the physical integrity of any facility of the State Water Project or that could interfere with the department’s rights with regard to access, inspection, repair or the operation and maintenance of any State Water Project facility.
- k) **“Encroachment Permit”** means the department’s written authorization for an alteration, improvement, encroachment, excavation, use or activity within the department’s right-of-way that is not inconsistent with the function, operation, maintenance, enlargement, and rehabilitation of any portion of the facilities of the State Water Project. An ‘Encroachment

Permit' is revocable and non-transferable and can only be modified or transferred with the written approval of the department.

- l) **“FERC”** means the Federal Energy Regulatory Commission which issues licenses for power generation.
- m) **“Joint-Use Facilities”** means those facilities of the State Water Project which are jointly owned, operated, and maintained by the State and the United States Bureau of Reclamation.
- n) **“Member”** as it relates to bridge construction means an individual angle, beam, plate, or built piece intended to become an integral part of an assembly frame or structure.
- o) **“Milepost”** means the distance designated along the State Water Project in miles identifying each project feature such as aqueduct pool, control structure, plant, reservoir outlet, and manhole starting from the beginning of the system.
- p) **“Permittee”** means any person or entity who has obtained an Encroachment Permit from the department.
- q) **“Person”** means any person, firm, partnership, association, corporation, other business entity, nonprofit organization, or governmental entity.
- r) **“Potable”** means water that meets the drinking water standards as defined in Sections 116270-116293 of the California Health and Safety Code.
- s) **“Reclamation”** means the United States Bureau of Reclamation, Department of the Interior as described in the “Agreement between the United States of America and the Department of Water Resources of the State of California for the Construction and Operation of the Joint-Use Facilities of the San Luis Unit” dated December 30, 1961.
- t) **“Right-of-Way”** means any property interest acquired by the department for State Water Project purposes, including but not limited to, an easement, license, permit, agreement, or fee ownership.

- u) **“Safety Plan”** means the implementation of an Injury and Illness Prevention Program in accordance with Section 1509 Title 8, Article 3, Subchapter 4, of California Code of Regulations.
- v) **“State Water Contractor”** means a public agency that has a long-term water supply contract with the Department of Water Resources for the delivery of water pursuant to subdivision (b) of Section 12937 of the Water Code.
- w) **“State Water Resources Development System”** hereinafter referred to as the State Water Project or SWP, means the State Water Resources Development System as described in Section 12931 and Section 12934(d) of the Water Code, including, but not limited to, all portions of the project authorized pursuant to the Central Valley Project Act (Part 3 commencing with Section 11100) and additions thereto.
- x) **“Unauthorized Encroachment”** means any alteration, improvement, encroachment, excavation, use or activity within the State Water Project right-of-way acquired for the State Water Project without an encroachment permit or agreement from the department authorizing such encroachment, use or activity.

Note: Authority: Section 12899.9, Water Code

Reference: Sections 120, 12931, 12934 (d), 11100, 12899, 12899.1 (a), (c), 12899.5 (b), (2) (e), 12899.8 (e), 12899.10, & 12899.11(a), Water Code, and Sections 21000-21174, Public Resources Code

Section 600.4: Delegations

This confirms that the department may delegate any of its power or duties under the enabling legislation, Water Code section 12899, excluding approval authority by the Director of the department, and may withdraw or revoke this delegation at any time.

Article 2: Encroachment Permit General Provisions

The department has made a diligent effort to categorize the various specifications required for approval of an encroachment permit. Under the first sections of this article, the general provisions are set out, which are required for every encroachment permit. In later sections of the regulations, specific types of encroachments are set out, each with its own specifications. These are based on the history of the department in dealing with encroachments over the years.

Section 601: General Prohibition of Unauthorized Encroachments by the Public

Water Code section 12899.1 sets out the requirement that any person who intends to make any alteration, improvement, encroachment, or excavation within the right-of-way acquired for the State Water Project first obtain a permit from the department.

Section 602: Requirement of the Public to Submit an Encroachment Permit

Application

Senate Bill 543, establishing the legal authority for the department to create an encroachment permit program, declares that "The State Water Project resources Development System serves a critical public infrastructure function by providing water to California's residents, businesses, farms, environment, and other users." (S.B. 543 (2005), Section 1(a).) The legislature declared it "vital that the Department of Water Resources" should be "able to protect this infrastructure from encroachments that may threaten the integrity, or interfere with the operation and maintenance, of this system." (S.B. 543 (2005), Section 1(b).) In this regulation, the department provides notice and guidance to the public of the requirements to successfully obtain an encroachment permit.

Section 603: Department's Authority to Issue an Encroachment Permit

Water Code section 12899.1(c). Section 12899.9 authorizes the department to adopt regulations to implement Division 6, Part 6, Chapter 6.5 of the Water Code.

Section 603.5: Department's Authority to Deny an Encroachment Permit

Application

This section permits the department, upon initial review of the EP application, or other proposal for use of the SWP right-of-way, to deny the application or use if the department determines that the use “may pose a threat to the physical integrity of the State Water Resources Development System or that could interfere with the department’s rights with regard to access, inspection, repair, or the operation and maintenance of any State Water Resources Development System facility.” This language is found in Water Code section 12899(b), under the definition of “encroachment, repeated above in Section 600.3(j). The department may summarily deny the application without further review if it makes this determination.

Authority for this is found in Water Code section 11451, which states, in part: “The department shall have full charge and control of the construction, operation and maintenance of the [State Water Project]” and Section 12899(b).

Section 604: Department is Not Responsible for Construction of Encroachment

The department's authority is limited to specifying the conditions for issuance of a permit. This is necessary to protect the safety of the public, integrity of the SWP system and facilities and to ensure access for the department to respond in an emergency or conduct routine maintenance. By issuing an encroachment permit, the department makes no representations or guarantees with regard to the actual construction of the encroachment. Indeed, Water Code section 12899.1(d) absolves the department of responsibility “for the competence or reliability of the permittee or the encroachment.” Water Code section 12899.7 imposes liability on any person who “by any means willfully or negligently injures or damages any feature of the State Water Resources Development System or the department’s right-of-

way” for the costs of “any necessary repairs” including related costs, expenses and attorney’s fees.

Section 605: Activities Requiring Encroachment Permits

Based on the enabling statutes and the department’s long history of dealing with encroachments into the right-of-way, the department has attempted to list the most common types of encroachments that will require a permit. Due to the size and scope of the SWP system, extending approximately 700 miles from Lake Oroville to San Diego, it is impractical for the department to continuously monitor every inch of the system, even with regularly-scheduled daily visual inspections by department staff. Requiring a permit for these encroachments will ensure the safety and integrity of the system and allow the department to more closely monitor activities within the right-of-way. Some of those that are enumerated in this Section 605 are taken directly from the enabling statutes and others are based on the department’s history of handling encroachments.

Section 606: Encroachment Permits within FERC Boundaries

In addition to these requirements for encroachment permits, requests for encroachment permits within the FERC boundary must comply with the requirements contained in Article 52 of the FERC license. Water Code section 12899.1(e) permits the department to require an applicant to comply with all “statutory requirements” including, but not limited to the California Environmental Quality Act and Public Resources Code. Many of the SWP facilities are jointly owned or operated with the Federal Government, and so an applicant must also comply with federal statutes for an encroachment on this state-federal property.

Article 3: Encroachment Permit Exemption

Section 607: Persons Exempt from Permitting; Requirement for Plan Review

Water Code section 12899.8 provides an exemption from the requirement of obtaining an encroachment permit for “[a]ny person owning a legal real property interest over a portion of

the State Water Project right-of-way for an authorized encroachment, or who has an agreement with the department for the construction, operation, and maintenance of an authorized encroachment within the State Water Project right-of-way.” Section 607.1 confirms that exemption.

In addition, any person who holds a “permit” as of January 1, 2007, or a person “who has an agreement with the department” for construction, operation and maintenance of an encroachment, to may continue the “authorized encroachment” under the terms, conditions and limitations of that permit or agreement.

This section as provides a “grandfathering” mechanism for any person who had a pre-existing agreement for a encroachment activities, whether the agreement is considered an “encroachment permit” or not, up to the date this regulation becomes effective. It has been historically necessary for the department to enter into agreements that authorize activities within the right-of-way. This section provides assurance that people with pre-existing agreements with DWR will not have to apply for an encroachment permit under this regulation in order to continue their activities within the right-of-way.

Section 607.2 provides a specific exemption from these regulations and from the requirement to obtain an encroachment permit for any person who, pursuant to authority conferred by lease, contract, agreement, license or easement with the department, obtains an interest in department property, or performs an activity within the SWP right-of-way, or is authorized to use the SWP right-of-way, but only with regard to the interest, activity, or use under that lease, contract, agreement, license, or easement. This exemption allows the department to comply with the legislative mandate found in Water Code section 141. Further, in the case of a project developed under contract, lease, agreement, license, or easement with the department, the conditions set forth in these regulations will necessarily be applied

because the department personnel that would be involved in the project are the same who would normally review an encroachment permit application under these regulations.

Section 607.3 requires the person exempt under section 12899.8 to submit the plans to the department "for review and comment" before undertaking any encroaching activities within the department's right-of-way. The department has thirty (30) days to respond with comment.

Article 4: Existing Encroachments

Section 608: This Article 4 defines an "unauthorized encroachment" (Section 1) and an "authorized encroachment" (Section 2). These are codified in Water Code sections 12899.

Section 608.1: Unauthorized Encroachments

Generally, unauthorized encroachments include any type of construction activity, work of improvement, and any type of unnatural drainage on to the right-of-way that is created by activities along the right-of-way. As set forth in Water Code section 12899.1(a), an "unauthorized encroachment" is any "alteration, improvement, encroachment, or excavation within the right-of-way without first obtaining the written permission of the department." Reference is also made to Water Code section 12899.6, setting out specific types of activities which, unless written permission is obtained from the department, cannot be undertaken within the right-of-way. Those prohibitions include, but are not limited to, those listed in Water Code section 12899.6 (a)(1) through 12899.6(3), also referred to in this regulation in Article 2, Section 605, subsections (f) through (h).

As indicated in this section 608.1, if the department identifies an unauthorized encroachment, the "Department may immediately give a written notice to the owner to remove or abate the use, activity or encroachment within sixty (60) days of receipt of the notice." Unless the owner asserts a legal right pursuant to Water Code section 12899.8, and if the owner does not remove the encroachment within sixty (60) days, the department may remove

the encroachment and “the owner will be responsible for the cost and expense of the removal or abatement.” (Water Code sections 12899.5(c)(1); 12899.5(f); 12899.5(g).

Further, in the event an encroachment “obstructs, threatens, or prevents the proper operation, maintenance, or rehabilitation of the State Water Resources Development System,” the department may provide notice that the encroachment must be removed within five (5) days, or the department may commence removal.

Under Water Code section 12899.5(d)(2), if the encroachment “poses an imminent threat to the integrity of one or more features of the State Water Resources Development System,” the department is authorized to take “any action necessary to avert, alleviate, repair, or mitigate any threat to the State Water Resources Development System.” For purposes of this section, the term “emergency” adopts the definition of Water Code section 12899.5(e), as set forth in the definitions of these regulations.

In either event, emergency or non-emergency, the owner who has not removed the encroachment is responsible to reimburse the department for all costs associated with the unauthorized encroachment, in addition to court costs in the event legal action is required and all related attorney’s fees, and in addition, a penalty of \$1,000 per day for each day the encroachment is not removed after expiration of the applicable response period set forth in Water Code sections 12899.5(c) or 12899.5(d).

Section 608.2: Authorized Encroachments

An “authorized encroachment” is any activity within the right-of-way for which an encroachment permit is issued, and agreement exists, or a pre-existing ownership interest exists pursuant to Water Code section 12899.8, so long as the department has the opportunity to review and comment on related plans prior to the undertaking of any work within the right-of-way.

Article 5: Encroachment Permit Process

This Article 5, Sections 610.01 through 610.11, sets forth the general requirements applicable to all permits. As indicated above, the regulations also set out, in Article 6, *infra*, specifications for particular types of encroachments the department has historically considered.

Section 610.1: General Application Requirements

Water Code section 12899.2(b) and 12899.9 authorize the department to “prescribe requirements in the permit” and “the filing of an application for a permit, related administrative review and inspection, the imposition of permit fees and permit terms and conditions” among other things.

This Section 610.1 contains the general requirements for any encroachment permit application. The department intends to provide a form for the general information required by subsection (a). The multiple sets of construction plans required by subsection (a)(6) facilitate the department’s review of the plans by multiple divisions and units within DWR, including, but not limited to, Division of Engineering and Division of Environmental Services.

Water Code section 12899.2(d) and (e) authorize the department to charge “an application processing and review fee”. The department has conducted an historic review of administrative and review costs to the various reviewing divisions and determined the initial fee shall be \$1,500. Calculating the historical averages for staff review costs for permits or agreements authorizing encroachments, approximately 89% exceeded \$1,500. The historical average cost for review and issuance of an encroachment permit or related agreement for work within the right-of-way have ranged from \$1,000 for a simple access project to \$12,000 or more for an extensive construction project in the right-of-way. The costs cannot be estimated until a complete application and construction plans are received. The department will require periodic payments throughout the review and approval process and will communicate those

costs to the applicant. The department will not issue the permit until all related fees are paid by the applicant.

