

Chapter 700

Glossary and Definitions

Terminology used in policies and guidelines should depart little from conventional usage. However, some terms need to have restricted or special meaning. This glossary defines terms that are used commonly in this manual. Sources of definitions are American Association of State Highway and Transportation Officials (AASHTO), Federal Highway Administration (FHWA), State statutes, and Caltrans' manuals and Standard Specifications.

Access-Controlled Highway – Any route listed in the California Streets and Highways Code, Division 1, Chapter 2, Article 2, “The California Freeway and Expressway System” (see Project Development Procedures Manual, Chapter 17, Section 2, Article 2).

Access Hole (also known as manhole) – An opening in an underground system that workers may enter to make installations, removals, inspections, repairs, connections, and tests.

Agency – A public entity.

Airspace Development – Any development of airspace on or above the land within the State highway right-of-way limits for non-transportation purposes.

Americans with Disabilities Act (ADA) – Federal civil rights law to establish a clear and comprehensive prohibition of discrimination on the basis of disability. The Districts must follow established procedures to certify that the project “as-built” complies with the ADA standards in Design Information Bulletin (DIB) 82.

Average Daily Traffic (ADT) – The average twenty-four (24)-hour volume of traffic, being the total number during a stated period divided by the number of days in that period. The period is a year, unless stated otherwise (Caltrans Highway Design Manual, Topic 62.8(1)).

Backfill – Material used to replace or the act of replacing material removed during construction.

Also may denote material placed or the act of placing material adjacent to structures.

Bar Hole – Using a probe (bar) to locate underground facilities.

Bedding – Composition and shaping of soil or other suitable material to support a pipe, conduit, casing, or utility tunnel.

Blanket Permit – Caltrans' written permission to enter State highway right-of-way and perform authorized activities at more than one location within specified limits, and may be issued to be valid for one or two years.

Bore – Borehole excavated using trenchless methods for the installation of utility line or other authorized conduits.

Boring – An excavation operation that create a horizontal hole for the installation of a carrier pipe or casing pipe progressively behind the excavation face by jacking. Bore tailings are augered or mucked back through the pipe.

Buffer Strip – That portion of the roadside, usually vegetated, between the curb or curb line and the sidewalk, or extending about four (4) feet or more from the curb where there is no walk.

Cable – An insulated conductor or combination of insulated conductors, enclosed in a sheath.

California Manual on Uniform Traffic Control Devices (CA MUTCD) – Statewide adopted standards and specifications for all official traffic control devices.

Caltrans – California Department of Transportation.

Cap – Rigid structural element surrounding a pipe, conduit, casing, or utility tunnel.

Carrier – A pipe directly enclosing a transmitted fluid (liquid or gas). Also an electric or communication cable, wire or line.

Casing – A larger pipe, conduit, or duct enclosing a carrier.

Catch Point – The intersection of a cut or fill slope and the natural ground.

Categorical Exclusion – Federal terminology for an action that has no significant effects on the environment and requires neither an environmental assessment nor an environmental impact statement.

Categorical Exemption – State terminology for an exemption from the requirements of California Environmental Quality Act (CEQA) for a project having no significant effect on the environment.

CEQA (California Environmental Quality Act) – The State environmental legislation that establishes procedures for conducting an environmental analysis for all projects in California (California Public Resources Code, Section 21000, et seq.).

Clear Recovery Zone (CRZ) – As described in the Caltrans Highway Design Manual, Topics 304.1 & 309.1, this is an unobstructed, relatively flat (4:1 or flatter) or gently sloping area beyond the edge of the traveled way which affords the drivers of errant vehicles the opportunity to regain control.

Coating – Material applied to or wrapped around a pipe.

Common Carrier – means every person and corporation providing transportation for compensation to or for the public or any portion thereof. This includes pipelines that transport petroleum products.

Communication Line – A transmission circuit, such as fiber optic, telephone line, telegraph wire, fire alarm, or television cable.

Concurrent Resolution – Resolution requiring consideration and adoption by both the California Assembly and Senate.

Conductor – A material that contains movable electric charges such as a wire carrying electric current.

