

Minnesota Board of Architecture, Engineering, Land Surveying, Landscape Architecture, Geoscience and Interior Design

STATEMENT OF NEED AND REASONABLENESS

Proposed Amendment to Rules Governing Oral Examinations, *Minnesota Rules*, 1800.0800, 1800.0900, 1800.2600, 1800.3600.

INTRODUCTION

The nature of the proposed rules of the Board of Architecture, Engineering, Land Surveying, Landscape Architecture, Geoscience and Interior Design (Board) is to amend its current rules which generally pertain to all licensees and specifically pertain to the licensure of professional engineers and land surveyors and an applicant's existing opportunity for oral examination in lieu of meeting established qualification standards. The proposed rules will remove oral examinations from the Board rules. In some circumstances, an oral interview requirement will replace the oral examination requirement.

The elimination of oral examinations is intended to strengthen the Board's requirements for licensure by ensuring that the competence and qualification of all applicants are evaluated under established, objective criteria. The current rules generally provide an opportunity to take an oral examination when an applicant lacks minimal education, experience or examination requirements. The existing rules allow, and in some circumstances require, oral examinations to be provided even when it is evident that the applicant is not qualified to act under a license issued by the Board. This is notwithstanding that oral examinations have been criticized as subjective and psychometrically difficult to defend. Additionally, oral exams are time consuming and expensive to create, proctor, and grade, and may be subject to legal challenge. In order to ensure the health, safety and welfare of the public, the Board maintains that an applicant should complete specific education, examination and experience requirements clearly spelled out in other rules prior to obtaining a professional license.

The current rules allow for an applicant for the professional engineering examination whose experience record does not clearly substantiate the required qualifying engineering experience, or who does not hold a degree from an approved engineering curriculum to apply to take an oral examination. The applicant must submit two exhibits of engineering work to qualify to take the oral examination for licensure in Minnesota; however, the existing rules provide no other guidance or directive as to the content, substance or procedure of the oral examination. In essence, oral exams allow an applicant to potentially become a licensed professional engineer without passing written examinations or completing the required minimum education or experience.

Requiring applicants to obtain an accredited degree, complete at least three years of qualifying experience, and pass the fundamentals and professional examinations ensures that the licensees are minimally competent and protects the public health, safety and welfare. Applicants should not have an avenue to "get around" these basic requirements.

In regard to the requirements for licensure as a land surveyor, the current rule indicates that an applicant may be required to appear before the board for an oral examination to determine the applicant's eligibility for admission to the professional examination. The passage of the fundamentals examination combined with the objective measurement of the education and experience requirements spelled out in rule establish the minimum standard for entrance to the professional land surveyor examination. Subjecting candidates to an oral examination does not enhance the Board's ability to protect the public health, safety and welfare. If the minimum requirements have been met, the applicant should be allowed to sit for the written examination, and upon passage, obtain a license.

The rules do not clearly state which applicants should be required to take an oral examination, leaving substantial discretion to the Board to potentially subject some candidates and not others to the oral examination. The rule states that the examination shall be conducted to review evidence of personal qualifications and evaluate the educational and experience record of the applicant. The educational and experience record can easily be reviewed without the applicant present and the "personal qualifications" are archaic and subjective. The Board will remove the option of oral examination from the land surveyor application requirements.

ALTERNATIVE FORMAT

Upon request, this Statement of Need and Reasonableness can be made available in an alternative format, such as large print, Braille, or cassette tape. To make a request, contact Andrea Barker at the Board of Architecture, Engineering, Land Surveying, Landscape Architecture, Geoscience and Interior Design, 85 E. 7th Place, Suite 160, St. Paul, MN 55101, (651) 757-1511, Fax: (651-297-5310), and email: andrea.barker@state.mn.us. TTY users may call the Board at (800) 627-3529.

STATUTORY AUTHORITY

All sources of statutory authority were adopted and effective prior to January 1, 1996, and so Minnesota Statutes, section 14.125, does not apply.

