Conducting Business with the Iowa DOT
Bridges & Structures Bureau

February 2020

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1 Introduction

The aim of this document is to aid consultants in conducting business with the Iowa DOT Bridges and Structures Bureau (BSB). Standard policies, timelines, and expectations for structural design have been highlighted.

2 References

Bridges and Structures Bureau Bridge Design Manual (BDM)
Bridges and Structures Bureau Plan Review Checklists
Iowa Department of Transportation Standard Specifications
Design Bureau Roadway Design Manual
Traffic and Safety Bureau Traffic and Safety Manual
2
Website Links:
Checklists
Microstation Automation
Consultant Resources
Designer Resources
BDM
SIIMS
Plan Changes and Addendums

3 Key Contacts

Consultant Coordination Section:

Ronald Meyer, P.E.	Contracting, overall coordination, authorizations for payments
Tim Dunlay, P.E.	Project review coordinator
Steve Maifield, P.E.	Project review coordinator
Lili Yang, P.E.	Project review coordinator
Christian Yi	Project review coordinator

Other Office Personnel:

James Nelson, P.E.	Bridge Engineer
Mike Nop, P.E.	Assistant Bridge Engineer
Ahmad Abu-Hawash, P.E.	Chief Structural Engineer
Dave Claman, P.E.	Preliminary Design Section Leader
Jesse Peterson, P.E.	Methods Engineer
James Denny, P.E.	Software Program Support~~, Bridge Design Manual~~
Kimball Olson	Aesthetics
Brett Kloss	Lead Technician BSB CAD Operations
Annette Jeffers, P.E.	Automation Engineer
Jim Hauber, P.E.	Ratings Engineer
Tim Elliott	Shop Drawing Coordinator

4 Agreements

Upon BSB request, consultants are asked to prepare a scope and budget proposal for a project. Compensation for the scope and budget, if permitted by the Request for Proposal (RFP), should be negotiated in advance and if approved, a separate Agreement written for this.

The BSB will draft the formal Agreement, which follows the Iowa DOT boilerplate. If the maximum amount payable of the agreement exceeds $200,000, the Office of Audits performs a pre-contract review (typically two weeks). If it is under $200,000 an internal checklist review is completed. Appropriate DOT staff will review proposal and provide recommendations to clarify scope and negotiate budget (timeline dependent upon priorities). Prior to contract execution, a staff action for DOT management authorization is drafted and approved (typically 3 days). If federal funding and/or bordering state funds are used, approvals will take additional time.

5 Project Development

5.1 Quality Control and Quality Assurance

5.1.1 QC/QA Plan

Current BSB Requests for Proposals (RFPs) that may involve final bridge design require an executive summary of the Consultant's QC/QA plan, which is scored among the selection criteria. The BSB requires consultants to submit a QC/QA Plan for each new or replacement final bridge design or rehabilitation design contract, addressing both Quality Control (QC) and Quality Assurance (QA). This shall accompany the scope and budget proposal submittal and will be included as part of the scope evaluation and negotiation. The plan shall follow the general guidelines of the BSB QC/QA Policy [BDM 1.11].

5.1.1.1 Quality Control

The Quality Control section of the QC/QA Plan shall outline project specific QC measures. The plan shall include team members assigned to the project and the responsibilities of each member. Independent design checks of all structural elements shall be included as part of the QC plan.

5.1.1.2 Quality Assurance

The QA plan can include an overall review by the Project Manager as well as applicable company-wide QA practices. A signed standard form QC/QA Record [BDM C1.11.5] – will be required for consultants to complete on all projects that require a QC/QA plan.

