



ROC52 Design-Build Project

Rochester, Minnesota

Lessons Learned

Report 1 – Procurement Phase

September 2003





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PREFACE

This document is the first in a series of reports that will comprise the Lessons Learned Documentation for the reconstruction of the Trunk Highway 52 (ROC52) Design-Build Project. The Lessons Learned Documentation, as required under the SEP-14 Process, will be broken down into a series of four (4) reports. Each report will focus on specific elements performed during that phase of project development and implementation. These reports will follow the following phasing of the ROC52 Project:

Report I – Procurement Phase

- Request for Qualifications
- Request for Proposal
- Proposal Evaluation

Report II – Post Design Phase

- Focus on Design, Design Review and Contractual Issues
- Project Partnering

Report III – Construction Phase

- Quality Control
- Quality Assurance
- Contractual Issues
- Dispute Review Board/Dispute Escalation

Report IV – Project Completion

- Benchmarking Report
- Comparison of Design-Build to Design-Bid-Build process for this Project

It was the goal of the Lessons Learned Documentation to summarize critical experiences encountered on the ROC52 Project. Each report will contain various sections, organized to reflect a general description of the topic within the section along with specific events that occurred on the ROC52 Project. After a general topic discussion, advantage and disadvantages are discussed followed by recommendations. These recommendations highlight suggestions that, if implemented, will improve future processes used on Design-Build projects in the State of Minnesota.





PROJECT BACKGROUND

The ROC52 Project is located in the City of Rochester, Olmsted County, Minnesota. The Project extends from the junction of 85th Street NW to south of the junction of U.S. Highway 63 (South Broadway), a distance of about 11-miles. The existing highway is a controlled access rural/urban freeway with two-through lanes in each direction. As a primary route serving southeast Minnesota, the need to improve this corridor is critical to meet the current traffic congestion while maintaining safe passage for the traveling public in the Rochester area. With the presence of several major industries in the area, Mayo Clinic and IBM to name a few, maintenance of traffic during construction needed to be closely monitored for the Project.

The Project involved the design and reconstruction of the existing four-lane expressway/freeway to six-lane freeway (three through lanes in each direction), for the Minnesota Department of Transportation (Department). The Project generally consists of grading, roadway surfacing, detention ponds, bridges, noise and retaining walls, traffic signals, lighting, signing, and Intelligent Transportation System (ITS) activities. From 85th Street NW to north of 65th Street NW the roadway was to be reconstructed to a rural freeway section and from 65th Street NW to the south end of the Project, the roadway was to be reconstructed to mostly an urban freeway section. Interchanges and overpasses were modified, reconstructed or constructed at the following locations:

- 85th Street NW (new overpass);
- 75th Street NW (new interchange);
- 65th Street NW (new overpass);
- 55th Street NW (ramps only);
- 41st Street NW (ramps only);
- 37th Street NW (ramps only);
- 19th Street NW;
- TH 14 West/Civic Center Drive;
- 2nd Street SW;
- 6th Street SW;
- TH 14 East and Salem Road (loops and ramps only); and
- TH 63 and Broadway (loops and ramps only).

Other improvements will include; construction or reconstruction of 24-bridges (excluding temporary and pedestrian bridges), reconstruction of portions of the existing frontage road system, construction of pathways for bicyclists and pedestrians throughout the corridor, and reconstruction of that portion of TH 14 W/Civic Center Drive that passes under TH 52.

The pre-letting estimated cost of this Design-Build Project (in 2001 U.S. dollars) was \$227 million. The Project was awarded at \$232 million, which represented the Department's largest single highway contract ever as well as the first time that the "Best Value" selection methodology was used during the procurement and letting process. The Project construction activities are to be completed by August 31, 2006.





EXECUTIVE SUMMARY

Funding and schedule drove ROC52 to Design-Build because the Project could be completed under a single contract, funded without dedication of all funds up-front and completed faster than the traditional Design-Bid-Build process. The key benefits of the proposed reconstruction are improved safety and reduced congestion. With the addition of more thru-lanes along with major interchange reconfiguration, driver uncertainty will be reduced.

The calculated benefit/cost ratio for the ROC52 Project is 1.58. This means that for every dollar invested there will be a \$1.58 return in benefits from the reduced travel times, reduced crashes, savings in vehicle operating costs and reduced roadway maintenance costs.

As indicated above, an aggressive schedule was paramount to the success of the ROC52 Project. To achieve this goal, the Department use of Design-Build concepts was utilized. The Design-Build concept of combining design and construction into a condensed process lent itself to the needs of the ROC52 Project.

The Department determined that award of the ROC52 Design-Build Project would be based on a “Best Value” determination, providing the Department with the opportunity to obtain the most qualified and cost effective Design-Builder for the project. Although price was a major factor in the “Best Value” selection process, other factor such as time, quality, and professional project management were highly important factors in determining the final “Best Value” selection. The Department’s Proposal evaluation and selection procedures were designed to provide a comprehensive evaluation of quality that when combined with price, resulting in the selection of the appropriate Design-Builder. The Department selected the Proposal offering the “Best Value” considering price and technical factors. The intent of the Department was to create a fair and uniform basis for final Proposal evaluation in accordance with the State of Minnesota’s Design-Build Legislation.

During the Procurement Phase for the ROC52 Project, both Department staff and Procurement Consultant personnel teamed to create the ROC52 Core Team. This ROC52 Core Team provided the overall day-to-day leadership needed during the Procurement Phase of the Project, which included:

- Managed the overall procurement process used on the Project which included the development of contract documents, scope of work (both for design and construction), and reference materials to be used by the Proposer’s in preparation of the final Proposals;
- Finalized the environmental documentation for the Project thereby securing environmental clearances and obtained critical environmental permits;
- Established right-of-way needs for the ROC52 Project (based on Completed Preliminary Design) thereby allowing the Department to continue with securing right-of-way during the Procurement Phase;
- Established lines of communications with affected utility companies within the Project corridor, thereby establishing early coordination efforts for the successful Design-Builder;





- Checked and finalized the preliminary design and reference materials used in the final Design-Build documents;
- Developed evaluation guidelines and procedures for use during the Request for Qualification stage, allowing the Department to pre-qualify and shortlist potential Proposers for the ROC52 Project;
- Developed “Best Value” evaluation guidelines and procedures for use during Request for Proposal stage, thereby allowing for the selection of a final Design-Builder; and
- Provided general administrative duties for execution of the Design-Build Contract.

Key Challenges for the ROC52 Core Team:

- Select a Design-Builder that would deliver the Project within the Department’s budget while meeting quality, schedule, public relations and environmental goals;
- Use of a stipend payment, set by statutes, (see Section III.F below for details) that would motivate Proposers while providing the Department with useful information that could be used in the future on the ROC52 Project. It should be mentioned that on this Project, the Proposer who received the highest technical score also had the lowest price;
- Transition the Department from a prescriptive/methods based project approach to a performance/end-product based project delivery system; and
- Project integration of the “Best Value” process.

The following identify Key Management elements that lead to the successful implementation of the Procurement Phase for the Project:

- A ROC52 Core Team which was led by dedicated senior experienced Department and Procurement Consultant staff members, having the authority to make critical final decisions with direct lines of communications with Department management;
- A team of seasoned Technical Advisors that supported the ROC52 Core Team by providing technical expertise and critical input to the Proposal document and provisions used on the Project;
- Co-location of Department and Procurement Consultant staff at critical stages thereby forming a cohesive team;
- A management policy to make quality decisions with full team buy-in before proceeding to the next step;
- Establishment of an Executive Management Team that provided overall guidance on Department policy and advice to the ROC52 Core Team and Technical Advisors on the development of the proposal and Project requirements;
- Establishment of a Process Oversight Committee, composed of executive level Department and other Agency staff, to oversee and guide the ROC52 Core Team during the evaluation process of the proposals;
- Selection of a Procurement Consultant having seasoned and experienced staff in the Design-Build process with a local presence to augment the ROC52 Department staff; and
- Proactive involvement by the local Federal Highway Administration representative during the development of the procurement document and selection process.





I. PROJECT MANAGEMENT

I.A Resource Commitment

Design-Build projects similar to the size and complexity of the ROC52 Project, with an extremely aggressive schedule, require a full-time commitment of staff and resources from the Project onset. Each Department/District must realize what they are committing to and the impacts this involvement may have on the overall ongoing programs within the Department.

KEY STAFF COMMITTED TO THE D/B PROJECT SHOULD HAVE NO OTHER PROJECT COMMITMENTS WHILE TECHNICAL EXPERTS OUTSIDE THE KEY GROUP MUST BE DIRECTED THAT THE D/B PROJECT WILL TAKE PRECEDENCE OVER OTHER PROJECTS

Both the Department and the Consultant assigned managers to the ROC52 Core Team (CT) with authorization to commit resources from their respective organizations in order to complete the Project on schedule. The CT was mostly independent from other Mn/DOT functional groups and management assignments, having the authority to call upon other Departmental support for assistance and support as needed. As a result, the CT could make decisions on the spot for many project level issues, which facilitated production of the documents and maintained the Project schedule. The ROC52 Core Team was comprised of the following members:

- Jon Chiglo – Mn/DOT District 6 – Project Coordinator/Roadway
- Terry Ward – Mn/DOT District 6 – Project Manager/Traffic
- Kevin Anderson – Mn/DOT Office of Bridges & Structures
- Mike Reif – Mn/DOT District 6 – Materials
- Mike Kempinger – Mn/DOT District 6 – Construction
- Steve Kirsch – Mn/DOT District 6 – Structures/Hydraulics
- Kevin Kliethermes – FHWA
- Garey Foyt – HDR – Technical Advisor
- Doug Jackson – HDR – Technical Advisor

Within the CT, there was a management group consisting of four (4) members that were solely dedicated to this Project and had continuous involvement in development of the Request for Qualifications (RFQ) and Request for Proposals (RFP). The remaining members of the CT represented the District functional groups and provided technical input and guidance to the management group. The CT would meet bi-weekly with an Executive Management Team (EMT) to discuss impacts to the Department Program and policy issues. The EMT would provide guidance to the CT on these and other issues so that development of the RFQ and RFP would proceed thereby maintaining the Procurement schedule. This interaction was crucial to the decision making process that is discussed in more detail in Section I.B. The EMT was comprised of the following management staff:

- Mark Krebsbach – Mn/DOT District 6 – District Engineer
- Bernie Arseneau – Mn/DOT District 6 – Assistant District Engineer
- Dave Rettner – Mn/DOT District 6 – Pavements/Geotech (Maplewood Lab)





- Frank Vandesteeg – Mn/DOT District 6 – Office of Investment Management
- Mark Trogstad-Isaacson – Mn/DOT District 6 – Right-of-Way
- Paul Huston – Mn/DOT – D/B Program (Central Office)
- Pat Hughes – Mn/DOT – Program (Central Office)
- Richard Freese – City of Rochester
- Kaye Bieniek –Olmsted County

A key element of the overall success of the procurement development involved the ability of the Department and Procurement Consultant to have direct line of communications with their respective management structure. With the establishment of these lines of communications, critical decisions surrounding issues, policies, and resources could be made thereby minimizing impacts to the program development and Procurement schedule.

