

Guide and / or I.M. Revision Notice

To: Cities, Counties, and Consultants

Date: December 19, 2014

From: Office of Local Systems

Revision Notice Number: 2014-05

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existing Project Development Information Packet (Packet) or County Engineers I.M. documents that have been replaced or superseded.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 or 515-239-1051.

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

Document Title or I.M Number	Summary of Significant Revision(s)
I.M. Table of Contents December 19, 2014	The I.M. Table of Contents has been revised to reflect new or revised I.M.s, as indicated below.
I.M. 2.005 Farm-to-Market Program December 19, 2014	This I.M. has been updated. Substantive changes from the previous version include the following: <ul style="list-style-type: none"> • Added clarification that FM funds cannot be used for in-house engineering expenses.
I.M. 2.020 Federal and State Bridge Programs December 19, 2104	This I.M. has been updated. Substantive changes from the previous version include the following: <ul style="list-style-type: none"> • Eliminated the requirements for FHWA approval when it is desired to replace a bridge instead of rehabilitation. • Redirected the design guidelines references.
I.M. 3.111 Threatened and Endangered Species December 19, 2014	This I.M. has been updated. Substantive changes from the previous version include the following: <ul style="list-style-type: none"> • Changed the requirements under “Evaluation of Species and Habitats, section 1 and 2. This allows the LPA to perform the initial review of possible impacts to protected species or habitats, rather than requesting this review from the Iowa DNR. • Throughout the I.M. and Attachment A, made references to the “Determination of Effect for Threatened and Endangered Species for Local Public Agencies form” more compact.
I.M. 3.210 Rural Design Guidelines December 19, 2014	This I.M. has been updated. Substantive changes from the previous version include the following: <ul style="list-style-type: none"> • Changed “Cross Slopes” to “Entrance Foreslopes” to clarify the location.
I.M. 3.305 Federal Participation in Consultant Costs December 19, 2014	This I.M. has been substantially revised and expanded. Changes from the previous version are too numerous to detail in this notice, but they are all shown on the following marked-up version of this I.M. at: <ul style="list-style-type: none"> • http://www.iowadot.gov/local_systems/publications/im/3305redline2014-12-19.pdf

Document Title or I.M Number	Summary of Significant Revision(s)
I.M. 3.310 Federal-aid Participation in In- House Services December 19, 2014	This I.M. has been updated. Substantive changes from the previous version include the following: <ul style="list-style-type: none"> • Add and updated references to the CFR in the Eligible Costs section.
I.M. 3.405 Preliminary Plans December 19, 2014	This I.M. has been updated. Substantive changes from the previous version include the following: <ul style="list-style-type: none"> • Replace the requirements for urban design from I.M. 3.205, Urban Design, to the Iowa Statewide Urban Design and Specifications (SUDAS) Design Manual, Chapter 5. • Several changes were made to Attachment B, Preliminary Plan Checklist: <ul style="list-style-type: none"> ○ A checklist item was added for the TPMS Project Location Map. Having an accurate map is important because spatial data is being derived from the map in TPMS. Maps must be consistent with the project description in TPMS Programming. ○ The Federal Funds Programmed checklist item was modified to clarify that it only applies to county projects funded by Highway Bridge Program (HBP) and Highway Safety Improvement Program – Secondary (HSIP-S) funds. Also, the threshold for when a project should not be submitted for letting because of a difference in the amount of HBP funds programmed and the county’s current estimate was decreased to 15%. However, provisions were also added to allow a county to proceed towards letting even if the threshold is exceeded, but with a reduced Federal pro-rata share for the project. ○ A note was added to explain responsibility if a signature block is not added.
I.M. 3.505, Attachment B Check and Final Plan Checklist December 19, 2014	This Attachment to I.M. 3.505 has been updated. Substantive changes from the previous version include the following: <ul style="list-style-type: none"> ○ The Federal Funds Programmed checklist item was modified to clarify that it only applies to county projects funded by Highway Bridge Program (HBP) and Highway Safety Improvement Program – Secondary (HSIP-S) funds. Also, the threshold for when a project should not be submitted for letting because of a difference in the amount of HBP funds programmed and the county’s current estimate was decreased to 15%. However, provisions were also added to allow a county to proceed towards letting even if the threshold is exceeded, but with a reduced Federal pro-rata share for the project. • In the U.S. Army corps of Engineers 404 Permit, the requirements for temporary stream access were changed. • Use of Tabulation 110-17 is recommended when the Clearing and Grubbing, by unit, bid items is included in the plans.
I.M. 3.810 Federal-aid Construction by Local Agency Forces December 19, 2014	This I.M. has been updated. Substantive changes from the previous version include the following: <ul style="list-style-type: none"> • Add and updated references to the CFR in the Eligible Costs section.
I.M. 3.910 Final Review, Audit, and Close-out Procedures for Federal-aid Projects December 19, 2014	This I.M. has been updated. Substantive changes from the previous version include the following: <ul style="list-style-type: none"> • The Inspection of Field Work requirements were replaced. A time-line goal was included that should expedite project completion and result in one complete Final Inspection Punch List. • A time restriction was added to the Pre-audit Process to expedite this process. • Guidance was added to the Semi-final Voucher and Semi-final Pay Estimate when a

Document Title or I.M Number	Summary of Significant Revision(s)
	<p>there is a dispute over quantities or price adjustments.</p> <ul style="list-style-type: none"> • Changed the system approach requirement for Final Audits from projects that are let in a given Federal fiscal-year to those projects that have been completed at the time of an audit. • As part of the Construction Audit Process, a clarification was made that the Project Engineer will prepare a Pre-audit Checklist and submit it to the Administering Office. The Administering Office will review the Pre-audit Checklist before the final audit. • A requirement was added that the Administering Office will review the Final Forms Packet within 30 days of receipt. • Attachment B, C, and D reflect the requirement for developing one Punch List. • Attachment E has been substantially revised and expanded. Changes from the previous version are too numerous to detail in this notice, but they are all shown on the following marked-up version at: http://www.iowadot.gov/local_systems/publications/im/3910eredline2014-12-19.pdf • Attachment F contains the following substantive changes: <ul style="list-style-type: none"> ○ The Final Contract Construction Progress Voucher must now be signed by the Chairman of the Board of Supervisors and the District Local Systems Engineer. ○ The Category Descriptions section was deleted. ○ The Certification of DBE Accomplishments section was revised to reflect current requirements. ○ The Contractor Evaluation section was revised to reflect current requirements. ○ The Statement of Salvaged Materials section was deleted. ○ The Change Order section was deleted. ○ The Non-compliance Statement section was deleted.

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
-----	---------	---------------	------------

Chapter 1 – General Information

Section 1.0 -- General

1.020	Pavement Friction Evaluation Program	August 10, 2011	Both
1.030	Ordering Forms and Supplies From the Iowa Department of Transportation	November 2001	Both
1.050	Manuals, Guides and Instructional Information Available to Counties	December 2002	Both
1.070*	Title VI and Nondiscrimination Requirements	July 20, 2012	Both
1.080*	ADA Requirements	October 1, 2013	Both
	Attachment A – Sample Curb Ramp Transition Plan (Word)	August 24, 2012	Both

Section 1.1 -- References

1.120	References to the Iowa Code	August 2003	Counties
-----------------------	-----------------------------	-------------	----------

Chapter 2 – Administration

Section 2.0 -- Finance

2.005	Farm-to-Market Program	December 19, 2014	Counties
2.010	Transfer of Local Secondary Road Use Tax Funds to the Farm-to-Market Fund	November 2001	Counties
	Attachment A - Local to FM Fund Transfer Resolution (Word)	November 2001	Counties
2.020*	Federal and State Bridge Programs	December 19, 2014	Both
	Attachment A – City Bridge Priority Point Rating Worksheet (Word)	July 18, 2011	Both
	Attachment B – County Bridge Priority Point Rating Worksheet (Word)	July 18, 2011	Both
	Attachment C – Touchdown Points and Limits of Participation	July 18, 2011	Both
	Attachment D – County HBP Fiscal Constraint Requirements	July 18, 2011	Both
2.030	Transfer of Farm-to-Market Funds to the Local Secondary Road Fund	July 20, 2012	Counties
2.040	Temporary Allocation of Farm-to-Market Funds	November 2001	Counties
2.050	Procedure to Amend a County Secondary Road Construction Program and Budget	November 26, 2013	Counties
	Attachment A – Example of Resolution to Add, Modify, or Advance a Project (Word)	November 26, 2013	Counties
2.071	Secondary Road Budget Accounting Code Series	July 2005	Counties

Section 2.1 -- Maintenance

2.110	Maintenance of County Roads at Intersections, Interchanges, and Grade Separations with the Primary Highway System	May 12, 2014	Counties
	Attachment A – Iowa DOT PPM 630.01, Rural Intersection and Destination Lighting	March 16, 2004	Counties
	Attachment B – Iowa DOT PPM 630.03, Interchange and Freeway Lighting	March 16, 2004	Counties
2.120*	Bridge Inspections	July 18, 2013	Both
	Attachment A - Bridge Scour Stability Worksheet - Level A Evaluation (Word)	May 11, 2011	Both
	Attachment B - Intermediate Scour Assessment - Level B Evaluations	October 1, 2013	Both
	Attachment C - Scour Plan of Action (POA) (Word)	May 11, 2011	Both
	Attachment D - Scope of Services for NBI Bridge Inspection Services (Word)	July 18, 2013	Both
	Attachment E - Iowa Legal Trucks Diagrams	July 18, 2013	Both
	Attachment F - Routine Permit Trucks Diagrams	July 18, 2013	Both
	Attachment G - USGS Hydrologic Region Map with Region Descriptions	July 18, 2013	Both
	Attachment H - Unknown Foundations Guidance, Flowchart, Risk Assessment, Worksheet, and Plan of Action (POA) - Level A Evaluation (Word)	July 18, 2013	Both
	Attachment I - Unknown Foundations Flowchart - Level B Evaluation	July 18, 2013	Both
	Attachment J - Quality Assurance Field Review Worksheet (Word)	July 18, 2013	Both
	Attachment K - Fracture Critical Member Locations and Conditions for Trusses form (Word)	July 18, 2013	Both
	Attachment L - Fracture Critical Member Locations and Conditions for Thru/Two Girders form (Word)	July 18, 2013	Both
	Attachment M - Sample Fracture Critical Member Locations and Conditions for Trusses form	July 18, 2013	Both

Section 2.2 -- Traffic Service and Control

2.210	Engineering and Traffic Investigations – Speed Limit Study	March 2002	Counties
	Attachment A - Speed Restriction Ordinance (Word)	March 2002	Counties
	Attachment B - Amendment to Speed Restriction Ordinance (Word)	March 2002	Counties
	Attachment C - Resolution for Establishing Speed Limits (Word)	March 2002	Counties
2.220	Establishing and Signing Area Service B and Area Service C Roads	May 12, 2014	Counties
	Attachment A - Area Service “B” Sample Ordinance (Word)	May 12, 2014	Counties
	Attachment B - Area Service “B” Sample Resolution (Word)	May 12, 2014	Counties
	Attachment C - Area Service “C” Sample Ordinance (Word)	May 12, 2014	Counties
	Attachment D - Area Service “C” Sample Resolution (Word)	May 12, 2014	Counties
2.230	Signing for Low Cost Stream Crossings	June 2002	Counties
	Attachment A - Resolution for Low-Water Stream Crossing (Word)	June 2002	Counties
2.240	Iowa DOT Traffic Counts	(future)	Both

Section 2.3 -- Agreements

2.310	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 (Word)	April 2002	Both

Chapter 3 – Project Development

Section 3.0 -- General

3.002*	Federal-aid Project Scheduling	February 16, 2007	Both
3.005*	Project Development Submittal Dates and Information	February 11, 2014	Both
3.030	Project Development Outline -- Local Funding (L)	February 2002	Both
3.050*	In-Kind Contributions	August 10, 2011	Both
3.060	Project Numbers (see I.M. 3.14 , dated December 2002)	(future)	Both

Section 3.1 -- Environmental Reviews and Permits

3.105*	Concept Statement Instructions (see Packet, Index No. 6, Concept Statement Instructions)	(future)	Both
	Attachment A – Example Concept Statement	(future)	Both
3.110*	Environmental Data Sheet Instructions (see Packet, Index No. 6, Environmental Datasheet Instructions)	(future)	Both
	Attachment A – Example Environmental Data Sheet	(future)	Both
3.111	Threatened and Endangered Species	December 19, 2014	Both
	Attachment A - Section 7 Process Flowchart	July 1, 2014	Both
3.112*	FHWA Environmental Concurrence Process (see Packet, Index No. 6, NEPA Project Classification Process)	(future)	Both
	Attachment A - Environmental Concurrence Process Overview (see Packet, Flowcharts, Chart No. 6 – Environmental Process Overview)	(future)	Both
	Attachment B - Environmental Assessment / FONSI Process (see Packet, Flowcharts, Chart No. 6A – Environmental Assessment / FONSI Process)	(future)	Both
	Attachment C - Environmental Impact Statement / ROD Process (see Packet, Flowcharts, Chart No. 6B – Environmental Impact Statement / ROD Process)	(future)	Both
	Attachment D - Section 106 Process (see Packet, Flowcharts, Chart No. 6C – Section 106 Process)	(future)	Both
	Attachment E - Section 4(f) Process (see Packet, Flowcharts, Chart No. 6D – Section 4(f) Process)	(future)	Both
3.114*	Cultural Resource Regulations (see Packet, Index No. 6, Cultural Resource Regulations)	(future)	Both
3.120*	Farmland Protection Policy Act Guidelines (see Packet, Index No. 6, Farmland Protection Policy Act Guidelines)	(future)	Both
	Attachment A - Farmland Protection Policy Act Process Flowchart (see Packet, Flowcharts, Chart No. 6E – Farmland Protection Policy Act Process)	(future)	Both
3.130*	404 Permit Process	March 26, 2008	Both
	Appendix A – 404 Permit Checklist	March 26, 2008	Both
3.140*	Storm Water Permits	July 18, 2011	Both
3.150*	Highway Improvements in the Vicinity of Airports or Heliports	December 3, 2007	Both
3.160*	Asbestos Inspection, Removal, and Notification Requirements	April 12, 2007	Both
	Attachment A – Notification of Demolition form (Word)	April 12, 2007	Both

Section 3.2 -- Design Guidelines and Exceptions

3.210*	Rural Design Guidelines	December 19, 2014	Counties
3.213*	Traffic Barriers (Guardrail and Bridge Rail)	July 18, 2013	Both
	Attachment A - Bridge Barrier Rail Rating Systems (Word)	July 18, 2013	Both
3.214*	3R Guidelines	October 1, 2013	Both
3.215*	Clear Zone Guidelines	March 26, 2008	Both
3.216*	Economic Analysis (Benefit-to-Cost Ratio)	October 1, 2013	Both
3.218*	Design Exception Process	October 1, 2013	Both
	Attachment A – Design Exception Process Flowchart	October 1, 2013	Both

Section 3.3 -- Consultant and In-House Design

3.305*	Federal-aid Participation in Consultant Costs	December 19, 2014	Both
	Attachment A – Federal-Aid Consultant Checklist	December 19, 2014	Both
	Attachment B – Requirements for Federal-Aid Consultant Contracts	December 19, 2014	Both
	Attachment C – Payment Methods	December 19, 2014	Both
	Attachment D – Sample Consultant Contract (Word)	December 19, 2014	Both
	Attachment E – Errors and Omissions	December 19, 2014	Both
3.310*	Federal-aid Participation in In-House Services	December 19, 2014	Both
	Attachment A - Scope of Work and Budget Worksheet	February 18, 2013	Both

Section 3.4 -- Preliminary Design

3.405*	Preliminary Plans	December 19, 2014	Both
	Attachment A – Preliminary Plan Guidelines	February 18, 2013	Both
	Attachment B – Preliminary Plan Checklist (Word)	December 19, 2014	Both
	Attachment C – Preliminary Plan Process Flowchart	February 18, 2013	Both
3.410*	Preliminary Bridge or Culvert Plans	June 18, 2010	Both
	Attachment A – Flood Insurance Studies	June 18, 2010	Both
	Attachment B – Iowa DNR Floodplain Regulations	June 18, 2010	Both
	Attachment C – Instructions for Completing the Form 1-E	June 18, 2010	Both
	Attachment D – Instructions for Completing the Risk Assessment Form	June 18, 2010	Both

Section 3.5 -- Final Design

3.505*	Check and Final Plans	August 28, 2014	Both
	Attachment A – Check and Final Plan Guidelines	August 28, 2014	Both
	Attachment B – Check and Final Plan Checklist (Word)	December 19, 2014	Both
	Attachment C – Check and Final Plan Process Flowchart	February 18, 2013	Both
3.510*	Check and Final Bridge or Culvert Plans	June 18, 2010	Both
	Attachment A – Bridge or Culvert Plan Supplementary Checklist	June 18, 2010	Both
3.520*	Electronic Bid Item Information	February 18, 2013	Both

Section 3.6 -- Right-of-Way, Utilities, and Railroads

3.605*	Right-of-Way Acquisition	June 18, 2007	Both
	Attachment A – Compensation Estimate Procedures	June 18, 2007	Both
	Attachment B – FHWA Authorization of Right-of-Way Costs Flowchart	June 18, 2007	Both
	Attachment C – Early Right-of-Way Acquisition Process Flowchart	June 18, 2007	Both
3.640*	Utility Accommodation and Coordination	February 11, 2014	Both

Attachment A – Utility Coordination Flowchart	December 11, 2008	Both
Attachment B – Utility Coordination Checklist (Word)	February 11, 2014	Both
3.650* Federal-aid Participation in Utility Relocations	February 11, 2014	Both
Attachment A – Utility Relocation Federal-Aid Eligibility Flowchart	February 11, 2014	Both
Attachment B – FHWA Authorization of Utility Relocation Costs Flowchart	February 11, 2014	Both
3.670* Work on Railroad Right-of-Way	May 1, 2007	Both
Attachment A – Notification and Agreement of Maintenance Work in Railroad Right-of-Way (Word)	May 1, 2007	Both
Attachment B – Notification of Construction Work in Railroad Right-of-Way (Word)	May 1, 2007	Both
Attachment C – Work on Railroad Right-of-Way Flowchart	May 1, 2007	Both
3.680* Federal-aid Projects Involving Railroads	May 1, 2007	Both
Attachment A – FHWA Authorization of Railroad Costs Flowchart	May 1, 2007	Both

Section 3.7 -- Lettings and Contracts

3.705 Local Letting Process – State or Local Funded (see I.M. 3.41 , dated September 2005; I.M. 3.42 , dated March 2002; and I.M. 3.43 , dated September 2002)	(future)	Both
3.710* DBE Guidelines	June 18, 2007	Both
3.715 TSB Guidelines	(future)	Both
3.720* Local Letting Process – Federal-aid	April 12, 2007	Both
Attachment A – Pre-Award Checklist and Certification	April 12, 2007	Both
Attachment B – Post-Award Checklist and Certification	April 12, 2007	Both
Attachment C – Supplemental Agreement	April 12, 2007	Both
3.730* Iowa DOT Letting Process	August 28, 2014	Both
Attachment A - Iowa DOT Pre-Letting Process Flowchart	October 1, 2013	Both
Attachment B – Iowa DOT Post-Letting Process Flowchart	October 1, 2013	Both
3.750* Project Development Certification Instructions	December 3, 2007	Both
Attachment A – Project Development Certification Process Flowchart	December 3, 2007	Both
Attachment B - Sample Project Development Certification Form	December 3, 2007	Both
3.760* Public Interest Findings	May 12, 2014	Both
3.770 Paving Point Requirements	August 24, 2012	Counties
Attachment A – Paving Point Determination	August 24, 2012	Counties
Attachment B – Sample Notice of Public Hearing (Word)	August 24, 2012	Counties
Attachment C – Sample Resolution (Word)	August 24, 2012	Counties

Section 3.8 -- Construction

3.805* Construction Inspection (see I.M. 3.51 , dated September 2002)	(future)	Both
3.810* Federal-aid Construction by Local Agency Forces	December 19, 2014	Both

Section 3.9 -- Project Close-out and Audits

3.910* Final Review, Audit, and Close-out Procedures for Federal-aid Projects	December 19, 2014	Both
Attachment A – Project Close-out Process Overview Flowchart	December 3, 2007	Both
Attachment B – Final Review and Audit Process Flowchart – Highway or Bridge Construction	December 19, 2014	Both
Attachment C – Final Review and Audit Process Flowchart – Non-highway Construction, DOT Specifications	December 19, 2014	Both

	Attachment D – Final Review and Audit Process Flowchart – Non-highway Construction, Non-DOT Specifications	December 19, 2014	Both
	Attachment E – Pre-audit Checklist (Word)	December 19, 2014	Both
	Attachment F – Final Forms Packet Checklist (Word)	December 19, 2014	Both
3.920	Final Review, Audit, and Close-out Procedures for State-aid Projects	(future)	Both
3.930*	Interest Payment Procedures	December 3, 2007	Both
	Attachment A – Sample Interest Payment Information Form	December 3, 2007	Both
3.940	Resolution to allow County Engineer to Certify Completion of Work on Construction Contracts	August 28, 2014	Counties
	Attachment A – Sample Resolution (Word)	December 3, 2007	Counties

Chapter 4 – Systems Classification And Identification

Section 4.0 -- General

4.010	Procedures to Modify the Secondary Road Route Numbering System	September 2002	Counties
4.030	County Road Vacations	September 2002	Counties
	Attachment A - Resolution for Road Vacation Public Hearing (Word)	September 2002	Counties
	Attachment B - Notice of Public Hearing (Word)	September 2002	Counties
	Attachment C - Resolution to Vacate a County Road (Word)	September 2002	Counties

Section 4.1 -- (Reserved)

Section 4.2 -- Farm-to-Market System

4.210	Modification of the Farm-to Market (FM) System	August 10, 2011	Counties
4.220	Farm-to-Market Review Board Advisory Opinions on Proposed Jurisdictional Transfers	April 2002	Counties

INSTRUCTIONAL MEMORANDUMS

To Local Public Agencies



To: Counties	Date: December 19, 2014
From: Office of Local Systems	I.M. No. 2.005
Subject: Farm-to-Market Program	

Contents: This Instructional Memorandum (I.M.) provides information, guidelines, and procedures for the distribution, uses, and restrictions associated with Farm-to-Market (FM) funds for counties.

Funding Sources and Eligible Uses

The FM Fund is comprised of 8% of the Road Use Tax Fund (RUTF), per Iowa Code section [312.2](#). Iowa Code section [310.4](#) states that the FM Fund shall be used for the establishment, construction, reconstruction, or improvement to the FM System, including drainage; grading; surfacing; resurfacing; construction of bridges or culverts; the elimination, protection, or improvement of railroad crossings; acquiring of additional right-of-way; and all other expenses incurred in the construction, reconstruction, or improvement of the FM System. Transfers of funds may be made from the FM Fund to the Local Secondary Road Fund as per [I.M. 2.030](#), Transfer of Farm-to-Market Funds to the Local Secondary Road Fund. Also, transfers can be made from the Local Secondary Road Fund to the FM Fund as per [I.M. 2.010](#), Transfer of Local Secondary Road Use Tax Funds to the Farm-to-Market Fund. For procedures to modify the FM System, refer to [I.M. 4.210](#), Modification of the Farm-to-Market (FM) System, and [I.M. 4.220](#), Farm-to-Market Review Board Advisory Opinions on Proposed Jurisdictional Transfers.

Allocation, Borrowing, and Reallocation Procedures

Iowa Code section [310.27](#) allows for counties to accumulate up to 3 years worth of funds. Counties are also allowed to “borrow ahead” (temporarily allocate) up to 5 years worth of funds. If a county does not spend its allocation of FM funds within 3 years, the funds greater than 3 years of allocation get distributed amongst the remaining counties. The Iowa Department of Transportation (Iowa DOT) Office of Finance tracks receipts and expenditures for each county’s FM Fund. The Iowa DOT Office of Local Systems has a spreadsheet that keeps track of the years borrowed ahead or accumulated. The spreadsheet is published monthly and can be found on the Office of Local Systems [Funding Information](#) web page. In consultation with the Iowa County Engineers Association (ICEA) Executive Board, the Office of Local Systems may also impose additional restrictions on future obligations from the FM Fund, if necessary, to preserve a positive cash flow for the statewide FM Fund. If this occurs, a memo will be issued detailing the additional restrictions. Counties also must follow [I.M. 2.040](#), Temporary Allocation of Farm-to-Market Funds, before using a temporary allocation of FM funds.

Project Development and Department Oversight

Projects with Federal-aid or State-aid

In addition to the procedures outlined below for projects funded only with FM funds, Counties must also follow all applicable Federal-aid and State-aid requirements, as indicated in the project funding agreement.

Projects using only FM Funds

The Iowa DOT is responsible to ensure the project is an eligible use of FM funds, meets the Iowa Code restrictions for temporary allocations, complies with any additional restrictions imposed by the Office of Local Systems, and meets the Iowa DOT’s requirements for letting. Otherwise, the Iowa DOT has very limited oversight.

Counties will need to conduct their own design exceptions, and are encouraged but not required to use [I.M. 3.218](#), Design Exception Process. Counties should keep design exceptions on file in their office for FM funded projects.

The basic project development steps are shown below. For details to complete any particular step, see the referenced I.M.

1. Budget and Program Project. Include the project in the County Five Year Program (CFYP), as developed through the Transportation Program Management System (TPMS). The project does not need to be included in the Secondary Road Budget, as the project will not be paid from the local Secondary Road Budget. There is no I.M. on this procedure; however, instructions are issued annually and can be found on the Office of Local Systems [County and City Reports](#) web page. TPMS builds the project numbers according to [I.M. 3.060](#), Project Numbers.
2. Check/Final Plans. Submit check/final plans electronically to the appropriate Iowa DOT District Office, complete with all bid items and notes, according to [I.M. 3.005](#), Project Development Submittal Dates and Information. Refer to [I.M. 3.505](#), Check and Final Plans, for more information.
3. Right-of-Way/Relocation Assistance. If Federal-aid will be used on a later project phase, FHWA Environmental Concurrence must be received from the Iowa DOT's Office of Location and Environment before right-of-way is acquired. Refer to [I.M. 3.605](#), Right-of-Way Acquisition, and [I.M. 3.750](#), Project Development Certification Instructions.
4. Letting. Projects are let at the Iowa DOT unless conditions warrant special approval from the Office of Local Systems. Refer to [I.M. 3.705](#), Local Letting Process - State or Local Funded, or [I.M. 3.730](#), Iowa DOT Letting Process.

Construction Voucher Process

For projects on the FM System, project payments are made to Contractors using the Contractor Pay System (CPS). The County authorizes payment to the Contractor by completing a voucher, which is sometimes referred to as a "309 Voucher", or by generating a voucher in the FieldManager software. The Office of Finance processes these payments after they receive paperwork from the County for a 309 Voucher, or the electronic submittal for FieldManager vouchers. If a project has Federal-aid, the Office of Finance requests reimbursement from FHWA, and the reimbursement is transferred into the FM account from which the project payment was made.

To fill out the 309 vouchers, follow the steps below:

- Enter the total quantity that you want paid to date in the appropriate column. For projects using only FM funds (and State-aid when applicable), enter the quantities in the "Rural Non-Participating" column for each applicable item. For projects that have Federal-aid participation, enter the quantities in the "Rural Participating" column for Federal-aid eligible items and the "Rural Non-Participating" column for non-Federal-aid eligible items.
- Enter the total number of working days charged to date, as applicable, on the top left area of the voucher in the block titled "Days Worked, To Date".
- Enter the date of "This Voucher" on the top right area of the voucher.
- The County Engineer must sign all of the vouchers. For the semi-final voucher, the County Engineer and Contractor must sign the voucher. For the final voucher, the County Engineer, Board of Supervisors, and the Contractor must sign the voucher. The Contractor signs the final voucher in the "Claimant's Certification" box located on the bottom right of the voucher form.
- The intermediate and final vouchers for projects using only FM funds can be submitted directly to the Office of Finance. If the construction costs include Federal-aid or State-aid, the final voucher has to be submitted to the District Office, instead of the Office of Finance, as part of the Final Forms Packet.

The Office of Finance mails the first voucher to the County upon receiving confirmation that the contract has been fully awarded. Subsequent vouchers will be mailed to the County upon receipt of a voucher submitted for payment, or upon receipt of a Change Order that adds items to a contract or adjusts quantities of existing contract items.

To submit FieldManager vouchers, follow the instructions written in the FieldManager Users Guide.

The FieldManager program is used to track project quantities, and also generates Working Day Reports and can issue Change Orders. The delay of waiting for the hard copy of updated 309 vouchers is eliminated with the use of this program. This program is available for use on FM projects that are let through the DOT. There is no cost for installation of the FieldManager software but it does require a key fob (approximately \$ 50.00) to access the Iowa DOT accounting system. Training to use the program is available yearly through the Iowa DOT and can be scheduled at a location in the county if needed.

Project Close-out Procedures

For projects using only FM Funds, the County Engineer will certify on the Statement of Completion and Final Acceptance of Work ([Form 830435](#)) that the work was completed in substantial compliance with the plans and specifications. The Statement of Completion and Final Acceptance of Work requires the signature of the County Engineer and the Board of Supervisors. The Board of Supervisors may pass a resolution, as described in [I.M. 3.940](#), County Engineer Resolution, in order for the County Engineer to sign on behalf of the Board of Supervisors. The Statement of Completion and Final Acceptance of Work should be mailed to the Office of Finance. Once the project audit has been completed, the Final Packet should be mailed to the Office of Finance. The Final Packet includes the Interest Payment Information Form ([Form 830236](#)), the Final 309 Voucher, the Final Payment Form ([Form 830436](#)), Contractor Evaluation Report Form ([Form 517031](#)), and Certification of Subcontractor Payments Form ([Form 518002](#))

For projects using State-aid in conjunction with FM funds, the above listed forms should be submitted to the District Office, along with a letter stating the amount of State-aid being requested to be transferred to the County's FM fund. The District Local Systems Engineer (DLSE) will conduct a review of the completed project to assure substantial compliance with the terms of the funding agreement. The DLSE will sign the Statement of Completion, if the completed work is found acceptable, and a copy of the signed form will be forwarded to the County Engineer.

For projects using Federal-aid in conjunction with FM funds, the project closeout procedures should follow [I.M. 3.910](#), Final Review, Audit, and Close-out Procedures for Federal-aid projects.

If the project was a jointly sponsored project, the counties involved will need to reconcile their FM accounts at the completion of the project. The county who initially paid for the project will need to be reimbursed by the other county's FM account. The county that needs to reimburse the paying county will need to submit an email or letter to the Office of Finance stating the amount of FM funds to be transferred from their county to the paying county. The email or letter shall also include the project number for which the FM funds are being transferred.

Use of FM Funds for 3R Projects

Iowa Code Section [310.4](#) states that the FM Fund shall be used for establishment, construction, reconstruction, or improvements to the FM System. Projects that are not generally considered construction shall meet the following requirements to ensure that the proposed work constitutes an "improvement" in accordance with this Code section.

General Requirements

- The road must be part of the FM System.
- The road must meet the conditions of [I.M. 3.214](#), 3R Guidelines, "3R Table for Rural Collectors" under the "Resurfacing" category.
- Projects must cost more than \$50,000.
- Projects must be shown in the CFYP.
- For Granular Resurfacing projects, the application rate must be equal to or greater than 250 tons per mile.

- Counties must meet the current FM borrowing restrictions.
- The work must be done by contract. Reimbursement of FM funds for performance of the work by county forces is not allowed.

Types of Projects that are Applicable:

- Granular Resurfacing (see below for more information)
- Double Seal Coat
- Full Depth Patching
- Surface Recycling
- Longitudinal Subdrains
- Pavement Markings
- Crack Cleaning or Sealing
- Fog Sealing
- Slurry Sealing
- Other similar projects

Procedure for FM Granular Resurfacing Contracts to be Let Locally

Note: These procedures are applicable to projects using only FM funds; they are not applicable to FM projects with Federal-aid or State-aid participation. The reasons for which FM granular resurfacing contracts can be let locally are that typically the contractors are local and the projects need to be let quickly to get the rock onto the roads as early as possible in the spring and summer.

1. The County sends a request to the appropriate DLSE, and includes a cost estimate and general description of the project.
2. The DLSE forwards the request to the Office of Local Systems.
3. The Office of Local Systems verifies that the County meets the current FM borrowing restrictions and the guidelines set forth in this I.M.
4. The Office of Local Systems informs the DLSE and County of its decision.
5. The County submits plans, a FM Financial Worksheet (located in TPMS), and letting information (notice to bidders, bidding proposal) to the DLSE. The DLSE reviews this information to make sure it is consistent with the original project description. The County must also submit the Bulletin Reporting Form ([Form 650013 \(Word\)](#)) to the Office of Contracts so the project can be included in the local letting information on the Office of Contracts' webpage. This can also be accomplished by using the "Local Letting Notice" on the ICEA Service Bureau website.
6. Once the project has been let, submit the bid tabulations to the DLSE and request concurrence in the award of contract. The DLSE will notify the County in writing if the contract award can proceed.
7. After the contract has been signed, the County sends a copy to the DLSE and Office of Local Systems.
8. The DLSE forwards a copy of the contract to the Office of Finance.
9. The County submits a Universal Payment Voucher ([Form 181001](#)), along with invoices from the Contractor, to the DLSE in order to request payment. Follow the instructions below for filling out the Universal Payment Voucher. The Function Code for granular surfacing projects = 444. The DLSE submits a voucher to the Office of Finance, who will issue payment to the Contractor. The DLSE copies the Office of Local Systems on the voucher submittal.

Use of FM funds for Non-construction Work

FM funds can be used for consultant contracts, utility relocation payments, and right-of-way payments, as long as the work is being completed as part of an FM project. The Iowa DOT has a responsibility to review the FM eligibility of these contracts and payments.

While FM funds can be used for consultant contracts, they can't be used for in-house engineering expenses. Iowa Code Section [310.28](#) prohibits the salary and expenses of the county engineer from being paid from the FM fund.

In order to make payments from the FM account for these services, follow the steps below:

1. Complete the Universal Payment Voucher form ([Form 181001](#)) as follows:
 - Voucher Number and Date: Enter the Voucher Number and Date on the top right area of the form. The Voucher Number is the sequential number of the Universal Payment Voucher submitted for payment to the Vendor for a particular project number. The Date is the date that the voucher form is filled out, not the date of the invoice.
 - Contract No.: Typically this field can be left blank.
 - Vendor Number: Typically this field can be left blank.
 - Social Security/Tax I.D. Number: Enter the Social Security Number or Federal Tax I.D. Number of the individual/business in which the payment is being made on the top middle area of the form.
 - Name and Address: Enter the name and address of the person/business for which the payment is being made in the box on the top left area of the form.
 - Vendor Invoice: Enter the date and invoice number from the invoice on which payment is being made. The invoice may be a typical type of invoice, such as from a consultant for design services, or it may be a right-of-way acquisition contract. If it is a right-of-way acquisition contract, use the date of the last signature on the contract as the date and the parcel number as the invoice number.
 - Item Number: Enter 1, 2, 3, etc. if you are paying out multiple warrants to the Vendor on one Universal Payment Voucher form.
 - Cost Center: Typically this field should be entered as "8010" for the FM Fund. If this does not apply, contact the DLSE for assistance.
 - System Number: Enter the system number from the assigned project number. The system number is the two digits or alpha-numeric combination immediately preceding the county number located at the end of the project number.
 - County Number: Enter the county number associated with the project number (last two digits of the project number).***
 - Control Section: Enter the "C0xx" alpha-numeric combination or the four digit city number for an FM extension project, from the project number.
 - Or Bldg Number: Typically this field can be left blank.
 - Paren or Unit: Enter the paren number of the project number.
 - Design Bridge or Plate & Parcel or A Number or Job Number: Typically this field can be left blank.
 - Object Code: Use "860".

- Function Code: Use a function code that best matches what is being paid. Typical Function Codes are as shown below. If these do not apply, contact the DLSE for assistance.
 - Design = 201
 - Right-of-way = 301
 - Utilities = 310
- Rural/Urban: Typically, a "1" is entered since FM will typically only be used for rural roads. However, there are situations in which a county may administer a city project that is located on an FM extension, in which case a "2" may be appropriate.
- Part/Non-Part./Suspense: If Federal-aid funds are authorized for the costs being submitted for payment, enter a "1". If no Federal-aid funds are authorized for the costs being submitted for payment, enter a "2".
- Amount: Enter the amount to be paid for each invoice that is listed.
- Total: Enter the total amount of payment being made to the Vendor on the Universal Payment Voucher form.
- Approval Authority: On the top line, the County Engineer signs. The middle line may be signed by the Board of Supervisors if the County Engineer does not have the authority to sign on behalf of the Board. Refer to [I.M. 3.940](#) County Engineer Resolution, for more information on the County Engineer having authority to sign on behalf of the Board of Supervisors. The bottom line is for the DLSE's signature.
- Claimant's Certification: If an original invoice was submitted for payment, no signature is required. If an original invoice was not submitted or is unavailable, then the Vendor needs to sign and date this block.

Attach all supporting documentation (e.g. invoice, ROW Contract) to the voucher when submitting for payment.

Attach a copy of the agreement or contract between the County and Vendor with the first payment request for certain types of agreements or contracts (e.g. engineering, appraisals, and railroad). The payments will be held to the amounts stipulated in the contract unless a supplemental agreement is submitted.

2. Submit the Universal Payment Voucher form and supporting documentation to the appropriate DLSE.
3. The DLSE will review the form, and if it is acceptable, the DLSE signs the form. The original form and supporting documentation are then forwarded to the Office of Finance for payment processing.
4. The Office of Finance processes payment to the Vendor as appropriate.

INSTRUCTIONAL MEMORANDUMS

To Local Public Agencies



To: Counties and Cities	Date: December 19, 2014
From: Office of Local Systems	I.M. No. 2.020
Subject: Federal and State Bridge Programs	

Contents: This Instructional Memorandum (I.M.) includes guidelines and procedures for the Local Public Agency (LPA) Federal and State bridge programs for highways. This I.M. also includes the following attachments:

- [Attachment A](#) - City Bridge Priority Point Rating Worksheet ([Word](#))
- [Attachment B](#) – County Bridge Priority Point Rating Worksheet ([Word](#))
- [Attachment C](#) – Touchdown Points and Limits of Participation
- [Attachment D](#) – County HBP Fiscal Constraint Requirements

GENERAL

Cities and counties in Iowa are provided dedicated funding for bridges through one Federal-aid program and two State programs. The Federal-aid bridge program is administered by the Iowa Department of Transportation (Iowa DOT) Office of Local Systems in accordance with [761](#) Iowa Administrative Code (IAC), Chapter 161. Likewise, the State programs are administered in accordance with [761](#) IAC, Chapter 160. In both cases, these programs are developed and administered in consultation with city and county officials through their representative organizations. This I.M. documents the results of that consultation by describing each program in detail and providing additional guidance concerning eligible bridges and eligible project costs.

FEDERAL BRIDGE PROGRAM

The 2-year Federal Transportation Bill, Moving Ahead for Progress in the 21st Century (MAP-21), signed on July 6, 2012, did not re-establish the Highway Bridge Program (HBP) which provided funding for bridge reconstruction or rehabilitation projects. However, such projects are eligible for Surface Transportation Program (STP) funding. Therefore, representatives from the city and county organizations agreed to continue a bridge program using a set-aside from the “50% Available to Any Area of the State” portion of STP funds. For the sake of continuity, we will continue to refer to these funds as HBP funds. The HBP program provides Federal-aid participation for qualifying projects at a reimbursement rate of 80 percent of the eligible costs.

The HBP allocation is divided each fiscal year with 79% for the counties and 21% for the incorporated cities. This percentage of distribution is allocated on the square footage of each jurisdiction’s deficient bridges (structurally deficient or functionally obsolete, and a sufficiency rating of 80 or less) with no limit of Average Daily Traffic (ADT). Typically, these percentages are reviewed with representative city and county organizations for possible modification at the beginning of each new Federal multi-year highway transportation bill. The portions of HBP funds allocated for cities and counties are administered differently, as outlined below.

Cities

Cities may request to add a bridge to the City Bridge Candidate List at any time, but the deadline for the next Federal Fiscal Year’s funding is October 1. Such requests shall be submitted in writing to the Iowa DOT Office of Local Systems and shall include the FHWA bridge number, route carried, feature crossed, and the most recent replacement cost estimate available. Any highway bridge within the corporate limits, whether in whole or in part, may be submitted for consideration. This includes bridges on Farm-to-Market extensions within the city limits of cities less than 500 population. The City Bridge Candidate list, including the priority points, is available on the Office of Local Systems [web site](#).

During the month of November each year, the Office of Local Systems selects bridges from the Proposed City Bridge Candidate List based on their ranking and available funding. Candidates are ranked in descending order according to their priority points (see [Attachment A](#) to this I.M.). Cities are limited to one bridge per city per fiscal year. The total Federal-aid contribution limit per bridge is set at \$1 million.

Priority points will be calculated using the data shown on the SI&A form. If the data on the SI&A form does not reflect the most recent inspection, the priority points will not correctly reflect the status of a bridge when the Iowa DOT's Proposed City Bridge Candidate List computer program is ran.

