Illinois State Toll Highway Authority

Contract RR-22-4852

Design Services Upon Request

Systemwide

CONSULTANT QUALITY PLAN

April 23, 2025

Revision 2

Prepared by:

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Revision	Date	Author	Changes
0	December 1, 2022	S. Malik	First draft
1	December 29, 2022	S. Malik	Post IL Tollway review edits
2	April 23, 2025	S. Malik	Post IL Tollway audit edits

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Submitted to: Illinois State Toll Highway Authority

Submitted by:

Project Manager

04-23-2025 Date

Approved by:

Contract Principal

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Approved by:

Durner Hay has Quality Representative 04-23-2025 Date

04-23-2025 Date

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Introduction

The well-earned reputation of Lakeside Engineers, LLC (Lakeside) has been built on our firm's continuous record of excellent service and quality work. This document describes our company's Consultant Quality Plan (CQP) of planned and systematic Quality Assurance (QA) activities – *steps we take to make sure the right tasks are done, the right way.* Our goal is to ensure client confidence that all project deliverables satisfactorily fulfill the quality requirements of their project.

This document also describes the Quality Control (QC) reviews performed by Lakeside to verify that all project deliverables and supporting documents are complete and understandable, conform to applicable and reasonable standards relative to their intended purpose, and meet project-specific client expectations – *steps we take to make sure the results of what we have done are what the client expected of us.*

All Lakeside Project Team members maintain an awareness of Lakeside's CQP process and assist in its implementation while carrying out their project responsibilities. The achievement of quality management objectives for every Lakeside project is the shared responsibility of all Project Team members and is led and championed by Lakeside management.

Reporting Structure

For every project undertaken by Lakeside, a project organization chart (Appendix A) is developed to illustrate the reporting structure that will be used during the project and that demonstrates our commitment to effective quality management. This organization chart documents key personnel who serve in leadership roles for the implementation of the CQP for the duration of the project.

For all Lakeside projects, a separation of QA and QC functions will be maintained:

- The Quality Representative will be responsible for managing the Quality Assurance (QA) elements of the project and will support the efforts of the Project Manager in implementing other elements of the CQP.
- The Project Manager will be responsible for managing the Quality Control components of the project and will be supported by the Responsible Professional(s).
- The Contract Principal is responsible for implementation of Quality Assurance for the project.

Duties and Responsibilities

Quality project management begins with the clearly articulated assignment of each task to the most appropriate member of the Project Team and a clearly articulated timeline for all project milestones. Each team member will be professionally qualified, knowledgeable, and held accountable for working closely with project management staff and meeting all expectations for quality and timeliness. Each team member will be individually responsible for controlling the quality of their own work products, from line-level staff up through the Contract Principal.

Internal quality control reviews will be conducted on all project deliverables by qualified QC Reviewers, and all comments and potential shortcomings will be logged and resolved prior to submittal. Roles and responsibilities of project team members and management staff in guiding quality assurance and quality control efforts are presented in the organization chart and described below.

Contract Principal - Responsible for allocation of resources and monitoring of the project to administer

the contract. He/she oversees the development and implementation of the project QA/QC processes and procedures and calls for periodic reviews of the processes that are in place to monitor compliance with the CQP. The Contract Principal also reviews the CQP for effectiveness and suitability. Such reviews take place when there is a significant change in the project team, or when Lakeside's quality control processes change. The Contract Principal's review is documented by signature on the CQP.

Quality Representative - This person is a Lakeside manager responsible for allocating resources and monitoring the project to administer the contract. They are a highly qualified professional, who is familiar with industry best practices and applicable codes, standards and guidelines. They oversee development and implementation of project QA/QC processes and procedures. They direct periodic reviews of the processes in place to monitor compliance with the CQP, which may include review of quality control documentation, internal or external audits, and identification and control of nonconforming conditions.



Figure 1: Organizational hierarchy of the Quality Management Process employed by Lakeside for all projects.

