



Specifications for Illinois Bridge Inventory



Specifications for Illinois Bridge Inventory

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&
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Agency:
Illinois Department of Transportation

Springfield Illinois
January 1, 2026

PREFACE

The Illinois Department of Transportation (IDOT) prepared this manual in cooperation with the U.S. Department of Transportation, Federal Highway Administration (FHWA). It provides for the collection and management of all information needed to satisfy the requirements of the National Bridge Inspection Standards (NBIS) as outlined in the Federal Highway Administration's Specifications for the National Bridge Inventory (SNBI), March 2022. The FHWA SNBI should be used only as a reference. The Specifications for Illinois Bridge Inventory manual (a.k.a. SIBI or ISIS manual) should be used exclusively for entering and interpreting codes to represent Illinois' structure data.

The SIBI manual was developed through a cooperative effort within the Department between the Office of Highways Project Implementation and the Office of Planning and Programming. IDOT is committed to maintaining the structure information system at a high level. This commitment is not only to satisfy NBIS requirements but also to provide an excellent working tool in managing the bridges and other structures as they relate to the overall transportation system in Illinois. In the interest of the traveling public's safety and convenience, this commitment remains a high priority for the Department.

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INTRODUCTION

Bridge inventory information collected by IDOT is reported to FHWA, as requested, in accordance with the National Bridge Inspection Standards (NBIS) reporting requirements (23 CFR 650.315). The resulting information is maintained in the National Bridge Inventory (NBI) database, which enables state-level and national-level analyses and reporting, supports Federal funding programs, and facilitates the identification of freight and defense-critical corridors and connectors. By having a complete and thorough inventory, an accurate report can be made to the Congress on the number, condition, and performance of the Nation's bridges. The data also support FHWA's programs, and the efforts of the Military Surface Deployment and Distribution Command (SDDC) Transportation Engineering Agency (TEA).

The Manual for Bridge Evaluation (MBE), produced by the American Association of State Highway and Transportation Officials (AASHTO) and the Structural Services Manual (SSM), produced by IDOT's Bureau of Bridges and Structures, discusses various items of information that are to be recorded as part of bridge inspections. Those manuals and the FHWA's Bridge Inspector's Reference Manual (BIRM) discuss inspection procedures and the preparation of detailed reports about bridge members. These reports are the basis for reporting values for many of the data items shown in these specifications.

The proper assessment of element-level bridge conditions and the ability to use condition data to efficiently and effectively manage bridge inventories are cornerstones to providing a safe and efficient highway transportation system. These specifications include the description of bridge condition rating data for both component-level (deck, superstructure, substructure, and culvert) and element-level evaluation.

The reporting of inventory data for all highway bridges subject to the NBIS, and their related features, are based on the definitions, explanations, and data items supplied in these specifications and supplemented by the SSM, NBIS, AASHTO Manual for Bridge Element Inspection (MBEI), MBE, and BIRM. IDOT uses the data items and instructions in these specifications when reporting NBI data to FHWA. IDOT is responsible for the accuracy and completeness of the reported data, using agency data quality control and quality assurance procedures. IDOT may use their own data item names and codes for their agency inventory but must report NBI data to FHWA in accordance with these specifications.

It is expected that coordination is needed between various personnel, in various infrastructure disciplines of an agency, to obtain and report the data in accordance with these specifications and does not solely rely on bridge inspection personnel.

All possible combinations of actual bridge characteristics may not be addressed in these specifications. Consult with the IDOT for an acceptable solution when a special situation is encountered that is not addressed by these specifications.

DEFINITIONS

For clarity, the definitions of some terms and abbreviations as used in the context of this manual are provided below:

Bridge - See Introduction.

History - Any database where all past values for that item are stored in the database.

Illinois Highway Information System (IHIS) - The master database resulting from the combining of the individual IRIS and ISIS databases.

Illinois Roadway Information System (IRIS) - The computer system and data base which accommodate the entry and retrieval of pertinent information in relation to all highways open to public travel.

Illinois Structure Information System (ISIS) - The computer database which accommodates the entry and retrieval of inventory and inspection data for all structures open to public travel.

See the FHWA Specification for the National Bridge Inventory Manual for more definitions.

SPECIFICATION FORMAT

These specifications provide information in a format modeled in part after the AASHTO design specifications, with the specification separated and presented parallel to the commentary. The format used to present the data items is as shown in the following table.

<i>Data Item Name</i>		
<u>Format</u>	<u>Frequency</u>	<u>Item ID</u>
Specification	Commentary	
Requirements for reporting the data item.	Expanded guidance on the specification.	
Specification Continued, Commentary Continued, or Examples		
Additional space for Specification or Commentary, if needed. Examples are presented to further clarify the specification. Each item typically has brief examples. A more comprehensive example can be found at the end of each section or subsection.		

BORDER BRIDGES

When a bridge crosses a border between two or more states, the Designated Lead State submits a full bridge record, including all features associated with the bridge, regardless of the location of the feature on either side of the border. The Neighboring State reports an abbreviated bridge record that includes feature records for all highway features carried on or passing above the bridge. The Neighboring State does not report non-highway features. Features that pass below the bridge are reported only by the Designated Lead State. The Designated Lead State is determined through agreement between the bordering States.

Concurrence as to the accuracy of the items associated with the border bridge occurs between the bordering States prior to submittal. Submittal of the border bridge data signifies such concurrence. The data reported by the Designated Lead State for a border bridge is incorporated into the Neighboring State's bridge inventory upon acceptance into the NBI, except for the data contained in the abbreviated bridge record submitted by the Neighboring State.

The Neighboring State reports only the items listed below, as values for these items may vary between States. Additional data items reported by the Neighboring State are not processed. It is essential that Item B.F.01 (*Feature Type*) values be assigned to the same features by both States so that the Designated Lead State's submitted feature data are assigned to the correct feature records in the Neighboring State's inventory.

When a border bridge is submitted by a Federal agency or Tribal government, the submitting entity determines which is the Designated Lead State, and which is the Neighboring State. The Federal agency or Tribal government submits both records; Item B.ID.1 (*Bridge Number*) may be the same for both.

When a bridge crosses an international border, the bordering State is considered the Designated Lead State and reports a full bridge record.

Item ID	Data Item
B.ID.01	Bridge Number
B.ID.03	Previous Bridge Number
B.L.01	State Code
B.L.02	County Code
B.L.03	Place Code
B.L.04	Highway Agency District
B.L.07	Border Bridge Number
B.L.08	Border Bridge State or Country Code
B.L.09	Border Bridge Inspection Responsibility
B.L.10	Border Bridge Designated Lead State
B.L.12	Metropolitan Planning Organization
B.F.01	Feature Type
B.F.02	Feature Location
B.F.03	Feature Name
B.RT.01	Route Designation
B.RT.02	Route Number
B.RT.03	Route Direction
B.RT.04	Route Type
B.RT.05	Service Type
B.H.03	NHS Designation
B.H.06	LRS Route ID
B.H.07	LRS Mile Point
B.H.18	Crossing Bridge Number

SECTION 1: BRIDGE IDENTIFICATION

This section has data items that have been grouped by the following three subsections: Identification, Location, and Classification. The data items in these subsections identify, locate, and classify bridges and are considered part of the Primary Data Set. These data items have a one-to-one relationship with a bridge. The data for these items typically remain static once a bridge has been inventoried.

The following data items are included in this section.

SUBSECTION 1.1: IDENTIFICATION

<u>Item ID</u>	<u>Data Item</u>
B.ID.01	Bridge Number
B.ID.02	Bridge Name
B.ID.03	Previous Bridge Number
B.ID.IL.01	Proposed Bridge Number
B.ID.IL.02	Asset Type
B.ID.IL.03	Parallel Structure Designation
B.ID.IL.04	Parallel Structure Number

SUBSECTION 1.2: LOCATION

<u>Item ID</u>	<u>Data Item</u>
B.L.01	State Code
B.L.02	County Code
B.L.03	Place Code
B.L.04	Highway Agency District
B.L.05	Latitude
B.L.06	Longitude
B.L.07	Border Bridge Number
B.L.08	Border Bridge State or Country Code
B.L.09	Border Bridge Inspection Responsibility
B.L.10	Border Bridge Designated Lead State
B.L.11	Bridge Location
B.L.12	Metropolitan Planning Organization
B.L.IL.01	Border Bridge Remarks

SUBSECTION 1.3: CLASSIFICATION

<u>Item ID</u>	<u>Data Item</u>
B.CL.01	Owner
B.CL.02	Maintenance Responsibility
B.CL.03	Federal or Tribal Land Access
B.CL.04	Historic Significance
B.CL.05	Toll
B.CL.06	Emergency Evacuation Designation
B.CL.IL.01	Maintenance County
B.CL.IL.02	Maintenance Township
B.CL.IL.03	Maintenance Municipality
B.CL.IL.04	Reporting Agency
B.CL.IL.05	Reconstruction Year
B.CL.IL.06	Functionally Obsolete
B.CL.IL.07	Inventory Route Record Type
B.CL.IL.08	Bridge Remarks (General)
B.CL.IL.09	Link Indicator

- B.CL.IL.10 [Secondary Maintenance Responsibility](#)
- B.CL.IL.11 [Maintenance Team Section-Subsection Over](#)
- B.CL.IL.12 [Maintenance Team Section-Subsection Over](#)
- B.CL.IL.13 [Maintenance Team Section-Subsection Under](#)
- B.CL.IL.14 [Maintenance Team Section-Subsection Under](#)
- B.CL.IL.15 [Over/Only Maintenance By](#)
- B.CL.IL.16 [Inspection Route](#)
- B.CL.IL.17 [AMP Remarks](#)

SUBSECTION 1.1: IDENTIFICATION

The data items in this subsection uniquely identify the bridge and are considered part of the Primary Data Set. These data items have a one-to-one relationship with a bridge. The data for these items typically remain static once a bridge has been inventoried.

The following data items are included in this subsection.

<u>Item ID</u>	<u>Data Item</u>
B.ID.01	Bridge Number
B.ID.02	Bridge Name
B.ID.03	Previous Bridge Number
B.ID.IL.01	Proposed Bridge Number
B.ID.IL.02	Asset Type
B.ID.IL.03	Parallel Structure Designation
B.ID.IL.04	Parallel Structure Number

<i>Bridge Number</i>		
<u>Format</u> N (7)	<u>Frequency</u> I	<u>Item ID</u> B.ID.01
Specification	Commentary	
<p>Report the unique bridge number assigned according to agency policy for each bridge meeting the NBIS bridge definition that is fully or partially located within the State's boundaries, Federal agency's responsibility or jurisdiction, or Tribal government's responsibility or jurisdiction, regardless of inspection or financial responsibility.</p> <p>Do not change the bridge number once it has been assigned and recorded, except for a rare or unusual circumstance that requires a one-time change.</p> <p>When a bridge number is changed, report the previous bridge number under B.ID.03.</p> <p>Report all spans from abutment to abutment as one bridge.</p> <p>This item is a PERMANENT four-digit number assigned to each structure which, when combined with - Structure County - forms a unique number for each structure in the state. This number facilitates data management and interagency communications concerning structures.</p> <p>Twin or parallel structures are numbered individually. A structure with a closed median is considered as one structure, not two.</p>	<p>There are no national policies established for assigning unique bridge numbers. Therefore, each State transportation department, Federal agency, or Tribal government develops policy for assigning unique bridge numbers.</p> <p>It is preferable that a new and unique bridge number be assigned when a bridge is replaced. When any portion of the existing bridge is retained for a rehabilitated or partially replaced bridge, it is preferable to retain the existing bridge number.</p> <p>It is preferred that all spans of a superstructure spanning from one abutment to another be recorded as one bridge, per the NBIS bridge definition, not as multiple bridges. This is required for all new structures.</p> <p>Enter the appropriate number in the last four digits of the seven-digit structure number.</p> <p>The structure numbers allotted to each district range from 0001 through 9999.</p> <p>Districts may arrange blocks of numbers to identify categories of bridges at their discretion. However, there is no required statewide scheme for this purpose. Specific bridge maintenance categories will be indicated only by Maintenance Responsibility.</p> <p>Once a number has been assigned, it is a permanent identification number and will not be changed to reflect future changes in any categorical scheme.</p> <p>New structures are to be assigned numbers using the next available number in the appropriate category by district scheme.</p> <p>Refer to Section E, Identification by Structure Number, in the Introduction for additional instructions regarding the assignment of numbers.</p>	

Commentary Continued

For border bridges, the Neighboring State reports this item as part of their abbreviated bridge record. For more information, see the [Border Bridges](#) section of this document.

It is preferable that one bridge number be assigned to a bridge that supports multiple features.

It is preferable that any bridge or bridges with a closed median, where the area between the two roadways on the bridge is bridged over and can support traffic, be reported as one bridge. Closed medians may have either mountable or non-mountable curbs or barriers. It is preferable that separate superstructures with an open median (not meeting the closed median criteria above) sharing a common substructure unit or units be reported as two bridges.

It is preferable that separate bridge numbers be reported for each mainline bridge and the ramp that connects to the mainline bridge, when the ramp has at least one distinct abutment and is greater than 20 feet in length. It is also preferable that separate bridge numbers be reported for a bridge that divides into two or more separate bridges, or two or more bridges that merge into one single bridge. In both cases, the separating point between bridges should be the closest deck joint, or substructure unit to the separating point, or other logical and reasonable location as determined by the bridge owner.

Double deck bridges may be reported as one or two bridges. However, all related data items need to be compatible with the method selected.

Consult with the local FHWA division office contact for questions concerning assigning bridge numbers to unique or complex bridges.

<i>Bridge Name</i>		
<u>Format</u> AN (300)	<u>Frequency</u> I	<u>Item ID</u> B.ID.02
Specification		Commentary
<p>This item indicates the posted name of a bridge. The posted name may be erected at the entrance to a bridge or on a bridge nameplate. Report the commonly known name(s) for the bridge. For more than one name, report all names with the most common name first.</p> <p>Report multiple names separated by pipe () delimiters.</p>		<p>There are no national policies established for assigning unique bridge names. Therefore, each State transportation department, Federal agency, or Tribal government develops their own policy for assigning unique bridge names.</p> <p>If the bridge has no commonly known name, it is optional to report this item, but it is preferable to enter a general description.</p> <p>No Abbreviations</p>
Examples		
<p>Bridge Number A4231 has a commonly known name of O'Donnell Memorial Bridge. Report O'Donnell Memorial Bridge.</p> <p>Bridge Number 8675S that carries SR 15 over Goose Creek has a commonly known name of Goose Creek Bridge. Report Goose Creek Bridge.</p> <p>Bridge Number 3555C that carries Harlem Avenue over I-80 is commonly known by the names Harlem Bridge and State Route 43 Bridge. Report Harlem Bridge State Route 43 Bridge.</p>		

<i>Previous Bridge Number</i>		
<u>Format</u> N (7)	<u>Frequency</u> I	<u>Item ID</u> B.ID.03
Specification		Commentary
<p>This item is used to cross-reference a new (or proposed) structure with the structure that it replaces (or will replace). It aids in maintaining history of the crossing that is accommodated at this location.</p> <p>Leave Blank if no previous bridge number.</p>		<p>The purpose of this item is to retain a link to data for previous bridge numbers associated with this bridge in the NBI.</p> <p>For border bridges, the Neighboring State reports this item as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>
Examples		
<p>Bridge Number 024657 is constructed adjacent to Bridge Number 000123 as a planned replacement project. When the roadway is connected to the new bridge and it is opened, Bridge Number 000123 is closed and demolished. Report 000123.</p> <p>Separate parallel bridges with unique bridge numbers (Bridge Number 234 and Bridge Number 567) are reconstructed to form one bridge. The reconstructed bridge is inventoried as Bridge Number 234. Report 567.</p>		

<i>Proposed Bridge Number</i>		
<u>Format</u> N (7)	<u>Frequency</u> I	<u>Item ID</u> B.ID.IL.01
Specification		Commentary
<p>This item is used to cross-reference a structure being replaced with the structure number that replaces it or will replace it. It aids in maintaining history of the crossing that is accommodated at this location.</p>	<p>A seven-digit field.</p> <p>Enter the new structure number in the spaces allocated.</p> <p>Enter the new structure number into the ISIS database as soon as it is assigned for a proposed structure during a bridge replacement project.</p> <p>Leave blank if not applicable.</p> <p>If an existing structure is replaced by a grade crossing, enter the appropriate three-digit county number followed by four zeros.</p> <p>If an existing structure is not replaced and the crossing is closed, leave blank.</p>	
Examples		
<p>A structure in Adams County is replaced with a grade crossing, enter: 0010000.</p> <p>A structure in Cook County is taken out and barricaded: do not enter a value; leave blank.</p> <p>A structure in Christian County is being replaced by structure number 011-0199; enter: 0110199</p>		

<i>Asset Type</i>		
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.ID.IL.02
Specification		Commentary
<p>This item identifies the type of structure that is going to be input into the system.</p>		
Examples		
<p>A select field. Select the code for the type of structure.</p> <p><u>Code Types</u></p> <ul style="list-style-type: none"> • Bridges • Retaining Walls • Noise Wall • Tunnel 		

<i>Parallel Structure Designation</i>										
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.ID.IL.0 3								
Specification	Commentary									
<p>This item indicates situations where separate structures carry the same inventory route in opposite directions of travel over the same feature.</p>	<table border="1"> <thead> <tr> <th style="text-align: left;">Code</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>R</td> <td>The right structure of parallel bridges carrying the roadway in the direction of inventory.</td> </tr> <tr> <td>L</td> <td>The left structure of parallel bridges. This structure carries traffic in the opposite direction of the inventory.</td> </tr> <tr> <td>N</td> <td>No parallel structure exists or a non-highway facility is carried on the structure.</td> </tr> </tbody> </table>		Code	Description	R	The right structure of parallel bridges carrying the roadway in the direction of inventory.	L	The left structure of parallel bridges. This structure carries traffic in the opposite direction of the inventory.	N	No parallel structure exists or a non-highway facility is carried on the structure.
Code	Description									
R	The right structure of parallel bridges carrying the roadway in the direction of inventory.									
L	The left structure of parallel bridges. This structure carries traffic in the opposite direction of the inventory.									
N	No parallel structure exists or a non-highway facility is carried on the structure.									
Examples										
<div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;"> <p style="text-align: center;"><u>Enter</u></p> <p>Structure #1 R</p> <p>Structure #2 L</p> </div> <div style="width: 60%; text-align: right;"> <p style="text-align: center;">The Key Route's direction of inventory is north.</p> </div> </div>										

<i>Parallel Structure Number</i>		
<u>Format</u> AN (50)	<u>Frequency</u> I	<u>Item ID</u> B.ID.IL.0 4
Specification		Commentary
<p>This item records the structure number of the adjacent parallel structure when Parallel Structure</p> <p>Designation is coded to indicate parallel structures.</p>		

SUBSECTION 1.2: LOCATION

The data items in this subsection uniquely locate the bridge and are considered part of the Primary Data Set. These data items have a one-to-one relationship with a bridge. The data for these items typically remain static once a bridge has been inventoried.

The following data items are included in this subsection.

Item ID	Data Item
----------------	------------------

B.L.01	State Code
B.L.02	County Code
B.L.03	Place Code
B.L.04	Highway Agency District
B.L.05	Latitude
B.L.06	Longitude
B.L.07	Border Bridge Number
B.L.08	Border Bridge State or Country Code
B.L.09	Border Bridge Inspection Responsibility
B.L.10	Border Bridge Designated Lead State
B.L.11	Bridge Location
B.L.IL.01	Border Bridge Remarks

<i>State Code</i>					
<u>Format</u> N (2,0)		<u>Frequency</u> I		<u>Item ID</u> B.L.01	
Specification			Commentary		
Report the State code where the bridge is located using one of the codes listed below.			<p>State codes are derived from the FIPS, Standard Codes for States (FIPS PUB 5-2).</p> <p>Federal agency or Tribal governments that own bridges which cross State borders need to choose a State code to report here and the bordering State's code in Item B.L.08 (<i>Border Bridge State or Country Code</i>).</p> <p>For border bridges, the Neighboring State reports this item as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>		
Specification Continued					
<u>Code</u>	<u>Description</u>	<u>Code</u>	<u>Description</u>	<u>Code</u>	<u>Description</u>
1	Alabama	25	Massachusetts	47	Tennessee
2	Alaska	26	Michigan	48	Texas
4	Arizona	27	Minnesota	49	Utah
5	Arkansas	28	Mississippi	50	Vermont
6	California	29	Missouri	51	Virginia
8	Colorado	30	Montana	53	Washington
9	Connecticut	31	Nebraska	54	West Virginia
10	Delaware	32	Nevada	55	Wisconsin
11	District of Columbia	33	New Hampshire	56	Wyoming
12	Florida	34	New Jersey	60	American Samoa
13	Georgia	35	New Mexico	64	Federated States of Micronesia
15	Hawaii	36	New York	66	Guam
16	Idaho	37	North Carolina	68	Marshall Islands
17	Illinois	38	North Dakota	69	Commonwealth of the Northern Mariana Islands
18	Indiana	39	Ohio	70	Palau
19	Iowa	40	Oklahoma	72	Puerto Rico
20	Kansas	41	Oregon	74	U.S. Minor Outlying Islands
21	Kentucky	42	Pennsylvania	78	U.S. Virgin Islands
22	Louisiana	44	Rhode Island		
23	Maine	45	South Carolina		
24	Maryland	46	South Dakota		

<i>County Code</i>		
<u>Format</u> N (3,0)	<u>Frequency</u> I	<u>Item ID</u> B.L.02
Specification		Commentary
<p>Report the FIPS code for the county, parish, or borough in which the bridge is located.</p> <p>The code number constitutes the first three digits of the 7-digit structure identification number. All history is kept by this number, and it appears at the top of all data screens.</p> <p>This item cannot be updated after it has been added to the file. See Item B.L.IL.02 for changes in Inventory County or Item B.CL.IL.01 for changes in Maintenance County.</p>		<p>Use the FIPS codes in the current version of the Census of Population and Housing - Geographic Identification Code Scheme to determine the appropriate code.</p> <p>County and county equivalent entity codes can be found through a link at the following web site: https://www.fhwa.dot.gov/bridge/nbi.cfm</p> <p>For border bridges, the Neighboring State reports this item as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>
Examples		
<p>See County Codes on next page</p>		

County Codes

<u>County</u>	<u>Dist-Code</u>	<u>County</u>	<u>Dist-Code</u>	<u>County</u>	<u>Dist-Code</u>
Adams	6-001	Hardin	9-035	Morgan	6-069
Alexander	9-002	Henderson	4-036	Moultrie	7-070
Bond	8-003	Henry	2-037	Ogle	2-071
Boone	2-004	Iroquois	3-038	Peoria	4-072
Brown	6-005	Jackson	9-039	Perry	9-073
Bureau	3-006	Jasper	7-040	Piatt	5-074
Calhoun	8-007	Jefferson	9-041	Pike	6-075
Carroll	2-008	Jersey	8-042	Pope	9-076
Cass	6-009	Jo Daviess	2-043	Pulaski	9-077
Champaign	5-010	Johnson	9-044	Putnam	4-078
Christian	6-011	Kane	1-045	Randolph	8-079
Clark	7-012	Kankakee	3-046	Richland	7-080
Clay	7-013	Kendall	3-047	Rock Island	2-081
Clinton	8-014	Knox	4-048	St. Clair	8-082
Coles	7-015	Lake	1-049	Saline	9-083
Cook	1-016	LaSalle	3-050	Sangamon	6-084
Crawford	7-017	Lawrence	7-051	Schuyler	6-085
Cumberland	7-018	Lee	2-052	Scott	6-086
DeKalb	3-019	Livingston	3-053	Shelby	7-087
DeWitt	5-020	Logan	6-054	Stark	4-088
Douglas	5-021	McDonough	4-055	Stephenson	2-089
DuPage	1-022	McHenry	1-056	Tazewell	4-090
Edgar	5-023	McLean	5-057	Union	9-091
Edwards	7-024	Macon	7-058	Vermilion	5-092
Effingham	7-025	Macoupin	6-059	Wabash	7-093
Fayette	7-026	Madison	8-060	Warren	4-094
Ford	3-027	Marion	8-061	Washington	8-095
Franklin	9-028	Marshall	4-062	Wayne	7-096
Fulton	4-029	Mason	6-063	White	9-097
Gallatin	9-030	Massac	9-064	Whiteside	2-098
Greene	8-031	Menard	6-065	Will	1-099
Grundy	3-032	Mercer	4-066	Williamson	9-100
Hamilton	9-033	Monroe	8-067	Winnebago	2-101
Hancock	6-034	Montgomery	6-068	Woodford	4-102

Districts**District 1**

Cook	016
DuPage	022
Kane	045
Lake	049
McHenry	056
Will	099

District 2

Boone	004
Carroll	008
Henry	037
Jo Daviess	043
Lee	052
Ogle	071
Rock Island	081
Stephenson	089
Whiteside	098
Winnebago	101

District 3

Bureau	006
DeKalb	019
Ford	027
Grundy	032
Iroquois	038
Kankakee	046
Kendall	047
LaSalle	050
Livingston	053

District 4

Fulton	029
Henderson	036
Knox	048
McDonough	055
Marshall	062
Mercer	066
Peoria	072
Putnam	078
Stark	088
Tazewell	090
Warren	094
Woodford	102

District 5

Champaign	010
DeWitt	020
Douglas	021
Edgar	023
McLean	057
Piatt	074
Vermilion	092

District 6

Adams	001
Brown	005
Cass	009
Christian	011
Hancock	034
Logan	054
Macoupin	059
Mason	063
Menard	065
Montgomery	068
Morgan	069
Pike	075
Sangamon	084
Schuyler	085
Scott	086

District 7

Clark	012
Clay	013
Coles	015
Crawford	017
Cumberland	018
Edwards	024
Effingham	025
Fayette	026
Jasper	040
Lawrence	051
Macon	058
Moultrie	070
Richland	080
Shelby	087
Wabash	093
Wayne	096

District 8

Bond	003
Calhoun	007
Clinton	014
Greene	031
Jersey	042
Madison	060
Marion	061
Monroe	067
Randolph	079
St. Clair	082
Washington	095

District 9

Alexander	002
Franklin	028
Gallatin	030
Hamilton	033
Hardin	035
Jackson	039
Jefferson	041
Johnson	044
Massac	064
Perry	073
Pope	076
Pulaski	077
Saline	083
Union	091
White	097
Williamson	100

<i>Place Code</i>		
<u>Format</u> N (5,0)	<u>Frequency</u> I	<u>Item ID</u> B.L.03
Specification	Commentary	
<p>Report the FIPS place code for the city, town, township, village, and other census-designated place where the bridge is located.</p> <p>Report 0 if there is no FIPS place code where the bridge is located.</p> <p>This item indicates the Municipality in which the Key Route carried / below the structure is physically located.</p> <p>If newly incorporated areas are not listed, the District Bureau of Program Development should be contacted to obtain a new code number</p>	<p>DO NOT ENTER. (This item is computer generated).</p> <p>Use the FIPS codes in the current version of the Census of Population and Housing - Geographic Identification Code Scheme to determine the city, town, township, village, or other census-designated place code, regardless of ownership.</p> <p>FIPS place codes can be found through a link at the following web site: https://www.fhwa.dot.gov/bridge/nbi.cfm</p> <p>For border bridges, the Neighboring State reports this item as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>	
Examples		
<p>Unincorporated area with no FIPS code. Report 0.</p>		

<i>Highway Agency District</i>																						
<u>Format</u> AN (2)	<u>Frequency</u> I	<u>Item ID</u> B.L.04																				
Specification	Commentary																					
<p>Report the State transportation department's district or region code where the bridge is located.</p> <p>Where districts or regions are identified by number, report that number.</p> <p>Where districts or regions are identified by name, report a number based on an alphabetical or organizational listing of the districts or regions, or use an abbreviation.</p>	<p>DO NOT ENTER. (This item is computer generated).</p> <p>Federal agencies and Tribal governments may report their district or region code where the bridge is located, or use the State transportation department's district or region code.</p> <p>Consult with the local FHWA division office contact for questions concerning State transportation department districts or regions.</p> <p>Current staff listings can be found at: https://www.fhwa.dot.gov/about/field.cfm.</p> <p>For border bridges, the Neighboring State reports this item as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>																					
Examples																						
<p>(See the list of county codes for B.L.02).</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: left;"><u>District Office</u></th> <th style="text-align: left;"><u>District</u></th> </tr> </thead> <tbody> <tr> <td>Schaumburg</td> <td>1</td> </tr> <tr> <td>Dixon</td> <td>2</td> </tr> <tr> <td>Ottawa</td> <td>3</td> </tr> <tr> <td>Peoria</td> <td>4</td> </tr> <tr> <td>Paris</td> <td>5</td> </tr> <tr> <td>Springfield</td> <td>6</td> </tr> <tr> <td>Effingham</td> <td>7</td> </tr> <tr> <td>Collinsville</td> <td>8</td> </tr> <tr> <td>Carbondale</td> <td>9</td> </tr> </tbody> </table>			<u>District Office</u>	<u>District</u>	Schaumburg	1	Dixon	2	Ottawa	3	Peoria	4	Paris	5	Springfield	6	Effingham	7	Collinsville	8	Carbondale	9
<u>District Office</u>	<u>District</u>																					
Schaumburg	1																					
Dixon	2																					
Ottawa	3																					
Peoria	4																					
Paris	5																					
Springfield	6																					
Effingham	7																					
Collinsville	8																					
Carbondale	9																					

<i>Latitude</i>		
<u>Format</u> N (9,6)	<u>Frequency</u> I	<u>Item ID</u> B.L.05
Specification	Commentary	
<p>Report the latitude of the bridge in decimal degrees.</p> <p>Report a negative sign when the bridge is in the southern hemisphere.</p>	<p>DO NOT ENTER. (This item is computer generated).</p> <p>Mapping of bridges by FHWA will assume that the reported value is based on World Geodetic System 1984.</p> <p>The format accommodates reporting a negative sign which is counted as a digit. FHWA will adjust the polarity when it is incorrectly reported.</p> <p>The reported value does not need to be at the same location as the LRS mile point reported in Item B.H.07 (LRS Mile Point). LRS bridge mile point locations occurring on a chorded shape file created using only roadway mile points do not always correspond with the true longitude of a bridge.</p>	
Examples		
<p>Latitude is 50° 10' 00.00" N. Report 50.166667.</p> <p>Latitude is 53° 52.457' N. Report 53.874285.</p> <p>Latitude is 14.291368° S. Report -14.291368.</p>		

<i>Longitude</i>		
Format N (10,6)	Frequency I	Item ID B.L.06
Specification	Commentary	
<p>Report the longitude of the bridge in decimal degrees.</p> <p>Report a negative sign when the bridge is in the western hemisphere.</p> <p>DO NOT ENTER. Generated based on the roadway link location.</p>	<p>Mapping of bridges by FHWA will assume that the reported value is based on World Geodetic System 1984.</p> <p>The format accommodates reporting a negative sign which is counted as a digit. FHWA will adjust the polarity when it is incorrectly reported.</p> <p>The reported value does not need to be at the same location as the LRS mile point reported in Item B.H.07 (LRS Mile Point). LRS bridge mile point locations occurring on a chorded shape file created using only roadway mile points do not always correspond with the true longitude of a bridge.</p>	
Examples		
<p>Longitude is 125° 10' 00.00" W. Report -125.166667.</p> <p>Longitude is 166° 32.784333' W. Report -166.546406.</p> <p>Longitude is 144.677519° E. Report 144.677519.</p>		

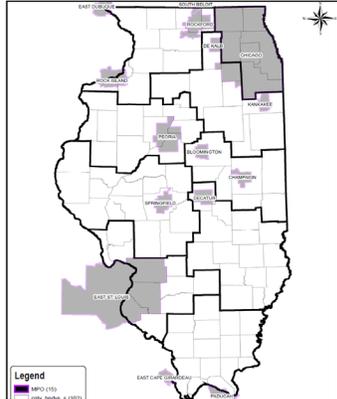
<i>Border Bridge Number</i>		
<u>Format</u> AN (15)	<u>Frequency</u> I	<u>Item ID</u> B.L.07
Specification		Commentary
<p>Report the neighboring State's exact bridge number as used in their Item B.ID.01 (<i>Bridge Number</i>).</p> <p>Report N when the bridge does not cross a border with another State or Country.</p> <p>Report 0 when the bordering country does not have a bridge number.</p>	<p>For the purposes of the NBI, only bridges that cross a State or international border are considered border bridges.</p> <p>The Neighboring State reports this item as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>	
Examples		
<p>SN 064-9901, I-45 over the Ohio River between Illinois and Kentucky. Kentucky assumes 100% responsibility. Kentucky reports Illinois's bridge number. Illinois reports Kentucky's bridge number.</p>		

<i>Border Bridge State or Country Code</i>													
<u>Format</u> AN (2)	<u>Frequency</u> I												
<u>Item ID</u> B.L.08													
Specification	Commentary												
<p>Report the neighboring State code using the codes listed in Item B.L.01 (<i>State Code</i>).</p> <p>Do not report this item when the bridge does not cross a border with another State or Country.</p> <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>State</u></th> </tr> </thead> <tbody> <tr> <td>18</td> <td>Indiana</td> </tr> <tr> <td>19</td> <td>Iowa</td> </tr> <tr> <td>21</td> <td>Kentucky</td> </tr> <tr> <td>29</td> <td>Missouri</td> </tr> <tr> <td>55</td> <td>Wisconsin</td> </tr> </tbody> </table>	<u>Code</u>	<u>State</u>	18	Indiana	19	Iowa	21	Kentucky	29	Missouri	55	Wisconsin	<p>Use this item to indicate bridges crossing borders of States or countries.</p> <p>The Neighboring State reports this item as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>
<u>Code</u>	<u>State</u>												
18	Indiana												
19	Iowa												
21	Kentucky												
29	Missouri												
55	Wisconsin												
Examples													
<p>A bridge crosses the border between Illinois and Indiana.</p> <p style="padding-left: 40px;">Illinois reports 18 .</p> <p style="padding-left: 40px;">Indiana reports 17.</p>													

<i>Border Bridge Inspection Responsibility</i>		
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.L.09
Specification		Commentary
<p>Report the border bridge inspection responsibility for any entity within the State geographical boundaries, regardless of ownership, using one of the following codes.</p> <p><u>Code</u> <u>Description</u></p> <p>0 No responsibility</p> <p>1 Shared responsibility with bordering State or country</p> <p>2 Full responsibility</p> <p>Do not report this item when the bridge does not cross a border with another State or Country.</p>		<p>The intent of this item is to capture the border bridge inspection responsibility for any entity within the State geographical boundaries, for all inspection types, regardless of ownership (Federal, State, city, county, toll authority etc.).</p> <p>Agency inspection responsibility should be documented in interagency agreements or memorandums of understanding and included as part of the bridge file or record.</p> <p>The Neighboring State reports this item as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>
Examples		
<p>Border bridge between Illinois and Kentucky with shared maintenance responsibility. Kentucky has responsibility for inspection. Kentucky reports 2. Illinois reports 0.</p>		

<i>Border Bridge Designated Lead State</i>		
<u>Format</u> N (2,0)	<u>Frequency</u> I	<u>Item ID</u> B.L.10
Specification		Commentary
<p>Report the State code for the State that has been determined to be the Designated Lead State for reporting the border bridge full record using one of the State codes listed in Item B.L.01 (<i>State Code</i>).</p> <p>Do not report this item when the bridge does not cross a border with another State or Country.</p>		<p>The intent of this item is to capture the State which has been designated by agreement between the two bordering states to report a full bridge record for the border bridge. For more information, see the Border Bridges section of this document.</p> <p>The Neighboring State reports this item as part of their abbreviated bridge record.</p>
Examples		
<p>Border bridge between Illinois and Kentucky with shared maintenance responsibility. Kentucky has responsibility for inspection. Through agreement, Kentucky is determined to be the Designated Lead State. Illinois and Kentucky report 21.</p>		

<i>Bridge Location</i>		
<u>Format</u> AN (300)	<u>Frequency</u> I	<u>Item ID</u> B.L.11
Specification	Commentary	
<p>Report a narrative description of the bridge location.</p> <p>This item is a description of the structure location as it appears on the General Highway Map. It is used to assist in locating the structure in the field or from the office. This description should be keyed to distinguishable map features such as route junctions, Rural Reference Coordinates, township - range sections, street names, rivers, railroads, etc. Reference to features that are known primarily only in the locality of the structure (e.g. "Jones Corner") should be avoided in the location description.</p> <p>Local agency structures in rural areas on roads not numbered on the General Highway Map (i.e. Township Roads) in counties where the "Rural Reference Coordinates" grid system is used, should use that system in the location description. As an alternative, the relative location within a given section number of a township and range may be used.</p>	<p>It is preferred that the narrative describe the location and distance of the bridge from a distinguishable feature along the same route the bridge carries. Include additional information as needed to locate the bridge.</p> <p>Distinguishable features should be on official highway department, State, local, or Federal agency maps.</p> <p>No Abbreviations</p>	
Examples		
<p>Report 3.2 miles south of the junction of SR 35.</p> <p>Report 0.2 miles south of I-80 middle-tier of 3 ramps ramp to southbound State Route 15.</p> <p>Report 5.7 miles north of State Route 10 on State Route 15, then 1.8 miles east on Buckingham Road. Bear right at the unmarked fork at the 1.1-mile point of Buckingham Road.</p> <p>Report At the entrance to the Veterans Affairs facility in Bath, NY.</p>		

<i>Metropolitan Planning Organization</i>		
Format AN (300)	Frequency I	Item ID B.L.12
Specification	Commentary	
<p>Report the name(s) of the Metropolitan Planning Organization(s) in which the bridge is located, regardless of bridge owner or maintenance responsibility.</p> <p>Report each MPO when the bridge is located on a boundary between MPOs. Report multiple MPOs separated by pipe () delimiters.</p> <p>Report N if Bridge is not located in an MPO.</p> <p>Bloomington Champaign Chicago DeKalb Decatur East Cape Girardeau East Dubuque East St. Louis Paducah, KY Peoria Rock Island Rockford South Beloit Springfield Kankakee</p>	<p>DO NOT ENTER. (This item is computer generated).</p> <p>This item only needs to be reported if a highway carried by the bridge is on the National Highway System, as indicated in Item B.H.03 (<i>NHS Designation</i>).</p> <p>If the State transportation department and its MPOs have established a numeric or alphanumeric identification system for MPOs, that identifier can be used to report this item if it is used consistently.</p> <p>This item can be used to assist in calculating MPO performance measures and targets required by the National Performance Management Measures regulation.</p> <p>The names of Regional Planning Organizations (RPOs) or single county planning organizations do not need to be reported for this item. The National Performance Management Measures regulation only applies to MPOs and not RPOs.</p> <p>For border bridges, the Neighboring State reports this item as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>	
		

<i>Border Bridge Remarks</i>		
<u>Format</u> AN	<u>Frequency</u> I	<u>Item ID</u> B.L.IL.01
Specification		Commentary
<p>This item allows the recording of any special information or data that would not fit the space available regarding the Border Bridge.</p>		<p>Enter appropriate comments beginning at the first space available using any combination of letters, numbers, symbols and spaces.</p>

SUBSECTION 1.3: CLASSIFICATION

The data items in this subsection provide classification data for the bridge and are considered part of the Primary Data Set. These data items have a one-to-one relationship with a bridge. The data for these items typically remain static once a bridge has been inventoried.

The following data items are included in this subsection.

Item ID	Data Item
B.CL.01	Owner
B.CL.02	Maintenance Responsibility
B.CL.03	Federal or Tribal Land Access
B.CL.04	Historic Significance
B.CL.05	Toll
B.CL.06	Emergency Evacuation Designation
B.CL.IL.01	Maintenance County
B.CL.IL.02	Maintenance Township
B.CL.IL.03	Maintenance Municipality
B.CL.IL.04	Reporting Agency
B.CL.IL.05	Reconstruction Year
B.CL.IL.06	Functionally Obsolete
B.CL.IL.07	Inventory Route Record Type
B.CL.IL.08	Bridge Remarks (General)
B.CL.IL.09	Link Indicator
B.CL.IL.10	Secondary Maintenance Responsibility
B.CL.IL.11	Maintenance Team Section-Subsection Over
B.CL.IL.12	Maintenance Team Section-Subsection Over
B.CL.IL.13	Maintenance Team Section-Subsection Under
B.CL.IL.14	Maintenance Team Section-Subsection Under
B.CL.IL.15	Over/Only Maintenance By
B.CL.IL.16	Inspection Route
B.CL.IL.17	AMP Remarks

<i>Owner</i>		
<u>Format</u> AN (4)	<u>Frequency</u> I	<u>Item ID</u> B.CL.01
Specification		Commentary
<p>Report the agency that has ownership of the bridge using one of the following codes.</p> <p>Code Description</p> <p>1 Illinois Department of Transportation</p> <p>2 Illinois State Toll Highway Authority</p> <p>3 County</p> <p>4 Municipality</p> <p>5 Other Federal Agencies (Not listed below)</p> <p>6 Railroad</p> <p>7 Other or Private (Not listed below)</p> <p>8 Adjacent state</p> <p>9 Township or Road District</p> <p>A State Park, Forest or Reservation (excludes IL Dept. of Natural Resources)</p> <p>B Local Park, Forest, or Reservation</p> <p>C Other State Agency (Not listed)</p> <p>D Other Local Agency (Not listed)</p> <p>E Local Toll Authority</p> <p>F US Forest Service</p> <p>G National Park Service</p> <p>H Corps of Engineers/Military Base</p> <p>I IL Dept. of Natural Resources</p> <p>J Chicago Transit Authority</p>		<p>This item is used to identify bridges owner.</p>

<i>Maintenance Responsibility</i>																							
<u>Format</u> AN (4)	<u>Frequency</u> I																						
<u>Item ID</u> B.CL.02																							
Specification	Commentary																						
<p>Report the agency that has primary maintenance responsibility for the bridge using one of the codes listed in Item B.CL.01 (<i>Owner</i>).</p> <p>A two-digit field.</p> <p>Enter the appropriate code(s) as listed below.</p> <table border="0"> <thead> <tr> <th style="text-align: left;">Code</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Unknown, or a placeholder code for the A State Park, Forest or Reservation second position if only one agency is responsible (excludes IL Dept. of Natural Resources)</td> </tr> <tr> <td>1</td> <td>Illinois Department of Transportation B Local Park, Forest, or Reservation</td> </tr> <tr> <td>2</td> <td>Illinois State Toll Highway Authority C Other State Agency (Not listed)</td> </tr> <tr> <td>3</td> <td>County D Other Local Agency (Not listed)</td> </tr> <tr> <td>4</td> <td>Municipality E Local Toll Authority</td> </tr> <tr> <td>5</td> <td>Other Federal Agencies (Not listed below) F US Forest Service</td> </tr> <tr> <td>6</td> <td>Railroad G National Park Service</td> </tr> <tr> <td>7</td> <td>Other or Private (Not listed below) H Corps of Engineers/Military Base</td> </tr> <tr> <td>8</td> <td>Adjacent state I IL Dept. of Natural Resources</td> </tr> <tr> <td>9</td> <td>Township or Road District J Chicago Transit Authority</td> </tr> </tbody> </table>	Code	Description	0	Unknown, or a placeholder code for the A State Park, Forest or Reservation second position if only one agency is responsible (excludes IL Dept. of Natural Resources)	1	Illinois Department of Transportation B Local Park, Forest, or Reservation	2	Illinois State Toll Highway Authority C Other State Agency (Not listed)	3	County D Other Local Agency (Not listed)	4	Municipality E Local Toll Authority	5	Other Federal Agencies (Not listed below) F US Forest Service	6	Railroad G National Park Service	7	Other or Private (Not listed below) H Corps of Engineers/Military Base	8	Adjacent state I IL Dept. of Natural Resources	9	Township or Road District J Chicago Transit Authority	<p>This item is used to identify Responsibility.</p>
Code	Description																						
0	Unknown, or a placeholder code for the A State Park, Forest or Reservation second position if only one agency is responsible (excludes IL Dept. of Natural Resources)																						
1	Illinois Department of Transportation B Local Park, Forest, or Reservation																						
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7	Other or Private (Not listed below) H Corps of Engineers/Military Base																						
8	Adjacent state I IL Dept. of Natural Resources																						
9	Township or Road District J Chicago Transit Authority																						

<i>Federal or Tribal Land Access</i>																					
<u>Format</u> AN (30)	<u>Frequency</u> I																				
<u>Item ID</u> B.CL.03																					
Specification	Commentary																				
<p>Report the Federally managed and/or Indian Tribal Government lands using one or more of the following codes, for the bridge owned by a State or local agency and carrying a highway that leads to or traverses through the Federal or Tribal lands.</p> <p>Report multiple codes separated by pipe () delimiters.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td>N</td> <td>Not applicable</td> </tr> <tr> <td>BIA</td> <td>Indian Tribal Government or Bureau of Indian Affairs</td> </tr> <tr> <td>BLM</td> <td>Bureau of Land Management</td> </tr> <tr> <td>NPS</td> <td>National Park Service</td> </tr> <tr> <td>USACE</td> <td>U.S. Army Corps of Engineers</td> </tr> <tr> <td>USBR</td> <td>Bureau of Reclamation</td> </tr> <tr> <td>USFS</td> <td>U.S. Forest Service</td> </tr> <tr> <td>USFWS</td> <td>U.S. Fish and Wildlife Service</td> </tr> <tr> <td>X</td> <td>Other</td> </tr> </tbody> </table> <p>Report N when the highway carried by the bridge is not owned by a State or local agency and/or does not lead to or traverse through Federal or Tribal lands.</p>	<u>Code</u>	<u>Description</u>	N	Not applicable	BIA	Indian Tribal Government or Bureau of Indian Affairs	BLM	Bureau of Land Management	NPS	National Park Service	USACE	U.S. Army Corps of Engineers	USBR	Bureau of Reclamation	USFS	U.S. Forest Service	USFWS	U.S. Fish and Wildlife Service	X	Other	<p>This item is used to identify bridges owned by State or local agencies on highways that lead to and/or traverse through any Federally managed land or Tribal government property. These bridges may be eligible to receive funding from the Federal Lands Access Program under 23 U.S.C. 204.</p> <p>Consider those bridges that are located on the identified highway to the nearest intersecting highway owned by a State or local agency.</p> <p>For assistance in locating Federal properties, contact Federal Lands Highway at: https://highways.dot.gov/federal-lands/about/contacts .</p>
<u>Code</u>	<u>Description</u>																				
N	Not applicable																				
BIA	Indian Tribal Government or Bureau of Indian Affairs																				
BLM	Bureau of Land Management																				
NPS	National Park Service																				
USACE	U.S. Army Corps of Engineers																				
USBR	Bureau of Reclamation																				
USFS	U.S. Forest Service																				
USFWS	U.S. Fish and Wildlife Service																				
X	Other																				

<i>Historic Significance</i>		
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.CL.04
Specification		Commentary
<p>Report the historic significance of the bridge using one of the following codes.</p> <p>Code Description</p> <p>1 Bridge is on the National Register</p> <p>2 Bridge is eligible for the National Register</p> <p>3 Bridge is in a historic district that is on or eligible for the National Register, and contributes to the eligibility of the district</p> <p>4 Bridge is in a historic district that is on or eligible for the National Register, but does not contribute to the eligibility of the district</p> <p>5 Bridge is potentially eligible for the National Register, or potentially contributes to a historic district, but has not been evaluated according to the criteria for listing</p> <p>6 Bridge is on a State or local historic register, but is not eligible for the National Register</p> <p>7 Historic significance of the bridge has not been determined</p> <p>N Bridge is not eligible for the National Register, and is not in a historic district eligible for the National Register</p>		<p>This item is used to report the historic significance of bridges. Bridges that are historically significant are subject to Section 106 of the National Historic Preservation Act of 1966, and 36 CFR 800 (Protection of Historic Properties). 36 CFR 800 governs the Section 106 process, and outlines how agencies are to consult with various parties, identify historic properties, and assess the effects of undertakings to properties.</p> <p>Undertakings to historically significant bridges or their surroundings are also subject to Section 4(f) of the Department of Transportation Act of 1966, and 23 CFR Part 774 (Parks, Recreation Areas, Wildlife and Waterfowl Refuges, and Historic Sites). 23 CFR Part 774 governs the Section 4(f) process, considers how the property is used as a resource, and outlines the project approval process when undertakings are proposed.</p> <p>36 CFR Part 70 (National Register of Historic Places) identifies the attributes that may make a property historically significant and prescribes the evaluation criteria and procedures for listing properties on the National Register.</p> <p>Determinations of eligibility are generally not made with the purpose of eventual listing on the National Register of Historic Places. Rather, the evaluation criteria for listing is used to assess historical significance with the purpose of assessing the effects of undertakings, and to fulfill the goals of 23 USC 144(g) Historic Bridges. Determinations of eligibility are normally made by the relevant federal agency, typically FHWA for highway bridges, and can change when circumstances or conditions change, such as age or bridge integrity. As such, the eligibility status and reported code can change with time.</p>

Commentary Continued – Historic Significance

Use code 2 when the bridge has been determined to be eligible for listing on the National Register even though the nomination and listing process have not concluded or are not being pursued.

Use code 5 when the bridge has attributes that may make it historically significant as indicated by the National Register criteria for evaluation and listing. This code may also apply when a bridge was previously evaluated but requires reevaluation because its current attributes, such as age, may make it historically significant.

Use code 6 when a bridge has local historic value but has been determined to be not eligible for the National Register. Undertakings may be subject to the Section 4(f) process, but without the same level of consultation as prescribed by Section 106.

Use code N when the other codes do not apply.

<i>Toll</i>		
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.CL.05
Specification		Commentary
<p>Report the toll status of the bridge using one of the following codes.</p> <p><u>Code</u> <u>Designation</u></p> <p>Free Road - (The bridge is toll free and carries a toll-free highway):</p> <p style="padding-left: 40px;">0 No toll</p> <p>Toll Bridges - (Tolls are paid specifically to use the structure):</p> <ol style="list-style-type: none"> 1. State owned 2. County owned 3. City owned 4. Other publicly owned 5. Privately owned <p>Toll Roads - (Tolls are paid to use the toll road facility which includes use of the bridge):</p> <ol style="list-style-type: none"> 6. Toll road 7. On Interstate toll segment under Secretarial Agreement. Structure functions as a part of the toll segment. 8. Toll bridge is a segment under Secretarial Agreement. Structure is separate agreement from highway segment. <p>Report this item if only a portion of the bridge is tolled such as if an HOV Toll lane is on the same bridge as a freeway.</p>		<p>Use code 1 when tolls on a toll bridge are paid</p> <p>More tolling program information related to 23 U.S.C. 129 can be found at: https://www.fhwa.dot.gov/ipd/tolling_and_pricing/ and in the FHWA Informational Memorandum - Federal Tolling Programs under the Moving Ahead for Progress in the 21st Century Act.</p>

<i>Emergency Evacuation Designation</i>	
<u>Format</u> AN (1)	<u>Frequency</u> I
<u>Item ID</u> B.CL.06	
Specification	Commentary
<p>Report whether the route carried on the bridge is an emergency evacuation route using one of the following codes.</p> <p><u>Code</u> <u>Description</u></p> <p>N Not an Emergency evacuation route.</p> <p>Y Emergency evacuation route.</p>	<p>DO NOT ENTER. (This item is computer generated).</p> <p>This item is used by FHWA with other items, as per 23 U.S.C. 144(b), to classify bridges according to serviceability, safety, and essentiality for public use and considers the potential impacts to emergency evacuation routes and to regional and national freight and passenger mobility if the serviceability of the bridge is restricted or diminished.</p> <p>Emergency evacuation routes may be designated for various events such as hurricanes, earthquakes, tsunami, dam failure, and other hazardous events.</p> <p>Refer to the State Emergency Management Agency for designated emergency evacuation routes.</p>

<i>Maintenance County</i>		
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.CL.IL.01
Specification		Commentary
<p>This item identifies the county where the maintenance responsibility resides. The number entered here is used to computer generate B.L.04 - Highway District.</p> <p><u>State Maintained:</u> In most cases enter the number for the county in which the structure is physically located. In cases where a Highway District has maintenance responsibility for a structure outside its boundaries, this number should reflect the county within the responsible District that is nearest to the structure in order that the District assignment can be adequately made.</p> <p><u>County Maintained:</u> Enter the county that has maintenance responsibility.</p> <p><u>Township, Municipal or Other Maintenance:</u> Enter the county in which the agency having maintenance responsibility is located.</p>		<p>A three-digit field.</p> <p>Enter the appropriate county code (See the list of county codes for B.L.02).</p>

<i>Maintenance Township</i>		
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.CL.IL.02
Specification		Commentary
<p><u>Township or Municipality Maintained:</u> Enter the number for the township or road district with maintenance responsibility for the structure.</p> <p><u>State, County or Other Agency Maintained:</u> If Maintenance County (B.CL.IL.01) and Inventory County (B.L.IL.02) are the same, enter the same number as the Inventory Township. In cases where the Inventory County and Maintenance County differ, enter the township number for the township within the Maintenance County.</p>		<p>A two-digit field.</p> <p>Enter the appropriate township or road district code (See the list of Township/Road District codes in Appendix B).</p>

<i>Maintenance Municipality</i>		
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.CL.IL.03
Specification		Commentary
<p>This item identifies the municipality with the maintenance responsibility for the structure. The municipality that is responsible for maintenance is not always the same municipality where the structure is physically located (i.e., B.L.03 – Municipality).</p>		<p>A four-digit field.</p> <p>Enter the appropriate code from Appendix A – Municipality Codes.</p> <p>If the structure is not maintained by an incorporated city, town, or village, code 0000 (all zeroes).</p>

<i>Reporting Agency</i>		
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.CL.IL.04
Specification		Commentary
<p>This item indicates the agency that is responsible for submitting inventory and inspection data for the structure.</p> <p>A one-digit field.</p> <p>Enter the appropriate code for each structure.</p> <p><u>Code</u> <u>Agency</u></p> <p>1 District</p> <p>2 BBS – Major River Roads</p> <p>3 County</p> <p>4 Municipality</p> <p>5 Federal</p> <p>6 Railroad</p> <p>7 Illinois Department of Natural</p> <p>8 Resources Illinois State Toll Highway</p> <p>9 Authority Township or Road District</p> <p>0 Other or Private</p>		

<i>Reconstruction Year</i>		
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.CL.IL.05
Specification		Commentary
<p>This item records the latest year of construction for the structure.</p> <p>B.CL.IL.05 is extracted from Item 27A (Construction Year) and reported to FHWA as the latest year of reconstruction. It appears on the data base as the last year of construction in B.W.01 when B.W.IL.01 - Original/Maintenance/Reconstruction Indicator has been coded "R" for Reconstruction.</p>		<p>DO NOT ENTER. (This item is computer generated).</p>

<i>Functionally Obsolete</i>		
<u>Format</u> RO	<u>Frequency</u> I	<u>Item ID</u> B.CL.IL.06
Specification		Commentary
<p>Structures are functionally obsolete if they have deck geometry, load carrying capacity, clearance or approach roadway alignment that no longer meet the criteria for the roadway system of which the structure is part.</p> <p>An appraisal rating of 3 or less for: B.G.IL.03 – Deck Geometry; or B.H.IL.01 – Underclearances; or B.AP.01 – Approach Roadway Alignment; or</p> <p>An appraisal rating of 3 for: B.LR.IL.03 – Structural Evaluation; or B.AP.02 – Waterway Adequacy</p>		<p>DO NOT ENTER. (This item is computer generated).</p> <p>A "Yes/No" text field.</p>

<i>Inventory Route Record Type</i>		
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.CL.IL.07
Specification		Commentary
<p>This item identifies whether the Inventory Route is carried “on” the structure or goes “under” the structure.</p> <p>Code Description</p> <p>1 Key Route carried “on” the structure</p> <p>2 Single Key Route goes “under” the structure</p> <p>A through Z Multiple Key Routes go “under” the structure</p>		<p>DO NOT ENTER (This item is computer generated for NBIS purposes only).</p>

<i>Bridge Remarks (General)</i>		
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.CL.IL.08
Specification		Commentary
<p>This item provides general comments about the bridge. Operational "status remarks" should not be recorded here but should be recorded in B.PS.IL.01, Bridge Status Remarks.</p>		<p>A unlimited text field.</p> <p>Enter appropriate comments beginning at the first space available using any combination of letters, numbers, symbols and spaces.</p> <p>Abbreviations can be used if they are not ambiguous.</p>

<i>Link Indicator</i>										
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.CL.IL.09								
Specification		Commentary								
<p>This item provides the method whereby the route specific data items can be extracted from the IRIS file and thus eliminates a duplication of entry. When the Key Route and station on ISIS match a Key Route and station on IRIS and the link indicator is set to 'Y' (YES); the following data items will automatically transfer from IRIS to ISIS:</p> <p>ISIS numbers: B.L.IL.02, B.L.IL.03, B.L.03, B.H.02, B.H.01, B.H.09, B.H.11, B.H.05, B.H.03, B.H.10, B.G.16, and B.H.IL.03.</p>		<p>A one-digit field.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>Key Route 'is Linked' to IRIS file</td> </tr> <tr> <td>N</td> <td>Key Route 'is not Linked' to IRIS file</td> </tr> <tr> <td>X</td> <td>Key Route 'is not Linked' because IRIS file indicates that the road is not open to public travel. This may be due to the route does not exist or the stationing is beyond the end of the</td> </tr> </tbody> </table> <p>Linking should be accomplished using either the manual or map based linking tool on the Key Routes screen. Use the relink tool on the Key Routes screen to move or change the point of linkage. For both linking tools, follow the on screen prompts to and code the following data items to complete linkage.</p> <p>ISIS Item numbers: B.H.17, B.H.08, B.H.16, B.H.IL.12, B.H.IL.13, B.H.IL.14, B.H.13, B.H.IL.15, B.H.15, B.H.IL.16, and B.H.IL.02.</p>	<u>Code</u>	<u>Description</u>	Y	Key Route 'is Linked' to IRIS file	N	Key Route 'is not Linked' to IRIS file	X	Key Route 'is not Linked' because IRIS file indicates that the road is not open to public travel. This may be due to the route does not exist or the stationing is beyond the end of the
<u>Code</u>	<u>Description</u>									
Y	Key Route 'is Linked' to IRIS file									
N	Key Route 'is not Linked' to IRIS file									
X	Key Route 'is not Linked' because IRIS file indicates that the road is not open to public travel. This may be due to the route does not exist or the stationing is beyond the end of the									

<i>Secondary Maintenance Responsibility</i>		
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.CL.IL.10
Specification		Commentary
<p>This one-digit code identifies the agency(s) responsible for assuring that the maintenance and needed repairs are made to the structure.</p> <p>If more than one agency are jointly responsible, report the agencies in the order of primary and secondary responsibility. If equally responsible, report the agencies in the order of hierarchy as listed below. If only one agency is responsible, the agency code is in the first position and code "0" (zero) is in the second position.</p> <p>Enter the appropriate code(s) as listed below.</p> <p><u>Code Description</u></p> <p>0 Unknown, or a placeholder code for the second position if only one agency is responsible</p> <p>1 Illinois Department of Transportation</p> <p>2 Illinois State Toll Highway Authority</p> <p>3 County</p> <p>4 Municipality</p> <p>5 Other Federal Agencies (Not listed below)</p> <p>6 Railroad</p> <p>7 Other or Private (Not listed below)</p> <p>8 Adjacent state</p> <p>9 Township or Road District</p> <p>A State Park, Forest or Reservation (excludes IL Dept. of Natural Resources)</p> <p>B Local Park, Forest, or Reservation</p> <p>C Other State Agency (Not listed)</p> <p>D Other Local Agency (Not listed)</p> <p>E Local Toll Authority</p> <p>F US Forest Service</p> <p>G National Park Service</p> <p>H Corps of Engineers/Military Base</p> <p>I IL Dept. of Natural Resources</p> <p>J Chicago Transit Authority</p>		

Examples	
Designation	Enter
Township	90
IDOT, County (Equal Responsibility)	13
IDOT, County, Township (IDOT Primary)	13
RR-Other Local Agency (Other Local Agency Primary)	D6
Unknown	00

<i>Maintenance Team Section Over</i>		
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.CL.IL.11
Specification		Commentary
<p>B.CL.IL.11 identifies the Team Section in which the bridge is located.</p> <p>A few structures exist which are maintained by two Team Sections, with one Team Section maintaining the upper part of the structure and the other maintaining the lower part. Therefore, the structure is located in two different Team Sections and Subsections. B.CL.IL.11 and B.CL.IL.12 are used to identify the location of the Team Section and Subsection of the upper part of the structure. B.CL.IL.13 and B.CL.IL.14, Under Team Section and Subsection, should have the Team Section and Subsection entered for the location of the lower part of the structure.</p> <p>To report any work performed on the structure, an entry has to be made into Maintenance Team Section & Subsection Over.</p>		<p>Enter the Team Section and Subsection in the appropriate fields.</p>

<i>Maintenance Team Subsection Over</i>		
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.CL.IL.12
Specification		Commentary
<p>B.CL.IL.12 identifies the Team Subsection in which the bridge is located.</p> <p>A few structures exist which are maintained by two Team Sections, with one Team Section maintaining the upper part of the structure and the other maintaining the lower part. Therefore, the structure is located in two different Team Sections and Subsections. B.CL.IL.11 and B.CL.IL.12 are used to identify the location of the Team Section and Subsection of the upper part of the structure. B.CL.IL.13 and B.CL.IL.14, Under Team Section and Subsection, should have the Team Section and Subsection entered for the location of the lower part of the structure.</p> <p>To report any work performed on the structure, an entry has to be made into Maintenance Team Section & Subsection Over.</p>		<p>Enter the Team Section and Subsection in the appropriate fields.</p>

<i>Maintenance Team Section Under</i>		
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.CL.IL.13
Specification		Commentary
<p>This item records the Team Section and Subsection information for a structure that is maintained by two Team Sections.</p> <p>Specifically, this item is used to identify the Team Section and Subsection in which the lower part of the structure is located.</p>		<p>Enter the Team Section and Subsection in the appropriate fields.</p> <p>Leave blank when a structure is maintained by only one Team Section.</p>

<i>Maintenance Team Subsection Under</i>		
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.CL.IL.14
Specification		Commentary
<p>This item records the Team Section and Subsection information for a structure that is maintained by two Team Sections.</p> <p>Specifically, this item is used to identify the Team Section and Subsection in which the lower part of the structure is located.</p>		<p>Enter the Team Section and Subsection in the appropriate fields.</p> <p>Leave blank when a structure is maintained by only one Team Section.</p>

<i>Over/Only Maintenance By</i>		
Format AN (50)	Frequency I	Item ID B.CL.IL.15
Specification		Commentary
<p>This item identifies the agency (other than IDOT) that has any maintenance responsibility for any portion of the superstructure. This item is to be left blank if the "OVER/ONLY" Maintenance responsibility belongs entirely to IDOT.</p>		<p>A text field.</p> <p>Enter the literal description of the responsible agency (other than IDOT) beginning at the first space available, using any combination of letters, numbers, symbols and punctuation as necessary.</p> <p>Abbreviations can be used if they are not ambiguous.</p> <p>Punctuation can be omitted if it does not alter the context.</p> <p>Leave blank if not applicable.</p>

<i>Inspection Route</i>		
<u>Format</u> AN (5)	<u>Frequency</u> I	<u>Item ID</u> B.CL.IL.16
Specification		Commentary
<p>This item identifies the inspector's route number that has been assigned to the structure. This enables the grouping of specific structures into an efficient inspection route.</p>		<p>A text field.</p>

<i>AMP Remarks</i>		
<u>Format</u> AN	<u>Frequency</u> I	<u>Item ID</u> B.CL.IL.17
Specification		Commentary
<p>This item allows the recording of any special information or data that would not fit the space available regarding the features primarily of AMP (Asset Management Project) interest.</p>		<p>An unlimited text field.</p> <p>Enter appropriate comments beginning at the first space available using any combination of letters, numbers, symbols and spaces. Abbreviations can be used as long as they are not ambiguous.</p>

SECTION 2: BRIDGE MATERIAL AND TYPE

This section has data items that have been grouped by the following three subsections: Span Material and Type, Substructure Material and Type, and Roadside Hardware. The data items in these subsections identify the structural materials, structure types, and structural configurations that make up a bridge.

The data items in Span Material and Type subsection identify the bridge configuration based on material(s), type(s), and continuity. These items are considered part of the Span Data Set and have a many-to-one relationship with a bridge when applicable.

The data items in the Substructure Material and Type subsection identify the bridge substructure and foundation material(s) and type(s). These items are considered part of the Substructure Data Set and have a many-to-one relationship with a bridge when applicable.

The data items in the Roadside Hardware subsection identify crash-tested roadside hardware. These data items are considered part of the Primary Data Set and have a one-to-one relationship with a bridge.

The data for items in this section typically remains static once a bridge has been inventoried. The following data items are included in this section.

SUBSECTION 2.1: SPAN MATERIAL AND TYPE

Item ID Data Item

B.SP.01	Span Configuration Designation
B.SP.02	Number of Spans
B.SP.03	Number of Beam Lines
B.SP.04	Span Material
B.SP.05	Span Continuity
B.SP.06	Span Type
B.SP.07	Span Protective System
B.SP.08	Deck Interaction
B.SP.09	Deck Material and Type
B.SP.10	Wearing Surface
B.SP.11	Deck Protective System
B.SP.12	Deck Reinforcing Protective System
B.SP.13	Deck Stay-In-Place Forms
B.SP.IL.01	Total Deck Thickness
B.SP.IL.02	Deck Structure Thickness

SUBSECTION 2.2: SUBSTRUCTURE MATERIAL AND TYPE

Item ID Data Item

B.SB.01	Substructure Configuration Designation
B.SB.02	Number of Substructure Units
B.SB.03	Substructure Material
B.SB.04	Substructure Type
B.SB.05	Substructure Protective System
B.SB.06	Foundation Type
B.SB.07	Foundation Protective System

SUBSECTION 2.3: ROADSIDE HARDWARE

Item ID Data Item

B.RH.01	Bridge Railings
B.RH.02	Transitions

SUBSECTION 2.1: SPAN MATERIAL AND TYPE

The data items in this subsection identify the span and deck configurations based on material(s), type(s), and continuity for the bridge, and are considered part of the Span Data Set. These data items have a many-to-one relationship with a bridge when applicable.

Data items in this subsection are reported for each span configuration present in the bridge. A span configuration characterizes all spans of similar material, type, and continuity. Spans of similar configuration do not need to be contiguous to be reported in the same data set.

All bridges have at least one span configuration; therefore at least one data set must be reported for each bridge. Additional data sets are reported when applicable.

Do not report these data items for bridges and culverts that were originally designed and constructed under fill: B.SP.08 (*Deck Interaction*), B.SP.10 (*Wearing Surface*), B.SP.11 (*Deck Protective System*), B.SP.12 (*Deck Reinforcing Protective System*), and B.SP.13 (*Deck Stay-In-Place Forms*).

The data for items in this subsection typically remain static once a bridge has been inventoried. The following data items are included in this subsection.

Item ID	Data Item
B.SP.01	Span Configuration Designation
B.SP.02	Number of Spans
B.SP.03	Number of Beam Lines
B.SP.04	Span Material
B.SP.05	Span Continuity
B.SP.06	Span Type
B.SP.07	Span Protective System
B.SP.08	Deck Interaction
B.SP.09	Deck Material and Type
B.SP.10	Wearing Surface
B.SP.11	Deck Protective System
B.SP.12	Deck Reinforcing Protective System
B.SP.13	Deck Stay-In-Place Forms
B.SP.IL.01	Total Deck Thickness
B.SP.IL.02	Deck Structure Thickness

<i>Span Configuration Designation</i>		
<u>Format</u> AN (3)	<u>Frequency</u> I	<u>Item ID</u> B.SP.01
Specification	Commentary	
<p>Report the assigned span configuration designation using one of the following codes.</p> <p><u>Code</u> <u>Description</u> M## Main A## Approach C## Culvert V## Culvert extension W## Widening</p> <p>Replace the ## characters in the above codes with sequential numbers, with leading zeros, assigned to each span configuration.</p>	<p>This item captures how spans of the reported bridge configuration are classified and designated.</p> <p>Except for culverts, each bridge has at least one main span. Main spans include all spans of most bridges or the major span(s) of a sizable bridge.</p> <p>Replacing the "##" characters in the codes with a sequential number (e.g., M01, A01, A02, etc.) identifies each unique span configuration present on the bridge.</p>	
Commentary Continued		
<p>A bridge may or may not have approach spans. Approach spans are typically those of a different material, type, or design than the main span and are typically at one or both ends of the main span.</p> <p>Consider the span(s) of vaulted abutments as an approach span.</p> <p>Use code C for spans that convey water through or under a roadway embankment and are designed hydraulically to take advantage of submergence to increase water carrying capacity.</p> <p>Use code V when a culvert is extended using dissimilar construction.</p> <p>Use code W for widened portions of main or approach spans with dissimilar construction. Widening data sets do not contribute to the calculation of the total number of spans for the bridge.</p>		
Examples		
<p>Four-span steel plate girder bridge. This bridge has one span data set. Report M01.</p> <p>Double-leaf bascule bridge with four steel box girder approach spans. This bridge has two span data sets.</p> <ul style="list-style-type: none"> • Report M01 for the bascule data set. • Report A01 for the steel box girder data set. 		

Examples Continued – Span Configuration Designation

Six-span bridge with two continuous steel plate girder main spans and four simply supported steel plate girder approach spans. This bridge has two span data sets.

- Report M01 for the continuous steel plate girder data set.
- Report code A01 for the simply supported steel plate girder data set.

Four-barrel corrugated steel pipe culvert, modified by adding four additional HDPE round pipes along the roadway centerline to increase hydraulic capacity. This bridge has two span data sets.

- Report C01 for the steel pipes data set.
- Report C02 for the HDPE pipes data set.

Steel truss main span bridge with three prestressed concrete multi-beam approach spans at the north end, and two steel multi-beam approach spans at the south end. This bridge has three span data sets.

- Report M01 for the steel truss data set.
- Report A01 for the north approach data set.
- Report A02 for the south approach data set.

Single span reinforced concrete tee-beam bridge widened with prestressed concrete box beams. This bridge has two span data sets.

- Report M01 for the reinforced concrete tee-beam data set.
- Report W01 for the prestressed concrete box beams data set.

Three-sided frame culvert, lengthened by adding a four-sided box culvert to the end of the barrel. This bridge has two span data sets.

- Report C01 for the three-sided frame culvert data set.
- Report V01 for the four-sided box culvert data set.

Single span steel beam bridge widened using the same superstructure/deck construction. This bridge has one span data set. Report M01.

<i>Number of Spans</i>		
<u>Format</u> N (4,0)	<u>Frequency</u> I	<u>Item ID</u> B.SP.02
Specification	Commentary	
Report the number of spans.	<p>This item captures the number of spans of the configuration(s) designated in item B.SP.01 (<i>Span Configuration Designation</i>).</p> <p>If the number of barrels or spans varies, report the maximum number.</p>	
Examples		
<p>Four-span steel plate girder bridge. This bridge has one span data set. Report 4.</p> <p>Double-leaf bascule bridge with four steel box girder approach spans. This bridge has two span data sets.</p> <ul style="list-style-type: none"> • Report 1 for the bascule main span data set. • Report 4 for the box girder approach span data set. <p>Six-span bridge with two continuous steel plate girder main spans and four simply supported steel plate girder approach spans. This bridge has two span data sets.</p> <ul style="list-style-type: none"> • Report 2 for the main span data set. • Report 4 for the approach span data set. <p>Four-barrel corrugated steel pipe culvert, modified by adding four additional HDPE round pipes along the roadway centerline to increase hydraulic capacity. This bridge has two span data sets.</p> <ul style="list-style-type: none"> • Report 4 for the steel pipes data set. • Report 4 for the HDPE pipes data set. <p>Three steel girder spans with concrete vaulted/cellular abutments that enclose a reinforced concrete slab span at each end of the bridge. This bridge has two span data sets.</p> <ul style="list-style-type: none"> • Report 3 for the steel girder main span data set. • Report 2 for the reinforced concrete approach span data set. <p>Four-sided concrete box culvert that collects runoff at a single-barrel inlet at the northeast corner of an intersection, and at a three-barrel inlet at the northwest corner. The barrels merge beneath the intersection, and all four barrels outlet to the southeast corner. This bridge has one span data set. Report 4.</p> <p>Three-sided frame culvert, lengthened by adding a four-sided box culvert to the end of the barrel. This bridge has two span data sets.</p> <ul style="list-style-type: none"> • Report 1 for the three-sided frame culvert data set. • Report 1 for the four-sided box culvert data set. <p>Twin concrete box girder bridge that has eastbound and westbound lanes separated by a 1" median gap. Eastbound portion of superstructure is supported by two piers, and westbound portion is supported by three piers due to unusual terrain restrictions. This bridge has one span data set. Report 4.</p>		

<i>Number of Beam Lines</i>		
<u>Format</u> N (3,0)	<u>Frequency</u> I	<u>Item ID</u> B.SP.03
Specification	Commentary	
<p>Report the number of principal beam lines.</p> <p>Report 1 for bridges where Item B.SP.06 (<i>Span Type</i>) is F01, F02, S01, or S02.</p> <p>Report 0 for bridges where Item B.SP.06 (<i>Span Type</i>) is P01 or P02.</p>	<p>Principal beam lines include the main longitudinal load-carrying members of the superstructure such as beams, girders, trusses, and arches or arch ribs, but do not include stringers of a floor beam system or spandrel walls of an arch.</p> <p>Use the average number of beam lines for bridges with variable number of beam lines within a span configuration, rounded down.</p>	
Examples		
<p>Timber multi-beam bridge with 12 beams. Report 12.</p> <p>Steel through truss bridge with two trusses and ten stringers. Report 2.</p> <p>Flared three-span tee-beam bridge with 12 beams at the south end and 17 beams at the north end. Report 14.</p> <p>Steel arch bridge with three arch ribs. Report 3.</p> <p>Concrete arch bridge with masonry spandrel walls. Report 1.</p> <p>Four-barrel corrugated steel pipe culvert, modified by adding four additional HDPE round pipes along the roadway centerline to increase hydraulic capacity. This bridge has two span data sets.</p> <ul style="list-style-type: none"> • Report 0 for the steel pipes data set. • Report 0 for the HDPE pipes data set. <p>Three-sided frame culvert, lengthened by adding a four-sided box culvert to the end of the barrel. This bridge has two span data sets.</p> <ul style="list-style-type: none"> • Report 1 for the three-sided frame data set. • Report 1 for the four-sided frame data set. 		

<i>Span Material</i>		
<u>Format</u> AN (3)	<u>Frequency</u> I	<u>Item ID</u> B.SP.04
Specification		Commentary
<p>Report the principal span material type using one of the following codes.</p> <p><u>Code</u> <u>Description</u></p> <p>A01 Aluminum</p> <p>C01 Reinforced concrete – cast-in-place</p> <p>C02 Reinforced concrete – precast</p> <p>C03 Prestressed concrete – pre-tensioned</p> <p>C04 Prestressed concrete – cast-in-place post-tensioned</p> <p>C05 Prestressed concrete – precast post-tensioned</p> <p>CX Concrete – other</p> <p>F01 FRP composite – aramid fiber</p> <p>F02 FRP composite – carbon fiber</p> <p>F03 FRP composite – glass fiber</p> <p>FX FRP composite – other</p> <p>I01 Iron – cast</p> <p>I02 Iron – wrought</p> <p>M01 Masonry – block</p> <p>M02 Masonry – stone</p> <p>P01 Plastic – Polyethylene</p> <p>PX Plastic - other</p> <p>S01 Steel – rolled shapes</p> <p>S02 Steel – welded shapes</p> <p>S03 Steel – bolted shapes</p> <p>S04 Steel – riveted shapes</p> <p>S05 Steel – bolted and riveted shapes</p> <p>SX Steel – other</p> <p>Codes continued next page.</p>		<p>A principal span member includes the main longitudinal load-carrying members of the span such as beams, girders, trusses, arches, or pipes, but does not include the floor system.</p> <p>Use code C04 or C05, as applicable, for prestressed concrete superstructures that utilize both pre-tensioning and post-tensioning.</p> <p>Use code M01 for masonry made from bricks or concrete blocks. Use code M02 for natural stone.</p> <p>Use code P01 for plastics that include HDPE and PE materials typically used for pipes.</p>

Specification Continued – Span Material

Code	Description
T01	Timber – glue laminated
T02	Timber – nail laminated
T03	Timber – solid sawn
T04	Timber – stress laminated
TX	Timber – other
X	Other

Examples – Span Material

Spliced concrete girder: post-tensioned, precast, pre-tensioned bulb-T. Report C05.

Stress laminated timber slab. Report T04.

Concrete encased steel rolled beam. Report S01.

Bolted steel truss with timber stringers. Report S03.

Cast-in-place reinforced concrete tee-beams strengthened with carbon fiber FRP. Report C01.

Corrugated steel pipes with bolted seams. Report S03.

Corrugated steel pipe culvert with welded seams, modified by adding additional HDPE round pipes to lengthen the culvert along the roadway centerline. This bridge has two span data sets.

- Report S02 for the steel pipes data set.
- Report P01 for the HDPE pipes data set.

Three-sided, cast-in-place reinforced concrete frame culvert, lengthened by adding a four-sided precast reinforced concrete frame culvert to the end of the barrel. This bridge has two span data sets.

- Report C01 for the three-sided frame data set.
- Report C02 for the four-sided frame data set.

Terra cotta pipes. Report X.

<i>Span Continuity</i>	
<u>Format</u> AN (1)	<u>Frequency</u> I
<u>Item ID</u> B.SP.05	
Specification	Commentary
<p>Report the span continuity using one of the following codes.</p> <p><u>Code</u> <u>Description</u></p> <p>1 Simple or single span</p> <p>2 Continuous</p> <p>3 Continuous for live loads only</p> <p>4 Cantilever</p> <p>5 Cantilever with pin and hanger</p> <p>6 Frame</p> <p>7 Buried</p>	<p>This item captures the continuity of the span(s) in the configuration.</p> <p>Use code 2 for bridges designed continuous for permanent (dead) loads and live loads. Also, use code 2 for cable stayed and suspension bridges, and for multi-span arches.</p> <p>Use code 3 for bridges designed as simple spans for permanent (dead) loads and continuous for live loads. When it is unknown if the superstructure was designed as continuous for live loads, code this item consistent with the assumption used in the load rating calculations.</p> <p>Use code 6 for three-sided and four-sided frames that are not buried.</p> <p>Use code 7 for pipe culverts and other structures that rely on soil-structure interaction to support vertical loads.</p>

Examples – Span Continuity

Two prestressed concrete girder simple spans that have one span data set. Report 1.

Three-span bridge with cantilevered end spans that are unsupported at the extreme ends. There are two span data sets, one for the center span and one for the end spans. Report 2 for the center span. Report 4 for the end spans.

Steel rigid K-frame that has one span dataset. Report 6.

Two prestressed concrete girder simple spans with continuous deck designed to provide continuity for live load over the pier and have one span data set. Report 3.

Three-span concrete girder bridge with cantilever and suspended center span. There are two span data sets, one for the center span and one for the end spans. Report 4 for the center span. Report 2 for the end spans.

Three-span steel girder bridge with cantilever and suspended pin and hanger center span. There are two span data sets, one for the center span and one for the end spans. Report 5 for the center span. Report 2 for the end spans. Report 5.

Three-barrel monolithic concrete frame bridge that is not buried and has one span data set. Report 6.

Four-barrel corrugated steel pipe culvert. Report 7.

<i>Span Type</i>		
<u>Format</u> AN (3)	<u>Frequency</u> I	<u>Item ID</u> B.SP.06
Specification	Commentary	
<p>Report the span type using one of the following codes.</p> <p>Code Description</p> <p>A01 Arch – under fill without spandrel A02 Arch – open spandrel A03 Arch – closed spandrel A04 Arch – through A05 Arch – tied</p> <p>B01 Box girder/beam – single B02 Box girder/beam – multiple adjacent B03 Box girder/beam – multiple spread B04 Box girder/beam – segmental</p> <p>F01 Frame – three-sided F02 Frame – four-sided F03 Frame – K-shaped F04 Frame – delta-shaped</p> <p>G01 Girder/beam – I-shaped adjacent G02 Girder/beam – I-shaped spread G03 Girder/beam – tee-beam G04 Girder/beam – inverted tee-beam G05 Girder/beam – double-tee adjacent G06 Girder/beam – double-tee spread G07 Girder/beam – channel adjacent G08 Girder/beam – channel spread G09 Girder/beam – girder & floor beam G10 Girder/beam – through girder GX Girder/beam – other</p> <p>Codes continued next page.</p>	<p>Adjacent girders/beams are those sections that are placed directly next to each other and are touching or nearly touching.</p> <p>Spread girders/beams are those sections that are spaced so that the deck spans the space between the sections.</p> <p>Box girder/beams include boxes, tubs, and cellular structures where interior surfaces may or may not be accessible. Use code B04 for segmental construction and irrespective if the span type meets the description for B01, B02, or B03.</p> <p>Use code F01 for three-sided rigid frames.</p> <p>Use code F02 for rigid four-sided concrete box bridges.</p> <p>Use code G01 or G02, as applicable, for bulb-tee and deck bulb-tee girders/beams.</p> <p>Use code G09 for superstructures with girder and floor beam systems regardless of the girder shape.</p> <p>Use code G10 for girder type superstructures regardless of the girder shape.</p> <p>Use code P02 for pipes that rely on the stability of surrounding soils to maintain their structural shape.</p>	

Specification Continued – Span Type	
<u>Code</u>	<u>Description</u>
L01	Cable – suspension
L02	Cable – cable-stayed
L03	Cable – extradosed
LX	Cable – other
M01	Movable – vertical lift
M02	Movable – bascule
M03	Movable – swing
MX	Movable – other
P01	Pipe - Rigid
P02	Pipe - Flexible
S01	Slab – solid
S02	Slab – voided
T01	Truss – deck
T02	Truss – through
T03	Truss – pony
X01	Other – railroad flat car
X02	Other – ferry transfer
X03	Other – floating
X	Other

<i>Span Protective System</i>	
<u>Format</u> AN (3)	<u>Frequency</u> I
<u>Item ID</u> B.SP.07	<u>Item ID</u> B.SP.07
Specification	Commentary
<p>Report the span protective system using one of the following codes.</p> <p>Code Description</p> <p>0 None</p> <p>A01 Admixture – internally sealed A02 Admixture – low permeability A03 Admixture – polymer impregnated A04 Admixture – corrosion inhibitor A05 Admixture – ASR inhibitor AX Admixture – other</p> <p>C01 Coating – paint C02 Coating – sealer C03 Coating – methacrylate C04 Coating – hot dip galvanizing C05 Coating – metalizing/thermal spray CX Coating – other</p> <p>E01 Encasement – concrete EX Encasement – other</p> <p>M01 Membrane – built-up M02 Membrane – sheet M03 Membrane – liquid applied MU Membrane – unknown MX Membrane – other</p> <p>P01 Patina – uncoated weathering steel</p> <p>Codes continued next page.</p>	<p>Code this item consistent with the material reported for Item B.SP.04 (<i>Span Material</i>).</p> <p>In cases where the span configuration may have a combination of protective systems, use the code for the predominant protective system based on protected area. In cases where multiple systems protect the same area, use the code for the outermost protective layer.</p> <p>Use code 0 when the span is unprotected.</p> <p>Use code 0 when unprotected steels either never were coated or currently have no signs of coating systems and have no protective systems such as cathodic protection or weathering chemistry.</p> <p>Non-protective anti-graffiti and aesthetic coatings are not considered when coding this item.</p> <p>Use code C01 for weathering steel that has been painted.</p> <p>Use code C02 for sealers such as silanes, siloxanes, linseed oils, etc.</p> <p>Use code P01 only for weathering grades of steel.</p> <p>For timber, use code T01 for oil-based or water-borne timber preservatives. Use code C01 for paints and stains.</p> <p>Use the appropriate code for span members under fill that have a protective system.</p>

Specification Continued – Span Protective System	
Code	Description
S01	Sacrificial – cathodic, passive
S02	Sacrificial – cathodic, active
SX	Sacrificial – other
T01	Treated – timber preservative
U	Unknown
X	Other
Examples – Span Protective System	
<p>Low permeability concrete slab bridge with waterproofing sheet membrane. Report M02.</p> <p>Weathering steel multi-beam bridge that has the beam ends painted to protect from leakage through the joints. Report P01.</p>	

<i>Deck Interaction</i>		
<u>Format</u> AN (2)	<u>Frequency</u> I	<u>Item ID</u> B.SP.08
Specification		Commentary
<p>Report the type of interaction between the superstructure and deck for the span configuration using one of the following codes.</p> <p>Code Description</p> <p>CS Composite – shored construction</p> <p>CU Composite – unshored construction</p> <p>IM Integral or monolithic</p> <p>NC Non-composite</p> <p>Do not report this item when Item B.SP.09 (<i>Deck Material and Type</i>) is 0.</p>		<p>This item captures the type of structural interaction that occurs between the bridge deck and superstructure, which may indicate the importance of the deck to the overall stability and capacity of the bridge.</p> <p>Use code NC to indicate that the deck and the superstructure act independently.</p> <p>Use code CU to indicate that the deck acts composite with the superstructure, and that the superstructure can carry its own self-weight, plus that of the deck concrete prior to curing.</p>
Commentary Continued		
<p>Use code CS to indicate that the deck acts composite with the superstructure, but without the deck the superstructure requires shoring to carry its own self weight, the weight of the deck concrete prior to curing, or both.</p> <p>Use code IM to indicate that the deck was cast or fabricated of the same material and at the same time as the superstructure and the two can be expected to act as a unit. Use code IM for slabs and orthotropic steel decks.</p> <p>When the type of interaction is unknown, code this item consistent with the assumption used in the load rating calculations.</p>		
Examples		
<p>Steel rolled shape beams with cast-in-place deck. No shear connectors. Report NC.</p> <p>Precast concrete bulb-tee with cast-in-place deck. Shear connectors extend into the deck. Deck was cast without shoring. Report CU.</p> <p>Precast concrete double-tee beam bridge with an additional structural deck cast on top. Report CU.</p> <p>Steel plate girder with cast-in-place deck. Shear connectors extend into the deck. Girders were shored during deck construction to maintain stability. Report CS.</p> <p>Cast-in-place tee-beam bridge. Report IM.</p> <p>Adjacent box beam bridge. Traffic rides on the top flange of the box. Report IM.</p> <p>Steel box girder with orthotropic deck. Deck plate acts as top flange of the box section. Report IM.</p>		

<i>Deck Material and Type</i>	
<u>Format</u> AN (3)	<u>Frequency</u> I
<u>Item ID</u> B.SP.09	
Specification	Commentary
<p>Report the deck material and type for the span configuration using one of the following codes.</p> <p><u>Code</u> <u>Description</u></p> <p>0 None</p> <p>A01 Aluminum</p> <p>C01 Reinforced concrete – cast-in-place</p> <p>C02 Reinforced concrete – precast</p> <p>C03 Prestressed concrete – pre-tensioned</p> <p>C04 Prestressed concrete – cast-in-place post-tensioned</p> <p>C05 Prestressed concrete – precast post-tensioned</p> <p>CX Concrete – other</p> <p>F01 FRP composite – aramid fiber</p> <p>F02 FRP composite – carbon fiber</p> <p>F03 FRP composite – glass fiber</p> <p>FX FRP composite – other</p> <p>S01 Steel – open grid</p> <p>S02 Steel – filled or partially filled grid</p> <p>S03 Steel – plate</p> <p>S04 Steel – orthotropic</p> <p>S05 Steel – corrugated</p> <p>SX Steel – other</p> <p>T01 Timber – glue laminated</p> <p>T02 Timber – nail laminated</p> <p>T03 Timber – solid sawn</p> <p>T04 Timber – stress laminated</p> <p>TX Timber – other</p> <p>X Other</p>	<p>In cases where the superstructure configuration may have a combination of deck materials and/or types, code the predominant deck material and type based on the deck area.</p> <p>Use the applicable code for superstructure types with integral top flanges that serve as the deck, such as concrete tee-beams and box beams/girders.</p> <p>For slabs, and for the slab portion of three-sided and four-sided concrete rigid frame bridges and culverts not under fill, use the same applicable material code as used in Item B.SP.04 (<i>Span Material</i>).</p> <p>Use code 0 for the following bridge and culvert types when under fill, as these do not have a deck component: slabs, arches without spandrels, closed spandrel arches, pipes, and three-sided or four-sided rigid frames.</p> <p>Use code C02, C03, or C05, as applicable, for full depth precast panels only. Use code C01 or C04, as applicable, for cast-in-place concrete on partial depth structural panels that are not just considered stay-in-place forms.</p>

<i>Wearing Surface</i>		
<u>Format</u> AN (3)	<u>Frequency</u> I	<u>Item ID</u> B.SP.10
Specification		Commentary
<p>Report the predominant wearing surface material type protecting the deck or slab for the span configuration using one of the following codes.</p> <p><u>Code</u> <u>Description</u></p> <p>0 None</p> <p>B01 Bituminous (asphalt)</p> <p>C01 Concrete – monolithic</p> <p>C02 Concrete – unmodified</p> <p>C03 Concrete – latex modified</p> <p>C04 Concrete – low slump</p> <p>C05 Concrete – fiber reinforced</p> <p>C06 Concrete – microsilica</p> <p>C07 Concrete – polyester</p> <p>CX Concrete – other</p> <p>CU Concrete – unknown</p> <p>E01 Earth – gravel or soil</p> <p>P01 Polymer – epoxy</p> <p>P02 Polymer – polyester</p> <p>PX Polymer – other</p> <p>S01 Steel</p> <p>T01 Timber – running planks</p> <p>X Other</p> <p>Do not report this item when Item B.SP.09 (<i>Deck Material and Type</i>) is 0.</p>		<p>When a span configuration has a combination of wearing surface types, code the predominant wearing surface type based on the deck or slab area.</p> <p>Do not consider patching materials when coding this item.</p> <p>Use code 0 when no additional sacrificial concrete thickness or wearing surface is included on the deck or slab.</p> <p>Use codes C01 through CU for overlays that contain portland cement.</p> <p>Use code C01 when there is an additional sacrificial thickness cast concurrently with the structural deck or slab.</p> <p>Use code C02 when an additional placement of concrete of the same concrete material as the deck or slab is placed after the deck or slab has cured.</p> <p>Use code CU when a concrete wearing surface exists, but the specific material composition is unknown.</p> <p>Use code S01 when a steel grid deck is fabricated with an additional sacrificial thickness. Code S01 is not intended for temporary steel plates.</p> <p>Use code T01 where running planks are added on timber decks or slabs.</p>
Examples		
<p>Bridge with 2" asphalt wearing surface over a sheet waterproofing membrane. Report B01.</p> <p>Bridge with latex modified concrete overlay topped with an epoxy polymer overlay. Report P01.</p>		

<i>Deck Protective System</i>	
<u>Format</u> AN (3)	<u>Frequency</u> I
<u>Item ID</u> B.SP.11	
Specification	Commentary
<p>Report the deck protective system for the span configuration using one of the following codes.</p> <p><u>Code</u> <u>Description</u></p> <p>0 None</p> <p>A01 Admixture – internally sealed A02 Admixture – low permeability A03 Admixture – polymer impregnated A04 Admixture – corrosion inhibitor A05 Admixture – ASR inhibitor AX Admixture – other</p> <p>C01 Coating – paint C02 Coating – sealer C03 Coating – methacrylate C04 Coating – hot dip galvaning C05 Coating – metalizing/thermal spay CX Coating – other</p> <p>M01 Membrane – built up M02 Membrane – sheet M03 Membrane – liquid applied MU Membrane – unknown MX Membrane – other</p> <p>P01 Patina – weathering steel</p> <p>T01 Treated – timber preservative</p> <p>U Unknown</p> <p>X Other</p> <p>Do not report this item when Item B.SP.09 (<i>Deck Material and Type</i>) is 0.</p>	<p>Code this item consistent with the predominant material reported in Item B.SP.09 (<i>Deck Material and Type</i>).</p> <p>In cases where the deck may have a combination of protective systems, use the code for the predominant protective system based on protected area. In cases where multiple systems protect the same area, use the code for the outermost protective layer.</p> <p>Use code 0 when the deck is unprotected</p> <p>Use code A01 for internally sealed concrete systems that use wax beads in the concrete. After the concrete cures, it is heated to melt the wax and seal the concrete.</p> <p>Use code A02 when low permeability concrete is used with admixtures such as flyash, microsilica, or slag.</p> <p>Use code A05 when admixtures are used to inhibit alkali-silica reactivity (ASR).</p> <p>Use code C02 for sealer such as silanes, siloxanes, linseed oils, etc.</p> <p>Do not use codes C02 and C03 when the material is applied for localized crack repair.</p> <p>Use code M01 when the membrane is built up using combined layers of liquid and preformed/sheet membranes.</p> <p>Use code MU when a membrane exists, but the type is unknown.</p> <p>Use code MX when a membrane type is known, but does not match the types specified for codes M01, M02, or M03.</p>

Examples – Deck Protective System

Bridge with 2" asphalt wearing surface over a sheet waterproofing membrane. Report M02.

Bridge deck constructed with polymer impregnated concrete and sealed with a flood coat of methacrylate. Report C03.

<i>Deck Reinforcing Protective System</i>	
<u>Format</u> AN (3)	<u>Frequency</u> I
<u>Item ID</u> B.SP.12	
Specification	Commentary
<p>Report the type of deck reinforcing protective system for the span configuration using one of the following codes for concrete decks and slabs.</p> <p><u>Code</u> <u>Description</u></p> <p>0 None</p> <p>C01 Coating – epoxy coated C02 Coating – galvanized C03 Coating – metalized CX Coating – other</p> <p>R01 Reinforcing – stainless, clad R02 Reinforcing – stainless, solid R03 Reinforcing – high chromium R04 Reinforcing – FRP, aramid fiber R05 Reinforcing – FRP, carbon fiber R06 Reinforcing – FRP, glass fiber R07 Reinforcing – FRP, other RX Reinforcing – other</p> <p>S01 Sacrificial – cathodic, passive S02 Sacrificial – cathodic, active SX Sacrificial – other</p> <p>U Unknown</p> <p>X Other</p> <p>Report this item only if Item B.SP.09 (<i>Deck Material and Type</i>) is concrete (i.e. codes C01 to CX).</p>	<p>In cases where the span(s) may have a combination of protective systems, use the code for the predominant protective system based on protected area. In cases where multiple systems protect the same area, use the code for the outermost protective layer. If the top and bottom mat have different protective systems, report the protective system for the top mat.</p> <p>Do not consider bar chairs or other reinforcing steel supports when coding this item.</p> <p>Use code 0 when steel reinforcement is unprotected, such as with black steel.</p> <p>Use codes C01 to CX and R01 to RX when any (e.g., top mat only) or all the reinforcing steel in the deck is protected by the selected steel type.</p> <p>Use code S02 when impressed currents are used as the cathodic protection system.</p>

Example – Deck Reinforcing Protective System

Bridge deck constructed with black reinforcing bars, later widened with a top mat of epoxy coated bars and bottom mat of black bars. This bridge has two span data sets.

- Report 0 for the original deck data set.
- Report C01 for the widened deck data set.

<i>Deck Stay-In-Place Forms</i>		
<u>Format</u> AN (3)	<u>Frequency</u> I	<u>Item ID</u> B.SP.13
Specification	Commentary	
<p>Report the type of deck stay-in-place form for the span configuration using one of the following codes.</p> <p>Code Description</p> <p>0 None C01 Concrete – reinforced C02 Concrete – prestressed F01 FRP composite M01 Metal T01 Timber X Other</p> <p>Do not report this item when Item B.SP.09 (<i>Deck Material and Type</i>) is 0.</p>	<p>Use this item to identify forms used in construction that remain in place by design or owner preference.</p> <p>When a span configuration has a combination of stay-in-place form types, code the predominant type based on the deck area.</p> <p>Use code C01 when a precast reinforced concrete panel (partial depth) is used with a cast-in-place reinforced concrete placement on top.</p> <p>Use code C02 when a precast prestressed concrete panel (partial depth) is used with a cast-in-place reinforced concrete placement on top.</p> <p>This item is not intended to be used for materials installed only for debris shielding, or when Item B.SP.09 (<i>Deck Material and Type</i>) is S05 (Steel – corrugated).</p>	
Examples		
<p>Bridge constructed using 3" thick prestressed concrete form panels. Completed deck is 8" thick. Report C02.</p> <p>Bridge with reinforced concrete deck placed originally with removable forms, subsequently widened with reinforced concrete deck placed on metal stay-in-place forms. This bridge has two span data sets.</p> <ul style="list-style-type: none"> • Report 0 for the original data set. • Report M01 for the widened data set. 		

<i>Total Deck Thickness</i>		
<u>Format</u> N (3,1)	<u>Frequency</u> I	<u>Item ID</u> B.SP.IL.01
Specification		Commentary
<p>This item describes the total thickness of the structure's deck and includes the structural deck and the wearing surface above the top of deck support.</p> <p>The total deck thickness can be determined by comparing the vertical positions of the top and bottom of the deck relative to a common reference point.</p> <p>This measurement must be taken at the same location on the deck as the measurement for Item</p> <p>B.SP.IL.07 – Deck Structure Thickness is taken. General guidelines for measurement location on various structure types are as follows:</p> <p><u>Concrete Slab Bridge</u> - Measure along the edge of the deck or, when a curb is present, along the curblines. When the slab is haunched, its thickness should be taken at the midpoint of the longest span.</p> <p><u>Deck Supported by Stringers or Girders</u> - Measure inside the flange of the fascia beam or, when a curb exists and is inside the fascia beam, along the curblines.</p> <p><u>Culvert</u> – B.SP.IL.01 will automatically be set to null when B.C.01 (<i>Span Configuration Designation</i>) is C## (Culvert) or V## (Culvert extension).</p> <p>If the value of this item has increased since the last inspection and the structure has not been rated for load carrying capacity since that inspection, contact the Bureau of Bridges & Structures.</p> <p>History is retained for each Inspection Date (B.IE.03) entered.</p>		

Examples		
<u>Deck Type</u>	<u>Deck Thickness</u>	<u>Entry</u>
7" Concrete Slab w/No Overlay	7"	07.0
6" Concrete Slab w/2.25" Overlay	8.25"	08.3
27" x 36" PPC Deck Beam w/3.5" Overlay	30.5"	30.5
18" x 3'9" Precast Channel Beams w/5" Slab & 2" Overlay	7"	07.0
Timber Plank (3.5" x 10") w/2.5" Thick Runners	6"	06.0

<i>Deck Structure Thickness</i>		
<u>Format</u> N (3,1)	<u>Frequency</u> I	<u>Item ID</u> B.SP.IL.02
Specification	Commentary	
<p>This item indicates, in inches, the thickness of the predominant Deck Structure Type (B.SP.09) on the structure.</p> <p>This item reports the structural portion of the deck thickness as originally built and does not include built up wearing surface thickness. Deck Structure Thickness is most easily obtained from construction plans but should also be measurable in the field.</p> <p>Measurements for Deck Structure Thickness (B.SP.IL.07) and Total Deck Thickness (B.SP.IL.04) must be obtained from the same location on the structure.</p>	<p>Leave blank when Deck Structure Type (B.SP.09) is coded "N".</p>	
Examples		
Deck Type	Deck Thickness	Entry
Cast-in-Place Slab	7"	07.0
Cast-in-Place Slab	12.25"	12.3
27" x 36' PPC Deck Beam	27"	27.0
18" x 3'9" Precast Channel Beams with 5" Slab & 2" Overlay	5"	05.0
Timber Plank (3.5" x 10") with 2.5" Thick Runners	3.5"	03.5

SUBSECTION 2.2: SUBSTRUCTURE MATERIAL AND TYPE

The data items in this subsection identify the substructure and foundation material(s) and type(s) for the bridge and are considered part of the Substructure Data Set. These data items have a many-to-one relationship with a bridge when applicable.

Data items for this subsection are reported for each substructure configuration present in the bridge. A substructure configuration characterizes all substructure units that have the same material, type, and foundation type. One or more substructure sets are reported for a bridge when applicable. Substructures of similar configuration do not need to be adjacent to be reported in the same data set.

These data items are not reported when Item B.SP.06 (*Span Type*) is a pipe (i.e. code P01 or P02). Deck and superstructure are not otherwise considered in the determination of a substructure set.

The data for items in this subsection typically remain static once a bridge has been inventoried. The following data items are included in this subsection.

