

# Guide and / or I.M. Revision Notice

**To:** Cities, Counties, and Consultants

**Date:** December 1, 2011

**From:** Office of Local Systems

**Revision Notice Number:** 2011-06

The Federal-aid Project Development Guide (Guide) and / or Instructional Memorandums to Local Public Agencies (I.M.s) have been revised as indicated below. This revision notice identifies all new or revised documents and includes a summary of the significant changes. Where appropriate, it also references the existing Project Development Information Packet (Packet) or County Engineers I.M. documents that have been replaced or superseded.

The Iowa DOT does not provide paper copies of the Guide or I.M.s. Since these documents are updated frequently, we recommend using the on-line version of the [Guide and I.M.s](#) for reference. However, if you prefer using paper copies, all new or revised documents have been included in this file for convenient printing. If you maintain a paper copy of these documents, please remove the old documents and replace them with the new documents. Note: This file is designed for double-sided printing; therefore, all documents with an odd number of pages will be followed by a blank page.

For more information and additional download options, refer to the [Guide and I.M.s](#) web page. If you have any questions concerning these revisions, please contact Donna Buchwald [Donna.Buchwald@dot.iowa.gov](mailto:Donna.Buchwald@dot.iowa.gov) or 515-239-1051.

**\*\*\* PLEASE NOTIFY ALL AFFECTED PERSONNEL OF THIS CHANGE \*\*\***

<b>Document Title or I.M Number</b>	<b>Summary of Significant Revision(s)</b>
<b>I.M. Table of Contents</b> December 1, 2011	The I.M. Table of Contents has been revised to reflect new or revised I.M.s, as indicated below.
<b>I.M. 2.120</b> Bridge Inspections December 1, 2011	This I.M. has been updated. Substantive changes from the previous version include the following: <ul style="list-style-type: none"> <li>• Deleted Attachment I as it was not used.</li> <li>• Deleted Attachment J as it is now in SIIMS.</li> <li>• Extended the date of the requirement for completion of the Fracture Critical Inspection Techniques for Steel Bridges Training Course by one year.</li> <li>• In the Procedures for Rating Standard Bridges section, Item 7 was added to describe what to do when standard ratings are used.</li> <li>• In the Inspection Procedures - Records section, Photograph subsection:               <ul style="list-style-type: none"> <li>○ Changed the reference for Culverts to Item 62.</li> <li>○ Deleted the requirement that photographs of deficiencies be in the bridge folder or scanned into SIIMS</li> <li>○ Changed the requirement of photographs in SIIMS to be only those that are relevant and taken after January 1, 2012.</li> </ul> </li> <li>• In the Inspection Procedures - Records section, Scour Evaluation Data subsection:               <ul style="list-style-type: none"> <li>○ Added the requirement that all Level A Evaluation, Level B Evaluation, and Level C Calculations be in SIIMS</li> <li>○ Added the requirement that all POAs be in SIIMS.</li> <li>○ Added the requirement that all scour analysis worksheets and POAs be in SIIMS by January 1, 2013.</li> </ul> </li> <li>• In the Inspection Procedures - Records section, Channel Cross Section subsection,</li> </ul>

Document Title or I.M Number	Summary of Significant Revision(s)
	<p>the Channel Cross Section will be required in SIIMS after January 1, 2013.</p> <ul style="list-style-type: none"> <li>• In the Inspection Procedures - Records section, Load Rating Evaluation Form subsection, revised the paragraph to remove references to Attachment J – Load Rating Evaluation form as it is now required in SIIMS.</li> <li>• In the Inspection Procedures - Master Lists section, Unknown Foundations subsection: <ul style="list-style-type: none"> <li>○ Deleted the “3” from Step C3.</li> <li>○ Added a paragraph that risk-based POAs developed for the unknown foundations are required to be in SIIMS by January 1, 2013.</li> </ul> </li> <li>• In the Inspection Procedures - Quality Control (QC) and Quality Assurance (QA) section, Team Leader Reviews subsection, moved the beginning date of the Team Leader Reviews up one year and the findings are to be submitted by e-mail.</li> <li>• In the Inspection Procedures - Critical Findings section, Purpose subsection, revised the second paragraph to indicate FHWA will run their own quarterly report.</li> <li>• In the Inspection Procedures - Critical Findings section, Criteria subsection, item 3.e., changed the reference for Culverts to Item 62.</li> </ul>
<p><b>I.M. 2.120, Attachment I</b> Special Training, Equipment, and Access Requirements Checklist December 1, 2011</p>	<p>Delete this Attachment.</p>
<p><b>I.M. 2.120, Attachment J</b> Load Rating Evaluation Form December 1, 2011</p>	<p>Delete this Attachment as this process is now in SIIMS.</p>
<p><b>I.M. 3.730</b> Iowa DOT Letting Process December 1, 2011</p>	<p>This is a new I.M. This I.M. replaces the information that was previously included in County Engineer’s I.M. 3.44, dated September 2005. This I.M. has been completely rewritten.</p>
<p><b>I.M. 3.730, Attachment A</b> Iowa DOT Letting Process Flowchart December 1, 2011</p>	<p>This is a new Attachment to a new IM. This Attachment replaces Packet Flowcharts, Chart No. 12, DOT Pre-letting Process, and Chart No. 13, DOT Post-letting Process. These charts have been completely replaced.</p>

# Instructional Memorandums to Local Public Agencies

## Table of Contents



Some I.M.s are written either to counties or cities; others are written to both counties and cities. The intended audience is indicated in the "To:" field of the I.M. as well as the Table of Contents below. Many of the I.M.s are referenced by the Federal-aid Project Development Guide (Guide). These I.M.s are marked with an asterisk (\*). For more information about the relationship between the Guide and I.M.s, refer to the [Guide and I.M.s web page](#).

**Note:** The I.M.s are currently in the process of being transitioned into a new format and numbering system. New or updated I.M.s will use the new format. Existing I.M.s will remain in the old format until they are revised or updated. Some of the I.M.s are not yet complete, as shown in light grey text. Some incomplete I.M.s will be based on an existing Project Development Information Packet document, some will be based on an existing County Engineers I.M. that will be renumbered, and some will include entirely new content. Where applicable, a reference and link to the existing Packet document or County Engineers I.M. is provided.

No.	Subject	Revision Date	Written To
<b>Chapter 1 – General Information</b>			
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<a href="#">1.020</a>	Pavement Friction Evaluation Program	August 10, 2011	Both
<a href="#">1.030</a>	Ordering Forms and Supplies From the Iowa Department of Transportation	November 2001	Both
<a href="#">1.050</a>	Manuals, Guides and Instructional Information Available to Counties	December 2002	Both
<a href="#">1.070*</a>	Title VI and Nondiscrimination Requirements	February 21, 2008	Both
<a href="#">1.080*</a>	ADA Requirements	February 21, 2008	Both
	<a href="#">Attachment A</a> – Sample Curb Ramp Transition Plan ( <a href="#">Word</a> )	February 21, 2008	Both
<b>Section 1.1 -- References</b>			
<a href="#">1.120</a>	References to the Iowa Code	August 2003	Counties
<b>Chapter 2 – Administration</b>			
<b>Section 2.0 -- Finance</b>			
<a href="#">2.010</a>	Transfer of Local Secondary Road Use Tax Funds to the Farm-to-Market Fund	November 2001	Counties
	<a href="#">Attachment A</a> - Local to FM Fund Transfer Resolution ( <a href="#">Word</a> )	November 2001	Counties
<a href="#">2.020*</a>	Federal and State Bridge Programs	July 18, 2011	Both
	<a href="#">Attachment A</a> – City Bridge Priority Point Rating Worksheet	July 18, 2011	Both
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	<a href="#">Attachment C</a> – Touchdown Points and Limits of Participation	July 18, 2011	Both
	<a href="#">Attachment D</a> – County HBP Fiscal Constraint Requirements	July 18, 2011	Both
<a href="#">2.030</a>	Transfer of Farm-to-Market Funds to the Local Secondary Road Fund	April 12, 2007	Counties
<a href="#">2.040</a>	Temporary Allocation of Farm-to-Market Funds	November 2001	Counties
2.050	Procedure to Change a County Secondary Road Construction Program (see <a href="#">I.M. 3.11</a> , dated March 2003)	(future)	Counties
	<a href="#">Attachment A</a> – Add FM or Local Project Resolution (see attachment to <a href="#">I.M. 3.11</a> , dated March 2003) ( <a href="#">Word</a> )	(future)	Counties
	<a href="#">Attachment B</a> - Advance Local Project Resolution (see attachment to <a href="#">I.M. 3.11</a> , dated March 2003) ( <a href="#">Word</a> )	(future)	Counties
<a href="#">2.071</a>	Secondary Road Budget Accounting Code Series	July 2005	Counties
<b>Section 2.1 -- Maintenance</b>			
<a href="#">2.110</a>	Maintenance of County Roads at Intersections, Interchanges, and Grade Separations with the Primary Highway System	June 1998	Counties