Project Manager – The Project Manager (PM) is a highly qualified, senior professional (registered Professional Engineer or holding relevant certification, training, or experience), who is familiar with industry best practices and applicable codes, standards and guidelines. They are responsible for successfully implementing the overall Lakeside contract, including CQP. They allocate sufficient resources to various elements of the project, schedule work activities, adjust plans as the project progresses, and identify actual and potential problem areas and resolve them in a timely manner.. The PM is responsible for final review and approval of all project documents before submittal to the client and that each submittal has been prepared and checked in accordance with accepted practices of the discipline and in conformance with applicable federal, state and local standards and represents a quality product. During the project, the PM maintains frequent contact and communication with the client to verify their satisfaction with the Project Team's progress and performance, and documents key decisions and amendments, if any, to the project scope, timeline and client expectations. They identify the QC activities that need to be undertaken, the resources necessary for these activities, and the logical interactions of these activities with other elements of work on the project. The PM clearly identifies the personnel involved and their duties, allocates sufficient resources (time, effort, funds) to the quality control function, and reviews/revises the allocation of resources appropriately as work progresses. They are responsible for the production, collection, indexing, filing, storage, maintenance, and disposition of QMP-related project records.

Responsible Professional – This person is a qualified professional with relevant certification, training, or experience, who has primary technical responsibility for production of project-specific work elements or tasks. The Responsible Professional (RP) is supported, as needed, by other technical staff assigned to the project. They are responsible for producing high quality work that conforms to all applicable codes, standards, and guidelines and for doing so in a timely manner to not jeopardize meeting all project milestones. The RP is responsible for continuously checking the quality of their own work products and for resolving all comments and suggested revisions noted by other Project Team members and the Quality

Control Reviewer (*see below*). As a Project Team member, the RP is responsible for helping ensure that all team members produce high quality work products, which means they:

- Pro-actively initiate actions to prevent the occurrence of nonconforming work
- Assist with corrective actions to identify, evaluate and document root causes of non-conforming work to prevent recurrence
- Recommend or initiate quality process improvements through the Project Manager
- Assist with implementing quality process improvement
- Assist the Project Manager with the production, collection, indexing, filing, storage, maintenance, and disposition of CQP-related project records

Quality Control Reviewer – This person is typically not directly involved in the preparation of the Project Team's work products but is a qualified professional experienced in the type and expected format of the work products and is capable of providing an objective, thorough review. The QC Reviewer verifies the accuracy, clarity and completeness of the work product in accordance with Lakeside and client expectations for a quality work product.

Conflict of Interest

All personnel involved in the project must avoid any activities or relationships that could compromise, or appear to compromise, their impartiality or objectivity. This includes, but is not limited to, other professional obligations, financial interests, personal relationships, or any other situations that could influence decision-making.

All Project Team members are required to disclose any potential conflicts of interest to the Project Manager at commencement of the project or immediately upon identification.

- The signed Conflict-of-Interest Statement will be required at the beginning of a task to disclose the state of conflicts.
- If conflicts are identified, the Conflict-of-Interest Mitigation Reporting Form will be required to eliminate the conflict.
- Conflicts of interest will be screened periodically throughout the project in conjunction with internal and external audits.

This policy framework is designed to uphold the integrity of the project and ensure compliance with the Illinois Tollway's expectations for ethical conduct.

Document Control

Qualification records for personnel and certifications and training records are stored on Lakeside's cloudbased business management system

Project Files

Project document control is accomplished via Lakeside's internal network. A running index of all documents and the latest revision information is maintained. Lakeside's folder structure serves as a design document index where revision history for each project document is available. Obsolete documents will be eliminated from each work location by relocating them out of the current file folders. Calculations, drawings, or reports that have been superseded will be clearly marked "old" or "superseded" or will be filed in a sub-folder labeled ""Archive". The Project Manager will reinforce to the project team that the latest circulated Tollway manuals, standards, and specifications are to be accessed from the Tollway website at http://www.illinoistollway.com throughout the duration of the project.

A sample Design Document Index for the project is depicted in Figure 2. Quality records will be maintained in the "12. QC" directory while the project is in progress. Documents under this directory are backed up off-site on a weekly basis. Following contract closeout, these files are backed up on an off-site server and maintained for a period of 15 years.



Figure 2: Design Document Index

Quality records to be maintained vary depending on the item under review, including, as applicable:

- Inspection reports
- Test data
- Calibration records
- Non-conformance and corrective action reports
- Drawings, procedures and the CQP
- Design input, output, and verification
- Subconsultant evaluations and quality records

Project-related documents are generated in a wide variety of formats. Electronic mail is typically the primary means of written communication between Lakeside and our clients and subconsultants. In addition, all Lakeside personnel are proficient in generating documents using Microsoft Word and Excel, as well as PDF editors. Our engineering professionals also use a wide array of software products to generate technical documents, such as Microsoft Office products, MicroStation/GEOPAK/OpenRoads, and BlueBeam.

