Chapter Six

BRIDGE INVENTORY AND INSPECTIONS
# Chapter Six
## BRIDGE INVENTORY AND INSPECTIONS

### Table of Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-1</td>
<td>NATIONAL BRIDGE INSPECTION STANDARDS (NBIS)</td>
</tr>
<tr>
<td>6-1.01</td>
<td>General</td>
</tr>
<tr>
<td>6-1.02</td>
<td>Definitions</td>
</tr>
<tr>
<td>6-2</td>
<td>BRIDGE INVENTORY</td>
</tr>
<tr>
<td>6-2.01</td>
<td>National Bridge Inventory</td>
</tr>
<tr>
<td>6-2.02</td>
<td>Illinois Structure Information System (ISIS)</td>
</tr>
<tr>
<td>6-2.03</td>
<td>Inventory Requirements</td>
</tr>
<tr>
<td>6-2.04</td>
<td>Structure Number</td>
</tr>
<tr>
<td>6-2.05</td>
<td>ISIS Structure Reports</td>
</tr>
<tr>
<td>6-2.06</td>
<td>Sufficiency Rating</td>
</tr>
<tr>
<td>6-2.07</td>
<td>Updating</td>
</tr>
<tr>
<td>6-3</td>
<td>BRIDGE INSPECTIONS</td>
</tr>
<tr>
<td>6-3.01</td>
<td>Local Agency Responsibility</td>
</tr>
<tr>
<td>6-3.01(a)</td>
<td>Publicly Owned Structures</td>
</tr>
<tr>
<td>6-3.01(b)</td>
<td>Privately Owned Structures</td>
</tr>
<tr>
<td>6-3.02</td>
<td>Reporting Requirements</td>
</tr>
<tr>
<td>6-3.02(a)</td>
<td>New Structure, or Initial Inspection of Old Structure not in ISIS</td>
</tr>
<tr>
<td>6-3.02(b)</td>
<td>Re-inspection of Structures on File in Structure ISIS</td>
</tr>
<tr>
<td>6-3.02(c)</td>
<td>Reconstruction of an Existing Structure</td>
</tr>
<tr>
<td>6-4</td>
<td>LOAD RATING AND POSTING</td>
</tr>
<tr>
<td>6-4.01</td>
<td>Requirements</td>
</tr>
<tr>
<td>6-4.02</td>
<td>Responsibilities</td>
</tr>
<tr>
<td>6-4.02(a)</td>
<td>Load Rating by IDOT</td>
</tr>
<tr>
<td>6-4.02(b)</td>
<td>Load Rating by Others</td>
</tr>
<tr>
<td>6-4.02(c)</td>
<td>Reporting</td>
</tr>
<tr>
<td>6-4.03</td>
<td>Bridge Closure and Weight Limit Posting</td>
</tr>
</tbody>
</table>
6-4.04 Bridge Closure and Weight Limit Posting Review ........................................... 6-4(3)
Chapter Six
BRIDGE INVENTORY AND INSPECTIONS

6-1 NATIONAL BRIDGE INSPECTION STANDARDS (NBIS)

6-1.01 General

The National Bridge Inspection Standards (NBIS) is the Federal regulation that establishes the requirements for inspection procedures, frequency of inspections, qualifications of personnel, inspection reports, and preparation and maintenance of a state bridge inventory. The NBIS applies to all structures defined as bridges carrying a roadway and open to the public. The bridge inspection program resulting from the NBIS is intended to detect structural and functional deficiencies to minimize the probability of structural failure and to improve bridge traffic safety. The Federal Highway Administration (FHWA) has promulgated regulations to establish the applicable criteria that each state transportation department must meet. See 23 CFR, Part 650, Subpart C.