Each city with a selected bridge is sent a letter offering HBP or State bridge funding for the next Federal Fiscal Year. State funds are typically offered to only one or two small bridges per year. The city then decides if they have the matching funds to proceed and sends a letter accepting or rejecting the funding. If accepted, the city provides an updated cost estimate and information on who will administer the project. The Office of Local Systems will then prepare the appropriate agreement for the project for distribution by the District Local Systems Engineer (DLSE). This agreement will indicate if the project will receive Federal-aid or State funding, as determined by the Office of Local Systems. The city must sign and return the agreement to the DLSE within 90 days of receipt. If a city does not return an agreement within 90 days, the Office of Local Systems will treat the offer as declined by the city.

After the agreement is approved, the city may begin project development; however, the city must receive written notification from the DLSE prior to beginning any work for which they desire Federal-aid reimbursement. Project development activities shall be carried out as outlined in the [Federal-aid Project Development Guide](#) and the associated I.M.s.

Projects must meet all the Federal-aid requirements and be let at the Iowa DOT within 3 years of signing the agreement. If requested by the city, a 6 month extension may be granted by the Office of Local Systems.

HBP funds awarded are for the next Federal Fiscal Year, which begins on October 1. These funds are not available until the corresponding Federal appropriations bill is passed, which is supposed to occur prior to October, but often is delayed. If a city would like to begin Federal-aid reimbursable work before the awarded funds are available, the following process must be followed:

1. The project agreement must be signed by both parties.
2. The city (not a consultant) must send a request to the DLSE for approval to perform reimbursable work early. This request must specifically identify the cost of work to begin before the awarded funds are available.
3. The DLSE forwards the request to the Office of Local Systems for approval. The Office of Local Systems will confer with the Office of Program Management to determine if sufficient funds are available. The Office of Local Systems will notify the DLSE of its decision and the DLSE will notify the city.
4. If approved, the city must then include the project in the current year of the TIP/STIP.
5. The city may begin the FHWA authorization process for only the work that they have requested. Work must not begin until written notice of FHWA authorization has been received from the DLSE.

Counties

The Office of Local Systems does not select county bridges for HBP funding. Instead, county bridge projects are selected by the County Engineer in cooperation with the County Board of Supervisors. HBP funds are allocated to each county according to the following formula:

1. One-third (33 percent) on the county Road Use Tax (RUT) fund distribution, weighted 32 percent on the Farm-to-Market Factor and 68 percent on the Secondary Road Factor, as calculated by the Iowa County Engineers Service Bureau.
2. Two-thirds (67 percent) on a qualifying deficient bridge factor. This factor is the percent of square footage of SD or FO bridges with ADT's greater than or equal to 25 and a Sufficiency Rating of 80 or less.

After receiving the notification of the HBP funds available, the Office of Local Systems will notify the counties of their allocations based on the latest factors. Counties then select their own bridges for programming and development. Any eligible bridge may be programmed, provided the counties' HBP program as a whole is fiscally constrained in the Statewide Transportation Improvement Program (STIP). For additional information regarding the fiscal constraint requirements and procedures, see [Attachment D](#) to this I.M.

No county will be allowed to accumulate more than 3 years of HBP funds. In October of each year, the years of funds accumulated is calculated by taking an average of the last 3 years' allocations and dividing that into

the current balance of unobligated HBP funds. Projects let in the Iowa DOT's December letting or before, will be considered as obligated for purposes of this calculation. Counties with more than 3 years of accumulated funds after the December letting will have the amount that exceeds 3 years accumulated funds redistributed to those counties with less than 3 years accumulated funds.

Counties with approved bridge projects that could exceed their accumulated allocation may be able to let their projects, provided that HBP funds are available and the total cost does not exceed their anticipated 6 year allocation in the current year. The Iowa DOT may grant exceptions. Since Counties may "borrow ahead" in this manner, saving up for a large project may not be used to obtain a waiver from the 3 year accumulated funds limit.

The allocation system described above is designed to maximize utilization of all of the available HBP funds but does not guarantee that a county will be able to let a HBP funded bridge project each and every year, or be able to utilize its entire allocation. This system is dependent upon all of the Federal-aid funds being released at the beginning of the Federal Fiscal Year.

Project development activities shall be carried out as outlined in the [Federal-aid Project Development Guide](#) and the associated I.M.s. All projects must be let by the Iowa DOT. After letting, the county makes initial project payments either from their Farm-to-Market or Secondary Road funds, depending on which system the bridge is on. The Federal-aid (80 percent of the participating project cost) will be reimbursed to the appropriate fund, up to the amount shown in the STIP.

STATE BRIDGE PROGRAMS

City Bridge Construction Fund

[Iowa Code Section 312.2](#), 12.b provides \$500,000 annually off-the-top from the Road Use Tax Fund to the city bridge construction fund for the reconstruction or replacement of highway bridges within or touching a city's corporate limits, regardless of who owns the bridge. This includes bridges on Farm-to-Market extensions within the city limits of cities less than 500 population. State participation in qualifying projects will be 80 percent of the eligible costs, up to the limit specified in the project funding agreement.

The City Bridge funds are allocated to cities in the same manner as the HBP funds for cities, as described above.

Project development must comply with State law and the agreement provisions. Projects involving only City Bridge Funds or other non-Federal-aid funds may be let locally by the city.

County Bridge Construction Fund

Iowa Code Section 312.2, 12.a provides \$2 million annually off-the-top from the Road Use Tax Fund to the county bridge construction fund for the construction, reconstruction, or replacement of highway bridges on the Secondary Road System. State participation in qualifying projects will be 80 percent of the eligible costs, up to a maximum of \$2 million per project.

During the month of November each year, the Iowa DOT Office of Local Systems requests one candidate from each county for County Bridge funds. To assist counties in selecting candidates for funding, the Office of Local Systems prepares a current listing of each county's qualifying bridges along with a determination of priority points, calculated in accordance with County Bridge Priority Point Rating factors (see [Attachment B](#) to this I.M.). A list of all county bridges including their priority points is available on the Office of Local Systems [web site](#).

Candidates are ranked in descending order according to their priority points. Projects are selected from the listing until the available funds are obligated. The successful county candidates are notified of funding in January.

Project development must comply with State law and the agreement provisions. Projects involving only County Bridge Funds or other non-Federal-aid funds may be let locally by the county.

ELIGIBLE BRIDGES

In general, to be eligible for either HBP or State bridge funding, a bridge must be classified as structurally deficient (SD) or functionally obsolete (FO); have a Sufficiency Rating of 80 or less; and have an Average Daily Traffic (ADT), as determined by the Iowa DOT, greater than or equal to 25. Each of these criteria are explained in more detail below.

SD or FO

For a bridge to be classified as SD or FO, one of the following conditions must be met on the Structural Inventory and Appraisal (SI&A) form:

SD:

1. A condition rating of 4 or less for:

Item 58 - Deck; or
Item 59 - Superstructures; or
Item 60 - Substructures; or
Item 62 - Culvert and Retaining Walls.¹

2. An appraisal rating of 2 or less for:

Item 67 - Structural Condition; or
Item 71 - Waterway Adequacy.²

FO:

1. An appraisal rating of 3 or less for:

Item 68 - Deck Geometry; or
Item 69 - Underclearances³; or
Item 72 - Approach Roadway Alignment.

2. An appraisal rating of 3 or less for:

Item 67 - Structural Condition; or
Item 71 - Waterway Adequacy.²

¹ Item 62 applies only if the last two digits of Item 43 are coded 07 or 19.

² Item 71 applies only if the last digit of Item 42 is coded 0, 5, 6, 7, 8, or 9.

³ Item 69 applies only if the last digit of Item 42 is coded 0, 1, 2, 4, 6, 7, or 8.

Any bridge classified as SD is excluded from the FO category. In other words, a bridge cannot be classified as both SD and FO, even if it meets the requirements for both classifications. All bridges are classified as SD, FO, or "neither".

Sufficiency Rating

The Sufficiency Rating is calculated using SI&A data, according to the formula given in the [Recording and Coding Guide for the Structure Inventory and Appraisal of Nations Bridges](#), published by FHWA.

HBP Funds – Bridges with a Sufficiency Rating of 60 or less are eligible for replacement or rehabilitation. Bridges with a Sufficiency Rating of 61 to 80 are eligible for rehabilitation only, unless approved by the Iowa DOT Office of Local Systems (see "REHABILITATION WORK" section below for more information).

State Bridge Funds – Bridges with a Sufficiency Rating of 80 or less are eligible for either replacement or rehabilitation.

ADT

The current Average Daily Traffic (ADT) must be greater than or equal to 25 vehicles per day (vpd), as determined by the Iowa DOT. If the LPA disagrees with the Iowa DOT's ADT, Item 29 on the SI&A, the LPA

may request an update, provided new count data is submitted and the data collection methods are verified by the Iowa DOT, Office of Transportation Data. The Iowa DOT loans traffic counting equipment to local agencies on an as-available basis. For equipment availability and other questions, please contact the Office of Transportation Data at 515-239-1323.

If there is evidence that the deteriorating condition of the bridge caused the low ADT, the LPA may submit a request for consideration to waive this requirement. The most effective documentation are old traffic counts that show higher volumes when the bridge was in better condition. However, if old traffic counts are not available, other factors may be considered, such as progressively more restrictive load postings over an extended period of time.

FHWA Qualifying Bridge List

The FHWA Qualifying Bridge List (QBL) is prepared in the fall of each calendar year. Bridges on the QBL meet the HBP requirements for SD / FO and Sufficiency Rating; however, they may not meet the ADT requirement. QBL data for a bridge may be viewed by clicking on the QBL link shown for the project in the Transportation Program Management System (TPMS) development module. If no link is shown, the bridge is not on the QBL.

The QBL is based on information that may be over one year old; therefore, it is possible that an eligible bridge may not be included on the list. If an LPA wishes to use HBP funds for a bridge not on the QBL, a written request must be submitted to the DLSE. Updated SI&A information and any other documentation needed to justify the request must be attached or uploaded to the Iowa DOT's [Structural Inventory and Inspection Management System](#) (SIIMS). After the eligibility has been verified by the DLSE, the DLSE will forward the request to the Office of Local Systems. This request must be reviewed and approved by the Office of Local Systems before any HBP funds can be authorized for work on the bridge.

Caution: If the SI&A ratings for the bridge requested have dropped significantly (i.e., 2 points or more in the last year), Local Systems will probably require additional information or explanation to justify the sudden change in bridge conditions. Such additional information might include pictures or other documentation provided by the city, county, or consultant that explains why the sudden change occurred. Reasonable care should be taken to verify that the changes to the SI&A ratings are justifiable, especially for those bridges that are close to not qualifying. Questionable SI&A rating information may lead to an audit of the city or county bridge inspection program.

If a bridge has been closed for 10 years, it is considered not significantly important and is therefore not eligible and will be removed from the list; unless, the LPA has made reasonable progress in scheduling the rehabilitation or replacement of the bridge, which indicates the bridge was of significant importance.

BRIDGE INSPECTIONS

All public highway bridges must be inspected in accordance with the National Bridge Inspection Standards (NBIS), as required by 23 CFR 650, [Subpart C](#). If the Iowa DOT determines that an LPA is not in at least conditional compliance with NBIS requirements that LPA is not eligible to receive any type of Federal funds or State bridge funds, even if it has bridges that meet the eligibility requirements outlined above. For additional guidance concerning the NBIS requirements, refer to [I.M. 2.120](#), Bridge Inspections.

Bridges carrying highway traffic over a railroad may be owned by a railroad company. If the railroad company owns the bridge, it is not subject to the inspection requirements of the NBIS. As a result, this bridge is not listed in the National Bridge Inventory (NBI) and is not eligible for Federal funding, unless the following steps are taken:

1. The bridge is inspected according to NBIS requirements.
2. Any rehabilitation or replacement of the bridge includes the requirement that ownership of the bridge is transferred to a public agency that will be responsible for maintaining the structure.

ELIGIBLE PROJECT COSTS

Types of Costs

Within the Limits of Participation (see below), HBP funds and City Bridge Funds may be used for preliminary engineering, right-of-way, construction, utility relocations (as per [I.M. 3.650](#)), and construction engineering. County Bridge Funds may only be used for construction costs within the Limits of Participation.

Limits of Participation

Replacement cost may include the bridge plus a nominal amount of roadway work sufficient to connect the structure to the existing roadway or return the grade line to an attainable Touchdown Point in accordance with the Iowa Statewide Urban Design and Specifications (SUDAS) [Design Manual](#), Chapter 5, for urban design guidance, and [I.M. 3.210](#), Rural Design Guidelines. In most situations the Touchdown Points and the Limits of Participation are at the same location. However, there are a few situations where the Limits of Participation may extend beyond the Touchdown Points. For more information, see [Attachment C](#).

Limits on Channel Work

Reasonable channel work necessary to improve the stream alignment through the bridge opening is eligible for funding. Typically a limit of 500 feet is allowed under USACE Nationwide Permit Number 13, therefore, channel realignments exceeding 500 feet are typically not eligible for HBP or State bridge funds. To be eligible the work must be accomplished as part of the bridge project.

REHABILITATION WORK

Bridge rehabilitation projects have some additional requirements and procedures associated with them, as described below.

Future Bridge Program Eligibility

Because HBP funds are allocated to cities and counties in part based on the number of SD and FO bridges, the Iowa DOT has instituted a “10-year rule” that prevents a bridge from remaining in either the SD or FO classifications after being replaced or rehabilitated, regardless of the type of funds used for the replacement or rehabilitation project. Rehabilitation projects are defined as requiring major work to restore the structural capacity of the bridge, as well as work necessary to correct major safety deficiencies. The Iowa DOT also considers bridge deck overlays that meet the requirements outlined below as rehabilitation work.

The effect of this rule is that the Iowa DOT will remove any bridge that has been replaced or rehabilitated in the last 10 years from the Qualifying Bridge List, and as a consequence, such bridges will not be eligible for Federal or State bridge funds in Iowa. Therefore, LPA should carefully consider the potential funding impacts when planning any type of bridge replacement or rehabilitation project.

Structural and Safety Deficiencies

The purpose of the Federal and State bridge programs is to address bridges that are SD or FO; therefore, a rehabilitation project must correct a bridge’s SD or FO status (except as noted in the “Design Exceptions” subsection below) and any major safety or structural problems. For example, the project may have to include widening, barrier rail, strengthening, etc. The remaining life of the rehabilitated bridge must be at least 15 years. The structural capacity after the rehabilitation must be greater than H15.

To address possible safety problems, bridge rehabilitation projects should be reviewed according to the safety considerations outlined in [I.M. 3.214](#), 3R Guidelines. Bridge rails and approach guardrails should be reviewed in accordance with [I.M. 3.213](#), Traffic Barriers (Guardrail and Bridge Rail).

Replacement vs. Rehabilitation

If the bridge is only eligible for rehabilitation with HBP funds but the LPA requests replacement instead, the LPA must submit a written request to the Office of Local Systems with the following information:

- The reason for replacement vs. rehabilitation. This should include specific numbers relating to such considerations as ADT, detour distance, load limits, number, and proximity of crossings on the stream, bridge widths in the area, public input, safety aspects, etc.
- A cost estimate of rehabilitation to current standards for width and load carrying capacity, and a cost estimate for replacement.
- For county bridges, an explanation of why each of the bridges in the county with a Sufficiency Rating of 60 or less is not being replaced before the proposed structure. Each bridge should be addressed individually or grouped by similar Sufficiency Ratings, ADT, road system, road surface type, or any other logical way.

The Office of Local Systems will review the proposed justification for possible approval. If the rehabilitation cost is more than 65% of the replacement cost, it is probably more cost effective to replace the bridge and the Office of Local Systems will usually approve replacement. The Office of Local Systems will also examine the merits of the project and what the LPA is doing to replace or rehabilitate its remaining deficient bridges.

For city projects, if the replacement is not approved by the Office of Local Systems, the city may use the funding offered for rehabilitation, or they may decline the funding offered and remain on the Proposed City Bridge Candidate List until the bridge qualifies for replacement.

Overlays

Bridge deck overlays are not typically eligible for HBP or other Federal funds unless the project includes substantial reconstruction of the deck by removing all deteriorated deck concrete. Deteriorated concrete includes areas that are delaminated or spalled; as well as, concrete which is contaminated with chloride above the corrosion threshold. The LPA may either remove the entire deck down to the top mat of reinforcement or they may perform chloride testing to determine what, if any, areas of the top mat need to be removed and replaced. When the chloride concentration exceeds 0.6 of the hydroxyl concentration, corrosion is observed¹. Chloride contents in excess of 0.025% per cubic yard of concrete for uncoated mild steel reinforcing bars and 0.1% per cubic yard for epoxy coated bars will cause corrosion to begin. This contaminated concrete must be removed and replaced. For concrete with a density of 150 lb./ft.³ this is 1 pound of chloride per cubic yard of concrete for uncoated steel and 4 pounds of chloride per cubic yard of concrete for epoxy covered bars. If testing is performed instead of removing and replacing the top mat of the deck, the plan sheets should document the following information: locations where testing was performed, the outcomes of the testing, and what action needs to be taken because of the testing. No specific approval from FHWA is required to perform testing in lieu of replacing the top mat.

Design Exceptions

Bridge rehabilitation projects should be designed to meet the AASHTO structural design guidelines referenced in [I.M. 3.510](#), Check and Final Bridge or Culvert Plans, and the applicable geometric design guidelines provided in Section 5.3.1 of the [Federal-aid Project Development Guide](#). Design exceptions for structural capacity less than what the bridge was originally designed for will not be granted. However, if the LPA can demonstrate that is not cost effective to upgrade the bridge to meet the geometric design guidelines, a design exception may be approved as prescribed in [I.M. 3.218](#), Design Exception Process.

If a design exception is granted for a geometric element on a bridge rehabilitation project, the LPA has determined that for the remaining life of the bridge, it is adequate for the type and volume of projected traffic, and that particular geometric element may not be used as the basis for classifying the bridge as FO. Examples of such geometric elements include deck width, vertical clearance over the bridge roadway, vertical and horizontal underclearances, and approach roadway geometry. Since this may affect the future eligibility of the bridge for the Federal and State bridge programs, LPAs should carefully consider this before requesting a geometric design exception.

¹Hausmann, D.A. (1967) "Steel Corrosion in Concrete: How Does it Occur?" *Materials Protection*, **6**, 19-23.

INSTRUCTIONAL MEMORANDUMS

To Local Public Agencies



To: Counties and Cities	Date: December 19, 2014
From: Office of Local Systems	I.M. No. 3.111
Subject: Threatened and Endangered Species	

Contents: This Instructional Memorandum (I.M.) includes guidelines and procedures for a Local Public Agency (LPA) to understand and comply with the requirements of the [Endangered Species Act](#) (ESA) as it applies to its listed species and critical habitats on Federal-aid projects. Specifically, Section 7 of the Act, called “Interagency Cooperation” is the mechanism to ensure actions taken do not jeopardize the existence of any federally threatened or endangered species. This I.M. also includes guidelines and procedures for compliance with 571 Iowa Administrative Code (IAC) [Chapter 77](#), Endangered and Threatened Plant and Animal Species. Section 7 procedures apply to all Federal-aid projects. Iowa Code section [481B](#) and 571 IAC [Chapter 77](#) applies to all Federal-aid and non-Federal-aid projects.

This I.M. also includes the following attachment:

[Attachment A](#) - Section 7 Process Flowchart

Acronyms

- BA - Biological Assessment
- BMP - Best Management Practices
- CE - Categorical Exclusion
- DNR - Department of Natural Resources
- DOE - Determination of Effect for Threatened and Endangered Species for Local Public Agencies form ([Form 760005](#))
- DOT - Department of Transportation
- EA - Environmental Assessment
- EIS - Environmental Impact Statement
- ESA - [Endangered Species Act](#)
- FHWA - Federal Highway Administration
- LPA - Local Public Agency
- USFWS - United States Fish and Wildlife Service

Introduction

The purpose of the ESA is to conserve “the ecosystems on which threatened and endangered species depend” and to also conserve and recover listed species. Under the law, species listed as either threatened or endangered are provided protection and regulated by the USFWS.

Section 7 of the ESA is the mechanism by which the FHWA or its designees ensure the actions taken will not jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat. This is achieved through consultation with the USFWS, which may take two forms, informal consultation or formal consultation.

A list of federally listed threatened and endangered species in Iowa can be found on the [USFWS Midwest Region](#) website. A list of State threatened and endangered species can be found in 571 IAC [Chapter 77](#), Endangered and Threatened Plant and Animal Species.

NOTE: The Determination of Effect for Threatened and Endangered Species for Local Public Agencies (DOE) form ([Form 760005](#)) may be included with the Concept Statement submittal, as per [I.M. 3.105](#), Concept Statement Instructions. If the Concept Statement submittal has not been completed the DOE form ([Form 760005](#)) may be submitted independently but must include a general description of the work, location of the project, and photos of the surrounding impact area. For additional information see [Office of Location and Environment Section 7](#) website.

Evaluation of Species and Habitats

1. Determine what species to look for:
 - a. Review the list of state species/critical habitat on the [Iowa DNR](#) website. As an alternative, the LPA may request the Iowa DNR to review for species or habitat in the project area. The Iowa DOT has developed a [sample letter of request to the DNR](#) for this purpose. Instructions are also available on the [Iowa DNR](#) website. However, this service is provided by the Iowa DNR as staffing and workload allows, and reviews may take up to 30 days to complete.
 - b. Review the list of Federal species/critical habitat on the [USFWS](#) website.
2. Using the information gathered in the previous step, evaluate the habitat characteristics. Species-specific information is available on the [Iowa DNR](#) and [USFWS](#) websites. It will describe the habitats needed for each species.
3. Determine if there are species or habitats in the project area that may be impacted.

Determination of Effect

Following evaluation of the project area, the LPA needs to determine the effect of the intended action on any federal or state listed species or listed habitat using the Determination of Effect for Threatened and Endangered Species for Local Public Agencies (DOE) form ([Form 760005](#)). There are four categories of effect:

- *No effect* – consultation with USFWS is not required
- *May affect, not likely to adversely affect* - This includes good effects. Informal Consultation with USFWS is required.
- *May affect, likely to adversely affect* – Harm to the species is likely to occur. Formal Consultation with USFWS may be required in the form of a Biological Assessment (BA).
- *Jeopardy* – Harm to the species will occur, Formal Consultation with the USFWS is required, requires changing the project by using reasonable and prudent alternatives to avoid jeopardy.

Step 1 - If the LPA finds that no species or habitats are in the project area, complete the DOE form ([Form 760005](#)) and indicate that there is “No Effect”. The LPA shall submit the completed DOE form ([Form 760005](#)) with a copy of the response letter from the Iowa DNR (if received) to the LPA Section 7 Specialist, Office of Location and Environment. Section 7 is complete.

If the LPA finds there are species or habitats in the project area, move on to the next step.

Step 2 - The LPA determines if there are measures that can be taken to avoid potential impacts to species or habitats. If there are, the LPA shall document the avoidance measures when completing the DOE form ([Form 760005](#)) and indicate that there is “No Effect”. The LPA shall submit the completed DOE form ([Form 760005](#)) with a copy of the response letter from the Iowa DNR (if received) to the LPA Section 7 Specialist, Office of Location and Environment. Section 7 is complete.

If measures cannot be taken to avoid potential impacts to the species or habitats, move on to the next step.

Step 3 - The LPA shall determine if there are measures that can be taken to minimize potential impacts to species or habitats. If more in-depth habitat assessments are needed, contact a qualified professional.

To determine the measures that will be necessary to minimize impacts to a Federally listed species, an Informal Consultation will be required. To initiate an Informal Consultation, the LPA shall submit a letter requesting an Informal Consultation to the Office of Location and Environment including a DOE form ([Form 760005](#)), a copy of the response letter from the Iowa DNR (if received), and any other relevant project information. The Office of Location and Environment will contact USFWS for consultation. Concurrence from USFWS concludes Informal Consultation. For State listed species, the LPA shall forward project information and documentation to Iowa DNR. Review by the Iowa DNR will also conclude state level consultation. All agency responses will be included in NEPA documentation.

If measures can be taken to minimize potential impacts and the USFWS concurs and/or the Iowa DNR

has reviewed the consultation, note such measures when completing the DOE form ([Form 760005](#)) and indicate "May Affect – Not likely to adversely affect". Section 7 is complete.

If measures can be taken to minimize potential impacts but USFWS does not concur or Iowa DNR does not agree, the LPA, Office of Location and Environment, and FHWA will evaluate whether the non-concurrence supports further study including:

- a. Additional habitat surveys.
- b. Presence/absence surveys.
- c. Collection of other additional data.
- d. Whether to prepare a BA and request formal consultation through FHWA.

If measures cannot be taken to minimize potential impacts to species or habitats, a Formal Consultation will be required. A Formal Consultation requires the LPA to complete a Biological Assessment (BA) and submit a request for formal consultation to the LPA Section 7 Specialist, Office of Location and Environment. The LPA Section 7 Specialist will work with FHWA to enter into formal consultation with the USFWS.

Species-Specific Guidance

The following information is provided as guidance for commonly encountered issues with certain species. This guidance is not exhaustive or comprehensive. Please see the [USFWS](#) web site for more information.

Endangered Bats

The map of counties designated as within the range of the Indiana bat may be found at the USFWS [Iowa Bat Range Map](#) website. Refer to the USFWS [Indiana Bat Summer Survey Guidelines](#) for additional guidance. When tree clearing is required in areas meeting criteria for Indiana bat habitat, the LPA should take steps to avoid impacts to Indiana bat habitat and to minimize impacts that are unavoidable. The LPA should plan for clearing trees after September 30 and prior to April 1, to avoid direct harm to the Indiana bats. See Iowa DOT Standard Specification 2101.01, A. If significant tree clearing of Indiana bat habitat is necessary, mitigation may be required.

Topeka Shiner

The map of counties designated as within the range of the Topeka shiner may be found at the [Topeka Shiner Range and Designated Critical Habitat in Iowa](#) website.

For projects located within a stream designated as critical habitat for the Topeka shiner, consultation between Iowa DOT and USFWS will be required. When working in areas meeting criteria for Topeka shiner habitat, the LPA should take steps to avoid impacts to Topeka shiners and to minimize impacts that are unavoidable. The LPA should plan for avoiding activities in the stream between May 15 and July 31, which is the primary spawning period for Topeka shiners. Insert Iowa DOT Standard Note [281-6](#) into the project plans, which restricts project activities within the stream between these dates.

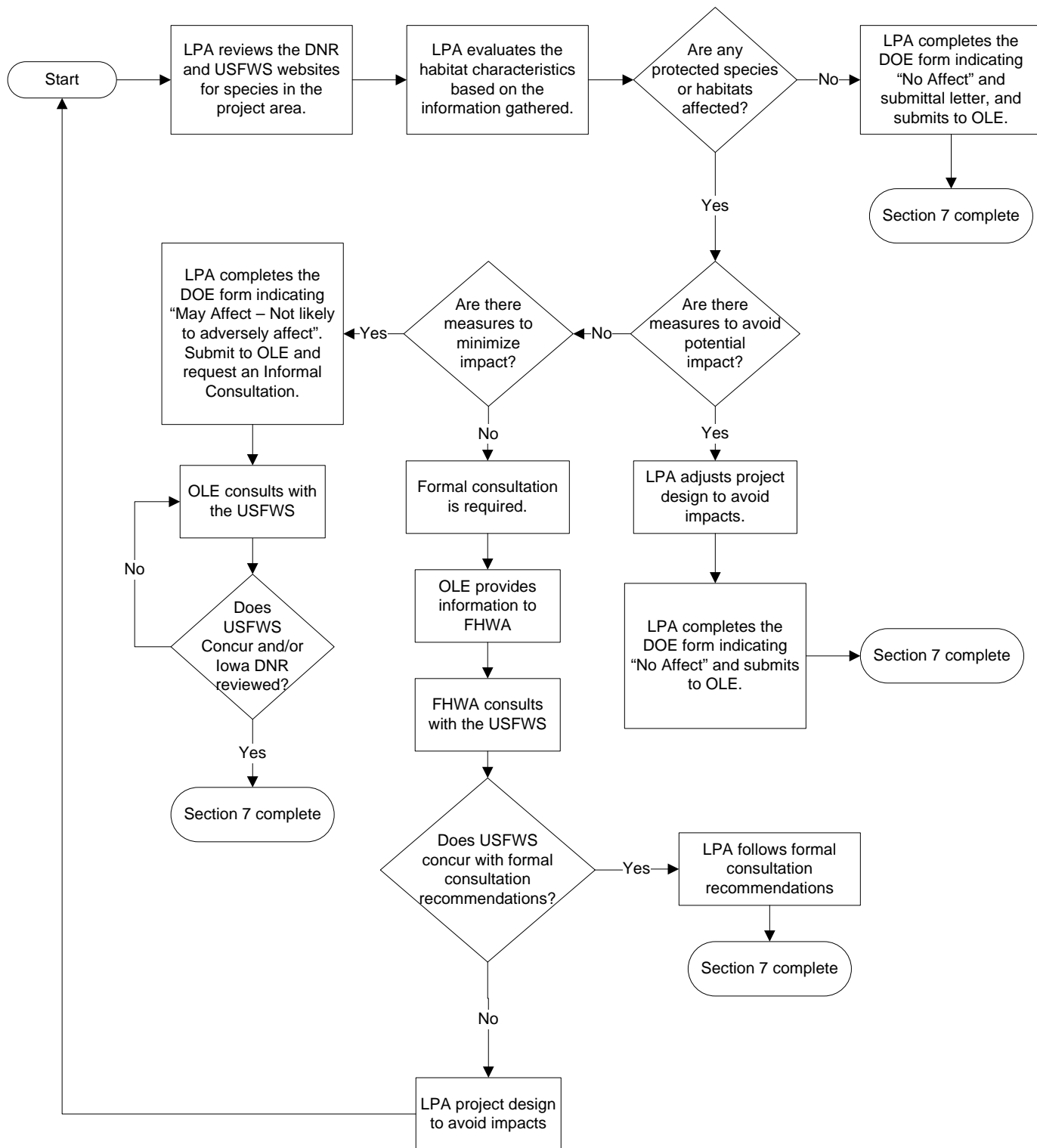
Bald Eagle

The Bald eagle is no longer listed as threatened or endangered by USFWS or the Iowa DNR; however, the Bald eagle remains protected under the [Bald and Golden Eagle Protection Act of 1940](#) and the [Migratory Bird Treaty Act of 1918](#). The Iowa DNR recommends limiting disturbance of known nesting sites and winter roosts by creating a minimum 0.25 mile no disturbance buffer zone. The [National Bald Eagle Management Guidelines](#) offer additional measures for avoiding impacts to bald eagles.

Migratory Birds

Migratory birds, their occupied nests, and their eggs are protected from disturbance or destruction in Iowa by the [Migratory Bird Treaty Act of 1918](#). To protect migratory birds, do not conduct construction activities where active nests are present between the dates April 1 and July 15 inclusive or until the birds have fledged and left the structure. If evidence of migratory bird nesting is discovered after beginning work, or in the event that migratory bird nests become established, immediately stop work and notify the Engineer. Remove and properly dispose of all non-active, existing migratory birds nests and monitor weekly to prevent the establishment of active nests. Contact the [Iowa DNR](#) with any questions.

Section 7 Process Flowchart



Abbreviations / Acronyms:

- Admin Office = Iowa DOT Administering Office
- DNR = Iowa Department of Natural Resources
- DOE = Determination of Effect for Threatened and Endangered Species for Local Public Agencies form (Form 760005)
- LPA = Local Public Agency
- OLE = Iowa DOT Office of Location and Environment
- USFWS = United States Fish and Wildlife Service

INSTRUCTIONAL MEMORANDUMS

To Local Public Agencies



To: Counties	Date: December 19, 2014
From: Office of Local Systems	I.M. No. 3.210
Subject: Rural Design Guidelines	

Contents: This Instructional Memorandum (I.M.) provides design guidelines for new construction or complete reconstruction of road or bridge projects on rural collectors and rural local roads. It includes general design considerations, background on the development and application of the design guidelines, and several design tables. These guidelines are most applicable to counties; however they may be used on projects within the corporate limits that have a rural cross section (e.g., shoulders with open ditches, no curbs). Please note the following:

1. These guidelines will be used by the Iowa Department of Transportation (Iowa DOT) to review the proposed design values of Federal-aid road or bridge projects.
2. The Iowa County Engineers Association (ICEA), by action of the Association’s Design Guide and Supervisor Engineer Committee, and Executive Board, has adopted the AASHTO Guidelines Tables contained in this I.M. for use on County projects funded with Farm-to-Market (FM) or local funds only. For such projects, the Iowa DOT will not provide any review of the proposed design values, unless specifically requested by the County.
3. These guidelines are not applicable for projects on arterial roadways. For arterials roadways on the Primary or Interstate systems, refer to the Iowa DOT [Road Design Manual](#). For minor arterials that are not on either the Primary or Interstate systems, refer to the American Association of State Highway and Transportation Officials (AASHTO) publications: *A Policy on Geometric Design of Highways and Streets* (2011), commonly referred to as the “Green Book”.

Design Considerations

The objective of the engineering design of any public facility is to satisfy the demands for service in the safest and most economical manner while maintaining the integrity of the environment. On new or complete reconstruction projects, the selected design speed should be consistent with the proposed or existing operating speed limit. Any individual curves below this design speed may require mitigation by placement of warning signs and/or markings such as: curve or turn signs, advisory speed plaques, chevrons, no passing lines, edgelines, or reduced speed zones.

Development and Application of the Design Tables

The guidelines in this I.M. are applicable to rural collectors and rural local roads, as classified on the [Federal Functional Classification Maps](#). For each of these road classifications, two design tables are provided: the Design Aids tables and the AASHTO Guidelines tables. These tables were developed using two AASHTO publications: Green Book and the *Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT \leq 400)* (2001). The proper application and use of each kind of table is described below.

The values in the Design Aids tables are based on the upper range of recommended values provided by the Green Book, using design speeds adopted by the ICEA. These tables should be used in the initial stages of project development. Values approaching or exceeding the upper limits of the ranges in the Design Aids tables should be used as the basis for design wherever the conditions permit. However, values within the ranges are acceptable. For Federal-aid projects, the County Engineer shall identify any design values that do not meet or exceed the Design Aids tables, and explain the reasons for not meeting these values. This documentation should be included with the Concept Statement submittal.

The values in the AASHTO Guidelines tables typically represent the minimum recommended values given in the Green Book. For local roads with design traffic volumes less than or equal to 400 ADT, some of the values are based on the *Guidelines for Geometric Design of Very Low-Volume Local Roads*. The AASHTO Guidelines tables are furnished to provide alternate values for design criteria if problems with excessive costs or adverse impacts to adjacent property occur when using the Design Aids values. Any proposed Federal-aid project that does not meet the values in the AASHTO Guidelines tables will require a design exception. The design exception request will need to be in the form of safety and service (crash experience, function of road, etc.) benefits versus the economics and environment (right of way and construction costs, farmsteads affected, parks, etc.), as described in [I.M. 3.218](#), Design Exception Process.

Design Aids For Rural Collectors

These “Aids” are presented to help in the design of new or complete reconstruction projects on rural collector roads. Each design element of each project should reflect the most practicable and economically justified value. For Federal-aid projects, design values below those shown in this table will be considered on a project-by-project basis, provided that an explanation is provided to the Iowa DOT Administering Office.

Design Elements	Paved Roadway						Non-Paved Roadway			
	Over 1500		1500 – 400		Under 400		400 – 50		Under 50	
Terrain (1)	Level	Rolling	Level	Rolling	Level	Rolling	Level	Rolling	Level	Rolling
Design Speed (mph)	60	50	55	50	55	45	55	45	50	40
Stopping Sight Distance (ft)	570	425	495	425	495	360	495	360	425	305
Minimum Radius (ft) (2)	1200	758	960	758	960	587	960	587	758	444
Maximum Gradient (%) (3)	5	6	6	7	6	8	6	8	7	8
Traveled Way (ft) (4)	24	24	22	22	22	22	20	20	20	20
Shoulder Width (ft)	8	8	6	6	6	6	4	4	2	2
Roadway Top Width (ft)	40	40	34	34	34	34	28	28	24	24
New Bridge Roadway Width (ft) (5)	40	40	30	30	30	30	24	24	24	24
Existing Bridge Roadway Width (ft) (6)	24	24	22	22	22	22	22	22	22	22
Foreslope	4:1	4:1	3:1	3:1	3:1	3:1	3:1	3:1	3:1	3:1
Entrance Foreslopes	8:1	8:1	6:1	6:1	6:1	6:1	3:1	3:1	3:1	3:1
Clear Zone Distance (ft)	See note (7)									

- NOTES:
- (1) Prevailing (over 50%) slopes of natural ground are: Level-less than 3%, Rolling-3% or more.
 - (2) a. Based on a maximum superelevation (e) of 0.08.
b. Horizontal curves should have a minimum length of 500 feet.
 - (3) Short lengths of grade (less than 500 feet) and grades on low-volume collectors (<400 vpd) may be steepened by 2%.
 - (4) Traveled Way is the pavement or surfacing width.
 - (5) a. For bridges over 100 feet long, the width may be the traveled way plus 6 feet (Note: This only applies for Design Volumes of 1500 ADT or greater).
b. Bridges should have a design loading of HL-93.
 - (6) a. For bridges less than 100 feet in length. Bridges over 100 ft. will be analyzed individually.
b. If the Design Volume is over 2000 ADT, use 28 feet.
c. Design loading should be HS-15.
d. Existing Bridge Roadway Width should be greater than or equal to the Traveled Way width, unless a design exception has been approved.
 - (7) The recommended clear zone distance is a function of Design Speed, Design Volume, horizontal curvature, and roadside geometry. To determine the recommended clear zone distance, refer to [I.M. 3.215](#), Clear Zone Guidelines.

AASHTO Guidelines For Rural Collectors

These "Guidelines" are a composite of the recommendations from Chapter 6 of the AASHTO Green Book (2011). These guidelines are presented to help in the design of new or complete reconstruction projects on rural collectors. For Federal-aid projects, design values below those shown in this table may be used on a project-by-project basis, provided that a design exception or justification is approved by the Iowa DOT Administering Office, as per [I.M. 3.218](#), Design Exception Process.

Design Elements	All Collector Roads							
	Over 2000		2000 – 1500		1500 – 400		Under 400	
Terrain (1)	Level	Rolling	Level	Rolling	Level	Rolling	Level	Rolling
Design Speed (mph)	60	50	50	40	50	40	40	30
Stopping Sight Distance (ft)	570	425	425	305	425	305	305	200
Minimum Radius (ft) (2)	1200	758	758	444	758	444	444	214
Maximum Gradient (%) (3)	5	7	6	8	6	8	7	9
Traveled Way (ft) (4)	24	24	22	22	22	22	20	20
Shoulder Width (ft)	8	8	6	6	5	5	2	2
Roadway Top Width (ft)	40	40	34	34	32	32	24	24
New Bridge Roadway Width (ft) (5)	40	40	30	30	28	28	24	24
Existing Bridge Roadway Width (ft) (6)	28	28	24	24	22	22	22	22
Foreslope	3:1	3:1	3:1	3:1	3:1	3:1	3:1	3:1
Clear Zone Distance (ft)	See note (7)							

- NOTES:
- (1) AASHTO "Mountainous" terrain design guides may be used on Federal-aid projects only with Iowa DOT concurrence. Note (1) in the Design Aids Table provides definitions for Level and Rolling.
 - (2) Based on a maximum superelevation (e) of 0.08.
 - (3) Short lengths of grade (less than 500 feet) and grades on low-volume collectors (<400 vpd) may be steepened by 2%.
 - (4) Traveled Way is the pavement or surfacing width.
 - (5) a. Bridges over 100 feet long, the width may be the traveled way plus 6 feet (Note: This only applies for Design Volumes of 1500 ADT or greater).
b. Design loading should be HL-93.
 - (6) a. For bridges less than 100 feet in length. Bridges over 100 feet will be analyzed individually.
b. Design Loading should be HS-15.
c. Existing Bridge Roadway Width should be greater than or equal to the Traveled Way width, unless a design exception has been approved.
 - (7) The recommended clear zone distance is a function of Design Speed, Design Volume, horizontal curvature, and roadside geometry. To determine the recommended clear zone distance, refer to [I.M. 3.215](#), Clear Zone Guidelines.

Design Aids For Rural Local Roads

These "Aids" are presented to help in the design of new or complete reconstruction projects on rural local roads. Each design element of each project should reflect the most practicable and economically justified value. For Federal-aid projects, design values below those shown in this table will be considered on a project-by-project basis, provided that an explanation is provided to the Iowa DOT Administering Office.