Item ID Data Item

B.SB.01	Substructure Configuration Designation
B.SB.02	Number of Substructure Units
B.SB.03	Substructure Material
B.SB.04	Substructure Type
B.SB.05	Substructure Protective System
B.SB.06	Foundation Type
B.SB.07	Foundation Protective System

<i>Substructure Configuration Designation</i>										
<u>Format</u> AN (3)	<u>Frequency</u> I	<u>Item ID</u> B.SB.01								
Specification		Commentary								
<p>Report the substructure set designation using one of the following codes.</p> <table border="0"> <tr> <td><u>Code</u></td> <td><u>Description</u></td> </tr> <tr> <td>A##</td> <td>Abutment</td> </tr> <tr> <td>P##</td> <td>Pier or Bent</td> </tr> <tr> <td>W##</td> <td>Widening</td> </tr> </table> <p>Replace the ## characters in the above codes with sequential numbers, with leading zeros, assigned to each substructure configuration.</p> <p>Do not report this item when B.SP.06 (<i>Span Type</i>) is a pipe (i.e. code P01 or P02).</p>		<u>Code</u>	<u>Description</u>	A##	Abutment	P##	Pier or Bent	W##	Widening	<p>This item captures how the reported substructure configuration is designated.</p> <p>The substructure is the portion of a bridge below the bearings or below the springline of an arch, which transfers loads to the foundation. This includes the walls and footings, caps, or floor slabs of three- sided and four-sided rigid frame bridges and culverts.</p> <p>Replacing the "##" characters in the codes with a sequential number (e.g., A01, A02, P01, etc.) identifies each unique substructure configuration present on the bridge.</p>
<u>Code</u>	<u>Description</u>									
A##	Abutment									
P##	Pier or Bent									
W##	Widening									
Commentary Continued										
<p>An abutment is a substructure unit located at the end of a bridge that transfers loads from the superstructure to the foundation while providing lateral support for the approach roadway embankment. Typically, a bridge has two abutments, but there may be cases (such as bifurcated structures assigned two bridge numbers) where one end of the bridge does not mate up with the approach roadway.</p> <p>A multiple span bridge with cantilevered end spans that are unsupported at the extreme ends does not have abutments.</p> <p>Piers and bents are substructure units that support the spans of a multi-span superstructure at intermediate location(s) between abutments.</p> <p>Use code W for widened portions of abutments or piers/bents with dissimilar substructure construction.</p>										
Examples										
<p>Single-span concrete rigid frame bridge. This bridge has one designated substructure data set. Report A01.</p> <p>Two-span concrete, three-sided, rigid frame culvert. This bridge has two designated substructure data sets.</p> <ul style="list-style-type: none"> • Report A01 for the end support frame legs data set. • Report P01 for the intermediate support frame leg data set. <p>Four-span multi-beam bridge with integral concrete abutments and concrete column piers. This bridge has two designated substructure data sets.</p> <ul style="list-style-type: none"> • Report A01 for the abutment data set. • Report P01 for the pier data set. 										

Examples Continued – Substructure Configuration Designation

Three-span bridge with intermediate concrete pier walls and cantilevered end spans that are unsupported at the extreme ends. This bridge has one designated substructure data set. Report P01.

Three-span suspension bridge with concrete tower piers, concrete pier walls supporting the ends of the suspension spans, eight timber bents supporting the approach spans, and concrete stub abutments at each end of the bridge. The north abutment has a spread footing on rock foundation and the south abutment has a steel H-pile foundation. This bridge has five designated substructure data sets.

- Report A01 for the north abutment data set.
- Report A02 for the south abutment data set.
- Report P01 for the towers data set.
- Report P02 for the concrete pier walls data set.
- Report P03 for the timber bents data set.

Five-span girder bridge with concrete stub abutments and concrete wall piers. Bridge is widened with concrete stub abutments and concrete column piers. This bridge has three designated substructure data sets.

- Report A01 for the stub abutments (including the widening) data set.
- Report P01 for the concrete wall piers data set.
- Report W01 for the concrete columns data set.

<i>Number of Substructure Units</i>		
<u>Format</u> N (3,0)	<u>Frequency</u> I	<u>Item ID</u> B.SB.02
Specification		Commentary
Report the number of substructure units.		This item captures the number of substructure units of similar material, design, and foundation type that are being reported.
Examples		
<p>Four-span multi-beam bridge with integral concrete abutments and concrete column piers. This bridge has two substructure data sets.</p> <ul style="list-style-type: none"> • Report 2 for the abutment data set. • Report 3 for the pier data set. <p>Three-span bridge with intermediate concrete pier walls and cantilevered end spans that are unsupported at the extreme ends. This bridge has one substructure data set. Report 2.</p> <p>Three-span suspension bridge with concrete tower piers, concrete pier walls supporting the ends of the suspension spans, eight timber bents supporting the approach spans, and concrete stub abutments at each end of the bridge. The north abutment has a spread footing on rock foundation and the south abutment has a steel H-pile foundation. This bridge has five substructure data sets.</p> <ul style="list-style-type: none"> • Report 1 for the north abutment data set. • Report 1 for the south abutment data set. • Report 2 for the towers data set. • Report 2 for the concrete pier walls data set. • Report 8 for the timber bents data set. <p>Five-span girder bridge with concrete stub abutments and concrete wall piers. Bridge is widened with concrete stub abutments and concrete column piers. This bridge has three substructure data sets.</p> <ul style="list-style-type: none"> • Report 2 for the stub abutments (including the widening) data set. • Report 4 for the concrete wall piers data set. • Report 4 for the concrete columns data set. 		

<i>Substructure Material</i>	
<u>Format</u> AN (3)	<u>Frequency</u> I
<u>Item ID</u> B.SB.03	
Specification	Commentary
<p>Report the principal substructure material type using one of the following codes.</p> <p>Do not report this item when B.SP.06 (<i>Span Type</i>) is a pipe (i.e. code P01 or P02).</p> <p><u>Code</u> <u>Description</u></p> <p>0 None</p> <p>A01 Aluminum</p> <p>C01 Reinforced concrete – cast-in-place</p> <p>C02 Reinforced concrete – precast</p> <p>C03 Prestressed concrete – pre-tensioned</p> <p>C04 Prestressed concrete – cast-in-place post-tensioned</p> <p>C05 Prestressed concrete – precast post-tensioned</p> <p>CX Concrete – other</p> <p>E01 Earth – reinforced soil mass</p> <p>F01 FRP composite – aramid fiber</p> <p>F02 FRP composite – carbon fiber</p> <p>F03 FRP composite – glass fiber</p> <p>FX FRP composite – other</p> <p>I01 Iron – cast</p> <p>I02 Iron – wrought</p> <p>M01 Masonry – block</p> <p>M02 Masonry – stone</p> <p>P01 Plastic – Polyethylene</p> <p>PX Plastic – other</p> <p>Codes continued next page.</p>	<p>This item reflects the material which provides the support for the transfer of the superstructure load to the foundation. In cases where the substructure unit(s) may have a combination of materials, use the code for the predominant material that transfers load to the foundation.</p> <p>Use code 0 when the superstructure rests directly on the foundation (i.e. on unreinforced soil or bedding material, reinforced soil or bedding material, or rock).</p> <p>Use code C04 or C05, as applicable, for prestressed concrete substructure unit(s) that utilize both pre-tensioning and post-tensioning.</p> <p>Use code E01 when the superstructure rests directly on the reinforced soil mass. Code E01 is not intended to be used for MSE walls when the superstructure does not rest directly on the reinforced soil mass.</p> <p>Use code M01 for masonry made from bricks or concrete blocks. Use code M02 for natural stone.</p> <p>Use code S06 for filled or unfilled steel pipe piles.</p> <p>Use code C01 for cased and uncased cast-in-place concrete piles, and for driven corrugated, fluted, or spiral-welded shell-cased concrete piles.</p>

Specification Continued – Substructure Material	
Code	Description
S01	Steel – rolled shapes
S02	Steel – welded shapes
S03	Steel – bolted shapes
S04	Steel – riveted shapes
S05	Steel – bolted and riveted shapes
S06	Steel – pipe
SX	Steel – other
T01	Timber – glue laminated
T02	Timber – nail laminated
T03	Timber – solid sawn
T04	Timber – stress laminated
TX	Timber – other
X	Other
Examples – Substructure Material	
<p>Closed spandrel arch founded on cast-in-place concrete spread footings on rock. Report C01.</p> <p>Reinforced concrete full height cantilever abutment. Report C01.</p> <p>Pile bent abutment with timber piles, timber lagging, and concrete cap. Report C01.</p> <p>Pile bent abutment with steel H-piles, timber lagging, and rolled steel cap. Report S01.</p> <p>Reinforced concrete stub abutment on steel piles with a MSE wall. Report C01.</p> <p>GRS abutment with precast, prestressed concrete box beams placed directly on the reinforced soil mass. Report E01.</p>	

<i>Substructure Type</i>	
<u>Format</u> AN (3)	<u>Frequency</u> I
<u>Item ID</u> B.SB.04	
Specification	Commentary
<p>Report the abutment, pier, or bent design type using one of the following codes.</p> <p>Do not report this item when B.SP.06 (<i>Span Type</i>) is a pipe (i.e. code P01 or P02).</p> <p>Code Description</p> <p>0 None</p> <p>A01 Abutment – cantilever/wall A02 Abutment – stub A03 Abutment – open/spill through A04 Abutment – integral A05 Abutment – semi-integral A06 Abutment – gravity A07 Abutment – counterfort or buttressed A08 Abutment – pile bent with lagging A09 Abutment – crib A10 Abutment – cellular/vaulted A11 Abutment – reinforced soil mass A12 Abutment – footing or cap only AX Abutment – other</p> <p>B01 Bent – column or open B02 Bent – column with web wall B03 Bent – pile B04 Bent – straddle or c-shaped BX Bent – other</p> <p>P01 Pier – wall P02 Pier – single column P03 Pier – multiple column P04 Pier – multiple column with web wall P05 Pier – straddle or c-shaped P06 Pier – movable bridge P07 Pier – tower P08 Pier – footing or cap only PX Pier – other</p> <p>Specification continued next page.</p>	<p>In cases where the substructure may have a combination of designs due to retrofitting actions, use the code for the predominant design.</p> <p>Both piers and bents provide the same function; however, a pier has only one footing at each substructure unit (the footing may serve as a pile cap) while a bent has several footings or no footing, as is the case with a pile bent.</p> <p>Use code 0 when the superstructure rests directly on the foundation (i.e. on unreinforced soil or bedding material, reinforced soil or bedding material, or rock).</p> <p>Use codes A01 to A10, as appropriate, if the superstructure load is supported by a substructure unit, which is in turn supported by piles or the reinforced soil mass. Use code A11 when the superstructure rests directly on the reinforced soil mass.</p> <p>Use code A02 for partial height abutments that do not extend to near the bottom of the embankment fill. Use code A02 for abutments that are larger height than a pile cap or have features such as a backwall that exceed the purpose of a pile cap.</p> <p>Use code A10 when the space between wingwalls, abutment stem, approach slab, and footings is hollow.</p> <p>Use code A12 or P08 when the superstructure rests only on a footing, grade beam, thrust block, or pile or shaft cap with embedded piles or shafts that are not part of a bent.</p> <p>Use code B04 when a highway or railroad passes directly beneath or through the bent.</p> <p>Commentary continued next page.</p>

Specification Continued – Substructure Type		Commentary Continued – Substructure Type
Code	Description	
U	Unknown	Use code P06 for piers that support movable bridges and the equipment needed to open and close the bridge.
X	Other	Use code P07 for towers of complex bridges such as cable-stayed and suspension bridges.
Examples – Substructure Type		
<p>Reinforced concrete full-height cantilever abutment. Report A01.</p> <p>Reinforced concrete stub abutment on steel piles with a MSE wall. Report A02.</p> <p>Pile bent type abutment with painted steel piles, timber lagging, and steel cap. Report A08.</p> <p>Single-span closed spandrel arch that bears directly on a thrust block founded on rock. Report A12.</p> <p>Single-span timber beams resting on concrete grade beam. Report A12.</p> <p>Single-span railroad flat car with ends resting on unreinforced soil. Report 0.</p> <p>Intermediate bent supported on concrete-filled steel pipe piles connected with a concrete cap beam. Report B03.</p> <p>Reinforced concrete pier wall widened with a single reinforced concrete column. This bridge has two substructure data sets.</p> <ul style="list-style-type: none"> • Report P01 for the pier data set. • Report P02 for the widening data set. <p>Reinforced concrete pier with three concrete columns on concrete footing/pile cap. Report P03.</p>		

<i>Substructure Protective System</i>	
<u>Format</u> AN (3)	<u>Frequency</u> I
<u>Item ID</u> B.SB.05	
Specification	Commentary
<p>Report the substructure protective system using one of the following codes.</p> <p>Do not report this item when Item B.SB.04 (<i>Substructure Type</i>) is 0.</p> <p>Do not report this item when B.SP.06 (<i>Span Type</i>) is a pipe (i.e. code P01 or P02).</p> <p><u>Code</u> <u>Description</u></p> <p>0 None</p> <p>A01 Admixture – internally sealed A02 Admixture – low permeability A03 Admixture – polymer impregnated A04 Admixture – corrosion inhibitor A05 Admixture – ASR inhibitor AX Admixture – other</p> <p>C01 Coating – paint C02 Coating – sealer C03 Coating – methacrylate C04 Coating – hot dip galvanizing C05 Coating – metalizing/thermal spray CX Coating – other</p> <p>E01 Encasement – concrete EX Encasement – other P01 Patina – uncoating weathering steel</p> <p>S01 Sacrificial – cathodic, passive S02 Sacrificial – cathodic, active SX Sacrificial – other</p> <p>T01 Treated – timber preservative</p> <p>U Unknown</p> <p>X Other</p>	<p>Code this item consistent with the predominant material reported in Item B.SB.03 (<i>Substructure Material</i>).</p> <p>In cases where the substructure may have a combination of protective systems, use the code for the predominant protective system based on protected area. In cases where multiple systems protect the same area, use the code for the outermost protective layer.</p> <p>Use code 0 when the substructure is unprotected.</p> <p>Use code 0 when unprotected steels either never were coated or currently have no signs of coating systems and have no protective systems, such as, cathodic protection or weathering chemistry.</p> <p>Anti-graffiti coatings are not considered when coding this item.</p> <p>Use code C01 for weathering steel that has been painted.</p> <p>Use code C02 for sealers such as silanes, siloxanes, linseed oils, etc.</p> <p>Use code E01 for steel piles of pile bents that are encased in concrete.</p> <p>Use code P01 only for weathering grades of steel.</p> <p>For timber, use code T01 for oil-based or water-borne timber preservatives. Use code C01 for paints and stains.</p>

Examples – Substructure Protective System

Painted weathering steel pier cap. Report C01.

Pile bent with preservative treated timber piles and concrete cap sealed with siloxane. Report C02.

Pile bent type abutment with painted steel H-pile foundation, timber lagging, and reinforced concrete cap with active cathodic protection. Report S02.

<i>Foundation Type</i>		
<u>Format</u> AN (3)	<u>Frequency</u> I	<u>Item ID</u> B.SB.06
Specification		Commentary
<p>Report the foundation type using one of the following codes.</p> <p>Do not report this item when B.SP.06 (<i>Span Type</i>) is a pipe (i.e. code P01 or P02).</p> <p><u>Code</u> <u>Description</u></p> <p>E01 Earth – reinforced soil E02 Earth – unreinforced soil E03 Rock</p> <p>F01 Footing – not on rock F02 Footing – on rock F03 Footing – on reinforced soil</p> <p>P01 Pile – steel H-shape P02 Pile – steel pipe P03 Pile – concrete, cast-in-place P04 Pile – prestressed concrete P05 Pile – timber P06 Pile – auger cast P07 Pile – micropile P08 Pile – composite P09 Pile – FRP composite PX Pile – other</p> <p>S01 Drilled shaft – single S02 Drilled shafts – multiple S03 Caisson</p> <p>U Unknown</p> <p>X Other</p>		<p>In cases where the substructure has a combination of foundations due to retrofitting actions, use the code for the predominant foundation.</p> <p>Do not consider localized repairs to original foundation types when reporting this item.</p> <p>Use code E01 when the superstructure bears directly on reinforced soil, reinforced bedding material, or the reinforced soil mass. Use code E02 when the superstructure bears directly on unreinforced soil or unreinforced bedding material. Use code E03 when the superstructure bears entirely on rock.</p> <p>Use codes F01 to F03 for footings or when the substructure bears directly on ground at grade or below grade, e.g. grade beams, floor slabs, gravity walls, crib walls, etc.</p> <p>Use code F02 only if the design plans, or subsequent subsurface investigation, indicate that the entire foundation is supported by rock.</p> <p>Use code F03 if the superstructure load is supported by a substructure unit, which is in turn supported by the reinforced soil mass.</p> <p>Use code P02 for filled or unfilled steel pipe piles.</p> <p>Use code P03 for cased and uncased cast-in-place concrete piles, and for driven corrugated, fluted, or spiral-welded shell-cased concrete piles.</p> <p>Use code P04 for solid or hollow-core square, octagonal, or cylindrical piles.</p> <p>Use code P06 for piles that have concrete or grout placed by pumping through the stem of the auger pipe as the auger is withdrawn.</p>

Commentary Continued – Foundation Type
<p>Use code P07 for small diameter piles, typically less than 12 inches, that are drilled, then grouted.</p> <p>Use code P08 for piles in which the length is composed of two or more pile types or materials, excluding pile tips.</p> <p>Use code P09 when FRP composite piles are used for construction but not as repairs to existing piles of a different type.</p> <p>Use codes S01 and S02 for cased or uncased drilled shafts.</p> <p>Use code S03 for footings sunk into position by excavation through or beneath the caisson structure.</p>
Examples – Foundation Type
<p>Three-sided concrete frame culvert with a spread footing keyed into bedrock, modified by adding a four-sided box culvert placed on crushed stone bedding to the end of the barrel to widen the culvert. This culvert has two substructure data sets.</p> <ul style="list-style-type: none"> • Report F02 for the three-sided concrete frame culvert data set. • Report F01 for the four-sided box culvert data set. <p>Three-sided concrete frame culvert with steel H-pile foundation, modified by adding a four-sided box culvert with steel H-pile foundation to the end of the barrel to widen the culvert. This culvert has two substructure data sets.</p> <ul style="list-style-type: none"> • Report P01 for the three-sided concrete frame culvert data set (B.SB.01=A01). • Report P01 for the four-sided box culvert data set (B.SB.01=W01). <p>Closed spandrel arch founded on spread footings on bedrock. Report F02.</p> <p>Pile bent abutment with steel H-piles, timber lagging, and rolled steel cap. Report P01.</p> <p>Reinforced concrete stub abutment on steel H-piles with an MSE wall. Report P01.</p> <p>Precast, reinforced concrete arch structure constructed on cast-in-place concrete footing with steel H-pile foundation. Report P01.</p> <p>Pile bent abutment with timber piles, timber lagging, and concrete cap. Report P05.</p> <p>GRS abutment with precast, prestressed concrete box beams placed directly on the reinforced soil mass. Report E01.</p> <p>Four corrugated steel circular pipes placed on crushed stone bedding. Do not report this item.</p>

<i>Foundation Protective System</i>	
<u>Format</u> AN (3)	<u>Frequency</u> I
<u>Item ID</u> B.SB.07	
Specification	Commentary
<p>Report the foundation protective system using one of the following codes.</p> <p>Do not report this item when B.SP.06 (<i>Span Type</i>) is a pipe (i.e. code P01 or P02).</p> <p>Code Description</p> <p>0 None</p> <p>A01 Admixture – internally sealed A02 Admixture – low permeability A03 Admixture – polymer impregnated A04 Admixture – corrosion inhibitor A05 Admixture – ASR inhibitor AX Admixture – other</p> <p>C01 Coating – paint C02 Coating – sealer C03 Coating – methacrylate C04 Coating – hot dip galvanizing C05 Coating – metalizing/thermal spray CX Coating – other</p> <p>E01 Encasement – concrete EX Encasement – other</p> <p>P01 Patina – uncoated weathering steel</p> <p>S01 Sacrificial – cathodic, passive S02 Sacrificial – cathodic, active SX Sacrificial – other T01 Treated – timber preservative</p> <p>U Unknown</p> <p>X Other</p>	<p>Code this item consistent with the predominant material reported in Item B.SB.06 (<i>Foundation Type</i>).</p> <p>In cases where the foundation may have a combination of protective systems, use the code for the predominant protective system based on protected area. In cases where multiple systems protect the same area, use the code for the outermost protective layer.</p> <p>Use code 0 when the foundation is unprotected.</p> <p>Use code 0 when unprotected steels either never were coated or currently have no signs of coating systems and have no protective systems, such as cathodic protection or weathering chemistry.</p> <p>Anti-graffiti coatings are not considered when coding this item.</p> <p>Use code C02 for sealers such as silanes, siloxanes, linseed oils, etc.</p> <p>Use code E01 for steel piles of pile bents that are encased in concrete.</p> <p>Use code P01 only for weathering grades of steel.</p> <p>For timber, use code T01 for oil-based or water-borne timber preservatives. Use code C01 for paints and stains.</p>

Examples – Foundation Protective System

Closed spandrel arch founded on spread footings on bedrock. Report 0.

Pile bent abutment with timber piles treated with creosote, timber lagging, and concrete cap. Report T01.

Pile bent with painted steel H-piles and rolled steel cap. Report C01.

GRS abutment with precast, prestressed concrete box beams placed directly on the reinforced soil mass. Report 0.

Three-sided concrete frame culvert with a spread footing keyed into bedrock, modified by adding a four-sided box culvert placed on crushed stone bedding to the end of the barrel to widen the bridge. The four-sided box was constructed with high performance concrete that provides for low permeability.

- Report 0 for the three-sided concrete frame culvert data set.
- Report A02 for the four-sided box culvert data set.

Precast, reinforced concrete arch bridge constructed on cast-in-place concrete footing with unpainted steel H-pile foundation. Report 0.

SUBSECTION 2.3: ROADSIDE HARDWARE

The data items in this subsection identify crash tested roadside hardware on the bridge. These data items are considered part of the Primary Data Set and have a one-to-one relationship with a bridge.

The data for these items typically remain static once a bridge has been inventoried. The following data items are included in this subsection.

Item ID Data Item

B.RH.01 [Bridge Railings](#)

B.RH.02 [Transitions](#)

Roadside hardware is commonly associated with bridges and serves as a traffic safety feature to redirect errant vehicles and reduce crash severity. The items in this subsection are inventoried to indicate if hardware at the bridge is required, present, or has been crash tested. Do not consider the condition of the hardware when reporting these items.

Table 6 contains the applicable crash testing codes used for all the roadside hardware items in this subsection. The applicable code may be based on an approved analytical equivalency evaluation.

Refer to the FHWA Office of Highway Safety website for policy and guidance on roadside hardware (<https://highways.dot.gov/safety/rwd/reduce-crash-severity>). Also, refer to the Task Force 13 – Hardware Guide website for roadside hardware, systems specifications, and individual component details.

The AASHTO LRFD Bridge Design Specifications are currently used to design bridge railings. The AASHTO Manual for Assessing Safety Hardware (MASH), which replaces NCHRP Report 350, is currently used for testing and evaluating the safety performance of roadside hardware.

The AASHTO Roadside Design Guide addresses appropriate bridge railings, roadside barriers, barrier end treatments, and crash cushions.

Table 6. Roadside Hardware codes.

Code	Test Level Code						Description
	1	2	3	4	5	6	
N							Not applicable – roadside hardware is not required.
	MY1	MY2	MY3	MY4	MY5	MY6	Roadside hardware successfully crash-tested for AASHTO MASH.
	3501	3502	3503	3504	3505	3506	Roadside hardware successfully crash-tested for NCHRP Report 350.
	2301	2302	2303				Roadside hardware successfully crash-tested for NCHRP Report 230.
	2391	2392	2393				Roadside hardware successfully crash-tested for NCHRP Report 239.
	891	892	893				Roadside hardware successfully crash-tested for 1989 AASHTO Guide Specifications for Bridge Railings.
X							Roadside hardware successfully crash-tested for other criteria.
AYY							Roadside hardware has not been crash-tested but meets AASHTO Standard Specifications for Highway Bridges.
SY							Roadside hardware has not been crash-tested but meets approved agency standards.
I							Roadside hardware has not been crash-tested and does not meet approved agency standards.
0 (zero)							None - roadside hardware is required, but required roadside hardware is not present.

Note that YY, for codes in *Table 6*, represents the last two digits of the year for the crash testing publication, AASHTO Specifications, or agency approved standards.

Bridge Railings		
<u>Format</u> AN (4)	<u>Frequency</u> I	<u>Item ID</u> B.RH.01
Specification	Commentary	
<p>Report the crash-test level for the bridge railings using one of the codes in <i>Table 6</i>.</p>	<p>This roadside hardware includes all types and shapes of bridge railings (parapets, median barriers, or structure mounted) located on the bridge or that cross over culverts.</p> <p>Use the code that first applies going from the bottom (Code 0) of <i>Table 6</i> to the top (MYY), if there are more than one type of bridge railing on the bridge.</p>	
Commentary Continued		
<p>A list of crash-tested bridge railings may be obtained from the FHWA Office of Highway Safety website at: http://safety.fhwa.dot.gov/roadway_dept/policy_guide/road_hardware/.</p> <p>Prior to 1993, bridge railings were tested according to the AASHTO Guide Specifications for Bridge Railings, NCHRP Report 230, or NCHRP Report 239.</p> <p>Since 1993, bridge railings were crash-tested and classified according to the guidelines shown in NCHRP Report 350.</p> <p>In 2009 the AASHTO Manual for Assessing Safety Hardware (MASH) replaced NCHRP 350.</p> <p>Refer to State, Federal agency, or Tribal government policies for bridge railing standards.</p> <p>Use code I when no information is known about the crash test level or an agency approved standard. Also, use code I when an overlay is applied to the deck/slab and the height no longer meets the original geometry requirements of the crash-tested rail.</p> <p>Refer to the IDOT Bridge Data Guidance for common railing types and their corresponding codes.</p>		

<i>Transitions</i>		
<u>Format</u> AN (4)	<u>Frequency</u> I	<u>Item ID</u> B.RH.02
Specification	Commentary	
<p>Report the crash-test level for transition railings using one of the codes in <i>Table 6</i>.</p>	<p>This roadside hardware serves as the transition from the roadside approach railing to the bridge railing and is firmly attached and anchored to the bridge railing to provide sufficient tension in the transition rail upon impact.</p> <p>Use the code that first applies going from the bottom (Code 0) of <i>Table 6</i> to the top (MY), if there are more than one type of transition.</p>	
Commentary Continued		
<p>A list of crash-tested transitions may be obtained from the FHWA Office of Highway Safety website at: http://safety.fhwa.dot.gov/roadway_dept/policy_guide/road_hardware/.</p> <p>Since 1993, transitions to bridge railings have been crash tested and classified according to the guidelines shown in NCHRP Report 350.</p> <p>In 2009 the AASHTO Manual for Assessing Safety Hardware (MASH) replaced NCHRP 350.</p> <p>Refer to State, Federal agency, or Tribal government policies for transition railing standards.</p> <p>Use code I when no information is known about the crash test level or an agency approved standard. Also, use code I when an overlay is applied to the deck/slab and the height no longer meets the original geometry requirements of the crash-tested transition.</p> <p>For bridges with one-way traffic, and which a transition on the departure end of the bridge is not warranted (i.e. only a connection to develop the departure rail strength is warranted), the crash-test level of the departure end does not need to be reported when it is lower crash test level than the approach end.</p> <p>Refer to the IDOT Bridge Data Guidance for common transition types and their corresponding codes.</p>		

Examples – Bridge Railings/Transitions

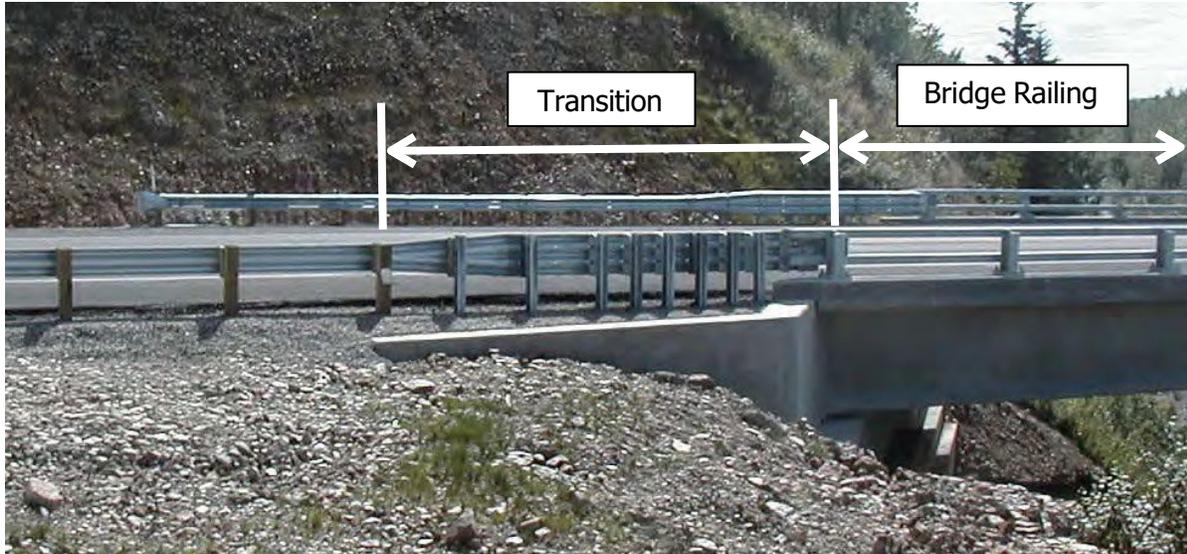


Figure 11. Metal bridge railing and transition. (Source: Alaska DOT)

Bridge carries an NHS route with the following roadside hardware.

Alaska Multi-State Bridge Rail successfully crash-tested for NCHRP 350 Test Level 4.

- Report 3504 for Item B.RH.01 (*Bridge Railings*).

Alaska Multi-State Bridge Rail Thrie-Beam Transition successfully crash tested for NCHRP 350 Test Level 4.

- Report 3504 for Item B.RH.02 (*Transitions*).



Figure 12. Metal bridge railing and transition for long-span application. (Source: Delaware DOT)

Concrete pipe bridge that carries a non-NHS route with the following roadside hardware.

Steel W-beam bridge rail with wood posts (long-span application) successfully crash tested to MASH 2009 Test Level 3.

- Report M093 for Item B.RH.01 (*Bridge Railings*).

Steel W-beam transition with wood posts (long-span application) successfully crash tested to MASH 2009 Test Level 3.

- Report M093 for Item B.RH.02 (*Transitions*).

SECTION 3: BRIDGE GEOMETRY

The data items in this section provide geometric data for bridges and are considered part of the Primary Data Set. These data items have a one-to-one relationship with a bridge.

The data for these items typically remain static once a bridge has been inventoried. The following data items are included in this section.

Item ID	Data Item
B.G.01	NBIS Bridge Length
B.G.02	Total Bridge Length
B.G.03	Maximum Span Length
B.G.04	Minimum Span Length
B.G.05	Bridge Width Out-to-Out
B.G.06	Bridge Width Curb-to-Curb
B.G.07	Left Curb or Sidewalk Width
B.G.08	Right Curb or Sidewalk Width
B.G.09	Approach Roadway Width
B.G.10	Bridge Median
B.G.11	Skew
B.G.12	Curved Bridge
B.G.13	Maximum Bridge Height
B.G.14	Sidehill Bridge
B.G.15	Irregular Deck Area
B.G.16	Calculated Deck Area
B.G.IL.01	Structure Fill Depth

Item B.G.16 (*Calculated Deck Area*) is calculated by FHWA using data from other items in the SNBI. This item is not reported to FHWA. The item specification that explains how the item is calculated is presented for reference only. Therefore, the wording of the specification and commentary is different (passive voice) than for other items (active voice) in this section.

The reported dimensional values for the items in this section can be obtained from either plans or field measurement, excluding B.G.01 (*NBIS Bridge Length*), which is field measured when required by the item specification.

<i>NBIS Bridge Length</i>		
<u>Format</u> N (7,1)	<u>Frequency</u> I	<u>Item ID</u> B.G.01
Specification	Commentary	
<p>Report the NBIS bridge length to the nearest tenth of a foot measured along the roadway centerline.</p> <p>Measure along the roadway centerline between undercopings of abutments or spring lines of arches.</p> <p>For filled or closed spandrel arches, measure along the roadway centerline from inside faces of exterior spring lines.</p> <p>For other bridges under fill, measure along the roadway centerline from inside faces of exterior walls; this includes multiple pipes, where the clear distance between openings is less than half of the smaller contiguous opening.</p> <p>Vaulted abutments and enclosed spans or sections are included in the NBIS bridge length.</p> <p>Report the field measured NBIS bridge length when Item B.G.02 (<i>Total Bridge Length</i>) is less than 30 ft.</p>	<p>NBIS bridge definition: A structure, including supports, erected over a depression or an obstruction, such as water, highway, or railway, and having a track or passageway for carrying traffic or other moving loads, and having an opening measured along the center of the roadway of more than 20 feet between undercopings of abutments or spring lines of arches, or extreme ends of openings for multiple boxes; it includes multiple pipes, where the clear distance between openings is less than half of the smaller contiguous opening. (23 CFR 650.305)</p> <p>Structures that meet the NBIS bridge definition, and NBIS applicability in 23 CFR 650.303, are reported to FHWA.</p> <p>The roadway centerline is the physical center of the portion of the roadway for the movement of vehicles, regardless of striping, and exclusive of shoulders. The length for curved structures would be measured along the curved centerline.</p> <p>When item B.G.02 (<i>Total Bridge Length</i>) is greater than 30.0 feet the value for this item may be estimated from plans or drawings, or estimated using the observed difference between items B.G.02 (<i>Total Bridge Length</i>) or B.G.03 (<i>Maximum Span Length</i>) and the NBIS bridge definition.</p> <p>99.9 needs to be updated to actual length</p>	

Examples – NBIS Bridge Length

Report measurement A.

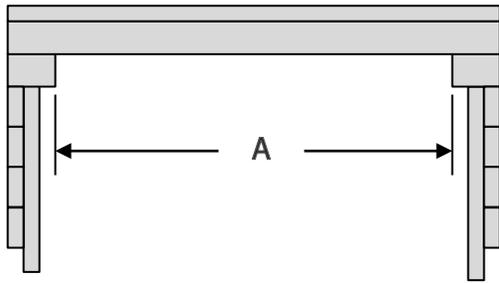


Figure 14. Profile view of a single span bridge with pile bent abutments.

Report measurement A.

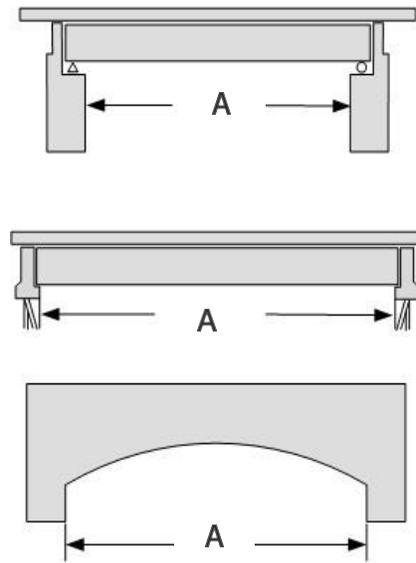


Figure 15. Profile views of various single span bridges.

Report measurement A.



Figure 16. Profile view of a four-sided, multi-cell culvert under fill.

Report measurement A.

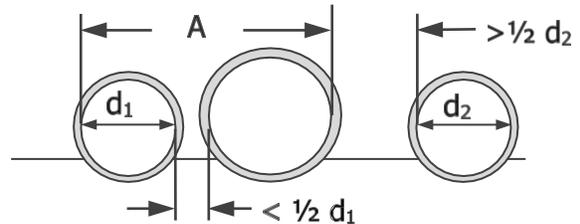


Figure 17. Profile view of a multi-pipe culvert under fill.

Examples Continued – NBIS Bridge Length

Skewed multi-pipe bridge under highway has an opening of 20.85 ft measured along the center of the roadway. Report 20.9.

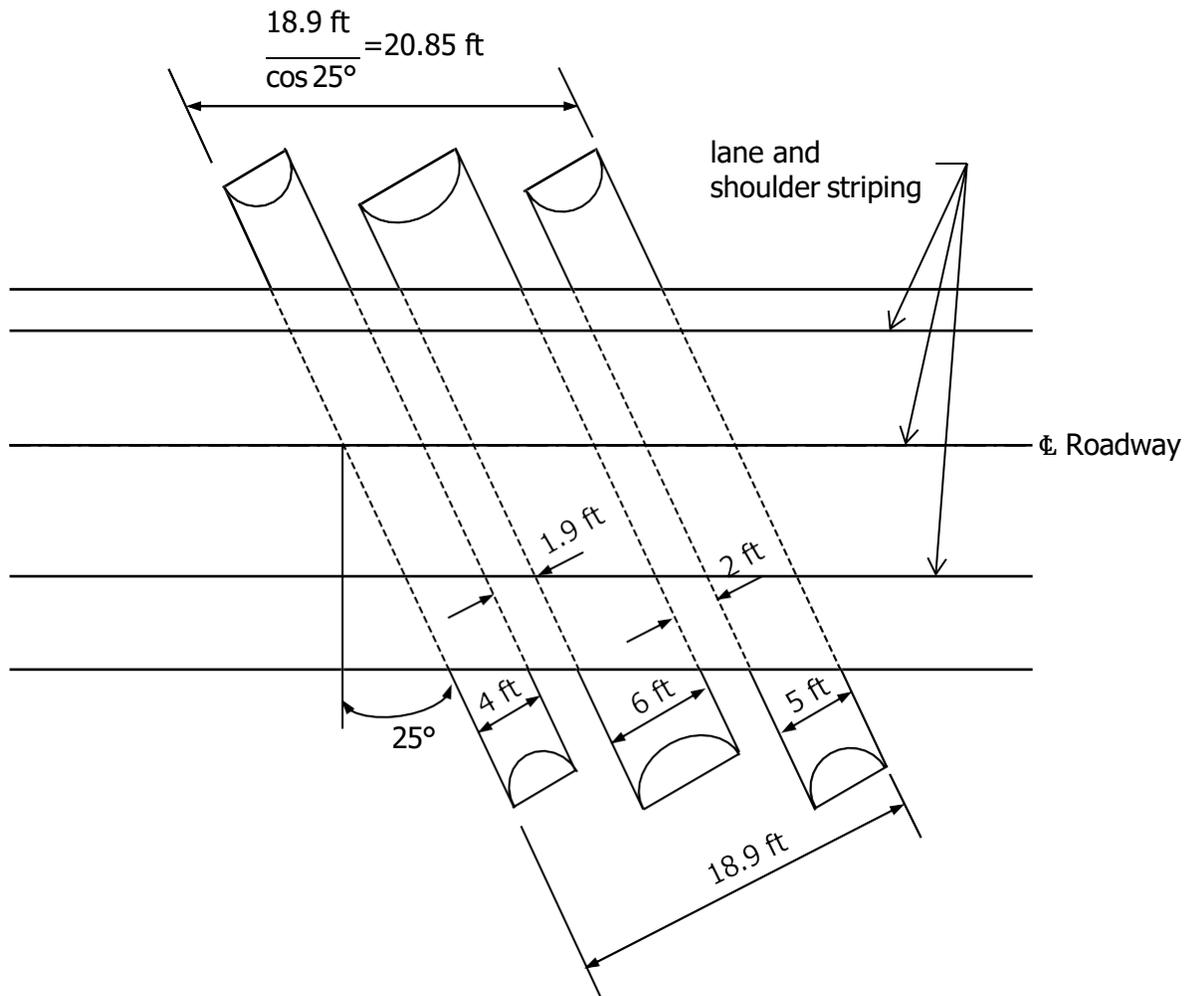


Figure 18. Plan view of a skewed, multi-pipe culvert under fill.

<i>Total Bridge Length</i>		
<u>Format</u> N (7,1)	<u>Frequency</u> I	<u>Item ID</u> B.G.02
Specification		Commentary
<p>Report the total length of the bridge to the nearest tenth of a foot measured along the roadway centerline.</p> <p>Measure along the roadway centerline from back-to-back of backwalls or from paving notch to paving notch at abutments.</p> <p>For filled or closed spandrel arches, measure along the roadway centerline from inside faces of exterior spring lines when well-defined backwalls or paving notches do not exist.</p> <p>For other bridges under fill, measure along the roadway centerline from inside faces of exterior walls</p> <p>For bridges with vaulted abutments and enclosed spans or sections, measure from back-to-back of backwalls or from paving notch to paving notch inclusive of the vaulted abutments and enclosed spans.</p>		<p>The total bridge length measurement can be used with the bridge width out-to-out to calculate an estimated deck area.</p> <p>The roadway centerline is the physical center of the portion of the roadway for the movement of vehicles, regardless of striping, and exclusive of shoulders. The total bridge length for curved bridges is measured along the curved centerline.</p>

Examples – Total Bridge Length

Report measurement A.

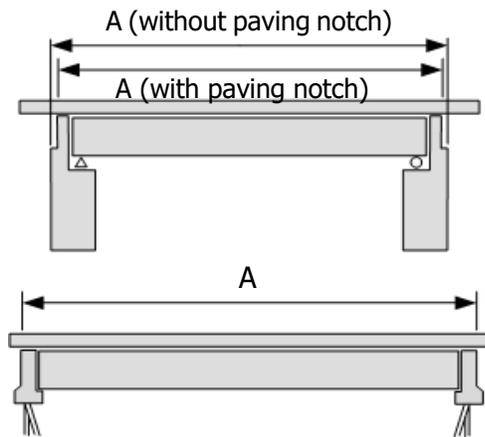


Figure 19. Profile views of various single span bridges.

Report measurement A.

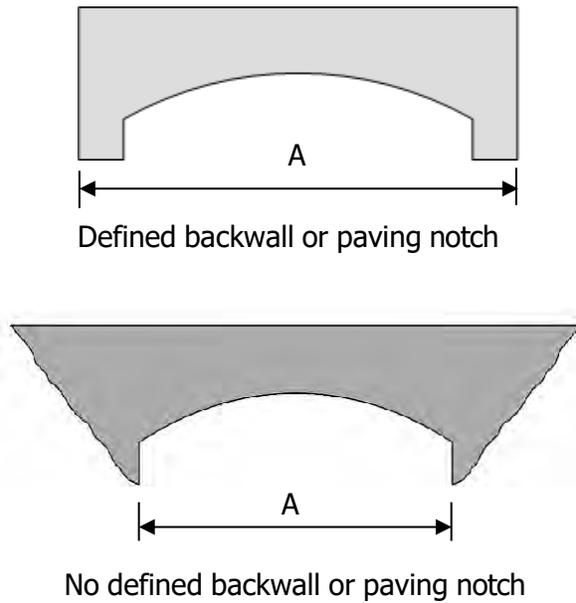


Figure 20. Profile views of various spandrel arches.

Report measurement A.

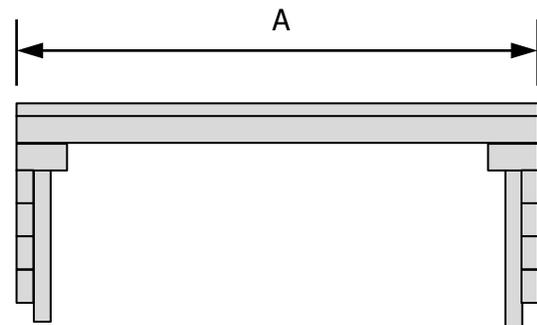


Figure 21. Profile view of a single span bridge with pile bent abutments.

Examples Continued – Total Bridge Length

Report measurement A.

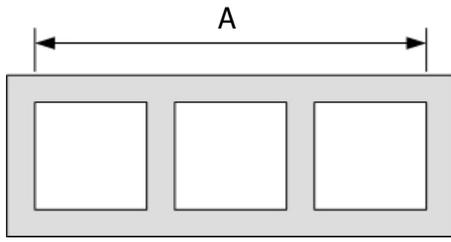


Figure 22. Profile view of a four-sided, multi-cell culvert under fill.

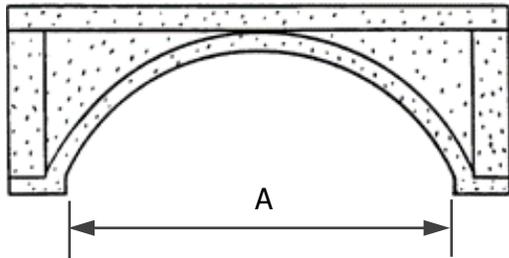


Figure 23. Profile view of a culvert under fill.

Report measurement A.

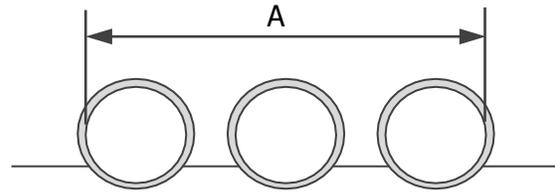


Figure 24. Profile view of a multi-pipe culvert under fill.

Four span bridge with variable skews. Total bridge length is measured along the roadway centerline from back-to-back of backwalls at abutments. Report 477.6.

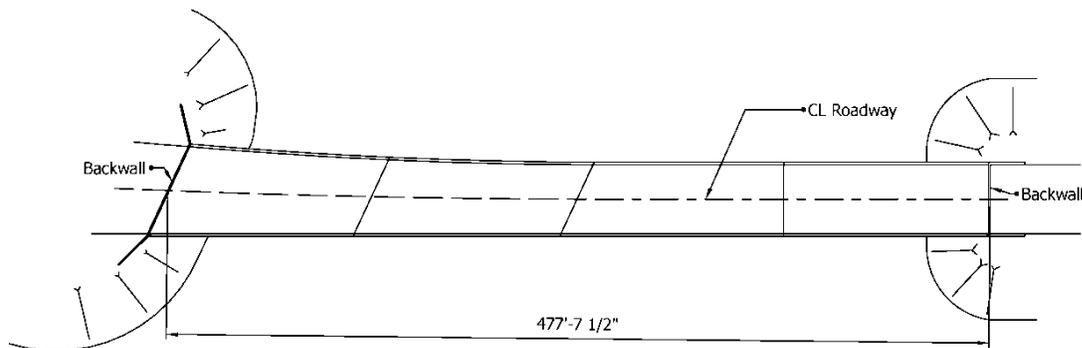
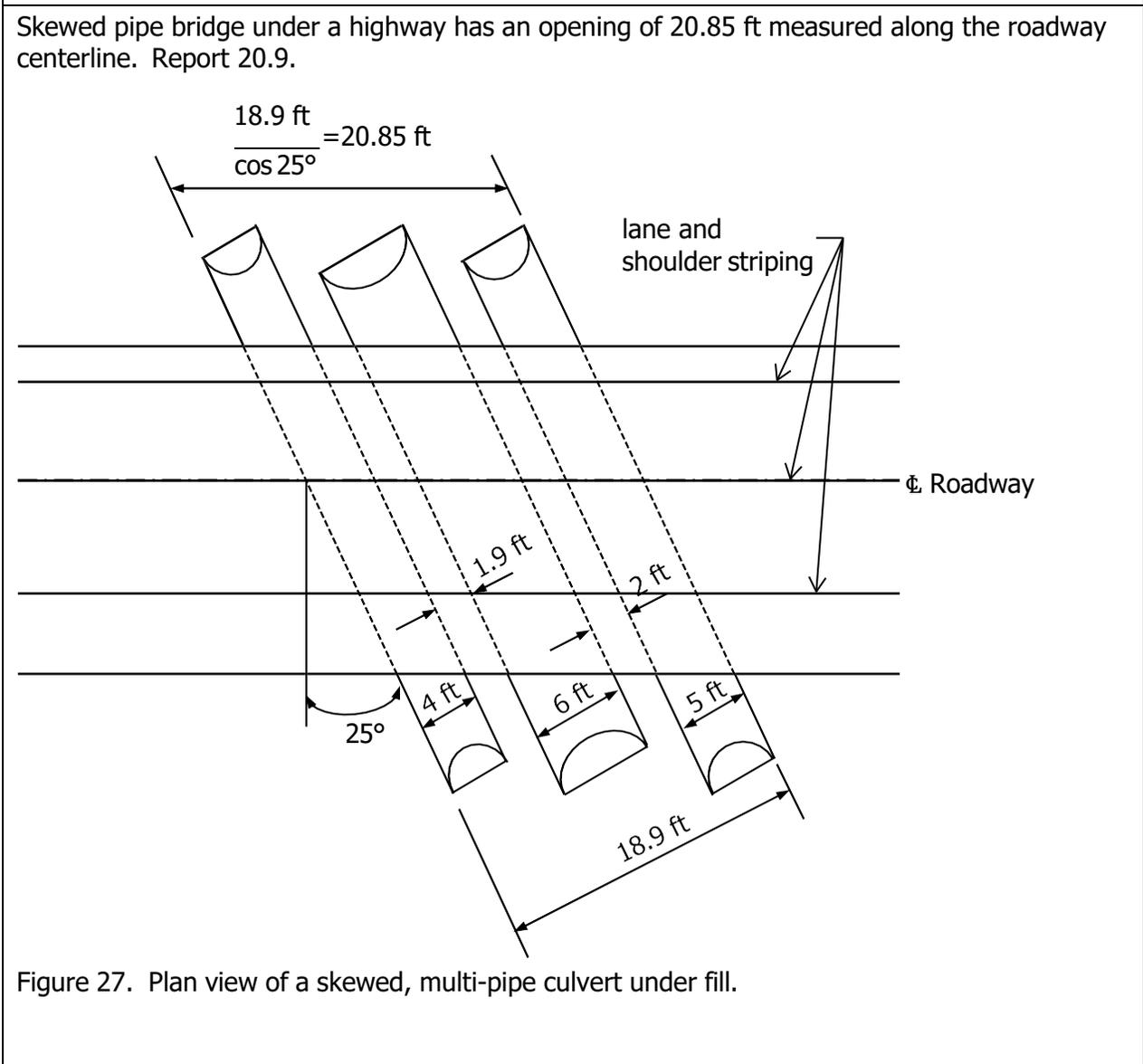
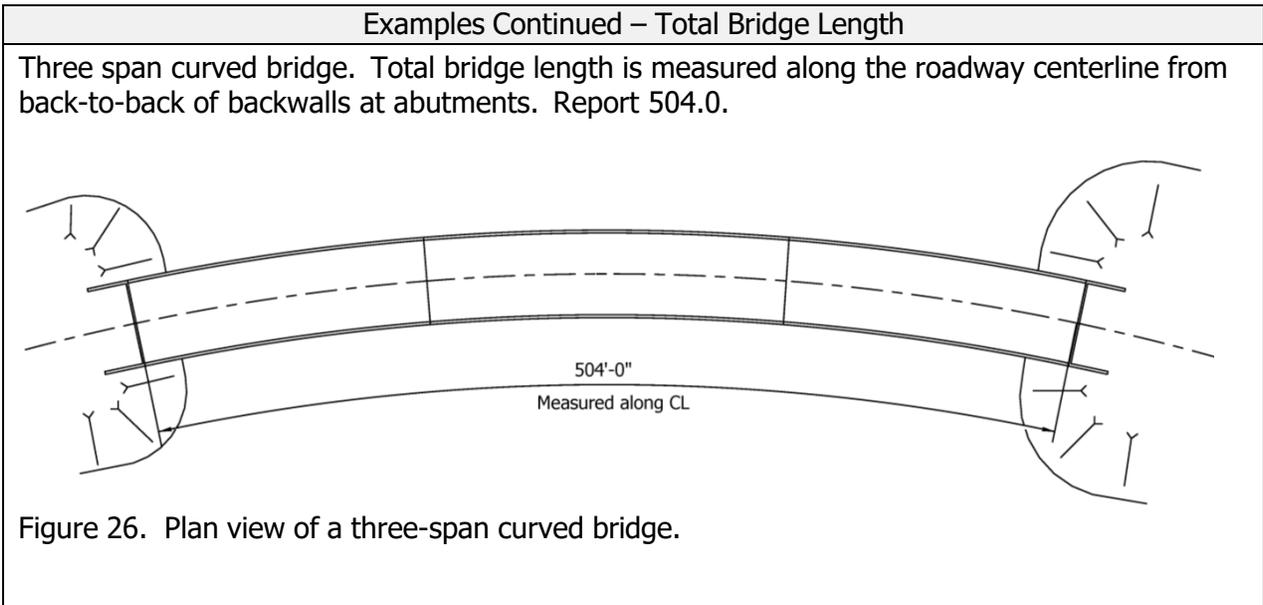


Figure 25. Plan view of a four-span bridge with variable skews.



<i>Maximum Span Length</i>		
<u>Format</u> N (5,1)	<u>Frequency</u> I	<u>Item ID</u> B.G.03
Specification		Commentary
<p>Report the length of the maximum span to the nearest tenth of foot, measured from centerline of bearing to centerline of bearing, along the roadway centerline.</p>		<p>For rigid frames, arches, pipes, integral abutments, or similar type bridges where there is not a clear centerline of bearing, use the clear open distance between piers, bents, walls, or abutments.</p> <p>The roadway centerline is the physical center of the portion of the roadway for the movement of vehicles, regardless of striping, and exclusive of shoulders. The length for curved bridges would be measured along the curved centerline.</p> <p>For bridges with in-span hinges or bearings, measure from centerline of substructure bearing to centerline of substructure bearing, or clear open distance between substructure units when there is not a clear centerline of bearing.</p> <p>For bridges with single spans this item has the same value as B.G.04 (<i>Minimum Span Length</i>).</p>

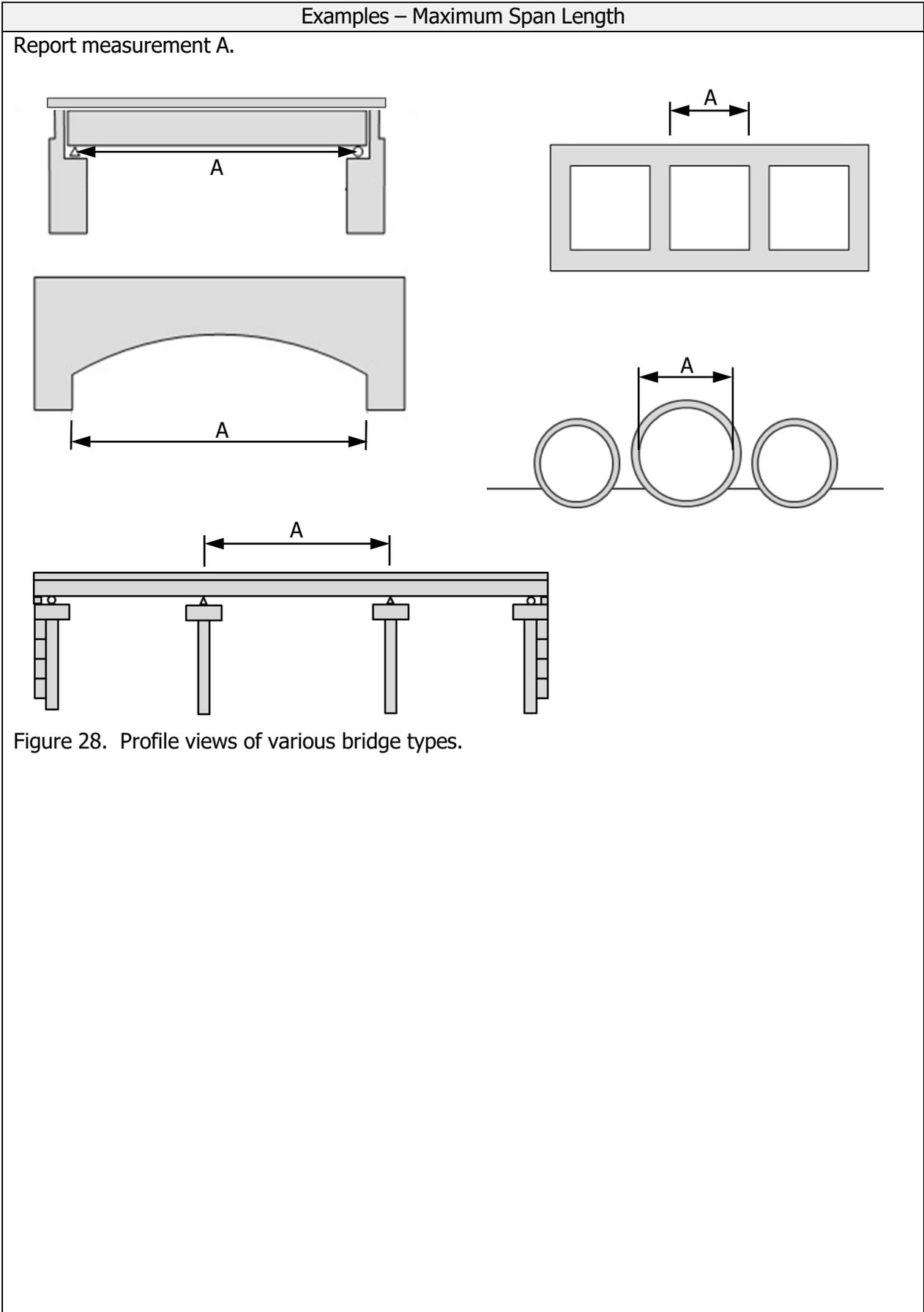


Figure 28. Profile views of various bridge types.

Examples Continued – Maximum Span Length

Four span bridges with variable skews. Span lengths are measured from centerline of bearing to centerline of bearing along the roadway centerline. Report 120.1.

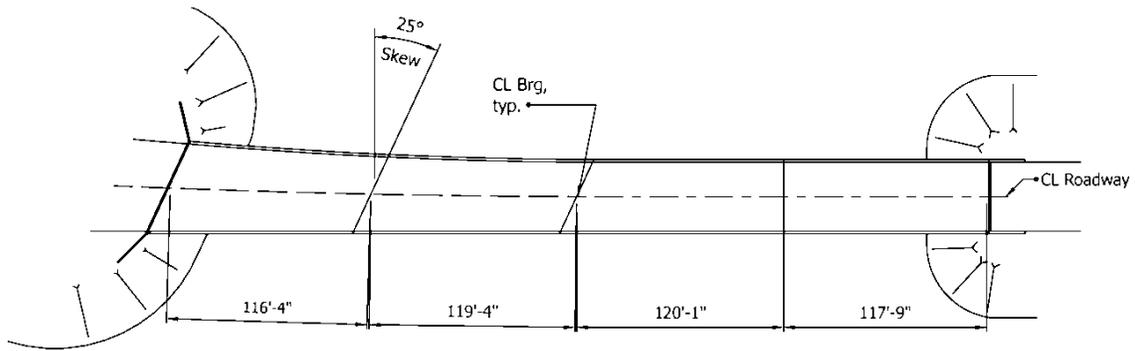


Figure 29. Plan view of a four-span bridge with variable skews.

Three span curved bridge. Span lengths are measured from centerline of bearing to centerline of bearing along the curved roadway centerline. Report 190.0.

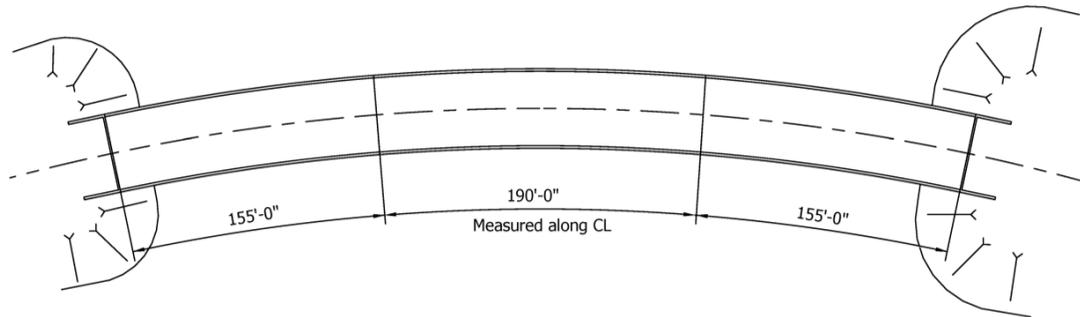
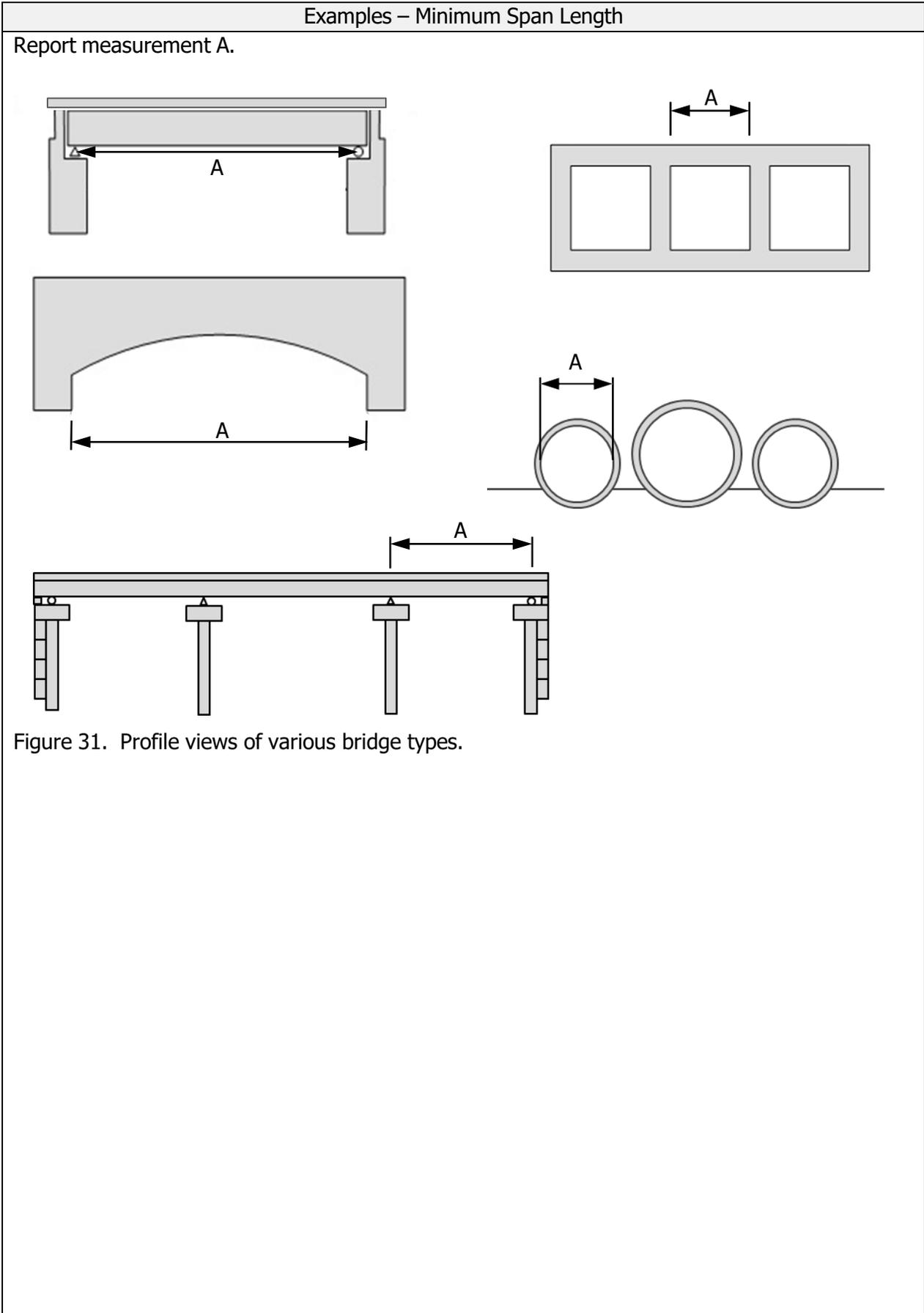


Figure 30. Plan view of a three-span curved bridge.

<i>Minimum Span Length</i>		
<u>Format</u> N (5,1)	<u>Frequency</u> I	<u>Item ID</u> B.G.04
Specification	Commentary	
<p>Report the length of the minimum span to the nearest tenth of foot, measured from centerline of bearing to centerline of bearing, along the roadway centerline.</p>	<p>For rigid frames, arches, pipes, integral abutments, or similar type bridges where there is not a clear centerline of bearing, use the clear open distance between piers, bents, or abutments.</p>	
Commentary Continued		
<p>The roadway centerline is the physical center of the portion of the roadway for the movement of vehicles, regardless of striping, and exclusive of shoulders. The length for curved bridges is measured along the curved centerline.</p> <p>For bridges with in-span hinges or bearings, measure from centerline of substructure bearing to centerline of substructure bearing, or clear open distance between substructure units when there is not a clear centerline of bearing.</p> <p>For bridges with single spans this item has the same value as B.G.03 (<i>Maximum Span Length</i>).</p>		



Examples Continued – Minimum Span Length

Four span bridge with variable skews. Span lengths are measured from centerline of bearing to centerline of bearing along the roadway centerline. Report 116.3.

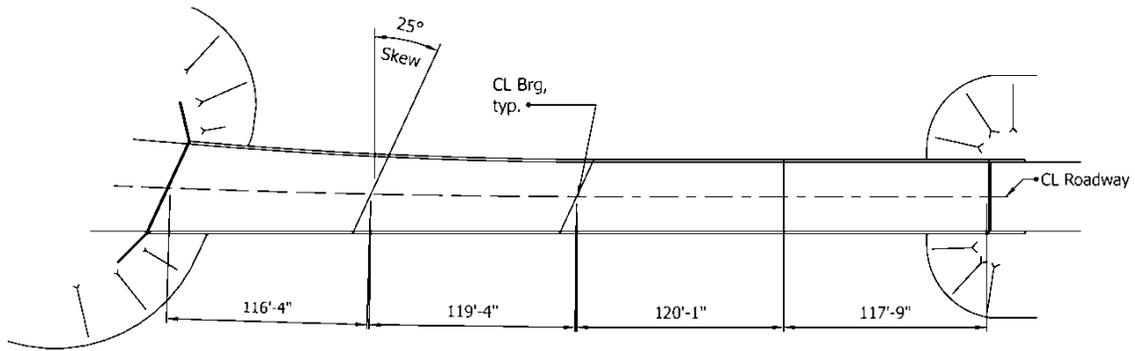


Figure 32. Plan view of a four-span bridge with variable skews.

Three span curved bridge. Span lengths are measured from centerline of bearing to centerline of bearing along the curved roadway centerline. Report 155.0.

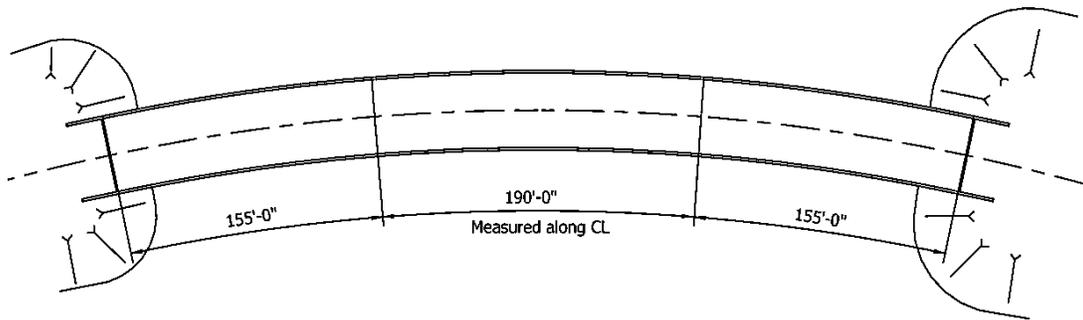
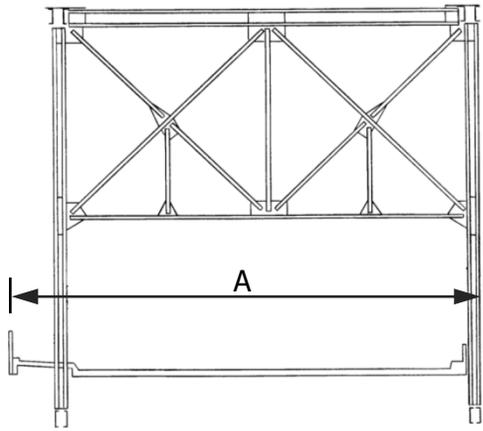


Figure 33. Plan view of a three-span curved bridge.

<i>Bridge Width Out-to-Out</i>		
<u>Format</u> N (4,1)	<u>Frequency</u> I	<u>Item ID</u> B.G.05
Specification	Commentary	
<p>Report the minimum out-to-out width measured perpendicular to the centerline of the roadway to the nearest tenth of a foot.</p> <p>For multiple (double) deck bridges that are inventoried as one bridge, measure all levels, and report the sum of the measurements to account for the total width carried on the bridge.</p> <p>For bridges under fill, measure the width from out-to-out of the headwalls or barrel ends.</p> <p>For sidehill bridges, measure the out-to-out structure width.</p> <p>For bridges that carry multiple types of service, for example highway, pedestrian, and railroad, measure the out-to-out width that encompasses all service types.</p>	<p>For bridges under fill, the reported value can be limited to the width of the roadway section over the bridge for unusual situations where the bridge continues far beyond the roadway cross-section, and a lesser width would likely be constructed for a replacement project.</p> <p>For bridges under fill, in which the features that define the out-to-out width are not parallel, report the minimum out-to-out width.</p>	
Examples		
<p>Report measurement A.</p> 		
<p>Figure 34. Cross-section view of a through truss bridge.</p>		

Examples Continued – Bridge Width Out-to-Out

Report measurement A.

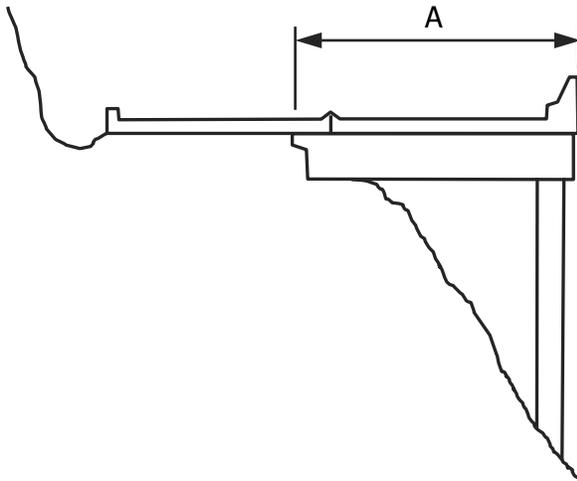


Figure 35. Cross-section view of a sidehill bridge.

Report measurement A.

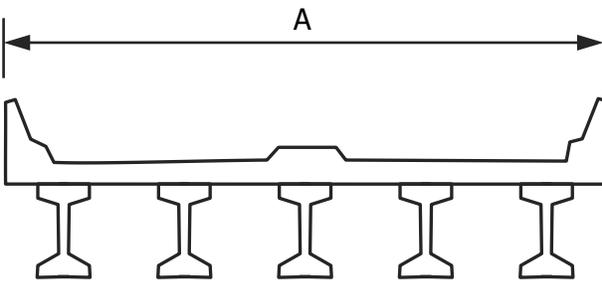


Figure 36. Cross-section view of a multi-girder bridge.

Report measurement A.

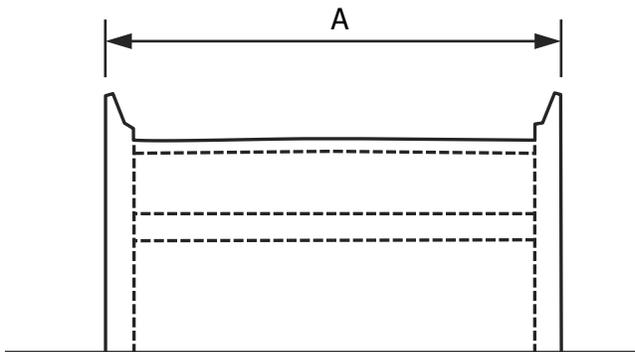


Figure 37. Cross-section view of a filled arch bridge or culvert under fill with headwalls.

Examples Continued – Bridge Width Out-to-Out

Report measurement A.

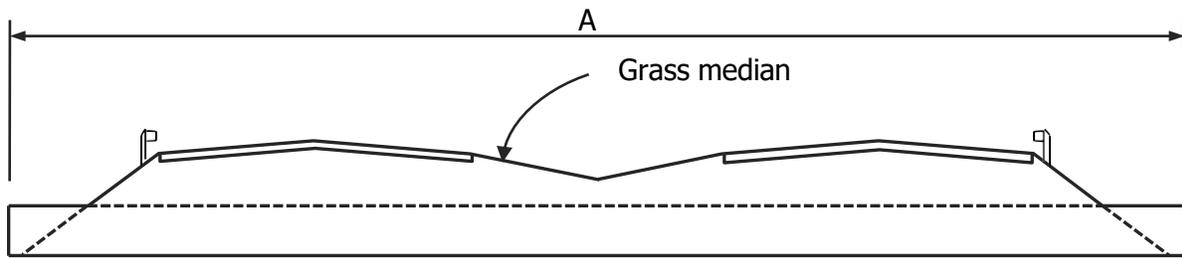


Figure 38. Cross-section view of a pipe culvert under fill.

Report measurement A.

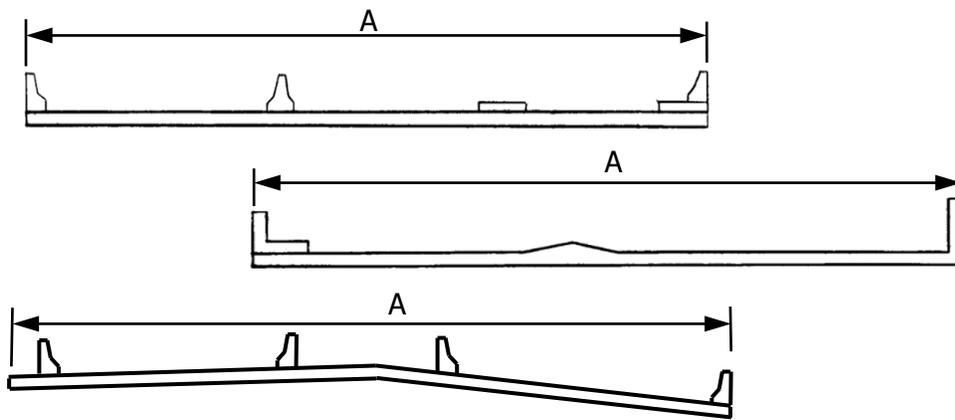


Figure 39. Cross-section views of various bridge decks with medians.

Report measurement A.

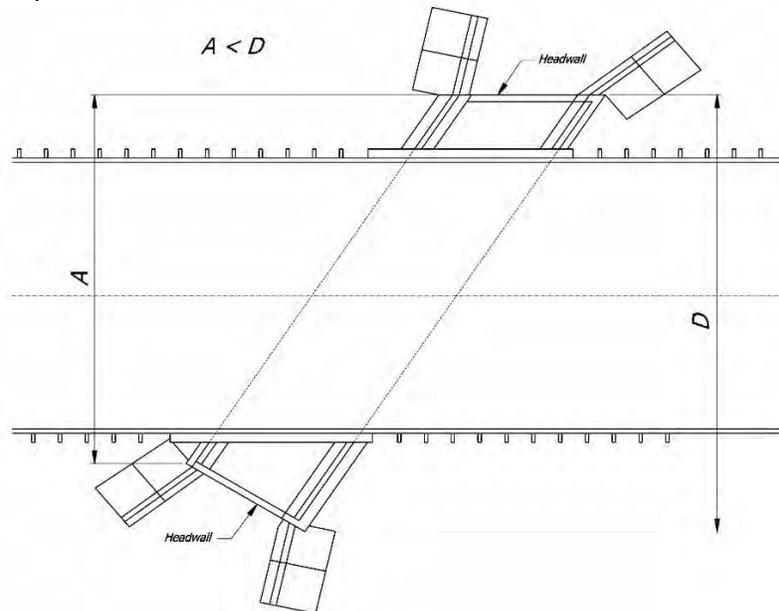


Figure 40. Plan view of a bridge with non-parallel fascias.

Examples Continued – Bridge Width Out-to-Out

Report measurement A.

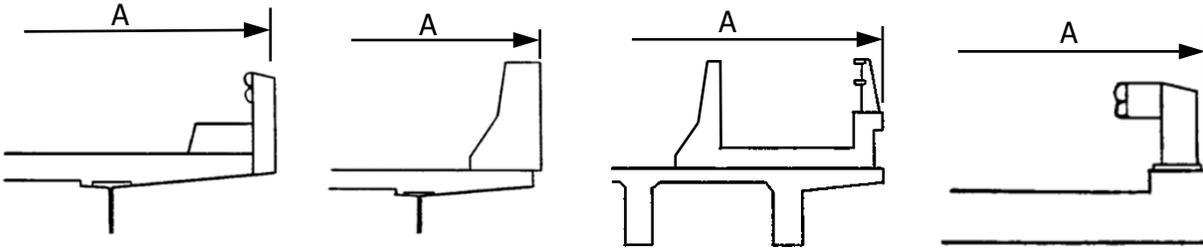


Figure 41. Partial cross-section views of various bridge decks with railings.

Report measurement A.

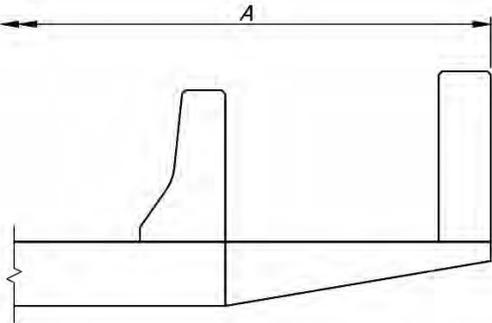
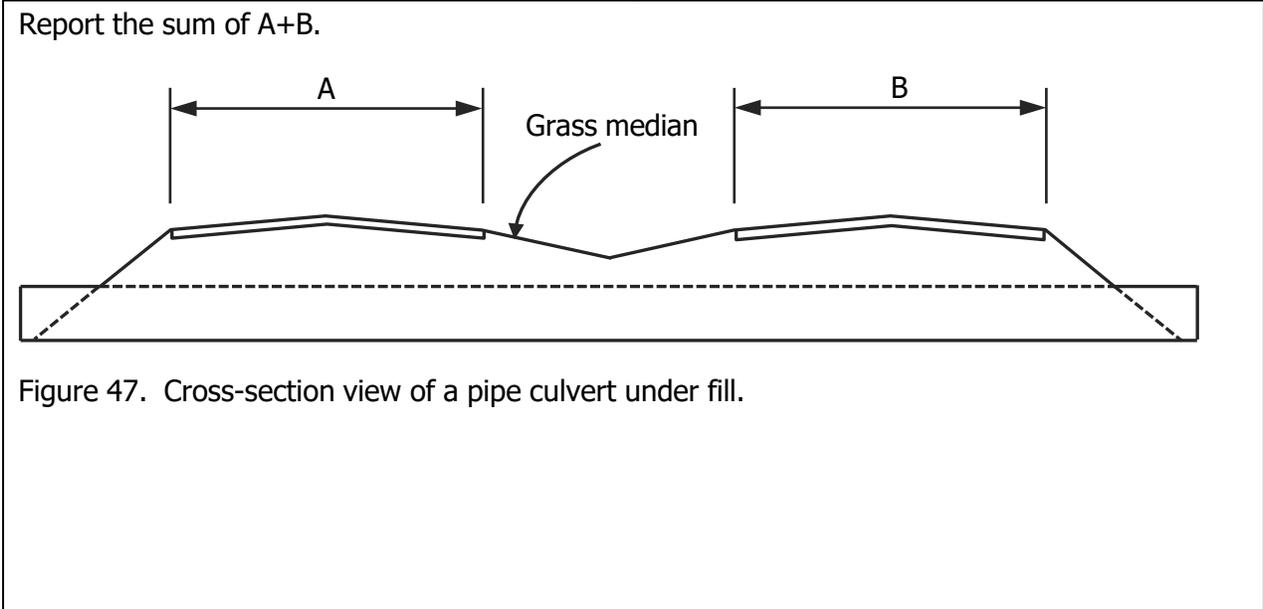
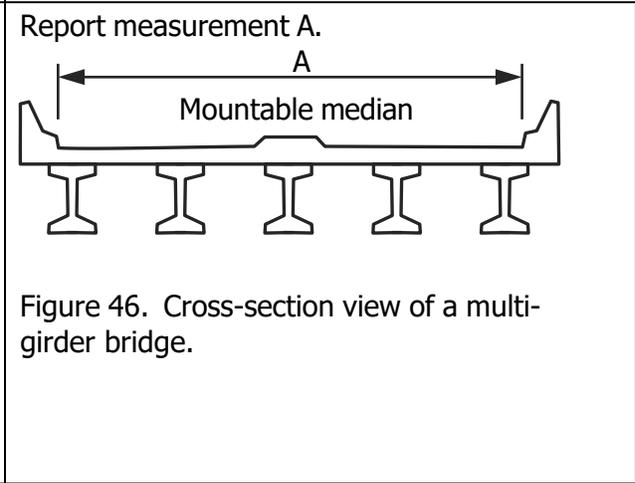
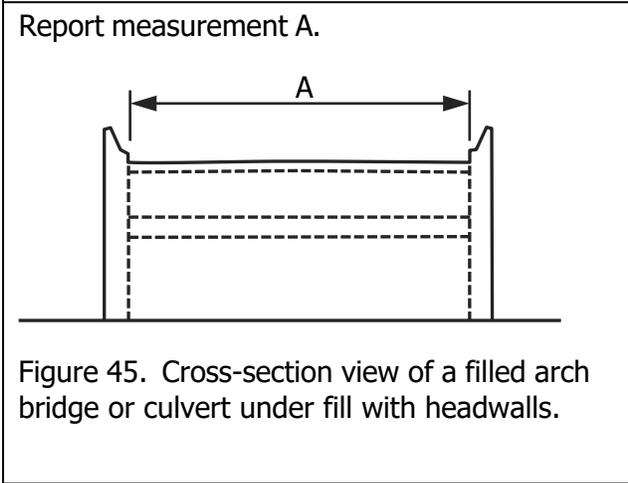
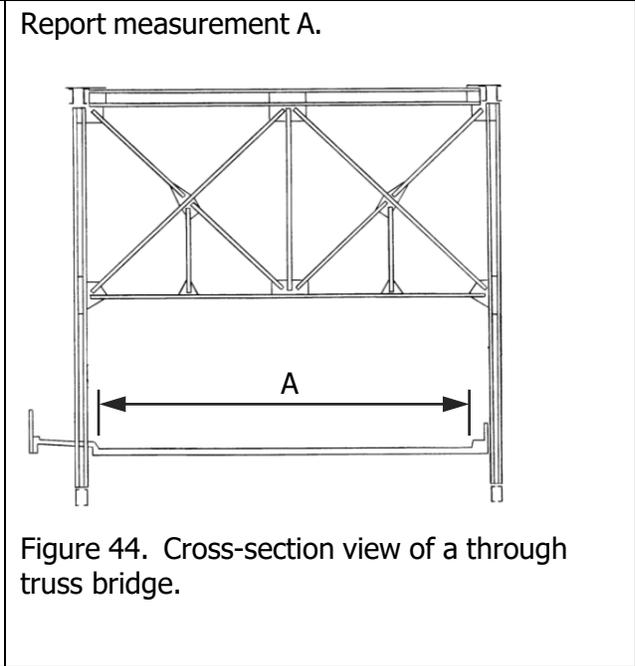
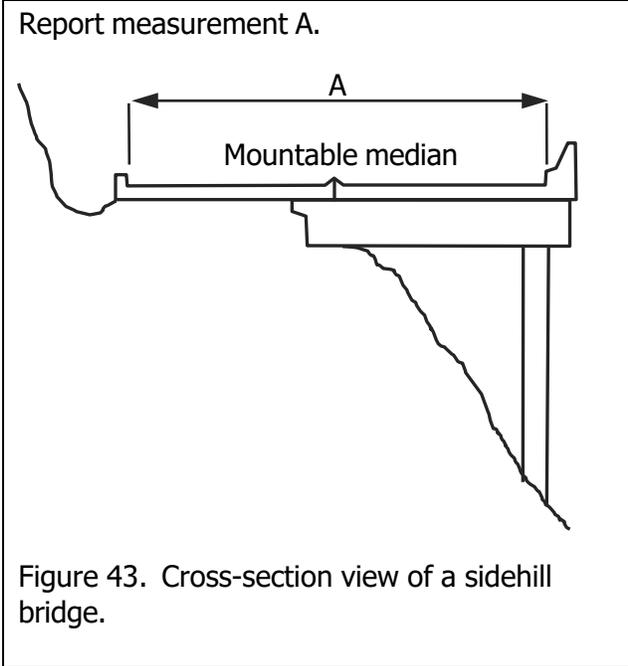


Figure 42. Cross-section view of a sidewalk retrofit.

<i>Bridge Width Curb-to-Curb</i>		
<u>Format</u> N (4,1)	<u>Frequency</u> I	<u>Item ID</u> B.G.06
Specification		Commentary
<p>Report the sum of the most restrictive minimum usable distances for all roadways carried by the bridge. Measure the distance on the bridge perpendicular to the centerline of the roadway between curbs or rails to the nearest tenth of a foot. Exclude from the usable distance measurement medians, sidewalks, structurally inadequate shoulders, and other non-mountable areas.</p> <p>The measurement for this item shall be compatible with the measurements used for Item B.H.08 (<i>Lanes On Highway</i>), Item B.G.09 (<i>Approach Roadway Width</i>), and Item B.H.09 (<i>Annual Average Daily Traffic</i>).</p> <p>For multiple (double) deck bridges that are inventoried as one bridge, measure all levels, and report the sum of the most restrictive minimum usable distances carried by the bridge.</p> <p>For sidehill bridges measure the actual full curb-to-curb roadway width.</p> <p>For bridges that carry multiple types of service, for example highway, pedestrian, and railroad, report the usable distance that serves the highway service as denoted by curb or barrier separation, or other delineation that separates the service types.</p>		<p>Usable roadway width includes the width of traffic lanes and the widths of shoulders.</p> <p>Shoulders must be contiguous with the traveled way and must be structurally adequate for all weather and traffic conditions consistent with the facility carried. Unstabilized grass or dirt, with no base course, flush with and beside the traffic lane is not to be considered a shoulder for this item. Refer to agency policy for when and where stabilized shoulders are used. When it is not readily known if stabilized construction details were used, the presence of rutting, heaving, water retention, or other distress may be used as indicators that the shoulder is not stabilized.</p> <p>For bridges under fill, the usable roadway width crossing the bridge is commonly the same value reported for Item B.G.09 (<i>Approach Roadway Width</i>).</p> <p>A barrier or curb greater than 6 inches high may be considered non-mountable for these specifications.</p>

Examples – Bridge Width Curb-to-Curb



Examples Continued – Bridge Width Curb-to-Curb

Report measurement A.

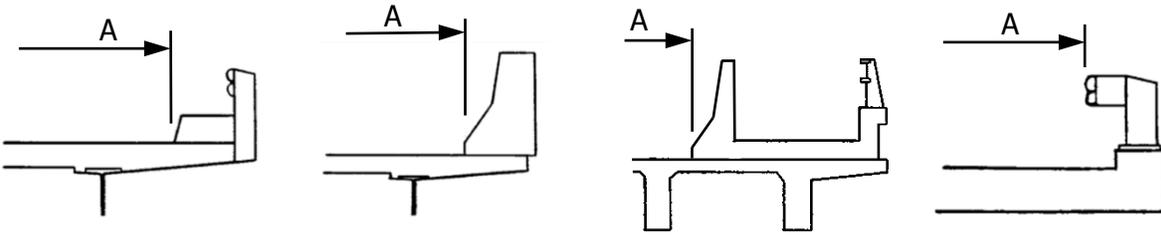


Figure 48. Partial cross-section views of various bridge decks with railings.

Report measurement A.

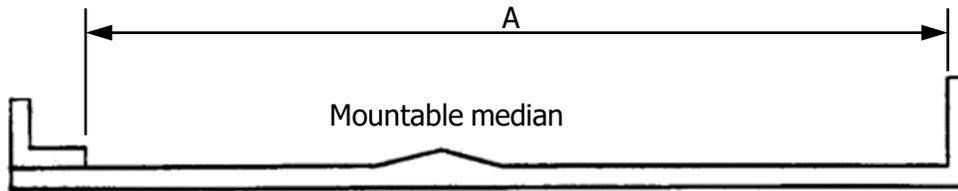


Figure 49. Cross-section view of a bridge deck with mountable median.

Report the sum of A+B+C.

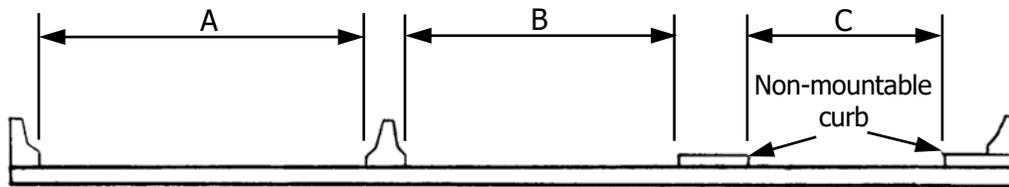


Figure 50. Cross-section view of a bridge deck with non-mountable curb and median barrier.

Report the sum of A+B.

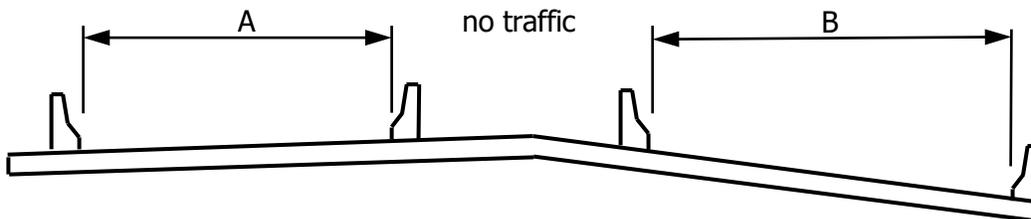
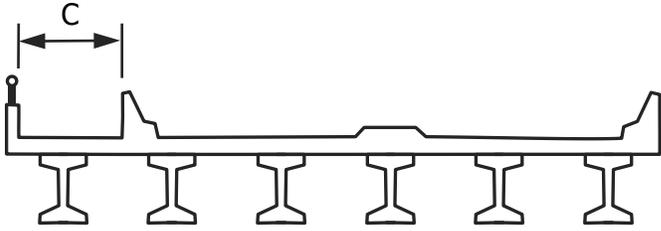
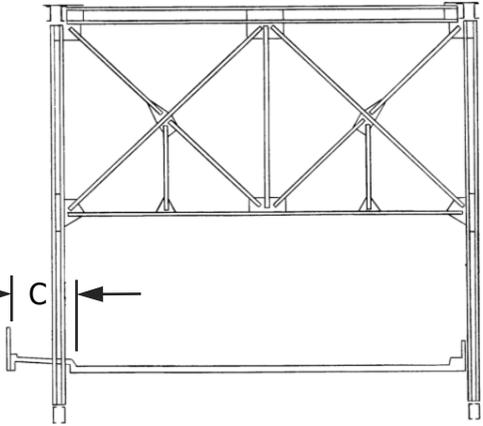
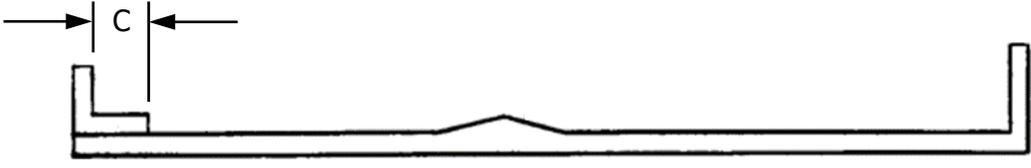


Figure 51. Cross-section view of a bridge deck with multiple median barriers.

<i>Left Curb or Sidewalk Width</i>		
<u>Format</u> N (3,1)	<u>Frequency</u> I	<u>Item ID</u> B.G.07
Specification	Commentary	
<p>Report the minimum width of the left curb or sidewalk to the nearest tenth of a foot from the face of bridge rail to the face of curb. Measure the width perpendicular to the centerline of the roadway.</p> <p>Report 0.0 when the face of the curb does not extend beyond the face of the bridge rail.</p> <p>Report 0.0 when there is no left curb or sidewalk.</p>	<p>Left and right are determined based on the direction of the inventoried route carried by the bridge, commonly west to east or south to north.</p> <p>When a defined longitudinal joint exists between the curb and the sidewalk, such as a granite curb and concrete sidewalk, measure the width from the face of bridge rail to the face of the granite curb.</p>	
Examples		
<p>Report measurement C.</p>  <p>Figure 52. Cross-section view of a multi-girder bridge.</p>	 <p>Figure 53. Cross-section view of a through-truss bridge.</p>	
<p>Report measurement C.</p>  <p>Figure 54. Cross-section view of a slab bridge.</p>		

Examples Continued – Left Curb or Sidewalk Width

Report measurement C.

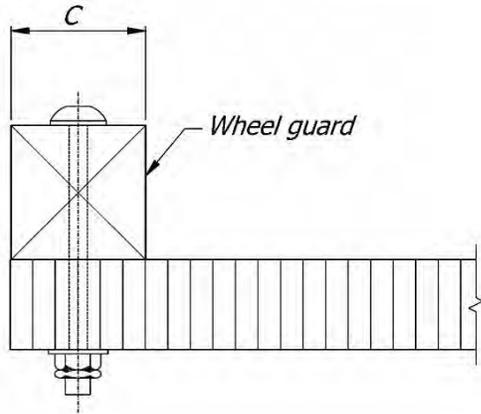


Figure 55. Cross-section view of a timber wheel guard.

Report measurement C.

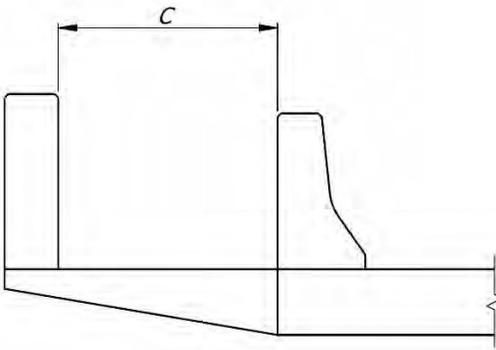


Figure 56. Cross-section view of a sidewalk retrofit.

Report measurement C.

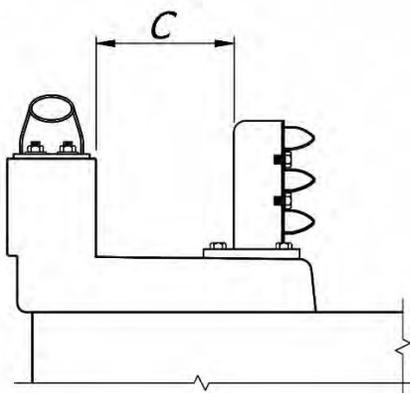
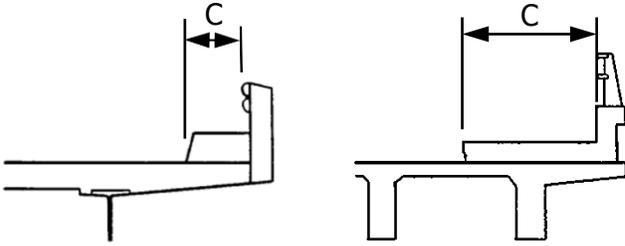
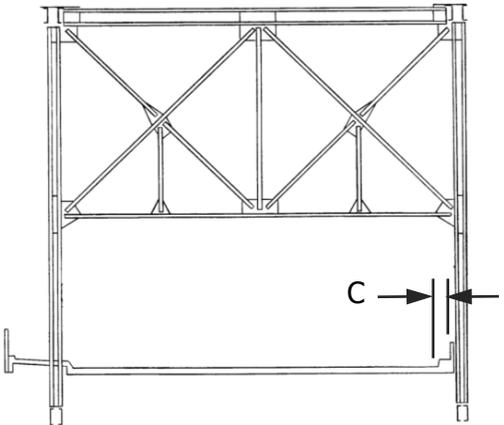
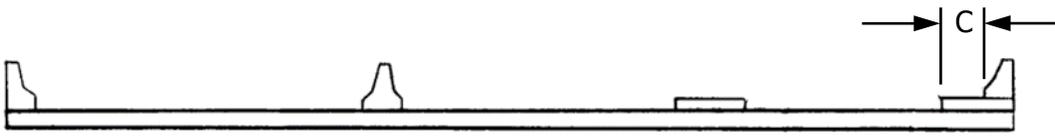


Figure 57. Cross-section view of a sidewalk retrofit.

<i>Right Curb or Sidewalk Width</i>		
<u>Format</u> N (3,1)	<u>Frequency</u> I	<u>Item ID</u> B.G.08
Specification	Commentary	
<p>Report the minimum width of the right curb or sidewalk to the nearest tenth of a foot from the face of bridge rail to the face of curb. Measure the width perpendicular to the centerline of the roadway.</p> <p>Report 0.0 when the face of the curb does not extend beyond the face of the bridge rail.</p> <p>Report 0.0 when there is no right curb or sidewalk.</p>	<p>Right and left is determined based on the direction of the inventoried route carried by the bridge, commonly west to east or south to north.</p> <p>When a defined longitudinal joint exists between the curb and the sidewalk, such as a granite curb and concrete sidewalk, measure the width from the face of bridge rail to the face of the granite curb.</p>	
Examples		
<p>Report measurement C.</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Figure 58. Partial cross-section views of various bridge decks with railings.</p> </div> <div style="text-align: center;">  <p>Figure 59. Cross-section view of a through truss bridge.</p> </div> </div>		
<div style="text-align: center;">  <p>Figure 60. Cross-section view of a slab bridge with various medians.</p> </div>		

Examples Continued – Right Curb or Sidewalk Width

Report measurement C.

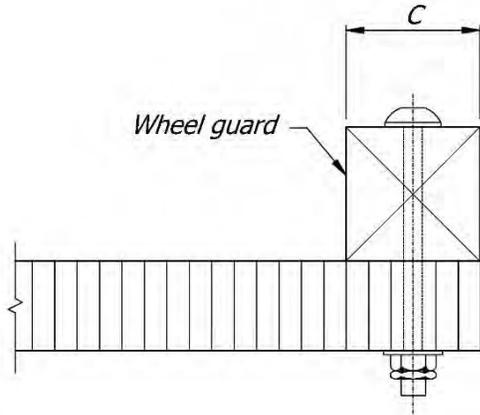


Figure 61. Cross-section view of a timber wheel guard.

Report measurement C.

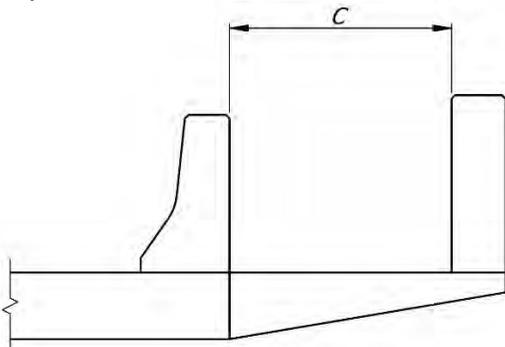


Figure 62. Cross-section view of a sidewalk retrofit.

Report measurement C.

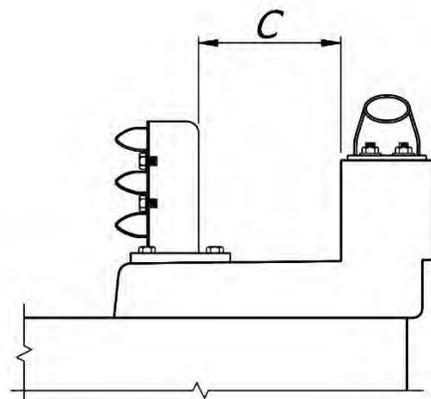
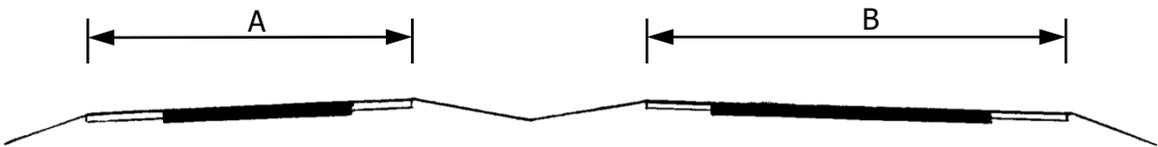


Figure 63. Cross-section view of a sidewalk retrofit.