To properly implement the NBIS program requirements for local agencies in Illinois, the department delegates the responsibility for applying the NBIS requirements to the individual Local Public Agency (LPA). All LPAs with jurisdiction of a structure in the National Bridge Inventory (NBI) must designate a Program Manager to ensure compliance with the NBIS, and provide guidance and management of their bridge inventory. The designated Program Manager must meet the qualifications as described in Section 3 of the Structural Services Manual, maintained by the Bureau of Bridges and Structures. Statewide oversight of the local agency bridge inspection program is provided by the Local Bridge Unit Chief of the Bureau of Bridges and Structures.

All IDOT policies and procedures for Bridge Inspection are located in the Bureau of Bridges and Structures, Structural Services Manual. The manual can be found on the IDOT website.

6-1.02 Definitions

The following definitions apply to the NBIS and its implementation:

1. Bridge. A “bridge” is a structure — comprised of a deck, superstructure, and substructure/foundation or culvert — erected over a depression or obstruction (e.g., water, highway, or railroad) and having a track or passageway for carrying traffic or other moving loads. In addition, a bridge’s length must meet the following minimum criteria: The opening, measured along the centerline of the roadway, is greater than 20.0 ft, between undercopings of abutments or springlines of arches, or extreme ends of openings for multiple box culverts; it may also include multiple pipes, where the clear distance between openings is less than half of the smaller, contiguous opening. For
closed pile bent abutments, the distance between the front faces of exposed piling is used. See Figure 6-1A for examples of various bridge openings.

Determination of Bridge Length for the Purpose of Definition of a Bridge

Figure 6-1A

2. National Bridge Inspection Standards (NBIS). The Federal regulations establishing requirements for inspection procedures, frequency of inspections, qualifications of personnel, inspection reports, and preparation and maintenance of a state bridge inventory. The NBIS apply to all structures defined as bridges carrying roads open to the public.

3. National Bridge Inventory (NBI). The aggregation of structure inventory and appraisal data collected to fulfill the requirements of the National Bridge Inspection Standards, which require that each state prepare and maintain an inventory of all bridges subject to the NBIS.
4. **National Bridge Inventory (NBI) Record.** Data that has been coded according to the *Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation’s Bridges* for each structure carrying highway traffic or each inventory route which passes beneath a structure.

5. **Structure Inventory and Appraisal (SI&A) Sheet.** The representation of the data recorded and stored for each NBI record in accordance with the *Guide*.

6. **Sufficiency Rating.** A numerical value from 0.0 to 100.0 which indicates a bridge’s overall sufficiency to remain in service. The rating is calculated from the SI&A data and reflects the following factors:

   - structural adequacy and safety,
   - serviceability and functional obsolescence,
   - essentiality for public use, and
   - any special considerations.
6-2  BRIDGE INVENTORY

6-2.01  National Bridge Inventory

The National Bridge Inventory is a national program that requires each state to prepare and maintain an inventory of all bridges on public roads that are subject to the National Bridge Inspection Standards. The purpose is to maintain a national database on structures and applicable structural analyses data. This information is used by the FHWA to develop reports to submit to Congress on the status of the nation’s bridges and by states’ in managing their bridge maintenance, rehabilitation, and replacement programs.

6-2.02  Illinois Structure Information System (ISIS)

IDOT maintains a computerized bridge inventory system, designated as the Illinois Structure Information System (ISIS). This is part of the Illinois Highway Information System. The ISIS database system contains information required by the NBIS including inspection data.

The ISIS data is available from the Structure Information Management System (SIMS). Local agencies may obtain the database file of local bridges for each county from IDOT’s website and use the SIMS with the Microsoft Access database application program.

6-2.03  Inventory Requirements

The bridge inventory must include the following:

- all structures carrying public roads meeting the definition of a bridge, and
- all other structures where an opening length (measured along the centerline of the roadway) of less than or equal to 20 ft. (6.1 m) and involving a highway, may be accepted into the system only if prior approval is given by the Central Office Planning Services Section - Data Management Unit. The department does not encourage the input of these structures. However, they will be accepted on an “as-needed” basis.