Design Elements	All Local Roads									
	Over 1500		1500 – 400		400 – 250		250 – 50		Under 50	
Terrain (1)	Level	Rolling	Level	Rolling	Level	Rolling	Level	Rolling	Level	Rolling
Design Speed (mph)	55	50	55	45	50	45	50	40	40	35
Stopping Sight Distance (ft)	495	425	495	360	425	360	425	305	305	250
Minimum Radius (ft) (2)	960	758	960	587	758	587	758	444	444	314
Maximum Gradient (%) (3)	6	8	6	9	6	9	6	10	7	10
Traveled Way (ft) (4)	24	24	22	22	22	22	20	20	20	20
Shoulder Width (ft)	8	8	6	6	4	4	3	3	2	2
Roadway Top Width (ft)	40	40	34	34	30	30	26	26	24	24
New Bridge Roadway Width (ft) (5)	40	40	30	30	30	30	24	24	24	24
Existing Bridge Roadway Width (ft) (6)	24	24	22	22	22	22	20	20	20	20
Foreslope (7)	4:1	4:1	3:1	3:1	2:1*	2:1*	2:1*	2:1*	2:1*	2:1*
Clear Zone Distance (ft)	See note (8)									

NOTES:

- (1) Prevailing (over 50%) slopes of natural ground are: Level – less than 3%, Rolling - 3% or more.
- (2) a. Based on a maximum superelevation (e) of 0.08.
b. Horizontal curves should have a minimum length of 500 feet.
- (3) Maximum gradient may be steepened by 2% for a short distance (less than 500 feet).
- (4) Traveled Way is the pavement or surfacing width
- (5) a. Where the approach roadway width is surfaced, that surface width should be carried across structure.
b. For bridges over 100 feet long, the width may be the traveled way plus 6 feet (Note: This only applies for Design Volumes of 2000 ADT or greater).
c. Bridges should have a design loading of HL-93.
- (6) a. For bridges less than 100 feet in length. Bridges over 100 feet will be analyzed individually.
b. If the Design Volume is over 2000 ADT, use 28 feet.
c. Design loading should be HS-15.
d. Existing Bridge Roadway Width should be greater than or equal to the Traveled Way width, unless a design exception has been approved.
- (7) * If slopes steeper than 3:1 are used within the recommended clear zone distance, they should be reviewed for shielding with a traffic barrier, as per [I.M. 3.215](#), Clear Zone Guidelines.
- (8) The recommended clear zone distance is a function of Design Speed, Design Volume, horizontal curvature, and roadside geometry. To determine the recommended clear zone distance, refer to [I.M. 3.215](#), Clear Zone Guidelines.

AASHTO Guidelines For Rural Local Roads

These "Guidelines" are a composite of the AASHTO recommendations from Chapter 5 of the Green Book (2011) and the Guidelines for Geometric Design of Very Low-Volume Local Roads (2001). The values in the first four columns are based on the Green Book. The values in the last column (Agricultural Access) are based on the Guidelines for Geometric Design of Very Low-Volume Local Roads. These guidelines are presented to help in the design of new or complete reconstruction projects on rural local roads. For Federal-aid projects, design values below those shown in this table may be used on a project-by-project basis, provided that a design exception or justification is approved by the Iowa DOT Administering Office, as per [I.M. 3.218](#), Design Exception Process.

Design Elements	All Local Roads									
	Over 2000		2000 – 1500		1500 – 400		Under 400		Under 400 Agricultural Access (9)	
Terrain (1)	Level	Rolling	Level	Rolling	Level	Rolling	Level	Rolling	Level	Rolling
Design Speed (mph)	50	40	50	40	50	40	40	30	30	20
Stopping Sight Distance (ft)	425	305	425	305	425	305	305	200	165	95
Minimum Radius (ft) (2)	758	444	758	444	758	444	444	214	170	105
Maximum Gradient (%) (3)	6	10	6	10	6	10	7	10	UAC	UAC
Traveled Way (ft) (4) (10)	24	24	22	22	22	20	18	18	--	--
Shoulder Width (ft) (10)	8	8	6	6	5	5	2	2	--	--
Roadway Top Width (ft)	40	40	34	34	32	30	22	22	24	24
New Bridge Roadway Width (ft) (5)	40	40	28	28	28	26	22	22	22	22
Existing Bridge Roadway Width (ft) (6)	28	28	24	24	22	22	22	22	UAC	UAC
Foreslope (7)	2:1*	2:1*	2:1*	2:1*	2:1*	2:1*	2:1*	2:1*	UAC*	UAC*
Clear Zone Distance (ft)	See note (8)									

- NOTES:
- (1) AASHTO "Mountainous" terrain design guides may be used on Federal-aid projects only with Iowa DOT concurrence. Note (1) in the Design Aids Table provides definitions for Level and Rolling.
 - (2) Based on a maximum superelevation (e) of 0.08.
 - (3) Maximum gradient may be steepened by 2% for short distance (less than 500 feet).
 - (4) Traveled Way is the pavement or surfacing width.
 - (5) a. For bridges over 100 feet long, the width may be the traveled way plus 6 feet (Note: This only applies for Design Volumes of 2000 ADT or greater)
b. Design Loading should be HL-93.
 - (6) a. For bridges less than 100 feet in length. Bridges over 100 feet will be analyzed individually.
b. Design loading should be HS-15.
c. 20 foot minimum clear roadway width is acceptable for Design Volumes from 0 – 250 ADT
d. Existing Bridge Roadway Width should be greater than or equal to the Traveled Way width, unless a design exception has been approved.
 - (7) * If slopes steeper than 3:1 are used within the recommended clear zone distance, they should be reviewed for shielding with a traffic barrier, as per [I.M. 3.215](#), Clear Zone Guidelines.
 - (8) The recommended clear zone distance is a function of Design Speed, Design Volume, horizontal curvature, and roadside geometry. To determine the recommended clear zone distance, refer to [I.M. 3.215](#), Clear Zone Guidelines.
 - (9) Agricultural Access roads are used regularly or seasonally to provide access to fields and farming operations for agricultural equipment that is wider than a typical truck.
 - (10) No values are shown in the Agricultural Access column because there are no criteria for surfacing width or shoulder width in the Very Low-Volume Local Roads Design Guide.

INSTRUCTIONAL MEMORANDUMS

To Local Public Agencies



To: Counties and Cities	Date: December 19, 2014
From: Office of Local Systems	I.M. No. 3.305
Subject: Federal-aid Participation in Consultant Costs	

Contents: This Instructional Memorandum (I.M.) includes guidelines and procedures for a Local Public Agency (LPA) to select a consultant; request Iowa Department of Transportation (Iowa DOT) approval and Federal Highway Administration (FHWA) authorization for Federal participation in consultant costs; and prepare, negotiate, and administer a consultant contract. This I.M. also includes the following attachments:

- [Attachment A](#) – Federal-aid Consultant Checklist
- [Attachment B](#) – Requirements for Federal-aid Consultant Contracts
- [Attachment C](#) – Payment Methods
- [Attachment D](#) – Standard Consultant Contract ([Word](#))
- [Attachment E](#) – Errors and Omissions

Definitions

Construction Engineering (CE) – Work that includes materials testing, construction inspection, and other work directly related to the administration of the construction contract (e.g., processing contractor payment requests, or preparing Change Orders, a final punch list, or project close-out paperwork). Any additional design work that occurs after the construction letting is also considered CE work.

Extra Work – Any additional activity or activities, level of effort, or deliverables that exceed the previously approved scope of work, but are minor changes to the consultant contract.

Planning Work – Work that involves planning or studies, but is not part of the development of the plans, specifications, and estimate (PS&E) necessary for a construction project. Examples include planning studies, feasibility studies, conceptual studies, and Interchange Justification Reports. Planning work *should not* be authorized as PE. Feasibility or conceptual studies may include some engineering work, but only to the extent needed to determine if it is feasible to build the proposed project or determine what type of structure or facility should be designed. Any engineering or design work beyond the planning stage is considered PE.

Phase of Work – A clearly distinguishable stage in the project development process. For planning work, typical phases consist of planning studies, feasibility studies, and conceptual studies. For PE work, typical phases include preparation of environmental studies or documents, preliminary design, final design, and preparation of bid documents. CE work is usually not phased, unless the approved CE work is for multiple construction contracts. In this case, the CE work associated with each construction contract would be considered a separate phase.

Preliminary Engineering (PE) – Work that is part of the development of the plans, specifications, and estimate (PS&E) for a construction project. This includes environmental studies and documents, preliminary design, and final design up through and including the preparation of bidding documents. PE does not include planning or other activities that are not intended to lead to a construction project. Examples of work not considered PE include planning, conceptual, feasibility studies, and Interchange Justification Reports.

Scope of Work – The statement of services to be provided, as written in the contract between the local agency and the consultant. This includes the specific work activities, deliverables, and timeframes to perform the work for the specified price.

General Considerations

All consultant contracts which will be reimbursed with Federal funds shall comply with the Title 23 of the Code of Federal Regulations (CFR), Part 172 ([23 CFR 172](#)). Among other things, these regulations stipulate when consultant services must be acquired through a qualifications-based selection process. When using a qualifications-based process, price may not be considered when determining which consultant is most qualified. Price is negotiated only after the most qualified consultant has been identified.

Conflicts of Interest

The LPA and the consultant shall comply with the conflict of interest requirements in Iowa Code Chapter 68B, 193C Iowa Administrative Code (IAC), [Chapter 8](#), and [23 CFR 1.33](#). Situations that create conflicts of interest include, but may not be limited to, the following:

1. An LPA employee who participates in the procurement, management, or administration of the consultant contract has a direct or indirect financial or other personal interest in the contract or related subcontracts. For example, a city engineer may not participate in the selection of a consulting firm that employs a close relative.
2. The consultant has a direct or indirect financial or other personal interest, other than employment or retention by the LPA, in any contract or related subcontracts in connection with the project. For example, when a consultant is acting as the project engineer for a construction project, that consultant's firm may not also provide construction staking services to the contractor for the same project. Another example is if the consultant is serving as city engineer, the consultant may not participate in any aspect of the selection process if his or her own firm is being considered to perform those services.
3. The consultant has a direct or indirect financial or other personal interest in any real property acquired for the project, unless such interest is openly disclosed in public records, and the consultant has not participated in such acquisition for and in behalf of the LPA. For example, a consultant may not participate or assist in the acquisition of property owned by the consultant or a close relative.

Person in Responsible Charge

If the LPA uses a consultant to perform construction inspection services, [23 CFR 635.105](#) requires the LPA to have a full time employee who is in responsible charge of the project. For counties and larger cities, this person is typically the county or city engineer; however, they need not be a licensed engineer or architect to be the person in responsible charge. For smaller cities that do not have any full time employees, the mayor or city clerk may perform this function, with assistance from the Iowa DOT Administering Office. A consultant may not serve as the person in responsible charge for a Federal-aid project.

Duties and functions of the person in responsible charge include:

1. administering inherently governmental project activities, including those dealing with cost, time, adherence to contract requirements, construction quality and scope of Federal-aid projects;
2. maintaining familiarity with day to day project operations, including project safety issues;
3. making or participating in decisions about changed conditions or scope changes that require change orders or supplemental contracts;
4. visiting and reviewing the project on a frequency that is commensurate with the magnitude and complexity of the project;
5. reviewing financial processes, transactions and documentation to ensure that safeguards are in place to minimize fraud, waste, and abuse; and
6. directing project staff, agency or consultant, to carry out project administration and contract oversight, including proper documentation; and
7. is aware of the qualifications, assignments and on-the-job performance of the agency and consultant staff at all stages of the project.

These duties may be shared by several people. A single person may also serve as the person in responsible charge for multiple projects.

Consultants Acting in a Management Role

In accordance with [23 CFR 172.9\(d\)](#), Federal funds may not be used to for a consultant to act in a management role for the LPA, unless this has been approved in advance by FHWA. A consultant is acting in a management role when the firm or individual representatives of the firm act on the LPA's behalf to perform inherently governmental functions, or fulfill a program or project administrative role typically performed by an LPA employee. Examples of consultants acting in management roles include: being responsible for managing a major project or series of projects; being responsible for overseeing the work of other consultants; and being responsible for

reviewing or approving permits or applications on the LPA's behalf. To request approval for a consultant acting in a management role, contact the Administering Office for assistance.

PE 10-Year Rule

When Federal funds are authorized for PE services, [23 CFR 630.112\(c\)\(2\)](#) requires that either right-of-way acquisition or actual construction begin by the close of the tenth fiscal year following the fiscal year in which the PE services were authorized. Otherwise, the LPA will be required to repay all the Federal funds expended for the PE services.

The LPA may request an extension to the 10-year rule if the project has been delayed by factors beyond the ability of the LPA to control, and the LPA can provide a reasonable plan of action for proceeding with the project in the near future. Requests should be submitted to the Administering Office well in advance of the 10-year deadline. The Administering Office will review with the Office of Local Systems. If acceptable, the Office of Local Systems will forward the request to FHWA for approval.

Errors and Omissions

In accordance with 23 CFR 172.9(a)(6), the written procedures for Federal-aid consultant contracts shall include procedures to address errors and omissions. These procedures are provided in [Attachment E](#) to this I.M.

Final Design Activities and the NEPA process

The National Environmental Policy Act (NEPA) and its implementing regulations require that certain procedures be followed in the process of selecting the location of Federal-aid project. Until this process has been completed and accepted by the Iowa DOT and the FHWA, final design activities may not begin, as required by [23 CFR 771.113](#).

Environmental and related engineering studies, agency coordination, public involvement activities, and preliminary design work are not considered final design. Therefore, if FHWA authorization for these costs has been obtained, these activities may proceed prior to completing the NEPA process. However, work directly associated with preparation of construction documents is considered final design. For Federal-aid projects let at the Iowa DOT, work associated with preparation, review, or submittal of Check Plans or Final Plans is considered final design.

The event that marks the completion of the NEPA process depends on the type of NEPA document that is required for the project:

- For projects that are classified as a Categorical Exclusion (CE), the NEPA process is complete as of the effective date of FHWA Environmental Concurrence. This date is specified in the written notice the LPA will receive from the Iowa DOT Office of Location and Environment.
- For projects that require an Environmental Assessment (EA) or Environmental Impact Statement (EIS) document, the NEPA process is considered complete as of the date that the FHWA signs these documents, referred to respectively as a Finding of No Significant Impact (FONSI) and Record of Decision (ROD).

Estimate of Consultant Costs

Prior to beginning the consultant selection process, the LPA shall prepare its own estimate of consultant costs. This estimate should include all phases of work that the consultant will be expected to perform, even if the initial contract will not encompass all phases of work. In other words, the estimate should reflect the total anticipated cost of all services that will eventually be provided by the consultant.

The LPA should prepare a detailed estimate based on the estimated number of hours and hourly rates for each type of employee, direct expenses, and typical overhead and profit margins. However, if the LPA is unable to prepare a detailed estimate, the LPA may prepare a simplified estimate based on typical consultant fees as a percentage of the total construction costs. Typical design costs for road, bridge, and trail construction range from 8 to 10 percent of the total construction cost. Typical construction inspection services for road, bridge, and trail construction range from 12 to 15 percent of the total construction cost.

However the cost estimate is prepared, the primary responsibility for determining the reasonableness of the proposed consultant costs rests with the LPA. The purpose of the LPA's estimate is to assist in negotiating a

consultant contract at a fair and reasonable cost. For estimating very complex or unusual consultant services, the Iowa DOT will provide assistance to the LPA upon request.

The LPA's estimate shall identify the type of services included, such as PE, CE, planning studies, etc., and provide a subtotal for each. The estimate shall also be documented so that a third party such as the Iowa DOT or FHWA can determine what services were included and how the LPA determined the estimated cost of those services.

Consultant Selection

[Attachment A](#), Federal-aid Consultant Checklist, outlines the steps for selecting a consultant, requesting FHWA authorization, and requesting reimbursement of consultant costs. The LPA should be careful to follow the steps outlined in this Attachment. If the selection process used does not comply with these procedures, the consultant costs may not be eligible for Federal reimbursement. In addition, the cost of any consultant work done prior to FHWA authorization will not be eligible for Federal reimbursement.

Pre-qualification

Prime consultants and subconsultants must be on the [Iowa DOT pre-qualified list](#) at the time of selection, by the LPA and the prime consultant, respectively. Consultants removed from the pre-qualified list may finish contracts currently underway, but will not be allowed to participate in future Federal-aid contracts until pre-qualified status is regained.

Scope of selection

The basis of selection must be based on the complete scope of services the consultant will be expected to provide; even if the initial contract will not include all those services. If an LPA desires to select a consultant for services not included in the original scope of selection, another selection process must be used.

Abbreviated Process

The abbreviated process may be used if the cost of all phases of the proposed consultant work is estimated to be less than \$150,000. The abbreviated process does not require use of a selection committee, distribution of a Request for Proposal (RFP), or use of written evaluation criteria and a scoring matrix. However, the LPA must consider at least 3 firms and document their selection process.

If the estimated cost of all phases of the proposed consultant work is close to the \$150,000 threshold, the LPA should use the full process. The full amount of any contract modifications that exceed this threshold will not be eligible for Federal participation. If the abbreviated process is used to select a consultant for multiple phases of work and the same consultant is chosen for more than one phase of work on the same project, the \$150,000 threshold applies to the total amount of work performed on the different phases of work. In addition, if it appears the full selection process was intentionally circumvented, the entire cost of the consultant services may be ineligible for Federal participation.

Full Process

If the cost of all phases of the proposed consultant work is estimated to be \$150,000 or more, the full selection process shall be used. In summary, the full process includes forming a selection committee, preparation and distribution of an RFP, and evaluation of proposals received based on established criteria.

A key aspect of the full selection process is preparing a well written RFP. The Iowa DOT does not require a standard format; however, the RFP prepared by the LPA shall contain the following as a minimum:

1. A scope of services for the proposed work.
2. The evaluation criteria used and the relative weight for each factor.
 - The criteria shall **not** include a factor for estimated contract cost.
 - The criteria may include a factor for DBE involvement.* Scoring of this criterion should be based on a firm's proposed DBE involvement. Proposals that meet or exceed the goal should get full credit for

this criterion. If the proposed DBE involvement is less than the DBE goal, the scoring should be based on the firm's documented good faith efforts to involve DBE firms.

- Geographic location may be included in the evaluation criteria, unless application of this criterion would result in less than 3 qualified firms.*

Note: LPAs may not use this criterion to disqualify firms that are not within a particular State or local jurisdiction. Firms that propose to establish a temporary local office shall be considered to have met this criterion.

* The combined weight of the DBE and geographic location criteria, if used, may not exceed 10% of the total.

3. The preferred method of payment (see [Attachment C](#), Payment Methods, for acceptable methods).
4. The proposed DBE goal. If no DBE goal is proposed for contracts estimated to be greater than \$100,000, the LPA must document the reasons why no DBE goal is proposed. Regardless of whether a goal is set or not, the RFP should encourage use of DBE firms and include a reference and link to the [Iowa Directory of Certified Disadvantaged Business Enterprises](#), which is available on the Iowa DOT Office of Employee Services, Civil Rights Team (OES-CRT) [DBE Program website](#). For guidance in setting DBE goals, refer to [I.M. 3.710](#), DBE Guidelines.
5. The deadline date for receiving proposals.

If inexperienced in preparing RFPs, the LPA should review the Iowa DOT current list of RFPs for examples of typical format and content. These are available on the Iowa DOT Consultant Utilization web site, as shown on the [Open Requests for Proposals](#) page. (Note: most of the Iowa DOT consultant contracts are not Federally funded, so they do not typically include a statement about a DBE goal.)

For additional guidance in conducting the full selection process using qualifications-based procedures, refer to the [Qualifications-Based Selection: A Guide for Selecting an Architect, Engineer, or Land Surveyor for Public Owners](#), published by the [American Council of Engineering Companies of Iowa](#).

Noncompetitive selections

If less than 3 firms were considered under the abbreviated process, or if less than 3 proposals were received under the full process, then the selection process is not considered competitive. Noncompetitive selections may be approved, but only if at least one of the following criteria is met:

1. The desired services are available from only one firm.
2. There is an emergency situation which does not allow sufficient time for a regular selection process.
3. After soliciting a number of sources, less than 3 proposals were received, but additional solicitations are unlikely to generate any additional proposals.

Requests for approval of a noncompetitive selection shall be submitted with appropriate justification and / or documentation to the Administering Office. The Administering Office will review the request and confer with the Office of Local Systems. The Administering Office will then notify the LPA of the decision.

Suspended or Debarred Firms

Firms that are presently suspended or debarred by the Federal government are prohibited from providing services that exceed \$25,000 on any Federal-aid contract. The Standard Consultant Contract contains provisions requiring the consultant to certify the suspension or debarment status of his or her firm. Even so, the Iowa DOT strongly recommends the LPA verify the firm is not presently suspended or debarred using the System for Award Management (SAM) web site before proceeding with contract negotiations. The status of a firm can be determined using the [SAMS web site search page](#).

Contract Negotiation

After receiving Iowa DOT approval, the LPA shall initiate negotiations with the consultant deemed to be the most qualified. The LPA shall provide the consultant with necessary information and request the consultant to submit its proposal with supporting cost and pricing data. Negotiations are intended to lead to the development of a contract mutually satisfactory to the LPA and the selected consultant. The goals of the negotiation process are to:

- Make certain that the consultant has a clear understanding of the scope of services.
- Determine that the consultant will make available the necessary personnel and facilities to accomplish the scope of services within the required time.
- Reach agreement with the consultant on the provisions of the contract, including equitable compensation for the required services and the most suitable and appropriate method of payment. This should include review of an itemized estimate of consulting fees, including tasks, estimated hours, hourly rates, and expenses (both direct and indirect, such as overhead).
- Determine, where applicable, whether the consultant can provide a design that will permit construction within established project costs.
- Verify that the project manager and the project team are the same as those in the proposal submitted to the selection committee (applicable only if the full process was used).

If a mutually satisfactory contract cannot be negotiated upon receiving a best and final offer in writing, the LPA shall formally terminate the negotiations and notify the consultant in writing. Termination of negotiations shall be made without prejudice. The substance of terminated negotiations is confidential. The LPA shall then initiate negotiations with the consultant given second preference, and this procedure shall be continued until a mutually satisfactory contract has been negotiated.

Contract Preparation

The following attachments to this I.M. are provided to assist the LPA and consultant in preparing an acceptable contract:

[Attachment B](#) – Requirements for Federal-aid Consultant Contracts, provides guidance for preparing a consultant contract. The Iowa DOT requires that certain provisions be included in all contracts which will be reimbursed with Federal-aid. The Iowa DOT also recommends that certain other contract provisions be included for the mutual benefit of both the LPA and the consultant. This Attachment identifies both the required and recommended contract provisions.

[Attachment C](#) – Payment Methods, outlines several types of payment options that are acceptable for consultant contracts with Federal-aid participation. The method of payment used shall conform to one or more of the options described in this Attachment.

[Attachment D](#) – Standard Consultant Contract, provides a model contract for the LPA and its consultant. Use of this document is required for contracts with Federal participation.

The Standard Consultant Contract indicates the areas that are intended for modification by using blue text with grey highlighting. Explanatory text is shown with yellow highlighting and is for information only. The explanatory text shall be removed when drafting of the agreement is complete. If additional modifications to the text of the Standard Consultant Contract are made, the LPA shall advise the Iowa DOT Administering Office when the draft contract is submitted for review and specifically identify those parts of the Standard Consultant Contract that have been modified. All additional changes shall be shown using red underline and strikeout, highlighting, or other similar formatting so that any changes to the standard text are clearly visible.

Note: The Iowa DOT requires use of the Standard Consultant Contract because it contains all the required Federal contract provisions. This helps ensure compliance with the Federal regulations and considerably reduces the time required for review by the Iowa DOT.

FHWA Authorization

FHWA authorization must be obtained before incurring any costs for which Federal reimbursement will be requested. The LPA shall submit a written request for authorization to the Administering Office along with a draft consultant contract and other supporting documentation, as described in Attachment A. The LPA shall not give

the consultant notice to proceed until after receiving written notification from the Iowa DOT that the requested consultant services have received FHWA authorization.

The process for requesting FHWA authorization for PE costs is different than CE costs, as described below:

PE Costs

When requesting FHWA authorization for PE costs, the estimated cost shall include all phases of PE work, even if the scope of the initial consultant contract does not include all phases. If the initial contract does not include all phases of PE work, the LPA shall provide the best estimate available for all phases of PE work. This amount can be adjusted later as supplemental contracts for additional PE work are reviewed and approved. Requesting authorization for all phases of work up-front is an important safeguard that helps avoiding incurring costs prior to FHWA authorization.

CE Costs

Unlike PE costs, FHWA authorization of CE costs may not be requested well in advance of authorizing construction costs. Ordinarily, authorization for CE costs will be requested at the same time authorization for construction is requested.

However, authorization of CE may be requested 1-2 months prior to requesting authorization for construction, if it includes work that must be done prior to beginning construction, such as construction survey or conducting a pre-construction meeting.

LPAs should use the following guidelines to determine when to submit their request for FHWA authorization of CE costs to the Administering Office:

1. If the CE services are being added as a supplemental contract to an existing Federal-aid consultant contract which has already been reviewed and approved by the Iowa DOT, including a pre-audit if necessary, submit a detailed scope of services and a corresponding estimate of CE costs to the Iowa DOT Administering Office with the final letting plans, as per [I.M. 3.005](#), Project Development Submittal Dates and Information.
2. If the consultant contract has not yet been approved by the Iowa DOT, contact the Administering Office to determine the appropriate amount of lead time required for their review and approval of the consultant selection process, consultant contract, and FHWA authorization.

Following the above guidelines should allow enough time for the CE authorization request to be reviewed by the Iowa DOT and authorized by FHWA at the same time construction is authorized. If some CE work needs to begin before construction is authorized, the above timeframes should be adjusted accordingly. The LPA is responsible for notifying the Iowa DOT Administering Office of any CE work that needs to occur prior to authorization of construction.

Pre-audit Procedures

If the estimated total consultant cost (including any planned supplemental contracts) is \$100,000 or more, the Administering Office will forward 1 copy of the draft contract(s) to the Office of Finance, External Audits, and request a pre-audit. If the estimated cost is less than \$100,000, a pre-audit is usually not required, unless:

- there is insufficient knowledge of the consultant's accounting system;
- there is previous unfavorable experience regarding the reliability of the consultant's accounting system;
- the contract involves procurement of new equipment or supplies for which cost experience is lacking; or
- the Administering Office has concerns about any item in the proposed cost estimate; or
- the Administering Office has any other concerns about the proposed contract.

External Audits may waive the need for a pre-audit based on its knowledge of the consultant and its past audit history. A pre-audit typically includes:

- an analysis of the consultant's cost proposal and financial records for the method of accounting in place to assure that the consultant has the ability to adequately segregate and accumulate reasonable and allowable costs to be charged against the contract; and
- an analysis of the consultant's proposed direct costing rates and indirect overhead factors to assure their propriety and eligibility for Federal reimbursement.

If there are any questions about the pre-audit procedures, the LPA or Administering Office may contact External Audits for assistance.

Contract Administration

Contract officials

The LPA shall appoint one of its officials to act as the Contract Administrator and be responsible for administration of the consultant contract. The Contract Administrator shall not be employed by the selected consultant. An Iowa DOT Administering Office staff person shall serve as the Contract Monitor.

Contract modifications

The Contract Administrator's approval and the Contract Monitor's concurrence are required on all matters regarding contract administration, including any contract modifications, such as adjustments to the contract price, approval of extra work, release of contingency, or execution of supplemental contracts. Before proceeding with work covered by a contract modification, the Contract Administrator's approval and the Contract Monitor's concurrence must be obtained in writing.

Contract modifications may not expand the scope of services beyond what was considered during the original selection process. For example, if the proposed scope of services for the original consultant selection only included PE services, then CE services cannot be added to the contract. In this scenario, a separate selection process would be needed for the CE services.

Adjustments to the FHWA authorization

If a contract modification changes the estimated cost of planning, PE, or CE services previously authorized, the Administering Office will initiate an adjustment to the FHWA authorization upon receipt of the contract modification request.

Some contract modifications may require a corresponding adjustment to FHWA authorization prior to beginning the work, others may not. In general, if the proposed work is within the same phase(s) of work included in a previous FHWA authorization for the contract, then the adjustment to the FHWA authorization may occur after the work begins. However, if the proposed work involves a new phase of work, FHWA authorization must be obtained first. *In either case, the Contract Administrator shall contact the Contract Monitor to verify whether the FHWA authorization must be adjusted in advance of proceeding with the work.*

Note: Proceeding with a new phase of work without an adjustment to the FHWA authorization will make such work ineligible for Federal participation.

Pre-audits of Contract Modifications

If a pre-audit was conducted for the original contract, an additional pre-audit is not required for a contract modification, except in the following circumstances:

1. The contract modification changes or adds to the previously approved payment method(s).
2. The estimated costs are increased by \$100,000 or more.

If a pre-audit was not conducted for the original contract, a pre-audit of the contract modification will be required if the new estimated total cost of the proposed services is \$100,000 or more, or if otherwise requested by the Administering Office.

Reimbursements

The LPA may request reimbursement for approved and authorized consultant costs anytime after payments have been made to the consultant. Each request for reimbursement shall include:

- 1 cover letter, or Claim for Reimbursement of Project Costs ([Form 517050](#)), that identifies the project number, the type of services for which reimbursement is being requested, and the total amount claimed for reimbursement;
- 1 copy each of the prime consultant and any applicable subconsultant invoices; and
- 1 copy of the canceled check or warrant to verify that the LPA has made payment to the consultant.

Invoices shall include as a minimum: the Iowa DOT project number, a description of the work performed, and the dates the work was performed. If the invoice includes both PE and CE services, a separate breakdown of each shall be provided. Use the invoice format as shown in [Attachment D](#), Standard Consultant Contract.

For contracts that extend more than one year, reimbursement requests should be submitted every 6 months, but in no case less than every 12 months.

Contract Close-out

Final payment to the consultant

For contracts that do not include CE services and are not fixed fee with a variable overhead rate, the LPA shall make final payment to the consultant as soon as all the deliverables required by the contract have been provided.

For contracts that include CE services, the LPA shall not make final payment to the consultant until after receiving approval from the Administering Office to do so. Before authorizing final payment to the consultant for CE services, the Administering Office will verify that all construction documentation that must be supplied by the consultant for final reimbursement of construction costs has been received. Until such documentation is provided, the Administering Office will not grant approval to the LPA for final payment to the consultant. If final payment is made to the consultant without the Administering Office's approval, such payment will be ineligible for Federal-aid reimbursement. The LPA shall not withhold retainage on CE services if the remaining documentation is not the responsibility of the consultant.

For cost plus fixed-fee contracts with variable overhead rates, the LPA shall submit the consultant's final invoice to the Administering Office. The Administering Office will forward the final invoice to the Office of Finance, External Audits, for final review and approval. External Audits will notify the consultant and LPA if any adjustments to the final invoice are required. After the consultant has adjusted its final invoice accordingly, the LPA shall pay the final invoice.

Final reimbursement

After all the consultant's work is complete, all deliverables have been received, and the consultant has been paid in full, the LPA shall submit a request for final reimbursement for consulting services to the Iowa DOT Administering Office. Upon receipt of the final reimbursement request, the Administering Office will process the final Federal reimbursement for consultant services.

Final audit

Upon receipt of a request for final reimbursement of consultant costs, the Administering Office will also forward a request for a final audit or final review to the Iowa DOT Office of Finance, External Audits. Lump sum contracts do not need a final audit, but may have a final review. External Audits may waive final audit requirements on contracts less than \$100,000.

If a final audit is conducted, External Audits will review all invoiced charges to assure that the charges are adequately supported and are eligible for reimbursement. After the final audit is complete, External Audits will return the audit report to the Administering Office, which in turn will pass the report on to the LPA and the consultant.

- If the audit report finds that a balance is due to the consultant, the consultant may invoice the LPA for the balance due and the LPA may request reimbursement for the additional payment. Upon receipt of such a request, the Iowa DOT will reimburse the LPA for the appropriate Federal share.
- If the audit report finds that the consultant has been overpaid, the Iowa DOT will invoice the LPA for the appropriate Federal share or deduct this amount from the balance of reimbursement that is due to the LPA for other project costs. Likewise, the LPA may request reimbursement from the consultant for the amount of overpayment.

Consultant evaluations

Upon completion of the contract work, the LPA shall complete the LPA Consultant Evaluation ([Form 517024](#)). After completing the form, the LPA shall send the evaluation to the consultant, the Administering Office, and the Office of Local Systems.

Records retention

Upon FHWA approval of the final closure document, the Administering Office will notify the LPA and the consultant of the record retention date. The LPA and consultant shall keep all records associated with the project for at least 3 years from the record retention date. During this time, the records shall be available to Iowa DOT and FHWA staff upon request.

Federal-aid Consultant Checklist

The following checklist describes the procedures and sequence of steps that a local public agency (LPA) must follow to receive Federal-aid reimbursement for consulting services. Items with an asterisk (*) are the responsibility of the LPA. The LPA is encouraged to include this checklist in their project file and use it to ensure that all the necessary steps are completed.

- * 1. The LPA obtains a list of consultants which are prequalified with the Iowa Department of Transportation (Iowa DOT) in the categories of work required. This list is available on the [Iowa DOT Consultant Utilization](#) website. Only firms on the Iowa DOT prequalified list may be considered for the work.
- * 2. The LPA prepares a scope of work and cost estimate that reflects all the services to be provided by the consultant for the entire project, even if the initial contract will not include all of the services that will eventually be provided. If the cost estimate for consultant work is less than \$150,000 go to Step 3; if \$150,000 or more, go to Step 6. See the "Estimate of Consultant Costs" section of [I.M. 3.305](#) for additional guidance in preparing a cost estimate.
- * 3. The LPA identifies at least 3 firms from the Iowa DOT prequalified list to be considered for the desired services. The LPA also decides if a Disadvantaged Business Enterprise (DBE) goal will be set, and if so, what percentage will be targeted. For guidance in setting DBE goals, refer to [I.M. 3.710](#), DBE Guidelines.
- * 4. The LPA may hold discussions with an adequate number of prequalified firms as necessary to evaluate their ability to perform the work. Such discussions should include items such as: any changes in qualified staff, workload, willingness to meet time requirements, ability to meet the established DBE goal (if any), past performance, accounting methods, and approach to the project.
- * 5. If after discussions, the LPA feels they can negotiate an contract with a prequalified consultant at a cost less than \$150,000, the LPA submits a request to begin negotiations to the Administering Office and proceeds to Step 21. This request shall include the following:
 - a) The proposed scope of work and estimate of consultant costs.
 - b) The names of all the pre-qualified firms considered.
 - c) The reasons why the selected consultant is considered most qualified.
 - d) An indication if the LPA has set a DBE goal, and if so, the targeted percentage of DBE participation. If not, the LPA shall indicate the reasons why no goal is proposed.
- * 6. The LPA appoints a selection committee. The selection committee should have 3 to 5 members which may include LPA staff, elected officials, and at least one member with technical expertise (i.e., a licensed professional engineer or architect). The selection committee can add non-voting members to act as resources if it deems necessary.
- * 7. The LPA submits the selection committee membership to the Administering Office. The LPA requests authority to proceed with the consultant selection process.
- 8. If acceptable, the Administering Office approves the LPA's request to proceed with the selection process.
- * 9. The LPA prepares and submits a draft Request for Proposal (RFP), estimate of costs, and the proposed DBE goal, if any, to the Administering Office. If no DBE goal is proposed, the LPA shall indicate the reasons why. If a DBE goal has been set, the RFP shall identify the goal. The RFP shall also specify that proposals that do not meet the DBE goal or provide documentation of a good faith effort to meet the goal will not be considered. For guidance in preparing the draft RFP, refer to the "Consultant Selection" section of [I.M. 3.305](#).

- 10. The Administering Office reviews the draft RFP, estimated consultant costs, and proposed DBE goal, if any. If these are acceptable, the Administering Office concurs and notifies the LPA. If not, the Administering Office works with the LPA to resolve any concerns.
- * 11. The LPA solicits RFPs by public announcement, notice or advertisement. This should be accomplished using the same means the LPA uses for other public notices, such as web sites, e-mail distribution lists, newspaper, social media, etc. The LPA should also send qualifications-based RFPs to three or more consultants. The Iowa DOT recommends sending RFPs to more than 3 firms, since additional justification will be required if less than 3 proposals are received.

Note: The LPA shall not direct the consultant to include an estimate of cost with their proposal, even if the estimated cost is to be submitted in a separate, sealed envelope. If the LPA receives a proposal that includes cost information, that proposal shall not be considered.

- 12. Consultants prepare and submit proposals in response to the RFP. If a DBE goal has been set by the LPA, consultants that did not meet the goal must document their good faith efforts to meet the goal. This documentation should include: a list of DBE firms contacted, a list of the DBE firms that responded with a subcontract proposal, and, if the consultant does not propose to use a DBE firm that submitted a subcontract proposal, an explanation why such a DBE firm will not be used. The documentation may be included in the proposal or in a separate document that accompanies the proposal.
- * 13. The LPA selection committee evaluates proposals utilizing the evaluation criteria. If less than 3 proposals are received, the LPA should consider making another solicitation for proposals.
- * 14. If appropriate, the LPA selection committee conducts interviews (usually with no more than the top three firms). The LPA then applies the evaluation criteria, and finalizes the ranking in order of preference. The selection committee also documents its decision-making process.
- * 15. If a DBE goal was set for the contract, the LPA reviews the documentation provided with the top-ranked consultant's proposal to verify the DBE goal was met. If the goal was not met, but in the opinion of the LPA, the consultant made a good faith effort, or if no DBE goal was set for the contract, proceed to Step 20. For guidance in evaluating good faith efforts, refer to [I.M. 3.710](#), DBE Guidelines.
- * 16. If, in the opinion of the LPA, the consultant **did not** make a good faith effort to achieve the DBE goal, the LPA notifies the consultant that a contract cannot be awarded due to the consultant's lack of a good faith effort.

The consultant may appeal the LPA's decision by submitting a written request for an administrative reconsideration. If an appeal is made, proceed to the next step. If no appeal is sought, the LPA goes back to Step 15 and evaluates the good faith effort of the next highest ranked firm. For the guidance concerning the administrative reconsideration procedures, refer to [I.M. 3.710](#), DBE Guidelines.

- 17. The consultant prepares and sends a written request for an administrative reconsideration to the Administering Office. This request should include copies of the following: the RFP, the consultant's proposal, and any additional justification or documentation that may support the consultant's good faith efforts to meet the DBE goal.
- 18. Upon receipt of the written request for an administrative reconsideration, the Administering Office forwards this request to the Office of Employee Services, Civil Rights Team (OES-CRT), along with one copy of the documentation provided by the LPA and / or consultant.
- 19. The OES-CRT reviews the administrative reconsideration request. If the OES-CRT concurs with the LPA's determination, the OES-CRT so notifies the Administering Office and provides copies to both the LPA and the consultant. The LPA goes back to Step 15 and evaluates the good faith effort of the next highest ranked firm.

If, on the other hand, the consultant's good faith effort is judged sufficient, the OES-CRT notifies the Administering Office and provides copies to the LPA and the consultant.

- * 20. The LPA submits the consultant rankings to Administering Office and requests approval to initiate negotiations with the consultant ranked highest by the selection process. If less than 3 firms submitted a proposal, the LPA shall include justification for proceeding with the selection process. This justification must address whether soliciting proposals again would result in additional proposals or not.
- 21. The Administering Office reviews the LPA's request to begin negotiations with the selected consultant and the proposed DBE goal, if not already reviewed. If acceptable, the Administering Office concurs and notifies the LPA.
- * 22. The LPA informs those consultants that submitted proposals of the results of the selection process.
- * 23. The LPA begins negotiations with the selected consultant. For additional guidance on negotiation procedures, refer to the "Contract Negotiation" section of [I.M. 3.305](#). Negotiations continue until agreement is reached on these items. If agreement cannot be reached on these items, the LPA goes back to Step 3 (for contracts estimated less than \$150,000) and begins discussions with the next firm; or goes back to Step 15 (for contracts estimated at \$150,000 or more) and evaluates the good faith effort of the next highest ranking firm. This process continues until negotiations are successful.
- * 24. The LPA submits a request for FHWA authorization to the Administering Office. This request shall include the following information:
 - a) A copy of the draft contract prepared by the consultant, including any subconsultant contracts, if available.
 - b) An estimate (even if only a very rough one) of the costs of all phases of consultant contract work that are anticipated for the project. This should also include costs for any services that are not included in the initial draft contract. The estimate for all phases of work may be based on the typical percentages provided in this I.M., but the costs associated with the scope of work included in the draft contract must be supported by a detailed estimate.
 - c) A copy of the completed DBE Commitment Information ([Form 517010 \(Word\)](#)). This form is required, even if no DBE goal was set or no DBE commitment has been made. For more information, refer to the instructions included with the form.
 - d) If a DBE goal was set, and the consultant's DBE commitment is less than the goal, include documentation that supports the consultant's good faith efforts to meet the DBE goal established for the contract. This should include the justification for the consultant's proposed DBE involvement that was submitted as part of their proposal. It also should include any additional considerations weighed by the LPA when reviewing the consultant's good faith efforts.
- 25. The Administering Office reviews the draft contract in accordance with [Attachment B](#) to I.M. 3.305 and verifies that [Form 517010 \(Word\)](#) was completed correctly. If a DBE goal was set for the contract, and the consultant's proposed DBE commitment is less than the goal, the Administering Office reviews the documentation provided by the LPA concerning the consultant's good faith effort to meet the DBE goal.
- 26. If appropriate, the Administering Office shall forward a copy of the draft contract(s) to the Office of Finance (External Audits) and request a pre-audit. For more information on pre-audits, refer to the "Pre-audit Procedures" section of [I.M. 3.305](#).
- 27. External Audits conducts a pre-audit (if requested) of the draft contract(s) and forwards a copy of the pre-audit report to the Administering Office.
- 28. The Administering Office forwards a copy of the pre-audit report (if conducted) and the Administering Office's comments on the draft contract(s) to the LPA and the consultant.
- 29. The Administering Office verifies that adequate federal funds are shown in the current fiscal year of the Statewide Transportation Improvement Program (STIP). If funds are inadequate, or if they are incorrectly programmed, the Administering Office contacts the LPA and requests them to work with the appropriate Metropolitan Planning Organization (MPO) or Regional Planning Affiliation (RPA) to revise the programming of the project's funds.