Water Code section 12899.1(e) permits a requirement that the applicant obtain and provide proof of all environmental clearances required for work on or along the department's right-of-way, in addition to all "other statutory requirements." This is reflected in subsection (a)(7).

Subsection (b) sets forth the construction plan requirements for all work performed under a encroachment permit. The plans must contain an original stamp by a licensed engineer, unless the department determines that the applicant is exempt. That determination must be made prior to plan submittal. The department's right-of-way boundary must be specifically marked. Any work to be performed must be clearly identified, including the physical location within the right-of-way and any areas designated for staging or access to the work site.

Subsections (b)(6) through (9) require specific notices to be included on the plans. These notices are designed specifically to ensure safety of the work being performed as well as protecting the integrity of the SWP facility. The department recognizes that the permit applicant may not be the same as the contractor who is actually performing the work, so the notices provide necessary information to the contractor. A seven (7) day notice to the department is required prior to commencing the work, allowing the department to schedule oversight or inspections as necessary. Trenching requirements, set out in subsection (b)(7) reflect the industry standard ASTM D1557-09 for slope and backfill.

Subsection (b)(8) protects the communication cabling that runs along the aqueduct or pipeline and may not otherwise be visible. This cabling is essential to the operation of the SWP. Prior to excavation, all cabling must be identified. Excavation within three feet of the

cabling must be done only with handheld tools which provide greater control and reduce the potential for damage to the communications cabling.

Subsection (b)(9) requires compliance with generally accepted industry standards for trenching and backfill compaction.

Subsection (b)(10) prohibits embankments on or around the right-of-way where a pipeline exists. Exceptions may be made upon written request by the applicant and upon the determination by the department that the embankment “does not pose a hazard to the integrity of the pipeline or impedes pipeline maintenance.”

Subsection (b)(11) requires road improvements of existing roads along or in the right-of-way to comply with the generally accepted industry standards specified in the California Department of Transportation Standard Specifications, 2010 edition.

Subsection (b)(12) specifies that if existing drainage features are to be modified during construction, detailed construction plans showing the proposed drainage replacement/restoration shall be submitted for review and approval by the department. Like any feature within the right-of-way, the department must ensure safety to the public, integrity of the system and access for maintenance and repairs. Therefore, the department must approve the construction plans for compliance with these regulations. However, as indicated in Article 2, Section 604, above, the department is not responsible the quality of the work to be performed. Any work not performed according to the approved plans will be considered to be an unauthorized and illegal encroachment.

Subsection (c) reiterates the authority of the department under Water Code section 12899.1(e) to require that any work performed within the right-of-way will be evaluated by the department’s Division of Environmental Services for compliance with any and all applicable environmental laws, including, but not limited to, the California Environmental Quality Act and the related Guidelines, the California and Federal Endangered Species Acts and the National

Environmental Policy Act. Written confirmation of compliance will be required by the department as a condition of issuing the permit.

Subsection (d) reserves the authority to approve the “type and weight of construction equipment” and location of crossing over the SWP pipeline. This is necessary to ensure the safety of the public and the integrity of the pipeline.

Section 610.2: Temporary Entry Permit

A temporary entry permit is distinguished from the encroachment permit by restricting the types of activities that can be undertaken. The temporary entry permit will allow “visual inspections, aerial and ground surveys, or potholing to locate certain utilities within the department’s right-of-way.” This is typically preliminary activity to gather information that will be required by an encroachment permit application. This section specifically prohibits general construction activities under a temporary entry permit. An encroachment permit must be obtained prior to the commencement of general construction activities.

Section 610.3: General Provisions of an Encroachment Permit

Section 610.3 outlines the basic provisions applicable to all encroachment permits. Water Code section 12899.2(b) allows the department to prescribe reasonable conditions “as deemed appropriate by the department, and may include mitigation for effects of the approved activity on the environment.” Each encroachment permit will obligate the applicant or permit holder to agree to restore the SWP facility to the same condition that existed prior to any work being performed under the encroachment permit, to agree to mitigation plans, or a “reporting and monitoring” plan for the protection of the environment after completion of the project. The department reserves the right to require the permit applicant or permit holder to record a document containing a “covenant, restriction, servitude or combination thereof, which runs with the land” for the continued protection of the environment. The department may also require a bond to be posted as authorized by Water Code section 12899.2(g) if the department, in its

reasonable discretion, believes that there is a potential for a lack of compliance in the future by the permit holder.

Subsection (f) of this section requires the applicant to demonstrate compliance with all licensing or permitting requirements of all public entities having jurisdiction over the location of the proposed work.

Subsection (g) specifies that the applicant must take all reasonable precautions to preserve and ensure the integrity of the SWP facilities in the vicinity of the work being performed under the permit. In the event the work of the permittee causes damage to the SWP facilities, the applicant is required to immediately restore the facilities to the condition that existed prior to the work being performed by the applicant or permit holder, at the expense of the permit holder, as set forth in Water Code section 12899.7.

Subsection (h) requires the permit holder to indemnify and hold harmless the department and the State of California, as prescribed by Water Code section 12899.7, as it relates to any work performed under the permit. Water Code section 12899.2(f) and (g) allow the department to require, as a condition of issuing the permit, either proof of insurance, or a bond, in such amount as is "reasonably necessary to protect the state's interest."

Subsection (i) limits the time an encroachment permit will remain effective pending the start of construction under the permit. The department has found itself in a situation where a permit is issued and for reasons beyond the department's control, work is not commenced or completed within a reasonable amount of time. As a result, conditions of the SWP facility or land upon which the project was supposed to take place, may have changed, rendering the conditions of the permit to be invalid. The department intends to work with the applicant, to the extent possible, to ensure work is commenced and/or completed within one year. The department will permit extensions of this time limitation upon application by the permittee and based on reasonable grounds for the extension. However, if it appears that the project is

abandoned for an extended period of time, and if the department cannot confirm the start or continuation of the work in a timely fashion, the permit will be revoked.

Under subsection (j) "The permittee's signature on the encroachment permit constitutes acceptance of, and agreement with, all the terms and conditions of the encroachment permit." Language to that effect will be included on the department's application form.

Subdivision (k) reserves the authority to determine whether the permitted work is being conducted in conformity with the plans and specifications. Water Code section 12899.2(e) permits the department to "inspect and supervise the work performed under any permit issued." If the work is not conforming, Water Code section 12899.5 allows the department to require conformity with the plans and specifications, or if the permittee will not or cannot comply, the department may perform the work and the permittee will be liable for the costs related to re-establishing the SWP right-of-way to a safe condition.

Section 610.4: Encroachment Permit Revisions, Modifications, Revocations

Water Code section 12899.2(e) allows the department to "inspect and supervise the work performed" under the EP. There will be occasions when site conditions require modifications of approved plans. Modifications may be allowed upon written application. Minor modifications may be allowed only if approved by the department's inspector. However, with any modification, all requirements of obtaining an EP must be followed by the applicant. Implicit in the supervision authority is the ability of the department's inspector to halt work if a deviation from the plans is proceeding without approval. See Section 610.10, below, for further details.

Section 610.5: Removal or Relocation of Encroachment

Notice is given by this Section 610.5, pursuant to Water Code sections 12899.2 and 12899.5, that an owner holding an encroachment permit, or subject to action by the department due to an unauthorized encroachment, may be required to remove or relocate the

encroachment. Please see Article 4, Section 608 and Article 9 for details on the action the department may take in a non-emergency and emergency situation, as authorized by Water Code sections 12899.5(c) and (d). To avoid duplication, they are not repeated here. Water Code section 12899.5, specifically subsection (c), authorizes the department to require removal of an unauthorized encroachment. Water Code section 12899.2(b) authorizes the department to require relocation of an authorized encroachment, "in the event the future repair, rehabilitation, or improvement of the State Water Resources Development System requires the relocation or removal of the encroachment." Removal or relocation is to be done "at the sole expense of the permittee." These statutes detail the action the department will take to effect that removal or relocation. Notice to the owner by the department triggers the obligation of the property owner to remove or relocate the encroachment. Water Code section 12899.5(b) allows the department to serve the notice upon the person, or registered mail and posting for a period of five days. In the event the owner, occupant or person in possession of the property that is causing the unauthorized encroachment does not reside in the county, the department may serve the notice to "an agent" of the owner in lieu of mail service.

Section 610.6: Encroachment Permit Fees

Water Code section 12899.2(d) obligates by the use of the term "shall" the department to charge an "application processing and review" fee for a person to use the right-of-way. Please see Article 5, Section 610.1, above, for further details explaining how the department determined initial fees. This section details the process of invoicing or billing the applicant during the department's review process.

Review of the permit application requires the attention of personnel in various sections within DWR, including, but not limited to, the Real Estate Branch, Division of Engineering and Division of Environmental Services. The actual time involved will depend on the scope of the application and the proposed project. During the review process, associated fees are incurred

by the department. The department will periodically invoice or bill the applicant. Fees must be paid, or the department will cease the review process. At the conclusion of the review, all fees are due and payable by the applicant, or the permit will not be issued. In the event the project proceeds without the permit, the project will be considered an unauthorized encroachment and the department will take all appropriate action as authorized by Water Code section 12899.

As reflected by subsection c of this Section 610.6, the department may inspect and supervise the work under the permit. As reflected in Section 610.10(d), below, if, in the opinion of the department's inspector, the work is not proceeding according to the approved plans, or is being conducted in a manner that creates danger to the workers or to the public, the inspector may order a halt to further activity by the permittee, until the dangerous condition is corrected.

In the event that the actual review and approval costs are, in fact, less than the total charges paid by the permittee, the department will refund the difference, upon receipt of the as-built plans, or at such a time as the permittee withdraws the permit application.

Section 610.7: Proof of Insurance

Water Code section 12899.2(f) allows the department to require proof of insurance from an applicant in an amount to be determined at the discretion of the department. The insurance must name the State of California as an additional insured and must in an amount sufficient to reasonably protect the interests of the State, but not less than \$1 million per occurrence. This amount is included in the Standard Terms and Conditions that will be incorporated by reference in all permits, and is referred to in Section 610.03(o).

Section 610.8: Bonds

Water Code section 12899.2(g) permits the department, in its discretion, to require a bond to be posted "in an amount that the department determines to be sufficient, conditioned on the proper compliance by the permittee with this chapter." The department has

experienced circumstances where an applicant either unreasonably delays completion of the permitted work, abandons the work, or fails to maintain the permitted work. The bond requirement allows the department to secure adequate funding to mitigate this failure. A history of non-compliance with section 12899 *et seq.* is not a condition precedent to the department's authority to require a bond from a private person or non-public entity. However, there must be a history of non-compliance prior to the department securing a bond from a county, city, city and county, or public agency which applies for an encroachment permit.

Section 610.9: Pre-Construction Requirements

Section 610.9 sets the conditions a permittee must satisfy before work is begun on an encroachment. Water Code Section 12899.2(b) allows the department to prescribe reasonable conditions "as deemed appropriate by the department, and may include mitigation for effects of the approved activity on the environment." Each encroachment permit will obligate the applicant or permittee to agree to restore the SWP facility to a level equal to or better than the condition that existed prior to any work being performed under the encroachment permit, to agree to mitigation plans, or to a "reporting and monitoring" plan for the protection of the property, facilities, or environment after completion of the project.

Subsection (a) requires the permittee to provide written notice to the department at least seven (7) calendar days prior to beginning any work within the SWP right-of-way, and provide a copy of the notification to the field division office having jurisdiction over the location of the proposed encroachment. This allows the department to plan around the activities under the permit and schedule necessary inspections that may be required.

Subsection (b) requires the permittee to submit a construction schedule detailing a timeline for the construction of any project within the SWP right-of-way. The schedule must be submitted at least seven (7) calendar days prior to the start of any work. This allows the

department to plan around the activities under the permit and schedule necessary inspections that may be required.

Subsection (c) provides for a joint inspection by DWR and the permittee, both prior to, and after, construction to assess and document the condition of the area within the SWP right-of-way that will be affected by the encroachment. Specifies that permittee is liable for all costs associated with restoration of the SWP property, facilities, or environment to the condition that existed prior to the commencement of work under the permit.

Section 610.10: Construction Requirements

Section 610.10 sets the conditions a permittee must satisfy during the construction work approved by an encroachment permit. Water Code Section 12899.2(b) allows the department to prescribe reasonable conditions “as deemed appropriate by the department, and may include mitigation for effects of the approved activity on the environment.” Each encroachment permit will obligate the applicant or holder to agree to restore the SWP facility to the same condition that existed prior to any work being performed under the encroachment permit, to agree to mitigation plans, or to a “reporting and monitoring” plan for the protection of the properties, facilities, or environment after completion of the project.

Subsection (a) specifies a one-year time limit to complete construction within SWP right-of-way. The one-year clock begins on the date that work is begun on the project. Historically, the work performed under a permit has not exceeded this time limit. This one-year limit is necessary because if there is an extended delay between the issuance of the permit and completion of the work, conditions on the ground may change, requiring additional clearances or environmental studies. Should that occur, the permittee will be required to update the clearances or environmental documents at permittee’s expense in order for the work to continue.

Subsection (b) requires that the permittee manage construction work within SWP right-of-way so that DWR access and ongoing operations and maintenance activities are not disrupted during the construction approved by the encroachment permit.

