**ITEMS INCLUDED IN FEATURE INTERSECTED (RC13)**

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<tr>
<td>Description or Route Number and Reference Marker</td>
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<tr>
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<tr>
<td>Year of Future Average Daily Traffic</td>
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<td>Type of Highway</td>
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<td>Route Description</td>
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<td>Federal Aid System</td>
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<td>Functional Classification</td>
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<td>Toll</td>
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<td>Number of Lanes/ Tracks</td>
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<td>Maximum Vertical Clearance</td>
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<tr>
<td>STRAHLNET Designation</td>
</tr>
<tr>
<td>Designated National Network (for Trucks)</td>
</tr>
</tbody>
</table>
RC13: Feature Intersected

ITEM: Feature Number (of Intersected Feature)

PROCEDURE:
Record the number of the Feature Intersected by the bridge. A bridge may intersect (pass over or under) more than one Feature. Each intersected Feature is identified by the number 2 or greater. (Feature 1 is always the Feature Carried by the bridge.) Refer to RC12 for more information on Feature Number.

Every bridge must have at least one Feature Intersected. A maximum of 8 can be coded. For divided highways, only one Feature Intersected code is to be used per given route number.

ITEM: Over-Under-On Code

PROCEDURE:
Record the appropriate code to indicate whether the Feature Intersected passes over or under the bridge.

CODING:
2 - Feature passes under the bridge
3 - Feature passes over the bridge.

ITEM: Feature Code

PROCEDURE:
Record the code shown below that best describes the Feature Intersected. This code should be consistent with the “Description or Route Number” Item in this Record Code.

CODING:
01 - Description
09 - State Highway
10 - Expressway
11 - Interstate
12 - Parkway
13 - Authority
14 - County Road
15 - Town Road
16 - City Street
17 - Village Street
18 - Indian Reservation Road
19 - Military Reservation Road
20 - Access Road or Ramp
21 - Institution Road
22 - Park Road
23 - Board of Water Supply Road
24 - Private Road
30 - Navigable Waterway (Non-Canal)
31 - Non-Navigable Waterway
40 - NYS Barge Canal
50 - Railroad
60 - Feature Closed to All Use
61 - Feature Closed to Prime Use (Open for Other Service)
80 - Conveyer
90 - Pedestrian Facility-Bikeway
99 - Other and Miscellaneous
RC13: Feature Intersected

**ITEM: Description Type**

**PROCEDURE:**
If the Feature is an Interstate, US Route or State Touring Route leave this Item blank. A route number and a reference marker will be supplied in the system fields via a link with the Highway Database (HDMS) when that data becomes available. Until that time, the data will need to be entered manually. If this Feature is not an Interstate, US Route or State Touring Route or is a private road or ramp, record a “D” in this field and provide a description in the next Item, “Description or Route Number and Reference Marker.”

**CODING:**
D - Feature is not an Interstate, US Route or State Touring Route
Blank - Feature is an Interstate, US Route or State Touring Route

**ITEM: Description or Route Number and Reference Marker**

**PROCEDURE:**
If the Feature is an Interstate, US Route or State Touring Route, leave this Item blank. The data will be supplied by the Highway Database (HDMS) when that data becomes available. Until that time, the data will need to be entered manually. A partial list of State Touring Route numbers and their common names is shown in Appendix G. This is provided as a reference for identifying touring route names when viewing data. If the Feature carried is not an Interstate, U.S. Route or State Touring Route, record its most commonly used description, using up to 17 characters, left justified. Record the “Description Type” Item with the letter “D”.