The Legislature granted the Board's authority to engage in rulemaking in Minnesota Statutes §326.06, which states:

326.06 General powers and duties of board.

Each member of the board shall receive a certificate of appointment from the governor, and, before beginning a term of office, shall file with the secretary of state the constitutional oath of office. The board shall adopt and have an official seal, which shall be affixed to all licenses granted; shall make all rules, not inconsistent with law, needed in performing its duties; and shall fix standards for determining the qualifications of applicants for certificates, which shall not exceed the requirements contained in the curriculum of a recognized school of architecture, landscape architecture, engineering, geoscience, or interior design. The board shall make rules to define classes of buildings with respect to

which persons performing services described in section 326.03, subdivision 2, may be exempted from the provisions of sections 326.02 to 326.15, by a finding of no probable risk to life, health, property or public welfare.

Under this statute, the Board has the necessary statutory authority to adopt the proposed rules.

REGULATORY ANALYSIS

“(1) a description of the classes of persons who probably will be affected by the proposed rule, including classes that will bear the costs of the proposed rule and classes that will benefit from the proposed rule”

The classes of persons who will probably be affected by the proposed rule are generally all applicants for professional engineer or land surveyor licensure who fail to meet minimum educational, experience, or examination standards.

The elimination of the oral examination will not increase or decrease direct costs to candidates, applicants, certificate holders or licensees (although, unqualified applicants may bear additional costs associated with securing education, experience, or examination). The public would benefit from the proposed rule by improving the quality of licensed professionals. Both professional engineer and land surveyor applicants will benefit from the proposed rule as they will have one less requirement for licensure. The Board will benefit as the rules will be easier and less costly to regulate.

“(2) the probable costs to the agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenues”

The probable costs to the agency of the implementation of the proposed rule will include the costs associated with the rulemaking. The Board anticipates a decrease in operating costs pertaining to the implementation of the proposed rule since the new rules will eliminate the need to create, administer, grade, or defend oral examinations. The probable cost of enforcing the proposed rule will likely decrease for the same reason.

The Board is charged with the implementation and enforcement of the proposed rule. As such, it does not anticipate any probable costs to any other agency of implementation and enforcement of the proposed rule.

“(3) a determination of whether there are less costly methods or less intrusive methods for achieving the purpose of the proposed rule”

The cost of the oral examinations falls on the Board as there is no statutory authority for the Board to charge applicants for oral examinations. The elimination of the oral examinations is the least costly method for the Board.

“(4) a description of any alternative methods for achieving the purpose of the proposed rule that were seriously considered by the agency and the reasons why they were rejected in favor of the proposed rule”

No alternative methods were seriously considered.

“(5) the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals”

The costs associated with creating, proctoring, grading, and, if applicable, defending oral exams are currently absorbed by the Board. There will be no change in the cost of compliance with the proposed rule since affected parties currently do not pay for the oral exams.

“(6) the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals”

Not adopting the proposed rule results in continued costs for the Board associated with creating, proctoring, grading, and, if applicable, defending oral exams. Not every applicant is required to take an oral examination, only those that lack objective, minimum requirements. For the applicants provided with an oral examination, however, the Board does not have a databank of questions on hand for use in an oral examination. In such instances, the Board must solicit experts for the content of each individual examination, draft the questions, administer and grade the examination, and potentially defend the entire process against legal challenges. Creating and administering an oral examination to a single applicant can be quite a costly and time-consuming undertaking for the Board. The rules already have in place requirements for education, written examination and experience to ensure the protection of the public health, safety and welfare. Requiring an oral examination in lieu of one of the requirements is costly, unnecessary and potentially compromises the public health, safety, and welfare by granting licensure to unqualified applicants.

Additionally, the cost to defend any legal challenges raised by an examinee following an unfavorable examination result can be significant, including hearings at the Office of Administrative Hearings and judicial review at the Minnesota Court of Appeals.

Adoption of the new rules will eliminate the oral examination costs.

“(7) an assessment of any differences between the proposed rule and existing federal regulations and a specific analysis of the need for and reasonableness of each difference”

No relationship exists between these rules and federal regulations.

PERFORMANCE-BASED RULES

Minnesota Statutes, sections 14.002 and 14.131, require that the SONAR describe how the agency, in developing the rules, considered and implemented performance-based standards that emphasize superior achievement in meeting the agency's regulatory objectives and maximum flexibility for the regulated party and the agency in meeting those goals.