5.1.2 Plan Preparation Tools

The following are used in completion of the design plans and should be checked in accordance with the BSB QC/QA policy:

- AASHTO LRFD Design Specifications
- BSB Bridge Design Manual
- BSB Plan Review Checklists
- Standard Plan Sheets
- Signed Standard Plans
- Iowa DOT Standard Specifications for Highway and Bridge Construction
- Developmental Specifications
- Special Provisions
- Construction Manual developed by Construction & Materials Bureau
- Instructional Memorandums (IM) developed by the Construction & Materials Bureau
- BSB developed spreadsheets [BDM1.14.1]
- BSB libraries and automation tools [BDM1.8]

5.1.3 Plan Review

Once plans have been submitted, BSB will complete their review of the plans. Although this review serves as a quality check, it does not replace elements of the consultant's QC/QA Plan. All submittals to the DOT shall be considered 100% complete and the consultant should strive for an error free submission. A description of the typical consultant submittals and the expectations for each is below, in section 5.2.3.

5.2 Timeline & Expectations

Contained within a contract for design work are deadlines for submittals. The two typical submittals are "100% Unapproved Plan Submittal" and "Final Plan Submittal." Deadlines are set starting with proposed letting date of the project and working backwards. Our BSB plan turn-in to the Contracts Bureau is 7:00 AM on the first Tuesday of the month two months prior to the letting month. BSB uses the prior day (Monday) as this deadline for practical purposes. For example, if a plan is scheduled for a July letting, the plan turn-in deadline is the Monday before the first Tuesday in May. For "large" (combined) or unique projects, an additional month may be necessary for advertising and for review. The contract for a specific project governs all deadlines and submittals, unless mutual e-mail acknowledgements of schedule changes are made. All Submittals should be made through ProjectWise, and the Project Folder Structure is shown on the website here:
https://iowadot.gov/bridge/tools/Bridge%20Project%20Directory%20Folder%20Structure.pdf
The Consultant Structure under the Project Folder is shown in more detail here:
https://iowadot.gov/bridge/tools/Consultant%20ProjectWise%20Folder%20Structure.pdf
Send an email notifying the BSB reviewer that a submittal has been made along with a link to the submittal.

5.2.1 50% Plan Quantities for Bid Items Application

The 50% plan quantities submittal is due two months prior to the 100% unapproved plan submittal. This submittal consists of entering all bid items and quantities into the Bid Items Application web tool, providing a cost estimate in ExeVision, and notifying the Consultant Coordination Section that these tasks have been completed. The purpose is to provide quantities for estimating construction costs. Although this submittal is intended to occur after the plans have been approximately 50% completed, the bid items and quantities should be as close to complete as possible with only minor changes occurring from 50% plan quantities to the completion of 100% unapproved plans. The Divisions in the Bid Item Application should be in the proper order. For B03 plans, the Bridge Item Division(s) should be first followed by the Roadway Division(s). For B04 plans, the Roadway Item Division(s) should be first followed by the Bridge Item Division(s). This submittal will not be required on repair projects. Instructions for using ExeVision are located on our website here: https://iowadot.gov/bridge/programs/iPDWeb%20Project%20Cost%20Estimating%20for%20OBS.pdf

5.2.2 QC/QA Interview

Engineers from the Design Team shall attend an "interview" conference call approximately seven weeks prior to 100% unapproved plan submittal, discussing progress with project development, roles of the design team, intentions regarding independent check of structural elements and nuances of unique design aspects of the project. The 50% plan submittal is due 3 days prior to this meeting, so the reviewer can get familiar with the project. The Consultant shall also submit the completed Design Criteria Form 3 days prior to this meeting. It can be downloaded from the website here: https://iowadot.gov/bridge/Design Criteria for Typical Bridges.docm

The Consultant will prepare and submit minutes from the interview. Regular Project Management Team (PMT) meetings may substitute for the interview, presuming documentation with meeting minutes is accommodated.

5.2.3 100% Unapproved Plan Submittal

For routine projects, the 100% Unapproved Plan Submittal is typically two months plus two weeks prior to the Contracts Bureau turn-in date. For example, a July letting/May turn-in to Contracts, the 100% Unapproved Plan Submittal would be due in the middle of February. This timeline gives the Consultant Coordination Section time to work the review into their priorities, to conduct the review, to seek input from the Districts and other central bureaus, and time for any necessary changes to be completed in time for Final Plan Submittal. Often, on Contracts with multiple projects, BSB will specify staggering submittal dates for unapproved plan sets to balance the work load of plan reviewers. For the busier letting months of November through February, resource leveling may be necessary, meaning that we may need an advance submittal to be able for DOT staff to accommodate all consultant project reviews.