- 30. If adequate funds are available, and they are correctly programmed, the Administering Office prepares a request for FHWA authorization. If FHWA Environmental Concurrence has not yet been obtained, final design may not yet begin. In such cases, the Administering Office's authorization request will note that final design will not begin until after FHWA Environmental Concurrence has been obtained.
- 31. The Iowa DOT submits the authorization request to FHWA. FHWA reviews the authorization request, and if acceptable, electronically signs the request.
- * 32. The consultant and LPA modify the contract(s) to address the Administering Office's comments and the pre-audit recommendations, if any. The LPA submits the contract(s) to the City Council, County Board of Supervisors, County Conservation Board, or other appropriate contracting authority for approval.
- * 33. The consultant and LPA execute and forward a copy of the prime contract and any subconsultant contracts to the Administering Office.
- 34. The Administering Office verifies that all comments have been addressed. If not, the Administering Office works with the LPA to resolve any remaining issues.
- 35. The Administering Office verifies that FHWA authorization has been obtained. If so, the Administering Office signs and dates a copy of the prime contract, notifies the LPA that FHWA authorization has been obtained, and provides a copy of the notification to the appropriate RPA or MPO. The Administering Office's notification shall contain a reminder that the consultant's final design activities shall not proceed until the NEPA process is complete. For additional information concerning this requirement, refer to the "Contract Administration" section of [I.M. 3.305](#).
- * 36. The LPA issues notice to proceed to the consultant and reminds the consultant that final design activities may not proceed until the NEPA process is complete.
- 37. The Administering Office sends a copy of the authorized contract to both the LPA and consultant; and provides a copy to the Office of Finance (Project Accounting & Payables) and External Audits. The Administering Office retains one copy of the prime contract for their file.
- * 38. The LPA forwards copies of the executed subconsultant contracts (if not previously obtained) to the Administering Office. Upon receipt, the Administering Office sends a copy of the subconsultant contract to the Office of Finance (Project Accounting & Payables) and External Audits. The Administering Office retains one copy for their file.
- * 39. After a payment has been made to the consultant, the LPA may submit a request for reimbursement to the Administering Office. For more information on reimbursement requests, refer to the "Contract Administration" section of [I.M. 3.305](#).
- 40. The Administering Office processes the billings received from the LPA for reimbursement.
- * 41. After all work covered by the consultant contract is complete, including any approved supplemental contracts, and all deliverables have been received and accepted, the LPA makes final payment to the consultant in accordance with the final payment procedures in the Contract Close-out section of [I.M. 3.305](#).
- * 42. After the consultant has been paid in full, the LPA requests final reimbursement for the consulting services. Along with the request for final reimbursement of consulting services, the LPA shall also complete and include a copy of the DBE Payment Information ([Form 517011 \(Word\)](#)). This form is required, even if no DBE goal was set or no DBE commitment has been made. For more information, refer to the instructions included with the form.
- 43. The Administering Office reviews [Form 517011 \(Word\)](#). If complete, the Administering Office forwards a copy of this form to the OES-CRT.

- 44. The Administering Office reviews the final reimbursement request, and if acceptable, processes the final reimbursement for consultant services.
- 45. The Administering Office requests a final audit or a final review from External Audits. External Audits conducts a final review or audit in accordance with the procedures in the "Contract Close-out" section of [I.M. 3.305](#).
- 46. After the final review or audit is completed, the Administering Office provides a copy of the audit findings, if any to the LPA.
- * 47. If the audit report finds that a balance is due to the consultant, the consultant may invoice the LPA for the balance due and the LPA may request reimbursement for the additional payment. Upon receipt of such a request, the Iowa DOT will reimburse the LPA for the appropriate Federal share. If the audit report finds that the consultant has been overpaid, the Iowa DOT will invoice the LPA for the appropriate Federal share or deduct this amount from the balance of reimbursement that is due to the LPA for other project costs. Likewise, the LPA may request reimbursement from the consultant for the amount of overpayment.
- * 48. The LPA completes the LPA Consultant Evaluation ([Form 517024](#)) and sends a copy to the Administering Office. The Administering Office completes its portion of the evaluation form and returns a copy to the LPA, the consultant, and the Office of Local Systems.
- 49. Upon FHWA approval of the final closure document, the Administering Office will notify the LPA and the consultant of the record retention date.
- * 50. The LPA and consultant keep all records associated with the project for at least 3 years from the record retention date.

Requirements for Federal-aid Consultant Contracts

There are a number of provisions in Federal-aid consultant contracts that are required either by Federal regulations or for effective and efficient oversight by the Iowa DOT. Therefore, use of the Standard Consultant Contract, as shown in in [Attachment D](#) to I.M. 3.305, is required.

Nevertheless, the Standard Consultant Contract can and should be modified to fit the needs of the project and the desired services. Even so, modifications should be made only when necessary, and substantive modifications to required contract provisions will not be allowed. A substantive change is one that affects the meaning or application of the provision in a way that circumvents the original intent. Keeping changes to a minimum will help speed up the review by the Iowa DOT and ensure that all the Federal requirements are met.

The purpose of this attachment is to show which provisions in the Standard Consultant Contract may not be substantively modified. These provisions are listed below, with a reference the appropriate Article(s) or page numbers in Standard Consultant Contract shown in parenthesis.

Required Contract Provisions

The following provisions are requirements and must be included in all Federal-aid consultant contracts between a Local Public Agency (LPA) and its consultant. These provisions must also be included in all subcontracts between the prime consultant and its subconsultants. Such contracts shall:

1. Clearly define the parties to the contract (page 1).
2. Set forth the time of beginning and completion of work under the contract (1.4).
3. Include a provision that prohibits beginning final design activities until after FHWA Environmental Concurrence has been obtained. For more information on this requirement, see the "Contract Administration" section of [I.M. 3.305](#) (1.4.3).
4. Include the name of the project for which services are being provided (page 1).
5. Include a general description of the services to be performed (page 1).
6. Contain a scope of services section that specifically details each individual task to be performed and describes what each task is to accomplish (Attachment A – Scope of Services).
7. Clearly define the specifications for the consultant contract work, such as the quantity and format of the project deliverables. Project deliverables may include hard and / or electronic copies of plans, specifications, and other electronic files (Attachment B – Specifications)
8. Include provisions that require approval of both the Owner and the Iowa DOT before the prime consultant may use cost underruns associated with subcontracts (3.2).
9. Set forth the terms under which the consultants may be compensated for extra work (4.7)
10. Include provisions that apply in the event that the contract is terminated or suspended. (4.11, 4.12)
11. Include a clause stating that the consultant shall defend, indemnify and hold harmless the LPA, the State of Iowa and the Iowa DOT, its agents, employees, representatives, assigns and from all claims and liabilities due to negligent acts, errors, or omissions of the consultant, its members, agents, stockholders or employees in connection with performance of the contract (4.9.1).
12. Include a conflict of interest provision stating that the consultant shall not engage the services of any person or persons, in the employ of the LPA, Iowa DOT, or FHWA for work covered by the contract without addressing potential conflicts of interest and obtaining the written consent of the employers of such persons (4.10).
13. Include a statement that the consultant agrees to comply with all federal, state and local laws and ordinances applicable to the work (2.3).

14. Include provisions prohibiting assignment or transfer of any portion of the contract without the written approval of the LPA and concurrence of the Iowa DOT and FHWA, if applicable (4.14).
15. Include provisions that require a licensed engineer or architect in the State of Iowa to certify the plans and specifications (4.3).
16. Contain provisions ensuring compliance with the nondiscrimination and Disadvantaged Business Enterprise (DBE) requirements contained in Title 49 of the Code of Federal Regulations, and the nondiscrimination requirements of the Code of Iowa (4.17, 4.18).
17. Include provisions that provide for access to the consultant's records and sets forth the time of record retention as three years from the date of final payment under the Contract (4.15).
18. Include provisions acknowledging that the consultant's work is subject to the review and approval of the Iowa DOT and FHWA (when applicable), and that both have the right to participate in conferences between the owner and the consultant (4.16).
19. Include provisions for inspection and acceptance of the consultant's work by the Owner (4.4, 4.5, and 4.6.1)
20. Include a clause requiring the consultant to perform such additional work as may be necessary to correct errors in the work required under the contract. The consultant should complete the additional work without undue delays and without additional cost to the owner. In addition, the consultant should be held responsible for additional costs in subsequent related construction work, resulting from errors or omissions which are a result of gross negligence or carelessness on the part of the consultant (4.6.2)
21. Include provisions for time extensions (4.8).
22. Include a page for signature by the contracting agency and the consultant. This page shall also include the following signature block for the Iowa DOT (page 10):

Iowa Department of Transportation

Accepted for FHWA Authorization*

By _____ Date _____

Name _____

Title _____

* The Iowa DOT is not a party to this agreement. However, by signing this agreement, the Iowa DOT is indicating the work proposed under this Agreement is acceptable for FHWA authorization of Federal funds.

23. Contain a section covering fees and payments to the consultant. This section shall specify the method(s) of payment (Attachment C – Fees and Payments).
24. Include a clause stating that the consultant agrees to reimburse the Owner for any overpayment determined by final audit (Attachment C – Fees and Payments).
25. Contain a section whereby the consultant agrees to comply with the cost principles specified by the Federal Acquisition Regulations found in [48 CFR 31](#) (Attachment C – Fees and Payments).
26. If the contract uses a Cost Plus Fixed Fee or Fixed Overhead Rate method of compensation, attach a detailed itemized cost estimate that includes a summary of staff hours, fees, indirect costs and any subcontract costs. Any costs not eligible for Federal-aid participation should be clearly identified (Attachment C – Fees and Payments, Cost Plus Fixed Fee and Fixed Overhead Rate options).

27. If the contract uses a Specific Rate of Compensation or Unit Price method of compensation, attach a fee schedule that specifies the rates or unit prices that will be used (Attachment C – Fees and Payments, Specific Rate of Compensation and Unit Price options).
28. Include a consultant certification regarding suspension and debarment (Attachment D).
29. Include a consultant certification regarding unauthorized brokering, commissions, fees, contributions or other considerations in connection with procuring or carrying out the contract (Attachment E).
30. Include an owner certification regarding unauthorized commissions, fees, contributions or other considerations received in connection with awarding the contract (Attachment F).
31. If the contract includes construction engineering (CE) services, include a provision for withholding retainage. For other types of services, the retention provision is optional.

Payment Methods

Types of Payment Methods

Several types of payment methods are available for use in Federal-aid consultant contracts. All payment methods must be based on supportable and reasonable costs within the consultant's accounting system. A reasonable cost is one that does not exceed that which would be incurred by a prudent person in the conduct of a competitive business.

The Standard Consultant Contract, included as [Attachment D](#) to I.M. 3.305, contains a different "Attachment C – Fees and Payments" for each type of payment method described below.

1. Cost Plus Fixed Fee

This method should **only be used** for contracts that are estimated to be 18 months or more in duration, OR are estimated to be \$250,000 or more in total costs.

Using this method, the consultant is reimbursed for actual documented costs incurred and, in addition, receives a predetermined fixed fee. This method of payment is appropriate when the scope, complexity, character and duration is indeterminable at the time of negotiations, or where the work is of a nature that the contracting authority does not have experience or knowledge to permit an evaluation of the consultant's proposal on any other basis.

This method requires, as a prerequisite to equitable negotiations, that the contracting authority and consultant define as fully and completely as possible, and agree upon, the scope of services.

By definition, cost plus fixed fee includes payment of:

- a. Direct costs incurred, including:
 - Direct labor.
 - Direct non-salary costs incurred, such as the cost of materials incorporated into the contract work, travel expenses, computer charges, printing costs, expendable supplies, and payments to sub-consultants.

Direct costs should be estimated by classification/category of expense. Categories can include, but are not limited to: CADD, computer, mileage, printing, telephone, copying, meals and lodging. All direct cost categories, estimated by the consultant, need to be charged consistently to all types of contracts to be eligible for reimbursement.

- b. Indirect cost: Salary-related expenses and general overhead costs, which are calculated as percentages of direct labor. The overhead rate used should normally be estimated at the last verified rate. Under circumstances where the last verified rate is more than two years old, or where the last verified rate is not representative of the current business trend, an attempt should be made to negotiate a rate taking these circumstances into account. A three year average may be an acceptable alternative.
- c. Fixed fee: A fixed amount (fixed fee) over and above direct and indirect costs. The determination of the amount of fixed fee shall take into account the size, complexity, duration, and degree of risk involved in the work. The establishment of the fixed fee shall be project-specific. Fixed fees normally range from 6 to 15 percent of the estimated total direct and indirect costs. When determining a fixed fee, exclude travel expenses, printing costs, miscellaneous expenses, contingency, and any subconsultant fees.
- d. Contingency: An amount established to provide for reimbursement of unforeseen costs associated with the original contract items. The amount is normally 10% of direct and indirect costs, excluding any subconsultant fees. Under circumstances where the scope is not well defined, it may be appropriate to increase the amount of contingency.

Contingency is normally used to cover increases in wage rates and overhead cost and, under some circumstances, to cover a limited amount of unforeseen costs. Contingency is not to be used without the

prior written approval of the contracting authority and concurrence of the Iowa Department of Transportation (DOT), unless it is for overhead increases.

2. Fixed Overhead Rate

This method should **only be used** for contracts that are estimated to be less than 18 months in duration, OR are estimated to be less than \$250,000 in total costs.

This method is the same as the Cost Plus Fixed Fee describe above, except that the overhead rate is fixed for the duration of the contract instead of being adjusted each year.

3. Lump Sum

Using this method, the consultant undertakes to perform the services stated in the contract for an agreed amount as full compensation. This method of payment is appropriate only if the contracting authority has established the scope, complexity and duration of the work required to a degree that just compensation can be determined and evaluated by all parties at the time of negotiations. This method would be most appropriate for use on small and repetitious items of work of no more than 18 months in duration. Use of contingency on a lump sum contracts is not appropriate.

4. Specific Rates of Compensation

Using this method, the consultant is paid at an agreed and supported specific fixed hourly or daily rate for each class of employee directly engaged in the work. Such rates of pay include the consultant's estimated costs and net fee. This method of payment should be considered only for relatively minor items of work of indeterminable extent.

This method is recommended for CE services because of the indeterminate duration of the work.

Direct non-salary costs may be either set forth as an element of the specific rate or may be included in the contract as independent cost items. The specific rates, so determined, should be established by the consultant and found by the contracting authority to be reasonable and proper.

5. Unit Prices

Using this method, the consultant is paid on the basis of units of work performed. A unit of work may be defined as a measurement of work, such as linear feet (meters) of borings, number of right-of-way plats, tons (megagrams) of structural steel, or pounds (kilograms) of reinforcing steel. This method is appropriate when the cost of the work per unit can be determined, in advance with reasonable accuracy, but the extent of the work is indefinite.

Estimate of Proposed Consultant Fees

For all the types of contracts listed above, the consultant shall prepare a cost estimate to support the proposed fees. This estimate shall include direct and indirect costs the firm expects to incur, contingency (if any), and the expected fixed fee. For contracts using the Cost Plus Fixed Fee and Fixed Overhead Rate payment types, a similar estimate shall be attached to and made part of the contract (referenced as Attachment H – Consultant Fee Proposal in the Standard Consultant Contract). For the contracts using the other payment types, the cost estimate does not need to be part of the contract, but shall accompany the draft contract when submitted for review by the LPA and the Iowa DOT. An example cost estimate is shown in the Standard Consultant Contract.

The cost estimate shall also include subconsultant expenses. Subconsultant expenses should represent total estimated cost of work to be completed by an identified subconsultant. The estimated fee for the subconsultant should include direct labor, overhead, direct expenses, fixed fee and contingency, if any. The cost estimate should identify the type of payment method that will be used for each subconsultant. The subconsultant should also submit an estimate similar to one above so the subconsultant's expenses can be reviewed in the same manner as the prime consultant's.

Retention

A consultant contract may provide that a percentage of monthly payments be withheld until final payment is made or until final audit. This amount is often referred to as “retention” or “retainage.”

When the scope of the contract includes CE services, the contract shall provide for retention. The amount retained shall be held until the Iowa DOT has verified the consultant has provided all the construction documentation necessary for final reimbursement of construction costs. Once verified, the Administering Office will notify the LPA that the amount retained shall be released. The LPA shall not withhold retainage on CE services if the remaining documentation is not the responsibility of the consultant, or if the delay is for reasons beyond the ability of the consultant to control.

For contracts that do not include CE services, retention is optional. Situations which may warrant the use of retainage include, but are not limited to, the following:

- The LPA has no prior experience with the consultant.
- The consultant’s prior contracts have included large fluctuations in overhead rates.

When used for CE services, the Iowa DOT recommends that the amount retained be at least 3% but not exceed 5% of the amount payable. Lesser amounts of retainage may be used for services other than CE services.

Contract No. [XXXXXX]
Owner Project No. [XXXXXX]
Iowa DOT Project No. [XXXXXX]

Standard Consultant Contract
For Local Public Agency Consultant Contracts with Federal-aid Participation

(Areas intended for modification are shown in [bracketed blue text with grey highlight]. Drafting instructions are shown with yellow highlight and should be removed when drafting. The header information should also be removed or modified when drafting.)

This **AGREEMENT**, made as of the date of the last party's signature below, is by and

BETWEEN [name of Local Public Agency], the **Owner**, located at:

[street address]
[city, state, zip]
Phone: (xxx) xxx-xxxx
FAX: (xxx) xxx-xxxx

and [Insert Company Name], the **Consultant**, located at:

[street address]
[city, state, zip]
Phone: (xxx) xxx-xxxx
FAX: (xxx) xxx-xxxx

For the following Project: [insert a description of the Federal-aid project here, consistent with the description in the Statewide Transportation Improvement Program]

The **Owner** has decided to proceed with the Project, subject to the concurrence and approval of the Iowa Department of Transportation (Iowa DOT), and the Federal Highway Administration (FHWA), U.S. Department of Transportation (when applicable).

The **Owner** desires to employ the **Consultant** to provide [insert general description of services to be provided here] services to assist with the development and completion of the Project. The **Consultant** is willing to perform these services in accordance with the terms of this Agreement.

TABLE OF CONTENTS

Article Number And Description

- 1 Initial Information**
 - 1.1 Project Parameters
 - 1.2 Financial Parameters
 - 1.3 Project Team
 - 1.4 Time Parameters
 - 1.5 Prequalification

- 2 Entire Agreement, Required Guidance and Applicable Law**
 - 2.1 Entire Agreement of the Parties
 - 2.2 Required Guidance
 - 2.3 Applicable Law

- 3 Form of Compensation**
 - 3.1 Method of Reimbursement for the Consultant
 - 3.2 Subconsultant's Responsibilities for Reimbursement

- 4 Terms and Conditions**
 - 4.1 Ownership of Engineering Documents
 - 4.2 Subconsultant Contract Provisions and Flow Down
 - 4.3 Consultant's Endorsement on Plans
 - 4.4 Progress Meetings
 - 4.5 Additional Documents
 - 4.6 Revision of Work Product
 - 4.7 Extra Work
 - 4.8 Extension of Time
 - 4.9 Responsibility for Claims and Liability
 - 4.10 Current and Former Agency Employees
 - 4.11 Suspension of Work
 - 4.12 Termination of Agreement
 - 4.13 Right to Set-off
 - 4.14 Assignment or Transfer
 - 4.15 Access to Records
 - 4.16 Iowa DOT and FHWA Participation
 - 4.17 Nondiscrimination Requirements
 - 4.18 Compliance with Title 49, Code of Federal Regulations, Part 26
 - 4.19 Severability

Attachment A - Scope of Services

Attachment B - Specifications

Attachment C - Fees and Payments

Attachment C-1 – Cost Analysis Worksheet

Attachment D - Certification Regarding Debarment, Suspension, and Other Responsibility Matters

Attachment E - Certification of Consultant

Attachment F - Certification of Owner

Attachment G - Sample Invoice Form

Attachment H - Consultant Fee Proposal

Attachment I - Subconsultant Scope and Budget

[\[Attachment J – Any other attachments are to be listed here\]](#)

ARTICLE 1 INITIAL INFORMATION

This Agreement is based on the following information and assumptions.

1.1 Project Parameters

The objective or use is: [Identify, if appropriate, proposed use or goals and insert here]

1.2 Financial Parameters

1.2.1 Amount of the **Owner's** budget for the **Consultant's** compensation is:
[Insert amount here]

1.2.2 Amount of the **Consultant's** budget for the subconsultants' compensation is:
[Insert amount here]

1.3 Project Team

1.3.1 The **Owner's** Designated Representative, identified as the **Contract Administrator** is:
[insert name here]

The **Contract Administrator** is the authorized representative, acting as liaison officer for the **Owner** for purpose of coordinating and administering the work under the Agreement. The work under this Agreement shall at all times be subject to the general supervision and direction of the **Contract Administrator** and shall be subject to the **Contract Administrator's** approval.

1.3.2 The **Consultant's** Designated Representative is:
[insert name here]

1.3.3 The subconsultants retained at the **Consultant's** expense are identified in the following table:

<u>Subconsultant</u>	<u>Amount Authorized</u>	<u>Maximum Amount Payable</u>	<u>Method of Payment</u>
[Insert first subconsultant]	[Insert amount]	[Insert amount]	[Insert type (from 3.1.2)]
[Insert 2nd subconsultant]	[Insert amount]	[Insert amount]	[Insert type (from 3.1.2)]
[Insert 3rd subconsultant]	[Insert amount]	[Insert amount]	[Insert type (from 3.1.2)]

1.4 Time Parameters

1.4.1 The **Consultant** shall begin work under this Agreement upon receipt of a written notice to proceed from the **Owner**.

1.4.2 Milestones for completion of the work under this Agreement as follows:

1. Preliminary design plans including type/size/location for all structures (preliminary design) and detail elements for a design public hearing and construction right-of-way needs shall be completed and accepted on or before [Insert date here] or [Insert days] calendar days after receiving the notice to proceed (whichever is greater).
2. Final design, contract plans and specifications and estimates shall be completed and in a form acceptable to the **Owner** on or before [Insert date here].
3. Completion of all work under this agreement shall be on or before [Insert date here] unless extended by written approval of the **Contract Administrator** or adjusted by supplemental agreement.

(the above examples may be edited to fit the needs of the project)

1.4.3 The **Consultant** shall not begin final design activities until after the **Owner** has been notified by the Iowa DOT that FHWA Environmental Concurrence has been obtained. Upon receipt of such notice, the **Owner** will provide the **Consultant** notice to proceed with final design activities.

1.5 Prequalification

1.5.1 The **Consultant** shall remain prequalified in work category [Insert all applicable work categories here], as defined in Iowa Department of Transportation Policy and Procedure No. 300.04. Failure to do so will exclude the **Consultant** from consideration for future Federal-aid contracts, until the **Consultant** regains pre-qualification status.

1.5.2 All services within this agreement shall be performed by the **Consultant** or subconsultant prequalified by the Iowa DOT in that particular category of work. If no work category exists for a particular service, normal methods of acceptance shall be used, such as experience, typical licensure, certification or registration, or seals of approval by others.

ARTICLE 2 ENTIRE AGREEMENT, REQUIRED GUIDANCE AND APPLICABLE LAW

2.1 **Entire Agreement of the Parties.** This Agreement, including its attachments, represents the entire and integrated agreement between the **Owner** and the **Consultant** and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both **Owner** and **Consultant**. This Agreement comprises the documents listed as attachments in the Table of Contents. The work to be performed by the **Consultant** under this Agreement shall encompass and include all detail work, services, materials, equipment and supplies necessary to prepare and deliver the scope of services provided in Attachment A.

2.2 **Required Guidance.** All services shall be in conformity with the Specifications outlined in Attachment B, the Iowa Department of Transportation Federal-aid Project Development Guide, Instructional Memorandums to Local Public Agencies (I.M.s), and other standards, guides or policies referenced therein. In addition, applicable sections of the U.S. Department of Transportation Federal Aid Policy Guide (FAPG) shall be used as a guide in preparation of plans, specifications and estimates.

2.3 **Applicable Law.** The laws of the State of Iowa shall govern and determine all matters arising out of or in connection with this Agreement without regard to the choice of law provisions of Iowa law. In the event any proceeding of a quasi-judicial or judicial nature is commenced in connection with this Agreement, the exclusive jurisdiction for the proceeding shall be brought in the [county name] County District Court of Iowa, [city name], Iowa. This provision shall not be construed as waiving any immunity to suit or liability including without limitation sovereign immunity in State or Federal court, which may be available to the **Owner**. The **Consultant** shall comply with all Federal, State and local laws and ordinances applicable to the work performed under this Agreement.

ARTICLE 3 FORM OF COMPENSATION

3.1 Method of Reimbursement for the Consultant.

3.1.1 Compensation for the **Consultant** shall be computed in accordance with one of the following compensation methods, as defined in Attachment C: (mark method selected with an [X])

- .1 Cost Plus Fixed Fee - Attachment C
- .2 Lump Sum - Attachment C
- .3 Specific Rate of Compensation - Attachment C
- .4 Unit Price - Attachment C
- .5 Fixed Overhead Rate - Attachment C

3.1.2 When applicable, compensation for the subconsultant(s) shall be computed in accordance with one of the payment methods listed in section 3.1.1. Refer to section 1.3.3 for identification of the method of payment utilized in the subconsultant(s) contract. The compensation method utilized for each subconsultant shall be defined within the subconsultant contract to the **Consultant**.

3.2 **Subconsultant's Responsibilities for Reimbursement.** The **Consultant** shall require the subconsultants (if applicable) to notify them if they at any time determine that their costs will exceed their estimated actual costs. The **Consultant** shall not allow the subconsultants to exceed their

estimated actual costs without prior written approval of the **Contract Administrator**. The prime **Consultant** is cautioned that cost under-runs associated with any subconsultant's contract are not available for use by the prime **Consultant** or other subconsultant unless the **Contract Administrator**, Iowa DOT, and FHWA (when applicable) have given prior written approval.

ARTICLE 4 TERMS AND CONDITIONS

4.1 Ownership of Engineering Documents

4.1.1 All sketches, tracings, plans, specifications, reports on special studies and other data prepared under this Agreement shall become the property of the **Owner** and shall be delivered to the **Contract Administrator** upon completion of the plans or termination of the services of the **Consultant**. There shall be no restriction or limitation on their future use by the **Owner**, except any use on extensions of the project or on any other project without written verification or adaptation by the **Consultant** for the specific purpose intended will be the **Owner's** sole risk and without liability or legal exposure to the **Consultant**.

4.1.2 The **Owner** acknowledges the **Consultant's** plans and specifications, including all documents on electronic media, as instruments of professional service. Nevertheless, the plans and specifications prepared under this Agreement shall become the property of the **Owner** upon completion of the services and payment in full of all moneys due to the **Consultant**.

4.1.3 The **Owner** and the **Consultant** agree that any electronic files prepared by either party shall conform to the specifications listed in Attachment B. Any change to these specifications by either the **Owner** or the **Consultant** is subject to review and acceptance by the other party. Additional efforts by the **Consultant** made necessary by a change to the CADD software specifications shall be compensated for as Additional Services.

4.1.4 The **Owner** is aware that significant differences may exist between the electronic files delivered and the respective construction documents due to addenda, change orders or other revisions. In the event of a conflict between the signed construction documents prepared by the **Consultant** and electronic files, the signed construction documents shall govern.

4.1.5 The **Owner** may reuse or make modifications to the plans and specifications, or electronic files while agreeing to take responsibility for any claims arising from any modification or unauthorized reuse of the plans and specifications.

4.2 Subconsultant Contract Provisions and Flow Down

4.2.1 All provisions of this Agreement between the **Owner** and **Consultant** shall also apply to all subconsultants hired by the **Consultant** to perform work pursuant to this Agreement. It is the **Consultant's** responsibility to ensure all contracts between **Consultant** and its subconsultants contain all provisions required of Consultant in this Agreement. The only recognized exceptions to this requirement are under provision 1.5.2 when the subconsultant is required to be prequalified in a different work category than the **Consultant** and under provision 3.1.2 when the subconsultant has a different method of reimbursement than the **Consultant**.

4.2.2 The **Consultant** may not restrict communications between the **Owner** and any of the subconsultants. The **Consultant** will encourage open communication among the **Owner**, the **Consultant** and the subconsultants.

4.3 Consultant's Endorsement on Plans. The **Consultant** and its subconsultants shall endorse and certify the completed project deliverables prepared under this Agreement, and shall affix thereto the seal of a professional engineer or architect (as applicable), licensed to practice in the State of Iowa, in accordance with the current Code of Iowa and Iowa Administrative Code.

4.4 Progress Meetings. From time to time as the work progresses, conferences will be held at mutually convenient locations at the request of the **Contract Administrator** to discuss details of the design and progress of the work. The **Consultant** shall prepare and present such information and studies as may

be pertinent and necessary or as may be requested by the **Contract Administrator**, to enable the **Contract Administrator** to pass judgment on the features and progress of the work.

4.5 Additional Documents. At the request of the **Contract Administrator**, the **Consultant** shall furnish sufficient documents, or other data, in such detail as may be required for the purpose of review.

4.6 Revision of Work Product

4.6.1 Drafts of work products shall be reviewed by the **Consultant** for quality control and then be submitted to the **Contract Administrator** by the **Consultant** for review and comment. The comments received from the **Contract Administrator** and the reviewing agencies shall be incorporated by the **Consultant** prior to submission of the final work product by the **Consultant**. Work products revised in accordance with review comments shall constitute "satisfactorily completed and accepted work." Requests for changes on work products by the **Contract Administrator** shall be in writing. In the event there are no comments from the **Contract Administrator** or reviewing agencies to be incorporated by the **Consultant** into the final work product, the **Contract Administrator** shall immediately notify the **Consultant**, in writing, that the work product shall constitute "satisfactorily completed and accepted work."

4.6.2 In the event that the work product prepared by the **Consultant** is found to be in error and revision or reworking of the work product is necessary, the **Consultant** agrees that it shall do such revisions without expense to the **Owner**, even though final payment may have been received. The **Consultant** must give immediate attention to these changes so there will be a minimum of delay to the project schedule. The above and foregoing is not to be construed as a limitation of the **Owner's** right to seek recovery of damages for negligence on the part of the **Consultant** herein.

4.6.3 Should the **Contract Administrator** find it desirable to have previously satisfactorily completed and accepted work product or parts thereof revised, the **Consultant** shall make such revisions if requested and directed by the **Contract Administrator** in writing. This work will be paid for as provided in Article 4.7.

4.7 Extra Work. If the **Consultant** is of the opinion that any work it has been directed to perform is beyond the scope of this Agreement, and constitutes "Extra Work," it shall promptly notify the **Contract Administrator** in writing to that effect. In the event that the **Contract Administrator** determines that such work does constitute "Extra Work", the **Consultant** shall promptly develop a scope and budget for the extra work and submit it to the **Contract Administrator**. The **Owner** will provide extra compensation to the **Consultant** upon the basis of actual costs plus a fixed fee amount, or at a negotiated lump sum. Prior to receipt of a fully executed Supplemental Agreement and written Notice to Proceed, any cost incurred that exceeds individual task costs, or estimated actual cost, or the maximum amount payable is at the **Consultant's** risk. The **Owner** has the right, at its discretion, to disallow those costs. However, the **Owner** shall have benefit of the service rendered.

4.8 Extension of Time. The time for completion of each phase of this Agreement shall not be extended because of any delay attributed to the **Consultant**, but may be extended by the **Contract Administrator** in the event of a delay attributed to the **Owner** or the **Contract Administrator**, or because of unavoidable delays beyond the reasonable control of the **Consultant**.

4.9 Responsibility For Claims And Liability

4.9.1 The **Consultant** agrees to defend, indemnify, and hold the **Owner**, the State of Iowa, the Iowa DOT, their agents, employees, representatives, assigns and successors harmless for any and all liabilities, costs, demands, losses, claims, damages, expenses, or attorneys' fees, including any stipulated damages or penalties, which may be suffered by the **Owner** as the result of, arising out of, or related to, the negligence, negligent errors or omissions, gross negligence, willfully wrongful misconduct, or breach of any covenant or warranty in this Agreement of or by the **Consultant** or any of its employees, agents, directors, officers, subcontractors or subconsultants, in connection with this Agreement.

4.9.2 The **Consultant** shall obtain and keep in force insurance coverage for professional liability (errors and omissions) with a minimum limit of \$1,000,000 per claim and in the aggregate, and all such other insurance required by law. Proof of **Consultant's** insurance for professional liability coverage and all such other insurance required by law will be provided to the **Owner** at the time the contract is executed and upon each insurance coverage renewal.

4.10 Current and Former Agency Employees

The **Consultant** shall not engage the services of any current employee of the **Owner** or the Iowa DOT unless it obtains the approval of the **Owner** or the Iowa DOT, as applicable, and it does not create a conflict of interest under the provisions of Iowa Code section 68B.2A. The **Consultant** shall not engage the services of a former employee of the **Owner** or the Iowa DOT, as applicable, unless it conforms to the two-year ban outlined in Iowa Code section 68B.7. Similarly, the **Consultant** shall not engage the services of current or former FHWA employee without prior written consent of the FHWA, and the relationship meets the same requirements for State and local agency employees set forth in the above-referenced Iowa Code sections and the applicable Federal laws, regulations, and policies.

4.11 Suspension of Work under this Agreement

4.11.1 The right is reserved by the **Owner** to suspend the work being performed pursuant to this Agreement at any time. The **Contract Administrator** may effect such suspension by giving the **Consultant** written notice, and it will be effective as of the date established in the suspension notice. Payment for the **Consultant's** services will be made by the **Owner** to the date of such suspension, in accordance with the applicable provisions in Article **4.12.2** or Article **4.12.3** below.

4.11.2 Should the **Owner** wish to reinstate the work after notice of suspension, such reinstatement may be accomplished by thirty (30) days' written notice within a period of one year after such suspension, unless this period is extended by written consent of the **Consultant**.

4.11.3 In the event the **Owner** suspends the work being performed pursuant to this Agreement the **Consultant** with approval from the **Contract Administrator**, has the option, after 180 days to terminate the contract.

4.12 Termination of Agreement

4.12.1 The right is reserved by the **Owner** to terminate this Agreement at any time and for any reason upon not less than thirty (30) days written notice to the **Consultant**.

4.12.2 In the event the Agreement is terminated by the **Owner** without fault on the part of the **Consultant**, the **Consultant** shall be paid for the reasonable and necessary work performed or services rendered and delivered up to the effective date or time of termination. The value of the work performed and services rendered and delivered, and the amount to be paid shall be mutually satisfactory to the **Contract Administrator** and to the **Consultant**. The **Consultant** shall be paid a portion of the fixed fee, plus actual costs, as identified in Attachment C. Actual costs to be reimbursed shall be determined by audit of such costs to the date established by the **Contract Administrator** in the termination notice, except that actual costs to be reimbursed shall not exceed the Maximum Amount Payable.

4.12.3 In the event the Agreement is terminated by the **Owner** for fault on the part of the **Consultant**, the **Consultant** shall be paid only for work satisfactorily performed and delivered to the **Contract Administrator** up to the date established by the termination notice. After audit of the **Consultant's** actual costs to the date established by the **Contract Administrator** in the termination notice and after determination by the **Contract Administrator** of the amount of work satisfactorily performed, the **Contract Administrator** shall determine the amount to be paid to the **Consultant**.

4.12.4 This Agreement will be considered completed when the scope of the project has progressed sufficiently to make it clear that [insert controlling milestone -- for example "construction"] can be

completed without further revisions in that work, or if the **Consultant** is released prior to such time by written notice from the **Contract Administrator**.

- 4.13 Right to Set-off.** In the event that the **Consultant** owes the **Owner** any sum under the terms of this Contract, the **Owner** may set off the sum owed to the **Owner** against any sum owed by the **Owner** to the **Consultant** under any other contract or matter in the **Owner's** sole discretion, unless otherwise required by law. The **Consultant** agrees that this provision constitutes proper and timely notice of the **Owner's** intent to utilize any right of set-off.
- 4.14 Assignment or Transfer.** The **Consultant** is prohibited from assigning or transferring all or a part of its interest in this Agreement, unless written consent is obtained from the **Contract Administrator** and concurrence is received from the Iowa DOT and FHWA, if applicable.
- 4.15 Access to Records.** The **Consultant** is to maintain all books, documents, papers, accounting records and other evidence pertaining to this Agreement and to make such materials available at their respective offices at all reasonable times during the agreement period, and for three years from the date of final closure of the Federal-aid project with FHWA, for inspection and audit by the **Owner**, the Iowa DOT, the FHWA, or any authorized representatives of the Federal Government; and copies thereof shall be furnished, if requested.
- 4.16 Iowa DOT and FHWA Participation.** The work under this Agreement is contingent upon and subject to the approval of the Iowa DOT and FHWA, when applicable. The Iowa DOT and FHWA shall have the right to participate in the conferences between the **Consultant** and the **Owner**, and to participate in the review or examination of the work in progress as well as any final deliverable.
- 4.17 Nondiscrimination Requirements.**
- 4.17.1** During the performance of this Agreement, the **Consultant** agrees to comply with the regulations of the U.S. Department of Transportation, contained in Title 49, Code of Federal Regulations, Part 21, and the Code of Iowa. The **Consultant** will not discriminate on the grounds of race, religion, age, physical disability, color, sex, sexual orientation, or national origin in its employment practices, in the selection and retention of subconsultants, and in its procurement of materials and leases of equipment.
- 4.17.2** In all solicitations, either by competitive bidding or negotiation made by the **Consultant** for work to be performed under a subcontract, including procurement of materials or equipment, each potential subconsultant or supplier shall be notified by the **Consultant** of the **Consultant's** obligation under this contract and the regulations relative to nondiscrimination on the grounds of race, religion, age, physical disability, color, sex, sexual orientation, or national origin.
- 4.17.3** In the event of the **Consultant's** noncompliance with the nondiscrimination provisions of this Agreement, the **Owner** shall impose such contract sanctions as it, the Iowa DOT, or the FHWA may determine to be appropriate, including, but not limited to withholding of payments to the **Consultant** under the Agreement until the **Consultant** complies, or the Agreement is otherwise suspended or terminated.
- 4.17.4** The **Consultant** shall comply with the following provisions of Appendix A of the U.S. DOT Standard Assurances:
- During the performance of this contract, the **Consultant**, for itself, its assignees and successors in interest (hereinafter referred to as the "**Consultant**") agrees as follows:
1. Compliance with Regulations: The **Consultant** shall comply with the Regulations relative to non-discrimination in Federally assisted programs of the Department of Transportation (hereinafter, "DOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this contract.
 2. Nondiscrimination: The **Consultant**, with regard to the work performed by it during the

contract, shall not discriminate on the grounds of race, color, national origin, sex, age, or disability in the selection and retention of subconsultants, including procurement of materials and leases of equipment. The **Consultant** shall not participate either directly or indirectly in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations.

3. Solicitations for Subcontracts, Including Procurement of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the **Consultant** for work to be performed under a subcontract, including procurement of materials or leases of equipment, each potential subconsultant or supplier shall be notified by the **Consultant** of the **Consultant's** obligations under this contract and the Regulations relative to non-discrimination on the grounds of race, color, national origin, sex, age, or disability.

4. Information and Reports: The **Consultant** shall provide all information and reports required by the Regulations or directives issued pursuant there to, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the **Owner**, the Iowa Department of Transportation or Federal Highway Administration to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of a **Consultant** is in the exclusive possession of another who fails or refuses to furnish this information the **Consultant** shall so certify to the **Owner**, the Iowa Department of Transportation or the Federal Highway Administration as appropriate, and shall set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of the **Consultant's** noncompliance with the nondiscrimination provisions of this contract, the **Owner** shall impose such contract sanctions as it, the Iowa Department of Transportation or the Federal Highway Administration may determine to be appropriate, including, but not limited to:

- a. withholding of payments to the **Consultant** under the contract until the **Consultant** complies, and/or
- b. cancellation, termination or suspension of the contract, in whole or in part.

6. Incorporation of Provisions: The **Consultant** shall include the provisions of paragraphs (1) through (6) in every subcontract, including procurement of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The **Consultant** shall take such action with respect to any subcontract or procurement as the **Owner**, the Iowa Department of Transportation or the Federal Highway Administration may direct as a means of enforcing such provisions including sanctions for non-compliance: provided, however, that, in the event a **Consultant** becomes involved in, or is threatened with, litigation with a subconsultant or supplier as a result of such direction, the **Consultant** may request the **Owner** or the Iowa Department of Transportation to enter into such litigation to protect the interests of the **Owner** or the Iowa Department of Transportation; and, in addition, the **Consultant** may request the United States to enter into such litigation to protect the interests of the United States.

4.18 Compliance with Title 49, Code of Federal Regulations, Part 26

4.18.1 The **Consultant** agrees to ensure that disadvantaged business enterprises (DBEs) as defined in 49 CFR Part 26 have the maximum opportunity to participate in the performance of contracts and subcontracts financed in whole or in part with Federal funds provided under this Agreement. In this regard the **Consultant** and all of its subconsultants shall take all necessary and reasonable steps in compliance with the Iowa DOT DBE Program to ensure disadvantaged business enterprises have the maximum opportunity to compete for and perform contracts.

4.18.2 Upon notification to the **Consultant** of its failure to carry out the requirements of this Article, the **Owner**, the Iowa DOT, or the FHWA may impose sanctions which may include termination of the Agreement or other measures that may affect the ability of the **Consultant** to obtain future U.S. DOT financial assistance. The **Consultant** is hereby advised that failure to fully comply with the requirements of this Article shall constitute a breach of contract and may result in termination of this Agreement by the **Owner** or such remedy as the **Owner**, Iowa DOT or the FHWA deems appropriate.

