

VIRGINIA DEPARTMENT OF TRANSPORTATION

STRUCTURE AND BRIDGE DIVISION

INSTRUCTIONAL AND INFORMATIONAL MEMORANDUM

GENERAL SUBJECT: Restricted Structure Atlas	NUMBER: IIM-S&B-35.5
SPECIFIC SUBJECT:	Date: June 8, 2010
	SUPERSEDES: IIM-S&B-35.4
DIVISION ADMINISTRATOR APPROVAL: /original signed/ Kendal R. Walus, P.E. State Structure and Bridge Engineer Approved: June 8, 2010	

Changes are shaded.

Increasingly, industry is producing and transporting goods and equipment that exceeds the standard load, height and width restrictions. To aid industry, protect infrastructure, and enable routing, the Restricted Structures Atlas was developed, and is updated in January and July of each year. These maps show the locations of vertical, horizontal clearance, and weight limit restrictions on Interstate, Primary and Urban Extension highways.

The following restricted clearances shall be shown on the maps:

- Vertical: Structures with vertical clearance less than 20 feet
(Rounded down to the nearest inch)
- Horizontal: Horizontal restrictions on or under structures less than 18 feet wide

Additionally, restricted capacities for the following vehicle types shall be depicted on the maps:

- Gross weight for single unit truck (Type 3): 27 Tons or less
- and
- Gross weight for vehicle combination (Type 3S2): 40 Tons or less
- and
- Gross weight for permit vehicles: 45 Tons

In May and again in November of each year, the Central Office Structure and Bridge Division (COS&B) will provide the District Structure and Bridge Sections two copies of the latest maps within their District to review these maps for accuracy and provide updates. Updates reflecting changes in vertical and horizontal clearances or weight restrictions are to be provided to the COS&B no later than the last week of May and November, respectively.

The updates will be reviewed and compiled by the COS&B, and forwarded to the Office of Communications and Public Affairs, who will update the maps, print copies, and make distribution within and outside the Department.

When changes occur after an updated map is issued, IMMEDIATE actions shall be taken by the District Structure and Bridge Engineer or their designee as follows:

Upon learning of a change or an addition to the Restricted Structures Atlas, the District Structure and Bridge Engineer or their appointee shall notify the following person at the Virginia Department of Motor Vehicles by phone: Wayne Davis (804) 497-7121 directly or (804) 497-7135 for the Hauling Permits office. Immediately following the phone notification send an email to:

Wayne Davis

Wayne.Davis@dmv.virginia.gov

and

Fitzhugh Jackson

Fitzhugh.Jackson@dmv.virginia.gov

All personnel who have the authority to issue hauling permits within your District (this may include personnel in the Residencies).

and copied to:

C. M. 'Ceil' Asbury

Ceil.Asbury@dmv.virginia.gov

and

Michael Baxter

Michael.Baxter@dmv.virginia.gov

and

Keith A. Clary (Structure & Bridge, Central Office)

Keith.Clary@vdot.virginia.gov

and

Office of Public Affairs

Vdotmapfiles@vdot.virginia.gov

and

Central Office Hauling Permits

haulingpermits@vdot.virginia.gov

The email shall include the following:

District:

County:

Route:

Feature Intersected:

Virginia Structure Number:

Page number(s) of Restricted Structures Atlas where restriction is shown:

and

Clearance on the Restricted Structures Atlas should be changed from _____ to _____.

or

Capacity on the Restricted Structures Atlas should be changed from _____ to _____.