If the Feature is a local road, use the following standard abbreviations:

<table>
<thead>
<tr>
<th>County Road</th>
<th>CR</th>
<th>North</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>County Route</td>
<td>CR</td>
<td>South</td>
<td>S</td>
</tr>
<tr>
<td>Town Highway</td>
<td>TH</td>
<td>East</td>
<td>E</td>
</tr>
<tr>
<td>Road</td>
<td>RD</td>
<td>West</td>
<td>W</td>
</tr>
<tr>
<td>Street</td>
<td>ST</td>
<td>Northbound</td>
<td>NB</td>
</tr>
<tr>
<td>Avenue</td>
<td>AVE</td>
<td>Southbound</td>
<td>SB</td>
</tr>
<tr>
<td>Boulevard</td>
<td>BLVD</td>
<td>Eastbound</td>
<td>EB</td>
</tr>
<tr>
<td>Drive</td>
<td>DR</td>
<td>Westbound</td>
<td>WB</td>
</tr>
<tr>
<td>Parkway</td>
<td>PKWY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expressway</td>
<td>EXPWY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Road</td>
<td>SRD</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

If the Feature Carried is a "highway ramp" which provides access from one roadway to another, record its description here. Record the Description as “RAMP” plus the Route Number or brief description of the Route from which traffic is coming and to which it is going. For example, “RAMP 90I EB to Main ST.”

If the Feature Carried is a Service Road, enter “SRD” plus the name of the main road; eg, SRD, LIE.

If the Feature is a non-highway, the following naming conventions should be used:

| Railroad | Enter the name of the railroad followed by “RR”; eg, CSX RR |
| Water Main | Enter “WTR MAIN” plus diameter of main and the name of the Utility Company, if |
RC13: Feature Intersected

Power Line  Enter “PWR LINE”, plus voltage if known, and the name of the Utility Company, if known; eg, “PWR LINE 990V” NYSE&G
Pedestrian Path  Enter “PED PATH” plus any name associated with the path, if known; eg, “PED PATH” AP Trail. Use this term instead of similar terms like “Foot Bridge,” etc.
Aqueduct  Enter “AQUEDUCT” and name of Utility company, if known.
Bike Path  Enter “BIKE PATH” and name, if known.
Conveyor  Enter “CONVEYOR” and name of owner, if known.
Pipeline  Enter “PIPELINE”, it’s diameter, and owner, if known.
Horse Path  Enter “HORSE PATH” plus name, if known.

CODING:
Accepts alpha-numeric characters.

ITEM: Milepoint
FHWA 11

PROCEDURE AND CODING:
See the RC12 chapter.

ITEM: Future AADT
FHWA 114

PROCEDURE AND CODING:
See the RC12 chapter.

ITEM: Year of Future AADT
NYSDoT

PROCEDURE AND CODING:
See the RC12 chapter.

ITEM: State Highway Number
NYSDoT

PROCEDURE AND CODING:
See the RC12 chapter.
ITEM: **Type of Highway**

**PROCEDURE:**
If the Feature Intersected is an Interstate, US Route or State Touring Route the Highway type will be obtained from the Highway Database (HDMS) when that data becomes available. Until that time, the data will need to be entered manually.

If the Feature Intersected is not an Interstate, US Route or State Touring Route, record this Item using the code shown below which best describes the highway. High speed facilities or parkways without a Signed Route Number in a city are to be recorded as “5 - City Streets.” Other parkways without a Signed Route Number, and town and village roads are to be recorded as “8 - Other.” The coding of this Item will relate directly to the Route Number of the Feature Intersected by the bridge, when applicable.

If the Feature Intersected is not a highway, record this Item with an "8 - Other."

**CODING:**
1 - Interstate Highway 2 - U.S. Numbered Highway 5 - City Street
3 - State Highway 6 - Federal Lands Road
4 - County Highway 7 - State Lands Road
8 - Other

ITEM: **Route Description**

**PROCEDURE:**
If the Feature Intersected is a highway, record the code below which best describes this feature.
If the Feature Intersected is not a highway, record this Item with "0".

**CODING:**
1 – Mainline 7 - Ramp or Wye
2 - Alternate 8 - Service or Unclassified
3 - Bypass 0 - No Description Applies
4 - Spur
5 - Not Used
6 - Business Access

ITEM: **Federal Aid System**

**PROCEDURE:**
This Item is no longer used. The Federal Aid System can be defined by the National Highway System and the functional classification of the roadway.
**ITEM: Functional Classification**  
*FHWA 26*

**PROCEDURE:**
If the Feature Intersected is not an Interstate, US Route or State Touring Route use this Item to record its functional classification. If the Feature Intersected is an Interstate, US Route or State Touring Route this information will be provided by the Highway Database (HDMS) when that data becomes available. Until that time, the data will need to be entered manually. The Functional Classification is tracked by the Highway Data Services Bureau. It can generally be found in the Project Design Approval document.