Structure numbers should be assigned and the Inventory Inspection should be completed for non-highway, railroad and pedestrian structures over roads open to the public. This establishes the structure in the ISIS for the purpose of inventorying its location and vertical clearance. NBIS inspections are not required for pedestrian structures. However, regular maintenance inspections are encouraged.

The responsibility for reporting the required information for ISIS rests with the agency having jurisdiction of the road leading to and from the bridge. If there is no public road on the structure, the reporting responsibility rests with the agency having jurisdiction of the road under the structure.
6-2.04  **Structure Number**

Each structure is identified by a 7 digit structure number composed of a 3 digit structure county number and a 4 digit structure sequence number. The structure number is assigned by the district or the maintaining agency from a block of numbers reserved for each agency. The structure number should be assigned prior to submittal of the Preliminary Bridge Design and Hydraulic Report (PBDHR) or Type, Size & Location (TS&L) plans, as applicable, to IDOT.

Data for the old number will be retained in a historical file. Similarly, a bridge constructed using any portion of the original substructure will keep its same number. Completely new bridges erected at the same location on the same or new alignment that does not use any part of the old bridge will be assigned a new number. Structures moved to a new location should receive a new number. New structures are to be assigned numbers using the next available number by district scheme. There is no official statewide scheme for the assignment of structure numbers according to jurisdiction.

Once the maintaining agency and IDOT have agreed upon a structure number for a bridge, that number is permanent and will not be changed for any reason even if there is a change in maintenance responsibility. This avoids confusion in record retrieval and retention. To make the bridge numbering system effective in the field, one number tag should be painted or installed on each end of the bridge.

6-2.05  **ISIS Structure Reports**

Figure 6-2A presents the Structure Reports necessary to communicate information for entry into the Illinois Structure Information System. The forms for the initial recording of inventory, route, and inspection information may be available from the district, copied from the *Structure Information and Procedure (SIP) Manual*, or printed from the Structure Information Management System (SIMS - County), which can be downloaded from the IDOT website. Forms for reporting changes and information on existing structures can be obtained directly from SIMS - County or from the IDOT website.