Attachment: Appendix A

CC:

Chief Engineer

Chief of Systems Operations

Chief of Communications and Public Affairs

Director of Virginia Transportation Research Council

Division Administrator, Location & Design Division

Division Administrator, Maintenance Division

Division Administrator, Traffic Engineering Division

Division Administrator, Operations and Security Division

District Administrators

District Maintenance Engineers

District Structure and Bridge Engineers

Residency Administrators

Federal Highway Administration, Bridge Division

APPENDIX A

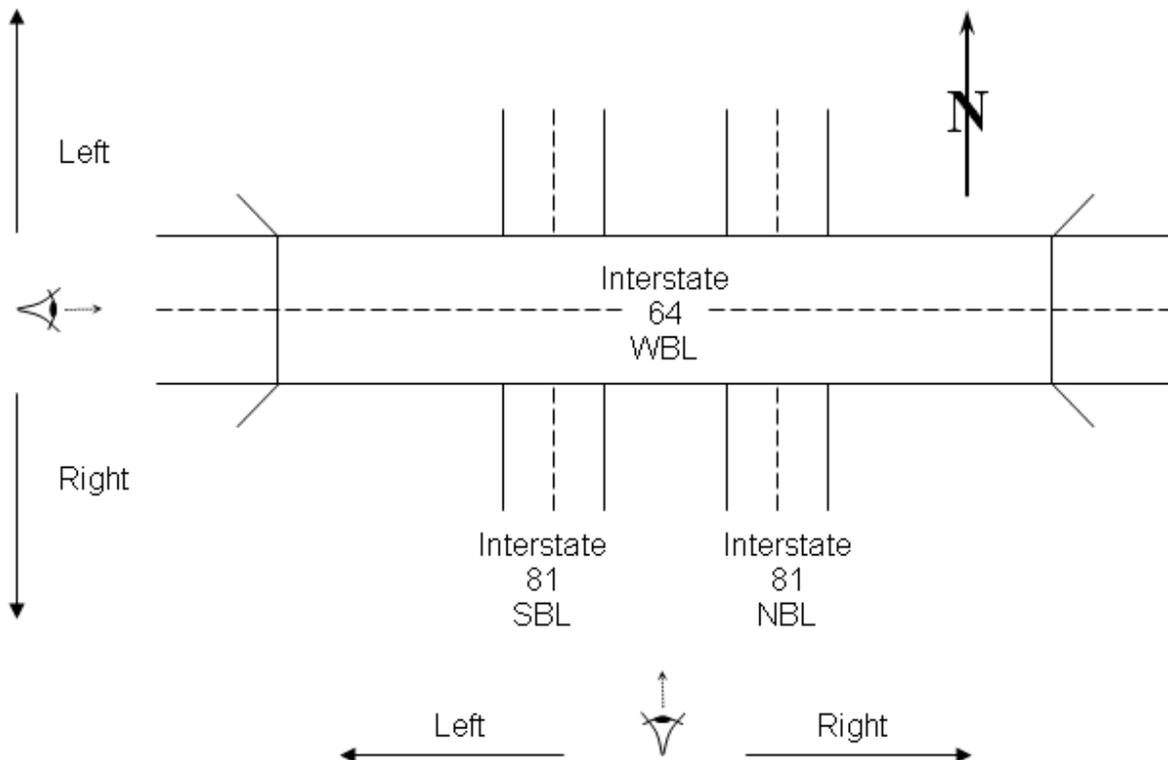
How to record a vertical clearance:

According to the definition of terms in the manual 'Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges':

Inventory Route – The route for which the applicable inventory data is to be recorded. The inventory route may be on the structure or under the structure. Generally, inventories along a route are made from west to east and south to north.

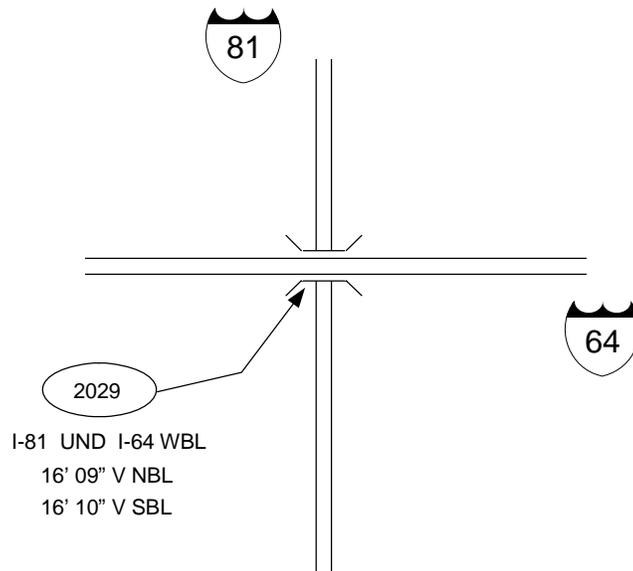
West to east and south to north are generally the directions of increasing mileposts, therefore, unless stated otherwise in the description of an item in the coding guide left and right shall be determined by looking in the direction of the increasing mileposts on the route.