Conduit – An enclosed casing for protection of wires, cables, or lines. Conduits often occur in multiple, usually are jacketed, and often extend from access hole to access hole.

Control of Access – The condition where the right of owners or occupants of abutting land or other persons to access in connection with a highway is fully or partially controlled.

- Full Control of Access (freeway) – Control is exercised by providing access connection with selected public roads and by prohibiting crossings at grade or direct private driveway connections.
- Partial Control of Access (expressway) – Control is exercised to a degree that there may be some crossings at grade and some private driveway connections, in addition to access connections with selected public roads.

Conventional Highway – Any highway not listed in the California Streets and Highways Code, Division 1, Chapter 2, Article 2, “The California Freeway and

Expressway System" (see Project Development Procedures Manual, Chapter 17, Section 2, Article 2). Typically, a highway with no control of access, which may be divided or have grade separations at intersections, and abutting property owners have access rights.

Cooperative Agreement – An executed document that specifies the respective roles and responsibilities of Caltrans and local government entities involved.

Coring – A small casing drilled into firm soil, which enters the pipe as it advances. The core is removed by sluicing during or after drilling.

Cover – The depth to the top of pipe, conduit, casing, cable, or similar line or utility tunnel below the earth or roadway surface.

Cradle – A rigid structural element below and supporting a carrier or casing.

CTC – California Transportation Commission.

CWA – Clean Water Act

Department – California Department of Transportation (Caltrans).

Design Exception – Written documentation of a design criteria decision, by an individual with authority for such decision, to deviate from Caltrans' design standards or policy.

Design Information Bulletin (DIB) 82 Pedestrian Accessibility Guidelines for Highway Projects – Caltrans Policy to improve mobility for all travelers on the State Highway System. DIB 82 provides Americans with Disabilities Act (ADA) design guidance and standards to comply with the various federal and state laws and regulations on pedestrian accessibility.

Direct Burial – Installing a utility facility underground without encasement.

Discretionary Project – Requires analysis and consideration for its approval or disapproval.

District – A management region defined by the Department of Transportation (Caltrans).

District Permit Engineer (DPE) – The district functional manager in charge of Encroachment Permits Program for the district (Caltrans).

District Utility Coordinator – The District Right-of-Way employee responsible for utility relocations.

Discovery – A determination that an existing installation/facility has been modified or upgraded. The installation/facility design or capacity exceeds that, which was allowed for placement under the original encroachment permit.

Double Permit – A permit issued to someone performing work for the original permittee, e.g., a contractor performing encroachment work for the owner permittee. Double permits have been discontinued as of January 1, 2023 and are not required any more.

Drain – An appurtenance to discharge liquid contaminants from casings.

Duct – An enclosed tubular non-metal casing for protecting wires, lines, or cables. Often semi-rigid or flexible.

Electric Lines – Overhead conductors with supporting structures or underground conductors and the conduit in which they are contained.

Emergency Conditions – When a situation is life threatening, when traffic is severely impacted, or when conditions are unsafe.

Encasement – Surrounding a carrier or casing with a structural element.

Encroachment – Includes any tower, pole, pole line, pipe, pipeline, fence, billboard, stand or building, or any structure, object of any kind or character not particularly mentioned in this section, or special event, which is in, under, or over any portion of the State highway right-of-way. (California Streets and Highways Code, Section 660)

Encroachment Permit – A revocable permissive authority for the permittee to enter State highway right-of-way to construct facilities or conduct special events. An encroachment permit is a valid contract between the State and the permittee. It is not a property right and is not transferable.

Environmental Assessment – A public document for which a Federal agency is responsible that provides sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.

Environmental Documents – Environmental impact reports and statements, negative declarations, initial studies, and environmental assessments under California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA).

Environmental Handbook – A Caltrans publication of guidelines for complying with State and federal environmental requirements.

Environmental Impact Report (EIR) – A detailed statement prepared under California Environmental Quality Act (CEQA) describing and analyzing the significant environmental effects of a project and discussing ways to mitigate or avoid the effects.

