

Chapter 820 Board of Examiners for Engineering and Land Surveying

DIVISION 1

820-010-0720 Engineering or Land Surveying Offices

PROCEDURAL RULES

- 820-001-0000** Notice Rule
- 820-001-0005** Contested Cases
- 820-001-0010** Requiring an Answer to Charges as Part of Notices to Parties in Contested Cases
- 820-001-0015** Hearing Request and Answers: Consequences of Failure to Answer
- 820-001-0020** Public Records Requests

DIVISION 10

LICENSING

- 820-010-0010** Definitions
- 820-010-0200** Application for Registration as Professional Engineers (PE)
- 820-010-0205** Applications for Registration as Professional Land Surveyors (PLS)
- 820-010-0207** Applications for Registration as Professional Photogrammetrists
- 820-010-0210** Application for Enrollment as an Engineering (EI) and Land Surveying Intern (LSI)
- 820-010-0215** Form of Applications
- 820-010-0225** Information to Be Furnished by EI and LSI Applicants
- 820-010-0230** Information to Be Furnished by Professional Engineer, Professional Land Surveyor, and Professional Photogrammetrist Applicants
- 820-010-0235** Information to Be Furnished by Water Right Examiners Applicants
- 820-010-0255** References
- 820-010-0260** Rejections
- 820-010-0300** Refunds and Charges
- 820-010-0305** Fees
- 820-010-0325** Budget
- 820-010-0400** Examinations
- 820-010-0415** Nature of the Examination for Professional Engineer (PE)
- 820-010-0420** Nature of Examination for Engineering Intern (EI)
- 820-010-0425** Nature of Examination for Professional Land Surveyor (PLS)
- 820-010-0427** Nature of Examination for Professional Photogrammetrists
- 820-010-0430** Nature of Examination for Land Surveyor Intern (LSI)
- 820-010-0435** Oral Interview
- 820-010-0440** Times for Examinations
- 820-010-0450** Branches Examined by Board
- 820-010-0455** Exemption from FE or FLS Examination
- 820-010-0460** Exemption from FE Section
- 820-010-0465** Application for Readmission to Examination
- 820-010-0470** Review of Examinations
- 820-010-0500** Qualifications of Administrative Officer (Executive Secretary)
- 820-010-0600** Records
- 820-010-0605** Address Changes; Service of Notice
- 820-010-0610** Certificates of Registration and Enrollment
- 820-010-0615** Posting of Certificates
- 820-010-0617** Civil Penalty Consideration Factors
- 820-010-0618** Policy in Establishing Civil Penalty Amounts
- 820-010-0619** Civil Penalties for Violations of ORS 92.040 to 92.080, 209.250, and County Ordinances
- 820-010-0620** Official Seal
- 820-010-0622** Modifying Designs or Documents Prepared by Another Professional Engineer
- 820-010-0623** Dual Stamping Documents
- 820-010-0625** Registration and Certificate Number
- 820-010-0635** Continuing Professional Development

DIVISION 15

PROCEDURE FOR FILING COMPLAINTS

- 820-015-0005** Definitions
- 820-015-0010** Processing Complaints
- 820-015-0026** Failure to Comply with Continuing Professional Development Requirements

DIVISION 20

RULES OF PROFESSIONAL CONDUCT

- 820-020-0005** Preamble
- 820-020-0010** Fundamental Canons
- 820-020-0015** Registrants Shall Hold Paramount the Safety, Health and Welfare of the Public in the Performance of their Professional Duties
- 820-020-0020** Registrants Shall Perform Services Only in the Areas of Their Competence
- 820-020-0025** Registrants Shall Issue Public Statements Only in an Objective and Truthful Manner
- 820-020-0030** Registrants Shall Act in Professional Matters for Each Employer or Client as Faithful Agents or Trustees, and Shall Avoid Conflicts of Interest
- 820-020-0035** Registrants Shall Avoid Improper Solicitation of Professional Employment
- 820-020-0040** Examination Subversion
- 820-020-0045** Unprofessional Behavior

DIVISION 30

THE PRACTICE OF LAND SURVEYING

- 820-030-0060** Filing Time and Place
- 820-030-0070** Surveyor's Seal and Signature Required

DIVISION 40

THE PRACTICE OF ENGINEERING

- 820-040-0005** Definitions
- 820-040-0010** Electrical Engineering
- 820-040-0020** Structural Engineering
- 820-040-0030** Traffic Engineering
- 820-040-0040** Geotechnical Engineering

DIVISION 1

PROCEDURAL RULES

820-001-0000 Notice Rule

Before permanently adopting, amending or repealing any rule, the Oregon Board of Examiners for Engineering and Land Surveying will give notice of the intended action:

(1) In the Secretary of State's Bulletin referred to in ORS 183.360 at least twenty-one (21) days prior to the effective date.

(2) By mailing or electronic mailing a copy of the notice to persons on the agency's mailing list established pursuant to ORS 183.335(8) at least twenty-eight (28) days before the effective date of the rule.

(3) By mailing or electronic mailing a copy of the notice to the legislators specified in ORS 183.335(15) at least forty-nine (49) days before the effective date of the rule; and

(4) By mailing, electronic mailing, or furnishing a copy of the notice to:

- (a) Publications:
 - (A) The Associated Press; and
 - (B) Portland Business Today.
- (b) State Societies:

- (A) American Council of Engineering Companies of Oregon;
- (B) Professional Engineers of Oregon;
- (C) Professional Land Surveyors of Oregon;
- (D) Structural Engineers Association of Oregon; and
- (E) Oregon Association of County Engineers and Surveyors.

below:

- (A) American Society of Heating, Refrigeration, and Air Conditioning Engineers;
 - (B) American Institute of Industrial Engineers;
 - (C) American Society of Civil Engineers;
 - (D) American Society of Mechanical Engineers;
 - (E) Institute of Electrical and Electronic Engineers;
 - (F) Illuminating Engineers Society; and
 - (G) American Institute of Chemical Engineers.
- (d) Colleges, universities and community colleges within the State with an engineering and/or land surveying degree program.
- (e) Capitol Press Room.
- (5) The agency may update the mailing list described in section (2) of this rule annually by requesting persons to confirm that they wish to remain on the mailing list. If a person does not respond to a request for confirmation within twenty-eight (28) days of the date that the agency sends the request, the agency will remove the person from the mailing list. Any person removed from the mailing list will be immediately returned to the mailing list upon request, provided that the person provides a mailing address or electronic mailing address to which notice may be sent.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 18, f. & ef. 1-13-76; EE 1-1981, f. 5-19-81, ef. 6-1-81; EE 2-1985, f. 12-4-85, ef. 12-16-85; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; BEELS 1-1998, f. & cert. ef. 2-10-98; BEELS 2-2004, f. & cert. ef. 7-14-04; BEELS 1-2006(Temp.), f. & cert. ef. 6-23-06 thru 12-12-06

820-001-0005

Contested Cases

Pursuant to ORS 183.341, the Board of Examiners for Engineering and Land Surveying adopts the current version of the Attorney General's Model Rules of Procedure under the Administrative Procedure Act.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 12, f. 11-2-71, ef. 11-15-71; EE 13, f. 3-29-72, ef. 4-15-72; EE 15, f. 11-21-73, ef. 12-11-73; EE 19, f. 3-3-76, ef. 3-5-76; Renumbered from 820-010-0800; EE 1-1978, f. 4-19-78, ef. 5-1-78; EE 1-1980, f. & ef. 5-14-80; EE 3-1981, f. & ef. 12-14-81; EE 1-1984, f. & ef. 3-6-84; EE 1-1994, f. & cert. ef. 2-11-94; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; EE 1-1996, f. & cert. ef. 8-30-96; BEELS 1-1998, f. & cert. ef. 2-10-98

820-001-0010

Requiring an Answer to Charges as Part of Notices to Parties in Contested Cases

In addition to the notice requirements under the Attorney General's Model Rules of Procedure under OAR 820-001-0005, the Notice to Parties in Contested Cases may include the statement that an answer to the assertions or charges will be required, and if so, the consequence of failure to answer. A statement of the consequences of failure to answer may be satisfied by enclosing a copy of OAR 820-001-0015 with the notice.

Stat. Auth.: ORS 670 & 672

Stats. Implemented:

Hist.: EE 2-1983, f. 2-28-83, ef. 3-1-83

820-001-0015

Hearing Request and Answers: Consequences of Failure to Answer

(1) A hearing request, and answer when required, shall be made in writing to the Board by the party or his/her attorney and an answer shall include the following:

- (a) An admission or denial of each factual matter alleged in the notice;
- (b) A short and plain statement of each relevant affirmative defense the party may have.
- (2) Except for good cause:

- (a) Factual matters alleged in the notice and not denied in the answer shall be presumed admitted;
- (b) Failure to raise a particular defense in the answer will be considered a waiver of such defense;
- (c) New matters alleged in the answer (affirmative defenses) shall be presumed to be denied by the board; and
- (d) Evidence shall not be taken on any issue not raised in the notice and the answer.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 2-1983, f. 2-28-83, ef. 3-1-83; BEELS 1-1998, f. & cert. ef. 2-10-98

820-001-0020

Public Records Requests

(1) Scope and Applicability. This rule governs requests for inspection of Board documents under the Public Records Law, ORS Chapter 192.

(2) All requests must be submitted in writing for copies of public records pertaining to the Board.

(3) The Board charges fees as follows for reimbursement of the actual cost in making public records available upon request:

- (a) Postage/freight — First Class or rate(s) based on weight for public records mailed or sent by carrier.
- (b) Audio Cassette — 90 minute — \$10.00 each.
- (c) Lists, or computer disk of licensees — \$50.
- (d) Photocopies — \$0.25 per page.
- (e) A waiver or reduction of fees requested under ORS 192.440 must be submitted in writing, show how a waiver or reduction is in the public interest and that availability will benefit the general public.
- (f) No fees are charged:

(A) To Board members when conducting official Board business;

(B) For first five pages of any Board documents;

(C) To public libraries, public educational institutions, or federal, state, county or city agencies participating in a cooperative program with the Board; or

(D) To examine records readily available which do not require supervision during the inspection.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: BEELS 2-2004, f. & cert. ef. 7-14-04

DIVISION 10

LICENSING

820-010-0010

Definitions

The following definitions and guides have been adopted by the Board to assist registrants and the general public in their interpretation of specific portions of ORS 672.002 to 672.325.