I.A.1 Department Staffing

The Department staffed the CT with motivated personal having previous experience with two (2) smaller scale Design-Build (low-bid process) projects within MnDOT. The CT management group volunteered for the management role and was fully aware of the workload and commitment they were undertaking. The technical experts from the District's functional groups were selected based on the following characteristics:

- Their innovative abilities,
- Their ability to get the job done, and
- Their technical expertise and knowledge of the Project.

I.A.2 Consultant Staffing

The Procurement Consultant staffed the CT with seasoned and experienced personnel having prior related Design-Build expertise, representing both large and small projects, from many other State DOTs. The Procurement Consultant also committed core staff solely to the ROC52 Project, relying on the firm's Design-Build expertise to supplement technical support and guidance when needed. The Procurement Consultant primary responsibility was to assist the Department with the creation of all procurement documents and Proposal evaluation process needed for the final award of the ROC52 Project.

The following advantages, disadvantages and recommendations were developed which impact both Department and Procurement Consultant staffing.

Advantages:

- Actions requiring Department control were taken at the CT level by personnel committed to the ROC52 Project.
- Department personnel had an opportunity to learn the process as it developed utilizing the expertise of the Procurement Consultant's personnel.
- The overall Department's support of the CT permitted timely decisions.





- The Department’s commitment of key technical experts as resources to the CT strengthened the team, ensured that the Department’s technical requirements were met and was central to the success of this phase of the ROC52 Project.
- Dedicated consistent project management to the Project insured a smooth process development.

Disadvantages:

- Occasionally it was time consuming to get buy-in at all levels but that was mitigated by the time saved in not having to backtrack or not having the entire team at the same stage of development.
- Not having the Procurement Consultant co-located at all times with Mn/DOT sometimes caused delay in finalizing an idea.

Recommendations:

- Both Department and the Procurement Consultant should assign staff to the CT that have experience and are trusted by their respective organizations to make on-the-spot decisions and commit resources necessary to maintain the project schedule.
- Both Department and the Procurement Consultant should assign senior staff that can work well together and have each other’s trust and respect.
- Both Department and the Procurement Consultant should assign staff members that have the respect of the Design-Build industry (if possible).
- The Department should commit senior technical staff to provide guidance at significant project development milestones.
- The Department should assign a Project Management team that will remain with the project until its completion.
- The Department should assign an attorney from the AG’s office to the project or the Procurement Consultant should assign an attorney to the project to give advice on contract law related to the legal aspects of the Procurement documents.
- Right-of-way staff should be committed and involved from the very beginning of the project.
- Permits and utility staff should be involved early in the project’s development.
- Ensure that the chain of command from the Department’s CT chairperson to top management of the Department is as direct as possible.
- Adequately staff the project from the beginning so as not to overload the CT and avoid staff burnout in the late stages of the project.
- Assign a Document Manager to implement a document management system from the onset of the project.

BOTH DEPARTMENT AND CONSULTANT SHOULD ASSIGN STAFF TO THE CT THAT HAVE EXPERIENCE AND ARE TRUSTED BY THEIR RESPECTIVE ORGANIZATIONS TO MAKE ON-THE-SPOT DECISIONS AND COMMIT RESOURCES NECESSARY TO MAINTAIN THE PROJECT SCHEDULE





- Secure FHWA involvement early, working closely to provide guidance in the overall project development thereby minimizing the approval time process.
- Require all persons involved, both Department and Procurement Consultant, sign a “Confidentiality Statement” is strongly recommended – the need to maintain a high level of confidentiality regarding the overall process development will be a key element in the overall success of the program.
- Create a Project Oversight Committee at the onset, comprised of top management staff to provide guidance at important project development milestones. This will provide the following advantages:
 - Validation of the CT’s progress and direction on a regular basis,
 - Provides the CT with a resource of senior advisors and decision makers,
 - Maintains Department buy-in on a regular basis,
 - Supports the quality decision management style adopted for the project, and
 - Provides the CT with a sounding board for ideas, individuals devoted to viewing issues related to the “big picture” thereby assisting those embedded in the project development.

I.B Decision Making

The success of the ROC52 Project Procurement process can be directly related to the authority given to the CT by the Department. The ability to make decisions that relate to specific design elements without the need to get formal Departmental approval on each issue was vital.

Another key element in the decision making process surround the lines of communication during the Procurement stage. A single point of contact within the CT was established, thereby providing the Proposers with a reliable point for addressing questions that arose during the Procurement stage. Likewise, the Proposers were requested to provide the Department with a single point of contact within the proposed Design-Builder team. These two points of contact were then used to communicate questions and answers between the Design-Builder and the Department, thereby reducing errors and miscommunication during Procurement development.

Advantages:

- The high degree of independent decision-making authority of the CT was essential to this phase of the ROC52 Project.
- Timely decisions by the CT reduced cost of service, sped document production and minimized schedule delays.
- The focused decision making authority of the CT won confidence and maintained its credibility in the eyes of the Proposers.
- Timely decisions allowed the Proposers to focus their efforts and reduce development costs that ultimately contributed to lower bids.
- The single point of contact for the CT and Proposers was very helpful—it focused all communications and eliminated miscommunication.





Disadvantages:

- By having the CT removed from the Department, decisions were sometimes questioned leading to delays in the overall development process.

Recommendations:

- The Department must commit Key Staff to the project that have decision-making authority.
- Make quality decisions and make them once.
- Thoroughly discuss decisions and get buy-in from the entire CT.
- Build confidence in the decision so that members of the CT do not feel the need to revisit the issues.
- Establish a Department policy and understanding that the CT can make design decision, while policy decisions will need to be elevated within the Department.
- Establish a single point of contract, within the Department, for the project.
- Establish clear lines of decision-making responsibilities and dispute resolution within the Department.

**THE FOCUSED DECISION MAKING
AUTHORITY OF THE CT WON
CONFIDENCE AND MAINTAINED ITS
CREDIBILITY IN THE "EYES" OF THE
PROPOSERS**

I.C Project Oversight—FHWA

FHWA participation on the CT was welcomed and it contributed significantly to the overall success of the Procurement Phase of the ROC52 Project. With respect to the ROC52 Project, FHWA involvement began at the onset and continued throughout the Procurement process.

Recommendations:

- Due to general downsizing of government, use of funding codes for establishment of cost allocations need to be established based on the Engineer's Estimate of the project. This general percentage can then be applied to the actual Contractors bid to establish funding code allocations.





II. CONTRACT DOCUMENTS

II.A Request For Qualifications (RFQ) Stage

The purpose of the RFQ was to solicit information, in the form of Statement of Qualifications (SOQ), that the Department could evaluate to determine which Proposers were the most qualified to successfully manage, design and build the ROC52 Project. The Department stated its intent to shortlist a minimum of two, and a maximum of five (5) of the Proposers that submitted SOQs. Only the short-listed Proposers were then eligible to submit technical and price proposals for the ROC52 Project. The decision to limit the number of Proposers was done to avoid those with limited capability and capacity to do the work, reduce potential bid protests and minimize the cumulative cost of stipends.

The RFQ stage began in the fall of 2001 with the following schedule:

- | | |
|---------------------------------|---------------------------------------|
| ▪ Issue RFQ | December 17, 2001 |
| ▪ SOQs due | February 15, 2002 |
| ▪ Evaluation of SOQs | February 15 – March 15, 2002 |
| ▪ Interviews | March 4 – 8, 2002 (<i>Not Held</i>) |
| ▪ Notify short-listed Proposers | March 15, 2002 |

The RFQ stated that the Department's Project Manager would be the Proposer's single point of contact for receiving and issuing all official communications about the ROC52 Project. The RFQ provided the requirements of the ROC52 Project, direction on the format and required content of the SOQ, along with the evaluation criteria and how the submitted information would be evaluated and rated.

The Department formed an SOQ Technical Review Committee (TRC) consisting of eleven (11) people representing the Department, Olmsted County, City of Rochester, FHWA and the Associated General Contractors (AGC). The Department also appointed technical advisors from within MnDOT, HDR Engineering, Inc., and the Consulting Engineers Council of Minnesota (CEC). The TRC reviewed and evaluated the SOQs and determined a numerical score for each SOQ. Each TRC member individually evaluated and scored each SOQ. The TRC then met to discuss the scores, and a total score was assigned to each Proposer based upon the sum of scores that each TRC member assigned to that Proposer. A total of four (4) Proposers submitted SOQs and all four (4) were qualified and short-listed to respond to the RFP. A total of four (4) Addenda and four (4) Clarifications were issued during the RFQ/SOQ process.

Advantages:

- Provides the Department with a device for short-listing the most qualified Proposers.
- A single point of contact discourages the Proposer from shopping around for a specific answer to a question – providing for consistent responses to all potential questions raised during the proposal stage.





Disadvantages:

- A single source with the Department sometimes caused problems, mainly in the fact that this person could not perform other duties within the Department during the RFP stage.

Recommendations:

- Advertise the project — “get the word out” — as early as possible.
- Define the Department’s role and funding alternatives of the Project early.
- Determine alternative funding opportunities early (i.e., SEP-14) – closely monitoring guidelines to ensure success.
- Include the Department’s Central Office and top management staff early on.
- Identify single point of contact within the Department.
- Work to secure Municipal Consent before RFQ is distributed.
- Determine if Consultant is needed, establishing their role and guidelines prior to RFQ stage.
- Determine project goals and evaluate project risk.
- Obtain FHWA Project Approval prior to issuing the RFQ.
- Understand early on the Department’s Utility Office, FHWA and Attorney General’s Office level of authority and role.
- Define and identify members of the Technical Review committee.
- Define and publish DBE/EEO goals in the RFQ.
- Seek approval from municipalities of all local design guides and standards during the RFQ stage – pass resolutions if needed prior to completion of the RFQ stage.
- Qualify a minimum of two (2) or a maximum of five (5) Proposers.