To safeguard life, health and property, and promote the public welfare, the Board provides reasonable assurance that persons practicing within the Board's regulated professions are competent, ethical practitioners qualified through education, examination and experience as appropriate to their title and role. Additionally, as an official state licensing agency, the Board is charged with the responsibility of implementing those statutes and rules which specifically regulate the professions of architecture, engineering, land surveying, landscape architecture, geology and soil science.

The proposed rule amendments embodied in this Statement of Need and Reasonableness emphasize superior achievement in meeting the Board's regulatory objectives with maximum flexibility for the regulated party and the Board in meeting those goals.

First, the Board determined that oral examinations are costly, subjective and unnecessary. In the past, the Board administered oral examinations to applicants for licensure as a land surveyor. In order to create and administer a psychometrically defensible oral examination, the Board needs licensed subject matter experts to write the examination questions and administer and grade the exam. Each question should address, or focus on, different areas of competency. The cost of the subject matter experts is large and the ability for the Board to uphold a failing score in an appeal is low because the questions and scoring could be perceived as subjective. Additionally, the Board's requirements for education, written examination and experience for licensure are clearly spelled out and easily verified. There is generally no need to subject an applicant to an oral examination if the education, written examination and experience requirements are met.

Second, the proposed amendments allow for maximum flexibility to the regulated parties. Not all applicants for licensure as a professional engineer or land surveyor are required to pass an oral examination. According to the professional engineer rules, an applicant would only be required to complete an oral examination for one of three reasons: if the applicant's experience record was in question, if the applicant did not hold a degree from an approved engineer curriculum, or if an applicant qualified for waiver of the fundamentals of engineering examination. The Board's requirements for experience and education are clearly defined and in order to ensure protection of the public health, safety and welfare those requirements should be met. In the case of an applicant qualifying for a waiver of the fundamentals of engineering examination, an oral *interview* is sufficient to allow the applicant to demonstrate meeting the criteria for waiver and to provide any and all explanation necessary to support the waiver. An oral interview allows the applicant the flexibility to present the reasons for a waiver from the fundamentals of engineering examination without compromising the overall education, examination and experience requirements, whereas the current rules potentially allow an applicant who has not clearly met the education or experience requirements to bypass the requirement through an oral *examination*.

Finally, the proposed amendments allow for maximum flexibility to the Board in meeting its goals. The Board must protect the public health, safety and welfare. The Board ensures that its goals are met by verifying the completion of the education, written examination and experience requirements prior to issuing a license. If an applicant is allowed by rule to complete an oral examination in lieu of completing the standard education or experience requirements, the Board's ability to protect the public health, safety and welfare is diminished.

ADDITIONAL NOTICE

This Additional Notice Plan was reviewed by the Office of Administrative Hearings and approved in a letter by Administrative Law Judge Manuel J. Cervantes dated April 28, 2011 and a follow up letter dated May 6, 2011.

Copies of the Dual Notice of Intent to Adopt and the proposed rule change will be mailed to the Minnesota Chapter of the American Institute of Architects ("AIA"), the professional society representing architects regulated by this Board.

Copies of the Dual Notice of Intent to Adopt and the proposed rule change will be mailed to the Minnesota Society of Professional Engineers ("MSPE") and the American Council of Engineering Companies of Minnesota ("ACEC/MN"), the two largest professional societies representing professional engineers regulated by this Board.

Copies of the Dual Notice of Intent to Adopt and the proposed rule change will be mailed to the Minnesota Society of Professional Surveyors ("MSPS"), the professional society representing land surveyors regulated by this Board.

Copies of the Dual Notice of Intent to Adopt and the proposed rule change will be mailed to the Minnesota Chapter of the American Society of Landscape Architects ("MASLA"), the professional society representing landscape architects regulated by this Board.

Copies of the Dual Notice of Intent to Adopt and the proposed rule change will be mailed to the Minnesota Section of the American Institute of Professional Geologists ("AIPGMN"), the professional society representing professional geologists regulated by this Board.

Copies of the Dual Notice of Intent to Adopt and the proposed rule change will be mailed to the Minnesota Association of Professional Soil Scientists ("MAPSS"), the professional society representing professional soil scientists regulated by this Board.