(1) "Board" means the Oregon State Board of Examiners for Engineering and Land Surveying provided by ORS 672.240.

(2) "Practice of engineering" refers to ORS 672.005 and 672.007.

(3) "Technician work" means the time spent on work where the personal responsibility and technical knowledge required are small; that is, where the individual performance of a task, set and supervised by others, is all that is required. It shall also include all time spent in work before an applicant is 18 years old "Technician work" does not include engineering work as described in section (4), land surveying work as described in section (7) or photogrammetric work as described in section (10). Engineering "technician work" includes, but is not limited to, work as an inspector, a laboratory assistant, a design assistant, a survey technician, or a draftsman. Land Surveying "technician work" includes, but is not limited to, work as a survey technician, a draftsman, an instrument plotter, or computation work under close supervision and not requiring the exercise of judgment in survey or map design, or decisions on boundary location. Photogrammetric mapping "technician work" includes but is not limited to, work as a photogrammetric mapping technician to perform technical photogrammetric or remote sensing tasks to extract spatial

data from photographic imagery, digital imagery or other remotely-sensed data under close supervision and not requiring the exercise of judgment in project design or decisions related to authoritative photogrammetric measurements.

(4) "Engineering work," means time after an applicant is 18 years old spent in work of a higher grade and responsibility than that defined as "technician work." Time spent in engineering teaching subsequent to graduation shall be listed as "engineering work." Time spent in training and performing engineering work to supplement engineering education for the purpose of qualifying for the FE examination shall be listed as "engineering work." Engineering work done during summer vacations will be considered as part of the year of "engineering education."

(5) As provided in ORS 672.002(9)(a), "responsible charge of engineering work" means that:

(a) The applicant must have had direction of work, the successful accomplishment of which rested upon the individual, where the individual had to decide questions of methods of execution and suitability of materials, without relying upon instruction from their superior, and of supplying deficiencies in plans, or correcting errors in design without first referring them to higher authority for approval; or

(b) That the applicant must have undertaken investigations or carried out important assignments that demand resourcefulness and originality, or made plans, written specifications, and directed computations made in connection with engineering works when guided solely by rough sketches, general information, and field measurements; or

(c) Experience as a full-time assistant professor or above, in a Board-approved engineering curriculum, may be considered at the discretion of the Board as "charge of engineering work of a character satisfactory to the Board."

(6) "Practice of land surveying" refers to ORS 672.005(2) and 672.007.

(7) "Land surveying work" means time after the applicant is 18 years old spent in work of a higher grade and responsibility than that defined as "technician work." Engineering work, not related to the practice of land surveying, is not land surveying work. Time spent in training and performing land surveying work to supplement surveying education, for the purpose of qualifying for the FLS examination shall be listed as "land surveying work." "Land surveying work" done during summer vacations shall be considered as part of the year of "land surveying education."

(8) As provided in ORS 672.002(9)(b), "responsible charge of land surveying work" means that:

(a) The applicant must have had direction of work, the successful accomplishment of which rested upon the individual, where the individual had to decide questions of methods of execution, design of a survey system, the research and evaluation of evidence, the preparation of maps, or plats for record without relying upon advice or instruction from their superior, and the supplying of deficiencies or correcting errors in surveys or maps without first referring them to higher authority for approval; or

(b) That the applicant must have undertaken investigations or carried out important assignments that demand resourcefulness and originality, or made plans and directed computations in connection with land surveying work when guided solely by general guidelines and information;

(c) Experience as a full-time assistant professor or above, in a Board-approved land surveying curriculum may be considered at the discretion of the Board as "charge of land surveying work."

(9) "Practice of photogrammetric mapping" or "practice of photogrammetry" refers to ORS 672.002(7).

(10) "Photogrammetric work" means time after the applicant is 18 years old spent in work of a higher grade and responsibility than that defined as "technician work." Time spent teaching photogrammetric mapping after graduation shall be listed as "photogrammetric work." Time spent in training and performing photogrammetric mapping to supplement education for the purpose of qualifying for the FLS examination shall be listed as "photogrammetric work." "Pho-

togrammetric work" done during summer vacations will be considered as part of the year of "photogrammetric education."

(11) "Responsible charge of photogrammetric work" means that:

(a) The applicant must have had direction of work, the successful accomplishment of which rested upon the individual, where the individual had to make decisions involving project design, imagery requirements, ground control requirements for points to be set by a professional land surveyor and the determination of topography, area, contours and location of planimetric features using photogrammetric methods or similar remote sensing technology; or

(b) The applicant must have undertaken projects that entail the evaluation and measurement of land that is limited to the determination of the topography, area, contours and location of planimetric features, by using photogrammetric methods or similar remote sensing technology; or

(c) Experience as a full-time assistant professor or above, in a Board-approved photogrammetry curriculum, may be considered at the discretion of the Board as "charge of photogrammetric work of a character satisfactory to the Board."

(12) As provided in ORS 672.002(10), "under direct supervision and control" shall be construed to mean that the engineer, land surveyor or photogrammetrist providing such supervision shall have made the decisions on technical matters of policy and design and shall have exercised their own professional judgment in all engineering, land surveying or photogrammetric matters that are embodied in the plans, design, specifications, or other documents involved in the work. By applying their seal to the final documents, they accept responsibility thereof.

(13) Professional Development Hour (PDH) — A contact hour (nominal) of instruction or presentation. The common denominator for other units of credit.

(14) Continuing Education Unit (CEU) — Unit of credit customarily used for continuing education courses. One continuing education unit equals 10 hours of class in an approved continuing education course.

(15) College/Unit Semester/Quarter Hour — Credit for course work in an approved program or other related college course approved in accordance with article (e) of this section.

(16) Course/Activity — Any qualifying course or activity with a clear purpose and objective which will maintain, improve or expand the skills and knowledge relevant to the licensee's field of practice.

(17) Multiple Registrant — A person who is registered as both a land surveyor and an engineer or is registered as an engineer in two or more disciplines.

(18) Active Status means the registrant is authorized to engage in the professional practice of engineering, land surveying or photogrammetric mapping, and is in good standing with regard to payment of annual renewal fees and Continuing Professional Development requirements.

(19) Exempt Status means the registrant has notified the Board that they are not providing or offering to provide professional engineering, land surveying or photogrammetric mapping services to the public of the State of Oregon and requests exemption from Continuing Professional Development requirements.

(20) Inactive Status means the registrant is not holding out as a professional engineer, land surveyor or photogrammetrist and is not authorized to engage in the professional practice of engineering, land surveying or photogrammetric mapping until such time the Board determines otherwise.

(21) Retired status means an engineer or land surveyor meeting the requirements of ORS 672.180, who has notified the Board that they are not providing engineering or land surveying services to the public of the State of Oregon and who requests the retired status.

(22) Delinquent Status means the registrant has not renewed their license or has not completed the Continuing Professional Development requirements.

(23) Nonresident engineer means a nonresident engineer as used in ORS 672.050 shall mean an engineer who does not meet the residence requirements of OAR 820-010-0616(1).

(24) Acronyms:

- (a) ACCE — American Council for Construction Education;
- (b) ABET — Accreditation Board for Engineering and Technology, Inc.;
- (c) EAC — Engineering Accreditation Commission of ABET;
- (d) TAC — Technology Accreditation Commission of ABET;
- (e) ASAC — Applied Science Accreditation Commission of ABET;

(f) EI — Engineering Intern;

(g) LSI — Land Surveying Intern.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 16, f. 3-5-74, ef. 3-25-74; EE 17, f. 4-22-74, ef. 5-11-74; EE 20, f. & ef. 12-15-77; EE 1-1987, f. & ef. 1-5-87; EE 1-1992, f. & cert. ef. 2-3-92; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; BEELS 1-1998, f. & cert. ef. 2-10-98; BEELS 1-2000, f. & cert. ef. 1-14-00; BEELS 4-2000, f. & cert. ef. 8-4-00; BEELS 5-2000, f. & cert. ef. 10-19-00; BEELS 1-2001, f. & cert. ef. 5-22-01; BEELS 1-2002, f. & cert. ef. 3-13-02; BEELS 1-2004, f. & cert. ef. 1-26-04; BEELS 2-2004, f. & cert. ef. 7-14-04; BEELS 1-2005, f. & cert. ef. 3-16-05; BEELS 6-2005, f. & cert. ef. 12-13-05

820-010-0200

Application for Registration as Professional Engineers (PE)

(1) (References are to Engineers' and Land Surveyors' Registration Law, ORS Chapter 672, as amended.) Applications may be made for admission to examination for registration as provided in ORS 672.255. Professional engineers registered in other states may file applications for registration on the basis of comity with such other state as provided in ORS 672.125. The National Council of Examiners for Engineering and Surveying Certificate verified record may be accepted at full value. Experience records and references of the NCEES verified record are to be current within the last two years. If not, they must be verified by the Board.

(2) Applicants who are not registered in any state or jurisdiction but who meet all requirements for registration in Oregon may be considered for registration if the application is submitted within 2 years following completion of the practical examination. This section does not apply to applicants who are not currently registered due to expired, delinquent, or otherwise invalid certificates.

(3) Professional engineers currently registered in another jurisdiction that, at the time of that registration, did not require an examination equivalent to the Fundamentals of Engineering may be considered as having met substantially-equivalent requirements for registration in Oregon after providing evidence of each of the following:

(a) Graduation in an engineering curriculum of four years or more;

(b) Passage of a written examination devoted to practical engineering problems; and

(c) No less than 12 years of qualifying engineering practice, approved by the Board, as a registered professional or a chartered engineer in a jurisdiction identified as approved by the Board through the agreement on education known as the "Washington Accord";

(d) Successful passage of an oral exam if required by the Board;

(e) Applicants are advised that registration under this equivalent provision may not satisfy requirements in other jurisdictions.

(4) Prior to issuing an initial certificate of registration to practice in Oregon, each applicant must pass a "take-home" examination on the laws and rules that regulate practice.