**WORK TO SECURE MUNICIPAL
CONSENT BEFORE THE RFQ IS
DISTRIBUTED**

II.A.1 EEO/DBE Requirements

A critical element within the Procurement process is a sound understanding of the EEO/DBE policies of the Department. The general policies of determining percentage breakdowns for EEO/DBE participation in traditional let projects will need to be revisited prior to the release of an RFP for Design-Build. Currently, the Department’s EEO/DBE program was developed around a traditional letting. The traditional process of showing specific EEO/DBE amounts that can be evaluated as part of the low bid process may not lend itself to the Design-Build selection. In developing the ROC52 Project requirements and goals, early cost estimates were developed for the Project. These early estimates provided the EEO/DBE Office an opportunity to participate in the establishment of the ROC52 Project goals and requirements thereby meeting the intent of State’s program.

Advantages:

- Establishment of EEO/DBE goals will provide the Department with a general understanding of the Proposer’s intent.





- Requesting Proposer's procedures surrounding EEO/DBE participation provides some level of insurance that the Department's goal will be achieved.

Disadvantages:

- Specific needs for the program cannot be identified until after design is well underway.
- A good faith offer to meet the EEO/DBE goals may not be acceptable to the Department.
- A Technical Proposal review will only state intent and past history, no project specific information on percentage can be included.
- Use of a closed bidding process does not lend itself to specific percentage evaluation – since bids are sealed until opened in public.

Recommendations:

- Develop specific Design-Build procedure and guidelines surrounding EEO/DBE programs.
- Establish an approach that is acceptable to the Department's EEO/DBE office for use with Design-Build bidding process.
- Closely work with the EEO/DBE Office to establish acceptable goals.
- Require the Proposer to provide their procedures for meeting EEO/DBE goals and intent – these procedures will then be reviewed as part of the Technical Proposal review thereby allowing the Department to determine the likelihood of meeting the Department goals.

II.B Request For Proposal (RFP) Stage

The purpose of the Request for Proposal (RFP) stage during the Procurement phase was to provide the shortlisted Proposers with the information necessary for preparation and submittal of technical and price proposals. The RFP was organized into the following six (6) parts:

- Part I – Scope of Work;
- Part II – Instructions to Proposers (ITP);
- Part III – Special Provisions;
- Part IV – Appendices;
- Part V – Conceptual Layout (Preliminary Design Plans); and
- Part VI – Design Data and Mapping.

Distribution of the Department's RFP distribution packages were based on the following formats:

- Parts I, II & III were distributed in both hardcopy form and as electronic files in read-only format on CD ROMs;
- Most of Part IV was distributed in the same fashion except some were only electronic files or hard copy; and
- Parts V & VI were distributed in electronic file format only.





Advantages:

- Set processes based on industry standards provide a level playing field for all Proposers.

Disadvantages:

- Difficult to obtain cooperative agreements with City and County without final quantities.
- Cross referencing between existing Department criteria and that being proposed for the project can lead to confusion if not properly documented.

Recommendations:

- Determine the management structure for this stage — Executive Management team, Core team, Technical Expert team etc.
- Require the Proposers to better define the advantages in their proposal such that evaluators do not have to dig for them.
- The RFP manager should provide an outline and clearly define limits of the RFP. Early development of comprehensive outlines by each legal and technical author is beneficial. (Note: It should be noted that the Department, through its current GEC efforts is developing a standard RFP outline for all future Design-Build projects).
- Establish an internal escalation process for development of the RFP.
- SAY IT ONCE – Easily said, difficult to achieve. Conflicts occur when the same requirement is presented in a different way by different authors. Cross-referencing is a tool to eliminate saying it twice.
- Do not restate the obvious. Use standards whenever possible.
- Execute cooperative agreements with City and County.
- Clearly define and maintain confidentiality throughout the process. At no time should the sharing of information between Proposers be allowed. The Department should take extra precaution to ensure the confidentiality of the proposal process.
- Develop the project specific Evaluation Manual for the project during this stage (see Section IV – Proposal Evaluation for details).
- Define Department and Design-Builder risk (see Section II.B.1 below for details surrounding Risk Management). If this is not defined early the Proposers will ask questions during the proposal stage.
- Have meetings with the pre-qualified Proposers well in advance of the final RFP to discuss their perception of the costly risk items. Once the Proposers have identified where they will be including risk in their proposals, re-evaluate the risk matrix. Determine if there are ways to mitigate the risk. Is the risk assigned to the party best

SAY IT ONCE – EASILY SAID, DIFFICULT TO ACHIEVE. CONFLICTS OCCUR WHEN THE SAME REQUIREMENT IS PRESENTED IN A DIFFERENT WAY BY DIFFERENT AUTHORS

DEFINE DEPARTMENT AND DESIGN-BUILDER RISK. IF THIS IS NOT DEFINED EARLY THE PROPOSERS WILL ASK QUESTIONS DURING THE PROPOSAL STAGE





- suited to manage it? Could risk be more effectively managed in another way? Without ambiguity, define in the RFP specifically who is taking the risk.
- Decide early in the process how RFP information will be organized and distributed to the Proposers — electronic, hardcopy drawings and reports etc. Be consistent and concise; do not overload the Proposer with information that does not directly apply to the project.
 - Third party agreements affecting design constraints need to be fashioned for specific elements of the Project.
 - Balance the proposal size and effort required by the Proposer to the size of the Project.
 - Consider providing the Proposer with some idea of the Department's price comfort range at the RFP stage.

II.B.1 Risk Management

The corner stone of the Department's development for the ROC52 Project was the proper allocation of risk, assignment of responsibilities, which was then used to develop the overall program requirements. Several key areas were evaluated during the risk allocation phase, which had an impact on design and construction. These areas of risk assignment included:

- Quality (design & construction)
- Design
- Environmental
- Innovation (use of Alternative Technical Concept as discussed in Section II.B.5 below)
- Geotechnical
- Right-of-Way
- Schedule
- Construction

After careful consideration by the Department, a decision was made as to what materials and data would be included and made part of the Department's request for proposals (see Section II.B.3 – Scope of Work for details surrounding reference materials included in the Department's distribution packages).

Advantages:

- Identification of risk will ensure a clear understanding of responsibilities – both Department and Design-Builder.
- Risk assignment will be based on the level of available data to the Department.
- Minimizes the level of data needed at the time of project award – providing only pertinent information needed by the Proposer to evaluate the Project Proposal.
- Proper risk assignment will promote creativity in design and construction.

Disadvantages:

- Potential risk assignments may eliminate potential Proposers.
- In most cases, increased risk on potential Proposers will increase project cost.



Recommendations:

- Proper identification of risk should be performed for each project; risk assignment needs to be based on the complexity and specific needs of the Project.
- Decision makers need to have basic understanding of the level of risk that is considered standard to the industry – transferring all risk to the Proposer is not recommended.
- Risk assignment should be performed during the development stage of a Project prior to final project development.

II.B.2 Performance-Based vs. Prescriptive-Based Specifications

The Department's goal was to employ the use of prescriptive-based specifications as opposed to performance-based specifications for the ROC52 Project. In general, a prescriptive-based specification tells the Contractor "how to do it" while a performance-based specification focuses on results and allows for unique solutions. In a paper titled, THE MULTIPLE ROLES OF SPECIFICATIONS IN LEAN CONSTRUCTION, Patrick T.I. Lam, Mohan M. Kumaraswamy and S. Thomas Ng wrote the following on performance-based specifications:

"The recent proliferation of specialist works has seen an increasing use of performance-based specifications replacing the mainstream "prescriptive" specifications, which are characterized by detailed descriptions of material and workmanship requirements. In order to give flexibility and encourage innovations in the use of materials, systems and methods, performance specifications state the required end-results and leave the contractors to come up with means to achieve those results.

Yet, performance specifications are not without problems. Hartman (1997) quoted an attorney as saying that "an unsophisticated owner reading a performance specification thinks of a Mercedes-Benz, while the contractor sees a Volkswagen." He brought forth the question of practicality and the difficult situation where no objective criteria are available for testing."

IN GENERAL, A PRESCRIPTIVE SPECIFICATION TELLS THE CONTRACTOR "HOW TO DO IT" WHILE A PERFORMANCE SPECIFICATION FOCUSES ON RESULTS AND ALLOWS FOR UNIQUE SOLUTIONS

The Department's sensitivity for quality, combined with their relative inexperience with Design-Build, led to a prescriptive-based specification with a comprehensive quality program. The quality program must continue to evolve to the point where future projects can succeed with more performance oriented specifications.

Advantages:

- Performance-based specifications promote creativity in design and construction.
- Performance-based specifications can result in reduced design and construction costs.



- Performance-based specifications place the burden on Contractor for good quality.
- Performance-based specifications, when combined with long warranty periods, force the Design-Builder to do life cycle cost analysis of design and construction techniques.
- Prescriptive-based specifications provide assurance to the Department that design and construction techniques are done in accordance with their requirements and guidelines.
- Provides for a standard to be used in the State of Minnesota on future Design-Build projects.
- Established a Department understanding of the minimum amount of work needed to develop a procurement package for future Design-Build projects.

Disadvantages:

- Performance-based specifications can result in a loss of Department control of design and construction techniques.
- In certain situations, performance-based specifications present a risk that the Department may not get what it wants.
- Objective on-site measurement/testing may not be fully or adequately developed to verify the achievement of performance criteria with reasonable cost and expediency.
- Not all projects are equal – site-specific elements may not lend themselves to established standards.
- Due to prior negotiation and agreements with municipalities in obtaining Municipal Consent prior to issuing the RFP, used of performance-based specification may be hampered.

Recommendations:

- Performance criteria and quality expectations should be addressed through an explicit Department briefing process (one-on-one meetings), during which the Department's requirements are made known to the Proposer.
- Joint tours or visits by the Department to similar completed projects can be a useful starting point to visualize and compare the expected quality levels. This process would help to clarify uncertainties that may exist in written statements within the Department's specifications.
- For a better Design-Build project to evolve, the Department must be proactive and maintain an open mind to innovation. This applies to both the Department and, ultimately, the Proposer.
- By short-listing a small number of Proposers and working with them for a longer period, the Department can gauge the standards that can be achieved with higher accuracy. Thereby identifying those items of work that can be met utilizing performance criteria and items of work that are more suited for prescriptive-based specifications.
- Bringing all key parties together at an early stage and introducing an appropriate risk/reward sharing mechanism should implement project partnering.