Subsection (c) requires that a construction schedule be submitted for review and approval. Water Code section 12899.2(b) permits the department to prescribe the requirements in the permit. In approving the work, the department must be able to schedule its own activities around the work to be performed under the permit.

Subsection (d) confirms the authority to inspect and supervise construction work performed under an encroachment permit. The department has construction supervision and inspection staff located throughout the length of the SWP. The subsection also authorizes inspectors to halt work if any construction activities within SWP right-of-way do not conform to the conditions of the encroachment permit. This is an important empowerment for department inspectors if unsafe work conditions, potential damage to SWP facilities, or work being performed outside the scope of the encroachment permit are witnessed.

Subsection (e) requires that construction work under the encroachment permit be completed within one year after construction work is begun, unless the permittee requests and is granted an extension of time to complete work. The elapsed time without an extension of time could be up to 2 years, including a deadline to start construction within one year after the permit issuance date and a complete construction deadline ending one year after construction work is begun. The department will work with the permittee on a construction schedule that cannot be completed within the required time limit. Written notification to the department is required to engage the department in a modification of the schedule for completion of the work.

Section 610.11: Post-Construction Requirements

The purpose of this section is to detail the responsibilities of the permittee after construction work on the encroachment has been completed. Following the completion of the

construction or project within the right-of-way, the final as-built plans must be submitted. The as-built plans detail the completed project and will assist the department in its future operations in and around the authorized encroachment. If the permit applicant fails to submit the as-built plans, the Encroachment Permit will not be issued, or if it has been issued, may be revoked and the department may hold the deposit, or any unused funds pending receipt of the final as-built plans.

Article 6: Requirements for Specific Types of Encroachments

This Article specifies the technical requirements for encroachment and are in addition to the general encroachment requirements detailed in Article 5. Water Code Section 12899.2(b) allows the department to prescribe requirements relating to the location and manner in which the work shall be performed, as determined by the department to be necessary for the protection of the SWP facilities. The structure of Article 6 was designed to present technical requirements related to the specific type of encroachment proposed, making a search of the relevant requirements for a particular type of encroachment easier to find within the framework of the regulations.

The requirements were developed to minimize the effects of various types of encroachments, including, but not limited to: trenching over buried SWP pipelines; corrosion control; self-supporting casing pipes; drainage into SWP easement; etc, on the SWP conveyance structures and right-of-way. Some of the technical specifications mirror the construction industry standards for compaction, safety, clearances, and materials. Where possible, DWR has cited the most recent publication dates for these referenced standards. Technical requirements developed by the department have evolved out of several decades of experience with the effects and impacts of various encroachments on SWP facilities.

Encroachment permit application submissions that do not meet these criteria are deemed incomplete. A detailed response letter noting the deficiencies is sent to the applicant

with instructions to re-submit with the required changes. The department may allow alternatives to its stated requirements, provided the applicant has submitted compelling information discussing the alternatives to the department.

Section 612.1: Bridge Encroachments

There are hundreds of bridges that cross the SWP right-of-way, nearly all of which cross over the open aqueduct segments of the system. This Section covers both proposed new bridge construction and encroachments that propose to use existing bridges as means to attach a utility crossing over SWP right-of-way. Most of these bridges are owned and maintained by the California Department of Transportation or by County or local government entities. However, there are more than three hundred bridges owned by the department, which is responsible for the maintenance of the bridge structure, such as pilings, columns, abutments, girders or members connecting substructure elements that support the deck. Public safety and structural integrity are a primary concern to the department in the review of new bridge designs, and any new bridge proposal must demonstrate that the structure will not impact SWP facilities or operations and maintenance activities. Applications for encroachments that propose to attach to an existing bridge must also demonstrate that the attachment can be accomplished without impacting structural integrity of the bridge or impairing operations and maintenance activities by the department.

Subsection (a) specifies that the bridge design shall cross the right-of-way perpendicular to the SWP aqueduct. This specification shortens the bridge span length over the aqueduct and minimizes the impact area footprint within the right-of-way. The department will review any requests that deviate from this specification on a case-by-case basis.

Subsection (b) specifies that new bridge designs which cross the SWP open aqueduct shall be free-span design that completely clear the canal with the required minimum vertical clearance above the top of the concrete canal liner (5 feet for box-girder bridges, 3 feet

minimum for all other bridges). This reinforces the commitment to protect the integrity of the canal by not allowing the aqueduct's concrete liner to be pierced by new piers or columns to support non-free-span bridges.

Subsection (c) specifies that no sheet piles can be driven into the right-of-way as part of the proposed bridge abutment construction. The concern is that impact and vibration from driving sheet piles could affect the Aqueduct canal embankment and/or liner structural integrity.

Subsection (d) specifies that construction plans for proposed bridges contain detailed information on the materials to be used in the bridge construction including, but not limited to: the type of concrete; details of various members of the bridge structure; vertical clearances between the top of the canal liner and the bridge girders.

Subsection (e) specifies that the applicant submit calculations and construction specifications for the proposed bridge to the department for review and approval.

Subsection (f) specifies that the bridge design include adequate right turn radius from the bridge road onto the department's operating road. The turning radius must accommodate an 80-foot long vehicle to allow the department's heavy construction equipment to access the SWP operating road.

Subsection (g) specifies that the applicant shall include details of any existing or proposed utilities attached to the bridge in the construction plans. Utility attachments can be suspended beneath the bridge, or attached to the sides of the bridge.

Subsection (h) specifies the requirements for attaching utilities to bridges, old and new. The requirements are necessary to preserve structural integrity of the bridges and abutments. This is done by controlling the mechanisms used to attach utilities to DWR bridges or abutments. . The subsection also includes specifications for self-supporting casing pipes that contain the utility pipeline or conduit.

Subsection (i) specifies that the permittee will abide by all provisions designed to prevent contamination of SWP water during construction of the bridge, or during construction of a utility crossing attached to the bridge.

Section 612.2: Landscaping Encroachments

This Section is primarily focused on landscaping encroachments within SWP right-of-way where the system is in buried pipeline segments and the SWP right-of-way is secured by easement. The department is committed to maintaining the overlying ground above the SWP pipeline segments free of landscaping elements that that would interfere with visual reconnaissance or jeopardize the integrity of the SWP pipelines from root intrusion.

Subsection (a) Specifies that no landscaping encroachments will be permitted within the department's right-of-way where open canal segments of the SWP exist.

Subsection (b) Specifies that the buried pipeline right-of-way can be used as a green-belt corridor upon review and approval, and outlines the types of plantings permissible within the right-of-way. Subsection (b)(3) details the position that no new tree will be allowed within 25 feet of the edge of the buried pipeline as measured from the tree's full-growth drip line. The department reviewed several water management agencies' policy on trees within their buried pipeline easements and found this distance-to-pipeline standard to be a reasonable criterion in preventing future potential damage to the pipeline due to invasive root growth.

Subsection (c) specifies that drawings containing landscaping details must indicate the project limits and show the right-of-way boundaries and facilities, matching the requirements for construction plans and drawings as specified under 610.1(b).

Subsection (d) specifies that large diameter irrigation pipelines (1 inch in diameter, or larger) shall be located at least 15 feet from the edge of the buried SWP pipeline. The concern is that a break in the irrigation pipe could cause extensive damage to the fill surrounding the SWP

pipeline or jeopardize buried communication cable(s) because of the high potential pressures in large-diameter irrigation pipelines.

Subsection (e) specifies that valves controlling large diameter irrigation pipelines (1 inch in diameter, or larger) shall be located outside of the right-of-way, or if necessary, within 10 feet from the edge of the right-of-way. The concern with large valves located in proximity to the SWP pipeline, buried communication cable(s) or other appurtenances is the same as stated in Subsection (d).

Subsection (f) specifies that detectable warning tape be buried 18, or more, inches above any buried irrigation pipeline within the right-of-way. In practice, the warning tape should provide a means to locate the buried irrigation pipeline, and will give added assurance that, failing magnetic detection, anyone digging over the irrigation pipeline will encounter the warning tape before the irrigation pipeline can be damaged.

Subsection (g) specifies that the existing cover (earth fill) over the SWP pipeline shall not be modified without advance review and approval before any grading work can proceed within the right-of-way.

Subsection (h) specifies that placement of excavated materials within the department's right-of-way is subject to department review. The concern is that spoil or fill piles will be deposited directly over the buried SWP pipeline or in proximity, or over, a control vault or other SWP facility or appurtenance. The reason for the concern is that adding fill over the pipeline will create excessive downward pressure that may jeopardize the structural integrity of the pipeline.

Subsection (i) specifies that a grading plan indicating the top elevation of the buried SWP pipeline shall be submitted for review and approval. This plan verifies the existing elevation of the ground above the pipeline. It also allows the department to verify that the

post-construction ground elevations are consistent with the SWP design engineering requirements.

Subsection (j) specifies that open space with trails and walkways will be permitted only if the access to SWP facilities is ensured.

Section 612.3: Longitudinal Encroachments

This Section is focused on the issue of proposals for encroachments that would run parallel to the SWP pipeline or canal within the right-of-way. The concern regarding longitudinal encroachments is the potential for disruption of maintenance efforts due to location of utilities, or other encroachments, in proximity to the SWP facilities.

In instances involving the right-of-way along buried pipeline segments, the department has developed criteria for acceptable longitudinal encroachments within the right-of-way based on experience and the potential impacts to maintenance activities. Any excavation to expose and repair or replace buried pipeline will require the removal of material far in excess of the pipeline dimensions. Even utilizing shoring methods to minimize the excavation width, any utilities or fixtures located within the excavation footprint have the potential to create difficulties for department staff and hinder maintenance and repair activities.

There are similar concerns within SWP right-of-way along open canal segments regarding any proposed longitudinal encroachments that could hinder maintenance and/or repair activities. The department is frequently approached regarding encroachment proposals within the open aqueduct right-of-way, however the department recognizes that the perceived open space may be necessary to accommodate the type of heavy equipment and the construction footprint required for excavation and repair of the aqueduct.

Subsection (a) addresses the policy is that longitudinal encroachments that do not directly serve the interests of the SWP will not be allowed within the right-of-way. In cases where the department allows a longitudinal encroachment, the encroachment must be located

as close to the right-of-way boundary as possible to minimize the impact on maintenance activities.

Subsections within (b): These subsections address various situations with which the department has dealt over the years. As with any activity on the right-of-way, the department has discretion to approve or prevent changes to the surface elevations. Subdivision lot layouts cannot include SWP pipeline right-of-way unless an existing encroachment has been approved prior to the adoption of these regulations. This will allow exceptions that have been previously approved by the department. DWR will consider future exceptions on a case-by-case basis.

In some areas, linear open space and hiking areas can be considered over pipeline easement because hiking and bicycling trails provide DWR access for maintenance and patrol. However, the department's access must be provided for and maintained.

Pavement over SWP pipeline easement is allowed so long as certain pavement compositions are used. All pavement over SWP pipeline easement must be asphalt or other flexible pavement that would not impair DWR excavation efforts to expose the SWP pipeline. Pressurized water pipelines, including irrigation supply lines, that are proposed parallel to the SWP pipeline shall be at least 15 feet from the edge of the SWP pipeline.

No longitudinal encroachments for hazardous material pipelines will be allowed within SWP pipeline right-of-way. Pipelines containing hazardous materials must be routed across SWP right-of-way perpendicular to the SWP pipeline with all minimum SWP pipeline vertical clearance criteria (described in Section 612.6, including subsections 612.63-612.64.) also being met.

Power poles, light poles (electroliers) and other similar structures proposed within the department's right-of-way must be installed as far from any SWP pipeline as they can reasonably be placed in order to protect the integrity of the pipeline and surrounding ground.

Embankments present a special problem for the pipelines due to the excess weight bearing down on the pipeline. No embankments may be constructed within the right-of-way where a buried SWP pipeline is present unless the department determines that the added surcharge of the embankment material does not jeopardize the integrity of the SWP pipeline. In the case of a future approved, or existing approved, embankment, the department will require removal of the embankment if a determination is made that SWP pipeline structural integrity is jeopardized by the embankment. Such removal would be by permittee, or by the department at permittee's expense, as reflected in Water Code sections 12899.5, 12899.6.

A similar situation exists with modifications of the grading above and around the pipeline. Proposed grading modifications to the cover over buried SWP pipeline, either adding material or removal of material, must be approved in advance. The initial SWP pipeline construction was based on a designed amount of earth covering on top of the pipeline and modification to this amount of cover, either adding or removing cover, could impact structural stresses and affect integrity of the pipeline.

Staging, or permanent placement, of fill or borrow material from excavation within the right-of-way is subject to advance review and approval because the piles of material present an obstacle to general maintenance activities and could create stress on the pipeline.

All projects that involve modifications to the cover over SWP pipelines must be accompanied by a grading plan that shows the top of SWP pipeline elevation.

Section 612.4: Road, Parking Areas, and Recreational Trails Encroachments

This section applies to those encroachment applications that propose to install roads, pavement, parking lots or recreational trails (including bicycle and walking paths) within the right-of-way. These types of encroachments are almost entirely related to buried SWP pipeline segments, however there are paving issues involving open aqueduct and non-operating right-of-way. The SWP pipeline alignment runs through urban corridors, as well as rural areas, and

the department has a long-standing policy of allowing these types of uses with the right-of-way provided that the following criteria are satisfied.