(5) The Board shall grant registration as a "Geotechnical Engineer" to a professional engineer if the professional engineer:

(a) Holds an unexpired, valid Oregon license as a professional;

(b) Passes the geotechnical engineering examination offered by the Board; and

(c) Submits evidence satisfactory to the Board demonstrating four (4) years of qualifying experience as required by ORS 672.255(1)(d) and as defined in Section 820-040-0040. In addition, up to one year credit for qualifying experience will be given for possession of post graduate degree(s) from a Board approved school of engineering with major studies in soil engineering. Credit for post graduate degree(s) will not be given if already applied to the experience requirement for professional engineering licensure.

(6) Within one year after the date the Board first gives an examination in the new branch, a professional engineer may qualify for registration as a professional geotechnical engineer without taking the geotechnical exam if the engineer is licensed in a branch of engineering and submits an application that demonstrates qualifying experience to the satisfaction of the Board.

(7) "Qualifying experience" as used in section (6) of this rule means:

(a) At least four (4) years of experience having responsible charge of soil engineering projects in geotechnical engineering as defined in 820-040-0040 and accumulated since licensure as a professional engineer. The application must contain a description of the pertinent geotechnical aspects of each project claimed as part of the minimum experience. Teaching soil engineering and related courses at a board approved school of engineering will be given credit as qualifying experience.

(b) Unless waived by the Board, an applicant must provide at least three (3) references acceptable to the Board from professional engineers substantiating the applicant's experience and that the application meets the requirements for geotechnical engineering as defined in 820-040-0040. Additional references may be required to substantiate all of the minimum experience.

(8) The titles "geotechnical engineer," "soils engineer," "foundation engineer," and "soil engineer" are identifications of competence and specialization in the geotechnical subspecialty of professional engineering and necessitates experience in addition to that required for registration as a professional engineer. Use of any of the above designations without licensure as a geotechnical engineer is misleading to the public and may subject the registrant to disciplinary action by the board.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 16, f. 3-5-74, ef. 3-25-74; EE 20, f. & ef. 12-15-77; EE 1-1992, f. & cert. ef. 2-3-92; EE 1-1993, f. 1-28-93, cert. ef. 2-1-93; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; BEELS 1-1998, f. & cert. ef. 2-10-98; BEELS 1-2000, f. & cert. ef. 1-14-00; BEELS 3-2001, f. & cert. ef. 11-26-01; BEELS 1-2003, f. & cert. ef. 1-28-03; BEELS 1-2004, f. & cert. ef. 1-26-04; BEELS 1-2005, f. & cert. ef. 3-16-05

820-010-0205

Applications for Registration as Professional Land Surveyors (PLS)

(1) Applications may be made for admission to examination for registration as provided in ORS 672.255. Professional Land Surveyors registered in other states and making application for registration on the basis of comity with such other states in accordance with the provisions of ORS 672.125, must successfully pass an examination which includes a state-specific portion covering Oregon law.

(2) Applicants who are not registered in any state or jurisdiction but who meet all requirements for registration in Oregon may be considered for registration if the application is submitted within 2 years following completion of the practical examination. This section does not apply to applicants who are not currently registered due to expired, delinquent, or otherwise invalid certificates.

(3) Prior to issuing an initial certificate of registration to practice in Oregon, each applicant must pass a "take-home" examination on the laws and rules that regulate practice.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 20, f. & ef. 12-15-77; EE 1-1992, f. & cert. ef. 2-3-92; BEELS 3-2001, f. & cert. ef. 11-26-01; BEELS 5-2005(Temp), f. & cert. ef. 9-23-05 thru 3-21-06; BEELS 6-2005, f. & cert. ef. 12-13-05

820-010-0207

Applications for Registration as Professional Photogrammetrists

(1) Applications may be made for admission to examination for registration as provided in ORS 672.255. Professional Photogrammetrists registered in other states may apply for registration on the basis of comity with such other states in accordance with the provisions of ORS 672.125.

(2) Prior to issuing an initial certificate of registration to practice in Oregon, each applicant must pass a "take-home" examination on the laws and rules that regulate practice.

Stat. Auth.: ORS 670.310 & 672.255
 Stats. Implemented: ORS 672.002 - 672.325
 Hist.: BEELS 6-2005, f. & cert. ef. 12-13-05

820-010-0210

Application for Enrollment as an Engineering Intern (EI) and Land Surveying Intern (LSI)

(1) Applications may be made for admission to examination for enrollment as an EI or LSI as provided in ORS 672.255. Applications must be submitted by the dates specified in OAR 820-010-0440 to be considered by the Board.

(2) If an applicant qualifies for and fails to pass the FE or FLS exam prior to January 1, 2006, he/she remains qualified to sit again for the exam for a period limited to five years and one month. This five-year, one-month period is measured from the date the exam was initially taken.

Stat. Auth.: ORS 670.310, 672.097, 672.099 & 672.255
 Stats. Implemented: ORS 672.002 - 672.325
 Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 20, f. & ef. 12-15-77; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; BEELS 2-1999, f. & cert. ef. 9-15-99

820-010-0215

Form of Applications

Applications for registration as professional engineers, professional land surveyors, professional photogrammetrists and for enrollment as an EI, an LSI, or a water right examiner shall be made on printed forms issued by the Board. All applications must be accompanied by the licensing or examination fee required by law.

Stat. Auth.: ORS 670.310 & 672.255
 Stats. Implemented: ORS 672.002 - 672.325
 Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 20, f. & ef. 12-15-77; EE 1-1983, f. 2-28-83, ef. 3-1-83; EE 2-1986, f. 3-26-86, ef. 3-31-86; EE 4-1987, f. & ef. 12-1-87; EE 1-1992, f. & cert. ef. 2-3-92; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; Renumbered from 820-010-0220; BEELS 6-2005, f. & cert. ef. 12-13-05

820-010-0225

Information to Be Furnished by EI and LSI Applicants

Applicants for admission to examination for enrollment as an EI or LSI will be required to submit the following evidence to show eligibility to take the FE or FLS examination:

(1) Grade transcripts demonstrating completion of an engineering or land surveying curriculum satisfactory to the Board, as described in (3) through (7) hereinafter.

(2) If taking the examination in the applicant's senior year, a statement signed by an official from the school, university or college that all work necessary to complete a curriculum satisfactory to the Board has been or will be completed within four months following the examination as provided in ORS Chapter 670. A transcript verifying completion must be received to allow enrollment. Scores will not be released until verification of completion is received.

(3) For entrance to the Fundamentals of Engineering Examination, a curriculum acceptable to the Board shall include, but not be limited to:

(a) Graduation from an EAC of ABET accredited engineering program.

(b) Graduation from a TAC of ABET baccalaureate engineering program or an ACCE accredited four year baccalaureate construction engineering management program.

(c) Graduation from a Graduate Degree Program in engineering at a college or university which has an EAC of ABET accredited undergraduate degree program in the same field as the Graduate degree program and completion of a specified curriculum. The specified curriculum shall include 21 semester/32 quarter hours of engineering related technical course work approved by the Board. The specified curriculum shall include courses in at least six of the following eight subjects: Differential Equations, Physics, Statistics, Statics, Dynamics, Thermodynamics, Fluid Mechanics, Electrical Fundamentals and Strength of Materials.

(d) Graduation from TAC of ABET accredited two-year Engineering Technology program or graduation from a two-year Associate of Applied Science program, which the Board finds, has adequately prepared the applicant for enrollment as an EI. A Board approved curriculum shall meet the following criteria:

(A) A total of at least 64 semester/96 quarter hours.

(B) At least 32 semester/48 quarter hours in technical courses. (Skills and knowledge of appropriate methods, procedures and techniques; experience in carrying out established engineering procedures).

(C) At least 16 semester/24 quarter hours in math and science: (i) 4 semester/6 quarter basic science (physics, chemistry, earth and life sciences);

(ii) 8 semester/12 quarter mathematics (not counting courses below college algebra or courses in computer programming).

(D) At least 9 semester/13 quarter hours in social science, humanities and communications.

(E) However, prior to being admitted to the FE examination, graduates from the above described two-year programs shall complete two or more years of active practice in engineering work of a character satisfactory to the Board or complete additional course work set out in OAR 820-010-0230(1)(b). The additional course work shall be in addition to that required by the two-year degree.

(e) Completion of a curriculum that the Board finds has adequately prepared the applicant for enrollment as an EI.

(4) For entrance to the Fundamentals of Land Surveying Examination, a curriculum acceptable to the Board shall include, but not be limited to:

(a) Graduation from an EAC/ASAC/TAC of ABET accredited four year baccalaureate land surveying program.

(b) Graduation from a Graduate Degree Program in engineering or surveying with 11 semester/16 quarter-credits of surveying instruction as defined in ORS 672.005(2)(a) through (d), "Practice of Land Surveying."

(c) Graduation from a ASAC/TAC of ABET accredited two-year Surveying Technology program or graduation from a two-year Associate of Applied Science program in Surveying Technology or Engineering Technology, which the Board finds, has adequately prepared the applicant for enrollment as a LSI. A Board approved curriculum shall meet the following criteria:

(A) A total of at least 64 semester/96 quarter hours.

(B) At least 32 semester/48 quarter hours in technical courses, of which a minimum of 11 semester/16 quarter hours shall be in subjects defined in ORS 672.005(2)(a) through (d), "Practice of Land Surveying."

(C) At least 16 semester/24 quarter hours in subjects such as math, science, basic electricity, hydraulics, road design, construction management and estimating engineering economics with college level algebra, trigonometry and statistics.

(D) At least 9 semester/13 quarter hours in social science, humanities and communications.

(E) However, prior to being admitted to the FLS examination, graduates from the above described two-year programs shall complete two or more years of active practice in land surveying work of a character satisfactory to the Board.

(d) Graduation from either an EAC/TAC of ABET, an ACCE accredited four-year baccalaureate program or a Board approved engineering curriculum of four years or more with 11 semester/16 quarter hours of surveying instruction as defined in ORS 672.005(2)(a) through (d), "Practice of Land Surveying."

(e) Completion of a curriculum that the Board finds as adequately prepared the applicant for enrollment as an LSI.

(5) Notwithstanding (3)(a), (b), (c), (d), and (e), and (4)(a), (b), (c), (d), and (e) above, an applicant may apply for admission to the examination based on a combination of education and experience in the practice of engineering for the FE examination or the practice of land surveying for the FLS examination if the applicant's experience and education meet the following criteria:

(a) The experience, defined as "engineering work" or "land surveying work," shall meet the definition of responsible charge and be performed under the direct supervision of a licensed professional PE or LS; and

(b) The applicant has completed sufficient college course work in engineering ethics, fundamentals and design for the FE examination or land surveying ethics, fundamentals and practical application for the FLS examination to demonstrate to the Board that the appli-

cant is competent to practice either engineering or land surveying under the supervision of a licensed professional engineer or land surveyor.