**PERFORMANCE SPECIFICATIONS
SHOULD ONLY BE USED WHEN THERE
ARE PROVEN METHODS OF VERIFYING
COMPLIANCE**





- Establish Incentive/Disincentive based on Road User Cost not Liquidated Damages.
- Clarifications of uncertainties should be done early and often throughout this stage. Records of such clarifications should be kept by the Department to form a source of feedback for improving future editions of specifications.
- Care should be exercised in drafting the specifications clearly and ensuring alignment with other contract documents.
- Performance-based specifications should only be used when there are proven methods of verifying compliance.
- As a means of communication, specifications should be written with the readers in mind.
- Keep format for specifications flexible – use of electronic format versus written documentation is strongly encouraged.
- Concurrent production of construction documents by the same designers reduces the likelihood of coordination problems. There should also be independent design control, which keeps the drawings and specifications continuously under review by the CT or an oversight committee.
- Consider retaining the services of an Independent Quality Firm (IQF) for development of the Quality Program specifications of the RFP. Review the quality specifications at key milestones in development of the RFP. The Department should be prepared to make course corrections and changes such as requiring additional IQF staff, replacement of staff or even a new IQF if the Department is not satisfied.
- Use more performance-based specifications coupled with strict pre-qualification, a comprehensive quality control program, warranties and similar tools rather than rely on prescriptive-based specifications for quality.
- Adjust quality standards to fit the Project. Revert to the Department's standard specifications. Use higher quality specifications only when specifically warranted.
- Use standard contract clauses and RFP format is preferred — reference from a standard specification.
- Make conscious and informed decision about using old RFP or standardized form of contract for new work. When model is used, make sure to evaluate every single clause for validity and applicability to the project. Do not cut a clause without understanding the implications.

II.B.3 Scope of Work

The Department established a detailed scope of work for the ROC52 Project. This scope of work provided the framework for the Proposer to use in the development of the Base Technical Concept. The scope was divided into several specific sections, providing requirements and details that were considered critical to the development of the ROC52 Project. Specific areas included:

- | | | |
|---------------------|---------------------|-------------------------------|
| ▪ Introduction | ▪ Pavement Markings | ▪ Roadway & Geometric Design |
| ▪ Roadway Structure | ▪ Bridges | ▪ Geotechnical Considerations |





- Maintenance of Traffic
- Permanent Signing
- Utilities
- Warranties
- Right-of-Way
- Railroad
- Value Engineering
- Lighting
- Traffic Signals
- Aesthetics
- Quality Management
- Environmental Compliance
- Project Schedule
- Incentives & Disincentives
- Water Resources Engineering
- Intelligent Transportation Systems
- Noise & Retaining Walls
- Maintenance During Construction
- Public Relations
- Project Administration & Management

To better define the scope of work for the ROC52 Project, the Department provided all shortlisted Proposers with information and data surrounding the conceptual and preliminary design performed by the Department. This information and data was in the form of reference materials that could be used by the Proposers in preparation of the Technical and Price Proposals. The following will highlight activities and reference materials, which were included in the Department's RFP distribution packages.

- Conceptual Layout - During the RFP stage, all shortlisted Proposers were provided with a completed preliminary design (a 30% design effort), developed by the Department. The Department provided no guarantees as to the completeness of the design. The Proposers were to meet the scope of work defined in the RFP with the flexibility to adjust vertical and horizontal alignments as shown on the preliminary design. Modifications could be made only if they did not impact the established right-of-way limits, met noise study requirements and remained within the contractual requirements as defined by the scope of work.
- Aesthetic Concepts - The Department established an Aesthetic Design Review Committee (ADRC) and developed an Aesthetic Design Guide (ADG) that identified the overall concept and guidelines to be used on the ROC52 Project. The final selected Proposer responsibility included; assuming the leadership role of the ADRC, and developing the final aesthetic details along with methods and techniques of implementation on the ROC52 Project. The Department's responsibilities included finalizing a cooperative cost agreement with the City of Rochester and obtaining approval of the ADG.
- Utility Information - Public and private utility companies were involved early on in the ROC52 Project development. This early involvement included the hiring of an independent consultant by the Department to prepare a utility study that identified utilities along with any relocation requirements impacted by the Department's preliminary design. Based on the findings of this utility study, the Department worked with the utility company to relocate in advance of the ROC52 Project. All parties, including the Department and utility company were aware that relocations, if performed prior to the selection of a Design-Builder, were based upon a preliminary design and not the final plans that would be prepared by the Design-Builder. In addition to the utility study, the Department held several pre-letting conference with representatives from the utilities and the Proposers to discuss the impacts to utilities and schedule. The Proposers were informed that they were responsible to coordinate with the utilities and that utility relocation work must be included in their schedule. The Proposers were informed that if further adjustment/relocation of





utilities were required as a result of a revision or modification to the Department's preliminary design, the Proposer would be responsible for all cost associated with the additional relocations.

- Environmental Compliance - Environmental regulatory agencies (such as the MPCA, DNR, COE, SHPO, and et al.) were involved in the ROC52 Project from the start. The Department and the Corps of Engineers (COE) initiated a two-phase 404 permit process that started with the RFP and will be completed after letting of the ROC52 Project. It was established that the Proposer would be both the “owner” and “contractor” on the NPDES permit. The Proposers were provided with the wetland impacts and proposed mitigation site as shown on the Department's preliminary design. The ROC52 Project offered a unique situation for the Department and regulatory agencies in that the permitting process was initiated without final plans.
- Geotechnical Data - An independent geotechnical consultant was hired by the Department to perform soils investigations early in ROC52 Project development. The roll of the geotechnical consultant was to provide enough geotechnical information and data so that the Proposer could create a sound estimate of needs while managing the risk surrounding this design element. The soil boring logs resulting from the geotechnical consultant work efforts were included as an appendix to the RFP thereby providing preliminary geotechnical information for all Proposers to use in the preparation of their final Proposals. It should be mentioned that all Proposers understood that this geotechnical work activities was for risk management purposes and that during final design, the design engineer of record would determine additional geotechnical borings and recommendations for the Project.
- Right-of-Way Data – The Department retained right-of-way acquisition responsibilities, utilizing existing acquisition contractors and in-house staff to perform all property acquisitions. All property acquisitions were based on the Department's preliminary design for the ROC52 Project. The intent was to buy sufficient right-of-way early to ensure there would be no delays to the Design-Builder's critical path schedule during the construction phase. As part of the right-of-way data included in the Department's RFP distribution package, each acquisition parcel along the ROC52 Project corridor was identified with a planned acquisition date. This information was then used by the Proposer in the development of their Project Schedule for inclusion in their final Proposal.
- Project Management - The Department required that the Design-Builder, including key individuals as defined by the RFP scope of work, be co-located throughout the design and construction of the ROC52 Project. The Proposer was to describe its goals and approach to providing office space for its staff and Department personnel assigned to the ROC52 Project during the scheduled duration of the design and construction. The Proposer was to include a discussion regarding approximate staffing numbers and Department personnel who will be co-located during the ROC52 Project design and construction.





- Warranty Items - Proposers were to provide warranties to the Department against defects in materials and workmanship. The Special Provisions defined the Final Completion Acceptance (FCA), Final Warranty Acceptance (FWA), Warranty Bond, and Warranty Work.

For the FWA, the Department and the Design-Builder would jointly review all completed warranted work or a portion thereof, as determined by the Department. If the work does not meet the Contract requirements as determined by the Department, the Design-Builder must make all necessary corrections, at its own expense, before acceptance. The date on which acceptance occurs was termed the date of FWA. The Proposers were further informed that the Department might accept the work and begin the warranty period, excluding any area needing corrective work, to accommodate seasonal limitations or staged construction.

The RFP stated that neither the FCA or any prior inspection, acceptance, or approval by the Department, would diminish the Proposers' responsibility under the warranty. The FWA would be documented and executed jointly by the Department and the Proposer on a form furnished by the Department. The Department would send a copy of the form to the Proposers' warranty bond surety agent.

The Proposers were required to furnish a single-term Warranty Bond in the amount of twenty million (\$20,000,000). The effective starting date of the warranty bond was to be the date of FCA. The warranty bond would be released at the end of the warranty period (at FWA) or after all warranty work had been completed and accepted, whichever was latest. The Proposers were informed that they would not be allowed to contest this determination by the Department.

Advantages:

- Provides the Proposer with specific guidelines and criteria to be used in the development of the final product.
- Provides an opportunity for the Department to tailor the work effort to specific Project needs.
- Providing schematic plans to all Proposers allowed common elements to be reviewed during the Proposal stage.
- Use of Alternative Technical Concepts provides Proposer a procedure for input into innovative methods (see II.B.5 below for details of Alternative Technical Concept provision).

Disadvantages:

- Cross referencing between existing Department criteria and that being proposed for the project can lead to confusion if not properly documented.
- Process of cross referencing is very time consuming – if not performed precisely, chances of misrepresentation increase thereby causing delays and possible disputes during design and construction.
- Public involvement prior to letting can be difficult without final plans.





- Right-of-way acquisition process difficult without final plans.
- Property owner turnover during procurement phase hampers the acquisition process.
- Performance of right-of-way acquisition by the Department increases the risk for the Department – possible time delays due to the acquisition process, once construction has started, places schedule risk on the Department.
- If sufficient right-of-way is not obtained before letting, large potential claims against the Department for delay may result.
- May require right-of-way and parcel acquisition that are not needed to meet the final design prepared by the Design-Builder. This additional acquisition of unneeded land would increase Project cost without providing benefit to the Project.

Recommendations:

- The details of the scope of work need to be developed for the specific needs of the Project.
- Develop a detailed scope of work utilizing headers for each technical section.
- Finalize agreements with City/County on road/ramp closures and nighttime noise ordinances prior to release of RFP by the Department.
- Finalize agreements with City on aesthetic concepts and maintenance of aesthetic features prior to release of RFP by the Department.
- Establishment of Memorandum of Understanding (MOU) with existing utilities along the corridor is strongly encouraged.
- Develop a process for obtaining sufficient right-of-way before letting of Project to ensure access and reduce impacts on potential construction delays.
- Determine Preliminary Design status of all items (if pre-design has been done).
- Examine design criteria (performance vs. prescriptive specifications).
- Place great emphasis on a public involvement program from the onset of the project's development.
- The Design-Builder selected for the Project should be responsible for leading (or at a minimum become heavily involved) in the public involvement program — be sure to define the Department's role both during and after the procurement phase.
- Define the plan review process, including roles and responsibilities of the Department's (State Aid, Central Office, District, etc.), FHWA et al.
- The ROC52 Project had a total of twenty-four (24) bridges shown on the conceptual layout. Providing a table of minimum bridge widths in the RFP was very beneficial to the Proposers. This help eliminate confusion on the part of the Proposer as to how wide the bridges should be, especially when only concept layouts have been developed for the Project.
- Consider defining components of the design that must be done in Department/Design-Builder co-located office and identify components that could be done off-site (i.e. Traffic Signals, Permanent Signing, Lighting, TMS and Pavement Markings).