4.19 Severability. If any section, provision or part of this Agreement shall be adjudged invalid or unconstitutional, such adjudication shall not affect the validity of the Agreement as a whole or any section, provision, or part thereof not adjudged invalid or unconstitutional.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their proper officials thereunto duly authorized as of the dates below.

[INSERT CONSULTANT NAME]

By _____ Date: _____

[Name of Person Signing for Consultant]
[Position of Person Signing for Consultant]

ATTEST:

By _____ Date: _____

[INSERT OWNER NAME]

By _____ Date: _____

[Name of Person Signing for the Owner]
[Position of Person Signing for the Owner]

IOWA DEPARTMENT OF TRANSPORTATION
Accepted for FHWA Authorization*

By _____ Date: _____

Name _____

Title _____

* The Iowa DOT is not a party to this agreement. However, by signing this agreement, the Iowa DOT is indicating the work proposed under this Agreement is acceptable for FHWA authorization of Federal funds.

ATTACHMENT A
Scope of Services

*Insert scope of services here, as developed and agreed upon jointly by the **Owner** and the **Consultant**.*

Consider including within the project administration portion of the scope of services something similar to the following for progress reporting and 85% budget notification requirements:

It is understood by the **Owner** and the **Consultant** that the level and frequency of Progress Reporting shall be mutually established for each project, taking into account the complexity and duration of the work to be performed. For this specific project it is agreed that progress reporting will be [Choose: waived / provided on a monthly basis].

It is understood by the **Owner** and the **Consultant** that the task detail associated with the 85% budget notification shall be mutually established for each project in relation to the complexity and duration of the work to be performed. For this specific project it is agreed that all work contemplated in the agreement will be considered as [Choose: one / or insert number] task(s). It is further agreed that the 85% budget notification requirements will be [Choose: waived / required] for this Agreement based on the volume of work assigned, duration, complexity, and rate of progress anticipated on the project.

Also, for those projects involving road, engineering survey, or geotechnical design tasks, consider including something similar to the following within the project administrative portion of the scope of services:

The **Consultant** will monitor and review updates to the Iowa DOT's Instructional Memorandums (I.M.s), Road Design Manual, Standard Road Plans, Road Design Details. Updates requiring no additional effort on the part of the **Consultant** will be incorporated into the work by the **Consultant**. If the **Consultant** is of the opinion additional effort will be required, the **Consultant** will so notify the **Contract Administrator**, in accordance with Paragraph 4.7. The **Contract Administrator** will provide written approval or disapproval for the **Consultant** to incorporate said update into the work and indicate how payment for such work will be addressed.

ATTACHMENT B
Specifications

Insert appropriate project specifications here. These should include specific standards or specifications that will govern the production of work products or other deliverables to be provided by the consultant under the contract. Examples may include electronic file specifications, plan formatting, report requirements, etc.

**ATTACHMENT C (referenced from 3.1)
Cost Plus Fixed Fee**

3.1.1 FEES AND PAYMENTS

3.1.1.1 Fees. For full and complete compensation of all work, materials, and services furnished under the terms of this Agreement, the **Consultant** shall be paid fees in the amount of the **Consultant's** actual cost plus applicable fixed fee amount. The **Consultant's** actual costs shall include payments to any subconsultants. The estimated actual costs and fixed fee are shown below and are itemized in Attachment C-1. Subconsultant costs are not available for use by the prime **Consultant** or other subconsultants. A contingency amount has [has / has not] been established to provide for actual costs that exceed those estimated.

Estimated Actual Costs (Prime only)	\$ [Insert Costs]
Fixed Fee (Prime only)	\$ [Insert Fee]
Contingency (Prime only)	\$ [Insert Contingency, if applicable]
Total Prime Consultant Costs	\$ [Insert Costs]
Subconsultant (1)	\$ [Insert Costs]
Subconsultant (2)	\$ [Insert Costs]
Subconsultant (3)	\$ [Insert Costs]
Total Subconsultant Costs	\$ [Insert Costs]
Maximum Amount Payable	\$ [Insert Amount]

The nature of engineering services is such that actual costs are not completely determinate. Therefore, the **Consultant** shall establish a procedure for comparing the actual costs incurred during the performance of the work to the estimated actual costs listed above. The procedure will itemize prime consultant and subconsultant costs in association with each scoped task. The purpose is to monitor these two elements and thus provide for early identification of any potential for the actual costs exceeding the estimated actual costs. The procedure shall be used in a way that will allow enough lead time to execute the paragraphs below without interrupting the work schedule. Therefore once the accrued labor costs for a scoped task reach 85% of the estimated value for the prime or subconsultant, then the **Consultant** shall notify the **Owner** in writing.

It is possible that the **Consultant's** costs for the scoped tasks may need to exceed those shown in Attachment [Insert Attachment Number]. The **Consultant's** and subconsultants' costs for scoped tasks shall not be exceeded without prior written authorization from the **Contract Administrator**. Costs for scoped tasks that exceed estimated costs, if approved by the **Contract Administrator**, may be compensated via Supplemental Agreement, Work Order, Amendment, or Contingency as detailed in the paragraphs below. If the **Consultant** exceeds the estimated costs for scoped tasks for any reason (other than that covered in Section 3.1.1.2) before the **Contract Administrator** is notified in writing, the **Owner** will have the right, at its discretion, to deny compensation for that amount.

The fixed fee amount will not be changed unless there is a substantial reduction or increase in scope, character, or complexity of the services covered by this Agreement or the time schedule is changed by the **Owner**. The adjustment to fixed fee will consider both cumulative and aggregate changes in scope, character, or complexity of the services. Any change in the fixed fee amount will be made by a Supplemental Agreement, Work Order, or Amendment.

If a contingency amount has been established and at any time during the work the **Consultant** determines that its actual costs will exceed the estimated actual costs, thus necessitating the use of a contingency amount, it will promptly so notify the **Contract Administrator** in writing and describe what costs are causing the overrun and the reason. The **Consultant** shall not exceed the estimated actual costs without the prior written approval of the **Contract Administrator** and concurrence of the Iowa DOT. The **Owner** or Iowa DOT may audit the **Consultant's** cost records prior to authorizing the use of a contingency amount.

The maximum amount payable will not be changed except for a change in the scope. Changes due to an overhead adjustment are identified in Section 3.1.1.2. If at any time it is determined that a maximum

amount payable will be or has been exceeded, the **Consultant** shall immediately so notify the **Contract Administrator** in writing. The maximum amount payable shall be changed by a Supplemental Agreement, Work Order, or Amendment or this Agreement will be terminated as identified in Article 4.12.3. The **Owner** may audit the **Consultant's** cost records prior to making a decision whether or not to increase the maximum amount payable.

3.1.1.2 Reimbursable Costs. Reimbursable costs are the actual costs incurred by the **Consultant** which are attributable to the specific work covered by this Agreement and allowable under the provisions of the Code of Federal Regulations (CFR), Title 48, Federal Acquisition Regulations Systems, Subchapter E., Part 30 (when applicable), and Part 31, Section 31.105 and Subpart 31.2. In addition to Title 48 requirements, for meals to be eligible for reimbursement, an overnight stay will be required. The Title 48 requirements include the following:

1. Salaries of the employees for time directly chargeable to work covered by the Agreement, and salaries of principals for time they are productively engaged in work necessary to fulfill the terms of the Agreement.
2. Direct non-salary costs incurred in fulfilling the terms of this Agreement. The **Consultant** will be required to submit a detailed listing of direct non-salary costs incurred and certify that such costs are not included in overhead expense pool. These costs may include travel and subsistence, reproductions, computer charges and materials and supplies.
3. The indirect costs (salary related expenses and general overhead costs) to the extent that they are properly allowable to the work covered by this Agreement. The **Consultant** has submitted to the **Owner** the following indirect costs as percentages of direct salary costs to be used provisionally for progress payments for work accomplished during the **Consultant's** current fiscal year: Salary related expenses are [Insert Amount]% of direct salary costs and general overhead costs are [Insert Amount]% of direct salary costs.

Use of updated overhead percentage rates shall be requested by the **Consultant** after the close of each fiscal year and the updated overhead rate shall be used to update previous year invoices and subsequent years as a provisional rate for invoicing in order to more accurately reflect the cost of work during the previous and subsequent years.

Any actual fiscal year or fiscal year's audited or unaudited indirect costs rates known by the **Consultant** shall be used in computing the final invoice statement. All unverified overhead rates shall have a schedule of computation supporting the proposed rate attached to the final bill. Prior to final payment for work completed under this Agreement all indirect cost rates shall be audited and adjusted to actual rates through the most recently completed fiscal year during which the work was actually accomplished. In the event that the work is completed in the current fiscal year, audited indirect cost rates for the most recently completed fiscal year may be applied also to work accomplished in the current fiscal year. If these new rates cause the actual costs to be exceeded, the contingency amount will be used.

3.1.1.3 Premium Overtime Pay. Premium overtime pay (pay over normal hourly pay) will not be allowed without written authorization from the **Contract Administrator**. If allowed, premium overtime pay shall not exceed 2 percent of the total direct salary cost without written authorization from the **Contract Administrator**.

3.1.1.4 Payments. Monthly payments shall be made based on the work completed and substantiated by monthly progress reports. The report shall indicate the direct and indirect costs associated with the work completed during the month. The **Contract Administrator** will check such progress reports and payment will be made for the direct non-salary costs and salary and indirect costs during said month, plus a portion of the fixed fee. The **Owner** shall retain from each monthly payment for construction inspection or construction administration services [Insert Amount]% of the amount due.* Fixed fee will be calculated and progressively invoiced based on actual costs incurred for the current billing cycle. Each invoice shall be accompanied with a monthly progress report which details the tasks invoiced, estimated tasks to be billed on the next invoice, and any other contract tracking information.

* Retainage is required only if the contract includes construction inspection and / or administration

services. If the LPA elects to withhold retainage on other types of services, or if the contract does not include construction inspection and / or administration services, this sentence should be modified accordingly.

Invoices shall clearly identify the beginning and ending dates of the prime's and subconsultant's billing cycles. All direct and indirect costs incurred during the billing cycle shall be invoiced. Costs incurred from prior billing cycles and previously not billed, will not be allowed for reimbursement unless approved by the **Contract Administrator**.

Upon delivery and acceptance of all work contemplated under this Agreement, the **Consultant** shall submit one complete invoice statement of costs incurred and amounts earned. Payment of 100% of the total cost claimed, inclusive of retainage, if applicable, will be made upon receipt and review of such claim. Final audit will determine correctness of all invoiced costs and final payment will be based upon this audit. The **Consultant** agrees to reimburse the **Owner** for possible overpayment determined by final audit.

**ATTACHMENT C (referenced from 3.1)
Lump Sum**

3.1.1 FEES AND PAYMENTS

3.1.1.1 Fees. For full and complete compensation for all work, materials, and services furnished under the terms of this Agreement, the **Consultant** shall be paid fees on a lump sum basis and payment of this amount shall be considered as full and complete compensation for all work, materials and services furnished under the terms of this Agreement. The lump sum amount shall be \$ [Insert Amount]. The estimated staff hours and fees are shown in Attachment C-1*

** Use of Attachment C-1, Cost Analysis Worksheet, is recommended, but not required for lump sum contracts. However, if not included in the contract, the consultant must still provide similar documentation to the LPA to justify the lump sum fee as part of the contract negotiations.*

The lump sum amount will not be changed unless there is a substantial change in the magnitude, scope, character, or complexity of the services from those covered in this Agreement. Any change in the lump sum amount will be by Supplemental Agreement.

3.1.1.2 Reimbursable Costs. Reimbursement of costs is limited to those that are attributable to the specific work covered by this Agreement and allowable under the provisions of the Code of Federal Regulations (CFR), Title 48, Federal Acquisition Regulation System, Subchapter E., Part 30 (when applicable), and Part 31, Section 31.105 and Subpart 31.2. In addition to Title 48 requirements, for meals to be eligible for reimbursement, an overnight stay will be required.

3.1.1.3 Premium Overtime Pay. Not applicable.

3.1.1.4 Payments. Monthly payments for work completed shall be based on the percentage of work completed and substantiated by monthly progress reports. The **Contract Administrator** will check such progress reports and payment will be made for the proportional amount of the lump sum fee. The **Owner** shall retain from each monthly payment for construction inspection or construction administration services [Insert Amount]% of the amount due.**

*** Retainage is required only if the contract includes construction inspection and / or administration services. If the LPA elects to withhold retainage on other types of services, or if the contract does not include construction inspection and / or administration services, this sentence should be modified accordingly.*

Invoices shall clearly identify the beginning and ending dates of the prime's and subconsultant's billing cycles. All direct and indirect costs incurred during the billing cycle shall be invoiced. Costs incurred from prior billing cycles and previously not billed, will not be allowed for reimbursement unless approved by the **Contract Administrator**.

Upon completion, delivery, and acceptance of all work contemplated under this Agreement, the **Consultant** shall submit one complete invoice statement for the balance of the lump sum fee. Payment of 100% of the total cost claimed, inclusive of retainage, if applicable, will be made upon receipt and review of such claim. The **Consultant** agrees to reimburse the **Owner** for possible overpayment determined by final audit.

**ATTACHMENT C (referenced from 3.1)
Specific Rate of Compensation**

3.1.1 FEES AND PAYMENTS

3.1.1.1 Fees. For full and complete compensation for all work, materials, and services furnished under the terms of this Agreement, the **Consultant** shall be paid fees not to exceed the maximum amount payable under this Agreement of \$ [Insert Amount].

The maximum amount payable will not be changed unless there is a substantial change in the magnitude, scope, character, or complexity of the services from those covered in this Agreement. Any change in the maximum amount payable will be by Supplemental Agreement.

A contingency amount of \$ [Insert Amount] has been established for this Agreement and is included in the maximum amount payable. Written request by the **Consultant** indicating the need and written approval by the **Contract Administrator** are needed prior to usage of the contingency amount.

The current schedule of billing rates (direct labor rate, overhead, and fixed fee) are set forth in Attachment C-1. The **Consultant** may submit for approval a revised rate schedule once during the contract period. This revision may include a revised overhead rate and revised direct labor rates. The revised rate schedule should be submitted to the **Contract Administrator** for approval and by the **Contract Administrator's** written approval it shall become a part of this Agreement.

**The example Cost Analysis Worksheet (Attachment C-1) may be modified for this method of compensation to show the schedule of specific rates instead of a breakdown of direct labor, overhead and fixed fee.*

3.1.1.2 Reimbursable Costs. The **Consultant** shall be reimbursed for direct non-salary costs which are directly attributable and properly allocable to the work. The **Consultant** will be required to submit a detailed listing of direct non-salary costs incurred and certify that such costs are not included in the overhead expense pool. These costs may include travel and subsistence, reproductions, computer charges, and materials and supplies.

Reimbursement of costs is limited to those that are attributable to the specific work covered by this Agreement and allowable under the provisions of the Code of Federal Regulations (CFR), Title 48, Federal Acquisition Regulation System, Subchapter E., Part 30 (when applicable), and Part 31, Section 31.105 and Subpart 31.2. In addition to Title 48 requirements, for meals to be eligible for reimbursement, an overnight stay will be required.

3.1.1.3 Premium Overtime Pay. Not applicable.

3.1.1.4 Payments. Monthly payments for work completed shall be based on the services completed at the time of the billing and substantiated by monthly progress reports in a form that follows the specific rate schedule. The **Contract Administrator** will check such progress reports and payment will be made for the hours completed at each rate and for direct non-salary costs incurred during said month. The **Owner** shall retain from each monthly payment for construction inspection or construction administration services [Insert Amount]% of the amount due.**

*** Retainage is required only if the contract includes construction inspection and / or administration services. If the LPA elects to withhold retainage on other types of services, or if the contract does not include construction inspection and / or administration services, this sentence should be modified accordingly.*

Invoices shall clearly identify the beginning and ending dates of the prime's and subconsultant's billing cycles. All direct and indirect costs incurred during the billing cycle shall be invoiced. Costs incurred from prior billing cycles and previously not billed, will not be allowed for reimbursement unless approved by the **Contract Administrator**.

Upon completion, delivery and acceptance of all work contemplated under this Agreement, the **Consultant** shall submit one complete invoice statement of costs incurred and amounts earned.

Payment of 100% of the total cost claimed, inclusive of retainage, if applicable, will be made upon receipt and review of such claim. The **Consultant** agrees to reimburse the **Owner** for possible overpayment determined by final audit.

**ATTACHMENT C (referenced from 3.1)
Unit Price**

3.1.1 FEES AND PAYMENTS

3.1.1.1 Fees. For full and complete compensation for all work, materials, and services furnished under the terms of this Agreement, the **Consultant** shall be paid fees on a unit price basis in accordance with the following fee schedule. Maximum amount payable is the total cost of \$ [\[Insert Amount\]](#).

The maximum amount payable will not be changed unless there is substantial change in the magnitude, scope, character, or complexity of the services from those covered in this Agreement. Any change in the maximum amount payable will be by Supplemental Agreement.

A contingency amount of \$ [\[Insert Amount\]](#) has been established for this Agreement and is included in the maximum amount payable. Written request by the **Consultant** indicating the need and written approval by the **Contract Administrator** are needed prior to usage of the contingency amount.

3.1.1.2 Reimbursable Costs. Reimbursement of costs is limited to those that are attributable to the specific work covered by this Agreement and allowable under the provisions of the Code of Federal Regulations (CFR), Title 48, Federal Acquisition Regulation System, Subchapter E., Part 30 (when applicable), and part 31, Section 31.105 and Subpart 31.2. In addition to Title 48 requirements, for meals to be eligible for reimbursement, an overnight stay will be required.

3.1.1.3 Premium Overtime Pay. Not applicable.

3.1.1.4 Payments. Monthly payments for work completed shall be based on the services completed at the time of billing and substantiated by monthly progress reports in a form that follows unit prices in fee schedule. The **Contract Administrator** will check such progress reports and payment will be made for the unit amounts completed. The **Owner** shall retain from each monthly payment for construction inspection or construction administration services [\[Insert Amount\]](#)% of the amount due.*

** Retainage is required only if the contract includes construction inspection and / or administration services. If the LPA elects to withhold retainage on other types of services, or if the contract does not include construction inspection and / or administration services, this sentence should be modified accordingly.*

Invoices shall clearly identify the beginning and ending dates of the prime's and subconsultant's billing cycles. All direct and indirect costs incurred during the billing cycle shall be invoiced. Costs incurred from prior billing cycles and previously not billed, will not be allowed for reimbursement unless approved by the **Contract Administrator**.

Upon completion, delivery and acceptance of all work contemplated under this Agreement, the **Consultant** shall submit one complete invoice statement of costs incurred and amounts earned. Payment of 100% of the total cost claimed, inclusive of retainage, if applicable, will be made upon receipt and review of such claim. The **Consultant** agrees to reimburse the **Owner** for possible overpayment determined by final audit.

[\[Attach Fee Schedule\]](#).

**ATTACHMENT C (referenced from 3.1)
Fixed Overhead Rate**

3.1.1 FEES AND PAYMENTS

3.1.1.1 Fees. For full and complete compensation of all work, materials, and services furnished under the terms of this Agreement, the **Consultant** shall be paid fees in the amounts of the **Consultant's** actual cost plus applicable fixed fee amount. The **Consultant's** actual costs shall include payments to any subconsultants. The estimated actual costs and fixed fee are shown below and are itemized in Attachment [Insert Attachment Number]. Subconsultant costs are not available for use by the prime **Consultant** or other subconsultants. A contingency amount [has / has not] been established to provide for actual costs that exceed those estimated.

Estimated Actual Costs (Prime only)	\$ [Insert Costs]
Fixed Fee (Prime only)	\$ [Insert Fee]
Contingency (Prime only)	\$ [Insert Contingency]
Total Prime Consultant Costs	\$ [Insert Costs]
Subconsultant (1)	\$ [Insert Costs]
Subconsultant (2)	\$ [Insert Costs]
Subconsultant (3)	\$ [Insert Costs]
Total Subconsultant Costs	\$ [Insert Costs]
Maximum Amount Payable	\$ [Insert Amount]

The nature of engineering services is such that actual costs are not completely determinate. Therefore, the **Consultant** shall establish a procedure for comparing the actual costs incurred during the performance of the work to the estimated actual costs listed above. The procedure will itemize prime consultant and subconsultant costs in association with each scoped task. The purpose is to monitor these two elements and thus provide for early identification of any potential for the actual costs exceeding the estimated actual costs. The procedure shall be used in a way that will allow enough lead time to execute the paragraphs below without interrupting the work schedule. Therefore once the accrued labor costs for a scoped task reach 85% of the estimated value for the prime or subconsultant, then the **Consultant** shall notify the **Owner** in writing.

It is possible that the **Consultant's** costs for the scoped tasks may need to exceed those shown in Attachment C-1. The **Consultant's** and subconsultants' costs for scoped tasks shall not be exceeded without prior written authorization from the **Contract Administrator**. Costs for scoped tasks that exceed estimated costs, if approved by the **Contract Administrator**, may be compensated via Supplemental Agreement, Work Order, Amendment, or Contingency as detailed in the paragraphs below. If the **Consultant** exceeds the estimated costs for scoped tasks for any reason (other than that covered in Section 3.1.1.2) before the **Contract Administrator** is notified in writing, the **Owner** will have the right, at its discretion, to deny compensation for that amount.

The fixed fee amount will not be changed unless there is a substantial reduction or increase in scope, character, or complexity of the services covered by this Agreement or the time schedule is changed by the **Owner**. The adjustment to fixed fee will consider both cumulative and aggregate changes in scope, character, or complexity of the services. Any change in the fixed fee amount will be made by a Supplemental Agreement, Work Order, or Amendment.

If a contingency has been established and at any time during the work the **Consultant** determines that its actual costs will exceed the estimated actual costs, thus necessitating the use of a contingency amount, it will promptly so notify the **Contract Administrator** in writing and describe what costs are causing the overrun and the reason. The **Consultant** shall not exceed the estimated actual costs without the prior written approval of the **Contract Administrator** and concurrence of the Iowa DOT. The **Owner** or the Iowa DOT may audit the **Consultant's** cost records prior to authorizing the use of a contingency amount.

The maximum amount payable will not be changed except for a change in the scope. If at any time it is determined that a maximum amount payable will be or has been exceeded, the **Consultant** shall

immediately so notify the **Contract Administrator** in writing. The maximum amount payable shall be changed by a Supplemental Agreement, Work Order, or Amendment, or this Agreement will be terminated as identified in Article 4.12.3. The **Owner** may audit the **Consultant's** cost records prior to making a decision whether or not to increase the maximum amount payable.

3.1.1.2 Reimbursable Costs. Reimbursable costs are the actual costs incurred by the **Consultant** which are attributable to the specific work covered by this Agreement and allowable under the provisions of the Code of Federal Regulations (CFR), Title 48, Federal Acquisition Regulations System, Subchapter E., Part 30 (when applicable), and Part 31, Section 31.105 and Subpart 31.2. In addition to Title 48 requirements, for meals to be eligible for reimbursement, an overnight stay will be required. The Title 48 requirements include the following:

1. Salaries of the employees for time directly chargeable to work covered by the Agreement, and salaries of principals for time they are productively engaged in work necessary to fulfill the terms of the Agreement.
2. Direct non-salary costs incurred in fulfilling the terms of this Agreement. The **Consultant** will be required to submit a detailed listing of direct non-salary costs incurred and certify that such costs are not included in overhead expense pool. These costs may include travel and subsistence, reproductions, computer charges and materials and supplies.
3. The indirect costs (salary-related expenses and general overhead costs) to the extent that they are properly allowable to the work covered by this Agreement. The **Consultant** has submitted to the **Owner** the following indirect costs as percentages of direct salary costs to be used for the duration of the contract: Salary-related expenses are [Insert %] of direct salary costs and general overhead costs are [Insert %] of direct salary costs, for a composite rate of [Insert %].

3.1.1.3 Premium Overtime Pay. Premium overtime pay (pay over normal hourly pay) will not be allowed without written authorization from the **Contract Administrator**. If allowed, premium overtime pay shall not shall not exceed 2 percent of the total direct salary cost without written authorization from the **Contract Administrator**.

3.1.1.4 Payments. Monthly payments shall be made based on the work completed and substantiated by monthly progress reports. The report shall indicate the direct and indirect costs associated with the work completed during the month. The **Contract Administrator** will check such progress reports and payment will be made for the direct non-salary costs and salary and indirect costs during said month, plus a portion of the fixed fee. The **Owner** shall retain from each monthly payment for construction inspection or construction administration services [Insert Amount] % of the amount due.* Fixed fee will be calculated and progressively invoiced based on actual costs incurred for the current billing cycle. Each invoice shall be accompanied with a monthly progress report which details the tasks invoiced, estimated tasks to be billed on the next invoice, and any other contract tracking information.

** Retainage is required only if the contract includes construction inspection and / or administration services. If the LPA elects to withhold retainage on other types of services, or if the contract does not include construction inspection and / or administration services, this sentence should be modified accordingly.*

Invoices shall clearly identify the beginning and ending dates of the prime's and subconsultant's billing cycles. All direct and indirect costs incurred during the billing cycle shall be invoiced. Costs incurred from prior billing cycles and previously not billed, will not be allowed for reimbursement unless approved by the **Contract Administrator**.

Upon delivery and acceptance of all work contemplated under this Agreement, the **Consultant** shall submit one complete invoice statement of costs incurred and amounts earned. Payment of 100% of the total cost claimed, inclusive of retainage, if applicable, will be made upon receipt and review of such claim. Final audit will determine correctness of all invoiced costs and final payment will be based upon this audit. The **Consultant** agrees to reimburse the **Owner** for possible overpayment determined by final audit.

**ATTACHMENT C-1
Cost Analysis Worksheet**

Contract xxxxx, [Either insert "Base Agreement" or "Supplemental Agreement No. ____"]
Project Number: _____

I. Direct Labor Cost (Prime Only)

<u>Category</u>	<u>Hours</u>	<u>Rate/Hour</u>	<u>Amount</u>
Engineer I			
Engineer II			
Tech I			
Tech II			
		Payroll total	\$ _____

II. Combined Overhead (COH) & Facilities Capital Cost of Money (FCCM) Costs (Prime Only)

I.A. Indirect Cost Factor: [Insert COH factor] (% X I)	\$ _____
I.B. FCCM Factor: [Insert FCCM factor] (% X I)	\$ _____ *
Combined Overhead and FCCM total:	\$ _____

III. Direct Project Expenses (Prime Only)

Phone/Fax	_____		
Mileage	_____	_____ miles @ _____	
Reproduction	_____		
Postage	_____		
Total Direct Project Expenses			\$ _____

IV. Estimated Actual Costs (EAC) (Prime Only) (I + II + III) \$ _____
(Rounded)

V. Fixed Fee (Prime Only) (_____ % X (I + IIA)) \$ _____
Less FCCM (IIB) - \$ _____ *
Fix Fee total: \$ _____
(Rounded)

VI. Contingency (Prime Only) _____ % X (I + II + III) \$ _____
(Rounded)

VII. Subconsultant Expenses (Designate if Cost Plus Fixed Fee (CP), Lump Sum (LS), etc. and include appropriate number of Attachment "I's" as necessary)

List First Subconsultant Total Costs (EAC+FF+Cont.)	CP \$ _____
List Second Subconsultant Total Costs (EAC+FF)	LS \$ _____
List the remaining Subconsultant for this contract	CP \$ _____

Total Subcontractor Costs \$ _____
(Rounded)

VIII. [Indicate type of reimbursement] Agreement Total (IV + V + VI + VII) \$ _____
(Maximum Amount Payable) (Rounded)

**Including the FCCM in the overhead rate is optional. If included in the overhead, it must be subtracted from the Fixed Fee amount. If FCCM is not included in the overhead, these lines may be omitted from the calculations.*

ATTACHMENT D

**CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER
RESPONSIBILITY MATTERS -- PRIMARY COVERED TRANSACTIONS**

Instructions for Certification

1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.
4. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the definitions and coverage sections of the rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
6. The prospective primary participant agrees by submitting this proposal that should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.
9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions

- (1) The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - (b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State Antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) Have not within a three-year period preceding this application /proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- (2) Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

State of [\[Insert State\]](#)

[\[Insert County Name\]](#) County

I [\[Insert Name\]](#), [\[Insert Title\]](#) of the

[\[Insert Company Name\]](#) Company, being duly sworn (or under penalty of perjury under the laws of the United States and the State of Iowa) do hereby certify that the above Statements are true and correct.

(Signature)

Subscribed and sworn to this _____ day of _____, _____
(month) (year)

ATTACHMENT E

CERTIFICATION OF CONSULTANT

I hereby certify that I, [name of signatory], am the [Title] and duly authorized representative of the firm of [Organization], whose address is [Address], and that neither the above firm nor I has:

- (a) Employed or retained for a commission, percentage, brokerage, contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for me or the above **Consultant**) to solicit or secure this contract,
- (b) Agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any firm or person in connection with carrying out the contract, or
- (c) Paid, or agreed to pay, to any firm, organization or person (other than a bona fide employee working solely for me or the above **Consultant**) any fee, contribution, donation or consideration of any kind for, or in connection with, procuring or carrying out the contract; except as here expressly stated (if any):

I acknowledge that this certificate is to be furnished to the Iowa Department of Transportation and the Federal Highway Administration, U.S. Department of Transportation, in connection with this contract involving participation of Federal-aid highway funds, and is subject to applicable, State and Federal laws, both criminal and civil.

Signature

Date

ATTACHMENT F

CERTIFICATION OF OWNER

I hereby certify that I, [name of signatory], am the [title of signatory] and the duly authorized representative of the **Owner**, and that the above consulting firm or his representative has not been required, directly or indirectly as an express or implied condition in connection with obtaining or carrying out this contract to:

- (a) Employ or retain, or agree to employ or retain, any firm or person, or
- (b) Pay, or agree to pay, to any firm, person, or organization, any fee, contribution, donation, or consideration of any kind; except as here expressly stated (if any):

I acknowledge that this certificate is to be furnished to the to the Iowa Department of Transportation and the Federal Highway Administration, U.S. Department of Transportation, in connection with this contract involving participation of Federal-aid highway funds, and is subject to applicable State and Federal laws, both criminal and civil.

Signature

Date

ATTACHMENT G
Page 1

Consultant Name
Consultant Address
Consultant Address

Cost Plus Fixed Fee Progressive Invoice

Date

Invoice No.
Invoice Period Covered
Consultant Job No.

Client Project No.
County
Client Project Description
Client Contract No.

	Contract Estimate	Cumulative To Date	Current Period
--	-------------------	--------------------	----------------

Labor Dollars
Overhead
Overhead Adjustments
Direct Expenses
 Mileage
 Per Diem
 CADD
Estimated Actual Costs
 [Prime Only] (See Note 1)

Subconsultants (including authorized contingency)
 Name
 Name
 Name

Estimated Actual Costs
 [Total Subconsultant Costs]

Total Estimated Actual Costs
 [Prime + Total Subconsultant Costs]

Fixed Fee (See Note 2)
Authorized Contingency
 Total Authorized Amount
Total Billed To Date
Remaining Authorized Balance

Unauthorized Contingency
 Prime
 Subconsultant Name
 Subconsultant Name

Labor Hours

Note 1: Do not include Subconsultant Expenses. Include Direct Labor, Overhead, and Direct Expenses for Prime Consultant only.

Note 2: Fixed fee shall be proportionate to the amount of actual costs invoiced compared to the actual costs estimated.

ATTACHMENT G
Page 2

Consultant Name
Consultant Address
Consultant Address

Cost Plus Fixed Fee Final Invoice

Date

Invoice No.
Invoice Period Covered
Consultant Job No.

Client Project No.
County
Client Project Description
Client Contract No.

	Contract Estimate	Cumulative To Date	Current Period
--	-------------------	--------------------	----------------

Labor Dollars (2001)

Labor Dollars (2000)

Labor Dollars (1999)

Overhead (2001)

Overhead (2000)

Overhead (1999)

Direct Expenses

Mileage

Per Diem

CADD

Estimated Actual Costs

[Prime Only]

Subconsultants (including authorized contingency)

Name

Name

Name

Estimated Actual Costs

[Total Subconsultant Costs]

Total Estimated Actual Costs

[Prime + Total Subconsultant Costs]

Fixed Fee

Authorized Contingency

Total Authorized Amount

Total Billed To Date

Remaining Authorized Balance

Unauthorized Contingency

Prime

Subconsultant Name

Subconsultant Name

Labor Hours (2001)

Labor Hours (2000)

Labor Hours (1999)

ATTACHMENT G
Page 3

Cost Plus Fixed Fee Final Invoice Instructions

- Employee Labor Hours and Dollars: A final cumulative job cost report that shows a breakdown of labor by fiscal year, employee name, employee labor hours and employee labor rate is required. In lieu of a final job cost report, a summary of the aforementioned information is needed. The summary should be supported by monthly job cost detail.
- Overhead Rates: Overhead rates and labor dollars to which the overhead rates are applied should match the fiscal year in which the costs are incurred. Overhead rates applied to labor should be audit verified when available. When not available, proposed FAR adjusted rates for the fiscal year in which the labor is incurred should be used.
- Direct Expenses: A final cumulative job cost report that shows a breakdown of direct expenses by specific item (mileage, CADD, per diem, etc....) by fiscal year is required. Direct expense items charged should identify the number of units (miles, hours, prints, copies, feet, etc....) and the rate applied by fiscal year. In lieu of a final job cost report, a summary of the aforementioned information is needed. The summary should be supported by monthly job cost detail.
- Subconsultant: Final invoice requirements for subconsultants with cost plus fixed fee contracts are the same as the requirements for the prime consultant. It is the prime consultant's responsibility to assure such an invoice is acquired and attached to the prime's final invoice.

ATTACHMENT G
Page 4

Consultant Name
Consultant Address
Consultant Address

Lump Sum Progressive Invoice

Date

Invoice No.
Invoice Period Covered
Consultant Job No.

Client Project No.
County
Client Project Description
Client Contract No.

Total Lump Sum Amount [Prime only]
Percentage Completed
 Total
Less Amount Previously Billed
 [Prime only]
 Total Current Bill [Prime only]
Subconsultants
 Name
 Name
 Name
Total

Current Labor Hours
Total Labor Hours Incurred To Date
Total Estimated Labor Hours

Note: When submitting more than the final invoice on a lump sum project, each progressive invoice shall be identified as a "Progressive Invoice" (as in the above title).

ATTACHMENT G
Page 5

Consultant Name
Consultant Address
Consultant Address

Lump Sum Final Invoice

Date

Invoice No.
Invoice Period Covered
Consultant Job No.

Client Project No.
County
Client Project Description
Client Contract No.

Total Lump Sum Amount [Prime only]
Percentage Completed
 Total
Less Amount Previously Billed
 [Prime only]
 Total Current Bill [Prime only]
Subconsultants
 Name
 Name
 Name
Total

Current Labor Hours
Total Labor Hours Incurred To Date
Total Estimated Labor Hours

Note: When submitting a final invoice on a lump sum project, the final cumulative job cost report should be submitted with the final invoice.

ATTACHMENT G
Page 6

Consultant Name
Consultant Address
Consultant Address

Specific Rate Progressive Invoice

Date

Invoice No.
Invoice Period Covered
Consultant Job No.

Client Project No.
County
Client Project Description
Client Contract No.

	Contract Estimate	Cumulative To Date	Current Period
--	-------------------	--------------------	----------------

Labor Dollars
Direct Expenses
 Mileage
 Per Diem
 CADD
Estimated Actual Costs
 [Prime Only] (See Note 1)

Subconsultants (including authorized contingency)
 Name
 Name
 Name

Total
Authorized Contingency
 Total Authorized Amount
Total Billed To Date
Remaining Authorized Balance

Unauthorized Contingency
 Prime
 Subconsultant Name
 Subconsultant Name

Labor Hours

Note 1: Do not include Subconsultant Expenses. Include Labor Dollars and Direct Expenses for Prime Consultant only.

ATTACHMENT G
Page 7

Consultant Name
Consultant Address
Consultant Address

Specific Rate Final Invoice

Date

Invoice No.
Invoice Period Covered
Consultant Job No.

Client Project No.
County
Client Project Description
Client Contract No.

	Contract Estimate	Cumulative To Date	Current Period
--	-------------------	--------------------	----------------

Labor Dollars (2002)
Labor Dollars (2001)
Labor Dollars (2000)
Labor Dollars (1999)
Direct Expenses
 Mileage
 Per Diem
 CADD
Estimated Actual Costs
 [Prime Only] (See Note 1)

Subconsultants (including authorized contingency)
 Name
 Name
 Name

Total
Authorized Contingency
 Total Authorized Amount
Total Billed To Date
Remaining Authorized Balance

Unauthorized Contingency
 Prime
 Subconsultant Name
 Subconsultant Name

Labor Hours (2002)
Labor Hours (2001)
Labor Hours (2000)
Labor Hours (1999)

Note 1: Do not include Subconsultant Expenses. Include Labor Dollars and Direct Expenses for Prime Consultant only

ATTACHMENT G
Page 8

Specific Rate Final Invoice Instructions

- Employee Labor Hours and Dollars: A final cumulative job cost report that shows a breakdown of labor by fiscal year, employee name, employee labor hours and employee labor rate is required. In lieu of a final job cost report, a summary of the aforementioned information is needed. The summary should be supported by monthly job cost detail.
- Direct Expenses: A final cumulative job cost report that shows a breakdown of direct expenses by specific item (mileage, CADD, per diem, etc....) by fiscal year is required. Direct expense items charged should identify the number of units (miles, hours, prints, copies, feet, etc....) and the rate applied by fiscal year. In lieu of a final job cost report, a summary of the aforementioned information is needed. The summary should be supported by monthly job cost detail.
- Subconsultant: Final invoice requirements for subconsultants with specific rate contracts are the same as the requirements for the prime consultant. It is the prime consultant's responsibility to assure such an invoice is acquired and attached to the prime's final invoice.

ATTACHMENT H
Consultant Fee Proposal

Insert prime consultant fee proposal here.

ATTACHMENT I
Page 1 of x
SUBCONSULTANT SCOPE AND BUDGET

Project Number: [Insert Project Number]

State of [Insert State]

I hereby certify that I, [name of signatory], am the [Title] and duly authorized representative of the firm of [name of subconsultant firm], whose address is [Address], and do hereby certify that the below Scope of Services and Subconsultant Budget Proposals are a true and accurate copy of the Scope of Services and Subconsultant Budget. Any changes to the proposed Scope and Budget shall be documented, signed by both the **Consultant** and subconsultant, and approved by the **Contract Administrator**.

Signature

Date

[Insert Subconsultant Scope of Services]

[Insert Subconsultant Fee Proposal]

Errors and Omissions

These following procedures shall be used for determining the extent to which a consultant that is responsible for the professional quality, technical accuracy, and coordination of services may be reasonably liable for the costs resulting from errors or deficiencies in the services it provides. These procedures are based on those used by the Iowa DOT with its consultants, adapted as needed for use with Local Public Agency (LPA) Federal-aid projects.

The contract shall specify that the consultant is responsible for damages incurred by the LPA due to an error or omission made by the consultant. The LPA Contract Administrator shall be notified upon discovery of an alleged consultant error or omission with the potential to result in damages. Following are the steps in the recovery process:

1. The LPA Contract Administrator shall:
 - a. Assess the preliminary information to determine whether the consultant may have some responsibility for the error or omission.
 - b. If the potential for consultant liability is found, notify the Iowa DOT Administering Office.
2. The LPA Contract Administrator shall notify the consultant either by telephone or in writing of the error or omission as soon as possible after discovery of the problem, and document all telephone conversations with a follow-up letter or e-mail. When notifying the consultant:
 - a. Allow the consultant to respond to the claim of error or omission.
 - b. Discuss with the consultant any conditions that must be met to reach a resolution that is acceptable to the LPA.
 - c. Inform the consultant that the LPA may take action to correct the issue without consultant assistance for any of the following reasons:
 - i. Notification by telephone or in writing to the consultant is not successful.
 - ii. Conditions created by the error or omission require an immediate response to avoid additional damages or construction costs.
 - iii. Other means of resolution with the consultant have been unsuccessful.
 - d. Establish deadlines for the consultant to provide a response
 - e. Inform the consultant that it needs to track all time spent resolving the issue separately.

At this stage, the LPA shall not negotiate, reach agreement or sign any document relative to the consultant's responsibility.

3. The LPA Contract Administrator shall review the consultant's proposed resolution. If acceptable, forward to the Administering Office for review and concurrence.
4. The Administering Office reviews, and if acceptable, concurs with the proposed resolution.
5. If the LPA and the consultant either disagree on the extent of any negligence or are unable to come to a mutual agreement on the resolution, contact the Iowa DOT Administering Office for assistance resolving the disagreement. The Administering Office will notify the Office of Local Systems, which will meet with the parties and attempt to informally resolve the matter. If this proves unsuccessful, the LPA and consultant may seek a resolution through binding arbitration in accordance with Iowa Code chapter 679A, litigation, or other means.
6. Upon implementation of the resolution, the LPA Contract Administrator shall review the financial information and:
 - a. Calculate the expected costs based upon a product without errors.
 - b. Determine the consultant's liability by subtracting the expected costs from the actual costs incurred.
 - c. The LPA Contract Office should request assistance from the Administering Office if needed.
7. Should there be a need for the consultant to pay for any costs to correct its negligence, the LPA Contract Administrator shall send a letter to the consultant requesting payment.
 - a. The consultant may either send a check for the amount or credit the dollar amount to a subsequent invoice.