(c) Where “engineering work” or “land surveying work” is substituted for “engineering education” or “land surveying education” the applicant must submit a specific record of eight or more years active practice in engineering or land surveying work of a character satisfactory to the Board.

(6) Examination results will be distributed as soon as available to any interested parties that have submitted written requests for statistical information. Based upon data provided by the candidates, results shall identify the educational institution, and the title of the program from which the candidate graduated. The results shall be stated in terms of the number of successful candidates expressed as a percent of all candidates from the same institution and program.

Stat. Auth.: ORS 670.310, 672.097, 672.099, 672.255 & 672.155

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 16, f. 3-5-74, ef. 3-25-74; EE 20, f. & ef. 12-15-77; EE 1-1986, f. 2-4-86, ef. 2-15-86; EE 1-1992, f. & cert. ef. 2-3-92; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; EE 2-1996, f. & cert. ef. 10-3-96; BEELS 1-1998, f. & cert. ef. 2-10-98; BEELS 1-1999, f. 5-27-99, cert. ef. 7-1-99; BEELS 1-2001, f. & cert. ef. 5-22-01; BEELS 1-2004, f. & cert. ef. 1-26-04

820-010-0230

Information to Be Furnished by Professional Engineer, Professional Land Surveyor, and Professional Photogrammetrist Applicants

(1) Applicants for admission to examination for registration will be required to submit evidence to show qualification of eligibility consisting of current enrollment as an EI or LSI, meeting the requirements of the State of Oregon at the time of enrollment and the following practice experience:

(a) Applicants qualified under OAR 820-010-0225(3)(a), (3)(c), (3)(e), (4)(a), (4)(b), (4)(d), (4)(e) and (5) shall verify having four or more years of active practice in engineering, land surveying, or photogrammetric work of a character satisfactory to the Board in addition to the requirements for admission to examination for enrollment as an EI or LSI.

(b) Applicants qualified under OAR 820-010-0225(3)(b) shall verify having six or more years of active practice in engineering work of a character satisfactory to the Board in addition to the requirements for admission to examination for enrollment as an EI. The six years of active practice year requirement may be reduced to four years provided the applicant verifies completion of additional curriculum. The additional curriculum shall include a Board approved mixture of Differential Equations, Physics, Statistics, Dynamics, Thermodynamics, Fluid Mechanics, Electrical Fundamentals and Strength of Materials, totaling 21 semester/32 quarter hours.

(c) Applicants qualified under OAR 820-010-0225(3)(d) and (4)(c) shall verify having six or more years of active practice in engineering, land surveying, or photogrammetric work of a character satisfactory to the Board in addition to the requirements for admission to examination for enrollment as an EI or LSI.

(2) Active practice satisfactory to the Board shall be practice in the applicant’s area of competence, in responsible charge performed under the direction and supervision of a licensed engineer, land surveyor, or photogrammetrist.

(3) Graduation from a Master’s Degree Program in engineering or surveying at a college or university which as an EAC of ABET accredited undergraduate degree program in the same field as the Master’s degree program may be substituted for one year of the four years of active practice required in OAR 820-010-0230 as long as this degree is not used as the basis for admission to the fundamental examination under OAR 820-010-0225(3)(c) or (4)(b).

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 20, f. & ef. 12-15-77; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; BEELS 1-1998, f. & cert. ef. 2-10-98; BEELS 1-2001, f. & cert. ef. 5-22-01; BEELS 1-2002, f. & cert. ef. 3-13-02; BEELS 6-2005, f. & cert. ef. 12-13-05

820-010-0235

Information to Be Furnished by Water Right Examiner Applicants

Applicants for admission to the examination for certification as a water right examiner must be currently registered as provided in ORS 672.007 to 672.035. Once certified, the water right examiner certificate will remain valid and renewable as long as the individual’s registration as a professional engineer or land surveyor remains valid.

Stat. Auth.: ORS 672

Stats. Implemented:

Hist.: EE 4-1987, f. & ef. 12-1-87

820-010-0255

References

Engineering, land surveyor, and photogrammetrist applicants and those engineering and land surveying intern applicants requesting admission to the examination on the basis of experience must supply to their references special forms provided by the Board for this purpose. Each reference must have knowledge of the applicant’s work for a period of at least one year. A minimum of five references is required by the Board and at least three of the five references must be registrants in the field of practice in which the applicant seeks to be registered. The signature and stamp of the reference if licensed must appear on the returned form. Qualifying experience accrued by the applicant must be included in the application and all qualifying experience shall be certified by the person supervising the work as meeting the definition of engineering work, land surveying work or photogrammetric work as defined in OAR 820-010-0010. The Board may, for good cause upon written application, reduce the number of references required.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 20, f. & ef. 12-15-77; EE 1-1992, f. & cert. ef. 2-3-92; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; BEELS 1-1998, f. & cert. ef. 2-10-98; BEELS 1-2001, f. & cert. ef. 5-22-01; BEELS 6-2005, f. & cert. ef. 12-13-05

820-010-0260

Rejections

A rejected applicant shall on request be fully informed as to the reason for the rejection of their application, and they may thereafter file with the Board any reason they desire to support a claim for reconsideration.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented:

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 20, f. & ef. 12-15-77; EE 1-1992, f. & cert. ef. 2-3-92

820-010-0300

Refunds and Charges

(1) Examination fees are non-refundable.

(2) Refunds of examination application fees will not be made to individuals who fail to qualify for, withdraw from, or do not appear for, the examination.

(3) Comity application fees will not be refunded, but may be applied toward examination fee if requested by the applicant.

(4) If the Board receives payment of any fees by check and the check is deposited and returned to the Board, the payor of the fees will be assessed a charge of \$20 in addition to the required payment of the fees.

Stat. Auth.: ORS 670 & 672

Stats. Implemented:

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 20, f. & ef. 12-15-77; EE 2-1985, f. 12-4-85, ef. 12-16-85; BEELS 2-2004, f. & cert. ef. 7-14-04

820-010-0305

Fees

(1) The Board has determined an outside testing provider will administer examinations on behalf of the Board. In addition to state fees, all approved applicants are charged for the test administration fee in addition to any book or scoring fees or any other examination-related fees. The applicant must pay all these costs in advance to the Board and the outside testing provider. The amount for each specific application is compiled in section (2) of this rule. Where applicable, the initial activation and certificate fee must be included. The total

amount for each specific application is compiled in a fee schedule published separately. The amount to be submitted will be equal to a total of items (a) through (c) in this section. Actual dollar amounts for application, initial activation, renewal and certificate are listed in sections (2) and (3) of these rules:

- (a) Fee for application.
- (b) Fee for initial activation equal to one year renewal (one time fee applies to PE, PLS, and CWRE only; not applicable to reexamination).
- (c) Fee for issuance of first certificate (one time fee applies to PE, PLS, and CWRE only).
- (2) Fees for examination application:
 - (a) Initial fundamentals of engineering examination application — \$35.
 - (b) Initial fundamentals of land surveying examination application — \$35.
 - (c) Initial professional engineering (PE) examination application — \$100.
 - (d) Initial professional structural engineering examination application — \$575.
 - (e) Initial professional land surveying examination application — \$140.
 - (f) Initial professional photogrammetric mapping examination application — \$120.
 - (g) Certified Water Right Examiner test application — \$50.
 - (h) Fundamentals of engineering examination re-application — \$25.
 - (i) Fundamentals of land surveying examination re-application — \$25.
 - (j) Professional engineering (PE) examination re-application — \$90.
 - (k) Professional structural engineering examination re-application — \$565.
 - (l) National portion of professional structural engineering examination re-application — \$85.
 - (m) Oregon requirement of professional structural engineering examination re-application — \$480.
 - (n) Professional land surveying (PLS) examination re-application — \$130.
 - (o) Oregon law portion of PLS examination re-application — \$55.
 - (p) National portion of PLS examination re-application — \$75.
 - (q) Professional photogrammetric examination re-application — \$110.
 - (r) Certified Water Rights Examiner test re-application — \$40.
- (3) Fees for certification, registration, and renewal:
 - (a) First registered professional engineer certificate — \$10.
 - (b) First registered professional land surveyor certificate — \$10.
 - (c) First registered professional photogrammetrist certificate — \$10.
 - (d) First certified water right examiner certificate — \$10.
 - (e) Application for registration as a professional engineer — \$110.
 - (f) Application for registration as a professional land surveyor — \$140.
 - (g) Temporary permit issued under ORS 672.135 and Enrolled SB 55, section 5a — \$50.
 - (h) Re-issuance of lost or mutilated certificate — \$25.
 - (i) Re-issuance of lost or mutilated pocket card — \$10.
 - (j) Issuance of certificate without examination based on experience as provided under ORS 672.255 and Enrolled SB 55, section 4 — \$225.
 - (k) Re-score of an Oregon specific examination - \$50.
 - (l) Annual renewal of a professional engineering certificate — \$40.
 - (m) Annual renewal of a professional land surveyor certificate — \$40.
 - (n) Annual renewal of a professional photogrammetrist certificate — \$40.
 - (o) Annual renewal of exempt professional engineering or professional land surveying certificate as defined in OAR 820-010-

0010(21) which meets the requirements for exemption under OAR 820-010-0635(6) — \$20.

(p) Annual renewal of water right examiner certificate — \$20.

(q) The penalty for late payment of a renewal fee under subsections (l), (m), (n), (o), or (p) of this section is equal to the accumulated total of the amount of the delinquent renewal. The late penalty becomes due and payable 30 days after the date of expiration.

(r) Verification of exam/licensure — \$15.

