

STRUCTURE NAMING RULES

FOR ALL STRUCTURES REQUIRING A STRUCTURE NUMBER IN THE BRIDGE DATA SYSTEM (BDS)



Oregon Department of Transportation

5/19/2026

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For local agency owned structures, use the local agencies naming convention, then add the name per these rules as an “Alias Name” in BDS.

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For structure numbering rules, see the [ODOT Structure Numbering Rules for Major/Critical Structures](#).

IMPORTANT! Before changing the name of a structure, copy the previous name to the *Alias Name* section in the *Alias/Near* tab in BDS.

The structure name should be consistent with the information in BDS, the Bridge Log and BrM. If the name is changed because of the updated naming rules, please notify the Standards Unit, [Lead Bridge CAD Standards Specialist](#).

REVISIONS

3 January 2019	Fixed Basic Rules numbering.
6 March 2019	Added water feature naming rule and example for clarity.
8 July 2019	Connection milepoint clarification; added sound wall rules
12 Sept. 2019	Example added to Basic Rule #1
22 May 2025	Add language regarding BrM naming
19 May 2026	Accessibility edits; flowcharts omitted

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BASIC RULES

1. Name must be 50 characters or less (required by BrM(PONTIS)).
 - a. Example:
 - i. Hwy 006 over Hwy 006 (Conn 006GL)_MP345.83 (N Huntington Intchg) ← 64 characters
 - ii. Hwy6 ovr Hwy6(Conn 006GL)_MP345.83(N Hntngtn Intc) ← confusing road name
 - iii. Hwy6 ovr Hwy6(Cn 006GL)_MP345.83(N Huntington Int) ← unclear abbreviations
 - iv. Hwy6 ovr Hwy6(006GL)_MP345.83(N Huntington Intchg) ← clearest option
2. Use the ODOT highway number, not route number. The ODOT number is unique. Some highways can have multiple route numbers.
3. Do not use "Bridge", "O'xing", "U'xing" or forms thereof, except where the feature name includes the word, such as "Bridge Cr" or "Bridge St".
4. The location of bridges, culverts, traffic and ITS structures are identified by highway and milepoint when on or along a state highway. Retaining walls not attached to a bridge and structures not on or along a state highway use latitude/longitude. To determine the location milepoint (2 decimal places) or latitude/longitude (5 decimal places; Negative longitude is assumed):

Location points:

 - a. Bridge - center along roadway centerline.
 - b. Culvert - On edge of pavement at a line perpendicular to the edge of pavement, aligned with the inlet end.
 - c. Traffic/ITS - one end if crosses roadway, otherwise center.
 - d. Retaining wall - left end when facing the open side.
 - e. Sound wall - left end when facing the roadway side.
5. Never use project stationing - it is not used after project completion.
6. Use common abbreviations, except for feature names such as "D River", or for clarity. [See abbreviation list](#).
7. Do not use punctuation, except underscores and parenthesis, unless necessary for clarity. The underscore is used for separating types of data such as "Bear Cr_Hwy030", not individual words such as "Bear_Cr_Hwy_030".
8. Use cardinal directions for city or county roadways, as appropriate (e.g. 12th St SE).
9. When the structure is a retaining wall or a structure that does not cross the roadway, use cardinal direction from roadway - NS (North Side), SS (South Side), ES (East Side), WS (West Side) (e.g. Hwy062_WS).
10. When the structure is on a divided highway or one-way street, include the direction of traffic (NB, SB, EB, WB) (e.g. Hwy001NB or 3rd St_SB).
11. For highway connections (ramps, etc.) add the road identifier from the highway inventory which consists of the 3-digit highway number and a 2-letter code (e.g. (Conn 001GV)). The road identifier is unique to each connection. (Users can get the road identifier from the [Straightline Charts](#). They are also available to internal users in [TransGIS](#), by turning on the Highway Connections layer in the Road Network tab.) Connections are always associated with the highway they come "from", unless they connect with a non-highway; then they are always with the highway. Note that the practice of adding a "C" to the milepoint is now retired: the identification of a connection indicates that milepoints belong to the connection.

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12. Check the BrM database to see if they have a name, or if there is a conflict in naming. In the case of conflicts, contact the BrM database manager and negotiate a common name for both systems. If conflict cannot be resolved, enter the BrM structure name as an alias in BDS.

13. Acceptable structure type codes:

Structure Type Code	Description*
N/A	Bridge, culvert 20 ft. and greater, culvert not intended for water (e.g. cattle pass, equipment pass, wildlife pass, or trail), tunnel, viaduct, misc. structure
Cl	Culvert (greater or equal to 6 ft. and less than 20 ft.)
Its	Intelligent transportation system structure
Rtw	Retaining wall (4 ft. or higher, not attached to a bridge)
Sg	Signal structure
Sn	Sign structure
Sw	Sound wall

*See [design manuals](#) for detailed structure definitions: *Bridge Design Manual*, *Geotechnical Design Manual*, *Hydraulics Manual*, *Traffic Structures Design Manual*.