**CODING:**
- 01 - Rural - Principal Arterial - Interstate
- 02 - Rural - Principal Arterial - Other
- 06 - Rural - Minor Arterial
- 07 - Rural - Major Collector
- 08 - Rural - Minor Collector
- 09 - Rural - Local (Including Unclassified)
- 11 - Urban - Principal Arterial - Interstate
- 12 - Urban - Principal Arterial - Other Freeways/Expressways
- 14 - Urban - Other Principal Arterial
- 16 - Urban - Minor Arterial
- 17 - Urban - Collector
- 19 - Urban - Local
- 00 - None - Not a Highway

**ITEM: Toll**  
*FHWA 20*

**PROCEDURE:**
Record the code shown below which best describes the Feature Crossed, with respect to Tolls. Interstate Toll and Toll Bridge Segments Under Secretarial Agreement (Title 23 - United State Code - Highways Section 129, as amended by 1991 ISTEA and prior legislation) means that an agreement has been entered into between NYSDot and FHWA wherein the State agrees to apply tolls to bridge or highway maintenance, etc. This agreement allows for federal aid to be applied to these facilities.

**CODING:**
- 2 - Toll Road
- 3 - Free Road or Non-Highway
- 4 - Interstate Toll Segment
- 5 - Toll Bridge Is a Segment

**ITEM: Total Number of Lanes / Tracks**  
*FHWA 28 B*

**PROCEDURE:**
If the Feature Intersected is a highway or a railroad, record the total number of full width lanes or railroad tracks which are intersected. This includes full width parking lanes or other pavement which is at least 3.7m or 12 feet wide.

If multiple features are intersected, record the number of lanes, or tracks, associated with each. For example, if a highway and a railroad are intersected, record the number of lanes with the Highway Feature and the Number of Tracks with the Railroad Feature.
RC13: Feature Intersected

CODING:
Accepts the numbers 0 – 99

ITEM: Maximum Vertical Underclearance
FHWA 10

PROCEDURE:
If the Feature Intersected is a highway, record the maximum height, to the nearest 300mm or one foot, of a 3m or ten feet wide vehicle that can safely pass under the bridge using the Feature Intersected, including its shoulders.

The maximum height of vehicle (3m or 10 feet wide) which can safely pass under the bridge is measured between the bottom of the lowest, permanent overhead obstruction to the point directly below it on the Feature Intersected.

Occasionally, a component with no structural purpose is provided to limit the height of vehicles using the bridge. The restricted vertical clearance provided by these components should not be considered when recording this Item. If the Maximum Vertical Under Clearance is greater than 5.5m or 18 feet, the clearance can be approximated to the nearest 300mm. If the Feature Intersected is not a highway, code this item N.

CODING:
Accepts the numbers 0-99 and “N”.

ITEM: Minimum Vertical Clearance Provided for Navigation
(Movable Bridges Only)
FHWA 116

PROCEDURE:
If the bridge is a movable bridge, record the Minimum Vertical Clearance provided to navigation by the bridge while in the closed or dropped position, rounded down to the nearest 300mm or one foot. The Minimum Vertical Clearance is measured between the lowest point on the bridge which is above the channel and the datum elevation specified on a navigation permit issued by a Control Agency.

If the bridge is not a movable bridge, leave this item blank.

CODING:
Accepts the numbers 0 - 99.9 and blank.

ITEM: Protection of Substructures from Navigation

PROCEDURE:
If the Feature Intersected is a navigable waterway controlled by an Agency, record whether the pier or abutment protection is adequate.

CODING:
N - Feature being inventoried is not a navigable waterway
1 - Navigation protection is not required
2 - Navigation protection is in place and it is functioning
RC13: Feature Intersected

3 - Navigation protection is in place, but it is in a deteriorated condition
4 - Navigation protection is in place, but it should be reevaluated
5 - Navigation protection is not in place and this situation should be reevaluated

ITEM: AADT
FHWA 29

PROCEDURE AND CODING:
See the RC12 chapter.