<i>Approach Roadway Width</i>		
<u>Format</u> N (4,1)	<u>Frequency</u> I	<u>Item ID</u> B.G.09
Specification	Commentary	
<p>Report the minimum usable approach roadway width measured to the nearest tenth of a foot.</p> <p>Measure the distance perpendicular to the centerline of the roadway between curbs or rails that is representative of the approach roadway within 100 feet of the bridge. Exclude from the usable distance measurement: medians, sidewalks, and other protected areas with non-mountable curbs or barriers.</p> <p>Report the lesser of the two approach roadway widths for bridges that carry two-way traffic.</p> <p>Report the width at the approach end for bridges that carry one-way traffic.</p>	<p>Usable roadway width includes the width of traffic lanes and the width of shoulders.</p> <p>Shoulders must be contiguous with the traveled way and must be structurally adequate for all weather and traffic conditions consistent with the facility carried. Unstabilized grass or dirt, with no base course, flush with and beside the traffic lane is not to be considered a shoulder for this item. Refer to agency policy for when and where stabilized shoulders are used. When it is not readily known if stabilized construction details were used, the presence of rutting, heaving, water retention, or other distress may be used as indicators that the shoulder is not stabilized.</p> <p>A curb greater than 6 inches high may be considered non-mountable for these specifications.</p>	
Examples		
<p>Both roadways are carried on one bridge. Report the sum of measurements A and B.</p> 		
<p>Figure 64. Cross-section view of two approach roadways that are carried across one bridge.</p>		

Examples Continued – Approach Roadway Width

Mainline and Ramp are both carried on one bridge. Report the sum of measurements A and B.

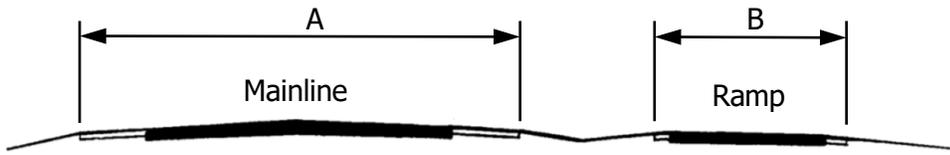


Figure 65. Approach roadway cross-section view for a mainline and a ramp that are carried across one bridge.

Mainline and Ramp are carried on separate bridges.

- Report measurement A for the Mainline bridge.
- Report measurement B for the Ramp bridge.

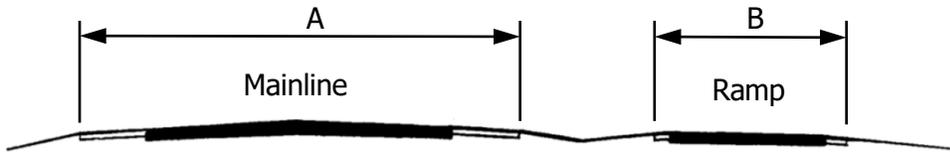
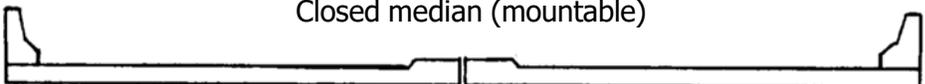
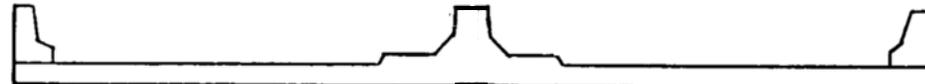


Figure 66. Approach roadway cross-section view for a mainline and a ramp that are carried across separate bridges.

Bridge Median		
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.G.10
Specification	Commentary	
<p>Report the type of bridge median using one of the following codes.</p> <p>Code Description</p> <p>0 No median 1 Open median 2 Closed median (mountable) 3 Closed median (non-mountable)</p>	<p>A barrier or curb greater than 6 inches high may be considered non-mountable for these specifications.</p> <p>For bridges with a longitudinal joint, use code 1 when traffic cannot safely traverse the joint width. If the joint width is safely traversable, use one of the remaining codes. Joint condition does not affect the coding of this item.</p>	
Commentary Continued		
<p>Use code 0 for bridges that do not have a median, including bridges that carry adjacent traffic lanes separated only by centerline, edge line, or channelization striping, with or without a traversable longitudinal joint.</p> <p>Use code 2 for bridges with medians that are either flush or mountable, with or without a traversable longitudinal joint, including areas that are striped to designate a median.</p>		
Examples		
<p>Each example represents a single bridge.</p> <p>Report 1.</p> <p style="text-align: center;">Open median</p>  <p>Figure 67. Cross-section view of a bridge deck with open median.</p>		
<p>Report 2.</p> <p style="text-align: center;">Closed median (mountable)</p>  <p>Figure 68. Cross-section view of a bridge deck with closed median (mountable)</p>		
<p>Report 3.</p> <p style="text-align: center;">Closed Median (non-mountable)</p>  <p>Figure 69. Cross-section view of a bridge deck with closed median (non-mountable).</p>		

<i>Skew</i>		
<u>Format</u> N (2,0)	<u>Frequency</u> I	<u>Item ID</u> B.G.11
Specification	Commentary	
<p>Report the skew angle to the nearest degree. Measure the skew angle between the centerline of a substructure unit and a line perpendicular to the roadway centerline.</p> <p>Report the maximum skew when skews vary amongst substructure units.</p> <p>Report 0 if there is no skew.</p>	<p>The skew angle can be taken directly from the plans, if available, or measured in the field.</p>	

Example

Report the skew as the result of $\text{Sin}^{-1}(A/C)$, $\text{Cos}^{-1}(B/C)$ or $\text{Tan}^{-1}(A/B)$.

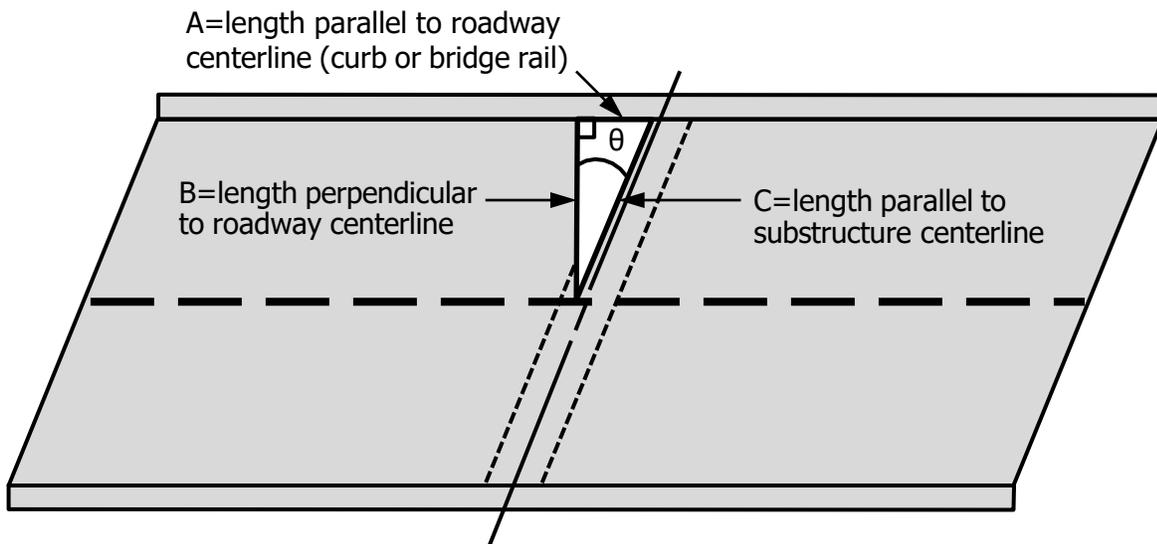


Figure 70. Plan view of a bridge deck indicating skew determination.

<i>Curved Bridge</i>		
<u>Format</u> AN (2)	<u>Frequency</u> I	<u>Item ID</u> B.G.12
Specification	Commentary	
<p>Report whether the bridge is horizontally curved using one of the following codes.</p> <p>Code Description</p> <p>CU Curved girder(s) CP Piecewise straight girders CK Kinked girder(s) N Not curved</p>	<p>A bridge is considered horizontally curved when at least one partial or full-length girder line forms a curve using either a curved girder(s), piecewise straight girders forming a segmented/chorded curve, or a kinked girder(s).</p> <p>For this specification, a piecewise straight girder line is comprised of girders with a longitudinal axis that changes orientation at one or more supports. The girder line may be simply supported or continuous at supports. A kinked girder is a girder with a longitudinal axis that changes orientation at a location(s) along the girder length excluding at the supports.</p> <p>Use code N for bridges that have curved deck geometry, or may be striped as curved, but the girders do not form a curve.</p>	
Example		
<p>Report CU.</p>		
		
<p>Figure 71. Curved bridge with curved girders. (Source: Alaska DOT)</p>		

Examples Continued – Curved Bridge

Report CP.

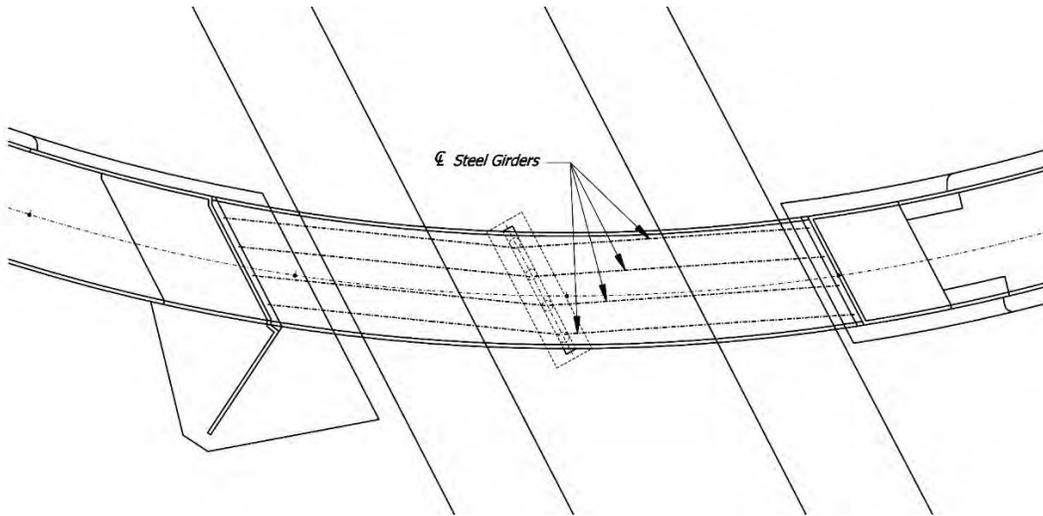


Figure 72. Plan view of a curved bridge with piecewise straight girders.

Report CK.

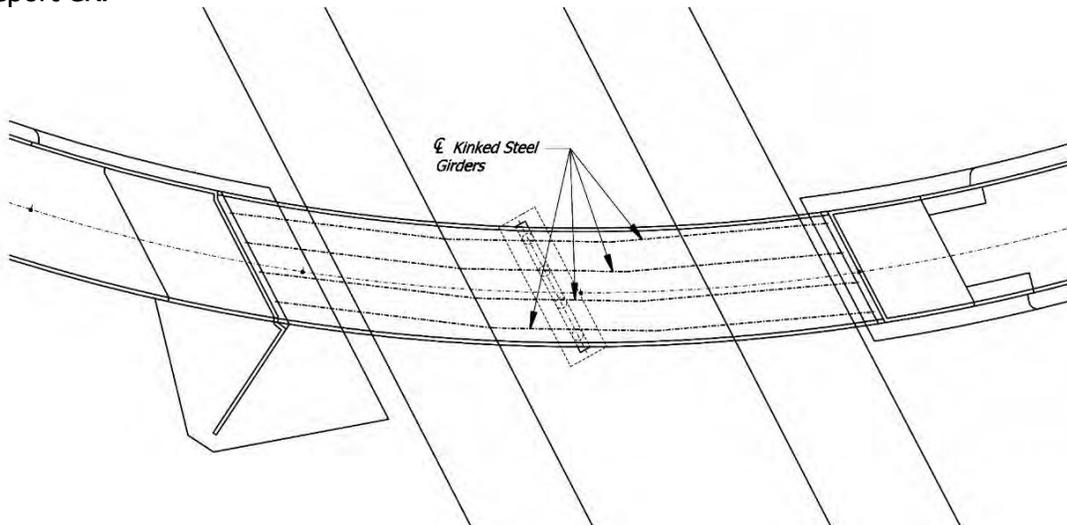


Figure 73. Plan view of a curved bridge with kinked girders.

<i>Maximum Bridge Height</i>		
<u>Format</u> N (4,0)	<u>Frequency</u> I	<u>Item ID</u> B.G.13
Specification	Commentary	
<p>Record the maximum height from top of deck to ground line or water surface elevation, whichever yield the largest value, rounded to the nearest foot.</p>	<p>For double-deck bridges inventoried as one bridge, measure from top of deck of the lower deck. For double-deck bridges inventoried as two bridges, measure from the top of deck of the inventoried bridge.</p> <p>For bridges under fill, excluding closed spandrel arches, measure from top of slab, or top of pipe, to water surface elevation. When there is no waterway feature, measure to inside bottom of pipe, inside of floor slab, or ground line when the bottom is unexposed or the bridge is bottomless. For closed spandrel arches measure from top of roadway surface.</p> <p>Ground line represents dry terrain or pavement.</p> <p>Use the water surface elevation at the time the value for this item is established.</p> <p>This item may be estimated by field observation or from plans when it is not practical or is infeasible to measure, or height is more than 30 ft.</p> <p>This item does not need to be updated due to fluctuations in water surface elevation.</p>	

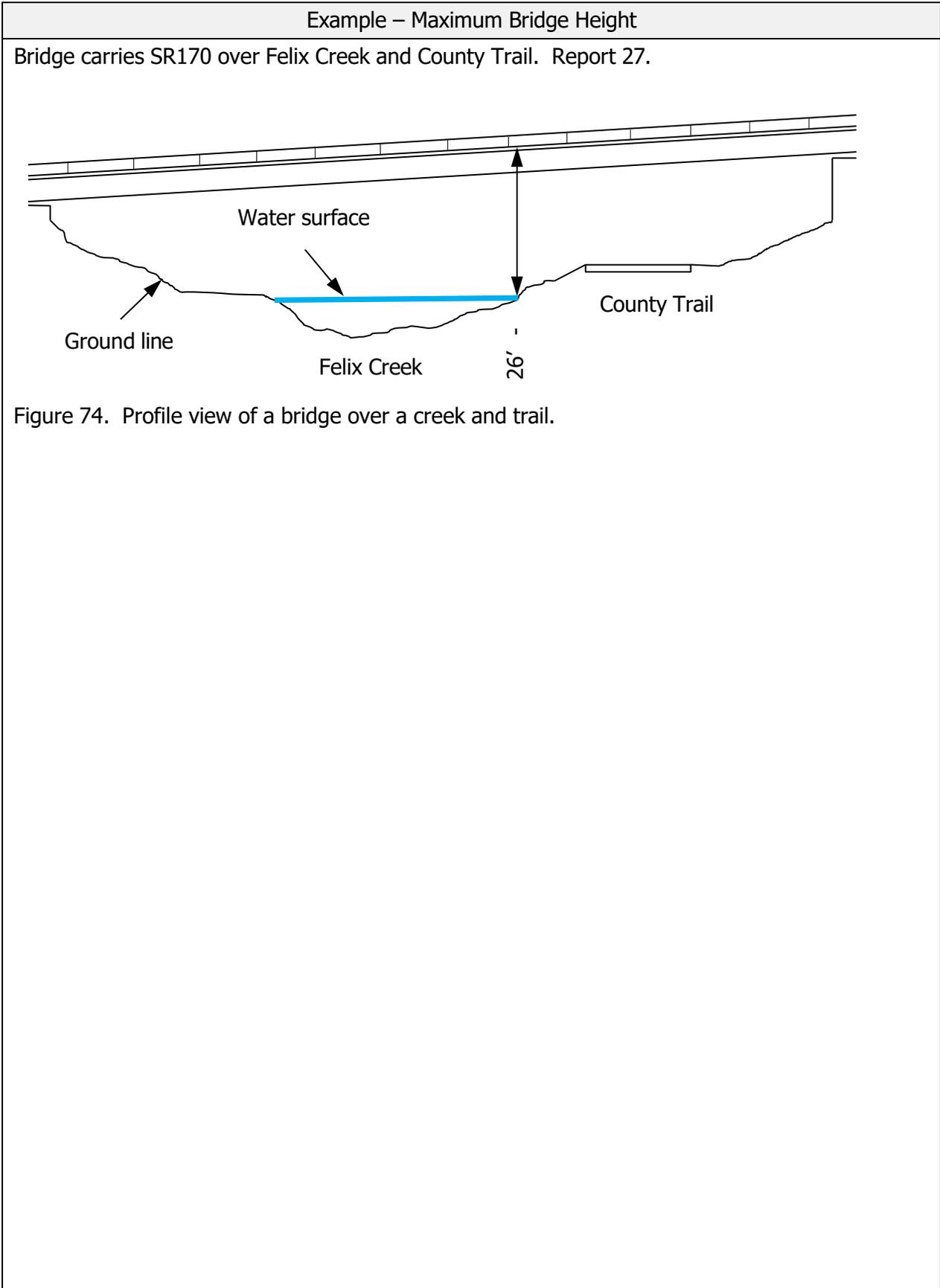
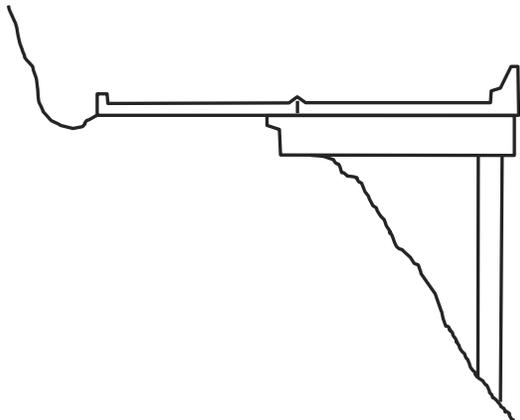


Figure 74. Profile view of a bridge over a creek and trail.

Sidehill Bridge		
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.G.14
Specification	Commentary	
<p>Report whether any portion of the bridge is a sidehill structure.</p> <p>Code Description N Not a sidehill bridge Y Is a sidehill bridge</p>	<p>A sidehill bridge is a structure built onto the side of terrain or earth material with the roadway centerline running nearly parallel to the face of the terrain or material. The roadway is carried partially on structure and partially on terrain that has been modified by cutting or filling to form the required roadway subgrade elevation.</p> <p>For sidehill bridges, Item B.G.06 (<i>Bridge Width Curb-to-Curb</i>) is typically larger than Item B.G.05 (<i>Bridge Width Out-to-Out</i>).</p> <p>For sidehill bridges with irregular geometry, reporting the actual deck area in Item B.G.15 (<i>Irregular Deck Area</i>) provides a more accurate value than using the default calculation described for that item.</p> <p>Use code N when no portion of the bridge is a sidehill structure.</p>	
Example		
<p>A bridge is built onto the side of a hill with the roadway partially on ground and partially on structure. Report Y.</p> <div style="text-align: center;">  </div> <p>Figure 75. Cross-section view of a sidehill bridge.</p>		

<i>Irregular Deck Area</i>		
<u>Format</u> N (10,1)	<u>Frequency</u> I	<u>Item ID</u> B.G.15
Specification		Commentary
<p>Report the total deck area rounded to the nearest tenth of a square foot.</p> <p>Only report this item when the actual area is obtained from plans or measurement of bridges with irregular geometry.</p> <p>The limits of measurement shall be in accordance with Items B.G.05 (<i>Bridge Width Out-to-Out</i>) and B.G.02 (<i>Total Bridge Length</i>).</p> <p>For bridges that carry multiple types of service, for example highway and railroad, report the deck area that encompasses all service types.</p>		<p>Reporting the deck area calculated from plans may more accurately reflect the deck area for bridges with unusual geometry (e.g. flared, sidehill, or bifurcated structures), or through structures with cantilevered sidewalks.</p> <p>This item can improve the accuracy of national performance measure computations, estimating cost, etc.</p>

<i>Calculated Deck Area</i>		
<u>Format</u> N (10,1)	<u>Frequency</u> C	<u>Item ID</u> B.G.16
Specification		Commentary
<p>Do not report this item as it is calculated by FHWA.</p> <p>The default calculation for bridges is the value reported in Item B.G.05 (<i>Bridge Width Out-to-Out</i>) multiplied by the value reported in Item B.G.02 (<i>Total Bridge Length</i>) rounded to the nearest tenth of a square foot.</p>		

<i>Structure Fill Depth</i>		
<u>Format</u> N (3,1)	<u>Frequency</u> I	<u>Item ID</u> B.G.IL.01
Specification		Commentary
<p>This item indicates the depth of fill (earth and pavement thickness) measured from the top slab of culverts or the top of bridge decks, to the top of the pavement surface.</p> <p>This measurement is used to aid in the calculation of permit overloads.</p>		<p>Enter the measurement in feet and rounded to the nearest tenth (.1) of a foot.</p> <p>Where there is no earth fill, enter 00.0</p>
Examples		

SECTION 4: FEATURES

This section has data items that have been grouped by the following five subsections: Feature Identification, Routes, Highways, Railroads, and Navigable Waterways. The data items in these subsections identify and describe the features that are above, below, and carried on bridges.

The data items in the Feature Identification subsection identify and locate features that are above, below, and carried on the bridge. These items are considered part of the Features Data Set and have a many-to-one relationship with a bridge.

The data items in the Routes and Highways subsections are reported when the feature type reported in Item B.F.01 (*Feature Type*) is a highway (e.g. code H01, H02, etc.).

The data items in the Routes subsection identify the routes that are carried on each highway feature reported in Item B.F.01 (*Feature Type*). These items are considered part of the Routes Data Set and have a many-to-one relationship with a highway feature.

The data items in the Highways subsection provide information about the highways that are carried on, and that pass above or below the bridge. These items are considered part of the Features Data Set and have a many-to-one relationship with a bridge.

The data items in the Railroads subsection are reported when the feature type reported in Item B.F.01 (*Feature Type*) is a railroad (e.g. code R01, R02, etc.). The items in this subsection provide information about railroads that are carried on or pass below the bridge. These data items are considered part of the Features Data Set and have a many-to-one relationship with a bridge.

The data items in the Navigable Waterways subsection are reported when the feature type reported in Item B.F.01 (*Feature Type*) is a waterway (e.g. code W01, W02, etc.). The items in this subsection provide information on navigable waterways that pass below the bridge. These data items are considered part of the Features Data Set and have a many-to-one relationship with a bridge.

The data for items in this section typically remain static once a bridge has been inventoried. The following data items are included in this section.

SUBSECTION 4.1: FEATURE IDENTIFICATION

Item ID Data Item

B.F.01	Feature Type
B.F.02	Feature Location
B.F.03	Feature Name

SUBSECTION 4.2: ROUTES

Item ID Data Item

B.RT.01	Route Designation
B.RT.02	Route Number
B.RT.03	Route Direction
B.RT.04	Route Type
B.RT.05	Service Type

SUBSECTION 4.3: HIGHWAYS**Item ID Data Item**

B.H.01	Functional Classification
B.H.02	Urban Code
B.H.03	NHS Designation
B.H.04	National Highway Freight Network
B.H.05	STRAHNET Designation
B.H.06	LRS Route ID
B.H.07	LRS Mile Point
B.H.08	Lanes on Highway
B.H.09	Annual Average Daily Traffic
B.H.10	Annual Average Daily Truck Traffic
B.H.11	Year of Annual Average Daily Traffic
B.H.12	Highway Maximum Usable Vertical Clearance
B.H.13	Highway Minimum Vertical Clearance
B.H.14	Highway Minimum Horizontal Clearance, Left
B.H.15	Highway Minimum Horizontal Clearance, Right
B.H.16	Highway Maximum Usable Surface Width
B.H.17	Bypass Detour Length
B.H.18	Crossing Bridge Number
B.H.IL.01	Underclearance Appraisal
B.H.IL.02	One Or Two Way Traffic
B.H.IL.03	Congressional District
B.H.IL.04	Representative District
B.H.IL.05	Iris Jurisdiction
B.H.IL.06	Iris Maintenance
B.H.IL.07	Reasonable Access
B.H.IL.08	Cardinal Direction
B.H.IL.09	Remarks
B.H.IL.10	Ten-Foot Vertical Clearance
B.H.IL.11	Ten-Foot Vertical Clearance
B.H.IL.12	Right Horizontal Clearance
B.H.IL.13	Left Horizontal Clearance
B.H.IL.14	Minimum Vertical Clearance On - left
B.H.IL.15	Minimum Vertical Highway Underclearance-Left
B.H.IL.16	Minimum Lateral Highway Underclearance (Left)
B.H.IL.17	Calculated NHS
B.H.IL.18	Calculated FC
B.H.IL.19	Route Appurtenance Type
B.H.IL.20	Inventory County
B.H.IL.21	Township/Road District (Inventory)

SUBSECTION 4.4: RAILROADS**Item ID Data Item**

B.RR.01	Railroad Service Type
B.RR.02	Railroad Minimum Vertical Clearance
B.RR.03	Railroad Minimum Horizontal Offset
B.RR.IL.01	Railroad Crossing Numbers

SUBSECTION 4.5: NAVIGABLE WATERWAYS**Item ID Data Item**

B.N.01	Navigable Waterway
B.N.02	Navigation Minimum Vertical Clearance
B.N.03	Movable Bridge Maximum Navigation Vertical Clearance
B.N.04	Navigation Channel Width
B.N.05	Navigation Channel Minimum Horizontal Clearance
B.N.06	Substructure Navigation Protection
B.N.IL.01	Coast Guard

SUBSECTION 4.1: FEATURE IDENTIFICATION

The items in this subsection identify and locate features that are above, below, and carried on the bridge. These items are reported for each feature.

These data items are considered part of the Features Data Set and have a many-to-one relationship with a bridge. Therefore, each feature has a unique Feature data set, and there are typically multiple Feature data sets associated with a bridge.

The data for the items in this subsection typically remain static once a bridge has been inventoried. The following data items are included in this subsection.

Item ID	Data Item
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B.F.01	Feature Type
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B.F.02	Feature Location
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B.F.03	Feature Name
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<i>Feature Type</i>		
<u>Format</u> AN (3)	<u>Frequency</u> I	<u>Item ID</u> B.F.01
Specification	Commentary	
<p>Report the feature that is above, below, or carried on the bridge using one of the following codes.</p> <p><u>Code</u> <u>Description</u> H## Highway R## Railroad P## Pathway W## Waterway F## Relief for waterway B## Urban feature D## Dry terrain or side slope X## Other</p> <p>Replace the ## characters in the above codes with sequential numbers, with leading zeros, assigned to each feature type.</p> <p>For a double deck bridge that is inventoried with one unique bridge number, report a feature for each deck level.</p> <p>Report a railroad feature for each separate railroad service type, as identified in Item B.RR.01 (<i>Railroad Service Type</i>), that is carried on or passes below the bridge. When a track carries multiple railroad service types, report only one feature. When multiple tracks carry the same railroad service type(s), report only one feature.</p> <p>Report one highway feature for a highway that is designated with two or more route numbers.</p> <p>Report multiple highway features when the highway is divided at the bridge.</p>	<p>All bridges have at least one feature carried on the bridge and one feature below the bridge. Some bridges have several features that are above, below, or carried on the bridge.</p> <p>Each feature type is numbered sequentially, starting with one (H01, R01, etc.). Highway features should be numbered beginning with the features carried on the bridge, followed by those below and above (H01, H02, H03, etc.).</p> <p>This item does not include ancillary structures and utilities.</p> <p>Reporting more than one Urban feature or other feature is optional.</p> <p>For multi-level interchanges, report highway features directly above and below the bridge.</p> <p>The presence of a flush or mountable median on the bridge does not in itself indicate that the highway is divided.</p> <p>Use code R for each railroad service type listed in Item B.RR.01 (<i>Railroad Service Type</i>).</p> <p>Use code P for separated pathways dedicated for pedestrian, bicycle, equestrian, or other non-highway modes of human transportation not covered in other codes.</p> <p>Use code W for each unique waterway. Do not use for roadside ditches or pipes that typically only carry roadway runoff from rain events.</p> <p>Use code F for bridges where one or more spans provide waterway openings for flow only during flood stages to provide additional hydraulic capacity, such as relief channels.</p>	

Commentary Continued – Feature Type
<p>Use code B for urban features such as buildings, parking lots, etc.</p> <p>Use code D for features such as a natural depression or sidehill slope when there is no discernable waterway channel and none of the other feature codes apply.</p> <p>Use code X when no other code applies for features that exist below the bridge.</p> <p>For border bridges, the Neighboring State reports this item for all highway features carried on or passing above the bridge, as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>
Examples – Feature Type
<p>A bridge carries I-66 eastbound and I-66 westbound over County Route 601 and Passage Creek. I-66 eastbound and westbound are divided at the bridge by an opening between two superstructure units supported by abutments common to both superstructures.</p> <ul style="list-style-type: none"> • Report H01 for I-66 eastbound. • Report H02 for I-66 westbound. • Report H03 for County Route 601. • Report W01 for Passage Creek. <p>A bridge carries I-68 eastbound and State Route 17 northbound over County Route 603, the Appalachian Trail, and Postage Creek. I-68 eastbound and State Route 17 northbound share a common highway that is not divided at the bridge. Above the bridge is a ramp connecting I-68 westbound to County Route 603 southbound.</p> <ul style="list-style-type: none"> • Report H01 for I-68/SR17. • Report H02 for County Route 603. • Report H03 for the ramp. • Report P01 for the Appalachian Trail. • Report W01 for Postage Creek. <p>A bridge carries Brookside Glen Drive over Union Creek. The bridge carries sidewalks on the north and south sides.</p> <ul style="list-style-type: none"> • Report H01 for Brookside Glen Drive. • Report P01 for the sidewalks. • Report W01 for Union Creek.

<i>Feature Location</i>														
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.F.02												
Specification		Commentary												
<p>Report the location for the feature reported in Item B.F.01 (<i>Feature Type</i>) that is above, below, or carried on the bridge using one of the following codes.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td>C</td> <td>Carried on bridge</td> </tr> <tr> <td>A</td> <td>Above bridge</td> </tr> <tr> <td>B</td> <td>Below bridge</td> </tr> <tr> <td>T</td> <td>Top level</td> </tr> <tr> <td>L</td> <td>Lower level</td> </tr> </tbody> </table>		<u>Code</u>	<u>Description</u>	C	Carried on bridge	A	Above bridge	B	Below bridge	T	Top level	L	Lower level	<p>This item has a corresponding code for each feature reported for Item B.F.01 (<i>Feature Type</i>).</p> <p>Use code T for the top level of a double deck bridge that is inventoried using one unique bridge number.</p> <p>Use code L for the lower level of a double deck bridge that is inventoried using one unique bridge number.</p> <p>For border bridges, the Neighboring State reports this item for all highway features carried on or passing above the bridge, as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>
<u>Code</u>	<u>Description</u>													
C	Carried on bridge													
A	Above bridge													
B	Below bridge													
T	Top level													
L	Lower level													
Examples														
<p>A bridge carries I-66 eastbound and I-66 westbound over County Route 601 and Passage Creek. I-66 eastbound and westbound are divided at the bridge by an opening between two superstructure units supported by abutments common to both superstructures.</p> <ul style="list-style-type: none"> • Report C for I-66 eastbound. • Report C For I-66 westbound. • Report B for County Route 601. • Report B for Passage Creek. <p>A bridge carries I-68 eastbound and State Route 17 northbound over County Route 603, the Appalachian Trail, and Postage Creek. I-68 eastbound and State Route 17 northbound share a common highway that is not divided at the bridge. Above the bridge is a ramp connecting I-68 westbound to County Route 603 southbound.</p> <ul style="list-style-type: none"> • Report C for I-68/SR17. • Report B for County Route 603. • Report A for the ramp. • Report B for the Appalachian Trail. • Report B for Postage Creek. <p>A bridge carries Brookside Glen Drive over Union Creek. The bridge carries sidewalks on the north and south sides.</p> <ul style="list-style-type: none"> • Report C for Brookside Glen Drive. • Report C for the sidewalks. • Report B for Union Creek. 														

<i>Feature Name</i>		
<u>Format</u> AN (300)	<u>Frequency</u> I	<u>Item ID</u> B.F.03
Specification		Commentary
<p>Report the commonly known name(s) for the feature reported in Item B.F.01 (<i>Feature Type</i>). If the feature has no commonly known name, provide a general description.</p> <p>For more than one name, report all names with the most common name first.</p> <p>When applicable, report the route number first followed by other names.</p> <p>Report multiple names separated by pipe () delimiters.</p>		<p>This item has correlating data for each feature reported for Item B.F.01 (<i>Feature Type</i>).</p> <p>The owner may include directional or other descriptive information in this field. Official names and local names may be included.</p> <p>For border bridges, the Neighboring State reports this item for all highway features carried on or passing above the bridge, as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>
Examples		
<p>I-90, commonly named Massachusetts Turnpike. Report I-90 Massachusetts Turnpike.</p> <p>I-64, with no commonly known name. Report I-64.</p> <p>US 50 & US 301 carried on one highway commonly named John Hanson Highway. Report US 50 US 301 John Hanson Highway.</p> <p>I-95S carried on the lower deck of the George Washington Bridge. Report I95S George Washington Bridge - Lower Deck.</p> <p>I-495 northbound. Report I-495 NB.</p> <p>A bridge carries I-68 eastbound (commonly named Harry Byrd Expressway), and State Route 17 northbound (commonly named Paris Pike) over County Route 603 (commonly named Blue Ridge Mountain Road), the Appalachian Trail, and Postage Creek. I-68 eastbound and State Route 17 northbound share a common highway that is not divided at the bridge. Above the bridge is a ramp connecting I-68 westbound to County Route 603 southbound.</p> <ul style="list-style-type: none"> • Report I-68 Harry Byrd Expressway SR17 Paris Pike for I-68/SR17. • Report County Route 603 Blue Ridge Mountain Road for County Route 603. • Report I-68 WB to County Route 603 SB for the ramp. • Report Appalachian Trail for the pathway. • Report Postage Creek for the waterway. <p>A bridge carries Brookside Glen Drive over Union Creek. The bridge carries sidewalks on the north and south sides.</p> <ul style="list-style-type: none"> • Report Brookside Glen Drive for the highway. • Report Sidewalks for the pathways. • Report Union Creek for the waterway. 		

SUBSECTION 4.2: ROUTES

The data items in this subsection identify the routes that are carried on each highway feature reported in Item B.F.01 (*Feature Type*). These data items are considered part of the Routes Data Set and have a many-to-one relationship with a highway feature. Therefore, each route reported in Item B.RT.01 (*Route Designation*) has a unique route data set, and there may be multiple route data sets associated with a highway feature.

For each highway feature that is carried on the bridge, report all route items.

For each highway feature that passes below the bridge and is not carried by another bridge, report all route items.

Do not report route items for highway features that pass above or below the bridge and are carried by another bridge. When needed, FHWA obtains the data for these highway feature(s) using the data reported for the crossing bridge, per Item B.H.18 (*Crossing Bridge Number*).

The data for the items in this subsection typically remain static once a bridge has been inventoried. The following data items are included in this subsection.

Item ID	Data Item
B.RT.01	Route Designation
B.RT.02	Route Number
B.RT.03	Route Direction
B.RT.04	Route Type
B.RT.05	Service Type

<i>Route Designation</i>		
<u>Format</u> AN (3)	<u>Frequency</u> I	<u>Item ID</u> B.RT.01
Specification	Commentary	
<p>Report the assigned route designation for the highway reported in Item B.F.01 (<i>Feature Type</i>) using the following code.</p> <p><u>Code</u> <u>Description</u> R## Unique Route Designation</p> <p>Replace the ## characters in the above code with sequential numbers, with leading zeros, assigned to each unique route designation carried on the highway feature (e.g., R01, R02, etc.).</p> <p>If a highway carries multiple routes, report only those routes that have a route number. If a highway carries only routes without route numbers, report one route designation.</p>	<p>This item captures how routes that share the reported highway feature are designated.</p> <p>Each highway feature has at least one route designation.</p> <p>Typically, the route with the highest-class route type is listed first, using the hierarchy shown in Item B.RT.04 (<i>Route Type</i>). An interstate is considered the highest-class route.</p> <p>If the highway feature is carried on a ramp bridge, report all applicable routes for the highways that are being connected.</p> <p>For border bridges, the Neighboring State reports this item for all highway features carried on the bridge, as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>	
Examples		
<p>I-35 southbound. Report R01.</p> <p>Local road with no known route number. Report R01.</p> <p>I-66 and State Route 17 northbound share one highway that is not divided at the bridge.</p> <ul style="list-style-type: none"> • Report R01 for I-66. • Report R02 for State Route 17. <p>A ramp bridge departs from I-66 westbound and enters I-81 southbound.</p> <ul style="list-style-type: none"> • Report R01 for I-66. • Report R02 for I-81. <p>One highway feature is signed for both State Highway 43 and Harlem Avenue.</p> <ul style="list-style-type: none"> • Report R01 for State Highway 43. • Do not report a route record for Harlem Avenue. 		

<i>Route Number</i>		
<u>Format</u> AN (15)	<u>Frequency</u> I	<u>Item ID</u> B.RT.02
Specification	Commentary	
<p>Report the route number for the route reported in Item B.RT.01 (<i>Route Designation</i>).</p> <p>Include letters that are used as part of the route numbers.</p> <p>Report 0 for routes without route numbers.</p>	<p>For divided highways, do not report the route direction. Identify that information in Item B.RT.03 (<i>Route Direction</i>).</p> <p>For border bridges, the Neighboring State reports this item for all highway features carried on the bridge, as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>	
Examples		
<p>I-35 southbound. Report 35.</p> <p>I-35W southbound. Report 35W.</p> <p>State Highway 9A is not divided at the bridge. Report 9A.</p> <p>Local road with no known route number. Report 0.</p> <p>I-66 and State Route 17 northbound share one highway that is not divided at the bridge.</p> <ul style="list-style-type: none"> • Report 66 for the route designated as I-66. • Report 17 for the route designated as State Route 17. <p>A ramp bridge departs from I-66 westbound and enters I-81 southbound.</p> <ul style="list-style-type: none"> • Report 66 for the route designated as I-66. • Report 81 for the route designated as I-81. 		

<i>Route Direction</i>																
<u>Format</u> AN (2)	<u>Frequency</u> I	<u>Item ID</u> B.RT.03														
Specification	Commentary															
<p>Report the designated route direction for the route reported in Item B.RT.01 (<i>Route Designation</i>) using one of the following codes.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td>NB</td> <td>Northbound</td> </tr> <tr> <td>EB</td> <td>Eastbound</td> </tr> <tr> <td>SB</td> <td>Southbound</td> </tr> <tr> <td>WB</td> <td>Westbound</td> </tr> <tr> <td>NS</td> <td>Northbound and Southbound</td> </tr> <tr> <td>EW</td> <td>Eastbound and Westbound</td> </tr> </tbody> </table>	<u>Code</u>	<u>Description</u>	NB	Northbound	EB	Eastbound	SB	Southbound	WB	Westbound	NS	Northbound and Southbound	EW	Eastbound and Westbound	<p>Use code NS when the route is not divided at the bridge, and carries traffic in both north and south directions.</p> <p>Use code EW when the route is not divided at the bridge, and carries traffic in both east and west directions.</p> <p>Use the designated route direction for the departure or entrance route when a bridge only carries a ramp; i.e. Item B.RT.05 (<i>Service Type</i>) is 7.</p> <p>Use the most applicable code when a route does not have a designated route direction.</p> <p>For border bridges, the Neighboring State reports this item for all highway features carried on the bridge, as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>	
<u>Code</u>	<u>Description</u>															
NB	Northbound															
EB	Eastbound															
SB	Southbound															
WB	Westbound															
NS	Northbound and Southbound															
EW	Eastbound and Westbound															
Examples																
<p>I-35 southbound. Report SB.</p> <p>I- 5W southbound. Report SB.</p> <p>State Highway 9W is not divided at the bridge and carries traffic in north and south directions. Report NS.</p> <p>A ramp bridge departs from I-66 westbound and enters I-81 southbound.</p> <ul style="list-style-type: none"> • Report WB for the route designated as I-66. • Report SB for the route designated as I-81. <p>Bridge carries I-81 northbound and I-64 eastbound.</p> <ul style="list-style-type: none"> • Report NB for the route designated as I-81. • Report EB for the route designated as I-64. 																

<i>Route Type</i>																		
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.RT.04																
Specification	Commentary																	
<p>Report the route type for the route reported in Item B.RT.01 (<i>Route Designation</i>) using one of the following codes.</p> <p>Code Description</p> <table border="0"> <tr><td>1</td><td>Interstate route</td></tr> <tr><td>2</td><td>U.S. route</td></tr> <tr><td>3</td><td>State route</td></tr> <tr><td>4</td><td>County route</td></tr> <tr><td>5</td><td>City street</td></tr> <tr><td>6</td><td>Federal lands road</td></tr> <tr><td>7</td><td>State lands road</td></tr> <tr><td>X</td><td>Other</td></tr> </table>	1	Interstate route	2	U.S. route	3	State route	4	County route	5	City street	6	Federal lands road	7	State lands road	X	Other	<p>Use code 4 for parish routes or other county route equivalents.</p> <p>Use code 5 for city or other municipal streets.</p> <p>Use code 6 when a public highway passes through Federal lands such as national parks, national forests, or DOD facilities and does not meet the description of codes 1 through 5.</p> <p>Use code 7 when a public highway passes through State lands such as State parks or State forests and does not meet the description of codes 1 through 5.</p> <p>Use code X when a public highway is not designated as one of the defined route type codes.</p> <p>For border bridges, the Neighboring State reports this item for all highway features carried on the bridge, as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>	
1	Interstate route																	
2	U.S. route																	
3	State route																	
4	County route																	
5	City street																	
6	Federal lands road																	
7	State lands road																	
X	Other																	
Examples																		
<p>Highway feature is signed for both I-35 and US-77.</p> <ul style="list-style-type: none"> • Report 1 for the route designated as I-35. • Report 2 for the route designated as US-77. <p>Route is signed I-35 southbound. Report 1.</p> <p>Route is signed State Highway 9W. Report 3.</p> <p>A ramp bridge departs from VA-7 westbound and enters I-81 southbound.</p> <ul style="list-style-type: none"> • Report 3 for the route designated as VA-7. • Report 1 for the route designated as I-81. 																		

<i>Service Type</i>																				
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.RT.05																		
Specification		Commentary																		
<p>Report the designated service type for the route reported in Item B.RT.01 (<i>Route Designation</i>), using one of the following codes.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr><td>1</td><td>Mainline</td></tr> <tr><td>2</td><td>Alternate</td></tr> <tr><td>3</td><td>Bypass</td></tr> <tr><td>4</td><td>Spur</td></tr> <tr><td>6</td><td>Business</td></tr> <tr><td>7</td><td>Ramp, connector, etc.</td></tr> <tr><td>8</td><td>Service or frontage road</td></tr> <tr><td>X</td><td>Other</td></tr> </tbody> </table>		<u>Code</u>	<u>Description</u>	1	Mainline	2	Alternate	3	Bypass	4	Spur	6	Business	7	Ramp, connector, etc.	8	Service or frontage road	X	Other	<p>The service type designation is determined by the agency, and typically included as part of the signage for the route.</p> <p>Use code 7 for all types, arrangements, and sizes of turning roadways that connect two or more highways at an interchange.</p> <p>Use code 8 for frontage roads. These are typically parallel to the traveled way, may be provided on one or both sides of the mainline, and may or may not be continuous. A frontage road may include a U-turn lane.</p> <p>For Federal agency roads, report the most logical description of the service type compared to other routes within the facility.</p> <p>For border bridges, the Neighboring State reports this item for all highway features carried on the bridge, as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>
<u>Code</u>	<u>Description</u>																			
1	Mainline																			
2	Alternate																			
3	Bypass																			
4	Spur																			
6	Business																			
7	Ramp, connector, etc.																			
8	Service or frontage road																			
X	Other																			
Examples																				
<p>A ramp bridge connects I-66 westbound to I-81 southbound. Report 7.</p> <p>I-35W southbound. Report 1.</p>																				

SUBSECTION 4.3: HIGHWAYS

The data items in this subsection provide information about the highways that are carried on, and that pass above or below the bridge. These data items are considered part of the Features Data Set and have a many-to-one relationship with a bridge. Therefore, each highway feature reported in Item B.F.01 (*Feature Type*) has a unique highway feature data set, and there are typically multiple highway feature data sets associated with a bridge.

For each highway feature that is carried on the bridge, report all applicable items.

For each highway feature that passes below the bridge and is not carried by another bridge, report all applicable items. Items B.H.12 (*Highway Maximum Usable Vertical Clearance*) and B.H.16 (*Highway Maximum Usable Surface Width*) apply to highway features below a bridge only when the highway feature carries an NHS route.

For each highway feature that passes above or below the bridge and is carried by another bridge, report only Item B.H.18 (*Crossing Bridge Number*). When needed, FHWA obtains the data for these highway feature(s) using the data reported for the crossing bridge.

The data for the items in this subsection typically remain static once a bridge has been inventoried. The following data items are included in this subsection.

Item ID	Data Item
B.H.01	Functional Classification
B.H.02	Urban Code
B.H.03	NHS Designation
B.H.04	National Highway Freight Network
B.H.05	STRAHNET Designation
B.H.06	LRS Route ID
B.H.07	LRS Mile Point
B.H.08	Lanes on Highway
B.H.09	Annual Average Daily Traffic
B.H.10	Annual Average Daily Truck Traffic
B.H.11	Year of Annual Average Daily Traffic
B.H.12	Highway Maximum Usable Vertical Clearance
B.H.13	Highway Minimum Vertical Clearance
B.H.14	Highway Minimum Horizontal Clearance - Left
B.H.15	Highway Minimum Horizontal Clearance - Right
B.H.16	Highway Maximum Usable Surface Width
B.H.17	Bypass Detour Length
B.H.18	Crossing Bridge Number
B.H.IL.01	Underclearance Appraisal
B.H.IL.02	One Or Two Way Traffic
B.H.IL.03	Congressional District
B.H.IL.04	Representative District
B.H.IL.05	Iris Jurisdiction
B.H.IL.06	Iris Maintenance
B.H.IL.07	Reasonable Access
B.H.IL.08	Cardinal Direction
B.H.IL.09	Remarks
B.H.IL.10	Ten-Foot Vertical Clearance
B.H.IL.11	Ten-Foot Vertical Clearance
B.H.IL.12	Right Horizontal Clearance

- B.H.I.L.13 Left Horizontal Clearance
- B.H.I.L.14 Minimum Vertical Clearance On - Left
- B.H.I.L.15 Minimum Vertical Highway Underclearance - Left
- B.H.I.L.16 Minimum Lateral Highway Underclearance - Left
- B.H.I.L.17 Calculated NHS
- B.H.I.L.18 Calculated FC
- B.H.I.L.19 Route Appurtenance Type
- B.H.I.L.20 Inventory County
- B.H.I.L.21 Township/Road District (Inventory)

<i>Functional Classification</i>																
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.H.01														
Specification		Commentary														
<p>This item is generated using data from the Illinois Roadway Information System (IRIS). Report the functional classification for the highway feature reported in Item B.F.01 (<i>Feature Type</i>) using one of the following codes.</p> <p>Code Description</p> <table border="0"> <tr><td>1</td><td>Interstate</td></tr> <tr><td>2</td><td>Principal Arterial – Other Freeways and Expressways</td></tr> <tr><td>3</td><td>Principal Arterial – Other</td></tr> <tr><td>4</td><td>Minor Arterial</td></tr> <tr><td>5</td><td>Major Collector</td></tr> <tr><td>6</td><td>Minor Collector</td></tr> <tr><td>7</td><td>Local</td></tr> </table>		1	Interstate	2	Principal Arterial – Other Freeways and Expressways	3	Principal Arterial – Other	4	Minor Arterial	5	Major Collector	6	Minor Collector	7	Local	<p>DO NOT ENTER. (This item is computer generated).</p> <p>Functional classifications result from the grouping of highways by the character of service they provide.</p> <p>Ensure that the functional classification designated in this item is consistent with the HPMS.</p> <p>When one highway feature carries multiple route types, report the code for the highest-class route following the hierarchy in the code descriptions; Interstate being the highest class.</p> <p>Use code 7 for State or Federal parkways and other park roads unless there is a through highway designated at a higher classification.</p> <p>FHWA Highway Functional Classification Concepts, Criteria, and Procedures website: http://www.fhwa.dot.gov/planning/processes/statewide/related/highway_functional_classifications/.</p>
1	Interstate															
2	Principal Arterial – Other Freeways and Expressways															
3	Principal Arterial – Other															
4	Minor Arterial															
5	Major Collector															
6	Minor Collector															
7	Local															

<i>Urban Code</i>		
Format AN (5)	Frequency I	Item ID B.H.02
Specification	Commentary	
<p>This item is generated using data from the Illinois Roadway Information System (IRIS). Report the urbanized area code consistent with the State's HPMS urban boundaries for the highway feature reported in Item B.F.01 (<i>Feature Type</i>) at the bridge.</p>	<p>Urban codes can be found at: https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural.html.</p> <p>For bridges outside urbanized areas, use code 99999 for rural areas with population less than 5,000 and use code 99998 for small urban areas with population 5,000 to 49,999 in accordance with the HPMS Field Manual.</p> <p>FHWA approves adjusted urban boundaries submitted by State DOT planning offices. State's HPMS urban boundaries are based on the FHWA-approved adjusted urban boundaries.</p> <p>State maps of the unadjusted U.S. Census urban boundaries with highways (map layers: Labels, Transportation, and Urban Areas checked) can be found at: https://tigerweb.geo.census.gov.</p>	

Example

U.S. 13/113A over Saint Jones River. Report 24580.

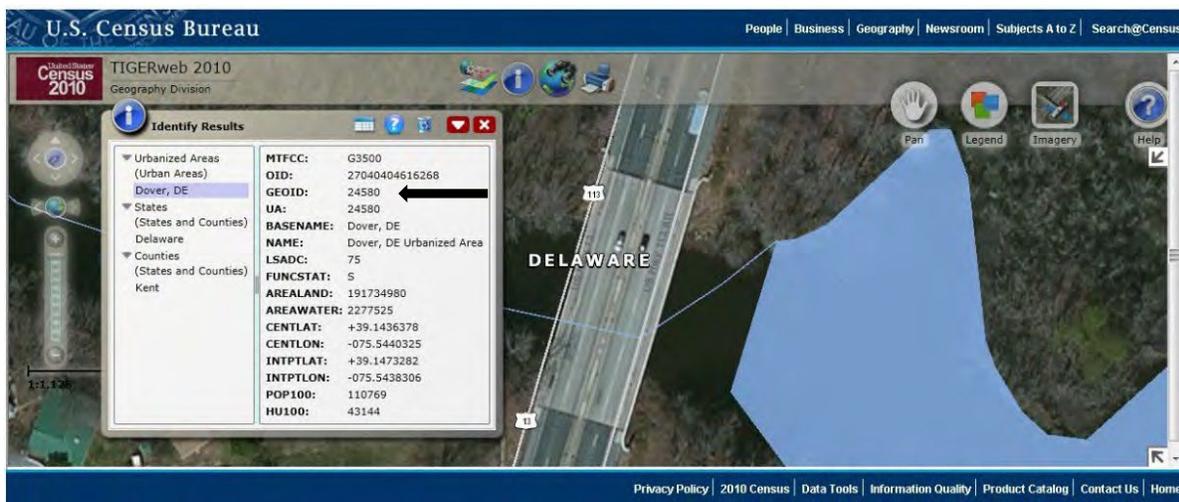


Figure 80. TIGERweb screen shot for the bridge in Delaware. (Source: US Census Bureau)

<i>NHS Designation</i>								
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.H.03						
Specification		Commentary						
<p>This item is generated using data from the Illinois Roadway Information System (IRIS). Report the NHS designation for the highway feature reported in Item B.F.01 (<i>Feature Type</i>), using one of the following codes.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td>N</td> <td>Non-NHS</td> </tr> <tr> <td>Y</td> <td>NHS</td> </tr> </tbody> </table>		<u>Code</u>	<u>Description</u>	N	Non-NHS	Y	NHS	<p>The National Highway System (NHS) includes the Interstate Highway System as well as other roads important to the nation's economy, defense, and mobility. The NHS was developed by the U.S. Department of Transportation (DOT) in cooperation with the states, local officials, and metropolitan planning organizations (MPOs). The NHS includes the following subsystems of highways: Interstate, other principal arterials, STRAHNET, major STRAHNET connectors, and intermodal connectors.</p> <p>NHS routes and connectors are identified in the HPMS.</p> <p>State maps of the NHS can be found at: http://www.fhwa.dot.gov/planning/national_highway_system/nhs_maps/.</p> <p>For border bridges, the Neighboring State reports this item for all highway features carried on the bridge, as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>
<u>Code</u>	<u>Description</u>							
N	Non-NHS							
Y	NHS							

<i>National Highway Freight Network</i>		
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.H.04
Specification		Commentary
<p>This item is generated using data from the Illinois Roadway Information System (IRIS). Report the National Highway Freight Network (NHFN) designation for the highway feature reported in Item B.F.01 (<i>Feature Type</i>), using one of the following codes.</p> <p>Code Description</p> <p>1 Primary Highway Freight System</p> <p>2 Interstate portions not on the Primary Highway Freight System</p> <p>3 Critical Rural Freight Corridor</p> <p>4 Critical Urban Freight Corridor</p> <p>N Not on the NHFN</p>		<p>This item is used to identify the National Highway Freight Network and to report to Congress on the conditions and performance of the network. This item is also used with other items to classify bridges according to serviceability, safety, and essentiality for public use and considers the potential impacts to emergency evacuation routes and to regional and national freight and passenger mobility if the serviceability of the bridge is restricted or diminished.</p> <p>More information can be found at: http://www.ops.fhwa.dot.gov/freight/infrastructure/index.htm.</p>

<i>STRAHNET Designation</i>		
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.H.05
Specification		Commentary
<p>This item is generated using data from the Illinois Roadway Information System (IRIS). Report the Strategic Highway Network (STRAHNET) designation for the highway feature reported in Item B.F.01 (<i>Feature Type</i>), using one of the following codes.</p> <p>Code Description</p> <p>1 STRAHNET route</p> <p>2 STRAHNET Connector route</p> <p>N Not a STRAHNET route</p>		<p>The STRAHNET is a system of Interstate and primary highways and connectors that provide access to major US military installations and strategic ports, and provides continuity and emergency capabilities for defense purposes. The STRAHNET is determined by the Surface Deployment and Distribution Command (SDDC) in coordination with FHWA.</p> <p>STRAHNET routes and STRAHNET Connector routes can be found on NHS State maps at: http://www.fhwa.dot.gov/planning/national_highway_system/nhs_maps/.</p>

<i>LRS Route ID</i>		
<u>Format</u> AN (120)	<u>Frequency</u> I	<u>Item ID</u> B.H.06
Specification		Commentary
<p>This item is generated using data from the Illinois Roadway Information System (IRIS). Report the LRS Route ID defined by the State that is reported to the HPMS for the highway feature reported in Item B.F.01 (<i>Feature Type</i>).</p> <p>The LRS Route ID must match the HPMS data exactly.</p> <p>Report N if an LRS Route ID has not been assigned.</p>		<p>The LRS Route ID is not necessarily the same as the route number posted along the highway, but is a number used to uniquely identify a route within a county or a State for GIS analysis and mapping purposes.</p> <p>Refer to the FHWA HPMS Field Manual at http://www.fhwa.dot.gov/policyinformation/hpms/fieldmanual/.</p> <p>For border bridges, the Neighboring State reports this item for all highway features carried on the bridge, as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>

<i>LRS Mile Point</i>		
<u>Format</u> N (8,3)	<u>Frequency</u> I	<u>Item ID</u> B.H.07
Specification	Commentary	
<p>This item is generated using data from the Illinois Roadway Information System (IRIS). Report the LRS mile point for the highway feature reported in Item B.F.01 (<i>Feature Type</i>) to the nearest thousandth of a mile. The mile point must be consistent with the LRS route and mile point system for the HPMS.</p> <p>For highway features that carry an LRS route, report the mile point at the beginning of the bridge.</p> <p>When the LRS route passes below the bridge, report the mile point on the LRS route where the bridge is first encountered.</p>	<p>The LRS mile point is used to establish the location of the bridge along the LRS route.</p> <p>If the highway does not carry an LRS route, report the most appropriate mile point.</p> <p>Refer to the FHWA HPMS Field Manual at http://www.fhwa.dot.gov/policyinformation/hpms/fieldmanual/.</p> <p>For border bridges, the Neighboring State reports this item for all highway features carried on the bridge, as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>	
Examples		
<p>LRS Mile Point from HPMS is 130.344. Report 130.344.</p> <p>LRS Mile Point from HPMS is 9.600. Report 9.600.</p> <p>The highway does not carry an LRS route. The beginning of the bridge is 0.2 miles past the 34.0 mile marker. Report 34.2.</p>		

<i>Lanes On Highway</i>		
<u>Format</u> N (2,0)	<u>Frequency</u> I	<u>Item ID</u> B.H.08
Specification	Commentary	
<p>Report the number of highway traffic lanes for the highway feature reported in Item B.F.01 (<i>Feature Type</i>).</p> <p>Report 1 when a highway is signed or striped for one-lane, but carries two-way traffic.</p> <p>Report 1 for a highway feature carried on the bridge when Item B.G.06 (<i>Bridge Width Curb-to-Curb</i>) is less than 16 feet and the bridge is not striped for full width traffic lanes.</p>	<p>For highway features carried on the bridge, include all lanes that are striped or otherwise operated as full width highway traffic lanes and special use lanes (e.g., merge lanes, ramp lanes, and left-turn lanes) - and run the entire length of the bridge.</p> <p>For highway features below the bridge that are not carried on another bridge, include all lanes that are striped or otherwise operated as full width highway traffic lanes and special use lanes (e.g., merge lanes, ramp lanes, and left-turn lanes) that pass below the entire width of the bridge.</p>	
Commentary Continued		
<p>Do not include pedestrian sidewalks, bike paths, or railroad tracks as lanes, unless the railroad tracks are concurrent with the highway lanes.</p> <p>For double deck bridges and parallel bridges, report the number of lanes consistent with the highway feature reported in Item B.F.01 (<i>Feature Type</i>).</p> <p>For sidehill bridges, report the total number of lanes for the highway feature regardless if carried on the bridge or terrain/earth material.</p>		
Examples		
<p>Highway feature carried on the bridge has one lane. Report 1.</p> <p>Highway feature carries two-way traffic on unstriped lanes and has a curb-to-curb width of 18 ft. Report 2.</p> <p>Double deck bridge inventoried as one unique bridge number. Highway feature on top level carries five lanes. Highway feature on lower level carries five lanes.</p> <ul style="list-style-type: none"> • Report 5 for the highway feature on the top level. • Report 5 for the highway feature on the lower level. 		

<i>Annual Average Daily Traffic</i>		
<u>Format</u> N (8,0)	<u>Frequency</u> I	<u>Item ID</u> B.H.09
Specification		Commentary
<p>This item is generated using data from the Illinois Roadway Information System (IRIS). Report the annual average daily traffic (AADT) from the most recent count for the highway feature reported in Item B.F.01 (<i>Feature Type</i>).</p> <p>The AADT must be compatible with the other items reported for the highway feature.</p> <p>Report the design AADT for a newly inventoried highway feature when actual AADT information is not yet available.</p> <p>Report the last open AADT for a highway feature that is temporarily closed until repair or replacement can be completed.</p>		<p>The AADT should be updated at intervals in accordance with the standards for the HPMS and standards/policies within the State.</p> <p>All traffic, including trucks, is counted in the AADT. The number of trucks counted in the AADT is reported in Item B.H.10 (<i>Annual Average Daily Truck Traffic</i>).</p> <p>When HPMS or other planning data are not available, use a best estimate based on site familiarity or functional classification in accordance with State standards and policies.</p>

<i>Annual Average Daily Truck Traffic</i>		
<u>Format</u> N (8,0)	<u>Frequency</u> I	<u>Item ID</u> B.H.10
Specification		Commentary
<p>This item is generated using data from the Illinois Roadway Information System (IRIS). Report the Average Annual Daily Truck Traffic (AADTT) from the most recent count for the highway feature reported in Item B.F.01 (<i>Feature Type</i>).</p> <p>The AADTT must be compatible with the other items reported for the highway feature.</p> <p>Report the design AADTT for a newly inventoried highway feature when actual AADTT information is not yet available.</p> <p>Report the last open AADTT for a highway feature that is temporarily closed until repair or replacement can be completed.</p>		<p>The AADTT should be updated at intervals in accordance with the standards for the HPMS and standards/policies within the State.</p> <p>When HPMS or other planning data are not available, use a best estimate based on site familiarity or functional classification in accordance with State standards and policies.</p> <p>Do not include vans, pickup trucks, and other light delivery trucks in the AADTT. The AADTT represents vehicle classes 4-13 as described in FHWA’s Traffic Monitoring Guide at: http://www.fhwa.dot.gov/policyinformation/tmguide/.</p>

<i>Year of Annual Average Daily Traffic</i>		
<u>Format</u> N (4,0)	<u>Frequency</u> I	<u>Item ID</u> B.H.11
Specification		Commentary
<p>This item is generated using data from the Illinois Roadway Information System (IRIS). Report the year associated with the data reported in Item B.H.09 (<i>Annual Average Daily Traffic</i>) for the highway feature reported in Item B.F.01 (<i>Feature Type</i>).</p>		<p>The traffic data should be updated at intervals in accordance with the standards for the HPMS and standards/policies within the State.</p>

<i>Highway Maximum Usable Vertical Clearance</i>		
<u>Format</u> N (3,1)	<u>Frequency</u> EI	<u>Item ID</u> B.H.12
Specification	Commentary	
<p>Report the minimum vertical clearance for the highway feature reported in Item B.F.01 (<i>Feature Type</i>), measured over the 10-foot-wide envelope of the traveled part of the highway, that provides for the maximum usable clearance envelope, rounded down to the nearest tenth of a foot.</p> <p>Measure the vertical clearance plumb from the deck or highway surface to the lowest bridge member restriction, appurtenance (signs, utilities, etc.) attached to the bridge, or other structure.</p> <p>Report 99.9 when the clearance is 100 feet or greater or no restriction exists above the highway.</p>	<p>This item identifies the maximum height of a notional 10-foot wide vehicle that can pass on the highway feature(s) reported in Item B.F.01 (<i>Feature Type</i>). This information is sometimes used for preliminary military routing.</p> <p>The data may not represent the absolute minimum clearance over the highway feature. Refer to Item B.H.13 (<i>Highway Minimum Vertical Clearance</i>) for the absolute minimum clearance.</p> <p>The traveled part of the highway feature does not include shoulders.</p> <p>These data may be different than the posted vertical clearance due to agency vertical clearance posting policies and procedures. These data are not sufficient for permit routing as the location of the 10-foot-wide envelope that provides for the maximum usable clearance is not reported.</p> <p>For a double decked bridge inventoried as one bridge, report this information for each highway feature on each level of the bridge.</p> <p>Update field measurements when alterations are made to the bridge or highway that affect the previously measured clearance.</p> <p>Reporting this item is optional for highway features below the bridge that do not carry NHS routes as identified in Item B.H.03 (<i>NHS Designation</i>).</p> <p>Clearances greater than 30 feet may be estimated.</p>	

Example – Highway Maximum Usable Vertical Clearance

The bridge has a 13'-9" maximum usable vertical clearance. Report 13.7.

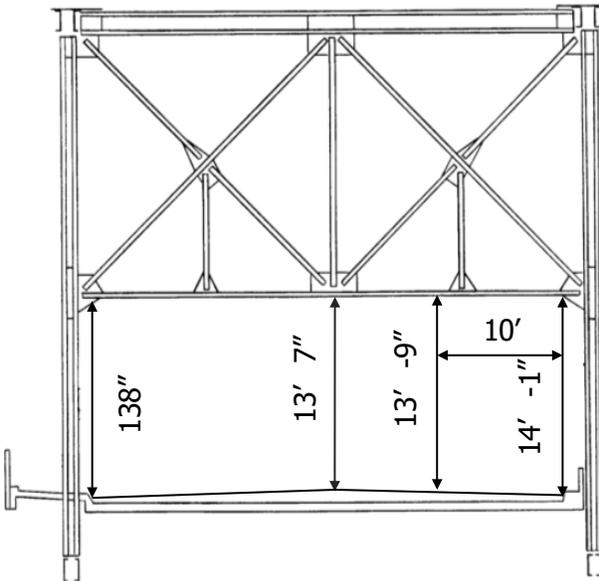


Figure 81. Cross-section view of through truss bridge showing vertical clearances.

The bridge carries a highway with no vertical clearance restrictions. Report 99.9.

Arthur Road passes below the bridge and has an 18'-5" maximum usable vertical clearance. SR70 also passes below the bridge and has a 19'-11" maximum usable vertical clearance.

- Report 18.4 for the Arthur Road highway feature.
- Report 19.9 for the SR70 highway feature.

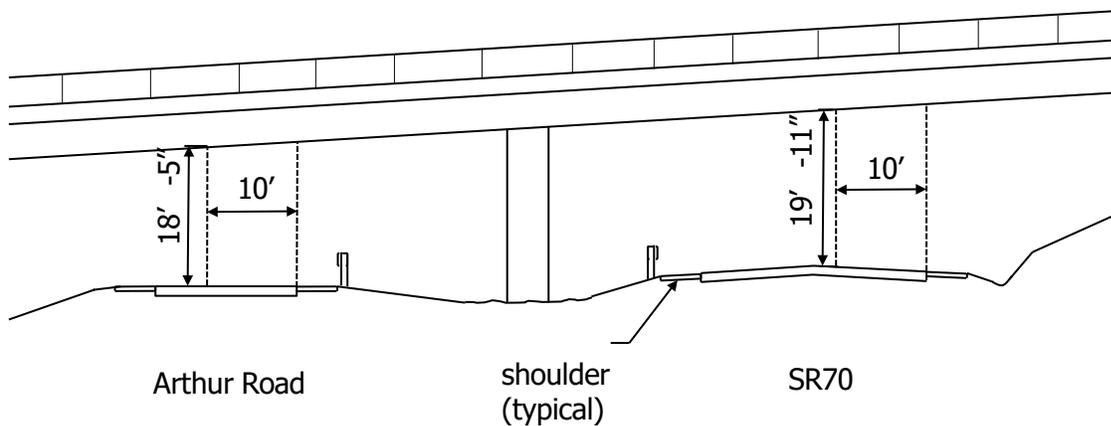


Figure 82. Elevation view with two separate highway features passing below the bridge.

<i>Highway Minimum Vertical Clearance</i>		
<u>Format</u> N (3,1)	<u>Frequency</u> EI	<u>Item ID</u> B.H.13
Specification		Commentary
<p>Report the minimum vertical clearance measured over the highway feature reported in Item B.F.01 (<i>Feature Type</i>), rounded down to the nearest tenth of a foot.</p> <p>Measure the vertical clearance plumb from the deck or highway surface (including paved or stabilized shoulders) to the lowest bridge member restriction, appurtenance (signs, utilities, etc.) attached to the bridge, or other structure.</p> <p>Report 99.9 when the clearance is 100 feet or greater or no restriction exists above the highway.</p>		<p>Several measurements may need to be made to determine the minimum vertical clearance. However, only the minimum measurement is reported.</p> <p>Shoulders must be contiguous with the traveled way and must be structurally adequate for all weather and traffic conditions consistent with the facility carried.</p> <p>Unstabilized grass or dirt, with no base course, flush with and beside the traffic lane is not to be considered a shoulder for this item. Refer to agency policy for when and where stabilized shoulders are used. When it is not readily known if stabilized construction details were used, the presence of rutting, heaving, water retention, or other distress may be used as indicators that the shoulder is not stabilized.</p> <p>These data may be different than the posted vertical clearance due to agency vertical clearance posting policies and procedures.</p> <p>Update field measurements when alterations are made to the bridge or highway that affect the previously measured clearance.</p> <p>Clearances greater than 30 feet may be estimated.</p>

Examples – Highway Minimum Vertical Clearance

The bridge has a 13'-7" minimum vertical clearance. Report 13.5.

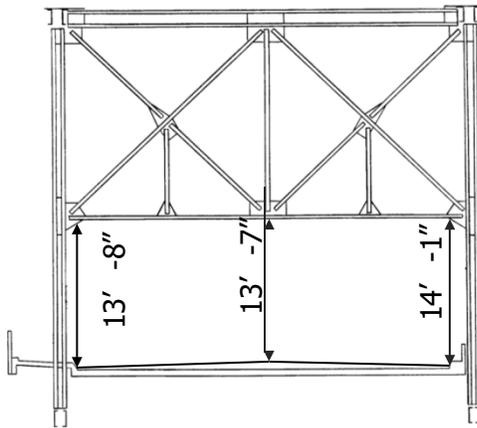


Figure 83. Cross-section view of a through-truss bridge showing minimum vertical clearance.

The bridge carries a highway with no vertical clearance restrictions. Report 99.9.

Two highway features below the bridge. Arthur Road passes below the bridge and has an 18'-3" minimum vertical clearance. SR70 also passes below the bridge and has a 19'-9" minimum vertical clearance.

- Report 18.2 for the Arthur Road highway feature.
- Report 19.7 for the SR70 highway feature.

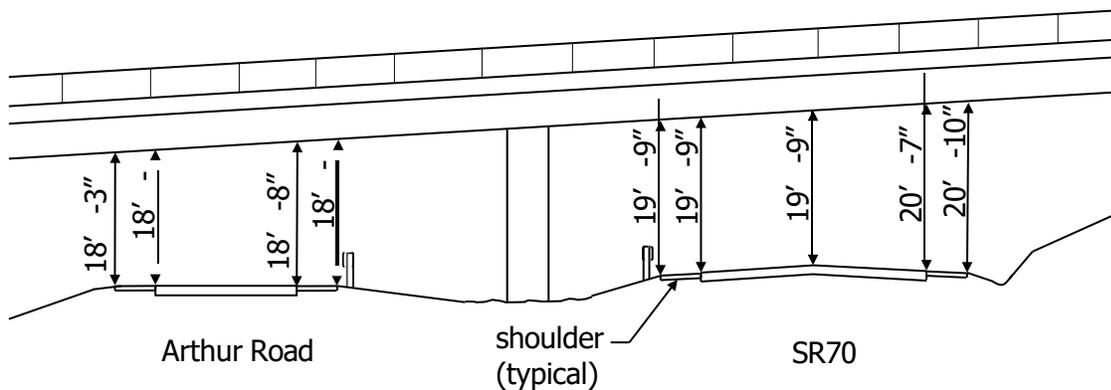


Figure 84. Elevation view with two separate highway features passing below the bridge.

<i>Highway Minimum Horizontal Clearance, Left</i>		
Format N (3,1)	Frequency I	Item ID B.H.14
Specification	Commentary	
<p>Report the minimum horizontal clearance on the left, for the highway feature reported in Item B.F.01 (<i>Feature Type</i>), rounded down to the nearest tenth of a foot.</p> <p>Measure from the left edge line of the highway (excluding shoulders, turn lanes, acceleration, or deceleration lanes) in the direction of travel to the nearest substructure unit, rigid barrier, oncoming traffic lane, or toe of slope that is steeper than 1 to 3 (vertical to horizontal).</p> <p>Report 99.9 when the clearance is 100 feet or greater.</p> <p>Report 0 when the highway is a two-way highway that is not divided at the bridge.</p> <p>Do not report this item for highway feature(s) carried on the bridge.</p>	<p>This item provides data for the highway feature(s) reported in Item B.F.01 (<i>Feature Type</i>) that pass below the bridge.</p> <p>Highways undivided at the bridge are reported as 0 due to the adjacent oncoming traffic lane which provides no horizontal clearance to the left.</p> <p>Reinforced concrete and masonry traffic safety features are considered rigid barriers; metal and timber railings are not considered rigid barriers.</p> <p>Clearances greater than 30 feet may be estimated.</p>	

Examples

Highway feature below the bridge carries 1-way traffic, looking in the direction of travel. Report 20.0.

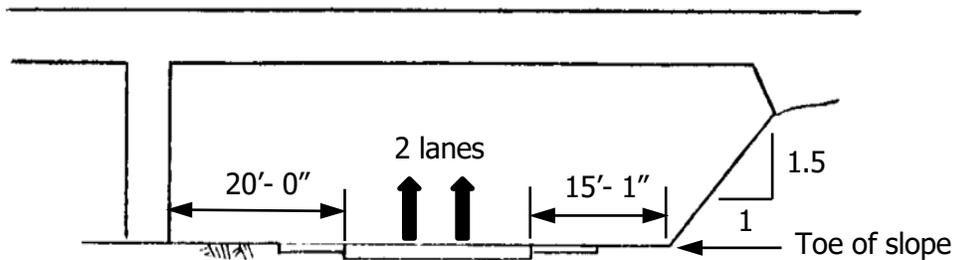


Figure 85. Bridge elevation view of horizontal clearances for a 2-lane highway with 1-way traffic below the bridge.

Examples Continued – Highway Minimum Horizontal Clearance, Left

Highway feature below the bridge carries two-way traffic. Report 0.

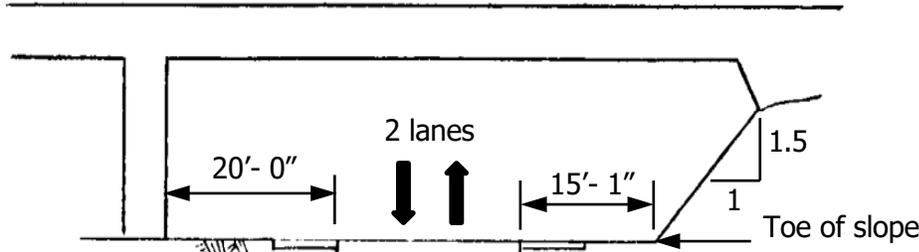


Figure 86. Bridge elevation view of horizontal clearances for a 2-lane highway with 2-way traffic below the bridge.

Two highway features below the bridge for a highway that is divided at the bridge. One highway feature carries 1-way traffic southbound and one carries 1-way traffic northbound.

- Report 18.0 for the southbound highway feature.
- Report 19.0 for the northbound highway feature.

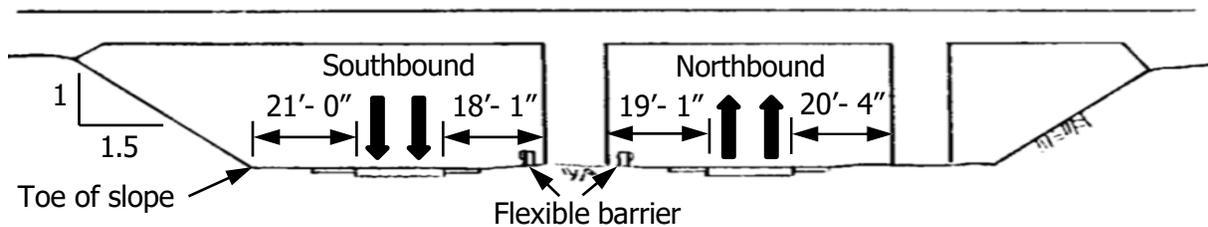


Figure 87. Bridge elevation view of horizontal clearances for separate southbound and northbound highway features below the bridge, with flexible barriers.

Two highway features below the bridge for a highway that is divided at the bridge. One highway feature carries 1-way traffic eastbound and one carries 1-way traffic westbound.

- Report 35.5 for the eastbound highway feature.
- Report 35.5 for the westbound highway feature.

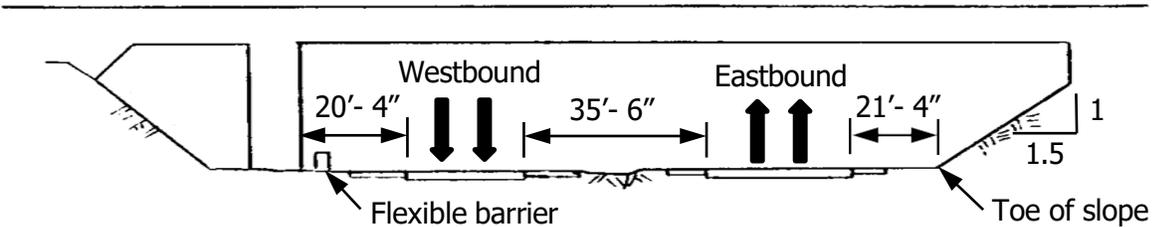


Figure 88. Bridge elevation view of horizontal clearances for separate westbound and eastbound highway features below the bridge, with flexible barrier.

Examples Continued – Highway Minimum Horizontal Clearance, Left

Highway feature below the bridge carries 1-way ramp traffic, looking in the direction of travel. Report 14.5.

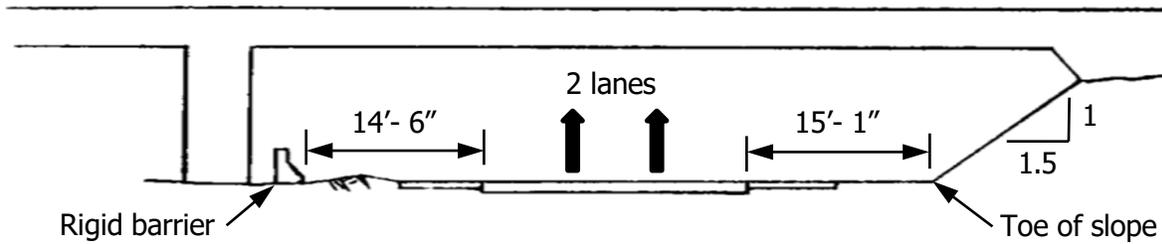


Figure 89. Bridge elevation view of horizontal clearances for a 2-lane, 1-way highway feature below the bridge, with a rigid barrier.

Highway feature below the bridge carries 1-way mainline traffic and 1-way ramp traffic, looking in the direction of travel. Report 20.0.

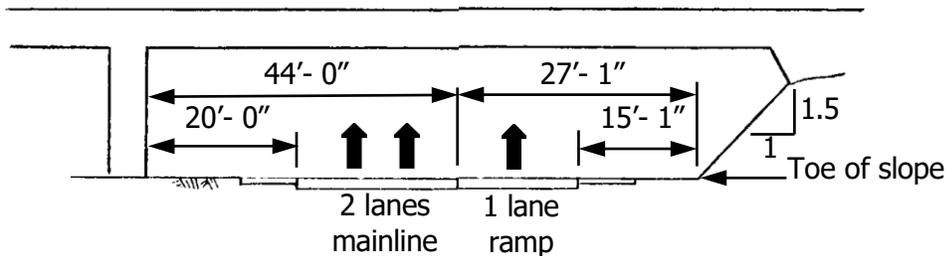


Figure 90. Bridge elevation view of horizontal clearances for a highway feature below the bridge carrying mainline and ramp.

Highway Minimum Horizontal Clearance, Right		
Format N (3,1)	Frequency I	Item ID B.H.15
Specification	Commentary	
<p>Report the minimum horizontal clearance on the right, for the highway feature below the bridge reported in Item B.F.01 (<i>Feature Type</i>), rounded down to the nearest tenth of a foot.</p> <p>Measure from the right edge line of the highway (excluding shoulders, turn lanes, acceleration, or deceleration lanes) in the direction of travel to the nearest substructure unit, rigid barrier, oncoming traffic lane or toe of slope that is steeper than 1 to 3 (vertical to horizontal).</p> <p>Report 99.9 when the clearances are 100 feet or greater.</p> <p>Do not report this item for highway feature(s) carried on the bridge.</p>	<p>This item provides data for the highway feature(s) reported in Item B.F.01 (<i>Feature Type</i>) that pass below the bridge.</p> <p>Reinforced concrete and masonry traffic safety features are considered rigid barriers; metal and timber railings are not considered rigid barriers.</p> <p>Clearances greater than 30 feet may be estimated.</p>	

Examples

Highway feature below the bridge carries 1-way traffic, looking in the direction of travel. Report 15.0.

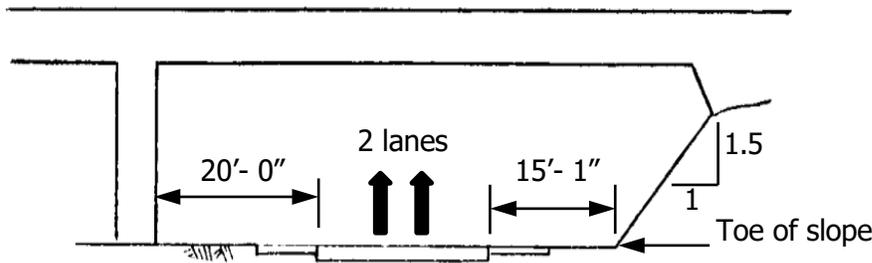


Figure 91. Bridge elevation view of horizontal clearances for a 2-lane highway feature with 1-way traffic below the bridge.

Examples Continued – Highway Minimum Horizontal Clearance, Right

Highway feature below the bridge carries two-way traffic. Report 15.0.

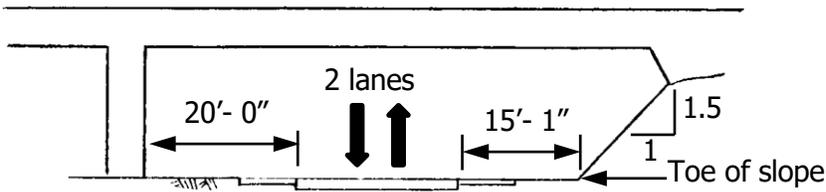


Figure 92. Bridge elevation view of horizontal clearances for a 2-lane highway feature with 2-way traffic below the bridge.

Two highway features below the bridge for a highway that is divided at the bridge. One highway feature carries 1-way traffic southbound and one carries 1-way traffic northbound.

- Report 21.0 for the southbound highway feature.
- Report 20.3 for the northbound highway feature.

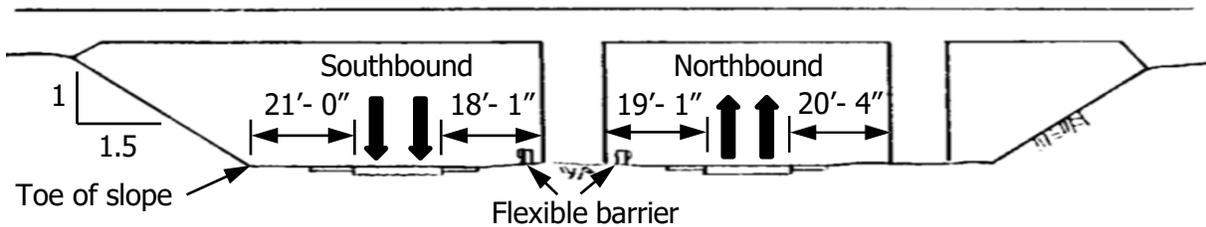


Figure 93. Bridge elevation view of horizontal clearances for separate southbound and northbound highway features below the bridge, with flexible barriers.

Two highway features below the bridge for a highway that is divided at the bridge. One highway feature carries 1-way traffic eastbound and one carries 1-way traffic westbound.

- Report 21.3 for the eastbound highway feature.
- Report 20.3 for the westbound highway feature.

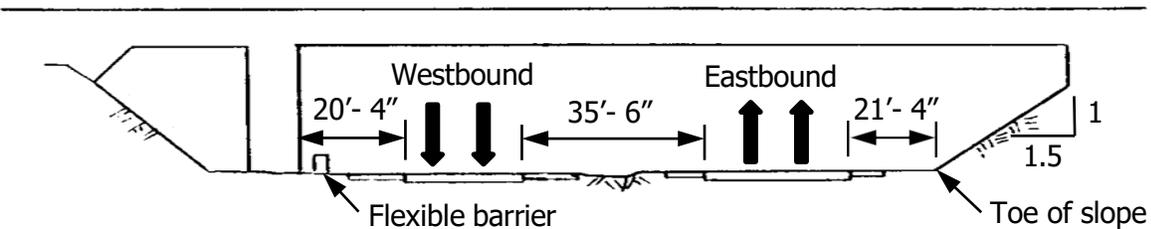


Figure 94. Bridge elevation view of horizontal clearances for separate westbound and eastbound highway features below the bridge, with a flexible barrier.

Examples Continued – Highway Minimum Horizontal Clearance, Right

Highway feature below the bridge carries 1-way ramp traffic, looking in the direction of travel. Report 15.0.

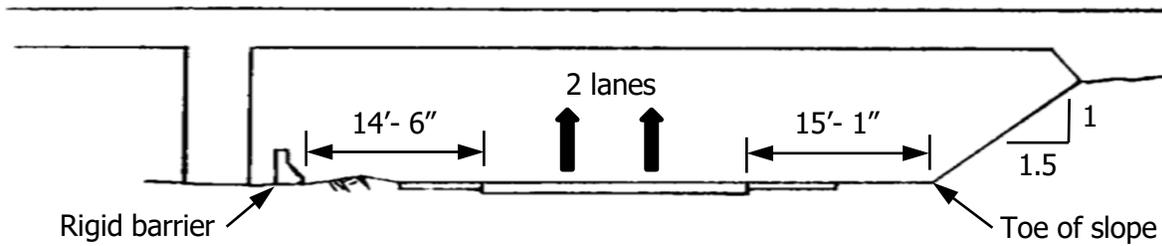


Figure 95. Bridge elevation view of horizontal clearances for a 2-lane, 1-way highway feature below the bridge, with a rigid barrier.

Highway feature below the bridge carries 2-way traffic. Report 14.5.

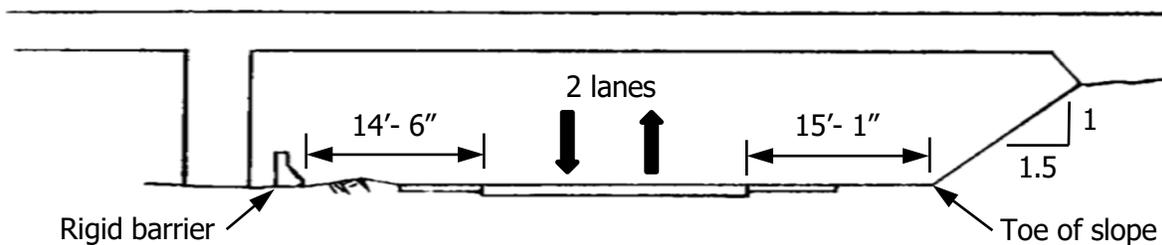


Figure 96. Bridge elevation view of a 2-lane, 2-way highway feature below the bridge, with a rigid barrier.

Highway feature below the bridge carries 1-way mainline traffic and 1-way ramp traffic, looking in the direction of travel. Report 15.0.

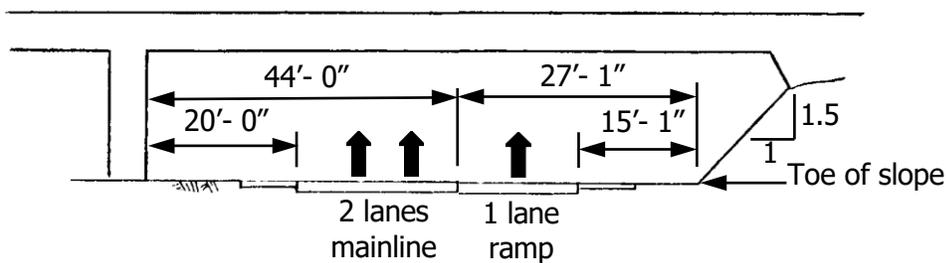
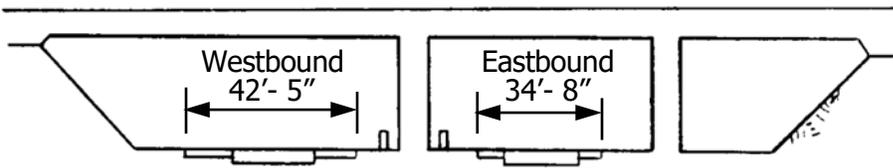


Figure 97. Bridge elevation view of horizontal clearances for highway feature carrying mainline and ramp traffic below the bridge.

Highway Maximum Usable Surface Width		
Format N (3,1)	Frequency I	Item ID B.H.16
Specification	Commentary	
<p>Report the maximum usable surface width for the highway feature reported in Item B.F.01 (<i>Feature Type</i>) that passes below or is carried on the bridge, rounded down to the nearest tenth of a foot.</p> <p>Measure the width perpendicular to the centerline of the highway (including paved or stabilized shoulders).</p> <p>Report 99.9 when the surface width is 100 feet or greater.</p>	<p>Shoulders are included when they are contiguous with the traveled way and structurally adequate for all weather and traffic conditions consistent with the facility carried. Unstabilized grass or dirt, with no base course, flush with and beside the traffic lane is not considered a shoulder for this item. Refer to agency policy for when and where stabilized shoulders are used. When it is not readily known if stabilized construction details were used, the presence of rutting, heaving, water retention, or other distress may be used as indicators that the shoulder is not stabilized.</p>	
Commentary Continued		
<p>Flush (striped) and mountable medians are not considered restrictions.</p> <p>A curb greater than 6 inches high may be considered non-mountable for these specifications.</p> <p>Use the least restrictive configuration when movable rigid barriers are used to accommodate reversible lanes for non-construction-related applications.</p> <p>Reporting this item is optional for highway features below the bridge that do not carry NHS routes as identified in Item B.H.03 (<i>NHS Designation</i>).</p>		
Examples		
<p>Two highway features below the bridge. One highway feature carries eastbound traffic and one carries westbound traffic.</p> <ul style="list-style-type: none"> • Report 34.6 for the eastbound highway feature. • Report 42.4 for the westbound highway feature. 		
		
<p>Figure 98. Bridge elevation view of two separate highway features below the bridge.</p>		

Examples Continued – Highway Maximum Usable Surface Width

One highway feature carried on the bridge. Highway feature carries 2-way traffic that is not divided at the bridge. Report measurement A.

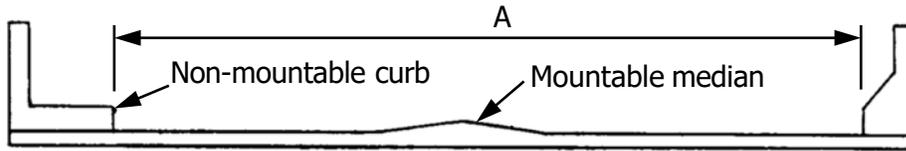


Figure 99. Cross-section view of a highway feature carried on the bridge with a mountable median.

Two highway features carried on the bridge. Highway 1 (H01) and Highway 2 (H02) are divided at the bridge by the non-mountable median.

- Report measurement A for H01.
- Report measurement B for H02.

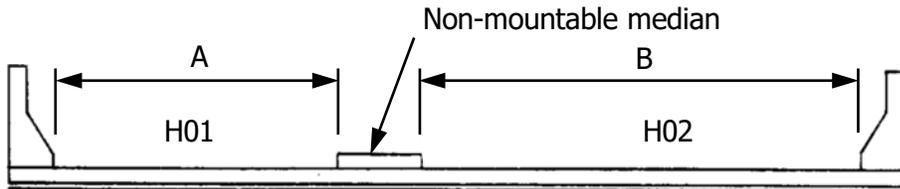


Figure 100. Cross-section view of two highway features carried on the bridge with a non-mountable median.

Two highway features carried on the pipe culvert under fill. Highway 1 (H01) and Highway 2 (H02) are divided at the bridge.

- Report measurement A for H01.
- Report measurement B for H02.

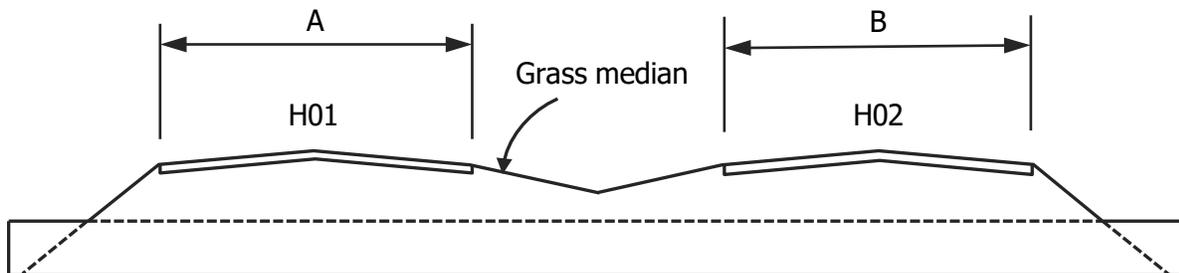
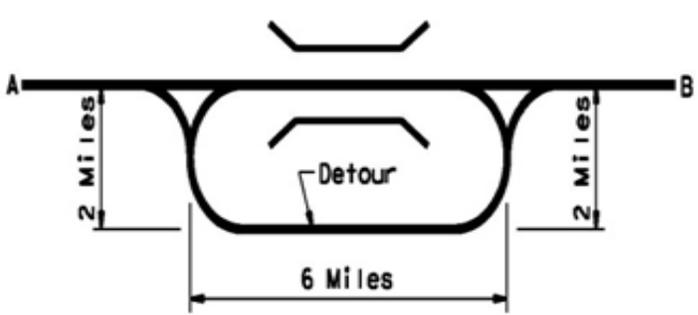


Figure 101. Cross-section view of two highway features carried on the pipe culvert under fill with a grass median.

<i>Bypass Detour Length</i>		
<u>Format</u> N (3,0)	<u>Frequency</u> I	<u>Item ID</u> B.H.17
Specification	Commentary	
<p>Report the length to the nearest mile of the total additional travel for a vehicle to bypass the bridge for the highway feature reported in Item B.F.01 (<i>Feature Type</i>), that passes below or is carried on the bridge.</p> <p>Report 999 where a detour does not exist.</p> <p>Report 0 for available ground level bypass.</p> <p>Report 1 when the highway feature is carried by a bridge, is not at an interchange, and a parallel bridge can be used as a temporary bypass with a reasonable amount of crossover grading.</p>	<p>Determine bypass detour length by evaluating the potential to move traffic, including military vehicles and trucks, around bridges.</p> <ul style="list-style-type: none"> • Avoid detour routes that have load, height, or capacity limitations unacceptable for the additional traffic detoured onto them. • Consider using the parallel bridge of dual bridges or temporary culverts if emergency detours can be constructed with a reasonable amount of grading within the existing right-of-way. • Consider using ramps and/or frontage roads in interchanges. • Review plans for strategic bridge detour routes. 	
Examples		
<p>Diamond interchange. Bridge can be bypassed. Report 0.</p> <p>Cloverleaf. Bridge cannot be bypassed; 18-mile detour. Report 18.</p> <p>Highway feature carried on the bridge with a 4-mile detour (<i>Figure 102</i>). Report 4.</p>		
		
<p>Figure 102. Detour map for a highway feature carried on the bridge.</p>		

Examples Continued – Bypass Detour Length

Highway feature passes below the bridge with a 0-mile detour (*Figure 103*). Report 0.

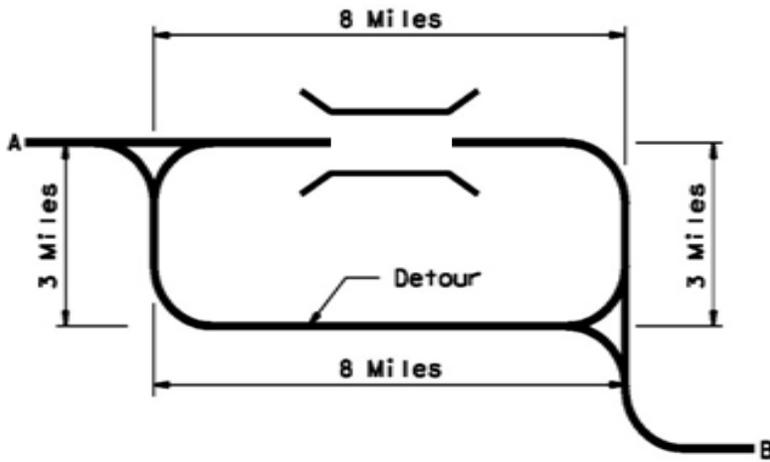


Figure 103. Detour map for a highway feature that passes below the bridge.

<i>Crossing Bridge Number</i>		
<u>Format</u> AN (15)	<u>Frequency</u> I	<u>Item ID</u> B.H.18
Specification	Commentary	
<p>Report the exact bridge number(s) as assigned in Item B.ID.01 (<i>Bridge Number</i>) for the bridge carrying a highway feature that is located directly above or below the inventoried highway bridge.</p> <p>Do not report this item when the highway bridge does not pass above or below another bridge, or passes above or below a bridge that is not reportable to the NBI.</p>	<p>The intent of this item is to capture the bridge number for bridges of a multi-level interchange, where bridges pass directly above or below other bridges.</p> <p>For border bridges, the Neighboring State reports this item for all highway features that pass above the bridge, as part of their abbreviated bridge record. For more information, see the Border Bridges section of this document.</p>	

Example

The inventoried bridge number 082-0142 passes above bridge numbers 082-0141, 082-0251, 082-0252, 082-0254 and 082-0256.

- Report 082-0141 for the bridge below.
- Report 082-0251 for the bridge below.
- Report 082-0252 for the bridge below.
- Report 082-0254 for the bridge below.
- Report 082-0256 for the bridge below.

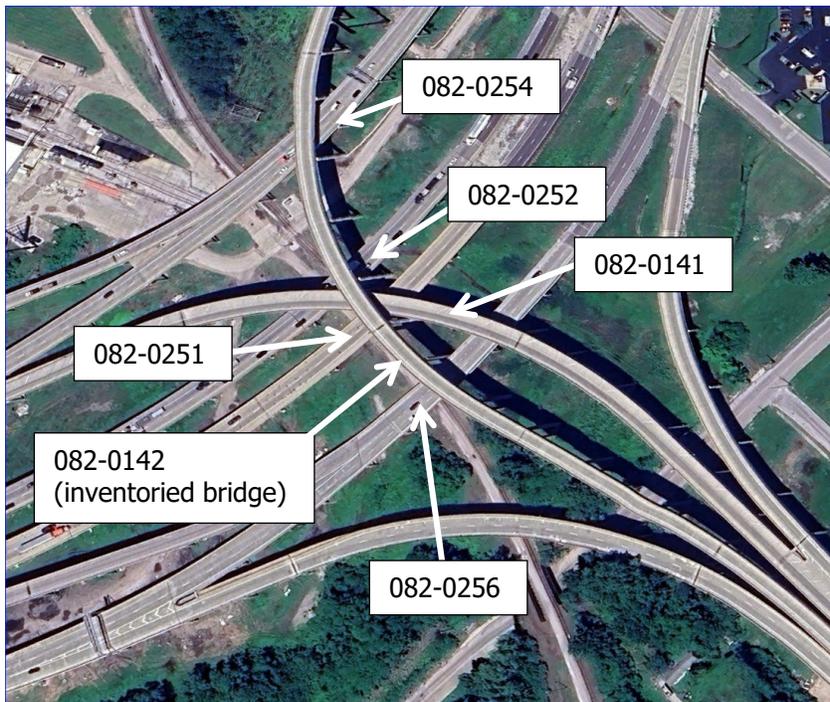


Figure 104. Multi-level interchange with bridges passing above and below other bridges.