Subsection (a) specifies that projects involving modifications to the cover over SWP pipelines must be accompanied by a grading plan that shows the top of SWP pipeline elevation.

Subsection (b) specifies that proposed grading modifications to the cover over buried SWP pipeline, either adding material or removal of material, must be approved in advance by the department. The concern is that the SWP pipeline construction was based on a designed amount of cover over the pipeline and that modification to this amount of cover, plus or minus, could impact structural stresses and affect integrity of the pipeline.

Subsection (c) specifies that the staging, or permanent placement, of fill or borrow material from excavation within the right-of-way is subject to advance review and approval by the department out of concern for the SWP pipeline structural issues and because the piles of material present an obstacle to maintenance activities. Also specifies that any imported fill material may require testing before use.

Subsection (d) specifies that the any project that proposes to change existing drainage features must be accompanied by detailed design plans for department review and approval. The department's concern is for any change in the drainage pattern by modification of grading or drainage alignment either upslope or downslope of SWP facilities that may threaten SWP facility structural integrity or hinder operations and maintenance activities.

Subsection (e) specifies that no road travel lanes be located directly over the buried SWP pipeline. Placement of road shoulders or median over SWP pipeline will be considered on a case-by-case basis. There are numerous existing approved encroachments with street traffic lanes located over SWP pipelines and these existing encroachments will not be affected by this regulation.

Subsection (f) specifies that any proposed paving for a road that involves a bridge crossing over SWP pipeline shall comply with the specific criteria relating to bridges contained in Article 6, Section 612.1 of these regulations.

Subsection (g) specifies that roadways, or other pavement projects such as parking lots, may utilize the full width of the right-of-way, subject to department review and approval.

Subsection (h) specifies that all pavement installed within department's right-of-way must be asphalt or other flexible paving compound. The flexible pavement can be easily removed, if necessary, when required for maintenance and repair efforts.

Subsection (i) specifies that depressed curbs, or driveways, must be incorporated into the design for any road crossing over SWP aqueduct or pipeline. This is essential to allow department vehicles to access the SWP pipeline alignment for patrol and maintenance activities.

Subsection (j) specifies that fencing be installed by the applicant between any new maintenance road, or trail, and the right-of-way, except where the right-of-way is a greenbelt, such as a linear parkway. The fence must be approved in advance and must not present an access obstacle to department staff or vehicles.

Subsection (k) specifies that any gates installed within the right-of-way must be at least 16 feet wide and, if locked, must allow unrestricted access to the department's staff and maintenance vehicles and equipment.

Section 612.5: Subdivision Encroachments

This section is directed at those subdivisions that are proposed neighboring, or including, the right-of-way. Some of the issues potentially affecting the SWP include incorporation of any part of the right-of-way into the overall footprint of the subdivision and the concerns about any changes in the drainage patterns as a result of grading and channeling of runoff within the subdivision. In open aqueduct segments, historical drainage paths across the

SWP aqueduct were incorporated into the aqueduct design in the form of cross-drainage facilities sized to accept historical flows. These facilities include overchutes over the aqueduct and culverts under the aqueduct. Any re-routing of, or changes to, the drainage regime can have damaging consequences in the right-of-way if these changes do not incorporate these cross-drainage facilities.

Subsection (a) specifies that no permanent structures be placed in the right-of-way. Permanent structures, such as retaining walls, reinforced concrete, etc., have the potential to impair access to, and to impede maintenance efforts for, SWP facilities. Any object that cannot be easily removed by backhoe, or similar equipment, will not allowed within the right-of-way.

Subsection (b) specifies that subdivision plans must not divert drainage water into the department's open aqueduct right-of-way unless the flows are directed into the existing cross-drainage facilities. Because of persistent nuisance drainage produced year-round by subdivision developments, the department now requires that developments upslope of the aqueduct include a design for lined diversion channels to route drainage into the inlets of SWP cross-drainage facilities.

Subsection (c) specifies that that subdivision lots may not be drawn to include any part of the buried pipeline right-of-way. Existing approved encroachments for subdivisions that include buried SWP pipeline easement will not be affected, however all other criteria regarding compatibility of structures, trees, cover, etc., over buried SWP pipeline will apply.

Subsection (d) specifies that unimproved portions of subdivision lots within the right-of-way may be considered on an individual basis. This is more likely in the case of non-operational department right-of-way or where subdivision infrastructure (streets, sidewalks, utilities, landscaping, etc.) extends over SWP pipeline. Where these elements will be turned over to the local municipality, homeowner's association, or utility, the eventual responsible

entity may be required to sign the encroachment permit to guarantee awareness of the department's encroachment policies within the right-of-way and to indemnify the department from any costs tied to the maintenance, repair or replacement of any approved encroachment elements installed in department's right-of-way as part of a subdivision encroachment permit. As with other types of encroachments contained in these regulations, the applicant shall include all proposed encroachment elements in the plans accompanying the encroachment application.

Subsection (e) specifies that trees or vines are not allowed within buried SWP pipeline right-of-way. The department will consider exceptions to this policy on an individual basis and must not be planted within 25 feet from edge of SWP pipeline as measured from the tree's drip line.

Subsection (f) specifies that open-space recreation areas may be allowed over SWP pipeline right-of-way provided that the department's access to the pipeline alignment and right-of-way is provided.

Subsection (g) specifies that all pavement for streets and parking lots be constructed using flexible paving materials

Subsection (h) specifies that the department may permit paving of the full-width of the department's right-of-way, subject to department review and approval.

Subsection (i) specifies that the department may establish a set-back for the placement of encroachments within the SWP buried pipeline right-of-way.

Subsection (j) specifies that depressed curbs or driveways shall be provided at all road crossings over SWP pipeline right-of-way to allow access to the right-of-way by department's vehicles.

Subsection (k) specifies that any gates installed within department's right-of-way be at least 16 feet in width and, if locked, that department staff be provided with a key, lock combination, or automatic gate code, in order to be able to access the right-of-way at all times.

Subsection (l) specifies that all sewer, gas, petroleum products, or hazardous materials pipelines crossing the SWP buried pipeline shall be routed across the right-of-way perpendicular to the SWP pipeline. The pipeline encroachment must also meet all required vertical clearances with respect to SWP pipeline, communication cables and roads.

Subsection (m) specifies that light poles, posts, etc., proposed within department's right-of-way must be installed as far from buried SWP pipeline as possible. The department has determined that, to ensure safety and integrity of the compaction requirements, poles, posts, etc. should not be located closer than 25 feet from the edge of SWP pipeline.

Subsection (n) specifies that no embankments may be constructed within the right-of-way where a buried SWP pipeline is present unless the department determines that the added surcharge of the embankment material does not jeopardize the integrity of the SWP pipeline. In the case of a future approved, or existing approved, embankment, the department can call for the removal of the embankment if a determination is made that SWP pipeline structural integrity is jeopardized by the embankment. Such removal would be by permittee, or by the department at permittee's expense.

Subsection (o) specifies that proposed grading modifications to the cover over buried SWP pipeline, either adding material or removal of material, must be approved in advance. The concern is that the SWP pipeline construction was based on a designed amount of cover over the pipeline and that modification to this amount of cover, plus or minus, could impact structural stresses and affect integrity of the pipeline.

Subsection (p) specifies that the staging, or permanent placement, of fill or borrow material from excavation within the right-of-way is subject to advance review and approval out

of concern for the structural issues detailed in (o) above and because the piles of material present an obstacle to maintenance activities.

Subsection (q) specifies that projects that involve modifications to the cover over SWP pipelines must be accompanied by a grading plan that shows the top of SWP pipeline elevation.

Section 612.6: Utility Encroachments

This Section sets the criteria for the various utility encroachments that the department has to consider, including: electrical cables (buried and overhead); petroleum product and natural gas pipelines; water pipelines; sewer and storm water pipelines; telecommunication cables (buried and overhead); etc. The issues involving a utility crossing through the right-of-way are significantly different depending on the SWP facility that will be crossed. In the interest of readability and logical structure, the utility encroachment criteria are divided into (A) utility encroachment crossing SWP open aqueduct; (B) utility encroachment crossing SWP buried pipeline; and utility encroachment crossing SWP road.

Section 612.61: Utility Crossing SWP Open Aqueduct (Canal)

Utility crossings over SWP open aqueduct can involve attachment of a utility pipeline to a bridge or overchute spanning the open aqueduct, overhead span of wire between utility poles or towers, and horizontal directional drilling to construct a utility pipeline crossing beneath the aqueduct.

Subsection (a) specifies that utilities shall cross the right-of-way perpendicular to the SWP canal.

Subsection (b) specifies that no pier construction in the canal will be allowed for support of utility pipeline crossings. All crossing utility pipelines shall be self-supported free-span construction, or shall be attached to existing spanning structure.

Subsection (c) specifies that utilities attached to existing spanning structures shall not impede the hydraulics of either the aqueduct/canal or the existing spanning structure (cross drainage facility such as an overchute).

Subsection (d) specifies that the minimum vertical clearance of 12 inches between a crossing utility and the top of the existing, or future, aqueduct liner. If the minimum clearance is lost by either subsidence or future raising of the aqueduct liner, the permittee will be responsible for the cost of re-establishing the minimum clearance.

Subsection (e) specifies that boring and jacking of a utility through protective dikes or aqueduct embankments within the right-of-way will not be permitted.

Subsection (f) specifies that directional drilling of a utility under SWP aqueduct or canal may be considered provided that a 25 foot minimum vertical clearance can be maintained between the bottom of the aqueduct liner and the top of the utility.

Subsection (g) specifies that all utilities under SWP roads shall have a minimum vertical clearance of 36 inches below the road surface.

Subsection (h) specifies that berms shall be rebuilt or repaired to equal, or better, condition than the existing berms. This is of concern when excavation is required to bury utility casing pipes in existing protective dikes or aqueduct embankments.

Subsection (i) specifies the details that shall be provided in all drawings submitted for utilities crossing open SWP aqueduct, including: 1) SWP aqueduct milepost location, size of carrier pipeline and type of material for each utility crossing; 2) specifications for carrier pipe, type of pipe, operation pressure, wall thickness, joint type; 3) type of casing; physical details of aqueduct-spanning SWP facility if utility is to be attached; corrosion protection measures; details of expansion/contraction management for utility carrier pipe and casing; location of shut-off valves; details of thrust blocks; construction code used for design of utility crossing;

location and depth of all SWP pipelines, communication cables, etc.; any existing utility crossings in vicinity of proposed encroachment.

Subsection (j) specifies the corrosion-resistant anchor bolts to be used for all attachments to SWP facilities.

Subdivision 612.62: Overhead Electrical and Communication Utilities

Subsection (a) specifies that minimum vertical overhead electrical conductor and communication cable clearances shall meet, or exceed, California Public Utilities Commission General Rule 95 criteria.

Subsection (b) specifies additional vertical clearance criteria for overhead electrical/communication cabling over SWP open aqueduct and aqueduct service roads, many of which are located on top of the aqueduct embankment.

Subsection (c) specifies that no poles or towers for overhead electrical/communication cabling over SWP open aqueduct may be placed in the right-of-way. Also, overhead electrical/communication cabling over SWP open aqueduct must cross perpendicular to the aqueduct.

Subsection (d) specifies that the applicant shall install warning signs facing vehicle traffic in the right-of-way indicating the presence of overhead electrical conductor(s), the vertical clearance to the conductor(s) and the line voltage.

Subsection (e) specifies that the applicant develop and submit an emergency response plan for the electrical/communication utility crossing.

Subdivision 612.63: Casing Requirements

Subsection (a) specifies that all pipelines containing anything other than potable water must be in a casing over SWP open aqueduct.

Subsection (b) specifies that any pipe attached to a spanning facility, such as bridge or overchute, shall be sleeved through the earthen section of the aqueduct embankment or protective dike within the right-of-way.

Subsection (c) specifies that all casing pipes shall be a minimum 5/16-inch wall thickness steel pipe with an inside diameter at least 4 inches greater than the carrier pipe. The ends of the carrier pipe must have casing end seals to prevent containment of any material from the carrier pipe and must be tested for seal verification in presence of a department inspector.

Subsection (d) specifies that mortar-coated steel pipe can be used without Cathodic protection provided that the omission of Cathodic protection is supported by department's review of the soil environment.

Subsection (e) specifies that full concrete encasement is required for all sleeve or casing pipe sections buried beneath department operating roads on SWP open aqueduct or canal embankments unless accompanied by stamped engineering calculations indicating that the encasement is not required.

Subsection (f) specifies drain details for discharging from casing pipes away from the SWP open aqueduct. Guard posts to protect the valves and sign posts indicating pipeline owner, contents of carrier pipeline, utility ID, and emergency contact information shall be installed.

Subsection (g) specifies details and materials for accommodating thermal elongation of utility pipelines in mounting or hanging to bridges or overchutes over SWP open aqueduct

Subsection (h) specifies that casings larger than specified in (c), above, will be considered on a case-by-case basis with consideration for required clearances from the bottom of the canal liner.

Subdivision 612.64: Hazardous Material Carrier Requirements

Subsection (a): No hazardous material will be allowed to span the SWP open aqueduct. Exceptions will be considered by the department on a case-by-case basis.