Environmental Impact Statement (EIS) – A detailed statement prepared under the National Environmental Policy Act (NEPA) presenting studies and information needed to identify and assess the significant effects a project may have on the quality of the human environment.

Existing facility – A facility installed in a prior era of time (months, years).

Expressway – An arterial highway for through traffic with at least partial control of access, which may or may not be divided or have grade separations at intersections.

Facility – Something installed to serve a particular purpose.

FHWA – Federal Highway Administration.

Finished Grade – The top surface of the completed roadway.

Flexible Pipe – A plastic, fiberglass, or metallic pipe having a large ratio of diameter-to-wall thickness that can be deformed without undue stress.

Franchise – A privately owned company that has been licensed as a corporation and is regulated by the California Public Utilities Commission to operate in the State of California.

Freeway – A divided arterial highway with full control of access and with grade separations at intersections.

Frontage Road – A local street or road auxiliary to and located on the side of an arterial highway for service to abutting property and adjacent areas and for control of access.

General Provisions – Basic requirements that are attached to each encroachment permit.

Grade Separation – A crossing of two highways, highway and local road, or a highway and a railroad at different levels.

Grading Plane – The lowest level of original ground upon which the first layer of highway base is placed.

Grounded – Connected to earth or to an extended conducting body that serves instead of the earth, whether the connection is intentional or accidental.

Grout – A cement mortar or slurry of fine sand or clay.

Highway, Street, or Road – A general term denoting a public way for the transportation of people, materials, goods, and services but primarily for vehicular travel. Includes the entire area within the right-of-way.

Highway Improvement Agreement – An executed document that specifies the respective roles and responsibilities of Caltrans and private entities involved in developing a special funded State highway project.

Highway Right-of-Way – Any public street or highway or portion thereof which is within the boundaries of a state highway, including a traversable highway adopted or designated as a state highway, shall constitute a part of the right-of-way of such state highway without compensation being paid therefore, and the department shall have jurisdiction thereover and responsibility for the maintenance thereof. (California Streets and Highways Code, Section 83)

Historical Resource – Includes, but not limited to, any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the archaeological, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California (for more information see: California Register of Historic Resources “Proposed Guidelines for the Nomination of Properties,” March 1, 1995).

Initial Study – Determines whether an environmental impact report or a negative declaration must be prepared to satisfy California Environmental Quality Act (CEQA) provisions.

Innerduct – A flexible sheath used to enclose cables and protect them from damage. Commonly used when running fiber optic cable through underground conduits originally designed for large-diameter telephone cables.

Interchange – A system of interconnecting roadways in conjunction with one or more grade separations that provides for the movement of vehicles between two or more roadways on different levels.

Jacket – Encasement by concrete poured around a carrier or casing.

Jacking – Pushing pipe horizontally into a bored hole behind a drilling device or to protect a manual excavation operation.

Lead Agency – The public agency having principal responsibility for a project, including preparing environmental documents and approving and carrying out the project.

Local Assistance Project – A local agency project involving federal or State highway funds.

Longitudinal – A facility located parallel to and within State highway right-of-way.

Manhole – see Access Hole

Median – The portion of a divided highway separating traveled ways for traffic in opposite directions.

Modification – a revision to or change of an existing installation/facility, which does not increase size or capacity.

ND (Negative Declaration) – Justifies that a project subject to California Environmental Quality Act (CEQA) will not have a significant environmental effect and does not require an environmental impact report.

NEPA (National Environmental Policy Act) – The national environmental law that establishes procedures for conducting an environmental analysis for a project involving federal action.

New Installation – An installation placed in a location where none exists.

Newspaper Vending Machine – A self-service and coin-operated box, container, storage unit or other dispenser installed, used or maintained for the display and sale of newspapers.

Nonprofit Corporation – An organization that is tax exempt under Title 26 of the United States Code, Sections 501(c)(3), (4), (6), (7), (8), 501(d) and the California Revenue and Taxation Code, Section 23701(d).

Non-operational Right-of-Way – State land used for, but not limited to, future highway use, office buildings, District offices, maintenance facilities, and labs managed by the Division of Right-of-Way.