Stat. Auth.: ORS 670.310, 672.097, 672.099 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 2-1980, f. & ef. 5-14-80; EE 4-1981, f. & ef. 12-14-81; EE 2-1984(Temp), f. & ef. 5-7-84; EE 2-1984(Temp), f. & ef. 5-7-84; EE 4-1984, f. & ef. 12-11-84; EE 2-1987, f. & ef. 7-2-87; EE 3-1987, f. & ef. 8-25-87; EE 2-1989, f. 1-3-89, cert. ef. 1-15-89; EE 1-1990(Temp), f. & cert. ef. 5-21-90; EE 1-1991(Temp), f. 8-14-91, cert. ef. 9-1-91; EE 2-1991, f. & cert. ef. 9-23-91; EE 1-1992, f. & cert. ef. 2-3-92; EE 2-1992, f. & cert. ef. 2-4-92; EE 4-1992, f. & cert. ef. 7-22-92; EE 2-1993(Temp), f. & cert. ef. 2-22-93; EE 3-1993, f. & cert. ef. 6-3-93; EE 2-1994, f. & cert. ef. 7-22-94; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; EE 2-1997, f. & cert. ef. 8-6-97; BEELS 3-1998, f. & cert. ef. 5-11-98; BEELS 1-1999, f. 5-27-99, cert. ef. 7-1-99; BEELS 1-2000, f. & cert. ef. 1-14-00; BEELS 3-2000, f. 3-17-00, cert. ef. 3-20-00; BEELS 3-2001, f. & cert. ef. 11-26-01; BEELS 3-2002, f. & cert. ef. 11-13-02; BEELS 4-2002, f. & cert. ef. 12-3-02; BEELS 6-2005, f. & cert. ef. 12-13-05

820-010-0325

Budget

The amount of \$1,820,150 is established for the biennium beginning July 1, 2005, as the intended limit for payment of expenses from fees, moneys or other revenue, including Miscellaneous Receipts, collected or received by the Board. The expenditure limitation includes an operating budget of \$1,564,012 and an examination budget of \$250,000.

Stat. Auth.: ORS 670.310, 672.155 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: BEELS 1-1999, f. 5-27-99, cert. ef. 7-1-99; BEELS 1-2001, f. & cert. ef. 5-22-01; BEELS 2-2002, f. & cert. ef. 5-15-02; BEELS 4-2003, f. 5-14-03, cert. ef. 7-1-03; BEELS 2-2004, f. & cert. ef. 7-14-04; BEELS 2-2005(Temp), f. & cert. ef. 6-9-05 thru 12-5-05; BEELS 4-2005, f. & cert. ef. 9-23-05

820-010-0400

Examinations

The Board shall be represented during the written examinations of candidates.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented:

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 16, f. 3-5-74, ef. 3-25-74; EE 20, f. & ef. 12-15-77; EE 4-1987, f. & ef. 12-1-87; EE 1-1992, f. & cert. ef. 2-3-92

820-010-0415

Nature of the Examination for Professional Engineer (PE)

(1) The nature of the examinations to qualify for registration as a professional engineer may be written or written and oral.

(2) An applicant to qualify for registration must obtain a passing grade as established by the Board for:

(a) A written examination in engineering fundamentals for qualification as an EI as covered in OAR 820-010-0420, unless exempted from this examination under OAR 820-010-0455. Such examination may be taken at any scheduled examination period but must be passed in order to be admitted to the branch examination as covered in subsection (2)(b) of this rule;

(b) A written examination in a professional branch of engineering covering practical engineering problems in branches as covered in OAR 820-010-0450.

(3) The examinations shall conform as nearly as practicable to nationally-established testing standards such as those set-forth by the National Council of Examiners for Engineering and Surveying. The tests may be conducted with or without reference to books as the Board may elect.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented:

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 16, f. 3-5-74, ef. 3-25-74; EE 20, f. & ef. 12-15-77; EE 2, f. 12-4-85, ef. 12-16-85; EE 1-1992, f. & cert. ef. 2-3-92; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95

820-010-0420

Nature of Examination for Engineering Intern (EI)

The examination to qualify for enrollment as an EI will be a written examination on the fundamentals of General engineering or one of the discipline specific subjects in the fields of Chemical, Civil, Electrical, Industrial, or Mechanical Engineering. The examination may cover such subjects as chemistry, dynamics, engineering economics, engineering mechanics, electrical circuits, electronics and electrical machinery, fluid mechanics, materials science, mathematics, mechanics of materials, statistics, structure of matter and thermodynamics, and discipline specific questions in the chosen discipline.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 16, f. 3-5-74, ef. 3-25-74; EE 20, f. & ef. 12-15-77; EE 1-1983, f. 2-28-83, ef. 3-1-83; EE 1-1992, f. & cert. ef. 2-3-92; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; BEELS 1-1998, f. & cert. ef. 2-10-98

820-010-0425

Nature of Examination for Professional Land Surveyor (PLS)

(1) The examinations to qualify for registration as a professional land surveyor (PLS) are written examinations.

(2) An applicant to qualify for registration must obtain a passing grade as established by the Board for:

(a) A written examination in land surveying fundamentals as covered in OAR 820-010-0430 unless exempted for this examination under OAR 820-010-0455. Such examination may be taken at any scheduled period but must be passed in order to be admitted to the branch examination as covered in subsection (2)(b) of this rule;

(b) A written examination in the practical land surveying problems.

(3) The examinations shall conform as nearly as practicable to nationally-established testing standards such as those set-forth by the National Council of Examiners for Engineering and Surveying. These tests may be conducted with or without reference to books as the Board may elect.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented:

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 16, f. 3-5-74, ef. 3-25-74; EE 20, f. & ef. 12-15-77; EE 2, f. 12-4-85, ef. 12-16-85; EE 1-1992, f. & cert. ef. 2-3-92; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95

820-010-0427

Nature of Examination for Professional Photogrammetrists

(1) The examinations to qualify for registration as a professional photogrammetrist are written examinations.

(2) An applicant to qualify for registration must obtain a passing grade as established by the Board for:

(a) A written examination in land surveying fundamentals as covered in OAR 820-010-0430. Such examination may be taken at any scheduled period but must be passed in order to be admitted to the examination as covered in subsection (2)(b) of this rule;

(b) A written examination in the practical photogrammetric mapping problems.

(3) The examinations shall conform as nearly as practicable to any nationally-established testing standards, such as those set-forth by the National Council of Examiners for Engineering and Surveying. These tests may be conducted with or without reference to books as the Board may elect.

(4) At the discretion of the Board, any applicant may be requested to appear for an oral interview before the Board or any member thereof. Such interview is to be for the purpose of reviewing the applicant's educational background, experience record, or examination, or to review examples of the applicant's work, or to assist the Board in determining that the applicant fully meets the required qualifications.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: BEELS 6-2005, f. & cert. ef. 12-13-05

820-010-0430

Nature of Examination for Land Surveyor Intern (LSI)

The examination to qualify for enrollment as a land surveyor intern (LSI) will be a written examination on the fundamentals of

land surveying. The examination may cover such subjects as science fundamentals, mathematics, surveying fundamentals, measurements, computations, applications and legal principles.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented:

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 16, f. 3-5-74, ef. 3-25-74; EE 20, f. & ef. 12-15-77; EE 1-1983, f. 2-28-83, ef. 3-1-83; EE 1-1992, f. & cert. ef. 2-3-92; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95

820-010-0435

Oral Interview

At the discretion of the Board, any applicant may be requested to appear for an oral interview before the Board or any member thereof. Such interview is to be for the purpose of reviewing the applicant's educational background, experience record, or examination, or to review examples of the applicant's work, or to assist the Board in determining that the applicant fully meets the required qualifications.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 20, f. & ef. 12-15-77; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; BEELS 1-1998, f. & cert. ef. 2-10-98

820-010-0440

Times for Examinations

Examinations will be held at times and locations determined by the Board. A spring examination is usually scheduled in April and a fall examination is usually scheduled in October. January 15 is the last day for postmark of initial applications for the April examination and July 15 is the last day for postmark of initial applications for the October examination. Applicants seeking to retake examination shall be provided sufficient time following notification of test results to submit a reapplication for after the initial deadline. Each applicant accepted for examination will be notified of the time and location of the scheduled test.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 20, f. & ef. 12-15-77; EE 1-1992, f. & cert. ef. 2-3-92; EE 2-1993(Temp), f. & cert. ef. 2-22-93; EE 3-1993, f. & cert. ef. 6-3-93; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; EE 3-1994(Temp), f. & cert. ef. 11-21-94; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; BEELS 5-2000, f. & cert. ef. 10-19-00; BEELS 3-2001, f. & cert. ef. 11-26-01

820-010-0450

Branches Examined by Board

The Board will conduct examinations and issue licenses in accordance with the following:

(1) Examinations will be offered annually and successful examinees will be licensed as professional engineers especially qualified in one of the branches listed below. The applicant will be limited to the selection of examination questions pertaining to that branch:

- (a) Acoustical;
- (b) Agricultural;
- (c) Chemical;
- (d) Civil;
- (e) Control Systems;
- (f) Electrical;
- (g) Environmental;
- (h) Fire Protection;
- (i) Industrial;
- (j) Forest;
- (k) Mechanical;
- (l) Metallurgical;
- (m) Nuclear;
- (n) Structural.

(2) Persons desiring to be licensed as a professional engineer naming a branch other than one listed under section (1) of this rule as one in which the individual is especially qualified may petition the Board to amend the list. Procedures are designated in the Model Rules of Procedure under the Administrative Procedure Act, OAR 137-001-0070. Information in the petition shall include:

- (a) The public need for recognition of the new discipline;
- (b) The number of potential licensees that would be affected;

(c) Whether the new branch is a specialty under an already recognized discipline; and

(d) Recommendations for examination sources in that discipline.

(3) The Board may, at its option, discontinue examining and licensing in any branch at any time that it receives fewer than six qualified applicants in that branch in a three-year period.

(4) For a license as a professional land surveyor the applicant will be examined in land surveying.

(5) For a license as a professional photogrammetrist the applicant will be examined in photogrammetry.

(6) For certification as a water right examiner, the applicant will be examined on water right applications and the preparation of claims of beneficial use.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 20, f. & ef. 12-15-77; EE 2-1978, f. 12-21-78, ef. 1-1-79; EE 1-1981, f. 5-19-81, ef. 6-1-81; EE 1-1984, f. & ef. 3-6-84; EE 2-1986, f. 3-26-86, ef. 3-31-86; EE 4-1987, f. & ef. 12-1-87; EE 1-1992, f. & cert. ef. 2-3-92; EE 3-1992, f. 3-19-92, cert. ef. 4-1-92; EE 5-1993, f. 8-3-93, cert. ef. 8-13-93; BEELS 5-2000, f. & cert. ef. 10-19-00; BEELS 3-2001, f. & cert. ef. 11-26-01; BEELS 1-2004, f. & cert. ef. 1-26-04; BEELS 6-2005, f. & cert. ef. 12-13-05

820-010-0455

Exemption from FE or FLS Examination

An applicant for registration as a professional engineer or land surveyor who holds a valid certificate as an EIT or LSIT will be excused from the respective FE or FLS examination. The applicant must file with the application evidence of a valid EIT (Engineer in Training) or LSIT (Land Surveyor in Training) Certificate:

(1) A valid Oregon EIT or LSIT Certificate is one which was issued by the Oregon State Board of Examiners for Engineering and Land Surveying.