The 100% Unapproved Plan Submittal is to consist of a link to Projectwise containing the electronic MicroStation design files and any special materials such as Special Provisions and spreadsheets for use during construction (see below). The electronic Microstation files should be in final form in level and color, as well as to scale. CAD drafting adequacy is a separate category within Iowa DOT evaluations. Roadway plans completed by the consultant should be submitted as a PDF file as part of the 100% Unapproved Plan Submittal.

The 100% Unapproved Plans are expected to be in final form with no missing details. Any unresolved issues should be flagged, so that the reviewer can easily identify such instances. However, every effort should be made to resolve outstanding issues prior to the 100% Unapproved Plan Submittal. Consultant initiative to resolve outstanding issues is a separate category in the evaluations.

If the 50% plan quantities submittal was not required for the project (overlay, repair) quantities should be entered into the Bid Items Application for the 100% Unapproved submittal. If the 50% plan quantities were entered, the quantities should be updated for the 100% Unapproved submittal to account for any changes that were made. The Divisions in the Bid Item Application should be in the proper order. For B03 plans, the Bridge Item Division(s) should be first followed by the Roadway Division(s). For B04 plans, the Roadway Item Division(s) should be first followed by the Bridge Item Division(s). The ExeVision cost estimate does not require updating for this submittal.

The Bridge Deck Grade Adjustment Spreadsheet, Top of Slab Elevation Spreadsheet, PPC Beam Data Spreadsheet, Bridge Staking Data file, all Standards used, and all Existing Plans should be completed as applicable and submitted with the 100% Unapproved Plans. These e-Files should follow the proper naming conventions [BDM 1.14.1]. These spreadsheets were developed by BSB and the Construction & Materials Bureau to aid contractors with setting deck grades.

5.2.4 Review Period/Review Comments

When BSB receives the 100% Unapproved Submittal, the electronic files are reviewed for CAD and detail related issues.

The CAD related review begins with printing. If the electronic files are not scaled correctly or found to be not reviewable due to other issues, the consultant will be advised of the problems and a second submittal of the electronic files should be completed once the files are corrected. The primary focus of the CAD review is for color, leveling and detailing issues. Minor color and leveling errors will be noted and returned with the review plan comments. Follow the CADD Detailing Guidelines document which is available on-line at:
https://iowadot.gov/bridge/tools/CADD%20Detailing%20Guidelines.pdf

The second portion of the BSB review process includes a review of the plan details and coordination with other Iowa DOT bureaus. Plans are reviewed for accuracy and adherence to BSB Bridge Design Manual (BDM) policy, AASHTO Standard Specs./LRFD code, and the BSB Plan Checklist. The checklist was initiated in 2000 to address common plan errors and design oversights. The checklist is updated twice a year to reflect changes in BSB policy and to alert designers of recent changes, common errors, and oversights. The checklist is available on-line at: https://iowadot.gov/bridge/design-policies/bridge-and-culvert-plan-checklist.

The BSB Bridge Design Manual is available at https://iowadot.gov/bridge/design-policies/bridge-design-manual. Designers are charged with being familiar and consistent with BSB policy as stated in the BDM. Prior to seeking assistance of the Consultant Coordination staff, designers should review design policy in the BDM. If the BDM does not address the designer's questions, then contact should be made with the Consultant Coordination Section to seek policy clarification. Consultant initiative may also be impacted on the evaluation form for seeking information on published policy.

Once the reviewer has completed the initial plan review, all comments on both CAD and policy issues will be forwarded to the consultant. The plan set, with comments, will also be distributed to other Iowa DOT bureaus including Construction & Materials, Design, Districts, RCE, etc. This provides other Iowa DOT staff the opportunity to review the plan details with comments and provide any additional feedback. Typically, a two to three week review period is given to other Iowa DOT bureaus. Any comments provided by other bureaus will be evaluated and forwarded to the design consultant for inclusion in the final plan submittal. In instances where further discussion is needed with other bureaus to resolve comments, BSB should be informed of any correspondence and resolutions. The final date that BSB will accept comments from other offices will be communicated to the consultant. The goal of the Consultant Coordination Section is to give the consultant at least two weeks to incorporate review comments before the Final Plan Submittal.