- b. If the amount will be credited to an invoice, the contract maximum should be evaluated and may be lowered accordingly.
 - c. The consultant shall not be allowed to make payment directly to a third party to remedy any claimed negligence because of the difficulty in verifying and recording these payments.
8. If it is later determined that the consultant was not negligent, the LPA shall compensate the consultant accordingly.
9. The LPA Contract Administrator shall prepare a memorandum summarizing the negligence and all costs recovered. The memorandum shall also include:
 - a. All appropriate information including the letter requesting payment, copies of any payments received, and the consultant's summary of unbilled hours.
 - b. The summary of unbilled hours must list employee names, the number of hours for each employee, the dates worked and the accounting code numbers to which the hours were charged.
 - c. If any portion of the recovered costs were previously reimbursed with Federal or State funds, the LPA's proposed method of repayment. The LPA may either deduct the Federal and / or State share of the recovered costs from its future reimbursement requests for the project (if sufficient unreimbursed costs remain), or reimburse the Iowa DOT for the Federal and / or State share.
10. The LPA Contract Administrator shall send this memorandum and supporting documentation to the Administering Office.
11. The Administering Office will forward the information to the Iowa DOT Office of Finance for review and approval.
 - a. If the recovered costs were previously reimbursed with Federal funds, the Office of Finance, Accounts Payable will initiate a credit-bill with FHWA.
 - b. If the recovered costs were previously reimbursed with State funds, the Office of Finance, Accounts Receivable will issue an invoice to the LPA for the appropriate amount.
 - c. A copy of the LPA's memo and supporting documentation will also be provided to the Office of Finance, External Audit Section.
12. The Office of Finance will notify the Administering Office if the memorandum and proposed repayment method is acceptable. The Administering Office will in turn notify the LPA and the consultant.

INSTRUCTIONAL MEMORANDUMS

To Local Public Agencies



To: Counties and Cities	Date: December 19, 2014
From: Office of Local Systems	I.M. No. 3.310
Subject: Federal-aid Participation in In-House Services	

Contents: This Instructional Memorandum (I.M.) includes guidelines and procedures to receive Federal-aid reimbursement for the costs of in-house services. In-house services include non-construction, project-related services performed by Local Public Agency (LPA) staff. For purposes of this I.M., LPA staff also includes employees of co-sponsoring organizations, such as non-profit organizations and other governmental agencies. Topics addressed include eligible costs and activities, submittal requirements, authorization, approval, reimbursement, and record keeping associated with in-house services. This I.M. includes the following attachments:

[Attachment A](#) – Sample Scope of Work and Budget ([Excel Spreadsheet](#))

Eligible Costs

Eligible costs are defined by the Cost Principles outlined in [2 CFR 200, Subpart E](#). These costs can be further classified as Direct Costs and Indirect Cost.

Direct Costs

Federal-aid may participate in the direct costs of salaries, wages, and related payroll expenses of LPA employees, but only for those costs incurred when the LPA's employees are directly engaged in eligible activities. Related payroll costs include travel, transportation, leave, holidays, social security, retirement, and other payroll benefits.

Other direct costs include equipment and supplies necessary to perform the in-house services. Examples include copying, printing, rental fees for facilities or equipment, and travel costs.

Indirect Costs

Federal-aid may also participate in indirect costs provided such costs have been allocated to the Federal-aid project in accordance with an approved indirect cost proposal (Indirect Cost Allocation Plan (ICAP) or Indirect Cost Rate) that meets the requirements of [2 CFR 200](#), Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. The indirect cost proposal must be reviewed and approved on an annual basis by the Iowa DOT unless approved by a federally cognizant agency. The FHWA may also elect to review the LPA's indirect cost proposal.

All project costs for which reimbursement will be requested must have FHWA authorization and Iowa DOT written approval prior to being incurred.

Eligible Activities

Only project-related activities that directly contribute to the planning, design, development, or implementation of the project are eligible for Federal participation. These include the following:

1. Preliminary Engineering (PE) – This includes work that is part of the development of the plans, specifications, and estimate (PS&E) for a construction project. This includes environmental studies and documents, preliminary design, and final design up through and including the preparation of bidding documents. PE does not include planning or other activities that are not intended to lead to a construction project. Examples of work not considered PE include planning, conceptual, feasibility studies, and Interchange Justification Reports. Note: Final design activities may not begin until after receipt of FHWA Environmental Concurrence.

2. Construction Engineering (CE) – This includes supervision and inspection of construction activities, additional staking functions considered necessary for effective control of the construction operations, testing materials incorporated into construction, checking shop drawings, and measurements needed for the preparation of pay estimates.
3. Right-of-Way Acquisition Services – This includes all work associated with acquisition of property interests needed for the project. Examples include preparation of right-of-way plats, appraisals for parcel acquisitions, review of appraisals, preparation for and trial of condemnation cases, and furnishing of relocation advisory assistance. Note: Acquisition of property rights may not begin until after receipt of FHWA Environmental Concurrence.
4. Other Services – For projects that do not result in physical construction which includes activities that are necessary for the development or implementation of the project. Examples include developing or conducting programs, feasibility studies, conceptual studies, or planning documents.

Submittal Requirements

Scope of Work and Budget

The LPA shall submit a Scope of Work and Budget for the requested in-house services to the Administering Office using the provided [Excel spreadsheet](#). This includes both a completed form and the accompanying budget detail. For a Sample Scope of Work and Budget, refer to [Attachment A](#) to this I.M.

The scope of work shall include a detailed list of tasks to be performed by the LPA staff, the deliverables associated with each task, and a listing of fringe benefits provided to employees.

The budget shall include, but may not be limited to, the following information:

1. Staff time (hours) for each task. Staff time should be estimated separately for individual employees or classifications of employees.
2. Wage rates (salaries) for each employee or classification of employee. Include an explanation that shows how the wage rates were calculated.
3. Fringe benefits, including any payroll expenses such as IPERS, FICA, employee benefits, or other related direct payroll expenses.
4. Other direct costs. Include an explanation to show how the estimated costs or cost rates were determined. Examples include: equipment or printing costs that are charged directly to the project, mileage, outside printing costs, etc.
5. Indirect costs. If these are requested for reimbursement, the indirect costs shall be broken out separately.

Authorization and Approval Procedures

The necessary procedures to request, review, and approve in-house services costs are summarized below:

1. The LPA submits a request for Federal-aid participation in in-house services to the Administering Office. The request shall include a Scope of Work and Budget. If indirect costs are requested, the LPA shall submit documentation showing approval of its indirect cost proposal by either the Iowa DOT or by the LPA's Federal cognizant agency. If the LPA's indirect cost proposal has not already been approved, the Administering Office will refer the LPA to the Iowa DOT Office of Finance, External Audits, which will provide the LPA with additional instructions and sample documents for requesting approval of indirect costs.
2. The Administering Office reviews for the completeness of the submittal. If the submittal is incomplete, the Administering Office works with the LPA to address any concerns.

3. The Administering Office requests a pre-audit from the Office of Finance, External Audits.
4. The Office of Finance, External Audits, reviews the pre-audit request and either performs a pre-audit or notifies the Administering Office that the pre-audit has been waived. If a pre-audit is conducted, the Office of Finance, External Audits, sends an electronic copy of the pre-audit report to the Administering Office and the Office of Finance, Project Accounting and Payables.
5. The Administering Office sends an electronic copy of the pre-audit report (if completed) to the LPA. If the pre-audit report requires modifications of the LPA's submittal, the LPA must respond to the findings of the pre-audit report. The Administering Office will work with the LPA and the Office of Finance, External Audits, until the LPA's request is acceptable.
6. Once the LPA's request is acceptable, the Administering Office requests FHWA authorization based on the approved Scope of Work and Budget.
7. After FHWA Authorization is received, the Administering Office notifies the LPA its request has been approved and provides the effective date of FHWA authorization. The Administering Office sends an electronic copy of this notice to the Office of Finance, External Audits; Office of Finance, Project Accounting and Payables; and the appropriate Metropolitan Planning Organization (MPO) or Regional Planning Affiliation (RPA).

Changes to the Approved Scope of Work and Budget

Once a Scope of Work Budget has been approved by the Administering Office, none of the following revisions shall be made without the approvals shown.

Revision Type	Approval
Changes in Federal-aid amount.	Iowa DOT with FHWA Authorization
Transfer of funds between project categories, tasks, or activities exceeding 10 percent of the total approved budget when the Federal share of the total budget exceeds \$100,000.	Iowa DOT
Revision of the project scope or objectives regardless of whether there is an associated budget revision requiring prior approval.	Iowa DOT with FHWA Authorization
Extending the period of availability of funds.	Iowa DOT
Changes in key persons in cases where specified in an application or a grant award (i.e., change in lead consultant or uniquely qualified staff).	Iowa DOT
The addition or removal of services of a third party to perform project activities (i.e., consultant or in-kind services).	Iowa DOT (with FHWA Authorization for in-kind)

If the need arises to make any of the above revisions to the Scope of Work and Budget, the LPA shall submit a request to the Administering Office. Each request should consist of a detailed narrative description of each change requested and should be accompanied by the existing and proposed project budget. The request will be reviewed by the Administering Office and notice of approval or denial of the request will be made in writing. Iowa DOT approval and/or FHWA Authorization must be acquired prior to incurring any costs associated with the proposed revision.

Reimbursement Procedures

After the requested in-house services have been authorized by FHWA and the LPA has received written notification from the Administering Office, the LPA may proceed to perform the in-house services. After costs have been incurred, the LPA shall submit periodic requests, no more than monthly but not less than annually, for reimbursement to the Administering Office. In general, reimbursement requests shall include the same information as the approved Scope of Work and Budget. Reimbursement requests shall include the following information:

1. A signed reimbursement claim form.
 - Use either the Claim for Reimbursement of Federal Grant Program Project Costs ([Form 240007](#)) or Claim for Reimbursement of Safe Routes to School Project Costs ([Form 240009](#)), as applicable.
2. Supporting documentation, including:
 - A statement of work completed during the billing period. This shall be identified by the tasks and / or deliverables as shown on the approved Scope of Work and Budget. Include details on the specific activities completed. For example, for a public meeting task item, include the meeting date and location.
 - For direct costs, a copy of invoices or other documentation showing what was purchased and how much was paid.
 - For direct costs, proof of payment such as copies of cancelled checks or check registers.
 - For indirect costs, include the approved indirect cost rate used to calculate the indirect costs.
 - For payroll costs, include documentation that shows the actual wages and fringe benefits.
 - Timesheets for each employee charging direct hours to the project. This should be in a format that shows how their time on a daily basis was charged to all projects during the billing period.

Project Close-out Procedures

1. Upon completion of the in-house services, the LPA notifies the Administering Office and requests final reimbursement for such costs. This request shall include a statement that all project tasks and deliverables have been completed and include copies of all project deliverables, such as final reports, manuals, brochures, etc.
2. The Administering Office requests a final audit from the Office of Finance, External Audits.
3. The Office of Finance, External Audits, reviews the final audit request and either performs a final audit or notifies the Administering Office that the final audit has been waived. If a final audit was conducted, the Office of Finance, External Audits, sends 2 copies of the final audit report to the Administering Office and 1 copy to the Office of Finance, Project Accounting and Payables.
4. The Administering Office provides a copy of the final audit report to the LPA. If additional reimbursement is due, the Administering Office processes the final reimbursement. If the final audit finds the LPA has been over-reimbursed, the Administering Office will request the Office of Finance, Financial Management and Reporting, to invoice the LPA for the appropriate Federal-aid share or deduct this amount from the balance of Federal-aid reimbursement that is due to the LPA for other project costs.
5. If the project includes construction or consultant costs, refer to [I.M. 3.910](#), Final Review, Audit, and Close-out Procedures for Federal-aid Projects, for additional instructions.

Record Retention

The LPA shall maintain records of supporting documentation for all in-house services costs for at least 3 years after the record retention date provided by the Administering Office. The FHWA and the Iowa DOT may review the records any time prior to this date. If such a review finds costs reimbursed cannot be documented, some or all of the Federal reimbursement will need to be returned. Documentation may be maintained electronically, provided the electronic record keeping system can produce the required documentation upon request.

INSTRUCTIONAL MEMORANDUMS

To Local Public Agencies



To: Counties and Cities	Date: December 19, 2014
From: Office of Local Systems	I.M. No. 3.405
Subject: Preliminary Plans	

Contents: This Instructional Memorandum (I.M.) includes guidelines and procedures for preparation, submittal, and review of preliminary plans for Local Public Agency (LPA) Federal-aid projects and certain State-aid projects that will be let by the Iowa Department of Transportation (Iowa DOT). This I.M. also includes the following attachments:

- [Attachment A](#) – Preliminary Plan Guidelines
- [Attachment B](#) – Preliminary Plan Checklist ([Word](#))
- [Attachment C](#) – Preliminary Plan Process Flowchart

Note:

- If the project involves a bridge or culvert, refer also to [I.M. 3.410](#), Preliminary Bridge or Culvert Plans.
- Preliminary plan reviews are required for State-aid projects that include improvements that will be maintained by the Iowa DOT.
- Preliminary plan reviews are not required for the following:
 - State-aid projects that do not include improvements that will be maintained by the Iowa DOT, unless otherwise specified in the project agreement.
 - Projects funded with only Farm-to-Market or local funds.However, if requested by the LPA, preliminary plans for such projects will be reviewed in accordance with the guidelines set forth in this I.M.

Preparation

Content and Format

Preliminary plans shall be prepared in accordance with [Attachment A](#), Preliminary Plan Guidelines, and [Attachment B](#), Preliminary Plan Checklist. [Attachment A](#) provides general guidelines and instructions applicable for all types of projects. [Attachment B](#) provides a checklist of specific items that will be reviewed by the Iowa DOT Administering Office. The Iowa DOT strongly recommends that the LPA or its consultant use both these attachments to perform an internal plan review prior to submitting the project plans to the Iowa DOT.

Design Guidelines

For new or complete reconstruction projects, refer to either the Iowa Statewide Urban Design and Specifications (SUDAS) [Design Manual](#), Chapter 5, for urban design guidance, or [I.M. 3.210](#), Rural Design Guidelines. For Resurfacing, Restoration, or Rehabilitation (3R) projects, refer to [I.M. 3.214](#), 3R Guidelines.

Federal-aid projects that do not meet these guidelines will require a design exception. If the need for a design exception has been identified at the preliminary plan stage, the design exception request and supporting documentation should be submitted with the preliminary plans. For more information, refer to [I.M. 3.218](#), Design Exception Process.

Even though the Iowa DOT does not review design criteria for projects funded with only Farm-to-Market or local funds, the Iowa DOT strongly recommends that LPAs properly document any design features that do not meet the current applicable AASHTO design guidelines.

Submittals

Timely submission of preliminary plans is important. Electronic submittals are required. All submittals shall be made to the Administering Office in accordance with [I.M. 3.005](#), Project Development Submittal Dates and

Information. LPAs are strongly encouraged to use the Transportation Program Management System (TPMS), Development module, for all project submittals and correspondence. Submittals shall include the following items, as applicable:

- A transmittal letter, memo, or e-mail, including the following information:*

 - The project number, location, and proposed letting date.
 - Identification of all changes from the previously approved project Concept Statement, if any.
 - Whether or not a hydraulic review is being requested, as per [I.M. 3.410](#), Preliminary Bridge and Culvert Plans.
 - Whether or not the project may involve work within the right-of-way of an Interstate or Primary highway.
 - Whether or not the project may require acquisition of property rights.

* If the TPMS Development submittal tool is used, information that is already available in TPMS Development does not need to be repeated in the transmittal e-mail.

- Preliminary Plans.
- A completed Preliminary Plan Checklist, as per [Attachment B](#) (use of the checklist is encouraged, but not required).
- Design exception documentation, if required as per the SUDAS [Design Manual](#), Chapter 5, for urban design guidance, or [I.M. 3.210](#), Rural Design Guidelines.
- A completed Environmental Data Sheet ([Form 517006](#)), if required and it was not previously submitted with the Concept Statement as per [I.M. 3.110](#), Environmental Data Sheet Instructions.

Utility Coordination

In addition to submitting preliminary plans to the Iowa DOT, preliminary plans should also be submitted to all utilities within the project limits or corridor. For more information, refer to [I.M. 3.640](#), Utility Accommodation and Coordination.

Review

Plans submitted in conformance with this I.M. should be returned by the Administering Office in a timely manner with relatively few comments. If the plans do not conform to these guidelines, the review process will require more time and effort by the LPA and the Iowa DOT, which could delay the project letting.

The process for submittal, distribution, and review of project plans is illustrated in [Attachment C](#), Preliminary Plan Process Flowchart. As the flowchart shows, if the project involves bridge or culvert that requires a hydraulic review, or requires work on an Interstate or Primary highway, the plans will need additional reviews by other Iowa DOT offices. Because these reviews may require additional time, early submittal of such plans is strongly encouraged.

After the Administering Office has provided comments to the LPA, a field review may be conducted, if requested by either party. Any additional comments from the Administering Office shall be sent in writing to the LPA after the review, and the LPA shall provide a written response to those comments. The LPA may provide a separate response or include the response as part of the Check Plan submittal.

Note: Federal-aid projects may not proceed to final design or acquire right-of-way with Federal funds until after FHWA Environmental Concurrence has been received. For more information, refer to Sections 4.1, 5.1, and 6.1 of the [Federal-aid Project Development Guide](#).

Preliminary Plan Checklist

For Local Public Agency (LPA) Projects Let by the Iowa Department of Transportation (Iowa DOT)

Project No.: _____ Date: _____ LPA or Consulting Firm: _____

Name of Designer: _____ Phone No.: _____ e-mail: _____

Note: This checklist is not intended to cover all of the details, notes and information that may be necessary for acceptable preliminary plans. However, this checklist addresses the items where most questions or problems generally arise. *This checklist is requested, but not required with the preliminary plan submittal.*

GENERAL

- Project Concept.** The proposed design criteria, improvements, and project limits are consistent with the scope and type of work shown in the approved Concept Statement for Local Systems Federal-aid Projects ([Form 517001](#)). Any significant changes to the project concept (e.g., proposed design elements, project limits, potential environmental impacts, type of work, etc.) shall be explained in the cover letter that accompanies the plans. For more information, refer to [I.M. 3.105](#), Concept Statement Instructions.
- Environmental Document Requirements.** If the approved environmental document (e.g., Section 4(f) statement, Environmental Assessment, or Environmental Impact Statement) specifies that certain conditions shall be met, or certain sensitive areas shall be avoided, the plans shall be consistent with these requirements.
- Format.** Plans shall conform to the [Specifications for Electronic Plan Submittals to the Iowa DOT](#).
- Dimensions and Legibility.** Plans shall be formatted for 11"x17" printing. To ensure that the entire plan can be printed accurately, the border widths (i.e., clear space between the edge of paper and printing on the plan) shall meet the following minimum dimensions: top and bottom = 1/4 in.; left and right = 5/8 in. All lettering and details on the 11"x17" plan sheets shall be legible if printed.
- Preliminary Bridge or Culvert Plans.** Bridge or culvert plans shall also conform to the guidelines provided in [I.M. 3.410](#), Preliminary Bridge or Culvert Plans.
- STIP Description.** Verify the project location description in the [Statewide Transportation Improvement Program](#) (STIP), as shown in the [Transportation Program Management System](#) (TPMS) Programming, matches the description shown on the plans and the description shown in TPMS Development. All project work must be within the limits of STIP description and the limits used for environmental review (as shown on the Concept Statement); otherwise, additional programming changes or environmental review will be required. If so, contact the Administering Office as soon as possible.
- TPMS Project Location Map:** Verify the project location map shown in TPMS is consistent with the project location description in the STIP and the limits of the project shown on the plans. The project location map is used to collect spatial data about the project. The TPMS project location map need not be exact, but should be reasonably accurate. For the purposes of this data collection, the project termini on the location map should be within 0.1 miles of the actual project termini.
- Federal-aid Programmed.** For Highway Safety Improvement Program - Secondary (HSIP-S) and county Highway Bridge Program (HBP) projects only, review the amount of Federal-aid shown in the current STIP. If the estimated Federal share exceeds the amount of Federal-aid programmed in the STIP by more than 15%, the project should not be submitted for letting, unless a STIP amendment or modification can be completed before the 1st Tuesday, 1 month prior to letting. The time required to complete a STIP amendment or modification may vary from a few days to more than a month, depending on the planning agency and the specific circumstances. If a STIP amendment or modification may be required, contact the planning agency and Administering Office as soon as possible. Projects submitted with a pending STIP amendment or modification must specify the current status and the anticipated completion date. If the amendment or modification cannot be completed before the 1st Tuesday, 1 month prior to letting, the project will either be withdrawn from the letting or authorized "as-is", which would limit the amount of Federal-aid that can be received to whatever is programmed at the time of authorization. If the county elects to authorize the project "as-is", it will be reimbursed at rate less than the regular 80% Federal share

for the remaining life of the project. The reimbursement rate will be equal to the amount of Federal-aid programmed divided by the estimated total cost, at the time the project is submitted for authorization.

TITLE SHEET

- Preliminary Plans Stamp.** Preliminary plan submittals should be identified by including the words “Preliminary Plans” on, near, or across the designer’s certification block.
- System Classification.** The roadway system classification shall be shown. The Systems Classification should be shown in large font near the center or upper middle part of the sheet. For county projects, use “Farm-to-Market System” for a project on a Farm-to-Market route or “Secondary Road System” for a project on a local route. For city projects, use “Urban Road System.” For projects located on the corporation line, use the system classification that is under the jurisdiction of the lead governmental agency.
- Location Map.** A location map with a north arrow and major street names shall be shown. Use of the 911 street names, as shown on the [Iowa DOT city and county maps](#), is recommended. The location map should be located near the left or bottom left part of the sheet. The location map should also include a scale (or be noted as “Not to Scale”) and identify the project limits including the beginning and ending stations. If project divisions are used, their limits shall also be indicated, either on the location map or in a plan note.
- Designer’s Certification Block.** The plans shall include a certification block and seal that complies with the appropriate sections or chapters of the Code of Iowa and the Iowa Administrative Code (IAC). The designer’s certification block should be shown near the bottom right part of the sheet. The certification block shall not be signed or sealed for the preliminary plan submittal.
- LPA’s Signature Block.** The plans may include a signature block that includes the title of the appropriate LPA official(s) with a space for each official(s) signature and date. If included, the LPA’s signature block should be shown near the bottom right part of the sheet. The signature block shall not be signed for the preliminary plan submittal.

NOTE: If a signature block is not included, this does not relieve the LPA officials of the responsibility to approve the plans and specifications by the council or board of supervisors. Approval should be documented by means of a motion or resolution.

- Index of Sheets.** An index listing all sheets included in the plans shall be shown. The index of sheets should be shown near the right or upper right part of the sheet. Sheets should generally be listed in the following order: title sheet, typical sections, standard details, estimated quantities tabulation, estimate reference information, supplemental tabulations, plan and profile sheets, other detail sheets, and cross sections. Use of the Iowa DOT sheet numbering system as shown in the Iowa DOT Road Design Manual, [Section 1F-1](#), is recommended. If used, it shall be used consistently.
- Sheet Total.** The total number of sheets included in the plan set should be shown in the upper right corner.
- Project Number.** The Iowa DOT project number shall be shown in at least one place on all plan sheets. Recommended placements for the title sheet and all other sheets include the middle left margin and the bottom right margin. For the title sheet, the project number should also be shown near the upper right corner or in the center (above or below the project title).

Note:

- Usually, only one project number should be shown on the plans. However, if the plans will include more than one project, additional project numbers should be shown, along with a description of the limits of each project. In such cases, a separate entry in the [TPMS](#) and a separate electronic bid item file will be required for each project.
- If a single project spans more than one jurisdiction (e.g., across county or city boundaries), the project number used should correspond to jurisdiction in which the project stationing begins (i.e., the westerly or southerly end of the project).
- If unsure about which project number or how many project numbers to use, contact the Administering Office for assistance.

- LPA Name and Project Location.** The name of the city or county shall be shown in at least one location on all plan sheets. Recommended placement is on the bottom left margin. On the title sheet, the name of the city or county and a brief description of the project location shall also be shown, preferably in the center part of the sheet. The description shall include the route or street name, plus the beginning and ending points of the project. Beginning and ending points shall be identified by a cross street, feature crossed, corporation limits, or some other feature that can be located on a map. If multiple routes or streets are included in the project, list each separately. For a Federal-aid project, the description on the plans shall be consistent with description for the project in the [STIP](#) and in [TPMS](#) Development.
- Letting Date.** A space or a box for the project letting date shall be shown, preferably on upper left margin of sheet. If the letting date is known, the appropriate date may be shown in the box or space provided.
- FHWA Structure Number.** If the project involves a bridge, the FHWA structure number shall be shown, preferably on or near the location map that shows the location of the bridge. Bridges are defined as any structure with a clear opening greater than 20 feet, as measured along the centerline of the roadway.

TYPICAL SECTION SHEETS

- Dimensions and Slopes.** Proposed cross section elements shall be detailed with adequate horizontal and vertical dimensions. Pavement slopes, cut slopes, and fill slopes shall also be specified.
- Materials Specified.** The type and thickness of surface, base and subbase materials for pavements, shoulders, sidewalks, or trails shall be shown.
- Number of Typical Sections.** Separate typical sections for each significantly different type of cross section found on the project shall be shown. Use separate typical sections to show differences in the number of lanes, pavement types, pavement thicknesses, curb and gutter, sidewalk, or recreational trails.
- Station Ranges.** If more than one typical section is used, the applicable stationing ranges shall be labeled for each. If the project contains more than one plan division, the applicable division(s) for each typical section should be noted.
- Existing Features.** For projects that involve widening, milling, resurfacing, or other modifications to the existing pavement and / or shoulder; the type, thickness, and width of existing pavement and / or shoulder structure should be shown on the typical cross section.

PLAN AND/OR PROFILE SHEETS

- Existing Features.** The plans should show the location of existing topographical features (e.g., existing pavement, structures, buildings, etc.).
- North Arrow.** A North arrow shall be shown on all plan sheets.
- Scale.** All plan and profile sheets shall show a horizontal scale. Profile sheets shall also show a vertical scale.
- Proposed Right-of-Way (ROW).** If the project involves ROW acquisitions, permanent easements, or temporary easements, the proposed right-of-way lines, easement lines, property lines, parcel numbers, and property owners shall be shown. For projects involving several ROW acquisitions or easements, use of separate ROW sheets is recommended.
- Existing ROW.** Existing ROW lines shall be shown.
- Profiles.** The vertical profile data shall be shown, including the percent grade, vertical curve length, K factor, stopping sight distance (SSD), and design speed. The point of vertical curvature (P.V.C.), point of vertical tangency (P.V.T.), and point of vertical intersection (P.V.I.) stations and elevations shall be labeled.
- Benchmarks.** List the type, location, and elevation of each benchmark. This information may be listed on a separate sheet if necessary.

- Alignments.** The horizontal curve data shall be shown, including the point of intersection (P.I.) station, curve length, radius or degree of curvature, tangent length, and delta angle. The point of curvature (P.C.) and point of tangency (P.T.) stations should also be shown.
- Utilities.** All known utility facilities within or immediately adjacent to the project limits shall be shown, including the approximate location of such facilities and the name of the utility company. For more information, refer to [I.M. 3.640](#), Utility Accommodation and Coordination.
- Railroad (RR) Crossings.** All RR crossings within or immediately adjacent to the project limits shall be shown, including the RR property lines and the name of the RR company. This information shall be included anytime the Contractor will be required to gain access or perform work on the RR right-of-way or within 25 feet of the centerline of the outermost RR track, even if the RR facilities are not directly impacted by the project. For more information, refer to [I.M. 3.670](#), Work on Railroad Right-of-Way.

TRAFFIC SIGNAL SHEETS

- Scale.** Drawings shall be of sufficient scale to show the necessary details. A 1"=20' scale is recommended.
- Pavement Markings Details.** Pavement markings including lane lines, stop bars, crosswalks, symbols, and legends should be shown.
- Signal Details.** Signal pole, signal head, mast arm, and detector loops locations should be shown.
- Roadway Details.** Edges of pavement, curbs, sidewalks, and pedestrian curb ramps should be shown.

ACCESSIBILITY

If the roadway, sidewalks, or shared use paths are being altered by the project, the Americans with Disabilities Act (ADA) applies. The following items shall be included on the plans in accordance with the [Design Manual](#), Chapter 12, and [I.M. 1.080](#), ADA Requirements:

- Curb Ramps.** Include compliant curb ramps where required. If ramps already exist but are not fully compliant (e.g., they do not include detectable warnings), those ramps shall either be replaced or retrofitted to meet current ADA requirements.

Check and Final Plan Checklist

For Local Public Agency (LPA) Projects Let by the Iowa Department of Transportation (Iowa DOT)

Project No.: _____ Date: _____ LPA or Consulting Firm: _____

Name of Designer: _____ Phone No.: _____ e-mail: _____

Note: This checklist is not intended to cover all of the details, notes, and information that may be necessary for acceptable check and final plans. However, this checklist addresses the items where most questions or problems generally arise. *This checklist is requested, but not required with the check plan submittal.* This checklist is not needed with the final plan submittal.

GENERAL

- Project Concept:** For Federal-aid projects, the proposed design criteria, improvements, and project limits are consistent with the scope and type of work shown in the approved Concept Statement for Local Systems Federal-aid Projects ([Form 517001](#)) and the approved Preliminary Plans. Any significant changes to the project concept (e.g., proposed design elements, project limits, potential environmental impacts, type of work, etc.) shall be explained in the cover letter that accompanies the plans. For more information, refer to [I.M. 3.105](#), Concept Statement Instructions.
- Environmental Document Requirements:** If the approved environmental document (e.g., Section 4(f) statement, Environmental Assessment, or Environmental Impact Statement) specifies that certain conditions shall be met, or certain sensitive areas shall be avoided, the plans shall be consistent with these requirements.
- Format:** Plans shall conform to the [Specifications for Electronic Plan Submittals to the Iowa DOT](#).
- Dimensions and Legibility:** Plans shall be formatted as single-sided, 11"x17" printing. To ensure that all of the plan can be printed accurately, the border widths (i.e., clear space between the edge of paper and printing on the plan) shall meet the following minimum dimensions: top and bottom = 1/4 in.; left and right = 5/8 in. All lettering and details on the 11"x17" plan sheets shall be legible if printed.
- Check and Final Bridge or Culvert Plans:** Bridge or culvert plans shall also conform to the guidelines provided in [I.M. 3.510](#), Check and Final Bridge or Culvert Plans.
- STIP Description:** Verify the project location description in the Statewide Transportation Improvement Program ([STIP](#)), as shown in the Transportation Program Management System ([TPMS](#)) Programming, matches the description shown on the plans and the description shown in TPMS Development. All project work must be within the limits of STIP description and the limits used for environmental review (as shown on the Concept Statement); otherwise, additional programming changes or environmental review will be required. If so, contact the Administering Office as soon as possible.
- TPMS Project Location Map:** Verify the project location map shown in TPMS is consistent with the project location description in the STIP and the limits of the project shown on the plans. The project location map is used to collect spatial data about the project. The TPMS project location map need not be exact, but should be reasonably accurate. For the purposes of this data collection, the project termini on the location map should be within 0.1 miles of the actual project termini.
- Federal Funds Programmed:** For Highway Safety Improvement Program - Secondary (HSIP-S) and county Highway Bridge Program (HBP) projects only, review the amount of Federal-aid shown in the current STIP. If the estimated Federal share exceeds the amount of Federal-aid programmed in the STIP by more than 15%, the project should not be submitted for letting, unless a STIP amendment or modification can be completed before the 1st Tuesday, 1 month prior to letting. The time required to complete a STIP amendment or modification may vary from a few days to more than a month, depending on the planning agency and the specific circumstances. If a STIP amendment or modification may be required, contact the planning agency and Administering Office as soon as possible. Projects submitted with a pending STIP amendment or modification must specify the current status and the anticipated completion date. If the amendment or modification cannot be completed before the 1st Tuesday, 1 month prior to letting, the project will either be withdrawn from the letting or authorized "as-is", which would limit

the amount of Federal-aid that can be received to whatever is programmed at the time of authorization. If the county elects to authorize the project "as-is", it will be reimbursed at rate less than the regular 80% Federal share for the remaining life of the project. The reimbursement rate will be equal to the amount of Federal-aid programmed divided by the estimated total cost, at the time the project is submitted for authorization.

TITLE SHEET

- Check Plans Stamp:** Check Plan submittals should be identified by including the words "Check Plans" on, near, or across the designer's certification block.
 - System Classification:** The roadway system classification shall be shown. The Systems Classification should be shown in large font near the center or upper middle part of the sheet. For county projects, use "Farm-to-Market System" for a project on a Farm-to-Market route or "Secondary Road System" for a project on a local route. For city projects, use "Urban Road System." For projects located on the corporation line, use the system classification that is under the jurisdiction of the lead governmental agency.
 - Location Map:** A location map with a north arrow and major street names shall be shown. Use of the 911 street names, as shown on the [Iowa DOT city and county maps](#), is recommended. The location map should be located near the left or bottom left part of the sheet. The location map should also include a scale (or be noted as "Not to Scale") and identify the project limits including the beginning and ending stations. If project divisions are used, their limits shall also be indicated, either on the location map or in a plan note.
 - Railroad Crossing Numbers:** If there are any railroad crossings within the project limits, include the Federal Rail Administration (FRA) crossing number for each crossing. Crossing numbers can be obtained from the FRA, [Office of Safety Analysis web site](#).
 - Electronic Signatures:** Check Plans should not be signed. Final Plans shall be signed by the design engineer and may be signed by the LPA officials. Electronic signatures may be applied in a variety of ways, including:
 - Printing a hard copy of the plan sheet, signing by hand, and scanning the plan sheet in PDF file format; or
 - Placing a scanned image of a hand written signature into the drawing file before creating the PDF file of the plan sheet; or
 - Placing text or an image in the signature area using one of Adobe Acrobat's electronic signature features; or
 - Any other means that produces a visual indication that the plans have been signed.
 - Designer's Certification Block:** The plans shall include a certification block and seal that complies with the appropriate sections or chapters of the Code of Iowa and the Iowa Administrative Code (IAC). The designer's certification block should be shown near the bottom right part of the sheet.
 - LPA's Signature Block:** The plans may include a signature block that includes the title of the appropriate LPA official(s) with a space for each official(s) signature and date. If included, the LPA's signature block should be shown near the bottom right part of the sheet.
- NOTE: If a signature block is not included, this does not relieve the LPA officials of the responsibility to approve the plans and specifications by the council or board of supervisors. Approval should be documented by means of a motion or resolution.
- Index of Sheets:** An index listing all sheets included in the plans shall be shown. The index of sheets should be shown near the right or upper right part of the sheet. Sheets should generally be listed in the following order: title sheet, typical sections, standard details, estimated quantities tabulation, estimate reference information, supplemental tabulations, plan and profile sheets, other detail sheets, and cross sections. Use of the Iowa DOT sheet numbering system as shown in the Iowa DOT Road Design Manual, [Section 1F-1](#), is recommended. If used, it shall be used consistently.

- Sheet Total:** The total number of sheets included in the plan set should be shown in the upper right corner.
- Availability of Cross Sections:** If cross-sections will be included, they shall be submitted with the plans. Cross-sections will be available only through the Office of Contracts. They shall not be supplied directly to bidders by the LPA.
- Project Number:** The Iowa DOT project number shall be shown in at least one place on all plan sheets. Recommended placements for the title sheet and all other sheets include the middle left margin and the bottom right margin. For the title sheet, the project number should also be shown near the upper right corner or in the center (above or below the project title).

NOTE:

- Usually, only one project number should be shown on the plans. However, if the plans will include more than one project, additional project numbers should be shown, along with a description and limits of each project. In such cases, a separate entry in the [TPMS](#) and a separate electronic bid item file will be required for each project.
- If a single project spans more than one jurisdiction (e.g., across county or city boundaries), the project number used should correspond to jurisdiction in which the project stationing begins (i.e., the westerly or southerly end of the project).
- If unsure about which project number or how many project numbers to use, contact the Administering Office for assistance.

- LPA Name and Project Location:** The name of the city or county shall be shown in at least one location on all plan sheets. Recommended placement is on the bottom left margin. On the title sheet, the name of the city or county and a brief description of the project location shall also be shown, preferably in the center part of the sheet. The description shall include the route or street name, plus the beginning and ending points of the project. Beginning and ending points shall be identified by a cross street, feature crossed, corporation limits, or some other feature that can be located on a map. If multiple routes or streets are included in the project, list each separately. For a Federal-aid project, the description on the plans shall be consistent with description for the project in the [STIP](#) and in [TPMS](#) Development.
- Work Type Description:** A [standard work type description](#) shall be shown, preferably in the center part of the sheet. Use the work type description that best represents the largest portion of the estimated contract cost. More than one work type description may be used, but for advertising purposes, only one work type (that which represents the largest portion of the estimated contract cost) will be used. Verify that the work type description used is the same as the work type chosen in TPMS.
- Mileage Summary Tabulation:** For roadway or trail projects, a mileage summary tabulation that includes the total project mileage shall be shown. This tabulation should be shown near the center or bottom center part of the sheet. The tabulation shall also include the beginning and ending stations of the project and any plan divisions (if used). Any station equations or exceptions present on the project shall also be identified in the tabulation.
- Standard Plans Note:** A note shall be included that specifies the location of all of the applicable [Standard Road Plans](#), [English County Bridge Standards](#), [LRFD English Culvert Standards](#), and/or [LRFD Precast Culvert Standards](#).
- Letting Date:** A space or a box for the project letting date shall be shown, preferably on upper left margin of sheet. If the letting date is known, the appropriate date may be shown in the box or space provided.
- U.S. Army Corps of Engineers 404 Permit:** If a permit is needed, include Standard Note [281-1](#) near the left or upper left part of the sheet. Complete the first blank with one of the following, as appropriate: "Nationwide Permit XX", where XX is the Nationwide Permit Number (14, 33, etc.); "Regional Permit 7", or "Individual Permit". Complete the second blank with the Corps' project-specific permit number, as shown in the subject line of the Corps' permit approval letter. The project-specific number may be omitted for projects that can proceed under a Corps Nationwide Permit without notification to the Corps, because no such number is assigned.

NOTE:

- If a bridge, culvert, or grading project does not require this permit, this shall be noted in the cover letter with the check plans.
- General 404 permit requirements are included in [Article 1105.14](#) of the Iowa DOT Standard Specifications for Highway and Bridge Construction (Standard Specifications). However, if the Corps added any special conditions to their approval of the permit, these shall be indicated on the plans.
- If the approved 404 Permit application indicated a temporary stream access will be allowed, and if a temporary stream access is required, then Standard Road Plan [EW-401](#) shall be used. Bid item quantities shall be calculated if the temporary stream access is required. If a temporary stream access is allowed by the 404 permit, but is not required, then EW-401 shall not be listed on the plans. In this case, Standard Specification [2547](#) applies, which states that a temporary stream access may be installed at the contractor's option, and if so, payment will be incidental to mobilization.
- If the approved 404 Permit application indicated that temporary stream access will not be allowed, include Standard Note [282-1](#) to note this condition.
- An electronic copy of the 404 permit shall be supplied to the Administering Office with either the Check or Final Plans submittal.
- For more information, refer to [I.M. 3.130](#), 404 Permit Process.

Iowa DNR Floodplain Construction Permit: If a permit is needed, the following note shall be included: *"This project is covered by Iowa DNR Floodplain Construction Permit No. (insert Iowa DNR permit number)."* This note should be shown on the left or upper left part of the sheet. If a bridge, culvert, or grading project does not require this permit, this shall be noted in the cover letter with the check plans. Refer to [I.M. 3.410](#), Preliminary Bridge or Culver Plans, for more information.

Iowa DNR Storm Water Permit: If the project disturbs 1 acre or more of land, include one of the following notes. The note should be shown near the left or upper left part of the sheet. Any area where soil is exposed to erosive forces, such as wind or water, shall be considered disturbed. The LPA shall be responsible for obtaining the appropriate National Pollutant Discharge Elimination System (NPDES) permit. The contract documents shall not shift this responsibility to the contractor. For more information, refer to [I.M. 3.140](#), Storm Water Permits.

- If the project can be constructed under General Permit No. 2, include the following note: "This project is covered by the Iowa Department of Natural Resources NPDES General Permit No. 2. The contractor shall carry out the terms and conditions of General Permit No. 2 and the storm water pollution prevention plan which is a part of these contract documents. Refer to [Section 2602](#) of the Standard Specifications for additional information."
- If the project requires an individual permit, include Standard Note [281-2](#) and fill-in the appropriate individual permit number and submit an electronic copy of the permit to the Administering Office.

Standard Specification Note: The following standard note shall be included near the center of the sheet: *"Refer to the Proposal Form for list of applicable specifications."*

FHWA Structure Number: If the project involves a bridge, the FHWA structure number shall be shown, preferably on or near the location map that shows the location of the bridge. Bridges are defined as any structure with a clear opening greater than 20 feet, as measured along the centerline of the roadway.

Utility Contacts: If any utility facilities are within or immediately adjacent to the proposed limits of construction, utility contact information (company name and a contact person's name, address, and phone number) shall be shown for each utility company. The Iowa One-Call symbol and phone number should also be displayed. These should be shown near the bottom center part of the sheet.

Automatic Traffic Recorders: If automatic traffic recorders are present within the project limits, Standard Note [262-4](#) shall be included. See the Iowa DOT's [Automatic Traffic Recorder](#) web page to locate existing traffic recorders.