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<a href="#">2.120*</a>	Bridge Inspections	December 1, 2011	Both
	<a href="#">Attachment A</a> - Bridge Scour Stability Worksheet, Level A Evaluation	May 11, 2011	Both
	<a href="#">Attachment B</a> - Intermediate Scour Assessment Procedures, Level B Evaluations	May 11, 2011	Both
	<a href="#">Attachment C</a> - Scour Plan of Action (POA)	May 11, 2011	Both
	<a href="#">Attachment D</a> - Scour Safe Foundations for Spread Footings or Steel Piles	May 11, 2011	Both
	<a href="#">Attachment E</a> - Highly Erodible Soils	May 11, 2011	Both
	<a href="#">Attachment F</a> - Berm Stability Criteria	May 11, 2011	Both
	<a href="#">Attachment G</a> - Guidance for Developing and Implementing Plans of Action (POA) for Bridges with Unknown Foundations, Flowcharts, and Worksheets	May 11, 2011	Both
	<a href="#">Attachment H</a> - USGS Hydrologic Region Map with Region Descriptions	May 11, 2011	Both
	<a href="#">Attachment I</a> - Intentionally left blank	December 1, 2011	Both
	<a href="#">Attachment J</a> - Intentionally left blank	December 1, 2011	Both
	<a href="#">Attachment K</a> - Iowa Legal Trucks Diagram	May 11, 2011	Both
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<a href="#">2.210</a>	Engineering and Traffic Investigations – Speed Limit Study	March 2002	Counties
	Attachment A - Speed Restriction Ordinance ( <a href="#">Word</a> )	March 2002	Counties
	Attachment B - Amendment to Speed Restriction Ordinance ( <a href="#">Word</a> )	March 2002	Counties
	Attachment C - Resolution for Establishing Speed Limits ( <a href="#">Word</a> )	March 2002	Counties
<a href="#">2.220</a>	Establishing and Signing Area Service B and Area Service C Roads	January 2004	Counties
	Attachment A - Area Service "B" Ordinance ( <a href="#">Word</a> )	March 2002	Counties
	Attachment B - Area Service "B" Resolution ( <a href="#">Word</a> )	March 2002	Counties
	Attachment C - Area Service "C" Ordinance ( <a href="#">Word</a> )	January 2004	Counties
	Attachment D - Area Service "C" Resolution ( <a href="#">Word</a> )	January 2004	Counties
<a href="#">2.230</a>	Signing for Low Cost Stream Crossings	June 2002	Counties
	Attachment A - Resolution for Low-Water Stream Crossing ( <a href="#">Word</a> )	June 2002	Counties
2.240	Iowa DOT Traffic Counts	(future)	Both
<b>Section 2.3 -- Agreements</b>			
<a href="#">2.310</a>	Construction Agreements Between City and County on Secondary Road Extensions	April 2002	Both
	Attachment A - Resolution for Construction Agreement between City and County on Secondary Road Extensions ( <a href="#">Word</a> )	April 2002	Both
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<a href="#">3.002*</a>	Federal-aid Project Scheduling	February 16, 2007	Both
<a href="#">3.005*</a>	Project Development Submittal Dates and Information	April 22, 2010	Both
<a href="#">3.010</a>	Project Development Outline -- Federal-Aid Funding (BRS, BHS, BROS, BHOS, STS-S, STP-A, STP-E, STP-ES)	February 2002	Both
<a href="#">3.020</a>	Project Development Outline -- Farm-to-Market Funding (FM)	February 2002	Counties
<a href="#">3.030</a>	Project Development Outline -- Local Funding (L)	February 2002	Both
<a href="#">3.050*</a>	In-Kind Contributions	August 10, 2011	Both
3.060	Project Numbers (see <a href="#">I.M. 3.14</a> , dated December 2002)	(future)	Both
<b>Section 3.1 -- Environmental Reviews and Permits</b>			

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3.105*	Concept Statement Instructions (see Packet, Index No. 6, <a href="#">Concept Statement Instructions</a> )	(future)	Both
	Attachment A – Example Concept Statement	(future)	Both
3.110*	Environmental Data Sheet Instructions (see Packet, Index No. 6, <a href="#">Environmental Datasheet Instructions</a> )	(future)	Both
	Attachment A – Example Environmental Data Sheet	(future)	Both
3.112*	FHWA Environmental Concurrence Process (see Packet, Index No. 6, <a href="#">NEPA Project Classification Process</a> )	(future)	Both
	Attachment A - Environmental Concurrence Process Overview (see Packet, Flowcharts, <a href="#">Chart No. 6 – Environmental Process Overview</a> )	(future)	Both
	Attachment B - Environmental Assessment / FONSI Process (see Packet, Flowcharts, <a href="#">Chart No. 6A – Environmental Assessment / FONSI Process</a> )	(future)	Both
	Attachment C - Environmental Impact Statement / ROD Process (see Packet, Flowcharts, <a href="#">Chart No. 6B – Environmental Impact Statement / ROD Process</a> )	(future)	Both
	Attachment D - Section 106 Process (see Packet, Flowcharts, <a href="#">Chart No. 6C – Section 106 Process</a> )	(future)	Both
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3.114*	Cultural Resource Regulations (see Packet, Index No. 6, <a href="#">Cultural Resource Regulations</a> )	(future)	Both
3.120*	Farmland Protection Policy Act Guidelines (see Packet, Index No. 6, <a href="#">Farmland Protection Policy Act Guidelines</a> )	(future)	Both
	Attachment A - Farmland Protection Policy Act Process Flowchart (see Packet, Flowcharts, <a href="#">Chart No. 6E – Farmland Protection Policy Act Process</a> )	(future)	Both
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<a href="#">3.140*</a>	Storm Water Permits	July 18, 2011	Both
<a href="#">3.150*</a>	Highway Improvements in the Vicinity of Airports or Heliports	December 3, 2007	Both
<a href="#">3.160*</a>	Asbestos Inspection, Removal, and Notification Requirements	April 12, 2007	Both
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<b>Section 3.2 -- Design Guidelines and Exceptions</b>			
3.205*	Urban Design Guidelines (see Packet, Index No. 5, <a href="#">Application of Design Criteria</a> , <a href="#">Urban Design Aids</a> , <a href="#">Alternative Urban Design Guides</a> , and <a href="#">Design Exception Process for City Federal-aid Projects</a> )	(future)	Cities
<a href="#">3.210*</a>	Rural Design Guidelines	March 26, 2008	Counties
<a href="#">3.211</a>	Rehabilitation of Existing Surfaces	November 2001	Counties
<a href="#">3.213*</a>	Traffic Barriers (Guardrail and Bridge Rail)	November 2001	Both
<a href="#">3.214*</a>	3R Guidelines	March 26, 2008	Both
<a href="#">3.215*</a>	Clear Zone Guidelines	March 26, 2008	Both
<a href="#">3.216*</a>	Economic Analysis (Benefit-to-Cost Ratio)	October 2001	Counties
<a href="#">3.218*</a>	Design Exception Process	December 2002	Counties
	Attachment A – Design Exception Process Flowchart (see Packet, Flowcharts, <a href="#">Chart No. 4 – Design Exception Process</a> )	(future)	Both
3.220*	Design Exception Information for Bridges Narrower than Approach Pavement (see <a href="#">I.M. 3.132</a> , dated February 2002)	(future)	Both
<b>Section 3.3 -- Consultant and In-House Design</b>			
<a href="#">3.305*</a>	Federal-aid Participation in Consultant Costs	August 29, 2006	Both
	<a href="#">Attachment A</a> – Federal-Aid Consultant Checklist	August 29, 2006	Both

No.	Subject	Revision Date	Written To
	<a href="#">Attachment B</a> – Guidelines for Federal-Aid Consultant Contracts	August 29, 2006	Both
	<a href="#">Attachment C</a> – Payment Methods	August 29, 2006	Both
	<a href="#">Attachment D</a> – Sample Consultant Contract ( <a href="#">Word</a> )	August 29, 2006	Both
<a href="#">3.310*</a>	Federal-aid Participation in In-House Services	December 11, 2008	Both
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<b>Section 3.4 -- Preliminary Design</b>			
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	<a href="#">Attachment A</a> – Preliminary Plan Guidelines	June 18, 2010	Both
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<a href="#">3.410*</a>	Preliminary Bridge or Culvert Plans	June 18, 2010	Both
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<b>Section 3.5 -- Final Design</b>			
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<a href="#">3.510*</a>	Check and Final Bridge or Culvert Plans	June 18, 2010	Both
	<a href="#">Attachment A</a> – Bridge or Culvert Plan Supplementary Checklist	June 18, 2010	Both
3.520*	Electronic Bid Item Information (see Packet, Index No. 8, <a href="#">BIAS 2000 Information</a> )	(future)	Both
<b>Section 3.6 -- Right-of-Way, Utilities, and Railroads</b>			
<a href="#">3.605*</a>	Right-of-Way Acquisition	June 18, 2007	Both
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	<a href="#">Attachment C</a> – Early Right-of-Way Acquisition Process Flowchart	June 18, 2007	Both
<a href="#">3.640*</a>	Utility Accommodation and Coordination	December 11, 2008	Both
	<a href="#">Attachment A</a> – Utility Coordination Flowchart	December 11, 2008	Both
	<a href="#">Attachment B</a> – Utility Coordination Checklist ( <a href="#">Word</a> )	December 11, 2008	Both
<a href="#">3.650*</a>	Federal-aid Participation in Utility Relocations	June 18, 2007	Both
	<a href="#">Attachment A</a> – Utility Relocation Federal-Aid Eligibility Flowchart	June 18, 2007	Both
	<a href="#">Attachment B</a> – FHWA Authorization of Utility Relocation Costs Flowchart	June 18, 2007	Both
<a href="#">3.670*</a>	Work on Railroad Right-of-Way	May 1, 2007	Both
	<a href="#">Attachment A</a> – Notification and Agreement of Maintenance Work in Railroad Right-of-Way ( <a href="#">Word</a> )	May 1, 2007	Both
	<a href="#">Attachment B</a> – Notification of Construction Work in Railroad Right-of-Way ( <a href="#">Word</a> )	May 1, 2007	Both
	<a href="#">Attachment C</a> – Work on Railroad Right-of-Way Flowchart	May 1, 2007	Both
<a href="#">3.680*</a>	Federal-aid Projects Involving Railroads	May 1, 2007	Both
	<a href="#">Attachment A</a> – FHWA Authorization of Railroad Costs Flowchart	May 1, 2007	Both
<b>Section 3.7 -- Lettings and Contracts</b>			