Item: Year of AADT
FHWA 30

PROCEDURE AND CODING:
See the RC12 chapter.

ITEM: Total Horizontal Clearance
FHWA 47

PROCEDURE:
If the Feature Carried is a highway, record the Total Horizontal Clearance available to traffic to the nearest 30mm or tenth of a foot. Measure the clearance between the bridge components which provide the least restrictive horizontal clearance. These include curbs, non-mountable medians, railings and any other items which restrict horizontal clearance. Do not consider flush or mountable curbs as restrictive features. If the clearance is greater than 30m or 99 feet, record this Item with 99.9. If the Feature Carried is not a highway, record this Item with "0."

CODING:
Accepts the numbers 0 - 99.9

ITEM: Minimum Horizontal Clearance (Left)
FHWA 56

PROCEDURE:
If the Feature Intersected is a one-way highway, ramp, or divided highway, record the Minimum Horizontal Clearance, on the left side of the alignment, to the nearest 30mm or tenth of a foot. This item is measured from the left edge of the left travel lane (not including the shoulder) to the nearest obstruction which is at least 300mm higher than the ground adjacent to it, or to the nearest toe of slope steeper than one on three. If the Feature Intersected is a divided highway, record the smaller Minimum Horizontal Clearance in either direction of travel. If there is no obstruction in the median area, record this Item with "99.9". If the clearance is greater than 30 meters or 100 feet, record this Item with "99.9". If the Feature Intersected is not a divided highway, a ramp or other one-way highway, record this Item with "0."

CODING:
Accepts the numbers 0 - 99.9
ITEM: **Minimum Horizontal Clearance (Right)**
FHWA 55

**PROCEDURE:**
If the Feature Intersected is a highway or a railroad, record the Minimum Horizontal Clearance provided to the feature intersected to the nearest 30mm or tenth of a foot.

For highways, this item is measured from the right edge of the right travel lane (not the edge of the shoulder) to the nearest obstruction which is at least 300mm or one foot higher than the ground adjacent to it, or to the toe of any slope which is steeper than one on three. Measure this distance in both directions of travel and record the smaller of the two. For railroads, the Minimum Horizontal Clearance is measured from the centerline of the tracks which are closest to the bridge. If the clearance is greater than 30 meters or 99 feet, record this Item with “99.9”. If the Feature Intersected is not a highway or a railroad, record this Item with “99.9”.

**CODING:**
Accepts the numbers 0 - 99.9

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ITEM: **Minimum Vertical Clearance**
FHWA 54

**PROCEDURE:**
If the Feature Intersected is a highway, record the Minimum Vertical Clearance Available, to the nearest 25mm or 1 inch (rounded down), between the lowest permanent, overhead obstruction and a point on the pavement which is directly below it (Not including shoulders). If recording in US customary units, enter two separate integers to denote feet and inches. For metric, record in decimal meters.

If the Feature Intersected is a railroad, record the Minimum Vertical Clearance available to the nearest 25mm or 1 inch (rounded down) between the lowest permanent overhead obstruction and the top of the rail. If the Minimum Vertical Clearance is greater than 7 meters or 23 feet, record this Item to the nearest 300mm or 1 foot (rounded down). If the Minimum Vertical Clearance is greater than 30 meters or 100 feet, but it is not unlimited, record this Item as “99 12” for US customary, 30.0 metric. If the clearance is unlimited, record this Item as “99 99” for US customary, 99.9 metric. If the Feature is neither a highway or a railroad, record this Item with “0 0”.

**CODING:**
Accepts the numbers 0 0 – 99 99 (US) or 0 – 99.9 (metric)

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ITEM: **Navigation Control**
FHWA 38

**PROCEDURE:**
Record whether navigation at the bridge is controlled by an agency. (A bridge permit is required for Construction.)

**CODING:**
1 - Navigation is controlled by an Agency
**RC13: Feature Intersected**

0 - Navigation is not controlled by an Agency  
N - Bridge is not over water

**ITEM: Maximum Vertical Clearance to Navigation**  
FHWA 39

**PROCEDURE:**
If the Feature Intersected is a navigable waterway, record the Maximum Vertical Clearance that the bridge provides for navigation, rounded down to the nearest 300mm or one foot. Record the actual clearance obtained by direct measurement, from the Contract Plans, or from Navigation Permits.

