

CALTRANS Broadband FAQs Table of Contents

PLANNING TOPICS:	3
1. How does Caltrans see Broadband?	3
2. What is required of Caltrans related to Broadband?	3
3. Does Caltrans support Broadband deployment along its rights-of-way to bridge the digital divide in California?	4
4. What partnership opportunities exists to work with Caltrans?	4
5. How can broadband deployment be a part of Caltrans Corridor Planning Process?	4
ENCROACHMENT PERMITTING TOPICS:	6
1. How long will it take to process an Encroachment Permit Application Package? ..	6
2. Why does Caltrans require encroachment permit plans to be stamped by a California Registered Engineer?	6
3. What are the utility plan set content requirements?	7
4. Can Caltrans' Standard Traffic Control Plans be used as part of an Encroachment Permit Application Package?	7
5. Can a blanket (District-wide) preliminary site survey permit be issued?	7
6. What type of permit is required for maintenance purposes?	7
7. What activities are allowed under an annual utility maintenance permit? Are there any restrictions for work that can be performed under an annual utility maintenance permit?	8
8. When is it required to provide public notice informing interested parties and providing them an opportunity to respond and/or participate in my project (joint build)?	8
9. When and why are geotechnical studies required?	8
10. Can we break projects down into smaller ones to get through the process more efficiently?	9
11. Where can I find additional information related to broadband installations?	9
STRUCTURES TOPICS:	10
1. Are broadband installations allowed on bridges?	10
2. What do I need to submit for approval to attach my broadband facility to a bridge?	10
3. Where can we attach our conduit?	10

4. Where can we get more details? 10

5. Where can we get Caltrans bridge plans?..... 10

6. Where do I need to install expansion and deflection fittings? 11

7. What are the approved anchors for Caltrans Bridges? 11

PROJECT MANAGEMENT TOPICS:..... 12

1. What is a Complex Utility Project Agreement (CUPA)? 12

2. Why and when is CUPA needed? 12

3. How long does it take to have CUPA in place? 12

ENVIRONMENTAL TOPICS: 13

1. What is CEQA? 13

2. What is NEPA? 13

3. Do they apply to my project? 13

4. What is a Lead Agency?..... 13

DESIGN:..... 14

1. What is access-controlled and non-access-controlled highway right-of way? 14

2. Is broadband allowed in access-controlled right-of-way? 14

3. Why are access points not allowed in access-controlled right-of-way? 14

4. Why and when is an exception to policy needed? 14

5. What is needed for requesting an exception to policy? 14

6. How can we request an exception? 15

7. What is a DSDD and when is it required? 15

8. Do utility/broadband installations also require a DSDD? 15

9. Who can prepare a DSDD? 15

10. Why is a DSDD required to be stamped and signed by a licensed engineer? Why is this not covered by the utilities' exemption from stamp and sign requirements? 16

REFERENCES AND LINKS: 17

PLANNING TOPICS:

1. How does Caltrans see Broadband?

Broadband services are becoming an important utility in the twenty-first century, advancing communications and connecting California to the world. Access to broadband services is limited in some parts of California, specifically in rural areas, and the deployment of services remains a challenge. Availability of broadband services throughout California can enable improvements in public safety, transportation, healthcare, education, and the economy as mentioned in the National Broadband Plan (<https://www.fcc.gov/general/national-broadband-plan>).

To accelerate the closing of the "Digital Divide," Caltrans encourages developing partnership during the planning, scoping and project development phases, coordinating with the California Broadband Council and stakeholders to identify strategic corridors for the deployment of broadband with transportation projects in those strategic corridors.

2. What is required of Caltrans related to Broadband?

California Assembly Bill (AB) 1549 (Wood, Chapter 505, Statutes of 2016) adds certain specific requirements for Caltrans.

The Section 14051 (b)(1) is added to the Government Code, to read: "During the project planning phase of a department-led highway construction project that was initiated on or after January 1, 2017, is parallel to the highway, and involves construction methods that are suitable for installing broadband conduit, the department shall notify companies and organizations working on broadband deployment of the project on its Internet Web site to encourage collaborative broadband installations."

To address this requirement, Caltrans projects under development are shown on the Opportunity Map at our website at <https://dot.ca.gov/programs/design/wired-broadband>.

Among other additions, the Section 14051 (b)(3) adds: "The department, in consultation with stakeholders, on or before January 1, 2018, shall develop guidelines to facilitate the installation of broadband conduit on state highway rights-of-way. The guidelines shall address access to information on existing assets and collaboration on future projects."