(2) A valid EIT or LSIT Certificate or equivalent issued by another state or authority is a certificate (or certification) obtained by a written or a written and oral examination equivalent to that required by ORS 672.255. For the purpose of determining equivalency, the examination must have been devoted to basic engineering or land surveying subjects similar to that used in Oregon examinations. For certification of an FE examination taken during or after 1960, (or an FLS examination taken during or after 1965) the examination must have been eight hours in length. For certification of a FE examination taken prior to 1960, (or an FLS examination taken prior to 1965) the applicant must provide evidence, satisfactory to the Board, that the scope of the examination was substantially equal to the scope of the examination used by Oregon during the same time period.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 16, f. 3-5-74, ef. 3-25-74; EE 20, f. & ef. 12-15-77; EE 1-1984, f. & ef. 3-6-84; EE 1-1992, f. & cert. ef. 2-3-92; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; BEELS 1-1998, f. & cert. ef. 2-10-98

820-010-0460

Exemption from FE Section

Any applicant who was previously registered as a professional engineer in one branch of engineering by this Board, shall be excused from the FE section should the applicant desire admission to examination for registration in any other branch of engineering.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented:

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 20, f. & ef. 12-15-77; EE 1-1992, f. & cert. ef. 2-3-92; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95

820-010-0465

Application for Readmission to Examination

Applicants for registration and for EI and LSI enrollment who did not achieve a passing grade in their first and second written examinations will, before re-admittance to a subsequent examination, be required to submit valid evidence of further preparation on their part. Such evidence should indicate the courses of study undertaken, special training and additional experiences gained since their last examination and must be in all cases satisfactory to the Board.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 20, f. & ef. 12-15-77; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; BEELS 6-2005, f. & cert. ef. 12-13-05

820-010-0470

Review of Examinations

(1) The cutoff score for the Fundamentals of Engineering (FE), Fundamentals of Land Surveying (FLS), Principles and Practice of Engineering (PE), Principles and Practice of Land Surveying (PLS), and other examinations administered by the Board, are established at 70 on a base of 100. Procedures used by the National Council of Examiners for Engineering and Surveying (NCEES) are used when applicable.

(2) Applicants may, by appointment with Board staff, review their own examination within 60 days after notices of the results have been mailed, but only to the extent the Board is provided information to review by the organization preparing the exam.

(3) During review of the examination materials, notes may be made for use in appealing the score, but no notes consisting of any more than a subject-matter outline may be removed from the review site by the applicant.

(4) Applicants who have failed an examination may submit a written request for Board reconsideration and rescore of specific items and solutions. Such a request must be submitted to staff at the time of the review and must be accompanied by the fee.

(5) The Board, during executive session, or its designee will consider all requests to reconsider. If the request is well founded, the Board may either rescore the contested items or refer the request to the original scorer for reconsideration.

(6) Any costs related to the rescore request will be borne by the applicant.

(7) Should the rescore result in a passing grade, and such result is attributed to an error by the original scorer, the rescore fee will be refunded to the examinee.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 3-1986, f. & ef. 7-21-86; EE 1-1989, f. & cert. ef. 1-3-89; EE 1-1992, f. & cert. ef. 2-3-92; BEELS 1-1998, f. & cert. ef. 2-10-98; BEELS 3-2002, f. & cert. ef. 11-13-02

820-010-0500

Qualifications of Administrative Officer (Executive Secretary)

The administrative officer of the Oregon State Board of Examiners for Engineering and Land Surveying authorized by ORS 670.306 shall:

(1) Not be a member of the Board.

(2) Serve at the pleasure of the Board.

(3) Receive such compensation as the Board may determine.

(4) Perform such duties as assigned by the Board.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 20, f. & ef. 12-15-77; EE 1-1983, f. 2-28-83, ef. 3-1-83; EE 1-1984, f. & ef. 3-6-84; BEELS 1-1998, f. & cert. ef. 2-10-98; BEELS 1-2001, f. & cert. ef. 5-22-01; BEELS 3-2002, f. & cert. ef. 11-13-02; BEELS 3-2003(Temp), f. 5-14-03, cert. ef. 5-15-03 thru 11-11-03; BEELS 5-2003(Temp), f. 11-10-03, cert. ef. 11-12-03 thru 5-8-04; BEELS 1-2004, f. & cert. ef. 1-26-04

820-010-0600

Records

(1) The Board will maintain and store complete and accurate records on professional registrants registered by the Board pursuant to OAR 166 division 350.

(2) The Board will maintain and store complete and accurate records on EIs and LSIs enrolled by the Board pursuant to OAR 166 division 350.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 20, f. & ef. 12-15-77; EE 2-1986, f. 3-26-86, ef. 3-31-86; EE 1-1992, f. & cert. ef. 2-3-92; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; BEELS 1-1998, f. & cert. ef. 2-10-98; BEELS 1-2005, f. & cert. ef. 3-16-05

820-010-0605

Address Changes; Service of Notice

It is the registrant's responsibility to inform the Board in writing, within six months, of any address change. Notice by registered or certified mail to the registrant's last address on file with the Board shall constitute service.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 2-1980, f. & ef. 5-14-80; EE 1-1992, f. & cert. ef. 2-3-92; BEELS 1-1998, f. & cert. ef. 2-10-98

820-010-0610

Certificates of Registration and Enrollment

Certificates shall be of a design approved by the Board. These shall bear on their face a notation stating that the registrant is qualified to practice land surveying, photogrammetry or a particular branch of engineering; this qualification having been determined by a written, or oral and written examination.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 670.310 & 672.255

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 16, f. 3-5-74, ef. 3-25-74; EE 20, f. & ef. 12-15-77; EE 1-1992, f. & cert. ef. 2-3-92; BEELS 6-2005, f. & cert. ef. 12-13-05

820-010-0615

Posting of Certificates

Registrants doing business with the public on their own account, or as consultants, or otherwise where appropriate shall keep their certificates of registration issued by the Board posted conspicuously in their places of business, where the public can readily examine said certificates. It is the registrants' responsibility to ensure that their certificate is valid.

Stat. Auth.: ORS 670.310 & 672.225

Stats. Implemented:

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 20, f. & ef. 12-15-77; EE 1-1992, f. & cert. ef. 2-3-92

820-010-0617

Civil Penalty Consideration Factors

(1) In establishing the amount of a civil penalty to be assessed, pursuant ORS 672.325, the Board shall consider, but not be limited to, the following factors:

- (a) The gravity and magnitude of the violation;
- (b) Prior violations, including administrative, civil or criminal proceeding any state;
- (c) Whether the violation was repeated or continuous;
- (d) Whether the violation was an inadvertent act or an intentional act;
- (e) The history of the person in taking all feasible steps or procedures necessary or appropriate to correct any violation;
- (f) The opportunity and degree of difficulty to correct the violation.

(2) In considering the factors set forth in section (1) of this rule, the applicable factors may be given different weight depending upon the conditions and surrounding circumstances.

(3) If the Board considers factors other than those enumerated in section (1) of this rule, the notice of proposed civil penalty shall set forth such factors.

(4) If the person requests a hearing of a proposed assessment of a civil penalty and factors other than those enumerated in section (1) of this rule, are brought to the attention of the Board through evidence, the Board may consider such additional factors in establishing the amount of civil penalty and shall set forth the additional factors in the final order.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 4-1981, f. & ef. 12-14-81; BEELS 1-1998, f. & cert. ef. 2-10-98

820-010-0618

Policy in Establishing Civil Penalty Amounts

In assessing civil penalties, the Board desires to be both consistent and equitable. Each case will be considered and evaluated on an individual basis. The maximum penalty shall not exceed \$1,000 for each violation of statute or rule pertaining to the practice of engineering, land surveying or photogrammetry.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 4-1981, f. & ef. 12-14-81; EE 1-1992, f. & cert. ef. 2-3-92; BEELS 1-1998, f. & cert. ef. 2-10-98; BEELS 6-2005, f. & cert. ef. 12-13-05

820-010-0619

Civil Penalties for Violations of ORS 92.040 to 92.080, 209.250, and County Ordinances

Pursuant to ORS 209.250(11), the Board may impose civil penalties against a registrant for any violation of ORS 92.040 to 92.080, 209.250(1) to (9), or of any county ordinance that establishes standards or plats, in an amount not to exceed \$1,000 per offense.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: BEELS 6-2005, f. & cert. ef. 12-13-05

820-010-0620

Official Seal

(1) Final documents including but not limited to, specifications, reports, plats, maps, drawings, plans, design information and calculations whenever presented to a client or any public agency prepared by a professional engineer, professional traffic engineer, or professional land surveyor as part of engineering or land surveying work, or by certified water rights examiners, shall bear the seal, expiration or renewal date of the certificate, and signature of the professional engineer, professional traffic engineer, professional land surveyor, or certified water rights examiner responsible for the work. Seals shall contain, pursuant to ORS 672.020(2) and 672.025(2), the name of the registrant, the date of registration, the number of the certificate, and the appropriate title. A "final" document is defined by the Board as any document that is not clearly noted as being "preliminary." (See Exhibit 1) [Exhibit not included. See ED. NOTE.]

(2) Failure on the part of registrants to comply with this requirement will be construed as prima facie evidence of intent to deceive the public and under ORS Chapter 672 their certificates may be suspended or revoked.

(3) Professional engineers holding structural engineering certificates shall include the title "Structural" on their seals as shown in exhibit 1-b. Branches other than structural engineering shall use the design that does not include any title as shown in exhibit 1-a. [Exhibit not included. See ED. NOTE.]

[ED. NOTE: Exhibits referenced are available from the agency.]