TYPICAL SECTION SHEETS

- Dimensions and Slopes:** Proposed cross section elements shall be detailed with adequate horizontal and vertical dimensions. Pavement slopes, cut slopes, and fill slopes shall also be specified.
- Materials Specified:** The type and thickness of surface, base and subbase materials for pavements, shoulders, sidewalks, or trails shall be shown. Materials should be identified using the appropriate bid item description for that material.
- Number of Typical Sections:** Separate typical sections for each significantly different type of cross section found on the project shall be shown. Use separate typical sections to show differences in the number of lanes, pavement types, pavement thicknesses, curb and gutter, sidewalk, or recreational trails.
- Station Ranges:** If more than one typical section is used, the applicable stationing ranges shall be labeled for each. If the project contains more than one plan division, the applicable division(s) for each typical section should be noted.
- Existing Features:** For projects that involve widening, milling, resurfacing, or other modifications to the existing pavement and / or shoulder; the type, thickness, and width of existing pavement and / or shoulder structure should be shown on the typical cross section.

QUANTITY, ESTIMATE REFERENCE, GENERAL NOTE, AND TABULATION SHEETS

- Estimated Project Quantities Tabulation:** All plans shall include an Estimated Project Quantities tabulation. Use of the Standard Tabulations ([100 Series](#)) is recommended. If a non-standard tabulation is used instead, it shall include, as a minimum, the Iowa DOT bid item code, item description, unit, and total bid item quantity. If plan divisions are used, the Estimated Project Quantities tabulation shall also indicate the bid items or quantities of items that apply to each division. A label or description of each division shall also be included. For additional information, refer to I.M. 3.505, [Attachment A](#), Check and Final Plan Guidelines, Plan Divisions section.
- Tabulation of Standard Plans:** Tabulations shall be included that list all of the applicable [Standard Road Plans](#), [English County Bridge Standards](#), [LRFD English Culvert Standards](#), and/or [LRFD Precast Culvert Standards](#), including revision dates which are current for the targeted letting. For each standard plan listed, all of the standard plans referenced by that standard plan shall also be listed.

Note: Bidders should not be referred to the Office of Bridges and Structures or the Office of Local Systems to obtain hard copies of the Standard Bridge Plans or Standard Culvert Plans. These are available in electronic format at the links provided above.

- Supplementary Tabulations:** Supplementary tabulations should also be used to provide additional information or a breakdown of bid item quantities. When possible, include a total quantity for each bid item shown in a supplemental tabulation. The bid item quantity listed in a supplemental tabulation should match the total bid item quantity as listed in the estimated quantities tabulation. If the bid item quantity contains additional quantities that are not shown in the supplemental tabulation, note these additional quantities in the Estimate Reference Information. Use of the Standard Tabulations ([100 Series](#)), is recommended. If included, the most current version shall be used. For additional information, refer to I.M. 3.505, [Attachment A](#), Check and Final Plan Guidelines, Iowa DOT Road Design Details section.
- Bid Item Codes, Description, and Units:** The bid item codes, descriptions, and units listed on the plans shall match the current list of standard bid items, as shown in the Bid Items Application referenced by [I.M. 3.520](#), Electronic Bid Item Information. Only valid bid items shall be used. For additional guidance, refer to I.M. 3.505, [Attachment A](#), Check and Final Plan Guidelines, Bid Items section.
- Bid Item Specifications:** Check the SPEC code given for each item in the [Bid Item Description Book](#). If this code indicates that the specification information, including, but not limited to method of measurement and basis of payment, must be supplied by the designer, it shall be included in the plans (preferably in the Estimate Reference Information) or the applicable Special Provision. For additional guidance, refer to I.M. 3.505, [Attachment A](#), Check and Final Plan Guidelines, Method of Measurement and Basis of Payment section.

- Estimate Reference Information:** Estimate Reference Information shall be provided. Estimate Reference Information should explain what is included in a bid item and where additional information about that item can be found in the plans. For additional guidance, refer to I.M. 3.505, [Attachment A](#), Check and Final Plan Guidelines, Estimate Reference Information section.
- Non-Participating Items or Quantities:** If any bid items or quantities are excluded from participation by one or more of the project funding sources, those bid items or quantities shall be separated by means of plan divisions. Some bid items or quantities may be non-participating based on the Federal or State eligibility rules or regulations for a particular funding program. For example, some utility relocations are not eligible for Federal-aid, as described in [I.M. 3.650](#), Federal-aid Participation in Utility Relocations. For additional guidance, refer to I.M. 3.505, [Attachment A](#), Check and Final Plan Guidelines, Plan Divisions section. If uncertain about whether any bid items or quantities should be designated as non-participating, contact the Administering Office for assistance.
- Salvaged Items:** If the contractor is required to deliver and stockpile any salvaged items that will become the property of the Contracting Authority, bid item 2555-000010, Deliver and Stockpile Salvaged Materials, shall be used. This bid item shall be placed in a non-participating plan division in the plans and in the Bid Items Application. If the Contracting Authority will deliver and stockpile the salvaged materials with its own forces, this bid item shall not be used. For more information, refer to I.M. 3.505, [Attachment A](#), Check and Final Plan Guidelines, Salvaged Materials section.
- Earthwork Quantities:** A breakdown of earthwork quantities should be shown in a separate tabulation or in the Estimate Reference Information. Quantities should be shown for cut, fill, the assumed shrinkage percentage, and any waste or borrow requirements.

NOTE:

1. Topsoil shall not be included in the pay quantity for the various excavation bid items. Topsoil is a separate pay item, and must be included if NPDES General Permit No. 2 is required on this project.
2. Overhaul should be paid for if it is in excess of the free-haul limits specified by the contract documents. If the plans do not specify a free-haul distance, the free-haul distance will be 1000 feet, as per [Article 2108.04.E](#) of the Standard Specifications.

- Contractor Furnished Borrow:** If the amount of contractor furnished borrow material is 10,000 cubic yards or less, which includes the combination of select soil treatment and Class 10, use bid item 2102-2625000, Embankment-in-Place. This item will not require any special submittals or testing or specifications. A reference note should be included with the bid item that indicates the embankment is contractor provided. If the quantity is greater than 10,000 cubic yards, use bid item 2102-2625001, Embankment-in-Place, Contractor Furnished.

NOTE:

1. If the quantity is greater than 10,000 cubic yards, the contractor will be required to provide sampling, testing, and a proposed borrow report to the Engineer as per [Materials I.M. 545](#).
2. If the quantity is greater than 50,000 cubic yards, the Iowa DOT Office of Contracts will post a copy of the check plans on its [web site](#) to provide bidders with advance notice of projects with large amounts of contractor furnished borrow.

- Roadway Pipe Culverts:** If roadway pipe culverts are part of the project work, the bid item, 2402-2720100, Excavation, Class 20, For Roadway Pipe Culvert, shall be included as per the [Standard Road Plans](#).

- Earth Shoulders / Fill:** If the work involves construction of earth shoulders or earth shoulder fill above the subgrade elevation adjacent to a paved surface or curb and gutter, one of the following bid items shall be included: if the volume of earth shoulder is included in the Class 10 Excavation quantity, bid item 2123-7450020, Shoulder Finishing, Earth, shall be used; if the volume of earth shoulder is not included in the Class 10 Excavation quantity, then bid item 2123-7450000, Shoulder Construction, Earth, shall be used. Each side of a trail or roadway is measured separately.

- Lump Sum Item Split:** For each lump sum item on a project with more than one plan division, a decimal fraction quantity shall be included for each plan division, if the lump sum item applies to that division. For each lump sum item, the sum of the quantities shown for all the applicable plan divisions shall equal 1.0.
- Guardrail Items:** If the construction includes guardrail, all of the bid items as listed on the applicable [BA](#) series of Standard Road Plans shall be included. The applicable Standard Tabulations in the [108 series](#) shall be used.
- Trail Paving:** Portland Cement Concrete (PCC) or Hot Mix Asphalt (HMA) bicycle or pedestrian trails shall be paid for with the bid items specified by [Section 2511](#) of the Standard Specifications. HMA Commercial Mix is also acceptable for trails (see item below).
- HMA Commercial Mix for Trail Paving:** If bid item 2303-0000100, Hot Mix Asphalt Mixture, Commercial Mix, is used for trail paving, the following note shall be included in the Estimate Reference Information, unless an alternative specification has been approved: *"All work shall be completed in accordance with Iowa DOT Standard Specifications, except that Article 2303.02 Materials, shall not apply. The Contractor shall furnish and place a commercial asphalt mix with a three-eighths (3/8) maximum aggregate size and a minimum asphalt content of 6.25 %. Class II compaction shall be required. Payment for asphalt cement shall not be made separately but shall be included in the unit price bid for this item."*
- Bridge Approach Paving:** If bridge approach paving is included in the work, all of the bid items as listed on the applicable RK series of Standard Road Plans shall be included. Standard Tabulation [112-6](#) shall be used.
- Bridge Removals:** If the project involves removal of a bridge, bid item 2401-6745625, Removal of Existing Bridge, shall be used. Use of this bid item for bridge removals is required to automatically generate the "Notification of Demolition" form that the Office of Contracts will send to the contractor. This form is required to comply with the State and Federal asbestos regulations. For more information, refer to [I.M. 3.160](#), Asbestos Inspection, Removal, and Notification Requirements.
- Construction Survey:** Bid item 2526-8285000, Construction Survey, shall be included if the contractor is providing the construction survey for the project.
- Flaggers:** Bid item 2528-8445113, Flaggers, shall be included if reference is made to roadway flaggers in a Standard Road Plan, or if flaggers are called for by the traffic control details or notes. The bid quantity for Flaggers shall be designated as "Per Proposal" on the plans. If desired, the designer may estimate a quantity for purposes of preparing the engineer's estimate. However, the Office of Contracts will determine the actual bid quantity based on the number of working days assigned for the project and insert this number on the proposal.
- Safety Closures:** Bid item 2518-6910000, Safety Closure, shall be included if road closures or hazard closures are shown on a referenced Standard Road Plan or traffic control detail, or if they are required by a plan note. Use of Standard Tabulation [108-13A](#) for Safety Closures is recommended.
- Pavement Smoothness:** If the Pavement Smoothness, [Section 2316](#) of the Standard Specification, is desired for HMA or PCC paving, this shall be indicated in the Estimate Reference Information for the appropriate paving bid items. If called for, this specification shall be added in its entirety. Parts of the specification shall not be written out.
- Certified Plant Inspection:** If the Certified Plant Inspection, [Section 2521](#) of the Standard Specifications, is desired for a specific bid item (e.g., HMA or PCC paving, structural concrete, or flowable mortar), this shall be indicated in the Estimate Reference Information of the bid item(s) for which Certified Plant Inspection will apply. If Certified Plant Inspection is called for, it may be appropriate to also include bid item 2520-3350010, Field Laboratory.
- Subdrains:** If a drainable base is used, a subdrain system should be included. If subdrains are used, all the associated bid items shall be included, as indicated on the appropriate Standard Road Plan.
- Pavement Removal and Patching:** If pavement removal, driveway removal, or patching is required for the project, the type and thickness of the existing pavement shall be shown on the plans. This information may be shown in the tabulations for the removal or patching items, in the Estimate Reference

Information, or in separate tabulation for existing pavement (use of Standard Tabulation [102-5](#) is recommended).

- Mobilization:** Bid item 2533-4980005, Mobilization, shall be included for all contracts, except maintenance aggregate, materials only, granular surfacing, or other minor contracts.
- Traffic Control:** Bid item 2528-8445110, Traffic Control, shall be included, unless the plans indicate the LPA will provide and maintain all the necessary traffic control devices. If the LPA does provide the traffic control devices, the plans shall specify where they will be provided to the contractor.
- Clearing and Grubbing:** When large areas densely covered by trees and other vegetation must be cleared, bid item 2101-0850001, Clearing and Grubbing, measured by the acre, should be used. If this acre bid item is used, the plans should specifically indicate the extent of the area to be cleared and grubbed. When the area to be cleared is not densely covered by trees or other vegetation, bid item 2101-0850002, Clearing and Grubbing, measured by the unit, shall be used. In either case, the Estimate Reference Information for these items should include a reference to plan sheet or tabulation where the quantities are shown. Use of Standard Tabulation [110-17](#) is recommended.
- Scrape Test Note:** If the project involves either removal or painting of an existing painted steel bridge or railing, the following note shall be included: *“Scrape samples of this bridge were taken to get an indication of the existence of and level of total chromium and total lead. The analysis of total chromium in the sample was ___ppm. The analysis of total lead in the sample was ___ppm. The analysis shows the existence of these two toxic constituents. The levels indicated by these tests could create conditions above regulatory limits for health safety requirements. No other substances were analyzed. The bidder should not rely on the LPA’s testing and analysis for any purpose other than an indication of the existence of these two constituents.”*
- Pollution Prevention Plan (PPP):** If a National Pollutant Discharge Elimination System (NPDES) permit is required for the project, the PPP and the appropriate erosion control bid items associated with the PPP shall be included, as listed in [Section 2602](#) of the Standard Specifications, unless the LPA will be providing and maintaining all of the erosion control measures. If the LPA will provide these, this shall be clearly stated on the plans. For more information on the NPDES permit procedures, refer to [I.M. 3.140](#), Storm Water Permits.
- Erosion Control Mobilizations:** Bid item 2602-0010010, Mobilizations, Erosion Control, shall be included in projects that are not stand-alone erosion control or landscaping projects, if one or more of the following bid item quantities is shown on the plans: 2601-2642100, Stabilizing Crop - Seeding and Fertilizing (1 acre or greater); 2601-2642120, Stabilizing Crop - Seeding and Fertilizing (Urban) (1 acre or greater); 2602-0000020, Silt Fence (250 feet or greater); or 2602-0000030, Silt Fence for Ditch Checks (250 feet or greater). Stand-alone erosion control or landscaping projects do not require this item since the mobilization work is covered by the regular mobilization bid item.
- Incentive / Disincentive Items:** If the LPA would like to include an estimated cost for incentives or disincentives in the bid price, include incentive / disincentive bid items as appropriate. For more information, refer to [Local Systems Mailing](#) letter on Use of Incentive / Disincentive Bid Items, dated February 7, 2012.
- Project Funding Signs:** If the LPA elects to include such signs as part of the project work, the cost of such work shall be non-participating with respect to Federal and State funds. If used, the signs must conform to the Manual on Uniform Traffic Control Devices (MUTCD). Only essential information regarding the source and amount of funding shall be included on the sign. Promotional information such as the identification of public officials, contractors, organizational affiliations, symbols, logos or other items are prohibited.

PLAN AND/OR PROFILE SHEETS

- Existing Features:** The plans should show the location of existing topographical features (e.g., existing pavement, structures, buildings, etc.).
- North Arrow:** A North arrow shall be shown on all plan sheets.

- Scale:** All plan and profile sheets shall show a horizontal scale. Profile sheets shall also show a vertical scale.
- Proposed Right-of-Way (ROW):** If the project involves ROW acquisitions, permanent easements, or temporary easements, the proposed right-of-way lines, easement lines, property lines, parcel numbers, and property owners shall be shown. For projects involving several ROW acquisitions or easements, use of separate ROW sheets is recommended.
- Existing ROW:** Existing ROW lines shall be shown.
- Storm Sewers:** The station and offset information for all new intakes and utility accesses shall be shown on the plan sheets or in a tabulation. If needed, storm sewer profiles should be shown on separate sheets.
- Culverts:** The station, skew, length, and flow line elevations of all roadway and entrance culverts shall be identified, either on the plan and profile sheets or in a separate tabulation.
- Profiles:** The vertical profile data shall be shown, including the percent grade, vertical curve length, K factor, stopping sight distance (SSD), and design speed. The point of vertical curvature (P.V.C.), point of vertical tangency (P.V.T.), and point of vertical intersection (P.V.I.) stations and elevations shall be labeled.
- Alignments:** The horizontal curve data shall be shown, including the point of intersection (P.I.) station, curve length, radius or degree of curvature, tangent length, and delta angle. The point of curvature (P.C.) and point of tangency (P.T.) stations should also be shown.
- Construction Survey Information:** If the contractor will be responsible for the construction staking, the following information shall be shown:
 - **Benchmarks:** List the type, location, and elevation of each benchmark. This information may be listed on a separate sheet if necessary.
 - **Reference Point Information:** List the type, station, offset, and coordinates of each reference point (sometimes called control points). Reference points should also be tied to other existing fixed objects if they are likely to be disturbed by construction activities. Reference tie information should be included by using either a sketch showing the distances to the tie points, or a verbal description of the same. At least 3 reference ties should be given for each reference point. This information may be listed on a separate sheet if necessary.
 - **Horizontal Alignment Information:** List the horizontal coordinates of all P.I.s. The bearing of all tangent lines should also be shown.
- Utilities:** All known utility facilities within or immediately adjacent to the project limits shall be shown, including the approximate location of such facilities and the name of the utility company. For more information, refer to [I.M. 3.640](#), Utility Accommodation and Coordination.
- Railroad (RR) Crossings:** All RR crossings within or immediately adjacent to the project limits shall be shown, including the RR property lines and the name of the RR company. This information shall be included anytime the contractor will be required to gain access or perform work on the RR right-of-way or within 25 feet of the centerline of the outermost RR track, even if the RR facilities are not directly impacted by the project. For more information, refer to [I.M. 3.670](#), Work on Railroad Right-of-Way.
- Intersection Details:** For new construction or reconstruction projects, intersection detail drawings shall be included. Dimensions of channelization islands, curve radii, taper ratios, and taper lengths shall be shown. Intersection details shall be at a scale sufficient to show the necessary geometric details. A 1"=20' scale is recommended.
- Jointing Details:** For PCC paving projects, the spacing and type of joints shall be shown. Use of the Standard Road Plans [PV-101](#) and / or special jointing details is recommended. Joint types shall be specified using the standard types shown on the Standard Road Plans.

- Non-Participation Limits:** If any portion of the contract work is outside the approved or eligible project limits for one or more of the project's funding sources, the limits of the participating work shall be indicated on the plan sheets, including the beginning and ending stations.

TRAFFIC CONTROL

- Status of Vehicular Traffic:** The plans shall state whether traffic will be maintained or detoured during construction. This may be accomplished via special traffic control notes, details, Standard Traffic Control Plans, or some combination thereof. If part or all of the traffic control devices will be provided, installed, and/or maintained by the LPA, this shall also be stated.
- Status of Pedestrian Traffic:** The plans shall indicate how pedestrian traffic will be addressed during construction. Pedestrian paths may be maintained, closed, or detoured during construction. This may be accomplished via special traffic control notes, details, or some combination thereof. In all cases, pedestrian paths and / or detours shall comply with ADA and MUTCD requirements. For more information, refer to [Section 2528](#) of the Standard Specifications and the [Section 9A-5](#) of the Iowa DOT Design Manual.
- Standard Traffic Control Plans:** Use of applicable Standard Road Plans, [TC Series](#), is strongly recommended. If used, the traffic control notes should explain under what conditions or which locations each Standard Road plan applies.
- Phased Traffic Control:** If the project involves phased construction, project-specific traffic control plans or details shall be included, unless the Standard Road Plans can adequately describe the necessary traffic control for each phase. The traffic control plans or details shall show the appropriate traffic control devices for each phase. Staging notes shall also be included that describe which items of work must be completed as part of each phase.
- Detour Routes:** If a detour will be required, the detour route and the appropriate temporary traffic control devices shall be specified, unless all of the traffic control devices will be provided, installed, and maintained by the LPA. Use of a schematic or "to-scale" detour plan sheet is recommended.

Note: If the detour route and / or signing involves a Primary Highway in any way, contact the appropriate [Iowa DOT District Office](#) to obtain approval of the proposed detour route and / or signs.

- References to the MUTCD:** It is not necessary to reference the MUTCD with respect to temporary or permanent traffic control devices shown on the plans. The Standard Specifications require that all traffic control devices comply with the MUTCD, as adopted by the Iowa DOT. If reference is made to the MUTCD on the plans, it shall be referred to as the *"Manual on Uniform Traffic Control Devices for Streets and Highways, as adopted by the Department per 761 of the Iowa Administrative Code (IAC), Chapter 130."*

TRAFFIC SIGNAL SHEETS

- Scale:** Drawings shall be of sufficient scale to show the necessary details. A 1"=20' scale is recommended.
- Pavement Markings Details:** Pavement markings including lane lines, stop bars, crosswalks, symbols, and legends should be shown.
- Signal Details:** Signal pole, signal head, mast arm, and detector loops locations should be shown.
- Roadway Details:** Edges of pavement, curbs, sidewalks, and pedestrian curb ramps should be shown.
- Tabulations:** Tabulation(s) shall be provided that list all of the items and quantities that are included in the lump sum Traffic Signalization bid item.

ACCESSIBILITY

If the roadway, sidewalks, or shared use paths are being altered by the project, the Americans with Disabilities Act (ADA) applies. The following items shall be included on the plans in accordance with the [Design Manual](#), Chapter 12, and [I.M. 1.080](#), ADA Requirements:

- Curb Ramps:** Include compliant curb ramps where required. If ramps already exist but are not fully compliant (e.g., they do not include detectable warnings), those ramps shall either be replaced or retrofitted to meet current ADA requirements.
- Tabulations:** Standard Tabulation [113-10](#), Sidewalk Compliance, shall be included. Other tabulations in the 113 series should be included as appropriate.
- Sidewalk Details:** Sheets that detail the curb ramp designs shall be provided according to the Design Manual, [Section 1F-18](#).

INSTRUCTIONAL MEMORANDUMS

To Local Public Agencies



To: Counties and Cities	Date: December 19, 2014
From: Office of Local Systems	I.M. No. 3.810
Subject: Federal-aid Construction by Local Agency Forces	

Contents: This Instructional Memorandum (I.M.) includes guidelines and procedures to receive Federal-aid reimbursement for the costs of construction performed by Local Public Agency (LPA) forces. Topics addressed include eligible costs and activities, submittal requirements, and the procedures for requesting, reviewing, and authorizing Federal funds for such use.

Introduction

Federal regulations ([23 CFR 635.104](#)) require Federal-aid projects to be constructed by contracts awarded on the basis of competitive bidding. However, in rare cases, this requirement may be waived if the LPA finds it is more cost effective to use some other method, as provided for in [23 CFR 635, Subpart B](#). One such method is the use of LPA forces to perform the construction. The LPA's finding of cost effectiveness shall be reviewed and approved by the Iowa Department of Transportation (Iowa DOT) before construction by LPA forces can proceed.

The term "cost effective" means the efficient use of labor, equipment, materials, and supplies to assure the lowest overall cost. A "finding of cost effectiveness" must demonstrate two things:

1. completing the proposed construction work using LPA forces will be cost effective; and
2. there are special or unique circumstances that justify deviating from the competitive bidding process.

Eligible Costs

Subject to the approvals and procedures outlined in this I.M., Federal funds may participate in the direct costs of labor, equipment, materials, or supplies provided by LPA to complete the project construction, either in whole or in part. Labor costs include salaries, wages, and other related payroll expenses, such as leave, holidays, social security, retirement, and other payroll benefits.

Federal funds may also participate in the associated indirect costs, provided such costs have been allocated to the Federal-aid project in accordance with an approved cost allocation plan that meets the requirements of [2 CFR 200](#), Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards. Such cost allocation plans must be reviewed and approved on annual basis by the Iowa DOT. The Federal Highway Administration (FHWA) may also elect to review the LPA's cost allocation plan. If reimbursement of indirect costs is desired, the LPA shall submit documentation showing approval of its indirect cost proposal by either the Iowa DOT or by the LPA's Federal cognizant agency. If the LPA's indirect cost proposal has not already been approved, the Administering Office will refer the LPA to the Iowa DOT Office of Finance, External Audits, which will provide the LPA with additional instructions and sample documents for requesting approval of indirect costs.

Submittal Requirements

To receive Federal-aid reimbursement for construction by LPA forces, the LPA must submit the following information to the Iowa DOT Administering Office to support its finding of cost effectiveness:

1. An explanation, including supporting documentation, of the reasons or special circumstances that justify using LPA forces in lieu of traditional competitive bidding. Examples of supporting documentation may include things such as:
 - a) a failed attempt to accomplish the proposed work by competitive bidding due to lack of bids or unreasonable bids; or
 - b) a history of failed competitive bidding in the local area on similar work due to lack of bids or unreasonable bids, including reasons why competitive bidding, if attempted, would be unlikely to succeed for the requested work.

There may be other reasons or situations that justify the use of LPA forces. However, in all cases, they must be unusual and are unlikely to recur.

2. Identification of the project in the Statewide Transportation Improvement Program (STIP), a description of the project, and the kind of work to be performed by LPA forces.
3. An estimate of the construction costs to be performed by LPA forces that includes the following:
 - (a) Staff time (hours) for each different phase of the work. Staff time should be estimated separately for each employee or classification of employees.
 - (b) Wage rates for each employee or classification of employee including any payroll expenses that are part of the wage rate, such as IPERS, FICA, employee benefits, etc.
 - (c) Equipment type, hours of use, and unit costs (such as the rental rate per hour or per mile). Note: If an LPA must acquire or rent substantially more equipment than required for its normal operations, it may be difficult to justify the use of LPA forces.
 - (d) Costs of materials and supplies to be incorporated in the project. Include sources and suppliers, if known.
 - (e) Source documentation for the unit costs (labor, equipment, and materials) used to prepare the estimate.
4. A cost estimate of the work that assumes the work will be competitively bid. This estimate is for comparison purposes with the estimate described in item 3 above. Source documentation for the unit costs should also be included with this estimate. Unit bid price averages maintained by the Iowa DOT may be used as source documentation for this estimate.
5. The amount of Federal funds requested.

Procedures

The necessary procedures to request, review, and approve Federal participation in construction by LPA forces are summarized below:

1. The LPA submits a finding of cost-effectiveness and a request for Federal-aid participation in construction by LPA forces to the Administering Office, including a cost estimate and all supporting documentation, as described above.
2. The Administering Office reviews the cost estimate and completeness of submittal. If the submittal is incomplete or is not acceptable, the Administering Office works with the LPA to address any concerns. The Administering Office also verifies that Environmental Concurrence has been obtained. If not, the Administering Office reminds the LPA that construction work by LPA forces may not proceed until Environmental Concurrence and FHWA Authorization has been obtained.
3. The Administering Office requests a pre-audit from the Office of Finance, External Audits.
4. The Office of Finance, External Audits, reviews the pre-audit request and either performs a pre-audit or notifies the Administering Office that the pre-audit has been waived. If a pre-audit is conducted, External Audits sends 2 copies of the pre-audit report to the Administering Office and 1 copy to Office of Finance, Project Accounting and Payables.
5. The Administering Office sends 1 copy of the pre-audit report (if completed) to the LPA. If the pre-audit report requires modifications of the LPA's submittal, the LPA must respond to the findings of the pre-audit report. The Administering Office will work with the LPA and External Audits until the LPA's request is acceptable.
6. Once the LPA's request is acceptable, and after verifying that Environmental Concurrence has been obtained, the Administering Office requests FHWA authorization. The Administering Office's request shall indicate its concurrence with the LPA's finding of cost-effectiveness and include all supporting documentation.

Note: The Administering Office shall also provide a copy of the request and all supporting documentation to the FHWA prior to initiating action in the Fiscal Management Information System (FMIS). In addition, the "State Remarks" of the FMIS document shall indicate the request is for construction by LPA forces.

7. After FHWA authorization is received, the Administering Office notifies the LPA and provides the effective date of FHWA authorization. The Administering Office sends 1 copy of this notice to External Audits, Project Accounting and Payables, and the appropriate Metropolitan Planning Organization (MPO) or Regional Planning Affiliation (RPA).
8. After incurring construction costs by LPA forces, the LPA may submit periodic requests for reimbursement to the Administering Office. The requests shall document the actual costs incurred, including: staff hours and rates, equipment usage and rates, and costs of materials or supplies.
9. The Administering Office reviews and processes the requests for reimbursement as appropriate.
10. Upon completion of construction by LPA forces, the LPA notifies the Administering Office and requests final reimbursement for such costs.
11. The Administering Office requests a final audit from External Audits.
12. External Audits reviews the final audit request and either performs a final audit or notifies the Administering Office that the final audit has been waived. If a final audit was conducted, External Audits sends 2 copies of the final audit report to the Administering Office and 1 copy to Project Accounting and Payables.
13. The Administering Office provides a copy of the final audit report to the LPA. If additional reimbursement is due, the Administering Office processes the final reimbursement. If the final audit finds the LPA has been over-reimbursed, the Administering Office will request the Office of Finance, Financial Management and Reporting, to invoice the LPA for the appropriate Federal share or deduct this amount from the balance of Federal reimbursement that is due to the LPA for other project costs.

INSTRUCTIONAL MEMORANDUMS

To Local Public Agencies



To: Counties and Cities	Date: December 19, 2014
From: Office of Local Systems	I.M. No. 3.910
Subject: Final Review, Audit, and Close-out Procedures for Federal-aid Projects	

Contents: This Instructional Memorandum (I.M.) provides guidelines and procedures for closing-out Local Public Agency (LPA) Federal-aid projects, including field inspections, pre-audits, final audits or reviews, final Federal reimbursement, and records retention. This I.M. includes the following attachments:

[Attachment A](#) – Project Close-out Process Overview Flowchart. This attachment illustrates the entire project close-out process. It also directs the reader to the appropriate flow chart for the final review, audit, and payment of construction work, depending on the type of project.

[Attachment B](#) – Final Review and Audit Process Flowchart – Highway or Bridge Construction. This attachment illustrates the final review, audit, and payment process for traditional highway and bridge construction contracts that are let by the Iowa DOT and use the Iowa DOT Standard Specifications.

[Attachment C](#) – Final Review and Audit Process Flowchart – Non-highway Construction, DOT Specifications. This attachment illustrates the final review, audit, and payment process for non-highway type construction contracts that use the Iowa DOT Standard Specifications. These may be let at the Iowa DOT or locally*. They may include trails or landscaping / scenic improvement projects, such as those funded by the Transportation Enhancement, Federal Recreational Trails, Scenic Byways, and Safe Routes To School programs.

[Attachment D](#) – Final Review and Audit Process Flowchart – Non-highway Construction, Non-DOT Specifications. This attachment illustrates the final review, audit, and payment process for non-highway construction contracts that do not use the Iowa DOT Specifications. These may be let at the Iowa DOT or locally*. In addition to the kinds of projects listed for Attachment C above, these may include building restoration or renovation projects.

*For more information on the types of contracts that may be let locally, refer to [I.M. 3.720](#), Local Lettings – Federal-aid.

[Attachment E](#) – Pre-audit Checklist ([Word](#)). This attachment includes a checklist and instructions to guide the LPA's Project Engineer through the pre-audit process and prepare for a final audit. This checklist will also be used by the Iowa DOT staff when performing the final construction contract audit.

[Attachment F](#) – Final Forms Packet Checklist ([Word](#)). This attachment includes a checklist and instructions that describe the necessary forms and documents that should accompany the Project Engineer's request for approval of final payment to the Contractor.

Introduction

The primary objective of this I.M. is to document the process for closing-out Federal aid projects and set expectations, for both LPA and Iowa DOT staff, concerning the amount of time required to complete this process. Timely completion of the close-out process is very important because of Federal and State laws or regulations that pertain to prompt payment to contractors and subcontractors. The flowcharts included as Attachments [A](#), [B](#), [C](#), and [D](#) of this I.M. provide an estimate of the *minimum* amount of time required to complete each step. However, depending on the circumstances of each project, more time may be required.

Another important objective of this I.M. is to outline the documentation necessary to ensure that the project was constructed in accordance with the approved plans and specifications. In order to effectively carry-out its responsibilities to oversee the use of Federal funds, the Iowa DOT reviews some of this documentation. If such documentation is lacking, the Iowa DOT has the responsibility and the authority to deny Federal participation in some or all of the project costs.

Besides reviewing the construction documentation, the Iowa DOT is also responsible to ensure that the LPA is adequately staffed and equipped to undertake a Federal-aid project. If the Iowa DOT's reviews of an LPA's

projects during the close-out process consistently indicate that the LPA is not adequately staffed or equipped, the Iowa DOT has the responsibility and the authority to withhold letting of future Federal-aid projects until the LPA makes the necessary corrections.

The best way to make the project close-out process run smoothly and quickly is to ensure that proper documentation and records are kept during construction. Some of the documentation reviewed during the close-out process is discussed in [I.M. 3.805](#), Construction Inspection. Therefore, the information contained in I.M. 3.805 should be thoroughly reviewed before beginning either construction or the project close-out process.

Besides I.M. 3.805, the Iowa DOT's [Construction Manual](#) should also be consulted as a resource for construction inspection and close-out procedures. The current version of the Construction Manual is available on-line as part of the Iowa DOT's [Electronic Reference Library](#). In many places throughout this I.M., references to the Construction Manual are provided for additional explanation or information.

Note: LPA and consultant staff should be aware that the Construction Manual is written primarily for use by Iowa DOT staff. Therefore, the terminology it uses reflects the Iowa DOT's organizational structure. For example, references in the Construction Manual to the Resident Construction Engineer (RCE) should be interpreted as referring to the LPA's Project Engineer. Likewise, references to the District Construction Engineer (DCE) correspond to the District Local Systems Engineer (DLSE), or in the case of projects administered by the Office of Systems Planning, the appropriate Grant Program Manager or their designee. In addition, the LPA should also recognize that some of the procedures described in the Construction Manual are internal to the Iowa DOT and therefore may not be applicable for LPA administered projects. If you have any questions concerning the applicability of procedures in the Construction Manual, contact the Administering Office for assistance.

While not detailed extensively in this I.M., timely completion and review of other non-construction contracts that have Federal-aid participation, such as consultant, railroad, or utility relocation contracts, are also very important to the project close-out process. When such Federal-aid participating work is complete, the LPA should forward a request for final reimbursement for that work to the Iowa DOT as soon as possible. This enables the final review or audit process for such contracts to begin prior to completion of the construction contract, when possible. Sometimes the final reviews or audits of consultant, railroad, or utility work can take a significant amount of time, and therefore have potential to delay close-out of the project as a whole. For more information regarding these procedures, refer to [I.M. 3.305](#), Federal-aid Participation in Consultant Costs; [I.M. 3.650](#), Federal-aid Participation in Utility Costs; and [I.M. 3.680](#), Federal-aid Projects Involving Railroads.

The attachments referenced above provide an outline of the entire process for closing-out a Federal-aid project. The remainder of this I.M. provides additional explanation for each major part of this process. These parts include the following:

Completion of Field Work

The project field work is considered complete when all the Contractor's items of physical work have been completed. In other words, unless some of the work is found to be defective, the Contractor will not need to come back to the project site.

Completion of field work requires some, but not all of the paperwork that will eventually be required from the Contractor. Before accepting the field work as complete, the Project Engineer should obtain the following from the Contractor, as applicable: survey books, the Contractor's Daily Traffic Control Diary, Abandoned Water Well Plugging Record ([DNR Form 542-1226](#)), corrected profilometer reports, and plant reports. In addition, any non-compliances related to field work should be resolved before accepting the field work as complete.

Inspection of Field Work

The Project Engineer shall notify the Administering Office when it appears the Contractor is approximately 1 week from substantial completion of the field work. The Project Engineer shall schedule a final inspection with the Contractor, the Administering Office, and themselves. The goal is to complete the final inspection within 2 weeks of substantial completion of the project, weather permitting. While every effort will be made to meet this goal, it is possible that staff availability will not allow this goal to be met for every project. In such cases, the final inspection will be scheduled as soon as possible. During the final inspection, a Final Inspection Punch List will be developed listing all items of work that have not been completed in reasonable close conformity to the contract documents. The Project Engineer shall deliver to the Contractor the Final Inspection Punch List and specify the corrective

action that must be taken. A copy of the Final Inspection Punch List shall also be sent to the Administering Office. Once the Project Engineer determines all of the work is satisfactorily completed, including any corrective actions, the Project Engineer shall send a copy of the final Weekly Report of Working Days ([Form 830238 \(Word\)](#)) and documentation of completion of the Final Inspection Punch List to the Administering Office.

The Project Engineer should not accept the field work as complete by signing the Statement of Completion and Final Acceptance of Work ([Form 830435 \(Word\)](#)) or Certificate of Completion and Final Acceptance of Agreement Work ([Form 640003 \(Word\)](#)), as applicable, until both the Project Engineer and the Administering Office agree the field work is complete and in reasonably close conformance with the contract documents.

Statement of Completion and Final Acceptance of Work

After the field inspections have been completed, and any required corrective actions completed, the Project Engineer shall notify the Administering Office in writing. This notice shall specify the corrective actions that have been taken, if any, and include the appropriate form to document the completion and acceptance of the work. The Administering Office staff, at its discretion, may spot check these corrections. The form used to document the completion and acceptance of the work depends on the type of specifications used:

For projects using the Iowa DOT Standard Specifications, the Project Engineer shall sign and date the Statement of Completion and Final Acceptance of Work ([Form 830435 \(Word\)](#)) and send the original to the Administering Office. Upon receipt, the Administering Office will sign and date [Form 830435](#), return a copy to the Project Engineer, forward the original to the Office of Finance, Project Accounting and Payables Section, and retain a copy for the Administering Office's file. The Project Engineer shall then send a copy to the Contractor.

For projects that use other specifications, the Project Engineer shall sign and date the *top portion only* of the Certificate of Completion and Final Acceptance of Agreement Work ([Form 640003 \(Word\)](#)), send a copy to the Administering Office and the Contractor, and keep the original in the LPA's file. The only purpose of this submittal is to document the date of completion of the work. It is not intended to be the LPA's approval for final payment. Approval for final payment occurs later, at which time the original [Form 640003](#) shall be sent to the Administering Office as part of the Final Forms Packet submittal. For more information, refer to [Attachment D](#) and [Attachment F](#).

The date of the Project Engineer's signature on [Form 830435](#) or [640003](#) is important, because this date marks the beginning of a 50 day count that is used to determine whether interest may be due to the Contractor. For more information, refer to [I.M. 3.930](#), Interest Payment Procedures.

A County Board of Supervisors may authorize its County Engineer to sign either the [Form 830435](#) or [640003](#) on its behalf, provided, that it has passed and executed a resolution authorizing the County Engineer to do so. For more information, refer to [I.M. 3.940](#), County Engineer Resolution.

Pre-audit Process

Prior to requesting a final audit from the Administering Office, the Project Engineer shall conduct a pre-audit. Within 90 days of completion of construction and/or other activities authorized by the project agreement, the Recipient shall provide the completed pre-audit checklist to the Department and request a final audit; however, if there is an anticipated delay the pre-audit could be started when the project is substantially completed. The pre-audit consists of a thorough review of the construction contract documentation, as specified in the Pre-audit Checklist ([Attachment E](#) to this I.M.). The purpose of the pre-audit is to prepare for a possible audit by Administering Office staff. Therefore, when conducting the pre-audit, the Project Engineer should ensure that all of the documentation associated with the construction contract is complete, correct, and well organized. If the Administering Office finds that the documentation is not complete, correct, or well organized, it may defer its final audit until the Project Engineer addresses these issues.

As part of the pre-audit process, the Project Engineer shall also prepare the proposed final quantities, including all applicable price adjustments, such as incentives / disincentives, liquidated damages, or adjustments due to non-compliance with the contract documents. Additional guidance for each of these items is provided in [I.M. 3.805](#), Construction Inspection, and the Construction Manual sections referenced by the Pre-audit Checklist ([Attachment E](#) to this I.M.).

When the pre-audit is complete, the Project Engineer shall notify the Administering Office that the project is ready for an audit. This notification shall include a completed Pre-audit Checklist ([Attachment E](#) to this I.M.), and if

applicable, all materials review forms and associated documentation, as specified by [Materials I.M. 101](#). The applicability of the materials audit process is discussed in the Final Audits section below.

Semi-final Voucher or Semi-final Pay Estimate

After the pre-audit is complete, the Project Engineer shall send the proposed final quantities, including any price adjustments, to the Contractor for review and acceptance. For contracts that are paid by the Iowa DOT through its Contractor Pay System (CPS), this submittal consists of the semi-final voucher, which is documented using the Construction Contract Progress Voucher (Form 181013), or if the Field Manager software is used, a similar computer generated form. For contracts where the LPA makes payment to the Contractor directly, this submittal consists of a semi-final pay estimate, which may be documented using either the Final Estimate of Road or Bridge Work on Non-State Roads / Streets ([Form 181235 \(Word\)](#)) or an equivalent form.

The submittal of the semi-final voucher or semi-final pay estimate to the Contractor should be made at the same time a final audit is requested from the Administering Office. Therefore, the Project Engineer should make it clear to the Contractor that the proposed final quantities are subject to change by an Iowa DOT audit.

Also as part of the semi-final voucher or semi-final pay estimate submittal, the Project Engineer shall provide the Contractor with a complete list of any missing documentation that will be required in order to receive final payment, as determined by the Project Engineer's Pre-audit.

If any quantities or price adjustments are in dispute, the Project Engineer and the Contractor shall negotiate a mutually acceptable resolution. If the parties are unable to reach an agreement, the Project Engineer or the Contractor may contact the Administering Office for assistance. If requested, the Administering Office will attempt to mediate an acceptable solution to both parties.

After the Project Engineer and the Contractor have reached agreement on the semi-final voucher or semi-final pay estimate, the Project Engineer shall approve the semi-final voucher or semi-final pay estimate and the Contractor should be paid in full, less any retainage withheld.

If informal discussions between the Project Engineer, the Contractor, and if requested, the Administering Office, are unable to reach an agreement on any quantities or price adjustments, the Project Engineer shall approve the semi-final voucher or semi-final pay estimate, less any retainage and pay adjustments for items that are being disputed. The Project Engineer shall document the reason for the items that are being disputed and what actions were taken to resolve the dispute.