NPDES – National Pollution Discharge Elimination System

Occupation of an Existing Facility – The placement of telecommunications within an existing empty facility.

Operational Right-of-Way – The area between the right-of-way limits utilized for the purpose and protection of public travel.

Occupational Safety and Health Administration (Cal/OSHA) – A California State agency that regulates workplace safety and health.

Overcrossing – A structure carrying a road or street over a State highway.

Overhead – An elevated structure carrying a highway over a railroad.

Owner – The individual, corporation, or organization responsible for an encroachment.

Pascal - Newton per square meter.

Pavement Structure – The combination of subbase, base course, and surface course placed on a subgrade to support the traffic load and distribute it to the roadbed.

PEER (Permit Engineering Evaluation Report) – A report prepared to document the engineering analysis of proposed work. The analysis includes review of the proposed improvements to determine drainage, maintenance, operation, tort liability, and environmental impact on the State highway system.

Pipe – A tubular product made as a production item for sale as such. Cylinders formed from plate are not defined here as pipe.

Pipeline – A pipe used to transport liquids or gases.

Plowing – Direct burial by means of a "plow-type" mechanism that in a single operation breaks the ground, places the line, and closes the break in the ground.

Pothole – see Test Hole.

Pressure – Relative internal pressure in psig (pounds per square inch gauge) or pascal (Pa).

Pressure Pipeline – Any pipeline flowing full shall be considered under pressure.

Probe – A rod used to locate an underground facility without exposing the facility.

Project Report – A detailed document that justifies Caltrans' approval for a proposed State highway project and includes the appropriate environmental documents.

PSIG (PSI) – Pounds per square inch gauge pressure.

Public Corporation – Includes federal, State, cities, counties, and public Districts (not including privately-owned public utilities).

Public Road Connection – Provides an access opening through the right-of-way line which serves abutting land ownerships whose remaining access rights have been acquired by the State.

Public Utility – Includes every common carrier, toll bridge corporation, pipeline corporation, gas corporation, electrical corporation, telephone corporation, telegraph corporation, water corporation, sewer system corporation, and heat corporation, where the service is performed for, or the commodity is delivered to, the public or any portion thereof.

Public Utility Facility – Any pole, pole line, pipe, pipeline, conduit, cable, aqueduct, or other structure or appurtenance dedicated to public use and used to provide a service to the public.

Public Works - All road, bridge, street lighting, or installation of signal work performed under an encroachment permit issued and for acceptance into the State highway system, except work performed solely to allow private encroachments onto the State highway or for utility and/or drainage encroachments within the State highway.

RWQCB – Regional Water Quality Control Board

Relocation – Removal, rearrangement, reinstallation, or adjustment of a public utility facility required by highway construction or improvement.

Relocation within State Right-of-Way – Relocation is required from an existing location to a designated location remaining within the existing or proposed State highway right-of-way.

Relocation out of State Rights-of-Way – Relocation is required from an existing location to a location out of the existing or proposed State highway right-of-way.

Repairs – To correct problems with an existing installation/facility that is deemed inoperable by the owner.

Replacement in Kind – When an owner cannot correct a problem with an existing facility and is deemed inoperable, the owner shall replace that existing facility with another of the same size or capacity.

Resolution – A written expression of the will of a legislative body, such as a city or town council, county board, of the California Assembly or Senate.

Responsible Agency – A public agency, other than the Lead Agency, which has responsibility under California Environmental Quality Act (CEQA) for carrying out or approving a project in California.

Rider – A document used to amend an approved encroachment permit. Amendments may be initiated by the permittee for time extension or to modify work or initiated by Caltrans to modify permit requirements.

Right-of-Way – A general term denoting land, property, or interest therein (usually in a strip) acquired for or devoted to transportation purposes.

Rigid Pipe – Pipe designed for diametric deflection of less than one percent (1%).

Roadbed – That portion of the roadway extending from curb line to curb line or shoulder line to shoulder line; divided highways are considered to have two roadbeds.

Roadside – A general term denoting the area adjoining the outer edge of the roadbed to the right-of-way line. Extensive areas between the roadways of a divided highway also may be considered roadside.