No.	Subject	Revision Date	Written To
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<a href="#">3.710*</a>	DBE Guidelines	June 18, 2007	Both
<a href="#">3.720*</a>	Local Letting Process – Federal-aid	April 12, 2007	Both
	<a href="#">Attachment A</a> – Pre-Award Checklist and Certification	April 12, 2007	Both
	<a href="#">Attachment B</a> – Post-Award Checklist and Certification	April 12, 2007	Both
	<a href="#">Attachment C</a> – Supplemental Agreement	April 12, 2007	Both
	<a href="#">Forms Packet</a> Note: The documents included in the Forms Packet are not actually a part of I.M. 3.720 or its attachments. However, for convenient download, these documents are bundled together in a self-extracting executable file (forms.exe).	N/A	Both
<a href="#">3.730*</a>	Iowa DOT Letting Process	December 1, 2011	Both
	<a href="#">Attachment A</a> - Iowa DOT Letting Process Flowchart	December 1, 2011	Both
<a href="#">3.750*</a>	Project Development Certification Instructions	December 3, 2007	Both
	<a href="#">Attachment A</a> – Project Development Certification Process Flowchart	December 3, 2007	Both
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<a href="#">3.760*</a>	Public Interest Findings	December 3, 2007	Both
3.770	Paving Point Requirements	(future)	Counties
<b>Section 3.8 -- Construction</b>			
3.805*	Construction Inspection (see <a href="#">I.M. 3.51</a> , dated September 2002)	(future)	Both
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3.870	Farm-to-Market Voucher Process	(future)	Counties
<b>Section 3.9 -- Project Close-out and Audits</b>			
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	<a href="#">Attachment A</a> – Project Close-out Process Overview Flowchart	December 3, 2007	Both
	<a href="#">Attachment B</a> – Final Review and Audit Process Flowchart – Highway or Bridge Construction	December 3, 2007	Both
	<a href="#">Attachment C</a> – Final Review and Audit Process Flowchart – Non-highway Construction, DOT Specifications	December 3, 2007	Both
	<a href="#">Attachment D</a> – Final Review and Audit Process Flowchart – Non-highway Construction, Non-DOT Specifications	December 3, 2007	Both
	<a href="#">Attachment E</a> – Pre-audit Checklist ( <a href="#">Word</a> )	December 3, 2007	Both
	<a href="#">Attachment F</a> – Final Forms Packet Checklist ( <a href="#">Word</a> )	December 3, 2007	Both
3.920	Final Review, Audit, and Close-out Procedures for State-aid Projects	(future)	Both
<a href="#">3.930*</a>	Interest Payment Procedures	December 3, 2007	Both
	<a href="#">Attachment A</a> – Sample Interest Payment Information Form	December 3, 2007	Both
<a href="#">3.940</a>	County Engineer Resolution	December 3, 2007	Counties
	<a href="#">Attachment A</a> – Sample County Engineer Resolution ( <a href="#">Word</a> )	December 3, 2007	Counties
<b>Chapter 4 – Systems Classification And Identification</b>			
<b>Section 4.0 -- General</b>			
<a href="#">4.010</a>	Procedures to Modify the Secondary Road Route Numbering System	September 2002	Counties
<a href="#">4.030</a>	County Road Vacations	September 2002	Counties
	Attachment A - Resolution for Road Vacation Public Hearing ( <a href="#">Word</a> )	September 2002	Counties
	Attachment B - Notice of Public Hearing ( <a href="#">Word</a> )	September 2002	Counties
	Attachment C - Resolution to Vacate a County Road ( <a href="#">Word</a> )	September 2002	Counties
<b>Section 4.1 -- (Reserved)</b>			

No.	Subject	Revision Date	Written To
<b>Section 4.2 -- Farm-to-Market System</b>			
<a href="#">4.210</a>	Modification of the Farm-to Market (FM) System	August 10, 2011	Counties
<a href="#">4.220</a>	Farm-to-Market Review Board Advisory Opinions on Proposed Jurisdictional Transfers	April 2002	Counties

# INSTRUCTIONAL MEMORANDUMS

## To Local Public Agencies



To: Counties and Cities	Date: December 1, 2011
From: Office of Local Systems	I.M. No. 2.120
Subject: Bridge Inspections	

**Contents:** This Instructional Memorandum (I.M.) includes guidelines and procedures for a Local Public Agency (LPA) to assist them in complying with the National Bridge Inspection Standards (NBIS). This I.M. also includes the following attachments:

- [Attachment A](#) - Bridge Scour Stability Worksheet – Level A Evaluation
- [Attachment B](#) - Intermediate Scour Assessment Procedures Flowchart – Level B Evaluation
- [Attachment C](#) - Scour Plan of Action (POA)
- [Attachment D](#) - Scour Safe Foundations for Spread Footings or Steel Piles
- [Attachment E](#) - Highly Erodible Soils
- [Attachment F](#) - Berm Stability Criteria
- [Attachment G](#) - Guidance for Developing and Implementing Plans of Actions (POA) for Bridges with Unknown Foundations, Flowcharts, and Worksheet
- [Attachment H](#) - USGS Hydrologic Region Map with Region Descriptions
- Attachment I - *Intentionally left blank*
- Attachment J - *Intentionally left blank*
- [Attachment K](#) - Iowa Legal Trucks Diagrams
- [Attachment L](#) - Quality Assurance Field Review Worksheet
- [Attachment M](#) - Routine Permit Trucks Diagrams

### Introduction

According to Iowa Code [Chapter 314.18](#), the counties, cities, and other public agencies are responsible for the safety inspection and evaluation of all highway bridges under their jurisdiction which are located on public roads, in accordance with the NBIS. These responsibilities include inspection policies and procedures, inspections, reports, load ratings, quality control (QC), quality assurance (QA), maintaining a bridge inventory, and other requirements of the NBIS.

The NBIS may be found in [23 CFR 650](#). The following are additions or clarifications to the indicated subsections of [23 CFR 650](#).

### Definitions ([23 CFR 650.305](#))

*Armored Countermeasure (Armoring)* - Material such as Class E Revetment, according to Section 4130 of the Standard Specifications, placed under and around a bridge structure for the purpose of protecting the embankment or berm from scour and/or erosion. Armoring is not a permanent countermeasure since the material is subject to displacement during a major flood event which is considered to be the lesser of the 500 year or roadway overtopping event.

*Bridge Inspector Refresher Training Course* – (FHWA-NHI-130053) – The major goals of this course are to refresh the skills of practicing bridge inspectors in fundamental visual inspection techniques, review the background knowledge necessary to understand how bridges function, communication issues of national significance relative to the nations' bridge infrastructures, re-establish proper condition and appraisal rating practices, and review the professional obligations of bridge inspectors.

*Fracture Critical Inspection Techniques for Steel Bridges Training Course* – (FHWA-NHI-130078) – The course curriculum for this training reflects current practices, while addressing new and emerging technologies available to bridge inspectors. In addition, the course features exemplary training, hands-on workshops for popular types of nondestructive evaluation (NDE) equipment, and a case study of an inspection plan for a fracture critical bridge.

*Fracture Critical Member (FCM)* - A steel member in tension, or with a tension element, whose failure would probably cause a portion of or the entire bridge to collapse. Floor beams are considered to be fracture critical members when the floor beam spacing is greater than 14 feet.

*Extended Inspection Cycle* - A period of time to allow for unforeseen circumstances such as severe weather, concern for bridge inspector safety, concern for inspection quality, the need to optimize scheduling with other bridges, or other unique situations may be cause to adjust the scheduled inspection date. The adjusted date should not extend more than 30 days beyond the scheduled inspection date.

*Independent Party* - An entity not influenced by or affiliated with the LPA or the LPA's Program Manager. An LPA or consulting firm with more than one Program Manager can utilize an alternate Program Manager from the same consulting firm or LPA to conduct the QA review.

*Low Water* - Water depth of less than 6 feet.

*Monthly Notifications* – automated notifications sent by e-mail to the LPA's by the Iowa DOT's Office of Bridges and Structures regarding inspections past due or bridges not in compliance with posting requirements on a monthly basis.

*Permanent Countermeasure* - Designed to account for all three major types of scour (i.e. long term degradation, general or contraction scour, and local pier or abutment scour). Properly designed and installed systems satisfy the requirements of a "Permanent" classification. Examples of permanent systems include:

- Fabric Formed Articulated Block Mattress (ABM)
- Stone Revetment
- Proprietary Articulated Concrete Block (ACB)
- Gabion Mattress

Stone revetment is subject to displacement during a major flood event which is considered to be the lesser of the 500 year or roadway overtopping event. Therefore, unless the revetment is designed in accordance with Hydraulic Engineering Circular (HEC) [HEC 23](#) and contained, it cannot be considered to provide adequate protection to attain a "Permanent" classification. The following are some examples of permanent stone revetment:

- Burial below the contraction scour elevation.
- Installation of cut-off walls.
- Placing the revetment as launchable stone.

*Safety Inspection of In-service Bridges* – (FHWA-NHI-130055) – This course is based on the "Bridge Inspector's Reference Manual" and provides training on the safety inspection of in-service highway bridges. Satisfactory completion of this course will fulfill the training requirements of the National Bridge Inspection Standards (NBIS) for a comprehensive training course. This course does not address fracture critical, underwater, or complex structures.

*Scour Plan of Action (POA)* (see [Attachment C](#) to this IM) - A POA is a written procedure developed by the bridge owner or delegated Program Manager that outlines the monitoring plan for a specific bridge. The plan provides guidelines and practical information pertaining to each bridge for the purpose of monitoring foundation scour during flood events.

*Standard bridge* – a bridge constructed using the "Bridge Standards" developed by the Iowa DOT. See the [Procedures for Rating Standard Bridges](#) section below in this IM.

[Structural Inventory and Inspection Management System \(SIIMS\)<sup>\(R\)</sup>](#) - Bridge inspection data collection software.

*Scour Evaluation* - Scour evaluation is the process of determining the susceptibility of each bridge for scour. The depth, or level, of this process varies for each bridge. Some bridges may be determined scour safe after the first level of evaluation, Level A. Other bridges cannot be determined scour safe after Level A so they shall go to Level B using assessment procedures. Still others may need to go to the highest level of evaluation, Level C.

*Level A* - Bridge Scour Stability Worksheets (see [Attachment A](#) to this IM). Bridges that meet the required Stability Total of less than 35 points, do not need any further evaluation, and may be considered scour safe.

Bridges with a Stability Total of 35 points or greater need further evaluation using the Level B Intermediate Scour Assessment Procedures Flowchart (see [Attachment B](#) to this IM).

*Level B* - Intermediate Scour Assessment Procedures Flowchart (see [Attachment B](#) to this IM). From this assessment, bridges are determined to be either stable, limited risk needing monitoring, scour susceptible needing monitoring, or scour susceptible needing a Level C Evaluation.