14. When a structure has a commemorative, historic, local, or interchange name, add it at the end in parenthesis.
15. When a water feature has a commemorative, historic, local name, add it at the end of the water feature name in parenthesis
16. When a structure is inside city limits, add the city street name in parenthesis.
17. If there are multiple features crossed, you may list up to three features in order of high to low priority separated by a "+". A "+" at the end indicates additional or minor features not listed.

NOTE: Railroads are always listed as "RR" (Light Rail Transit – "LRT") after named water features, but before highways and other roads.

Prioritize major features, except railroads, as follows:

- 1 – Named water feature
- 2 – Highway
- 3 – County Road or Major City Street

18. If the structure crosses the state line and is owned by the neighboring state, add the state's DOT acronym to the end in parenthesis (WSDOT).

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DEFINITIONS (FOR THE PURPOSE OF STRUCTURE NAMING ONLY)

Culvert - A covered channel used to convey a watercourse (continuous or intermittent) below ground; single or multiple barreled culverts that are 6 feet or larger.

Swale - Low depression which may contain water during heavy rainfall.

Channel - unnamed stream, canal or ditch - natural or man-made - may or may not contain water.

Facility - Roadway, railroad, multi-use path, etc. that is carried by a bridge, crosses over a culvert, nearest wall or traffic structure.

Feature - Waterway, railroad, roadway, etc. being spanned by a bridge or culvert.

COMMON ABBREVIATIONS (FOR THE PURPOSE OF STRUCTURE NAMING ONLY)

Abandoned – Abnd

Avenue – Ave or Av

Canyon – Cyn

Creek – Cr

Drive – Dr

Expressway – Expy

Frontage – Frtg

Highway – Hwy

Interchange – Intchg

Lane – Ln

Light Rail Transit – LRT

Milepoint – MP

Pedestrian – Ped

Railroad – RR

River – R

Road – Rd

Street – St

Slough – Sl

Trail – Tr

Tunnel – Tunl

QUESTIONS/COMMENTS

For questions or comments, please call the ODOT Bridge Section at (503)986-4200 or email [ODOT Bridge Engineering](#).

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EXAMPLES

DESCRIPTION OF STRUCTURE	NAMING EXAMPLES
STRUCTURE OVER WATER FEATURE – Bay, Stream, etc.	NAMING FORMAT (Brackets [] indicates data to be entered)
	<i>Example(s) on state highway (shown red)</i> <i>Example(s) on non-highway (shown blue)</i>
Structure at named water feature or swale.	[feature name]_[facility] <i>Yaquina Bay_Hwy009</i> <i>North Powder R_Bidwell Rd_45.02411/117.91889</i>
See Basic Rule 10.	<i>Mill Creek_Hwy001NB</i>
See Basic Rules 10 and 11.	<i>Link R+_Hwy004NB(Conn 004AZ)</i>
See Basic Rule 12.	[structure type]_[feature name]_[facility] <i>cl_Holmes Cr_Hwy006</i> <i>cl_Sand Cr_Neil Peck Rd(C-734)_44.91951/117.95139</i>
See Basic Rule 16.	<i>Klamath R+RR+_Hwy424</i> <i>Washington St over LRT_45.5183/122.5644</i>
See Basic Rule 17.	<i>Columbia R_Hwy070EB(Umatilla)(WSDOT)</i>
Facility crosses named water feature multiple times.	[feature name]_[facility]_MP[XX.XX] <i>Little Elk Cr_Hwy033_MP32.24</i> [feature name]_[facility]_[lat/long] <i>Little Cr_High Valley Rd_45.20665/117.79882</i>
Structure at unnamed channel (unnamed stream, canal, or ditch – natural or man-made – may or may not contain water).	Channel_[facility]_MP[XX.XX] <i>Channel_Hwy030_MP20.14</i> [feature name]_[facility]_[lat/long] <i>Channel_Smith Rd_44.93426/123.02854</i> <i>Channel_Lake Ewauna Tr Ped_44.93426/123.02855</i>