Copies of the Dual Notice of Intent to Adopt and the proposed rule change will be mailed to the Northland Chapter of the International Interior Design Association ("IIDA") and the Minnesota Chapter of the American Society of Interior Designers ("ASID"), the two professional societies representing certified interior designers regulated by this Board.

Copies of the Dual Notice of Intent to Adopt and the proposed rule change will be mailed to the Minnesota Association of County Surveyors (“MACS”), the group that represents land surveyors regulated by this Board who are working for Minnesota local county governments.

Copies of the Dual Notice of Intent to Adopt and the proposed rule change will be mailed to Minnesota academic institutions that offer engineering degree programs accredited by the Accreditation Board for Engineering and Technology, Inc. (ABET):

- MN State University – Mankato: Department of Mechanical and Civil Engineering
- MN State University – Mankato: Department of Electrical and Computer Engineering
- St. Cloud State University: Department of Electrical and Computer Engineering
- St. Cloud State University: Department of Mechanical and Manufacturing Engineering
- Univ. of MN – Duluth: Department of Electrical and Computer Engineering
- Univ. of MN – Duluth: Department of Chemical Engineering
- Univ. of MN – Duluth: Department of Mechanical and Industrial Engineering
- Univ. of MN – Twin Cities: Aerospace Engineering and Mechanics Department
- Univ. of MN – Twin Cities: Biomedical Engineering Department
- Univ. of MN – Twin Cities: Department of Chemical Engineering
- Univ. of MN – Twin Cities: Department of Civil Engineering
- Univ. of MN – Twin Cities: Department of Electrical and Computer Engineering
- Univ. of MN – Twin Cities: Department of Mechanical Engineering
- University of St. Thomas: School of Engineering
- Winona State University: Composite Materials Engineering Department

Copies of the Dual Notice of Intent to Adopt and the proposed rule change will be mailed to Minnesota institutions that offer diploma or certificate level courses in land surveying, and to Minnesota academic institutions that offer college level courses in land surveying:

- Dunwoody College of Technology: Land Surveying Program
- St. Cloud State University: College of Social Sciences – Land Surveying and Mapping
- St. Paul College: Land Surveying Technology

The Board will also post the Dual Notice of Intent to Adopt and the proposed rule change on the Board’s website.

A postcard notification of the proposed rule changes with the website address where recipients will find the Dual Notice of Intent to Adopt, official language of the proposed rule and SONAR will be mailed to all current licensees and certificate holders.

Our Notice Plan also includes giving notice required by statute. We will mail the proposed rules and the Notice of Intent to Adopt to everyone who has registered to be on the Board’s rulemaking mailing list under Minnesota Statutes, section 14.14, subdivision 1a. We will also give notice to the Legislature per Minnesota Statutes, section 14.116.

Our Notice Plan did not include notifying the Commissioner of Agriculture because the rules do not affect farming operations per Minnesota Statutes, section 14.111.

Our Notice Plan does not including notifying the Council on Affairs of Chicano/Latino People because the rules do not have a primary effect on Chicano/Latino people per Minnesota Statutes, section 3.922.

CONSULTATION WITH MMB ON LOCAL GOVERNMENT IMPACT

As required by Minnesota Statutes, section 14.131, the Board will consult with Minnesota Management and Budget (MMB). We will do this by sending MMB copies of the documents that we send to the Governor's Office for review and approval on the same day we send them to the Governor's office. We will do this before the Board's publishing the Notice of Intent to Adopt. The documents will include: the Governor's Office Proposed Rule and SONAR Form; the proposed rules; and the SONAR. The Board will submit a copy of the cover correspondence and any response received from Minnesota Management and Budget to OAH at the hearing or with the documents it submits for ALJ review.

DETERMINATION ABOUT RULES REQUIRING LOCAL IMPLEMENTATION

As required by Minnesota Statutes, section 14.128, subdivision 1, the agency has considered whether these proposed rules will require a local government to adopt or amend any ordinance or other regulation in order to comply with these rules. The agency has determined that they do not because the rules pertain to individuals applying for licensure in Minnesota not entities. Compliance with the rules falls on individuals applying for licensure and enforcement of the rules falls solely on the Board.