Roadway – That portion of the highway included between the outside lines of the sidewalks, or curbs and gutter, or side ditches also including the appertaining structures, and all slopes, ditches, channels, waterways, and other features necessary for proper drainage and protection.

Safety Roadside Rest Area – A designated area within and along State highways with parking facilities provided for motorists to stop and rest for short periods. It may include drinking water, toilets, tables and benches, telephones, information, and other facilities for travelers. (California Streets and Highways Code, Sections 220 and 220.5)

Scenic Highway – A State or county highway, in total or in part, which is recognized for its scenic value, protected by a locally adopted corridor protection program, and has been officially designated by the Department. The state scenic highway system is listed in the California Streets and Highways Code, Section 263 et seq.

Scenic Overlook – A roadside area provided for motorists to stop their vehicles beyond the shoulder, primarily for viewing the scenery in safety.

Scenic Resource – Includes but not limited to a stand of trees, a rock outcropping, or an historic building; having scenic or visual qualities, as determined by a trained individual.

Semi-Rigid Pipe – Pipe designed to tolerate from one percent (1%) to three percent (3%) diametric deflection.

Shoulder – The paved or unpaved portion of the roadway contiguous with the traveled way for accommodating stopped vehicles, for emergency use, and for lateral support of base and surface courses.

Sidewalk Sale – Use of the sidewalk for vending purposes. It may be permitted as a special event, but otherwise is prohibited by Section 731 of the California Streets and Highways Code.

Slab, Floating – A slab between (but not contacting) a utility line and a structure or pavement.

Sleeve – A short casing through a pier or abutment of a highway structure.

Special Event – A street festival, sidewalk sale, or community-sponsored activity, or community approved activity as defined in the California Streets and Highway Code, Sections 660 (b) and 682.5.

Special Funded Project – Any project on the State highway system developed with local or private funds that is planned, developed and constructed efficiently and effectively in accordance with standards and practices defined in various Caltrans policies, procedures, manuals and guidance documents. Utility and drainage encroachment projects normally are not considered special funded projects (Deputy Directive (DD) 23).

Special Provisions – Written requirements of an encroachment permit supplementary to the General Provisions.

SWMP – The Caltrans Statewide Stormwater Management Plan. A description of the procedures and practices used to reduce or eliminate the discharge of pollutants to storm drain systems and receiving waters.

SWRCB – State Water Resources Control Board

Telecommunications – The installation of wiring, to include but not limited to fiber optic cabling or hard wiring (copper or aluminum).

Telecommunication Facilities – The installation and placement of conduits (Steel, Galvanized Iron Pipe, High Density Polyethylene, Medium Density Polyethylene, or Polyvinyl Chloride) splice boxes, vaults, access holes, regeneration/boosting stations, or cabinets.

Temporary Traffic Barrier – An object used to prevent vehicular access into construction or maintenance work zones, and to redirect an impacting vehicle so as to limit damage to the vehicle and injury to the occupants while providing worker protection.

Test Hole (also known as pothole) – An excavation to expose an underground facility.

Traffic Barrier – A device used to prevent a vehicle from striking a more severe obstacle or feature located on the roadside or in the median to prevent crossover median accidents.

Transverse – A facility crossing from one side of a highway right-of-way to the other.

Traveled Way – The portion of the roadway used for movement of through traffic.

Trenched – Installed in a narrow open excavation.

Tunnel – A horizontal underground highway crossing of jacked pipe, liner plate, or wood lagging work in excess of thirty (30) inches diameter.

Undercrossing – A structure providing passage for a road or street under a State highway.

Underpass – A structure providing passage for a highway under a railroad.

Untrenched – Installed without breaking the ground or pavement surface, such as jacking, boring, or mechanical compaction.

Upgrade – An upgrade consists of an increase in the size or capacity of the existing.

Utility Tunnel – An undercrossing for one or more utility lines.

Vent – An appurtenance used to discharge gaseous contaminants from casings.

Vista Point – A dedicated area, typically paved, beyond the shoulder that permits travelers to stop and view a scenic area.

Walled – Partially encased by concrete placed alongside a carrier or casing.