Subsection (b) specifies the special conditions applicable to any encroachment approved by department for a hazardous material pipeline over the SWP open aqueduct, including: 1) the applicant must develop a hazardous material spill plan, develop a leak detection program, and an emergency response plan; and 2) applicant must detail and install check valves on both sides of the SWP open aqueduct to minimize the risk of hazardous material entering the aqueduct.

Subdivision 612.65: Attaching Utilities to Bridges and Overchutes

Subsection (a) provides requirements for any encroaching utility that proposes to attach to a DWR bridge. These requirements detail where utilities can be placed on a DWR bridge, as well as how they can be attached. These requirements are necessary to maintain structural integrity of DWR bridges, as well as maintain safe and reliable use for each of these structures.

Subsection (b) provides requirements for any encroaching utility that proposes to attach to a DWR overchute. Overchutes are utilized as cross drainage facilities for the SWP. This subsection provides requirements that detail where and how utilities can be attached to a DWR overchute. These requirements are necessary to maintain structural integrity of the overchutes, while maintaining the maximum flowage capacity for which these overchutes were designed.

Section 612.70: Utility Crossing SWP Underground Pipelines

Section 612.71 – General Requirements: Specifies the general requirements applicable to all utilities crossing SWP buried pipelines.

Subsection (a) describes the documentation required from the applicant regarding the procedures; excavation plans; work and completion schedule; and the weight and types of

construction equipment that will be used over SWP buried pipeline. The encroachment work scheduling info is necessary for the department to plan maintenance activities around the proposed construction. The department requires excavation plans and equipment list to ensure that the SWP pipeline structural integrity is protected.

Subsection (b) requires that any utility pipe carrying anything other than potable water must cross the right-of-way perpendicular to the SWP buried pipeline. This reduces the overall area within the right-of-way affected by the encroachment, as well as minimizing potential contamination impacts to the right-of-way in the event of a utility pipeline leak or failure.

Subsection (c) describes the casing requirements for all utilities crossing SWP underground pipeline. The utility carrier pipe must cross inside a minimum 5/16-inch wall thickness corrosion-protected steel casing pipe with an inside diameter at least 4 inches greater than the carrier pipe. The casing pipe must be self-supporting to minimize maintenance issues if excavation of SWP becomes necessary.

Subsection (d) describes the requirement that the casing pipe must extend beyond the excavation pit required to expose the SWP buried pipeline in order to support the casing and carrier pipe over the open pit. The extra length required will be determined based on the weight of the casing & carrier pipes (and contents); width of the pit and the soil make-up of the pit walls.

Subsection (e) is similar to (d), above, but adds specific starting length for the extension of casing pipe beyond the excavation pit for all utility crossings where shored excavation would be used to expose the SWP buried pipeline. A continuation of the self-supporting casing pipe criteria started in (c) and (d) above. Requires that a minimum of 6 feet of casing pipe length be added on both sides of a shored excavation pit wide enough to expose the SWP buried pipeline, plus any additional length required by the soil characteristics, to fully support the casing and carrier pipes over the open pit.

Subsection (f) limits installation of any utility crossing under the SWP buried pipeline to the jack and bore method. The concern is that other methods of crossings under existing pipelines, for example, horizontal directional drilling, may result in instability of the soil around or under the SWP pipeline, or may cause some damage the pipeline. Also, any space between the bore-hole and the casing pipe must be filled with cement grout and the annular space between the casing pipe and the carrier pipe be filled with cement slurry.

Subsection (g) specifies that the minimum vertical clearance between the utility crossing and the SWP buried pipeline must be at least 3 feet. This clearance helps prevent construction equipment used to place new utilities within DWR right-of-way from damaging the buried SWP pipeline. The clearance also allows space for DWR to work in the area without removing or damaging the buried utilities.

Subsection (h) specifies that the applicant must install signs at the locations where the utility enters and exits the right-of-way. The signs must detail the nature of the utility, the owner information, utility ID, and emergency contact information. This allows for immediate communication with the utility operator in the event of an emergency.

Subsection (i) specifies that the SWP buried pipeline and control/communication cables must be shown on all plans containing work to be performed within department's right-of-way. The reason for this information is to allow the department to verify relative locations of all SWP facilities and other crossing utilities. The reason only hand tools may be used within 3 feet of either the buried pipeline or control/communication cables is to minimize the potential for damage to the SWP facilities. The applicant must also contact the local Underground Service Alert office, the central repository for information about underground utilities in order to confirm relative locations prior to beginning construction.

Subsection (j) requires that a construction note advising that control/communication cables are located alongside the SWP buried pipeline be placed on every drawing sheet

containing work to be performed within department's right-of-way. This is to highlight the location of the cables to all parties working off of the construction plans.

Subsection (k) requires pothole locations and elevations to be indicated on all pertinent drawing sheets for the project. This verifies that potholing was completed and adds information about the amount of cover over SWP facilities for future users.

Subsection (l) specifies that all trench excavation must comply with relevant Occupational Safety and Health Administration standards. The department's compaction standards must be followed and noted on every drawing sheet. These standards are designed to protect all DWR and outside construction personnel from injury during construction, and to ensure that all contractors are aware of the compaction standards to be followed.

Subsection (m) requires all drawings and plans to include specific location as well as construction and operating information regarding the utility crossing. This information must be on all drawings to verify the inclusion of the criteria during construction and to provide a permanent record of all buried utilities that could affect planning for future DWR maintenance projects.

Subsection (n) requires all buried utilities within DWR right-of-way to have detectable warning tape installed over all trenched utilities no more than 18 inches above the utility within department's right-of-way. The color coding specific to the buried utility are standardized throughout the pipeline safety industry (American Public Works Association APWA Uniform Color Code, ANSI Z535.1). These tapes will assist future location of these utilities should DWR, or another entity, have need to excavate in the area of the crossing utility.

Subsection (o) requires all electrical utility crossings within DWR right-of-way to also have 3 inches of red-dyed concrete overlaid over the conduit/casing in addition to the warning tape specified in (n) above. The reason for this requirement is to make sure that no one

working in the area in the future unexpectedly encounters a charged electrical utility. It follows industry standards for detectability over buried electrical utilities.

Subsection (p) specifies that the permittee shall maintain the utility pipeline, casing seal, and identification signs in good condition. This will minimize any work the department may have to undertake for the duration of the permit.

Section 612.72: Overhead Electrical and Communication Utilities

Subsection (a) specifies that minimum vertical overhead electrical conductor and communication cable clearances shall meet, or exceed, California Public Utilities Commission General Rule 95 criteria.

Subsection (b) specifies additional vertical clearance criteria for overhead electrical/communication cabling over SWP pipeline and pipeline service roads, many of which are located on top of the pipeline.

Subsection (c) specifies that no poles or towers for overhead electrical/communication cabling over SWP pipeline may be placed in the right-of-way. Also, overhead electrical/communication cabling over SWP pipeline must cross perpendicular to the pipeline.

Subsection (d) specifies that the applicant shall install warning signs facing vehicle traffic in department's right-of-way indicating the presence of overhead electrical conductor(s), the vertical clearance to the conductor(s) and the line voltage.

Subsection (e) specifies that the applicant develop and submit an emergency response plan for the electrical/communication utility crossing.

Sub-Division 612.80: Utility Crossing Under SWP Roads

Subsection (a) requires that all drawings include existing surface elevations, trench excavation elevations and all utilities to be placed in trench so that clearances between the trenched utilities DWR road surface can be verified.

Subsection (b) specifies that all trench excavations comply with relevant Occupational Safety and Health Administration standards. The department's compaction standards must be followed and noted on every drawing sheet. These standards are designed to protect all DWR and outside construction personnel from injury during construction, and to ensure that all contractors are aware of the compaction standards to be followed.

Subsection (c) requires digging for utility crossing conduits under the SWP roads with a diameter of 5 inches, or less, to be performed by jack and bore method. This preserves stability of the DWR roadway and ensures that compaction standards are maintained, reducing the possibility of damage to the paved surface due to subsidence.

Subsection (d) specifies that a 3-foot minimum vertical clearance between SWP road surface and utility conduits must be maintained to allow for future maintenance without impacting the crossing utility.

Subsection (e): No SWP road surface may be cut without department approval.

Subsection (f) confirms that any SWP road damaged by the applicant's construction activities shall be replaced, or repaired, in accordance with the construction standards established by the California Department of Transportation (Caltrans). The Caltrans standards are utilized by DWR in building roads associated with the operation of the SWP.

Subsection (g) requires that any SWP road embankments that are to be widened as a result of the applicant's construction activities shall conform to the construction standards established by the California Department of Transportation (Caltrans), for the reason indicated in subsection (f) above.

Subsection (h) requires that all buried utilities within DWR right-of-way must have detectable warning tape installed over all trenched utilities no more than 18 inches above the utility within department's right-of-way. The color coding specific to the buried utility are standardized throughout the pipeline safety industry (American Public Works Association

APWA Uniform Color Code, ANSI Z535.1). These tapes will assist future location of these utilities should DWR, or another entity, have need to excavate in the area of the crossing utility.

Article 7: Corrosion Protection Requirements

Corrosion protection measures used by DWR to protect components of the SWP include the use of coatings, Cathodic protection, and materials selection. The goal is to ensure design service life of water conveyance systems are met at reasonable maintenance costs. Encroachment appurtenances (e.g., turnouts with associated gates, pipes and pumps) that connect to SWP main line systems become a part of DWR's overall water distribution network, and must also be protected from corrosion. This ensures integrity and minimizes discontinuities in the main line corrosion protection system. Preservation of the SWP infrastructure (including encroachment appurtenances) contributes to the economical and safe delivery of water to the public. This section 615, *et. seq.*, provides requirements for projects that have the potential for disrupting DWR's corrosion protection system.

Article 8: Encroachment Permit Evaluation Process

This Article deals with the timelines for the department and public in processing the encroachment permit application. The Legislature set forth timelines for the department to respond to an application, Water Code section 12899.1(e), namely the department "shall approve or deny and application . . . not later than 60 days from the date of receipt of the complete application." The determination of a "complete application" is a department function. However, the department is required to respond to an applicant within 30 days with a determination as to whether or not the application is complete. Since the department is not required by this law to approve or deny an application that is not complete, this Article outlines the process the department will take if the application does not meet with the requirements of this section in its contents.

Section 618: Departmental Determination of Application Completeness

Water Code section 12899.1 prohibits any person from making any "alteration, improvement, encroachment, or excavation" within the SWP "without first obtaining the written permission of the department." Water Code section 12899.2 authorizes the department to "prescribe requirements in the permit." The requirements are set forth in the statute and this regulation. Within thirty (30) days of receipt of an application for a permit, the department will determine its completeness and compliance with all the requirements of this regulation. If the department identifies a deficiency in the application or its supporting documentation, the department will, within 30 days, provide written notice to the applicant, specifying how the application is deficient. It is the applicant's responsibility to make sure all the requirements are met before resubmission.

Until the application is complete, the department has no obligation to begin the review process for either issuing or denying the application. This timeline is necessary because of the number of different divisions within the department that must review the application.

Section 620: Notice of Permit Application Deficiency and Conditions of Denial

Once the application is complete, this Section 620 initializes the departmental review process. With the exception of a simple encroachment that will exist for a very limited period of time, review of an encroachment permit involves many personnel within several divisions or units of DWR. As a result, the department reserves the ability to determine when an application is "complete," meaning that all the required elements have been submitted along with the fees to cover the costs of the department. If the department begins review prior to receipt of the "complete" application, it is possible that a lot of time will be devoted to the review and, ultimately, the applicant never provides all the required information. The "Comment Letter" referred to will detail the deficiencies in the application and to the extent possible, will be provided within sixty days. Should the applicant fail to cure the deficiencies within a reasonable amount of time, the department may deny the application for this failure.

Under subsection 620.2, the failure of the department to provide a Comment Letter within sixty (60) days does not constitute a conclusion by the department that the application is complete, or that a permit will be issued. The department and the applicant can waive the sixty-day limit under certain circumstances. For example, it may not be possible for the applicant to provide all the necessary documentation within the sixty-day period, but can provide at a later time. Under this scenario, the department may only be able to deny the application as incomplete due to the approaching deadline. Agreement to waive the time limit will allow the applicant to obtain and submit the required documentation so that the permit can be issued.

Water Code section 12899.1(c) authorizes the department to issue a permit for any act that is “not inconsistent” with the “functioning, operation, maintenance, enlargement, and rehabilitation” of the SWP facilities. Water Code section 12899.2 authorizes the department to prescribe the requirements and conditions of granting the permit. Section 620.3 details some of the circumstances under which the department may deny the application.

Article 9: Department’s Enforcement Actions For Unauthorized Encroachments

This Article 9 sets forth the procedures for the department in dealing with unauthorized encroachments. Water Code section 12899.5 authorizes the department to take action to remove encroachments. Water Code section 12899.5 authorizes the department to “require the removal of the encroachment in the manner provided in this section.” The requirements distinguish between types of encroachments and the existence of an emergency in determining the type and timing of notice prior to removal. Non-emergency situations are addressed in Water Code Section 12899.5(b) and (c). Situations where the SWP facilities are at risk of “imminent harm” are described in Section 12899.5(d). Situations where there is an emergency as defined are described in Section 12899.5(e). In the case of an emergency, the department is authorized to “take any action necessary to avert, alleviate, repair, or mitigate

any threat” to the SWP, without notice to the landowner. Water Code section 12899.5(e) defines “emergency” for this purpose.