- Use of pre-letting utility conferences is strongly encouraged – use of these pre-letting utility conferences will provide beneficial information to the Proposer in understanding and formulating their final Technical Proposal.
- On the ROC52 Project, significant problems arose for the Proposers relating to the warranty requirements, amount, when the warranty period started, and the length of the warranty period – special consideration needs to be given when evaluating warranty requirements. Define the warranty period and when it begins and what is to be covered by the warranty program. To minimize warranty issues, breaking the project up into segments and specify warranty periods on the basis of partial completion is strongly suggested.
- Technical experts within the specific field need to be utilized when preparing the specific sections of the scope – use of senior seasoned professional is strongly encouraged.
- Co-location of the RFP (Management) team, weekly team meetings, Project Oversight Committee and Technical Expert team meetings, white papers on key project decisions and similar tools all work well to assure that the consultant and Department staff are moving ahead at the same pace with the Project and have compatible visions of the Project status.
- Co-location of the Department and Procurement Consultant staff during the RFP development stage is strongly encouraged.
- The co-located office should be removed from the Department's Central or District Office to promote team identity and autonomy. If this does not occur it is unlikely that the sense of Project ownership and pride will be achieved. Advantages of a co-located project office are:
 - Trust can be quickly developed between Department and Procurement Consultant resulting in a team motivated by the Project;
 - Encourages team partnering, due to the daily contact between members of the Procurement team;
 - The Procurement team can evolve quickly and establish its own identity and pride of ownership;
 - Communications between Procurement team members are instant — no waiting for someone to return a call;
 - Common vision of the Project can be maintained;
 - Co-locating minimizes cost of services because of better communications and decision making process; and
 - Co-locating will eliminate duplication of effort systems — one common filing system, E-Room, and support staff all contributes to the development efficiency.

II.B.4 Base Technical Concept (BTC)

The Department provided a preliminary design for the ROC52 Project as part of the Department's RFP distribution package. Contained within this preliminary design were roadway alignment, structural





concepts, and interchange configurations (including cross sections, geometric data, and preliminary structural designs) all termed the “Base Technical Concept” (BTC). The BTC followed the preferred alignment for the ROC52 Project, which was developed through the Preliminary Design and Environmental Study process as outlined in the Department’s Highway Project Development Process (HPDP) manual.

The development process associated with the ROC52 Project started with a Public Scoping meeting held in September of 1992, followed by the Final Environmental Impact Statement (FEIS) submitted in April of 1996. After which the Department secured two (2) Staff Approved Layouts (SAL) for the ROC52 Project; a 4-lane configuration was secured in August of 1998 with a 6-lane configuration being secured in March of 2002. An update to the FEIS process was completed in April of 2002, which reflected the preliminary design presented in the BTC to all Proposers.

Advantages:

- Development of the BTC under the traditional Department process assures that the initial project development is completed in accordance with applicable standards and guidelines.
- Development of the BTC to a 30% level of completion (Completed Preliminary Design) enables the Department to apply cost estimating methodologies such as Length Width Depth (LWD) that relies on pavement areas, bridge areas and other miscellaneous quantity items.
- Development of the BTC establishes the minimum design expected by the Department for the program.
- Development of the BTC establishes a common set of elements needed for bid comparison.

Disadvantages:

- Development of the Project, by the Department, to this level of detail along with prescriptive parameters, criteria and specifications places more risk on Department for project quality and outcome.
- After letting of project, the Proposer may place risk back on the Department — a common Proposer response is “this is how you defined the Project and told us how to do it”.
- Strict adherence to the BTC will limit potential design innovation by the Proposer.

Recommendations:

- The use of the BTC establishes a leveling field for all Proposers and is essential for direct comparisons of Technical and Price Proposals.

II.B.5 Alternate Technical Concept (ATC)

The Department promoted innovation by encouraging Proposers to submit alternatives to the BTC; each alternative was called an “Alternative Technical Concept” (ATC). The process established within the





Department's RFP submittal process governed the use of the ATCs. Short-listed Proposers were encouraged to bring innovative concepts to the program not contemplated within the RFP. With respect to the ROC52 Project, potential ATCs affecting modifications to the general alignment were not allowed. This limitation by the Department was based on several issues:

THE DEPARTMENT PROMOTED INNOVATION BY ENCOURAGING PROPOSERS TO SUBMIT ALTERNATIVES TO THE BTC; EACH ALTERNATIVE WAS CALLED AN "ALTERNATIVE TECHNICAL CONCEPT" (ATC).

- The Department's current right-of-way acquisition process, well underway prior to release of the RFP packages to the Proposers; and
- The existing urban highway alignment was well established.

In addition to alignment modifications, ATCs were not allowed which could affect the right-of-way, ITS, pavement structures, or Aesthetics components of the ROC52 Project.

Each ATC submitted by a Proposer, for review and consideration by the Department, included the following information:

- A detailed ATC description (Proposer's could provide drawings to highlight description) of where and how the ATC would be used on the ROC52 Project;
- A list of deviations from the RFP requirements, along with an explanation of deviation and a request for approval;
- A full analysis justifying use of the ATC in lieu of the BTC and why the deviation (if any) should be allowed;
- An analysis of potential impacts on vehicular traffic, environmental permitting, community impact, safety, and life-cycle project and infrastructure costs (including impacts on the cost of repair and maintenance) resulting from acceptance of the ATC;
- A list of other projects where the ATC had been used, its success, the names and telephone numbers of project owners that could be used as references; and
- A description of added risks to the Department or third parties associated with implementing the ATC, as well as an estimate of the ATC implementation costs to the Department, the Design-Builder, and third parties.

The Department's pre-proposal ATC process provided the Proposer with a summary of findings for potential ATCs. The Department reviewed each ATC and limited its response to the Proposer to one of the following determinations:

- That the concept was acceptable for inclusion in the Proposal as an ATC;
- That the concept was not acceptable for inclusion in the Proposal as an ATC; or
- That certain identified conditions must be met or certain clarifications or modifications must be made as a condition of acceptance for inclusion in the Proposal as an ATC.

During the pre-proposal ATC process, the Department conducted a series of one-on-one meetings, a total of five (5) meetings were held with each individual Proposers. The purpose and goal of these meetings were:





- To discuss the general understanding of a potential ATC prior to final submittal for pre-approval,
- To address specific questions that the Department may have concerning a potential ATC, and
- Provide direction to the potential Proposer.

It should be mentioned that these meetings were performed under strict conditions of confidentiality; sharing of information on potential ATCs between Proposers was strictly prohibited by all parties.

The acceptance and approval of an ATC by the Department was in no way a guarantee that the Proposer would use the individual ATC in their final Proposal. This pre-approval process only identified ATCs that would be considered during the final bid opening, inclusion of any ATC would be judged on its merit during the final evaluation of the Technical Proposal, with the Department reserving the sole right to reject or modify any ATC that did not meet the requirements of the Proposal submittal process.

Like all other parts of the Proposal process, ATCs remained confidential until the selection of the successful Proposer through the 'Best-Value' selection process (see Section IV – Proposal Evaluation for details surround 'Best Value' process). The price bid for each ATC would be added or subtracted from the Proposers' BTC price resulting in the Adjusted Bid Price for each individual Proposer (see Section IV.D – RFP Scoring for details surround the proposal scoring procedures).

The Department received a total of 100 ATCs (nearly half affecting design associated with retaining wall systems and bridges), all totaling a potential \$14-million savings to the Department. Since ATCs were received from all potential Proposers, ATCs that were provided by the unsuccessful Proposers became the property of the Department. Once selection of the 'Best Value' Proposer was completed, the Department reviewed the ATCs provided by the unsuccessful Proposers, providing the successful 'Best Value' Proposer an opportunity to negotiate those ATCs which the Department felt provided merit to the ROC52 Project. This negotiation process was only performed after the final award and contract execution was completed.

Advantages:

- Promotes innovation and taps into the expertise of the Proposer.
- Can result in reduction of Project cost.
- Can provide the Department with new ideas, techniques or materials to use in future Projects.

Disadvantages:

- Makes comparison of Proposal somewhat difficult – essentially, not all final projects had the same elements at time of bid opening.
- If Proposer omits or ignores condition of approvals, including that ATC may cause confusion as to why ATC was not accepted – reasons and conditions need to be clearly documented.





Recommendations:

- Hold private one-on-one meetings with each Proposer throughout this stage of the Project development.
- The Department should have all decision makers present at the one-on-one meetings.
- All ATCs that affect local agencies (cities and counties) must have their approval as a condition of acceptance.
- Maintain the Department right to reject ATCs at the bid table – the pre-approval process for ATCs does not grant final acceptance, conditions of approvals defined in the pre-approval process need to be stated by the Proposer.
- Require that all Proposers provide a BTC price independently of any ATC. All pre-approved ATCs will then be provided as independent prices, allowing the Department to eliminate any ATC that did not meet the proposal submittal requirements. Following this process ensures that the Department does not jeopardize the bidding opening process while still providing flexibility.

II.B.6 Document Control and Preparation

The use of clear and easily understood document control for the final preparation of the ROC52 Project was essential to the overall success of the program.

Advantages:

- Establishes a set of standards for use during the procurement stage so that there is continuity between authors.
- Established methods and procedures for tracking changes.
- Provides a single location for storage of the final document and all supporting elements that may be supplied to the Design-Build teams.
- The creation of a control set will establish a master for the program.

Disadvantages:

- A complete set of prior standards may not fit all Projects.
- The procedures for document control can be complicated and cumbersome.

Recommendations:

- Document Control Manager needs to be on-board at the onset of the Project development.
- Create and maintain an addenda log to track changes in the document.
- Co-location of Department and Procurement Consultant staff would greatly facilitate drafting, editing and finalization of the documents.
- Establish a set of standards to be used for document control and preparation.
- Provide all information in an electronic format is strongly suggested.
- Provide for flexibility in system.





- Choose a document control system that has the capability to be used for project control – Procurement to Final Project Completion.