6-2.06  **Sufficiency Rating**

Based upon the inventory, traffic, inspection, and load-rating data submitted to the Illinois Structure Information System, the department generates a Sufficiency Rating (SR) for each structure. The Sufficiency Rating is between 0.0 and 100.0, with the lower numbers implying a higher priority of need for improvement.
<table>
<thead>
<tr>
<th>Report</th>
<th>Usage of Report</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inventory/Status Initial Report (R105-I)</td>
<td>Reporting inventory and bridge status information to the Illinois Structure Information System on new-to-system bridges.</td>
</tr>
<tr>
<td>Inventory Turnaround Report (S105)</td>
<td>Reporting revisions of inventory data to the Illinois Structure Information System. The inspector should have this form or Forms S114 and S111 at each NBIS inspection.</td>
</tr>
<tr>
<td>Inspector’s Inventory Report (S114)</td>
<td>Form S114 is for reporting revisions of inventory data to the Illinois Structure Information System. The inspector should have this form or Form S105 and Form S111 at each NBIS inspection.</td>
</tr>
<tr>
<td>Key Route/Construction Initial Report (R111-I)</td>
<td>Reporting route information to the Illinois Structure Information System on new-to-system bridges.</td>
</tr>
<tr>
<td>Key Route Turnaround Report (S111)</td>
<td>Reporting revisions of key route data to the Illinois Structure Information System. The inspector should have this form and Form S114 or S105 at each NBIS inspection.</td>
</tr>
<tr>
<td>Master Structure Report (S107)</td>
<td>Reports most information contained in the Illinois Structure Information System for each bridge. This form is not for reporting revisions to the System. The inspector should have this form at each NBIS inspection.</td>
</tr>
<tr>
<td>Bridge Inspection Report (BBS-BIR)</td>
<td>The BBS-BIR form is used for recording specific inspection notes and ratings for each bridge. The BBS-BIR is used for a single inspection and contains current ratings information. The inspector should have this form at each NBIS inspection, and the signed original copy must be in the bridge file kept by the owner of the bridge.</td>
</tr>
<tr>
<td>Bridge Record Card (BLR 06310)</td>
<td>Form BLR 06310 may be used as a record of initial construction, repairs, reconstruction, load posting and inspections. If this form is used, it is kept in the local agency’s structure file.</td>
</tr>
<tr>
<td>Fracture Critical Inspection Form (BBS-BIR-FC1)</td>
<td>Form BBS-BIR-FC1 is used for recording results of fracture critical inspections. The inspection should have this form at each FC inspection.</td>
</tr>
<tr>
<td>Fracture Critical Member Inventory Form (BBS-BIR-FC2)</td>
<td>Form BBS-BIR-FC2 is used to record the Fracture Critical Type, number of spans, and number of members in each FC bridge. The inspector should consult this form before each FC inspection, and the signed original must be in the bridge file kept by the owner of the bridge.</td>
</tr>
<tr>
<td>Underwater Bridge Inspection Report (BBS-BIR-UW1)</td>
<td>Form BBS-BIR-UW1 is used for recording results of underwater inspections. The inspector should have this form at each UW inspection.</td>
</tr>
<tr>
<td>Special Inspection Report (BBS-SI-1)</td>
<td>Form BBS-SI-1 is used to record the Special Inspection Type Code and Condition Status for all bridges requiring a Special Inspection. The inspector should consult this form before each Special Inspection, and the signed original must be in the bridge file kept by the owner of the bridge.</td>
</tr>
<tr>
<td>Scour Critical Evaluation Coding Report (BBS SCE)</td>
<td>Form BBS SCE is used for reporting coding recommendations for Scour Critical Evaluations (ISIS Item 113).</td>
</tr>
<tr>
<td>Scour Critical Bridge Plan of Action (BBS 2680)</td>
<td>Form BBS 2680 is used to record actions to be taken to monitor scour critical or scour susceptible bridges during and after major storm events. The inspector should consult this form before each Routine Inspection and when a major storm event occurs. The form should be updated to reflect current field conditions and the signed original must be in the bridge file kept by the owner of the bridge.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Bridge Posting / Closure Review (BBS PCR)</td>
<td>Form BBS PCR is used for recording results of each Bridge Posting / Closure review inspection. The inspector should have this form at each review.</td>
</tr>
<tr>
<td>Bridge File Checklist (BBS BFC)</td>
<td>Form BBS BFC is used to document the contents of each official Bridge File and the location of required information that may be stored separately or electronically. The inspector should consult this form before each inspection, and the signed original copy must be in the bridge file kept by the owner of the bridge.</td>
</tr>
</tbody>
</table>

**Note:** All forms listed are available from SIMS - County or from the IDOT website. *BIR forms may be found on the IDOT website.*

**STRUCTURE REPORTS**

*Figure 6-2A*
6-2.07 Updating

IDOT is required to maintain and report on the accurate operational status of all bridges in the NBI. New bridges or any conditions that require revision of existing structure information must be reported to the district promptly. The district must include the revision in the Illinois Structure Information System within 180 days after the change in status for local agency structures. The 180 days start when the structure is opened or reopened to unrestricted traffic or when other events occur that result in changes to inventory or inspection data for a structure.

Refer to the SIP Manual, Item 41 for appropriate Bridge Status codes. NBIS requirements state that changes in Bridge Status must be entered in ISIS within 180 days of that change. When a local agency bridge is load posted (ISIS Items 2-6), under staged construction (ISIS Item 7), closed for construction (ISIS Item A), or closed but anticipated to be rehabilitated or replaced within 5 years (ISIS Item B), the owner should report that change in Bridge Status to the district.