5.2.5 Final Plan Submittal

The Final Plan Submittal should be two weeks prior to the plan turn-in to Contracts date. The submittal includes the PDF plan set file in conformance with the File Specifications for Electronic Plans Submittals to the Iowa DOT as well as any Special Provisions required by the plans. The PDF plan set and Special Provisions should be submitted electronically in Projectwise. The PDF plan set should include all sheets including the Soils and Roadway Sheets. No electronic Microstation CAD plan files should be sent in with the Final Plan Submittal. The bid items and quantities should be updated in the Bid Items Application so that they match what is in the final plans. The Divisions in the Bid Item Application should be in the proper order. For B03 plans, the Bridge Item Division(s) should be first followed by the Roadway Division(s). For B04 plans, the Roadway Item Division(s) should be first followed by the Bridge Item Division(s). These quantities should be used to update the Cost Estimate in ExeVision for the Final Plans.

5.2.6 Second Review

The reviewer will verify that all comments have been addressed and that the plan set is complete and ready for the turn-in to the Contracts Bureau. If any additional comments or changes are needed, the two week window allows for any last minute updating of plan sheets and other unresolved issues. The Bid Items Application data will also be checked, as well as any other special documents.

5.2.7 Turn-In to Contracts Bureau

Plan turn-in to the Contracts Bureau is typically done anytime between the Final Plan Submittal and the deadline date on the Monday prior to the first Tuesday two months prior to letting. The reviewer submits the PDF plan set to Contracts. One week prior to the Contracts Bureau plan turn-in, the reviewer submits any Special Provisions to the Specifications Section. During the next few weeks after turn-in, the Contracts Bureau begins putting the proposal together. Any obvious omissions will be brought to the attention of the designer. The Contracts Bureau considers plans as incomplete if they have major omissions or errors including bid items without quantities, blank plan sheets and obviously incomplete plan sheets. Plans with minor errors such as quantity corrections will not be considered incomplete. Incomplete plans may lead to a missed letting.

5.2.8 Plan Changes

Occasionally the Contracts Bureau will request a change to the plan set either for a clarification in language or other issues. Contracts refers to this practice as "plan changes." Contracts is to notify BSB of any necessary changes, whereupon the reviewer will evaluate the issue. The reviewer passes this information onto the consultant and requests a new corrected PDF plan set. The new PDF plan set should be sent electronically to the reviewer, who forwards it to Contracts. This plan set shall include all sheets including the Soils and Roadway Sheets. If any Bid Items were changed, an additional plan set which includes the affected sheets only shall also be required with these changes highlighted. All plan changes must be completed prior to the Contracts Bureau last day for plan changes critical date, typically two weeks after turn-in, or in an agreed upon timeframe.

It should be noted that the BSB makes every effort to avoid plan changes by completing a thorough review of the plan set before the turn-in to Contracts. If plan changes are due to a consultant error or omission, the evaluation will reflect this. Plan changes for other reasons will not impact the evaluation score. Again, plan changes should only be needed in extreme cases and not viewed as routine. Extensive plan changes can result in the letting date being moved back and viewed negatively as a missed letting. Follow "Plan Changes and Addendums" document of the Contracts and Specifications Bureau: https://iowadot.gov/contracts/electronicplanspecs/Plan_Changes_and_Addendums_Contracts.pdf