In cases of non-emergency, the department must provide notice to the owner of the encroachment and allow the encroacher an opportunity to remove it. If the encroacher does not respond and remove the encroachment, the department is authorized to remove the encroachment. The owner of the unauthorized encroachment will be financially responsible for all costs of removal, including court costs and attorney’s fees if legal action is required.

Section 625.1: Department’s Authority to Remove Unauthorized Encroachments

Water Code section 12899.5(a) authorizes the department to require removal any encroachment “in the manner set forth in this section.”

Section 625.2: Department’s Unauthorized Encroachment Notification, General Information

The department is authorized by Water Code section 12899.5 to remove any encroachment, whether permitted or not, under certain circumstances. The statutory trigger for removal whether in an emergency or not, is a determination by the department that the encroachment obstructs, threatens, or prevents the proper operation, maintenance, or rehabilitation of the SWP facilities, or constitutes an imminent threat to the integrity of one or more features of the SWP.

Notice is required except in the case of an emergency and in that event, the department can “take any action” without notice to ensure the safety of people and property and the integrity of the SWP facilities.

Section 625.3: Non-Emergency Situations Notification and Removal of Unauthorized Encroachment

In a non-emergency, Water Code sections 12899.5(b) and 12899.5(c), the department must provide notice to the owner, occupant, or person in possession of the encroachment, or to any other person causing or permitting the encroachment to exist, by serving a notice demanding the immediate removal of the encroachment. The department will describe the encroachment with reasonable certainty. The notice will be served in such a manner as to effect personal notice if possible, including personal service, or registered mail and posting for five days at the location of the encroachment. If the owner, occupant, or person in possession does not reside within the county of the encroachment, the notice may be given to an agent in lieu of service by mailing and posting.

The department will take action to remove the encroachment if the following are met:

- 1) If, within sixty (60) days of the notice, the owner, occupant, or person in possession has not asserted a right for possession pursuant to Water Code section 12899.8 and has not removed or commenced removal of the encroachment, and
- 2) The department has determined that the encroachment obstructs, threatens, or prevents the proper operation, maintenance, or rehabilitation of the SWP facilities.

If the department is compelled to act upon the failure of the encroachment to be removed following notice, the department may, pursuant to section 12899.5(f) recover the expense of the removal, costs and expenses of any legal action including attorneys fees, and in addition, \$1,000 per day for each day the encroachment remains after the applicable period following notice.

Section 625.4: Imminent Threat Situations Notification and Removal of Unauthorized Encroachment

Water Code section 12899.5 describes various scenarios when the department can seek removal of an encroachment. Section 12899.5(d) authorizes the department to “immediately remove” an encroachment under the following two conditions:

1) The department gives notice to the owner, occupant, or person in possession of the encroachment and “not later than five days” from the date on which the notice was given, the owner, occupant, or person in possession has not asserted a right to be in possession pursuant to Water Code section 12899.8 and has not removed, or commenced to remove the encroachment “in a diligent manner”.

2) The encroachment poses an imminent threat to the integrity of one or more features of the SWP.

If, after five days following notice to the owner, occupant, or person in possession of the encroachment, the encroachment is not removed, or work has not commenced to remove the encroachment, the department will act to immediately remove the encroachment. This action will be necessary to mitigate any imminent threat to the public or to the integrity of the SWP facilities.

Water Code section 12899.5(f) permits the department to recover “the expense of removal, costs and expenses of any legal action including attorneys fees,” and in addition, \$1,000 per day for each day the encroachment remains after the expiration of the applicable response period following the notice.

Section 625.5: Emergency Situations Notification and Removal of Unauthorized Encroachment

Water Code section 12899.5 describes various scenarios when the department can seek removal of an encroachment. Section 12899.5(d) authorizes the department to “immediately remove” an encroachment under the following two conditions:

1) The department gives notice to the owner, occupant, or person in possession of the encroachment and “not later than five days” from the date on which the notice was given, the owner, occupant, or person in possession has not asserted a right to be in possession

pursuant to Water Code section 12899.8 and has not removed, or commenced to remove “in a diligent manner” the encroachment.

2) The encroachment poses an imminent threat to the integrity of one or more features of the SWP.

However, as set forth in Water Code section 12899.5(e), in the case of an “emergency” as defined by this section, the department is authorized to “take any action necessary to avert, alleviate, repair, or mitigate any threat” to the SWP.

The statute defines “emergency” as “a sudden, unexpected occurrence that poses a clear and imminent danger, requiring immediate action to prevent or mitigate the loss or impairment of life, health, property, or essential public services.” Upon making this determination, the department will take necessary action without prior notice to the owner, occupant, or person in possession. The department will make every attempt to provide notice prior to acting, however, it may not be possible under the specific circumstances of the emergency.

Section 625.6: Diversion, Drainage, Seepage, or Overflow of Water Onto Departmental Right-Of-Way

Water Code section 12899.6 describes specific acts that are declared unlawful, including, in separate subsections:

(1) Drain water, or permit water to be drained, from the person’s lands onto the State Water Resources Development System right-of-way by any means, which results in damage to the system or the department’s right-of-way, except where the water naturally drains onto the department’s right-of-way.

(2) Obstruct any natural watercourse in a manner that does any of the following:

(A) Prevents, impedes, or restricts the natural flow of waters from any portion of the department’s right-of-way into and through the watercourse or State Water Resources

Development System cross drainage structures, unless other adequate and proper drainage is provided.

(B) Causes waters to be impounded within the department's right-of-way that damages the State Water Resources Development System or the department's right-of-way, except where the water naturally drains onto the department's right-of-way.

(C) Causes interference with, or damages or makes hazardous the operation, maintenance, and rehabilitation of, the State Water Resources Development System.

(3) Stores or distributes water for any purpose so as to permit the water to overflow onto, causing damage to, or to obstruct or damage any portion of, the State Water Resources Development System or the department's right-of-way.

Subdivision (b) requires "any person" who has permitted any of the enumerated conditions to exist, to, upon notice by the department, "immediately cease and discontinue" the violation, or to "repair, or pay for the repair of "any damage" to the SWP system or the department's right-of-way. The recipient of the notice may challenge the department's decision in court, as the department has decided that it will not create an administrative appeal mechanism.

Subdivision (c) allows the department, upon failure of the notice recipient to abate the encroachment, to undertake "repairs and perform work as it determines necessary" to abate the unauthorized encroachment.

Subdivision (d) permits the department to recover, "in an action at law," all costs related to the abatement of the unauthorized encroachment, and in addition, the sum of one thousand dollars (\$1,000.00) for each day the unauthorized encroachment is allowed to continue after notice, served in accordance with Water Code section 12899.5, together with "the costs and expensed, including attorney's fees, incurred in the action."

Section 625.7: Criminal Prosecution of Unauthorized Encroachers

Water Code section 12899.1(f) makes “alteration, improvement, encroachment, or excavation within the right-of-way” without a permit a misdemeanor crime. The department will utilize its discretion to prosecute under this section if the circumstances are such that criminal prosecution is justified.

Article 10: Jointly - Owned State and Federal Facilities

Section 630: Under Water Code section 12899.10, the encroachment permit process described in this regulation does not apply to a public agency that jointly owns facilities along with the state and the United States, specifically mentioning the San Luis Unit of the Central Valley Project, so long as the activities “are conducted pursuant to, and consistent with, an agreement with the United States for the operation and maintenance of those facilities.” Activities undertaken pursuant to those agreements will be conducted in accordance with the agreements.

Article 11: General Encroachment Permit and Maintenance of Public Agencies

Section 635: Water Code section 12899.11 was enacted as part of Senate Bill 543 to exempt the state water contractors from the encroachment process described in this regulation. According to the legislative history, this section was inserted at the request of Metropolitan Water District, one of the state’s water contractors. An expedited process for a “general encroachment permit” is set out for “routine operation and maintenance” of the water contractors’ facilities that are in and around the DWR right-of-way.

IV. ECONOMIC IMPACTS OF THE REGULATIONS

A. Creation or Elimination of Jobs within the State.

No impacts to the creation or elimination of jobs within the state are anticipated with the regulations. Over the years, DWR has entered into many contractual agreements with landowners, contractors, public agencies, etc., for use of the right-of-way. The regulations seek to codify the requirements the department has developed and utilized in evaluating an

encroachment permit application. In addition, compliance with the statute and these regulations is entirely voluntary; no mandate is imposed by the regulations. Since no member of the public or any local governmental entities who may own land adjacent to the department's right-of-way seek is obligated to seek access to the right-of-way, no cost will be incurred unless the landowner seeks to encroach on the right-of-way.

B. Creation of New Businesses or the Elimination of Existing Businesses within the State.

No impacts to the creation of new business or elimination of existing businesses within the state are anticipated. The regulations clarify the general standards set forth in the enabling statute, Water Code section 12899. Since use of the right-of-way is entirely at the discretion of adjacent landowners, the requirements and costs set forth in the regulations have no effect on any business unless that business chooses to seek an encroachment permit from the department.

C. Competitive Advantages or Disadvantages for Businesses Currently Doing Business within the State.

No impacts to the competitive advantages or disadvantages for businesses currently doing business within the state are anticipated because the proposed regulations codify existing practice within the department and the standards set forth in these regulations apply equally to anyone seeking an encroachment permit.

D. Increase or Decrease of Investment in the State.

No impacts to the increase or decrease of investment in the state are anticipated because the proposed regulations merely codify the historic practice of the department in considering encroachment permit applications and are not expected to increase any existing requirements.

E. Impact on Government Revenue.

No impact on government revenue is expected as a result of the regulations because the requirements for an encroachment permit and associated costs will remain unchanged by the proposal.

F. Small Business Economic Effect.

Government Code sections 11342 et. seq. require DWR to consider any adverse effects on small businesses that would have to comply with a proposed regulation. DWR staff has concluded that because of the discretionary nature of the applicability of the regulations, there will be no mandatory impact on small businesses in the state.

G. Fiscal Impacts.

1. Impact on Government Revenue.

No impact on government revenue is expected as a result of the regulations because the encroachment permit process seeks will reimburse the department for its costs of reviewing and issuing the permit.

2. Impact on Government Expenditures.

No impact on government entities as the statute and these regulations provide an exemption from obtaining an encroachment permit for those entities along the SWP that have existing agreements with the department. Those agreements were negotiated initially at least 50 years ago when the SWP was under construction, and new or modified agreements have been executed since then.

There will be no additional person-years needed to enforce the regulations because the regulations do not add additional requirements above what is already currently being required on a case-by-case contractual basis. Any additional work that may be required to enforce unauthorized encroachments will be absorbed by existing personnel within the department.

H. Reasonable Alternatives to the Regulations.

DWR staff considered potential alternatives to the proposed regulations (namely, the no action alternative in most cases). DWR staff determined the proposed regulations are more appropriate than the alternatives considered, which would continue the practice of applying the standards in these regulations on a case-by-case basis. The department is obligated by law to operate and maintain the State Water Resources Development System. In allowing access, the department has, out of necessity, negotiated the terms and conditions of allowing encroachments and encroaching activities in the right-of-way, while preserving its obligation to ensure the integrity of the system, continued interrupted operations and maintenance obligations and ensure safety to the public. The proposed regulations codify past practice so that all permit applicants are advised of the requirements that must be met.

No alternative considered by the agency would be more effective in carrying out the purpose for which the regulation is proposed or would be as effective as or less burdensome to affected private persons than the proposed regulation.

I. Description of Reasonable Alternatives Considered That Would Lessen Impact On Small Business.

DWR staff has also considered the potential alternatives to the proposed regulations that would lessen any adverse impact on small business. However, as discussed above, the proposed regulations are more appropriate than the alternatives considered.

V. No Conflict With Other Regulatory Schemes.

These regulations do not create a conflict with any applicable Federal Law. The Department of Water Resources jointly operates certain portions of the Water Resources Development System with the Federal Bureau of Reclamation. The Bureau of Reclamation does not have a set of regulations or statutes that conflict with the principles set forth in Water Code section 12899, or these regulations. With regard to the requirements set forth in these

regulations, the Bureau of Reclamation defers to the department for operations and maintenance control.

VI. Environmental Justice.

"Environmental Justice" is defined as the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies (Government Code §65040.12(c)).

DWR Staff does not believe that these proposed regulations will have any adverse environmental justice impacts because they codify the practice historically utilized by the department on a case-by-case basis for requests by the public to encroach on the right-of-way. These proposed regulations are only mandatory where a landowner seeks to encroach on the right-of-way, and in that respect, they set forth standards that will be applied to any encroachment permit applicant.

APPENDIX A

A. Documents Relied Upon And/Or Incorporated By Reference

1. Department of Water Resources Standard Provisions for Encroachment Permits

These contractual provisions must be accepted by all applicants. They were developed within the Department's Office of Chief Counsel and set forth specific provisions that protect the State, the Department, the SWP facilities and the right-of-way. They establish insurance requirements as authorized by Water Code section 12899.2(f).

2. ASTM Standards

ASTM (2012), Standard Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lb/ft³ (2.700 kN-m/m³)), in Annual Book of ASTM Standards, Method D1557-12, ASTM International, West Conshohocken, Pennsylvania, 201309. This sets out the standards for compaction required by the department in all fill situations within the right-of-way.