Structures with Bridge Status B for more than 5 years will be considered permanently closed and Bridge Status will be changed to E. When structures are coded with Bridge Status 5 or 6 (Temporary Measures) for more than 5 years, the temporary measures become permanent for the structure. Condition Ratings, Load Ratings, and Bridge Status will be based on these measures. In addition, all inventory information should be updated as necessary.
6-3  BRIDGE INSPECTIONS

The bridge owner (local agency) must have a systematic strategy for conducting field inspections and reporting the findings. It must be made clear for the inspection team what deficiencies are and which structural elements should be investigated. The bridge inspection report should accurately and clearly record all findings and should include photographs of the overall structure and of any significant defects.

Per the NBIS, the owner of a bridge should have an individual bridge file for each structure. In addition, the local agency, as the owner of the structure, must have a systematic means of entering, storing, and retrieving all bridge inspection data. The file should contain a full history of the structure.

A Bridge File Checklist (Form BBS BFC) must be maintained with each Bridge File. This form may be found on the IDOT website or by contacting the appropriate district office.

6-3.01  Local Agency Responsibility

6-3.01(a)  Publicly Owned Structures

In order to satisfy the requirements of the NBIS, the local agency is responsible for inspections of all structures on roads open to public travel that meet the definition of a bridge (see Section 3.1.2 in the Structural Services Manual) for facilities under its jurisdictional responsibility. In addition, all closed structures are required to be inspected for proper closure by the local public agency.

Though not required by the NBIS, for structures under their jurisdiction and responsibility that do not meet the definition of a bridge or are not carrying highway traffic, local agencies are strongly encouraged to perform regular inspections to ensure public safety.

The responsible local agency may perform the inspection with qualified in-house personnel, or retain the services of a qualified inspector proficient in the performance of NBIS inspections. See Section 3.9.2 in the Structural Services Manual for Personnel Qualifications.

6-3.01(b)  Privately Owned Structures

Privately owned structures, and those owned by government agencies that are not highway agencies, carrying public roadways, are subject to inspection and inclusion in the Illinois Structure Information System; see Section 6-2.02. Therefore, it is the responsibility of the owners of these structures to have timely inspections performed according to the provisions of the NBIS. The Bureau of Bridges and Structures Bridge Management Unit and the Local Bridge Unit will work with the owner to:

- ensure the owner is aware when the NBI inspection is due, and
obtain copies of the inspection forms to keep on file and for submission to the district for inclusion in ISIS.

In general, a local agency has a responsibility to post and warn the public of any hazards on a public highway carried by a structure. When it becomes apparent that the private owner (e.g., railroad, drainage or sanitary district, developer) of a bridge carrying a public highway will not or cannot perform the safety inspections required by the NBIS, the local agency having jurisdiction over the public highway leading to the bridge is responsible for performing the necessary inspection. If the private owner also has jurisdiction over the road leading to the bridge (e.g., private business that allows customers to use the road), the local agency may need to consider closing the public road leading to the private road until an inspection is performed and the bridge is considered safe.

6-3.02 Reporting Requirements

This Section discusses the process for entering field inspection results into the ISIS. See Figure 6-2A for a list of inspection report forms.

6-3.02(a) New Structure, or Initial Inspection of Old Structure not in ISIS

The following applies:

1. Complete the Inventory / Status Initial Report (R105-I) and the Key Route / Construction Initial Report (R111-I) and submit copies to the district. If a bridge has been replaced, then also indicate in the submittal the structure number of the replaced structure so the replaced bridge can be marked for deletion.

2. Complete the Bridge Inspection Report (Form BBS-BIR). In addition, when the initial NBIS Maintenance Inspection has been performed, the local agency may also use the Bridge Record Card (Form BLR 06310). The signed original of Form BBS-BIR and Form BLR 06310 are retained in the individual bridge file kept by the owner of the bridge. The Bridge Inspection Report (Form BBS-BIR) should be completed and a copy submitted to the district. NBIS requirements state the inspection data must be entered into ISIS within 180 days after opening to traffic for local agency bridges. The local agency should submit the inspection report as soon as possible in order to allow the district proper time to enter the data within the required timeframe.