5.2.9 Addendum

Plans can be altered after the advertising date by issuing an addendum. An addendum is simply a document describing changes, additions or otherwise, to a plan set that has already been sent to contractors for bid preparation. The addendum format is typically text describing the changes, but it is common to include updated sheets if needed to show changes. Addendum format should be coordinated by the BSB reviewer with the Contracts Bureau prior to preparing the addendum. The addendum informs contractors of changes prior to a bid being placed so that all bidders are aware of the changes. Should errors or omissions be noted after the plan changes period, evaluation of the need for an addendum should be reviewed. In some

instances, an addendum can be skipped and a plan revision issued following the letting to correct the change. When Addendums are needed, add the Bridge "ADDENDUM" cell located in the BrgFinal.cel cell library of Microstation to the bottom of the sheet. Follow "Plan Changes and Addendums" document of the Contracts and Specifications Bureau: https://iowadot.gov/contracts/electronicplanspecs/Plan_Changes_and_Addendums_Contracts.pdf

5.2.10 Electronic Plan and Calculations Submittal (CD)

After the Contracts Bureau has had their time to review the plan set and any needed corrections are made, the final plan CD containing the most recent edition of MicroStation V8 files, CADD reference files, Calculations (sealed and signed), LARS rating file and QC/QA record should be submitted. The form for the QC/QA record is located in the BDM Commentary Section of Chapter 1 here: https://iowadot.gov/bridge/policy/01-00-00GenDesLRFDC.pdf The Microstation V8 files, Calculations and QC/QA record should also be submitted to ProjectWise. This is done at the end of the month prior to letting. BSB loads them into the project directory for storage and preserves the CD containing the final files as backup. When doing this, the rating file and a pdf of the current full plan set should be uploaded into SIIMS. There are instructions on how to upload files onto SIIMS here: https://siims.iowadot.gov/Consultant-Requirement-for-rating.pdf

A PDF file of calculations should be included on the CD with the final CAD files on new or replacement bridge designs. Our preference is not to have to remind consultants of this deadline. We are looking for completeness and organization, however, are not interested in extravagance. Hand calculations, if that's how calculations were performed, are fine. The calculations should contain: a table of contents to index the major sections of the calculations required to design and detail the bridge, the necessary assumptions made by the engineer, and a brief summary of the results of each segment of the calculations. Independent calculations for structural elements should be included. Submittal of volumes of computer runs is not necessary.

5.2.11 Construction Issues

Construction issues may arise during the course of construction of a project, due to many reasons including contractor error, differing field conditions from what was given in the plan set, or design errors. When a construction issue is discovered, the contractor will alert the Iowa DOT. The BSB will review the issue and decide if the consultant's input is needed. If the issue is minor in nature and the design intent is not altered, the Iowa DOT may proceed with a remedy to the issue without the consultant's input. The consultant may be copied on a response.

When a construction issue needs the designer's input, the BSB will notify the designer of the issue and discussions on a solution will begin. Negotiations may be necessary between the BSB and the consultant regarding level of effort needed. If the error was caused by the contractor, the consultant may be asked to track their time for the purpose of the Iowa DOT recovering cost from the contractor. Consultants may be asked to work on their own time to resolve a plan error or omission, per the "Errors and Omissions" article of the Agreement. Time worked on the project, but not billed, should be annotated as such on subsequent invoices.

5.2.12 Plan Revisions

Plan revisions may be needed to document changes, including a different construction method, plan alteration, or plan error. Plan revisions are done at the request of the Consultant Coordination Section. Consultants should not initiate plan revisions without the concurrence of the Consultant Coordination Section. With revisions, incorrect text / details are never deleted, but rather crossed-through, new information added, and clouded. Revisions are to be in conformance with the BSB Creating Revisions guidelines available at https://iowadot.gov/bridge/tools/creating%20revisions.pdf on the BSB web site. These revision instructions shall be followed and adhered to when performing revisions. Revision dates and reason for change are given on the detail sheet, as well as summarized on the revision sheet (RA). The title sheet revision box is filled out and dated. When a revision has been accepted, the Consultant shall upload it into SIIMS as documented here: https://siims.iowadot.gov/Consultant-Requirement-for-rating.pdf