*Level C* - This is the most in-depth level of the evaluation process needed for those bridges that do not satisfy guidelines in the Level B Evaluation. A full computational analysis is completed using the Federal Highway Administration's [HEC 18](#) procedures and a determination is made concerning the stability of the bridge. Bridge owners may decide to develop a Plan of Action (POA) for these structures in lieu of the Level C Evaluation.

*Thalweg* - The lowest point in the stream channel along the cross section.

### **Bridge Inspection Organization** ([23 CFR 650.307](#), d)

According to Iowa Code 314.18, the counties, cities, and other public agencies are responsible for the safety inspection and evaluation of all highway bridges under their jurisdiction, which are located on public roads, in accordance with the NBIS. These responsibilities include inspection policies and procedures, inspection reports, load ratings, QC, QA, maintaining a bridge inventory, and other requirements of the NBIS.

The NBIS regulations apply to all publicly owned highway bridges longer than 20 feet located on public roads. Railroad and pedestrian structures that do not carry vehicular traffic are not covered by the NBIS regulations. Similarly, the NBIS does not apply to inspection of sign support structures, high mast lighting, retaining walls, noise barrier structures, and overhead traffic signs. Tunnels, since they are not bridges, are not covered by the NBIS.

While NBIS is for all public highway bridges, the FHWA has no legal authority to require private bridge owners to inspect and maintain their bridges. However, the FHWA strongly encourages private bridge owners to follow the NBIS as the standard for inspecting their highway bridges. Where a privately owned bridge carries a public road, FHWA encourages the private bridge owner to inspect their bridge in accordance with the NBIS or reroute their public road.

The Bridge Owner shall have a Program Manager who is assigned the above responsibilities. The Bridge Owner may retain a consultant to perform the duties of Program Manager.

### **Qualifications of Personnel** ([23 CFR 650.309](#), b)

The Iowa DOT has developed the following procedure to determine if an individual with experience performing NBIS bridge inspections can qualify as a Team Leader in accordance with the [23 CFR 650.309\(b\)](#) and guidance provided by [FHWA Questions and Answers on NBIS](#).

Bridge inspection experience is defined as active participation in bridge inspections in accordance with NBIS, in either a field inspection, supervisory, or management role. A combination of bridge design, bridge maintenance, bridge construction, and bridge inspection experience is acceptable. At least 50% or more of the individual's experience must come from bridge inspection.

To determine an individual's bridge inspection experience, the number of years performing or supervising bridge inspections and the number of annual bridge inspections performed shall be provided. Office work associated with field inspection; such as, completing Structure Inventory & Appraisal (SI&A) forms, maintaining files of inspection data, performing load rating calculations, and other miscellaneous work, may be considered bridge inspection experience. One day a week is allotted for office work related to field inspection; therefore, the number of days calculated for field inspection time is divided by 4 to approximate average office time and then added to the field inspection time.

**Example calculation of bridge inspection experience for a technician Team Leader:**

Number of years performing or supervising bridge inspections: 25  
Annual bridge inspections performed: 150  
150 bridges/6 bridges per day = 25 days  
25 days/4 = 6.25 days of office related work  
Total days per year = 25+6.25= 31.25 days  
Months per year: 31.25 days/22 working days per month = 1.42 months  
Bridge inspection experience: (1.42 months) (25 years) = **35.5 months**

**35.5 months is greater than the required 30 month minimum, therefore this person would be approved.**

Bridge inspectors not qualified as Team Leaders may assist the Team Leader but may not inspect bridges independently. Education and experience requirements for bridge inspectors who are not Team Leaders should be determined by the Program Manager or Bridge Owner.

Program Managers and Team Leaders who perform field inspections on FCM's shall complete the Fracture Critical (FC) Inspection Techniques for Steel Bridges Training Course, by December 31, 2012. Any individual that meets the qualifications of Program Manager or Team Leader after December 31, 2012, that will be performing field inspections on FCM's shall complete the Fracture Critical (FC) Inspection Techniques for Steel Bridges Training Course.

The NBIS requires periodic bridge inspection refresher training for Program Managers and Team Leaders as part of QC and QA. The Iowa DOT has defined periodic as being every 5 years. Therefore, all bridge inspection personnel are required to complete the Bridge Inspection Refresher Training Course every 5 years following the completion of the Safety inspection of In-Service Bridges Training Course.

Professional Engineers that have successfully completed the Safety Inspection of In-Service Bridges have met the qualifications to be bridge inspection Program Managers as per the NBIS. The Iowa DOT provides access to bridge records authorized by the bridge owners in [SIIMS](#) bridge inspection software to these individuals once they have submitted the Bridge Inspector form provided on the [SIIMS](#) website to the Iowa DOT for review and approval.

Approved Program Managers are provided access to all forms and records for each bridge authorized by the bridge owner. Individuals approving the Load Rating form are required to be Professional Engineers licensed in the state of Iowa. Therefore, each person that is required to approve the load rating information must submit the Bridge Load Rating form provided in [SIIMS](#). The Bridge Load Rating form must be reviewed and approved by the DOT, or by an approved Program Manager who has submitted the Bridge Inspector form including Professional License information. Editing of the Bridge Load Rating form by other users with authorized access to the bridge forms is permitted but approval can only be completed by a qualified Load Rater.

**Inspection Frequency ([23CFR 650.311](#))**

Routine Inspections ([23CFR 650.311](#), a)

The required inspection frequency for routine inspections may be extended by the extended inspection cycle to account for unforeseen circumstances as described in the definition of extended inspection cycle. Subsequent inspections should adhere to the previously established interval; that is the use of the extended inspection cycle should be an exception. The inspection date recorded for Items 90, Inspection Date, shall be the actual date the new inspection is initiated. The details of why the bridge inspection was late shall be documented and placed in the bridge file folder.

Bridges that have Item 58, Deck; Item 59, Superstructure; or Item 60, Substructure, with a condition rating of 3 or less, should have an inspection frequency less than 24 months, which may be a routine inspection on a more frequent basis or a special inspection in between routine inspections. Other factors that may impact frequency of inspections are Item 29, ADT; Item 70, Posting; Item 64, Operating Rating; and all items under Structure Type and Materials on the SI&A form.

#### Underwater Inspections ([23CFR 650.311](#), b)

Underwater inspection requirements covered in this article pertain to the inspection of the structural elements such as abutments or piers to determine the structural integrity. If at any time during the 60 month underwater inspection interval there is low water, inspections may be performed with a method appropriate for the element and without the use of divers.

Bridges that have Item 60, Substructure, with a condition rating of 3 or less due to deficiencies below the waterline should have an underwater inspection frequency less than 60 months. Other factors that may impact frequency of inspections are Item 29, ADT; Item 70, Posting; Item 64, Operating Rating; all items under Structure Type and Materials; environment; age; and scour characteristics.

#### Fracture Critical Members (FCMs) ([23CFR 650.311](#), c)

An Item 59, Superstructure, coding of 4 or less should have an inspection frequency less than 24 months. FCM inspection may be on a more frequent basis or a special inspection in between FCM inspections. Other factors that may impact frequency of inspections are Item 29, ADT; Item 70, Posting; Item 64, Operating Rating; and all items under Structure Type and Materials.

#### Inspection Procedures – Load Rating ([23 CFR 650.313](#), c)

Bridges are to be load rated in accordance with the [FHWA Policy Memorandum on Bridge Load Ratings for the National Bridge Inventory, dated November 5, 1993](#) and [FHWA Policy Memorandum on Bridge Load Ratings for the National Bridge Inventory, dated October 30, 2006](#). Item 64, Operating Rating; and Item 66, Inventory Rating; will need to be updated accordingly upon completion of the new load rating capacity calculations. Computations shall be performed based on items found during the most recent field inspection. See the Load Rating Evaluation Form in [SIIMS](#).

At the discretion of the Program Manager, Team Leader, or Load Rater, the bridge may be re-rated to reflect changes in condition, method of analysis used, or changes in acceptable load rating methodologies. The re-rating may be justified without changes in the condition codes of Item 58, Deck; Item 59, Superstructure; or Item 60, Substructure. A new Bridge Load Rating Report form will need to be generated in [SIIMS](#) and the form certified by a Professional Engineer, licensed in the State of Iowa, when the controlling member changes or the controlling capacity is reduced.

#### Procedures for Rating Standard Bridges

The following procedure should be utilized for determining the load ratings of standard bridges that have been rated by the Iowa Highway Research Board Project, HR-239. There are currently 4 phases of the report available for different standard bridge designs ([Load Rating for Standard Bridges \(1982\)](#), [Load Rating for Secondary Bridges \(1991\)](#), [Load Rating for Standard Bridges, Phase III \(1998\)](#), and [Load Rating for Standard Bridges, Phase IV \(2008\)](#)).

1. Identify the standard bridge used. Refer to project plans, if available, in the bridge file to determine the version of the standard utilized. Some standards have multiple versions due to minor revisions.
2. Item 27, Year Built, is a good indicator of which standard version was used, if you are unable to locate the original plans. Some verification may be necessary in the field to determine exactly which version was utilized.
3. Review the applied dead load to determine if it matches the standard rating assumptions.
4. The operating and inventory ratings in the summary for each standard bridge are coded as an HS rating. This is **NOT** what should be coded on Items 64, Operating Rating, and Item 66, Inventory Rating, on the SI&A form. These numbers shall be converted to a tonnage based on a 36 ton truck.

The HS number shall be multiplied by the ratio of 36 tons/20 tons = 1.8 and this number recorded on the SI&A in Items 64, Operating Rating, and Item 66, Inventory Rating. For example, if the operating and inventory ratings are listed as HS 32.0 and HS 23.3 respectively; then Item 64, Operating Rating,

should be coded 57.6 (32.0 tons x 1.8 = 57.6 tons) and Item 66, Inventory Rating, should be coded 41.9 (23.3 tons x 1.8 = 41.9 tons).