3. The Scour Critical Evaluation Coding Report (BBS SCE), if applicable, must be filled out and submitted at the same time as the other two initial reports if it has not been submitted previously.
6-3.02(b) **Re-inspection of Structures on File in Structure ISIS**

The following applies:

1. Complete the Bridge Inspection Report (Form BBS-BIR). Update the Bridge Record Card (Form BLR 06310), if it is maintained by the local agency.

2. Submit copies of Reports BBS-BIR, S105, and S114 to the district. Copies of Reports BBS-BIR, S105, and S107 for each structure in the inventory are available either from the district or can be printed from SIMS - County, which can be downloaded from the IDOT website. NBIS requirements state inspection data must be entered into ISIS within 180 days after opening to traffic for local agency bridges. The local public agency should submit the inspection report as soon as possible in order to allow the district proper time to enter the data within the required time frame.

6-3.02(c) **Reconstruction of an Existing Structure**

Any reconstruction, rehabilitation, or major repair of an existing bridge currently in the Illinois Structure Information System must be recorded in the ISIS within 180 days of reopening the bridge to unrestricted traffic. Work that changes the inventory data of a bridge open to traffic must also be recorded within 180 days of the completion of the work. A bridge reconstructed using the same abutments or piers keeps the same structure number. The following applies:

1. Complete Form BBS-BIR and update Form BLR 06310, if maintained by the local agency.

2. Revise and submit copies of Reports BBS-BIR, S105, and S114 as described in Section 6-3.02(b).
6-4 LOAD RATING AND POSTING

6-4.01 Requirements

All bridges must be rated according to their load-carrying capacity. This includes the Inventory Rating Factor, Operating Rating Factor, and the ratings for the Illinois Legal Loads as defined in the *Illinois Vehicle Code* (625 ILCS 5/15-111). These ratings provide an indication of the bridge’s capacity to safely resist the loads it is likely to be subjected to. This information assists in the determination of necessary posting, the issuance of special overload permits, and the scheduling for rehabilitation or replacement. These ratings must be performed by IDOT or receive IDOT’s concurrence, in accordance with the *Illinois Vehicle Code* (625 ILCS 5/15-317(b)). New or reconstructed bridges approved by IDOT are considered as meeting this requirement.

According to IDOT’s load rating policy, as described in Section 3.3.9.1 of the Structural Services Manual, re-evaluation of load-carrying capacity must be performed when significant deterioration in structurally critical areas has occurred since the prior rating. Such deterioration is indicated when the ISIS Superstructure (Item 59), Substructure (Item 60), or Culvert (Item 62) is reduced to a “4” or less, or when the Condition Rating of Deck (Item 58) falls to “3” or less.

In addition, re-rating is performed at a maximum 10 year interval for bridges meeting any of the following criteria:

- a Condition Rating of “4” or less for Items 59, 60, or 62;
- a Condition Rating of “3” or less for Item 58; or

Re-rating of bridges not meeting the above criteria, although not specifically required, may be requested by the local agency.

6-4.02 Responsibilities

All bridges must be rated for load capacity by IDOT or by a qualified Illinois Licensed Structural Engineer with IDOT’s concurrence. Generally, structures do not need to be re-rated unless they have deteriorated or have been repaired or modified.

6-4.02(a) Load Rating by IDOT

IDOT will rate bridges upon request by the local agency or upon its own initiative. A request for rating should state any unusual or notable conditions. The local agency should provide a copy of the “as-built” construction plans or, if plans are not available, a dimensioned sketch of the
BUREAU OF LOCAL ROADS & STREETS

BRIDGE INVENTORY AND INSPECTIONS June 2014

bridge and its significant structural members. Representative photographs showing the overall condition and specific problem areas should be included.

Rating requests may be made in writing through the district using Form BLR 06510. A representative of the Bureau of Bridges and Structures will schedule a field investigation of each structure to determine actual conditions of the bridge which affect the load-carrying capacity.