To address this requirement, a new guidelines titled “Incorporating Wired Broadband Facility on State Highway Right of Way - User Guide” were developed and are posted on Caltrans Broadband website.

3. Does Caltrans support Broadband deployment along its rights-of-way to bridge the digital divide in California?

Yes, Caltrans accommodates wired broadband facility encroachments within its State highway right-of-way when there is a benefit to the public. Accommodation shall be in accordance with federal and state laws and shall not adversely impact the highway user or worker safety, transportation facility longevity, or highway aesthetic quality.

4. What partnership opportunities exists to work with Caltrans?

Caltrans may provide partnering opportunities in planned state transportation projects for Wired Broadband Stakeholders to incorporate wired broadband facilities within the State highway right-of-way. State projects under development are shown on the Opportunity Map at our website at <https://dot.ca.gov/programs/design/wired-broadband>. Contact a Coordinator listed on the website for assistance in determining if the project has a scope or timeline suitable to engage in a partnership. You can also contact the statewide coordinator at CTBroadband@dot.ca.gov to discuss partnering. Preferably such partnerships should be developed during the Project Initiation phase, or even earlier at the Corridor Planning phase.

5. How can broadband deployment be a part of Caltrans Corridor Planning Process?

The Caltrans corridor planning process provides an opportunity for State, regional, and local governments for long-term coordination and planning for statewide broadband deployment.

Caltrans Division of Transportation Planning has developed a Corridor Planning Process Guide which provides appendices on various Emphasis Areas – one of which addresses Broadband – to provide detailed guidance on the topic (<https://dot.ca.gov/programs/transportation-planning>). In addition, the Opportunity Map (<https://dot.ca.gov/programs/design/wired-broadband>) shows the Strategic Priority Corridors recommended by the Regional Broadband Consortia. Together, these two resources assist Caltrans planners get a sense of long-term opportunities for partnerships and to prepare Corridor

Plans to address Broadband needs. Please note this corridor planning precedes the Project Initiation phase.

For providing guidance to the cities and the counties, the California 2017 General Plan Guidelines, developed by Governor's Office of Planning and Research, identifies broadband planning and "Dig Once" policies in the Public Utilities and Facilities Section of General Plan Circulation Elements (Chapter 4, Pages 81 and 82) and notes that the provision for access to broadband should be included in Healthy Communities Sections (Chapter 6, Page 211) as it is needed to allow for telemedicine capacity.

ENCROACHMENT PERMITTING TOPICS:

1. How long will it take to process an Encroachment Permit Application Package?

Section 671.5 (a) of the California Streets and Highways Code requires that Caltrans either approve or deny an Encroachment Permit Application Package within 60 calendar days, upon determination that the submittal is complete. It also stipulates that an Encroachment Permit Application Package is complete when all statutory requirements, including but not limited to stormwater, Americans with Disabilities Act (ADA), California Environmental Quality Act (CEQA), have been complied with. The term statutory requirement includes both federal and California statutes.

The Caltrans Strategic Management Plan, Goal 2, Stewardship and Efficiency, has identified a performance target to issue or deny 95 percent of the Encroachment Permit Application Packages within **30 calendar days** from the submittal date of a completed application.

The actual time needed to review and approve an Encroachment Permit Application Package will depend on the completeness of the submittal, scope, and complexity of the proposed work.

2. Why does Caltrans require encroachment permit plans to be stamped by a California Registered Engineer?

For utility companies under the jurisdiction of the California Public Utilities Commission, utility plans prepared in connection with products, systems, or services of that utility company are exempt from the signature, registration seal and license number of the California Registered Engineer.

When Caltrans issues a permit for installation of public utility facilities, it does not inspect the installation for compliance with the utility or public corporation standards. Compliance with industry standards is the responsibility of the public utility or public corporation.

Plans that contain civil engineering elements, including those that relate to traffic handling and lane closures, are not considered utility plans and therefore must bear the signature and seal or stamp of a California Registered Engineer, the date of signing and sealing or stamping, and the license expiration date of the licensee responsible for the preparation of those elements. More details are in the Encroachment Permit Manual

Section 603.6A-7 “Procedural Requirements for Structural and Sub-Structural Design and Calculations”.