II.B.7 Proposal Schedule

The Department established the schedule for the Proposal such that the Proposers had nearly four (4) months from the May 30, 2002 Pre-proposal meeting to the Technical Proposal submittal date of September 27, 2002.

Issuance of Request for Proposals by Department to Short-Listed Proposers:	May 24, 2002
Pre-proposal Kickoff Meeting:	May 30, 2002
Private Pre-proposal Meetings with Proposers:	June 10 to August 1, 2002
Deadline for Submittal of ATCs for Pre-approval:	August 5, 2002
Deadline for Department's Responses to Proposers ATC Requests:	August 23, 2002
Private pre-proposal meetings with Proposers (specific Proposer time to be scheduled by Proposer)	August 27 and 28, 2002
Deadline for Submittal of Requests for Clarifications of RFP by Proposers:	September 11, 2002
Deadline for Submittal of Preferred Right-of-Way Acquisition Schedule by Proposer (optional):	September 27, 2002 by 12:00 noon (Central)
Deadline for Submittal of Technical Proposals, BTC Price Proposals, and ATC Price Proposals by Proposers:	September 27, 2002 by 12:00 noon (Central)
Evaluation of Technical Proposals by Department:	September 30 to October 30, 2002
Deadline for Submittal of Escrowed Proposal Documents by Proposers:	October 2, 2002 by 9:30 a.m. (Central)
Proposers' Oral Presentations and Responses to Department's Questions Regarding the Technical Proposals:	October 24 and 25, 2002
Public Opening of Price Proposals and Identification of the Apparent Best Value Proposal by the Department:	November 1, 2002 at 9:30 a.m. (Central)
Deadline for Return of Contract Documents by Selected Design-Builder:	10 days after Contract Forms are mailed





Anticipated Notice To Proceed from Department:

December 2, 2002

RFP Required Project Completion Date:

November 1, 2007

At the on set of the procurement development, a 4-½ month window was assigned for the development of the Request for Proposal (RFP). During the course of RFP development, the ATC process was determined to be a valid tool for bringing innovation into the selection program. With this in mind, a more realistic period of six (6) months for development of the RFP should be considered.

Advantages:

- Establishment of timelines helps set internal and external control for the project.
- Condensed schedule requires a concentrated effort and forces decisions and actions to be made by responsible parties.

Disadvantages:

- Establishment of interim dates that create accelerated timelines by the Department may not provide sufficient time for the Proposers to adequately address the proposal needs. The more complex the project, the greater the affect.
- Condensed schedule increases risk to the Proposer during bid preparation.

Recommendations:

- Allow at least four (4) months for Proposers to develop a Proposal from the Department's RFP distribution package.
- Establish submittal dates for innovation (ATC) submittals that maximize the potential benefit to both the Department and Proposers.
- Allow at least six (6) months for the Department's preparation of an RFP package after risk allocations have been assigned.

II.B.8 Required Contract Forms

A standard set of contract forms for Design-Build was not available for the ROC52 Project and had to be developed by the Department for the RFP distribution package. Use of traditional contract forms do not always lend themselves to the Design-Build process. Some examples of forms that had to be customized included:

- | | |
|----------------------|------------------------------|
| ▪ Standard Bid Forms | ▪ DBE Requirements |
| ▪ EEO Forms | ▪ Prevailing Wage Statements |
| ▪ Labor Compliance | ▪ Price Proposal Forms |

Advantages:

- Provides the Department with a minimum level of information needed during the contract stage.
- Sets standards to meet expectations of the Industry.





Disadvantages:

- Standard Department forms may not be well suited to Design-Build applications.
- Time consuming to review, modify and create the standard forms.

Recommendations:

- Adopt a standard set of contract and bid proposal forms for Design-Build delivery.
- Modify contractual language to be used as State's standard for Design-Build procurement.

II.B.9 Required Special Provisions

The Proposers were provided Special Provisions for the ROC52 Project. With respect to the ROC 52 Project, Mn/DOT's Special Provisions had to be tailored for this Project. The assumption that all Special Provisions used for traditional projects can be applied to the Design-Build program is misleading. A careful examination of current Special Provisions needs to be performed prior to RFP release by the Department.

Advantages:

- Established a clear understanding of the Department's needs in determination of the final selection.
- Allows general specification to be used, with changes tailored made for the specific Project requirements.

Disadvantages:

- Can lead to time extension by Proposers if sufficient review time is not provided.
- Use of multiple sections for the dissemination of information can lead to confusion for both the Proposers and Department.

Recommendations:

- Provide all contract provisions needed by the Proposers as early as possible, thereby establishing a complete understanding of the project requirements. At a minimum, if provisions are web-based, provide a direct link for the Proposers to secure needed information.
- Prepare a complete set of standard specifications for Design-Build and limit the use of special provisions is strongly encouraged.

II.B.10 Incentives and Disincentives Provisions

The incentive award provisions used on the ROC52 Project was to afford the Design-Builder an opportunity to earn an award commensurate with optimum performance. The incentive award was intended to:

- Encourage special management emphasis to the evaluation criteria,





- Encourage the Design-Builder to attain the highest standards of excellence in the performance of the Contract, and
- Provide financial rewards to the Design-Builder if it was successful at levels that exceeded the minimum requirements specified in the Contract Documents.

The incentive award was an amount that the Design-Builder could earn, in whole or in part, based upon an evaluation of the Design-Builder's performance by the Department. The payment of incentive awards was contingent upon compliance with contractual requirements and performance that exceeded the minimum standards specified in the Contract Documents.

The Department established a maximum allocation pool for the Incentive Award at two million dollars (\$2,000,000) for the ROC52 Project. This incentive pool was to be allocated based on the following maximum payment amounts.

- | | |
|--|---------------------------------------|
| ▪ Design Quality Control/Quality Assurance Program | \$200,000 (max) |
| ▪ Construction Quality Control Program | \$200,000 (max) |
| ▪ Public Relation Program | \$100,000 (max) |
| ▪ Project Schedule | \$ 50,000/day (capped at \$1,500,000) |

The Department conducted performance evaluation for each element shown above. A performance evaluation period was determined based on the Design-Builder's Project Schedule, evenly spaced for the Project duration.

Advantages:

- Establishes an incentive for a superior performance by the Design-Builder.
- Establishes procedures and provides the Department with a tool to provide continuous feedback to the Design-Builder on performance – if the Department's goals for any specific program are not being met, the Design-Builder will quickly realize it's lack of performance. This realization will be in the form of dollars.

Disadvantages:

- Could increase cost to the project.
- Can lead to confusion for both the Proposers and Department, if not well defined and documented.

Recommendations:

- Determine programs that are critical to the Department and success of the Project. These programs will then be used to determine incentive categories.
- Establish goals and specific elements to be used in establishing evaluation criteria for receipt of incentives.
- Evaluation criteria and performance goals needs to be documented as part of the scope of work for the Project.





III. PROPOSAL PREPARATION

III.A RFQ vs. RFP—Duplication of Material in a Two-Part Submittal

The ROC 52 Project involved a two-phase selection process, the Request for Qualification (RFQ) and the Request for Proposal (RFP). Each package request was developed to be stand-alone documents, with cross-reference being held to a minimum.

Advantages:

- Use a two-part submittal process allows for the development of a “short-list” of potential Proposers, reducing the number of unqualified Proposers.
- The two-part process will eliminate unqualified Proposers, thereby reducing the cost of the Department.

Disadvantages:

- Duplication of materials maybe required for both the RFQ and RFP.

Recommendations:

- Require the RFQ to be made part of the final selected Proposer’s contract.
- Do not request the same information to be shown in the RFQ and RFP.
- Make Proposer’s aware that the RFQ submittal will be made part of the final contract document – allowing Proposer to reference RFQ submittal information within the RFP submittal is discouraged.

III.B Document Control and Distribution

The general format used for the ROC52 Project centered round the concept that all documents would be controlled and distributed electronically. The use of a web based e-room tool for final management was critical to meet the accelerated schedule for procurement development.

Advantages:

- Use of an e-room concept ensured file management – allowing a built-in tracking system to document changes by authors.
- With multiple authors during the procurement development, the e-room concept allowed authors to check-in and check-out the latest version.

Disadvantages:

- Speed of the system – based on current web communications, use of the e-room may be limited.
- Misunderstanding of e-room protocol.





Recommendations:

- Establish dedicated authors and users.
- Establish a single source individual for document control and distribution, a Document Control Manager is strongly encouraged.

III.C Addenda and Clarifications—Electronic Format, E-mail

The Department informed the Proposers that if it determined (at its sole and absolute discretion) that interpretation or clarification of the RFP or any other consideration required a revision of the RFP, the Department would prepare and issue a written addendum. The Department reserved the right to revise the RFP up to five (5) Working Days before the Proposal submittal deadline. The Department sent copies of RFP revisions (Addendums) in writing to all the Proposers. For matters not requiring an addendum, the Department issued clarification notices listing questions received from the Proposers and the responses given by the Department. Clarification notices were sent in writing to all Proposers. Addendums and Clarifications were also posted on the Department's ROC52 Project website and were sent via e-mail to designated representatives from each Proposer.

The Proposers were to acknowledge in their Technical Proposal receipt of all RFP addenda and clarification notices. They were notified that failure to acknowledge receipt of any of the documents would have been cause for rejection of their Proposal. The Department was not bound by, and the Proposers were not to rely on, any oral communication regarding the ROC52 Project or RFP documents; and the Proposers were not to rely on any Department communication except the RFP documents, addenda, and clarification notices. The Department issued a total of fifteen (15) Addendums and nine (9) Clarifications for the RFP.

Advantages:

- Use of electronic format for delivery of information is greatly encouraged – essentially allowing additional time for Proposers to address issues.

Disadvantages:

- With the use of electronic formats, direct acknowledgment of delivery or understanding cannot be assured.

Recommendations:

- Addenda and Clarifications should be separated into their respective RFP sections following the outline of the RFP. This is preferable to grouping Addenda and Clarifications in no particular order (scattered) in the Addendum.
- Minimize the turnaround time for answer to Proposers' questions – in general, a turnaround of a few days for non-complex issues will meet expectation.
- Do not under estimate the time commitment to accomplish this task.





III.D One-on-One Meetings

The Department invited each Proposer to attend up to five (5) private one-on-one meetings at which the Department would address and respond to the Proposers' concerns and questions regarding ATCs, details of the ROC52 Project scope, administrative procedures, outstanding issues for the remainder of the Proposal process, and any other related matters. The Department met with the representative(s) of only one Proposer at a time. The Proposers, as a condition of proposal compliance, were not required to accept the meeting invitation.