COST OF COMPLYING FOR SMALL BUSINESS OR CITY

Agency Determination of Cost

As required by Minnesota Statutes, section 14.127, the Board has considered whether the cost of complying with the proposed rules in the first year after the rules take effect will exceed \$25,000 for any small business or small city. The Board has determined that the cost of complying with the proposed rules in the first year after the rules take effect will not exceed \$25,000 for any small business or small city.

The Board has made this determination based on the probable costs of complying with the proposed rule, as described in the Regulatory Analysis section on pages 3-4 of this SONAR.

LIST OF WITNESSES

If these rules go to a public hearing, the Board anticipates having the following witnesses testify in support of the need for and reasonableness of the rules.

Each of these individuals will testify to the value of the amendments to the value of the amendments to the engineering oral examination rules:

Mr. William Arockiasamy, Professional Engineer, Board Vice Chair
Mr. Doug Cooley, Professional Engineer, Board Secretary
Mr. Jim Grube, Professional Engineer
Mr. David Krech, Professional Engineer

Each of these individuals will testify to the value of the amendments to the value of the amendments to the land surveying oral examination rules:

Ms. Lisa Hanni, Land Surveyor
Mr. David Landecker, Land Surveyor, Board Treasurer

Each of these individuals will testify as to the need and reasonableness of the changes embodied in the proposed rules:

Ms. Kristine Kubes, JD, Public Member, Board Chair
Ms. Lyn Berglund, Certified Interior Designer
Ms. Mary Deeg, Certified Interior Designer
Mr. Gary Demele, Architect
Mr. David Fisher, Certified Building Official, Public Member
Mr. Bruce Johnson, Professional Geologist
Mr. Paul May, Architect
Ms. Micki Miller, Public Member
Mr. Peter Miller, Professional Soil Scientist
Mr. Carl Peterson, Certified Public Accountant, Public Member
Ms. Marjorie Pitz, Landscape Architect
Mr. Robert Seeger, Architect
Mr. John Uban, Landscape Architect

RULE-BY-RULE ANALYSIS

M.R. 1800.0800 PROOF OF QUALIFICATION TO PRACTICE.

The change to Part B clarifies how applicants may establish their qualifications. The Board has determined that oral examinations are costly and subjective and, in some cases, diminish the Board's ability to ensure the protection of the public health, safety and welfare. Applicants will not establish their qualifications through oral examination, but rather through objective, written supporting documentation.

M.R. 1800.0900 QUALIFICATION PROCEDURES.

The changes to Subparts 1 and 5 changes references of oral *examinations* to oral *interviews*. Since the Board will no longer subject applicants to oral examinations, any reference to oral

examinations is obsolete. However, the Board will continue to conduct oral interviews pursuant to M.R. 1800.2600 and M.R. 1800.3915.

M.R. 1800.2600 ORAL EXAMINATION.

The title of this rule is changed from ORAL EXAMINATION to ORAL INTERVIEW.

The criteria for which applicants may appear for an oral interview are modified. Currently, an applicant whose experience record does not clearly indicate the required qualifying engineering experience or an applicant who does not hold a degree from an approved engineering curriculum has the ability to appear before the Board for an oral examination. This option, combined with the current language in M.R. 1800.0800 Part B stating that an applicant may establish their qualifications to practice through an oral examination, has the potential to allow an applicant who has not met the minimum education, examination and experience requirements to obtain a license as a professional engineer in Minnesota. The Board already has specific, objective, education, experience and written examination requirements to ensure the protection of the health, safety and welfare of the public. The oral examination requirement is unnecessary if the education, experience and written examination requirements are met. Passing an oral examination is not the same as completing an accredited degree or qualifying experience.

Requiring applicants to obtain an accredited degree, complete at least three years of qualifying experience, and pass the fundamentals and professional examinations ensures that the licensees are minimally competent and protects the public health, safety and welfare. Applicants should not be able to bypass the education and experience requirements by taking an oral examination, thus, Parts A and B are removed.