3. What are the utility plan set content requirements?

The *Construction Projects Plan Sets Content* document available on Caltrans Encroachment Permits Website (See References for link) provides plan set requirements.

4. Can Caltrans’ Standard Traffic Control Plans be used as part of an Encroachment Permit Application Package?

Yes, Caltrans Standard Traffic Control Plans may be used as part of an encroachment permit application package provided the standard plans are applicable for the proposed work zone and do not require any modifications. Otherwise, a traffic control plan designed and signed by a California Registered Civil or Traffic Engineer must be submitted for review.

5. Can a blanket (District-wide) preliminary site survey permit be issued?

Districts may issue an annual survey permit (SV permit) to each Broadband service provider for all conventional highways within the District. Survey permit requests within access-controlled right-of-way must be issued on a one-time basis.

6. What type of permit is required for maintenance purposes?

Annual utility maintenance permits authorize utility companies that lawfully maintain a utility facility within the State's conventional highway right-of-way to inspect, maintain, and repair utility facilities, to install service connections under specified conditions, to perform pole maintenance and chemical treatment, and to make emergency repairs to remedy hazardous conditions or interruption of service to a customer. Annual utility maintenance permits may be issued to public and private utility owners.

Access to utility facilities located within the access-controlled right-of-way is typically permitted only from frontage roads, public roads and streets, trails, or auxiliary roads. Routine maintenance of facilities within the access-controlled right-of-way must be conducted under individual encroachment permits and are not allowed under annual utility maintenance permits (UE permits).

7. What activities are allowed under an annual utility maintenance permit? Are there any restrictions for work that can be performed under an annual utility maintenance permit?

Annual utility maintenance permits authorize communication utility companies to install additional capacity in existing ducts by placing additional cable or replacing an existing cable with a greater cable pair or fiber optics. Authorized work also includes interconnect splicing of existing cable pairs, placement of air-flow-monitoring transducers and air piping facilities in existing conduits, replacing pull boxes, and reconnection of existing service. Increasing the capacity of existing aerial facilities is also allowed along conventional highways. Utility owners may place new cable or replace existing cable provided the highway is not part of the State Scenic Highway System. Communication utility owners are not authorized under an Annual Utility Maintenance Permit to place conduit or utility vaults within highway right-of-way or to make any excavations other than for potholing or service connections under specified conditions.

Only those maintenance activities that can be performed using Caltrans Standard Plans for Temporary Traffic Control Systems and Temporary Pedestrian Access Routes are authorized under the annual utility maintenance permit. Otherwise, a separate permit application for the work, along with a traffic control plan designed and signed by a California Registered Civil or Traffic Engineer, must be submitted for review and approval.

8. When is it required to provide public notice informing interested parties and providing them an opportunity to respond and/or participate in my project (joint build)?

This requirement only applies to encroachments within access-controlled right-of-way (see Table 6.6B of the EP Manual) and is based on the Dig Smart concept.

9. When and why are geotechnical studies required?

Geotechnical analysis and recommendations are usually required when trenchless installation methods are used. The geotechnical investigations will help determine the appropriate trenchless method and depths of installation that will not adversely affect the highway structure. Adequate evaluation during the design phase will help protect highway facilities from failures or damage and reduces the risk for the ISP.

10. Can we break projects down into smaller ones to get through the process more efficiently?

Projects cannot be broken down into smaller projects simply to avoid an environmental or regulatory permitting threshold. As long as the entire project is evaluated and presented as a whole for its impacts, it can then be broken down into manageable segments that can be reviewed individually to make the review process more manageable for all.

11. Where can I find additional information related to broadband installations?

Additional information related to broadband installations is available at the *Wired Broadband Facilities on State Highway Right of Way* website and in Chapter 600, Section 603, of the *Encroachment Permit Manual* and Chapter 17 of the *Project Development Procedures Manual*.

STRUCTURES TOPICS:

1. Are broadband installations allowed on bridges?

Yes, broadband installations are allowed on bridges. Installation must be designed in compliance with the guidance and requirements in Chapter 600 of the *Encroachment Permit Manual*.

