

## 5.1 ASSIGNING BRIDGE NAMES AND NUMBERS



*Fisher Creek, Santa Clara County*



The ABME is responsible for assigning bridge names and numbers. There are two sets of loose leaf binders in the Office of Structural Analysis and Management: one for State, one for local agency structures, in which are recorded the official bridge number and name of all known State and local agency structures within the State. There are three other binders for recording the name and numbers of other bridges such as park, institutions, forest services, et cetera.

For bridges on State highways, bridge names and their identification numbers are assigned by the ABME responsible for that area. A request for a bridge name and number will normally come from Structures Design's liaison engineers. Upon this request, the ABME will assign a name and number and record it in the State Bridge Number Book. New structures are assigned the

next available number within the applicable county. In cases where a new structure is to replace an old structure in the same location or the same general vicinity and the old structure is to be torn down, the new bridge will be assigned a new number. The bridge number for the old bridge may be reassigned to the new structure if there has been considerable correspondence or project activity prior to the assignment.

For bridges not on State highways, bridge numbers are assigned by the ABME responsible for the area and are recorded in the appropriate Number Book. Names for local agency bridges are normally assigned by the owner agency but may be deferred to the responsible ABME. The descriptive portion of the name such as overcrossing, viaduct, et cetera, should conform to Subsection 5.1.1.

Bridge numbers for structures in the Southern Area are assigned by the Los Angeles office and the name and number are sent to Sacramento for entry into the appropriate Bridge Number Book.

### 5.1.1 Bridge Names

In general, structures are named for their function (separations, connectors, et cetera) or for features intersected such as streams, cross streets, railroad stations, schools, et cetera. Some structures are named as memorials of prominent persons, but these names are intended as supplemental names only, and are not considered to be part of the official bridge name. All attempts should be made to make the bridge name and the bridge number complimentary. Bridge function will have precedent over feature intersected. Specifically, structures are named using the following guidelines.



#### A. WATERWAY STRUCTURES

These bridges are named for the waterway over which they cross. Any local name applied to the bridge may be added in parentheses. The USGS Sheets are used as the authority for the names of streams.

#### B. UNDERPASS, OVERHEAD

These structures are named from the relation of the highway to the railroad. If the highway goes over the railroad, it is an "overhead." If the highway goes under the railroad, it is an "underpass." Such structures generally take the name of (1) the nearest station on the railroad, or (2) when within a city limit, the name of some important cross street or the structure's general geographic location within that city, i.e., *NORTH NAPA UNDERPASS*.

*NOTE:* Structures separating light rail systems from highways are not to be named underpass or overhead; they are to be called overcrossing or undercrossing. To identify the structure as being light rail, the established acronym for the system, sometimes in parentheses, should be entered as part of the proper name, i.e., *THIRD STREET UNDERCROSSING (BARTD)*, *LACTC OVERCROSSING*, et cetera.

#### C. SEPARATIONS

These structures separate State highways and/or highway segments. For local agency bridges they separate federal aid routes.

- 1) When two State highways cross, the name will normally be composed of route number of the highway going over the structure followed by the number of the highway going under the bridge and the word "separation". *ROUTE 104/99 SEPARATION* is a structure carrying Route 104 over Route 99.

- 2) Where the State highway above is also a city street, the structure can be named for the above street with the route numbers following in parentheses. *BRUNDAGE LANE SEPARATION (204/99)* is a structure which carries Brundage Lane, State Route 204, over Route 99.

Similarly, a local agency separation will most often be named after one of the separated streets or roads. Here too the name should include the route numbers, if applicable, following in parentheses. *CLARK STREET SEPARATION (G234/B123)*.

- 3) Where two State highways are separated but the structure has a well-defined name which has been used for some time, this name should be continued in use, but the structure should be called a "separation" and it too should include the route numbers in parentheses, i.e., *WARM SPRINGS SEPARATION (262/880)*.

- 4) Some of the more complex interchanges between State highways require structures to carry the connecting roads over or under the principle traffic lanes. These structures will be named for a related traffic movement (function). Thus the name *N680-W004* would indicate that traffic from northbound Route 680 was connecting to westbound Route 4. Similarly, *099-W004* would indicate that traffic from Route 99, both directions,

was connecting to westbound Route 4 and separating various highway segments. It should be noted here that the bridge number suffix must support the name; the first example would have a bridge number suffix "G"; the second, suffix "H."

prominent landmark or other local designation.



D. OVERCROSSINGS, UNDERCROSSINGS

When a county road, city street, or any facility (pipelines, tramways, pedestrian crossings, cattle-passes, equestrian crossings, et cetera), other than railroads, is separated from a State highway, the structure should be named for the facility according to its position over or under the State highway. For example; MACK ROAD OVERCROSSING is a structure that carries Mack Road (a county road) over a highway; CHEVRON PIPELINE UNDERCROSSING is a refinery pipeline crossing under a highway.

*EXCEPTION:* Where a city street or county road crosses under a State highway and there is also a railroad under the same structure it will be called an overhead. For example, the name of a structure that carries a State highway over Commercial street and a railroad might be EAST MERCED OVERHEAD.

For local agency bridges, "overcrossing" would indicate an off system road over a Federal Aid route. An "undercrossing" would indicate an off system road under a Federal Aid route.

E. VIADUCTS

A structure which carries highway traffic along a steep sidehill is called a "viaduct." "Viaduct" is also used occasionally for a long structure crossing over several facilities of approximately the same importance, any one of which alone would require a name category of bridge, overhead, undercrossing, or separation. The structure is normally named for a local

F. TUNNELS AND TUBES

An opening or passageway for highway traffic through a hill or mountain is to be called a "tunnel." This term normally follows a local name.