6-4.02(b) Load Rating by Others

Structure ratings performed by others must receive the concurrence of IDOT. A summary report for all bridges rated should detail the procedures, findings, inventory and operating ratings, and posting recommendations based on a field inspection and analysis performed by an Illinois Licensed Structural Engineer in accordance with provisions of the current AASHTO Manual for Bridge Evaluation (MBE). The structural engineer’s seal must be affixed to the Structure Load Rating Summary (Form BBS 2795) and IDOT may request computations. Excerpts from detailed inspection reports or other similar submittals will not be accepted.

6-4.02(c) Reporting

The local agency should submit the summary report and Form BBS 2795 to the district for forwarding to the Bureau of Bridges and Structures. The local agency should accept the consultant’s findings prior to submittal of the report.

6-4.03 Bridge Closure and Weight Limit Posting

When a structure cannot carry the legal load, the Illinois Vehicle Code, (625 ILCS 5/15-317) requires that IDOT ensure that suitable signs are erected and maintained that inform the public of the maximum weight limit. The agency having jurisdiction over the roadway is responsible for the posting of signs, regardless of structure ownership or maintenance responsibility.

When IDOT determines a structure carrying traffic on a public road is not capable of carrying the legal loads as defined in 625 ILCS 5/15-111, it will inform the local agency. Upon notification from IDOT of a required load posting, the local agency shall erect signs as soon as possible, and notify IDOT within 30 days that signs are in place.

Per 625 ILCS 5/15-317, the load posting signs must match the load posting requirements determined by the department. Posting at a lower or higher level is not permitted. Likewise, a single posting level is not permitted when a combination posting level is required. The Local Bridge Unit should be contacted for re-evaluation if a combination posting level is required but the local agency believes a single posting level would be more appropriate for the structure location. Please see Figure 6-4A for bridge weight limit posting traffic control.
When a structure is to be closed, the local agency should immediately erect barricades that will prohibit traffic access to the structure. Those barricades are to remain in place until permanent closure measures can be installed. Please see Figure 6-4B for the proper permanent bridge closure traffic control. Additional information may also be found in the Illinois Supplement to the MUTCD.

6-4.04 Bridge Closure and Weight Limit Posting Review

In accordance with the Illinois Vehicle Code, 625 ILCS 5/15-317, the districts annually monitor local bridges that are listed in the ISIS as requiring load postings or closure. The district will notify the appropriate local agency when a bridge is not properly posted or closed by sending a letter (See Figure 6-4C for example) with a copy of the Bridge Posting / Closure Review (Form BBS PCR) by certified mail.

The local public agency shall correct any signing in accordance with the ILMUTCD or other deficiencies in a timely manner and notify the district within 30 days (See Figure 6-4D for example). All district notifications will include a signed copy of the BBS PCR form with photographs, preferably digital, certifying the deficiency at the bridge has been corrected. If the local agency is unable to complete the required corrections within 30 calendar days, they must provide the district with an estimated compliance date with justification. Failure of a local agency to comply may result in the withholding of MFT allotments and the district not approving current MFT expenditures, or other actions determined by the department.
**SIGN FOR BRIDGE POSTINGS**

- **WEIGHT LIMIT 10 TONS**
- **AXLE WEIGHT LIMIT 5 TONS**
- **FOR SINGLE GROSS WEIGHT LIMIT**
- **FOR SINGLE AXLE WEIGHT LIMIT**
- **BRIDGE WEIGHT LIMIT - TONS**
  - SINGLE VEHICLE COMBINATION VEHICLE 20
  - SINGLE VEHICLE COMBINATIONS 3 OR 4 AXLES 21
  - 3 OR MORE 23
- **WEIGHT LIMIT 10 TONS AXLE 40 TONS GROSS**
- **FOR TWO SEPARATE WEIGHT LIMITS**
- **FOR THREE SEPARATE WEIGHT LIMITS**
- **MAY BE PLACED BELOW WEIGHT LIMIT SIGN TO PROVIDE ADVANCE NOTICE**

---

**SIGN HEIGHT AND OFFSET REQUIREMENTS**

- **RURAL LOCATIONS**
  - WEIGHT LIMIT 10 TONS
  - 12 FT MIN (RECOMMENDED)
  - 2 FT ABSOLUTE MINIMUM
  - 5 FT MIN.