<i>Underclearance Appraisal</i>		
<u>Format</u> AN (15)	<u>Frequency</u> I	<u>Item ID</u> B.H.IL.01
Specification	Commentary	
<p>This item evaluates vertical and horizontal underclearances from the through roadway to the superstructure or substructure units, respectively.</p> <p>"N" is coded unless the bridge is over a highway or railroad.</p> <p>The vertical underclearance is evaluated using Table 3A. The horizontal underclearance is evaluated using Table 3B. The lower of the codes obtained from Table 3A and Table 3B is used.</p> <p>Bridges seldom are closed due to deficient underclearances. However, these bridges may be good candidates for rehabilitation or replacement.</p> <p>Minimum Vertical Underclearance (B.H.13), Minimum Lateral Underclearance on Right (B.H.15), and Minimum Lateral Underclearance on Left (B.H.IL.16) are used to evaluate this item.</p> <p>The Functional Classification used in the table is for the underpassing route.</p> <p>History is retained for this item based on each Inspection Date (B.IE.03). Intermediate weekly or daily values are not retained.</p>	<p>DO NOT ENTER. (This item is computer generated).</p>	
Example		

Table 3A				
Underclearance Appraisal Code	Minimum Vertical Clearance			
	Functional Classification for Route Under Structure			Railroad
	Interstate and Other Freeway (FC = 1 & 2)	Other Principal and Minor Arterials (FC = 2, 3, 4)	Major and Minor Collectors and Locals (FC = 5, 6, 7)	
	All Routes – Except as Noted for Urban Areas			
9	> 17'-0"	> 16'-6"	> 16'-6"	> 23'-0"
8	= 17'-0"	= 16'-6"	= 16'-6"	= 23'-0"
7	>= 16'-9"	>= 15'-6"	>= 15'-6"	>= 22'-6"
6	>= 16'-6"	>= 14'-6"	>= 14'-6"	>= 22'-0"
5	>= 15'-9"	>= 14'-3"	>= 14'-3"	>= 21'-0"
4	>= 15'-0"	>= 14'-0"	>= 14'-0"	>= 20'-0"
3	Underclearance less than value in rating code of 4 and requiring corrective action. (See Item 75A)			
2	Underclearance less than value in rating code of 4 and requiring replacement. (See Item 75A)			
0	Bridge Closed			

Table 3A. Rating by Comparison of Minimum Vertical Underclearance (B.H.13) and Functional Classification (B.H.01) of Underpassing Route

NOTE: Use the lower appraisal code for values between those listed in the table

Table 3B. Rating by Comparison of Minimum Lateral Underclearance Right & Left (B.H.15& H.I.L.16) and Functional Classification (B.H.01) of Underpassing Route

UnderClearance Appraisal Code	Minimum Lateral Underclearance						
	Functional Classification (FC) of Under Routes						Railroad
	1-Way				2-Way		
	Principal Arterials - Interstate and Freeways (FC = 1 & 2)				Other Principal & Minor Arterials (FC = 2, 3, 4)	Major/Minor Collectors & Locals (FC = 5, 6, 7)	
	Mainline		Ramp				
Left (N/W)	Right (S/E)	Left (N/W)	Right (S/E)				
9	> 30	> 30	> 4	> 10	> 30	> 12	> 20
8	= 30	= 30	= 4	= 10	= 30	= 12	= 20
7	>= 18	>= 21	>= 3	>= 9	>= 21	>= 11	>= 17
6	>= 6	>= 12		>= 8	>= 12	>= 10	>= 14
5	>= 5	>= 11		>= 6	>= 10	>= 8	>= 11
4	>= 4	>= 10	>= 2	>= 4	>= 8	>= 6	>= 8
3	Underclearance less than value in rating code of 4 and requiring corrective action (See Item 75A)						
2	Underclearance less than value in rating code of 4 and requiring replacement (See Item 75A)						
0	Bridge Closed						

NOTES:

- Use the lower appraisal code for values between those listed in the table
- Dimensions are in feet
- When acceleration or deceleration lanes or ramps are provided under 2-way traffic, use the value from the "Right" ramp column to determine code

<i>One Or Two Way Traffic</i>												
<u>Format</u> DDL)	<u>Frequency</u> I	<u>Item ID</u> B.H.IL.02										
Specification	Commentary											
<p>This item indicates one or two-way traffic on the inventory route utilizing the structure. B.H.IL.02 must be compatible with other traffic related items such as Average Daily Traffic (B.H.09) and Bridge Roadway Width, Curb-to-Curb (B.G.06).</p>	<p>A N/A selected from a drop-down field.</p> <p>If Number of Lanes (B.H.08) = 1 then B.H.IL.02 can only be 1 or 3.</p> <p>Enter the appropriate code.</p> <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td>Leave Blank</td> <td>Highway traffic not carried</td> </tr> <tr> <td>1</td> <td>1-way traffic</td> </tr> <tr> <td>2</td> <td>2-way traffic</td> </tr> <tr> <td>3</td> <td>One lane bridge with 2-way traffic</td> </tr> </tbody> </table>		<u>Code</u>	<u>Description</u>	Leave Blank	Highway traffic not carried	1	1-way traffic	2	2-way traffic	3	One lane bridge with 2-way traffic
<u>Code</u>	<u>Description</u>											
Leave Blank	Highway traffic not carried											
1	1-way traffic											
2	2-way traffic											
3	One lane bridge with 2-way traffic											

<i>Congressional District</i>		
<u>Format</u> RO	<u>Frequency</u> I	<u>Item ID</u> B.H.IL.03
Specification		Commentary
<p>This item is generated using data from the Illinois Roadway Information System (IRIS). The item describes the U.S. Congressional District in which a highway is located.</p>		<p>DO NOT ENTER. (This item is computer generated). A two-digit field.</p>

<i>Representative District</i>		
<u>Format</u> RO	<u>Frequency</u> I	<u>Item ID</u> B.H.IL.04
Specification		Commentary
<p>This item is generated using data from the Illinois Roadway Information System (IRIS). The item describes the Illinois House of Representatives' Representative District in which a highway is located.</p>		<p>DO NOT ENTER. (This item is computer generated)..</p> <p>A Three-digit field.</p>

<i>Iris Jurisdiction</i>		
<u>Format</u> RO	<u>Frequency</u> I	<u>Item ID</u> B.H.IL.05
Specification		Commentary
<p>This item is generated using data from the Illinois Roadway Information System (IRIS). The item describes the agency or agencies having jurisdictional responsibility for a highway.</p>		<p>DO NOT ENTER. (This item is computer generated). A two-digit field.</p>

<i>Iris Maintenance</i>		
<u>Format</u> RO	<u>Frequency</u> I	<u>Item ID</u> B.H.IL.06
Specification		Commentary
<p>This item is generated using data from the Illinois Roadway Information System (IRIS). The item describes the agency or agencies having maintenance responsibility for a highway.</p>		<p>DO NOT ENTER. (This item is computer generated). A two-digit field.</p>

<i>Reasonable Access</i>		
<u>Format</u> RO	<u>Frequency</u> I	<u>Item ID</u> B.H.IL.07
Specification		Commentary
<p>This item is generated using data from the Illinois Roadway Information System (IRIS). The item describes the Reasonable Access to the structure.</p> <p>(e-2) Except as provided in subsection (e-3), combinations of vehicles over 65 feet in length, with no overall length limitation except as provided in subsections (d) and (e) of this Section, are allowed access as follows:</p> <ol style="list-style-type: none"> 1. From a Class I highway onto any street or highway for a distance of one highway mile for the purpose of loading, unloading, food, fuel, repairs, and rest, provided there is no sign prohibiting that access. 2. From a Class I or Class II highway onto any non-designated highway for a distance of 5 highway miles for the purpose of loading, unloading, food, fuel, repairs, and rest if: <ul style="list-style-type: none"> • There is no sign prohibiting that access; and • The route is not being used as a thoroughfare between Class I or Class II highways. 		<p>DO NOT ENTER. (This item is computer generated).</p>

<i>Cardinal Direction</i>		
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.H.IL.08
Specification		Commentary
<p>Report the direction of travel for the road linked to the structure using one of the following codes.</p> <p><u>Code</u> <u>Description</u></p> <p>NB Northbound</p> <p>EB Eastbound</p> <p>SB Southbound</p> <p>WB Westbound</p> <p>NS Northbound and Southbound</p> <p>EW Eastbound and Westbound</p>		<p>Use code NS when the road is not divided or does not have a non-mountable median and carries traffic in both north and south directions.</p> <p>Use code EW when the road is not divided or does not have a non-mountable median and carries traffic in both east and west directions.</p>

<i>Remarks</i>		
<u>Format</u> AN	<u>Frequency</u> I	<u>Item ID</u> B.H.IL.09
Specification		Commentary
<p>This item allows the recording of any Highway feature information or data that would not fit the space available regarding the Highway feature.</p>		<p>A unlimited text field.</p> <p>Enter appropriate comments beginning at the first space available using any combination of letters, numbers, symbols and spaces. Abbreviations can be used as long as they are not ambiguous.</p>

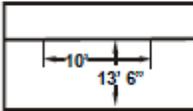
<i>Ten-Foot Vertical Clearance, Right</i>		
Format N(2)/N(2)	Frequency I	Item ID B.H.I.L.10
Specification	Commentary	
<p>This item indicates the practical unobstructed vertical clearance provided for free passage of vehicular traffic along a route without regard to lane markings. The minimum vertical clearance for a 10-foot width of the pavement or traveled part of the roadway where the clearance is greatest shall be recorded and coded in feet and inches.</p> <p>This item can be obtained through field measurement only.</p>	<p>A four-digit field. Record the appropriate measurement in feet and inches. The first two digits indicate feet and the second two digits indicate inches.</p> <p>Round dimension measurements down to the nearest inch.</p> <p>For structures with one roadway either on or under the structure, enter the 10-foot minimum vertical clearance over the inventory route (without regard to where it occurs across the pavement) in B.H.I.L.10, "South/East" column of the 10 Ft Vertical field on the update screens.</p> <p>For structures with two roadways either on or under the structure, enter the 10-foot minimum vertical clearance over the inventory route (without regard to where it occurs across the pavement):</p> <ul style="list-style-type: none"> • In B.H.I.L.10 for the southbound or eastbound direction of traffic ("South/East" column of the 10 Ft Vertical field on the update screens) • In B.H.I.L.11 for the northbound or westbound direction of traffic ("North/West" column of the 10 Ft Vertical field on the update screens) <p>When no restriction exists over the roadway, enter 9911.</p>	

Example

B.H.I.L.10

B.H.I.L.11

One Roadway

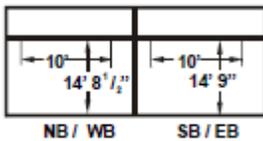


South/East
Minimum Vertical
10 ft Min

13' 06"

North/West Vertical
Minimum 10 ft Min

Two Roadways



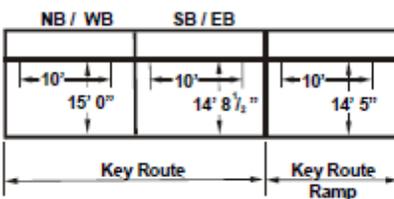
South/East Vertical
Minimum 10 ft Min

14' 09"

North/West Vertical
Minimum 10 ft Min

14' 08"

More Than Two Roadways



Key Route —————>
Ramp —————>

South/East Vertical
Minimum 10 ft Min

14' 08"
14' 05"

North/West Vertical
Minimum 10 ft Min

15' 00"

No Overhead Restriction



South/East Vertical
Minimum 10 ft Min

99' 11"

North/West Vertical
Minimum 10 ft Min



South/East Vertical
Minimum 10 ft Min

99' 11"

North/West Vertical
Minimum 10 ft Min

99' 11"

<i>Ten-Foot Vertical Clearance, Left</i>		
<u>Format</u> N(2)/N(2)	<u>Frequency</u> I	<u>Item ID</u> B.H.I.L.11
Specification	Commentary	
<p>This item indicates the practical unobstructed vertical clearance provided for free passage of vehicular traffic along a route without regard to lane markings. The minimum vertical clearance for a 10-foot width of the pavement or traveled part of the roadway where the clearance is greatest shall be recorded and coded in feet and inches.</p> <p>This item can be obtained through field measurement only.</p>	<p>A four-digit field.</p> <p>Record the appropriate measurement in feet and inches. The first two digits indicate feet and the second two digits indicate inches.</p> <p>Round dimension measurements down to the nearest inch.</p> <p>For structures with one roadway either on or under the structure, enter the 10-foot minimum vertical clearance over the inventory route (without regard to where it occurs across the pavement) in B.H.I.L.10, "South/East" column of the 10 Ft Vertical field on the update screens.</p> <p>For structures with two roadways either on or under the structure, enter the 10-foot minimum vertical clearance over the inventory route (without regard to where it occurs across the pavement):</p> <ul style="list-style-type: none"> • In B.H.I.L.10 for the southbound or eastbound direction of traffic ("South/East" column of the 10 Ft Vertical field on the update screens) • In B.H.I.L.11 for the northbound or westbound direction of traffic ("North/West" column of the 10 Ft Vertical field on the update screens) <p>When no restriction exists over the roadway, enter 9911.</p>	

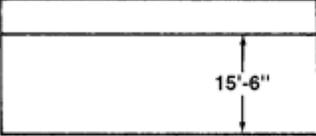
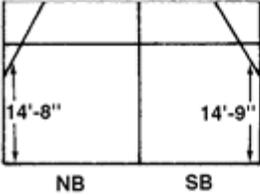
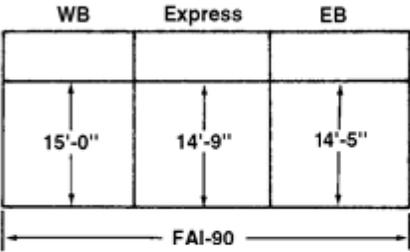
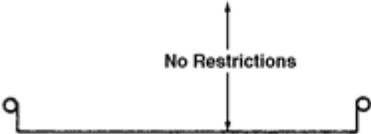
Example

This item example is in Item B.H.IL.10.

<i>Right Horizontal Clearance</i>		
<u>Format</u> N (3)	<u>Frequency</u> I	<u>Item ID</u> B.H.I.L.12
Specification	Commentary	
<p>This item indicates the horizontal clearance of the KEY ROUTE ON / UNDER for the RIGHT / LEFT roadways of the structure. RIGHT (B.H.I.L.12) is defined as the only roadway, or the southbound / eastbound travel lanes of dual roadways. LEFT (B.H.I.L.13) is defined as the northbound / westbound travel lanes for dual roadways.</p> <p>The measurement should represent the unobstructed distance (measured at right angles to the centerline) between vertical elements of the structure extending more than 18 inches from the pavement surface. The vertical elements include (but are not limited to) handrails, posts, guardrails, trusses or median barriers. For roadways beneath a structure, the measurement is between units of the substructure (or other vertical elements) or toe of slope greater than 3:1.</p>	<p>A four-digit field, with one decimal position.</p> <p>Enter the measurement in feet and tenths of a foot.</p> <p>Enter the value for each Key Route filling leading spaces with zeros.</p> <p>Leave B.H.I.L.13 blank for single roadways.</p> <p>For structures with more than two roadways, record the greatest in each direction.</p> <p>When there are only two roadways, both in the same direction, record the main through lanes in B.H.I.L.12 and the other in Item B.H.I.L.13.</p> <p>When the roadway is on a fill over a pipe or box culvert and the culvert headwalls do not affect the flow of traffic, enter 999.9.</p>	

<i>Left Horizontal Clearance</i>		
<u>Format</u> N (3)	<u>Frequency</u> I	<u>Item ID</u> B.H.I.L.13
Specification	Commentary	
<p>This item indicates the horizontal clearance of the KEY ROUTE ON / UNDER for the RIGHT / LEFT roadways of the structure. RIGHT (B.H.I.L.12) is defined as the only roadway, or the southbound / eastbound travel lanes of dual roadways. LEFT (B.H.I.L.13) is defined as the northbound / westbound travel lanes for dual roadways.</p> <p>The measurement should represent the unobstructed distance (measured at right angles to the centerline) between vertical elements of the structure extending more than 18 inches from the pavement surface. The vertical elements include (but are not limited to) handrails, posts, guardrails, trusses or median barriers. For roadways beneath a structure, the measurement is between units of the substructure (or other vertical elements) or toe of slope greater than 3:1.</p>	<p>A four-digit field, with one decimal position.</p> <p>Enter the measurement in feet and tenths of a foot.</p> <p>Enter the value for each Key Route filling leading spaces with zeros.</p> <p>Leave B.H.I.L.13 blank for single roadways.</p> <p>For structures with more than two roadways, record the greatest in each direction.</p> <p>When there are only two roadways, both in the same direction, record the main through lanes in B.H.I.L.12 and the other in B.H.I.L.13.</p> <p>When the roadway is on a fill over a pipe or box culvert and the culvert headwalls do not affect the flow of traffic, enter 999.9.</p>	

<i>Minimum Vertical Clearance On - Left</i>		
<u>Format</u> N (2) / N (2)	<u>Frequency</u> I	<u>Item ID</u> B.H.IL.14
Specification	Commentary	
<p>This item reports the minimum unobstructed vertical space provided for the free passage of vehicular traffic. This is the perpendicular distance between the pavement or rail surface (including shoulders) and the lowest part of the superstructure or other structure directly overhead.</p>	<p>A four-digit field (two digits for feet and two digits for inches).</p> <p>"Right" is defined as southbound or eastbound direction of travel.</p> <p>"Left" is defined as northbound or westbound direction of travel.</p> <p>For undivided structures with one roadway on, report the minimum vertical clearance in the "Right" field(Item 53A) and leave the "Left" field (B.H.IL.14) blank. Refer to Example "a".</p> <p>For divided structures with two roadways on, report "Right" and "Left" vertical clearances (Items 53A and B.H.IL.14 respectively). Refer to Example "b".</p> <p>For structures with more than two roadways on, record the right and left vertical clearances for those roadways as identified in B.H.IL.12/13. Refer to Example "c".</p> <p>For structures with no overhead restriction on, as in an open deck bridge, enter 9911 into "Right" (Item53A). Leave the "Left" field (B.H.IL.14) blank. Refer to Example "d".</p>	

Example			
	<u>Item No.</u>		<u>Enter</u>
<p>a. One Roadway On:</p> 	<p>53A (Min. Vert. Clear. SB/EB Rdwy.) 53B (Min. Vert. Clear. NB/WB Rdwy.)</p>		<p>15 06 BLANK</p>
<p>b. Two Roadways On:</p> 	<p>53A (Min. Vert. Clear. SB/EB Rdwy.) 53B (Min. Vert. Clear. NB/WB Rdwy.)</p>		<p>14 09 14 08</p>
<p>c. More than two Roadways On:</p> 	<p>53A (Min. Vert. Clear. SB/EB Rdwy.) 53B (Min. Vert. Clear. NB/WB Rdwy.)</p>		<p>14 05 15 00</p>
<p>d. No Overhead Restriction:</p> 	<p>53A (Min. Vert. Clear. SB/EB Rdwy.) 53B (Min. Vert. Clear. NB/WB Rdwy.)</p>		<p>99 11 BLANK</p>

<i>Minimum Vertical Highway Underclearance-Left</i>		
<u>Format</u> N (2) / N (2)	<u>Frequency</u> I	<u>Item ID</u> B.H.IL.15
Specification	Commentary	
<p>This is the minimum vertical underclearance between a roadway beneath the structure and the underside of the bridge superstructure (travel lanes only – no shoulders).</p>	<p>A four-digit field (two digits for feet and two digits for inches).</p> <p>"Right" is defined as southbound or eastbound direction of travel.</p> <p>"Left" is defined as northbound or westbound direction of travel.</p> <p>For structures with one roadway carried by the Key Route under, report the minimum vertical underclearance in the "Right" field (B.H.13) and leave the "Left" field (B.H.IL.15) blank.</p> <p>For structures with two roadways carried by the Key Route under, report the "Right and Left" minimum vertical underclearances (B.H.13, B.H.IL.15 respectively).</p> <p>For structures with a highway/railroad combination under, report the vertical underclearance(s) for the highway in B.H.13/B.H.IL.15 and report the measurement for the railroad in B.RR.02.</p> <p>For structures with more than two roadways carried by the Key Route under, report the Right and Left minimum underclearances for those roadways as identified in B.H.IL.12/13.</p>	

<i>Minimum Lateral Highway Underclearance (Left)</i>		
<u>Format</u> N (3,1)	<u>Frequency</u> I	<u>Item ID</u> B.H.IL.16
Specification	Commentary	
<p>This item indicates the minimum lateral clearance beneath a structure measured from the left (median) edge of the pavement to the nearest substructure unit or median barrier. This item applies only to a structure over a divided highway or an undivided highway with center obstruction separating the traffic lanes.</p> <p>The clearance is to be measured from the left (median) edge of the pavement to the nearest substructure unit or median barrier for each direction of travel. Report the smaller distance to the nearest tenth of a foot.</p> <p>The left edge of the pavement is the left edge of that portion of the roadway provided for (and intended to support) the passage of through traffic. The pavement does not include shoulders.</p> <p>For highways with curb and gutter, measure from the face of the curb to the nearest obstruction. Refer to Appendix C, Figure 9.1.</p>	<p>A three-digit field, with one decimal position.</p> <p>Enter the measurement in feet and tenths of a foot.</p> <p>For those clearances greater than 99.8 feet, code 99.8.</p>	
Example		
<p>A bridge crossing a divided highway has lateral underclearances, on the left, of 5.6 feet and 4.3 feet. Enter: 4.3</p>		

<i>Calculated NHS</i>		
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.H.IL.17
Specification		Commentary
<p>This is a calculated field based on the roads carried on the structure NHS Designation (B.H.03).</p> <p><u>Code</u> <u>Description</u> N Non-NHS Y NHS</p>		<p>If any road is NHS, then the structure will be calculated Yes. This value will be displayed on the Appraisals screen and stored in the database at the structure level.</p>

<i>Calculated FC</i>		
<u>Format</u> N (1)	<u>Frequency</u> I	<u>Item ID</u> B.H.IL.18
Specification		Commentary
<p>This is a calculated field based on the highest functional classification of the roadways carried on the structure for the highway features reported in Item B.H.01 (<i>Functional Classification</i>)</p> <p>Code Description</p> <p>1 Interstate</p> <p>2 Principal Arterial – Other Freeways and Expressways</p> <p>3 Principal Arterial – Other</p> <p>4 Minor Arterial</p> <p>5 Major Collector</p> <p>6 Minor Collector</p> <p>7 Local</p>		<p>DO NOT ENTER. (This item is computer generated).</p> <p>This value will be displayed on the Appraisals screen and stored in the database at the structure level.</p>

<i>Route Appurtenance Type</i>		
<u>Format</u> N	<u>Frequency</u> I	<u>Item ID</u> B.H.IL.19
Specification		Commentary
<p>This item identifies an appurtenance by its relationship to the Main Route. The Route Station for the main through highway where the appurtenance initially intersects becomes the appurtenance number.</p> <p>In the case where an alternate route intersects the main route more than once, the main route station at the first point of intersection becomes the appurtenance number.</p>		<p>A five-digit number, right justified, representing the main route station in thousandths (thousandth position is always zero).</p> <p>Enter the station in the appropriate spaces, filling any unused spaces with zeros.</p> <p>Leave this item blank if the Route is identified as a main route – not an appurtenance.</p>

<i>Inventory County</i>		
<u>Format</u> N	<u>Frequency</u> I	<u>Item ID</u> B.H.IL.20
Specification		Commentary
<p>This item indicates the county in which the Key Route(s) on and/or under the structure are inventoried.</p>		<p>DO NOT ENTER. Computer Generated from LRS Mile Point.</p>

<i>Township/Road District (Inventory)</i>		
<u>Format</u> N	<u>Frequency</u> I	<u>Item ID</u> B.H.IL.21
Specification		Commentary
<p>This item identifies the Township or Road District of the Inventory County (B.L.IL.02) for each Key Route linked to a structure.</p>		<p>DO NOT ENTER</p> <p>This item is computer generated based on the roadway data at the point of Key Route linkage.</p>

SUBSECTION 4.4: RAILROADS

The data items in this subsection provide information about railroads that are carried on or pass below the bridge. These data items are considered part of the Features Data Set and have a many-to-one relationship with a bridge. Therefore, each railroad feature reported in Item B.F.01 (*Feature Type*) has a unique railroad feature data set, and there may be multiple railroad feature data sets associated with a bridge.

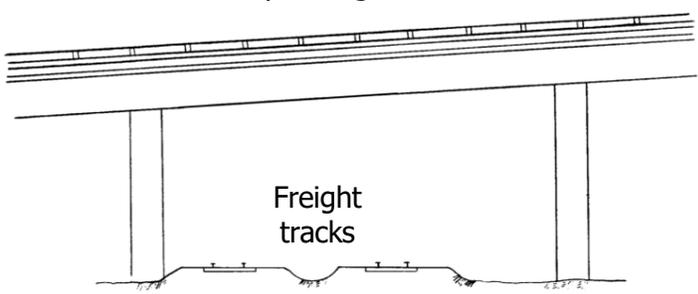
Item B.RR.01 (*Railroad Service Type*) is reported for all railroads, and the remaining items are reported only for railroads below the bridge, i.e. when Item B.F.02 (*Feature Location*) is B.

The dimensional values for the items in this subsection can be obtained from either plans or field measurement.

The data for the items in this subsection typically remain static once a bridge has been inventoried. The following data items are included in this subsection.

Item ID Data Item

B.RR.01	Railroad Service Type
B.RR.02	Railroad Minimum Vertical Clearance
B.RR.03	Railroad Minimum Horizontal Offset
B.RR.IL.01	Railroad Crossing Numbers

<i>Railroad Service Type</i>																		
<u>Format</u> AN (2)	<u>Frequency</u> I	<u>Item ID</u> B.RR.01																
Specification		Commentary																
<p>Report the designated railroad service type for the railroad feature reported in Item B.F.01 (<i>Feature Type</i>) using one of the following codes.</p> <table border="0"> <thead> <tr> <th style="text-align: left;">Code</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr> <td>F</td> <td>Freight</td> </tr> <tr> <td>FE</td> <td>Freight - electrified</td> </tr> <tr> <td>P</td> <td>Passenger</td> </tr> <tr> <td>PE</td> <td>Passenger - electrified</td> </tr> <tr> <td>M</td> <td>Multiple services - not electrified</td> </tr> <tr> <td>ME</td> <td>Multiple services - electrified</td> </tr> <tr> <td>I</td> <td>Inactive</td> </tr> </tbody> </table>		Code	Description	F	Freight	FE	Freight - electrified	P	Passenger	PE	Passenger - electrified	M	Multiple services - not electrified	ME	Multiple services - electrified	I	Inactive	<p>Electrified is intended for electricity-powered rail lines and third-rails, but not for battery or fuel cell powered lines.</p> <p>Use code M when multiple rail services (such as freight and passenger rail) use the same tracks and both services are not electrified.</p> <p>Use code ME when multiple rail services (such as freight and passenger rail) use the same tracks, and at least one is electrified.</p>
Code	Description																	
F	Freight																	
FE	Freight - electrified																	
P	Passenger																	
PE	Passenger - electrified																	
M	Multiple services - not electrified																	
ME	Multiple services - electrified																	
I	Inactive																	
Examples																		
<p>The bridge carries two highway features separated by two electrified passenger rail tracks (i.e. one railroad feature). Two railroad tracks pass below the bridge that both carry freight (i.e. one railroad feature).</p> <ul style="list-style-type: none"> • Report PE for the railroad feature carried on the bridge. • Report F for the railroad feature below the bridge. <div style="text-align: center;"> <p>Highways and electrified passenger tracks</p>  <p>Freight tracks</p> </div> <p>The diagram shows a bridge structure supported by two vertical piers. On top of the bridge, there are two sets of parallel lines representing electrified passenger tracks, with small vertical tick marks indicating overhead power lines. Below the bridge, between the two piers, there are two more sets of parallel lines representing freight tracks. The ground level is indicated by a wavy line at the bottom.</p>																		
<p>Figure 105. Bridge elevation view with two electrified passenger rail tracks carried on the bridge and two freight rail tracks below the bridge.</p>																		

Examples Continued – Railroad Service Type

Two railroad tracks below the bridge. One carries passenger rail service and one carries freight (i.e. two railroad features).

- Report P for the passenger rail feature.
- Report F for the freight rail feature.

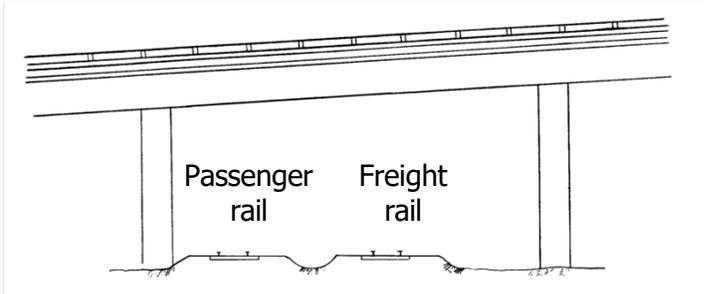


Figure 106. Bridge elevation view with one passenger rail and one freight rail track below the bridge.

Two railroad tracks below the bridge that both carry freight and passenger service (i.e. one railroad feature). Report M.

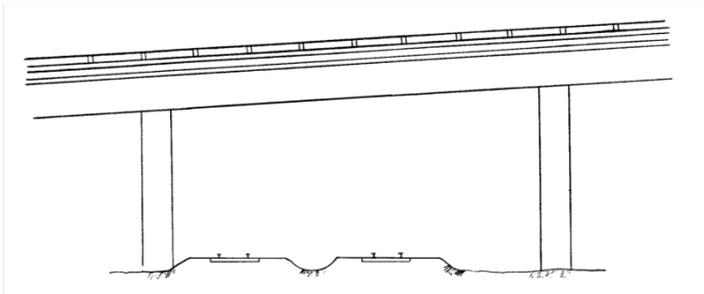


Figure 107. Bridge elevation view with two freight/passenger rail tracks below the bridge.

Two railroad tracks below the bridge. One carries electrified passenger service and one carries non-electrified passenger service (i.e. two railroad features).

- Report PE for the electrified passenger rail feature.
- Report P for the non-electrified passenger rail feature.

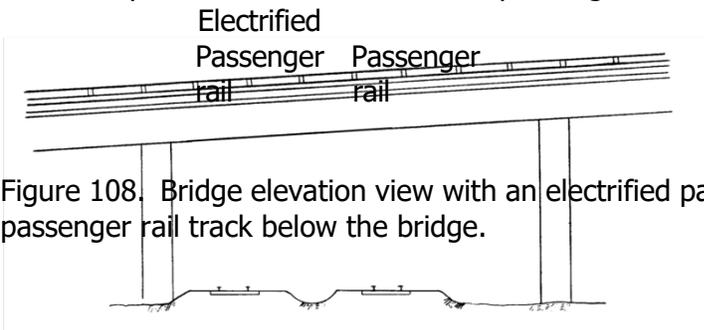
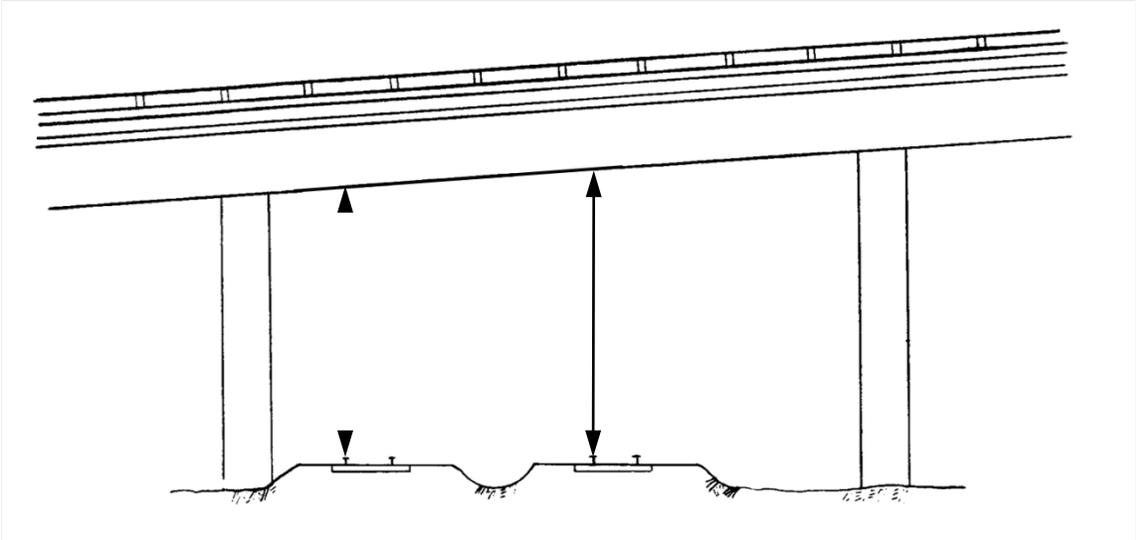


Figure 108. Bridge elevation view with an electrified passenger rail track and a non-electrified passenger rail track below the bridge.

<i>Railroad Minimum Vertical Clearance</i>		
<u>Format</u> N (3,1)	<u>Frequency</u> EI	<u>Item ID</u> B.RR.02
Specification	Commentary	
<p>Report the minimum vertical clearance for the railroad feature reported in Item B.F.01 (<i>Feature Type</i>), rounded down to the nearest tenth of a foot.</p> <p>Measure plumb from the top of rails to the lowest bridge restriction or appurtenance (signs, utilities, etc.) attached to the bridge. Appurtenances attached to the bridge that serve only a railroad purpose, such as catenary systems, are excluded from the measurement and do not reduce the vertical clearance measurement.</p> <p>Report 99.9 when the clearance is 100 feet or greater.</p> <p>Report this item only when Item B.F.02 (<i>Feature Location</i>) is B.</p>	<p>Several measurements may need to be made to determine the minimum vertical clearance for each railroad feature when one or more railroad tracks pass below the bridge. However, only the minimum measurement is reported.</p> <p>Update measurements when alterations are made to the bridge or railroad tracks that affect the previously measured clearance.</p> <p>Clearances greater than 30 feet may be estimated.</p>	
Examples		
<p>Two railroad tracks below the bridge that both carry freight and passenger service (i.e. one railroad feature). Report 31.2.</p>		
		
<p>Figure 109. Bridge elevation view with two freight/passenger rail tracks below the bridge.</p>		

Examples Continued – Railroad Minimum Vertical Clearance

Two railroad tracks below the bridge. One carries passenger rail service, and one carries freight (i.e. two railroad features).

- Report 20.2 for the passenger rail feature.
- Report 21.2 for the freight rail feature.

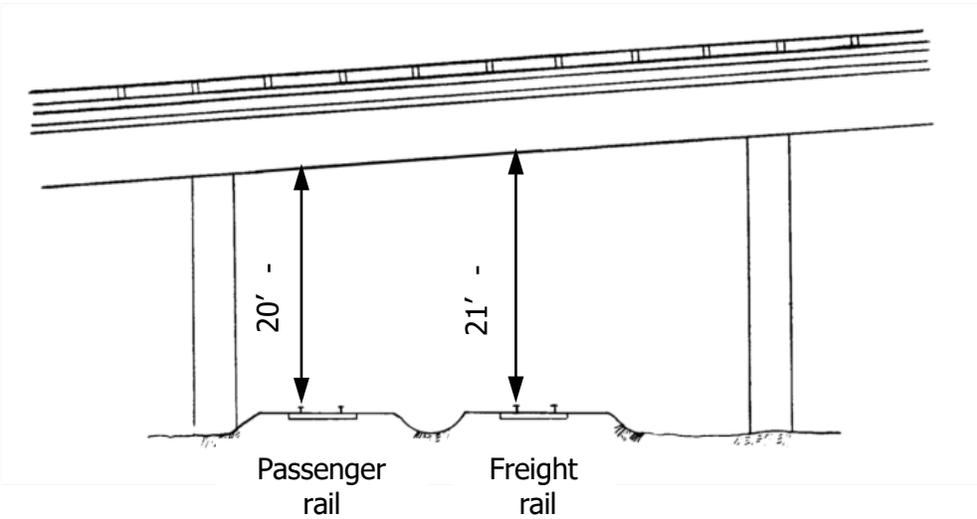
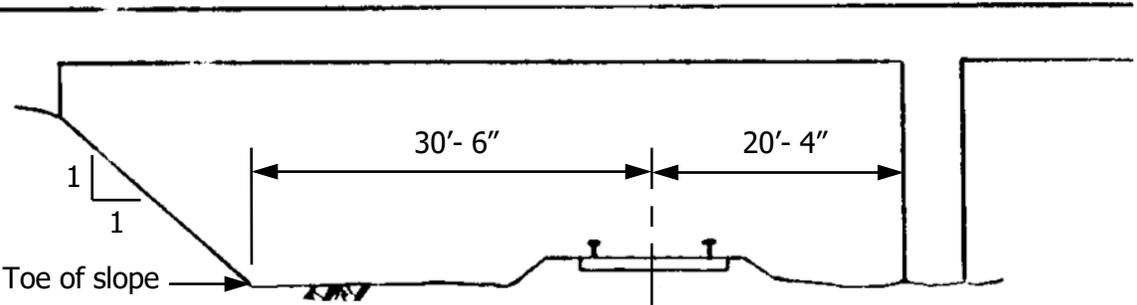


Figure 110. Bridge elevation view with one passenger rail and one freight rail track below the bridge.

<i>Railroad Minimum Horizontal Offset</i>		
<u>Format</u> N (3,1)	<u>Frequency</u> I	<u>Item ID</u> B.RR.03
Specification	Commentary	
<p>Report the minimum horizontal offset for the railroad feature reported in Item B.F.01 (<i>Feature Type</i>), rounded down to the nearest tenth of a foot.</p> <p>Measure perpendicular from the centerline of the tracks to the nearest substructure unit or toe of slope that is steeper than 1 to 3 (vertical to horizontal).</p> <p>For multiple tracks with the same railroad service type, report the minimum distance after measuring the offsets in both directions from all tracks.</p> <p>Report 99.9 when the minimum horizontal offset is 100 feet or greater.</p> <p>Report this item only when Item B.F.02 (<i>Feature Location</i>) is B.</p>	<p>The intent of this item is to collect the minimum distance from the centerline of the railroad track to a bridge related obstruction.</p> <p>Offsets greater than 30 feet may be estimated.</p>	
Examples		
<p>One railroad track below the bridge. Report 20.3.</p>  <p>The diagram shows a bridge structure with a centerline. To the left, a slope with a 1:1 ratio descends to a 'Toe of slope'. A horizontal dimension line indicates a distance of 30'-6" from the centerline to a substructure unit. Another horizontal dimension line indicates a distance of 20'-4" from the centerline to the toe of the slope.</p>		
<p>Figure 111. Bridge elevation view indicating horizontal offset for one railroad track below the bridge.</p>		

Examples Continued – Railroad Minimum Horizontal Offset

Two railroad tracks that both carry freight (i.e. one railroad feature). Report 18.5.

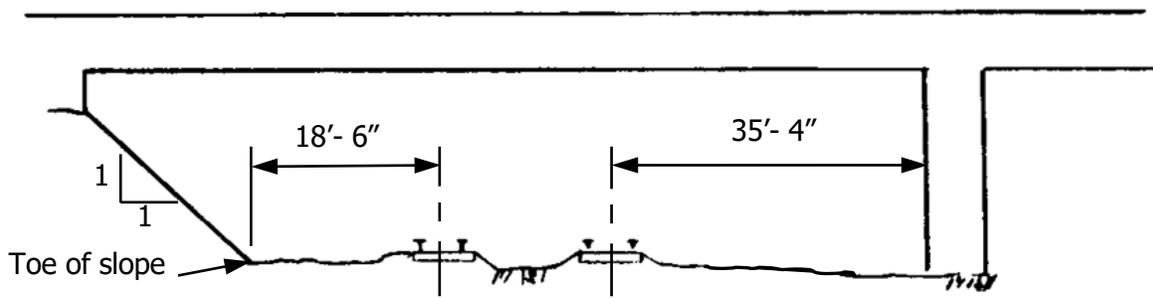


Figure 112. Bridge elevation view indicating horizontal offset for two railroad tracks below the bridge.

<i>Railroad Crossing Numbers</i>		
<u>Format</u> AN	<u>Frequency</u> I	<u>Item ID</u> B.RR.IL.01
Specification	Commentary	
<p>This item indicates the unique permanent number assigned to each railroad crossing by the railroad company. It is used for referencing purposes.</p>	<p>Two seven-digit fields are provided for identification of a maximum of two railroad lines crossing at the bridge.</p> <p>Enter the appropriate seven-digit number(s) in the field(s) provided.</p> <p>Leave blank if not applicable.</p>	
Examples		
<p>Report 069909W where 008-0052 (Savanna/Sabula bridge) spans over BNSF RR.</p>		
		
<p>Report 072766E where 001-0019 (Quincy Memorial bridge) spans over Burlington Junction RR.</p>		



Report 069891N where 008-9915 (BNSF RR bridge) spans over TR 8258 (Daggert Road).



SUBSECTION 4.5: NAVIGABLE WATERWAYS

The data items in this subsection provide information about the waterways that pass below the bridge. These data items are considered part of the Features Data Set and have a many-to-one relationship with a bridge. Therefore, each waterway feature reported in Item B.F.01 (*Feature Type*) has a unique waterway feature data set, and there may be multiple waterway feature data sets associated with a bridge.

Item B.N.01 (*Navigable Waterway*) is reported for all waterways, and the remaining items are reported only for navigable waterways, i.e. when Item B.N.01 (*Navigable Waterway*) is Y.

The dimensional values for the items in this subsection can be obtained from either plans or field measurement.

The data for the items in this subsection typically remain static once a bridge has been inventoried. The following data items are included in this subsection.

Item ID Data Item

B.N.01	Navigable Waterway
B.N.02	Navigation Minimum Vertical Clearance
B.N.03	Movable Bridge Maximum Navigation Vertical Clearance
B.N.04	Navigation Channel Width
B.N.05	Navigation Channel Minimum Horizontal Clearance
B.N.06	Substructure Navigation Protection
B.N.IL.01	Coast Guard

<i>Navigable Waterway</i>		
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.N.01
Specification		Commentary
<p>Report whether the waterway feature reported in Item B.F.01 (<i>Feature Type</i>) is considered navigable waters of the United States using one of the following codes.</p> <p><u>Code</u> <u>Description</u></p> <p>N Not navigable waters</p> <p>Y Navigable waters</p> <p>U Navigable waters designation is undetermined</p>		<p>This item identifies bridges over navigable waters where the United States Coast Guard may exercise jurisdiction, as defined in 33 CFR, Part 2. This information helps identify bridges at risk from vessel collision and bridges where a Coast Guard permit may be required for modifications to the structure.</p> <p>Information helpful in coding this item may be found in design and construction documentation or prior correspondence with the Coast Guard.</p> <p>Navigable waterways are determined by the Commandant of the United States Coast Guard per Title 33 of the Code of Federal Regulations, Section 2.36.</p>

Navigation Minimum Vertical Clearance										
Format N (4,1)	Frequency I	Item ID B.N.02								
Specification	Commentary									
<p>Report the minimum vertical clearance over the waterway feature reported in Item B.F.01 (<i>Feature Type</i>), rounded down to the nearest tenth of a foot.</p> <p>The reported clearance is from the highest datum plane referenced in the approved permit plans to the lowest superstructure restriction or other appurtenances attached to the bridge over the designated navigation channel.</p> <p>For all movable bridges, the vertical clearance reported for this item is for the bridge in the closed position (i.e., open to vehicular traffic).</p> <p>Report the most restrictive clearance when there are multiple designated navigation channels.</p> <p>Report this item only when Item B.N.01 (<i>Navigable Waterway</i>) is Y.</p>	<p>Reference datum, designated navigation channels, and vertical clearances can be found on permit plans approved by the United States Coast Guard.</p> <p>When permit plans are not available, values can be established from field measurements obtained for known navigation channels and the most restrictive clearance recorded. Reference field measurements to the following datum:</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>Crossing Type</u></th> <th style="text-align: left;"><u>Datum</u></th> </tr> </thead> <tbody> <tr> <td>Tidal waters</td> <td>Mean High Water</td> </tr> <tr> <td>Non-tidal waters</td> <td>Extreme High Water</td> </tr> <tr> <td>River</td> <td>Q50 Surface Elevation</td> </tr> </tbody> </table>		<u>Crossing Type</u>	<u>Datum</u>	Tidal waters	Mean High Water	Non-tidal waters	Extreme High Water	River	Q50 Surface Elevation
<u>Crossing Type</u>	<u>Datum</u>									
Tidal waters	Mean High Water									
Non-tidal waters	Extreme High Water									
River	Q50 Surface Elevation									
Examples										
<p>Permit plans for a bridge over tidal waters with the navigation channel designated by cross-hatched area. Permit plans set the datum at mean higher-high water (M.H.H.W.) instead of mean high water. Report 50.0.</p>										
<p>The diagram is a cross-sectional elevation view of a bridge over a navigation channel. The bridge spans from station 18 to station 23, with a total length of 620 feet. The roadway is shown above the bridge deck. A navigation channel, indicated by a cross-hatched area, is located between stations 21 and 23, with a width of 250 feet. The vertical clearance from the lowest part of the bridge structure to the top of the navigation channel is 50 feet. The datum for the water level is set at 16.4 M.H.H.W. (Mean Higher-High Water). The roadway centerline is at station 23+10. The ground line is shown below the roadway, labeled 'Approx. Ground Line @ C Roadway'.</p>										
<p>Figure 115. Bridge elevation view indicating navigation channel and vertical clearance. (Source: Alaska DOT)</p>										

Examples Continued - Navigation Minimum Vertical Clearance

Permit plans for a bridge over tidal waters with multiple designated navigation channels. Permit plans set the datum at mean higher-high water (M.H.H.W.) instead of mean high water. Report 23.1.

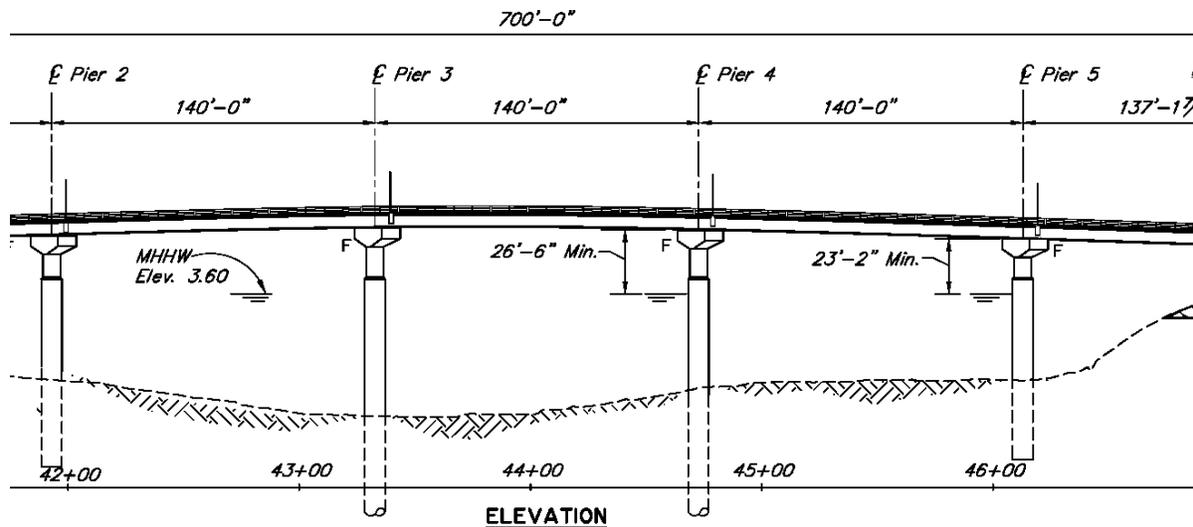


Figure 116. Bridge elevation view indicating multiple navigation channels and vertical clearances. (Source: Alaska DOT)

Vertical lift bridge. Information taken from "As-Built" plans as no permit plans are available. Mean High Water elevation is 3.2 ft. Minimum vertical underclearance is 12 ft – 3.2 ft = 8.8 ft. Report 8.8.

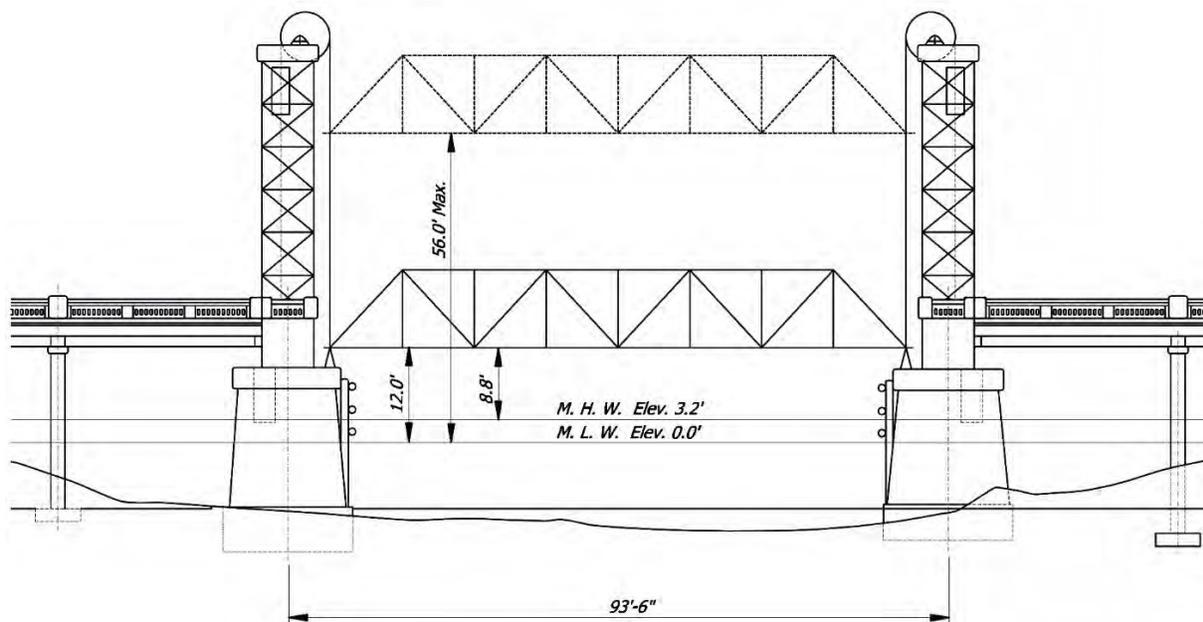


Figure 117. Bridge elevation view for a vertical lift bridge indicating vertical clearances. (Source: Florida DOT)

Movable Bridge Maximum Navigation Vertical Clearance

<u>Format</u> N (4,1)	<u>Frequency</u> I	<u>Item ID</u> B.N.03								
Specification	Commentary									
<p>Report the maximum vertical clearance over the waterway feature reported in Item B.F.01 (<i>Feature Type</i>), rounded down to the nearest tenth of a foot.</p> <p>The reported clearance is from the highest datum plane referenced in the approved permit plans to the lowest superstructure restriction or other appurtenances attached to the bridge over the designated navigation channel, when the movable bridge is in the open position.</p> <p>Report 999.9 when the bridge provides unlimited vertical clearance over the navigation channel in the open position.</p> <p>Report this item only when Item B.N.01 (<i>Navigable Waterway</i>) is Y and Item B.SP.06 (<i>Span Type</i>) begins with M, indicating that the span type is movable.</p>	<p>The value reported for this item is particularly useful for vertical lift bridges and for bascule bridges where the leaf (or leaves) does not provide unlimited vertical clearance over the designated navigation channel in the open position.</p> <p>When permit plans are not available, values can be obtained from field measurements. Reference field measurements to the following datum:</p> <table style="margin-left: auto; margin-right: auto; border: none;"> <tr> <td style="padding-right: 20px;"><u>Crossing Type</u></td> <td><u>Datum</u></td> </tr> <tr> <td>Tidal waters</td> <td>Mean High Water</td> </tr> <tr> <td>Non-tidal waters</td> <td>Extreme High Water</td> </tr> <tr> <td>River</td> <td>Q50 Surface Elevation</td> </tr> </table>		<u>Crossing Type</u>	<u>Datum</u>	Tidal waters	Mean High Water	Non-tidal waters	Extreme High Water	River	Q50 Surface Elevation
<u>Crossing Type</u>	<u>Datum</u>									
Tidal waters	Mean High Water									
Non-tidal waters	Extreme High Water									
River	Q50 Surface Elevation									

Example

Vertical lift bridge. Information taken from "As-Built" plans as no permit plans are available. Mean High Water elevation is 3.2 ft. Maximum vertical underclearance is 56 ft – 3.2 ft = 52.8 ft. Report 52.8.

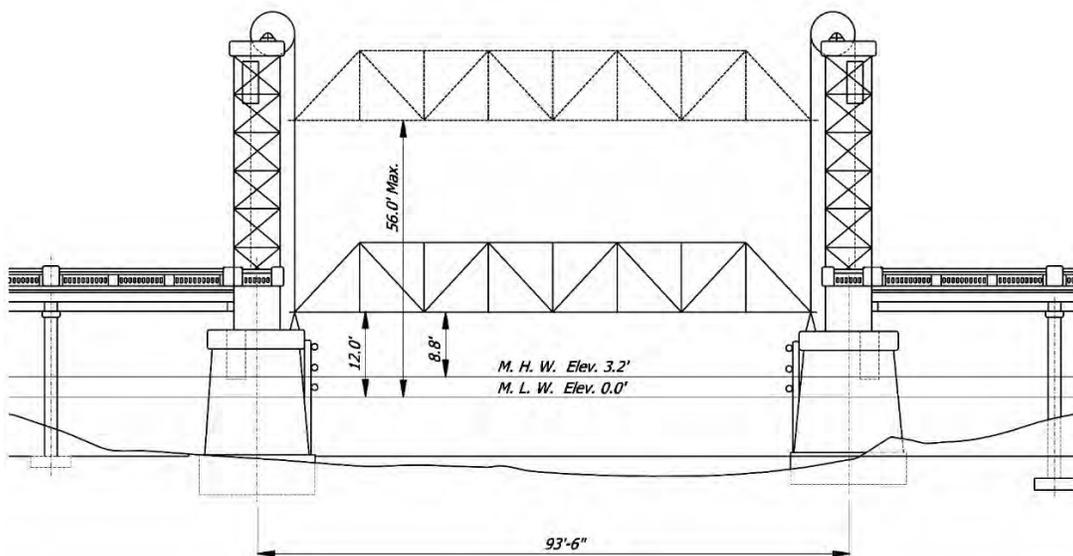


Figure 118. Bridge elevation view for a vertical lift bridge indicating vertical clearances. (Source: Florida DOT)

Navigation Channel Width		
Format N (5,1)	Frequency I	Item ID B.N.04
Specification	Commentary	
<p>Report the navigation channel width for the waterway feature reported in Item B.F.01 (<i>Feature Type</i>), rounded down to the nearest tenth of a foot.</p> <p>The width is as shown on the approved permit plans, or field measured when the navigation channel changes or is unmarked.</p> <p>For field measurements, measure the horizontal distance perpendicular to the centerline of the navigation channel. For marked channels measure between the markers designating the limits of the channel at the bridge. For unmarked channels, measure the minimum clear distance between fenders or piers.</p> <p>If multiple channels exist, report the most restrictive.</p> <p>Report this item only when Item B.N.01 (<i>Navigable Waterway</i>) is Y.</p>	<p>The width provided here should be consistent with the navigation channel used in the navigation vertical clearance items. The designated navigation channel width may be less than the distance between substructure units.</p>	
Examples		
<p>Permit plans for a bridge over tidal waters with the navigation channel designated by cross-hatched area. Report 250.0.</p>		
<p>Figure 119. Bridge elevation view indicating navigation channel width dimensions. (Source: Alaska DOT)</p>		

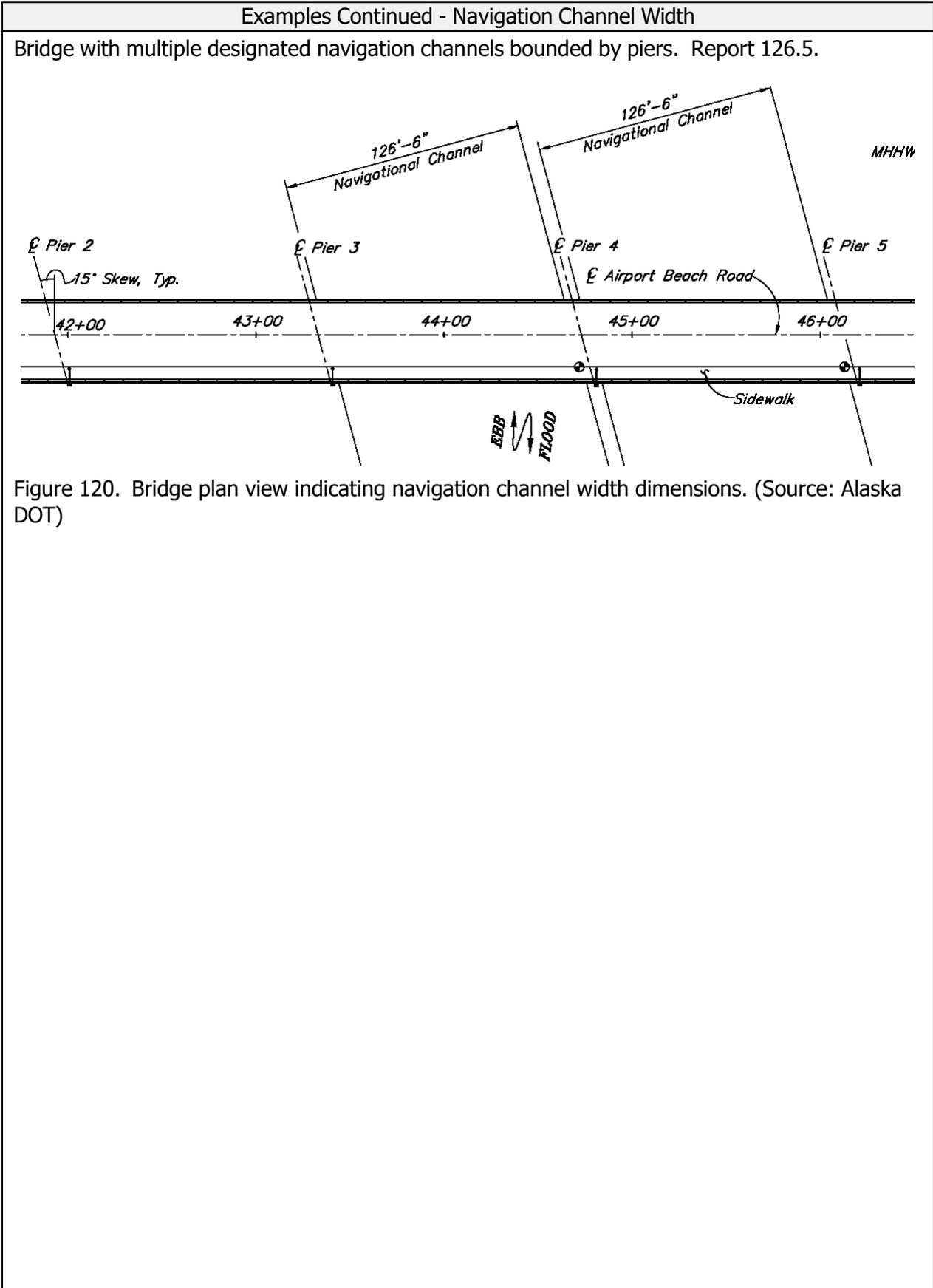


Figure 120. Bridge plan view indicating navigation channel width dimensions. (Source: Alaska DOT)

<i>Navigation Channel Minimum Horizontal Clearance</i>		
<u>Format</u> N (5,1)	<u>Frequency</u> I	<u>Item ID</u> B.N.05
Specification		Commentary
<p>Report the minimum horizontal clearance for the waterway feature reported in Item B.F.01 (<i>Feature Type</i>), rounded down to the nearest tenth of a foot.</p> <p>The clearance is the minimum distance from either edge of the navigation channel shown on the approved permit plans, to the face of the nearest bridge substructure unit located within the waterway.</p> <p>The clearance may be field measured when the placement of navigation markers at the bridge is inconsistent with the permit plans, or if the presence of navigation markers indicates a navigation channel and no permit plans are available.</p> <p>For field measurements, measure the horizontal distance perpendicular to the centerline of the navigation channel from the markers designating the limits of the channel at the bridge, to the face of the nearest bridge substructure unit located within the waterway.</p> <p>Report 0 when substructure units in the waterway are the boundaries for the navigation channel.</p> <p>Report 9999.9 when no substructure unit is within the waterway.</p> <p>Report this item only when Item B.N.01 (<i>Navigable Waterway</i>) is Y.</p>		<p>The intent of this item is to collect the most restrictive distance from the edge of the navigational channel to a bridge substructure to assess risk for vessel collision.</p> <p>The clearance provided here should be consistent with the navigation channel used in Item B.N.04 (<i>Navigation Channel Width</i>).</p>

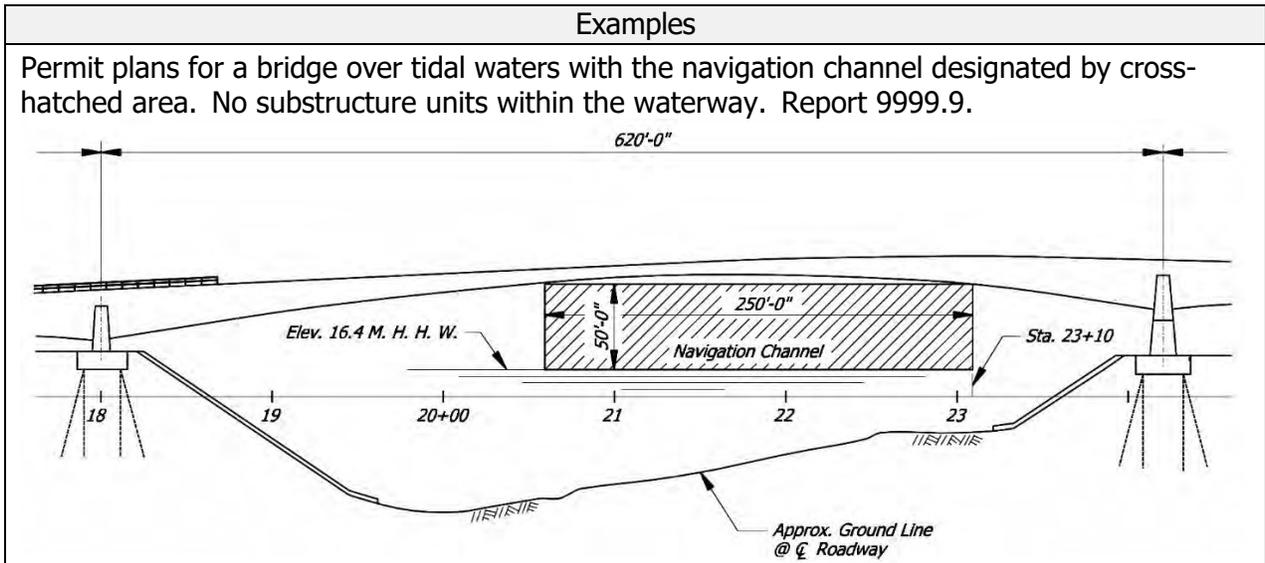


Figure 121. Bridge elevation view with no substructure units in the waterway. (Source: Alaska DOT)

Bridge with multiple designated navigation channels bounded by piers. Report 0.

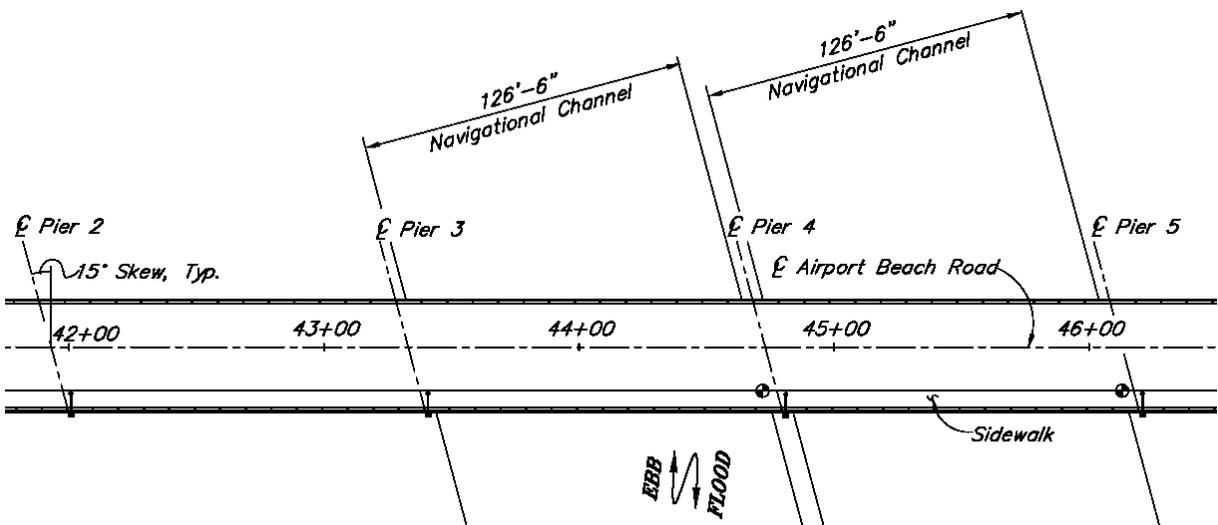


Figure 122. Bridge plan view indicating multiple navigation channel width dimensions to substructure units in the waterway. (Source: Alaska DOT)

Bridge with navigation channel designated by cross-hatched area. Substructure units within the waterway. Report 135.6.

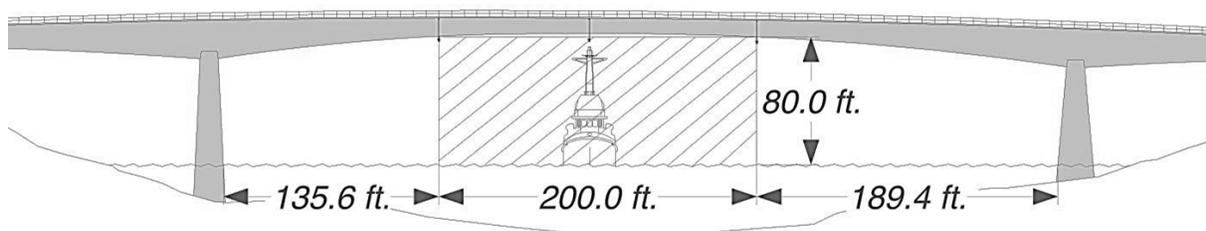


Figure 123. Bridge elevation view indicating navigation channel clearances to substructure units in the waterway.

<i>Substructure Navigation Protection</i>															
<u>Format</u> AN (1)	<u>Frequency</u> EI														
<u>Item ID</u> B.N.06															
Specification	Commentary														
<p>Report the presence and adequacy of substructure navigation protection for the waterway feature reported in Item B.F.01 (<i>Feature Type</i>), using one of the following codes.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Navigation protection not required; bridge has been designed or assessed to have adequate capacity to resist anticipated impact loads without collapse.</td> </tr> <tr> <td>1</td> <td>Navigation protection not required; assessment of navigation opening and vessel traffic has determined that there is a low probability that an errant vessel could impact the bridge.</td> </tr> <tr> <td>2</td> <td>Protective system in place and functioning.</td> </tr> <tr> <td>3</td> <td>Protective system in place, but damage or deterioration impacts ability to protect.</td> </tr> <tr> <td>4</td> <td>Protective system in place, but reevaluation of design suggested.</td> </tr> <tr> <td>5</td> <td>No protective system in place, but reevaluation of the need for a protective system is recommended.</td> </tr> </tbody> </table> <p>Report this item only when Item B.N.01 (<i>Navigable Waterway</i>) is Y.</p>	<u>Code</u>	<u>Description</u>	0	Navigation protection not required; bridge has been designed or assessed to have adequate capacity to resist anticipated impact loads without collapse.	1	Navigation protection not required; assessment of navigation opening and vessel traffic has determined that there is a low probability that an errant vessel could impact the bridge.	2	Protective system in place and functioning.	3	Protective system in place, but damage or deterioration impacts ability to protect.	4	Protective system in place, but reevaluation of design suggested.	5	No protective system in place, but reevaluation of the need for a protective system is recommended.	<p>Substructure navigation protection systems can be fender systems, dolphins, or other systems that either prevent the substructure from being impacted or adequately reduce the impact load that is transferred into the substructure.</p> <p>Use codes 0 and 1 to indicate that an assessment of vessel traffic characteristics and/or bridge capacity has determined that navigation protection is not required. AASHTO's Guide Specifications and Commentary for Vessel Collision Design of Highway Bridges provides a method for assessing an existing bridge's vulnerability to vessel collision. Codes 0 and 1 should not be assigned based on field observation.</p> <p>Use codes 4 and 5 to indicate that observed conditions necessitate a review of vessel traffic characteristics, bridge capacity, and protective system capability to determine whether the bridge is adequately protected from vessel collision.</p>
<u>Code</u>	<u>Description</u>														
0	Navigation protection not required; bridge has been designed or assessed to have adequate capacity to resist anticipated impact loads without collapse.														
1	Navigation protection not required; assessment of navigation opening and vessel traffic has determined that there is a low probability that an errant vessel could impact the bridge.														
2	Protective system in place and functioning.														
3	Protective system in place, but damage or deterioration impacts ability to protect.														
4	Protective system in place, but reevaluation of design suggested.														
5	No protective system in place, but reevaluation of the need for a protective system is recommended.														

<i>Coast Guard</i>		
<u>Format</u> AN (1)	<u>Frequency</u> EI	<u>Item ID</u> B.N.IL.01
Specification	Commentary	
<p>This item indicates the Coast Guard District for the Navigable waterways.</p> <p>Illinois is in two Coast Guard Districts, the break point is located in Will County – at the Lockport area, the IL 7 bridge is in the 9th Coast Guard District, and all bridges south of that bridge along the Illinois Waterway (including the Des Plaines River) in Will County belong to the 8th Coast Guard District.</p>	<p>A one-digit field.</p> <p>B.N.IL.01 is required when B.N.01 has been coded = 1 (YES).</p> <p><u>Code</u> <u>Description</u></p> <p>8 St. Louis</p> <p>9 Cleveland</p> <p>N Not applicable, no waterway</p>	

SECTION 5: LOADS, LOAD RATING, AND POSTING

This section has data items that have been grouped by the following three subsections: Loads and Load Rating, Load Posting Status, and Load Evaluation and Posting.

The data items in the Loads and Load Rating subsection provide information on the load carrying capacity of bridges, as well as the method used to determine the capacity and load posting. These items are considered part of the Primary Data Set and have a one-to-one relationship with a bridge. Some of the data items remain static once a bridge has been inventoried, but others may change after reevaluation of the load rating.

The data items in the Load Posting Status subsection provide information on the status of the bridge with regards to weight or other load restrictions. These items are considered part of the Posting Status Data Set and have a many-to-one relationship with a bridge when applicable. The data for these items may change after reevaluation of the load rating.

The data items in the Load Evaluation and Posting subsection provide information on the load carrying capacity of the bridge with respect to the legal load configurations established by AASHTO, FHWA, the State transportation department, Federal agency, or Tribal government. These items are considered part of the Posting Evaluation Data Set and have a many-to-one relationship with a bridge when applicable. The data for these items may change after reevaluation of the load rating.

The following data items are included in this section.

SUBSECTION 5.1: LOADS AND LOAD RATING

Item ID	Data Item
B.LR.01	Design Load
B.LR.02	Design Method
B.LR.03	Load Rating Date
B.LR.04	Load Rating Method
B.LR.05	Inventory Load Rating Factor
B.LR.06	Operating Load Rating Factor
B.LR.07	Controlling Legal Load Rating Factor
B.LR.08	Routine Permit Loads
B.LR.IL.01	Operating/Inventory Remarks
B.LR.IL.02	Load Rating Inspection Date
B.LR.IL.03	Structural Evaluation
B.LR.IL.04	Allowable Single Unit Weight Limit
B.LR.IL.05	Posted Single Unit Weight Limit
B.LR.IL.06	Allowable Combination Type 3S-1 Weight Limit
B.LR.IL.07	Posted Combination Type 3S-1 Weight Limit
B.LR.IL.08	Allowable Combination Type 3S-2 Weight Limit
B.LR.IL.09	Posted Combination Type 3S-2 Weight Limit
B.LR.IL.10	Lanes Adjusted/restricted for rating analysis

SUBSECTION 5.2: LOAD POSTING STATUS

Item ID	Data Item
B.PS.01	Load Posting Status
B.PS.02	Posting Status Change Date
B.PS.IL.01	Bridge Status Remarks

SUBSECTION 5.3: LOAD EVALUATION AND POSTING**Item ID Data Item**

B.EP.01	Legal Load Configuration
B.EP.02	Legal Load Rating Factor
B.EP.03	Posting Type
B.EP.04	Posting Value

SUBSECTION 5.1: LOADS AND LOAD RATING

The data items in this subsection provide information on the load carrying capacity of the bridge, as well as the method used to determine the capacity and load posting. These data items are considered part of the Primary Data Set and have a one-to-one relationship with a bridge. Some of the data items remain static once a bridge has been inventoried, but others may change after reevaluation of the load rating.

The following data items are included in this subsection.

Item ID **Data Item**

B.LR.01	Design Load
B.LR.02	Design Method
B.LR.03	Load Rating Date
B.LR.04	Load Rating Method
B.LR.05	Inventory Load Rating Factor
B.LR.06	Operating Load Rating Factor
B.LR.07	Controlling Legal Load Rating Factor
B.LR.08	Routine Permit Loads
B.LR.IL.01	Operating/Inventory Remarks
B.LR.IL.02	Load Rating Inspection Date
B.LR.IL.03	Structural Evaluation
B.LR.IL.04	Allowable Single Unit Weight Limit
B.LR.IL.05	Posted Single Unit Weight Limit
B.LR.IL.06	Allowable Combination Type 3S-1 Weight Limit
B.LR.IL.07	Posted Combination Type 3S-1 Weight Limit
B.LR.IL.08	Allowable Combination Type 3S-2 Weight Limit
B.LR.IL.09	Posted Combination Type 3S-2 Weight Limit
B.LR.IL.10	Lanes Adjusted/restricted for rating analysis

<i>Design Load</i>																																																																						
<u>Format</u> AN (8)	<u>Frequency</u> I																																																																					
<u>Item ID</u> B.LR.01																																																																						
Specification	Commentary																																																																					
<p>Report the live load for which the bridge was designed using one of the following codes.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr><td>H10</td><td>H-10</td></tr> <tr><td>H15</td><td>H-15</td></tr> <tr><td>H20</td><td>H-20</td></tr> <tr><td colspan="2"> </td></tr> <tr><td>HS15</td><td>HS-15</td></tr> <tr><td>HS20</td><td>HS-20</td></tr> <tr><td>HS20M</td><td>HS-20 and Military</td></tr> <tr><td colspan="2"> </td></tr> <tr><td>HS20Plus</td><td>Greater than HS-20</td></tr> <tr><td>HL93</td><td>HL-93</td></tr> <tr><td>HL93Plus</td><td>Greater than HL-93</td></tr> <tr><td colspan="2"> </td></tr> <tr><td>RR</td><td>Railroad</td></tr> <tr><td colspan="2"> </td></tr> <tr><td>U</td><td>Unknown</td></tr> <tr><td colspan="2"> </td></tr> <tr><td>X</td><td>Other</td></tr> </tbody> </table>	<u>Code</u>	<u>Description</u>	H10	H-10	H15	H-15	H20	H-20			HS15	HS-15	HS20	HS-20	HS20M	HS-20 and Military			HS20Plus	Greater than HS-20	HL93	HL-93	HL93Plus	Greater than HL-93			RR	Railroad			U	Unknown			X	Other	<p>For widened or rehabilitated bridges, code the most restrictive design load governing any portion of the bridge.</p> <p>Use code HS20M when the bridge is designed to accommodate both the HS-20 and the alternate military load.</p> <p>Use codes HS20Plus and HL93Plus when the HS-20 or HL-93 design load configuration is increased proportionally above that specified in the AASHTO design specifications.</p> <p>Use code U when the design plans are not available, and the likely design load cannot be inferred from design characteristics of the bridge or agency policy at the time the bridge was built. A code other than U can be reported when design plans are not available, but the design load can be inferred from design characteristics of the bridge or agency policy at the time the bridge was built.</p> <p>Use code X when the design load is known but is not based on AASHTO or railroad design load configurations.</p> <table border="0" style="margin-top: 20px;"> <thead> <tr> <th style="text-align: left;"><u>Metric</u> <u>Description</u></th> <th style="text-align: center;">or</th> <th style="text-align: left;"><u>English</u> <u>Description</u></th> </tr> </thead> <tbody> <tr><td>M 9</td><td></td><td>H 10</td></tr> <tr><td>M 13.5</td><td></td><td>H 15</td></tr> <tr><td>MS 13.5</td><td></td><td>HS 15</td></tr> <tr><td>M 18</td><td></td><td>H 20</td></tr> <tr><td>MS 18</td><td></td><td>HS 20</td></tr> <tr><td>MS 18+Mod</td><td></td><td>HS 20+Mod</td></tr> <tr><td>Pedestrian</td><td></td><td>Pedestrian</td></tr> <tr><td>Railroad</td><td></td><td>Railroad</td></tr> <tr><td>MS 22.5</td><td></td><td>HS 25</td></tr> <tr><td colspan="3">Other or Unknown (describe on inspection reporting form)</td></tr> </tbody> </table>	<u>Metric</u> <u>Description</u>	or	<u>English</u> <u>Description</u>	M 9		H 10	M 13.5		H 15	MS 13.5		HS 15	M 18		H 20	MS 18		HS 20	MS 18+Mod		HS 20+Mod	Pedestrian		Pedestrian	Railroad		Railroad	MS 22.5		HS 25	Other or Unknown (describe on inspection reporting form)		
<u>Code</u>	<u>Description</u>																																																																					
H10	H-10																																																																					
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HS20M	HS-20 and Military																																																																					
HS20Plus	Greater than HS-20																																																																					
HL93	HL-93																																																																					
HL93Plus	Greater than HL-93																																																																					
RR	Railroad																																																																					
U	Unknown																																																																					
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MS 18		HS 20																																																																				
MS 18+Mod		HS 20+Mod																																																																				
Pedestrian		Pedestrian																																																																				
Railroad		Railroad																																																																				
MS 22.5		HS 25																																																																				
Other or Unknown (describe on inspection reporting form)																																																																						

Example
<p>A bridge designed for an HS-20 load is later widened. The widening is designed for the HL-93 load. Report HS20.</p> <p>Per State design policy, a bridge is designed using LRFD, in which the truck load portion of the HL-93 load is increased by 25%. Report HL93Plus.</p> <p>Per State design policy, a bridge is designed for the HL-93 design load, with further consideration of a State-defined permit vehicle. The permit vehicle controls the design of the superstructure. Report X.</p>

<i>Design Method</i>														
<u>Format</u> AN (4)	<u>Frequency</u> I	<u>Item ID</u> B.LR.02												
Specification		Commentary												
<p>Report the method by which the bridge was designed using one of the following codes.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td>ASD</td> <td>Allowable Stress Design</td> </tr> <tr> <td>LFD</td> <td>Load Factor Design</td> </tr> <tr> <td>LRFD</td> <td>Load and Resistance Factor Design</td> </tr> <tr> <td>U</td> <td>Unknown</td> </tr> <tr> <td>X</td> <td>Other</td> </tr> </tbody> </table>		<u>Code</u>	<u>Description</u>	ASD	Allowable Stress Design	LFD	Load Factor Design	LRFD	Load and Resistance Factor Design	U	Unknown	X	Other	<p>The codes describe the design methods used in accordance with AASHTO design specifications.</p> <p>For widened or rehabilitated bridges, code the design method associated with the code in Item B.LR.01 (<i>Design Load</i>).</p> <p>Use code U when the design plans are not available and the likely design method cannot be inferred from design characteristics of the bridge or agency policy at the time the bridge was built. A code other than U can be reported when design plans are not available, but the design method can be inferred from design characteristics of the bridge or agency policy at the time the bridge was built.</p>
<u>Code</u>	<u>Description</u>													
ASD	Allowable Stress Design													
LFD	Load Factor Design													
LRFD	Load and Resistance Factor Design													
U	Unknown													
X	Other													
Example														
<p>A bridge designed for an HS-20 load using Load Factor design is later widened. The widened portion is designed for the HL-93 load using Load and Resistance Factor design. Item B.LR.01 (<i>Design Load</i>) has code HS20 reported. Report LFD.</p>														

<i>Load Rating Date</i>		
Format YYYYMMDD	Frequency I	Item ID B.LR.03
Specification	Commentary	
<p>Report the date of the most recent load rating.</p> <p>Do not report this item if no rating analysis or evaluation has been performed</p>	<p>This item reflects the date of the most recent calculation or reevaluation of the load rating.</p> <p>The load rating may be performed independently and at a different date than the inspection.</p> <p>Defects discovered during inspections that may impact the strength or serviceability of the bridge typically require reevaluation of the load rating. When reevaluation of the load rating is completed, report the date of the reevaluation for this item.</p> <p>Refer to the following items when a new or updated load rating is completed:</p> <ul style="list-style-type: none"> • B.LR.04 (<i>Load Rating Method</i>) • B.LR.05 (<i>Inventory Load Rating Factor</i>) • B.LR.06 (<i>Operating Load Rating Factor</i>) • B.LR.07 (<i>Controlling Legal Load Rating Factor</i>) • B.LR.08 (<i>Routine Permit Loads</i>) 	
Example		
<p>Load rating calculations found in the bridge record are dated September 5, 1999. Report 19990905.</p> <p>A bridge rated for an HS-20 load using Load Factor rating is later widened. The entire bridge is re-rated using Load and Resistance Factor rating on July 23, 2012. Report 20120723.</p>		

<i>Load Rating Method</i>																		
<u>Format</u> AN (4)	<u>Frequency</u> I	<u>Item ID</u> B.LR.04																
Specification		Commentary																
<p>Report the method used to calculate the load rating using one of the following codes.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td>LFR</td> <td>Load Factor Rating</td> </tr> <tr> <td>ASR</td> <td>Allowable Stress Rating</td> </tr> <tr> <td>LRFR</td> <td>Load and Resistance Factor Rating</td> </tr> <tr> <td>LT</td> <td>Load Testing</td> </tr> <tr> <td>AR</td> <td>Assigned Rating</td> </tr> <tr> <td>EJ</td> <td>Field evaluation and documented engineering judgment</td> </tr> <tr> <td>N</td> <td>No rating analysis or evaluation has been performed</td> </tr> </tbody> </table>		<u>Code</u>	<u>Description</u>	LFR	Load Factor Rating	ASR	Allowable Stress Rating	LRFR	Load and Resistance Factor Rating	LT	Load Testing	AR	Assigned Rating	EJ	Field evaluation and documented engineering judgment	N	No rating analysis or evaluation has been performed	<p>When different portions of a bridge are load rated using different methods, report the rating method associated with the controlling rating factor.</p> <p>For information on applicable load rating methods, refer to the October 30, 2006 FHWA memorandum at: http://www.fhwa.dot.gov/bridge/nbis/103006.cfm.</p> <p>For information on using code AR, refer to the September 29, 2011 FHWA memorandum at: http://www.fhwa.dot.gov/bridge/110929.cfm</p> <p>For information on using code EJ, refer to the February 2, 2011 FHWA memorandum at: http://www.fhwa.dot.gov/bridge/110202.cfm</p>
<u>Code</u>	<u>Description</u>																	
LFR	Load Factor Rating																	
ASR	Allowable Stress Rating																	
LRFR	Load and Resistance Factor Rating																	
LT	Load Testing																	
AR	Assigned Rating																	
EJ	Field evaluation and documented engineering judgment																	
N	No rating analysis or evaluation has been performed																	
Example																		
<p>A bridge rated for an HS-20 load using Load Factor rating is later widened. The entire bridge is re-rated using Load and Resistance Factor rating. Report LRFR.</p> <p>A steel truss bridge with steel beam approach spans originally rated using Allowable Stress Rating. The approach spans are re-rated using Load Factor Rating due to deterioration. The rating of the approach spans controls. Report LFR.</p> <p>A bridge designed and checked using Load Factor Design and an HS-20 live load. The bridge meets the criteria stated in the September 29, 2011 FHWA memo and has an assigned load rating. Report AR.</p> <p>A concrete bridge constructed in 1910 has no design plans. Load rating determined by a qualified engineer after field condition and live load history evaluation. Report EJ.</p>																		

<i>Inventory Load Rating Factor</i>		
<u>Format</u> N (4,2)	<u>Frequency</u> I	<u>Item ID</u> B.LR.05
Specification	Commentary	
<p>Report the inventory load rating factor, truncated to the hundredth, for the standard AASHTO HS-20 or HL-93 loadings, whichever is applicable based on the method reported in Item B.LR.04 (<i>Load Rating Method</i>).</p> <p>When temporary or supported conditions exist, as indicated in Item B.PS.01 (<i>Load Posting Status</i>), report the rating factor for the bridge including the temporary or supported conditions.</p> <p>Do not report this item when no rating analysis or evaluation has been performed.</p>	<p>For LRFR, this is the rating factor for the design load rating at the inventory level of reliability using the HL-93 loading considering all applicable strength and serviceability limit states.</p> <p>Refer to the AASHTO Manual for Bridge Evaluation for details of HS-20 and HL-93 loadings and limit states.</p>	
Example		
<p>A bridge has a calculated inventory load rating factor of 1.486. Report 1.48.</p>		

<i>Operating Load Rating Factor</i>		
<u>Format</u> N (4,2)	<u>Frequency</u> I	<u>Item ID</u> B.LR.06
Specification		Commentary
<p>Report the operating load rating factor, truncated to the hundredth, for the standard AASHTO HS-20 or HL-93 loadings, whichever is applicable based on the method reported in Item B.LR.04 (<i>Load Rating Method</i>).</p> <p>When temporary or supported conditions exist, as indicated in Item B.PS.01 (<i>Load Posting Status</i>), report the rating factor for the bridge including the temporary or supported conditions.</p> <p>Do not report this item when no rating analysis or evaluation has been performed.</p>		<p>For LRFR, this is the rating factor for the design load rating at the operating level of reliability using the HL-93 loading considering all applicable strength and serviceability limit states.</p> <p>Refer to the AASHTO Manual for Bridge Evaluation for details of HS-20 and HL-93 loadings and limit states.</p>
Example		
<p>A bridge has a calculated operating load rating factor of 1.679. Report 1.67.</p>		

<i>Controlling Legal Load Rating Factor</i>		
<u>Format</u> N (4,2)	<u>Frequency</u> I	<u>Item ID</u> B.LR.07
Specification		Commentary
<p>Report the lowest (controlling) rating factor for the AASHTO, FHWA emergency vehicle, State transportation department, Federal agency, or Tribal government defined legal loads truncated to the hundredth.</p> <p>Do not report a rating factor that was calculated using reduced force effects from postings or restrictions that affect traffic operation, e.g. that limit speed, number of lanes, number of trucks, or do not allow commercial vehicles. Report the rating factor that represents an unrestricted operation.</p> <p>When temporary or supported conditions exist, as indicated in Item B.PS.01 (<i>Load Posting Status</i>), report the rating factor for the bridge including the temporary or supported conditions.</p> <p>Do not report this item when no rating analysis or evaluation has been performed.</p> <p>Do not report State, Federal, or Tribal defined configurations that represent loads which exceed legal loads (e.g. special or routine permit vehicles).</p>		<p>For LRFR method this would be the rating factor of "Legal Load Rating"</p> <p>For Allowable Stress and Load Factor rating methods this would be the operating rating factor.</p> <p>When all legal loads are enveloped by the design load type reported in Item B.LR.04 (Load Rating Method) and the corresponding rating factor reported in Item B.LR.06 (Operating Load Rating Factor), then the value in Item B.LR.06 can be reported for this item when rating factors for legal load configurations have not been calculated.</p> <p>Enveloped as used here means that the legal load rating factor or the operating rating factor for all legal loads will be greater than or equal to 1.0 when the design load legal load rating factor or operating rating factor exceeds a threshold value established by an engineering study. The value in Item B.LR.06 to be reported in this item should exceed this threshold value. This includes legal loads representing emergency vehicles with the weights and bridge locations specified in 23 U.S.C. 127(r).</p> <p>State legal loads are typically described in State laws (State vehicle codes).</p>

Example

A bridge has the following calculated legal load rating factors for the AASHTO legal loads and a State-defined legal load:

Legal Load Configuration	Rating Factor
Type 3	1.07
Type 3S2	0.88
Type 3-3	0.80
SU4	0.70
SU5	0.65
FL120	1.15

Report 0.65.

<i>Routine Permit Loads</i>	
Format AN (1)	Frequency I
Item ID B.LR.08	
Specification	Commentary
<p>Report whether the bridge carries routine permit loads or whether routine permit loads are restricted from the bridge using one of the following codes.</p> <p><u>Code</u> <u>Description</u></p> <p>A Bridge carries routine permit loads. Load capacity is adequate for all routine permit loads approved for the route segment no routine permit loads are restricted.</p> <p>B Bridge carries routine permit loads. Load capacity is adequate for some routine permit loads approved for the route segment, but some routine permit loads are restricted.</p> <p>C Bridge does not carry routine permit loads. Load capacity is inadequate for all routine permit loads approved for the route segment. Routine permit loads are restricted from the bridge.</p> <p>N Bridge does not carry routine permit loads. Routine permit loads are not approved for the route segment.</p>	<p>This item is used to identify bridges where State routine permit loads must be considered in load rating and posting evaluations and to identify bridges where routine permit loads are restricted due to bridge load capacity limitations.</p> <p>Agencies have varying policies for issuing routine permits, from not issuing routine permits to issuing various routine permits when these loads exceed State legal loads. Some agencies may utilize maps that indicate highways and bridges that are restricted to routine permit loads or that allow routine permit loads.</p> <p>Use code A when all routine permit loads allowed to travel the route segment are also allowed to travel on the bridge.</p> <p>Use code B when not all routine permit loads allowed to travel the route segment are allowed to travel on the bridge.</p> <p>Use code C when all routine permit loads allowed to travel the route segment are restricted from the bridge.</p> <p>Use code N when the agency does not issue routine permits or routine permit loads are not approved for the route segment that is carried by the bridge.</p>

Examples – Routine Permit Loads

A State issues a routine permit for eleven vehicle configurations to travel segments of interstate routes throughout the State. A bridge is on an interstate route segment which all eleven configurations are allowed to cross the bridge. Report A.

A bridge is on a route segment that is included in a routine permit. The routine permit allows vehicles that do not exceed 55 tons and the limits of the Federal Bridge Formula B to travel the route segment, but the permit also restricts single unit vehicles exceeding State legal load from crossing the bridge. Report B.

A bridge is on State Route 10 and is posted for legal loads. Route 10 is included in a routine permit. The permit restricts the routine permit vehicles from crossing bridges that are posted for legal loads. Report C.

A State issues a routine permit for eleven vehicle configurations to travel segments of interstate routes throughout the State. A bridge is on an interstate route segment which is excluded from the permit and the route segment is not included in any other routine permit. Report N.

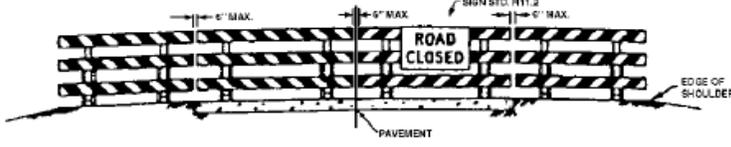
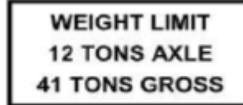
<i>Operating/Inventory Remarks</i>		
<u>Format</u> AN	<u>Frequency</u> I	<u>Item ID</u> B.LR.IL.01
Specification		Commentary
Remarks related to the Operating/Inventory Rating data.		An unlimited text field. Enter appropriate comments beginning at the first space available using any combination of letters, numbers, symbols and spaces. Abbreviations can be used as long as they are not ambiguous.

<i>Load Rating Inspection Date</i>		
<u>Format</u> MM/D D/YYY Y	<u>Frequency</u> I	<u>Item ID</u> B.LR.IL.02
Specification		Commentary
<p>This item is the date of the most recent load rating inspection which is performed to confirm and document items that may affect the safe live load carrying capacity of a structure.</p> <p>A drop of condition rating to a 4 and below for Superstructure (B.C.02), Substructure (B.C.03) or Culvert (B.C.03) or a 3 and below for Deck (B.C.01) or a 2 and below for Bridge Bearings (B.C.07) will initiate a load rating inspection. Follow up load rating inspections are required at the intervals shown below if the condition rating remains low:</p> <p>PPC Deck Beams w/Super Condition = 4 2 year interval</p> <p>PPC Deck Beams w/Super Condition ≤ 3 1 year interval</p> <p>All other structure types 10 year interval</p>		<p>A ten-digit field (standard date format MM/DD/YYYY).</p>

<i>Structural Evaluation</i>																		
<u>Format</u> N (4,2)	<u>Frequency</u> I	<u>Item ID</u> B.LR.IL.03																
Specification		Commentary																
<p>The appraisal rating is based on the condition rating of the Superstructure (Item B.C.02), Substructure (B.C.03), and Inventory Rating (B.LR.05). This item generally is coded no higher than the lowest condition rating of the superstructure or the substructure. The code is also based on the value obtained from Table 1 which evaluates the inventory rating (HS equivalent) shown for various traffic volumes.</p> <p>History is retained for this item based on each Inspection Date (B.IE.03). Though the value may be recalculated nightly for other uses within the ISIS database, the nightly value is not specifically retained unless an Inspection record (particularly an B.IE.03 Inspection date) is entered into the database.</p>		<p>DO NOT ENTER. (This item is computer generated).</p> <p>For other than culverts, the lowest of the codes obtained from B.C.02- Superstructure, B.C.03- Substructure, or Table 1 is used.</p> <p>For culverts, the lowest of the codes obtained from B.C.04 - Culverts, or Table 1 is used.</p> <p>Table 1 Notes:</p> <ol style="list-style-type: none"> 1. The live load used in establishing the Inventory Rating shall be one of the standard AASHTO vehicles or the maximum legal loads of the State. 2. In Table 1, the Inventory Rating is the coded HS rating or its equivalent. If the comparable HS equivalent is not calculated, a factor to determine the HS equivalent will be used. 3. Those agencies which have used other than an HS loading for calculating the inventory rating may use the following purposely conservative factors to convert to an equivalent coded HS rating load for use with Table 1. <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;"><u>1st digit of B.LR.05</u></th> <th style="text-align: left;"><u>Multiply 2nd and 3rd digits by</u></th> </tr> </thead> <tbody> <tr><td style="text-align: center;">1</td><td style="text-align: center;">1.25</td></tr> <tr><td style="text-align: center;">2</td><td style="text-align: center;">1.00</td></tr> <tr><td style="text-align: center;">3</td><td style="text-align: center;">1.20</td></tr> <tr><td style="text-align: center;">4</td><td style="text-align: center;">1.00</td></tr> <tr><td style="text-align: center;">5</td><td style="text-align: center;">.70</td></tr> <tr><td style="text-align: center;">6</td><td style="text-align: center;">.64</td></tr> <tr><td style="text-align: center;">9</td><td style="text-align: center;">1.00</td></tr> </tbody> </table> <ol style="list-style-type: none"> 4. All bridges on the Interstate system shall be evaluated using the ADT column of > 5000 regardless of the actual ADT on the bridge. <p>Table 1: Rating by Comparison of ADT (Item 29) And Inventory Rating – B.LR.05</p>	<u>1st digit of B.LR.05</u>	<u>Multiply 2nd and 3rd digits by</u>	1	1.25	2	1.00	3	1.20	4	1.00	5	.70	6	.64	9	1.00
<u>1st digit of B.LR.05</u>	<u>Multiply 2nd and 3rd digits by</u>																	
1	1.25																	
2	1.00																	
3	1.20																	
4	1.00																	
5	.70																	
6	.64																	
9	1.00																	

Example			
Structural Evaluation Appraisal Code	Inventory Rating		
	Average Daily Traffic (ADT)		
	0-500	501-5000	>5000
9	> 236* (HS20) **	> 236 (HS20)	> 236 (HS20)
8	= 236 (HS20)	= 236 (HS20)	= 236 (HS20)
7	>= 231 (HS17)	>= 231 (HS17)	>= 231 (HS17)
6	>= 223 (HS13)	>= 225 (HS14)	>= 227 (HS15)
5	>= 218 (HS10)	>= 220 (HS11)	>= 222 (HS12)
4	>= 212 (HS7)	>= 214 (HS8)	>= 218 (HS10)
3	Inventory rating less than value in appraisal code of 4 and requiring corrective action. (See Item 75A)		
2	Inventory rating less than value in appraisal code of 4 and requiring corrective action. (See Item 75A)		
0	Bridge Closed		

<i>Allowable Single Unit Weight Limit</i>		
<u>Format</u> N (4,2)	<u>Frequency</u> I	<u>Item ID</u> B.LR.IL.04
Specification		Commentary
<p>This item indicates the maximum allowable gross weight limit, in tons, for single unit vehicles that may be posted on structures as determined or agreed to by the Central Bureau of Bridges and Structures (Bridge Rating Unit for State structures and Local Bridge Unit for local agency structures).</p>		<p>A two digit-field.</p> <p>Enter gross tons.</p> <p>Enter "BC" (representing "Bridge Closed") for structures that should be closed.</p> <p>Enter "LL" (representing "Legal Loads Only") for structures that are restricted to legal loads and for which permits cannot be issued for overweight vehicles.</p> <p>Leave blank for structures for which no maximum allowable posting is required.</p>

Posted Single Unit Weight Limit	
Format AN (2)	Frequency EI
Specification	Item ID B.LR.IL.05
Specification	Commentary
<p>This item indicates the actual in-place posted gross weight limit, in tons, for single unit vehicles. Posted limits must be in accordance with the Illinois Supplement to the National Manual of Uniform Traffic Control Devices (MUTCD). History is retained for this item per each Inspection Date – B.IE.03.</p>	<p>A two-digit field.</p> <p>Enter the gross tons, filling leading spaces with zeros.</p> <p>Enter "LL" for structures when signs are in place that restrict traffic to legal loads only (i.e. 41 tons gross, 12 tons/axle).</p> <p>Enter "BC" when the signing for a bridge closure is in place.</p> <p>Leave blank for structures for which no applicable posting is in-place or when signs are illegible, not visible from each approach or not in conformance with the Manual for Uniform Traffic Control Devices.</p>
Example	
<p>EXAMPLES:</p>  <p style="text-align: center;">Code - BC (Local Agency)</p>	
<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Enter - 10</p> </div> <div style="text-align: center;">  <p>Enter - 17</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>Enter - 16</p> </div> <div style="text-align: center;">  <p>Leave Blank</p> </div> </div> <div style="text-align: center; margin-top: 20px;">  <p>Enter - LL</p> </div>	
<p>NOTES FROM FIGURE 7.E ("LOW VOLUME ROAD CLOSURE") – OF THE IDOT BUREAU OF TRAFFIC POLICY AND PROCEDURES MANUAL:</p> <p>1 . . ."Guardrail may be used in lieu of or in conjunction with the barricade fence where an extreme hazard exists immediately beyond the closure point. Barricades, when used, shall be striped red and white and be fully reflectorized. If practical, old pavement should be removed to some distance beyond the closure point or covered with dirt to minimize the illusion of the road continuing and to provide a reasonable safe recovery area. The markers for the end of the roadway shall conform with Section 3C-4 of the MUTCD."</p>	

<i>Allowable Combination Type 3S-1 Weight Limit</i>		
<u>Format</u> N (4,2)	<u>Frequency</u> I	<u>Item ID</u> B.LR.IL.06
Specification		Commentary
<p>This item indicates the maximum allowable gross weight limit, in tons, for tractor-semitrailer and/or truck and trailer combination vehicles with 3 or 4 axles that may be posted as determined or agreed to by the Central Bureau of Bridges and Structures (Bridge Rating Unit for State structures and Local Bridge Unit for local agency structures).</p>		<p>A two-digit field.</p> <p>Enter the gross tons.</p> <p>Leave blank for structures for which no maximum allowable posting is required or for which B.LR.IL.04 has been coded "BC" or "LL".</p>

<i>Posted Combination Type 3S-1 Weight Limit</i>		
<u>Format</u> N (4,2)	<u>Frequency</u> I	<u>Item ID</u> B.LR.IL.07
Specification		Commentary
<p>This item indicates the actual in-place posted gross weight limit, in tons, for tractor-semitrailer and/or truck-and trailer combination vehicles with three or four axles. Posted limits must be in accordance with the Illinois Supplement to the National Manual on Uniform Traffic Control Devices (MUTCD).</p> <p>History is retained for this item per each Inspection Date – B.IE.03.</p>		<p>A two-digit field.</p> <p>Enter the gross tons.</p> <p>Leave blank for structures when:</p> <ul style="list-style-type: none"> • no posting is in place, or • signs are illegible, or • signs are not visible from each approach, or • signs are not in conformance with the Manual for Uniform Traffic Control Devices, or • Item B.LR.IL.05 is coded "BC" or "LL" for a structure
Example		
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Enter - 10</p> </div> <div style="text-align: center;">  <p>Enter - 21</p> </div> <div style="text-align: center;">  <p>Enter - 20</p> </div> <div style="text-align: center;">  <p>Leave Blank</p> </div> </div>		

<i>Allowable Combination Type 3S-2 Weight Limit</i>		
<u>Format</u> N (4,2)	<u>Frequency</u> I	<u>Item ID</u> B.LR.IL.08
Specification		Commentary
<p>This item indicates the maximum allowable gross weight limit, in tons, for tractor-semitrailer and/or truck-and-trailer combination vehicles with 5 or more axles that may be posted as determined or agreed to by the Central Bureau of Bridges and Structures (Bridge Rating Unit for State structures and Local Bridge Unit for local agency structures).</p>		<p>A two-digit field.</p> <p>Enter the gross tons.</p> <p>Leave blank for structures for which no posting is required or for which B.LR.IL.04 has been coded "BC" or "LL".</p>

<i>Posted Combination Type 3S-2 Weight Limit</i>		
Format N (4,2)	Frequency I	Item ID B.LR.IL.09
Specification		Commentary
<p>This item indicates the actual in-place posted gross weight limit, in tons, for tractor-semitrailer and/or truck-and trailer combination vehicles with five or more axles. Posted limits must be in accordance with the Illinois Supplement to the National Manual on Uniform Traffic Control Devices (MUTCD).</p> <p>History is retained for this item per each Inspection Date – B.IE.03.</p>		<p>A two-digit field.</p> <p>Enter the gross tons.</p> <p>Leave B.LR.IL.09 blank for structures when:</p> <ul style="list-style-type: none"> • no posting is in place, or • signs are illegible, or • signs are not visible from each bridge approach, or • signs are not in conformance with the Manual for Uniform Traffic Control Devices, or • Item B.LR.IL.05 is coded "BC" or "LL" for a structure
Example		
<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  <p>Enter - 10</p> </div> <div style="text-align: center;">  <p>Enter - 23</p> </div> <div style="text-align: center;">  <p>Enter - 20</p> </div> <div style="text-align: center;">  <p>Leave Blank</p> </div> </div>		

<i>Lanes Adjusted/Restricted for Rating Analysis</i>		
<u>Format</u> N (4,2)	<u>Frequency</u> I	<u>Item ID</u> B.LR.IL.10
Specification		Commentary
<p>This item indicates if lanes are physically restricted on the structure to reduce force effects in certain members.</p> <p>Check the box if lanes are physically restricted. Leave unchecked if lanes are unrestricted.</p>		<p>This item is only applicable for physical lane restrictions, e.g. lanes that are blocked with some type of physical barrier. This box should be left unchecked when considering theoretical lane reductions in rating analysis, such as for consideration of striped lanes.</p>

SUBSECTION 5.2: LOAD POSTING STATUS

The data items in this subsection provide information on the status of the bridge with regards to weight or other load restrictions, and are considered part of the Posting Status Data Set. These data items have a many-to-one relationship with a bridge.