The following requirements applied to Proposers that accepted the meeting invitation and outlines the process involved during this stage of development.

- Each one-on-one meeting would be held in Rochester Minnesota, limited to two (2) hours.
- Each Proposer attending a one-on-one meeting was to be represented by at least one (1) person from each of its Major Participants; those persons were to attend the meeting in its entirety. Other design-builder team members were allowed to attend, but each team was limited to ten (10) attendees.
- To facilitate record keeping, each team was to appoint a spokesperson for asking questions and presenting issues.
- At least three (3) Working Days before the meeting, each Proposer was to submit to the Department in writing the names and functions of each of its attendees and the issues and questions to be addressed. Related follow-up questions would be allowed during the meeting.
- The Department would review the documentation of each meeting to determine whether any clarification or revision of the RFP or procurement process was needed. If so, an RFP clarification notice or addendum would be issued in writing to all Proposers. All discussions with the teams regarding ATCs were to remain confidential.

Advantages:

- Builds communications, trust and partnering.
- Provides communication control—people were not calling until they got the answer they wanted. Facts are dealt with, not rumors.
- Created a “safe” forum where the Proposers were free to ask questions without other teams being present.
- Provided a forum for the Department to reinforce the high quality standards that were involved in the project.

Disadvantages:

- Required strict discipline not to respond to questions that should be responded to by addenda to all Proposers.

Recommendations:

- The Department and Proposers were nearly unanimous in their support for the one-on-one meetings.





- Establish ground rules at the first meeting and adhere to them for all meetings with all Proposers — maintain discipline.
- Do not discuss one Proposers' ATC and advantages with another Proposer – maintain the confidentiality process at all times.
- Do not provide an advantage for one Proposer over another.

III.E Baseline Schedule

The Proposer was to submit with its Technical Proposal a Work Breakdown Structure (WBS) indicating and describing their work segments, Project phases, and major Project activities. The WBS was to be consistent with the Proposers' organization and approach to management, as well as its approach to technical challenges presented within the ROC52 Project and meet the requirements of the Project Schedule defined in Part I (Scope of Work) of the RFP. The Proposer was instructed to submit a WBS with the activities broken down sufficiently to show construction sequencing and significant Project interrelationships. The proposed traffic control concept was to be clearly identified within the ROC52 Project Schedule and WBS.

Each Proposer was to submit a Baseline Schedule with its Technical Proposal, addressing the Work required to complete the ROC52 Project. The Baseline Schedule was a critical consideration of the technical evaluation because of the effects of utility work, right-of-way acquisition, environmental requirements, and geotechnical challenges. The Department notified the Proposers that it had determined that a construction period of five (5) years or less would meet the goals of the ROC52 Project.

The Baseline Schedule was to be evaluated by the following:

- Narrative description of the proposed Baseline Schedule.
- The logical relationships, durations, and resource loading and timing of the WBS elements (work type and project areas) for engineering, construction, and maintenance during construction.
- Content of all major Project milestones, if any, designated by the Department or the Proposer.
- Accommodation of all schedule constraints indicated in the Scope of Work section of the RFP.
- Identification of material deliveries and associated payments for materials delivered to the Project.
- Conformity of the resource loading to the Price Proposal.
- Design-Builder Completion Date.

Proposers were to provide the date that they would complete the ROC52 Project. That date was to correspond with the completion date in the Baseline Schedule and would become the Contract Completion Date by which the Design-Builder must receive Final Construction Acceptance (FCA) by the Department, unless a time extension is granted by supplemental agreement. For work not completed by that date, the Design-Builder would be subject to disincentive charges (outlined in the Scope of Work section of the RFP).

Advantages:

- The use of a Baseline Schedule is critical for each Proposer to determine specific limits as it relates to the overall needs of the program.





Disadvantages:

- Non-standardized schedules may lead to misunderstanding as it relates to the overall program.

Recommendations:

- One of the main drivers/benefits of Design-Build vs. Design-Bid-Build projects is reduced time to deliver the project. Be sure to define the value of the schedule for the Proposers so that they can weigh the costs of a more aggressive schedule versus the number of technical points allocated to the schedule.

III.F Stipend Payment

Proposal preparation can be very time consuming and costly for Proposers with development costs ranging from 0.1% to as much as 7% of the estimated project cost. When faced with very large and complex projects, Proposers must go through an extensive internal “go/no-go” process to determine if the likelihood of winning the project justifies the effort and cost to prepare and submit a proposal. The risk and cost to the Proposer can be reduced by the use of a total Quality Based Selection (QBS) process. The Engineering community generally favors the QBS process while Contractors are accustomed to pricing projects and winning them based upon low bid.

For the ROC52 Project, the Department offered a stipend and based final selection upon a “Best Value” process that rated both technical strength of the proposal and bid price in the overall score. The Proposers were informed that the Department would pay a stipend to each short-listed Proposer that provided a responsive but unsuccessful Proposal. The value of the stipend was set at 0.2% of the Department’s estimated cost of design and construction of the ROC52 Project. If the Contract was not awarded, all responsive short-listed Proposers would receive the stipulated fee. The stipend was to be paid within 90-calendar-days after award of the Contract or the decision not to award a contract. The Department mailed to each Proposer a Stipend Agreement for accepting or waiving the stipend that had to be signed and returned before the stipend would be paid.

Responsive Proposers were only entitled to stipend reimbursement in connection with the RFP submittals, while non-responsive Proposer would earn no stipend associated with the ROC52 Project. A “non-responsive” Proposal was defined in the RFP as a Proposal with a technical evaluation score of less than 70. In consideration for paying the stipend, the Department reserved the right to use any ideas or information contained in the unsuccessful Proposal in connection with any Contract awarded for the ROC52 Project or with any subsequent procurement, without any obligation to pay any additional compensation to the Proposer.

If an unsuccessful short-listed Proposer elected to waive the stipend, the Department would not use any of the ideas or information contained in that Proposers’ Proposal. Upon the request of the Department, a Proposer that waived a stipend could withdraw the waiver, in which case the Department would pay the stipend to the Proposer and thereafter could use ideas and information in the Proposers’ Proposal.





Advantages:

- Shows the Departments serious intent and commitment to do the project.
- Encourage team development and participation in proposal development.
- Reduces risk and proposal preparation cost for Proposers. Department is ensured higher quality proposals by “setting the bar” that unsuccessful (not to be confused with non-responsive) proposals must meet or exceed to qualify for the stipend.
- Upon the Proposers acceptance of the stipend, the Department was given the right to use concepts presented in the unsuccessful proposals.

Disadvantages:

- In the event that a Proposer makes the shortlist and provides minimum information during the RFP stage, payment of the stipend will provide no additional information to the Department for consideration.

Recommendations:

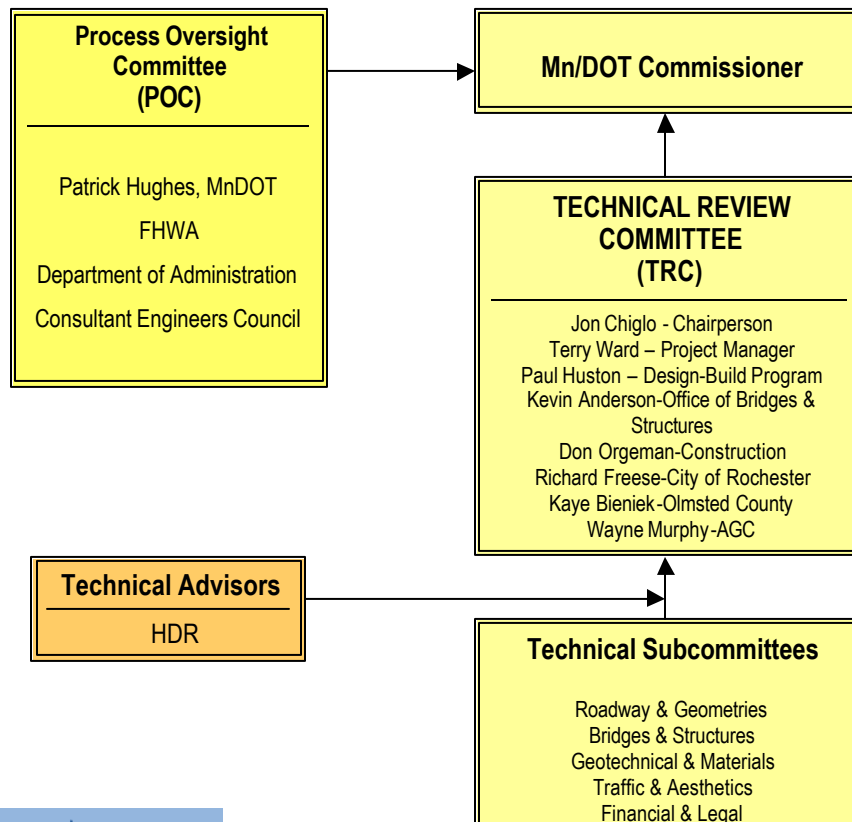
- Pre-qualify up to five (5) Proposers using the Statement of Qualifications process.
- Scale the RFP to balance with the project scope and streamline the proposal requirements to minimize cost to the Proposer.
- Rely more on standard Design-Build specifications in a format to make it easier for the Design-Builders to propose.
- Clearly define those areas where Proposer innovation is expected and separate from those areas where the Department is less flexible. This allows the Proposer to concentrate their resources in areas where they can achieve quality points and not waste time on areas where the Department has clear or inflexible ideas on what it wants.
- The stipend should approximately cover the difference in cost between what a Proposer would spend bidding the project under competitive bidding and what it costs to propose as a Design-Build project.
- Note—the Proposer that had put the most work into the design effort during the procurement phase achieved the highest technical score and the lowest bid price of the four (4) submittals. This resulted in a payback to both the Proposer and Department and so a stipend amount that encourages this front-end investment has a distinct benefit to the Department.



IV. PROPOSAL EVALUATION

The Department utilized a written evaluation and selection procedure to evaluate the Technical Proposals. The proposals for the ROC52 Project arrived in two (2) separate packages, with Technical Proposals in one package and Price Proposals in the second package. The separation was retained until the initial technical evaluations were made and recommendations submitted to the Mn/DOT Commissioner. Thereafter, the Mn/DOT Commissioner combined the Technical scores and Price Proposal in a public setting as governed by State Law. The combination of Technical and Price Proposal constituted the 'Best Value' to the Department and the State of Minnesota.