Lakeside uses Citrix ShareFile for a secure file transfer service to communicate with external parties (clients, subconsultants). Lakeside also uses Trimble and ProjectWise on this project for file sharing purposes.

File Structure

To ensure that Project Team members are using only the most current documents in their work and that only the most current documents are submitted, Lakeside uses a corporate naming convention for all documents which includes the project ID, brief descriptor, and document date. All outdated documents are stored in an Archive folder within the project file.

To ensure easy identification, storage and retrieval of project documents and records when needed, Lakeside uses the same type of electronic filing system and file hierarchy for each project within our

company's business areas. However, the format of the filing system and hierarchy varies slightly among our business areas.

In addition to following the expressed project file archival expectations of our clients, all Lakeside project files and folders are routinely backed up to a cloud-based storage service. It is company policy that all project files be retained for at least seven years following project closeout. Project files are retained for longer time periods if requested by the client.

Design Control

Design control will be accomplished by including checks for changes and modifications in project deliverables as part of the QC review procedures for detailed checking and QC reviews. Design reviews will look at constructability, operability, and maintainability. The checking will verify that for final deliverables:

- Design criteria and standards are understood
- Design basis, design criteria, regulatory requirements, codes and standards, reliability of data, environmental data and software utilized, as applicable, have been documented.
- Design output, including calculations and analyses, meets standards and criteria requirements, complies with regulatory requirements, and identifies generally accepted engineering practices.
- Drawings are numbered.
- Specifications follow a standard format.
- Drawing list is established.
- Changes are made according to procedures.
- Changes have been reviewed and incorporated as original documents.
- Permanent files of documents are maintained.

Quality Control and Quality Assurance Budget and Schedule

This project was negotiated to include hours for Quality Control and Quality Assurance (QC/QA). While the QC/QA hours budgeted are anticipated to be adequate to complete the required reviews, Lakeside Engineers is responsible for the quality of the deliverables regardless of the hours negotiated.

Quality Control Reviews

Major deliverables will undergo a quality control review at stage submittals. Other minor deliverables subject to a quality control review will be reviewed prior to submittal so that comments can be incorporated into the deliverable. The reviewer will be an individual who is experienced in the type of work being reviewed. Preliminary design/environmental documentation reviews formally occur prior to the draft and final submittals.

In general, the review process requires the RP to complete and back-check their work, submit their work and a signed QC Review Form (Appendix B, or similar) to the Quality Control Reviewer for review. The Quality Control Reviewer reviews the deliverables in Bluebeam (either in a Bluebeam session or directly within a PDF), signs the QC Review Form when the review is complete, and notifies the RP that comments are compiled in Bluebeam. The RP responds to the comments in Bluebeam, incorporates necessary changes into the deliverables, and then returns the revised deliverables to the QC Reviewer. The QC Reviewer verifies that comments were addressed by either highlighting or setting a status in Bluebeam indicating the comment is completed. If a revision was not correctly made, the QC Reviewer notifies the RP that there are outstanding changes. Once all comments have been addressed, the QC reviewer signs the QC review form and submits the review package to the Project Manager for final concurrence and signature on the QC Review Form before the submittal. Substantial comments along with Lakeside's responses are typed for clarity and returned with the next stage submittal to the Illinois Tollway.

Major and Minor Deliverables/Submittals that require QC documentation will be determined for each task. Due to the nature of this contract, the specific QA/QC roles and milestone tasks/schedule will be identified during scoping for individual tasks. The QC review will begin prior to the deliverable due date, and it will be performed by the QC reviewers listed in Appendix A, attached. If the designated QC reviewer is not available, the review will be performed by a Senior Engineer appointed by the Project Manager. The level of detail of the review will be clearly communicated to the QC reviewer by the Project Manager or his/her designee at the time of the review. The Project Manager is responsible for notifying staff of the level of quality control documentation required.

Quality control reviews may also occur for other documents not listed. The Project Manager is responsible for notifying staff of the level of quality control documentation required.

The bulleted list below represents items that shall be checked at the prefinal (95%) deliverable stage. Due to the nature of this contract and scope of work, these items are not applicable to this project.