The posting status of a bridge may change multiple times between data submittals and throughout its service life, such as after reevaluation of the load rating. Data items in this subsection are reported for each change in posting status. Reporting posting status changes that were accepted into the NBI in prior years is not required unless it is found that the accepted data were incomplete or incorrect.

The following data items are included in this subsection.

<u>Item ID</u>	<u>Data Item</u>
-----------------------	-------------------------

B.PS.01	Load Posting Status
B.PS.02	Posting Status Change Date
B.PS.IL.01	Bridge Status Remarks

<i>Load Posting Status</i>									
<u>Format</u> AN (2)	<u>Frequency</u> I					<u>Item ID</u> B.PS.01			
Specification					Commentary				
Report the load posting status of the bridge using one of the codes in <i>Table 15</i> .					When temporary or supported conditions exist ensure that data items related to physical characteristics of the bridge (e.g. geometry, clearances, condition, and load rating) represent those characteristics of the temporary or supported bridge. When both a weight and other load restriction exist at the bridge, use the code for the weight restriction (code PP, TP, or SP).				
Specification Continued									
Table 15. Load Posting Status Codes.									
		No restriction				Posted or restricted			
	Not Constructed	New	Open Not Inspected	Open	Needs Action	Weight	Other	Needs Reduction	Missing
Permanent	F	N	PI	PO	PA	PP	PR	PD	PM
Temporary			TI	TO	TA	TP	TR	TD	TM
Supported				SO	SA	SP	SR	SD	SM
		Deleted		Not Linked		Closed			
Permanent		D		Z		CF	CB	CC	CE
Temporary		D		Z		CF	CB	CC	CE
Supported		D		Z		CF	CB	CC	CE
Terms:									
Dropdown 1									
F - Proposed Structure.									
N – New: Bridge is newly constructed and not yet open to traffic but is expected to be open within 12 months.									
P – Permanent: Permanent bridge in place with no temporary supports.									
T - Temporary: Temporary bridge in place to carry traffic while the permanent bridge is closed and awaiting repair, rehabilitation, or replacement.									
S – Supported: Bridge with temporary shoring, supports, repairs, or supplemental members in place to keep the bridge open pending the completion of active or imminent repair, or replacement projects.									
C – Closed: Bridge is closed to all traffic.									
D - Deleted, structure has been removed or currently closed and under contract for removal.									
Z - Not Linked.									

Dropdown 2

O - Open (O): Bridge is open with no restrictions.

A - Needs Action: Bridge that is open with load posting recommended, but no posting signs in place, or a posting sign that is not legally enforceable.

P – Weight: Bridge is posted with a weight limit sign or signs.

R – Other: A posting sign or other traffic control device(s) at the bridge that reduces loading by reducing speed (to reduce impact), limiting the number of lanes or vehicles, or restricting commercial vehicles in general.

D - Needs Reduction: Bridge is posted, with posting reduction recommended but not implemented.

M – Missing: Bridge has a legally enforceable load posting and was posted, but one or more required signs are missing or illegible.

I - Needs Inspected.

B – Closed: Replacement/repairs anticipated within the next 5 years.

C – Closed: Closure not related to the condition of the structure.

E – Closed: Repairs/Replacement not expected within the next 5 years or closed for more than 5 years.

F – Closed: Rehabilitation/Repairs under contract.

<i>Posting Status Change Date</i>		
<u>Format</u> YYYYMMDD	<u>Frequency</u> I	<u>Item ID</u> B.PS.02
Specification		Commentary
<p>Report the date the bridge entered the status reported in Item B.PS.01 (<i>Load Posting Status</i>).</p>		<p>For bridges entering posted status, it is preferable that the reported date represents the date on which signs were properly installed at the bridge. The date the load posting became legally enforceable can also be used for this item when the installation date is unknown. When neither the installation nor legal enforcement date are known, the date the posting was first documented to be in place can be used for this item.</p>

<i>Bridge Status Remarks</i>		
<u>Format</u> AN	<u>Frequency</u> I	<u>Item ID</u> B.PS.IL.01
Specification		Commentary
<p>This item provides for general comments or remarks about the operational status of a bridge. This item is used in conjunction with Bridge Status and Bridge Status Date (B.PS.02).</p>		<p>An unlimited text field.</p> <p>Enter appropriate comments beginning at the first space available using any combination of letters, numbers, symbols and spaces. Abbreviations can be used if they are not ambiguous.</p>

SUBSECTION 5.3: LOAD EVALUATION AND POSTING

The data items in this subsection provide information on the load carrying capacity of the bridge with respect to the legal load configurations established by AASHTO, FHWA, the State transportation department, Federal agency, or Tribal government. These data items are considered part of the Posting Evaluation Data Set and have a many-to-one relationship with a bridge when applicable.

Data items in this subsection are reported, as applicable, for each legal load configuration evaluated when the bridge has undergone a load rating evaluation and each legal load configuration included in a posting when present at the bridge. The data for these items may change after reevaluation of the load rating.

The following data items are included in this subsection.

Item ID	Data Item
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B.EP.01	Legal Load Configuration
B.EP.02	Legal Load Rating Factor
B.EP.03	Posting Type
B.EP.04	Posting Value

<i>Legal Load Configuration</i>																																													
<u>Format</u> AN (15)	<u>Frequency</u> I																																												
<u>Specification</u>	<u>Item ID</u> B.EP.01																																												
<u>Specification</u>	<u>Commentary</u>																																												
<p>Report the configuration of the AASHTO, FHWA, State transportation department, Federal agency, or Tribal government defined legal load using one of the following codes.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr><td>3</td><td>AASHTO Type 3</td></tr> <tr><td>3S2</td><td>AASHTO Type 3S2</td></tr> <tr><td>3-3</td><td>AASHTO Type 3-3</td></tr> <tr><td>SU4</td><td>AASHTO SU4 truck</td></tr> <tr><td>SU5</td><td>AASHTO SU5 truck</td></tr> <tr><td>SU6</td><td>AASHTO SU6 truck</td></tr> <tr><td>SU7</td><td>AASHTO SU7 truck</td></tr> <tr><td>NRL</td><td>AASHTO Notional Rating Load</td></tr> <tr><td>EV2</td><td>FHWA Type EV2 emergency vehicle</td></tr> <tr><td>EV3</td><td>FHWA Type EV3 emergency vehicle</td></tr> <tr><td>IL-PS2-21</td><td>IL-PS2-21 IL Single Unit Posting Vehicle</td></tr> <tr><td>IL-PS3-31</td><td>IL-PS3-31 IL Single Unit Posting Vehicle</td></tr> <tr><td>IL-PS4-28</td><td>IL-PS4-28 IL Single Unit Posting Vehicle</td></tr> <tr><td>IL-PS4-34.75</td><td>IL-PS4-34.75 IL Single Unit Posting Vehicle</td></tr> <tr><td>IL-PS5-36</td><td>IL-PS5-36 IL Single Unit Posting Vehicle</td></tr> <tr><td>IL-PS6-35.75</td><td>IL-PS5-35.75 IL Single Unit Posting Vehicle</td></tr> <tr><td>IL-PS7-39.75</td><td>IL-PS7-39.75 IL Single Unit Posting Vehicle</td></tr> <tr><td>IL-PC3-31</td><td>IL-PC3-31 IL Combination Unit Posting Vehicle</td></tr> <tr><td>IL-PC4-41</td><td>IL-PC4-41 IL Combination Unit Posting Vehicle</td></tr> <tr><td>IL-PC5-41</td><td>IL-PC5-41 IL Combination Unit Posting Vehicle</td></tr> <tr><td>IL-PD6-40</td><td>IL-PD6-40 IL Combination Unit Posting Vehicle</td></tr> </tbody> </table> <p>S# State-defined legal load F# Federal-defined legal load T# Tribal-defined legal load</p>	<u>Code</u>	<u>Description</u>	3	AASHTO Type 3	3S2	AASHTO Type 3S2	3-3	AASHTO Type 3-3	SU4	AASHTO SU4 truck	SU5	AASHTO SU5 truck	SU6	AASHTO SU6 truck	SU7	AASHTO SU7 truck	NRL	AASHTO Notional Rating Load	EV2	FHWA Type EV2 emergency vehicle	EV3	FHWA Type EV3 emergency vehicle	IL-PS2-21	IL-PS2-21 IL Single Unit Posting Vehicle	IL-PS3-31	IL-PS3-31 IL Single Unit Posting Vehicle	IL-PS4-28	IL-PS4-28 IL Single Unit Posting Vehicle	IL-PS4-34.75	IL-PS4-34.75 IL Single Unit Posting Vehicle	IL-PS5-36	IL-PS5-36 IL Single Unit Posting Vehicle	IL-PS6-35.75	IL-PS5-35.75 IL Single Unit Posting Vehicle	IL-PS7-39.75	IL-PS7-39.75 IL Single Unit Posting Vehicle	IL-PC3-31	IL-PC3-31 IL Combination Unit Posting Vehicle	IL-PC4-41	IL-PC4-41 IL Combination Unit Posting Vehicle	IL-PC5-41	IL-PC5-41 IL Combination Unit Posting Vehicle	IL-PD6-40	IL-PD6-40 IL Combination Unit Posting Vehicle	<p>Refer to the AASHTO Manual for Bridge Evaluation for details of AASHTO legal load rating vehicle configurations.</p> <p>Some State transportation departments, Federal agencies, and Tribal governments have legal load rating vehicle configurations representing loads that exceed the 23 U.S.C. 127(a)(1) and (2) interstate weight limits or that have force effects more severe than AASHTO legal load rating vehicles. The use of codes S#, F#, and T# allows for reporting the correlated legal load configurations used for load rating evaluation, load rating factors, and postings (when present at a bridge). This is supported by the establishment of a unique code for reporting each State, Federal, or Tribal defined legal load configuration, and the consistent use of that code throughout the inventory.</p> <p>Only configurations that are used to evaluate the capacity to carry legal loads and their posting requirements are reported.</p> <p>For information on the load rating and load posting of emergency vehicles, refer to the November 3, 2016 FHWA memorandum at: http://www.fhwa.dot.gov/bridge/loadrating/161103.cfm</p>
<u>Code</u>	<u>Description</u>																																												
3	AASHTO Type 3																																												
3S2	AASHTO Type 3S2																																												
3-3	AASHTO Type 3-3																																												
SU4	AASHTO SU4 truck																																												
SU5	AASHTO SU5 truck																																												
SU6	AASHTO SU6 truck																																												
SU7	AASHTO SU7 truck																																												
NRL	AASHTO Notional Rating Load																																												
EV2	FHWA Type EV2 emergency vehicle																																												
EV3	FHWA Type EV3 emergency vehicle																																												
IL-PS2-21	IL-PS2-21 IL Single Unit Posting Vehicle																																												
IL-PS3-31	IL-PS3-31 IL Single Unit Posting Vehicle																																												
IL-PS4-28	IL-PS4-28 IL Single Unit Posting Vehicle																																												
IL-PS4-34.75	IL-PS4-34.75 IL Single Unit Posting Vehicle																																												
IL-PS5-36	IL-PS5-36 IL Single Unit Posting Vehicle																																												
IL-PS6-35.75	IL-PS5-35.75 IL Single Unit Posting Vehicle																																												
IL-PS7-39.75	IL-PS7-39.75 IL Single Unit Posting Vehicle																																												
IL-PC3-31	IL-PC3-31 IL Combination Unit Posting Vehicle																																												
IL-PC4-41	IL-PC4-41 IL Combination Unit Posting Vehicle																																												
IL-PC5-41	IL-PC5-41 IL Combination Unit Posting Vehicle																																												
IL-PD6-40	IL-PD6-40 IL Combination Unit Posting Vehicle																																												

Replace the # character in the S#, F#, and T# codes with as many as 14 characters that serve as a unique identifier of each legal load configuration. Use consistent codes for all bridges in a State, Federal, or Tribal jurisdiction.

Use codes for AASHTO and FHWA legal load configurations when the configuration is identical to those configurations (identical axles, axle spacings, and axle weights).

Do not report State, Federal, or Tribal defined configurations that represent loads which exceed legal loads (e.g. special or routine permit vehicles).

<i>Legal Load Rating Factor</i>		
<u>Format</u> N (4,2)	<u>Frequency</u> I	<u>Item ID</u> B.EP.02
Specification		Commentary
<p>Report the rating factor for the legal load configuration truncated to the hundredth.</p> <p>Report the rating factor for the legal load configuration without consideration of reduced force effects from postings or restrictions that affect traffic operation, e.g. that limit speed, number of lanes, number of trucks, or do not allow commercial vehicles.</p> <p>Do not report this item when a bridge posting includes the legal load configuration, but there is not a calculated legal load rating factor for the configuration.</p> <p>When temporary or supported conditions exist, as indicated in Item B.PS.01 (<i>Load Posting Status</i>), report the rating factor for the bridge including the temporary or supported conditions.</p>		<p>For LRFR method this would be the rating factor of "Legal Load Rating".</p> <p>For Allowable Stress and Load Factor rating methods this would be the operating rating factor.</p> <p>When the legal load configuration does not have a load rating evaluation because it is enveloped by a design load type and corresponding calculated design load rating factor, a value is not reported for the legal load configuration.</p> <p>Enveloped as used here means that the legal load rating factor or the operating rating factor for the legal load configuration will be greater than or equal to 1.0 when the design load has a legal load rating factor or operating rating factor that exceeds a threshold value established by an engineering study.</p> <p>When the legal load configuration does not have a load rating evaluation because it is enveloped by a screening level legal load model, e.g. AASHTO Notional Rating Load, and corresponding calculated screening load rating factor, a value is not reported for the legal load configuration. A value is reported for the screening load.</p> <p>Enveloped as used here means that the legal load rating factor or the operating rating factor for the legal load configuration will be greater than or equal to 1.0 when the screening level legal load has a legal load rating factor or operating rating factor that exceeds a threshold value established by an engineering study.</p>

Examples – Legal Load Rating Factor

A bridge has a calculated legal load rating factor of 0.926 for the AASHTO Type 3S2 load. Report 0.92.

A bridge does not have a calculated legal load rating factor for the AASHTO SU4 truck because the AASHTO Notional Rating Load has a legal load rating factor of 1.21 which is greater than 1.0. Report 1.21 for the AASHTO Notional Rating Load. Do not report a value for the AASHTO SU4 truck.

A bridge has a calculated legal load rating factor of 1.429 for State defined legal load S-NRLSHV which is the unique identifier code for the State's screening level legal load configuration for special hauling vehicles that are different than the AASHTO special hauling vehicles. Report 1.42 for the S-NRLSHV.

<i>Posting Type</i>																					
Format AN (17)	Frequency I																				
Item ID B.EP.03																					
Specification	Commentary																				
<p>Report the type of posting at the bridge restricting the vehicle reported in Item B.EP.01 (<i>Legal Load Configuration</i>) using one or more of the following codes.</p> <p>Report multiple codes in the order shown separated by pipe () delimiters.</p> <table border="0"> <thead> <tr> <th style="text-align: left;">Code</th> <th style="text-align: left;">Description</th> </tr> </thead> <tbody> <tr><td>G</td><td>Gross Load</td></tr> <tr><td>A</td><td>Single Axle Load</td></tr> <tr><td>D</td><td>Tandem Axle Load</td></tr> <tr><td>T</td><td>Truck Load</td></tr> <tr><td>C</td><td>No commercial vehicles</td></tr> <tr><td>S</td><td>Speed reduction</td></tr> <tr><td>L</td><td>Number of lanes restricted</td></tr> <tr><td>V</td><td>Number of vehicles restricted</td></tr> <tr><td>X</td><td>Other</td></tr> </tbody> </table> <p>Do not report this item if no posting sign is used for the legal load configuration.</p>	Code	Description	G	Gross Load	A	Single Axle Load	D	Tandem Axle Load	T	Truck Load	C	No commercial vehicles	S	Speed reduction	L	Number of lanes restricted	V	Number of vehicles restricted	X	Other	<p>This item is reported when a bridge is posted for the legal load configuration. Roadway postings are excluded.</p>
Code	Description																				
G	Gross Load																				
A	Single Axle Load																				
D	Tandem Axle Load																				
T	Truck Load																				
C	No commercial vehicles																				
S	Speed reduction																				
L	Number of lanes restricted																				
V	Number of vehicles restricted																				
X	Other																				
Examples																					
<p>Report G for all legal load configurations, excluding emergency vehicles if the State uses a separate sign type for emergency vehicles.</p> <div style="text-align: center;">  </div> <p>Figure 126. Weight limit sign – gross load.</p>	<p>Report T for all legal load configurations, excluding emergency vehicles if the State uses a separate sign type for emergency vehicles.</p> <div style="text-align: center;">  </div> <p>Figure 127. Weight limit sign</p>																				

Posting Value		
<u>Format</u> N (15)	<u>Frequency</u> I	<u>Item ID</u> B.EP.04
Specification		Commentary
<p>Report the weight limit value(s) shown on the load posting sign for the vehicle reported in Item B.EP.02 (<i>Legal Load Rating Factor</i>) rounded down to the nearest U.S. ton.</p> <p>Report multiple weight limit values in the order shown in Item B.EP.01 (Posting Type) separated by pipe () delimiters.</p> <p>Do not report this item if no posting sign is used for the legal load configuration.</p> <p>Do not report this item if Item B.EP.03 (<i>Posting Type</i>) has codes C, S, L, or V reported.</p>		<p>This item is reported when a bridge is posted. Roadway postings are excluded.</p> <p>Multiple weight limit values are reported when a posting sign has more than one weight limit that restricts the legal load configuration, e.g. a single axle and tandem axle weight limit.</p>
Example		
<p>Report 10 for all legal load configurations, excluding emergency vehicles if the State uses a separate sign type for emergency vehicles.</p> <div style="text-align: center;">  </div> <p>Figure 128. Weight limit sign – gross load (10T).</p>		<p>Report 17 for all IL single unit configurations.</p> <p>Report 17 for FHWA EV2 and EV3.</p> <p>Report 21 for IL PC3 and PC4 combination unit configurations.</p> <p>Report 23 for IL PC5 combination unit configuration.</p> <div style="text-align: center;">  </div> <p>Figure 129. Weight limit sign</p>

SECTION 6: INSPECTIONS

This section has data items that have been grouped by the following two subsections: Inspection Requirements and Inspection Events.

The data items in the Inspection Requirements subsection provide information about non-routine inspection types required, and special inspection features of the bridge. These items are considered part of the Primary Data Set and have a one-to-one relationship with a bridge. The data for items in this subsection typically remain static once a bridge has been inventoried.

The data items in the Inspection Events subsection provide information about each inspection performed for the bridge. These items are considered part of the Inspections Data Set and have a many-to-one relationship with a bridge. This subsection also has a data item for reporting inspection equipment used during an inspection. This data item is considered part of the Inspection Equipment Data Set and has a many-to-one relationship with an Inspection Event. The data for these items change with each inspection.

The following data items are included in this section.

SUBSECTION 6.1: INSPECTION REQUIREMENTS

Item ID Data Item

B.IR.01	NSTM Inspection Required
B.IR.02	Fatigue Details
B.IR.03	Underwater Inspection Required
B.IR.04	Complex Feature

SUBSECTION 6.2: INSPECTION EVENTS

Item ID Data Item

B.IE.01	Inspection Type
B.IE.02	Inspection Begin Date
B.IE.03	Inspection Completion Date
B.IE.04	Nationally Certified Bridge Inspector
B.IE.05	Inspection Interval
B.IE.06	Inspection Due Date
B.IE.07	Risk-Based Inspection Interval Method
B.IE.08	Inspection Quality Control Date
B.IE.09	Inspection Quality Assurance Date
B.IE.10	Inspection Data Update Date
B.IE.11	Inspection Note
B.IE.12	Inspection Equipment
B.IE.IL.01	Inspection Temperature
B.IE.IL.02	Inspection Resources Time
B.IE.IL.03	Inspection Resources Traffic Control
B.IE.IL.04	Remarks
B.IE.IL.05	Agency Program Manager
B.IE.IL.05	Agency Element Program Manager
B.IE.IL.06	Inspector
B.IE.IL.07	Underwater Inspection Method
B.IE.IL.08	Underwater Inspection Substructure Units

<i>NSTM Inspection Required</i>	
<u>Format</u> AN (1)	<u>Frequency</u> I
<u>Item ID</u> B.IR.01	
Specification	Commentary
<p>Report whether the bridge requires an NSTM inspection using one of the following codes.</p> <p>Code Description</p> <p>N NSTM inspection not required. Y NSTM inspection required. I NSTM inspection not required – Internal Redundancy S NSTM inspection not required – System Redundancy</p> <p>Do not report this item for bridges that do not have steel members, as indicated in Items B.SP.04 (<i>Span Material</i>) and B.SB.03 (<i>Substructure Material</i>).</p>	<p>The intent of this item is to identify bridges that require NSTM inspection for any part of the bridge, to ensure they are inspected in accordance with the NBIS.</p> <p>It is the State’s option to record a required NSTM inspection for any bridges meeting a State definition more rigorous than the FHWA definition of NSTM inspection.</p> <p>Use code N when an NSTM inspection is not required and codes I and S do not apply.</p> <p>Use code I when the bridge owner has demonstrated to FHWA, using nationally recognized methods, that a member without load path redundancy is internally redundant, and it is determined that the bridge does not require an NSTM inspection.</p> <p>Use code S when the bridge owner has demonstrated to FHWA, using nationally recognized methods, that a bridge without load path redundancy is system redundant, and it is determined that the bridge does not require an NSTM inspection.</p>

<i>Fatigue Details</i>		
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.IR.02
Specification		Commentary
<p>Report whether the bridge has AASHTO fatigue category E or E' details using one of the following codes.</p> <p><u>Code</u> <u>Description</u> N No E/E' details Y E/E' details are present</p> <p>Do not report this item for bridges that do not have steel members as indicated in Items B.SP.04 (<i>Span Material</i>) and B.SB.03 (<i>Substructure Material</i>).</p>		<p>This item provides data to identify bridges that have details most prone to fatigue.</p> <p>Refer to the BIRM or AASHTO LRFD Bridge Design Specifications for fatigue categories.</p>

<i>Underwater Inspection Required</i>	
<u>Format</u> AN (1)	<u>Frequency</u> I
<u>Item ID</u> B.IR.03	
Specification	Commentary
<p>Report whether an underwater inspection is required under normal flow conditions using one of the following codes.</p> <p><u>Code</u> <u>Description</u></p> <p>N Underwater inspection not required</p> <p>Y Underwater inspection required</p> <p>Do not report this item for bridges that do not pass over water as indicated in Item B.F.01 (<i>Feature Type</i>).</p>	<p>The intent of this item is to identify bridges that require an underwater inspection per the NBIS.</p> <p>Use code Y when during a typical routine inspection, any portion of a bridge substructure and the surrounding channel cannot be inspected to the mudline at low water by wading or probing, generally requiring diving or other appropriate technique.</p> <p>Use code N when during a typical routine inspection, all portions of a bridge substructure and the surrounding channel can be inspected to the mudline at low water by wading or probing.</p> <p>If this item was previously reported as Y because an underwater inspection is generally required, it should continue to be reported as Y even for instances of unusually low flow where all portions of the substructure can be inspected by wading and probing, and an underwater inspection is not required. This applies only if the low flow condition is truly unusual and is not likely to recur during the next inspection interval.</p> <p>The reported code for this item may change in the rare circumstance where long-term environmental conditions change for inspection access to underwater portions of the substructure.</p>

<i>Complex Feature</i>	
<u>Format</u> AN (1)	<u>Frequency</u> I
<u>Item ID</u> B.IR.04	
Specification	Commentary
<p>Report whether the bridge has a complex feature by using one of the following codes.</p> <p>Code Description</p> <p>N Bridge does not have complex features</p> <p>Y Bridge has complex feature</p>	<p>The intent of this item is to identify bridges with complex features as defined by the NBIS.</p> <p>Bridges with complex features are typically identified in agency policies and procedures.</p>

SUBSECTION 6.2: INSPECTION EVENTS

The data items in this subsection provide information about each inspection performed for bridges and are considered part of the Inspections Data Set. These data items have a many-to-one relationship with a bridge.

Data items in this subsection are reported for each inspection performed on the bridge. If more than one type of inspection is performed on a given inspection date, a separate inspection data set is reported for each inspection type performed. This uniquely identifies reported information for multiple inspection types that may occur during a calendar year or between submittals of data to FHWA. Reporting inspection events that were accepted into the NBI in prior years is not required unless it is found that the accepted data were incomplete or incorrect. To correct previously submitted inspection event data for a given inspection date and type, report a new complete inspection event data set representative of that event that includes the originally submitted data for Items B.IE.01 (*Inspection Type*) and B.IE.02 (*Inspection Begin Date*).

The following data items are included in this subsection.

Item ID **Data Item**

B.IE.01	Inspection Type
B.IE.02	Inspection Begin Date
B.IE.03	Inspection Completion Date
B.IE.04	Nationally Certified Bridge Inspector
B.IE.05	Inspection Interval
B.IE.06	Inspection Due Date
B.IE.07	Risk-Based Inspection Interval Method
B.IE.08	Inspection Quality Control Date
B.IE.09	Inspection Quality Assurance Date
B.IE.10	Inspection Data Update Date
B.IE.11	Inspection Note
B.IE.12	Inspection Equipment
B.IE.IL.01	Inspection Temperature
B.IE.IL.02	Inspection Resources Time
B.IE.IL.03	Inspection Resources Traffic Control
B.IE.IL.04	Remarks
B.IE.IL.05	Agency Program Manager
B.IE.IL.05	Agency Element Program Manager
B.IE.IL.06	Inspector
B.IE.IL.07	Underwater Inspection Method
B.IE.IL.08	Underwater Inspection Substructure Units

<i>Inspection Type</i>																						
<u>Format</u> AN (1)	<u>Frequency</u> EI	<u>Item ID</u> B.IE.01																				
Specification		Commentary																				
<p>Report the inspection type or scour monitoring performed using one of the following codes.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr><td>1</td><td>Initial</td></tr> <tr><td>2</td><td>Routine</td></tr> <tr><td>3</td><td>Underwater</td></tr> <tr><td>4</td><td>NSTM</td></tr> <tr><td>5</td><td>Damage</td></tr> <tr><td>6</td><td>In-Depth</td></tr> <tr><td>7</td><td>Special</td></tr> <tr><td>8</td><td>Service</td></tr> <tr><td>9</td><td>Scour Monitoring</td></tr> </tbody> </table>		<u>Code</u>	<u>Description</u>	1	Initial	2	Routine	3	Underwater	4	NSTM	5	Damage	6	In-Depth	7	Special	8	Service	9	Scour Monitoring	<p>Use code 2 when all portions of a bridge substructure and the surrounding channel have been inspected to the mudline at low water visually, or by wading or probing during routine inspections.</p> <p>Use code 3 when all portions of a bridge substructure reported Y for Item B.IR.03 (<i>Underwater Inspection Required</i>) is inspected by wading and probing in an instance of unusually low flow. If this is performed during a Routine inspection, record both a routine and underwater inspection.</p> <p>Use code 9 when scour monitoring is performed as required by a Scour POA for a triggering storm event. This can include periodic remote electronic readings of streambed changes when required in the POA. If multiple site visits occur for a triggering storm event, record this item once for that storm event.</p> <p>Use code 8 when a Service Inspection is performed for a bridge with a risk-based routine inspection interval that exceeds 48 months.</p>
<u>Code</u>	<u>Description</u>																					
1	Initial																					
2	Routine																					
3	Underwater																					
4	NSTM																					
5	Damage																					
6	In-Depth																					
7	Special																					
8	Service																					
9	Scour Monitoring																					
Examples																						
<p>The initial inspection of a widened bridge. Report 1.</p> <p>An inspection, scheduled every twelve months, of an entire bridge that is in poor condition. Report 2.</p> <p>An unscheduled inspection to assess the damage resulting from a vehicular impact. Report 5.</p> <p>An inspection to perform a hands-on inspection of pins using non-destructive testing methods. Report 6.</p> <p>An inspection to use non-destructive testing methods to assess the condition of the cables (complex feature) of a cable-stayed bridge. Report 6.</p> <p>An inspection of only the girders (controlling members) of a load restricted bridge. Report 7.</p>																						

<i>Inspection Begin Date</i>		
Format YYYYMMDD	Frequency EI	Item ID B.IE.02
Specification	Commentary	
<p>Report the date for the inspection type performed. For multiple day inspections, record the first day that field inspection begins.</p>	<p>The intent of this item is to record the inspection dates for the inspection types in Item B.IE.01 (<i>Inspection Type</i>), since the previous data submittal to FHWA.</p> <p>If multiple site visits occur for scour monitoring inspections, for a triggering storm event, report the first site visit date for that storm event.</p>	
Examples		
<p>For Bridge 0004794A:</p> <p>A Routine and NSTM inspection started on August 1, 2020.</p> <ul style="list-style-type: none"> • Report 20200801 for the Routine inspection. • Report 20200801 for the NSTM inspection. <p>An Underwater inspection started on August 31, 2020. Report 20200831.</p> <p>The bridge was struck by an over-height vehicle on November 22, 2020 requiring a Damage inspection on the same day. Report 20201122.</p> <p>The damage in the example above was repaired, and a one-time Special inspection of the repair was performed on December 23, 2020. Report 20201223.</p>		

<i>Inspection Completion Date</i>		
Format YYYYMMDD	Frequency EI	Item ID B.IE.03
Specification	Commentary	
<p>Report the completion date for the inspection type performed.</p> <p>For single day inspections, report the same date that field inspection begins.</p>	<p>The intent of this item is to record the field inspection completion dates for all inspections.</p> <p>If multiple site visits occur for scour monitoring inspections, for a triggering storm event, report the last site visit date for that storm event.</p>	
Examples		
<p>A Routine and NSTM inspection started on August 1, 2020. The Routine inspection was completed on August 2, 2020, and the NSTM inspection was completed on August 4, 2020.</p> <ul style="list-style-type: none"> • Report 20200802 for the Routine inspection. • Report 20200804 for the NSTM inspection. <p>An Underwater inspection started on August 31, 2020 and completed on September 1, 2020. Report 20200901.</p>		

<i>Nationally Certified Bridge Inspector</i>		
<u>Format</u> AN (15)	<u>Frequency</u> EI	<u>Item ID</u> B.IE.04
Specification		Commentary
<p>Report the name identifying the Nationally Certified Bridge Inspector (team leader) responsible for the inspection type performed.</p>		<p>The intent of this item is to indicate the Nationally Certified Bridge Inspector (team leader) present at the inspection, for each inspection type required by the NBIS.</p> <p>The unique identifier name is assigned by the State DOT, Federal agency, or Tribal government.</p> <p>Agencies may choose not to report this item for inspection types defined in the NBIS that do not require a Nationally Certified Bridge Inspector (team leader), even if one is present during the inspection.</p>
Examples		
<p>A Routine (53DJS007 team leader) and NSTM (53DMO003 team leader) inspection started on August 1, 2020.</p> <ul style="list-style-type: none"> • Report 53DJS007 for the Routine inspection. • Report 53DMO003 for the NSTM inspection. <p>An Underwater inspection (53WFC004 team leader) was performed on August 31, 2020. Report 53WFC004.</p>		

<i>Inspection Interval</i>		
<u>Format</u> N (2,0)	<u>Frequency</u> EI	<u>Item ID</u> B.IE.05
Specification		Commentary
<p>Report the planned interval in number of months between the current and next scheduled inspection for the type associated with Items B.IE.01 (<i>Inspection Type</i>) and B.IE.03 (<i>Inspection Completion Date</i>) items.</p> <p>Report 0 for damage inspections, scour monitoring inspections, or when a special inspection does not have a defined inspection interval.</p>		<p>The intent of this item is to record the planned interval at which the bridge is to be inspected per the NBIS and agency policies and procedures.</p> <p>This interval should be evaluated after each inspection, and adjusted as necessary.</p> <p>Add SSM</p>
Examples		
<p>A Routine and NSTM inspection started on August 1, 2020. The Routine inspection is on an approved 48-month extended interval, but after the inspection it was determined the interval be adjusted to 24 months due to worsening structural deterioration. The NSTM inspection is on a 24-month interval.</p> <ul style="list-style-type: none"> • Report 24 for the Routine inspection. • Report 24 for the NSTM inspection. <p>An Underwater inspection was performed on August 31, 2020. The Underwater inspection is on a 72-month extended interval. Report 72.</p>		

<i>Inspection Due Date</i>		
<u>Format</u> YYYYMMDD	<u>Frequency</u> C	<u>Item ID</u> B.IE.06
Specification		Commentary
<p>Do not report this item as it is calculated by the FHWA.</p> <p>The default calculation is the value reported in Item B.IE.03 (<i>Inspection Completion Date</i>) plus the value reported in Item B.IE.05 (<i>Inspection Interval</i>).</p>		<p>The intent of this item is to provide the inspection due date for the inspection types defined in the B.IE.01 (<i>Inspection Type</i>) where applicable.</p> <p>This item is only calculated for inspection types which have an inspection interval.</p>

<i>Risk-Based Inspection Interval Method</i>										
<u>Format</u> AN (1)	<u>Frequency</u> EI	<u>Item ID</u> B.IE.07								
Specification		Commentary								
<p>Report the risk-based inspection interval method using one of the following codes.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td>N</td> <td>Not applicable</td> </tr> <tr> <td>1</td> <td>Method 1</td> </tr> <tr> <td>2</td> <td>Method 2</td> </tr> </tbody> </table>		<u>Code</u>	<u>Description</u>	N	Not applicable	1	Method 1	2	Method 2	<p>The intent of this item is to record the risk-based inspection interval method, described in the NBIS, for determining the inspection interval.</p> <p>Method 1, as described in the NBIS, is when inspection intervals are determined by a simplified assessment of risk to classify each bridge into one of three risk levels with an inspection interval not to exceed 12, 24, or 48 months.</p> <p>Method 2, as described in the NBIS, is when inspection intervals are determined by a more rigorous assessment of risk to classify each bridge, or a group of bridges, into one of four risk levels with an inspection interval not to exceed 12, 24, 48, or 72 months.</p> <p>Use code N when Item B.IE.01 (<i>Inspection Type</i>) is 1, 5, 6, 7, 8 or 9.</p>
<u>Code</u>	<u>Description</u>									
N	Not applicable									
1	Method 1									
2	Method 2									

<i>Inspection Quality Control Date</i>		
Format YYYYMMDD	Frequency EI	Item ID B.IE.08
Specification	Commentary	
<p>Date the programming manager approves the inspection that the QC review is completed.</p> <p>Do not report when a QC review is not performed.</p>	<p>The intent of this item is to identify inspections that have had independent QC reviews to maintain inspection quality at or above a specified level.</p> <p>Agency QC procedures often vary, and every inspection might not receive an independent QC review. Bridge inspections might be selected for QC reviews based on representative bridge types or other agency defined methods.</p>	
Examples		
<p>A Routine and NSTM inspection started on August 1, 2020. The Routine inspection was completed on August 2, 2020. The NSTM inspection was completed on August 4, 2020. An agency QC review was performed on the Routine and NSTM inspections on September 15, 2020.</p> <ul style="list-style-type: none"> • Report 20200915 for the Routine inspection. • Report 20200915 for the NSTM inspection. <p>The bridge above was then struck by an over-height vehicle on November 22, 2020 requiring Damage inspection. The damage was repaired, and a one-time Special inspection of the repair was performed on December 23, 2020. No agency QC review was performed on the Damage and Special inspections.</p> <ul style="list-style-type: none"> • Do not report this item for the Damage inspection. • Do not report this item for the Special inspection. 		

<i>Inspection Quality Assurance Date</i>		
Format YYYYMMDD	Frequency EI	Item ID B.IE.09
Specification	Commentary	
<p>Report the date that the QA review is completed.</p> <p>Do not report when a QA review is not performed.</p>	<p>The intent of this item is to identify inspections that have had independent QA reviews to measure or verify the overall quality of the inspection program.</p> <p>Agency QA procedures often vary in the definition of a review period and number of inspections reviewed. Bridge inspections might be randomly selected for agency QA reviews or selected based on representative bridge type, region, district, or other agency defined bridge populations.</p>	
Example		
<p>A Routine and NSTM inspection started on August 1, 2020. The Routine inspection was completed on August 2, 2020. The NSTM inspection was completed on August 4, 2020. An agency QC review was performed on the Routine and NSTM inspections on September 15, 2020. The Routine inspection was randomly selected for an agency QA review according to agency policies and procedures, which was performed on January 4, 2021. Report 20210104 for the Routine inspection.</p>		

<i>Inspection Data Update Date</i>		
Format YYYYMMDD	Frequency EI	Item ID B.IE.10
Specification	Commentary	
Report the date that the NBI inspection data were entered or updated in the State transportation department, Federal agency, or Tribal government inventory.	The intent of this item is to verify that a complete NBI inspection data set is accepted and is entered or updated in the inventory within the timeframes required by the NBIS.	
Example		
<p>A Routine and NSTM inspection started on August 1, 2020. The Routine inspection was completed on August 2, 2020, and the NSTM inspection was completed on August 4, 2020. An agency QC review was performed on the Routine and NSTM inspections on September 15, 2020. The agency database was updated on September 16, 2020 for the Routine and NSTM inspections.</p> <ul style="list-style-type: none"> • Report 20200916 for the Routine inspection. • Report 20200916 for the NSTM inspection. 		

<i>Inspection Note</i>		
<u>Format</u> AN (300)	<u>Frequency</u> EI	<u>Item ID</u> B.IE.11
Specification	Commentary	
<p>Report a brief description of the members or features inspected when limited portions of the bridge are inspected. Use consistent terms to describe similar inspections.</p>	<p>This item is intended to capture a brief description of the members inspected when limited portions of the bridge are inspected such as for Underwater, NSTM, In-depth, Special, and Damage inspections, or for scour monitoring.</p> <p>This item is also used to describe the purpose for Special inspections performed following extreme events such as floods, hurricanes, and earthquakes.</p>	
Examples		
<p>A NSTM inspection was performed, including hands-on inspection of all girders and floor beams in spans 2 and 3.</p> <ul style="list-style-type: none"> • Report "Hands-on inspection of all girders and floor beams in spans 2 and 3." <p>An Underwater inspection was performed on August 31,2020 with divers for piers 4-7 during a period of low water.</p> <ul style="list-style-type: none"> • Report "Dove piers 4-7 at low water, with deficiencies in the splash zone noted and photographed. Team leaders 034 and 116 both participated, but TL 116 was the team leader in charge." <p>The bridge was struck by an over-height vehicle on November 22, 2020 requiring a Damage Inspection.</p> <ul style="list-style-type: none"> • Report "East portal and bracing given a hands-on inspection via bucket truck; mag-particle testing used in several locations where a crack was suspected." <p>The damage was repaired, and a one-time Special inspection of the repair was performed on December 25, 2020.</p> <ul style="list-style-type: none"> • Report "East portal and bracing given a hands-on inspection via bucket truck." <p>A scour critical bridge experienced flood water elevations up to the web of the exterior girder. Per the scour POA, scour monitoring was immediately completed by a team leader.</p> <ul style="list-style-type: none"> • Report "Bridge was visually monitored for damage and alignment issues during flooding." 		

<i>Inspection Equipment</i>		
<u>Format</u> AN (120)	<u>Frequency</u> EI	<u>Item ID</u> B.IE.12
Specification		Commentary
<p>Report all access and inspection equipment used to perform the inspection using one or more of the following codes.</p> <p>Report multiple codes separated by pipe () delimiters.</p> <p>Do not report this item if none of the equipment below was used.</p> <p><u>Code</u> <u>Description</u></p> <p style="padding-left: 40px;"><u>Access</u></p> <p>AN No access equipment used</p> <p>A01 Ladder</p> <p>A02 Bucket lift vehicle</p> <p>A03 Under bridge inspection vehicle</p> <p>A04 Rigging</p> <p>A05 Waders</p> <p>A06 Boat</p> <p>A07 Snorkel</p> <p>A08 SCUBA</p> <p>A09 Surface supplied air</p> <p>A10 Remotely Operated Vehicle (ROV)</p> <p>A11 Video pole</p> <p>A12 Borescope</p> <p>A13 Unmanned aerial systems (UAS)</p> <p>A14 Service Traveler</p> <p>AX Other</p> <p>Codes continued next page.</p>		<p>This item is used to provide information about access and inspection equipment used in addition to standard equipment for each inspection.</p> <p>Remotely operated vehicles include any remotely controlled device used to provide video access to members of a bridge via ground, water surface, or underwater.</p> <p>Use code AN when none of the listed access equipment codes apply for the inspection performed.</p> <p>Use code A13 when unmanned aerial systems (UAS), also referred to as drones, are used to supplement inspections.</p> <p>Use code IN when none of the listed inspection equipment codes apply for the inspection performed.</p> <p>Use code I13 when underwater imaging technologies such as side scan sonar are used to supplement underwater inspections.</p> <p>NDE and testing inspection equipment listed represent only more common or general types. Use the most closely related code or use code IX for types not listed.</p>

Specification Continued – Inspection Equipment	
Code	Description
	<u>Inspection</u>
IN	No inspection equipment used
I01	Ultrasonic
I02	Ground-penetrating radar
I03	Infrared thermography
I04	Radiographic testing
I05	Impact echo
I06	Electromagnetic methods
I07	Rebound & penetration methods
I08	Acoustic emissions testing
I09	Dye penetrant
I10	Magnetic particle
I11	Eddy current
I12	Boring or drilling
I13	Underwater imaging
I14	Depth finder/fathometer
I15	Stress wave timer
IX	Other
Example – Inspection Equipment	
<p>A NSTM inspection was performed, including hands-on inspection of all girders and floor beams in spans 2 and 3. An under-bridge inspection vehicle was used to gain access and magnetic particle testing was done to check fatigue details for cracking.</p> <ul style="list-style-type: none"> • Report A03 I10 for the NSTM inspection. <p>An underwater inspection was performed with divers using a boat and surface supplied air. Before the dive, side-scan sonar was performed to capture underwater images.</p> <ul style="list-style-type: none"> • Report A06 A09 I13 for the underwater inspection. <p>The bridge was struck by an over-height vehicle requiring a damage inspection. A hands-on inspection was performed using a bucket truck for access. Dye penetrant testing was used in several locations where cracks were suspected. The tip of identified cracks was determined using Eddy Current testing.</p> <ul style="list-style-type: none"> • Report A02 I09 I11 for the damage inspection. <p>A scour critical bridge experienced flood water elevations up to the web of the exterior girder. Per the scour POA, scour monitoring was immediately completed by a team leader. A remotely operated water vehicle was used that was equipped with underwater imaging technology.</p> <ul style="list-style-type: none"> • Report A10 I13 for the scour monitoring inspection. 	

<i>Inspection Temperature</i>		
<u>Format</u> YYYY	<u>Frequency</u> EI	<u>Item ID</u> B.IE.IL.01
Specification		Commentary
<p>This item reports the ambient air temperature, in degrees Fahrenheit, at the time of inspection of the structure.</p> <p>History is retained for this item per each Inspection Date (B.IE.03).</p>		<p>A three-digit field.</p> <p>For temperatures of less than zero degrees, enter the minus (-) sign to the immediate left of the degree entry.</p>

<i>Inspection Resources Time</i>		
<u>Format</u> YYYY	<u>Frequency</u> EI	<u>Item ID</u> B.IE.IL.02
Specification		Commentary
<p>This item records Time it took to complete a Routine, Fracture Critical, Underwater, Special, or Element Level Inspection of the Structure.</p>		<p>Enter the appropriate Hours, in accordance with the guidance below:</p> <ul style="list-style-type: none"> • This time shall be measured in man-hours – i.e. a team of 3, spent 4 hours inspecting and completing the paperwork would be 12 hours • The total time shall include the time spent at the site physically performing the inspection, travel time to / from the location, time spent preparing for the inspection, and time spent preparing the documentation and entering the inspection into the database.

<i>Inspection Resources Traffic Control</i>		
<u>Format</u> YYYY	<u>Frequency</u> EI	<u>Item ID</u> B.IE.IL.03
Specification	Commentary	
<p>This item records Traffic Control it took to complete a Routine, Fracture Critical, Underwater, Special, or Element Level Inspection of the Structure.</p> <p>Enter the appropriate Traffic Control, in accordance with the guidance below:</p> <ul style="list-style-type: none"> • 0 – No Traffic Control Required • 1 – Limited Traffic Control – Inspection can be performed safely from shoulders/sidewalks. • 2 – Short-Term Traffic Control – Inspection requires short-term encroachments. Traffic control may require advanced signage and spotters. • 3 – Full Traffic Control per IDOT Standards 	<ul style="list-style-type: none"> • 	

<i>Remarks</i>		
<u>Format</u> AN	<u>Frequency</u> EI	<u>Item ID</u> B.IE.IL.04
Specification		Commentary
<p>This item allows the recording of any special information or data that would not fit the space available regarding the Inspection.</p>		<p>An unlimited text field.</p> <p>Enter appropriate comments beginning at the first space available using any combination of letters, numbers, symbols, and spaces. Abbreviations can be used if they are not ambiguous.</p>

<i>Agency Program Manager</i>		
<u>Format</u> YYYY	<u>Frequency</u> EI	<u>Item ID</u> B.IE.IL.05
Specification		Commentary
<p>This item indicates the name of the Certified NBIS Program Manager having responsibility for the bridge inspection program within the agency’s jurisdiction.</p>		<p>Selected from a dropdown list of Certified NBIS Program Managers in the State of Illinois – as maintained by the Bridge Management and Inspection Unit, of the Bureau of Bridges & Structures. Only current Certified Program Managers will appear on the dropdown list.</p>

<i>Agency Element Program Manager</i>		
<u>Format</u> YYYY	<u>Frequency</u> EI	<u>Item ID</u> B.IE.IL.05
Specification		Commentary
<p>This item indicates the name of the Certified NBIS Element Program Manager having responsibility for the bridge inspection program within the agency’s jurisdiction.</p>		<p>Selected from a dropdown list of Certified NBIS Element Program Managers in the State of Illinois – as maintained by the Bridge Management and Inspection Unit, of the Bureau of Bridges & Structures. Only Certified NBIS Element Program Managers will appear on the dropdown list.</p>

<i>Inspector</i>		
<u>Format</u> YYYY	<u>Frequency</u> EI	<u>Item ID</u> B.IE.IL.06
Specification		Commentary
<p>This item indicates the name of the individual who, working under a Certified NBIS Team Leader in the State of Illinois, physically performed the Routine Inspection associated with Routine NBIS Inspection Date (B.IE.03).</p>		<p>A unlimited text field.</p> <p>If the person conducting the inspection is not a current Certified NBIS Team Leader, code the person's name in the following format: Last name, first initial, middle initial (continuous text string).</p>

<i>Underwater Inspection Method</i>														
<u>Format</u> YYYY	<u>Frequency</u> EI	<u>Item ID</u> B.IE.IL.07												
Specification		Commentary												
<p>This item indicates the method used in making the underwater inspection of the structure.</p> <p>History is retained for this item based on each Underwater Inspection Date (B.IE.03).</p>		<p>A check box.</p> <p>Check the appropriate boxes for the method of inspection performed.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Method</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td>V</td> <td>Visual</td> </tr> <tr> <td>P</td> <td>Probe</td> </tr> <tr> <td>S</td> <td>Sonar</td> </tr> <tr> <td>D</td> <td>Diver</td> </tr> <tr> <td>O</td> <td>Other</td> </tr> </tbody> </table>	<u>Method</u>	<u>Description</u>	V	Visual	P	Probe	S	Sonar	D	Diver	O	Other
<u>Method</u>	<u>Description</u>													
V	Visual													
P	Probe													
S	Sonar													
D	Diver													
O	Other													

<i>Underwater Inspection Substructure Units</i>		
<u>Format</u> YYYY	<u>Frequency</u> EI	<u>Item ID</u> B.IE.IL.08
Specification		Commentary
<p>This item indicates the substructure unit or cell protection unit to be inspected.</p> <p>History is retained for this item based on each Underwater Inspection Date (B.IE.03).</p>		<p>An unlimited text field.</p>
Example		
<p>Pier 3 - West Abutment Pier 4 - Cell Protection</p>		

SECTION 7: BRIDGE CONDITION

This section has data items that have been grouped by the following five subsections: Component Condition Ratings, Element Identification, Element Conditions, Appraisal, and Work Events.

The data items in the Component Condition Ratings subsection provide information about the condition of the bridge and waterway(s). These items are considered part of the Primary Data Set and have a one-to-one relationship with a bridge. The data for these items may change after each inspection.

The data items in the Element Identification subsection provide information about the elements present on the bridge, and the total quantity of each element as defined in the AASHTO MBEI. The data for these items typically remain static once a bridge has been inventoried. The data items in the Element Conditions subsection provide information about the condition of bridge elements as defined in the AASHTO MBEI. The data for these items may change after each inspection. Element data are only required to be reported to FHWA for bridges that carry NHS routes, while reporting is optional for bridges that carry non-NHS routes. These items are considered part of the Elements Data Set and have a many-to-one relationship with a bridge when applicable.

The data items in the Appraisal subsection provide information about potential bridge vulnerabilities. These items are considered part of the Primary Data Set and have a one-to-one relationship with a bridge. The data for these items typically remain static once a bridge has been inventoried.

The data items in the Work Events subsection provide information about the year the bridge was built, and subsequent work performed on the bridge. Item B.W.01 (*Year Built*) is considered part of the Primary Data Set and has a one-to-one relationship with a bridge. Items B.W.02 (*Year Work Performed*) and B.W.03 (*Work Performed*) are considered part of the Work Data Set and have a many-to-one relationship with a bridge. The data for these items may change periodically as work is completed for a bridge.

The following data items are included in this section.

SUBSECTION 7.1: COMPONENT CONDITION RATINGS

Item ID Data Item

B.C.01	Deck Condition Rating
B.C.02	Superstructure Condition Rating
B.C.03	Substructure Condition Rating
B.C.04	Culvert Condition Rating
B.C.05	Bridge Railing Condition Rating
B.C.06	Bridge Railing Transitions Condition Rating
B.C.07	Bridge Bearings Condition Rating
B.C.08	Bridge Joints Condition Rating
B.C.09	Channel Condition Rating
B.C.10	Channel Protection Condition Rating
B.C.11	Scour Condition Rating
B.C.12	Bridge Condition Classification
B.C.13	Lowest Condition Rating Code
B.C.14	NSTM Inspection Condition
B.C.15	Underwater Inspection Condition

SUBSECTION 7.2: ELEMENT IDENTIFICATION**Item ID Data Item**

B.E.01	Element Number
B.E.02	Element Parent Number
B.E.03	Element Total Quantity

SUBSECTION 7.3: ELEMENT CONDITIONS**Item ID Data Item**

B.CS.01	Element Quantity Condition State One
B.CS.02	Element Quantity Condition State Two
B.CS.03	Element Quantity Condition State Three
B.CS.04	Element Quantity Condition State Four

SUBSECTION 7.4: APPRAISAL**Item ID Data Item**

B.AP.01	Approach Roadway Alignment
B.AP.02	Overtopping Likelihood
B.AP.03	Scour Vulnerability
B.AP.04	Scour Plan of Action
B.AP.05	Seismic Vulnerability
B.AP.IL.01	Scour Critical Analysis Date
B.AP.IL.02	Scour Critical Evaluation Method
B.AP.IL.03	Scour Critical Analysis By
B.AP.IL.04	Scour Critical Remarks
B.AP.IL.05	Remarks
B.AP.IL.05	STP-Bridge Eligibility
B.AP.IL.06	Structurally Deficient

SUBSECTION 7.5: WORK EVENTS**Item ID Data Item**

B.W.01	Year Built
B.W.02	Year Work Performed
B.W.03	Work Performed
B.W.IL.01	Construction Type Indicator
B.W.IL.02	Construction Route Number
B.W.IL.03	Construction Section Number
B.W.IL.04	Construction Station Number
B.W.IL.05	Construction Contract Number
B.W.IL.06	Federal Aid Project Number
B.W.IL.07	Built By Agency
B.W.IL.08	Construction Remarks
B.W.IL.09	Plans Location
B.W.IL.10	Last Update Date
B.W.IL.11	PPS Improvement Type
B.W.IL.12	Letting Item Number
B.W.IL.13	Letting Date

SUBSECTION 7.6: MICROFILM**Item ID Data Item**

B.A.IL.01	Microfilm Date & Time
B.A.IL.02	Microfilm Number
B.A.IL.03	Microfilm Done By

- B.A.IL.04 [Microfilm Type](#)
- B.A.IL.05 [Microfilm Remarks](#)
- B.A.IL.06 [Microfilm Beginning Frame Number](#)
- B.A.IL.07 [Microfilm Ending Frame Number](#)

SUBSECTION 7.7: MISCELLANEOUS

Item ID Data Item

- B.M.IL.01 [Channel Section Cross Section Submission Date](#)
- B.M.IL.02 [NSTM Plan Section Submission Date](#)
- B.M.IL.03 [Underwater Inspection Plan Submission Date](#)
- B.M.IL.04 [Complex Bridge Inspection Plan Submission Date](#)
- B.M.IL.05 [TAMP Major Bridge](#)
- B.M.IL.06 [Other Agencies Structure Number](#)

SUBSECTION 7.8: NSTM INVENTORY

Item ID Data Item

- B.NSTM.IL.01 [Fracture Critical Bridge Type](#)
- B.NSTM.IL.02 [Fracture Critical Number Of Spans](#)
- B.NSTM.IL.03 [Fracture Critical Number Of Members](#)
- B.NSTM.IL.04 [NSTM Remarks](#)

SUBSECTION 7.9: PAINT

Item ID Data Item

- B.PT.IL.01 [Last Paint Date](#)
- B.PT.IL.02 [Last Paint Type](#)
- B.PT.IL.03 [Paint Remarks](#)

SUBSECTION 8.0: SPECIAL INSPECTIONS

Item ID Data Item

- B.PT.IL.01 [Last Paint Date](#)
- B.PT.IL.02 [Last Paint Type](#)
- B.PT.IL.03 [Paint Remarks](#)

SUBSECTION 8.1: UTILITY

Item ID Data Item

- B.U.IL.01 [Utilities Attached](#)

SUBSECTION 7.1: COMPONENT CONDITION RATINGS

The data items in this subsection provide condition information for the bridge and waterway(s) and are considered part of the Primary Data Set. These data items have a one-to-one relationship with a bridge. The data for these items may change after each inspection.

The following data items are included in this subsection.

Item ID **Data Item**

B.C.01	Deck Condition Rating
B.C.02	Superstructure Condition Rating
B.C.03	Substructure Condition Rating
B.C.04	Culvert Condition Rating
B.C.05	Bridge Railing Condition Rating
B.C.06	Bridge Railing Transitions Condition Rating
B.C.07	Bridge Bearings Condition Rating
B.C.08	Bridge Joints Condition Rating
B.C.09	Channel Condition Rating
B.C.10	Channel Protection Condition Rating
B.C.11	Scour Condition Rating
B.C.12	Bridge Condition Classification
B.C.13	Lowest Condition Rating Code
B.C.14	NSTM Inspection Condition
B.C.15	Underwater Inspection Condition

Items B.C.12 (*Bridge Condition Classification*) and B.C.13 (*Lowest Condition Rating Code*) are calculated by FHWA using data from other items in the SNBI. The data item pages explain how these items are calculated and recorded in the NBI, and are presented for reference only. These items are not intended to be reported by an inspector or designated agency personnel. Therefore, the wording of the specifications and commentary is different (passive voice) than for other items (active voice) in this subsection.

Condition ratings indicate the existing field conditions of the bridge components and waterway. A condition rating code must therefore consider the type, location, and severity of the defects; the extent to which they exist throughout the item being evaluated; and the degree to which the defects affect strength and/or performance of the bridge or component.

Determine the condition rating codes for the bridge components (Items B.C.01 through B.C.07) by correlating field observations with Table 20. The remaining condition ratings (Items B.C.08 through B.C.11) can be determined using the tables embedded in the item descriptions. These tables define the condition ratings in terms of defect severity, extent, and effect on strength and/or performance of the bridge or component. The term "defect", used in these tables indicates a problem with the bridge component that may be caused by deterioration, damage, or an inherent defect.

As used in the condition rating tables, an inherent defect is not indicative of damage or deterioration, but is characteristic of the material or results from normal construction practices. A minor defect is one where damage or deterioration has initiated but is not yet considered significant. A moderate defect is one where damage or deterioration are significant, but the strength and performance of the component are not affected. A major defect affects the strength and/or performance of the component, as determined by a structural and/or hydraulic review. For joints, bearings, railings, and railing transitions, a major defect prevents the component from functioning as intended.

A defect is considered widespread when it is present in many separate areas of the component, while an isolated defect occurs in one or a few concentrated locations. The term "some" is used when the defect prevalence is more than isolated and less than widespread.

Load posting alone, for an existing bridge designed for less than current legal loads, is not considered a defect and does not affect the condition rating code.

Evaluate portions of bridge components that are supported or strengthened by temporary members also considering the condition of the temporary members.

Optional tables provided in Appendix C give additional guidance on various defects and deterioration mechanisms.

Use Table 20 to determine condition rating codes for the bridge component items in this section (Items B.C.01 through B.C.07). The entire code description must be satisfied for the code to apply.

Table 20. Codes and descriptions for component condition ratings.

Code	Condition	Description
N	NOT APPLICABLE	Component does not exist.
9	EXCELLENT	Isolated inherent defects.
8	VERY GOOD	Some inherent defects.
7	GOOD	Some minor defects.
6	SATISFACTORY	Widespread minor or isolated moderate defects.
5	FAIR	Some moderate defects; strength and performance of the component are not affected.
4	POOR	Widespread moderate or isolated major defects; strength and/or performance of the component is affected.
3	SERIOUS	Major defects; strength and/or performance of the component is seriously affected. Condition typically necessitates more frequent monitoring, load restrictions, and/or corrective actions.
2	CRITICAL	Major defects; component is severely compromised. Condition typically necessitates frequent monitoring, significant load restrictions, and/or corrective actions in order to keep the bridge open.
1	IMMINENT FAILURE	Bridge is closed to traffic due to component condition. Repair or rehabilitation may return the bridge to service.
0	FAILED	Bridge is closed due to component condition, and is beyond corrective action. Replacement is required to restore service.

<i>Deck Condition Rating</i>		
<u>Format</u> AN (1)	<u>Frequency</u> EI	<u>Item ID</u> B.C.01
Specification		
<p>Report the deck component condition using one of the codes shown in tables below. Tables are grouped by Deck Material.</p> <p>Report N when Item B.SP.09 (<i>Deck Material and Type</i>) is 0.</p>		

Specification Continued – Deck Condition Rating		
CONCRETE DECK		
<p>For slab and precast prestressed concrete (PPC) deck beam bridges, the deck condition rating (Item 58) shall be rated the same as the superstructure (Item 59) using the superstructure criteria, except for PPC deck beam with 4" or more of reinforced concrete overlay, in which case the overlay shall be rated as the deck.</p>		
Code	Condition	Description
9	EXCELLENT	New with isolated inherent defects.
8	VERY GOOD	<p>Some inherent defects.</p> <ul style="list-style-type: none"> • Transverse cracks < 0.06" at > 15' intervals may be present. • No spalling, scaling, pop-outs or delamination.
7	GOOD	<p>Some minor defects.</p> <ul style="list-style-type: none"> • Some transverse cracks < 0.06" at > 5' intervals over the majority of the deck. • Light scaling (less than 1/4" depth) or pop-outs may be present. • No spalling
6	SATISFACTORY	<p>Widespread minor or isolated moderate defects.</p> <ul style="list-style-type: none"> • Transverse cracks < 0.06" at < 5' • Transverse cracks > 0.06" at > 5' intervals over a majority of the deck. • Isolated longitudinal cracks, spalls and delaminations may be present on up to 5% of the deck riding surface or soffit area. • Up to 10% of the deck soffit may be spalled, delaminated, and map cracked.
5	FAIR	<p>Some moderate defects; strength and performance of the component are not affected.</p> <ul style="list-style-type: none"> • Transverse cracks > 0.06" at < 5' intervals with or without leaching in the majority of the deck. • Longitudinal cracks < 0.06" in majority of deck. • Spalls and delaminations may be present on up to 10% of the deck surface or soffit area. • Up to 25% of the deck surface or soffit may be spalled, delaminated and map cracked. • Up to 10% loss of primary reinforcement in any 6' bay length.

Specification Continued – Deck Condition Rating		
CONCRETE DECK (continued)		
Code	Condition	Description
4	POOR	<p>Widespread moderate or isolated major defects; strength and/or performance of the component is affected.</p> <ul style="list-style-type: none"> • Longitudinal cracks > 0.06" in majority of deck. • Spalls and delaminations may be present on up to 25% of the deck surface or soffit area. • Up to 50% of the deck surface or soffit may be spalled, delaminated and map cracked. <p>Up to 30% loss of primary reinforcement in any 6' bay length.</p>
3	SERIOUS	<p>Major defects; strength and/or performance of the component is seriously affected. Condition typically necessitates more frequent monitoring, load restrictions, and/or corrective actions.</p> <ul style="list-style-type: none"> • Condition is similar to the description for a condition rating of "4", though more extensive full depth failures are evident to the point that wheel loads may need restricted or temporary measures implemented.
2	CRITICAL	<p>Major defects; component is severely compromised. Condition typically necessitates frequent monitoring, significant load restrictions, and/or corrective actions in order to keep the bridge open.</p> <ul style="list-style-type: none"> • Full depth failures needing patching over much of the deck on a regular basis, possibly with reduced load limits, temporary measures may be needed to allow continued use of the structure. • Special inspection is required to allow bridge to remain open. • The Bureau of Bridges and Structures shall be notified immediately.
1	IMMINENT FAILURE	<p>Bridge is closed to traffic due to component condition. Repair or rehabilitation may return the bridge to service.</p>
0	FAILED	<p>Bridge is closed due to component condition and is beyond corrective action. Replacement is required to restore service.</p>

Specification Continued – Deck Condition Rating		
STEEL DECK		
Code	Condition	Description
9	EXCELLENT	New with isolated inherent defects.
8	VERY GOOD	Some inherent defects. <ul style="list-style-type: none"> • Tightly secured to floor system with no rust.
7	GOOD	Some minor defects. <ul style="list-style-type: none"> • Sound connections with minor rusting. • No cracked welds.
6	SATISFACTORY	Widespread minor or isolated moderate defects. <ul style="list-style-type: none"> • Considerable rusting with indications of initial section loss. • Sound connections with isolated cracked welds and/or isolated broken grids.
5	FAIR	Some moderate defects; strength and performance of the component are not affected. <ul style="list-style-type: none"> • Heavy rusting with areas of up to 10% section loss in a 6 foot wide bay. • Isolated loose connections. • Numerous cracked welds and/or broken grids. • Grid sections may be uplifting in isolated areas without danger of breaking loose.
4	POOR	Widespread moderate or isolated major defects; strength and/or performance of the component is affected. <ul style="list-style-type: none"> • Heavy rusting resulting in considerable section loss up to 30% in a 6 foot wide bay. • Numerous holes in grid or deck structural elements resulting in many welds cracked and/or grids broken. • Uplifting of grid sections may be occurring throughout deck with danger of breaking loose.
3	SERIOUS	Major defects; strength and/or performance of the component is seriously affected. Condition typically necessitates more frequent monitoring, load restrictions, and/or corrective actions. <ul style="list-style-type: none"> • Severe or critical signs of structural distress are visible to the point where vehicular loads may need to be restricted. Sections have broken loose and are being repaired occasionally.
2	CRITICAL	Major defects; component is severely compromised. Condition typically necessitates frequent monitoring, significant load restrictions, and/or corrective actions in order to keep the bridge open. <ul style="list-style-type: none"> • Same as condition rating of "3" but special inspections are required to allow bridge to remain open, possibly with reduced load limits. The Bureau of Bridges and Structures shall be notified immediately
1	IMMINENT FAILURE	Bridge is closed to traffic due to component condition. Repair or rehabilitation may return the bridge to service.
0	FAILED	Bridge is closed due to component condition and is beyond corrective action. Replacement is required to restore service.

Specification Continued – Deck Condition Rating		
TIMBER DECK		
Code	Condition	Description
9	EXCELLENT	New with isolated inherent defects.
8	VERY GOOD	Some inherent defects. <ul style="list-style-type: none"> • No crushing, rotting, or splitting. • Tightly secured to floor system.
7	GOOD	Some minor defects. <ul style="list-style-type: none"> • Minor cracking, checking or splitting. • A few loose planks
6	SATISFACTORY	Widespread minor or isolated moderate defects. <ul style="list-style-type: none"> • A minor number of rotted or crushed planks in need of replacement. • Many planks cracked or split. • Many loose planks. • Fire damage limited to surface scorching with insignificant section loss. • Some wet areas noted.
5	FAIR	Some moderate defects; strength and performance of the component are not affected. <ul style="list-style-type: none"> • Numerous planks cracked or split. • Some non-adjacent planks rotted or crushed and in need of replacement. • Many planks may be loose. • Fire damage limited to surface charring with minor section loss.
4	POOR	Widespread moderate or isolated major defects; strength and/or performance of the component is affected. <ul style="list-style-type: none"> • Majority of the planks are rotted, crushed, and/or split, necessitating replacement of the entire deck. • Fire damage may be present. • Greater than 10% section loss to a significant area of the deck.
3	SERIOUS	Major defects; strength and/or performance of the component is seriously affected. Condition typically necessitates more frequent monitoring, load restrictions, and/or corrective actions. <ul style="list-style-type: none"> • Severe signs of structural distress are visible to the point where vehicular loads may have to be restricted. • Major fire damage which substantially reduces the sectional area of the plank.
2	CRITICAL	Major defects; component is severely compromised. Condition typically necessitates frequent monitoring, significant load restrictions, and/or corrective actions in order to keep the bridge open. <ul style="list-style-type: none"> • Advanced deterioration with partial deck failure to the point where a special inspection at reduced intervals is necessary to allow the structure to remain open, possibly with reduced load limits. • The Bureau of Bridges and Structures shall be notified immediately.

Specification Continued – Deck Condition Rating		
TIMBER DECK (continued)		
Code	Condition	Description
1	IMMINENT FAILURE	Bridge is closed to traffic due to component condition. Repair or rehabilitation may return the bridge to service.
0	FAILED	Bridge is closed due to component condition and is beyond corrective action. Replacement is required to restore service.

Commentary
<p>This item represents the condition of the deck as determined from the inspection of all deck surfaces (top, underside, and edges).</p> <p>Visual assessments may be supplemented with non-destructive or destructive testing results.</p> <p>Use destructive or non-destructive testing results or visual condition indicators of materials covering the surfaces being assessed when top, underside or both surfaces are not visible for assessment. Past inspection reports and repair records may also provide supplemental information to aid in the determination of the condition rating.</p> <p>Do not consider the condition of non-monolithic wearing surfaces (i.e. overlays), stay-in-place deck forms, joint assemblies, expansion devices, bridge rails, or scuppers when determining the condition rating code for this item, except insofar as they indicate the condition of the deck itself.</p> <p>Consider the condition of a joint header only when the deck serves as a joint header.</p> <p>For bridges with integral decks/top flanges (e.g. rigid frames, decked girders or tee beams, voided slab beams, box girders, etc.), the deck condition may affect the superstructure condition rating; however, the superstructure condition does not affect the deck condition rating.</p> <p>The deck and superstructure condition ratings are the same for solid slab bridges.</p>

<i>Superstructure Condition Rating</i>		
<u>Format</u> AN (1)	<u>Frequency</u> EI	<u>Item ID</u> B.C.02
Specification		
<p>Report the superstructure component condition rating using one of the codes shown in tables below. Tables are grouped by Superstructure Span Material.</p> <p>Report N (NOT APPLICABLE) when M, A, or W is not reported for Item B.SP.01 (<i>Span Configuration Designation</i>).</p>		

Specification Continued – Superstructure Condition Rating		
STEEL SUPERSTRUCTURE		
Code	Condition	Description
9	EXCELLENT	New superstructure with Isolated inherent defects.
8	VERY GOOD	Some inherent defects. <ul style="list-style-type: none"> No visible rust.
7	GOOD	Some minor defects. <ul style="list-style-type: none"> Some rust may be present but without any section loss.
6	SATISFACTORY	Widespread minor or isolated moderate defects. <ul style="list-style-type: none"> Initial section loss (minor pitting, scaling, or flaking). Up to 2% section loss.
5	FAIR	Some moderate defects; strength and performance of the component are not affected. <ul style="list-style-type: none"> Initial section loss up to 10% in critical areas. Fatigue or out-of-plane bending cracks may be present in secondary members. Arrested fatigue cracks may be present in primary members. Hinges may have minor corrosion.
4	POOR	Widespread moderate or isolated major defects; strength and/or performance of the component is affected. <ul style="list-style-type: none"> Section loss up to 30% in critical area. Fatigue or out-of-plane bending cracks may be present in primary members. Previously arrested fatigue cracks propagating beyond arresting holes in primary members. Fatigue cracks in secondary members throughout the bridge.
3	SERIOUS	Major defects; strength and/or performance of the component is seriously affected. Condition typically necessitates more frequent monitoring, load restrictions, and/or corrective actions. <ul style="list-style-type: none"> Advanced section loss up to 50%. Extensive perpendicular to stress fatigue or out of plane bending cracks in primary members.
2	CRITICAL	Major defects; component is severely compromised. Condition typically necessitates frequent monitoring, significant load restrictions, and/or corrective actions in order to keep the bridge open. <ul style="list-style-type: none"> Severe section loss over 50% requires special inspections. Temporary supports or repairs may be required to remain open to traffic. Structural elements that are judged to be in critical condition must receive special inspections in order for the structure to remain open to traffic. The Bureau of Bridges and Structures shall be notified immediately.
1	IMMINENT FAILURE	Bridge is closed to traffic due to component condition. Repair or rehabilitation may return the bridge to service.
0	FAILED	Bridge is closed due to component condition and is beyond corrective action. Replacement is required to restore service.

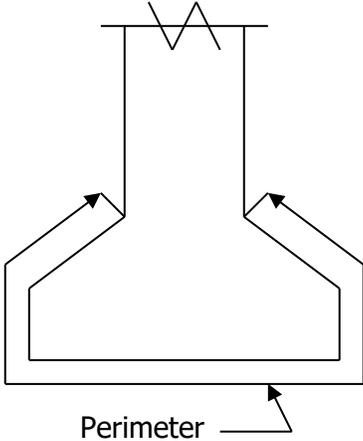
Specification Continued – Superstructure Condition Rating		
CIP & PRECAST REINFORCED CONCRETE SUPERSTRUCTURE		
Code	Condition	Description
9	EXCELLENT	New superstructure with Isolated inherent defects.
8	VERY GOOD	Some inherent defects. <ul style="list-style-type: none"> No significant defects. Very minor shrinkage cracks, surface scaling, spalling or pop-outs which do not expose reinforcing steel.
7	GOOD	Some minor defects. <ul style="list-style-type: none"> Isolated non-structural cracks up to 0.03". Minor pop-outs or spalls without exposed primary reinforcing steel. Stirrups may be exposed in a few locations.
6	SATISFACTORY	Widespread minor or isolated moderate defects. <ul style="list-style-type: none"> Extensive non-structural cracks up to 0.06". Isolated hairline structural cracks, spalls and delaminations may be present on up to 10% of a beams cross section or 6' width of a slab with exposed primary reinforcement with surface rust only. Up to 20% of a beam cross section or 6' width of a slab may be map cracked, spalled and delaminated. Spalls and delaminations up to 5% on the sides of a beam cross section.
5	FAIR	Some moderate defects; strength and performance of the component are not affected. <ul style="list-style-type: none"> Non-structural cracks greater than 0.06". Structural cracks up to 0.03". Spalling with section loss of reinforcing steel up to 10% in a beam or 6' width of slab. Up to 10% of compression surface area spalled or delaminated in a beam cross section or 6' width of slab. Up to 10% section loss of the concrete cross section.
4	POOR	Widespread moderate or isolated major defects; strength and/or performance of the component is affected. <ul style="list-style-type: none"> Flexural or shear cracks up to 0.06" Primary reinforcing steel exposed with section loss up to 30% in a 6' width of slab or in a beam cross section. Up to 50% of the compression surface area spalled or delaminated. Channel beams spalled or delaminated up to 30% section loss of the beam concrete cross section around the bottom primary reinforcement steel but not within 4' of beam ends.

Specification Continued – Superstructure Condition Rating		
CIP & PRECAST REINFORCED CONCRETE SUPERSTRUCTURE (continued)		
Code	Condition	Description
3	SERIOUS	<p>Major defects; strength and/or performance of the component is seriously affected. Condition typically necessitates more frequent monitoring, load restrictions, and/or corrective actions.</p> <ul style="list-style-type: none"> • Primary reinforcing steel exposed with section loss up to 50% on a 6' width for slabs or cross section for beams. • Up to 100% section loss of compression surface area in a 6' width of slab or beam cross section. • Channel beams spalled or delaminated up to 50% section loss of the beam concrete cross section around the bottom primary reinforcement steel but not within 4' of beam ends.
2	CRITICAL	<p>Major defects; component is severely compromised. Condition typically necessitates frequent monitoring, significant load restrictions, and/or corrective actions in order to keep the bridge open.</p> <ul style="list-style-type: none"> • Similar to the description for a condition rating of "3" although more extensive with over 50% loss of reinforcing steel. • Channel beams fully delaminated or spalled at ends with broken stirrups. • Temporary support or repairs may be required to remain open to traffic. • Structural elements that are judged to be in critical condition must receive special inspections in order for the structure to remain open to traffic. • The Bureau of Bridges and Structures shall be notified immediately.
1	IMMINENT FAILURE	Bridge is closed to traffic due to component condition. Repair or rehabilitation may return the bridge to service.
0	FAILED	Bridge is closed due to component condition and is beyond corrective action. Replacement is required to restore service.

Specification Continued – Superstructure Condition Rating		
PRESTRESSED CONCRETE DECK BEAM SUPERSTRUCTURE		
<p>Prestressing strands, reinforcement bars or wire mesh should be considered exposed in areas where the concrete appears to be deteriorated or is unsound (delaminated condition) to the level of the strands, bars or mesh. Strands adjacent to longitudinal cracks shall be interpreted as being exposed. Longitudinal cracks may be caused by water freezing in the voids and splitting the concrete in the longitudinal direction. Patches are considered delaminated. The dimensions stated below relate to the width of the cross section of the beams. The "end quarters of span" do not include the beam ends (up to 3').</p>		
Code	Condition	Description
9	EXCELLENT	New superstructure with Isolated inherent defects.
8	VERY GOOD	Some inherent defects. <ul style="list-style-type: none"> No notable problems.
7	GOOD	Some minor defects. <ul style="list-style-type: none"> No beams with prestressing strands, stirrup reinforcement bars or wire mesh exposed. Moderate cracking and leakage may be present in keyways, but no differential movement occurring between deck beams.
6	SATISFACTORY	Widespread minor or isolated moderate defects. <ul style="list-style-type: none"> Center half of span: No beams with prestressing strands, stirrup reinforcement or wire mesh bars exposed, no longitudinal cracking or spalling. End quarters of span: No more than 2 strands or 3" of stirrup reinforcement bars or 3" of wire mesh exposed in the bottom of any beam. Larger widths of wire mesh may be exposed due to inadequate concrete cover occurring during manufacturing (up to 1/2" cover) Keyway cracking may be evident with widespread leakage, but beams are still fully acting together.
5	FAIR	Some moderate defects; strength and performance of the component are not affected. <ul style="list-style-type: none"> Center half of span: No more than 2 strands or 3" of stirrup reinforcement bars or 3" of wire mesh exposed in any beam, longitudinal cracking on the outside face or spalling limited to one edge with no other defects exposing reinforcement, wire mesh or strands. End quarters of span: No more than 4 strands or 6" of stirrup reinforcement bars or 6" of wire mesh exposed in the bottom of any beam, no more than one longitudinal crack in any beam without any other defect. Beam ends (up to 3'): Prestressed strands, stirrup reinforcement bars or wire mesh exposed up to fullwidth of any beam bottom. Larger widths of wire mesh may be exposed due to inadequate concrete cover occurring during manufacturing (up to 1/2" cover). Keyway cracking with extensive leakage and evidence that beams are beginning to act independently of each other.

Specification Continued – Superstructure Condition Rating		
PRESTRESSED CONCRETE DECK BEAM SUPERSTRUCTURE (continued)		
Code	Condition	Description
4	POOR	<p>Widespread moderate or isolated major defects; strength and/or performance of the component is affected.</p> <ul style="list-style-type: none"> Center half of span: Prestressed strands, stirrup reinforcement bars or wire mesh exposed for no more than $\frac{1}{3}$ the width of any beam bottom, spalling or delamination of the top of the beams down to the top reinforcement, one longitudinal crack in the bottom of any beam. End quarters of span: Prestressed strands, stirrup reinforcement bars or wire mesh exposed for no more than $\frac{1}{2}$ the width of any beam bottom, two longitudinal cracks in the bottom of any beam Beam ends (up to 3'): Prestressed strands, stirrup reinforcement bars or wire mesh exposed up to full width of adjacent beam bottom with no exposed strands in the second layer of strands and sound concrete above the bottom layer. Larger width of wire mesh exposed and actively corroding due to inadequate concrete cover occurring during manufacturing (up to $\frac{1}{2}$" cover) Keyway has failed with groups of beams acting independently of others.
3	SERIOUS	<p>Major defects; strength and/or performance of the component is seriously affected. Condition typically necessitates more frequent monitoring, load restrictions, and/or corrective actions.</p> <ul style="list-style-type: none"> Center half of span: Prestressing strands, stirrup reinforcement bars or wire mesh exposed for no more than $\frac{1}{2}$ the width of any beam bottom, two longitudinal cracks in the bottom of any beam, combinations of deterioration in condition rating "4". End quarters of span: Prestressing strands, stirrup reinforcement bars or wire mesh exposed for no more than $\frac{2}{3}$ the width of any beam bottom, combination of deterioration in condition rating "4". Beam ends (up to 3'): Prestressed strands, stirrup reinforcement bars or wire mesh exposed full width of adjacent beam bottom with exposed strands in the second layer of strands or unsound concrete above the bottom layer. Keyways have failed causing a group of 3 or 4 beams to act independently from others.

Specification Continued – Superstructure Condition Rating		
PRESTRESSED CONCRETE DECK BEAM SUPERSTRUCTURE (continued)		
Code	Condition	Description
2	CRITICAL	<p>Major defects; component is severely compromised. Condition typically necessitates frequent monitoring, significant load restrictions, and/or corrective actions in order to keep the bridge open.</p> <ul style="list-style-type: none"> • Similar to but more serious and extensive than what is described for a condition rating of "3". • Transverse cracks full width in the bottom of the beams. • Keyways have failed causing 1 or 2 beams to act independently from others. • Structural elements that are judged to be in critical condition must receive special inspections in order for the structure to remain open to traffic. • The Bureau of Bridges and Structures shall be notified immediately.
1	IMMINENT FAILURE	Bridge is closed to traffic due to component condition. Repair or rehabilitation may return the bridge to service.
0	FAILED	Bridge is closed due to component condition, and is beyond corrective action. Replacement is required to restore service.

Specification Continued – Superstructure Condition Rating		
PRESTRESSED CONCRETE I-BEAM SUPERSTRUCTURE		
		<p>Prestressing strands, reinforcement bars or wire mesh should be considered exposed in areas where the concrete appears to be deteriorated or is unsound (delaminated condition) to the level of the strands, bars or mesh. Strands adjacent to longitudinal cracks shall be interpreted as being exposed. Patches are considered delaminated. The dimensions stated below relate to the perimeter (as shown in the figure at left) of the bottom flange of the beams. The "end quarters of span" do not include the beam ends (up to 3').</p>
Code	Condition	Description
9	EXCELLENT	New superstructure with Isolated inherent defects.
8	VERY GOOD	Some inherent defects. <ul style="list-style-type: none"> No notable problems.
7	GOOD	Some minor defects. <ul style="list-style-type: none"> No beams with prestressing strands, stirrup reinforcement bars or wire mesh exposed. Minor shrinkage or release cracks may be present. Minor map cracking at drains with sound concrete.
6	SATISFACTORY	Widespread minor or isolated moderate defects. <ul style="list-style-type: none"> Center half of span: No beams with prestressing strands, stirrup reinforcement exposed. End quarters of span: No more than 2 strands or 3" of stirrup reinforcement bars exposed in the bottom of any beam. Beam ends (up to 3'): Prestressed strands or stirrup reinforcement bars exposed up to 1/2 the perimeter of the bottom flange of any beam. Larger width of stirrups may be exposed due to inadequate concrete cover occurring during manufacturing (up to 1/2" cover). Webs may be spalled with exposed stirrups and only surface rust.

Specification Continued – Superstructure Condition Rating		
PRESTRESSED CONCRETE I-BEAM SUPERSTRUCTURE (continued)		
Code	Condition	Description
5	FAIR	<p>Some moderate defects; strength and performance of the component are not affected.</p> <ul style="list-style-type: none"> Center half of span: Prestressed strands or stirrup reinforcement bars exposed for no more than $\frac{1}{4}$ the perimeter of the bottom flange of any beam. End quarters of span: Prestressed strands or stirrup reinforcement bars exposed for no more than $\frac{1}{3}$ the perimeter of the bottom flange of any beam. Beam ends (up to 3'): Prestressed strands or stirrup reinforcement bars exposed from $\frac{1}{2}$ to full perimeter of the bottom flange of any beam. Larger areas of stirrup may be exposed due to inadequate concrete cover that occurs during manufacturing (up to $\frac{1}{2}$" cover). Webs may be spalled with exposed stirrups minor section loss.
4	POOR	<p>Widespread moderate or isolated major defects; strength and/or performance of the component is affected.</p> <ul style="list-style-type: none"> Center half of span: Prestressed strands or stirrup reinforcement bars exposed for no more than $\frac{2}{3}$ the perimeter of the bottom flange of any beam. End quarters of span: Prestressed strands or stirrup reinforcement bars exposed up to full perimeter of the bottom flange of any beam. No strands are exposed inside the exterior perimeter of strands. Beam ends (up to 3'): Prestressed strands or stirrup reinforcement bars exposed full perimeter of the bottom flange of any beam with some strands exposed inside the exterior perimeter of strands. Webs are spalled with exposed stirrups with up to 30% section loss at ends of beams.
3	SERIOUS	<p>Major defects; strength and/or performance of the component is seriously affected. Condition typically necessitates more frequent monitoring, load restrictions, and/or corrective actions.</p> <ul style="list-style-type: none"> Center half of span: Prestressed strands or stirrup reinforcement bars exposed up to full perimeter of the bottom flange of any beam. No strands are exposed inside the exterior perimeter of strands. End quarters of span: Prestressing strands, stirrup reinforcement bars exposed for the full perimeter of the bottom flange of any beam with some strands exposed inside the exterior perimeter of strands. Hairline transverse cracks in bottom of beams or hairline vertical/diagonal shear cracks in beam webs may be developing.

Specification Continued – Superstructure Condition Rating		
PRESTRESSED CONCRETE I-BEAM SUPERSTRUCTURE (continued)		
Code	Condition	Description
2	CRITICAL	<p>Major defects; component is severely compromised. Condition typically necessitates frequent monitoring, significant load restrictions, and/or corrective actions in order to keep the bridge open.</p> <ul style="list-style-type: none"> • Similar to but more serious and extensive than what is described for a condition rating of "3" • Measurable shear or transverse cracks. • Structural elements that are judged to be in critical condition must receive special inspections in order for the structure to remain open to traffic. • The Bureau of Bridges and Structures shall be notified immediately.
1	IMMINENT FAILURE	Bridge is closed to traffic due to component condition. Repair or rehabilitation may return the bridge to service.
0	FAILED	Bridge is closed due to component condition and is beyond corrective action. Replacement is required to restore service.

Specification Continued – Superstructure Condition Rating		
TIMBER SUPERSTRUCTURE		
Code	Condition	Description
9	EXCELLENT	New superstructure with Isolated inherent defects.
8	VERY GOOD	Some inherent defects. <ul style="list-style-type: none"> • May have only very minor defects in beams or stringers at non-critical locations.
7	GOOD	Some minor defects. <ul style="list-style-type: none"> • Minor insignificant decay, cracking, or splitting of beams or stringers.
6	SATISFACTORY	Widespread minor or isolated moderate defects. <ul style="list-style-type: none"> • Some decay, cracking, or splitting of beams or stringers may be occurring near the main load carrying portions. • Fire damage limited to surface scorching with no significant section loss.
5	FAIR	Some moderate defects; strength and performance of the component are not affected. <ul style="list-style-type: none"> • Moderate decay up to 10%, cracking, or splitting of beams or stringers but no significant effect in critical areas such as beam ends and mid-span. • Fire damage limited to surface charring with minor section loss up to 10%.
4	POOR	Widespread moderate or isolated major defects; strength and/or performance of the component is affected. <ul style="list-style-type: none"> • Extensive decay, cracking, splitting or crushing of beams or stringers, or fire damage with main load carrying portions affected. • Section loss up to 30%.
3	SERIOUS	Major defects; strength and/or performance of the component is seriously affected. Condition typically necessitates more frequent monitoring, load restrictions, and/or corrective actions. <ul style="list-style-type: none"> • Severe decay, cracking, splitting or crushing of beams or stringers, or fire damage. • Major section loss up to 50% in critical load carrying portions of members. • A further progression of problems noted for a condition rating of "4".
2	CRITICAL	Major defects; component is severely compromised. Condition typically necessitates frequent monitoring, significant load restrictions, and/or corrective actions in order to keep the bridge open. <ul style="list-style-type: none"> • Beam ends may be crushed or split with settlement of deck. • Any further deterioration of problems noted for a condition rating of "3". • Section loss over 50%, special inspection is required to allow bridge to remain open. • The Bureau of Bridges and Structures shall be notified immediately.

Specification Continued – Superstructure Condition Rating		
TIMBER SUPERSTRUCTURE (continued)		
Code	Condition	Description
1	IMMINENT FAILURE	Bridge is closed to traffic due to component condition. Repair or rehabilitation may return the bridge to service.
0	FAILED	Bridge is closed due to component condition and is beyond corrective action. Replacement is required to restore service.

Commentary – Superstructure Condition Rating

This item represents the condition of the superstructure as determined from the inspection of all superstructure members.

Consider primary load carrying members when determining the condition rating code for this item, which includes cross-frames and diaphragms for curved girder bridges. Consider secondary members only if they adversely impact the primary members. Visual assessments may be supplemented with non-destructive or destructive testing results.

The superstructure includes:

- members above the bearings for bridges with non-integral superstructure and substructure;
- girders/beams for integral superstructures;
- members above the spring line for arch bridges;
- slabs of concrete rigid frame bridges; and
- legs, knees and girders for concrete and steel rigid K-Frame or Delta-Frame bridges.

Consider the condition of headwalls and spandrel walls that are integral with the superstructure. Consider the condition of wingwalls that are integral with the superstructure (continuation of the superstructure), to the first expansion joint.

Do not consider the condition of bearings when determining the condition rating code for this item except to the extent that the bearings are causing distress in the superstructure.

Do not consider the condition of protective coating systems when determining the condition rating code for this item except to the extent that problems with the protective coating system are indicative of problems with the underlying superstructure material. A well-formed patina on weathering steel is considered a protective coating and is not considered a defect.

Do not consider the presence of drift, debris, and soil accumulation when determining the condition rating code for this item, except to the extent that these items are causing distress in the superstructure.

Superstructure types without substructures may be affected by scour. When observed conditions are not consistent with the scour design or the assumptions used in the scour appraisal, scour is considered when reporting the code for this item. In this case, observed conditions also indicate a need to reevaluate Item B.AP.03 (Scour Vulnerability). Observed scour that is less than the tolerable limit determined in the scour appraisal does not affect this item.

For structures with integral decks/top flanges (e.g. rigid frames, decked girders or tee beams, voided slab beams, box girders, etc.), the deck condition may affect the superstructure condition rating; however, the superstructure condition does not affect the deck condition rating.

The deck and superstructure condition ratings are the same for slab bridges.

<i>Substructure Condition Rating</i>		
<u>Format</u> AN (1)	<u>Frequency</u> EI	<u>Item ID</u> B.C.03
Specification		
<p>Report the substructure component condition rating using one of the codes shown in tables below. Tables are grouped by Substructure Material.</p> <p>Report N when only C and/or V is reported for Item B.SP.01 (<i>Span Configuration Designation</i>).</p>		
Specification Continued – Substructure Condition Rating		
CONCRETE OR MASONRY SUBSTRUCTURE		
Code	Condition	Description
9	EXCELLENT	New with isolated inherent defects.
8	VERY GOOD	Some inherent defects. <ul style="list-style-type: none"> • No significant defects. • Shrinkage cracks, very light surface scaling, spalling or pop-outs which do not expose reinforcing steel. • Insignificant damage caused by drift or collision with no misalignment and no corrective action warranted.
7	GOOD	Some minor defects. <ul style="list-style-type: none"> • Minor cracking, spalls or scaling with few incidences of exposed reinforcement with only surface rust. • Minor scour may have occurred at the foundation.
6	SATISFACTORY	Widespread minor or isolated moderate defects. <ul style="list-style-type: none"> • Moderate deterioration or disintegration, spalls, cracking and leaching on concrete or masonry units. • Up to 2% section loss or loss of bearing area. • Shallow, local scour may have occurred near foundations with exposure of top of pile supported footings. • Less than 2' deep scour around pile bents. • No exposed piles.

5	FAIR	<p>Some moderate defects; strength and performance of the component are not affected.</p> <ul style="list-style-type: none">• Large portions of concrete or masonry units are spalled, scaled, or delaminated with exposed reinforcing steel.• Up to 10% section loss of concrete (horizontal cross section).• Up to 10% section loss of reinforcement steel.• Extensive map cracking with leaching.• Spread footings with no undermining on soil and up to 5% undermining on rock.• Less than 2' of exposed piles or seal coat below pile supported footings.• Less than 6' deep scour around pile bents.• Up to 10% section loss of bearing seats or piles.
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Specification Continued – Substructure Condition Rating		
CONCRETE OR MASONRY SUBSTRUCTURE (continued)		
Code	Condition	Description
4	POOR	<p>Widespread moderate or isolated major defects; strength and/or performance of the component is affected.</p> <ul style="list-style-type: none"> Active cracks in concrete and masonry units that indicate a reduction in the substructure unit's capacity to support the superstructure loads. Up to 30% section loss of bearing seat(s) or pile(s). Up to 30% section loss of concrete (horizontal cross section). Up to 30% section loss of reinforcement steel. Undermining of spread footing which may affect the stability of the unit but no significant settlement has yet occurred. Worse condition or combination of deterioration stated in condition rating "5". If the rating of this item is due to scour, the rating for Item B.AP.03 (<i>Scour Vulnerability</i>) shall be re-evaluated.
3	SERIOUS	<p>Major defects; strength and/or performance of the component is seriously affected. Condition typically necessitates more frequent monitoring, load restrictions, and/or corrective actions.</p> <ul style="list-style-type: none"> Section losses up to 50%. Severe scour or undermining of footings affecting the stability of the unit with some settlement of the substructure. If the rating of this item is due to scour, the rating for Item B.AP.03 (<i>Scour Vulnerability</i>) shall be re-evaluated.
2	CRITICAL	<p>Major defects; component is severely compromised. Condition typically necessitates frequent monitoring, significant load restrictions, and/or corrective actions in order to keep the bridge open.</p> <ul style="list-style-type: none"> Conditions worse than a condition rating of "3". Section loss greater than 50%. Measurable lateral or vertical movement. Unstable structures. Special inspection is required to allow bridge to remain open. If the rating of this item is due to scour, the rating for Item B.AP.03 (<i>Scour Vulnerability</i>) shall be re-evaluated. The Bureau of Bridges and Structures shall be notified immediately.
1	IMMINENT FAILURE	<p>Bridge is closed to traffic due to component condition. Repair or rehabilitation may return the bridge to service.</p>
0	FAILED	<p>Bridge is closed due to component condition, and is beyond corrective action. Replacement is required to restore service.</p>

Specification Continued – Substructure Condition Rating		
STEEL SUBSTRUCTURE		
Code	Condition	Description
9	EXCELLENT	New with isolated inherent defects.
8	VERY GOOD	Some inherent defects. <ul style="list-style-type: none"> No significant defects, very minor damage caused by drift or collision with no misalignment.
7	GOOD	Some minor defects. <ul style="list-style-type: none"> Some light surface rust. Minor scour may have occurred.
6	SATISFACTORY	Widespread minor or isolated moderate defects. <ul style="list-style-type: none"> Up to 2% loss of steel section due to rust pitting may have occurred, but no effect on structural integrity of the substructure unit. Shallow, local scour may have occurred at foundation with exposure of top of pile caps. No exposed piles.
5	FAIR	Some moderate defects; strength and performance of the component are not affected. <ul style="list-style-type: none"> Corrosion has caused moderate section loss up to 10% but overall ability of substructure to support the structure is unaffected. Cracks may be present in non-critical areas, fatigue cracks in primary members have been arrested. Spread footings exposed with no undermining on soil and up to 5% undermining on rock. Less than 2' of piles or seal coat exposed below pile supported footings. Less than 6' deep scour around piles with pile caps installed above the ground. No misalignment or settlement noted.
4	POOR	Widespread moderate or isolated major defects; strength and/or performance of the component is affected. <ul style="list-style-type: none"> Section loss up to 30% in critical areas of main steel members. Localized buckling or cracks may be present in critical areas of primary members. Undermining of spread footing which may be affecting the stability of the unit but no significant settlement has yet occurred. Worse condition or combination of deterioration stated in condition rating "5". If the rating of this item is due to scour, the rating for Item B.AP.03 (<i>Scour Vulnerability</i>) shall be re-evaluated.

Specification Continued – Substructure Condition Rating		
STEEL SUBSTRUCTURE (continued)		
Code	Condition	Description
3	SERIOUS	<p>Major defects; strength and/or performance of the component is seriously affected. Condition typically necessitates more frequent monitoring, load restrictions, and/or corrective actions.</p> <ul style="list-style-type: none"> • Section losses up to 50%. • Severe scour or undermining of footings affecting the stability of the unit with some settlement of the substructure. • If the rating of this item is due to scour, the rating for Item B.AP.03 (<i>Scour Vulnerability</i>) shall be re-evaluated.
2	CRITICAL	<p>Major defects; component is severely compromised. Condition typically necessitates frequent monitoring, significant load restrictions, and/or corrective actions in order to keep the bridge open.</p> <ul style="list-style-type: none"> • Conditions worse than a condition rating of "3". • Section loss greater than 50%. • Measurable lateral or vertical movement. • Unstable structures. • Special inspection is required to allow bridge to remain open. • If the rating of this item is due to scour, the rating for Item B.AP.03 (<i>Scour Vulnerability</i>) shall be re-evaluated. • The Bureau of Bridges and Structures shall be notified immediately.
1	IMMINENT FAILURE	Bridge is closed to traffic due to component condition. Repair or rehabilitation may return the bridge to service.
0	FAILED	Bridge is closed due to component condition and is beyond corrective action. Replacement is required to restore service.

Specification Continued – Substructure Condition Rating		
TIMBER SUBSTRUCTURE		
Code	Condition	Description
9	EXCELLENT	New with isolated inherent defects.
8	VERY GOOD	Some inherent defects. <ul style="list-style-type: none"> No significant defects, insignificant damage caused by drift or collision, scour is insignificant.
7	GOOD	Some minor defects. <ul style="list-style-type: none"> Insignificant decay, cracking or splitting of timber, minor scour may have occurred.
6	SATISFACTORY	Widespread minor or isolated moderate defects. <ul style="list-style-type: none"> Surface decay, cracking, splitting of timber, fire damage limited to surface scorching of timber. Up to 2% section loss. Shallow, local scour may have occurred near foundations. No exposed piles.
5	FAIR	Some moderate defects; strength and performance of the component are not affected. <ul style="list-style-type: none"> Minor decay, cracking or splitting of timber A few secondary members may need replacement but primary members are performing their function as designed with section loss up to 10% Fire damage limited to surface charring of timber with minor section loss up to 10% Spread footings exposed with no undermining on soil and up to 5% undermining on rock. Less than 2' of piles or seal coat exposed below pile supported footings. Less than 6' deep scour around pile bents with pile caps installed above the ground. No misalignment or settlement noted.
4	POOR	Widespread moderate or isolated major defects; strength and/or performance of the component is affected. <ul style="list-style-type: none"> Serious decay, cracking, splitting or crushing of primary timber with section loss up to 30%. Fire damage with section loss up to 30% that has reduced the load carrying capacity of the substructure. Exposure of timber piles greater than 2' as a result of erosion, reducing the penetration. Undermining of spread footing which may be affecting the stability of the unit but no significant settlement has yet occurred. Worsening of condition or combination of deterioration stated in condition rating "5". If the rating of this item is due to scour, the rating for Item B.AP.03 (<i>Scour Vulnerability</i>) shall be re-evaluated.

Specification Continued – Substructure Condition Rating		
TIMBER SUBSTRUCTURE (continued)		
Code	Condition	Description
3	SERIOUS	<p>Major defects; strength and/or performance of the component is seriously affected. Condition typically necessitates more frequent monitoring, load restrictions, and/or corrective actions.</p> <ul style="list-style-type: none"> • Section losses up to 50%. • Severe scour or undermining of footings affecting the stability of the unit with some settlement of the substructure. • If the rating of this item is due to scour, the rating for Item B.AP.03 (<i>Scour Vulnerability</i>) shall be re-evaluated.
2	CRITICAL	<p>Major defects; component is severely compromised. Condition typically necessitates frequent monitoring, significant load restrictions, and/or corrective actions in order to keep the bridge open.</p> <ul style="list-style-type: none"> • Conditions worse than a condition rating of "3". • Section loss greater than 50%. • Measurable lateral or vertical movement. • Unstable structures. • Special inspection is required to allow bridge to remain open. • If the rating of this item is due to scour, the rating for Item B.AP.03 (<i>Scour Vulnerability</i>) shall be re-evaluated. • The Bureau of Bridges and Structures shall be notified immediately.
1	IMMINENT FAILURE	Bridge is closed to traffic due to component condition. Repair or rehabilitation may return the bridge to service.
0	FAILED	Bridge is closed due to component condition, and is beyond corrective action. Replacement is required to restore service.

Commentary – Substructure Condition Rating

This item addresses the condition of piers, abutments, piles, footings, and other substructure members.

For bridges that have substructures not visible for inspection, use appropriate visual condition indicators from the superstructure or surrounding foundation materials to determine the applicable code. Visual assessments may be supplemented with non-destructive or destructive testing results.

Consider the condition of integral abutment wingwalls to the first construction or expansion joint when determining the condition rating code for this item.

Do not consider the condition of protective coatings, fenders and other substructure protection systems when determining the condition rating code for this item, except to the extent that these items indicate distress of the substructure, or adversely affect its condition.

Do not consider the presence of drift, debris, and soil accumulation when determining the condition rating code for this item, except to the extent that these items are causing distress in the substructure.