2. What do I need to submit for approval to attach my broadband facility to a bridge?

The following details are the minimum required for consideration:

- i. Bridge number
- ii. Cross section of the bridge showing the exact location of the proposed conduit
- iii. Diameter and No. of conduit(s)- conduit size generally is limited to less than 4 inches in diameter
- iv. Type of conduit
- v. Hanger details
- vi. Anchor or cradle details
- vii. Expansion and deflection fitting details
- viii. Conduit transition details from the approach slab to the utility openings at abutments

3. Where can we attach our conduit?

See Table 6.4 of Caltrans' Encroachment Permits Manual for details on allowed locations on bridges. Note that encroachments should not be exposed to view and are not permitted on the exterior of a bridge unless they are enclosed and appear as an integral part of the bridge.

4. Where can we get more details?

Section 602.7 of Caltrans' Encroachment Permits Manual gives more details regarding utility encroachments on structures.

5. Where can we get Caltrans bridge plans?

Bridge plans can be requested from the Caltrans *Public Records Center*.

6. Where do I need to install expansion and deflection fittings?

Conduits must have adequate provisions for deflection as well as for expansion and contraction. Expansion and deflection fittings are needed to be installed at any bridge joint (typically located at abutments, bents and hinges). The type and size of expansion/deflection or combination expansion and deflection fittings must meet or exceed the thermal and seismic movement ratings of the bridge.

7. What are the approved anchors for Caltrans Bridges?

- a. In vertical applications, concrete undercut anchors must be used.
- b. In other applications, concrete anchorage devices must be on the Caltrans *Authorized Material List* for stud mechanical expansion anchors, shell-type mechanical expansion anchors, or resin capsule anchors. Anchors must comply with Caltrans' 2018 Standard Specifications Section 75-3.02C.
- c. Additionally, reinforcement must be located by nondestructive means before installing holes for anchors. Rotary drills are to be used, no impact drills or coring. If reinforcement is encountered, the anchor hole shall be abandoned, patched, and a new hole installed.

PROJECT MANAGEMENT TOPICS:

1. What is a Complex Utility Project Agreement (CUPA)?

The Complex Utility Project Agreement (CUPA) is an agreement that Caltrans and a broadband service provider (permittee) enter-into to implement larger projects within Caltrans Right-of-Way that are deemed more complex than a typical utility project. The CUPA will outline activities and establish a reimbursement mechanism for the permittee to cover the costs of State staff time. The CUPA is like a Cooperative Agreement that Caltrans would enter-into with a public agency for reimbursed work to oversee a transportation project.

2. Why and when is CUPA needed?

For complex utility projects, the fee charged for an Encroachment Permit is not adequate to cover state costs in facilitating the project, and Caltrans cannot provide the staff work as a gift of public funds (cite the statute?) The CUPA is the legal mechanism to reimburse Caltrans for project-related environmental and engineering work and oversight. The CUPA also defines Caltrans and the broadband service provider's roles and responsibilities throughout the project delivery process.

3. How long does it take to have CUPA in place?

A CUPA template is being developed to expedite the agreement execution process. The execution timeline is dependent on the time it takes both parties to reach a consensus on each party's roles and responsibilities.

ENVIRONMENTAL TOPICS:

1. What is CEQA?

CEQA is the California Environmental Quality Act. CEQA applies to any project that involves State funds or State right-of-way or requires any kind of State permit or approval. CEQA requires that the environmental impacts of a proposed project be disclosed and have mitigation measures proposed to lessen those impacts. This requirement is fulfilled by preparing an environmental document per the CEQA guidelines. The type and scope of the environmental document is determined by the significance and magnitude of the anticipated impacts.

2. What is NEPA?

NEPA is the National Environmental Policy Act. NEPA is very similar to CEQA in that the environmental impacts of a proposed project must be disclosed and mitigation to lessen those impacts be proposed. NEPA applies to a project that involves Federal funds or Federal right-of-way or requires any type of Federal permit or approval. Like CEQA, the type and scope of the environmental document is determined by the significance of the anticipated impacts. If a project is subject to both CEQA and NEPA, a joint environmental document is prepared that satisfies the requirements of both laws.

3. Do they apply to my project?

Yes, both CEQA and NEPA can apply to your project. Typically, projects requiring an encroachment permit and occurring on State right-of-way meet the conditions for CEQA to apply. Occasionally depending on the location of the project, NEPA may apply (e.g., Interstates, National Forests, etc.).

4. What is a Lead Agency?

The Lead Agency, as defined by CEQA, is the public agency that has the primary responsibility for carrying out or approving a project.

DESIGN:

1. What is access-controlled and non-access-controlled highway right-of-way?

Access-controlled highways, typically called freeways and expressways, are highways that are designed for higher speed by controlling vehicles' ingress and egress to designated entry and exit points. Access is controlled to maximize the safety and operation of the highway for transporting goods and services throughout the State of California.