- Handling, Storage, and Control of Materials and Equipment
 - Requirements for product identification and traceability to prevent the use of incorrect, deficient, or defective items.
 - Measures for proper handling and storage of material and equipment by contractors.
- Control of Special Processes including welding, non-destructive testing and heat treating
 - Requirements for process control and procedures and reference of appropriate standards.
 - Requirements for workers performing the special processes and inspectors overseeing the work to be certified and qualified.
 - Requirements for personnel performing the work to be qualified and certified. The work identified and performed in proper sequence and using documented procedures.
 - Requirements for contractors to implement controls for calibration and maintenance, and requirements for contractors to identify the inspection and test status of work, when and where appropriate.
- Inspection and Testing Status and Plans
 - Specifications will indicate the inspections and tests required, the standards to be achieved and acceptance criteria.
- Control of Measuring and Testing Equipment
 - Requirements for contractors to implement controls for calibration and maintenance of inspection, measuring and testing equipment are included in contract documents.
- Inspection and Test Status
 - Requirements for contractors to identify the inspection and test status of work during construction and installation.

Quality Assurance Reviews

Quality Assurance comprises the administrative and procedural activities that are in place so that the project quality requirements will be fulfilled. This starts with a management review of the CQP for applicability to the project and the appropriate level of detail. This review takes place prior to the CQP being distributed to the overall team. Management QC reviews are scheduled quarterly to identify any existing or potential issues related to project quality and to put plans into motion to proactively address

them. The Lakeside team will document with the QA form and verify that the subconsultant QC activities in the CQP are taking place. Other QA activities that the Quality Representative or designee will implement at the frequency noted below throughout the life of the project are summarized below:

QA Compliance Check	Frequency
QC Review Schedule . Check of the QC Reviews that are in the internal Lakeside QC scheduling program match the deliverables in the current project schedule.	Quarterly
QC Review Documentation. Verification that all QC Review documentation is properly completed, signed, dated, and filed in the proper folder. See Quality Assurance Review Form – Appendix C, or similar.	At milestone deliverables
Subconsultant adherence to CQP. Verification that the PM or designee is conducting a review of Subconsultant work products prior to them being incorporated into final deliverables.	At milestone submittals

Quality Assurance/Quality Control

At the startup of every project and individual task order, all members of the Lakeside Project Team receive via electronic mail an attached CQP document that is custom-tailored to reflect specific details regarding team structure, project deliverables, and project timeline. An electronic link to the CQP document on Lakeside's ShareFile system is also provided. All personnel assigned to the Project Team are required to review the CQP and affirm to the Project Manager that they have done so. Formal training on the CQP will occur during a preliminary project management meeting at the onset of the project.

CQP Updates

During every project, communications are periodically disseminated via electronic mail to remind all Project Team members of key project milestones and the team structure, highlighting any changes past or anticipated, including any revisions made to the project CQP process. Updates to the CQP are provided whenever client requirements change or when new/improved processes are identified.

Process for Ongoing Updates

To maintain alignment with evolving project requirements and regulations, the CQP will be treated as a living document, with all changes tracked. The following process outlines how updates will be identified, approved, and implemented:

- 1. Scheduled Reviews
 - The CQP will be formally reviewed at Lakeside's quarterly QC Review meeting.
 - The Quality Representative will initiate the review and solicit feedback.
- 2. Change Identification
 - Changes may originate from:

- Internal audits
- External Illinois Tollway audit
- Lessons learned from nonconformances or corrective actions
- Changes in project scope or applicable standards
- Staff feedback or organizational changes
- 3. Documentation of Proposed Changes
 - Any team member may submit a request to make a change to the CQP that details:
 - The section to be updated
 - The rationale for the change
 - Suggested new language or process
 - All proposed changes will be tracked using "track changes"
- 4. Evaluation and Approval
 - The Quality Representative will present all proposed changes to the CQP at Lakeside's quarterly QC Review meeting for discussion.
 - If the proposed change is minor or procedural, the Quality Representative may approve it after consultation at the QC Review meeting.
 - If the proposed change is major (e.g., impacting scope, deliverables, or organizational roles) it may require approval from Tollway representatives.
- 5. Implementation
 - Approved changes will be incorporated into the CQP document.
 - A new version number and revision date will be assigned.
 - Changes in the document will be identified with vertical lines in the margin.
 - The updated/approved CQP will be redistributed to all project team members. Subconsultants using Lakeside's CQP must return an acknowledgement via electronic mail for the updated document.
- 6. Training and Communication
 - Affected staff will receive training or briefings on any substantive changes.
 - Recorded training on CQP updates will be saved to a shared location and a link to the training will be distributed to the Project Team.
- 7. Archiving and Traceability
 - Superseded versions of the CQP will be archived with clear version history.
 - All versions will remain accessible for audit or review purposes for the duration of the project.