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DESCRIPTION OF STRUCTURE	NAMING EXAMPLES
STRUCTURE OVER WATER FEATURE (Cont.) – Bay, Stream, etc.	NAMING FORMAT (Brackets [] indicates data to be entered)
	<i>Example(s) on state highway (shown red)</i> <i>Example(s) on non-highway (shown blue)</i>
See Basic Rule 12.	[structure type]_Channel_[facility]_MP[XX.XX] <i>cl_Channel_Hwy005_MP20.14</i> [feature name]_[facility]_[lat/long] <i>cl_Channel_Co Rd 17_44.93426/123.02854</i>
Structure on state frontage road some connections, add	[feature name]_[facility]_[lat/long] <i>Rocky Cr_Hwy001 Frtg_44.77630/124.07284</i>
Hwy frontage rd with local rd name.	<i>cl_Clear Cr_Wildwood Dr_43.60226/124.18100</i>
Connection similar to frontage road.	<i>cl_Canyon Cr_Hwy001NB(Conn 001ER)_42.89217/123.23800</i>
See Basic Rule 12.	[structure type]_[feature name]_[facility]_[lat/long] <i>cl_Rocky Cr_Hwy001 Frtg_44.77630/124.07285</i>
Structure has commemorative, historic, or local name. See Basic Rule 13.	[feature name]_[facility (name)] <i>Rocky Cr_Hwy010(Ben Jones)</i> <i>Fifteen Mile Cr_Co Rd(Seufert)</i>
Water Feature has a commemorative, historic, or local name. See Basic Rule 14.	[feature name (local name)]_[facility] <i>W Fork Palmer Cr (Farmer R)_Hwy 154</i>

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STRUCTURE OVER or ALONG OTHER FEATURES – Railroads, Highways, Roads/Streets, Flumes, Etc.	NAMING FORMAT (Brackets [] indicates data to be entered)
	<i>Example(s) on state highway (shown red)</i> <i>Example(s) on non-highway (shown blue)</i>
Highway over feature or Facility over highway.	[facility] over [feature] <i>Hwy002 over Hwy001</i>
Although Hwy001 goes over Hwy273 multiple times, milepoint is not needed because the NB and SB designation distinguishes them.	<i>Hwy001 over Hwy273</i> <i>Hwy001NB over Hwy273</i> <i>Hwy001SB over Hwy273</i>
Where one highway crosses over another, associate the milepoint with the highway the bridge carries.	<i>Hwy 141_MP3.82 over Hwy 144</i> <i>Hwy052 over 23rd St NE</i> <i>Hwy064 over RR_MP13.76</i> <i>Hwy105_MP0.02 over Ped</i> <i>Empire Ave over Hwy004</i> <i>Flume over Hwy449_MP0.91</i> <i>RR over Hwy1W(091)_MP40.99 (Whiteson)</i> <i>Multi-use over Hwy002_MP5.77</i>
Non-highway over non-highway.	[facility] over [feature]_[lat/long] <i>Multi-use over 12th St SE_44.93426/123.02854</i>
Facility or feature has alternate name. See Basic Rules 13 through 15.	[facility]([name]) over [feature] [name]) <i>Hwy1E(081)(NE MLK Blvd) over RR(Paulson Viaduct)</i> <i>Phillipi Canyon Rd over Hwy002(Quinton Intchg)</i>

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STRUCTURE OVER or ALONG OTHER FEATURES – Railroads, Highways, Roads/Streets, Flumes, Etc. (continued)	NAMING FORMAT (Brackets [] indicates data to be entered)
	<i>Example(s) on state highway (shown red)</i> <i>Example(s) on non-highway (shown blue)</i>
Facility carries or over highway connection add the road identifier from the ODOT highway inventory. See Basic Rule 11.	[facility](Conn [###XX]) over [feature] <i>Hwy002(Conn 002AZ) over 103rd Ave</i> <i>E Barnett Rd(Conn 001BE) over Hwy001</i> [facility] over [feature](Conn [###XX]) <i>102nd Ave over Hwy002(Conn 002AZ)</i> <i>Hwy001NB over Clarks Branch Rd(Conn 001GV)</i> <i>Hwy006 over Hwy006(Conn 006EA)(Ladd Creek Intchg)</i>
Structure not intended for water such as a cattle guard, equipment, wildlife pass, or trail.	[structure type]_[facility]_MP[XX.XX] <i>Cattle Pass_Hwy021_MP5.20</i> <i>Rimrock Trail_Hwy0372_MP5.15</i> [structure type]_[facility]_[lat/long] <i>Cattle Pass_Smith Rd_44.93426/123.02854</i>
Traffic Structure Over or Along Other Features	
Traffic structure crosses roadway. Sign structures add "sn_"; signal structures add "sg_"; ITS structures add "its_". Non-highway add lat/long.	[structure type]_[facility]_MP[XX.XX] <i>sn_Hwy1W(091)_MP5.20</i> <i>sg_Hwy1W(091)_MP5.20</i> <i>its_Hwy1W(091)_MP5.20</i> [structure type]_[facility]_[lat/long] <i>sn_30th St_43.99014/124.10120</i> <i>sg_30th St_43.99014/124.10120</i> <i>its_30th St_43.99014/124.10120</i>
Traffic, sign or ITS structure does not cross roadway.	[structure type]_[facility]_[side]_MP[XX.XX] <i>sn_Hwy001SB_SS_MP5.20</i> <i>sg_Hwy001SB_SS_MP5.20</i> <i>its_Hwy001SB_SS_MP5.20</i> [structure type]_[facility]_[side]_[lat/long] <i>sn_30th St_WS_43.99014/124.10122</i> <i>sg_30th St_WS_43.99014/124.10122</i> <i>its_30th St_WS_43.99014/124.10122</i>