The substructure includes:

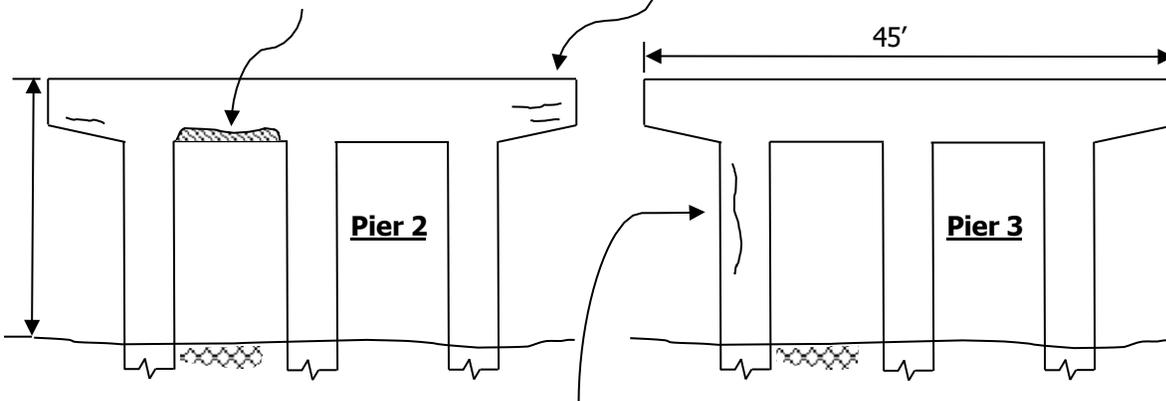
- backwalls and the members below the bearings for bridges with non-integral superstructure and substructure;
- members below the girders/beams for integral superstructures;
- thrust blocks and other members below the spring line for arch bridges;
- legs of concrete rigid frame bridges;
- abutments and footings/foundations below the leg bearings for concrete and steel rigid K-Frame or Delta-Frame bridges; and
- foundation piles exposed by erosion or scour.

When observed conditions are not consistent with the scour design or the assumptions used in the scour appraisal, scour is considered in the coding of this item. In this case, observed conditions also indicate a need to reevaluate Item B.AP.03 (*Scour Vulnerability*). Observed scour that is less than the tolerable limit determined in the scour appraisal does not affect this item.

Example – Substructure Condition Rating

Four span prestressed concrete bridge with reinforced concrete abutments and piers. No defects at the abutments or at Pier 1. The following defects are noted at the other piers:

Location 1: Spall 12' long x 2" deep with exposed rebar and rust staining (*Figure 138*). **Location 2:** Cracks 3' long x 0.04" wide with rust staining, both cantilevers.



Location 3: Previously noted crack 11' long x 3/16" wide (*Figure 139*). Structural review determined that crack does not affect strength or performance.

Figure 137. Elevation view of two concrete column piers showing substructure defect locations.



Figure 138. Spall in Pier 2 cap beam. Location 1.



Figure 139. Crack in Pier 3 column. Location 3.

Summary of Findings:

Location	Defect(s)	Severity	Extent
1	Spall with exposed rebar; rust staining	Moderate	12' of one cap beam (isolated)
2	Cracking with rust staining	Moderate	6' of one cap beam (isolated)
3	Cracking	Moderate	11' crack in one column (isolated)

Results: There are several areas of isolated moderate defects that can best be characterized together as "some moderate defects." Strength and performance of the component are not affected. Report 5.

<i>Culvert Condition Rating</i>		
<u>Format</u> AN (1)	<u>Frequency</u> EI	<u>Item ID</u> B.C.04
Specification		
<p>Report the culvert component condition rating using one of the codes in below the commentary.</p> <p>Report N when C or V is not reported for Item B.SP.01 (<i>Span Configuration Designation</i>).</p>		
Commentary Continued		
<p>This item addresses the condition of culverts. The condition assessment includes footings, piles, and other foundation members when present.</p> <p>For culverts that have components not visible for inspection, use appropriate visual condition indicators from the roadway or surrounding foundation materials to determine the applicable code. Visual assessments may be supplemented with non-destructive or destructive testing results.</p> <p>Consider the condition of integral wingwalls and headwalls to the first construction or expansion joint when determining the condition rating code for this item.</p> <p>Do not consider the condition of protective coatings and other culvert protection systems when determining the condition rating code for this item, except to the extent that these items indicate distress of the culvert, or adversely affect its condition.</p> <p>Do not consider the presence of drift, debris, and soil accumulation when determining the condition rating code for this item, except to the extent that these items are causing distress in the culvert.</p> <p>The culvert includes:</p> <ul style="list-style-type: none"> • buried pipe or box; • footings below the walls of a 3-sided box; and • foundation piles exposed by erosion or scour. <p>When observed conditions are not consistent with the scour design or the assumptions used in the scour appraisal, scour is considered in the coding of this item. In this case, observed conditions also indicate a need to reevaluate Item B.AP.03 (<i>Scour Vulnerability</i>). Observed scour that is less than the tolerable limit determined in the scour appraisal does not affect this item.</p>		

Example – Culvert Condition Rating

Three-span corrugated metal pipe culvert. Each pipe is 8' in diameter and 100' long. The pipes are spaced 4' apart. The following defects are noted.

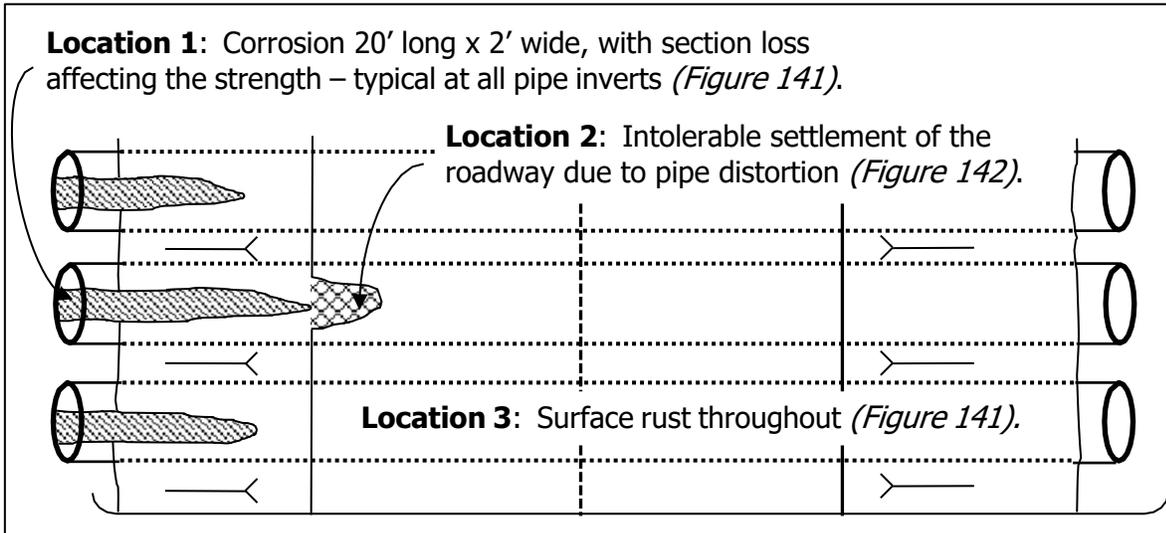


Figure 140. Plan view of pipe culvert showing defects.



Figure 141. Corroded pipe culvert invert. Location 1 and 3. (Source: Alaska DOT)



Figure 142. Roadway settlement over pipe culvert. Location 2. (Source: Alaska DOT)

Example Continued – Culvert Condition Rating

Summary of Findings:

Location	Defect(s)	Severity	Extent
1	Corrosion with section loss	Major	20% of total barrel length (some)
2	Distortion	Major	Isolated
3	Corrosion	Minor	Throughout (widespread)

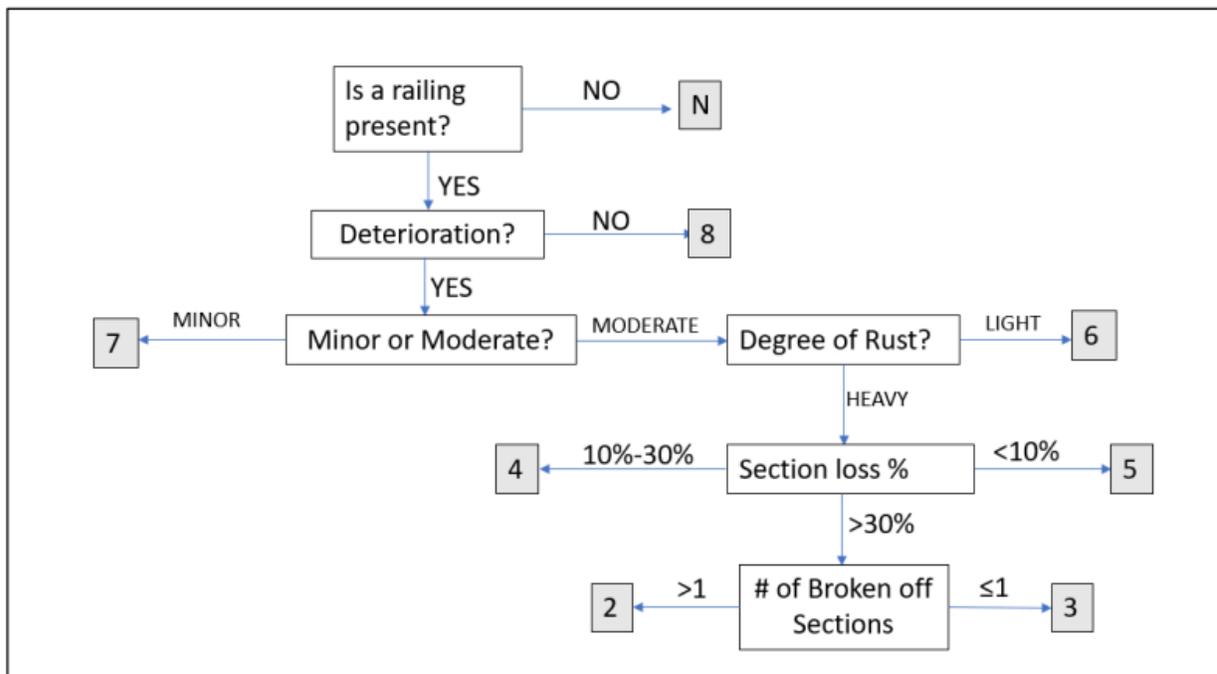
Results: The culvert has major defects that, together, seriously affect strength and performance. The condition necessitates more frequent monitoring or corrective actions. Report 3.

<i>Bridge Railings Condition Rating</i>		
<u>Format</u> AN (1)	<u>Frequency</u> EI	<u>Item ID</u> B.C.05
Specification		
<p>Report the bridge railing condition rating using one of the codes below.</p> <p>Report N when there are no bridge railings present.</p> <p>For a Poor (4) Condition Rating, a railing should exhibit "Widespread moderate or isolated major defects". Previously, this stated that a railing in Poor (4) condition would exhibit "Widespread moderate and isolated major defects". This revision applies for Steel, Concrete, and Timber Railing Material Types.</p> <p>CONDITION RATING GUIDES FOR CODES N, 9, 1, AND 0</p> <p>FOR ALL RAILING MATERIAL TYPES</p> <p>N – Not applicable</p> <p>9 – Excellent – New railing. (first inspection after installation)</p> <p>1 – Imminent Failure – Railing in "imminent failure" condition / more than 50% ineffective</p> <p>0 – Failed – Railing failed / crash impacted / non-functional; replacement railing is needed as soon as possible. Signage required.</p>		

CONDITION RATING GUIDES FOR SPECIFIC RAILING MATERIALS

STEEL

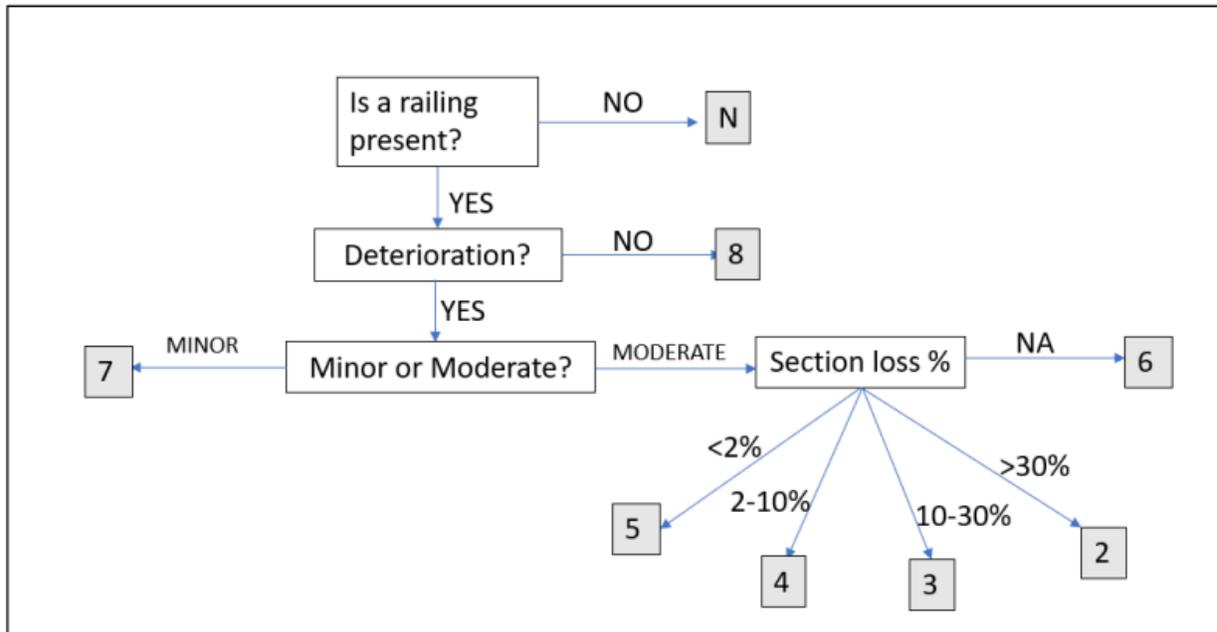
8	VERY GOOD	Some inherent defects. No deficiencies.
7	GOOD	Some minor defects. Minor dents, scratches, and gouges.
6	SATISFACTORY	Widespread minor or isolated moderate defects. Light rust. No missing connections or loose fasteners.
5	FAIR	Some moderate defects; strength and performance of the railing is not affected. Heavy rusting with up to 10% section loss. Isolated missing fasteners.
4	POOR	Widespread moderate or isolated major defects; strength and/ or performance of the railing is affected. Heavy rusting with up to 30% section loss. Some missing fasteners. Major dents, gouges, and misalignment.
3	SERIOUS	Major defects; strength and/ or performance of the railing is seriously affected. > 30% section loss. 1 section is broken off. Widespread missing fasteners. Crash worthiness evaluation warranted.
2	CRITICAL	Major defects; railing is severely compromised. > 30% section loss. > 1 section is broken off. Widespread missing fasteners. Crash worthiness evaluation warranted.



CONDITION RATING GUIDES FOR SPECIFIC RAILING MATERIALS

CONCRETE

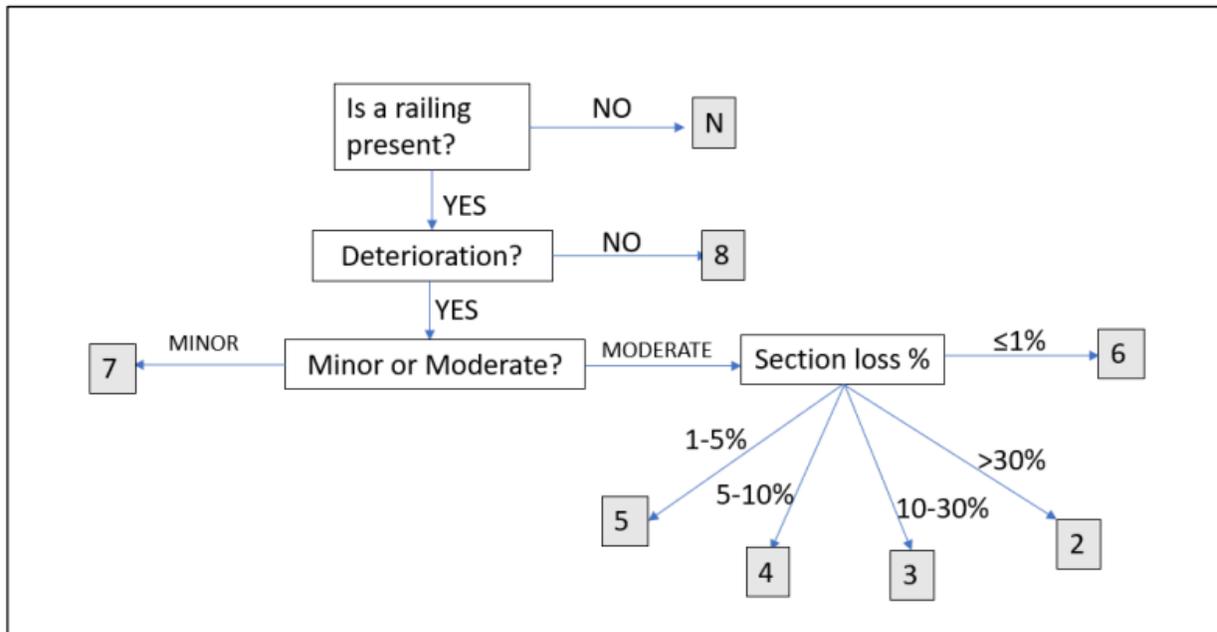
8	VERY GOOD	Some inherent defects. No deficiencies.
7	GOOD	Some minor defects. Vertical cracking present. Minor popouts with no exposed reinforcement.
6	SATISFACTORY	Widespread minor or isolated moderate defects. No section loss. Some delaminated areas.
5	FAIR	Some moderate defects; strength and performance of the railing is not affected. Delaminated and spalled with exposed reinforcement area up to 2%. Patched area that is sound. Spall 1 in. or less deep or 6 in. or less in diameter.
4	POOR	Widespread moderate or isolated major defects; strength and/ or performance of the railing is affected. Delaminated and spalled with exposed reinforcement area up to 10%. Spall 1 in. or less deep or 6 in. or less in diameter. Patched area that is unsound.
3	SERIOUS	Major defects; strength and/ or performance of the railing is seriously affected. Delaminated and spalled with exposed reinforcement area up to 30%. Spall >1 in. deep or > 6 in. in diameter. Patched area that is unsound. Crash worthiness evaluation warranted.
2	CRITICAL	Major defects; railing is severely compromised. Delaminated and spalled with exposed reinforcement area >30%. Spall >1 in. deep or > 6 in. in diameter. Patched area that is unsound. Crash worthiness evaluation warranted.



CONDITION RATING GUIDES FOR SPECIFIC RAILING MATERIALS

TIMBER

8	VERY GOOD	Some inherent defects. No deficiencies
7	GOOD	Some minor defects. Minor checks, shakes, and splits.
6	SATISFACTORY	Widespread minor or isolated moderate defects. Isolated decay/Section loss up to 1%. No missing connections or loose fasteners. Fire damage limited to scorching of surface.
5	FAIR	Some moderate defects; strength and performance of the railing is not affected. Decay/Section Loss up to 5%. Isolated missing fasteners. Fire damage limited to charring of surface.
4	POOR	Widespread moderate or isolated major defects; strength and/ or performance of the railing is affected. Decay/Section Loss up to 10%. Some missing fasteners. Major checks, shakes, and splits.
3	SERIOUS	Major defects; strength and/ or performance of the railing is seriously affected. Decay/section loss up to 30%. Widespread missing fasteners. Crash worthiness evaluation warranted.
2	CRITICAL	Major defects; railing is severely compromised. > 30% section loss. Widespread missing fasteners. Crash worthiness evaluation warranted.



Commentary
<p>This item addresses the condition of all types and shapes of bridge railings (parapets, median barriers, or structure mounted) located on the bridge or that cross over located on the bridge or that cross over buried structures. The condition assessment includes the portions of the railings, posts, blocking, and curbs that are part of the bridge railing system.</p> <p>Do not consider pedestrian railings when coding this item, except to the extent that the pedestrian railing is integral to the traffic barrier.</p> <p>Do not consider the condition of protective coatings and other protection systems when determining the condition rating code for this item, except to the extent that problems with the protective coating system are indicative of problems with the underlying railing material. History is retained for this item based on each Inspection Date (Item 90 B.IE.03).</p>
Example – B
<p>Steel W-beam bridge railing on both sides of a 300' long bridge. The following defect is noted:</p> <p>Description: Damage-induced distortion of the rail for a length of 25'. Three posts are no longer connected to the deck. No other defects.</p> <div style="display: flex; align-items: flex-start; margin-top: 20px;"> <div style="flex: 1;">  </div> <div style="flex: 1; padding-left: 20px;"> <p>Defect: Distortion Severity: Major Extent: 25' of the railing (isolated)</p> </div> </div> <p>Figure 143. Collision-induced distortion of bridge railing.</p> <p>Results: The railing is best characterized as having "isolated major defects." Report 4.</p>

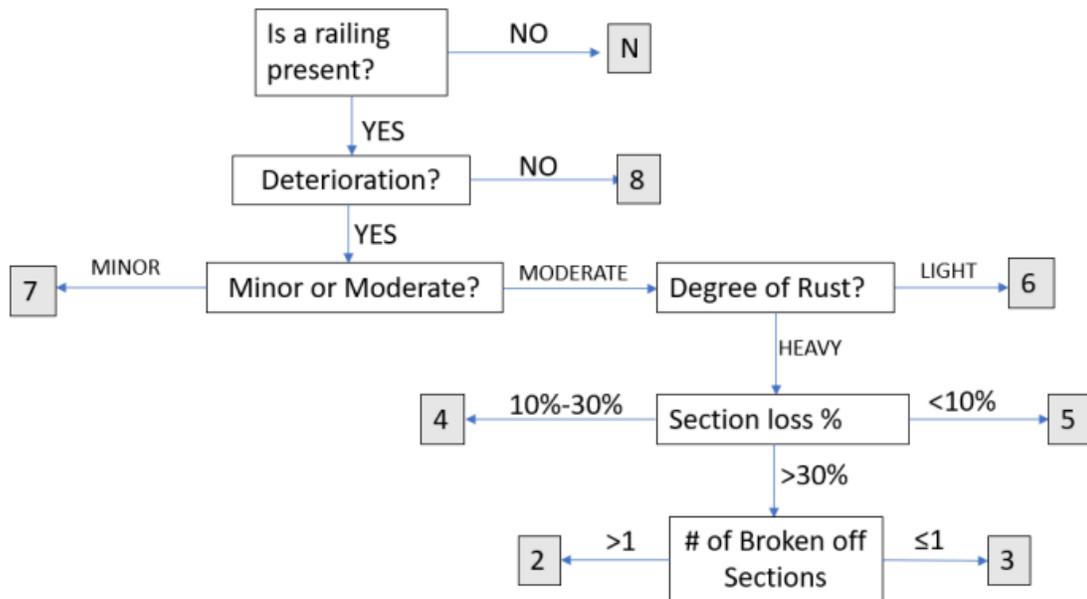


<i>Bridge Railing Transitions Condition Rating</i>		
<u>Format</u> AN (1)	<u>Frequency</u> EI	<u>Item ID</u> B.C.06
Specification		
<p>Report the bridge railing transitions condition rating using one of the codes below.</p> <p>Report N when there are no bridge railing transitions present.</p> <p>For a Poor (4) Condition Rating, a railing transition should exhibit "Widespread moderate or isolated major defects". Previously, this stated that a railing transition in Poor (4) condition would exhibit "Widespread moderate and isolated major defects". This revision applies for Steel, Concrete, and Timber Railing Material Types.</p> <p>CONDITION RATING GUIDES FOR CODES N, 9, 1, AND 0</p> <p>FOR ALL RAILING MATERIAL TYPES</p> <p>N – Not applicable – No bridge railing transitions required or present. 9 – Excellent – New railing transition. (first inspection after installation) 1 – Imminent Failure – Railing transition in "imminent failure" condition / more than 50% ineffective 0 – Failed – Railing transition failed / crash impacted / non-functional; replacement railing transition is needed.</p>		

CONDITION RATING GUIDES FOR SPECIFIC RAILING MATERIALS

STEEL

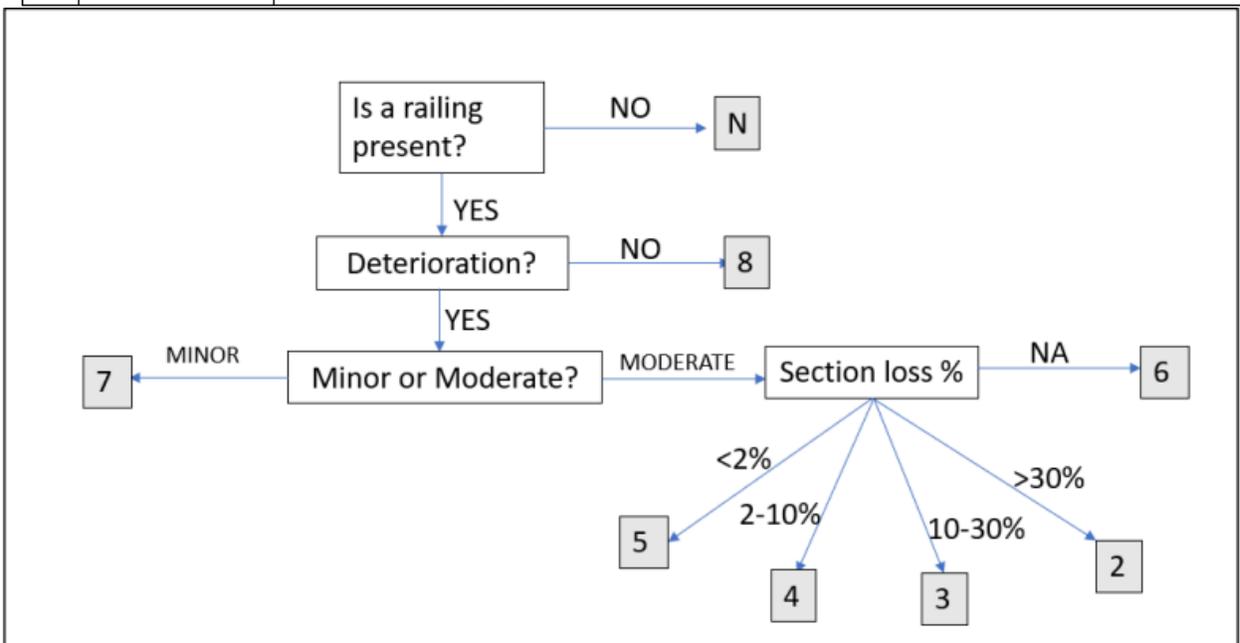
8	VERY GOOD	Some inherent defects. No deficiencies.
7	GOOD	Some minor defects. Minor dents, scratches, and gouges.
6	SATISFACTORY	Widespread minor or isolated moderate defects. Light rust. No missing connections or loose fasteners.
5	FAIR	Some moderate defects; strength and performance of the railing is not affected. Heavy rusting with up to 10% section loss. Isolated missing fasteners.
4	POOR	Widespread moderate or isolated major defects; strength and/ or performance of the railing is affected. Heavy rusting with up to 30% section loss. Some missing fasteners. Major dents, gouges, and misalignment.
3	SERIOUS	Major defects; strength and/ or performance of the railing is seriously affected. > 30% section loss. 1 section is broken off. Widespread missing fasteners. Crash worthiness evaluation warranted.
2	CRITICAL	Major defects; railing is severely compromised. > 30% section loss. > 1 section is broken off. Widespread missing fasteners. Crash worthiness evaluation warranted.



CONDITION RATING GUIDES FOR SPECIFIC RAILING MATERIALS

CONCRETE

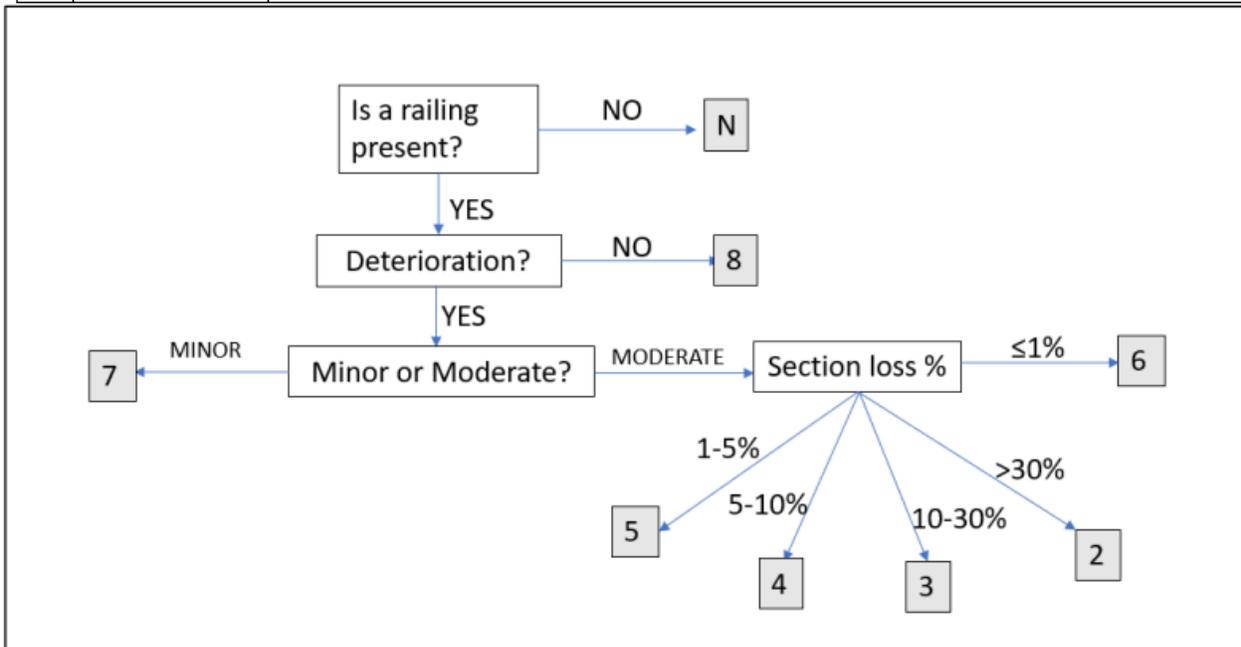
8	VERY GOOD	Some inherent defects. No deficiencies.
7	GOOD	Some minor defects. Vertical cracking present. Minor popouts with no exposed reinforcement.
6	SATISFACTORY	Widespread minor or isolated moderate defects. No section loss. Some delaminated areas.
5	FAIR	Some moderate defects; strength and performance of the railing is not affected. Delaminated and spalled with exposed reinforcement area up to 2%. Patched area that is sound. Spall 1 in. or less deep or 6 in. or less in diameter.
4	POOR	Widespread moderate or isolated major defects; strength and/ or performance of the railing is affected. Delaminated and spalled with exposed reinforcement area up to 10%. Spall 1 in. or less deep or 6 in. or less in diameter. Patched area that is unsound.
3	SERIOUS	Major defects; strength and/ or performance of the railing is seriously affected. Delaminated and spalled with exposed reinforcement area up to 30%. Spall >1 in. deep or > 6 in. in diameter. Patched area that is unsound. Crash worthiness evaluation warranted.
2	CRITICAL	Major defects; railing is severely compromised. Delaminated and spalled with exposed reinforcement area >30%. Spall >1 in. deep or > 6 in. in diameter. Patched area that is unsound. Crash worthiness evaluation warranted.



CONDITION RATING GUIDES FOR SPECIFIC RAILING MATERIALS

TIMBER

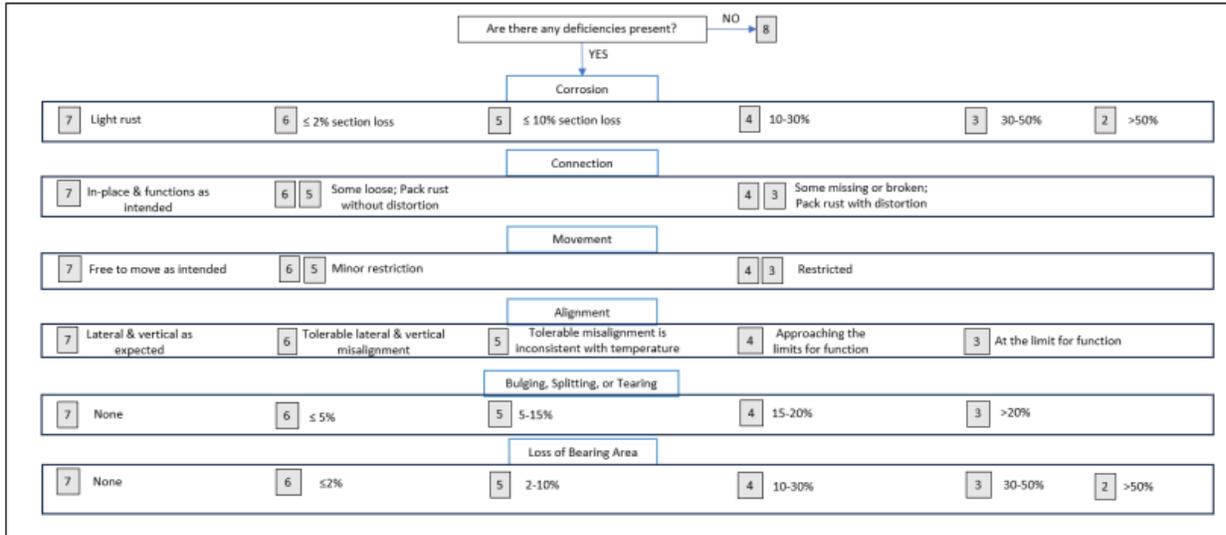
8	VERY GOOD	Some inherent defects. No deficiencies
7	GOOD	Some minor defects. Minor checks, shakes, and splits.
6	SATISFACTORY	Widespread minor or isolated moderate defects. Isolated decay/Section loss up to 1%. No missing connections or loose fasteners. Fire damage limited to scorching of surface.
5	FAIR	Some moderate defects; strength and performance of the railing is not affected. Decay/Section Loss up to 5%. Isolated missing fasteners. Fire damage limited to charring of surface.
4	POOR	Widespread moderate or isolated major defects; strength and/ or performance of the railing is affected. Decay/Section Loss up to 10%. Some missing fasteners. Major checks, shakes, and splits.
3	SERIOUS	Major defects; strength and/ or performance of the railing is seriously affected. Decay/section loss up to 30%. Widespread missing fasteners. Crash worthiness evaluation warranted.
2	CRITICAL	Major defects; railing is severely compromised. > 30% section loss. Widespread missing fasteners. Crash worthiness evaluation warranted.



Commentary
<p>This item addresses the condition of the transition from the bridge railing to the approach guardrail. The condition assessment includes the portions of the railings, posts, blocking, and curbs that are part of the bridge railing transitions.</p> <p>Do not consider the condition of protective coatings and other protection systems when determining the condition rating code for this item, except to the extent that problems with the protective coating system are indicative of problems with the underlying railing transition material. The approach guardrail must be firmly attached to the bridge railing and gradually stiffened as it nears the bridge railing. History is retained for this item based on each Inspection Date (Item 90 B.IE.03).</p>

<i>Bridge Bearings Condition Rating</i>																										
<u>Format</u> AN (1)	<u>Frequency</u> EI	<u>Item ID</u> B.C.07																								
Specification																										
<p>Report the bridge bearing condition rating using one of the codes in the below the commentary.</p> <p>Report N for bridges without bearings.</p> <p style="text-align: center;">CONDITION RATING GUIDES FOR ALL BEARINGS (Elastomeric, Fixed, Movable, Enclosed/Concealed, Pot, Disk, Other)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">N</td> <td style="text-align: center;">NOT APPLICABLE</td> <td>Component does not exist. No bearings present</td> </tr> <tr> <td style="text-align: center;">9</td> <td style="text-align: center;">EXCELLENT</td> <td>Isolated inherent defects New bearing. (first inspection after installation)</td> </tr> <tr> <td style="text-align: center;">8</td> <td style="text-align: center;">VERY GOOD</td> <td>Some inherent defects.</td> </tr> <tr> <td style="text-align: center;">7</td> <td style="text-align: center;">GOOD</td> <td>Some minor defects. Corrosion: light rust. Connections: in place and functioning as intended. Movement: free to move as intended. Alignment: lateral and vertical as expected for temperature conditions. Elastomer: no bulging or splitting. Bearing area loss: none.</td> </tr> <tr> <td style="text-align: center;">6</td> <td style="text-align: center;">SATISFACTORY</td> <td>Widespread minor or isolated moderate defects. Corrosion: Up to 2% section loss. Connections: some loose; pack rust without distortion; still functioning. Movement: minor restriction Alignment: tolerable lateral or vertical misalignment. Elastomer: bulging up to 5% or minor splitting. Bearing area loss: Up to 2%.</td> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">FAIR</td> <td>Some moderate defects; strength and performance of the component are not affected. Corrosion: Up to 10% section loss. Connections: some loose; pack rust without distortion; still functioning. Movement: minor restriction. Alignment: tolerable misalignment is inconsistent with temperature. Elastomer: bulging up to 15% or minor splitting. Bearing area loss: Up to 10%.</td> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">POOR</td> <td>Widespread moderate or isolated major defects; strength and/or performance is affected. Defects do not warrant structural review. Corrosion: Up to 30% section loss. Connections: some missing or broken; pack rust with distortion. Movement: restricted. Alignment: Approaching the lateral or vertical limits for function. Elastomer: bulging up to 20%; splitting or tearing; surfaces not parallel. Bearing area loss: Up to 30%.</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">SERIOUS</td> <td>Major defects; strength and/or performance is seriously affected. Defects may warrant structural review. Corrosion: Up to 50% section loss Connections: missing or pack rust with distortion Movement: restricted Alignment: at the limit for function. Elastomer: bulging > 20%; splitting or tearing; surfaces not parallel. Bearing area loss: Up to 50%</td> </tr> </table>			N	NOT APPLICABLE	Component does not exist. No bearings present	9	EXCELLENT	Isolated inherent defects New bearing. (first inspection after installation)	8	VERY GOOD	Some inherent defects.	7	GOOD	Some minor defects. Corrosion: light rust. Connections: in place and functioning as intended. Movement: free to move as intended. Alignment: lateral and vertical as expected for temperature conditions. Elastomer: no bulging or splitting. Bearing area loss: none.	6	SATISFACTORY	Widespread minor or isolated moderate defects. Corrosion: Up to 2% section loss. Connections: some loose; pack rust without distortion; still functioning. Movement: minor restriction Alignment: tolerable lateral or vertical misalignment. 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2	CRITICAL	Major defects; component is severely compromised. Corrosion: > 50% section loss Bearing area loss: > 50% Structural review is warranted.
1	IMMINENT FAILURE	Bridge is closed to traffic due to component condition. Bearing is in a state of imminent failure. Repair or rehabilitation of the bearings may return the bridge to service condition.
0	FAILED	Bridge is closed due to component condition and is beyond corrective action. Bearing has failed and replacement is required to restore service.



Commentary

This item addresses the condition of all types and shapes of bridge bearings. Do not consider the condition of protective coatings and other protection systems when determining the condition rating code for this item, except to the extent that problems with the protective coating system are indicative of problems with the underlying bearing material.

In cases where the bearing device is not visible, the condition can be assessed based on alignment, grade across the joint, or other indirect indicators of the condition.

Inspect bearings to verify proper functionality, tightened anchor bolt nuts surrounded by sound concrete, freedom of movement, acceptable vertical and lateral alignment, etc.

History is retained for this item based on each Inspection Date (Item 90 | B.IE.03).

The flow diagram for the bridge condition guide is intended for inspectors to assign a rating for each major defect category. From there, the inspector shall average those values and assign an overall rating.

Examples

Description: 5 of 25 bearings have 10% bearing area loss.



Defect: Loss of bearing area
Severity: Moderate
Extent: 20% of bearings (some)

Figure 144. Loss of bearing area for elastomeric bearing. (Source: Oregon DOT)

Results: The bearings are best characterized as having "some moderate defects." Report 5.

Examples Continued – Bridge Bearings Condition Rating

Description: 8 of 20 bearings are rotated beyond performance limits. The anchor bolts at these locations are bent and the nuts are loose. Surface rust is present on all bearings.



Defect: Alignment and connection
Severity: Major
Extent: 8 bearings (widespread)

Defect: Corrosion
Severity: Minor
Extent: All bearings

Figure 145. Misaligned rocker bearing. (Source: Alaska DOT)

Results: The bearings can best be characterized as having "major defects" affecting performance. Condition necessitates more frequent monitoring or corrective actions. Report 3.

Description: 20 of 20 bearings have surface rust with no section loss. Bearings are free to move and alignment is as expected for temperature conditions.



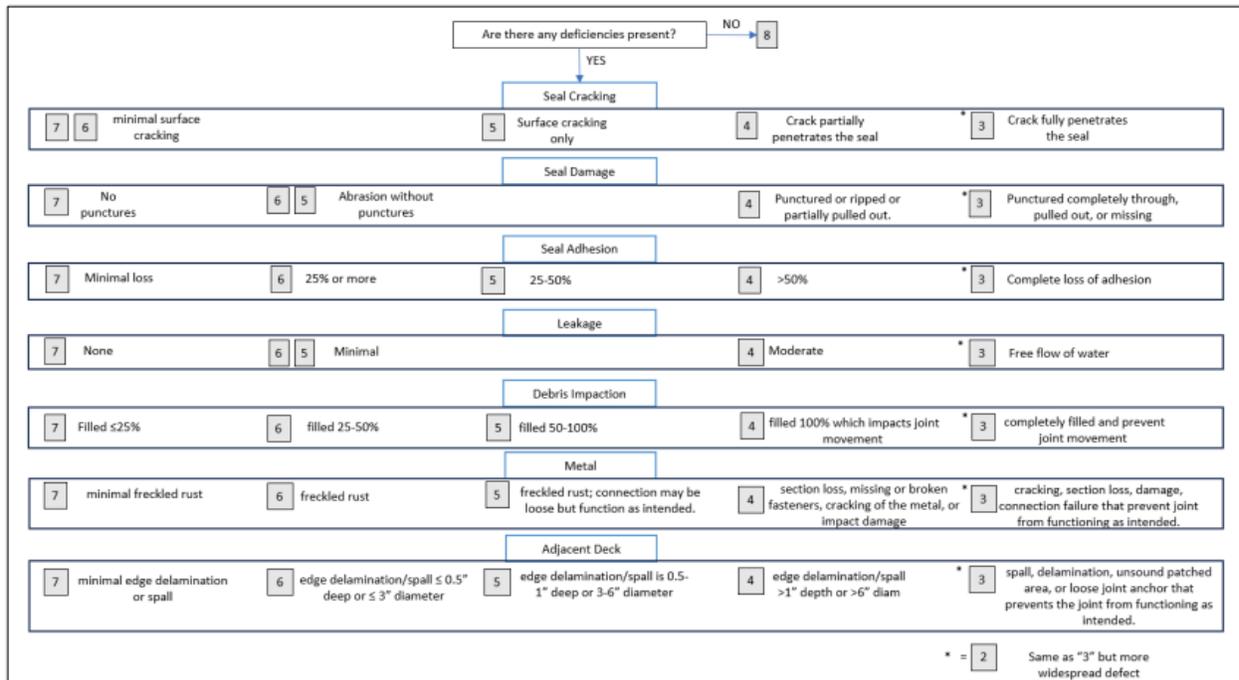
Defect: Corrosion
Severity: Minor
Extent: All bearings

Figure 146. Surface rust on moveable bearing.

Results: The bearings are best characterized as having "widespread minor defects." Report 6.

<i>Bridge Joints Condition Rating</i>																							
<u>Format</u> AN (1)	<u>Frequency</u> EI	<u>Item ID</u> B.C.08																					
Specification																							
<p>Report the bridge deck joint condition using one of the following codes. The entire code description must be satisfied for the code to apply.</p> <p style="text-align: center;">CONDITION RATING GUIDES FOR JOINTS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 5%; text-align: center;">N</td> <td style="width: 20%;">NOT APPLICABLE</td> <td>Component does not exist. Bridge does not have deck joints</td> </tr> <tr> <td style="text-align: center;">9</td> <td>EXCELLENT</td> <td>Isolated inherent defects. New joints. (first inspection after installation)</td> </tr> <tr> <td style="text-align: center;">8</td> <td>VERY GOOD</td> <td>Some inherent defects. Leakage: none. Seal adhesion: fully adhered. Seal damage: none. Seal cracking: none. Debris impaction: no debris. Adjacent deck: sound. Metal: no deterioration or damage.</td> </tr> <tr> <td style="text-align: center;">7</td> <td>GOOD</td> <td>Some minor defects. Leakage: none. Seal adhesion: minimal loss of adhesion. Seal damage: no punctures. Seal cracking: minimal surface cracking. Debris impaction: filled up to 25%; loose-packed material; free movement. Adjacent deck: minimal edge delamination or spall; no patched areas. Metal: minimal freckled rust; no cracks or impact damage.</td> </tr> <tr> <td style="text-align: center;">6</td> <td>SATISFACTORY</td> <td>Widespread minor or isolated moderate defects. Leakage: minimal leakage is present. Minor dripping through the joint. Seal adhesion: adhesion loss up to 25% of the joint height. Seal damage: abrasion without punctures. Seal cracking: minimal surface cracking. Debris impaction: filled up to 50%; packed material; free movement. Adjacent deck: edge delamination/spall up to 0.5" deep or up to 3" diameter; no exposed rebar; no unsound patch. Metal: freckled rust; no cracks or impact damage.</td> </tr> <tr> <td style="text-align: center;">5</td> <td>FAIR</td> <td>Some moderate defects. Leakage: minimal; minor dripping through the joint. Seal adhesion: adhesion loss up to 50% of the joint height. Seal damage: abrasion without punctures. Seal cracking: surface cracking only. Debris impaction: filled up to 100%; hard-packed material; free movement. Adjacent Deck: edge delamination/spall up to 1" deep or up to 6" diameter; no exposed rebar; no unsound patch. Metal: freckled rust; no cracks or impact damage; connection may be loose but function as intended.</td> </tr> <tr> <td style="text-align: center;">4</td> <td>POOR</td> <td>Widespread moderate or isolated major defects. Leakage: moderate; more than a drip and less than free flow of water. Seal adhesion: adhesion loss > 50% of the joint height Seal damage: Punctured or ripped or partially pulled out. Seal cracking: crack partially penetrates the seal. Debris impaction: filled 100% which impacts joint movement.</td> </tr> </table>			N	NOT APPLICABLE	Component does not exist. Bridge does not have deck joints	9	EXCELLENT	Isolated inherent defects. New joints. (first inspection after installation)	8	VERY GOOD	Some inherent defects. Leakage: none. Seal adhesion: fully adhered. Seal damage: none. Seal cracking: none. Debris impaction: no debris. Adjacent deck: sound. Metal: no deterioration or damage.	7	GOOD	Some minor defects. Leakage: none. Seal adhesion: minimal loss of adhesion. Seal damage: no punctures. Seal cracking: minimal surface cracking. Debris impaction: filled up to 25%; loose-packed material; free movement. Adjacent deck: minimal edge delamination or spall; no patched areas. Metal: minimal freckled rust; no cracks or impact damage.	6	SATISFACTORY	Widespread minor or isolated moderate defects. Leakage: minimal leakage is present. Minor dripping through the joint. Seal adhesion: adhesion loss up to 25% of the joint height. Seal damage: abrasion without punctures. Seal cracking: minimal surface cracking. Debris impaction: filled up to 50%; packed material; free movement. Adjacent deck: edge delamination/spall up to 0.5" deep or up to 3" diameter; no exposed rebar; no unsound patch. Metal: freckled rust; no cracks or impact damage.	5	FAIR	Some moderate defects. Leakage: minimal; minor dripping through the joint. Seal adhesion: adhesion loss up to 50% of the joint height. Seal damage: abrasion without punctures. Seal cracking: surface cracking only. Debris impaction: filled up to 100%; hard-packed material; free movement. Adjacent Deck: edge delamination/spall up to 1" deep or up to 6" diameter; no exposed rebar; no unsound patch. Metal: freckled rust; no cracks or impact damage; connection may be loose but function as intended.	4	POOR	Widespread moderate or isolated major defects. Leakage: moderate; more than a drip and less than free flow of water. Seal adhesion: adhesion loss > 50% of the joint height Seal damage: Punctured or ripped or partially pulled out. Seal cracking: crack partially penetrates the seal. Debris impaction: filled 100% which impacts joint movement.
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		Adjacent deck: edge delamination/spall > 1" deep or > 6" diameter; exposed rebar; unsound patched area that makes the joint loose. Metal: section loss, missing or broken fasteners, cracking of the metal, or impact damage; but joint still functioning as intended.
3	SERIOUS	Some major defects. Leakage: free flow of water through the joint. Seal adhesion: complete loss of adhesion. Seal damage: punctured completely through, pulled out, or missing. Seal cracking: crack fully penetrates the seal. Debris impaction: completely filled and prevents joint movement Adjacent deck: spall, delamination, unsound patched area, or loose joint anchor that prevents the joint from functioning as intended. Metal: cracking, section loss, damage, connection failure that prevent joint from functioning as intended.
2	CRITICAL	Widespread major defects. Same defects as condition 3, but defects are widespread.
1	IMMINENT FAILURE	Bridge is closed to traffic due to component condition. Repair or rehabilitation of the joint may return the bridge to service.
0	FAILED	Bridge is closed due to component condition. Joint replacement is required as soon as possible to restore service. Signage required.



Commentary
<p>This item addresses the condition of all types and shapes of bridge deck joints. The condition assessment includes all aspects of the joints such as any seals, headers (metal or concrete), connections, and other metal members.</p> <p>When a joint is designed as an open joint, leakage or lack of a seal is not considered a defect.</p> <p>Do not consider the condition of protective coatings and other protection systems when determining the condition rating code for this item, except to the extent that problems with the protective coating system are indicative of problems with the underlying joint material.</p> <p>In cases where the joint is not visible, the condition can be assessed based on other indirect indicators of the condition.</p> <p>Joints shall be inspected for alignment, freedom for movement, deterioration, and damage not shown in previous inspections. The amount of dirt and debris accumulation shall be noted.</p> <p>History is retained for this item based on each Inspection Date (Item 90 B.IE.03).</p> <p>The flow diagram for the bridge condition guide is intended for inspectors to assign a rating for each major defect category. From there, the inspector shall average those values and assign an overall rating.</p>

Examples – Bridge Joints Condition Rating

Description: All compression seal joints are partially filled with debris but are still free to move. Seals are intact.



Defect: Debris impaction
 Severity: Minor
 Extent: All joints (widespread)

Figure 147. Joint partially filled with debris.

Results: The joints are best characterized as having "widespread minor defects." Report 6.

Description: Strip seal joint 44' long at each end of a bridge. 3" deep x 12" wide x 6' long spall with exposed rebar in deck adjacent to joint header. Joint is loose, but functioning. Strip seal is intact. No other defects.



Defect: Adjacent deck or header
 Severity: Moderate
 Extent: 6' of one joint (isolated)

Figure 148. Spall in joint header. (Source: Colorado DOT)

Results: The joints are best characterized as having "isolated moderate defects." Report 6.

Examples Continued – Bridge Joints Condition Rating

Description: Compression seal joint 56' long at each end of a bridge. The seal is torn and partially pulled out for the full length of both joints. Performance of the joints is affected.

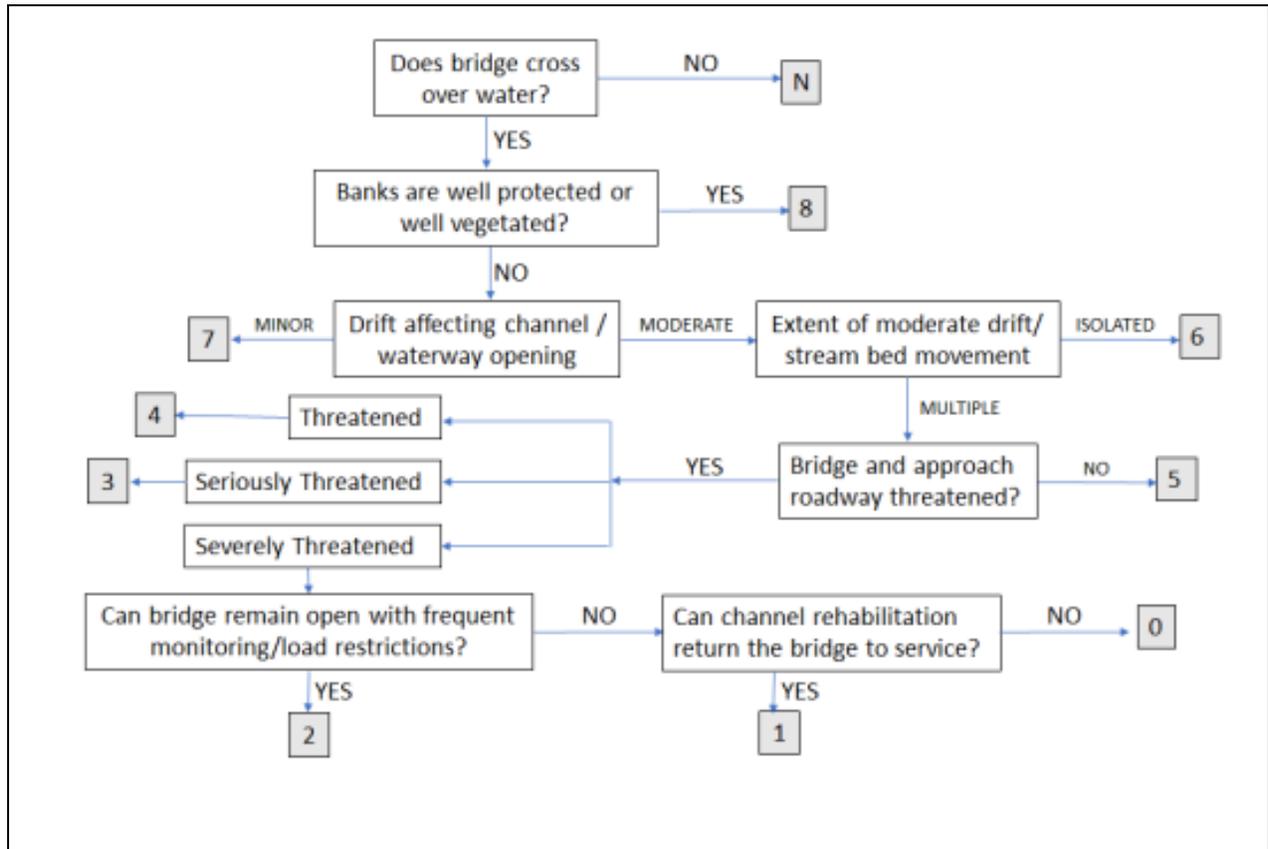


Defect: Seal damage
Severity: Moderate
Extent: All joints (widespread)

Figure 149. Joint seal is torn and partially pulled out.

Results: The joints can best be characterized as having "widespread moderate defects."
Report 4.

<i>Channel Condition Rating</i>																																			
<u>Format</u> AN (1)	<u>Frequency</u> EI	<u>Item ID</u> B.C.09																																	
Specification																																			
<p>Report the channel condition using one of the following codes. The entire code description must be satisfied for the code to apply.</p> <p style="text-align: center;">CONDITION RATING GUIDES FOR CHANNEL CONDITION RATING</p> <table border="1"> <tr> <td style="text-align: center;">N</td> <td style="text-align: center;">NOT APPLICABLE</td> <td>Channel does not exist. Bridge does not cross over water.</td> </tr> <tr> <td style="text-align: center;">9</td> <td style="text-align: center;">EXCELLENT</td> <td>Isolated inherent defects. (first inspection after installation)</td> </tr> <tr> <td style="text-align: center;">8</td> <td style="text-align: center;">VERY GOOD</td> <td>Some inherent defects. Banks are protected or well-vegetated.</td> </tr> <tr> <td style="text-align: center;">7</td> <td style="text-align: center;">GOOD</td> <td>Some minor defects. Banks and/or channels may have minor amounts of drift not affecting the waterway opening.</td> </tr> <tr> <td style="text-align: center;">6</td> <td style="text-align: center;">SATISFACTORY</td> <td>Widespread minor or isolated moderate defects. Defects affect up to 30% of channel area 50 ft. upstream and downstream. Bank is beginning to slump. There is minor streambed movement evident. Debris is restricting the waterway slightly.</td> </tr> <tr> <td style="text-align: center;">5</td> <td style="text-align: center;">FAIR</td> <td>Some moderate defects; strength and performance of the channel are not affected. Bridge and approach roadway are not threatened. Defects affect up to 50% of channel area 50 ft. upstream and downstream. Trees and brush restrict the channel.</td> </tr> <tr> <td style="text-align: center;">4</td> <td style="text-align: center;">POOR</td> <td>Widespread moderate or isolated major defects; strength and/or performance of the channel is affected. Bridge and/or approach roadway is threatened. Defects affect >50% of channel area 50 ft. upstream and downstream. Bank is severely undermined. Deposits of debris in the waterways are severely restricting the opening.</td> </tr> <tr> <td style="text-align: center;">3</td> <td style="text-align: center;">SERIOUS</td> <td>Major defects; strength and/or performance of the channel is seriously affected. Condition typically necessitates more frequent monitoring, load restrictions, and/or corrective actions. Bridge or approach roadway is seriously threatened. Streambed aggradation, degradation or lateral movement has changed the waterway to now threaten the bridge and/or approach roadway.</td> </tr> <tr> <td style="text-align: center;">2</td> <td style="text-align: center;">CRITICAL</td> <td>Major defects; component is severely compromised. Condition typically necessitates frequent monitoring, significant load restrictions, and/or corrective actions in order to keep the bridge open. Bridge or approach roadway is severely threatened. The waterway has changed to the extent the bridge is near a state of collapse.</td> </tr> <tr> <td style="text-align: center;">1</td> <td style="text-align: center;">IMMINENT FAILURE</td> <td>Bridge is closed to traffic due to channel condition. Channel rehabilitation may return the bridge to service.</td> </tr> <tr> <td style="text-align: center;">0</td> <td style="text-align: center;">FAILED</td> <td>Bridge is closed due to channel condition, and is beyond corrective action. Bridge location or design can no longer accommodate the channel, and bridge replacement is needed to restore service.</td> </tr> </table>			N	NOT APPLICABLE	Channel does not exist. Bridge does not cross over water.	9	EXCELLENT	Isolated inherent defects. (first inspection after installation)	8	VERY GOOD	Some inherent defects. Banks are protected or well-vegetated.	7	GOOD	Some minor defects. Banks and/or channels may have minor amounts of drift not affecting the waterway opening.	6	SATISFACTORY	Widespread minor or isolated moderate defects. Defects affect up to 30% of channel area 50 ft. upstream and downstream. Bank is beginning to slump. There is minor streambed movement evident. Debris is restricting the waterway slightly.	5	FAIR	Some moderate defects; strength and performance of the channel are not affected. Bridge and approach roadway are not threatened. Defects affect up to 50% of channel area 50 ft. upstream and downstream. Trees and brush restrict the channel.	4	POOR	Widespread moderate or isolated major defects; strength and/or performance of the channel is affected. Bridge and/or approach roadway is threatened. Defects affect >50% of channel area 50 ft. upstream and downstream. Bank is severely undermined. 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Commentary

This item is used to provide a condition rating for the channel at the bridge. Consider the channel upstream and downstream only insofar as it threatens the bridge and approach roadway.

The condition of channel protection devices is addressed under a separate item. Refer to Item B.C.10 (Channel Protection Condition Rating). For concrete lined channels, channel defects typically do not apply, except for Aggradation and Debris.

This item describes the physical conditions associated with the flow of water through the bridge, such as stream stability and the condition of the channel.

Consider these defects: aggradation, migration, drift, erosion, degradation, scour. The inspector must be particularly concerned with visible signs of excessive water velocity that may affect the undermining of slope protection or footings, erosion of banks, and realignment of the stream that may result in immediate or potential problems.

History is retained for this item based on each Inspection Date (Item 90 | B.EI.03).

Examples – Channel Condition Rating

Single span bridge. Channel is aggrading and requires periodic excavation to maintain a tolerable hydraulic opening. The thalweg has migrated such that flow is directed at one abutment (*Figure 150*) and threatens the approach roadway. However, a structural and hydraulic review has determined that the stability of the bridge is not impacted.



Defects: Aggradation and migration
Severity: Moderate
Extent: Widespread

Figure 150. Bridge elevation view of channel condition. (Source: Alaska DOT)



Figure 151. Looking downstream from bridge at excavated material. (Source: Alaska DOT)

Results: The channel can best be characterized as having "widespread moderate defects." Report 4.

Channel Protection Condition Rating

<u>Format</u> AN (1)	<u>Frequency</u> EI	<u>Item ID</u> B.C.10
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Specification

Report the condition of the channel protection device(s) using one of the following codes. The entire code description must be satisfied for the code to apply.

CONDITION RATING GUIDES FOR CHANNEL PROTECTION CONDITION RATING

N	NOT APPLICABLE	Bridge does not cross over water or channel protection devices do not exist. Vegetation is not considered installed channel protection.
9	EXCELLENT	Isolated inherent defects. (first inspection after installation) There are no noteworthy deficiencies that will affect the condition of the channel.
8	VERY GOOD	Some inherent defects. Banks are protected by installed channel protection device(s) which are performing as intended and are in stable condition.
7	GOOD	Some minor defects. Channel protection needs minor repairs. River control devices and embankment protection have isolated minor damage.
6	SATISFACTORY	Widespread minor or isolated moderate defects. River control devices and embankment protection have widespread minor defect or isolated moderate defect.
5	FAIR	Some moderate defects; performance of the channel protection is not affected. Bank protection is being lost. River control devices and/or embankment have major damage.
4	POOR	Widespread moderate or isolated major defects; performance of channel protection is affected. Bank and embankment protection is severely undermined. River control devices have severe damage.
3	SERIOUS	Major defects; performance of channel protection is seriously affected. Condition typically necessitates more frequent monitoring or corrective actions. Bank protection is no longer effective. River control devices are no longer present. Streambed aggradation, degradation or lateral movement has changed the waterway to now threaten the bridge and/or approach roadway.
2	CRITICAL	Major defects; channel protection is severely compromised. Condition typically necessitates more frequent monitoring or corrective actions.
1	IMMINENT FAILURE	Channel protection has failed, but corrective action could restore it to working condition.
0	FAILED	Channel protection is beyond repair and must be replaced.

Commentary
<p>This item is used to provide a condition rating for channel protection devices.</p> <p>Evaluate the condition and effectiveness of channel protection devices INSTALLED on banks or in the stream to mitigate channel issues that may impact the bridge. When reporting this item, consider erosion and scour, damage (unraveling, displacement, separation, and sagging), and material defects (scaling, abrasion, spalling, corrosion, cracking, splitting, and decay).</p> <p>Channel protection devices are considered countermeasures that control, inhibit, delay, or minimize stream instability and scour problems, including river training and armoring countermeasures.</p> <p>River training countermeasures may include: spurs, bendway weirs, guide banks, drop structures, and check dams. Additional river training countermeasures can be found in HEC-23.</p> <p>Armoring countermeasures may include: rock riprap, grouted riprap, concrete slope paving, articulating concrete blocks, gabion mattresses, and grout-filled mats. Additional armoring countermeasures can be found in HEC-23.</p> <p>For bridges that have countermeasures not visible for inspection, use appropriate visual condition indicators to determine the applicable code. These may include measurements taken at the bridge fascia during inspections to help determine degree of degradation, aggradation, and/or channel migration.</p> <p>For this item, a minor defect does not limit the effectiveness of the channel protection, while a moderate defect may limit its effectiveness. A major defect indicates the channel protection is missing or is no longer effective as determined by a hydraulic review.</p> <p>If channel protection devices are not present at the bridge, review plans and prior inspections for any channel protection requirements:</p> <ul style="list-style-type: none">• If channel protection devices are not required, code N.• If channel protection devices are required but no longer present, code 0. <p>History is retained for this item based on each Inspection Date (Item 90 B.IE.03)</p>

Example – Channel Protection Condition Rating

Description: Some stones are missing and revetment has limited effectiveness. Streambed is scouring and undermining the remaining riprap and culvert.



Defects: Scour and damage

Severity: Moderate

Extent: Widespread

Figure 152. Scour and missing riprap at concrete box culvert outlet.

Results: The channel can best be characterized as having "widespread moderate defects." Performance of the channel protection is affected. Report 4.

<i>Scour Condition Rating</i>																				
<u>Format</u> AN (1)	<u>Frequency</u> EI	<u>Item ID</u> B.C.11																		
Specification																				
<p>Report the scour condition that represents the observed or measured scour using one of the following codes. The entire code description must be satisfied for the code to apply.</p> <p>Report the scour condition that represents the observed or measured scour using one of the following codes. The entire code description must be satisfied for the code to apply.</p> <p>Use the following guidance to evaluate the scour severity for each substructure unit:</p> <p>Minor Scour: Foundations are not exposed or changed from as-built conditions. Scour depth < 2.0 ft. and may include, but is not limited to, aggradation, degradation, lateral stream instability, loss of embankment, and scour hole formation around substructure units.</p> <p>Moderate Scour: Foundation exposed or changed from as-built conditions but scour depth is less than the critical scour depth. Scour depth > 2.0 ft. and may include, but is not limited to, undermining of the substructure unit, head-cutting, unstable banks, and loss of slope.</p> <p>Major Scour: Foundation exposed and changed from as-built conditions. Scour depth is greater than the critical scour depth and may include, but is not limited to, rotation, lateral translation, settling and/or buckling of substructure unit, and complete loss of fill embankment and/ or slope. Use the following guidance to evaluate the scour extent for the entire bridge:</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr> <th style="text-align: center;">Scour Severity</th> <th style="text-align: center;">Affected Substructure units</th> <th style="text-align: center;">Percentage</th> </tr> </thead> <tbody> <tr> <td>None</td> <td style="text-align: center;">A</td> <td style="text-align: center;">A/X</td> </tr> <tr> <td>Minor</td> <td style="text-align: center;">B</td> <td style="text-align: center;">B/X</td> </tr> <tr> <td>Moderate</td> <td style="text-align: center;">C</td> <td style="text-align: center;">C/X</td> </tr> <tr> <td>Major</td> <td style="text-align: center;">D</td> <td style="text-align: center;">D/X</td> </tr> <tr> <td><i>Total Substructure Units Subject to Scour</i></td> <td style="text-align: center;">X</td> <td></td> </tr> </tbody> </table> <p>Isolated: One instance of the defect. Some: More than one instance but less than 30% Widespread: More than 30%</p>			Scour Severity	Affected Substructure units	Percentage	None	A	A/X	Minor	B	B/X	Moderate	C	C/X	Major	D	D/X	<i>Total Substructure Units Subject to Scour</i>	X	
Scour Severity	Affected Substructure units	Percentage																		
None	A	A/X																		
Minor	B	B/X																		
Moderate	C	C/X																		
Major	D	D/X																		
<i>Total Substructure Units Subject to Scour</i>	X																			

CONDITON RATING GUIDE FOR SCOUR

Stability of the bridge		
N	NOT APPLICABLE	Bridge does not cross over water.
9	EXCELLENT	Scour Extent: None. Scour Severity (Depth): No change. Stability of the bridge: Not affected. Foundations (Piers/Footings): Not exposed. Foundation conditions match as-built conditions with no change in support to the structure and no change of bank characteristics in the vicinity of the bridge.
8	VERY GOOD	Scour Extent: Insignificant. Scour Severity (Depth): Minimal change. Stability of the bridge: Not affected. Foundations (Piers/Footings): Not exposed. Minimal changes to groundline are evident compared to as-built condition.
7	GOOD	Scour Extent: Some Minor. Scour Severity (Depth): Minor < 2 ft. and may include, but is not limited to, aggradation, degradation, lateral stream instability, loss of embankment, and scour hole formation around substructure units. Stability of the bridge: Not affected. Foundations (Piers/Footings): Not exposed.
6	SATISFACTORY	Scour Extent: Widespread minor / Isolated moderate. Scour Severity (Depth): > 2 ft. but less than the critical scour depth. Stability of the bridge: Not affected. Foundations (Piers/Footings): Partially exposed.
5	FAIR	Scour Extent: Moderate. Scour Severity (Depth): Depth > 2 ft. but less than the critical scour depth and may include, but is not limited to, minor undermining of substructure unit, head-cutting, unstable banks, and loss of slope. Stability of the bridge: Not affected. Foundations (Piers/Footings): Moderately exposed with minor undermining.
4	POOR	Scour Extent: Widespread moderate / Isolated major. Scour Severity (Depth): Depth > 2.0 ft. and is greater than the critical scour depth. Stability of the bridge: Affected. Foundations (Piers/Footings): Significantly exposed with minor undermining
3	SERIOUS	Scour Extent: Major. Scour Severity (Depth): Depth > 2.0 ft. and is greater than the critical scour depth and may include, but is not limited to, complete loss of fill embankment and/or slope, undermining of spread footings or exposed piles(s) affecting the stability and/or structural capacity of the substructure unit, and some settlement. Stability of the bridge: Seriously affected. Foundations (Piers/Footings): Significantly exposed and affecting structural capacity.
2	CRITICAL	Scour Extent: Major. Scour Severity (Depth): Depth > 2.0 ft. and is greater than the critical scour depth and may include, but is not limited to, significant substructure support removed resulting in rotation, lateral translation, settlement and/or buckling of substructure unit, and complete loss of embankment. Stability of the bridge: Severely compromised. Foundations (Piers/Footings): Extensive undermining and affecting structural capacity. Notify the Bureau of Bridges & Structures (BBS) immediately. Critical Finding Report required to be submitted to the BBS. Special Inspection required with Interval < 12 months. May require load restriction, temporary measures, and/or corrective action.
1	IMMINENT FAILURE	Scour Extent: Major. Scour Severity (Depth): Extensive scour. Channel rehabilitation may return the bridge to service. Stability of the bridge: Imminent Failure. Foundations (Piers/Footings): Failure of pier/abutment imminent. Close the bridge immediately. Notify the BBS immediately to initiate remediation. Critical Finding Report required to be submitted to the BBS.
0	FAILED	Scour Extent: Major. Scour Severity (Depth): Extensive scour. Stability of the bridge: Failed. Foundations (Piers/Footings): Pier/abutment failed. Bridge is closed due to scour condition and is beyond corrective action. Bridge replacement required to restore service.

Commentary

This item is used to provide a condition rating for the observed or measured scour at a bridge.

Refer to Item B.AP.03 Scour Vulnerability to verify if the bridge has been determined to be stable or unstable for appraised scour conditions.

Consider design scour depth and critical scour depth, commonly found in hydraulic designs, scour evaluations, and Scour Plans of Action, when determining the scour condition rating.

When observed or measured conditions are not consistent with the scour design or the assumptions used in the scour appraisal, Item B.AP.03 Scour Vulnerability must be reevaluated.

History is retained for this item based on each Inspection Date (B.IE.03).

Examples – Scour Condition Rating

Description: Three span scour critical bridge founded on spread footings not on bedrock. The scour elevation for three spread footings at Pier 2 is at the bottom of the footings with one footing having one foot of undermining at one corner. Agency plans to monitor more frequently to keep the bridge open until repairs are completed.



Severity: Major
Extent: 3 of 6 pier footings

Figure 153. Exposed column footing in stream.

Results: The scour condition is best characterized as “major scour” that necessitates more frequent monitoring. Bridge is seriously affected. Report 3.

Description: Scour critical bridge. Critical scour limit was established in the Plan of Action. Inspectors measured the following streambed cross-section (*Figure 154*).

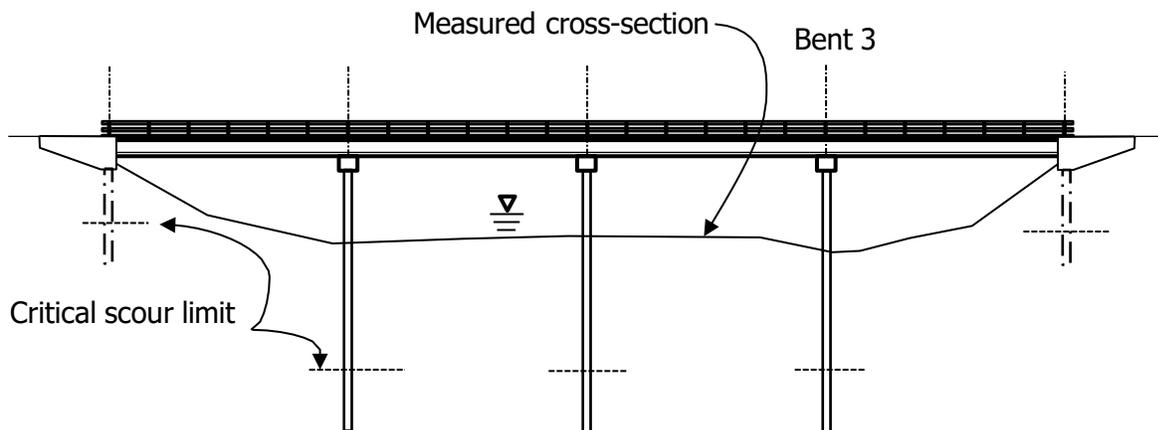


Figure 154. Elevation view showing scour elevations and stream cross-section for a bridge.

Severity: Minor (scour at Bent 3, does not exceed tolerable limit)

Extent: One of five substructure units (Isolated).

Results: The scour condition is best characterized as “isolated minor scour.” Report 7.

Examples Continued – Scour Condition Rating

Description: Scour critical bridge. Critical scour limit was established in the Plan of Action. Inspectors measured the following streambed cross-section (*Figure 155*), which indicates a scour depth at one bent that is below the critical scour elevation.

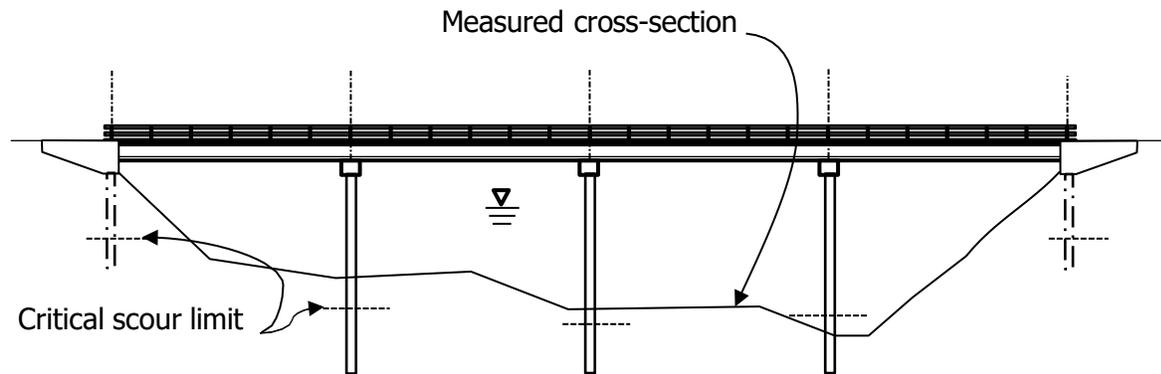


Figure 155. Elevation view showing critical scour limits and stream cross-section for a bridge.

Severity: Moderate

Extent: 2 of 5 substructure units (some)

Severity: Major

Extent: 1 of 5 substructure units (isolated)

Results: The scour condition is best characterized as "major scour". The bridge is closed until corrective actions are completed. Report 1.

Examples Continued – Scour Condition Rating

Description: Bridge was appraised for scour vulnerability and not considered scour critical. No scour calculations and no structural stability analysis were performed. Piles are end bearing on rock. Inspectors measured the following streambed cross-section, which indicates a scour depth at two piers that is not consistent with the scour assessment assumptions.

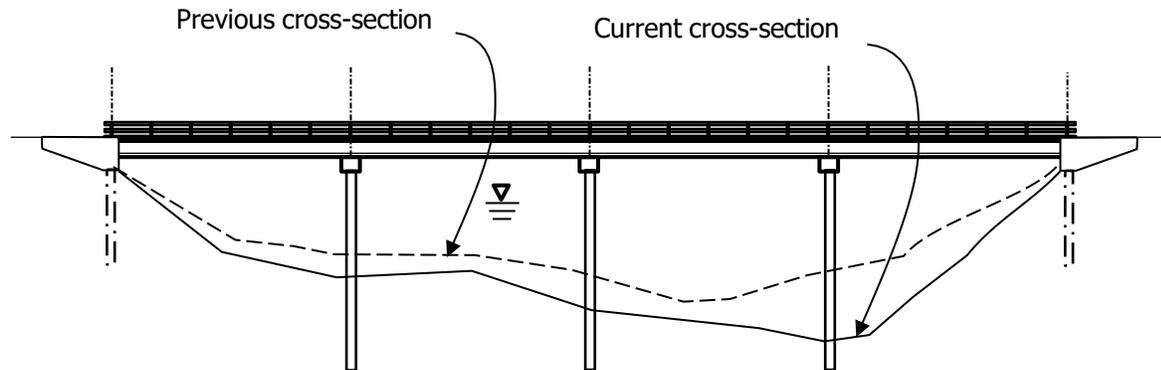


Figure 156. Elevation view showing current cross-section and previous cross-section for a bridge over water.

Severity: Moderate

Extent: 1 of 5 substructure units (isolated)

Severity: Major

Extent: 1 of 5 substructure units (isolated)

Results: The scour condition is best characterized as "isolated major scour". The defects warrant a structural and/or hydraulic review to determine the effect on strength and/or stability of the bridge. Report 4.

Since observed conditions are not consistent with the scour appraisal assumptions, then scour is considered in the coding of B.C.03 (*Substructure Condition Rating*). In this case, observed conditions also indicate a need to reevaluate Item B.AP.03 (*Scour Vulnerability*).

<i>Bridge Condition Classification</i>														
<u>Format</u> AN (1)	<u>Frequency</u> C	<u>Item ID</u> B.C.12												
Specification		Commentary												
<p>This item is calculated by FHWA and is not required to be reported. The bridge condition classification is indicated using one of the following codes.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Condition</u></th> <th style="text-align: left;"><u>Lowest Condition Rating</u></th> </tr> </thead> <tbody> <tr> <td>G</td> <td>Good</td> <td>7, 8, or 9</td> </tr> <tr> <td>F</td> <td>Fair</td> <td>5 or 6</td> </tr> <tr> <td>P</td> <td>Poor</td> <td>4, 3, 2, 1, or 0</td> </tr> </tbody> </table>		<u>Code</u>	<u>Condition</u>	<u>Lowest Condition Rating</u>	G	Good	7, 8, or 9	F	Fair	5 or 6	P	Poor	4, 3, 2, 1, or 0	<p>For the purpose of national performance measures, the method of assessment to determine the classification of a bridge is the minimum (i.e. lowest) condition rating code from the following items:</p> <p>B.C.01 (<i>Deck Condition Rating</i>), B.C.02 (<i>Superstructure Condition Rating</i>), B.C.03 (<i>Substructure Condition Rating</i>), and B.C.04 (<i>Culvert Condition Rating</i>).</p>
<u>Code</u>	<u>Condition</u>	<u>Lowest Condition Rating</u>												
G	Good	7, 8, or 9												
F	Fair	5 or 6												
P	Poor	4, 3, 2, 1, or 0												
Examples														
<p>Code G is calculated and recorded for a reinforced concrete closed-spandrel wall arch bridge with the following component condition rating item codes:</p> <ul style="list-style-type: none"> • B.C.02 (<i>Superstructure Condition Rating</i>) = 7 • B.C.03 (<i>Substructure Condition Rating</i>) = 8 <p>Code F is calculated and recorded for a corrugated metal pipe culvert with the following component condition rating item code:</p> <ul style="list-style-type: none"> • B.C.04 (<i>Culvert Condition Rating</i>) = 5 <p>Code P is calculated and recorded for a steel box girder bridge with the following component condition rating codes:</p> <ul style="list-style-type: none"> • B.C.01 (<i>Deck Condition Rating</i>) = 4 • B.C.02 (<i>Superstructure Condition Rating</i>) = 6 • B.C.03 (<i>Substructure Condition Rating</i>) = 7 														

<i>Lowest Condition Rating Code</i>		
<u>Format</u> AN (1)	<u>Frequency</u> C	<u>Item ID</u> B.C.13
Specification	Commentary	
<p>This item is calculated by FHWA and is not required to be reported. The code for this item is the lowest condition rating code from the following items:</p> <p>B.C.01 (<i>Deck Condition Rating</i>), B.C.02 (<i>Superstructure Condition Rating</i>), B.C.03 (<i>Substructure Condition Rating</i>), and B.C.04 (<i>Culvert Condition Rating</i>).</p>		
Examples		
<p>Code 7 is calculated and recorded for a reinforced concrete closed-spandrel wall arch bridge with the following component condition rating item codes:</p> <ul style="list-style-type: none"> • B.C.02 (<i>Superstructure Condition Rating</i>) = 7 • B.C.03 (<i>Substructure Condition Rating</i>) = 8 <p>Code 5 is calculated and recorded for a corrugated metal pipe culvert with the following component condition rating item code:</p> <ul style="list-style-type: none"> • B.C.04 (<i>Culvert Condition Rating</i>) = 5 <p>Code 4 is calculated and recorded for a steel box girder bridge with the following component condition rating codes:</p> <ul style="list-style-type: none"> • B.C.01 (<i>Deck Condition Rating</i>) = 4 • B.C.02 (<i>Superstructure Condition Rating</i>) = 6 • B.C.03 (<i>Substructure Condition Rating</i>) = 7 		

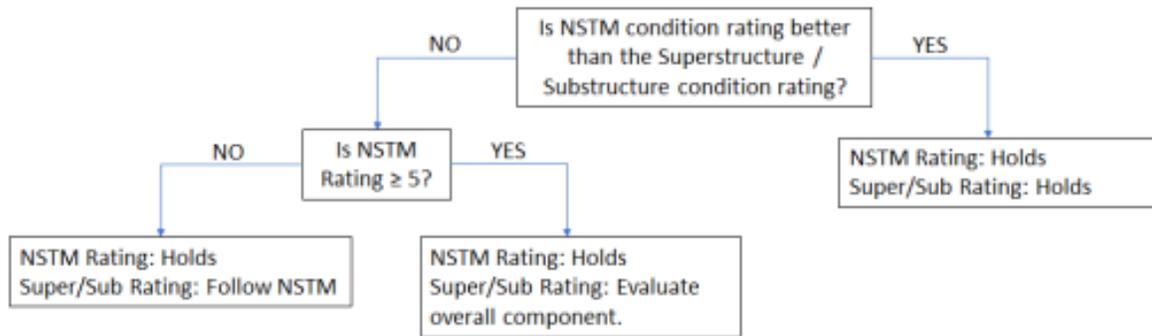
NSTM Inspection Condition

<u>Format</u> AN (1)	<u>Frequency</u> EI	<u>Item ID</u> B.C.14
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Specification

Report the condition rating of the Non- Redundant Steel Tension Members (NSTM) using one of the codes below.

Do not report this item when Item B.IR.01
(*NSTM Inspection Required*) is N.



			Fatigue/ Other		
N	Not Applicable	N/A	N/A	N/A	NSTM component does not exist.
9	Excellent	No	No	No	First inspection after installation.
8	Very Good	No	No	No	No deficiencies.
7	Good	No	Yes, Some	No	
6	Satisfactory	No	Yes, Minor	Up to 2% In critical areas	
5	Fair	Yes, Fatigue or out-of-plane bending cracks in secondary members. Yes, Arrested fatigue cracks, without propagation, and cracks parallel to the direction of stress in primary members.	Yes, Some moderate. Hinges may be showing minor corrosion problems.	Up to 10%, In critical areas	
4	Poor	Yes, cracks and previously arrested cracks with propagation in primary members Yes, widespread in secondary members.	Yes, Widespread moderate	Up to 30%, In critical areas	
3	Serious	Yes, Major crack(s) or extensive perpendicular to stress fatigue, or out-of-plane bending cracking in primary members.	Yes, Major	Up to 50%, In critical areas	Notify BBS immediately. Critical Finding Report required. May require more frequent monitoring, load restrictions, temporary measures, and/or corrective action.
2	Critical	Yes, may require temporary support or repairs to remain open.	Yes Major	> 50% In critical areas	Notify BBS immediately. Critical Finding Report required. Special Inspection required with Interval < 12 months. May require load restrictions,
					temporary measures, and/or corrective action.
1	Imminent Failure	Yes, Imminent Failure	Yes	100%	Notify BBS immediately. Critical Finding Report required. Bridge must be closed, or is closed, pending corrective action. Repair or rehabilitation may return the bridge to service.
0	Failed	Failed	Failed	100%	Bridge is closed due to component condition and is beyond corrective action. Replacement is required to restore service.

Commentary
<p>This item represents the condition of the Non-Redundant Steel Tension Member (NSTM) identified to be inspected in the NSTM inspection procedures and incorporated into the superstructure or substructure condition rating.</p> <p>For a bridges with multiple NSTM types, there must be a corresponding B.C.14 NSTM Condition Rating coded for each.</p> <p>Do not report this item when Item B.IR.01 NSTM Inspection Required is N. History is retained for this item based on each Inspection Date. (Item 90 B.IE.03).</p>

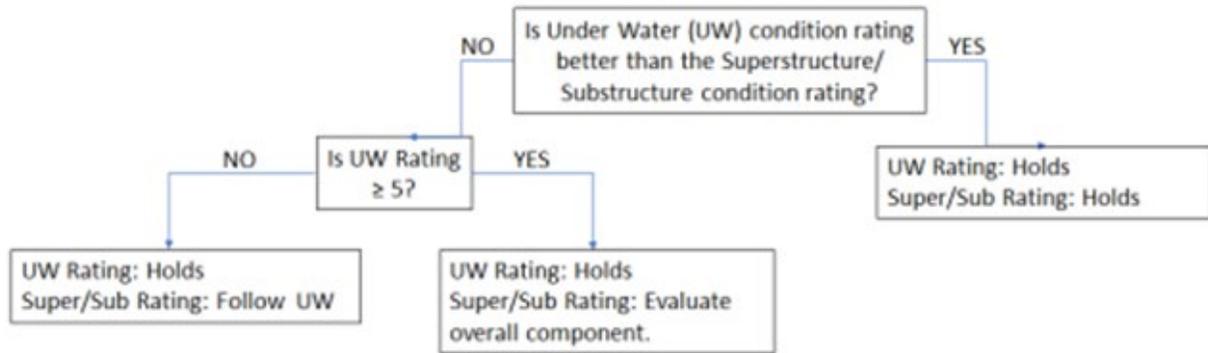
Underwater Inspection Condition

<u>Format</u> AN (1)	<u>Frequency</u> EI	<u>Item ID</u> B.C.15
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Specification

Report the condition rating of the underwater members of the substructure based on the underwater inspection using one of the codes in below the commentary.

Do not report this item when Item B.IR.03
(*Underwater Inspection Required*) is N.



8	VERY GOOD	<p>Some inherent defects. No significant defects. Shrinkage cracks. Very light surface scaling. Spalling with no exposed reinforcement. Insignificant damage caused by drift or collision with no misalignment and no corrective action warranted.</p>
7	GOOD	<p>Some minor defects. Minor cracking, spalls or scaling with few incidences of exposed reinforcement with only surface rust. Minor scour may have occurred at the foundation.</p>
6	SATISFACTORY	<p>Widespread minor or isolated moderate defects. Cracking and leaching, delamination, and spalling with exposed reinforcement. Up to 2% section loss to concrete or masonry (horizontal cross-section) or exposed reinforcement. Moderate sedimentation or shallow, local scour may have occurred with exposure of the top of the pile supported footings, less than 2' deep scour around pile bents.</p>
5	FAIR	<p>Some moderate defects; strength and performance of the component are not affected. Extensive map cracking and leaching, cracking, delamination, and spalling with exposed reinforcement. Up to 10% section loss to concrete or masonry (horizontal cross-section) or exposed reinforcement. Exposed spread footings with no undermining on soil and up to 5% undermining on rock. Less than 2' of exposed piles or seal coat below pile supported footings. Less than 6' deep scour around pile bents.</p>
4	POOR	<p>Widespread moderate or isolated major defects; strength and/or performance of the component is affected. Active cracks indicating a reduction in the substructure unit's capacity to support the superstructure loads. Up to 30% section loss of concrete or masonry (horizontal cross-section), pile(s), or exposed reinforcement. Undermining of spread footing which may be affecting the stability of the substructure unit, but no significant settlement observed. If the condition rating is due to scour, ensure Item B.C.11 Scour Condition Rating is consistent with B.C.15 Underwater Inspection Condition Rating. Item B.A.03 Scour Vulnerability must be re-evaluated. May require more frequent monitoring, load restrictions, temporary measures, and/or corrective action.</p>
3	SERIOUS	<p>Major defects; strength and/or performance of the component is seriously affected. Up to 50% section loss of concrete or masonry (horizontal cross-section), pile(s), or exposed reinforcement. Adjacent column ties with at or near 100% section loss causing the vertical reinforcement to be ineffective. Severe scour or undermining of footings affecting the stability of the substructure unit with measurable settlement. If the condition rating is due to scour, ensure Item B.C.11 Scour Condition Rating is consistent with B.C.15 Underwater Inspection Condition Rating. Item B.A.03 Scour Vulnerability must be re-evaluated. May require more frequent monitoring, load restrictions, temporary measures, and/or corrective action.</p>
2	CRITICAL	<p>Major defects; component is severely compromised. > 50% section loss to concrete or masonry (horizontal cross-section), pile(s), or exposed reinforcement. Measurable lateral or vertical movement compromising stability of bridge. If the condition rating is due to scour, ensure Item B.C.11 Scour Condition Rating is consistent with B.C.15 Underwater Inspection Condition Rating. Item B.A.03 Scour Vulnerability must be re-evaluated. Notify BBS immediately. Critical Finding Report required. Special Inspection required with Interval < 12 months. May require load restriction, temporary measures, and/or corrective action.</p>
1	IMMINENT FAILURE	<p>Bridge is closed to traffic due to component condition. Repair or rehabilitation may return the bridge to service. Close the bridge immediately. Notify BBS immediately. Critical Finding Report required.</p>
0	FAILED	<p>Bridge is closed due to component condition, and is beyond corrective action. Replacement is required to restore service.</p>

		Some light rust. Minor scour may have occurred at the foundation.
6	SATISFACTORY	<p>Widespread minor or isolated moderate defects. Up to 2% section loss of steel section due to rust pitting. Moderate sedimentation or shallow, local scour may have occurred at foundation with exposure of pile supported footings.</p>
5	FAIR	<p>Some moderate defects; strength and performance of the component are not affected. Up to 10% section loss of steel section. Cracks may be present in non-critical areas, arrested fatigue cracks in primary members without propagation. Less than 2' of pile(s) or seal coat exposed below pile supported footings. Less than 6' scour depth around pile bents.</p>
4	POOR	<p>Widespread moderate or isolated major defects; strength and/or performance of the component is affected. Up to 30% section loss of steel section. Localized buckling or cracks may be present in primary members. Greater than 6' scour depth around pile bents. No significant settlement has occurred. If the condition rating is due to scour, ensure Item B.C.11 Scour Condition Rating is consistent with B.C.15 Underwater Inspection Condition Rating. Item B.A.03 Scour Vulnerability must be re-evaluated. May require more frequent monitoring, load restrictions, temporary measures, and/or corrective action.</p>
3	SERIOUS	<p>Major defects; strength and/or performance of the component is seriously affected. Up to 50% section loss of steel section. Severe scour undermining pile supported footings affecting the stability of the substructure unit with some settlement having already occurred. If the condition rating is due to scour, ensure Item B.C.11 Scour Condition Rating is consistent with B.C.15 Underwater Inspection Condition Rating. Item B.A.03 Scour Vulnerability must be re-evaluated. May require more frequent monitoring, load restrictions, temporary measures, and/or corrective action.</p>
2	CRITICAL	<p>Major defects; component is severely compromised. > 50% section loss of steel section. Measurable lateral or vertical movement, unstable structures. If the condition rating is due to scour, ensure Item B.C.11 Scour Condition Rating is consistent with B.C.15 Underwater Inspection Condition Rating. Item B.A.03 Scour Vulnerability must be re-evaluated. Notify BBS immediately. Critical Finding Report required. Special Inspection required with Interval < 12 months. May require load restriction, temporary measures, and/or corrective action.</p>
1	IMMINENT FAILURE	<p>Bridge is closed to traffic due to component condition. Repair or rehabilitation may return the bridge to service. Close the bridge immediately. Notify BBS immediately. Critical Finding Report required.</p>
0	FAILED	<p>Bridge is closed due to component condition, and is beyond corrective action. Replacement is required to restore service.</p>

Commentary
<p>This item represents the condition of underwater members identified to be inspected in the underwater inspection procedures and incorporated into the substructure or culvert condition rating.</p> <p>Per the FHWA Underwater Bridge Inspection Reference Manual, Item B.C.15 Underwater Inspection Condition Rating represents the condition of the underwater portion of a bridge substructure that is typically submerged and inaccessible during a routine inspection. Item B.C.03 Substructure Condition Rating represents the condition of the entire substructure; therefore, the underwater inspection condition is incorporated into the B.C.03 Substructure Condition Rating. The substructure condition can vary greatly between the below- and above-water portions. A bridge substructure may appear to be in good condition based on the routine inspection by topside personnel, but the B.C.03 Substructure Condition Rating may be lower based on the findings from the underwater inspection.</p> <p>Please note, if Item B.IR.03 Underwater Inspection Required is Y, then Item B.C.15 Underwater Inspection Condition Rating must be reported, regardless of water level at time of inspection.</p> <p>The requirement to report this item may change in the rare circumstance where long-term environmental conditions change for inspection access to underwater portions of the substructure.</p> <p>Do not report this item when Item B.IR.03 Underwater Inspection Required is N.</p> <p>History is retained for this item based on each Inspection Date.</p>

SUBSECTION 7.2: ELEMENT IDENTIFICATION

The data items in this subsection provide information about the elements inventoried for the bridge, and the total quantity of each element. These data items are considered part of the Elements Data Set and have a many-to-one relationship with a bridge when applicable.

Element data are only required to be reported to FHWA for bridges that carry NHS routes, while reporting is optional for bridges that do not carry NHS routes. Refer to B.F.01 (*Feature Type*), B.F.02 (*Feature Location*), and B.H.03 (*NHS Designation*) for data indicating NHS routes carried on bridges.

Data items for this subsection are reported for each element present on a bridge and the data for these items may change after each inspection.

The following data items are included in this subsection.

Item ID Data Item

B.E.01	Element Number
B.E.02	Element Parent Number
B.E.03	Element Total Quantity

Refer to the AASHTO Manual for Bridge Element Inspection (AASHTO MBEI) and all applicable interims; and the Illinois Supplement to the AASHTO Manual for Bridge Element Inspection for element descriptions and quantity calculations.

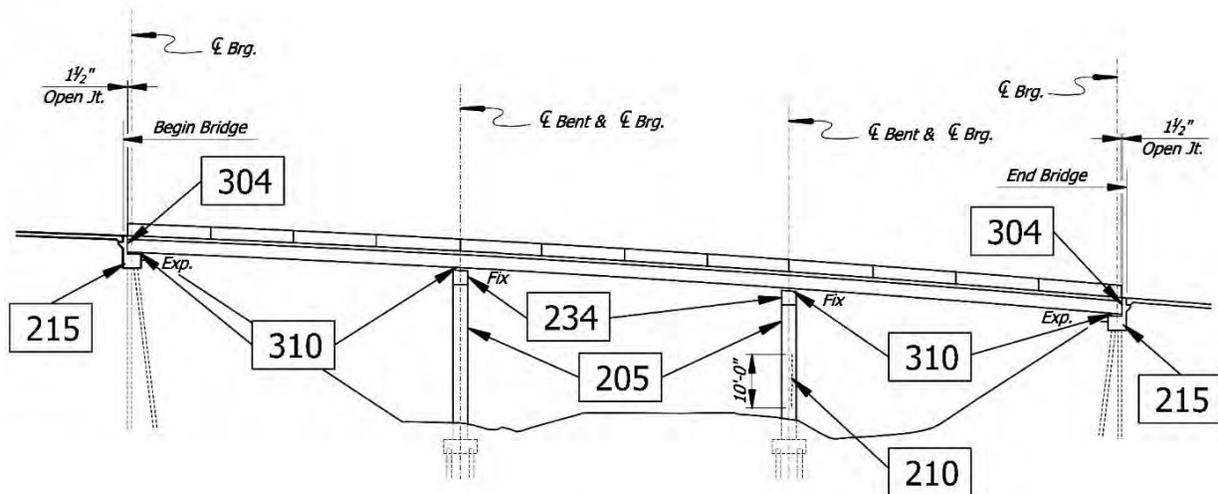
Ensure correlation between elements reported in this subsection and codes reported for items in the Bridge Material and Type section.

Elements that are entirely below ground and not accessible for inspection, such as piles and pile caps/footings, are not intended to be reported until they become exposed and visible for inspection. However, element data can be reported for elements that are not visible for inspection, or may become visible for inspection and are subsequently covered, by reporting the best available data for those element

<i>Element Number</i>		
Format N (4,0)	Frequency EI	Item ID B.E.01
Specification		Commentary
Report the applicable element number (EN) for each element reported for the bridge.		Refer to for element numbers reported to FHWA.
Example		

Values shown in the shaded cells, with italicized text, under column B.E.01 are the data for the elements in this example.