Final Audits

The Administering Office, at its discretion, may audit any construction contract. Some Administering Offices have elected to audit all contracts; others have elected to select contracts using a systems approach.

Using the systems approach, from among those contracts that have been completed at the time projects are selected for audit, the Administering Office will select at least one contract for each LPA. If the LPA only has one contract, that contract will be selected. If the LPA has more than one contract, the contract will be selected at random. If the audit of the selected contract does not reveal any significant problems, the Administering Office may waive the final audits for the LPA's other contracts let during that Federal fiscal year.

If a project is not selected for an audit, the Administering Office will simply review the Pre-audit Checklist for completeness, notify the Project Engineer that a final audit will not be conducted, and send a completed copy of the Pre-audit Checklist to the Project Engineer.

If a contract is selected for a final audit, the Administering Office will forward the materials review forms and associated documentation to the District Materials staff. The materials and construction audits will proceed as follows:

Materials Audit Process (highway and bridge projects only)

A materials audit will be performed for highway or bridge projects only. Materials audits will not be performed for non-highway projects, such as those funded by the Transportation Alternatives Program, Transportation Enhancement, Federal Recreational Trails, Scenic Byways, and Safe Routes to School programs.

After receipt of the materials review forms and associated documentation, the District Materials staff will perform a materials audit in accordance with procedures outlined in Materials I.M. [101](#) and [103](#). After their audit is complete, District Materials staff will notify the Project Engineer of any deficiencies in the materials testing, certification, or other required documentation and specify the corrective action that must be taken. If needed, the District Materials staff will provide a copy of this request to the Administering Office.

After the requested corrective actions have been taken and / or obtaining the requested documentation, the Project Engineer shall forward this information to the District Materials staff.

Construction Audit Process

After substantial completion of the project the Project Engineer shall submit to the Administering Office the Pre-audit Checklist (see [Attachment E](#) to this I.M.). The Administering Office will review the Pre-audit Checklist before the final audit. For selected items, the Administering Office will examine samples of the supporting documentation contained in the Project Engineer's files in order to verify that the item was completed as indicated on the Pre-audit Checklist. Those items for which supporting documentation was reviewed will be noted as such on the Pre-audit Checklist by the Administering Office staff. Any deficiencies identified by their review will be recorded on the Audit of Final Pay Estimate ([Form 830301 \(Word\)](#)). The Administering Office staff will provide a partially completed Form 830301 to the Project Engineer. If needed, the Administering Office staff will provide a copy of Form 830301 to the District Materials staff. The Administering Office staff will also sign and date the Pre-Audit Checklist, provide a copy to the Project Engineer, and retain the original for the Administering Office's file.

After the requested corrections have been completed, the Project Engineer shall indicate the date corrective actions were taken, and sign and date Form 830301. A copy of the completed form shall be returned to the Administering Office, along with any requested documentation, as part of the Final Forms Packet submittal (see [Attachment F](#) to this I.M.). The original Form 830301 shall be retained in the LPA's file.

Preparation of the Final Voucher or Final Pay Estimate

After the materials and construction audits are complete, or upon notice by the Administering Office that a final audit will not be conducted, the Project Engineer may begin preparing the final voucher or final pay estimate. The final voucher or final pay estimate shall incorporate the corrections to final quantities or price adjustments, if required by the final materials or construction audits.

Note: For counties using the Field Manager software on contracts paid through the CPS, any changes to quantities required by the final audits will require re-issuing a semi-final voucher before preparing a final voucher. This is because the final voucher is only used to release retainage; it cannot process changes in quantities.

The Project Engineer shall send the final voucher or final pay estimate to the Contractor and request the Contractor's approval of the final quantities, including any price adjustments that may apply. If acceptable, the Contractor signs the final voucher or final pay estimate and returns it to the Project Engineer. The Contractor shall also submit to the Project Engineer all required paperwork for final payment, if not already provided. This submittal marks the beginning of a 30 day count, referred to as the Day Zero count, which is used to determine when interest may begin to accrue. For more information, refer to [I.M. 3.930](#), Interest Payment Procedures. If all required paperwork is not provided, the Project Engineer shall promptly inform the Contractor which items are still needed and that final payment will not be processed until those items are received.

Submittal of Final Forms Packet

After the Contractor has signed the final voucher or final pay estimate and provided all the required paperwork, the Project Engineer shall submit the Final Forms Packet to the Administering Office. The Final Forms Packet includes the final voucher or final pay estimate and all other required documentation for final payment. Use [Attachment F](#) to this I.M., Final Forms Packet Checklist, as a complete list of required forms and documentation.

Upon receipt of the Final Forms Packet, it will be reviewed by the Administering Office within 30 days to ensure all the applicable forms and documentation has been included. If any forms or documentation are missing, the Administering Office will promptly notify the Project Engineer and specify the items that are not complete. Once acceptable, the Administering Office routes the appropriate forms and documentation as needed. For contracts let under the Iowa DOT Specifications, the Iowa DOT documents approval for final payment by signing the Final

Payment ([Form 830436 \(Word\)](#)). For contracts let under other specifications, the Iowa DOT documents approval for final payment by signing the bottom part of [Form 640003 \(Word\)](#).

Final Payment to the Contractor

After the Administering Office has approved the Final Forms Packet and signed the [Form 830436 \(Word\)](#) or [Form 640003 \(Word\)](#), final payment to the Contractor will be processed as follows:

For contracts that are paid by the LPA, the Administering Office notifies the Project Engineer that final payment may be processed and provides a copy of the signed Form 830436 or 640003 as appropriate. Upon receipt, the LPA makes final payment to the Contractor in accordance with the approved final pay estimate, including release of all retainage that is due.

For contracts paid using the CPS, the Administering Office forwards Form 830436 and the Final Forms Packet to the Office of Finance. Upon receipt, the Office of Finance processes the final payment to the Contractor, including a release of all retainage that is due.

Final Federal Reimbursement

For contracts paid by the LPA, the LPA may request final Federal reimbursement of project costs after all payments have been made, including the construction contract and any other project costs for which Federal reimbursement will be requested. This request shall be made using the reimbursement claim form provided by the Administering Office, if applicable, and shall include copies of all warrants and pay estimates for which reimbursement has not yet been requested. The Administering Office will review the LPA's final Federal reimbursement request, and if acceptable, will forward to the Office of Finance for processing, along with the Final Forms Packet.

For contracts paid by the CPS, the Office of Finance will process the Federal reimbursement of participating contract costs. Federal funds reimbursement will be deposited in the fund from which payments were originally made (e.g., the county's Farm-to-Market account for a Federal-aid project on the Farm-to-Market System). If there are any other Federal reimbursable project costs that were not paid through the CPS, the LPA shall request final reimbursement for these costs as described in the paragraph above.

Upon receipt of the final reimbursement request from the Administering Office, the Office of Finance will issue a warrant to the LPA for the final amount of Federal reimbursement that is due. If the final audits or reviews reveal that the LPA has been overpaid, the LPA shall reimburse the Iowa DOT accordingly.

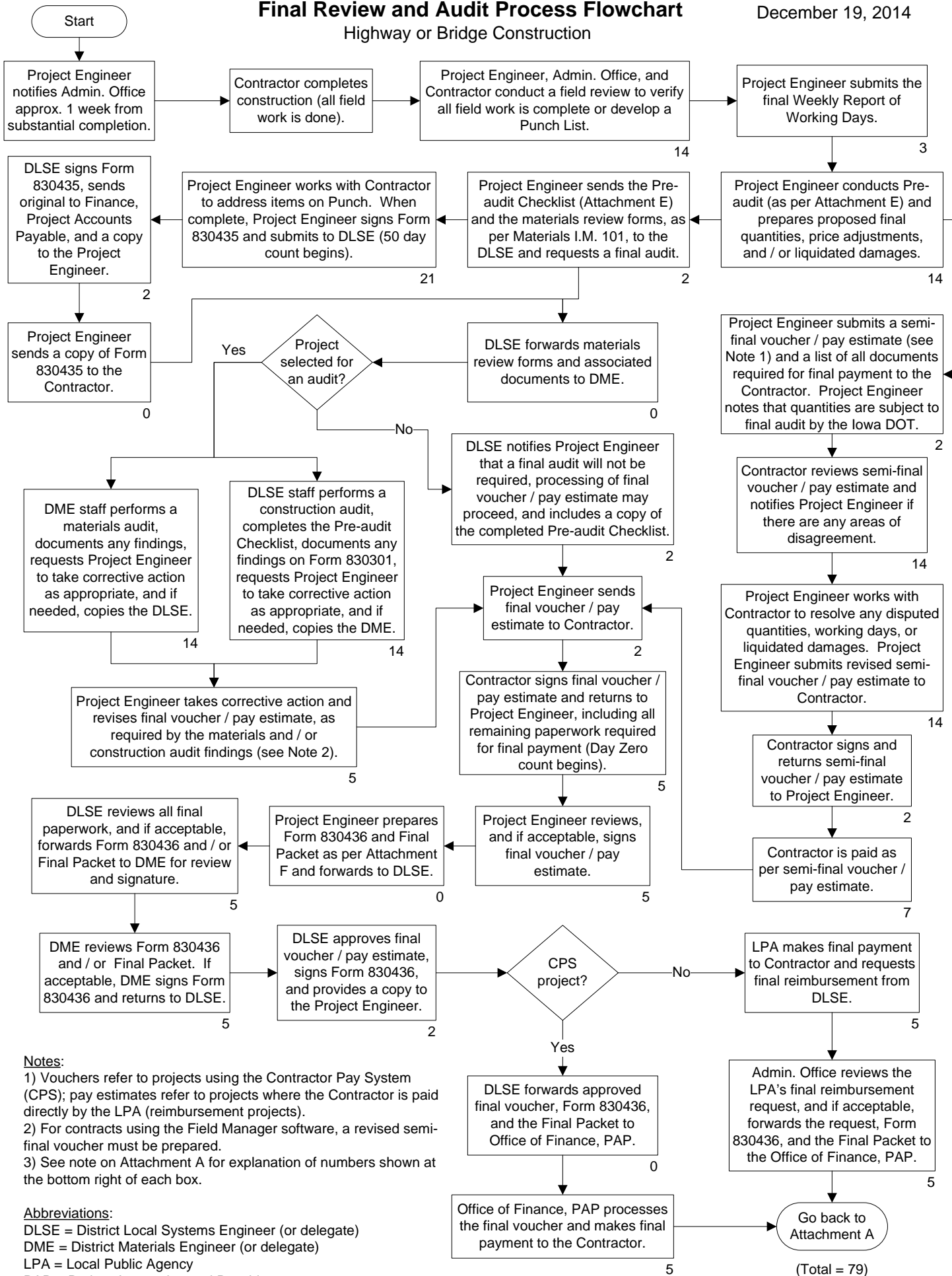
Project Close-out and Records Retention

After processing the final Federal-aid reimbursement to the LPA, the Office of Finance will prepare a final amendment / modification (amend / mod) to the project authorization in the Federal Highway Administration's Fiscal Management Information System (FMIS). The final amend / mod is sent to FHWA electronically for its review and approval.

Once approved by FHWA, the Office of Finance distributes 6 copies of the final FMIS amend / mod document to the Administering Office (4), Program Management (1), and the Office of Local Systems (1). In turn, the Administering Office distributes copies to the LPA (1) and the District Planner (2). Finally, the District Planner forwards one copy to the appropriate Metropolitan Planning Organization (MPO) or Regional Planning Affiliation (RPA).

Upon receipt of the final amend / mod, the LPA shall retain its project records for not less than 3 years from the date of FHWA's signature on the final FMIS amend / mod document. These records shall be available for inspection by authorized Iowa DOT or FHWA personnel at any time during the retention period.

Final Review and Audit Process Flowchart Highway or Bridge Construction

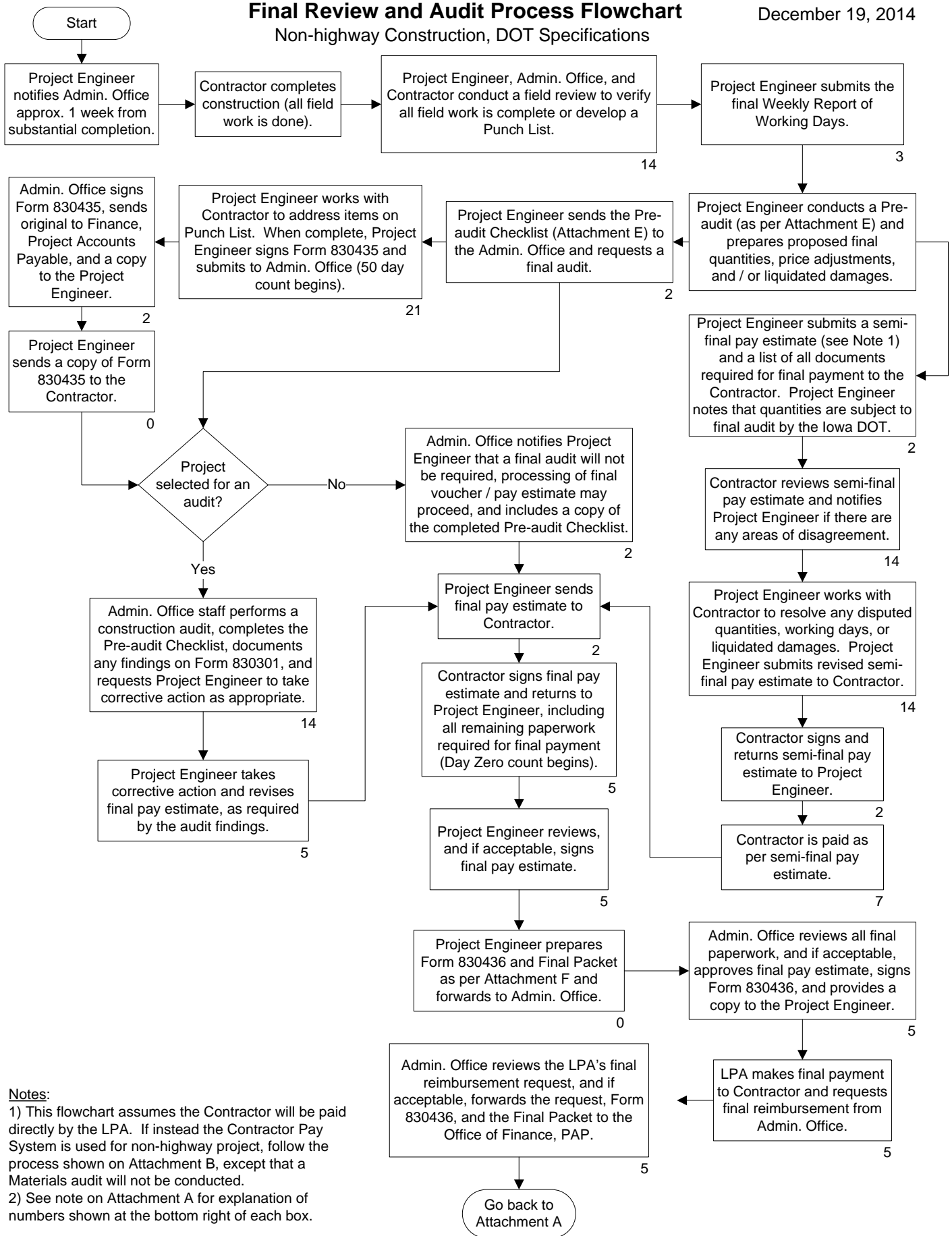


Notes:
 1) Vouchers refer to projects using the Contractor Pay System (CPS); pay estimates refer to projects where the Contractor is paid directly by the LPA (reimbursement projects).
 2) For contracts using the Field Manager software, a revised semi-final voucher must be prepared.
 3) See note on Attachment A for explanation of numbers shown at the bottom right of each box.

Abbreviations:
 DLSE = District Local Systems Engineer (or delegate)
 DME = District Materials Engineer (or delegate)
 LPA = Local Public Agency
 PAP = Project Accounting and Payables

Final Review and Audit Process Flowchart

Non-highway Construction, DOT Specifications



Notes:

- 1) This flowchart assumes the Contractor will be paid directly by the LPA. If instead the Contractor Pay System is used for non-highway project, follow the process shown on Attachment B, except that a Materials audit will not be conducted.
- 2) See note on Attachment A for explanation of numbers shown at the bottom right of each box.

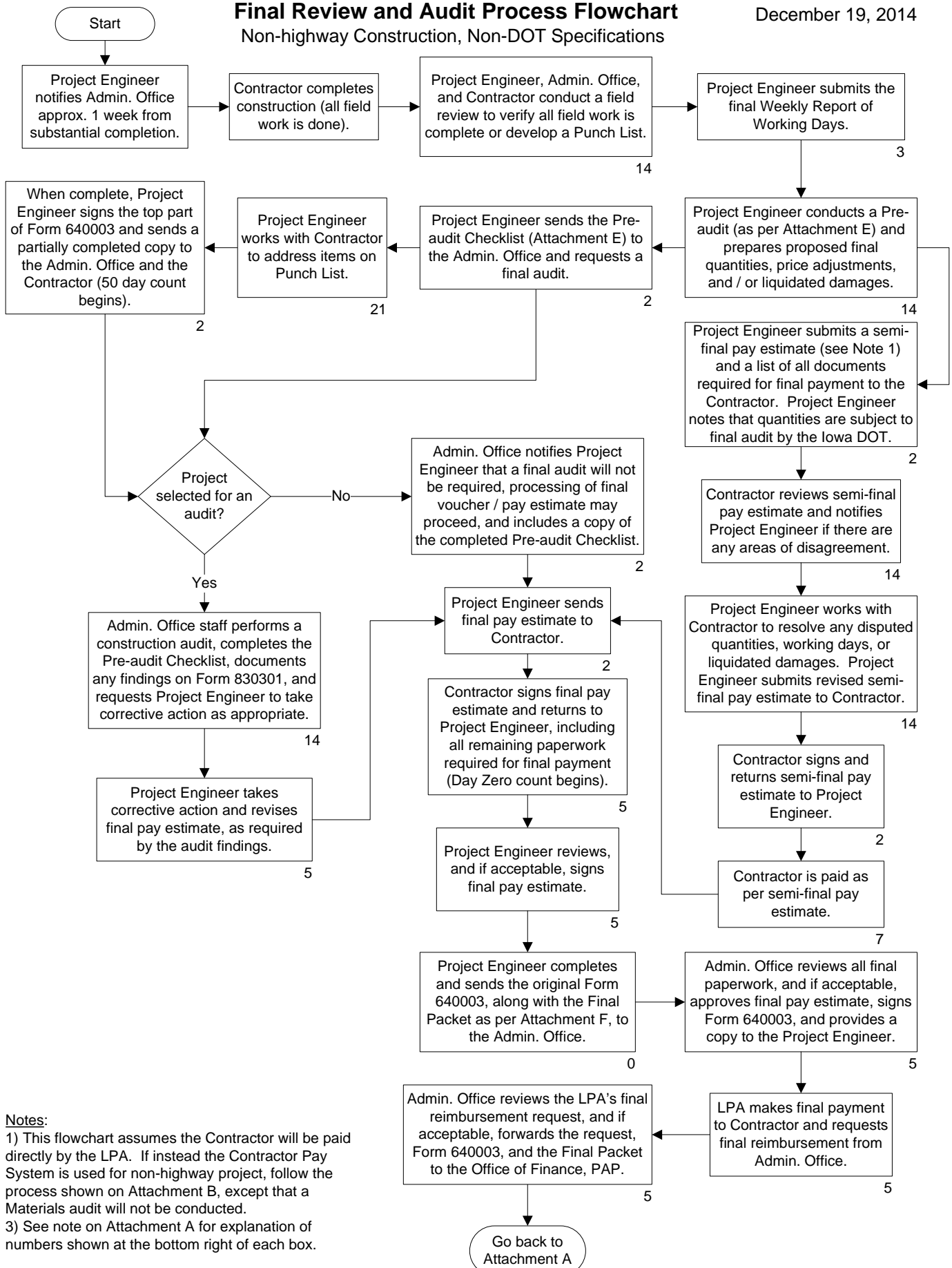
Abbreviations:

- Admin. Office = Administering Office
- LPA = Local Public Agency
- PAP = Project Accounting and Payables

(Total = 72)

Final Review and Audit Process Flowchart

Non-highway Construction, Non-DOT Specifications



Notes:
 1) This flowchart assumes the Contractor will be paid directly by the LPA. If instead the Contractor Pay System is used for non-highway project, follow the process shown on Attachment B, except that a Materials audit will not be conducted.
 3) See note on Attachment A for explanation of numbers shown at the bottom right of each box.

Abbreviations:
 Admin. Office = Administering Office
 LPA = Local Public Agency
 PAP = Project Accounting and Payables

(Total = 72)

Pre-audit Checklist

Project Number: _____ Project Name / Location: _____
Contract Number: _____ Contracting Authority: _____
Accounting Number: _____ Contractor: _____

Instructions: All of the applicable documents, steps, or reviews represented by this checklist should be complete and correct before requesting a final audit from the Iowa DOT Administering Office. Review and complete this checklist as indicated below, and as indicated by the instructions for each item:

- If the question(s) associated with an item can be answered “yes”, and the project file contains documentation to support this answer, check the box.
- If the item does not apply, write “N/A” over the box.
- If any items need additional explanation, place a note adjacent to that item, add remarks in the “comments” section below, or attach additional documents as necessary.

For many of the checklist items below, references have been provided to the appropriate Iowa DOT form number, Iowa DOT Standard Specifications Section or Article number, Construction Manual (C.M.) section, Materials Instructional Memorandum (Materials I.M.s), or Instructional Memorandum to Local Public Agencies (I.M.). Such references are included in parenthesis immediately after the checklist item title. Consult these references for additional instructions and information.

The Iowa DOT Standard Specifications, Construction Manual, and the Materials I.M.s are all available on-line as part of the Iowa DOT’s [Electronic Reference Library](#). Most of the Iowa DOT forms referenced below are also available on the [Iowa DOT Forms](#) web page. Finally, some of the forms or documents included in this checklist are also discussed as part of [I.M. 3.805](#), Construction Inspection.

This checklist is not an all inclusive list. It should be used as a starting point for the project audit. Additional documents and documentation may be required as part of the project records.

Contract Documents

- Local Agency Funding Agreement:** Does the file include a copy of the fully-executed Iowa DOT/Local agency funding agreement including all addendums to the agreement?
- Estimating Proposal:** Does the project file include a copy of the Estimating Proposal and all attachments to the proposal?
- Addendums:** If any addendums were issued during the bid advertisement period, does the project file include copies of each addendum?
- Contract:** Does the project file include a copy of the fully-executed construction contract with FHWA Form 1273 attached?
- Plans:** Does the project file include a copy of the plans?
- Plan Revisions:** If the plans were revised after the contract award, are copies of such plan revisions, including transmittals to the Contractor, included in the project file?
- Specifications:** Is a copy (electronic or paper) of the contract specifications (Iowa DOT Standard Specifications plus the applicable General Supplemental Specifications, or other specifications as applicable) located in the project file or can they be produced when requested?
- Specification Modifications:** If the contract was let using the Iowa DOT Standard Specifications, does the project file include copies of all applicable Special Provisions, Developmental Specifications, and Supplemental Specifications? If the contract was let using other specifications, does the project file include copies of all similar special provisions or modifications to those specifications?

Contract Administration and Inspection Documents

- Final Highway Funding Sources, Final Detail Estimate Cost Summary, and Final Highway Detail Construction Estimate (if applicable):** If the contract was let by the Iowa DOT, does the project file include a copy of these documents? These documents are distributed by the Iowa DOT Office of Finance after a contract is awarded by the LPA. Together, these documents document the Contractor, awarded contract amount, the funding sources that will be used to pay for the contract costs, and if applicable, a breakdown of costs and funding by bid item categories.
- Pre-construction Meeting Minutes:** If a pre-construction meeting was held, does the project file include a copy of these notes, including a list of attendees?
- Inspector's Daily Diary:** Does the project file contain a copy of the project inspector's daily diary of construction operations, including the date and name or initials for each diary entry?
- Property Used by Contractor (C.M. 2.26):** If the Contractor requires the use of property, other than the existing right-of-way or easements provided by the Contracting Authority:
 - Does the project file contain copies of the Contractor's agreements for purchase, lease, or temporary easements with the property owner(s)?
- Traffic Control Documentation (C.M. 5.40, Article 2528.01):** If the contract includes an item for traffic control, does the project file include:
 - A copy of the Contractor's Traffic Control Daily Diary?
 - Records to verify that the Contractor has a technician on staff that has attended and passed the exam in an American Traffic Safety Services Association (ATSSA) or International Municipal Signal Association (IMSA) Work Zone Traffic Control training class?
- Noncompliance Notice (Form 830245, C.M. 3.21):** If any of the contract items, test results for incorporated materials, or work activities were not in compliance with the contract documents, was the Contractor issued a noncompliance notice for each, and does the project file include complete copies of this form?
- DBE Commitment Report (C.M. 2.25):** If the contract was let by the Iowa DOT and if the Contractor made a DBE commitment. Does the project file include a completed copy of this report? This report is provided to the LPA by the Office of Employee Services, Civil Rights Section, after the contract has been let. It shows a summary of the Contractor's DBE commitment(s), including the proposed DBE Contractor and/or subcontractor(s), and the committed amounts of each.
- Statement of DBE Commitments (Form 517012, I.M. 3.720):** If the contract was let by the LPA, does the project file include a completed copy of this form?
- Subcontract Request and Approval (C.M. 2.25, Article 1108.01):** If the Contractor used subcontractors, does the project file contain evidence that the subcontractors were approved by the Iowa DOT Office of Contracts?
- DBE Commercially Useful function (Form 517014, C.M. 2.25):** Does the file include a copy of the DBE Commercially Useful Function form or documentation that the DBE did a commercially useful function on the project?
- Storm Water Permit (I.M. 3.140):** If the contract work required a National Pollutant Discharge Elimination System (NPDES) General Permit No. 2 from the Iowa DNR, does the project file include completed copies of the following:
 - Iowa DNR's Notice to Proceed form and a copy of the required newspaper notice?
 - Copy of the Storm Water Permit?

- Storm Water Site Inspection Reports ([Form 830214](#)) every 7 days starting with initial ground disturbance and continuing until 70% permanent vegetative growth is established?
- Are the site inspections signed by a representative of the Contracting Authority and the Contractor's Erosion and Sediment Control Basics trained individual?
- If the seeding or other permanent ground cover has been established, the Iowa DNR's Notice of Discontinuation (NOD) form? (If the site has not yet been stabilized, this form may be submitted later.)
- Iowa DNR Notification of Completion of Construction** (DNR Form 37, [I.M. 3.410](#)): If the project required an Iowa Department of Natural Resources (Iowa DNR) Flood Plain Permit, was this form completed and sent to the Iowa DNR and does the project file include a copy of this form?
- Contractor's Erosion Control Implementation Plan (ECIP)** ([Article 2602.03](#)):
- Does the Contractor's ECIP include stages for erosion control work to address the Contractor's time table and sequence of major activities or stages on the contract?
- For projects with a NPDES permit:
- Does the file contain the name of the Erosion and Sediment Control Basics (ESC Basics) and Erosion Control Technician (ECT) trained individuals on the Contractor's staff?
- Was the ECIP submitted by the Contractor's ESC Basics trained individual?
- If Erosion Control Mobilizations apply to the contract, did the ECIP include the anticipated number of erosion control mobilizations for the project?
- Did the contracting authority approve the ECIP?
- Does the project file include a copy of the Contractor's certification statement for storm water discharge associated with industrial activity for construction activities?
- Does the project file include signed affidavits from affected subcontractors identifying them as co-permittees?
- Weekly Report of Working Days** ([Form 830238 \(Word\)](#) or [Form 830241 \(Word\)](#), [C.M. 2.33](#)): Does the project file include these reports for each week that the Contractor or subcontractors performed or should have performed work?
- Notice of Suspension or Resumption of Work** ([Form 810036](#), [C.M. 3.06](#)): If the Contractor was directed to stop work by the Project Engineer at any time during the project, does the project file include a completed copy of this form?
- Davis-Bacon Compliance** ([C.M. 2.24](#)): If Davis-Bacon wage requirements apply to the contract, does the project file contain the following:
- Note: Federal-aid routes include all Federal Functional Classifications, except Local Roads and Rural Minor Collectors. This item also generally applies to contracts for construction of bicycle or pedestrian trails, if at least 50% of the trail is located within the right-of-way of a Federal-aid route. Projects including Safe Routes to School (SRTS) or Transportation Alternatives Program (TAP) funds require compliance with Davis-Bacon regardless of project location. For contracts let by the Iowa DOT, applicability of the Davis-Bacon requirements is indicated on the bid proposal and contract.
- Completed Wage Rate Reports ([Form 650170](#)) for the Contractor and all subcontractors with contracts greater than \$10,000 to document the wage rate interviews? The wage rate interviews should be completed at least once, and if the contract extends more than 6 months, approximately once every 6 months for the duration of the contract. Note: Wage rate interviews do not need to be completed for Contractor or subcontractors if they participate in the Association of General Contractors (AGC) Prevailing Wage Notification Program.

- Copies of the Certified Transcript of Labor Payroll ([Form 830176 \(Excel\)](#)) that are:
 - Signed and dated by the Contractor, for each week that the Contractor or subcontractors performed work?
 - Dated by the Project Engineer upon receipt?
 - Checked and initialed by the Project Engineer for compliance? (This is only required for the first few submitted; if no compliance problems are noted, subsequent submittals will only require spot checking.)
- A copy of the applicable Predetermined Wage Rate?
- Equal Employment Opportunity (EEO) Site Inspections** ([Form 650170](#), [C.M. 2.22](#)): Does the project file contain completed copies of this form to document the EEO site inspections? These inspections shall be completed at least once, and if the contract extends more than 6 months, approximately once every 6 months for the duration of the contract. **Note:** If Davis-Bacon wage rates do not apply for the contract, only the top portion and sections 1 and 2 must be completed for each site inspection.
- Log of Piling Driven** (if by formula, [Form 830210 \(Excel\)](#), if by wave equation, [Form 830209 \(Excel\)](#); [C.M. 11.25](#), [C.M. Appendix 11-22](#)): If the contract included an item of work for driving piles, such as on a bridge project, does the project file include a completed copy of this form? This form should be completed as piles are driven and forwarded to the Administering Office.
- Change Order** ([Form 830240 \(Word\)](#), [C.M. 2.36](#)): If the contract had any Change Orders, has the following been completed for each Change Order:
 - Marked either "Participating or Non-participating"?
 - Marked as either "Substantial" or "Non-substantial"?
 - Completed quantities recorded in the appropriate field book?
 - Does the Change Order include a Justification of Cost? Refer to the "Checklist for Change Orders" included in [C.M. Section 2.36](#) for additional guidance related to supporting documentation. **Note:** Supporting documentation is not required for changes in cost based on existing contract prices.
 - Is the Change Order's effect on contract time noted on the document?
 - If any work was performed on a force account basis, does the project file contain a Statement of Force Account with supporting documentation attached? ([Form 181213](#); [C.M. 2.35](#); [Article 1109.03](#), B)
- Materials Review:** For all materials incorporated into projects let using the Iowa DOT Standard Specifications:
 - Have all materials been reviewed for compliance with the materials testing, sampling, and acceptance requirements of the Iowa DOT Standard Specifications and Materials I.M.s [101](#), [204](#), and [205](#)?
 - Have the applicable materials review sheets been completed or reviewed by the Project Engineer? ([Materials I.M. 101](#))
 - Has a summary statement of non-compliant tests or measurements of material incorporated into the project been completed by the Project Engineer? ([C.M. Appendix 2-33](#))
 - If the contract included HMA and / or PCC from a plant, does the project file include copies of the HMA and / or PCC Plant Reports?
- ADA (Materials I.M. 363):** If project contains any construction or reconstruction of sidewalk or recreational trails, has the work been documented as required by Materials I.M.363?
- As-built Plans** ([C.M. 2.72](#)): If the contract involves work on an Interstate or Primary Highway, has the Project Engineer prepared 3 sets of as-built plans and forwarded a copy to the appropriate Administering Office?

- Statement of Completion and Final Acceptance of Work** (Form 830435, [C.M. 2.37](#)): If the contract was let using Iowa DOT Specifications, is a copy of this form included in the project file, signed and dated by the Project Engineer?
- Certificate of Completion and Final Acceptance of Agreement Work** ([Form 640003 \(Word\)](#), [I.M. 3.720](#)): If the contract was let using non-DOT specifications, is a copy of this form included in the project file, signed and dated by the Project Engineer?

Review of Quantities and Payments

- Field Book(s):** Are the quantities for all items documented in a field book, loose leaf binder, or if recorded electronically, available as a computer print-out or report? Does the item quantity documentation include:
 - Added Change Order items (8000 “Change Number” series) or modified Change Order items (7000 “Change Number” series)?
 - Dates and initials of the person who entered the quantity?
 - Initials of the person who checked the quantity?
 - Locations specified where each quantity was placed?
- Method of Measurement and Basis of Payment:** Do all items have a method of measurement and basis of payment specified? This information is usually contained in the specifications (including any applicable Special Provisions, Developmental Specifications, Supplemental Specifications, etc.) but may also be located on the plans. Note: If the bid item number indicates the Standard Specification Section where this information can be found, the bid item number is a sufficient reference for this information.
- Items Paid by Length:** Do all items paid on the basis of length show the actual measured quantity, including the date and initials of the person that performed the measurement?
- Items Paid by Count:** Do all items paid on the basis of count (per each) show the actual count, including the date and initials of the person that performed the count?
- Items Paid by Weight** ([Article 2001.07](#)): Do all items paid on the basis of weight include:
 - Scale tickets that are certified by the producer?
 - Scale tickets that are signed by the originator and the receiver?
 - Ticket totals that are supported by adding machine tapes, computer print-outs, or other documentation?
 - Dates and locations where the material was placed?
 - Documentation of scale checks (verification and/or check weights)?
 - Documentation that tare weights were newly determined (if applicable)?
- Ready Mix Tickets:** If ready mix concrete is used, are copies of all ready mix tickets meeting the requirements of [C.M. 9.03](#) available in the project file?
- Items Paid as Lump Sum:** Do all items paid as a lump sum include the date the work was started, dates of intermittent progress (if applicable), the date the work was completed, and initials of the person who verified the work was completed?
- Items Paid by Volume:** Do all items paid by volume include supporting calculations, such as original and final cross sections, or other methods that indicate how the volume was calculated?
- Items Paid by Area:** Do all items paid by area include supporting calculations, such as sketches with dimensions, or other methods that indicate how the area was calculated?

- Items Paid by Plan / Contract Quantity** ([C.M. 2.27](#), [Article 1109.01](#)): For each item paid for on the basis of plan / contract quantities:
 - Does each quantity entry include the date and location of the work performed and an estimated quantity of work performed at that location?
 - If the item is not plan / contract quantity by specification, does the item have a completed and approved Contract Quantity Agreement ([Form 830230](#))?
- Price Adjustments:** Have all appropriate price adjustments been documented by a completed Change Order ([Form 830240](#) ([Word](#))), including those related to:
 - Non-compliance with the contract documents? ([C.M. 2.53](#))
 - Incentive / disincentive specifications, including, but not limited to:
 - Pavement smoothness, if required by the contract documents? ([C.M. 3.60](#))
 - PCC Pavement thickness? ([C.M. 9.65](#), [Materials I.M. 346](#))
 - HMA Lab Voids, Field Voids? ([Section 2303](#))
 - Early completion? ([Section 1111](#))
 - Liquidated damages? ([C.M. 2.34](#))
- Progress Vouchers / Pay Estimates:** Does the project file contain copies of all progress vouchers or pay estimates prepared by the Project Engineer and approved by the LPA?
- Reimbursements:** If the Contractor was paid directly by the LPA, does the project file contain the following:
 - Copies of all checks or warrants issued to the Contractor or copy of a check register showing all payments that have been made to-date?
 - Copy(s) of the one of the following:
 - Claim for Reimbursement of Project Costs ([Form 517050](#) or equivalent)?
 - Claim for Reimbursement of Federal Grant Program Project Costs ([Form 240007](#))?
 - Claim for Reimbursement of Safe Routes to School Project Costs ([Form 240009](#))?
 - Claim for Reimbursement of State Grant Program (RISE, RT) Project Costs ([Form 240011](#))?
- Proposed Semi-final Voucher / Pay Estimate:** Does the project file contain a copy of the semi-final voucher or pay estimate, including the final quantities and price adjustments proposed by the Project Engineer?

Project Engineer's Comments

Project Engineer's Certification: I have reviewed and verified each of the applicable items shown above. The supporting documentation associated with each applicable item is in the project file. The project file is organized and ready for Iowa DOT and / or FHWA inspection.

Printed Name: _____ Date: _____

Signature: _____

Iowa DOT Review: As the authorized representative of the Iowa DOT:

- I have reviewed this checklist and performed a final audit of this contract. For the Davis-Bacon Compliance and EEO Site Inspection items, and for all other items indicated by my initials above, I have reviewed a sample of the supporting documentation and found it to be in substantial conformance with the contract documents and / or project requirements, except as noted on the Audit of Final Pay Estimate (Form 830301).
- I have reviewed this checklist only. This contract was not selected for a final audit.

Printed Name: _____ Date: _____

Signature: _____ Initials: _____

Final Forms Packet Checklist

Project Number: _____ Project Name / Location: _____
 Contract Number: _____ Contracting Authority: _____
 Accounting Number: _____ Contractor: _____

Instructions: Attach the following documents, as applicable, to this checklist and send with your request for approval of the final voucher or pay estimate to the Iowa DOT Administering Office. Check the box to indicate which documents are being submitted. If the document doesn't apply, write "N/A" below the check box. Include the original and / or number of copies, as indicated for each item. If any of the items are not complete or correct, the final voucher or pay estimate will not be processed until all applicable documents are provided. Keep a copy of this completed checklist, including all attached documents, in the project file.

For many of the checklist items below, references have been provided to the appropriate Iowa DOT form number, Standard Specification Article number, Construction Manual (C.M.) section, Materials Instructional Memorandum (Materials I.M.), or Instructional Memorandum to Local Public Agencies (I.M.). Such references are included in parenthesis immediately after the checklist item title. Consult these references for additional instructions and information.

The Iowa DOT Standard Specifications, Construction Manual, and the Materials I.M.s are all available on-line as part of the Iowa DOT's [Electronic Reference Library](#). Most of the Iowa DOT forms referenced below are also available on the [Iowa DOT Forms](#) web page. Finally, many of the forms or documents included in this checklist are also discussed as part of [I.M. 3.805](#), Construction Inspection.

Document	Number	
	Original	Copies
Include for all contracts paid directly by the LPA:		
<input type="checkbox"/> Final Pay Estimate (Form 181235 (Word) or acceptable substitute) - Include if the Contractor was paid directly by the LPA. The final pay estimate reflects the final quantities and price adjustments, as corrected by the Iowa DOT final audits (if applicable), and has been signed by the Contractor and the Project Engineer.	1	
Include for all contracts paid by the Iowa DOT using the Contractor Pay System (CPS):		
<input type="checkbox"/> Final Contract Construction Progress Voucher (Form 181013, C.M. 2.37) - The final voucher includes all Change Orders, reflects the final quantities and price adjustments, as corrected by the Iowa DOT final audits (if applicable), and has been signed by the Project Engineer, Chairman of the Board of Supervisors, District Local Systems Engineer, and the Contractor. <u>Note:</u> If the Field Manager software is used, the computer generated final voucher may be used instead of Form 181013.	1	
For all contracts that apply:		
<input type="checkbox"/> Certification of DBE Accomplishments (Form 102116 , C.M. 2.25 , Article 1102.03) - Include if the contract was let by the Iowa DOT, even if no DBE firms were used. This certificate shall be submitted on all Federal-aid contracts and shall list the dollar amounts paid to all DBE firms on the contract. The certification shall be dated and signed by a responsible official legally representing the Contractor. Falsification of this certification will result in suspension of bidder qualifications according to Article 1102.03 .		1
<input type="checkbox"/> Certification of DBE Accomplishments (Form 517013 , I.M. 3.720) - Include if the contract was let by the LPA, even if no DBE firms were used. If no DBE firms were used, the Project Engineer shall complete the applicable portions of the form.	1	
<input type="checkbox"/> Certification of Subcontractor Payments (Form 518002) - Include if the Contractor utilized any subcontractors.	1	

Document	Number	
	Original	Copies
<input type="checkbox"/> Contractor Evaluations (Evaluation Report form , Evaluation Report Instructions) - These have to be submitted electronically to the Office of Contracts for the Contractor and any subcontractors with subcontract amounts of \$20,000 or more. If using FieldManager, use instructions in the FieldManager Guide. All other projects, use the instructions on the Evaluation Report Instructions web page. At the Project Engineer's option, these may be submitted for subcontracts of lesser value.	1	
<input type="checkbox"/> Interest Payment Information (Form 830236 , I.M. 3.930) - Include for all contracts.	N/A	N/A
<input type="checkbox"/> Audit of Final Pay Estimate (Form 830301 (Word)) - Include if the contract was audited by the Iowa DOT. The form identifies the date corrective actions were taken and is signed and dated by the Project Engineer.		1
<input type="checkbox"/> Final Payment (Form 830436 , C.M. 2.37) - Include if the contract used the Iowa DOT Standard Specifications.		1

Project Engineer's Certification: I have reviewed and / or approved each of the applicable items shown above and have approved the final voucher or pay estimate. The applicable documents, including supporting documentation as required, are attached.

Printed Name: _____

Date: _____

Signature: _____