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DESCRIPTION OF STRUCTURE	NAMING EXAMPLES
STRUCTURE CARRIES or ALONG a HIGHWAY CONNECTION (RAMP) - Grade Separation Only	NAMING FORMAT (Brackets [] indicates data to be entered)
	<i>Example(s) on state highway (shown red)</i> <i>Example(s) on non-highway (shown blue)</i>
Facility is a highway connection/ramp add the connection designation from the ODOT highway inventory. See Basic Rule 11.	[facility](Conn [####XX]) to [facility] <i>Hwy1W(091)(Conn 091CO) to Hwy030</i> [facility] to [facility](Conn [####XX]) <i>NE 102nd Ave to Hwy002(Conn 002BA)</i>
Facility is a connection to or from a divided highway, add direction (NB, SB, EB, WB). See Basic Rule 9.	[facility][direction](Conn [####XX]) to [facility] <i>Hwy001NB(Conn 001WR) to Hwy069</i>
Traffic Structure Over or Along a Hwy Connection	
Traffic sign structures add "sn_"; signal structures add "sg_"; ITS structures add "its_".	[structure type]_[facility](Conn [####XX])_MP[XX.XX] <i>sn_Hwy1W(091)(Conn 091CB)_MP5.20</i> <i>sg_Hwy1W(091)(Conn 091CB)_MP5.20</i> <i>its_Hwy1W(091)(Conn 091CB)_MP5.20</i> [structure type]_[facility](Conn [####XX])_MP[XX.XX] <i>sn_Hwy1E(081)(Conn 081BG)_SS_MP6.21</i> <i>sg_Hwy1E(081)(Conn 081BG)_SS_MP6.21</i> <i>its_Hwy1E(081)(Conn 081BG)_SS_MP6.21</i>

DESCRIPTION OF STRUCTURE	NAMING EXAMPLES
STRUCTURE OVER MULTIPLE FEATURES	
You may list up to three features from high to low priority separated by a "+". A "+" at the end indicates additional or minor features not listed.	[feature]_[facility]+ <i>Willamette R+RR+_Hwy064</i> <i>Umpqua R+McIntosh Sl_Hwy009</i>
NOTE: Railroads are always listed as "RR" after named water features, but before highways and other roads. For list of priorities, See Basic Rule 16.	[facility] over [feature]+ <i>Hwy001 over NE Hassalo St+</i> <i>Hwy039 over RR+College St+River St+</i>

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DESCRIPTION OF STRUCTURE	NAMING EXAMPLES
TUNNELS AND VIADUCTS	NAMING FORMAT (Brackets [] indicates data to be entered)
	<i>Example(s) on state highway (shown red)</i> <i>Example(s) on non-highway (shown blue)</i>
Use accepted structure name. Non-highway add lat/long.	[name]_ [facility] <i>Salt Creek Tunnel_ Hwy018</i> <i>Cornell Tunt No 1_ NW Cornell Rd_45.53072/122.71674</i>

DESCRIPTION OF STRUCTURE	NAMING EXAMPLES
RETAINING WALLS & SOUND WALLS	
Retaining wall add "rtw_"; sound wall add "sw".	[structure type]_[nearest facility]_[side]_[lat/long] <i>rtw_Hwy009_WS_45.58914/118.64170</i> <i>sw_Hwy009_WS_45.58914/118.64170</i> <i>rtw_S Springbrook Rd_NS_45.30233/122.94701</i> <i>sw_S Springbrook Rd_NS_45.30233/122.94701</i>
Facility is a divided highway add direction of traffic to highway number.	[structure type]_[nearest facility]_[side]_[lat/long] <i>rtw_Hwy006EB_NS_45.58914/118.64170</i> <i>sw_Hwy006EB_NS_45.58914/118.64170</i>
Facility is a highway connection add connection designation from the ODOT highway inventory. See Basic Rule 11.	[structure type]_[highway](Conn[###XX])_ [side]_[lat/long] <i>rtw_Hwy1W(091)(Conn 091CB)_SS_45.58914/118.64170</i> <i>sw_Hwy1W(091)(Conn 091CB)_SS_45.58914/118.64170</i>
Sound wall runs along multiple highways or streets. List up to three features from high to low priority separated by a "+". A "+" at the end indicates additional or minor features not listed. See note under "Structure Over Multiple Features".	<i>sw_I-5(001)+001(Conn 001LS)+_WS_45.58914/118.64170</i>