Highways without access control are typically called conventional highways. Conventional highways are roadways that connect rural and urban communities to the freeway and expressway system.

See California Streets and Highways Code, Division 1, Chapter 2 for detailed route designations.

2. Is broadband allowed in access-controlled right-of-way?

Broadband, categorized as telecommunications, is allowed in access-controlled right-of-way under Caltrans' encroachment and utility policies outlined in Chapter 17 of the Project Development Procedures Manual.

3. Why are access points not allowed in access-controlled right-of-way?

Access points for maintenance of broadband facilities are not allowed in access-controlled right-of-way to ensure the optimum safety and operation of the access-controlled highways.

4. Why and when is an exception to policy needed?

An exception to the policy, outlined in Chapter 17 of the Project Development Procedures Manual, is needed when a proposed installation is prohibited within the State right-of-way. The reason for an exception process is to give applicants the opportunity to work with Caltrans on special cases with valid physical or economic constraints.

5. What is needed for requesting an exception to policy?

The submittal package needed for an exception request is detailed in Section 4 of Chapter 17 of the Project Development Procedures Manual.

A submittal typically includes:

- Memo that describes the exception
- Detailed location map
- Detailed plans (typical cross sections, layouts, profile, and construction details)
- Copies of any easements or other property rights document that relates to the request
- Discussion of future maintenance plans
- Analysis of the costs and benefit to the State and consequences if the request is denied
- If structures are involved, a review and concurrence from Caltrans' responsible divisions.

6. How can we request an exception?

Exception requests are processed through each district's Encroachment Permit Office. The contact information for the districts' encroachment permit offices can be found at the Caltrans Encroachment Permits website.

7. What is a DSDD and when is it required?

A Design Standard Decision Document (DSDD) is the standard format used to document engineering decisions regarding a proposed design that deviates from the design standards in the Highway Design Manual. Deviation from the design standard is commonly called a design exception by the Federal Highway Administration (FHWA). A draft DSDD should be submitted with the encroachment request and must be approved before an encroachment permit may be issued.

8. Do utility/broadband installations also require a DSDD?

Yes, a DSDD is required if the installation includes design features that deviate from Caltrans' design standards.

9. Who can prepare a DSDD?

A licensed professional engineer in the State of California can prepare a DSDD.

10. Why is a DSDD required to be stamped and signed by a licensed engineer? Why is this not covered by the utilities' exemption from stamp and sign requirements?

DSDDs are needed for Caltrans' design immunity protection in tort liability lawsuits against the department. Caltrans requires that a DSDD be stamped and signed by a licensed engineer. The DSDD is an engineering decision pertaining to deviations from Caltrans design standards found in the Highway Design manual and is not related to the installation and operation of the utilities under the California Public Utilities Commission rules.

REFERENCES AND LINKS:

Wired Broadband Facilities on State Highway Right of Way:

<https://dot.ca.gov/programs/design/wired-broadband>

Encroachment Permits Manual:

<https://dot.ca.gov/programs/traffic-operations/ep/ep-manual>

Project Development Procedures Manual:

<https://dot.ca.gov/programs/design/manual-project-development-procedures-manual-pdpm>

Highway Design Manual:

<https://dot.ca.gov/programs/design/manual-highway-design-manual-hdm>

Encroachment Permit Application, Forms, Resources and Tools:

<https://dot.ca.gov/programs/traffic-operations/ep/applications>

District Encroachment Offices Location and Contact Info:

<https://dot.ca.gov/programs/traffic-operations/ep/district-contacts>

Public Records Center (For As-builts and other Info):

[https://caltrans.mycusthelp.com/webapp/rs/\(S\(psqkztjvmx0ks43suefzkdhr\)\)/support/home.aspx](https://caltrans.mycusthelp.com/webapp/rs/(S(psqkztjvmx0ks43suefzkdhr))/support/home.aspx)

Caltrans Corridor Planning Process Guide:

<https://dot.ca.gov/programs/transportation-planning/multi-modal-system-planning/guidelines-procedures/corridor-planning-process-guide>

California 2017 General Plan Guidelines:

http://opr.ca.gov/docs/OPR_COMPLETE_7.31.17.pdf

Further queries or requests for information can also be sent to

CTbroadband@dot.ca.gov