Subconsultant Evaluation and Procurement Control

Subconsultant services are procured only from sources capable of meeting the requirements of the contract and procurement documents. Subconsultants under consideration are evaluated on the basis of the following:

- Technical competence as evidenced by professional qualifications and experience of the firm and committed personnel
- Past performance on related or similar projects
- Familiarity with these guidelines and other applicable codes and standards
- Current commitments of the firm and key personnel
- Safety and criticality of the project or activity

Deliverables provided by Subconsultants are subject to the same QC review criteria as required for the project overall. Early evaluations of Subconsultant compliance with the CQP will focus on adequate staffing, training, processes, procedures, and materials. Later checks will focus on documentation, guidance, and coordination.

Subconsultant CQP

A Subconsultant may either utilize their own corporate CQP or adopt Lakeside's approved CQP for the project. If opting to use their own CQP, the document will be reviewed by the Quality Representative to ensure alignment with Lakeside's standards. Upon approval, the Quality Representative will issue an approval notice via electronic mail to the Subconsultant, which will be retained in the project file. Alternatively, if the Subconsultant chooses to use Lakeside's approved CQP, they must provide written acknowledgment (via electronic mail), which will also be filed in the project records.

Review of Subconsultant Deliverables

Subconsultants are responsible for the work products they contribute as members of the Project Team. The Project Manager reviews all subconsultant deliverables, the manner of this review varies depending on the deliverable. At a minimum, the review assesses the deliverable for general conformance and applicability with the project overall. Specifically, the review includes the following:

- Verify the deliverable provides the information necessary for the Project Team to fulfill the contractual requirements.
- Verify the deliverable is complete and conforms to the subconsultant scope of services. The level of detail for this review will vary depending on the complexity and risk associated with the subconsultant work.
- Verify that agreed upon or appropriate assumptions and/or input data have been used.
- Assess the reasonableness of the deliverable to determine that the Project Team agrees with the technical analysis and results.
- Perform a detailed review of the deliverable based on previous experience or lack of prior experience with the subconsultant.
- Review the clarity of design assumptions, mandated parameters, references, formulas, and omissions, as applicable.
- Prepare a QA form of the deliverable that the QC process was followed

The Project Manager defines the scope of the review based on the nature of the subconsultant work product under consideration and designates qualified Lakeside personnel to perform the level of review necessary to proceed with further development of the expected deliverable. The staff performing this review will have the qualifications necessary to review the documents provided. They are expected to carry out an evaluation of the document in accordance with the defined scope of review and to document comments and exceptions.

Documentation Process

The methods used by Lakeside to create and maintain a record of the project work element review activity vary depending on the type and format of the work product. These include, but are not limited to, the following:

• Electronic mail correspondence documenting feedback from the client and Project Team members

- Marked-up comments and responses noted on check prints, check sheets, or prior draft versions, including a log entry when resolved
- Reviewer comments recorded on separate comment sheets and logged when resolved
- Technical review checklists, including log entries
- Technical review memorandum or other internal written communication records

Although the type of review varies, the process of the Responsible Professional performing updates to the work element and reviewing said work prior to Project Manager review and approval, is the same for all review types.

This plan is adaptable in meeting industry changes to software programs.

Continuous Improvement

Quality is more easily assured if every work product is planned, developed and reviewed, and (if warranted) action is taken to ensure necessary corrections are made before delivery. "An ounce of prevention is worth a pound of cure", so it is far more efficient to prevent a problem from occurring beginning with initial project startup and continuing throughout the project timeline than it is to discover and correct mistaken, incomplete or inferior work after completion of a project deliverable.