5. Some of the HR-239 reports include detailed computations for review of the critical and non-critical elements. These computations can be adjusted when changes to the dead load conditions are encountered or section loss in structural elements are noted.
6. Some of the standard bridges have restrictions to the number of vehicles that may be on the bridge at one time even if the roadway will accommodate more than one vehicle. If bridges are rated using one lane loading these bridges shall be posted accordingly and Item 41, Posting Status, on the SI&A coded based on the restriction.
7. When standard ratings are used from any of the HR-239 reports, the Bridge Load Rating Report does not require a signature by a Licensed Professional Engineer in the State of Iowa. In the Comment section of the Bridge Load Rating Report identify which of the Iowa DOT Office of Bridges and Structures Bridge Standard was used.

The Federal Government instituted a policy to use only metric units for all measurement. Therefore, FHWA requires all National Bridge Inventory data to be in metric units. The Iowa DOT has chosen to use English units instead of metric. [SIIMS](#) was developed using English units for all measurements; including, but not exclusive to, vertical and horizontal clearances, deck widths, bridge length, and Inventory and Operating ratings. These English values will be converted to metric units by [SIIMS](#) for the annual National Bridge Inventory submittal.

The Inventory, Operating, and Posting ratings are typically governed by superstructure elements; and in some cases, deck elements. Further analysis may be necessary to determine the capacity if significant changes in condition or applied dead load are noted based on the current conditions. Substructures should be reviewed for deterioration and rated, if necessary. Section loss should be reviewed and losses considered in adjustments to the original ratings.

#### Load Factor Rating (LFR) Requirements

Bridges are to be load rated in accordance with the [FHWA Policy Memorandum on Bridge Load Ratings for the National Bridge Inventory, dated November 5, 1993](#), for all bridges constructed, replaced, or rehabilitated since January 1, 1994. Bridges in this category shall be rated by load factor methods.

These ratings are required for the HS ratings Items 64, Operating Rating, and Item 66, Inventory Rating, on the SI&A. The bridge owner may elect to use Load Factor Rating (LFR), Allowable Stress Rating (ASR), or Load Resistance Factor Rating (LRFR) to establish load limits for purposes of load posting.

Bridges built or rehabilitated since January 1, 1994, falling into the following categories shall be rated by load factor methods:

1. Bridges constructed or replaced with the following materials:
  - a. Steel produced in 1936 (33 ksi or better) or after.
  - b. Prestressed concrete.
  - c. Reinforced concrete.
2. Bridges that undergo major rehabilitation or repairs.
3. Bridges designed with the Load Resistance Factor Design (LRFD) method prior to October 1, 2010, shall be rated with LRFR or LFR method. Bridges designed after October 1, 2010, shall be rated LRFR.

The following material types do not require LFR analysis and may be analyzed using ASR:

1. Masonry including stone, concrete block, or clay brick.
2. Bridges constructed with timber and designed prior to October 1, 2010.
3. Rolled steel produced prior to 1936 (30 ksi or less).

#### Bridge Load Rating Report

A Bridge Load Rating Report has been developed to be included in each bridge file to help identify the critical elements for the capacity rating of the structure and for certification of the ratings by a Professional Engineer, licensed in the State of Iowa.

1. All rating calculations shall be certified by a Professional Engineer, licensed in the State of Iowa, and summarized on the Bridge Load Rating Report in [SIIMS](#).
2. The Bridge Load Rating Report shall be reviewed by the Program Manager or Team Leader to ensure that it indicates the critical element, the operating and inventory ratings and the method of analysis used to determine the rating capacity of the bridge.
3. Rating calculations for standard bridges shall be reviewed using the Load Rating Evaluation Form in [SIIMS](#) by a Professional Engineer, licensed in the State of Iowa, to verify the ratings are still applicable under the current condition ratings and applied loads of the bridge, and be summarized on the Bridge Load Rating Report. For standard bridges the Controlling Element and Location fields are not required to be completed.
4. If a Bridge Load Rating Report has been previously completed, existing ratings shall be reviewed with the critical elements being determined from available file information and accepted by a Professional Engineer, licensed in the State of Iowa. Recertification is not required for existing computations included in the file that are deemed reasonable based on the present condition of the structure.
5. Re-ratings needed due to reasons listed in the Load Rating Evaluation Form in [SIIMS](#) will need to be certified if the element re-rated becomes the critical element and controls the capacity of the structure.
6. Completing the Posting Table on the Bridge Load Rating Report is not required if posting is not required.

#### Culverts

*This section is under construction and will be added at a later date.*

#### Posting

All bridges shall be rated for the following vehicles:

1. Type 4
2. 3S3
3. 3-3

Note: if SU7 vehicles are using a bridge, the bridge should also be rated for the SU7 vehicle.

All bridges with continuous spans or simple span lengths of 100 feet or greater should also be rated for:

1. 3S3B
2. 4S3

Diagrams of the Iowa Legal Trucks are in [Attachment K](#) to this IM. The SU7 vehicle configuration can be found in the First Edition of the 2008 AASHTO Manual for Bridge Evaluation with the 2010 versions.

Posting signs should limit all vehicles as efficiently as possible. Posting for a single gross weight limit, maximum axle weight limit, or both are the most enforceable means of restricting vehicles. Any method described in the Manual for Uniform Traffic Control Devices (MUTCD) is appropriate. Using the signs in the MUTCD with pictorial images of vehicles is allowed as long as it is clearly understood that the number of axles shown on any one vehicle could be literally interpreted if/when a violation is taken to court.

Bridges that have adequate capacity of legal vehicles up to 40 tons, but do not have adequate capacity for legal vehicles over 40 tons should be posted for a maximum gross limit of 40 tons regardless of the allowable limit calculated. This eliminates confusion about any permit vehicles that are within the 40 to 48 ton range.

Bridges do not need to be posted for loads that are annual permit loads. Bridges that commonly carry vehicles that fall under the annual permit types should be documented in [SIIMS](#) so when a permit request is made these bridges can be included on the permit as embargoed for that vehicle.

Item 70, Posting, should be calculated using the most restrictive legal truck. The most restrictive truck will be the one with the lowest Rating Factor (RF).  $1.0 - RF = \% \text{ below legal load}$ . Use this % to determine which coding, between 0 and 5, should be entered into Item 70, Posting. When Item 70, Posting, is equal to 4 or less, posting the bridge for the appropriate restriction is required. Item 41, Posting Status, shall be coded for the required restriction. The rating method for Item 70, Posting, does not have to be the same method used for Item 64, Operating Ratings, and Item 66, Inventory Rating. If a bridge is re-rated for Item 64, Operating Rating, and Item 66, Inventory Rating using the LFR or LRFR methods, the posting limits do not have to be re-calculated by these methods.

#### Advanced Posting

Bridges shall have advance load postings at the last available location to avoid crossing an embargoed structure by using an alternative route or turning around. The signs shall be readily visible and installed in accordance with the MUTCD.

When bridges are clearly visible and signs legible from the advance intersection, both advanced warning signs and signing at the bridge site are not required. The signing located at the bridge site will be sufficient to warn oncoming traffic.

Advance warning signs that restrict the bridge to one lane or limits the number of vehicles on the structure at one time shall also be located far enough in advance of the structure to allow the traffic to slow down prior to crossing the bridge along with oncoming traffic.

#### Overload or Superload Permitting

The bridge owner shall review requests for overload crossings of their bridges to minimize damage, ensure public safety, and protect the integrity of the local infrastructure.

1. The bridge files shall be reviewed and computations completed as required to determine if the specific overload will cause overstress to the structure.
2. Permit requests and approvals shall be kept on record for documentation. Special requirements such as reduction of speed, centering on the roadway, elimination of braking, and other restrictions should be noted on the permit.
3. The bridge owner has the right to be compensated for costs associated with the review for the overload permit by the individual/company requesting the permit as per [Iowa Code 321E.14](#), Fees for Permits.
4. Any request can be denied if it is determined the overload will be detrimental to the public facility.
5. Bridges may be evaluated for Routine Permit Trucks (see [Attachment M](#) to this IM). If the bridge does not have the capacity to carry one or more of these trucks, when center-lined at 5 mph, the inadequacy can be recorded on the Load Rating Bridge Report form in [SIIMS](#).

## Inspection Procedures - Records ([23 CFR 650.313](#), d)

Bridge owners are required to maintain a complete, accurate, and current record of each bridge under their jurisdiction, either electronically or hard copy, as per the American Association of State Highway and Transportation Officials Manual for Bridge Evaluation (AASHTO Manual). The components of a complete bridge record are listed in the AASHTO Manual. Many of the items listed will be included in [SIIMS](#) for each bridge. Bridge owners are encouraged to include electronic copies of these items in [SIIMS](#) as soon as possible.

The following list of items shall not to be considered in lieu of the requirements in the AASHTO Manual. All of the items in the AASHTO Manual will not be available for every bridge structure; therefore, the items listed below should be included in each bridge file as a minimum. However, any and all items addressed in the AASHTO Manual should be included in the bridge files when available.

### Bridge Plans

Plans for bridges are not required to be in the file folder; however, they are required to be readily available to the bridge owner, Program Manager, or Team Leader at all times. Plans for bridges let after January 1, 2011, shall be included in [SIIMS](#). Bridge owners are encouraged to scan relevant plan sheets for bridges let prior to January 1, 2011, and include them in [SIIMS](#).

### Repair Plans

Plans for bridge repair are not required to be in the file folder; however, they are required to be readily available to the bridge owner, Program Manager, or Team Leader at all times. Plans for bridges let after January 1, 2011, shall be included in [SIIMS](#). Bridge owners are encouraged to scan relevant plan sheets for bridges let prior to January 1, 2011, and include them in [SIIMS](#).

### Photographs

A road view and a side view of the bridge structure are the minimum requirement. Structures with Item 58, Deck; Item 59, Superstructure; Item 60, Substructure; Item 61, Channel / Channel Protection; and Item 62, Culvert, coding of 4 or less are required to have photographs of the deficiency. Structures that have had no changes from the previous inspection do not require updated photographs. All relevant photographs taken after January 1, 2012, will be required in [SIIMS](#).