The Mn/DOT Commissioner organized multidisciplinary Technical Review Committee (TRC) representatives who were chaired by the Commissioner's designee. In addition to voting members of the TRC, the TRC was also assisted by subcommittees composed of other Mn/DOT staff and outside consultants who offered advice on the technical, financial, and legal aspects of each proposal. In addition, the Mn/DOT Commissioner invited observers from other agencies with specific interests and responsibilities associated with the ROC52 Project to form a Process Oversight Committee. Outside consultants and observers were asked to endorse confidentiality statements and offer their opinions to the TRC in advance of the TRC's final deliberations. The primary responsibility of these subcommittees will be to assist the TRC in making an educated and informed assessment of the individual strengths and weaknesses of the proposals. A general layout of the Proposal Evaluation organization is shown below.



The TRC was mostly comprised of Core Team members (as defined in Section I.A – Resource Commitments) in order to minimize the ‘learning curve’ of transitioning new members to the TRC. The subcommittees were composed of a wide cross-section of advisors, consultants and members of the government and technical community that could provide neutral assessments of the material contained in the proposals.

IV.A Evaluation Manual—Public or Private Document

An evaluation manual was prepared for the Evaluators and became the final scoring criteria for each review element of the Proposals. Each TRC member individually reviewed and assessed each Proposer’s Technical Proposal using the overall criteria established in the Evaluation Manual. Each evaluator recorded his/her impressions and judgments via evaluation forms. The forms were intended to provide a record of the evaluation and be utilized as a beginning point for further discussions and evaluations. The evaluation forms were completed in a manner that adequately indicated the basis of the evaluator’s assessment. Reasoning for assigned scores or comments was documented. It was critical that the evaluation comments and score justification statements be specific and not generalized.

Advantages:

- Provided a common point for evaluation – establishment of benchmarks.
- Established minimum and maximum criteria to be used in the evaluation process.

Disadvantages:

- Provided a point of uncertainty that existed with the Proposers. Without having the specific benchmark scoring criteria, the Proposers felt that there was not enough information to address the final Technical Proposal.
- By providing specific scoring elements, experienced Proposers could have an unfair advantage.

Recommendations:

- Continue to develop an evaluation manual that is specific to the project.
- Identify in the RFP the elements and framework that will be scored. However, be careful as to not to provide an advantage for one Proposer that may be construed as showing favoritism, thereby jeopardizing the integrity of the evaluation process.
- Have all RFP Evaluators involved in the SOQ review process.

IV.B RFP Evaluation Meetings

IV.B.1 Subcommittees Review and Presentation

A technical subcommittee reviewed all proposals. The purpose of this step was to insure that each proposal met the pass/fail criteria. In addition to the benchmarking review, the subcommittees provided technical assistance to the final proposal reviewers.



IV.B.2 TRC Review and Presentation

The Technical Review Committee (TRC) was the final review body, which was responsible for the final evaluation and scoring of the Technical Proposals. Each member of the TRC separately evaluated and scored each Technical Proposal independent of the committee as a whole. Once the TRC members had performed their independent evaluation, the TRC then met as a whole to tabulate scores and create a final ranking of the Technical Proposals.

Advantages:

- By using an average composite score for each Technical Proposal, no single member can dramatically impact the final score.

Disadvantages:

- Due to the technical nature of the proposals, individual members of the TRC need to have a broad base of technical knowledge.

Recommendations:

- All members of the TRC will have an equal voice, weighting of TRC member's scores based on position or classification should not be performed.
- The TRC should be comprised of a minimum of five (5) members. When setting the membership of the TRC at five (5), each member's score will reflect twenty (20%) percent of the scoring body – creating a true average composite technical score. As the membership with the TRC is increased, the importance of each member's score will be reduced thereby minimizing the potential impact that one specific TRC score will have over the whole committee.
- TRC members should have a general knowledge of the project, limitations, guidelines and criteria.
- Ensure representation of AGC (required by State statute) on the TRC and CEC is on the POC only.

IV.C Oral Interviews

The Department required all Proposers to make formal oral presentations to summarize their Technical Proposals and to provide the Department with further information on which to base its evaluations. The oral presentations afforded each Proposer with an opportunity to highlight the most significant aspects of its Proposal, communicate its understanding of the RFP requirements and respond to the Department's (Evaluation Team) questions. It also provided an opportunity for the proposal evaluators to ask general and specific questions related to each proposal, while limiting the Proposer from introducing new or supplemental information not already found in the Technical Proposals.

As a condition of the Oral Interview process, Proposer were instructed as to which discipline leader was to attend, flexibility as to level of participation by the Proposer was governed by terms of the interview process.





Advantages:

- Provided the most informative presentation of personal qualifications, sense of team, communications skills and corporate culture.

Disadvantages:

- Expensive for Department and Proposers – time needed for preparation and conducting of oral interviews may be extensive.
- If not conducted properly, can be perceived as an opportunity for leveling – allowing the Proposer opportunity to clarify issues that are presented in the Technical Proposal.
- Difficult to score unless videotaped, recorded, or otherwise documented. Commitments made orally are not easily carried forward into the contract as enforceable specifications. Danger of Proposer saying, “This is not what I said” or “That is not what I meant”.
- Oral interviews held in advance of the proposal submittal offers the Department an opportunity to issue last minute addenda if it appears from the interviews that Proposers are having trouble understanding the project. It also offers the Proposers an opportunity to revise their proposals based upon the nature of the questions asked by the Department thereby posing a danger of leveling.

Recommendations:

- Oral interviews should be held on all Design-Build projects of any size or complexity.
- Oral interviews held after submittal of the proposal offers the Department more latitude in questioning without leveling. This is the preferred alternative.
- Release the Oral Interview outline in advance of the interview date with sufficient time for the Proposers to prepare.
- Define for the Proposer who from their team must participate and what areas are to be covered in the interview.
- Require materials used in oral presentations to be submitted in hard copy for future reference.
- If interviews are to be scored, suggest scoring be done immediately after and on the same day as the interview.
- Commitments made in oral interviews, when defined in the contract provisions, can be carried forward into the contract by requiring the Proposer to sign the minutes of the interview as prepared by a court reporter.

IV.D RFP Scoring

The Technical Proposal evaluation for scoring was based upon the following main categories:

- Project Management (40%);
- Project Approach and Understanding (30%);
- Schedule (25%); and





- Innovation (5%).

All Technical Proposals were evaluated based on pre-determined criteria, a set of criteria was developed by the TRC prior to receiving any Technical Proposals thereby eliminating tapering of criteria to meet selected Proposer's response.

Advantages:

- Provided detailed documentation and justification of selection score and process.
- Brought together a team of highly qualified evaluators for in depth review that left no stone unturned in evaluation of the proposals.
- Housing the evaluators in one (1) location assured everyone's undivided attention to task, maintained security and ensured uniform scoring methodology.

Disadvantages:

- Involved a significant contingent of personnel that was labor intensive (support and coordination), expensive and took key people from other duties.
- With respect to the ROC52 Project, Proposers were not clear on how the Department would score the details of the schedule. Proposers wanted to know how the Department would weigh the costs of a more aggressive schedule versus the points given for the length of the schedule. This could lead to the Department providing more evaluation information, thereby providing an unfair advantage to the more experienced bidder.

Recommendations:

- Be sure that evaluation teams have sufficient time commitment to the project.
- Ideally, evaluation team members should have no major commitments. The evaluation team, for purposes of conducting the scoring task, should allocate a period of four (4) weeks to complete the scoring process.
- The evaluation process should be formal and can have no outside influences.
- Scoring has to be done individually.
- Consider a three-part proposal. The first dealing with pass/fail matters submitted in advance of the second submittal that presents the creative elements that highlight the Proposers' clear advantages/quality points. The third part would be the price proposal.
- Involve outside agencies such as the FHWA and regulatory agencies in the selection process to reinforce that they are part of the team and that their opinion counts.
- Establish clear and easily understood scoring guidelines – potential points awarded to specific topics of technical concern need to be provided to each potential Proposers.





V. PRICE PROPOSAL OPENING & AWARD

V.A Bid Opening Format

With respect to the format used during the bid opening for ROC52, the Department followed the current State of Minnesota process for bid opening. This process is built around current laws requiring that a formal bid opening be performed in a public setting in which each Proposer's bids are opened and read aloud for the record. After the public bid opening, each Proposer's bid is tabulated for accuracy after which the official bid is publicized.

The specific steps used during the ROC52 bid opening included:

- A tailored made spreadsheet was developed for the ROC52 Project, which was projected for public viewing during the bid opening.
- Prior to opening of bids, the technical score for each Proposer was read aloud and entered into the appropriate column of the spreadsheet.
- Individual Proposer's BTC was opened and read aloud, after which the bid amount was entered into the spreadsheet.
- Once all BTC pricing was entered, Proposer's ATCs were opened and read aloud. The bid associated with each ATCs was entered as either a bid deduct or bid addition.
- Due to use of a projected spreadsheet during the bid opening process, the calculation of a 'Best Value' score (bid price divided by technical score) was performed for the first time in full view of the public.

Advantages:

- Established format that has proven merit.
- Provides a general format, which is accepted by the industry.
- Establishes a level field for competition.
- Proposer's Technical Proposals are not influenced by price.
- Provided a format such that the entire 'Best Value' selection was performed before the public.

Disadvantages:

- Due to the size of some projects and amount of time commitment on the part of the Proposers, smaller traditional project lettings may be overlooked.
- Unlike the traditional bid process, use of the 'Best Value' selection does not guarantee that the lowest bid will be selected.

Recommendations:

- Proposer's bids should remain sealed until actual public bid opening date.





- Establish official Design-Build bid opening dates – these dates would then be presented in the official state bid-letting schedule on a yearly basis. The Department is encouraged to pay close attention and consideration when scheduling the Design-Build bid opening dates, so as to not impact the traditional letting schedule.
- Be sure that sufficient time is established after the public opening to allow for bid tabulation and verification checks.

V.B Notice to Proceed

The official Notice to Proceed for the ROC52 Project was presented to the successful ‘Best Valued’ Proposer after the execution of contract. This Notice to Proceed signaled the official Project start date and was used by the Design-Build firm in the official Project Schedule.

Advantages:

- Establishes an official start date for the program.

Disadvantages:

- Could be misunderstood if limits are stated.

Recommendations:

- A Notice to Proceed should not be issued until all parties properly execute all contract documents.
- A staged Notice to Proceed should be used when the Department has outstanding permitting issues that may impact the Proposers ability to perform work – if used, specific elements that can be performed by the Proposer without causing change to the risk allocation need to be identified in the notice.