WATER CODE SECTIONS 12899-12899.11

12899. The following definitions govern the construction of this chapter:

(a) "State Water Resources Development System" means the State Water Resources Development System as described in Section 12931, including, but not limited to, all portions of the project authorized pursuant to the Central Valley Project Act (Part 3 (commencing with Section 11100)) and additions thereto.

(b) "Encroachment" means any installation of any tower, pole, pipe, fence, building, structure, object, or improvement of any kind or character that is placed in, on, under, or over any portion of the State Water Resources Development System or other use of the department's right-of-way, including the alteration of the ground surface elevation by more than one foot, or the planting of trees, vines, or other vegetation on the department's right-of-way that may pose a threat to the physical integrity of any facility of the State Water Resources Development System or that could interfere with the department's rights with regard to access, inspection, repair, or the operation and maintenance of any State Water Resources Development System facility.

(c) "Person" means any person, firm, partnership, association, corporation, other business entity, nonprofit organization, or governmental entity.

(d) "Right-of-way" means any property interest acquired by the department for State Water Resources Development System purposes, including but not limited to, an easement, license, permit, joint use agreement, or fee ownership.

12899.1. (a) Except as provided by Section 12899.8, no person shall make any alteration, improvement, encroachment, or excavation within the right-of-way acquired for the State Water Resources Development System, without first obtaining the written permission of the department.

(b) Any person proposing to make an alteration, improvement, encroachment, or excavation within the right-of-way acquired for the State Water Resources Development System shall submit an application to the department on a form prescribed by the department, along with other reports, studies, and analyses as required by the department.

(c) The department may issue a written permit, in accordance with this chapter, authorizing the permittee to do any act that is not inconsistent with the functioning, operation, maintenance, enlargement, and rehabilitation of any portion of the facilities of the State Water Resources Development System.

(d) By issuing the permits, the department is not responsible for the competence or reliability of the permittee or the encroachment.

(e) The department shall approve or deny an application for an encroachment permit not later than 60 days from the date of receipt of the complete application, as determined by the department. An application for a permit is complete when all application requirements and other statutory requirements, including, but not limited to, the California Environmental Quality Act (Division 13 commencing with Section 21000) of the Public Resources Code, have been met. Not later than 30 days from the date on which the application is received, the department shall determine whether an application is complete. The department shall not unreasonably deny an application for a permit. If the department denies an application for a permit, it shall provide an explanation of the reason for the denial at the time of notifying the applicant of the denial.

(f) Except as provided by Section 12899.8, any person who makes an alteration, improvement, encroachment, or excavation within the right-of-way acquired for the State Water Resources Development System, without a permit, is guilty of a misdemeanor.

12899.2. (a) Any act performed under the authority of a permit issued pursuant to this chapter shall be in accordance with the applicable provisions of this chapter and the terms and conditions of the permit.

(b) The department may prescribe requirements in the permit, including a requirement that the permittee pay the entire expense of restoring the affected State Water Resources Development System facilities to a condition equivalent to that before the work was performed, and requirements relating to the location and manner in which the work shall be performed, as determined by the department to be necessary for the protection of the department's facilities.

(c) Any permit issued to a permittee shall include a provision that requires the permittee to relocate or remove the encroachment in the event the future repair, rehabilitation, or improvement of the State Water Resources Development System requires the relocation or removal of the encroachment at the sole expense of the permittee.

(d) The department shall charge an application processing and review fee for a permit to use the right-of-way.

(e) The department may inspect and supervise the work performed under any permit issued under this chapter, in which event the permittee shall pay the reasonable cost of that inspection and supervision to the department, not to exceed the amount estimated by the department at the time of issuing the permit or commencement of work. If the actual costs exceed the estimated costs, an additional fee shall be required by the department before final permit approval or at the end of the inspection. If the actual costs are less than the estimated costs, the department shall refund the difference.

(f) Before granting a permit under this chapter, the department may require any applicant to provide proof of insurance naming the department as an additional insured in an amount reasonably necessary to protect the state's interest.

(g) Before granting a permit under this chapter, the department may require any applicant, other than a county, city, city and county, or public agency that is authorized by law to establish and maintain any works or facilities within the department's right-of-way, to file with the department a satisfactory bond payable to the department in an amount that the department determines to be sufficient, conditioned on the proper compliance by the permittee with this chapter. The department may require a bond from a county, city, city and county, or public agency that, prior to submitting an application, failed to comply with this chapter or with the conditions of a previous permit.

12899.3. No corporation has any franchise rights within the department's right-of-way, and no county, city, or city and county has any right to grant a franchise within that right-of-way. This section does not apply to a State Water Resources Development System right-of-way located within city, county, or city and county public roadways.

12899.4. The department may delegate, to any entity that has a contract with the department pursuant to Section 11625, any of the department's powers, duties and authority, other than approval, under this chapter as to any facility of the State Water Resources Development System that primarily benefits that entity, and may withdraw that delegation of authority.

12899.5. (a) Except as provided by Section 12899.8, if any encroachment exists within the department's right-of-way, the department may require the removal of the encroachment in the manner provided in this section.

(b) Except as provided in subdivision (e), notice shall be given to the owner, occupant, or person in possession of the encroachment, or to any other person causing or permitting the encroachment to exist, by serving a notice including a demand for the immediate removal of the encroachment from within the right-of-way. The notice shall describe the encroachment with reasonable certainty as to its character and location. In lieu of service upon the person, service of the notice may also be made by registered mail and posting for a period of five days, a copy of the notice on the encroachment described in the notice. In the case of an owner, occupant or person in possession, who is not present in the county, the notice may be given to an agent in lieu of service by mailing and posting.

(c) The department may remove from the State Water Resources Development System any right-of-way encroachment that meets both of the following criteria:

(1) Not later than 60 days from the date on which a notice was given pursuant to subdivision (b), the owner, occupant, or person in possession of the encroachment has not asserted a right to be in possession consistent with Section 12899.8 and has not removed, or commenced to remove in a diligent manner, the encroachment.

(2) The encroachment obstructs, threatens, or prevents the proper operation, maintenance, or rehabilitation of the State Water Resources Development System.

(d) The department may immediately remove from the State Water Resources Development System any right-of-way encroachment that meets both of the following criteria:

(1) Not later than five days from the date on which a notice is given pursuant to subdivision (b), the owner, occupant, or person in possession of the encroachment has not asserted a right to be in possession consistent with Section 12899.8 and has not removed, or commenced to remove in a diligent manner, the encroachment.

(2) The encroachment poses an imminent threat to the integrity of one or more features of the State Water Resources Development System.

(e) In the case of an emergency, the department has the authority to take any action necessary to avert, alleviate, repair, or mitigate any threat to the State Water Resources Development System. For the purposes of this chapter, "emergency" means a sudden, unexpected occurrence that poses a clear and imminent danger, requiring immediate action to prevent or mitigate the loss or impairment of life, health, property, or essential public services.

(f) If the department removes any encroachment upon the failure of the owner to comply with the notice pursuant to this section, the department may recover the expense of the removal, costs and expenses of suit, including attorneys fees, and, in addition, the sum of one thousand dollars (\$1,000) for each day the encroachment remains after the expiration of the applicable response period described in subdivision (c) or (d).

(g) If the owner, occupant, or person in possession of the encroachment, or person causing or suffering the encroachment to exist, or the agent of any of these parties, disputes or denies the existence of the encroachment, asserts a right to be in possession consistent with Section 12899.8, or refuses to remove or permit the removal of the encroachment, the department may commence, in any court of competent jurisdiction, an action to abate the encroachment as a public nuisance. If judgment is recovered by the department, it may, in addition to having the encroachment adjudged a nuisance and abated, recover one thousand dollars (\$1,000) for each day the encroachment remains after the expiration of the applicable response period described in subdivision (c) or (d), and may also recover the expense of that removal, and costs and expenses of the suit, including attorney's fees.

12899.6. (a) Unless a person is otherwise authorized, by permit or agreement, to do so, it is unlawful for any person to do any of the following acts:

(1) Drain water, or permit water to be drained, from the person's lands onto the State Water Resources Development System right-of-way by any means, which results in damage to the system or the department's right-of-way, except where the water naturally drains onto the department's right-of-way.

(2) Obstruct any natural watercourse in a manner that does any of the following:

(A) Prevents, impedes, or restricts the natural flow of waters from any portion of the department's right-of-way into and through the watercourse or State Water Resources Development System cross drainage structures, unless other adequate and proper drainage is provided.

(B) Causes waters to be impounded within the department's right-of-way that damages the State Water Resources Development System or the department's right-of-way, except where the water naturally drains onto the department's right-of-way.

(C) Causes interference with, or damages or makes hazardous the operation, maintenance, and rehabilitation of, the State Water Resources Development System.

(3) Stores or distributes water for any purpose so as to permit the water to overflow onto, causing damage to, or to obstruct or damage any portion of, the State Water Resources Development System or the department's right-of-way.

(b) When notice is given by the department, in the manner provided in Section 12899.5, to any person permitting a condition to exist, as described in subdivision (a), the person shall immediately cease and discontinue the diversion of waters or shall discontinue and prevent the drainage, seepage, or overflow and shall repair, or pay for the repair of, any damage to the State Water Resources Development System or the department's right-of-way. The person to whom the notice is provided may challenge, administratively in accordance with regulations adopted pursuant to Section 12899.9, or in a court of competent jurisdiction, the propriety of the determination by the department.

(c) If any person is notified pursuant to subdivision (b) and fails, neglects, or refuses to cease and discontinue the diversion, drainage, seepage, or overflow of the waters or to make or pay for the repairs, the department may make repairs and perform work as it determines necessary to prevent the further drainage, diversion, overflow, or seepage of the waters.

(d) The department may recover in an action at law, in any court of competent jurisdiction, the amount expended for those repairs and work, and in addition, the sum of one thousand dollars (\$1,000) for each day the drainage, diversion, overflow, or seepage of the waters is permitted to continue, after the service of the notice in the manner specified in this chapter, together with the costs and expenses, including attorney's fees, incurred in the action.

12899.7. Any person who by any means willfully or negligently injures or damages any feature of the State Water Resources Development System or the department's right-of-way is liable for necessary repairs, and the department may recover in an action at law the amount expended for the repairs, together with the costs and expenses, including attorney's fees, incurred in that action.

12899.8. (a) Notwithstanding any other provision of this chapter, and except as otherwise provided in an agreement between the department and landowner or predecessor-in-interest, any person owning a legal real property interest over a portion of the State Water Resources Development System right-of-way, or who has an agreement with the department for the construction, operation, and maintenance of an encroachment, is not required to obtain a permit from the department for exercising their property or other rights, but shall submit their plans to the department for review and comment before undertaking any additional work within the department's right-of-way. A person's legal real property or other interests shall be determined by the department upon the review of the appropriate document, agreement, or reservation of rights. The department shall respond not later than 30 days from the date of the receipt of the plans.

(b) Notwithstanding any other provision of this chapter, any holder of a current State Water Resources Development System encroachment permit on January 1, 2007, or a person who has an agreement with the department for the construction, operation, and maintenance of an encroachment as of that date, may continue the authorized encroachment pursuant to the terms, conditions, and limitations of that permit or agreement.

12899.9. The department may adopt regulations to implement this chapter, including regulations that provide for the filing of an application for a permit, related administrative review and inspection, the imposition of permit fees and permit terms and conditions, an administrative appeal process, and a process for administrative review and regulation of existing encroachments in accordance with this chapter.

12899.10. This chapter does not apply to the activities of a public agency that operates facilities of the State Water Resources Development System that are jointly owned by the state and the United States, including facilities of the San Luis Unit of the Central Valley Project, if the activities are conducted pursuant to, and consistent with, an agreement with the United States for the operation and maintenance of those facilities.

12899.11. (a) The department, not later than 60 days from the date on which it receives a complete application, shall issue a general encroachment permit, for a period not to exceed 10 years, for routine operation and maintenance activities of public agencies with a contract with the department for delivery of water pursuant to subdivision (b) of Section 12937.

(b) For the purposes of this section, "operation and maintenance" means inspection, equipment testing and maintenance, water quality monitoring and testing, weed and pest abatement, and other activities that the department determines are consistent with existing agreements between the department and its water contractors.

Exhibit A

STATE OF CALIFORNIA
CALIFORNIA NATURAL RESOURCES AGENCY
DEPARTMENT OF WATER RESOURCES

STANDARD ENCROACHMENT PERMIT PROVISIONS

1. **Specific Purpose:** This Encroachment Permit is to be strictly construed and no work, other than that specifically described herein, is authorized. Any reconstruction of, or additions or extensions to the permitted facility require an Encroachment Permit from State for such reconstruction of, or additions or extensions to the permitted facility.
2. **Acceptance of Provisions:** Permittee understands and agrees to acceptance of the provisions and all attachments to this Encroachment Permit, for any work to be performed under this Encroachment Permit.
3. **Liability for Damages:** The State of California and all officers and employees thereof shall not be answerable or accountable in any manner for injury to or death of any person, including but not limited to Permittee, persons employed by Permittee, or for damage to property from any cause. Permittee is responsible for all liability for personal injury or property damage which may arise out of work herein permitted including its operation, maintenance and use, or which may arise out of failure on Permittee's part to perform its obligations under this Encroachment Permit. In the event any claim of such liability is made against the State of California, or any department, officer or employee thereof, Permittee shall defend, indemnify and hold each of them harmless from such claims, suits or actions of every name, kind and description brought for or on account of injuries to or death of any person, including but not limited to Permittee, persons employed by Permittee, persons acting in behalf of Permittee and the public, or damage to property resulting from the performance of work, use of permitted facilities, or other activity under the Encroachment Permit, or arising out of the failure on Permittee's part to perform its obligations under any permit in respect to maintenance or any other obligations, or resulting from defects or obstructions, or from any cause whatsoever during the progress of the work, or other activity or at any subsequent time work or other activity is being performed under the obligations provided by and contemplated by the Encroachment Permit, except as otherwise provided by statute. The duty of Permittee to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code. Permittee waives any and all rights to any type of expressed or implied indemnity against the State, its officers, employees, and State contractors. It is the intent of the parties that Permittee will indemnify and hold harmless the State, its officers, employees, and State contractors, from any and all claims, suits or actions as set forth above regardless of the existence of degree of fault or negligence, whether active or passive, primary or secondary, on the part of State, Permittee, persons employed by Permittee, or acting on behalf of Permittee.