### Scour Evaluation Data

All scour evaluation documentation is required to be in [SIIMS](#), including the Bridge Scour Stability Worksheet, Level A Evaluation (see [Attachment A](#) to this IM); Intermediate Scour Assessment Procedures Flowchart, Level B Evaluation (see [Attachment B](#) to this IM); and/or Level C [HEC 18](#) calculations. Bridge owners or Program Managers are required to indicate the level of scour analysis completed using the check boxes on the Channel/Channel Protection tab in [SIIMS](#). POAs (see [Attachment C](#) to this IM) are required to be in [SIIMS](#) and indicated on the Channel & Channel Protection form. Scour analysis worksheets and POAs will be required in [SIIMS](#) by January 1, 2013.

### Channel Cross Section

A channel cross section on the upstream side of the bridge is required to be a part of the bridge record. A standard Channel Cross Section form has been incorporated into [SIIMS](#). Each bridge structure is required to have a data point at the top of bank, toe of bank, thalweg, and each substructure unit. The Channel Cross Sections are to be updated every 4 years for natural waterways and 10 years for drainage ditches controlled by a drainage district in [SIIMS](#) unless conditions at the bridge warrant more frequent monitoring. The Channel Cross Section will be required in [SIIMS](#) after January 1, 2013.

### Local Agency Field Data Collection Form

The Local Agency Field Data Collection form will be completed and stored in [SIIMS](#).

## Structure Inventory and Appraisal Forms (SI&A)

The SI&A forms will be completed and stored in [SIIMS](#).

## Load Rating Calculations

The bridge record is required to include a complete record of the calculations of the bridges load carrying capacity. A standard Bridge Load Rating Report has been incorporated into [SIIMS](#) and is required to be completed for each bridge structure by January 1, 2013. The load rating calculations are required to be signed by a Professional Engineer, licensed in the State of Iowa. Electronic signatures for the forms in [SIIMS](#) are not required, but a signed copy of the load rating calculations is required to be in the bridge file folder. Bridge owners are encouraged to have an electronic scanned copy of the signed Bridge Load Rating form included in [SIIMS](#).

## Load Rating Evaluation Form

The Load Rating Evaluation Form, in SIIMS, is required to be completed for each in-depth or routine inspection. The Program Manager or Team Leader completing this form in SIIMS is not confirming that the load rating calculations are correct, only that the condition of the bridge has or has not changed. If any of the items on the form indicate that the condition of the bridge has changed since the most recent load rating calculations, then re-rating the structure for load carrying capacity is required.

## Critical Findings

A standard Critical Finding report form has been incorporated into [SIIMS](#). The completed report is to be filed in [SIIMS](#).

## Critical Features

FC and scour critical elements are addressed in [SIIMS](#).

## Special Inspection Equipment

The list of specialized equipment and any additional requirements to complete the bridge inspection is included in [SIIMS](#).

## QC Office Review Form

All bridge inspections will be required to have a QC Form completed by the Program Manager before the inspection is approved. There is a standard QC Form in [SIIMS](#), which will be required to be completed in [SIIMS](#) for each inspection.

## **Inspection Procedures – Master Lists** ([23 CFR 650.313](#), e)

A master list shall be kept which identifies an agency's FC bridges, the bridges requiring underwater inspection, scour critical bridges, unknown foundations, and bridges that are load posted. Additionally, it is recommended that a map be prepared showing each of these bridges for easy reference.

The master list can be generated by selecting the Manager side of [SIIMS](#) and running the report for FC bridges, underwater inspections, scour critical bridges, unknown foundations, and bridges that are load posted.

## Fracture Critical (FC) Bridges

The following information shall be kept as part of the inspection records for each FC bridge.

1. A drawing of the bridge showing the location of all FCMs.
2. The inspection frequency and procedures that are necessary to inspect each FCM within arm's reach. The procedure may include equipment required (i.e. climbing equipment, ladder, snooper truck) or access methods (i.e. ground access, walk on lower chord) used to inspect the member.

## Underwater Inspections

The following information shall be kept as part of the inspection records for each bridge requiring underwater inspection.

1. The location of all elements requiring an underwater inspection.
2. The inspection frequency and procedures necessary to inspect each element. The procedure may include equipment required or access methods used to inspect the member.

## Scour Critical Bridges

The following information shall be kept as part of the inspection records for each bridge determined to be scour critical or with unknown foundations. Item 113, Scour Critical, shall be coded as 2 or 3.

### 1. POA

The POA includes a specific plan for monitoring, inspecting, or closure of scour critical bridges during and after a significant flood event. The level of flooding that triggers the POA is determined and listed within the POA document. A Team Leader or a Professional Engineer, licensed in the State of Iowa, shall inspect a bridge before it may be reopened. (See [Attachment C](#) to this IM for an example)

### 2. Scour Analysis Procedures

The analysis used to determine the Item 113, Scour Critical, coding shall be included in the inspection file for each bridge as applicable. This may include a Level A, B, or C scour evaluation (see [Attachment A](#) and [Attachment B](#) to this IM).

If a bridge has been designed for scour, a computed scour depth notation shall be shown on the plans or included in the inspection file.

### 3. Scour Inspection Frequency

All bridges should be monitored for changes that may affect the scour rating at the routine inspection interval.

Review Level A Bridge Scour Stability Worksheets (see [Attachment A](#) to this IM) and upstream channel cross section to determine scour rating.

New and reconstructed bridges shall be designed to resist scour in accordance with HEC 18, as required by AASHTO Bridge Design Specifications and [FHWA Technical Advisory, Evaluating Bridges for Scour, dated October 28, 1991](#).

## Unknown Foundations

The following information shall be kept as part of the inspection records for each bridge with unknown foundations.

1. A POA for monitoring bridges with unknown foundations should be developed and implemented to reduce the risk to users from a bridge failure during and immediately after a flood event (see [HEC 23](#)). Also, the use of risk assessment, standard design practices, and engineering judgment can be used to reduce the risk of scour induced failures.
2. Use [Attachment G](#) and [Attachment H](#) to this IM to evaluate the bridge according to the following procedures:
  - A. Use the Procedural Flowchart (see [Attachment G](#) to this IM) to determine if the foundation type and depth can be determined. If not, then go to Step B.

- B. Complete the Risk Assessment Worksheet (see [Attachment G](#) to this IM) utilizing the USGS Hydrologic Region (see [Attachment H](#) to this IM) information provided and the SI&A form. Determined the risk category based on the point totals and go to Step C.
- C. Utilize the appropriate Risk Category Flowchart to determine if the structure requires a plan of action. If so, refer to [Attachment G](#) to this IM for additional guidance on developing the appropriate plan of action.

The risk-based POAs developed for the unknown foundations are required to be in [SIIMS](#) by January 1, 2013.

Bridge owners are cautioned that simply developing a POA for each bridge with an unknown foundation without first making every effort to determine the foundation (by discovery or inference) may not be advisable. The personnel required to implement POA's for a large number of bridges during a widespread rainfall event may overwhelm staff.

#### Load Posting

Maintain a list of posted bridges with weight limits for each bridge. Additionally it is recommended that a map be prepared showing the locations of these bridges.

### **Inspection Procedures – Quality Control (QC) and Quality Assurance (QA) ([23 CFR 650.313](#), g)**

#### Quality Control (QC) Program

It is the Program Manager's responsibility to ensure the following:

1. The "Monthly Notifications" are reviewed to identify any bridges that have not been inspected within the specified frequency or are not in compliance with load posting requirements.
2. [SIIMS](#) is used to document each inspection, including but not limited to the following:
  - a. Local Agency Field Data Collection Forms in [SIIMS](#) are completed.
  - b. The QC Form in SIIMS is completed subsequent to each inspection.
  - c. The Supplemental Inspection Information tab is completed in [SIIMS](#) for each bridge.
3. Master lists are maintained as required in the Inspection Procedures-Master List section of this IM.
4. Team Leaders maintain the education/experience/training requirements contained in the Qualifications of Personnel section of this IM.
5. The individual charged with the overall responsibility for load rating bridges is a Professional Engineer, licensed in the State of Iowa.

#### Quality Assurance (QA) Program

##### Bridge Record Reviews

A review of the bridge records for LPA's to determine if they contain the minimum items listed in Inspection Procedures – Records section of this IM, will be conducted by the Office of Bridges and Structures utilizing [SIIMS](#) on an annual basis for randomly selected LPAs. Additional reviews of the bridge records will be conducted during on site reviews in conjunction with the DOT's annual oversight of the LPAs.

## Team Leader Reviews

It is the Program Manager's responsibility to ensure the following:

1. Team Leader Reviews are conducted every 4 years, beginning January 1, 2012.
  - a. Independent party review by a Professional Engineer, licensed in the State of Iowa, and qualified as a Team Leader.
  - b. Field review of inspection data for 10 bridges inspected during the past 12 months. The bridges selected shall include, but not limited to, predominant bridge types inspected and bridges with lower sufficiency ratings. The bridges selected shall include some bridges with Item 58, Deck; Item 59, Superstructure; Item 60, Substructure; Item 62, Culvert; or Item 70, Posting; rated 4 or less (if available for the bridges inspected by the Team Leader).
  - c. Reviewer accompanies the Team Leader during the inspection of 2 of the 10 selected bridges.
  - d. Quality Assurance Field Review Worksheet ([Attachment L](#) of this IM) completed for each bridge inspected.
  - e. Verification of the validity of information provided by an individual to obtain approval to utilize [SIIMS](#) as a Team Leader.
  - f. Documentation that the Team Leader has completed the Bridge Inspector Refresher Training Course and, if needed, Fracture Critical Inspection Techniques for Steel Bridges Training Course.

The findings of the Team Leader Reviews shall be attached to an e-mail to [eric.souhrada@dot.iowa.gov](mailto:eric.souhrada@dot.iowa.gov). The report shall be stamped and signed by the reviewer. If there are negative findings regarding the Team Leader, the report shall include corrective recommendations, or actions taken, to resolve those findings.

## 2. Disqualification and re-instatement of Team Leaders

The Program Manager shall disqualify a Team Leader if they have provided invalid information to obtain approval to utilize [SIIMS](#) as a Team Leader or have not completed the required training required by the Qualification of Personnel section of this IM. The disqualification shall be as follows:

- a. Invalid information willfully provided to obtain approval to utilize [SIIMS](#) as a Team Leader: Permanent disqualification as a Team Leader.
- b. Violation of the Qualification of Personnel section of this IM: Disqualification as a Team Leader for 1 year. After the disqualification period, an individual can be re-instated when they meet the requirements of Qualification of Personnel section of this IM.