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 16, f. 3-5-74, ef. 3-25-74; EE 20, f. & ef. 12-15-77; EE 2-1986, f. 3-26-86, ef. 3-31-86; EE 4-1987, f. & ef. 12-1-87; EE 1-1992, f. & cert. ef. 2-3-92; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; BEELS 1-1998, f. & cert. ef. 2-10-98; BEELS 1-2000, f. & cert. ef. 1-14-00

820-010-0622

Modifying Designs or Documents Prepared by Another Professional Engineer

(1) Registrants modifying designs or documents prepared and sealed by another Professional Engineer must meet all of the following requirements:

(a) Only a registered Professional Engineer may make changes to designs or documents prepared and sealed by another Professional Engineer.

(b) A registrant will not change or modify another Professional Engineer's design or document unless they are competent in the field that is covered by the work being changed.

(c) A registrant making a change to another Professional Engineer's design or document will cloud; encircle; or in some other way clearly indicate the portion of the design or document they are changing or revising and refer the viewer to a separate design or document.

(d) The registrant making the change will stamp and seal the separate design or document.

(2) Registrants modifying designs or documents not sealed must provide all the engineering services that would have been required had they started the work from its origin.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: BEELS 1-2005, f. & cert. ef. 3-16-05

820-010-0623

Dual Stamping Documents

No more than one registrant will seal documents unless it is clearly explained and denoted on the document by all registrants which portion of the work each registrant prepared and for which each registrant is responsible.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: BEELS 1-2004, f. & cert. ef. 1-26-04

820-010-0625

Registration and Certificate Number

Professional engineer, professional land surveyor, and professional photogrammetrist registration numbers; EI and LSI enrollment numbers; and water right examiner certificate numbers will be issued by the Board consecutively in the order in which applicants make application to and qualify before the Board. No discrimination or preference will be permitted in issuing numbers. Multiple certificates are permitted only when an applicant qualifies in additional branches.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 13, f. 3-29-72, ef. 4-15-72; EE 20, f. & ef. 12-15-77; EE 2-1986, f. 3-26-86, ef. 3-31-86; EE 4-1987, f. & ef. 12-1-87; EE 1-1992, f. & cert. ef. 2-3-92; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; BEELS 6-2005, f. & cert. ef. 12-13-05

820-010-0635

Continuing Professional Development

The purpose of professional development requirements is to demonstrate a continuing level of competency of professional land surveyors, engineers and photogrammetrists. Every registrant shall meet the professional development requirements as a condition of registration renewal.

(1) Requirements. Every registrant is required to obtain 30 PDH units during each biennial renewal period. Registrants who are licensed for a part of a renewal period shall obtain a prorated amount of PDH. If a registrant exceeds the annual requirement in any renewal period, a maximum of 15 PDH units in courses/activities may be carried forward into the next renewal period.

(2) PDH units may be earned as follows:

(a) Successful completion of college courses.

(b) Successful completion of short courses, tutorials, correspondence, web based courses, televised and videotaped courses.

(c) Active participation in seminars, in-house courses, workshops, and professional conventions.

(d) Teaching or instructing in (a) through (c) above.

(e) Authoring or co-authoring published papers, articles or books.

(f) Active participation in professional or technical societies.

(g) Self study.

(h) Mentoring of engineering topics.

(i) Non-technical educational activities related to the registrants employment.

(j) Passing a board prepared take home test.

(3) PDH units for each renewal period may be obtained as follows:

(a) 1 College Semester hour equals 45 PDH.

(b) 1 College Quarter hour equals 30 PDH.

(c) 1 Continuing Education unit equals 10 PDH.

(d) 1 hour of professional education in course work, seminars, professional conventions, workshops equals 1 PDH.

(e) For teaching, apply multiple of 2 (teaching credit is valid for teaching a given course or seminar one time only and does not apply to full time faculty teaching college courses).

(f) For authoring or co-authoring a paper, article or book, appearing in a recognized professional or technical publication, up to a maximum of 10 PDH.

(g) Active participation in a professional or technical society (each organization up to a maximum of 6). 2 PDH.

(h) Self study of relevant materials such that the registrant's knowledge of the subject significantly improves the registrant's ability to work in the subject area. Up to a maximum of 6 PDH.

(i) Mentoring of nonlicensed individuals not under your supervision in the field of engineering. Each 10 hours spent mentoring will provide 1 PDH with a maximum of 2 PDH per year.

(4) Determination of Credit. The Board has final authority with respect to approval of courses, credit, PDH values for courses and other methods of earning credit. The Board may maintain a list of courses and activities which it has approved. The Board will approve without listing courses which are sponsored by nationally recognized technical societies and those technical societies listed in 820-001-000(b)(A) through (F) and (c)(A) through (G). Criteria for determination of credit shall follow these guidelines:

(a) Credit for college or community college approved courses will be based upon course credit established by the college.

(b) Credit for qualifying seminars and workshops will be based on one PDH unit for each hour of attendance. Attendance at qualifying programs presented at professional and/or technical society meetings will earn PDH units for the actual time of each program.

(c) Credit determination for activities (3)(f) and (3)(h) is the responsibility of the registrant and is subject to review by the Board.

(5) Record keeping. Each registrant is charged with the responsibility of maintaining records of his/her own professional education activities. Every registrant shall report their professional education activities on a form approved by the Board only when requested by the Board to do so. The duty of maintaining records to support credits claimed is the responsibility of the registrant. Records required include, but are not limited to:

(a) A record showing the activity claimed, sponsoring organization, date, location, duration, instructor's or speaker's name, and PDH units earned; and

(b) Attendance verification records in the form of completion certificates, paid receipts, or other documents supporting evidence of attendance. These records must be retained for three (3) years. Copies may be requested by the Board for audit verification purposes.

(6) Exemptions. A registrant may be exempted from the professional development requirements for one of the following reasons.

(a) A registrant serving on active duty in the armed forces of the United States for a period of time exceeding one hundred twenty (120) consecutive days in a calendar year shall be exempt from obtaining the PDH units required for that year.

(b) Registrants experiencing physical disability, illness or other extenuating circumstances as reviewed and approved by the Board may be exempt. Supporting documentation must be furnished to the Board.

(c) Registrants who are listed as "Retired" or those who have requested an Exempt Status and certify they are no longer providing professional engineering or land surveying services shall be exempt from the PDH units required. A registrant may bring an exempt license to active status by obtaining all delinquent PDH units. However, if the total number required to become current exceeds 30, then 30 shall be the maximum number required.

(7) Out of Jurisdiction Resident. Continued Professional Development requirements will be satisfied when a non-resident certifies to be licensed in and having met the mandatory Continued Professional Development requirements of any NCEES member jurisdiction.

(8) Multiple Registrants. The number of PDH units required shall remain a total of 30 PDH per renewal period for persons who hold registration as an engineer or a land surveyor or more than one discipline of engineering. At least one third (1/3) of the PDH units required in courses/activities shall be related to each registration.

Stat. Auth.: ORS 670.310, 672.097 & 672.255

Stats. Implemented: ORS 672.002 - 672.375

Hist.: BEELS 2-2000, f. & cert. ef. 2-17-00; BEELS 5-2000, f. & cert. ef. 10-19-00; BEELS 3-2002, f. & cert. ef. 11-13-02; BEELS 1-2003, f. & cert. ef. 1-28-03; BEELS 6-2005, f. & cert. ef. 12-13-05

820-010-0715

Construction Contractors Offering Engineering

(1) For the purpose of this rule, the following definitions apply:

(a) "Offering services" means manifesting a willingness to provide services, either orally or in writing, such that another person

may reasonably believe that their assent to the services is invited and will establish an agreement.

(b) "Appurtenant" services are those services that relate to the construction trade, which include constructing, altering, repairing, or improving real estate.

(2) The engineer registration requirements of ORS 672.002 to 672.325 do not prevent a construction contractor from offering services constituting the practice of engineering when all of the following conditions are met:

(a) The construction contractor holds an active license under ORS 701;

(b) The services offered by the construction contractor, constituting the practice of engineering, are appurtenant to construction services to be provided by the contractor;

(c) The services constituting the practice of engineering are performed by an engineer or engineers registered under ORS 672.002 to 672.325; and

(d) The offer by the construction contractor discloses in writing that the contractor is not an engineer and identifies the registered engineer or engineers that will perform the services constituting the practice of engineering.

(3) An engineer performing or identified as an engineer that will perform the services constituting the practice of engineering as provided in subsection (2) of this rule must notify the Board in writing, within thirty (30) days if, after the contractor is retained by the owner, the engineer ceases to provide engineering services identified in the offer by the construction contractor.

(4) Construction contractors who violate any provision of this rule may be practicing engineering or using an engineer title in violation of ORS 672.020 and 672.045. As such, the contractor may be subject, under ORS 672.325, to sanctions and civil penalties of up to \$1,000 per violation.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: BEELS 3-2002, f. & cert. ef. 11-13-02

820-010-0720

Engineering or Land Surveying Offices

The purpose of this rule is to make certain all acts, which constitute the practice of engineering or land surveying, are adequately supervised and effectively managed by registered individuals in accordance with ORS 672.020(1) and (2):

(1) An engineering or land surveying office of a firm means any place of business that is established to offer and/or perform engineering or land surveying work. A resident registered professional engineer or registered land surveyor means one who spends a majority of his normal working time in that place of business when engineering or land surveying work is being offered and/or performed. A registered professional engineer or land surveyor may be the resident licensee at only one place of business at one time.

(2) Each engineering office of a firm providing or offering to provide engineering services shall have a resident registered professional engineer in charge. Each land surveying office of a firm providing or offering to provide land surveying services shall have a resident registered land surveyor in charge.

(3) Engineering or land surveying office restrictions shall not apply to project offices. A project office is one established to provide a workstation for a specific project, the use of which will not extend beyond the scope or duration of the specific project.

(4) If a resident registered professional engineer or registered professional land surveyor is not in charge of a project office, no engineering or land surveying work other than the project work shall be performed, nor shall new work be solicited by the firm's unregistered representatives located at the project office.

