



Selecting an Engineer: A Public Guide for Water and Wastewater System Boards

Communities rely on safe drinking water and reliable wastewater systems. When these systems need repairs or upgrades, the board responsible must hire a licensed professional engineer. Board members are responsible for ensuring that the engineer serves the community well and meets the terms of the contract. A clear, fair, and well-documented selection process helps set up the project for long-term success.

This guide explains why an engineer is needed, when to hire one, and how to select the right engineering firm.

Why a Board Needs an Engineer

A licensed engineer plays a key role in improving and maintaining water and wastewater systems. Engineers can:

- Evaluate the condition of the entire system and identify problems.
- Estimate the costs of repairs, replacements, and upgrades.
- Design projects and provide several possible solutions.
- Include information about how the community can pay for improvements, such as grants or loans.
- Offer ongoing advice and support as needed.

Selecting an engineer or engineering firm that fits the community and its project is essential for successful results.

When an Engineer Is Needed

Most funding agencies require a Preliminary Engineering Report (PER) before a project can move forward. A PER:

- Describes the water or wastewater system.
- Explains the problems the system is facing.
- Presents several possible solutions.
- Includes cost estimates, projected user rates, and potential funding sources.

Once a project is funded, the engineer:

- Designs the project in cooperation with the community and regulatory agencies.
- Prepares bid documents and assists with meetings before bids and construction.



- Often oversees construction and provides inspection services during the first year of operation.

The PER should look at the whole system, identify which parts need repair or replacement, and list solutions in order of priority. It may also include phased solutions if appropriate.

How the Board Selects an Engineering Firm

The board may choose to form a selection committee to help with the process. The committee can:

- Define and describe the problem(s) that need to be solved.
- Prepare the Request for Proposals (RFP).
- Develop interview questions.
- Review proposals, check references, and narrow the list of candidates.

However, **the governing board makes the final decision**, not the committee. Only the board can approve a contract.

Steps for Selecting an Engineer

1. Understand Your System

The board should gather information from the operator, community, and regulatory agencies. For example, problems may include:

- Being out of compliance with regulations
- Leaking pipes
- Undersized tanks or uneven pressure
- Public misunderstanding or lack of support
- Funding challenges

The board should prepare a description of what needs to be repaired or upgraded to give engineers a clear understanding of the system's condition.

2. Do Your Homework

Boards should use resources from regulatory agencies, funding agencies, and technical assistance providers. These groups can help the board understand:

- Possible solutions
- New technology
- Basic terms and processes involved

Understanding the basics helps the board ask better questions and evaluate engineers' suggestions.

3. Request Proposals (RFP)

If funding will come from federal or state agencies, the board must follow their rules. The RFP should clearly describe



what the board wants the engineer to do. It typically includes:

- A description of the community
- An evaluation of the entire system
- Project phases and deliverables (such as the PER)
- A request for several alternatives, cost estimates, and a recommended solution
- Deadlines and evaluation criteria
- Expectations for communication and meeting attendance
- Requests for resumes, references, and examples of similar completed projects
- Instructions for interviews or presentations

4. Make a List of Engineering Firms

Boards can get lists from funding agencies or from similar communities. They may advertise the RFP in newspapers or send it directly to firms. Agencies such as Community Development Block Grant programs may require an open, competitive process.

5. Review and Narrow the Proposals

The board or committee reviews each proposal according to the criteria listed in the RFP. Additional priorities — such as experience with similar systems or knowledge of the region — may help narrow the field. It is important to be consistent, keep clear records of ratings, and use checklists.

Finalists are usually invited to make oral presentations at a board meeting.

6. Check References

Boards should contact references for finalists. Helpful questions include whether:

- The project was completed on time
- There were cost overruns or change orders
- Communication was satisfactory
- The firm worked well with the board and public

Boards may check references either before or after interviews but before selecting a firm.

7. Conduct Oral Interviews

The board or committee holds interviews in an open meeting. The project manager who will work directly with the community should attend and present. Every firm should be asked the same core questions. It is also acceptable to ask about their specific proposal.

The board may take action at the same meeting (if listed on the agenda) or wait until references are checked.

8. Hire the Engineer

Nevada law ([NRS 625.530](#) and NRS 332.115) requires that engineers be selected based on **qualifications**, not cost. Cost is negotiated only after the top firm is selected. Negotiations must take



place in an open meeting following Nevada’s open meeting law (NRS Chapter 241).

If the board cannot agree on cost with its first choice, it may negotiate with the next firm on the list.

The board should notify all firms of the final decision.

9. Retain the Engineer Through Project Phases

At each phase—PER, design, and construction—the board may stay with the same firm or choose a different one. If the board is satisfied with the PER, it may negotiate with that firm for the next phase. Funding agencies may have additional rules the board must follow.

Expectations

What boards should expect from engineers

Engineers should:

- Communicate clearly with the public, board, and manager
- Provide regular progress reports
- Attend board meetings when needed
- Help seek funding
- Understand how project costs affect rates
- Meet deadlines
- Be clear about costs, billing, and changes
- Present options and costs in plain language

What engineers expect from boards

Boards should:

- Understand the problems and communicate them clearly
- Provide consistent and timely communication
- Assign a primary contact person
- Ask questions when needed
- Put items on meeting agendas and act promptly
- Pay bills on time
- Use the engineer’s time wisely during visits