## Load Rating Reviews

A Load Rating Review of 10 bridges is conducted every 4 years, except as noted below:

1. Each bridge owner shall have the load rating calculations reviewed by a Professional Engineer, licensed in the State of Iowa. The reviewing Professional Engineer shall not review their own rating calculations.
2. If a load rating differs by more than 15%, the reviewing engineer and the engineer being reviewed must come to a consensus as to what the rating should be.
3. Bridge owners with less than 10 bridges shall have all load ratings reviewed every 8 years.

The findings of the Load Rating Review shall be reported to the bridge owner. The report shall be stamped and signed by the reviewing engineer.

If there are negative findings regarding the Load Rating Review, the report shall include corrective recommendations or actions taken to resolve these findings.

## **Inspection Procedures – Critical Findings ([23 CFR 650.313](#), h)**

### **Purpose**

The purpose of the Critical Finding Bridge Report in [SIIMS](#) is to ensure that serious bridge damages or defects are reported, the necessary notifications are made to the bridge owner by the Program Manager or Team Leader, and that proper and timely action is taken to ensure the safety of the traveling public. This process alerts the bridge owner so damage or deterioration can be repaired in a proper and timely manner and that the damage and repairs are documented.

FHWA will query the Critical Finding Reports in SIIMS every quarter; therefore, it is imperative that the LPA's complete the Critical Finding Report in [SIIMS](#) as per this I.M.

### **Criteria**

Conditions that require the filing of a critical finding report shall include, but are not limited to one of the following:

1. a partial or complete bridge collapse,
2. structural or other defects posing a definite and immediate public safety hazard,
3. a condition rating of 2 or less for any of the following bridge items:
  - a. Item 58, Deck,
  - b. Item 59, Superstructure,
  - c. Item 60, Substructure,
  - d. Item 61, Channel/Channel Protection,
  - e. Item 62, Culverts, or
  - f. Item 113, Scour Critical.

In cases where it is determined that the bridge could be used safely at a lower posted load limit, the bridge may remain open if it is immediately posted at the reduced limit.

### **Procedure for County/City Bridges**

1. The individual discovering the critical finding shall:
  - a. Immediately report the finding to the responsible local official, who may notify law enforcement or maintenance personnel to close the bridge.
  - b. Complete Part I of the critical finding report and submit a copy to the responsible local official within 48 hours of the finding.
2. The responsible local official shall
  - a. Take action to ensure the safety of the traveling public.
  - b. Complete Part II of the critical finding report within 5 days of the finding.
3. When final action is taken to resolve the critical finding issue, the responsible local official shall complete Parts III & IV of the critical finding report as necessary.
4. Before a closed bridge may be reopened to traffic, a Professional Engineer, licensed in State of Iowa, shall approve any structural repairs, the bridge shall be load rated, and the bridge shall be inspected by a Team Leader.
5. If final action is not taken within 6 months of the initial report of the critical finding, the responsible official shall complete Part III, indicating the current status of the bridge.

**Inventory** ([23 CFR 650.315](#),

Iowa DOT maintains an inventory of all bridges subject to NBIS. This inventory is available for viewing and updating by local agencies in [SIIMS](#). All local agencies shall enter their inventory data updates into the database using this access system. User names and passwords are available by request from the [State of Iowa Enterprise A & A System](#). Access to [SIIMS](#) will be approved and granted by the Iowa DOT Office of Bridges and Structures, Bridge Maintenance and Inspection (BM&I) Unit.

For all types of bridge inspections, the inspection dates and condition codes shall be entered into [SIIMS](#) within 30 days of the field inspection.

Final approval of inspection reports, including load ratings if necessary, shall be completed in [SIIMS](#) within 90 days of the field inspection.



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# INSTRUCTIONAL MEMORANDUMS

## To Local Public Agencies



To: Counties and Cities

Date: December 1, 2011

From: Office of Local Systems

I.M. No. 3.730

Subject: Iowa DOT Letting Process

**Contents:** This Instructional Memorandum (I.M.) provides guidance, instructions, and information for Local Public Agency (LPA) projects that are let through the Iowa DOT letting process. It includes descriptions of the procedures, beginning with turning a project in for letting and continuing through obtaining an executed contract between the LPA and the responsible bidder who has submitted the lowest responsive bid.

[Attachment A](#) - Iowa DOT Letting Process flowchart

### Introduction

There are many State and Federal rules, policies, or procedures that apply to construction contract lettings conducted by the Iowa DOT. The Iowa DOT's process for advertising, letting, and awarding Federal-aid highway construction contracts must comply with [23 CFR Part 635](#). For LPA Federal-aid projects, the Iowa DOT is responsible for monitoring the LPA's compliance with these rules, policies, and procedures. The Iowa DOT requires all LPA Federal-aid projects, except those listed in [I.M. 3.720](#), Local Letting Process - Federal-aid, be advertised, let, and awarded through its Office of Contracts.

The Iowa DOT letting procedures cover all Federal requirements for Buy America, Non-collusion Affidavit, Non-discrimination Affidavit, Lobbying Certification, Certification of Non-segregate Facilities, exclusion of debarred contractors, Equal Employment Opportunity and Affirmative Action compliance reviews, and DBE program administration.

### Preparation

1<sup>st</sup> Tuesday of the month 2 months before letting

After completion of the requirements for [I.M. 3.505](#), Check and Final Plans, the Iowa DOT's letting process begins on the first Tuesday of the month 2 months before the anticipated letting date. The Administering Office shall submit the plans, Special Provisions, an engineer's estimate, and other required documents to the Iowa DOT's Office of Contracts in accordance with [I.M. 3.005](#), Project Development Submittal Dates and Information.

The engineer's estimate is considered confidential information as per Iowa Code 22.7; therefore, the Office of Contracts does not release the engineer's estimate before or after the letting.

The LPA must request any special considerations for the project at this time. Examples include contract period requests and innovative contracting.

If any project clearances have not been obtained, or there are other conditions that require a Public Interest Finding (PIF), a PIF must be submitted by the LPA and approved by the Administering Office prior to this date. Otherwise, the project may not enter the letting process. For more information, refer to [I.M. 3.760](#), Public Interest Findings.

During the next 2 weeks, the Office of Contracts will review the plans and specifications to see if they are biddable. If the Office of Contracts determines that they are not biddable, they will notify the person listed as the "Designer Contact" in TPMS and on the Local Project Plan Turn-in Checklist of the required changes and copy the Administering Office. The Designer Contact must make the requested changes and supply revised plan sheets within the time frame specified by the Office of Contracts. The LPA shall also provide a copy of any revised plans to the Administering Office. For more information on the Office of Contracts' plan requirements, refer to the Office of Contract's [Letting Guidelines](#).

3<sup>rd</sup> Tuesday of the month 2 months before letting

This is the last day the Designer Contact may request changes to the plans and Special Provisions. During the next 2 weeks, the Office of Contracts begins to finalize the bidding proposal, and determine contract periods. The Office of Contracts will also review the projects to determine if projects should be packaged together. For more information on the contract periods and packaging of projects, refer to the Office of Contract's [Letting Guidelines](#).

1<sup>st</sup> Tuesday of the month 1 month before letting

This is the day the contract documents must be complete. If a PIF was submitted for a project clearance, the project clearance must be obtained by this date, except those submitted for Right-of-way parcels scheduled for condemnation. Otherwise, the Office of Contracts will withdraw the project from the letting.

The Office of Contracts submits all projects to the Federal Highway Administration (FHWA) for their review; and requests authorization. If the project has full oversight by FHWA, this submittal also includes the plans, specifications, and engineer's estimate. During the next 2 weeks, FHWA reviews the projects submitted.

If FHWA determines that they cannot authorize a project for letting, they notify the Office of Contracts of the issue(s). The Office of Contracts then notifies the Administering Office of FHWA's issue(s). If the issues cannot be resolved and FHWA authorization obtained by the 3<sup>rd</sup> Tuesday of the month 1 month prior to letting, the Office of Contracts will withdraw the project from the letting. The Administering Office will contact the LPA to address the issue(s) and determine a new letting date. The LPA shall revise the plans and specifications as required and update the project information in TPMS.

The Office of Contracts sends the proposed contract periods to the Administering Offices for their distribution to LPAs for review. If LPAs have any concerns regarding the proposed contract period for their projects, they contact the Office of Contracts and copy the Administering Office. Only minor adjustments to the contract periods will be considered.

The Office of Contracts holds their Disadvantaged Business Enterprises (DBE) Goal Setting Meeting and sets DBE goals for contracts as appropriate so the DOT can achieve their annual DBE Goal.

3<sup>rd</sup> Tuesday of the month 1 month before letting

The Office of Contracts is notified by the FHWA of the projects they have authorized for letting.

The Office of Contracts sends a Notice to Advertise to the Des Moines Register and posts a notice on the Bid Express ([BIDX](#)) web site

The contract documents are made available in electronic format to the potential bidders [BIDX](#) web site. Contractors may also order paper plans if desired on the [BIDX](#) web site. All questions about any of the contract documents must be directed to the Office of Contracts.

After this day, all changes to the contract documents must be made by addendum. If the LPA believes an addendum is needed, the LPA shall send a request to the Office of Contracts, including the proposed text of the addendum, and copy the Administering Office. The Office of Contracts reviews the request and determines if an addendum will be prepared. If an addendum is deemed necessary, the Office of Contracts prepares and distributes the addendum to the prime contractors who have requested bidding documents. For more information on the criteria used to determine if an addendum is justified, refer to the Office of Contract's [Letting Guidelines](#).

1<sup>st</sup> Tuesday of the month of letting

All condemnation hearings for previously unacquired right-of-way parcels must have been held so the project is cleared for letting. Otherwise, the project will be withdrawn from the letting.