Vertical Clearance is measured between the surface elevation of the “Maximum Navigable Pool” and the lowest point on that portion of the superstructure which is above the channel. Navigation lights, which can be temporarily removed, shall be ignored when determining Vertical Clearance. Maximum Vertical Clearance provided by movable bridges should be determined when the bridge is in the open position. If the clearance is unlimited (basculc or swing types), record 99.9m or 999 feet.

If the Feature Intersected is not a navigable waterway, or if the bridge is not over water, record this Item with "0".

**CODING:**
Accepts the numbers 0 - 99.9 - Metric  
0 - 999 - US Customary

**ITEM: Minimum Horizontal Clearance Available to Navigation**  
FHWA 40

**PROCEDURE:**
Record the Minimum Horizontal Clearance that the bridge provides to navigation, rounded down to the nearest 300mm or one foot. This Minimum Horizontal Clearance should be the same as the clearance shown on a Navigation Permit. It may be less than the structure actually allows. If the Feature is not a navigable waterway or if the bridge is not over water, record this Item with "0".

**CODING:**
Accepts the numbers 0 - 999.9 - Metric  
0 - 9999 - US Customary

**ITEM: Stream Bed Material**  
NYSDoT

**PROCEDURE:**
If the Feature Intersected is a waterway, record the type of stream bed material in the area of the bridge. If the Feature Intersected is not a waterway, record this Item as “1 - No Waterway.”

**CODING:**
1 - No Waterway  5 - Sand  
2 - Bed Rock  6 - Silt  
* - Unknown
ITEM: Bank Protection

NYSDOT

PROCEDURE:
If the Feature is a waterway, record the type of bank protection used in the vicinity of the bridge.
If the Feature is not a waterway, code as "01 - No Bank Protection."

CODING:
01 - No Bank Protection
02 - Rip-Rap, Dry
03 - Rip-Rap, Grouted
04 - Block
05 - Timber
06 - Granular Fill
07 - Cribbing, Concrete
08 - Cribbing, Steel
09 - Steel Sheet ing
10 - Sod
11 - Gabions
12 - Stone Filling
13 - Concrete
00 - Other
** - Unknown

ITEM: Velocity of Current

NYSDOT

PROCEDURE:
If the Feature is a waterway, record the velocity of the stream current in feet or meters per second, based on the data shown on the Contract Plans or from the available Hydraulics Analysis.
If the Feature is not a waterway, enter "0."

CODING:
1 to 99 - Velocity of the current in feet or meters per second
0 - No velocity - still water or no waterway at the bridge site
** - Unknown

ITEM: Factors Affecting Stream Flow (F.A.S.F.)

NYSDOT

PROCEDURE:
If the Feature is a waterway, record any of the features below which affect the stream flow.
If there are no features affecting the flow, or if the Feature is not a waterway, code "1 - Not applicable."

CODING:
1 - Not Applicable
2 - Dam Upstream
3 - Spur Dyke
4 - Energy Dissipater
5 - Dam Upstream and Spur Dyke
RC13: Feature Intersected

6 - Dam Upstream and Energy Dissipater
7 - Dam Upstream, Spur Dike, and Energy Dissipater
8 - Other
* - Unknown

ITEM: Bypass Detour Length
FHWA 19

PROCEDURE:
This item is no longer used.

CODING:
No coding required.

ITEM: STRAHNET Designation
FHWA 100

PROCEDURE AND CODING:
See the RC12 chapter.

ITEM: Designated National Network (for Trucks)
FHWA 110

PROCEDURE AND CODING:
See the RC12 chapter.

ITEM: National Highway System (This Item is for Future Use)
FHWA 104

PROCEDURE:
The “National Highway System” includes the Interstate Highway System as well as other highways which are important to the nation’s economy, defense, and mobility. Guidelines for the development of the NHS were specified in the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA).

This code will always be obtained from the Highway Database(HDMS).

CODING:
N - Feature intersected is not a highway
0 - Feature Carried is not on the NHS.
1 - Feature Carried is on the NHS.