All Lakeside project team members focus on prevention and the mitigation of issues before they manifest and negatively impact project timelines and work product delivery. It is critical that candid, fact-checking questions be asked before improper/erroneous assumptions are made that result in additional resources being expended to correct issues that could have been resolved while the work was in progress. Early resolution is far more efficient than resolving nonconformance at or after submittal. The Lakeside CQP process has been proven to minimize the likelihood of issues arising during the work product development process. Effective procedures are in place to identify, correct and prevent nonconformance with product and service delivery. Conducting timely, on target reviews while work is still in progress has yielded valuable lessons learned, which are shared by Project Team members during project meetings and applied to future project stages. Also, opportunities for improvement of the work product review processes can be identified and implemented, if warranted.

Internal Quality Audit

The Contract Principal directs periodic internal audits to take place to verify the Project Team's compliance with the CQP and schedules the audits. The Internal Quality Audit is performed by the Quality Representative. The Internal Quality Audit is performed at the contract budget of 25%, 50%, and 75% milestones. The Quality Representative will document the audit with an audit report that will be shared with the Project Manager.

External Quality Audit

External audits of subconsultants are performed to verify full compliance with the CQP. External audits are performed at the contract budget 25%, 50%, and 75% milestones. The Quality Representative will perform the audit and document the audit with an audit report that will be shared with the Project Manager.

Nonconforming Work and Corrective Action

Nonconforming work products and procedures may be identified through various channels, including reports from subcontractors or other Responsible Professionals, as well as through routine quality control activities. Once a nonconformance is identified, it is documented in detail and recorded in Lakeside's Nonconformance Log.

The Quality Representative conducts a root cause analysis to determine the underlying cause of the nonconformance. This analysis is reviewed by the Project Manager, who then develops and implements an appropriate corrective action. Corrective actions may include, but are not limited to: reworking nonconforming deliverables, implementing enhanced quality control measures and updating the CQP, or providing additional training to project personnel.

The Project Manager communicates the nature and resolution of the nonconformance to all relevant Project Team members whose responsibilities may be impacted. If necessary, project deliverables are revised to reflect any changes resulting from the resolution process.

All identified nonconformances and corresponding corrective actions are documented and maintained in the project file via the Nonconformance Log.

The Project Manager will prepare a Nonconformance Report (NCR) for submittal to the Illinois Tollway through Trimble. The NCR will provide a formal record of how the nonconformance was identified, documented, and resolved in a timely and effective manner.

Certification and Training

The Project Manager is responsible for ensuring that all Project Team members have the required training, qualifications, and certifications in accordance with recognized standards and guidelines for personnel affecting and assuring quality. All team members must have demonstrated competence in their respective areas of expertise and must have an adequate understanding of the project requirements. Prior to project startup, the Project Manager reviews the credentials of all Project Team members to verify they have the necessary training, experience, and technical qualifications in their respective disciplines.

A training and qualification log is maintained throughout the project by the Quality Representative. Qualifications are evaluated quarterly at the Lakeside QC Review meeting. Documentation is evaluated to ensure that all certifications required by the Tollway are maintained throughout the project. Lakeside routinely provides opportunities for staff to attend professional development opportunities to maintain or enhance their qualifications in their disciplines and in QA/QC processes and techniques.

Task/Project Close-out

At the conclusion of each project task or phase, as well as at the conclusion of the project, the Project Manager verifies that all final project records are properly filed in the appropriate final records folder in the Lakeside archive. At minimum, project close-out will include the following:

- Eliminate duplicate, draft, interim and obsolete documents from the final records folder.
- Verify final record documents are included in the final records folder, including master files, QA/QC review documents, and completed QA/QC review forms.

All documents will be filed electronically in their native format or after being scanned into a PDF file. Electronic project records stored in the final records folder will be transferred to the Lakeside archive at final close-out. The Project Manager will consolidate all hardcopy project-related files, determine if they are appropriate to retain as final records, convert them into electronic media (if possible), and store them in the final records folder. The final records folder will be retained for seven (7) years after project closeout, or longer if requested by the client. A project-related file in a medium that cannot feasibly be stored electronically must be documented and stored for the same retention period. The Project Team will prepare and maintain an inventory of all hardcopy project records and monitor them for retention.