Element	B.E.01
	EN
RC Deck	<i>12</i>
Wearing Surface	<i>510</i>
Open Joint	<i>304</i>
RC Bridge Railing	<i>331</i>
Steel Beam/Girder	<i>107</i>
Steel Protective Coating	<i>515</i>
Elastomeric Bearings	<i>310</i>
RC Columns	<i>205</i>
RC Pier Wall	<i>210</i>
RC Abutment	<i>215</i>
RC Pier Cap	<i>234</i>



ELEVATION

Figure 179. Bridge elevation view from construction plans for a three-span steel beam bridge. (Source: Alabama DOT)

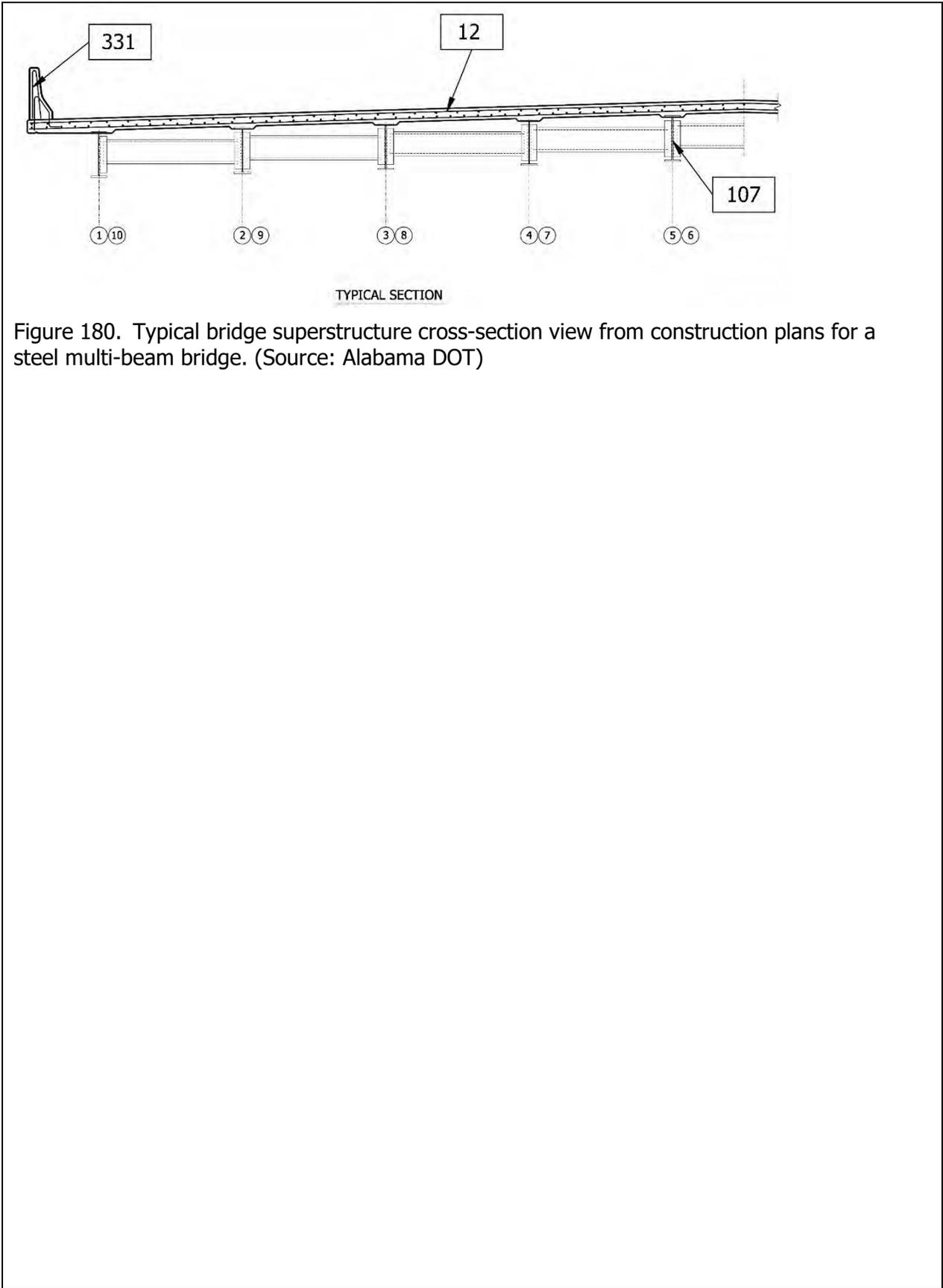


Figure 180. Typical bridge superstructure cross-section view from construction plans for a steel multi-beam bridge. (Source: Alabama DOT)

<i>Element Parent Number</i>		
<u>Format</u> N (4,0)	<u>Frequency</u> EI	<u>Item ID</u> B.E.02
Specification		Commentary
<p>Report the element number of the protected element for each protective system element reported for the bridge.</p> <p>Do not report this item for elements that do not have a protective system.</p>		<p>Refer to <i>Table 22</i> for wearing surface and protective coatings elements reported to FHWA.</p>
Example		
<p>Values shown in the shaded cells, with italicized text, under column B.E.02 are the element parent number (EPN) data for the element numbers shown in column B.E.01 in this example.</p>		
	B.E.01	B.E.02
Element	EN	EPN
RC Deck	12	
Wearing Surface	510	<i>12</i>
Open Joint	304	
RC Bridge Railing	331	
Steel Beam/Girder	107	
Steel Protective Coating	515	<i>107</i>
Elastomeric Bearings	310	
RC Columns	205	
RC Pier Wall	210	
RC Abutment	215	
RC Pier Cap	234	

<i>Element Total Quantity</i>			
<u>Format</u> N (8,0)	<u>Frequency</u> EI	<u>Item ID</u> B.E.03	
Specification		Commentary	
Report the total element quantity (Total Qty) to the nearest whole unit of measure for each applicable element reported for the bridge.		Refer to the AASHTO MBEI for details on the calculation of total element quantities for applicable elements.	
Example			
Quantities shown in the shaded cells, with italicized text, under column B.E.03 are the data for the element numbers shown in column B.E.01 in this example.			
	B.E.01	B.E.02	B.E.03
Element	EN	EPN	Total Qty
RC Deck (ft ²)	12		<i>16217</i>
Wearing Surface (ft ²)	510	12	<i>15783</i>
Open Joint (ft)	304		<i>158</i>
RC Bridge Railing (ft)	331		<i>412</i>
Steel Beam/Girder (ft)	107		<i>2054</i>
Steel Protective Coating (ft ²)	515	107	<i>15728</i>
Elastomeric Bearings (each)	310		<i>40</i>
RC Columns (each)	205		<i>8</i>
RC Pier Wall (ft)	210		<i>54</i>
RC Abutment (ft)	215		<i>182</i>
RC Pier Cap (ft)	234		<i>150</i>

SUBSECTION 7.3: ELEMENT CONDITIONS

The data items in this subsection provide information about the element condition quantity that exists in each of four condition states for the respective elements reported in the Element Identification subsection. These items are considered part of the Elements Data Set and have a many-to-one relationship with a bridge when applicable.

Element data are only required to be reported to FHWA for bridges that carry NHS routes, while reporting is optional for bridges that do not carry NHS routes. Refer to B.F.01 (*Feature Type*), B.F.02 (*Feature Location*), and B.H.03 (*NHS Designation*) for data indicating NHS routes carried on bridges.

Data items for this subsection are reported for each element present on a bridge, and the data for these items may change after each inspection.

The following data items are included in this subsection.

Item ID Data Item

B.CS.01	Element Quantity Condition State One
B.CS.02	Element Quantity Condition State Two
B.CS.03	Element Quantity Condition State Three
B.CS.04	Element Quantity Condition State Four

Refer to the AASHTO Manual for Bridge Element Inspection (AASHTO MBEI) for element defect and condition state definitions.

Refer to *Table 22* or *Figure 183* for listing of elements for which data are reported to FHWA. Specific material defects as shown in the AASHTO MBEI are not reported to FHWA.

All elements have four defined condition states. The severity of multiple distress paths or deficiencies is defined in the AASHTO MBEI for each condition state, with the general intent of the condition states as follows: Condition State One (CS1) – Good, Condition State Two (CS2) – Fair, Condition State Three (CS3) – Poor, and Condition State Four (CS4) – Severe.

The sum of the quantities recorded for items B.CS.01 (*Element Quantity Condition State One*), B.CS.02 (*Element Quantity Condition State Two*), B.CS.03 (*Element Quantity Condition State Three*), and B.CS.04 (*Element Quantity Condition State Four*) must equal the quantity recorded in item B.E.03 (*Element Total Quantity*).

Elements that are entirely below ground and not accessible for inspection, such as piles and pile caps/footings, are not intended to be reported until they become exposed and visible for inspection. However, element data can be reported for elements that are not visible for inspection or may become visible for inspection and are subsequently covered, by reporting the best available data for those elements.

<i>Element Quantity Condition State One</i>				
<u>Format</u> N (8,0)	<u>Frequency</u> EI			<u>Item ID</u> B.CS.01
Specification			Commentary	
Report the element quantity assigned to condition state one (CS1 Qty) to the nearest whole unit of measure for each element reported for the bridge.			Refer to the AASHTO MBEI for element defect and condition state definitions.	
Example				
Quantities shown in the shaded cells, with italicized text, under column B.CS.01 are the data for the element numbers shown under column B.E.01 in this example.				
Element	B.E.01	B.E.02	B.E.03	B.CS.01
	EN	EPN	Total Qty	CS1 Qty
RC Deck (ft ²)	12		16217	<i>0</i>
Wearing Surface (ft ²)	510	12	15783	<i>15083</i>
Open Joint (ft)	304		158	<i>100</i>
RC Bridge Railing (ft)	331		412	<i>360</i>
Steel Beam/Girder (ft)	107		2054	<i>1044</i>
Steel Protective Coating (ft ²)	515	107	15728	<i>0</i>
Elastomeric Bearings (each)	310		40	<i>30</i>
RC Columns (each)	205		8	<i>4</i>
RC Pier Wall (ft)	210		54	<i>44</i>
RC Abutment (ft)	215		182	<i>140</i>
RC Pier Cap (ft)	234		150	<i>105</i>

<i>Element Quantity Condition State Two</i>					
<u>Format</u> N (8,0)	<u>Frequency</u> EI			<u>Item ID</u> B.CS.02	
Specification			Commentary		
Report the element quantity assigned to condition state two (CS2 Qty) to the nearest whole unit of measure for each element reported for the bridge.			Refer to the AASHTO MBEI for element defects and condition state definitions.		
Example					
Quantities shown in the shaded cells, with italicized text, under column B.CS.02 are the data for the element numbers shown under column B.E.01 in this example.					
Element	B.E.01	B.E.02	B.E.03	B.CS.01	B.CS.02
	EN	EPN	Total Qty	CS1 Qty	CS2 Qty
RC Deck (ft ²)	12		16217	0	<i>16000</i>
Wearing Surface (ft ²)	510	12	15783	15083	<i>500</i>
Open Joint (ft)	304		158	100	<i>58</i>
RC Bridge Railing (ft)	331		412	360	<i>40</i>
Steel Beam/Girder (ft)	107		2054	1044	<i>1000</i>
Steel Protective Coating (ft ²)	515	107	15728	0	<i>5628</i>
Elastomeric Bearings (each)	310		40	30	<i>5</i>
RC Columns (each)	205		8	4	<i>4</i>
RC Pier Wall (ft)	210		54	44	<i>5</i>
RC Abutment (ft)	215		182	140	<i>30</i>
RC Pier Cap (ft)	234		150	105	<i>30</i>

<i>Element Quantity Condition State Three</i>						
<u>Format</u> N (8,0)	<u>Frequency</u> EI			<u>Item ID</u> B.CS.03		
Specification				Commentary		
Report the element quantity assigned to condition state three (CS3 Qty) to the nearest whole unit of measure for each element reported for the bridge.				Refer to the AASHTO MBEI for element defects and condition state definitions.		
Example						
Quantities shown in the shaded cells, with italicized text, under column B.CS.03 are the data for the element numbers shown under column B.E.01 in this example.						
Element	B.E.01	B.E.02	B.E.03	B.CS.01	B.CS.02	B.CS.03
	EN	EPN	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty
RC Deck (ft ²)	12		16217	0	16000	<i>217</i>
Wearing Surface (ft ²)	510	12	15783	15083	500	<i>0</i>
Open Joint (ft)	304		158	100	58	<i>0</i>
RC Bridge Railing (ft)	331		412	360	40	<i>12</i>
Steel Beam/Girder (ft)	107		2054	1044	1000	<i>10</i>
Steel Protective Coating (ft ²)	515	107	15728	0	5628	<i>10000</i>
Elastomeric Bearings (each)	310		40	30	5	<i>5</i>
RC Columns (each)	205		8	4	4	<i>0</i>
RC Pier Wall (ft)	210		54	44	5	<i>5</i>
RC Abutment (ft)	215		182	140	30	<i>12</i>
RC Pier Cap (ft)	234		150	105	30	<i>15</i>

<i>Element Quantity Condition State Four</i>							
<u>Format</u> N (8,0)	<u>Frequency</u> EI			<u>Item ID</u> B.CS.04			
Specification				Commentary			
Report the element quantity assigned to condition state four (CS4 Qty) to the nearest whole unit of measure for each element reported for the bridge.				Refer to the AASHTO MBEI for element defects and condition state definitions.			
Example							
Quantities shown in the shaded cells, with italicized text, under column B.CS.04 are the data for the element numbers shown under column B.E.01 in this example.							
Element	B.E.01	B.E.02	B.E.03	B.CS.01	B.CS.02	B.CS.03	B.CS.04
	EN	EPN	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
RC Deck (ft ²)	12		16217	0	16000	217	<i>0</i>
Wearing Surface (ft ²)	510	12	15783	15083	500	0	<i>200</i>
Open Joint (ft)	304		158	100	58	0	<i>0</i>
RC Bridge Railing (ft)	331		412	360	40	12	<i>0</i>
Steel Beam/Girder (ft)	107		2054	1044	1000	10	<i>0</i>
Steel Protective Coating (ft ²)	515	107	15728	0	5628	10000	<i>100</i>
Elastomeric Bearings (each)	310		40	30	5	5	<i>0</i>
RC Columns (each)	205		8	4	4	0	<i>0</i>
RC Pier Wall (ft)	210		54	44	5	5	<i>0</i>
RC Abutment (ft)	215		182	140	30	12	<i>0</i>
RC Pier Cap (ft)	234		150	105	30	15	<i>0</i>

Example Element Data Set

This example shows the progression of element data sets considering all inspections performed since the last reporting of data to FHWA and ending with the data set (*Table 26*) that would be reported to FHWA.

Table 24. Element data set for a complete routine inspection performed since the last reporting of data to FHWA.

B.E.01	B.E.02	B.E.03	B.CS.01	B.CS.02	B.CS.03	B.CS.04
EN	EPN	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
12		16217	0	16000	217	0
510	12	15783	15083	500	0	200
107		2054	1044	1000	10	0
515	107	15728	0	5628	10000	100
205		8	4	4	0	0
210		54	44	5	5	0
215		182	140	30	12	0
234		150	105	30	15	0
304		158	100	58	0	0
310		40	30	5	5	0
331		412	360	40	12	0

Preservation work was completed on the reinforced concrete deck (EN 12) and steel open girder/beam (EN 107). An inspection was performed prior to reporting data to FHWA to update the condition of the following elements: steel protective coating (EN 515), steel open girder/beam (EN 107 - with section loss), reinforced concrete deck (EN 12), new wearing surface (EN 510), and new pourable joints (EN 301). The element data for this inspection is shown in *Table 25*.

Table 25. Element data collected for a one-time special inspection performed to account for preservation work that occurred after the inspection data shown in *Table 24* and prior to reporting data to FHWA.

B.E.01	B.E.02	B.E.03	B.CS.01	B.CS.02	B.CS.03	B.CS.04
EN	EPN	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
12		16217	0	<i>16217</i>	<i>0</i>	0
510	12	15783	<i>15783</i>	<i>0</i>	0	<i>0</i>
107		2054	<i>2044</i>	<i>0</i>	10	0
515	107	15728	<i>15728</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>301</i>		158	<i>158</i>	<i>0</i>	0	0

Cells shaded, with italicized text, in columns B.E.01, B.CS.01, B.CS.02, B.CS.03, and B.CS.04 show changes in data from *Table 24*.

Table 26. Element data set reported to FHWA reflecting all inspections performed since the last reporting of data to FHWA.

B.E.01	B.E.02	B.E.03	B.CS.01	B.CS.02	B.CS.03	B.CS.04
EN	EPN	Total Qty	CS1 Qty	CS2 Qty	CS3 Qty	CS4 Qty
12		16217	0	<i>16217</i>	<i>0</i>	0
510	12	15783	<i>15783</i>	<i>0</i>	0	<i>0</i>
107		2054	<i>2044</i>	<i>0</i>	10	0
515	107	15728	<i>15728</i>	<i>0</i>	<i>0</i>	<i>0</i>
<i>301</i>		158	<i>158</i>	<i>0</i>	0	0
205		8	4	4	0	0
210		54	44	5	5	0
215		182	140	30	12	0
234		150	105	30	15	0
310		40	30	5	5	0
331		412	360	40	12	0

Cells shaded, with italicized text, in columns B.E.01, B.CS.01, B.CS.02, B.CS.03, and B.CS.04 show changes in data from *Table 24*.

SUBSECTION 7.4: APPRAISAL

The data items in this subsection provide information about potential bridge vulnerabilities. These data items are considered part of the Primary Data Set and have a one-to-one relationship with a bridge. The data for these items typically remain static once a bridge has been initially inventoried and inspected or verified during subsequent inspections.

The following data items are included in this subsection.

Item ID	Data Item
----------------	------------------

B.AP.01	Approach Roadway Alignment
B.AP.02	Overtopping Likelihood
B.AP.03	Scour Vulnerability
B.AP.04	Scour Plan of Action
B.AP.05	Seismic Vulnerability
B.AP.IL.01	Scour Critical Analysis Date
B.AP.IL.02	Scour Critical Evaluation Method
B.AP.IL.03	Scour Critical Analysis By
B.AP.IL.04	Scour Critical Remarks
B.AP.IL.05	STP-Bridge Eligibility
B.AP.IL.06	Structurally Deficient

<i>Approach Roadway Alignment</i>										
<u>Format</u> AN (1)	<u>Frequency</u> EI	<u>Item ID</u> B.AP.01								
Specification		Commentary								
<p>Report the operating speed reduction at the bridge using one of the following codes.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td>G</td> <td>Good</td> </tr> <tr> <td>F</td> <td>Fair</td> </tr> <tr> <td>P</td> <td>Poor</td> </tr> </tbody> </table>		<u>Code</u>	<u>Description</u>	G	Good	F	Fair	P	Poor	<p>This item identifies bridges that do not function adequately due to the horizontal or vertical alignment of the bridge and approach roadway. It is not intended that the alignment be compared to current standards, but rather to the existing roadway alignment.</p> <p>The basic criterion is how the alignment of the bridge and approach roadway relates to the general highway alignment for the section of highway the bridge carries.</p>
<u>Code</u>	<u>Description</u>									
G	Good									
F	Fair									
P	Poor									
Commentary Continued										
<p>Do not consider speed reductions due to the bridge width or intersecting highways when reporting this item.</p> <p>The operating speed reduction is in comparison to the posted speed limit for the highway segment.</p> <p>Use code G when the operating speed is no different at the bridge than the rest of the highway segment that crosses the bridge.</p> <p>Use code F when the operating speed is noticeably different at the bridge than the rest of the highway segment that crosses the bridge.</p> <p>Use code P when the operating speed is substantially different at the bridge than the rest of the highway segment that crosses the bridge.</p>										

<i>Overtopping Likelihood</i>		
<u>Format</u> AN (1)	<u>Frequency</u> EI	<u>Item ID</u> B.AP.02
Specification		Commentary
<p>Report the likelihood of the waterway overtopping the bridge using one of the following codes.</p> <p>Code Description</p> <p>0 Never</p> <p>1 Remote – once every 100 years or less frequently</p> <p>2 Very low – once every 51 to 99 years</p> <p>3 Low – once every 26 to 50 years</p> <p>4 Moderate – once every 11 to 25 years</p> <p>5 High – once every 3 to 10 years</p> <p>6 Very High – once every 2 years or more frequently</p> <p>Do not report this item if the bridge does not cross over a waterway as indicated in Item B.F.01 (<i>Feature Type</i>).</p>		<p>An overtopping occurrence is when the waterway overtops the riding surface carried on the bridge.</p> <p>Bridge overtopping likelihood, since the year built (B.W.01), is typically determined from historical bridge inspection or maintenance records, hydraulic studies, local residents/landowners, and/or site indicators including highwater marks on the bridge or its surroundings, debris remains on bridge upper members, etc.</p> <p>For newer bridges with limited historical inspection or maintenance information, hydraulic design information can be used to establish an overtopping likelihood.</p> <p>This item does not apply to the likelihood of the waterway overtopping approach roadways.</p>

<i>Scour Vulnerability</i>																	
<u>Format</u> AN (1)	<u>Frequency</u> I																
<u>Item ID</u> B.AP.03																	
Specification	Commentary																
<p>Report the scour vulnerability of the bridge using one of the following codes.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Scour appraisal has not been completed.</td> </tr> <tr> <td>A</td> <td>Scour appraisal completed. Bridge determined to be stable for scour.</td> </tr> <tr> <td>B</td> <td>Scour appraisal completed. Bridge determined to be stable for scour, dependent upon designed, and functioning countermeasures.</td> </tr> <tr> <td>C</td> <td>Scour appraisal completed. Bridge could become unstable for scour. Temporary (not designed) countermeasure installed to mitigate scour. Bridge is scour critical.</td> </tr> <tr> <td>D</td> <td>Scour appraisal completed. Bridge is, or may become, unstable for scour. Bridge is scour critical.</td> </tr> <tr> <td>E</td> <td>Scour appraisal has not been completed. Temporary (not designed) countermeasure installed to mitigate scour.</td> </tr> <tr> <td>U</td> <td>Scour appraisal has not been completed due to unknown foundations.</td> </tr> </tbody> </table> <p>Do not report this item if the bridge does not cross over a waterway as indicated in Item B.F.01 (<i>Feature Type</i>).</p>	<u>Code</u>	<u>Description</u>	0	Scour appraisal has not been completed.	A	Scour appraisal completed. Bridge determined to be stable for scour.	B	Scour appraisal completed. Bridge determined to be stable for scour, dependent upon designed, and functioning countermeasures.	C	Scour appraisal completed. Bridge could become unstable for scour. Temporary (not designed) countermeasure installed to mitigate scour. Bridge is scour critical.	D	Scour appraisal completed. Bridge is, or may become, unstable for scour. Bridge is scour critical.	E	Scour appraisal has not been completed. Temporary (not designed) countermeasure installed to mitigate scour.	U	Scour appraisal has not been completed due to unknown foundations.	<p>The intent of this item is to report the status and vulnerability determination from scour appraisals required by the NBIS.</p> <p>The codes for this item are based on the appraised scour vulnerability as described in HEC-18, Evaluating Scour at Bridges; HEC-23, Bridge Scour and Stream Instability Countermeasures; and HEC-20, Stream Stability at Highway Structures.</p> <p>Scour appraisals are typically performed by a multidisciplinary team of hydraulic, geotechnical, and structural engineers (Scour Appraisal Team).</p> <p>FHWA Hydraulic Technical Advisories, manuals, and software can be found at: http://www.fhwa.dot.gov/engineering/hydraulics/index.cfm.</p> <p>Refer to item B.C.11 (<i>Scour Condition Rating</i>) in the Component Condition Ratings subsection to address field observed scour conditions and the effect on bridge components.</p> <p>Use code B when designed, installed, and functioning countermeasures are used to address potential scour and to maintain bridge stability for new or existing bridges, or bridges with unknown foundations.</p> <p>Use code B when the Scour Appraisal Team determines that the in-place, non-designed countermeasures are fully functioning and are appropriate to mitigate the risk of scour.</p> <p>Use code C for bridges that could become unstable for the potential scour, and temporary countermeasures are installed that were not designed.</p>
<u>Code</u>	<u>Description</u>																
0	Scour appraisal has not been completed.																
A	Scour appraisal completed. Bridge determined to be stable for scour.																
B	Scour appraisal completed. Bridge determined to be stable for scour, dependent upon designed, and functioning countermeasures.																
C	Scour appraisal completed. Bridge could become unstable for scour. Temporary (not designed) countermeasure installed to mitigate scour. Bridge is scour critical.																
D	Scour appraisal completed. Bridge is, or may become, unstable for scour. Bridge is scour critical.																
E	Scour appraisal has not been completed. Temporary (not designed) countermeasure installed to mitigate scour.																
U	Scour appraisal has not been completed due to unknown foundations.																

<i>Scour Plan of Action</i>	
<u>Format</u> AN (1)	<u>Frequency</u> I
<u>Item ID</u> B.AP.04	
Specification	Commentary
<p>Report whether the bridge has a scour plan of action (POA) implemented using one of the following codes.</p> <p>Code Description</p> <p>0 A scour POA is not required.</p> <p>N A scour POA is required but not implemented.</p> <p>Y A scour POA is required and implemented.</p> <p>Do not report this item if the bridge does not cross over a waterway as indicated in Item B.F.01 (<i>Feature Type</i>).</p>	<p>The NBIS requires a scour POA for bridges over water that are determined to be scour critical or have unknown foundations.</p> <p>More information on scour POA can be found at the FHWA Hydraulics Engineering website: http://www.fhwa.dot.gov/engineering/hydraulics/bridgehyd/poa.cfm.</p> <p>Use code 0 if a bridge was considered scour critical, but now has designed, installed, and fully functional scour countermeasures.</p> <p>A scour POA is a document that addresses, based on risk, a schedule for repair or installation of scour countermeasures, and/or the monitoring, inspection, closing, and opening a bridge to traffic during and after flood events to protect the traveling public.</p> <p>A scour POA is implemented when those responsible for actions under the plan are aware of their responsibilities and are exercising them when called for during or after a triggering event.</p> <p>A bridge should have a scour POA when it could become unstable for scour, and temporary countermeasures are installed that were not designed.</p>

<i>Seismic Vulnerability</i>															
<u>Format</u> AN (1)	<u>Frequency</u> I														
<u>Item ID</u> B.AP.05															
Specification	Commentary														
<p>Report the seismic vulnerability of the bridge using one of the following codes.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td>0</td> <td>Seismic evaluation not completed.</td> </tr> <tr> <td>N</td> <td>Bridge does not require seismic evaluation due to low anticipated ground motion or agency prioritization.</td> </tr> <tr> <td>A</td> <td>Seismic evaluation completed. Bridge determined to meet the agency's performance criteria established for the evaluation without need for retrofit.</td> </tr> <tr> <td>B</td> <td>Seismic evaluation completed. Satisfactory performance is dependent upon a designed, installed, and functioning retrofit. Retrofit is in place.</td> </tr> <tr> <td>C</td> <td>Seismic evaluation completed. Satisfactory performance is dependent upon a designed, installed, and functioning retrofit. Partial retrofit is in place.</td> </tr> <tr> <td>D</td> <td>Seismic evaluation completed. Satisfactory performance is dependent upon a designed, installed, and functioning retrofit. Retrofit is not in place.</td> </tr> </tbody> </table>	<u>Code</u>	<u>Description</u>	0	Seismic evaluation not completed.	N	Bridge does not require seismic evaluation due to low anticipated ground motion or agency prioritization.	A	Seismic evaluation completed. Bridge determined to meet the agency's performance criteria established for the evaluation without need for retrofit.	B	Seismic evaluation completed. Satisfactory performance is dependent upon a designed, installed, and functioning retrofit. Retrofit is in place.	C	Seismic evaluation completed. Satisfactory performance is dependent upon a designed, installed, and functioning retrofit. Partial retrofit is in place.	D	Seismic evaluation completed. Satisfactory performance is dependent upon a designed, installed, and functioning retrofit. Retrofit is not in place.	<p>This item provides available information resulting from seismic evaluation and retrofit programs that an agency may have performed of their own volition. The codes allow for a broad interpretation based on the reporting agency's methods and evaluation criteria.</p> <p>In lieu of agency-developed evaluation criteria, refer to the FHWA Seismic Retrofitting Manual for Highway Structures: Part 1 – Bridges, Publication No. FHWA-HRT-06-032, January 2006, for guidance on assessing the vulnerability of highway structures to the effects of earthquakes, and implementing retrofit measures to improve performance.</p> <p>Use code A when bridge is designed to meet applicable performance criteria established by the design specifications in effect at the time of construction and bridge would be expected to meet current agency established performance criteria.</p> <p>Use code C when only certain portions of the bridge have been retrofitted but not all portions of the bridge have been retrofitted to meet agency performance criteria.</p>
<u>Code</u>	<u>Description</u>														
0	Seismic evaluation not completed.														
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<i>Scour Critical Analysis Date</i>		
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.AP.IL.01
Specification		Commentary
<p>This item records the date the Scour Vulnerability (B.AP.03) for the structure was performed.</p> <p>History is retained by this date for each of the items on the Scour Analysis screen.</p>		<p>A ten-digit field (standard date format xx/xx/xxxx).</p>

<i>Scour Critical Evaluation Method</i>		
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.AP.IL.02
Specification		Commentary
<p>This item indicates the evaluation method used when performing the Scour Critical Evaluation (B.AP.03) for the structure.</p> <p>History is retained for this item based on each Scour Critical Analysis Date (B.AP.IL.01)</p> <p>Enter the appropriate code as listed below:</p> <p>Code Description</p> <p>A Determined by calculation</p> <p>B Determined by rational analysis</p> <p>C Unknown foundation</p> <p>D Evaluation in progress</p>		<p>A one-digit field.</p>

<i>Scour Critical Analysis By</i>		
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.AP.IL.03
Specification		Commentary
<p>This item identifies the individual name that had principal responsibility for the subject analysis.</p> <p>History is retained for this item based on each Scour Critical Analysis Date (B.AP.IL.01).</p>		<p>A unlimited field.</p> <p>Begin entry at the first space provided using any combination of letters, numbers, symbols and spaces. Abbreviations can be used if they are not ambiguous.</p>

<i>Scour Critical Remarks</i>		
<u>Format</u> AN (1)	<u>Frequency</u> I	<u>Item ID</u> B.AP.IL.04
Specification		Commentary
<p>This item records any miscellaneous remarks about the scour critical analysis that need to be made to clarify or document values or procedures. This space is also provided to record recommended corrective action and all follow-up actions.</p> <p>History is retained for this item based on each Scour Critical Analysis Date (B.AP.IL.01).</p>		<p>A unlimited field.</p> <p>Begin entry at the first space provided using any combination of letters, numbers, symbols and spaces. Abbreviations can be used if they are not ambiguous.</p>

<i>STP-Bridge Eligibility</i>		
<u>Format</u> RO	<u>Frequency</u> I	<u>Item ID</u> B.AP.IL.05
Specification	Commentary	
<p>This item indicates whether a structure is eligible to be rehabilitated or replaced utilizing monies allocated from STP-Bridge funds. See the Eligibility Table on the next page for qualifying criteria.</p>	<p>DO NOT ENTER. (This item is computer generated). A "Yes/No" text field.</p> <p>ELIGIBILITY TABLE Classification of Bridge Deficiency <u>Structurally Deficient</u> 1. A condition rating of 4 or less for: B.C.01 – Deck; or B.C.02 – Superstructure; or B.C.03 – Substructure; or B.C.04 – Culvert or 2. An appraisal rating of 2 or less for: B.LR.IL.03 – Structural Evaluation; or B.AP.02 – Waterway Adequacy <u>Functionally Obsolete</u> 1. An appraisal rating of 3 or less for: B.G.IL.03 – Deck Geometry; or B.H.IL.01 – Underclearance; or B.AP.01 – Approach Roadway Alignment or 2. An appraisal rating of 3 for: B.LR.IL.03 – Structural Evaluation B.AP.02 – Waterway Adequacy</p> <p>Any structure meeting one or more of the above deficiencies and having a Sufficiency Rating of 80.0 or less is eligible for HBP funding.</p> <p>Structures having a Sufficiency Rating of 50.0 to 80.0 are only eligible for rehabilitation, whereas those having a rating of less than 50.0 are eligible for either replacement or rehabilitation.</p> <p>Those bridges which may be classified as deficient or obsolete but have a sufficiency rating greater than 80.0 are not eligible for funding.</p>	

<i>Structurally Deficient</i>		
<u>Format</u> RO	<u>Frequency</u> I	<u>Item ID</u> B.AP.IL.06
Specification		Commentary
<p>Structures are structurally deficient if the ratings fall into the following criteria.</p> <p>A condition rating of 4 or less for: B.C.01 – Deck; or B.C.02 – Superstructure; or B.C.03 – Substructure; or B.C.04 – Culvert; or</p>		<p>DO NOT ENTER. (This item is computer generated). A "Yes/No" text field.</p>

SUBSECTION 7.5: WORK EVENTS

The data items in this subsection provide information about the year the bridge was built, and subsequent work performed on the bridge. These items provide information to assist in identifying the age of the bridge, substantiate condition rating changes, and assess service life.

Item B.W.01 (*Year Built*) is considered part of the Primary Data Set and has a one-to-one relationship with a bridge. The data for this item typically remain static once a bridge has been inventoried.

Items B.W.02 (*Year Work Performed*) and B.W.03 (*Work Performed*) are considered part of the Work Data Set and have a many-to-one relationship with a bridge. These items are reported for each year regardless of whether work was completed in that year. Reporting work events that were accepted into the NBI in prior years is not required unless it is found that the accepted data were incomplete or incorrect. To correct previously submitted work data for a given year, report a new complete work data set representative of that year.

The following data items are included in this subsection.

Item ID Data Item

B.W.01	Year Built
B.W.02	Year Work Performed
B.W.03	Work Performed
B.W.IL.01	Construction Type Indicator
B.W.IL.02	Construction Route Number
B.W.IL.03	Construction Section Number
B.W.IL.04	Construction Station Number
B.W.IL.05	Construction Contract Number
B.W.IL.06	Federal Aid Project Number
B.W.IL.07	Built By Agency
B.W.IL.08	Construction Remarks
B.W.IL.09	Plans Location
B.W.IL.10	Last Update Date
B.W.IL.11	PPS Improvement Type
B.W.IL.12	Letting Item Number
B.W.IL.13	Letting Date

<i>Year Built</i>		
<u>Format</u> N (4,0)	<u>Frequency</u> I	<u>Item ID</u> B.W.01
Specification		Commentary
<p>Report the year in which original construction was completed and the bridge was able to carry traffic.</p> <p>For phased construction, report the year in which the first phase was completed and the bridge was able to carry traffic.</p>		<p>This date reflects the date when construction was completed, regardless of when the bridge was opened to traffic.</p> <p>Rehabilitation and/or widening of a bridge does not change the year built. If any portion of the bridge remains, the year built does not change.</p> <p>Provide a best estimate when the year built is unknown; do not assign a default value.</p>

<i>Year Work Performed</i>		
<u>Format</u> N (4,0)	<u>Frequency</u> I	<u>Item ID</u> B.W.02
Specification		Commentary
<p>Report the year that work was completed on a bridge.</p> <p>For phased construction, report the year in which the first phase was completed and the bridge was able to carry traffic.</p> <p>This item is reported for each year regardless of whether work was completed on a bridge in that year.</p>		<p>This item identifies when work was completed to improve the functionality of a bridge, prevent deterioration from occurring, preserve a bridge, or restore the strength or performance of a bridge.</p> <p>Work performed should be identifiable by inspectors conducting an initial inspection following bridge replacement or rehabilitation. For other work types, information can be obtained from work tracking systems. When tracking systems are not readily accessible, estimate based on knowledge, observed changes and condition improvements since the previous inspection, applied stencils or stamps, wear, etc.</p>
Examples		
<p>A lane was added in 2016 during a corridor widening project. Report 2016.</p> <p>The deck, superstructure, railing, deck joints, and bearings were replaced on existing abutments in 2017. Report 2017.</p> <p>All bearings and two of three deck joints were replaced in 2015. Report 2015.</p> <p>Major rehabilitation was performed on a deck in multiple stages. The first stage was completed and opened to traffic in 2018. The final stage was completed in 2020. Report 2018.</p>		

Work Performed

<u>Format</u> AN (120)	<u>Frequency</u> I	<u>Item ID</u> B.W.03
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Specification

This item will be calculated based on Construction Type and PPS Improvement Type. Report all work completed on the bridge.

Report all types of work when improvement, rehabilitation, or preservation work categories were performed in combination (one or more work types from Table 30, 31, 32, and/or 33).

Do not report bridge improvement or bridge preservation (Table 30, 32, or 33) when the work resulted from replacement of a bridge (including replacement of all culvert barrels), or replacement of the deck, superstructure, or substructure, (Table 29 or Table 31 replacement work types).

Report only major rehabilitation when both major and minor rehabilitation were completed on the same component (e.g. the deck, superstructure, substructure, or culvert).

Table 29. Bridge replacement code.

SNBI Code	Description	PPS Imp. Type	PPS IT #	Constr. Type Indicator
BR1	Replaced	Br Replacement	019	O

Table 30. Bridge improvement codes.

SNBI Code	Description	PPS Imp. Type	PPS IT #	Constr. Type Indicator
IP1	Widened	Bridge Widening	022	R
IP2	Raised	Bridge Raising	033	R
IP3	Strengthened by retrofit			
IP4	Seismic retrofit	Seismic Retrofit	051	P

Table 31. Rehabilitation codes for deck, superstructure, substructure, and culvert.

SNBI Code - Deck	Description	PPS Imp. Type	PPS IT #	Constr. Type Indicator
DK1	Replaced	Bridge New Deck	005	R
DK2	Major Rehab			
DK3	Minor Rehab	Bridge Deck Repairs	006	M
SNBI Code - Superstructure	Description	PPS Imp. Type	PPS IT	Constr. Type Indicator
SP1	Replaced	Super Replace	023	R
SP2	Major Rehab	Super Rehab	025	R
SP3	Minor Rehab			

SNBI Code - Substructure				
SB1	Replaced			
SB2	Major Rehab	Substructure Rehab	020	R
SB3	Minor Rehab			
SNBI Code - Culvert				
	Replaced			
CU2	Major Rehab	Culvert Rehab	032	R
CU3	Minor Rehab	Culvert Extension	028	R

Table 32. Preservation codes for deck, superstructure, substructure, and culvert.

SNBI Code - Deck	Description	PPS Imp. Type	PPS IT #	Constr. Type Indicator
DK4	Overlaid	Bridge Deck Overlay	049	P
DK5	Sealed	Bridge Deck Sealing	055	P
	Coating (New or Replaced)			
	Coating (Preserved)			
SNBI Code - Superstructure				
	Overlaid			
SB5	Sealed	<i>Substructure Sealing*</i>	<i>073</i>	P
SB6	Coating (New or Replaced)	<i>Substructure Full Painting*</i>	<i>074</i>	P
SB7	Coating (Preserved)	<i>Substructure Zone/Spot Painting*</i>	<i>075</i>	P
SNBI Code - Culvert				
CU4	Overlaid			
CU5	Sealed			
CU6	Coating (New or Replaced)			
CU7	Coating (Preserved)			

Specification Continued – Work Performed				
Table 33. Other preservation codes.				
SNBI Code - Bearings	Description	PPS Imp. Type	PPS IT #	Constr. Type Indicator
BG1	Installed or Replaced	<i>Bearing Replacement</i>	<i>078</i>	P
BG2	Repaired	<i>Bearing Repair</i>	<i>079</i>	P
	Condition Improved			
SNBI Code-Deck Jts.				
JT1	Installed or Replaced	<i>Bridge Joint Replace</i>	<i>076</i>	P
JT2	Repaired	<i>Bridge Joint Repair</i>	<i>077</i>	P
	Condition Improved			
SNBI Code -Bridge Railings/Transitions				
RT1	Installed or Replaced	Handrail Replacement	506	M
RT2	Repaired			
	Condition Improved			
SNBI Code - Scour Countermeasures				
SC1	Installed or Replaced	Scour Mitigation	054	P
SC2	Repaired			
	Condition Improved			
SNBI Code - Channel Protection				
CP1	Installed or Replaced			
CP2	Repaired			
	Condition Improved			
SNBI Code - Channel				
	Installed or Replaced			
	Repaired			
CH1	Condition Improved			

Commentary – Work Performed

This item is used to indicate work that was completed to improve the functionality of a bridge, prevent deterioration from occurring, preserve a bridge, or restore the strength or performance of a bridge.

Use deck, superstructure, and substructure work codes as applicable, and only when work is performed on span configurations that are not reported as culverts in Item B.SP.01 (*Span Configuration Designation*); i.e. M, A, or W is reported. Use culvert work codes as applicable, and only when work is performed on span configurations that are reported as culverts in Item B.SP.01 (*Span Configuration Designation*); i.e. C or V is reported.

Routine maintenance or routine repair work to be excluded from reporting include actions that may be performed on isolated deficiencies, may be reactive in nature, and do not add measurable service life given the small work quantity. Instead, they are intended to maintain a minimum acceptable performance level. Generally, routine maintenance or routine repair does not improve component condition ratings. Examples of routine maintenance or routine repairs that are not reported are: deck patching to correct isolated spalls or punctures that are affecting rideability or safety, sidewalk repairs to correct isolated defects that affect public safety, and repair of isolated impact damage to railings or transitions.

Work performed should be identifiable by inspectors conducting an initial inspection following bridge replacement or rehabilitation. For other work types, information can be obtained from work tracking systems. When tracking systems are not readily accessible, estimate based on knowledge, observed changes and condition improvements since the previous inspection, applied stencils or stamps, wear, etc.

Use code BR1 (*Table 29*) when the bridge is replaced and the same bridge number is retained. This item is generally not reported when a bridge is replaced, because it is preferable that a new bridge number is assigned.

Commentary Continued – Work Performed

Use code BR1 when all barrels of a culvert are replaced.

Use codes IP1, IP2, IP3, and IP4 (*Table 30*) for functional and seismic improvements. Use code IP3 when the bridge was retrofitted to increase its load capacity beyond the original design capacity.

Use codes DK1, SP1, and SB1 (*Table 31*) for replacement of the deck, superstructure, and substructure, respectively. Use these codes only when the whole component on the bridge is replaced.

Use codes DK2, SP2, SB2, and CU2 (*Table 31*) for major rehabilitation work. Major rehabilitation is defined as the major work required to restore the structural integrity or serviceability of a bridge as well as the work to correct major safety defects. These codes also apply when one or more spans, barrels, or units were replaced, but not all.

Use codes DK3, SP3, SB3, and CU3 (*Table 31*) for minor rehabilitation work, not to include minor repairs. Minor rehabilitation is defined as minor work required to preserve or restore the structural integrity or serviceability of a bridge, as well as the work to correct minor safety defects. For this specification, it generally should include work that affects no more than 25 percent of the deck area within any span, or 25 percent of any one substructure unit or culvert barrel.

Use codes CU2 or CU3, as applicable, when culvert invert paving or encasement restores strength or performance, although it may also prevent deterioration.

Use deck, superstructure, substructure, and culvert preservation codes (*Table 32*) for preventive maintenance and preservation work that may also include some minor repairs.

Use code DK4 (*Table 32*) for overlay work. Also use codes DK2 or DK3 (*Table 31*), if applicable based on quantity, when work includes exposing the top mat of deck reinforcing steel.

Use codes SP7, SB7, and CU7 (*Table 32*) when zone coating, spot coating, or overcoating was applied to repair and extend the life of existing coatings.

Use codes CU6 or CU7, as applicable, for culvert pipe invert paving or encasement intended only to prevent deterioration.

Use codes CP1 or CP2 (*Table 33*) when channel protection work was completed at or adjacent to the bridge to mitigate channel issues that may impact the bridge.

Use code CH1 (*Table 33*) when the channel was improved by means other than protection systems or in addition to protection systems (e.g. horizontal realignment, excavation of aggregated material, or removal of large debris deposits). Use this code when work was completed at or adjacent to the bridge to mitigate channel issues that may impact the bridge.

Examples – Work Performed

A lane was added during a corridor widening project. Report IP1.

A low-build surface sealer was placed on the deck, and deck joints were repaired. Report DK5|JT2.

The deck, superstructure, railing, deck joints, and bearings were replaced on existing abutments. Report DK1|SP1 since the railing, deck joints, and bearing replacement resulted from the deck and superstructure replacement.

The deck concrete was removed to just below the top mat of reinforcing steel over 35 percent of the deck area, the deck was patched and overlaid with a thin epoxy, and the superstructure coating was removed and replaced. Report DK2|DK4|SP6.

Girder end reinforcement plates were added to restore strength at 20% of the girder ends in one of three spans. Report SP3.

All bearings and two of three deck joints were replaced. Report BG1|JT1.

All bearings were replaced, two of three deck joints were replaced, and one deck joint was repaired. Report BG1|JT1|JT2.

The far masonry abutment had work performed to correct a local scour hole and the settled and displaced bottom course of masonry stone. The masonry was repositioned and underpinned and a designed riprap scour countermeasure was installed around the abutment. Report SB3|SC1.

One of six HDPE pipes was replaced, and the remaining pipes had all transverse joints repaired with inner concrete collars. Report CU2 since this work includes both major and minor rehabilitation on the same component.

Girders had minor rehabilitation to restore multiple locations with section loss, the coating was replaced, and bolted cover plates were added to increase strength beyond the original design capacity. Report SP3|SP6|IP3.

<i>Construction Type Indicator</i>		
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.W.IL.01
Specification		Commentary
<p>This item indicates whether the type of construction history information is for the Original construction (O) (note: an alpha "O", not a numeric zero), Rehabilitation (R), Preservation (P) or Maintenance/Repairs (M) of the structure. Code "X" is reserved for unique situations.</p> <p>Original construction (O) pertains to the original building of the structure. A single structure number should never have more than one Construction Type Indicator record coded "O".</p> <p>Rehabilitation (R) is defined as the work necessary to bring the structure up to acceptable standards for the system on which it is located. Normally, this would eliminate all structural deficiencies and safety defects of the structure.</p> <ul style="list-style-type: none"> • Deck Replacement, Superstructure Replacement, Superstructure Rehabilitation, Major Substructure Rehabilitation, and Bridge Widening (with/without adding beams) includes super and/or sub widening. <p>Preservation (P) is defined as Actions or strategies that prevent, delay or reduce deterioration of bridges or bridge elements, restore the function of existing bridges, keep bridges in good or fair condition and extend their service life. Preservation actions may be schedule based or condition based.</p> <ul style="list-style-type: none"> • Washing, Deck Sealing, Concrete Super/Substructure Sealing, Paint, Expansion Joint Replacement, PPC Deck Beam Keyway Repair, Bearing Replacement/Repair, Overlay (including deck patching if needed), Scour Mitigation, and Drainage. <p>Maintenance/Repairs (M) is defined as any work that does not meet the definitions of Rehabilitation and Preservation.</p> <p>As a guide to determine if the construction should be recorded as Rehabilitation or Maintenance/ Repairs, inquire on the inspection report recorded after the</p>		<p>A one-digit field.</p>

construction was completed (Menu Selection # 4). The condition rating items should all have a value of '7' or greater and the appraisal items should all be '6' or greater to qualify as Rehabilitation. Any construction that has actions or strategies that prevent, delay or reduce deterioration of bridges or bridge elements, restore the function of existing bridges, keep bridges in good or fair condition and extend their service life record as Bridge Preservation. Preservation actions may be schedule or condition-based. See the IDOT Bridge Preservation Guide for examples of preservation actions/strategies. An exception can be made for the rehabilitation of through trusses. If the extent of the construction removes all the deficiencies except for its geometry, this should be considered as Rehabilitation in as much as this type of structure cannot be widened to eliminate its geometric deficiency. If the final inspection is not available prior to the recording of this item, use your best engineering judgment. This item can easily be changed when the final inspection becomes available. Code "X" is reserved for use with structures whose structure numbers have been inadvertently reused.

Enter a value for all structures.

<u>Code</u>	<u>Construction Type Indicator</u>
O (alpha O, not zero)	Original
R	Rehabilitation
P	Preservation
M	Maintenance/Repairs
X	Special

Examples
<p>Example: a structure 000-1234 was originally built in 1924 (B.W.I.L.01 coded "O"), completely removed in 1968 and a new structure erected 1200 feet from the original. However, the same structure number 000-1234 was given to the replacement structure (when a new structure number should have been assigned). Because the error was not detected within a reasonable amount of time, the same structure number has been recording information in ISIS for two totally different structures. The "X" code will be used to differentiate between the old and the new structures' history, inventory, and inspection information on the ISIS database and in the stored archive records of ISIS data. The 1924 Construction Type record's code "O" will be changed to "X" with a notation made in the Remarks field as to the date the structure was replaced. The 1968 Construction Type's record will be given the "O" code. Contact the Central Office, Data Management Unit, prior to assigning the "X" code.</p>

<i>Construction Route Number</i>		
<u>Format</u> AN (20)	<u>Frequency</u> I	<u>Item ID</u> B.W.IL.02
Specification		Commentary
<p>This item identifies the FAI, FAP, FAS, SBI, CH or other route designation that was part of the structure's construction identity.</p>		<p>A text field.</p> <p>Left justify and leave unused positions blank.</p> <p>Code the actual route designation appearing on the construction plans.</p>
Examples		
<p>A structure constructed on FAI 55 & 70. CONSTRUCTION ROUTE ENTER: FAI 55</p> <p>A structure on County Highway 15 for which all deficiencies have been eliminated to bring it to currently acceptable standards (reconstruction). CONSTRUCTION ROUTE ENTER: CH 15.</p>		

<i>Construction Section Number</i>	
<u>Format</u> AN (45)	<u>Frequency</u> I
<u>Item ID</u> B.W.IL.03	
Specification	Commentary
<p>This item identifies a code that is applied to each improvement to indicate the type of work being done and the continuity of work along the route.</p> <p>The Construction Section Number, along with the Construction Route, forms a unique identification of the structure. It allows distinct reference to actual construction plans and records.</p>	<p>A 45-digit field.</p> <p>Omit the word "Section" and begin entry in the first position provided. Enter the number exactly as it appears on construction plans, utilizing numbers, letters, symbols and punctuation.</p>
Examples	
Designation	Enter
Section 102, 103 (VB-1)	102, 103 (VB-1)
Section 10-00156-01-BR	10-00156-01-BR

<i>Construction Station Number</i>		
<u>Format</u> AN (10)	<u>Frequency</u> I	<u>Item ID</u> B.W.IL.04
Specification		Commentary
<p>This item identifies the construction station number for the structure, as indicated on the design plans.</p> <p>Record the construction route station number for the midpoint of the structure along its longitudinal centerline.</p> <p>When a structure crossing a highway has been assigned a construction section according to the construction route designation for the highway that it crosses, the number of the construction route station for the intersection of the center lines of the two highways is to be used.</p>		<p>A ten-digit field.</p> <p>Enter the station number beginning in the first available position. Include the plus sign and decimal point as individual characters occupying their own positions.</p> <p>Leave unused positions blank.</p>

<i>Construction Contract Number</i>		
<u>Format</u> AN (6)	<u>Frequency</u> I	<u>Item ID</u> B.W.IL.05
Specification		Commentary
<p>This field identifies the contract number assigned for a construction contract.</p>		<p>A six-digit field.</p> <p>Enter the contract number, beginning in the first available position.</p> <p>Leave unused positions blank.</p>

<i>Federal Aid Project Number</i>																																												
<u>Format</u> AN (25)	<u>Frequency</u> I	<u>Item ID</u> B.W.IL.06																																										
Specification	Commentary																																											
<p>This item identifies, by project number, a construction or reconstruction project in which Federal funds have been used.</p>																																												
Examples																																												
<p>Federal Aid Project Number F-81-1(1)</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 45%;"></td> <td style="width: 55%; text-align: right;">Enter</td> </tr> <tr> <td>FEDERAL AID PROJECT DESIGNATION</td> <td style="text-align: right;">F ---</td> </tr> <tr> <td>ROUTE and SECTION NUMBER</td> <td style="text-align: right;">0811</td> </tr> <tr> <td>AGREEMENT NUMBER</td> <td style="text-align: right;">001</td> </tr> <tr> <td>MILEPOST</td> <td style="text-align: right;">000</td> </tr> <tr> <td>-OR-</td> <td style="text-align: right;">F---0811001000</td> </tr> <tr> <td colspan="2">(where "---" signifies 3 blank spaces)</td> </tr> </table> <p>a. Project Number NRS-28(3)-B</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 45%;"></td> <td style="width: 55%; text-align: right;">Enter</td> </tr> <tr> <td>FEDERAL AID PROJECT DESIGNATION</td> <td style="text-align: right;">NRS-</td> </tr> <tr> <td>ROUTE/SECTION NUMBER</td> <td style="text-align: right;">28(3)</td> </tr> <tr> <td>AGREEMENT NUMBER</td> <td style="text-align: right;">-B</td> </tr> <tr> <td>MILEPOST</td> <td style="text-align: right;">---</td> </tr> <tr> <td>-OR-</td> <td style="text-align: right;">NRS-28(3)-B</td> </tr> <tr> <td colspan="2">(where "----" signifies 3 blank spaces)</td> </tr> </table> <p>b. Interstate 70 Project Number I-70-3(8)116</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 45%;"></td> <td style="width: 55%; text-align: right;">Enter</td> </tr> <tr> <td>FEDERAL AID PROJECT DESIGNATION</td> <td style="text-align: right;">I ---</td> </tr> <tr> <td>ROUTE/SECTION NUMBER</td> <td style="text-align: right;">0703</td> </tr> <tr> <td>AGREEMENT NUMBER</td> <td style="text-align: right;">(8)</td> </tr> <tr> <td>MILEPOST</td> <td style="text-align: right;">116</td> </tr> <tr> <td>-OR-</td> <td style="text-align: right;">I ---0703(8)116</td> </tr> <tr> <td colspan="2">(where "---" signifies 3 blank spaces)</td> </tr> </table>				Enter	FEDERAL AID PROJECT DESIGNATION	F ---	ROUTE and SECTION NUMBER	0811	AGREEMENT NUMBER	001	MILEPOST	000	-OR-	F---0811001000	(where "---" signifies 3 blank spaces)			Enter	FEDERAL AID PROJECT DESIGNATION	NRS-	ROUTE/SECTION NUMBER	28(3)	AGREEMENT NUMBER	-B	MILEPOST	---	-OR-	NRS-28(3)-B	(where "----" signifies 3 blank spaces)			Enter	FEDERAL AID PROJECT DESIGNATION	I ---	ROUTE/SECTION NUMBER	0703	AGREEMENT NUMBER	(8)	MILEPOST	116	-OR-	I ---0703(8)116	(where "---" signifies 3 blank spaces)	
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<i>Built By Agency</i>		
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.W.IL.07
Specification		Commentary
<p>This item identifies the agency that originally built, reconstructed or repaired the structure.</p> <p>Enter the code number for the agency that built, reconstructed, or was responsible for the maintenance/repair of the structure.</p> <p><u>Code</u> <u>Agency</u></p> <p>0 Unknown</p> <p>1 Illinois Department of Transportation</p> <p>2 Other State Agency</p> <p>3 County Agency</p> <p>4 City</p> <p>5 Federal Agency</p> <p>6 Railroad</p> <p>7 Other or Private</p> <p>8 Combination</p> <p>9 Township or Road District</p>		<p>A one-digit field.</p>

<i>Construction Remarks</i>		
<u>Format</u> AN	<u>Frequency</u> I	<u>Item ID</u> B.W.IL.08
Specification		Commentary
<p>Any pertinent remarks about the construction or reconstruction of the structure may be entered into this field. It is recommended that the scope of work be identified.</p>		<p>An unlimited text field.</p> <p>Abbreviations may be used if they are not ambiguous. Punctuation can be omitted if not needed for clarity.</p>

<i>Plans Location</i>		
<u>Format</u> AN (3)	<u>Frequency</u> I	<u>Item ID</u> B.W.IL.09
Specification		Commentary
<p>This item allows the recording of where construction plans are stored.</p>		<p>A text field.</p> <p>Enter appropriate comments beginning at the first space available using any combination of letters, numbers, symbols, and spaces.</p>

<i>Last Update Date</i>		
<u>Format</u> N	<u>Frequency</u> I	<u>Item ID</u> B.W.IL.10
Specification		Commentary
<p>This item indicates the last date any structure data item was updated on the Illinois Structure Information System (ISIS). The date changes at the same time as the change to a data item is made.</p> <p>Only changes made through ISIS or extracted from IRIS will affect a change in this item.</p>		<p>DO NOT ENTER. (This item is computer generated).</p>

<i>PPS Improvement Type</i>		
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.W.IL.11
Specification		
<p>Below is a list of PPS Improvement types that are available by Asset type. Bridge and Culvert Improvement types are grouped together within the database. All other assets will only show their specific items in the drop down.</p>		
<u>Bridges</u>		
003	Bridge Beam Replacement	
004	Bridge (New)	
005	Bridge New Deck	
006	Bridge Deck Repairs	
009	Bridge Electrical Work	
010	Bridge Erection	
011	Bridge Fabrication	
016	Bridge Rehabilitation	
017	Bridge Removal/Demolition	
018	Bridge Repair	
019	Bridge Replacement	
020	Bridge Substructure Rehab	
022	Bridge Widening	
	Bridge Superstructure	
023	Replace	
024	Pier Repair	
	Bridge Superstructure	
025	Rehab	
029	Navigation Lighting Repairs	
033	Bridge Raising	
039	Lower Roadway	
040	Keyway Repair	
047	Bridge Approach Roadway	
049	Bridge Deck Overlay	
050	Bridge Cleaning	
051	Seismic Retrofit	
054	Scour Mitigation	
055	Bridge Deck Sealing	
057	Drains (Replace/Repair)	
070	Superstructure Sealing	
071	Superstructure Full Painting	
	Superstructure Zone/Spot	
072	Painting	
073	Substructure Sealing	
074	Substructure Full Painting	
	Substructure Zone/Spot	
075	Painting	
076	Bridge Joint Replace	

077	Bridge Joint Repair
078	Bearing Replacement
079	Bearing Repair
097	PE (Bridge Office TSL)
098	PE (Br Off Final Plans)
099	Bridge Office PE
110	Interchange (New)
111	Interchange Reconstruction
147	Interchange Construction
174	Steel Supply
209	Retaining Wall
218	Slopedwall
219	Slopedwall Repair
222	Wing Wall Repair
505	Guardrail
506	Handrail Replacement
508	Lighting
512	Pedestrian Overpass
525	Pedestrian Underpass
603	PE (Consultant TSL)
605	PE (Consultant Plans)
617	PE (Bridge Inspection_
705	RR Grade Separation
707	RR Separation Rehab
716	RR Separation Replacement
804	Dredging
808	Miscellaneous
817	Jurisdictional Transfer
818	Approach Embankment
841	Rip Rap

Culvert**s**

028	Culvert Extension
032	Culvert Rehabilitation
044	Culvert Replacement
045	Culvert Repair
048	Culvert (New)
052	Culvert Removal
808	Miscellaneous
830	Jurisdictional Transfer

Tunnels

037	Ventilate Tunnel
808	Miscellaneous
830	Jurisdictional Transfer

Retaining Walls

209	Retaining Wall
808	Miscellaneous
830	Jurisdictional Transfer

Dry Land Bridges

808	Miscellaneous
830	Jurisdictional Transfer

Noise Walls

817	Noise Barriers
808	Miscellaneous

Miscellaneous

808	Miscellaneous
-----	---------------

Commentary

These improvement types are the ones that have been identified for each asset. Most of these will be used to help determine the calculation for B.W.03.

<i>Letting Item Number</i>		
<u>Format</u> N (5)	<u>Frequency</u> I	<u>Item ID</u> B.W.IL.12
Specification		Commentary
<p>This item indicates the Letting Number of each respective Letting.</p>		<p>Enter the appropriate Letting number.</p>

<i>Letting Date</i>		
<u>Format</u> (MM/D D/YYYY Y)	<u>Frequency</u> I	<u>Item ID</u> B.W.IL.13
Specification		Commentary
<p>This item indicates the Letting Date of each respective Letting became effective.</p>		<p>A ten-digit field (standard date format xx/xx/xxxx).</p>

SUBSECTION 7.6: MICROFILM

The data items in this subsection provide information about

Item ID	Data Item
----------------	------------------

B.A.IL.01	Microfilm Date & Time
B.A.IL.02	Microfilm Number
B.A.IL.03	Microfilm Done By
B.A.IL.04	Microfilm Type
B.A.IL.05	Microfilm Remarks
B.A.IL.06	Microfilm Beginning Frame Number
B.A.IL.07	Microfilm Ending Frame Number

<i>Microfilm Date & Time</i>		
<u>Format</u> RO	<u>Frequency</u> I	<u>Item ID</u> B.A.IL.01
Specification		Commentary
<p>This item logs the date and time that a microfilm record was added to the database.</p> <p>The item is used internally by the system to define a record as unique.</p> <p>The system can accept an unlimited number of records for each structure.</p>		<p>DO NOT ENTER. (This item is computer generated).</p>

<i>Microfilm Number</i>		
<u>Format</u> AN (50)	<u>Frequency</u> I	<u>Item ID</u> B.A.IL.02
Specification		Commentary
<p>This item indicates the number that identifies a microfilmed set of bridge documents.</p>		<p>A field.</p> <p>Begin entry at the first space provided using any combination of letters, numbers, symbols and spaces. Abbreviations can be used as long as they are not ambiguous.</p>

<i>Microfilm Done By</i>		
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.A.IL.03
Specification		Commentary
<p>This item indicates the IDOT Agency and Bureau that ordered the microfilming.</p> <p>Enter the appropriate code as listed below (B.A.IL.03):</p> <p>Code Agency</p> <p>0 Central Office</p> <p>1-9 District</p> <p>A one-digit field.</p> <p>Enter the appropriate code as listed below (B.A.IL.03):</p> <p>Code Bureau</p> <p>B Bridges</p> <p>C Construction</p> <p>D Design</p> <p>L Local Roads</p> <p>M Maintenance</p> <p>P Planning</p>		<p>A one-digit field.</p>

<i>Microfilm Type</i>		
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.A.IL.04
Specification		Commentary
<p>This item identifies the type of documents that were microfilmed.</p> <p>Enter the appropriate code as listed below:</p> <p><u>Code</u> <u>Type of Plans</u></p> <p>0 Other</p> <p>1 As-Built Plans</p> <p>2 Design Plans</p> <p>3 Fabrication Plans</p> <p>4 Correspondence</p> <p>5 Computations (Original)</p> <p>6 Computations Rehabilitation</p> <p>7 Shop Plans</p>		<p>A one-digit field.</p>

<i>Microfilm Remarks</i>		
<u>Format</u> AN	<u>Frequency</u> I	<u>Item ID</u> B.A.IL.05
Specification		Commentary
<p>This item allows for special notes or remarks for the microfilmed set of plans.</p>		<p>A unlimited field.</p> <p>Begin entry at the first space provided using any combination of letters, numbers, symbols and spaces. Abbreviations can be used if they are not ambiguous.</p>

<i>Microfilm Beginning Frame Number</i>		
<u>Format</u> N (10)	<u>Frequency</u> I	<u>Item ID</u> B.A.IL.06
Specification		Commentary
This item indicates the first frame number which contains information about the microfilmed bridge.		A digit field.

<i>Microfilm Ending Frame Number</i>		
<u>Format</u> N (10)	<u>Frequency</u> I	<u>Item ID</u> B.A.IL.07
Specification		Commentary
<p>This item indicates the last frame number which contains information about the microfilmed bridge.</p>		<p>A digit field.</p>

SUBSECTION 7.7: MISCELLANEOUS

The data items in this subsection provide information about

Item ID Data Item

- B.M.IL.01 [Channel Section Cross Section Submission Date](#)
- B.M.IL.02 [NSTM Plan Section Submission Date](#)
- B.M.IL.03 [Underwater Inspection Plan Submission Date](#)
- B.M.IL.04 [Complex Bridge Inspection Plan Submission Date](#)
- B.M.IL.05 [TAMP Major Bridge](#)
- B.M.IL.06 [Other Agencies Structure Number](#)

<i>Channel Section Cross Section Submission Date</i>		
<u>Format</u> N	<u>Frequency</u> I	<u>Item ID</u> B.M.IL.01
Specification		Commentary
This item indicates the date that it became effective.		A ten-digit field (standard date format xx/xx/xxxx).

<i>NSTM Plan Section Submission Date</i>		
<u>Format</u> N	<u>Frequency</u> I	<u>Item ID</u> B.M.IL.02
Specification		Commentary
<p>This item indicates the date that it became effective.</p>		<p>A ten-digit field (standard date format xx/xx/xxxx).</p>

<i>Underwater Inspection Plan Submission Date</i>		
<u>Format</u> N	<u>Frequency</u> I	<u>Item ID</u> B.M.IL.03
Specification		Commentary
<p>This item indicates the date that it became effective.</p>		<p>A ten-digit field (standard date format xx/xx/xxxx).</p>

<i>Complex Bridge Inspection Plan Submission Date</i>		
<u>Format</u> N	<u>Frequency</u> I	<u>Item ID</u> B.M.IL.04
Specification		Commentary
<p>This item indicates the date that it became effective.</p>		<p>A ten-digit field (standard date format xx/xx/xxxx).</p>

<i>TAMP Major Bridge</i>		
<u>Format</u> CHK	<u>Frequency</u> I	<u>Item ID</u> B.M.IL.05
Specification		Commentary
<p>This item is used to mark a structure if it is a TAMP major bridge. This is based off BBS groupings of bridges.</p>		<p>A check box.</p>

<i>Other Agencies Structure Number</i>		
<u>Format</u> AN	<u>Frequency</u> I	<u>Item ID</u> B.M.IL.06
Specification		Commentary
<p>This item is used to cross-reference a structure with the other agencies structure number.</p>		<p>A field. Leave blank if not applicable.</p>

SUBSECTION 7.8: NSTM INVENTORY

The data items in this subsection provide information about

Item ID Data Item

B.NSTM.IL.01	Fracture Critical Bridge Type
B.NSTM.IL.02	Fracture Critical Number Of Spans
B.NSTM.IL.03	Fracture Critical Number Of Members
B.NSTM.IL.04	NSTM Remarks

<i>Fracture Critical Bridge Type</i>																																										
<u>Format</u> N	<u>Frequency</u> I	<u>Item ID</u> B.NSTM.IL.01																																								
Specification	Commentary																																									
<p>This item identifies a bridge or component type that contains fracture critical members, member components, or other related features. This item must be coded before a Fracture Critical inspection can be entered in the ISIS database. The procedure is as follows:</p> <ul style="list-style-type: none"> ▪ First, the Central Bureau of Bridges and Structures (BBS) must enter a type code on the ISIS FRACTURE CRITICAL INVENTORY screen that serves to identify the bridge as having a fracture critical member. ▪ Following the BBS entry, the District can then enter an inspection record for each identified member, using the FRACTURE CRITICAL screen on ISIS for ALL bridges and on BIS for STATE bridges only. <p>History is retained for each inspection of each fracture critical type.</p>	<p>A two-digit field. Enter the appropriate code for the identified type.</p> <table border="0" style="width: 100%;"> <thead> <tr> <th style="text-align: left;"><u>Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td>A1</td> <td>Two Girder System-Suspension Link and Pin A2 Two Girder System-Suspension Single Pin</td> </tr> <tr> <td>A3</td> <td>Two Girder System-Tension Flanges of Riveted or Bolted Plate Girders</td> </tr> <tr> <td>A4</td> <td>Two Girder System-Bearing Seat of Suspended Spans</td> </tr> <tr> <td>A5</td> <td>Two Girder System-Tension Flange of Rolled Beam</td> </tr> <tr> <td>A6</td> <td>Two Girder System-Tension Flanges of Welded Plate Girders</td> </tr> <tr> <td>A7</td> <td>Two Girder System-Tension Flanges of Lattice Truss Web Girders B1 Truss System-Eyebars and Pin Tension Members</td> </tr> <tr> <td>B2</td> <td>Truss System-Simple Span Welded Truss Tension Members</td> </tr> <tr> <td>B3</td> <td>Truss System-Hanger Link and Pin of Suspended Trusses</td> </tr> <tr> <td>B4</td> <td>Truss System-Single Element Tension Members</td> </tr> <tr> <td>B5</td> <td>Truss System-Simple Span Riveted or Bolted Tension Members</td> </tr> <tr> <td>B6</td> <td>Continuous Truss System-Welded, Riveted or Bolted Tension Members</td> </tr> <tr> <td>C1</td> <td>Suspension Bridge-Cables</td> </tr> <tr> <td>C2</td> <td>Cable Stayed-Cables</td> </tr> <tr> <td>D1</td> <td>Tied Arches-Welded Box Ties</td> </tr> <tr> <td>D2</td> <td>Tied Arches-Riveted or Bolted Box Ties</td> </tr> <tr> <td>D3</td> <td>Tied Arches-Stiffened Girders</td> </tr> <tr> <td>D4</td> <td>Tied Arches-Hangars Single Member</td> </tr> <tr> <td>E1</td> <td>Framed Steel Substructures-Welded or Rolled Abut./Pier Cap</td> </tr> <tr> <td>E2</td> <td>Framed Steel Substructures-Riveted</td> </tr> </tbody> </table>		<u>Code</u>	<u>Description</u>	A1	Two Girder System-Suspension Link and Pin A2 Two Girder System-Suspension Single Pin	A3	Two Girder System-Tension Flanges of Riveted or Bolted Plate Girders	A4	Two Girder System-Bearing Seat of Suspended Spans	A5	Two Girder System-Tension Flange of Rolled Beam	A6	Two Girder System-Tension Flanges of Welded Plate Girders	A7	Two Girder System-Tension Flanges of Lattice Truss Web Girders B1 Truss System-Eyebars and Pin Tension Members	B2	Truss System-Simple Span Welded Truss Tension Members	B3	Truss System-Hanger Link and Pin of Suspended Trusses	B4	Truss System-Single Element Tension Members	B5	Truss System-Simple Span Riveted or Bolted Tension Members	B6	Continuous Truss System-Welded, Riveted or Bolted Tension Members	C1	Suspension Bridge-Cables	C2	Cable Stayed-Cables	D1	Tied Arches-Welded Box Ties	D2	Tied Arches-Riveted or Bolted Box Ties	D3	Tied Arches-Stiffened Girders	D4	Tied Arches-Hangars Single Member	E1	Framed Steel Substructures-Welded or Rolled Abut./Pier Cap	E2	Framed Steel Substructures-Riveted
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		or Bolted Abut./Pier Cap
	E3	Framed Steel Substructures-Welded or Rolled Abut./Pier Column
	E4	Framed Steel Substructures-Riveted or Bolted Abut./Pier Column
	F1	Longitudinal Box Beam-Single Welded Box
	F2	Longitudinal Box Beam-Single Riveted or Bolted Box
	F3	Double Box Beam-Welded, Riveted, or Bolted
	X1	Bascule
	X2	Floor beams Supporting Other Steel Members or Spacing > 15'
	X3	Cross Frames or Transfer Beams
	X4	Other

<i>Fracture Critical Number of Spans</i>		
<u>Format</u> N	<u>Frequency</u> I	<u>Item ID</u> B.NSTM.IL .02
Specification		Commentary
<p>This item indicates the number of spans in the structure that contains the identified fracture critical or related bridge type. If substructure elements are fractured critical, the item indicates the number of affected units.</p> <p>This is not necessarily the same as the total number of spans contained within the total structure as reported in Items 45 and 46.</p>		<p>A three-digit field.</p>

<i>Fracture Critical Number of Members</i>		
<u>Format</u> N	<u>Frequency</u> I	<u>Item ID</u> B.NSTM.IL .03
Specification		Commentary
<p>This item gives the number of critical members, components or features contained in the identified fracture critical or related bridge type of the structure.</p>		<p>A three-digit field.</p>

<i>NSTM Remarks</i>												
<u>Format</u> AN	<u>Frequency</u> I	<u>Item ID</u> B.NSTM.IL .04										
Specification		Commentary										
<p>This item indicates the method used in performing the inspection of the fracture critical member for the associated fracture critical or related bridge type.</p> <p>History is retained according to Item 93A (Fracture Critical Inspection Date) for each inspection of an identified type as indicated by B.NSTM.IL.01 (Fracture Critical Member Type).</p> <p>Check the appropriate boxes for the method of inspection performed.</p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>Method</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td>V</td> <td>Visual</td> </tr> <tr> <td>MP</td> <td>Magnetic Particle</td> </tr> <tr> <td>DP</td> <td>Dye Penetrate</td> </tr> <tr> <td>UT</td> <td>Ultrasonic Testing</td> </tr> </tbody> </table>		<u>Method</u>	<u>Description</u>	V	Visual	MP	Magnetic Particle	DP	Dye Penetrate	UT	Ultrasonic Testing	<p>A check box.</p>
<u>Method</u>	<u>Description</u>											
V	Visual											
MP	Magnetic Particle											
DP	Dye Penetrate											
UT	Ultrasonic Testing											

SUBSECTION 7.9: PAINT

The data items in this subsection provide information about

Item ID Data Item

B.PT.IL.01 [Last Paint Date](#)

B.PT.IL.02 [Last Paint Type](#)

B.PT.IL.03 [Paint Remarks](#)

<i>Last Paint Date</i>		
<u>Format</u> (MM/D D/YYYY Y)	<u>Frequency</u> I	<u>Item ID</u> B.PT.IL.01
Specification		Commentary
<p>This item records the date the bridge was last painted.</p> <p>If an entry is made for this item, an entry is also required for Last Paint Type (B.PT.IL.02).</p> <p>History is retained for this item based on each Inspection Date (B.IE.03).</p>		<p>A ten-digit field (standard date format xx/xx/xxxx).</p>

<i>Last Paint Type</i>		
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.PT.IL.02
Specification		Commentary
<p>This item indicates the type of paint used for the time it was painted as indicated in Last Paint Date (B.PT.IL.01). This item is required if an entry is made for Last Paint Date (B.PT.IL.01).</p> <p>History is retained for this item based on each Inspection Date (B.IE.03).</p> <p>Enter any combination of the codes listed below in the sequence listed above.</p> <p><u>Code</u> <u>Paint Type</u></p> <p>A Shop applied Basic Lead Silico Chromate or Red Lead primer/Maroon first field coat and interstate green* final coat.</p> <p>B Shop applied Basic Lead Silico Chromate or Red Lead primer/Aluminum first and final field coats.</p> <p>C Combination of A and B.</p> <p>D Field applied Basic Lead Silico Chromate or Red Lead primer/Maroon and interstate green* 2nd and final coats.</p> <p>E Field applied Basic Lead Silico Chromate or Red Lead primer/Aluminum 2nd and final coats.</p> <p>F Combination of D and E.</p> <p>G Shop applied Zinc Silicate and Field applied Vinyl paint system.</p> <p>H Field applied Zinc Silicate and Vinyl paint system.</p> <p>I Aluminum Epoxy Mastic Primer and Vinyl or Urethane overcoat system.</p> <p>J Iron Oxide/Zinc Oxide Primer and Alkyd top coats.</p> <p>K Iron Oxide/Zinc Oxide Primer and Aluminum Phenolic top coats.</p> <p>L Miscellaneous Alkyd systems.</p> <p>M Miscellaneous Epoxy systems.</p> <p>N Miscellaneous Urethane primer systems.</p>		<p>Four, two-digit fields:</p> <p>1st & 2nd position - most extensively used paint system</p> <p>3rd & 4th position - second system</p> <p>5th & 6th position - third system</p> <p>7th & 8th position - handrail</p>

O	Base weathering Steel.	
P	Other coating systems.	
Q	Other protective systems.	
R	No protection system.	
S	Shop applied Zinc Silicate and Field applied Acrylic paint system.	
T	Field applied Zinc Silicate and Acrylic paint system.	
U	Field applied Aluminum Epoxy and Acrylic.	
V	Galvanized	
W	Shop applied Metallizing & Field applied Polyurethane	
X	Shop applied Zinc Silicate & Field applied Polyurethane	
Y	Shop applied Organic Zinc and Field applied Epoxy & Polyurethane	
Z	Field applied Organic Zinc, Epoxy & Polyurethane	
AA	Field applied Moisture Cured Urethane	
AB	Shop applied Organic Zinc, Epoxy, & Urethane	
AC	Shop applied Metallizing (No top coat)	
AD	Field applied Metallizing (No top coat)	
AE	Shop applied Metallizing (Clear top coat)	
AF	Shop applied Metallizing (Epoxy & Acrylic)	
AG	Shop applied Metallizing (Epoxy & Urethane)	

<i>Paint Remarks</i>		
<u>Format</u> AN	<u>Frequency</u> I	<u>Item ID</u> B.PT.IL.03
Specification		Commentary
<p>This item allows the recording of any special information or data that would not fit the space available regarding the Paint.</p>		<p>An unlimited text field.</p> <p>Enter appropriate comments beginning with the first space available using any combination of letters, numbers, symbols, and spaces. Abbreviations can be used if they are not ambiguous.</p>

SUBSECTION 8.0: SPECIAL INSPECTIONS

The data items in this subsection provide information about

Item ID Data Item

- B.SII.IL.01 [Special Inspection Type](#)
- B.SII.IL.02 [Special Inspection Start Date](#)
- B.SII.IL.03 [Special Inspection Close Date](#)
- B.SII.IL.04 [Special Inspection Initiated By](#)
- B.SII.IL.05 [Special Inspection Remarks](#)
- B.SII.IL.06 [Special Inspection Determination Date](#)
- B.SII.IL.07 [Special Inspection Inspect By Date](#)
- B.SII.IL.08 [Special Inspection Condition Status](#)

<i>Special Inspection Type</i>		
<u>Format</u> N	<u>Frequency</u> I	<u>Item ID</u> B.SII.IL.0 1
Specification		Commentary
<p>This item is the type or feature that needs to be inspected.</p> <p>Code Description</p> <p>A Structural Damage/Deterioration – Steel Superstructure Elements</p> <p>B Structural Damage/Deterioration – Concrete Superstructure Elements</p> <p>C Structural Damage/Deterioration – Timber Superstructure Elements</p> <p>D Structural Damage/Deterioration – Steel Substructure Elements</p> <p>E Structural Damage/Deterioration – Concrete Substructure Elements</p> <p>F Structural Damage/Deterioration – Timber Substructure Elements</p> <p>G Underwater Condition Inspection – Debris and/or Erodible Soils</p> <p>H Underwater Condition Inspection – Flow Restriction/Velocity</p> <p>I Underwater Condition Inspection – Spread Footings not adequately keyed into rock or protected from the effects of streambed scour</p> <p>J Reserved</p> <p>K Underwater Condition Inspection – Scour Critical Evaluation Monitoring</p> <p>L Existing Streambed Scour Adjacent to Spread Footing</p> <p>M Existing Streambed Scour Adjacent to Pile Supported Footing</p> <p>N Existing Streambed Scour Adjacent to Pile Bent Substructure Unit</p> <p>P Embankment Movement or Settlement</p> <p>Q Substructure Movement or Settlement</p> <p>R Pin & Link in Multi-Girder (Redundant) Bridge</p> <p>S Specifically Identified Problematic Structural Details</p> <p>T Deck</p> <p>Z Other</p>		<p>A one-digit field.</p>

<i>Special Inspection Start Date</i>		
<u>Format</u> N	<u>Frequency</u> I	<u>Item ID</u> B.SII.IL.0 2
Specification		Commentary
The date on which the need for a Special Inspection was initiated.		A ten-digit field (standard date format xx/xx/xxxx).

<i>Special Inspection Close Date</i>		
<u>Format</u> N	<u>Frequency</u> I	<u>Item ID</u> B.SII.IL.0 3
Specification		Commentary
The date on which the need for a Special Inspection was rescinded.		A ten-digit field (standard date format xx/xx/xxxx).

<i>Special Inspection Initiated By</i>												
<u>Format</u> N	<u>Frequency</u> I	<u>Item ID</u> B.SII.IL.0 4										
Specification		Commentary										
<p>This item indicates the Office or Agency that initiated the Special Inspection.</p> <p>Enter the appropriate code for the initiating agency.</p> <p><u>Initiated</u></p> <table border="0"> <thead> <tr> <th style="text-align: left;"><u>By Code</u></th> <th style="text-align: left;"><u>Description</u></th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Central Bridge Office (BBS)</td> </tr> <tr> <td>2</td> <td>IDOT District Office</td> </tr> <tr> <td>3</td> <td>Local Agency</td> </tr> <tr> <td>4</td> <td>Other Agency</td> </tr> </tbody> </table>		<u>By Code</u>	<u>Description</u>	1	Central Bridge Office (BBS)	2	IDOT District Office	3	Local Agency	4	Other Agency	<p>A one-digit field.</p>
<u>By Code</u>	<u>Description</u>											
1	Central Bridge Office (BBS)											
2	IDOT District Office											
3	Local Agency											
4	Other Agency											

<i>Special Inspection Remarks</i>		
<u>Format</u> AN	<u>Frequency</u> I	<u>Item ID</u> B.SII.IL.0 5
Specification		Commentary
<p>This item records any remarks about the Special Inspection Inventory that has been initiated.</p>		<p>A unlimited text field.</p> <p>Enter appropriate comments beginning at the first space available using any combination of letters, numbers, symbols and spaces. Abbreviations can be used if they are not ambiguous.</p>

<i>Special Inspection Determination Date</i>		
<u>Format</u> N	<u>Frequency</u> I	<u>Item ID</u> B.SII.IL.0 6
Specification		Commentary
The date when the determination is made that a Special Inspection is needed.		A ten-digit field (standard date format xx/xx/xxxx).

<i>Special Inspection Inspect By Date</i>		
<u>Format</u> N	<u>Frequency</u> I	<u>Item ID</u> B.SII.IL.0 7
Specification		Commentary
<p>The date when a structure should have a completed Special Inspection, determined by the appropriate agency and/or IDOT personnel.</p>		<p>A ten-digit field (standard date format xx/xx/xxxx).</p>

<i>Special Inspection Condition Status</i>	
<u>Format</u> N	<u>Frequency</u> I
<u>Item ID</u> B.SII.IL.0 8	
Specification	Commentary
<p>This item reflects the condition of the feature or type that is being inspected and monitored.</p> <p><u>Condition Type Code</u> <u>Description</u></p> <p>0 Worsening Condition Indicative of Imminent Structural Failure (closure required Until follow-up inspection by BBS staff)</p> <p>1 Progression of Deterioration or Worsening of Condition noted (immediate Follow-up inspection by BBS staff or District Bridge Maintenance Engineer required)</p> <p>2 No Change in Condition Noted</p> <p>3 Corrected Condition Noted (Special Inspection no longer required after verification of adequacy of corrected condition by appropriate IDOT personnel)</p> <p>4 Feature determined to be in good or better condition (primarily for monitoring problematic details)</p>	<p>A one-digit field.</p>

SUBSECTION 8.1: UTILITY

The data items in this subsection provide information about

Item ID Data Item

B.U.IL.01 [Utilities Attached](#)

<i>Utilities Attached</i>		
<u>Format</u> DDL	<u>Frequency</u> I	<u>Item ID</u> B.U.IL.01
Specification		Commentary
<p>This item indicates the type of utilities that are attached to the structure. Up to three utilities can be recorded.</p> <p>History is retained for this item based on each Inspection Date (B.IE.03).</p> <p>Unused fields may be left blank only if the first utility field is not "N". If first position is "N", code the remaining two utility fields "N".</p> <p><u>Code</u> <u>Utility</u></p> <p>0 Stream Gauge Conduit</p> <p>1 Natural Gas</p> <p>2 Petroleum</p> <p>3 Water Line</p> <p>4 Steam</p> <p>5 Storm Water</p> <p>6 Sewer</p> <p>7 Telephone</p> <p>8 Cable</p> <p>9 Electric</p> <p>A Fiber Optics</p> <p>B Other</p> <p>C Combination</p> <p>N Not Applicable</p>		<p>Three, one-digit fields, the first two of which may contain any code except "C".</p>

APPENDIX A: COMPREHENSIVE EXAMPLE DATA SETS & DATA ITEMS FOR BRIDGE NUMBER 15558X

Shaded cells in the following tables indicate when data items are not reported or left blank according to the data item specifications.

Table 36. Primary Data Set for Bridge Number 15558X.

Item ID	Data Item	Value
B.ID.01	<i>Bridge Number</i>	15558X
B.ID.02	<i>Bridge Name</i>	North Hanley Road Bridge
B.ID.03	<i>Previous Bridge Number</i>	0
B.L.01	<i>State Code</i>	29
B.L.02	<i>County Code</i>	189
B.L.03	<i>Place Code</i>	4906
B.L.04	<i>Highway Agency District</i>	5
B.L.05	<i>Latitude</i>	38.755356
B.L.06	<i>Longitude</i>	-90.334486
B.L.07	<i>Border Bridge Number</i>	N
B.L.08	<i>Border Bridge State or Country Code</i>	
B.L.09	<i>Border Bridge Inspection Responsibility</i>	
B.L.10	<i>Border Bridge Designated Lead State</i>	
B.L.11	<i>Bridge Location</i>	0.4 miles north on N Hanley Rd from intersection with Airport Rd
B.L.12	<i>Metropolitan Planning Organization</i>	East-West Gateway Council of Governments
B.CL.01	<i>Owner</i>	L01
B.CL.02	<i>Maintenance Responsibility</i>	L01
B.CL.03	<i>Federal or Tribal Land Access</i>	N
B.CL.04	<i>Historic Significance</i>	N
B.CL.05	<i>Toll</i>	N
B.CL.06	<i>Emergency Evacuation Designation</i>	N
B.RH.01	<i>Bridge Railings</i>	3504
B.RH.02	<i>Transitions</i>	S92
B.G.01	<i>NBIS Bridge Length</i>	400.6
B.G.02	<i>Total Bridge Length</i>	407.6
B.G.03	<i>Maximum Span Length</i>	75.0
B.G.04	<i>Minimum Span Length</i>	45.0
B.G.05	<i>Bridge Width Out-to-Out</i>	73.8
B.G.06	<i>Bridge Width Curb-to-Curb</i>	64.0
B.G.07	<i>Left Curb or Sidewalk Width</i>	3.5
B.G.08	<i>Right Curb or Sidewalk Width</i>	3.5
B.G.09	<i>Approach Roadway Width</i>	66.7
B.G.10	<i>Bridge Median</i>	0

Item ID	Data Item	Value
B.G.11	<i>Skew</i>	45
B.G.12	<i>Curved Bridge</i>	N
B.G.13	<i>Maximum Bridge Height</i>	38
B.G.14	<i>Sidehill Bridge</i>	N
B.G.15	<i>Irregular Deck Area</i>	
B.G.16	<i>Calculated Deck Area (Determined by FHWA*)</i>	30080.9*
B.LR.01	<i>Design Load</i>	HS20
B.LR.02	<i>Design Method</i>	ASD
B.LR.03	<i>Load Rating Date</i>	20160214
B.LR.04	<i>Load Rating Method</i>	LFR
B.LR.05	<i>Inventory Load Rating Factor</i>	0.30
B.LR.06	<i>Operating Load Rating Factor</i>	0.50
B.LR.07	<i>Controlling Legal Load Rating Factor</i>	0.44
B.LR.08	<i>Routine Permit Loads</i>	C
B.IR.01	<i>NSTM Inspection Required</i>	N
B.IR.02	<i>Fatigue Details</i>	N
B.IR.03	<i>Underwater Inspection Required</i>	N
B.IR.04	<i>Complex Feature</i>	N
B.C.01	<i>Deck Condition Rating</i>	6
B.C.02	<i>Superstructure Condition Rating</i>	5
B.C.03	<i>Substructure Condition Rating</i>	6
B.C.04	<i>Culvert Condition Rating</i>	N
B.C.05	<i>Bridge Railings Condition Rating</i>	7
B.C.06	<i>Bridge Railing Transitions Condition Rating</i>	7
B.C.07	<i>Bridge Bearings Condition Rating</i>	4
B.C.08	<i>Bridge Joints Condition Rating</i>	2
B.C.09	<i>Channel Condition Rating</i>	5
B.C.10	<i>Channel Protection Condition Rating</i>	6
B.C.11	<i>Scour Condition Rating</i>	9
B.C.12	<i>Bridge Condition Classification (Determined by FHWA*)</i>	F*
B.C.13	<i>Lowest Condition Rating Code (Determined by FHWA*)</i>	5*
B.C.14	<i>NSTM Inspection Condition</i>	
B.C.15	<i>Underwater Inspection Condition</i>	
B.AP.01	<i>Approach Roadway Alignment</i>	F
B.AP.02	<i>Overtopping Likelihood</i>	0
B.AP.03	<i>Scour Vulnerability</i>	A
B.AP.04	<i>Scour Plan of Action</i>	0
B.AP.05	<i>Seismic Vulnerability</i>	B
B.W.01	<i>Year Built</i>	1974

Table 37. Features Data Sets for Bridge Number 15558X.

Item ID	Data Item	Value (1)	Value (2)	Value (3)	Value (4)	Value (5)
B.F.01	<i>Feature Type</i>	H01	H02	R01	W01	P01
B.F.02	<i>Feature Location</i>	C	B	B	B	C
B.F.03	<i>Feature Name</i>	North Hanley Road	Wabash Ave.	BNSF RR	Berkeley Branch Coldwater Creek	Sidewalk east and west sides
B.H.01	<i>Functional Classification</i>	3	7			
B.H.02	<i>Urban Code</i>	77770	77770			
B.H.03	<i>NHS Designation</i>	Y	N			
B.H.04	<i>National Highway Freight Network</i>	N	N			
B.H.05	<i>STRAHNET Designation</i>	N	N			
B.H.06	<i>LRS Route ID</i>	N	N			
B.H.07	<i>LRS Mile Point</i>					
B.H.08	<i>Lanes On Highway</i>	4	2			
B.H.09	<i>Annual Average Daily Traffic</i>	8376	300			
B.H.10	<i>Annual Average Daily Truck Traffic</i>	838	45			
B.H.11	<i>Year of Annual Average Daily Traffic</i>	2014	2014			
B.H.12	<i>Highway Maximum Usable Vertical Clearance</i>	99.9	22.4			
B.H.13	<i>Highway Minimum Vertical Clearance</i>	99.9	21.7			
B.H.14	<i>Highway Minimum Horizontal Clearance, Left</i>		0			
B.H.15	<i>Highway Minimum Horizontal Clearance, Right</i>		7.6			
B.H.16	<i>Highway Maximum Usable Surface Width</i>	64	22			
B.H.17	<i>Bypass Detour Length</i>	1	999			
B.H.18	<i>Crossing Bridge Number</i>					
B.RR.01	<i>Railroad Service Type</i>			F		
B.RR.02	<i>Railroad Minimum Vertical Clearance</i>			23.4		
B.RR.03	<i>Railroad Minimum Horizontal Offset</i>			14.0		
B.N.01	<i>Navigable Waterway</i>				N	
B.N.02	<i>Navigation Minimum Vertical Clearance</i>					
B.N.03	<i>Movable Bridge Maximum Navigation Vertical Clearance</i>					
B.N.04	<i>Navigation Channel Width</i>					
B.N.05	<i>Navigation Channel Minimum Horizontal Clearance</i>					
B.N.06	<i>Substructure Navigation Protection</i>					

Table 38. Routes Data Sets for Bridge Number 15558X.

Item ID	Data Item	Value (1)	Value (2)
B.RT.01	<i>Route Designation</i>	R01	R02
B.RT.02	<i>Route Number</i>	0	0
B.RT.03	<i>Route Direction</i>	NS	EW
B.RT.04	<i>Route Type</i>	5	5
B.RT.05	<i>Service Type</i>	1	1

Table 39. Span Data Sets for Bridge Number 15558X.

Item ID	Data Item	Value (1)	Value (2)	Value (3)
B.SP.01	<i>Span Configuration Designation</i>	M01	M02	M03
B.SP.02	<i>Number of Spans</i>	3	1	3
B.SP.03	<i>Number of Beam Lines</i>	1	1	9
B.SP.04	<i>Span Material</i>	C01	C01	S01
B.SP.05	<i>Span Continuity</i>	2	4	2
B.SP.06	<i>Span Type</i>	S02	S02	G01
B.SP.07	<i>Span Protective System</i>	S02	S02	C01
B.SP.08	<i>Deck Interaction</i>	IM	IM	CU
B.SP.09	<i>Deck Material and Type</i>	C01	C01	C01
B.SP.10	<i>Wearing Surface</i>	C06	C06	C01
B.SP.11	<i>Deck Protective System</i>	C02	C02	C02
B.SP.12	<i>Deck Reinforcing Protective System</i>	S02	S02	C01
B.SP.13	<i>Deck Stay-In-Place Forms</i>	0	0	0

Table 40. Substructure Data Sets for Bridge Number 15558X.

Item ID	Data Item	Value (1)	Value (2)	Value (3)	Value (4)	Value (5)
B.SB.01	<i>Substructure Configuration Designation</i>	A01	A02	P01	P02	P03
B.SB.02	<i>Number of Substructure Units</i>	1	1	3	2	1
B.SB.03	<i>Substructure Material</i>	C01	C01	C01	C01	C01
B.SB.04	<i>Substructure Type</i>	A02	A05	B01	B02	B01
B.SB.05	<i>Substructure Protective System</i>	0	0	0	0	0
B.SB.06	<i>Foundation Type</i>	S02	S02	S02	S02	S02
B.SB.07	<i>Foundation Protective System</i>	0	0	0	0	0

Table 41. Posting Status Data Sets for Bridge Number 15558X.

Item ID	Data Item	Value (1)	Value (2)	Value (3)	Value (4)
B.PS.01	<i>Load Posting Status</i>	PD	PP	PM	PP
B.PS.02	<i>Posting Status Change Date</i>	20160214	20160415	20160723	20160905

Table 42. Posting Evaluation Data Sets for Bridge Number 15558X.

Item ID	Data Item	Value (1)	Value (2)	Value (3)	Value (4)	Value (5)	Value (6)	Value (7)
B.EP.01	<i>Legal Load Configuration</i>	3	3S2	3-3	SU4	SU5	SU6	SU7
B.EP.02	<i>Legal Load Rating Factor</i>	0.63	0.66	0.74	0.56	0.51	0.46	0.43
B.EP.03	<i>Posting Type</i>	T	T	T	T	T	T	T
B.EP.04	<i>Posting Value</i>	15	25	30	15	15	15	15

Table 43. Inspections Data Sets for Bridge Number 15558X.

Item ID	Data Item	Value (1)	Value (2)
B.IE.01	<i>Inspection Type</i>	2	7
B.IE.02	<i>Inspection Begin Date</i>	20160317	20160401
B.IE.03	<i>Inspection Completion Date</i>	20160318	20160401
B.IE.04	<i>Nationally Certified Bridge Inspector</i>	29KFF007	
B.IE.05	<i>Inspection Interval</i>	24	12
B.IE.06	<i>Inspection Due Date (Calculated by FHWA*)</i>	20180318*	20170401*
B.IE.07	<i>Risk-Based Inspection Interval Method</i>	1	N
B.IE.08	<i>Inspection Quality Control Date</i>	20160325	20160408
B.IE.09	<i>Inspection Quality Assurance Date</i>	20170317	
B.IE.10	<i>Inspection Data Update Date</i>	20160325	20160408
B.IE.11	<i>Inspection Note</i>		Inspected active cathodic protection system on spans 1 to 4. System operational.
B.IE.12	<i>Inspection Equipment</i>	A1 A11 I3	A1 IX

Table 44. Elements Data Sets for Bridge Number 15558X.

This table formatting is different than other tables for page fit purposes and indicates multiple element entries for a bridge.

Item ID	B.E.01	B.E.02	B.E.03	B.CS.01	B.CS.02	B.CS.03	B.CS.04
Data Item	<i>Element Number</i>	<i>Element Parent Number</i>	<i>Element Total Quantity</i>	Element Quantity Condition State One	Element Quantity Condition State Two	Element Quantity Condition State Three	Element Quantity Condition State Four
Value (1)	12		14462	7431	7031	0	0
Value (2)	521	12	12550	0	5519	7031	0
Value (3)	38		15340	11474	3866	19	0
Value (4)	510	38	13312	6812	6500	0	0
Value (5)	521	510	13312	0	6812	6500	0
Value (6)	107		1755	1648	107	0	0
Value (7)	515	107	15287	10609	4628	0	50
Value (8)	205		21	14	7	0	0
Value (9)	210		122	122	0	0	0
Value (10)	215		230	117	113	0	0
Value (11)	234		223	223	0	0	0
Value (12)	300		78	0	0	78	0
Value (13)	310		27	14	13	0	0
Value (14)	515	310	333	0	233	0	100
Value (15)	311		8	0	8	0	0
Value (16)	515	311	62	0	32	0	30
Value (17)	312		9	9	0	0	0
Value (18)	314		9	0	9	0	0
Value (19)	515	314	61	0	31	0	30
Value (20)	331		806	427	379	0	0

Table 45. Work Data Sets for Bridge Number 15558X.