A structure carrying highway traffic under a body of water is designated a "tube" and will usually be named after the body of water under which the roadway passes.

G. OTHER STRUCTURES

All facilities other than railroads (pipelines, tramways, pedestrian crossings, cattle-passes, equestrian crossings, et cetera) are named for their relation to the route being considered. Where a small structure is utilized both as a cattlepass and a waterway, the structure shall be named for the stream rather than be called a "cattlepass."

Names should be kept brief due to preset space limitations in the data processing system.

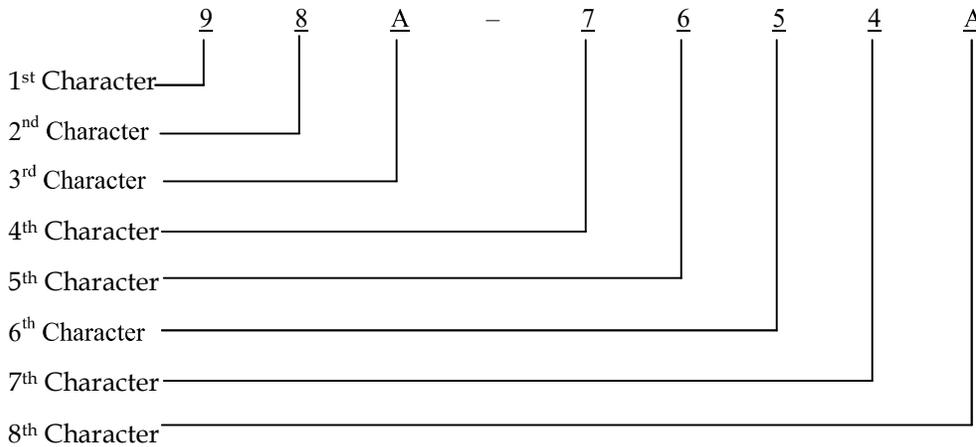
Naming structures in a complex interchange requires much study and consideration. To assist you, examples of various types have been illustrated in

Section 5, Attachment A. All possibilities cannot be shown; the examples diagrammed are to be used as a guide.

### 5.1.2 Bridge Numbers

A bridge number is assigned to each bridge that SM&I is responsible for inspecting and/or inventorying and in special cases to other structures which, with the approval of the Office Chief, require *periodic* structural investigations; i.e., retaining walls, sea walls, reinforced earth or mechanically stabilized embankment, channel covers, culverts, et cetera.

The bridge number is a hyphenated eight character alphanumeric designation that must conform to the format:



Every county in the State has been assigned a number from 01 to 58 (See Section 5, Attachment B for county numbers and abbreviations). The first two characters of the bridge number represent the county designation. The third character is either blank or an alpha character referred to as the "county suffix." The assignment of this county suffix character must conform to the following criteria:

**Blank** - For bridges located within the State highway system right of way or on State property; these are commonly referred to as "State" bridges.

**"C"** - For bridges located on or over a city or county road; these are commonly referred to as "local" bridges.

**"F"** - For bridges located on State forest roads.

**"G"** - For bridges owned and maintained by the California Department of Fish and Game.

**"I"** - For bridges located on roads within State institutions.



“P” - For bridges located in a State park.

“U” - For a federal government agency “owned bridge.”

Bridge numbers with the above county suffixes are generated by SM&I. Bridge numbers with the following are county suffixes generated by other Caltrans units.

“X” - For a local transit authority structure, either bridge or transit station, carrying transit traffic but not in any way involved with public highway traffic.

“E” - For earth retaining structures of special interest; such as MSE walls, tieback walls, etc.

“S” - For a State sign structure, overhead or structure mounted.

“T” - For a toll plaza on the State highway system.

“M” - For maintenance stations and similar Caltrans facilities.

“R” - For a safety roadside rest facility on the State highway system.

“W” - For a weight station (truck scale) on the State highway system.

Characters 4 through 7 represent a numerical value from 0001 to 9999 as obtained from the bridge number books.

The last (eighth) character is an alpha character commonly referred to as the bridge number suffix. The bridge number suffix serves to define the functional use of the bridge structure and/or the route-related physical location of the bridge at a crossing feature. Where application of these two definitions yield different suffix

designations, the function will govern. When a bridge serves dual functions, e.g., mainline and connector traffic, the suffix which is appropriate for mainline traffic will govern. Following is an explanation of number suffix use. For these definitions, left and right roadbeds are referenced to the ahead on the post mile direction of a route. The following definitions pertain to suffix use on State “bridges” and should be used with local agency Bridge Numbers where applicable.

- A) *No suffix:* A bridge number without a suffix is proper for either of the following: a bridge carrying two-way mainline State highway traffic; a bridge<sup>1</sup> not carrying State highway traffic but affecting State highway with vehicular impairments. Underpasses, POC’s, and most overcrossings fall into this category.
- B) *Suffixes “R” and “L”:* These suffix designations may be used either as a pair, or as individual structure identifications. With State highway traffic on the deck, they at all times apply to single direction bridges and will be used to relate direction of travel irrespective of the physical location of the bridge. These designations are also proper to identify the direction of travel on one-directional, parallel overcrossings over a State highway. A third proper use is for overcrossing structures that carry two-directional traffic, and separately span over the left (“L”) or the right (“R”) directions of a State highway.
- C) *Suffix “C”:* This suffix is reserved for single direction bridges connecting or distributing to or from facilities other than a State highway. This bridge most often occupies the center portion of divided roadways or carries traffic initiated from or directed to the left side of either roadbed.
- D) *Suffixes “E,” “F,” “G,” and “H”:* These suffix designations are