Appendix A: Quality Control Management Responsibilities



Appendix B: Sample Quality Control Review Form

QC Check/Review Record		
Project Name:	Project No.:	

Project Name:	
Job No.:	
Client:	
Deliverable Title:	
Milestone/Phase:	

Type of Check or Review

Internal QC Review	
External QC Review	
Subconsultant Review	
Constructability Review	
Visual Check	

	Name:	Initials	Date Received	Date Complete
Originated By:			N/A	
Checked By:				
BackChecked By:				
Updated By:				
Verified By:				

Comments:

Revision 1, 04/18/2025

Appendix C: Sample Quality Assurance Review Form

Fask Title:	
lob No.:	
Client:	
Deliverable Title:	
/lilestone/Phase:	

		Internal QC Review	External QC Review	Subconsultant QC Review	Constructability Review	Visual Check
Required						
Completed	YES					
	NO					
Comments Resolved & Verified	YES					
	NO					

	Comments Resolved/Verified?			
Comment Resolution Status		No	Yes	No
Deferred Comments to be addressed in this milestone?				
Client Comments from previous milestone to be addressed in this milestone?				

Additional Actions (if necessary):				

Project Quality Manager (Name)

Project Quality Manager (Signature):

Date:

Date:

Appendix D: Quality Representative CQP Written Endorsement and Resume

Lakeside Engineers' CQP will be managed throughout the project's lifecycle to ensure that the outlined quality policies and procedures will be followed and result in project deliverables and processes that satisfy all project objectives. I endorse this CQP as a document that will fulfill this purpose.

Down Hay hes

Dennis Hughes Quality Representative



DENNIS HUGHES

Education

Bachelor of Science, Secondary Education University of Wisconsin— Whitewater, 1973

Master of Science, Urban and Regional Planning University of Wisconsin— Madison, 1977

Skills

- Transportation Safety Evaluation
- Transportation Planning
- Emergency Transportation Operations
- Traffic Incident Management

Mr. Dennis Hughes has a long-standing career in transportation safety. During his 33-year career with WisDOT, Mr. Hughes performed long range highway system needs modeling based on safety, pavement, and capacity factors, and in the safety performance of young drivers, impaired roadway users, and commercial vehicle operators. He was a long-time member of WisDOT's inter-divisional Traffic Safety Council (TSC), which in the 1990s piloted one of the Nation's first formal statewide Safety Management Systems (SMS). He is extremely familiar with NHTSA-funded behavioral safety grant programs and related annual program planning requirements. Since joining Lakeside, Mr. Hughes has supported development of statewide emergency transportation operations and traffic incident management plans, as well as FHWA-sponsored guidance for traffic incident management in highway work zones. He recently worked on the 2020-2024 Minnesota Strategic Highway Safety Plan (SHSP) to identify priority driver behavior strategies and tactics for Minnesota.

EXPERIENCE

Minnestota Department of Transportation (MnDOT) Highway Safety Improvement Program (HSIP) Evaluation and Implementation

Lakeside Engineers is assisting MnDOT with the development and implementation of an evaluation component to the HSIP in Minnesota. The project aims to learn how effectively funds were used for deployed HSIP projects. Project tasks include the review of existing MnDOT data systems and developing a Master Data Collection Plan for use with future evaluations. Subsequently, evaluation methodology and a Master Evaluation Plan will be prepared to present the approved evaluation methods and details including but not limited to typical schedules and level of effort for method types. Evaluations will then be conducted on specific MnDOT assigned projects through use of the task level data collection plan and task level evaluation plan. Mr. Hughes served a role in the review of existing MnDOT data systems and the development of a Master Data Collection Plan for use with future evaluations.

MnDOT Strategic Highway Safety Plan

Lakeside Engineers provided technical support to the prime consultant and the project team as MnDOT and its partner agencies developed the 2020-2024 Minnesota SHSP. The SHSP is a statewide, coordinated safety policy plan that provides a comprehensive 5-year framework for reducing highway fatalities and serious injuries on all public roads in Minnesota. The SHSP identifies key areas in which to focus resources on action items that have the most potential to save lives and prevent injuries. The project team provided technical support to MnDOT and its partner agencies in developing the 2020-2024 SHSP. The project involved working closely with the MnDOT Office of Traffic Engineering to analyze crash data and trends, conduct outreach and consultation with a diverse array of traffic safety stakeholders, facilitate discussions to determine best practices and remedies of great promise, develop refined focus area priorities, establish targets and performance measures, create action-oriented strategies for moving toward zero deaths in Minnesota, develop all documents and related supporting materials, and create the 2020-2024 Minnesota SHSP. Mr. Hughes' role on the project team focused on refinement of countermeasure action items related to impaired roadway users, unbelted occupants, older drivers, younger drivers, and motorcyclists.