Item ID	Data Item	Value (1)	Value (2)	Value (3)
B.W.02	<i>Year Work Performed</i>	2015	2016	2017
B.W.03	<i>Work Performed</i>	SP6 DK1	DK4	0

APPENDIX B: INDEXES - DATA SETS, SECTIONS, AND ITEMS

<i>Sorted by Data Set then Section</i>				
Data Set	Section	Item ID	Data Item Name	Format
1 - Primary	1 - Bridge Identification	B.CL.01	Owner	AN (4)
1 - Primary	1 - Bridge Identification	B.CL.02	Maintenance Responsibility	AN (4)
1 - Primary	1 - Bridge Identification	B.CL.03	Federal or Tribal Land Access	AN (30)
1 - Primary	1 - Bridge Identification	B.CL.04	Historic Significance	AN (1)
1 - Primary	1 - Bridge Identification	B.CL.05	Toll	AN (1)
1 - Primary	1 - Bridge Identification	B.CL.06	Emergency Evacuation Designation	AN (1)
1 - Primary	1 - Bridge Identification	B.ID.01	Bridge Number	AN (15)
1 - Primary	1 - Bridge Identification	B.ID.02	Bridge Name	AN (300)
1 - Primary	1 - Bridge Identification	B.ID.03	Previous Bridge Number	AN (15)
1 - Primary	1 - Bridge Identification	B.L.01	State Code	N (2,0)
1 - Primary	1 - Bridge Identification	B.L.02	County Code	N (3,0)
1 - Primary	1 - Bridge Identification	B.L.03	Place Code	N (5,0)
1 - Primary	1 - Bridge Identification	B.L.04	Highway Agency District	AN (2)
1 - Primary	1 - Bridge Identification	B.L.05	Latitude	N (9,6)
1 - Primary	1 - Bridge Identification	B.L.06	Longitude	N (10,6)
1 - Primary	1 - Bridge Identification	B.L.07	Border Bridge Number	AN (15)
1 - Primary	1 - Bridge Identification	B.L.08	Border Bridge State or Country Code	AN (2)
1 - Primary	1 - Bridge Identification	B.L.09	Border Bridge Inspection Responsibility	AN (1)
1 - Primary	1 - Bridge Identification	B.L.10	Border Bridge Designated Lead State	N (2,0)
1 - Primary	1 - Bridge Identification	B.L.11	Bridge Location	AN (300)
1 - Primary	1 - Bridge Identification	B.L.12	Metropolitan Planning Organization	AN (300)
1 - Primary	2 - Bridge Material and Type	B.RH.01	Bridge Railings	AN (4)
1 - Primary	2 - Bridge Material and Type	B.RH.02	Transitions	AN (4)
1 - Primary	3 - Bridge Geometry	B.G.01	NBIS Bridge Length	N (7,1)
1 - Primary	3 - Bridge Geometry	B.G.02	Total Bridge Length	N (7,1)
1 - Primary	3 - Bridge Geometry	B.G.03	Maximum Span Length	N (5,1)
1 - Primary	3 - Bridge Geometry	B.G.04	Minimum Span Length	N (5,1)
1 - Primary	3 - Bridge Geometry	B.G.05	Bridge Width Out-to-Out	N (4,1)
1 - Primary	3 - Bridge Geometry	B.G.06	Bridge Width Curb-to-Curb	N (4,1)
1 - Primary	3 - Bridge Geometry	B.G.07	Left Curb or Sidewalk Width	N (3,1)
1 - Primary	3 - Bridge Geometry	B.G.08	Right Curb or Sidewalk Width	N (3,1)
1 - Primary	3 - Bridge Geometry	B.G.09	Approach Roadway Width	N (4,1)
1 - Primary	3 - Bridge Geometry	B.G.10	Bridge Median	AN (1)
1 - Primary	3 - Bridge Geometry	B.G.11	Skew	N (2,0)
1 - Primary	3 - Bridge Geometry	B.G.12	Curved Bridge	AN (2)
1 - Primary	3 - Bridge Geometry	B.G.13	Maximum Bridge Height	N (4,0)
1 - Primary	3 - Bridge Geometry	B.G.14	Sidehill Bridge	AN (1)
1 - Primary	3 - Bridge Geometry	B.G.15	Irregular Deck Area	N (10,1)

<i>Sorted by Data Set then Section</i>				
Data Set	Section	Item ID	Data Item Name	Format
1 - Primary	3 - Bridge Geometry	B.G.16	Calculated Deck Area	N (10,1)
1 - Primary	5 - Loads, Load Rating, and Posting	B.LR.01	Design Load	AN (8)
1 - Primary	5 - Loads, Load Rating, and Posting	B.LR.02	Design Method	AN (4)
1 - Primary	5 - Loads, Load Rating, and Posting	B.LR.03	Load Rating Date	YYYYMMDD
1 - Primary	5 - Loads, Load Rating, and Posting	B.LR.04	Load Rating Method	AN (4)
1 - Primary	5 - Loads, Load Rating, and Posting	B.LR.05	Inventory Load Rating Factor	N (4,2)
1 - Primary	5 - Loads, Load Rating, and Posting	B.LR.06	Operating Load Rating Factor	N (4,2)
1 - Primary	5 - Loads, Load Rating, and Posting	B.LR.07	Controlling Legal Load Rating Factor	N (4,2)
1 - Primary	5 - Loads, Load Rating, and Posting	B.LR.08	Routine Permit Loads	AN (1)
1 - Primary	6 - Inspections	B.IR.01	NSTM Inspection Required	AN (1)
1 - Primary	6 - Inspections	B.IR.02	Fatigue Details	AN (1)
1 - Primary	6 - Inspections	B.IR.03	Underwater Inspection Required	AN (1)
1 - Primary	6 - Inspections	B.IR.04	Complex Feature	AN (1)
1 - Primary	7 - Bridge Condition	B.AP.01	Approach Roadway Alignment	AN (1)
1 - Primary	7 - Bridge Condition	B.AP.02	Overtopping Likelihood	AN (1)
1 - Primary	7 - Bridge Condition	B.AP.03	Scour Vulnerability	AN (1)
1 - Primary	7 - Bridge Condition	B.AP.04	Scour Plan of Action	AN (1)
1 - Primary	7 - Bridge Condition	B.AP.05	Seismic Vulnerability	AN (1)
1 - Primary	7 - Bridge Condition	B.C.01	Deck Condition Rating	AN (1)
1 - Primary	7 - Bridge Condition	B.C.02	Superstructure Condition Rating	AN (1)
1 - Primary	7 - Bridge Condition	B.C.03	Substructure Condition Rating	AN (1)
1 - Primary	7 - Bridge Condition	B.C.04	Culvert Condition Rating	AN (1)
1 - Primary	7 - Bridge Condition	B.C.05	Bridge Railing Condition Rating	AN (1)
1 - Primary	7 - Bridge Condition	B.C.06	Bridge Railing Transitions Condition Rating	AN (1)
1 - Primary	7 - Bridge Condition	B.C.07	Bridge Bearings Condition Rating	AN (1)
1 - Primary	7 - Bridge Condition	B.C.08	Bridge Joints Condition Rating	AN (1)
1 - Primary	7 - Bridge Condition	B.C.09	Channel Condition Rating	AN (1)
1 - Primary	7 - Bridge Condition	B.C.10	Channel Protection Condition Rating	AN (1)
1 - Primary	7 - Bridge Condition	B.C.11	Scour Condition Rating	AN (1)
1 - Primary	7 - Bridge Condition	B.C.12	Bridge Condition Classification	AN (1)
1 - Primary	7 - Bridge Condition	B.C.13	Lowest Condition Rating Code	AN (1)
1 - Primary	7 - Bridge Condition	B.C.14	NSTM Inspection Condition	AN (1)
1 - Primary	7 - Bridge Condition	B.C.15	Underwater Inspection Condition	AN (1)
1 - Primary	7 - Bridge Condition	B.W.01	Year Built	N (4,0)
10 - Routes	4 - Features	B.RT.01	Route Designation (many-to-one)	AN (3)
10 - Routes	4 - Features	B.RT.02	Route Number	AN (15)
10 - Routes	4 - Features	B.RT.03	Route Direction	AN (2)
10 - Routes	4 - Features	B.RT.04	Route Type	AN (1)
10 - Routes	4 - Features	B.RT.05	Service Type	AN (1)
2 - Features	4 - Features	B.F.01	Feature Type (many-to-one)	AN (3)

<i>Sorted by Data Set then Section</i>				
Data Set	Section	Item ID	Data Item Name	Format
2 - Features	4 - Features	B.F.02	Feature Location	AN (1)
2 - Features	4 - Features	B.F.03	Feature Name	AN (300)
2 - Features	4 - Features	B.H.01	Functional Classification	AN (1)
2 - Features	4 - Features	B.H.02	Urban Code	AN (5)
2 - Features	4 - Features	B.H.03	NHS Designation	AN (1)
2 - Features	4 - Features	B.H.04	National Highway Freight Network	AN (1)
2 - Features	4 - Features	B.H.05	STRAHNET Designation	AN (1)
2 - Features	4 - Features	B.H.06	LRS Route ID	AN (120)
2 - Features	4 - Features	B.H.07	LRS Mile Point	N (8,3)
2 - Features	4 - Features	B.H.08	Lanes on Highway	N (2,0)
2 - Features	4 - Features	B.H.09	Annual Average Daily Traffic	N (8,0)
2 - Features	4 - Features	B.H.10	Annual Average Daily Truck Traffic	N (8,0)
2 - Features	4 - Features	B.H.11	Year of Annual Average Daily Traffic	N (4,0)
2 - Features	4 - Features	B.H.12	Highway Maximum Usable Vertical Clearance	N (3,1)
2 - Features	4 - Features	B.H.13	Highway Minimum Vertical Clearance	N (3,1)
2 - Features	4 - Features	B.H.14	Highway Minimum Horizontal Clearance, Left	N (3,1)
2 - Features	4 - Features	B.H.15	Highway Minimum Horizontal Clearance, Right	N (3,1)
2 - Features	4 - Features	B.H.16	Highway Maximum Usable Surface Width	N (3,1)
2 - Features	4 - Features	B.H.17	Bypass Detour Length	N (3,0)
2 - Features	4 - Features	B.H.18	Crossing Bridge Number	AN (15)
2 - Features	4 - Features	B.N.01	Navigable Waterway	AN (1)
2 - Features	4 - Features	B.N.02	Navigation Minimum Vertical Clearance	N (4,1)
2 - Features	4 - Features	B.N.03	Movable Bridge Maximum Navigation Vertical Clearance	N (4,1)
2 - Features	4 - Features	B.N.04	Navigation Channel Width	N (5,1)
2 - Features	4 - Features	B.N.05	Navigation Channel Minimum Horizontal Clearance	N (5,1)
2 - Features	4 - Features	B.N.06	Substructure Navigation Protection	AN (1)
2 - Features	4 - Features	B.RR.01	Railroad Service Type	AN (2)
2 - Features	4 - Features	B.RR.02	Railroad Minimum Vertical Clearance	N (3,1)
2 - Features	4 - Features	B.RR.03	Railroad Minimum Horizontal Offset	N (3,1)
3 - Span Sets	2 - Bridge Material and Type	B.SP.01	Span Configuration Designation (many-to-one)	AN (3)
3 - Span Sets	2 - Bridge Material and Type	B.SP.02	Number of Spans	N (4,0)
3 - Span Sets	2 - Bridge Material and Type	B.SP.03	Number of Beam Lines	N (3,0)
3 - Span Sets	2 - Bridge Material and Type	B.SP.04	Span Material	AN (3)
3 - Span Sets	2 - Bridge Material and Type	B.SP.05	Span Continuity	AN (1)
3 - Span Sets	2 - Bridge Material and Type	B.SP.06	Span Type	AN (3)
3 - Span Sets	2 - Bridge Material and Type	B.SP.07	Span Protective System	AN (3)
3 - Span Sets	2 - Bridge Material and Type	B.SP.08	Deck Interaction	AN (2)
3 - Span Sets	2 - Bridge Material and Type	B.SP.09	Deck Material and Type	AN (3)
3 - Span Sets	2 - Bridge Material and Type	B.SP.10	Wearing Surface	AN (3)

<i>Sorted by Data Set then Section</i>				
Data Set	Section	Item ID	Data Item Name	Format
3 - Span Sets	2 - Bridge Material and Type	B.SP.11	Deck Protective System	AN (3)
3 - Span Sets	2 - Bridge Material and Type	B.SP.12	Deck Reinforcing Protective System	AN (3)
3 - Span Sets	2 - Bridge Material and Type	B.SP.13	Deck Stay-in-Place Forms	AN (3)
4 - Substructure Sets	2 - Bridge Material and Type	B.SB.01	Substructure Configuration Designation (many-to-one)	AN (3)
4 - Substructure Sets	2 - Bridge Material and Type	B.SB.02	Number of Substructure Units	N (3,0)
4 - Substructure Sets	2 - Bridge Material and Type	B.SB.03	Substructure Material	AN (2)
4 - Substructure Sets	2 - Bridge Material and Type	B.SB.04	Substructure Type	AN (3)
4 - Substructure Sets	2 - Bridge Material and Type	B.SB.05	Substructure Protective System	AN (2)
4 - Substructure Sets	2 - Bridge Material and Type	B.SB.06	Foundation Type	AN (2)
4 - Substructure Sets	2 - Bridge Material and Type	B.SB.07	Foundation Protective System	AN (2)
5 - Posting Status	5 - Loads, Load Rating, and Posting	B.PS.01	Load Posting Status (many-to-one)	AN (2)
5 - Posting Status	5 - Loads, Load Rating, and Posting	B.PS.02	Posting Status Change Date	YYYYMMDD
6 - Posting Evaluation	5 - Loads, Load Rating, and Posting	B.EP.01	Legal Load Configuration (many-to-one)	AN (3)
6 - Posting Evaluation	5 - Loads, Load Rating, and Posting	B.EP.03	Posting Type	AN (1)
6 - Posting Evaluation	5 - Loads, Load Rating, and Posting	B.EP.04	Posting Value	N (2,0)
6 - Posting Evaluation	5 - Loads, Load Rating, and Posting	B.EP.02	Legal Load Rating Factor	N (4,2)
7 - Inspections	6 - Inspections	B.IE.01	Inspection Type (many-to-one)	AN (1)
7 - Inspections	6 - Inspections	B.IE.02	Inspection Begin Date	YYYYMMDD
7 - Inspections	6 - Inspections	B.IE.03	Inspection Completion Date	YYYYMMDD
7 - Inspections	6 - Inspections	B.IE.04	Nationally Certified Bridge Inspector	AN (15)
7 - Inspections	6 - Inspections	B.IE.05	Inspection Interval	N (2,0)
7 - Inspections	6 - Inspections	B.IE.06	Inspection Due Date	YYYYMMDD
7 - Inspections	6 - Inspections	B.IE.07	Risk-Based Inspection Interval Method	AN (1)
7 - Inspections	6 - Inspections	B.IE.08	Inspection Quality Control Date	YYYYMMDD
7 - Inspections	6 - Inspections	B.IE.09	Inspection Quality Assurance Date	YYYYMMDD
7 - Inspections	6 - Inspections	B.IE.10	Inspection Data Update Date	YYYYMMDD
7 - Inspections	6 - Inspections	B.IE.11	Inspection Note	AN (300)
7 - Inspections	6 - Inspections	B.IE.12	Inspection Equipment	AN (120)
8 - Elements	7 - Bridge Condition	B.CS.01	Element Quantity Condition State One	N (8,0)
8 - Elements	7 - Bridge Condition	B.CS.02	Element Quantity Condition State Two	N (8,0)
8 - Elements	7 - Bridge Condition	B.CS.03	Element Quantity Condition State Three	N (8,0)
8 - Elements	7 - Bridge Condition	B.CS.04	Element Quantity Condition State Four	N (8,0)
8 - Elements	7 - Bridge Condition	B.E.01	Element Number (many-to-one)	N (4,0)
8 - Elements	7 - Bridge Condition	B.E.02	Element Parent Number	N (4,0)
8 - Elements	7 - Bridge Condition	B.E.03	Element Total Quantity	N (8,0)
9 - Work	7 - Bridge Condition	B.W.02	Year Work Performed (many -to-one)	N (4,0)
9 - Work	7 - Bridge Condition	B.W.03	Work Performed	AN (120)

APPENDIX C: COMPONENT CONDITION RATING GUIDANCE

The following provides defect severity guidance that can be used in combination with the various condition rating code definition tables, in [Subsection 7.1 – Component Condition Ratings](#), to determine the appropriate condition rating codes.

Table 46. All Materials - defect severity guidance for component condition ratings.

Defect	Minor	Moderate
Distortion	Distortion that has been mitigated or does not require mitigation.	Distortion that requires mitigation but has not been addressed.
Settlement	Exists within tolerable limits or arrested with no observed structural distress.	Exceeds tolerable limits.
Scour	Exists within tolerable limits established for the bridge.	Exceeds tolerable limits, but is less than the critical limits established for the bridge.

The Settlement defect applies to substructure components, pipes, and other components that may be directly affected by settlement. Superstructure and deck components that indirectly show the effects of settlement are evaluated by the resulting defects. Tolerable settlement can be considered as uniform or differential settlement that is not causing other bridge defects or increased impact on the bridge.

The critical limit for scour is the scour depth at which the bridge becomes unstable.

Table 47. Concrete - defect severity guidance for component condition ratings.

Defect	Minor	Moderate
Delamination, Spalling, Patched Area	Delamination, small spall, or patched area that is sound.	Large spall or patched area that is unsound or showing distress.
Exposed Rebar	Present without measurable section loss.	Present with measurable section loss.
Exposed Prestressing	Present without section loss.	Present with section loss.
Cracking	Unsealed medium width cracks or unsealed medium pattern (map) cracking.	Wide cracks or heavy pattern (map) cracking.
Abrasion, Wear, Scaling	Exposed coarse aggregate, but the aggregate remains secure in the concrete.	Coarse aggregate is loose or has popped out of the concrete matrix.
Efflorescence, Rust Staining	Surface white or leaching with little or no build-up. No rust staining present.	Rust staining or heavy build-up of efflorescence.

The concrete crack defect description definitions describe generalized distress, but the width, spacing, location, orientation, and structural or non-structural nature of the cracking should also be considered.

In general, cracks can be considered:

- Insignificant – crack width less than 0.004 inches (prestressed) or 0.012 inches (reinforced), or medium width cracks that have been sealed.
- Medium – crack width ranging from 0.004 – 0.009 inches (prestressed) or 0.012 to 0.05 inches (reinforced).
- Wide – crack width wider than 0.009 inches (prestressed) or 0.05 inches (reinforced).
- Medium pattern (map) – crack spacing of 1 ft. to 3 ft.
- Heavy pattern (map) – crack spacing less than 1 ft.

In general, spall size can be considered:

- Small spall - 1 inch or less deep or 6 inches or less in diameter.
- Large spall - greater than 1 inch deep or greater than 6 inches in diameter.

The rust staining defect applies only to reinforcing steel.

Table 48. Steel - defect severity guidance for component condition ratings.

Defect	Minor	Moderate
Corrosion	Freckled rust. Corrosion has initiated.	Section loss is evident.
Cracking	Crack that has been effectively arrested.	Crack that has not been arrested.
Connection	Loose fasteners, or pack rust without distortion. Connection is in place and functioning as intended.	Missing bolts, rivets, or fasteners; broken welds; or pack rust with distortion.

A well-formed patina on weathering steel is considered a protective coating and is not considered a defect.

The Connection defect applies to any members of a component that are fastened by bolts, rivets, or welds.

Table 49. Masonry - defect severity guidance for component condition ratings.

Defect	Minor	Moderate
Efflorescence, Rust Staining	Surface white or leaching with little or no build-up. No rust staining present.	Rust staining or heavy build-up of efflorescence.
Mortar Breakdown	Cracking or partial depth voids.	Full depth voids.
Splits, Spalls	Block or stone has split or spalled with no shifting.	Block or stone has split or spalled with shifting.
Patched Area	Sound patch.	Unsound patch.
Displacement	Block or stone has shifted slightly out of alignment.	Block or stone has shifted significantly out of alignment or is missing.

Table 50. Timber - defect severity guidance for component condition ratings.

Defect	Minor	Moderate
Cracking	Crack that has been effectively arrested.	Crack that has not been arrested.
Connection	Loose fasteners, or pack rust without distortion. Connection is in place and functioning as intended.	Missing bolts, rivets, or fasteners; broken welds; or pack rust with distortion.
Decay, Section Loss	Affects up to 10% of the member section.	Affects more than 10% of the member section.
Checks, Shakes	Penetrates 5% to 50% of the thickness of the member; not in a high stress zone.	Penetrates more than 50% of the member thickness and length equal to or greater than the member depth, or penetrates more than 5% of the member thickness in a high stress zone.
Splits, Delamination	Length less than the member depth or arrested with effective actions taken to mitigate.	Length equal to or greater than the member depth.
Abrasion, Wear	Affects up to 10% of the member section.	Affects more than 10% of the member section.

In general, checks and shakes can be considered insignificant when there is surface penetration less than 5% of the thickness regardless of location.

Table 51. Other Materials - defect severity guidance for component condition ratings.

Defect	Minor	Moderate
Deterioration	Breakdown or deterioration has initiated.	Significant deterioration or breakdown.

For "Other Materials" the deterioration defect or other applicable defects shown within this table may apply. "Other Materials" include FRP, iron, aluminum, or materials other than concrete, steel, timber, or masonry. The "Other" category can also be considered when FRP is used as a repair material and is the predominant material type visible for inspection.

The following types of deterioration are common for FRP members:

- Blistering, discoloration, or wrinkling (Deterioration)
- Delaminations or voids (Delamination)
- Fiber exposure (Spall or Cracking)
- Scratches or cracks (Cracking)
- Creep or shrinkage (Distortion)

Table 52. Bearings - defect severity guidance for component condition ratings.

Defect	Minor	Moderate
Movement	Minor restriction.	Restricted.
Alignment	Lateral or vertical alignment that is inconsistent with temperature conditions but is tolerable.	Approaching limits of lateral or vertical alignment for the bearing.
Bulging, Splitting, Tearing	Bulging less than 15% of bearing thickness.	Bulging 15% or more of bearing thickness. Splitting or tearing. Bearing's surfaces are not parallel.
Loss of Bearing Area	Up to 10%	More than 10%.
Corrosion	Freckled rust. Corrosion has initiated.	Section loss is evident.
Connection	Loose fasteners, or pack rust without distortion. Connection is in place and functioning as intended.	Missing bolts, rivets, or fasteners; broken welds; or pack rust with distortion.

Table 53. Bridge Joints - defect severity guidance for component condition ratings.

Defect	Minor	Moderate	Major
Leakage	Minimal. Minor dripping through the joint.	Moderate. More than a drip and less than free flow of water.	Free flow of water through the joint.
Seal Adhesion	Adhered to more than 50% of the joint height.	Adhered 50% or less of joint height but still some adhesion.	Complete loss of adhesion.
Seal Cracking	Surface crack.	Crack that partially penetrates the seal.	Crack that fully penetrates the seal.
Seal Damage	Seal abrasion without punctures.	Punctured, torn, or partially pulled out.	Punctured completely through, pulled out, or missing.

Debris Impaction	Partially filled with hard-packed material, but still allowing free movement.	Completely filled; impacts joint movement.	Completely filled; prevents joint movement.
Adjacent Deck or Header	Edge delamination or spall 1" or less deep or 6" or less in diameter. No exposed rebar. Patched area that is sound.	Spall greater than 1" deep or greater than 6" diameter. Exposed rebar. Delamination or unsound patched area that makes the joint loose.	Spall, delamination, unsound patched area, or loose joint anchor that prevents the joint from functioning as intended.
Metal Deterioration or Damage	Freckled rust. Metal has no cracks or impact damage. Connection may be loose but functioning as intended.	Section loss, missing or broken fasteners, cracking of the metal, or impact damage. Joint still functioning.	Section loss, cracking of the metal, damage, or connection failure that prevents the joint from functioning as intended.

Table 54. Channel - defect severity guidance for component condition ratings.

Defect	Minor	Moderate	Major
Alignment	Flow angle of attack 15-30 degrees with respect to the bridge substructure, or 5-15 degrees with respect to wall piers.	Flow angle of attack 30-45 degrees with respect to the bridge substructure, or 15-30 degrees with respect to wall piers.	Flow angle of attack more than 45 degrees with respect to the bridge substructure, or more than 30 degrees with respect to wall piers.
Migration	Thalweg has moved from its baseline location, but movement has arrested or does not threaten the bridge or approach roadway.	Thalweg movement has not arrested and impacts embankment stability.	Thalweg movement has begun to undermine approach roadway.
Degradation	Exists within tolerable limits or has arrested.	Sloughing of banks, resulting in vertical embankments on both sides of the channel. Bridge is not yet impacted.	Sloughing of banks, resulting in vertical embankments on both sides of the channel. Bridge is impacted.
Aggradation	Exists within tolerable limits or has arrested.	Exceeds tolerable limits. Hydraulic opening is significantly blocked, increasing potential for overtopping or channel restriction.	Hydraulic opening is mostly blocked. May cause frequent overtopping or channel restriction.
Debris	Restricts channel slightly or is prone to build-up.	Large deposits exist and restrict the channel, causing increased water velocities, redirecting stream flow, or eroding banks.	Hydraulic opening mostly blocked, significantly redirecting stream flow or impacting waterway capacity.
Bank Erosion/ Instability	Erosion/instability that does not impact the bridge or approach roadway.	Significant erosion/instability that is progressing toward the bridge or approach roadway.	Stability of the approach roadway embankment is impacted.

APPENDIX D: MUNICIPALITY LIST

<u>Code</u>	<u>Municipality</u>	<u>Code</u>	<u>Municipality</u>
0005	ABINGDON	0260	ATLANTA
0010	ADDIEVILLE	0265	ATWOOD
0015	ADDISON	0270	AUBURN
0020	ADELINE	0275	AUGUSTA
0025	ALBANY	0280	AURORA
0030	ALBERS	0285	AVA
0035	ALBION	0290	AVISTON
0040	ALEDO	0295	AVON
0045	ALEXIS	0300	BALDWIN
0050	ALGONQUIN	0305	BANNER
0055	ALHAMBRA	0310	BANNOCKBURN
0060	ALLEDALE	0315	BARDOLPH
0065	ALLENVILLE	0320	BARRINGTON
0070	ALLERTON	0323	BARRINGTON HILLS
0075	ALMA	0330	BARRY
0080	ALORTON	0335	BARTELSON
0085	ALPHA	0340	BARTLETT
0090	ALSEY	0345	BARTONVILLE
0095	ALSIP	0350	BASCO
0100	ALTAMONT	0355	BATAVIA
0115	ALTON	0360	BATCHTOWN
0117	ALTONA	0365	BATH
0120	ALTO PASS	0366	BAYLIS
0125	ALVAN /ALVIN	0367	BAYVIEW GARDENS
0130	AMBOY	0368	BEACH PARK
0133	ANCHOR	0375	BEARDSTOWN
0135	ANDALUSIA	0380	BEAVERVILLE
0145	ANDOVER	0385	BECKEMEYER
0150	ANNA	0390	BEDFORD PARK
0155	ANNAWAN	0395	BEECHER
0160	ANTIOCH	0397	BEECHER CITY
0165	APPLE RIVER	0405	BELGIUM
0170	ARCOLA	0410	BELKNAP
0175	ARENZVILLE	0420	BELLE PRAIRIE CITY
0180	ARGENTA	0425	BELLE RIVE
0187	ARLINGTON	0430	BELLEVILLE
0190	ARLINGTON HEIGHTS	0435	BELLEVUE
0195	ARMINGTON	0437	BELLFLOWER
0200	AROMA PARK	0440	BELLMONT
0205	ARROWSMITH	0445	BELLWOOD
0210	ARTHUR	0450	BELVIDERE
0215	ASHKUM	0455	BEMENT
0220	ASHLAND	0460	BENLD
0225	ASHLEY	0465	BENSENVILLE
0230	ASHMORE	0470	BENSON
0235	ASHTON	0475	BENTLEY
0240	ASSUMPTION	0480	BENTON
0245	ASTORIA	0485	BERKELEY
0250	ATHENS	0490	BERLIN
0255	ATKINSON	0495	BERWYN

<u>Code</u>	<u>Municipality</u>	<u>Code</u>	<u>Municipality</u>
0500	BETHALTO	0730	BULPITT
0505	BETHANY	0735	BUNCOMBE
0510	BIGGSVILLE	0740	BUNKER HILL
0512	BIG ROCK	0743	BURBANK
0515	BINGHAM	0745	BUREAU JUNCTION
0525	BISHOP HILL	0750	BURLINGTON
0527	BISMARCK	0755	BURNHAM
0530	BLANDINSVILLE	0757	BURNT PRAIRIE
0535	BLOOMINGDALE	0759	BURR RIDGE
0540	BLOOMINGTON	0762	BUSH
0545	BLUE ISLAND	0765	BUSHNELL
0550	BLUE MOUND	0770	BUTLER
0555	BLUFFS	0775	BYRON
0560	BLUFORD	0780	CABERY
0563	BOLINGBROOK	0785	CAHOKIA
0564	BONDVILLE	0790	CAIRO
0565	BONE GAP	0795	CALHOUN
0570	BONFIELD	0800	CALUMET CITY
0575	BONNIE	0805	CALUMET PARK
0580	BOURBONNAIS	0810	CAMARGO
0585	BOWEN	0815	CAMBRIA
0590	BRACEVILLE	0820	CAMBRIDGE
0595	BRADFORD	0825	CAMDEN
0600	BRADLEY	0830	CAMPBELL HILL
0605	BRAIDWOOD	0835	CAMP POINT
0610	BREESE	0837	CAMPTON HILLS
0615	BRIDGEPORT	0840	CAMPUS
0620	BRIDGEVIEW	0845	CANTON
0625	BRIGHTON	0850	CANTRALL
0630	BRIMFIELD	0855	CAPRON
0635	BROADLANDS	0860	CARBON CLIFF
0640	BROADVIEW	0865	CARBONDALE
0645	BROADWELL	0870	CARBON HILL
0650	BROCTON	0875	CARLINVILLE
0655	BROOKFIELD	0876	CARLOCK
0660	BROOKLYN	0880	CARLYLE
0665	BROOKPORT	0885	CARMI
0670	BROUGHTON	0890	CAROL STREAM
0675	BROWNING	0895	CARPENTERSVILLE
0680	BROWNS	0900	CARRIER MILLS
0685	BROWNSTOWN	0905	CARROLLTON
0690	BRUSSELS	0910	CARTERVILLE
0695	BRYANT	0915	CARTHAGE
0700	BUCKINGHAM	0920	CARY
0705	BUCKLEY	0925	CASEY
0710	BUCKNER	0930	CASEYVILLE
0715	BUDA	0935	CATLIN
0720	BUFFALO	0940	CAVE IN ROCK
0725	BUFFALO GROVE	0945	CEDAR POINT
0729	BULL VALLEY	0950	CEDARVILLE

<u>Code</u>	<u>Municipality</u>	<u>Code</u>	<u>Municipality</u>
0955	CENTRAL CITY	1230	COMPTON
0965	CENTRALIA	1235	CONCORD
0975	CENTREVILLE	1237	CONGERVILLE
0980	CERRO GORDO	1240	COOKSVILLE
0985	CHADWICK	1245	CORDOVA
0990	CHAMPAIGN	1250	CORNELL
0995	CHANDLERVILLE	1255	CORTLAND
0997	CHANNAHON	1265	COULTERVILLE
1005	CHAPIN	1270	COUNTRY CLUB HILLS
1010	CHARLESTON	1272	COUNTRYSIDE
1015	CHATHAM	1275	COWDEN
1020	CHATSWORTH	1280	CRAINVILLE
1025	CHEBANSE	1285	CREAL SPRINGS
1030	CHENOA	1290	CRESCENT CITY
1037	CHERRY	1295	CREST HILL
1040	CHERRY VALLEY	1300	CRESTON
1045	CHESTER	1305	CRESTWOOD
1050	CHESTERFIELD	1310	CRETE
1051	CHICAGO	1315	CREVE COEUR
1055	CHICAGO HEIGHTS	1320	CROSSVILLE
1060	CHICAGO RIDGE	1325	CRYSTAL LAKE
1065	CHILLICOTHE	1335	CUBA
1075	CHRISMAN	1340	CULLOM
1080	CHRISTOPHER	1342	CURRAN
1085	CICERO	1345	CUTLER
1090	CISCO	1350	CYPRESS
1095	CISNE	1355	DAHLGREN
1100	CISSNA PARK	1360	DAKOTA
1110	CLAREMONT	1365	DALLAS CITY
1115	CLARENDON HILLS	1370	DALTON CITY
1120	CLAY CITY	1375	DALZELL
1125	CLAYTON	1377	DAMIANSVILLE
1130	CLEAR LAKE	1380	DANA
1135	CLEVELAND	1385	DANFORTH
1140	CLIFTON	1390	DANVERS
1145	CLINTON	1395	DANVILLE
1150	COAL CITY	1397	DARIEN
1155	COALTON	1400	DAVIS
1160	COAL VALLEY	1402	DAVIS JUNCTION
1165	COATSBURG	1405	DAWSON
1170	COBDEN	1410	DECATUR
1175	COFFEEN	1415	DEER CREEK
1180	COLCHESTER	1420	DEERFIELD
1185	COLETA	1425	DEER GROVE
1190	COLFAX	1430	DEER PARK
1205	COLLINSVILLE	1435	DE KALB
1210	COLONA	1440	DE LAND
1215	COLP	1445	DELAVAN
1220	COLUMBIA	1450	DE PUE
1225	COLUMBUS	1455	DE SOTO

<u>Code</u>	<u>Municipality</u>	<u>Code</u>	<u>Municipality</u>
1460	DES PLAINES	1725	ELIZABETH
1465	DETROIT	1728	ELIZABETHTOWN
1475	DE WITT	1735	ELK GROVE VILLAGE
1480	DIAMOND	1740	ELKHART
1485	DIETERICH	1745	ELKVILLE
1490	DIVERNON	1750	ELLIOTT
1492	DIX /ROME/	1755	ELLIS GROVE
1495	DIXMOOR	1760	ELLISVILLE
1500	DIXON	1765	ELLSWORTH
1505	DOLTON	1770	ELMHURST
1510	DONGOLA	1775	ELMWOOD
1515	DONNELLSON	1780	ELMWOOD PARK
1520	DONOVAN	1785	EL PASO
1525	DORCHESTER	1790	ELSAH
1530	DOVER	1795	ELVASTON
1535	DOWELL	1800	ELWOOD
1540	DOWNERS GROVE	1805	EMDEN
1545	DOWNS	1810	EMMINGTON
1550	DU BOIS	1815	ENERGY
1555	DUNFERMLINE	1820	ENFIELD
1560	DUNLAP	1825	EQUALITY
1565	DUPO	1830	ERIE
1570	DUQUOIN	1835	ESSEX
1575	DURAND	1840	EUREKA
1580	DWIGHT	1845	EVANSTON
1585	EAGARVILLE	1850	EVANSVILLE
1590	EARLVILLE	1855	EVERGREEN PARK
1595	EAST ALTON	1860	EWING
1600	EAST BROOKLYN	1865	EXETER
1603	EAST CAPE GIRARDEAU	1870	FAIRBURY
1605	EAST CARONDELET	1875	FAIRFIELD
1615	EAST DUBUQUE	1885	FAIRMONT CITY
1620	EAST DUNDEE	1890	FAIRMOUNT
1625	EAST GALESBURG	1892	FAIRVIEW
1630	EAST GILLESPIE	1893	FAIRVIEW HEIGHTS
1635	EAST HAZELCREST	1905	FARINA
1640	EAST MOLINE	1910	FARMER CITY
1645	EASTON	1915	FARMERSVILLE
1650	EAST PEORIA	1920	FARMINGTON
1660	EAST ST. LOUIS	1925	FAYETTEVILLE
1670	EDDYVILLE	1930	FERRIS
1675	EDGEWOOD	1935	FIDELITY
1680	EDINBURG	1940	FIELDON
1685	EDWARDSVILLE	1945	FILLMORE
1690	EFFINGHAM	1950	FINDLAY
1700	ELBURN	1955	FISHER
1705	EL DARA	1960	FITHIAN
1710	ELDORADO	1965	FLANAGAN
1715	ELDRED	1970	FLAT ROCK
1720	ELGIN	1975	FLORA

<u>Code</u>	<u>Municipality</u>	<u>Code</u>	<u>Municipality</u>
1980	FLORENCE	2235	GODFREY
1985	FLOSSMOOR	2240	GODLEY
1990	FOOSLAND	2245	GOLCONDA
1993	FORD HEIGHTS	2250	GOLDEN
1995	FOREST CITY	2253	GOLDEN GATE
2005	FOREST PARK	2260	GOLF
2010	FOREST VIEW	2265	GOODFIELD
2015	FORREST	2270	GOOD HOPE
2018	FORRESTON	2275	GOREVILLE
2025	FORSYTH	2280	GORHAM
2030	FOX LAKE	2285	GRAFTON
2035	FOX RIVER GROVE	2290	GRAND RIDGE
2040	FRANKFORT	2295	GRAND TOWER
2045	FRANKLIN	2300	GRANDVIEW
2050	FRANKLIN GROVE	2305	GRANITE CITY
2055	FRANKLIN PARK	2310	GRANTFORK
2060	FREEBURG	2315	GRANT PARK
2065	FREEMANSPUR	2320	GRANVILLE
2070	FREEPOR	2330	GRAYSLAKE
2075	FULTON	2335	GRAYVILLE
2080	FULTS	2340	GREENFIELD
2090	GALATIA	2342	GREEN OAKS
2095	GALENA	2350	GREENUP
2100	GALESBURG	2355	GREEN VALLEY
2105	GALVA	2360	GREENVIEW
2115	GARDNER	2365	GREENVILLE
2120	GARRETT	2368	GREENWOOD
2125	GAYS	2370	GRIDLEY
2130	GENESEO	2375	GRIGGSVILLE
2135	GENEVA	2380	GULFPORT
2140	GENOA	2385	GURNEE
2145	GEORGETOWN	2390	HAINESVILLE
2150	GERMANTOWN	2395	HAMBURG
2152	GERMANTOWN HILLS	2400	HAMEL
2155	GERMAN VALLEY	2405	HAMILTON
2160	GIBSON CITY	2415	HAMMOND
2165	GIFFORD	2420	HAMPSHIRE
2170	GILBERTS	2425	HAMPTON
2175	GILLESPIE	2430	HANAFORD/LOGAN
2180	GILMAN	2435	HANNA CITY
2185	GIRARD	2440	HANOVER
2190	GLADSTONE	2445	HANOVER PARK
2195	GLASFORD	2450	HARDIN
2200	GLASGOW	2455	HARMON
2205	GLEN CARBON	2460	HARRISBURG
2210	GLENCOE	2463	HARRISTOWN
2217	GLENDALE HEIGHTS	2465	HARTFORD
2220	GLEN ELLYN	2470	HARTSBURG
2225	GLENVIEW	2475	HARVARD
2230	GLENWOOD	2480	HARVEL

<u>Code</u>	<u>Municipality</u>	<u>Code</u>	<u>Municipality</u>
2490	HARVEY	2730	HURST
2495	HARWOOD HEIGHTS	2735	HUTSONVILLE
2500	HAVANA	2745	ILLIOPOLIS
2505	HAWTHORN WOODS	2750	INA
2510	HAZEL CREST	2755	INDIAN CREEK
2515	HEBRON	2760	INDIAN HEAD PARK
2520	HECKER	2765	INDIANOLA
2530	HENDERSON	2770	INDUSTRY
2535	HENNEPIN	2774	INVERNESS
2540	HENNING	2775	IOLA
2545	HENRY	2780	IPAVA
2550	HERRICK	2785	IROQUOIS
2555	HERRIN	2792	IRVING
2560	HERSCHER	2795	IRVINGTON
2565	HETTICK	2800	IRWIN
2575	HEYWORTH	2805	ISLAND LAKE
2580	HICKORY HILLS	2810	ITASCA
2585	HIDALGO	2815	IUKA
2590	HIGHLAND	2820	IVESDALE
2595	HIGHLAND PARK	2825	JACKSONVILLE
2600	HIGHWOOD	2828	JEFFERSONVILLE/GEFF
2605	HILLCREST	2835	JEISEYVILLE
2610	HILLSBORO	2840	JEROME
2615	HILLSDALE	2845	JERSEYVILLE
2620	HILLSIDE	2850	JEWETT
2625	HILLVIEW	2852	JOHNSBURG
2630	HINCKLEY	2855	JOHNSONVILLE
2635	HINDSBORO	2860	JOHNSTON CITY
2640	HINSDALE	2865	JOLIET
2645	HODGKINS	2870	JONESBORO
2646	HOFFMAN	2875	JOPPA
2647	HOFFMAN ESTATES	2880	JOY
2653	HOLIDAY HILLS	2888	JUNCTION
2655	HOLLOWAYVILLE	2890	JUNCTION CITY
2660	HOMER	2895	JUSTICE
2663	HOMER GLENN	2900	KAMPSVILLE
2665	HOMETOWN	2905	KANE
2670	HOMEWOOD	2907	KANEVILLE
2675	HOOPESTON	2910	KANGLEY
2680	HOOPPOLE	2915	KANKAKEE
2685	HOPEDALE	2920	KANSAS
2687	HOPEWELL	2925	KAPPA
2688	HOPKINS PARK	2930	KARNAK
2690	HOYLETON	2935	KASKASKIA
2695	HUDSON	2940	KEENES
2700	HUEY	2950	KEENSBURG
2705	HULL	2955	KEITHSBURG
2710	HUMBOLDT	2960	KELL
2715	HUME	2965	KEMPTON
2725	HUNTLEY	2970	KENILWORTH

<u>Code</u>	<u>Municipality</u>	<u>Code</u>	<u>Municipality</u>
2975	KENNEY	3223	LIBERTY
2980	KEWANEE	3230	LIBERTYVILLE
2985	KEYESPORT	3233	LILY LAKE
2990	KILBOURNE	3235	LIMA
2995	KILDEER	3237	LIMESTONE
3000	KINCAID	3240	LINCOLN
3005	KINDERHOOK	3245	LINCOLNSHIRE
3012	KINGSTON	3250	LINCOLNWOOD
3015	KINGSTON MINES	3255	LINDENHURST
3020	KINMUNDY	3260	LISBON
3025	KINSMAN	3265	LISLE
3030	KIRKLAND	3270	LITCHFIELD
3035	KIRKWOOD	3275	LITTLETON
3045	KNOXVILLE	3280	LITTLE YORK
3050	LACON	3285	LIVERPOOL
3055	LADD	3290	LIVINGSTON
3060	LA FAYETTE	3295	LOAMI
3062	LA GRANGE	3300	LOCKPORT
3064	LA GRANGE PARK	3305	LODA
3075	LA HARPE	3310	LOMAX
3080	LAKE BARRINGTON	3315	LOMBARD
3085	LAKE BLUFF	3320	LONDON MILLS
3090	LAKE FOREST	3323	LONG CREEK
3095	LAKE IN THE HILLS	3325	LONG GROVE
3097	LAKE KA-HO	3335	LONG POINT
3100	LAKEMOOR	3340	LONG VIEW
3105	LAKE VILLA	3345	LORAIN
3110	LAKESWOOD	3350	LOSTANT
3115	LAKE ZURICH	3355	LOUISVILLE
3120	LAMOILLE	3360	LOVES PARK
3125	LANARK	3365	LOVINGTON
3130	LANSING	3370	LUDLOW
3135	LA PRAIRIE	3375	LYNDON
3140	LA ROSE	3380	LYNNVILLE
3145	LASALLE	3385	LYNWOOD
3150	LATHAM	3390	LYONS
3155	LAWRENCEVILLE	3393	MCCLURE
3160	LEAF RIVER	3395	MC COOK
3165	LEBANON	3400	MC CULLOM LAKE
3170	LEE	3403	MACEDONIA
3177	LELAND	3405	MC HENRY
3180	LELAND GROVE	3406	MACHESNEY PARK
3185	LEMONT	3408	MACKINAW
3190	LENA	3410	MC LEAN
3195	LENZBURG	3415	MC LEANSBORO
3200	LEONORE	3420	MC NABB
3205	LERNA	3435	MACOMB
3210	LEROY	3440	MACON
3215	LEWISTOWN	3445	MADISON
3220	LEXINGTON	3450	MAEYSTOWN

<u>Code</u>	<u>Municipality</u>	<u>Code</u>	<u>Municipality</u>
3455	MAGNOLIA	3710	METTAWA
3460	MAHOMET	3720	MIDDLETOWN
3465	MAKANDA	3725	MIDLOTHIAN
3470	MALDEN	3730	MILAN
3475	MALTA	3735	MILFORD
3480	MANCHESTER	3737	MILLBROOK
3485	MANHATTAN	3740	MILL CREEK
3490	MANITO	3745	MILLEDGEVILLE
3495	MANLIUS	3750	MILLINGTON
3500	MANSFIELD	3755	MILL SHOALS
3505	MANTENO	3760	MILLSTADT
3510	MAPLE PARK	3770	MILTON
3515	MAPLETON	3775	MINERAL
3520	MAQUON	3780	MINIER
3525	MARENGO	3785	MINONK
3530	MARIETTA	3790	MINOOKA
3535	MARINE	3795	MODESTO
3540	MARION	3800	MOKENA
3550	MARISSA	3805	MOLINE
3558	MARK	3810	MOMENCE
3560	MARKHAM	3815	MONEE
3565	MAROA	3820	MONMOUTH
3570	MARQUETTE HEIGHTS	3825	MONROE CENTER
3575	MARSEILLES	3830	MONTGOMERY
3580	MARSHALL	3835	MONTICELLO
3585	MARTINSVILLE	3840	MONTROSE
3590	MARTINTON	3845	MORRIS
3595	MARYVILLE	3850	MORRISON
3600	MASCOUTAH	3855	MORRISONVILLE
3603	MASON	3872	MORTON
3605	MASON CITY	3873	MORTON GROVE
3615	MATHERSVILLE	3875	MOUND CITY
3620	MATTESON	3880	MOUNDS
3625	MATTOON	3890	MD STATION/TIMEWELL
3630	MAUNIE	3895	MT AUBURN
3635	MAYWOOD	3900	MOUNT CARMEL
3640	MAZON	3905	MT CARROLL
3645	MECHANICSBURG	3910	MOUNT CLARE
3650	MEDIA	3915	MT ERIE
3655	MEDORA	3920	MT MORRIS
3660	MELROSE PARK	3925	MOUNT OLIVE
3665	MELVIN	3930	MOUNT PROSPECT
3670	MENDON	3935	MT PULASKI
3675	MENDOTA	3940	MT STERLING
3680	MENOMINEE	3945	MOUNT VERNON
3685	MEREDOSIA	3947	MT ZION
3690	MERRIONETTE PARK	3950	MOWEAQUA
3695	METAMORA	3960	MUDDY
3700	METCALF	3965	MULBERRY GROVE
3705	METROPOLIS	3970	MUNCIE

<u>Code</u>	<u>Municipality</u>	<u>Code</u>	<u>Municipality</u>
3975	MUNDELEIN	4230	NORTH PEKIN
3980	MURPHYSBORO	4240	NORTH RIVERSIDE
3985	MURRAYVILLE	4245	NORTH UTICA/UTICA/
3990	NAPERVILLE	4250	NORWOOD
3995	NAPLATE	4262	OAK BROOK
4000	NAPLES	4263	OAKBROOK TERRACE
4005	NASHVILLE	4264	OAKDALE
4010	NASON	4265	OAKFORD
4020	NAUVOO	4270	OAK FOREST
4025	NEBO	4275	OAK GROVE
4030	NELSON	4285	OAKLAND
4035	NEOGA	4290	OAK LAWN
4040	NEPONSET	4295	OAK PARK
4045	NEWARK	4300	OAKWOOD
4050	NEW ATHENS	4305	OAKWOOD HILLS
4055	NEW BADEN	4310	OBLONG
4060	NEW BEDFORD	4315	OCONEE
4065	NEW BERLIN	4320	ODELL
4070	NEW BOSTON	4325	ODIN
4075	NEW BURNSIDE	4330	O'FALLON
4080	NEW CANTON	4335	OGDEN
4085	NEW DOUGLAS	4340	OGLESBY
4090	NEW GRAND CHAIN	4345	OHIO
4095	NEW HAVEN	4350	OHLMAN
4100	NEW HOLLAND	4355	OKAWVILLE
4105	NEW LENOX	4365	OLD MILL CREEK
4110	NEWMAN	4370	OLD RIPLEY
4112	NEW MILLFORD	4375	OLD SHAWNEETOWN
4115	NEW MINDEN	4380	OLMSTED
4120	NEW SALEM	4385	OLNEY
4125	NEWTON	4390	OLYMPIA FIELDS
4130	NIANTIC	4395	OMAHA
4135	NILES	4400	ONARGA
4140	NILWOOD	4405	ONEIDA
4145	NOBLE	4410	OQUAWKA
4150	NOKOMIS	4415	ORANGEVILLE
4155	NORA	4420	OREANA
4160	NORMAL	4425	OREGON
4165	NORRIDGE	4430	ORIENT
4170	NORRIS	4435	ORION
4172	NORRIS CITY	4437	ORLAND HILLS
4180	NORTH AURORA	4440	ORLAND PARK
4185	NORTH BARRINGTON	4445	OSWEGO
4190	NORTHBROOK	4450	OTTAWA
4193	NORTH CALEDONIA	4455	OTTERVILLE
4195	NORTH CHICAGO	4460	OWANECO
4205	NORTH CITY	4465	PALATINE
4210	NORTHFIELD	4470	PALESTINE
4215	NORTH HENDERSON	4475	PALMER
4220	NORTHLAKE	4480	PALMYRA

<u>Code</u>	<u>Municipality</u>	<u>Code</u>	<u>Municipality</u>
4485	PALOS HEIGHTS	4730	POPLAR GROVE
4490	PALOS HILLS	4733	PORT BARRINGTON
4495	PALOS PARK	4735	PORT BYRON
4500	PANA	4740	POSEN
4505	PANAMA	4745	POTOMAC
4510	PANOLA	4750	PRAIRIE CITY
4515	PAPINEAU	4755	PRAIRIE DU ROCHER
4520	PARIS	4757	PRAIRIE GROVE
4525	PARK CITY	4760	PRINCETON
4530	PARKERSBURG	4765	PRINCEVILLE
4535	PARK FOREST	4770	PROPHETSTOWN
4540	PARK RIDGE	4772	PROSPECT HEIGHTS
4545	PATOKA	4775	PULASKI
4550	PAWNEE	4780	QUINCY
4555	PAW PAW	4785	RADOM
4560	PAXTON	4790	RALEIGH
4565	PAYSON	4795	RAMSEY
4573	PEARL	4800	RANKIN
4575	PEARL CITY	4805	RANSOM
4580	PECATONICA	4810	RANTOUL
4585	PEKIN	4815	RAPIDS CITY
4590	PEORIA	4820	RARITAN
4595	PEORIA HEIGHTS	4825	RAYMOND
4600	PEOTONE	4830	RED BUD
4605	PERCY	4835	REDDICK
4610	PERRY	4840	REDMON
4615	PERU	4845	REYNOLDS
4620	PESOTUM	4850	RICHMOND
4625	PETERSBURG	4855	RIGHTON PARK
4630	PHILLIPSTOWN	4860	RICHVIEW
4635	PHILO	4865	RIDGE FARM
4640	PHOENIX	4870	RIDGWAY
4645	PIERRON	4875	RIDOTT
4650	PINCKNEYVILLE	4878	RINGWOOD
4655	PINGREE GROVE	4880	RIO
4660	PIPER CITY	4885	RIPLEY
4665	PITTSBURG	4890	RIVERDALE
4670	PITTSFIELD	4895	RIVER FOREST
4675	PLAINFIELD	4900	RIVER GROVE
4685	PLAINVILLE	4905	RIVERSIDE
4690	PLANO	4910	RIVERTON
4693	PLATTVILLE	4911	RIVERWOODS
4695	PLEASANT HILL	4915	ROANOKE
4700	PLEASANT PLAINS	4920	ROBBINS
4705	PLYMOUTH	4925	ROBERTS
4710	POCAHONTAS	4930	ROBINSON
4715	POLO	4935	ROCHELLE
4720	PONTIAC	4940	ROCHESTER
4724	PONTOON BEACH	4945	ROCKBRIDGE
4725	PONTOOSUC	4950	ROCK CITY

<u>Code</u>	<u>Municipality</u>	<u>Code</u>	<u>Municipality</u>
4955	ROCKDALE	5190	SAVANNA
4960	ROCK FALLS	5195	SAVOY
4965	ROCKFORD	5200	SAWYERVILLE
4970	ROCK ISLAND	5205	SAYBROOK
4975	ROCKTON	5210	SCALES MOUND
4980	ROCKWOOD	5215	SCHAUMBURG
4985	ROLLING MEADOWS	5220	SCHILLER PARK
4995	ROMEOVILLE	5225	SCHRAM CITY
5000	ROODHOUSE	5230	SCIOTA
5003	ROSCOE	5235	SCOTTVILLE
5005	ROSE HILL	5240	SEATON
5010	ROSELLE	5245	SEATONVILLE
5015	ROSEMONT	5250	SECOR
5020	ROSEVILLE	5255	SENECA
5030	ROSICLARE	5260	SESSER
5035	ROSSVILLE	5265	SHABBONA
5043	ROUND LAKE	5275	SHANNON
5045	ROUND LAKE BEACH	5280	SHAWNEETOWN
5047	ROUND LAKE HEIGHTS	5285	SHEFFIELD
5050	ROUND LAKE PARK	5290	SHELBYVILLE
5055	ROXANA	5295	SHELDON
5060	ROYAL	5300	SHERIDAN
5062	ROYAL LAKES	5301	SHERMAN
5065	ROYALTON	5305	SHERRARD
5070	RUMA	5310	SHILOH
5075	RUSHVILLE	5315	SHIPMAN
5080	RUSSELLVILLE	5320	SHOREWOOD
5085	RUTLAND	5325	SHUMWAY
5090	SADORUS	5330	SIBLEY
5095	SAILOR SPRINGS	5335	SIDELL
5100	ST ANNE	5340	SIDNEY
5105	ST AUGUSTINE	5345	SIGEL
5110	ST CHARLES	5350	SILVIS
5115	ST DAVID	5355	SIMPSON
5120	ST ELMO	5360	SIMS
5122	STE MARIE	5365	SKOKIE
5125	ST FRANCISVILLE	5370	SLEEPY HOLLOW
5130	ST JACOB	5375	SMITHBORO
5135	ST JOHNS	5380	SMITHFIELD
5140	ST JOSEPH	5385	SMITHTON
5145	ST LIBORY	5390	SOMONAUK
5155	ST PETER	5395	SORENTO
5160	SALEM	5397	SOUTH BARRINGTON
5163	SAMMONS POINT	5400	SOUTH BELOIT
5165	SANDOVAL	5405	SOUTH CHICAGO HTS
5170	SANDWICH	5410	SOUTH ELGIN
5175	SAN JOSE	5415	SOUTHERN VIEW
5177	SAUGET	5420	SOUTH HOLLAND
5180	SAUK VILLAGE	5425	SOUTH JACKSONVILLE
5185	SAUNEMIN	5430	SOUTH PEKIN

<u>Code</u>	<u>Municipality</u>	<u>Code</u>	<u>Municipality</u>
5435	SOUTH ROXANA	5690	TEUTOPOLIS
5445	SOUTH WILMINGTON	5695	THAWVILLE
5450	SPARLAND	5700	THAYER
5455	SPARTA	5705	THEBES
5460	SPAULDING	5707	THIRD LAKE
5465	SPELLERTOWN	5710	THOMASBORO
5470	SPRING BAY	5715	THOMPSONVILLE
5475	SPRINGERTON	5720	THOMSON
5480	SPRINGFIELD	5725	THORNTON
5485	SPRING GROVE	5730	TILDEN
5490	SPRING VALLEY	5735	TILTON
5497	STANDARD	5737	TIMBERLANE
5500	STANDARD CITY	5740	TIME
5505	STANFORD	5745	TINLEY PARK
5510	STAUNTON	5750	TISKILWA
5515	STEELEVILLE	5755	TOLEDO
5520	STEGER	5760	TOLONO
5525	STERLING	5765	TOLUCA
5530	STEWART	5770	TONICA
5535	STEWARTSON	5775	TOPEKA
5540	STICKNEY	5785	TOULON
5545	STILLMAN VALLEY	5788	TOVEY/HUMPHREY
5550	STOCKTON	5790	TOWANDA
5555	STONEFORT	5795	TOWER HILL
5560	STONE PARK	5797	TOWER LAKES
5565	STONINGTON	5800	TREMONT
5570	STOY	5805	TRENTON
5575	STRASBURG	5808	TROUT VALLEY
5580	STRAWN	5810	TROY
5585	STREAMWOOD	5815	TROY GROVE
5590	STREATOR	5820	TUSCOLA
5595	STRONGHURST	5825	ULLIN
5600	SUBLETTE	5830	UNION
5605	SUGAR GROVE	5835	UNION HILL
5610	SULLIVAN	5838	UNIVERSITY PARK
5615	SUMMERFIELD	5845	URBANA
5620	SUMMIT	5847	URSA
5625	SUMNER	5850	VALIER
5633	SUN RIVER TERRACE	5855	VALLEY CITY
5635	SWANSEA	5865	VALMEYER
5640	SYCAMORE	5870	VANDALIA
5645	SYMERTON	5875	VARNA
5650	TABLE GROVE	5880	VENEDY
5655	TALLULA	5890	VENICE
5660	TAMAROA	5895	VERGENNES
5665	TAMMS	5905	VERMILION
5670	TAMPICO	5910	VERMONT
5675	TAYLOR SPRINGS	5915	VERNON
5680	TAYLORVILLE	5920	VERNON HILLS
5685	TENNESSEE	5925	VERONA

APPENDIX E: TOWNSHIP/ROAD DISTRICT LIST

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Adams	01	Beverly
	02	Burton
	03	Camp Point
	04	Clayton
	05	Columbus
	06	Concord
	07	Ellington
	08	Fall Creek
	09	Gilmer
	10	Honey Creek
	11	Houston
	12	Keene
	13	Liberty
	14	Lima
	15	Mckee
	16	Melrose
	17	Mendon
	18	Northeast
	19	Payson
	20	Quincy (Quincy)
	21	Richfield
	22	Riverside
	23	Ursa
	AL	Bailey Pk Dist
	AZ	Beverly Pk Dist
	HK	Liberty Twp Pk Dist
	KW	Quincy Pk Dist
Alexander	01	Co Unit Road Dist
Bond	01	Burgess
	02	Central
	03	Lagrange
	04	Mills
	05	Mulberry Grove
	06	Old Ripley
	07	Pleasant Mound
	08	Shoal Creek
	09	Tamalco
	GS	Kingsbury Pk Dist
Boone	01	Belvidere
	02	Bonus
	03	Boone
	04	Caledonia
	05	Flora
	06	Leroy

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Boone (cont)	07	Manchester
	08	Poplar Grove
	09	Spring
	ZZ	Adjacent State Township
	AT	Belvidere Pk Dist
	BG	Boone Co Cons Dist
Brown	01	Buckhorn
	02	Cooperstown
	03	Elkhorn
	04	Lee
	05	Missouri
	06	Mount Sterling
	07	Pea Ridge
	08	Ripley
	09	Versailles
Bureau	01	Arispie
	02	Berlin
	03	Bureau
	04	Clarion
	05	Concord
	06	Dover
	07	Fairfield
	08	Gold
	09	Greenville
	10	Hall
	11	Indiantown
	12	Lamoille
	13	Leepertown
	14	Macon
	15	Manlius
	16	Milo
	17	Mineral
	18	Neponset
	19	Ohio
	20	Princeton
	21	Selby
	22	Walnut
	23	Westfield
	24	Wheatland
	25	Wyanet
KR	Princeton Pk Dist	
ND	Walnut Pk Dist	
Calhoun	01	Co Unit Road Dist
	KJ	Pleasant Hill Pk Dist

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Carroll	01	Cherry Grove - Shannon
	02	Elkhorn Grove
	03	Fairhaven
	04	Freedom
	06	Mount Carroll
	07	Rock Creek - Lima
	08	Salem
	09	Savanna
	11	Washington
	12	Woodland
	13	Wysox
	14	York
	IM	Milledgeville Pk Dist
	LS	Savanna Twp Pk Dist
	Cass	01
02		Ashland
03		Beardstown
04		Bluff Springs
05		Chandlerville
06		Hagener
07		Newmansville
08		Panther Creek
09		Philadelphia
10		Sangamon Valley
11		Virginia
AR	Beardstown Pk Dist	
Champaign	01	Ayers
	02	Brown
	03	Champaign
	54	Champaign City (Champaign)
	05	Colfax
	06	Compromise
	07	Condit
	08	Crittenden
	59	Cunningham (Urbana City)
	10	East Bend
	11	Harwood
	12	Hensley
	13	Kerr
	14	Ludlow
	15	Mahomet
	16	Newcomb
	17	Ogden
	18	Pesotum

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Champaign (cont)	19	Philo
	20	Rantoul
	21	Raymond
	22	Sadorus
	24	Scott
	25	Sidney
	26	Somer
	27	South Homer
	23	St Joseph
	28	Stanton
	29	Tolono
	30	Urbana
	CF	Chmpgn Co For Pres Dist
	CG	Chmpgn Pk Dist
	KX	Rantoul Pk Dist
	MS	Tolono Pk Dist
	MW	Urbana Pk Dist
Christian	01	Assumption
	02	Bear Creek
	03	Buckhart
	04	Greenwood
	05	Johnson
	06	King
	07	Locust
	08	May
	09	Mosquito
	10	Mt Auburn
	11	Pana
	12	Prairieton
	13	Ricks
	14	Rosamond
	15	South Fork
	16	Stonington
	17	Taylorville
KQ	Prairieton General Pk Dist	
MN	Tylrvl Com Pleasure Dr & Pk Dst	
Clark	01	Anderson
	02	Auburn
	03	Casey
	04	Darwin
	05	Dolson
	06	Douglas
	07	Johnson
	08	Marshall
	09	Martinsville

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Clark (cont)	10	Melrose
	11	Orange
	12	Parker
	13	Wabash
	14	Westfield
	15	York
	ZZ	Adjacent State Township
	CB	Casey Twp Pk Dist
	CS	Clark Co Pk Dist
Clay	01	Bible Grove
	02	Blair
	03	Clay City
	04	Harter
	05	Hoosier
	06	Larkinsburg
	07	Louisville
	08	Oskaloosa
	09	Pixley
	10	Songer
	11	Stanford
	12	Xenia
Clinton	01	Breese
	02	Brookside
	03	Carlyle
	04	Clement
	05	East Fork
	06	Germantown
	07	Irishtown
	08	Lake
	09	Looking Glass
	10	Meridian
	12	Santa Fe
	11	St Rose
	13	Sugar Creek
	14	Wade
	15	Wheatfield
FC	Germantown Pk Dist	
Coles	01	Ashmore
	02	Charleston
	03	East Oakland
	04	Humboldt
	05	Hutton
	06	Lafayette
	07	Mattoon

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Coles (cont)	08	Morgan
	09	North Okaw
	10	Paradise
	11	Pleasant Grove
	12	Seven Hickory
	AI	Arthur Comm Pk Dist
	CI	Charleston Pk Dist
	CJ	Charleston Playground & Rec Dpt
	DU	East Oakland Pk Dist
	ID	Mattoon Twp Pk Dist
	Cook	01
52		Berwyn (Berwyn)
03		Bloom
04		Bremen
05		Calumet
56		Cicero (Cicero)
07		Elk Grove
58		Evanston (Evanston)
09		Hanover
60		Hyde Pk (Chicago)
61		Jefferson (Chicago)
62		Lake (Chicago)
63		Lake View (Chicago)
14		Lemont
15		Leyden
16		Lyons
17		Maine
99		New Trier (New Trier)
98		Niles (Niles)
70		North Chicago (Chicago)
21		Northfield
22		Norwood Pk
73		Oak Pk (Oak Pk)
24		Orland
25		Palatine
26		Palos
27		Proviso
28		Rich
79		River Forest (River Forest)
97		Riverside
81		Rogers Pk (Chicago)
32	Schaumburg	
83	South Chicago (Chicago)	
34	Stickney	
35	Thornton	
86	West Chicago (Chicago)	

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Cook (cont)	37	Wheeling
	38	Worth
	ZZ	Adjacent State Township
	AE	Alsip Pk Dist
	AG	Arlington Heights Pk Dist
	AM	Barrington Countryside Pk Dist
	AN	Barrington Pk Dist
	AP	Bartlett Pk Dist
	AS	Bedford Pk Dist
	AU	Bensenville Pk Dist
	AW	Berkeley Pk Dist
	AX	Berwyn Pk Dist
	AY	Berwyn Playground & Rec Comm
	BE	Blue Island Pk Dist
	BI	Bridgeview Pk Dist
	BJ	Broadview Pk Dist
	BK	Buffalo Grove Pk Dist
	BM	Burr Ridge Pk Dist
	BR	Calumet Memorial Pk Dist
	CC	Central Area Pk Dist
	CD	Central Stickney Pk Dist
	CL	Chicago Heights Pk Dist
	CM	Chicago Pk Dist
	CN	Chicago Ridge Pk Dist
	CT	Clyde Pk Dist
	CX	Cntry Club Hills Pk Dist
	CV	Comm Pk Dist
	CW	Cook Co For Pres Dist
	DI	Deerfield Pk Dist
	DL	Desplaines Pk Dist
	DP	Dolton Pk Dist
	DZ	Elk Grove Pk Dist
	EA	Elmhurst Pk Dist
	EN	Forest View Pk Dist
	ET	Frankfort Sq Pk Dist
	EU	Franklin Pk Pk Dist
	FE	Glencoe Pk-Rec Dist
	FF	Glenview Pk Dist
	FG	Golf Maine Pk Dist
	FT	Hanover Pk Pk Dist
	FV	Harvey Pk Dist
	FW	Hawthorne Pk Dist
	FX	Hazel Crest Pk Dist
	GA	Hickory Hills Pk Dist
	GB	Hoffman Estates Pk Dist
	GD	Homewd-Flossmoor Pk Dist
	GI	Inverness Pk Dist

Cook (cont)	GL	Ivanhoe Pk Dist
	GQ	Kenilworth Pk Dist
	HC	Lan-Oak Pk Dist
	HG	Lemont Twp Pk Dist
	HL	Lighthouse Pk Dist
	HP	Lincolnwd Pks & Rec Dept
	IA	Markham Pk Dist
	IE	McCook-Hodgkins Pk Dist
	IH	Memorial Pk Dist
	IK	Midlothian Pk Dist
	IN	Mokena Comm Pk Dist
	IR	Morton Grove Pk Dist
	IT	Mount Prospect Pk Dist
	JC	Niles Pk Dist
	JE	Norridge Pk Dist
	JF	North Berwyn Pk Dist
	JG	Northbrook Pk Dist
	JH	Northfield Pk Dist
	JJ	Oak Forest Pk Dist
	JK	Oak Lawn Pk Dist
	JN	Olympia Field Pk Dist
	JQ	Orland Pk Rec & Pk Dept
	JS	Palatine Pk Dist
	KD	Phoenix Pk Dist
	JT	Pk Dist Of Forest Pk
	JV	Pk Dist Of Lagrange
	JW	Pk Dist Of Oak Pk
	JX	Pk Forest Rec & Pks Dept
	JY	Pk Ridge Rec & Pk Dist
	KI	Pleasant Dale Pk Dist
	KM	Plum Grove Cntryside Pk Dist
	KP	Posen Pk Dist
	KT	Prospect Heights Pk Dist
	KZ	Ridgeville Pk Dist
	LA	River Forest Pk Dist
	LB	River Trails Pk Dist
	LC	Riverdale Pk Dist
	LE	Robbins Pk Dist
	LH	Rolling Meadows Pk Dist
	LK	Rosemont Pk Dist
	LQ	Salt Creek Rural Pk Dist
	LT	Schaumburg Pk Dist
	LV	Skokie Pk Dist
	LW	So Barrington Pk Dist
	LX	So Holland Pks & Rec Dept
	LZ	So Stickney Pk Dist
	MI	Streamwood Pk Dist

Cook (cont)	MJ	Summit Pk Dist
	MQ	Tinley Pk Dist
	NC	Veterans Pk Dist
	NK	West Maywood Pk Dist
	NL	Westchester Pk Dist
	NM	Westdale Pk Dist
	NN	Western Springs Pk Dist
	NR	Wheeling Pk Dist
	NU	Wilmette Pk Dist
	NX	Winnetka Pk Dist
	PB	Worth-Palos Pk Dist
Crawford	01	Honey Creek
	02	Hutsonville
	03	Lamotte
	04	Licking
	05	Martin
	06	Montgomery
	07	Oblong
	08	Prairie
	09	Robinson
	10	Southwest
	GG	Hutsonville Pk Dist
	HB	Lamotte Twp Pk Dist
Cumberland	01	Cottonwood
	02	Crooked Creek
	03	Greenup
	04	Neoga
	05	Spring Point
	06	Sumpter
	07	Union
	08	Woodbury
	ML	Sumpter Twp Pk Dist
Dekalb	01	Afton
	02	Clinton
	03	Cortland
	04	Dekalb
	05	Franklin
	06	Genoa
	07	Kingston
	08	Malta
	09	Mayfield
	10	Milan
	11	Paw Paw
	12	Pierce

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
DeKalb (cont)	13	Sandwich
	14	Shabbona
	15	Somonauk
	16	South Grove
	17	Squaw Grove
	18	Sycamore
	19	Victor
	DF	Dekalb Co For Pres Dist
	DG	Dekalb Pk Dist
	EV	Franklin Twp Pk Dist
	FB	Genoa Twp Pk Dist
	GT	Kingston Twp Pk Dist
	LR	Sandwich Pk Dist
	MM	Sycamore Pk Dist
	Dewitt	01
02		Clintonia
03		Creek
04		Dewitt
05		Harp
06		Nixon
07		Rutledge
08		Santa Anna
09		Texas
10		Tunbridge
11		Wapella
12		Waynesville
13		Wilson
Douglas	01	Arcola
	02	Bourbon
	03	Bowdre
	04	Camargo
	05	Garrett
	06	Murdock
	07	Newman
	08	Sargent
	09	Tuscola
	AI	Arthur Comm Pk Dist
	Dupage	01
02		Bloomingtondale
03		Downers Grove
04		Lisle
05		Milton
06		Naperville
07		Wayne

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Dupage (cont)	08	Winfield
	09	York
	AA	Addison Pk Dist
	AP	Bartlett Pk Dist
	AU	Bensenville Pk Dist
	BD	Bloomingtondale Pk Dist
	BM	Burr Ridge Pk Dist
	BN	Butterfield Pk Dist
	BW	Carol Stream Pk Dist
	CM	Chicago Pk Dist
	CR	Clarendon Hills Pk Dist
	DE	Darien Pk Dist
	DR	Downers Grove Pk Dist
	EA	Elmhurst Pk Dist
	EK	For Pres Dist Of Dupage Co
	EQ	Fox Valley Pk Dist
	FD	Glen Ellyn Pk Dist
	FH	Golfview Hills Pk Dist
	FT	Hanover Pk Pk Dist
	GK	Itasca Pk Dist
	HQ	Lisle Pk Dist
	HT	Lombard Pk Dist
	IG	Medinah Pk Dist
	IY	Naperville Pk Dist
	JI	Oak Brook Pk Dist
	JL	Oakbrook Ter Pk Dist
	KF	Pick Sub-Div Pk Dist
	LJ	Roselle Pk Dist
	LM	Round Grove Pk Dist
	MB	St Charles Pk Dist
	MU	Tri-State Pk Dist
NJ	West Chicago Pk Dist	
NP	Westmont Pk Dist	
NQ	Wheaton Pk Dist	
NV	Winfield Pk Dist	
NZ	Wood Dale Pk Dist	
PA	Woodridge Pk Dist	
PC	York Center Pk Dist	
EG	53 Trails Pk Dist	
Edgar	01	Brouilletts Creek
	02	Buck
	03	Edgar
	04	Elbridge
	05	Embarrass
	06	Grandview
	07	Hunter

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Edgar (cont)	08	Kansas
	09	Paris
	10	Prairie
	11	Ross
	12	Shiloh
	13	Stratton
	14	Symmes
	15	Young America
	ZZ	Adjacent State Township
	Edwards	01
02		Road Dist #02
03		Road Dist #03
04		Road Dist #04
05		Road Dist #05
06		Road Dist #06
07		Road Dist #07
08		Road Dist #08
14		Road Dist #14
15		Road Dist #15
59		Road Dist #59 (Albion)
63		Road Dist #63 (West Salem)
AB		Albion Pk Dist
Effingham	01	Banner
	02	Bishop
	03	Douglas
	04	Jackson
	05	Liberty
	06	Lucas
	07	Mason
	08	Moccasin
	09	Mound
	10	St Francis
	11	Summit
	12	Teutopolis
	13	Union
	14	Watson
	15	West
DX	Effingham Pk Dist	
Fayette	01	Avena
	02	Bear Grove
	03	Bowling Green
	04	Carson
	06	Kaskaskia
	07	Laclede

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Fayette (cont)	08	Lone Grove
	09	Loudon
	05	North Hurricane
	10	Otego
	11	Pope
	12	Ramsey
	13	Sefton
	14	Seminary
	15	Shafter
	16	Sharon
	17	South Hurricane
	18	Vandalia
	19	Wheatland
	20	Wilberton
	MD	St Elmo Comm Pk Dist
	MY	Vandalia Pk Dist
	Ford	01
02		Button
03		Dix
04		Drummer
05		Lyman
06		Mona
07		Patton
08		Peach Orchard
09		Pella
10		Rogers
11		Sullivant
12		Wall
JZ		Paxton Pk Dist
Franklin	01	Barren
	02	Benton
	03	Browning
	04	Cave
	05	Denning
	06	Eastern
	07	Ewing
	08	Frankfort
	09	Goode
	10	Northern
	11	Six Mile
	12	Tyrone
	AV	Benton Comm Pk Dist
ER	Frankfort Comm Pk Dist	
Fulton	01	Astoria

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Fulton (cont)	02	Banner
	03	Bernadotte
	04	Buckheart
	05	Canton
	06	Cass
	07	Deerfield
	08	Ellisville
	09	Fairview
	10	Farmers
	11	Farmington
	12	Harris
	13	Isabel
	14	Joshua
	15	Kerton
	16	Lee
	17	Lewistown
	18	Liverpool
	19	Orion
	20	Pleasant
	21	Putman
	22	Union
	23	Vermont
	24	Waterford
	25	Woodland
	26	Young Hickory
	AJ	Astoria Pk Dist
BS	Canton Pk Dist	
EF	Farmington Twp Pk Dist	
HI	Lewistown Twp Pk Dist	
KV	Putnam Twp Pk Dist	
MX	Valley Pk Dist	
Gallatin	01	Asbury
	02	Bowlesville
	03	Eagle Creek
	04	Equality
	05	Gold Hill
	06	New Haven
	07	North Fork
	08	Omaha
	09	Ridgway
	10	Shawnee
Greene	01	Athensville
	02	Bluffdale
	03	Carrollton
	04	Kane

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>	
Greene (cont)	05	Linder	
	06	Patterson	
	07	Rockbridge	
	08	Roodhouse	
	09	Rubicon	
	10	Walkerville	
	11	White Hall	
	12	Woodville	
	13	Wrights	
	Grundy	01	Aux Sable
		02	Braceville
		03	Erienna
		04	Felix
05		Garfield	
06		Goodfarm	
07		Goose Lake	
08		Greenfield	
09		Highland	
10		Maine	
11		Mazon	
12		Morris	
13		Nettle Creek	
14		Norman	
15		Saratoga	
16		Vienna	
17		Wauponsee	
Hamilton	01	Beaver Creek	
	02	Crook	
	03	Crouch	
	04	Dahlgren	
	05	Flannigan	
	06	Knights Prairie	
	08	Mayberry	
	07	Mcleansboro	
	09	South Crouch	
	10	South Flannigan	
	11	South Twigg	
	12	Twigg	
Hancock	01	Appanoose	
	02	Augusta	
	03	Bear Creek	
	04	Carthage	
	05	Chili	
	06	Dallas City	

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Hancock (cont)	07	Durham
	08	Fountain Green
	09	Hancock
	10	Harmony
	11	Laharpe
	12	Montebello
	13	Nauvoo
	14	Pilot Grove
	15	Pontoosuc
	16	Prairie
	17	Rock Creek
	18	Rocky Run
	21	Sonora
	19	St Albans
	20	St Mary
	22	Walker
	23	Warsaw (Warsaw)
	24	Wilcox
	25	Wythe
	BY	Carthage Pk Dist
	CP	Chili Pk Dist
	DC	Dallas City Pk Dist
	FR	Hamilton Pk Dist
	GW	Laharpe Pk Dist
	IZ	Nauvoo Pk Dist
NE	Warsaw Pk Dist	
Hardin	01	Co Unit Road Dist
Henderson	01	Bald Bluff
	02	Biggsville
	03	Carman
	04	Gladstone
	05	Lomax
	06	Media
	07	Oquawka
	08	Raritan
	09	Rozetta
	10	Stronghurst
	11	Terre Haute
	DC	Dallas City Pk Dist
Henry	01	Alba
	02	Andover
	03	Annawan
	04	Atkinson
	05	Burns

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Henry (cont)	06	Cambridge
	07	Clover
	08	Colona
	09	Cornwall
	10	Edford
	11	Galva
	12	Geneseo
	13	Hanna
	14	Kewanee
	15	Loraine
	16	Lynn
	17	Munson
	18	Oscoda
	19	Oxford
	20	Phenix
	21	Weller
	22	Western
	23	Wethersfield
	24	Yorktown
	EY	Galva Pk Dist
	EZ	Geneseo Comm Pk Dist
	GR	Kewanee Pk Dist
	GV	Lafayette Pk Dist
	KS	Prophetstown Pk Dist
Iroquois	01	Artesia
	02	Ash Grove
	03	Ashkum
	04	Beaver
	05	Beaverville
	06	Belmont
	07	Chebanse
	08	Concord
	09	Crescent
	10	Danforth
	11	Douglas
	12	Fountain Creek
	13	Iroquois
	14	Loda
	15	Lovejoy
	16	Martinton
	17	Middleport
	18	Milford
	19	Milks Grove
	20	Onarga
	21	Papineau
	22	Pigeon Grove

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Iroquois (cont)	23	Prairie Green
	24	Ridgeland
	25	Sheldon
	26	Stockland
	ZZ	Adjacent State Township
	DQ	Douglas Pk Dist
	IL	Milford Pk Dist
Jackson	01	Bradley
	02	Carbondale
	03	Degognia
	04	Desoto
	05	Elk
	06	Fountain Bluff
	07	Grand Tower
	08	Kinkaid
	09	Levan
	10	Makanda
	11	Murphysboro
	12	Ora
	13	Pomona
	14	Sand Ridge
	15	Somerset
	16	Vergennes
	BU	Carbondale Pk Dist
	FI	Grand Tower Pk Dist
	IX	Murphysboro Pk Dist
Jasper	01	Crooked Creek
	02	Fox
	03	Grandville
	04	Grove
	05	Hunt City
	06	North Muddy
	08	Smallwood
	09	South Muddy
	07	Ste Marie
	10	Wade
	11	Willow Hill
Jefferson	01	Bald Hill
	02	Blissville
	03	Casner
	04	Dodds
	05	Elk Prairie
	06	Farrington
	07	Field

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Jefferson (cont)	08	Grand Prairie
	09	McClellan
	10	Moore's Prairie
	11	Mount Vernon
	12	Pendleton
	13	Rome
	14	Shiloh
	15	Spring Garden
	16	Webber
Jersey	01	Elsah
	02	English
	03	Fidelity
	04	Jersey
	05	Mississippi
	06	Otter Creek
	07	Piasa
	08	Quarry
	09	Richwood
	10	Rosedale
	11	Ruyle
JoDaviess	01	Apple River
	02	Berremans
	03	Council Hill
	04	Derinda
	05	Dunleith
	06	East Galena
	07	Elizabeth
	08	Guilford
	09	Hanover
	10	Menominee
	11	Nora
	12	Pleasant Valley
	13	Rawlins
	14	Rice
	15	Rush
	16	Scales Mound
	17	Stockton
	18	Thompson
	19	Vinegar Hill
	20	Wards Grove
	21	Warren
	22	West Galena
	23	Woodbine
ZZ	Adjacent State Township	
BB	Black Hawk Pk Dist	

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
JoDaviess (cont)	DT	Dunleith Pk Dist
	MH	Stockton Twp Mem Pk Dist
Johnson	01	Co Unit Road Dist
Kane	01	Aurora
	02	Batavia
	03	Big Rock
	04	Blackberry
	05	Burlington
	06	Campton
	07	Dundee
	08	Elgin
	09	Geneva
	10	Hampshire
	11	Kaneville
	12	Plato
	13	Rutland
	14	St Charles
	15	Sugar Grove
	16	Virgil
	AQ	Batavia Pk Dist
	BA	Big Rock Sugar Gr Pk Dist
	BL	Burlington Pk Dist
	DS	Dundee Twp Pk Dist
	EL	For Pres Dist Of Kane Co
	EQ	Fox Valley Pk Dist
FA	Geneva Pk Dist	
FS	Hampshire Twp Pk Dist	
GF	Huntley Pk Dist	
MB	St Charles Pk Dist	
Kankakee	01	Aroma
	02	Bourbonnais
	03	Essex
	04	Ganeer
	05	Kankakee
	06	Limestone
	07	Manteno
	08	Momence
	09	Norton
	10	Otto
	11	Pembroke
	12	Pilot
	13	Rockville
	15	Salina
14	St Anne	

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Kankakee (cont)	16	Sumner
	17	Yellowhead
	ZZ	Adjacent State Township
	GN	Kankakee Valley Pk Dist
	HM	Limestone Pk Dist
	IP	Momence Pk Dist
Kendall	01	Big Grove
	02	Bristol
	03	Fox
	04	Kendall
	05	Lisbon
	06	Little Rock
	07	Na-Au-Say
	08	Oswego
	09	Seward
	GP	Kendall Co For Pres Dist
	JR	Oswegoland Pk Dist
	LR	Sandwich Pk Dist
Knox	01	Cedar
	02	Chestnut
	03	Copley
	04	Elba
	05	Galesburg
	56	Galesburg City (Galesburg)
	07	Haw Creek
	08	Henderson
	09	Indian Point
	10	Knox
	11	Lynn
	12	Maquon
	13	Ontario
	14	Orange
	15	Persifer
	16	Rio
	17	Salem
	18	Sparta
	19	Truro
	20	Victoria
	21	Walnut Grove
GV	Lafayette Pk Dist	
Lake	01	Antioch
	02	Avon
	03	Benton
	04	Cuba

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Lake (cont)	96	Deerfield (Deerfield)
	06	Ela
	07	Fremont
	08	Grant
	09	Lake Villa
	10	Libertyville
	11	Newport
	12	Shields
	13	Vernon
	14	Warren
	15	Wauconda
	16	Waukegan
	17	West Deerfield
	68	Zion (Zion)
	ZZ	Adjacent State Township
	AF	Antioch Pk & Rec Dept
	AM	Barrington Cntryside Pk Dist
	AN	Barrington Pk Dist
	BK	Buffalo Grove Pk Dist
	DI	Deerfield Pk Dist
	EP	Foss Pk Dist
	FJ	Grandwood Pk Dist
	FM	Grayslake Comm Pk Dist
	FQ	Gurnee Pk Dist
	GY	Lake Barrington Pk Dist
	GZ	Lake Bluff Pk Dist
	HA	Lake Co For Pres Dist
	HU	Long Grove Pk Dist
	IW	Mundelein Pk & Rec Dist
	JU	Pk Dist Of Highland Pk
	LN	Round Lake Area Pk Dist
	NB	Vernon Hills Pk Dist
NH	Wauconda Pk Dist	
NI	Waukegan Pk Dist	
NR	Wheeling Pk Dist	
NT	Wildwood Pk Dist	
PD	Zion Pk Dist	
LaSalle	01	Adams
	02	Allen
	03	Brookfield
	04	Bruce
	05	Dayton
	06	Deer Pk
	07	Dimmick
	08	Eagle
	09	Earl

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>	
LaSalle (cont)	10	Eden	
	11	Fall River	
	12	Farm Ridge	
	13	Freedom	
	14	Grand Rapids	
	15	Groveland	
	16	Hope	
	17	Lasalle	
	18	Manlius	
	19	Mendota	
	20	Meriden	
	21	Miller	
	22	Mission	
	23	Northville	
	24	Ophir	
	25	Osage	
	26	Ottawa	
	27	Otter Creek	
	28	Peru	
	29	Richland	
	30	Rutland	
	31	Serena	
	32	South Ottawa	
	33	Troy Grove	
	34	Utica	
	35	Vermilion	
	36	Wallace	
	37	Waltham	
	Lawrence	01	Allison
		02	Bond
		03	Bridgeport
		04	Christy
		05	Denison
		06	Lawrence
		07	Lukin
		08	Petty
		09	Russell
HD		Lanterman Pk Dist	
HE		Lawrence Pk Dist	
Lee	01	Alto	
	02	Amboy	
	03	Ashton	
	04	Bradford	
	05	Brooklyn	
	06	China	

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Lee (cont)	07	Dixon
	08	East Grove
	09	Hamilton
	10	Harmon
	11	Lee Center
	12	Marion
	13	May
	14	Nachusa
	15	Nelson
	16	Palmyra
	17	Reynolds
	18	South Dixon
	19	Sublette
	20	Viola
	21	Willow Creek
	22	Wyoming
	23	Franklin Grove
	DN	Dixon Pk Dist
	ND	Walnut Pk Dist
	Livingston	01
02		Avoca
03		Belle Prairie
04		Broughton
05		Charlotte
06		Chatsworth
07		Dwight
08		Eppards Point
09		Esmen
10		Fayette
11		Forrest
12		Germanville
13		Indian Grove
14		Long Point
15		Nebraska
16		Nevada
17		Newtown
18		Odell
19		Owego
20		Pike
21		Pleasant Ridge
22		Pontiac
23		Reading
24		Rooks Creek
25		Round Grove
26		Saunemin
27		Sullivan

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Livingston (cont)	28	Sunbury
	29	Union
	30	Waldo
	BT	Caps Pk Dist
	EI	Flanagan Comm Pk Dist
	JM	Odell Pk Dist
	KG	Pike Eppards Point Pk Dist
Logan	01	Aetna
	02	Atlanta
	03	Broadwell
	04	Chester
	05	Corwin
	06	East Lincoln
	07	Elkhart
	08	Eminence
	09	Hurlbut
	10	Laenna
	11	Lake Fork
	12	Mount Pulaski
	13	Oran
	14	Orvil
	15	Prairie Creek
	16	Sheridan
	17	West Lincoln
	AH	Armington Comm Pk Dist
	AK	Atlanta-Eminence Pk Dist
	CK	Chestnut Beason Pk Dist
EC	Emden Pk Dist	
HN	Lincoln Pk Dist	
IU	Mount Pulaski Twp Pk Dist	
McDonough	01	Bethel
	02	Blandinsville
	03	Bushnell
	04	Chalmers
	06	Eldorado
	07	Emmet
	08	Hire
	09	Industry
	10	Lamoine
	11	Macomb
	62	Macomb City (Macomb)
	13	Mound
	14	New Salem
	15	Prairie City
	16	Sciota

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
McDonough (cont)	17	Scotland
	05	Twp Dist #01
	19	Walnut Grove
	BC	Blandinsville Pk Dist
	HV	Macomb Pk Dist
McHenry	01	Alden
	02	Algonquin
	03	Burton
	04	Chemung
	05	Coral
	06	Dorr
	07	Dunham
	08	Grafton
	09	Greenwood
	10	Hartland
	11	Hebron
	13	Marengo
	12	McHenry
	14	Nunda
	15	Richmond
	16	Riley
	17	Seneca
	ZZ	Adjacent State Township
	AM	Barrington Cntryside Pk Dist
	BZ	Cary Pk Dist
DA	Crystal Lake Manor Pk Dist	
DB	Crystal Lake Pk Dist	
GF	Huntley Pk Dist	
HY	Marengo Pk Dist	
IF	Mchenry Co Cons Dist	
McLean	01	Allin
	02	Anchor
	03	Arrowsmith
	04	Bellflower
	05	Bloomington
	56	Bloomington City (Bloomington)
	07	Blue Mound
	08	Cheneys Grove
	09	Chenoa
	10	Cropsey
	11	Dale
	12	Danvers
	13	Dawson
	14	Downs
	15	Dry Grove

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
McLean (cont)	16	Empire
	17	Funks Grove
	18	Gridley
	19	Hudson
	20	Lawndale
	21	Lexington
	22	Martin
	23	Money Creek
	24	Mount Hope
	25	Normal
	26	Old Town
	27	Randolph
	28	Towanda
	29	West
	30	White Oak
	31	Yates
	AD	Allin Twp Pk Dist
	HF	Leroy Comm Pk Dist
	HJ	Lexington Pk Dist
Macon	01	Austin
	02	Blue Mound
	03	Decatur
	04	Friends Creek
	05	Harristown
	06	Hickory Point
	07	Illini
	08	Long Creek
	09	Maroa
	10	Milam
	11	Mt Zion
	12	Niantic
	13	Oakley
	14	Pleasant View
	15	South Macon
	16	South Wheatland
	17	Whitmore
	DH	Decatur Pk Dist
	EX	Friends Creek Pk Dist
GH	Illini Twp Pk Dist	
HW	Macon Co Cons Dist	
NS	Whitmore Pk Dist	
Macoupin	01	Barr
	02	Bird
	03	Brighton
	04	Brushy Mound

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>	
Macoupin (cont)	05	Bunker Hill	
	06	Cahokia	
	07	Carlinville	
	08	Chesterfield	
	09	Dorchester	
	10	Gillespie	
	11	Girard	
	12	Hillyard	
	13	Honey Point	
	14	Mount Olive	
	15	Nilwood	
	16	North Otter	
	17	North Palmyra	
	18	Polk	
	19	Scottville	
	20	Shaws Point	
	21	Shipman	
	22	South Otter	
	23	South Palmyra	
	24	Staunton	
	25	Virden	
	26	Western Mound	
	BV	Carlinville Pk Dist	
	Madison	01	Alhambra
		52	Alton (Alton)
		03	Chouteau
		04	Collinsville
05		Edwardsville	
06		Fort Russell	
07		Foster	
08		Godfrey (Godfrey)	
59		Granite City (Granite City)	
10		Hamel	
11		Helvetia	
12		Jarvis	
13		Leef	
14		Marine	
15		Moro	
16		Nameoki	
17		New Douglas	
18		Olive	
19		Omphghent	
20		Pin Oak	
22		Saline	
21		St Jacob	
23		Venice	

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Madison (cont)	24	Wood River
	FK	Granite City Pk Dist
	LP	Roxana Comm Pk Dist
	ME	St Jacob Twp Pk Dist
	MV	Tri-Twp Pk Dist
	MZ	Venice Pk Dist
	Marion	01
02		Carrigan
03		Centralia
04		Foster
05		Haines
06		Iuka
07		Kinmundy
08		Meacham
09		Odin
10		Omega
11		Patoka
12		Raccoon
13		Romine
14		Salem
15		Sandoval
16		Stevenson
17		Tonti
Marshall	01	Bell Plain
	02	Bennington
	03	Evans
	04	Henry
	05	Hopewell
	06	Lacon
	07	Laprairie
	08	Richland
	09	Roberts
	10	Saratoga
	11	Steuben
	12	Whitefield
	GX	Lacon Pk Dist
	MT	Toluca Pk Dist
Mason	01	Allens Grove
	02	Bath
	03	Crane Creek
	04	Forest City
	05	Havana
	06	Kilbourne
	07	Lynchburg

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Mason (cont)	08	Manito
	09	Mason City
	10	Pennsylvania
	11	Quiver
	12	Salt Creek
	13	Sherman
	DW	Easton Comm Pk Dist
	IC	Mason City Comm Pk Dist
	Massac	01
Menard	01	Road Dist #01
	02	Road Dist #02
	03	Road Dist #03
	04	Road Dist #04
	05	Road Dist #05
	06	Road Dist #06
	07	Road Dist #07
	58	Road Dist #08 (Petersburg)
	09	Road Dist #09
	10	Road Dist #10
	62	Road Dist #12 (Tallula)
	63	Road Dist #13 (Athens)
	64	Road Dist #14 (Greenview)
	Mercer	01
02		Duncan
03		Eliza
04		Greene
05		Keithsburg
06		Mercer
07		Millersburg
08		New Boston
09		North Henderson
10		Ohio Grove
11		Perryton
12		Preemption
13		Richland Grove
14		Rivoli
15		Suez
AC		Aledo Pk Dist
LU	Seaton Pk Dist	
Monroe	01	Road Dist #01
	02	Road Dist #02
	03	Road Dist #03
	04	Road Dist #04

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Monroe (cont)	05	Road Dist #05
	06	Road Dist #06
	07	Road Dist #07
	08	Road Dist #08
	09	Road Dist #09
	10	Road Dist #10
	NG	Waterloo Pk Dist
Montgomery	01	Audubon
	02	Bois D Arc
	03	Butler Grove
	04	East Fork
	05	Fillmore
	06	Grisham
	07	Harvel
	08	Hillsboro
	09	Irving
	10	Nokomis
	11	North Litchfield
	12	Pitman
	13	Raymond
	14	Rountree
	15	South Fillmore
	16	South Litchfield
	17	Walshville
	18	Witt
	19	Zanesville
HR	Litchfield Pk Dist	
JD	Nokomis Comm Mem Pk Dist	
KY	Raymond Pk Dist	
Morgan	01	Road Dist #01
	02	Road Dist #02
	03	Road Dist #03
	04	Road Dist #04
	05	Road Dist #05
	06	Road Dist #06
	08	Road Dist #08
	09	Road Dist #09
	10	Road Dist #10
	11	Road Dist #11
	12	Road Dist #12
	13	Road Dist #13
	64	Road Dist #14 (Jacksonville)
	65	Road Dist #15 (So Jacksonville)
	Moultrie	01
02		East Nelson

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Moultrie (Cont)	03	Jonathan Creek
	04	Lovington
	05	Lowe
	06	Marrowbone
	07	Sullivan
	08	Whitley
	AI	Arthur Comm Pk Dist
	IB	Marrowbone Twp Pk Dist
Ogle	01	Brookville
	02	Buffalo
	03	Byron
	04	Dement
	05	Eagle Point
	06	Flagg
	07	Forreston
	08	Grand Detour
	09	Lafayette
	10	Leaf River
	11	Lincoln
	12	Lynnville
	13	Marion
	14	Maryland
	15	Monroe
	16	Mount Morris
	26	Oregon-Nashua
	19	Pine Creek
	20	Pine Rock
	21	Rockvale
22	Scott	
23	Taylor	
24	White Rock	
25	Woosung	
BP	Byron Forest Preserve Dist	
BQ	Byron Pk Dist	
EH	Flagg-Rochelle Comm Pk Dist	
JP	Oregon Pk Dist	
Peoria	01	Akron
	02	Brimfield
	03	Chillicothe
	04	Elmwood
	05	Hallock
	06	Hollis
	07	Jubilee
	08	Kickapoo
	09	Limestone
	10	Logan

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Peoria (cont)	11	Medina
	12	Millbrook
	64	Peoria City (Peoria)
	15	Princeville
	16	Radnor
	17	Richwoods
	18	Rosefield
	19	Timber
	20	Trivoli
	13	West Peoria
	CQ	Chillicothe Twp Pk Dist
	GC	Hollis Pk Dist
	KL	Pleasure Dr & Pk Dist Of Peo
	Perry	01
58		Road Dist #01-A (Duquoin)
63		Road Dist #01-B (Tamaroa)
64		Road Dist #01-C (St Johns)
04		Road Dist #04
61		Road Dist #04-A (Cutler)
62		Road Dist #04-B (Willisville)
02		Road Dist #04-2
03		Road Dist #04-3
05		Road Dist #05-2
06		Road Dist #05-3
57		Road Dist #05-3a (Pinckneyville)
09		Road Dist #06-2
10		Road Dist #06-3
15		Co Unit Road Dist
Piatt	01	Bement
	02	Blue Ridge
	03	Cerro Gordo
	04	Goose Creek
	05	Monticello
	06	Sangamon
	07	Unity
	08	Willow Branch
	KE	Piatt Co For Pres Dist
Pike	01	Atlas
	02	Barry
	03	Chambersburg
	04	Cincinnati
	05	Derry
	06	Detroit
	07	Fairmount
	08	Flint

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Pike (cont)	09	Griggsville
	10	Hadley
	11	Hardin
	12	Kinderhook
	13	Levee
	14	Martinsburg
	15	Montezuma
	17	New Salem
	16	Newburg
	18	Pearl
	19	Perry
	20	Pittsfield
	21	Pleasant Hill
	22	Pleasant Vale
	23	Ross
	24	Spring Creek
		FP
	KJ	Pleasant Hill Pk Dist
Pope	01	Road Dist #01
	02	Road Dist #02
	60	Road Dist #10 (Golconda)
Pulaski	01	Co Unit Road Dist
Putnam	01	Granville
	02	Hennepin
	03	Magnolia
	04	Senachwine
	FY	Hennepin Pk Dist
	KU	Putnam Co Cons Dist
Randolph	01	Road Dist #01
	02	Road Dist #02
	03	Road Dist #03
	04	Road Dist #04
Richland	01	Bonpas
	02	Claremont
	03	Decker
	04	Denver
	05	German
	06	Madison
	07	Noble
	08	Olney
	09	Preston
Rock Island	01	Andalusia

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Rock Island (cont)	02	Black Hawk
	03	Bowling
	04	Buffalo Prairie
	05	Canoe Creek
	06	Coal Valley
	07	Coe
	08	Cordova
	09	Drury
	10	Edgington
	11	Hampton
	62	Moline
	13	Port Byron
	64	Rock Island
	15	Rural
	16	South Moline
	17	South Rock Island
	18	Zuma
	LF	Rock Island For Pres Dist
	St. Clair	51
02		Canteen
03		Caseyville
04		Centreville
55		East St Louis (East St Louis)
06		Englemann
07		Fayetteville
08		Freeburg
09		Lebanon
10		Lenzburg
11		Marissa
12		Mascoutah
13		Millstadt
14		New Athens
15		O'fallon
16		Prairie Dulong
18		Shiloh Valley
19		Smithton
17		St Clair
95		Stites
21		Stookey
22		Sugar Loaf
CE		Centreville Rec & Pks Dept
DV	East St Louis Pk Dist	
EE	Fairmont City Pk Dist	
GE	Horner Pk Dist	
JA	New Athens Pk Dist	
MG	Stites Twp Pk Dist	

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>	
Saline	01	Brushy	
	02	Carrier Mills	
	03	Cottage	
	04	East Eldorado	
	05	Galatia	
	06	Harrisburg	
	07	Independence	
	08	Long Branch	
	09	Mountain	
	10	Raleigh	
	11	Rector	
	12	Stonefort	
	13	Tate	
	BX	Carrier Mills Twp Pk Dist	
	DY	Eldrdo-Raleigh Pleasure Dr & Pk Dis	
	FU	Harrisburg Twp Pk Dist	
	Sangamon	01	Auburn
		02	Ball
03		Buffalo Hart	
54		Capital (Springfield)	
05		Cartwright	
06		Chatham	
07		Clear Lake	
08		Cooper	
09		Cotton Hill	
10		Curran	
11		Divernon	
12		Fancy Creek	
13		Gardner	
14		Illiopolis	
15		Island Grove	
16		Lanesville	
17		Loami	
18		Maxwell	
19		Mechanicsburg	
20		New Berlin	
21		Pawnee	
22		Rochester	
24		Springfield	
25	Talkington		
26	Williams		
27	Woodside		
MA	Springfield Pk Dist		
Schuyler	01	Bainbridge	
	02	Birmingham	
	03	Brooklyn	

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>	
Schuyler (cont)	04	Browning	
	05	Buena Vista	
	06	Camden	
	07	Frederick	
	08	Hickory	
	09	Huntsville	
	10	Littleton	
	11	Oakland	
	12	Rushville	
	13	Woodstock	
	Scott	01	Road Dist #01
		02	Road Dist #02
		03	Road Dist #03
04		Road Dist #04	
05		Road Dist #05	
06		Road Dist #06	
07		Road Dist #07	
Shelby	01	Ash Grove	
	02	Big Spring	
	03	Clarksburg	
	04	Cold Spring	
	05	Dry Point	
	06	Flat Branch	
	07	Herrick	
	08	Holland	
	09	Lakewood	
	10	Moweaqua	
	11	Oconee	
	12	Okaw	
	13	Penn	
	14	Pickaway	
	15	Prairie	
	16	Richland	
	17	Ridge	
	18	Rose	
	19	Rural	
	20	Shelbyville	
	21	Sigel	
	22	Todds Point	
	23	Tower Hill	
	24	Windsor	
IV	Moweaqua Twp Pk Dist		
Stark	01	Elmira	
	02	Essex	
	03	Goshen	

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Stark (cont)	04	Osceola
	05	Penn
	06	Toulon
	07	Valley
	08	West Jersey
	BH	Bradford Pk Dist
	GV	Lafayette Pk Dist
Stephenson	01	Buckeye
	02	Dakota
	03	Erin
	04	Florence
	55	Freeport (Freeport)
	06	Harlem
	07	Jefferson
	08	Kent
	09	Lancaster
	10	Loran
	11	Oneco
	12	Ridott
	13	Rock Grove
	14	Rock Run
	15	Silver Creek
	16	Waddams
	17	West Point
	18	Winslow
	ZZ	Adjacent State Township
	EW	Freeport Pk Dist
HH	Lena Comm Pk Dist	
KA	Pearl City Pk Dist	
NY	Winslow Pk Dist	
Tazewell	01	Boynton
	02	Cincinnati
	03	Deer Creek
	04	Delavan
	05	Dillon
	06	Elm Grove
	07	Fondulac
	08	Groveland
	09	Hittle
	10	Hopedale
	11	Little Mackinaw
	12	Mackinaw
	13	Malone
	14	Morton
	15	Pekin
	16	Sand Prairie

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Tazewell (cont)	17	Spring Lake
	18	Tremont
	19	Washington
	AH	Armington Comm Pk Dist
	DK	Delavan Twp Pk Dist
	EC	Emden Pk Dist
	EJ	Fon Du Lac Pk Dist
	IS	Morton Pk Dist
	KB	Pekin Pk Dist
	KK	Pleasant View Pk Dist
	LY	South Pekin Pk Dist
	MP	Tazewell Co For Pres Dist
	NF	Washington Pk Dist
	Union	01
Vermilion	01	Blount
	02	Butler
	03	Carroll
	04	Catlin
	05	Danville
	06	Elwood
	07	Georgetown
	08	Grant
	09	Jamaica
	10	Love
	11	McKendree
	12	Middlefork
	13	Newell
	14	Oakwood
	15	Pilot
	16	Ross
	17	Sidell
	18	South Ross
	19	Vance
	ZZ	Adjacent State Township
	DD	Danville Pk & Rec Dept
	LL	Rossville Pk Dist
	NA	Vermilion Co Cons Dist
Wabash	01	Road Dist #01
	02	Road Dist #02
	03	Road Dist #03
	04	Road Dist #04
	05	Road Dist #05
	06	Road Dist #06
	57	Road Dist #07 (Mount Carmel)
	58	Road Dist #08 (Bellmont)

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Wabash (Cont)	59	Road Dist #09 (Keensburg)
Warren	01	Berwick
	02	Coldbrook
	03	Ellison
	04	Floyd
	05	Greenbush
	06	Hale
	07	Kelly
	08	Lenox
	09	Monmouth
	10	Point Pleasant
	11	Roseville
	12	Spring Grove
	13	Sumner
	14	Swan
	15	Tompkins
	GU	Kirkwood Pk Dist
	IQ	Monmouth Pk Dist
Washington	01	Ashley
	02	Beaucoup
	03	Bolo
	04	Covington
	05	Dubois
	06	Hoyleton
	07	Irvington
	08	Johannisburg
	09	Lively Grove
	10	Nashville
	11	Oakdale
	12	Okawville
	13	Pilot Knob
	14	Plum Hill
	15	Richview
	16	Venedy
	II	Memorial Pk Dist
Wayne	01	Arrington
	02	Barnhill
	03	Bedford
	04	Berry
	05	Big Mound
	06	Elm River
	07	Four Mile
	08	Garden Hill
	09	Grover

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Wayne (Cont)	10	Hickory Hill
	11	Indian Prairie
	12	Jasper
	13	Keith
	14	Lamard
	15	Leech
	16	Massilon
	17	Mount Erie
	18	Orchard
	19	Orel
	20	Zif
	ED	Fairfield Pk Dist
White	01	Burnt Prairie
	02	Carmi
	03	Emma
	04	Enfield
	05	Gray
	06	Hawthorne
	07	Heralds Prairie
	08	Indian Creek
	09	Mill Shoals
	10	Phillips
Whiteside	01	Albany
	02	Clyde
	03	Coloma
	04	Erie
	05	Fenton
	06	Fulton
	07	Garden Plain
	08	Genesee
	09	Hahnaman
	10	Hopkins
	11	Hume
	12	Jordan
	13	Lyndon
	14	Montmorency
	15	Mount Pleasant
	16	Newton
	17	Portland
	18	Prophetstown
	19	Sterling
	20	Tampico
	21	Union Grove
	22	Ustick
	CU	Coloma Twp Pk Dist
	IM	Milledgeville Pk Dist

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Whiteside (cont)	KS	Prophetstown Pk Dist
	MF	Sterling Pk Dist
	ND	Walnut Pk Dist
Will	01	Channahon
	02	Crete
	03	Custer
	04	Dupage
	05	Florence
	06	Frankfort
	07	Green Garden
	08	Homer
	09	Jackson
	10	Joliet
	11	Lockport
	12	Manhattan
	13	Monee
	14	New Lenox
	15	Peotone
	16	Plainfield
	17	Reed
	18	Troy
	19	Washington
	20	Wesley
	21	Wheatland
	22	Will
	23	Wilmington
	24	Wilton
	ZZ	Adjacent State Township
	BF	Bolingbrook Pk Dist
	CH	Channahon Comm Pk Dist
	CY	Crete Pk Dist
	CZ	Crete Rural Pk Dist
	EM	For Pres Dist Of Will Co
	ES	Frankfort Pk Dist
	ET	Frankfort Square Pk Dist
	GJ	Island Pk Dist
GM	Joliet Pk Dist	
HS	Lockport Twp Pk Dist	
HX	Manhattan Pk Dist	
IN	Mokena Comm Pk Dist	
IY	Naperville Pk Dist	
JB	New Lenox Pk Dist	
KC	Peotone Pk Dist	
JX	Pk Forest Rec & Pks Dept	
KH	Plainfield Twp Pk Dist	
LI	Romeoville Rec Dept	
MQ	Tinley Pk Dist	

<u>County</u>	<u>Code</u>	<u>Township Or Road District</u>
Williamson	01	Co Unit Road Dist
	FZ	Herrin Pk Dist
	HZ	Marion Pk Dist
Winnebago	01	Burritt
	02	Cherry Valley
	03	Durand
	04	Harlem
	05	Harrison
	06	Laona
	07	Owen
	08	Pecatonica
	09	Rockford
	10	Rockton
	11	Roscoe
	12	Seward
	13	Shirland
	14	Winnebago
	ZZ	Adjacent State Township
	LG	Rockford Pk Dist
	MK	Sumner Pk Dist
NW	Winnebago Co For Pres Dist	
Woodford	01	Cazenovia
	02	Clayton
	03	Cruger
	04	El Paso
	05	Greene
	06	Kansas
	07	Linn
	08	Metamora
	09	Minonk
	10	Montgomery
	11	Olio
	12	Palestine
	13	Panola
	14	Partridge
	15	Roanoke
	16	Spring Bay
	17	Worth
FL	Grant Memorial Pk Dist	
IJ	Metamora Pk Dist	
LD	Roanoke Pk Dist	