Consider the sketch below. Look east to determine left and right for items pertaining to Interstate 64 (mileposts increase as you travel east) and look north for items pertaining to Interstate 81 (mileposts increase as you travel north).



When the information is recorded on the maps, all information shall adhere to the standards noted below:

- Restrictions for an undivided route carrying traffic in both directions shall show the minimum restricted clearance.
- Restrictions for a divided route carrying northbound and southbound traffic shall show the northbound restriction first and be labeled 'NBL'. The southbound restriction shall be shown last and labeled 'SBL'.
- Restrictions for a divided route carrying eastbound and westbound traffic shall show the eastbound restriction first and be labeled 'EBL'. The westbound restriction shall be shown last and labeled 'WBL'.
- Information about a restriction shall be shown in the following order: structure number, location and restriction.
- The location of the structure shall be noted showing the route for which the restriction exists followed by any other pertinent route information.



In the above example, only a restriction for I-81 under I-64 WBL is shown. If eastbound and westbound I-64 are separate structures, restrictions will be recorded for each structure.

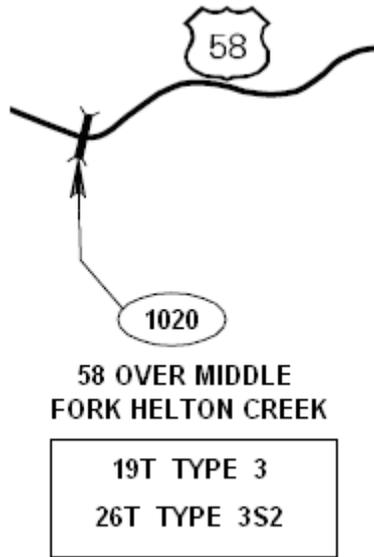
For the sake of space and uniformity all references to 'under' on the Restricted Structures Atlas will be abbreviated 'UND' and all references to 'Rte.' or 'Route' or 'Rt.', etc. on the Restricted Structures Atlas will be not be shown. All interstate routes will be preceded by 'I-' to eliminate confusion with other routes with the same number, i.e. Secondary Route 664 versus Interstate Route 664.

The vertical clearances reported on the Restricted Structures Atlas shall be the vertical clearances that are reported in the official inventory system and the vertical clearances reported in official inventory system shall be the vertical clearances measured in the field (rounded down to the nearest inch).

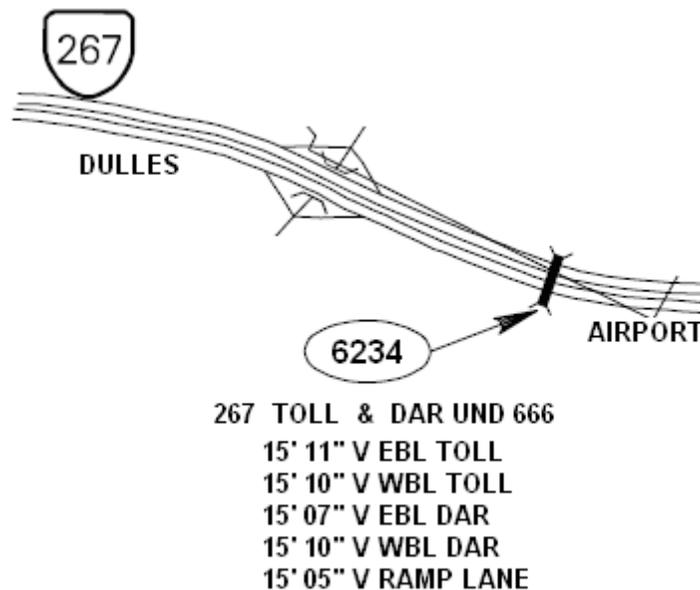
Example: Rte. 58 over Middle Fork Helton Creek; VA Structure number 1020 has the following weight restrictions for single unit trucks and vehicle combinations.