All addendum requests should be submitted. Addendum requests submitted after this date may not be approved. If the Office of Contracts has not received confirmation of receipt of the addendum from all the prime contractors who have requested bidding documents prior to the letting, the project will be withdrawn from the letting.

## Letting

The lettings are held the 3<sup>rd</sup> Tuesday of each month; except in January, when it is held the Wednesday after the 3<sup>rd</sup> Tuesday. Bids are due at 10:00 AM. The Office of Contracts opens the bids at 800 Lincoln Way, Ames, Iowa, and reads all bids starting at 10:30 AM, with the as-read-bid-totals available on [BIDX](#) shortly after the reading. Any bid received after 10:00 AM is returned unopened to the bidder. Any bid deemed non-responsive will not be read or posted.

## Contract Award or Rejection

All LPA projects let by the Iowa DOT will be awarded on the basis of the responsible bidder submitting the lowest responsive bid ("low bidder"). The Office of Contracts ensures all bidders are responsible by only allowing pre-qualified contractors to bid. The Office of Contracts determines the low bidder and makes an award recommendation. The LPA makes the final award determination after performing the bid analysis described below.

After bids are opened, the Office of Contracts sends the LPA a letter instructing them to take action, along with 2 unsigned original contracts with a copy of which will include Form FHWA-1273 on Federal-aid projects, Required Contract Provisions, physically attached; the Tabulation of Bids; and a letter informing the low bidders of the contracts for which they are the low bidder. The instruction letter to the LPA directs them to either award a contract to the low bidder or reject all bids within 30 days of the letting date. If over 30 days, the low bidder is allowed to withdraw their bid and their proposal guarantee is returned to them with no penalty.

There should be no discussions between the LPA and the low bidder until after the contract is executed.

## Bid Analysis

The LPA is responsible for reviewing the bid tabulations and documenting the basis for its decision to either award a contract or reject all bids. Factors to consider in the bid analysis should include the following:

1. Number of bids submitted on the project(s).
2. Distribution and range of bids received.
3. Urgency of the project(s).
4. Any unbalancing of unit bid items that may be detrimental to the contracting authority.
5. Current market conditions and workloads within the contracting industry.
6. Potential savings if the project(s) were re-advertised for another contract letting.
7. Potential changes to the project(s) or contract period that could affect the bid price.
8. Comparison of the low bidder to the bid prices of the other bidders on the project(s).
9. Comparison of bid prices with similar projects in the contract letting.
10. Justification for significant bid price differences.

Bids that exceed the engineer's estimate shall not be awarded, unless one of the following conditions is met:

1. There is adequate competition. Adequate competition shall be determined based on the number of bids received and the percentage of the low bid in comparison to the engineer's estimate, as shown below:

Number of bids received	Low bid percentage of the engineer's estimate does not exceed:
5 or more	120%
4	115%
3	110%
2	105%
1	100%

2. The project is essential and deferral would be contrary to the public interest. Examples of such projects include, but are not limited to the following:
  - a. Safety projects where an extremely hazardous condition exists.
  - b. Projects that close a gap in a corridor.
  - c. Projects that are critical to other staged projects in a corridor.
3. Re-advertising the project without any change to the contract requirements would not likely result in a lower bid.
4. An error was made in the engineer's estimate, and the error, if corrected, would result in a bid below the engineer's estimate.

As a condition of letting the project, the LPA agrees it has adequate financial resources to award a contract if competitive bids are received. Therefore, the LPA shall not reject a competitive bid, as define above, unless the low bid is more than 120% of the engineer's estimate.

#### Awarding a Contract

If the LPA elects to award a contract to the low bidder, the LPA should schedule the proposed contract for action at the next Board of Supervisors or City Council meeting. After the Board of Supervisors or City Council passes a resolution to award the proposed contract, the LPA sends 2 originals of the unsigned contract to the low bidder. The low bidder then signs both originals of the contract and returns them along with their performance bond on the DOT's form; a Certificate of Insurance; and the electronic file, or a printed copy of the electronic file, from the Sitexchange software furnished by the Iowa DOT listing the requested subcontractors, to the LPA for review. The electronic Sitexchange file listing the requested subcontractors must also be e-mailed to [dot.contracts@dot.iowa.gov](mailto:dot.contracts@dot.iowa.gov).

If approved, the LPA signs both originals of the contract and sends them, along with the performance bond, Certificate of Insurance, and a signed first page of the electronic Sitexchange file indicating approval of the listed subcontractors, to the Office of Contracts for their review. The Office of Contracts determines if the subcontractors and submitted documents are acceptable, and if so, signs both original contracts to indicate the Iowa DOT's concurrence in the contract award. **The Iowa DOT's Concurrence signature does not make the Iowa DOT a party to the contract; however, it is required before any work on the contract may begin in which Federal-aid reimbursement will be requested.** The Office of Contracts sends 1 copy of the executed contract to the LPA and 1 to the contractor.

#### Rejecting all Bids

If the LPA does not award a contract to the low bidder, the LPA shall notify the low bidder. The LPA shall also notify the Office of Contracts and the Administering Office explaining why all bids were rejected, and state its future plans for the project; i.e., whether it will be revised and re-let or if the project will be cancelled. If the project will be re-let, some type of change to the plans, specifications, or contract period should be made in order to obtain lower bids. Depending on when the contract will be re-let, Federal funding may need to be de-obligated. If the contract is not going to be re-let, the Federal funding shall be de-obligated. For additional information, refer to [I.M. 2.080](#), Inactive Obligations.

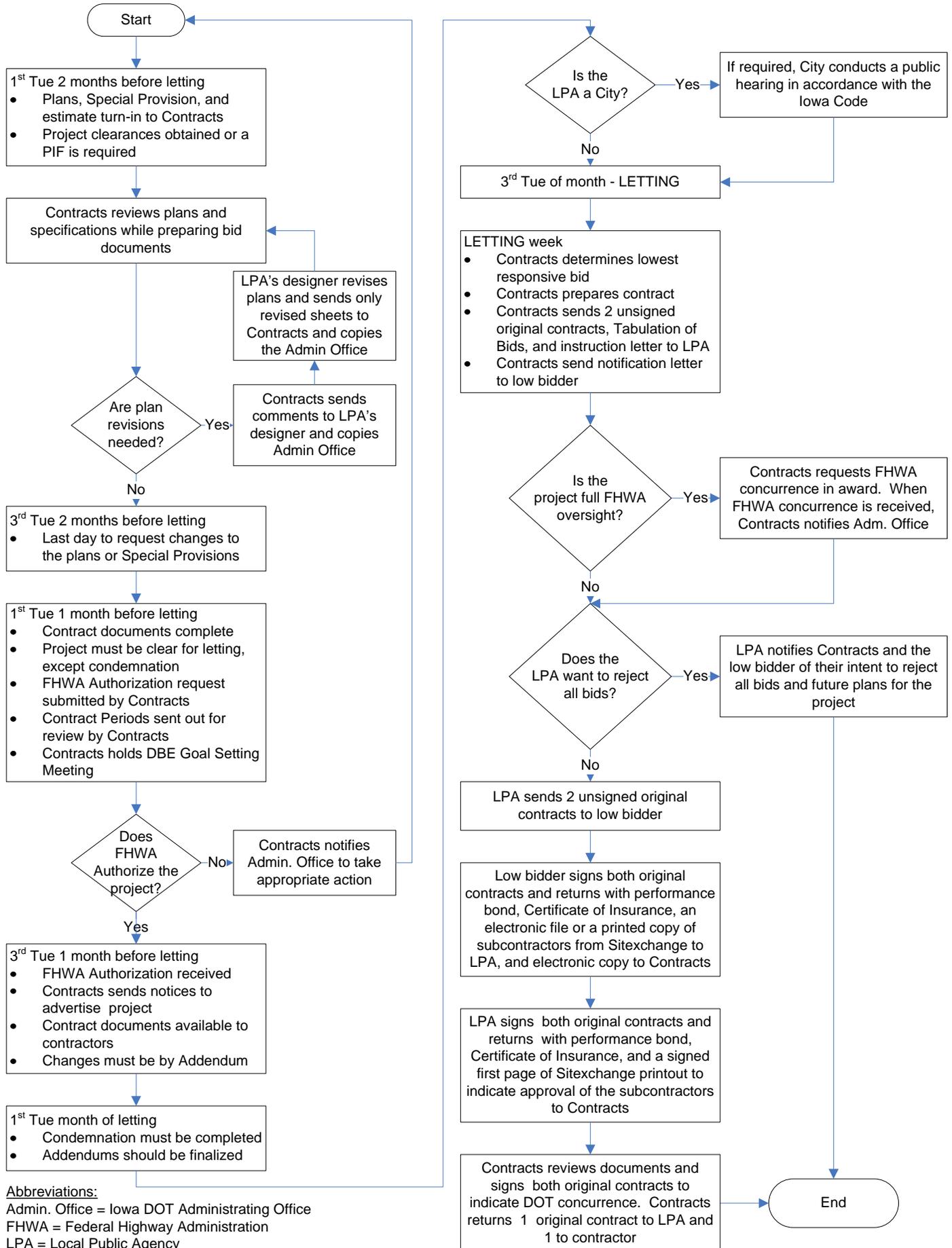
#### Beginning Work

After receipt of written notification of Iowa DOT concurrence of the contract from the Iowa DOT or the signed contract from the Office of Contracts, the contractor may begin work. The contractor should not be allowed to begin work prior to the Iowa DOT concurrence of the contract in case there are any problems with the required performance bonds, Certificate of Insurance, or subcontracts that would preclude Federal-aid reimbursement. For the same reason, the LPA should not hold a pre-construction meeting before receiving written notification of Iowa DOT concurrence or the signed contract from the Office of Contracts.

The LPA should not delete substantial portions of the contract after the contract has been executed in order to bring the project within budget as this could impact the bidding process.

For information regarding the procedures for construction contract administration, refer to [I.M. 3.805](#), Construction Inspection.

### Iowa DOT Letting Process



**Abbreviations:**  
 Admin. Office = Iowa DOT Administrating Office  
 FHWA = Federal Highway Administration  
 LPA = Local Public Agency  
 Contracts = Office of Contracts, Iowa DOT  
 PIF = Public Interest Finding