Part C, requiring an applicant requesting a waiver from the fundamentals of engineering examination remains; however, the rule is changed to require an oral interview rather than an oral examination in this instance. By conducting an oral *interview* rather than an oral *examination*, both the Board and the applicant are given maximum flexibility in determining and documenting the qualifications for licensure. To require an oral *examination* would require the Board to create an objective, psychometrically defensible examination with clear guidelines for determining a pass or fail score. The score an applicant receives, whether it be pass or fail, may be subject to challenge and difficult to defend. An applicant who has received a failing score on an oral examination might also argue that the scorers were biased and unfair. It is also difficult to objectively measure the competence of an individual based on the limited questions and results of an oral examination. An oral *interview*, on the other hand, allows the Board to assess the qualifications of an applicant and allows the applicant to present and establish their qualifications through exhibits and supporting documentation to determine whether or not the requirements for waiver of the fundamentals of engineering examination have been met.

Finally, the sentence regarding applicants residing overseas is removed. An applicant residing overseas must meet the same minimum qualifications as an applicant residing in the United States and must establish that the requirements have been met in the same way. The same paperwork must be submitted, and in the case of an oral interview, the applicant should not be allowed to bypass the step because they are out of the country. The only time an applicant for licensure as an

engineer would appear for an oral interview under the proposed rules is when the applicant is requesting a waiver from the fundamentals of engineering examination. When granting a waiver for this important step to licensure, the Board must be certain that the proper qualifications for a waiver have been met and must ensure that the applicant requesting the waiver is actually the individual who has performed the work on the exhibits submitted. Allowing an overseas applicant to bypass this could potentially open the door for fraud and cheating.

M.R. 1800.3600 REQUIREMENTS FOR ADMISSION TO EXAMINATION

The reference to oral examinations in subpart 1 is removed, leaving only the requirement for written examination.

The changes to subpart 3 remove the possibility of an applicant for licensure as a land surveyor to be required to appear before the Board for an oral examination. There are several reasons for this change. The current language states that “following submission of an application for admission to the professional practice examination, the applicant *may* be required to appear before the board for an oral examination to determine the applicant’s eligibility for admission to the professional examinations.” The term “may”, combined with a lack of a clear statement of how the Board will determine which applicants would be required to take an oral examination, leaves too much discretion to the Board to potentially subject some applicants and not others to the oral examination. Either all applicants should complete an oral examination, or no applicants should complete an oral examination. It is unfair to subject select applicants to an oral examination and not others, especially with no clear guidelines for which applicants would be required to take the examination. The Board could establish guidelines to objectively determine which applicants should complete an oral examination, or the Board could subject all applicants for licensure as land surveyors to oral examinations; however the Board has already determined that oral examinations are expensive, subjective and difficult to defend.

The current language establishes an oral examination to determine the applicant’s eligibility for admission to the professional examinations. The passage of the fundamentals examination combined with the objective measurement of the education and experience requirements spelled out in rule establish the minimum standard for entrance to the professional land surveyor examination. Subjecting candidates to an oral examination does not enhance the Board’s ability to protect the public health, safety and welfare. If the minimum requirements have been met, the applicant should be allowed to sit for the written examination, and upon passage, obtain a license.

Additionally, the current language states that “the board shall conduct the [oral] examination to review evidence of personal qualifications and evaluate the educational and experience record of the applicant.” Supporting documentation required to be submitted with the application includes official transcripts showing the appropriate education and specific, verified hours of experience in several defined knowledge areas. This written documentation of education and experience can easily establish whether the requirements for admission to the professional examination have been met without the applicant appearing before the Board in person. The reference to the evaluation of the applicant’s “personal qualifications” is archaic. The oral examination is viewed by many land surveyors as a rite of passage; however the protection of the public health, safety and welfare is not enhanced by requiring an applicant to complete an oral examination. The judgment of an

applicant's "personal qualifications" is irrelevant and subjective. Under the current rules, an applicant who had completed the appropriate education and experience requirements for licensure could potentially be denied the right to take the professional examination simply because the licensee conducting the oral examination did not like the applicant. In order to protect the public's health, safety and welfare, the education, written examination and experience requirements are sufficient.

CONCLUSION

Based on the foregoing, the proposed rules are both needed and reasonable.

5/26/11
Date

Doreen Frost
Doreen Frost
Executive Director