- **BUSINESS, COMMERCIAL, OR RESIDENTIAL LOCATIONS**
  - WEIGHT LIMIT 10 TONS
  - 5 FT MIN OR 7 FT MIN IF PARKING OR PEDESTRIANS ARE LIKELY
  - 2.1 FT MIN.

---

**SIGN PLACEMENT REQUIREMENTS**

- ‘SINGLE WEIGHT LIMIT’ SIGNS SHALL BE LOCATED IMMEDIATELY IN ADVANCE OF THE BRIDGE.
- ‘MULTIPLE WEIGHT LIMIT’ SIGNS SHALL BE LOCATED WITHIN 500 FT IN ADVANCE OF THE BRIDGE.
- ADDITIONAL WEIGHT LIMIT SIGNS MAY BE INSTALLED IN ADVANCE OF THE RESTRICTION WITH AN ‘X MILES AHEAD’ PLAQUE TO PROVIDE ADVANCE NOTICE. ADVANCED SIGNS SHOULD BE INSTALLED NEAR JUNCTIONS WHERE A DRIVER COULD CHOOSE AN ALTERNATE ROUTE WITH A MINIMUM OF INCONVENIENCE.
- LEGAL LOAD ONLY SIGNS SHALL BE LOCATED IMMEDIATELY IN ADVANCE OF THE BRIDGE.

---

**BRIDGE POSTING TRAFFIC CONTROL**

Figure 6-4A
RE: Bridge Posting & Closure

Dear ____________________:

In accordance with the Illinois Vehicle Code, Chapter 625, Section 5/15-317, an inspection of all structures within your jurisdiction that are load posted or closed was recently conducted by this office. This inspection was done to ensure that all load posted structures are properly signed and closed structures are properly signed and barricaded. The following deficiencies of structures under your jurisdiction were noted during this inspection:

<table>
<thead>
<tr>
<th>Structure Number</th>
<th>Structure Status</th>
<th>Deficiency</th>
<th>Corrective Action to be Taken</th>
</tr>
</thead>
</table>

Please correct the deficiencies in a timely manner and notify this office in writing by completing the attached Notice of Compliance form with digital photos within 30 calendar days from the date of this letter. If you are unable to complete the required corrections within the 30 calendar days, please provide this office with an estimated compliance date. Do not return the attached Notice of Compliance until the deficiencies have been corrected.

All signage must be in accordance with the IL MUTCD. The IL MUTCD may be accessed using the IDOT website. When performing your regular maintenance procedures during warmer weather, please ensure that all signing is clearly visible and not blocked by the growth of foliage.

If you have any questions regarding this issue, please contact {Name} at {Contact Information}.

Sincerely,

{Name}
Deputy Director of Highways,
Region ______ Engineer

By: {Name}
Local Roads and Streets Engineer

SAMPLE DISTRICT POSTING AND CLOSURE LETTER

Figure 6-4C
(Date)

(Regional Engineer Information)
Deputy Director of Highways,
Region ________ Engineer

Attn: Local Roads

(District Contact Information)

RE: NOTICE OF COMPLIANCE

I have completed the required corrections for the local posting / closure related discrepancies. Attached are photos of the corrections.

<table>
<thead>
<tr>
<th>Structure #</th>
<th>Date Correction Completed</th>
</tr>
</thead>
</table>

LOCAL OFFICIAL’S SIGNATURE

TITLE

COUNTY

TOWNSHIP / MUNICIPALITY

SAMPLE POSTING AND CLOSURE COMPLIANCE LETTER

Figure 6-4D