5.2.13 Shop Drawing & Shoring Plan Review

Shop drawing submittals are to be submitted using Doc Express, a web-based document management program. Section 1113 of the Standard Specifications documents the procedures for processing and storing electronic construction documents using Doc Express. The designer will be assigned for review as applicable and will be responsible for receiving and reviewing submittals within the acceptable timeframe. Submittals are no longer to be made by email either to the DOT or consultant. Approved submittals shall be uploaded into SIIMS, as documented here: https://siims.iowadot.gov/Consultant-Requirement-for-rating.pdf

5.2.14 Requests for Information (RFIs)

The Bridges & Structures Bureau shall be notified of direct contractor/fabricator contacts in writing. The Consultant is reminded that RFIs and alterations to the intent of the design plans submitted directly from contractor or their subcontractors may be considered as extra work and must receive approval prior to time being charged to this project. Protocol to request changes and/or clarifications is as follows:

Contractor → RCE → Construction & Materials Bureau → Bridges & Structures Bureau → Consultant

Responses from the Consultant are communicated in reverse order. Some questions are resolved internally at the Iowa DOT, at various bureau levels, while others take the full route to keep the consultant appraised of and involved in the decision making process.

6 Evaluations

According to PPM 300.12, “The evaluation shall consider:

1. The quality and adequacy of work performed.

2. The ability to meet established schedules and budgets.
3. General administration of the contract, including substantiation of cost billings, payments to subconsultants, and documentation of claims.
4. Cooperation shown by the consultant in responding to requests for information and in revising procedures and products according to directions.
5. Coordination exhibited by the consultant in communication with the Department, subconsultants, agencies and others to accomplish tasks and resolve problems.
6. Ingenuity displayed in solving unique and unusual design problems encountered during performance of contract objectives.
7. The ability to obtain an acceptable end product with appropriate department staff guidance."

Various sections of the Iowa DOT BSB evaluation form are highlighted and explained below.

Evaluations are done on a per Agreement basis, so should there be multiple plan sets involved within an Agreement, an average score for the work is taken.

Evaluations are provided to prime and subconsultants separately.

6.1 Project Information

6.1.1 Scope of Work/Description

The scope of work is a brief description of the structure features or work involved. Items that would be typically listed include, length and width of structure, type, crossing, span lengths, abutment type, pier type, foundation type, general design methodology, and other special considerations.

Sample Scope of Work: "Design of Stage I of dual 69.6 m x 4.96 m bulb tee C beam bridges with integral abutments, slotted deck drain, pile foundations, R.A. skew, I-235 mainline bridge aesthetic details, 17th Edition AASHTO."

This section may also contain similar scope language as what appears in the Contract.

6.1.2 Complexity

To rate the level of difficulty in design of projects, we have given point values to structural component groups that cover foundation type, pier type, superstructure type, abutment type, as well as items such as skew, beam tapers, curved alignments, etc. The above criteria are input into a scoring matrix and the outcome is a level of difficulty score between 1 and 10 with 10 being the most difficult. Complexity is recorded to establish a firm's success level for a given project complexity. It will be used as one criterion for evaluation of overall performance.

6.1.3 Work Category

The Work Category coding follows the Iowa DOT prequalification categories. Frequently used categories are as follows:

215 Culvert and Standard Bridge Design

216 Non-Standard Non-Steel Bridge Design
217 Steel Bridge Design
222 Bridge Construction
323 Hydraulic and Hydrologic Studies
361 Structural Coating Services

6.1.4 Design Fee

The Design Fee documents the amount of effort necessary to complete the design work. Design fee quantifies work given to a specific firm. Subconsultant work is tracked separately. Design Fee will be used as one criterion in future selections and in establishing statewide consultant work assignments.

6.2 Project Management

6.2.1 Schedule Delivery

The timelines given earlier in this document should be followed and met. Deductions in points will occur for any missed deadlines without BSB approval. The most critical of all dates is our turn-in to Contracts. If this date is missed and the letting forced to slip, a significant deduction will be given. Schedule Delivery also applies to timely review of construction issues and shop drawings.

6.2.2 Accelerated Schedule (if applicable)

An allowance of extra points will be awarded if the schedule is accelerated from that given in the Agreement and delivery met. The degree of addition points will reflect the effort required to speed production.