Posted capacity for a single unit truck (Type 3): 19 Tons

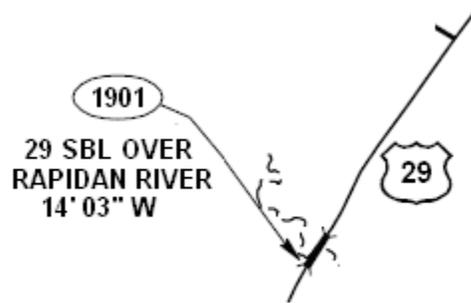
Posted capacity for a vehicle combination (Type 3S2): 26 Tons



Example: Reporting vertical clearances under Rte. 666 for Rte. 267 and Dulles Airport Road; VA Structure number 6234.

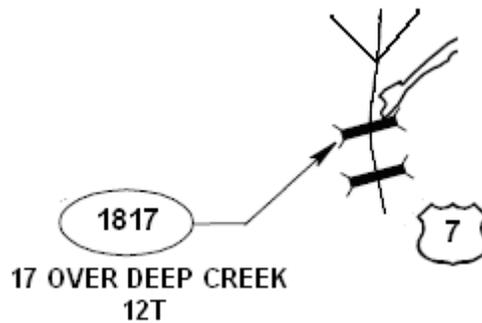


Example: Reporting horizontal restriction for Rte. 29 SBL over Rapidan River; VA Structure number 1901.

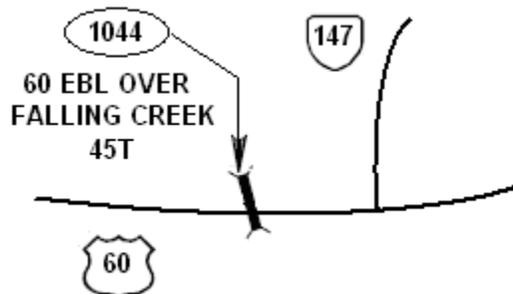


Example: Rte. 17 over Deep Creek; VA Structure number 1817 has a weight restriction for single unit trucks.

Posted capacity for the single unit truck (Type 3): 12 Tons



Example: Rte 60 EBL over Falling Creek; VA Structure number 1044 has a weight restriction of 45 Tons gross weight for permit vehicles.



Procedure to track changes on the Restricted Structure Atlas and communication between the District Structure and Bridge Offices with COS&B:

- Notify Central Office via email immediately when a change occurs.
- Changes shall be notated on the COS&B office copy of the Restricted Structure Atlas.
- During the first week of May and November of each year, COS&B shall request two copies of the Restricted Structures Atlas from the Office of Communications and Public Affairs with changes that have been recorded since the last issue date marked in **RED** on the maps.
- Changes on the maps received from the Office of Communications and Public Affairs shall be reconciled with changes recorded on the COS&B copy of the maps.
- COS&B shall then send each district two copies of their respective maps with the changes annotated in **RED**.
- Districts shall then review the maps, verify all changes, and annotate any additional changes. All changes to the maps by the Districts shall be made in **GREEN**. One copy of the final marked-up maps shall be returned to the COS&B.
- Any new changes or corrections marked in **GREEN** on the returned maps will be reviewed and added to the COS&B office copy.
- The FINAL combined annotated copies of the revised Restricted Structure Atlas shall then be sent the Office of Communications and Public Affairs for transcription.
- After the Office of Communications and Public Affairs corrects each District's maps, the maps shall be returned to COS&B to Copy Check.
- Upon COS&B verification and reconciliation, maps are then printed and distributed by the Office of Communications and Public Affairs.
- Once every three years, COS&B will perform a quality control/quality assurance review of the District maps against the inventory system.