For purposes of this Section, "State contractors" shall include contractors and their subcontractors under contract to the State of California performing work within the limits of this Encroachment Permit.

4. **Insurance:** If required, Permittee shall furnish to State a Certificate of Insurance, at the time the Encroachment Permit is signed and returned by Permittee, stating that there is liability insurance presently in effect for Permittee with bodily injury and property damage limits of not less than \$1,000,000 per occurrence. The Certificate of Insurance will provide:

- a. That the insurer will not cancel the insured's coverage without 30 days' prior written notice to State.
- b. That State, its officers, agents, employees and servants are included as additional insureds, but only insofar as the operations under this Encroachment Permit are concerned.
- c. That State will not be responsible for any premiums or assessments on the policy.
- d. That all work under this Encroachment Permit (referenced by Encroachment Permit number) is covered by the policy.

Permittee agrees that the bodily injury liability insurance herein provided for shall be in effect at all times during the period indicated on the cover sheet of this Encroachment Permit. In the event said insurance coverage expires at any time or times during the required period, Permittee agrees to provide at least thirty (30) days prior to said expiration date, a new Certificate of Insurance evidencing insurance coverage as provided for herein for not less than the remainder of the term of the required period, or for a period of not less than one (1) year. In the event Permittee fails to keep in effect at all times insurance coverage as herein provided, State may, in addition to any other remedies it may have, terminate this Encroachment Permit upon the occurrence of such event.

5. **Damage and Water Contamination Avoidance Warranty:** Permittee shall exercise reasonable diligence and precaution in the construction, installation, maintenance and use of structures, appurtenances, equipment, and tools on the lands of State to avoid damage or injury to the right of way, facilities, or personnel of State and the public and to preclude interference with operations of State. No material capable of water pollution shall be stored or discharged by Permittee within the drainage areas or waters of State's facilities. Permittee shall use all diligence and caution to prevent contamination or pollution of the waters of the State aqueduct system.
6. **Damage Repairs:** Permittee will be liable for any damage to State's facilities as a result of the proposed construction and for any other damages, including power, irrigation, municipal and industrial water supply, and communication losses. If Permittee damages, injures or disturbs State's right of way or facilities, State may elect to do its own repairs. Repairs to any of Permittee's facilities covered by this Encroachment Permit which State considers necessary to prevent damage or nuisance to State's facilities may be done by State at Permittee's expense if Permittee fails to make such repairs within 10 days after receiving written notice to do so. In either case, all expenses of such repair including State's administrative costs shall be borne by Permittee, State may require a deposit sufficient to pay the estimated repair cost, and Permittee agrees by acceptance of this Encroachment Permit to furnish such a deposit upon request.
7. **Conflicting Encroachments:** Permittee shall yield start of work to ongoing prior authorized work. When existing encroachments or installations may conflict with permitted facilities or work, Permittee is responsible for identifying and protecting said encroachments or installations unless other disposition has been authorized by the owning and operating entities.
8. **Notice Prior to Starting Work:** Before starting work Permittee shall notify State by contacting State's representative as shown on this Encroachment Permit's cover page, form DWR 33A, hereafter referred to as State's representative, and any other departmental employees designated. Such notice shall be given at least seven (7) days in advance of the date the work is to begin.

9. **Keep Permit on the Work Site:** During any period when any work is being pursued, this Encroachment Permit or a copy of the signed Encroachment Permit and the plans bearing the original DWR stamp with signature and date of DWR staff shall be kept at the site of the work and must be shown to any representative of State or any law enforcement officer on demand. It is a violation of Encroachment Permit conditions and work shall be suspended if the Encroachment Permit Package is not kept and available at the work site.
10. **Permits From Other Agencies:** This Encroachment Permit shall not obviate the need for any and all permits or approval required by law, whether from the Public Utilities Commission of the State of California (PUC), California Department of Fish and Game, California Occupational Safety and Health Administration (CAL-OSHA), or any other public agency having jurisdiction.
11. **Public Safety:** Permittee shall furnish, erect and maintain such fences, barriers, lights and signs and provide such flagmen and guards as are necessary to give adequate warning to the public of the construction of the encroachment and of any dangerous condition to be encountered as a result thereof.
12. **Access Gates and Fencing:** Alteration of State's fencing is permitted only as specifically described in this Encroachment Permit or as directed by State's Representative. All gates installed in State's right of way fencing as a means of access to Permittee's encroachment shall be constructed of materials and to standards at least equal to those of the existing fence. Before cutting the fence, Permittee shall install braces and additional posts, if necessary, on each side of the gate opening and shall anchor the fence to maintain tension in the wires. Such gates shall be kept in good repair by Permittee. Gates shall be kept closed and locked except when in actual use. State will at all times be allowed full use of said gates and, at the request of State's representative, will be allowed to place its locks in the chains securing the gates.
13. **Hazardous Substances:** Permittee agrees that it will comply with all laws, including Federal, State, or local, existing during the term of this Encroachment Permit pertaining to the use, storage, transportation and disposal of any hazardous substance as that term is defined in such applicable laws. In the event State or any other State agencies, officials, employees, agents or successors should incur any liability, cost or expense, including attorneys' fees and costs, as a result of Permittee's use, storage, transportation or disposal of any hazardous substance, including any petroleum derivative, Permittee shall indemnify, defend and hold harmless any of these entities or individuals against such liability. Where Permittee is found to be in breach of this provision due, for example, to the issuance of a government order directing Permittee to cease and desist any illegal action in connection with a hazardous substance, or to remediate a contaminated condition caused by Permittee or any person acting under Permittee's direction, control and authority, Permittee shall be responsible for all costs and expenses of complying with such order including any and all expenses imposed on or incurred by State in connection with or in response to such government order.
14. **Public Utilities Commission Orders:** All clearances and types of construction shall be in accordance with the applicable orders of the Public Utilities Commission of the State of California, unless otherwise modified herein or unless more restrictive provisions are required by County Ordinance.
15. **Maintenance:** Permittee shall operate and maintain properly any encroachment on State's right of way, make certain any encroachment is not damaging State's right of way or facilities, and immediately repair and make good any injury to any of State's improvements which occur as a result of the work done under this Encroachment Permit. including any and all injury to State's facilities which would not have occurred had such work not been done or such encroachment not been placed therein.

16. **Notice to State for Maintenance:** Permittee will notify State's representative before entering State's right of way to do maintenance work. When entry is required for routine inspection maintenance activities, adequate notice may be a telephone call or a formal written communication at the discretion of State's representative. Permittee may enter without notice for emergency repair or maintenance purposes, but shall notify State's representative within 24 hours of entry. Maintenance requiring alteration of Permittee's facilities, tunneling or excavation requires State's prior written approval.
17. **Clean Up Right of Way:** All trash, including waste food, must be removed from the work site at the end of the work day/night. Upon completion of the work, or maintenance or removal thereof, all waste material and debris shall be entirely removed from the work site and the site left in as presentable a condition as before the work started. All chemical spills must be cleaned up immediately and reported as soon as possible.
18. **Archaeological:** Should any archaeological resources be revealed in State's right of way Permittee is responsible for notifying State's Representative immediately, ceasing work and retaining a qualified archaeologist who shall evaluate the archaeological site and make recommendations to State's representative regarding the continuance of work.
19. **Facilities Subject to Damage, Destruction, and Removal Without Compensation:** The facilities or structures installed under this Encroachment Permit are subject to interruption, damage, destruction or removal at any time by State without compensation or liability in exercising any and all State's property rights or otherwise responding to public needs, and shall be subsequently reconstructed or restored at Permittee's expense. Permittee agrees to reimburse State for all extra costs of work performed to remove, dismantle, or destroy facilities or structures interfering with the exercise of State's rights. This Encroachment Permit grants no rights or warranty as to the availability or suitability of the land or State's rights therein for the facilities installed under this Encroachment Permit.
20. **Supervision of State:** All the work shall be done subject to the supervision of, and to the satisfaction of State, however, neither the supervision nor lack of supervision of the work by State will relieve Permittee of any obligations under the provision above entitled "Liability for Damage." State may, but is not required to, inspect any work performed under this Encroachment Permit. Equipment and Material storage in State right of way shall be at the direction of State's Field Division personnel.
21. **Reimbursement of Costs:** Permittee shall pay State for all reasonable time spent in reviewing plans, testing, issuing Encroachment Permits, inspecting Permittee's work performed in, along, under or near State's right of way, or ensuring compliance of the terms and conditions of this Encroachment Permit. On work which requires the presence of an employee of State as inspector, the salary, traveling and per diem expenses and other incidental expense of such inspection during the work shall be paid by Permittee upon presentation of a bill therefore.
22. **Cost of Work:** Unless stated in the Encroachment Permit, or separate written agreement, all costs incurred for work within State's rights of way pursuant to this Encroachment Permit shall be borne entirely by Permittee. Permittee hereby waives all claims for indemnification or contribution from State for any such work.
23. **Submit As-Built Plans:** Upon completion of all work within State's right of way, including any future construction or reconstruction, Permittee shall furnish reproducible as-built drawings to State's representative showing location and details of construction. Failure to submit as-built plans within sixty (60) days of completion may result in written notice of revocation as provided for under Provision 25 of this Encroachment Permit.

24. **Future Moving of Installations:** Permittee shall, on receipt of notice to do so and within 90 days unless otherwise approved by State, alter or remove at the sole expense of Permittee any property or structures covered by this Encroachment Permit, to such extent as may be necessary to avoid or eliminate interference with any facilities or structures now constructed or to be constructed by State, or with any operations of State, or with any use by State of the land affected hereby. Should Permittee fail to alter or remove the property or structures covered by this Encroachment Permit, and restore State's right of way and facilities to their condition prior to issuance of this Encroachment Permit, State will perform such work or have the work performed, and Permittee agrees to reimburse State for all costs of the work so performed including attorney's fees.
25. **Termination. Revocation and Modification of Permit:** This Encroachment Permit shall be revocable by State upon ten days' written notice to Permittee unless otherwise stated on the Encroachment Permit, and except as provided by law for public corporations, franchise holders, and utilities. Permittee's joint use agreements, franchise rights, reserved rights, or any other agreements for operating purposes in rights of way are an exception to this revocation. In the event that Permittee abandons the use of said facilities for a period of one year, or fails, neglects or refuses to comply with any of the conditions herein contained, or in the event that this Encroachment Permit is revoked, all rights of Permittee hereunder shall cease and terminate. Encroachment Permit provisions are subject to modification or abrogation at any time. Upon abandonment or termination, or if required by Encroachment Permit modification, Permittee shall remove all facilities installed pursuant to this Encroachment Permit, or make any alterations required by Encroachment Permit modification, and restore right of way to the condition prior to installation of facilities pursuant to this Encroachment Permit. All work to remove, alter, secure or restore required in this section shall be completed as soon as possible and at the sole expense of Permittee.
26. **Future Construction or Reconstruction:** Plans for any future construction or reconstruction within the permitted area shall be submitted to the State Department of Water Resources for review and approval of the affect of the construction or reconstruction on Permittee's facilities. Such approval may be withheld for any reason.
27. **No Precedent Established:** This Encroachment Permit is issued with the understanding that it does not establish a precedent.
28. **Captions:** This Encroachment Permit shall be construed as a whole and, in accordance with its fair meaning, the captions being for the convenience of the parties only, and not intended to describe or define the provisions in the portions of the Encroachment Permit to which they pertain.
29. **Permits for Record Purposes Only:** When work in rights of way is within an area under a Joint Use Agreement (JUA) or a Consent to Common Use Agreement (CCUA), this Encroachment Permit will be issued to Permittee for the purpose of providing a notice and record of work. All prior rights of Encroachment Permittee shall be preserved, no new or different rights or obligations are intended to be created.
30. **Assignments Not Permitted:** No right or interest included in said Encroachment Permit shall pass by assignment by Permittee without written permission from State, except upon dedication and/or acceptance for operation and maintenance by a public utility or municipality. No party other than Permittee or Permittee's authorized agent is allowed to work under this Encroachment Permit.
31. **No Third Party Beneficiaries:** This Encroachment Permit is made solely for the benefit of Permittee and is not made for the benefit of any person, firm, association, corporation or public entity not a party hereto, and no person, firm, association, corporation or public entity

other than Permittee shall have any right to enforce this Encroachment Permit under California Civil Code Section 1559 or otherwise.