6.2.3 Administration

The Administration rating applies to providing problem-free invoices with current format, referenced by the Agreement, as well as adherence to financial limits of the Agreement. Invoicing is also used as a communication mechanism to monitor progress throughout development. We anticipate receiving monthly progress reports or notification as to why not. Commentary on work completed to date and work anticipated should convey confidence that work is progressing relative to the percentage of completion. Should there be any errors or omissions hours, invoices should document the hours as not billed. Backup billing for direct labor should be provided with each invoice and separate notification of near 85% financial status submitted according to the Agreement.

6.3 Staffing

6.3.1 Project Issue Resolution and Initiative

The consultant is expected to be proactive in seeking resolutions to design issues. Any conflicts with surrounding structures, either roadway or other, should be brought to the attention of the BSB, so that there are no inconsistencies.

Prior to contacting Iowa DOT staff about design policy questions, the designer should first review the BDM for current design information. If this reference does not contain the answer to a specific design question, then the BSB should be contacted.

The consultant will be evaluated on being proactive and thorough during their design development work.

6.4 Technical Evaluation

6.4.1 Constructability of Design

Design plans should be constructible. The BDM has some constructability criteria, but common sense should also be applied during the design phase. Adequate details to portray what is being constructed are necessary. Any issues with the design plans affecting construction are typically noted in this section.

6.4.2 Final CD submittal (Calculations, CAD and rating files, QC/QA record)

The final CD submittal should contain all appropriate files, including the most up to date CAD file, calculations, rating files and QC/QA record. Calculations should be submitted for all new and replacement bridges and culverts as well as for significant repairs including deck replacements. Calculations are not required for bridge deck overlay projects. Calculations will be reviewed to make sure they have been submitted on time, are well organized and complete. The Consultant Coordination Section will review to make sure that structural elements contain both the primary calculations and independent check calculations.

6.5 Product Evaluation:

Deficiencies of plan flaws are weighed on the basis of impact on a per plan set basis.

6.5.1 Iowa DOT Bridges and Structures Bureau Design Manual

Deductions will be considered for errors relating to Iowa DOT policy and standard practices as noted in the BDM, as well as violations of AASHTO / LRFD. Designers are responsible for being up to date on BSB policies. Consultants will be notified of updates to the BDM through the monthly Iowa DOT Manual Updates e-mail. Subscribe to these updates at the Designer/Consultant Resources webpage https://iowadot.gov/projectdev/consultant-designer-resources-home.

6.5.2 Iowa DOT Bridges and Structures Bureau Design Plan Checklist

The Iowa DOT BSB Plan Checklist is updated biannually. Consultants are responsible for using the current checklist to develop their 100% Unapproved Plan Submittal. The current version of the checklist is always available on-line at the BSB webpage.

Consultants should adapt to changes in policy during their plan development effort. If effort to adopt a change will significantly impact work effort, consultants are asked to review with the Consultant Coordinator prior to proceeding to document the level of effort involved.

6.5.3 Iowa DOT Bridges and Structures Bureau Guidelines for CAD drafting

CAD files should be correct in level, weight, and color. BSB policy on these items has been in place since 2000. Please refer to the CADD review checklist at https://iowadot.gov/bridge/policy/CADD_Chklist.pdf and the CADD Detailing Guidelines document at https://iowadot.gov/bridge/tools/CADD%20Detailing%20Guidelines.pdf for current procedures.

6.6 Score

The maximum possible score is 100 points. The accelerated schedule bonus does not take the score over 100, but can offset other deficiencies. The evaluation form provides a description and expected frequency of occurrence for each score range.

Evaluations remain on file for a period of five years from the letting date or in other instances, the date of work acceptance. Evaluation scores are used to distinguish between levels of performance of firms doing business with the BSB. They are used as an indication of past performance, and may be considered in future consultant selections, in establishing statewide consultant work assignments, and are one factor in determining fixed fee on new agreements with consultants working for the Bridges & Structures Bureau.