(5) Only those persons certified as water rights examiners are authorized to perform services pertaining to water rights and the preparation of the claim of beneficial use.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 2-1980, f. & ef. 5-14-80; EE 2-1985, f. 12-4-85, ef. 12-16-85; EE 4-1987, f. & ef. 12-1-87; EE 1-1992, f. & cert. ef. 2-3-92; BEELS 1-1998, f. & cert. ef. 2-10-98; BEELS 3-2001, f. & cert. ef. 11-26-01; Renumbered from 820-010-0016

DIVISION 15

PROCEDURE FOR FILING COMPLAINTS

820-015-0005

Definitions

(1) "Board" means the State Board of Engineering Examiners or its authorized representatives as provided by ORS 672.240.

(2) "Respondent" means a person or firm against which a complaint has been made.

Stat. Auth.: ORS 670 & 672

Stats. Implemented:

Hist.: EE 3-1984, f. & ef. 6-18-84

820-015-0010

Processing Complaints

The Board will process complaints as follows:

(1) Anyone may submit a complaint against a licensed or unlicensed person. Complaints shall be in writing and include evidence to document all charges.

(2) A preliminary review of the complaint will be made to assure that there is sufficient evidence to justify proceeding and that the allegations against the respondent are such that, if proven, they could result in a penalty being imposed by the Board.

(3) If the Board concludes that the complaint is valid, it will notify the respondent of the allegations by mail and request written comments. Written comments must be received by the Board within two weeks after the notification was mailed, unless an extension is authorized by the Board, or the Board will evaluate the complaint using available evidence.

(4) The Board shall evaluate all evidence obtained, including any documentation or comments received from the respondent, Board investigators (volunteer or paid), Board staff or a committee of the Board. The Board will then proceed as follows:

(a) If the evidence is insufficient to show a cause of action, the complainant and respondent will be so notified in writing;

(b) If the evidence is sufficient to show a cause of action, the Board will consider and take appropriate action at a regular or special meeting.

Stat. Auth.: ORS 670 & 672

Stats. Implemented:

Hist.: EE 3-1984, f. & ef. 6-18-84

820-015-0026

Failure to Comply with Continuing Professional Development Requirements

(1) Any registrant who fails to comply with Continuing Professional Development requirements as established in Sections 820-010-0635(1) through (8) shall not be subject to revocation of his/her license if the sole reason for revocation is noncompliance with said sections.

(2) Registrants not in compliance with the Continuing Professional Development requirements of OAR 820-010-0635 may be placed on inactive status by the Board and prohibited from practicing Engineering and/or Land Surveying until such time the Board determines they are in compliance.

(3) The Board may allow a grace period of up to one year for registrants that are found to be deficient in accumulating PDH credits satisfactory to the Board. When a grace period is granted, the registrant shall complete all deficient PDH requirements plus the additional PDH requirements within the grace period at the rate of 15 per year.

Stat. Auth.: ORS 670.310, 672.097, 672.099 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: BEELS 2-2000, f. & cert. ef. 2-17-00; BEELS 1-2004, f. & cert. ef. 1-26-04

DIVISION 20

RULES OF PROFESSIONAL CONDUCT

820-020-0005

Preamble

(1) In order to safeguard life, health and property, to promote the public welfare, and to establish and maintain a high standard of

integrity and practice, the following Rules of Professional Conduct shall be binding on every person holding a certificate of registration or enrolled as an intern, and on all partnerships or corporations or other legal entities authorized to offer or perform engineering or land surveying services in this state.

(2) The Rules of Professional Conduct as promulgated herein are an exercise of the police power vested in the Board by virtue of the acts of the legislature.

(3) All persons registered under ORS 672.002 to 672.310 are charged with having knowledge of the existence of these Rules of Professional Conduct, and shall be deemed to be familiar with their provisions and to understand them. Such knowledge shall encompass the understanding that the practice of engineering and land surveying is a privilege, as opposed to a right.

(4) In these Rules of Professional Conduct, the word “registrant” shall mean any person holding a license or certificate issued by this Board.

Stat. Auth.: ORS 670 & 672

Stats. Implemented:

Hist.: EE 14, f. 4-26-72, ef. 5-15-72; EE 20, f. & ef. 12-15-77; EE 2-1981, f. 5-19-81, ef. 6-1-81; BEELS 3-2002, f. & cert. ef. 11-13-02

820-020-0010

Fundamental Canons

Registrants, in the fulfillment of their professional duties, shall:

(1) Hold paramount the safety, health and welfare of the public in the performance of their professional duties.

(2) Perform services only in the areas of their competence.

(3) Issue public statements only in an objective and truthful manner.

(4) Act in professional matters for each employer or client as faithful agents or trustees, and shall avoid conflicts of interest.

(5) Avoid improper solicitation of professional employment.

Stat. Auth.: ORS 670 & 672

Stats. Implemented:

Hist.: EE 2-1981, f. 5-19-81, ef. 6-1-81

820-020-0015

Registrants Shall Hold Paramount the Safety, Health and Welfare of the Public in the Performance of their Professional Duties

(1) Registrants shall at all times recognize that their primary obligation is to protect the safety, health, property and welfare of the public. If their professional judgment is overruled under circumstances where the safety, health, property or welfare of the public are endangered, they shall notify their employer or client and such other authority as may be appropriate.

(2) Registrants shall approve and seal only those design documents and surveys which are safe for public health, property and welfare in conformity with accepted engineering and land surveying standards.

(3) Registrants shall not reveal facts, data or information obtained in a professional capacity without the prior consent of the client, or employer except as authorized or required by law.

(4) Registrants shall not permit the use of their name or firm name nor associate in business ventures with any person or firm which they have reason to believe is engaging in fraudulent or dishonest business or professional practices.

(5) Registrants having knowledge of any alleged violation of any of these Rules of Professional Conduct, shall cooperate with the Board in furnishing such information or assistance as may be required.

(6) Conviction of a felony without restoration of civil rights, or the revocation or suspension of the license of a registrant in another jurisdiction, if for a cause which in the State of Oregon would constitute a violation of ORS 672.020 to 672.310 or of these rules, shall be grounds for a charge of violation of these rules.

(7) Registrants shall continue their professional development throughout their careers; and they shall provide opportunities for the professional development of individuals under their supervision. The Board may require, as a condition for license renewal, that registrants

provide documentation to support actions taken to maintain their professional competency.

(8) Registrants shall cooperate with the Board on all matter subject to the Board’s jurisdiction.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 2-1981, f. 5-19-81, ef. 6-1-81; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; BEELS 3-2001, f. & cert. ef. 11-26-01

820-020-0020

Registrants Shall Perform Services Only in the Areas of Their Competence

(1) Registrants shall undertake assignments only when qualified by education or experience in the specific technical fields of engineering or land surveying involved.

(2) Registrants shall not affix their signatures or seals to any plans or documents dealing with subject matter in which they lack competence, nor to any such plan or document not prepared under their direction and control.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.255

Hist.: EE 2-1981, f. 5-19-81, ef. 6-1-81; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; EE 1-1995, f. 8-15-95, cert. ef. 9-1-95; EE 2-1995, f. 12-15-95, cert. ef. 1-1-96

820-020-0025

Registrants Shall Issue Public Statements Only in an Objective and Truthful Manner

(1) Registrants shall be objective and truthful in professional reports, statements or testimony. They shall include all relevant and pertinent information in such reports, statements or testimony.

(2) Registrants may express publicly a professional opinion on technical subjects only when that opinion is founded upon adequate knowledge of the facts and competence in the subject matter.

(3) Registrants shall issue no statements, criticisms or arguments on technical matters which are inspired or paid for by interested parties, unless the registrants have prefaced their comments by explicitly identifying the interested parties on whose behalf they are speaking, and by revealing the existence of any interest the registrants may have in the matters.

Stat. Auth.: ORS 670 & 672

Stats. Implemented:

Hist.: EE 2-1981, f. 5-19-81, ef. 6-1-81

820-020-0030

Registrants Shall Act in Professional Matters for Each Employer or Client as Faithful Agents or Trustees, and Shall Avoid Conflicts of Interest

(1) Registrants shall disclose all known or potential conflicts of interest to their employers or clients by promptly informing them of any business association, interest, or other circumstances, which could influence their judgment or the quality of their services.

(2) Registrants shall not accept compensation, financial or otherwise, from more than one party for services on the same project, or for services pertaining to the same project, unless the circumstances are fully disclosed to, and agreed to, by all interested parties.

(3) Registrants shall not solicit or accept financial or other valuable consideration, directly or indirectly, from contractors, their agents, or other parties in connection with work for employers or client for which the registrant is responsible.

(4) Registrants in public service as members, advisors or employees of a governmental body shall not participate in decisions made by that governmental body with respect to professional services solicited from or provided by them or their organizations.

(5) Registrants shall not solicit or accept a professional contract from a governmental body on which a principal or officer of their organization serves as a member, except upon public disclosure of all pertinent facts and circumstances and consent of appropriate public authority.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 2-1981, f. 5-19-81, ef. 6-1-81; BEELS 1-1998, f. & cert. ef. 2-10-98

820-020-0035

Registrants Shall Avoid Improper Solicitation of Professional Employment

(1) Registrants shall not falsify or permit misrepresentation of their, or their associates, academic or professional qualifications. They shall not misrepresent or exaggerate their degree of responsibility in or for the subject matter of prior assignments. Brochures or other presentations incident to the solicitation of employment shall not misrepresent pertinent facts concerning employers, employees, associates, joint ventures or past accomplishments with the intent and purpose of enhancing their qualifications and their work.

(2) Registrants shall not offer, give, solicit or receive, either directly or indirectly, any commission or gift or other valuable consideration in order to secure work, and shall not make any political contribution in an amount intended to influence the award of a contract by public authority, but which may be reasonably construed by the public of having the effect or intent to influence the award of a contract.

Stat. Auth.: ORS 670 & 672

Stats. Implemented:

Hist.: EE 2-1981, f. 5-19-81, ef. 6-1-81

820-020-0040

Examination Subversion

(1) Examination subversion is the use of any means to alter the results of an examination to cause the results to inaccurately represent the competency of an examinee. Examination subversion includes, but is not limited to:

(a) Communication between examinees inside of the examination room.

(b) Giving or receiving any unauthorized assistance on the examination while an examination is in process.

(c) Having any unauthorized printed or written matter or other devices in the examinee's possession that might serve to aid the examinee on the examination.

(d) Obtaining, using, buying, selling, distributing, having possession of, or having unauthorized access to secured examination questions or other secured examination material prior to, during or after the administration of the examination.

(e) Copying another examinee's answers or looking at another examinee's materials while an examination is in progress.

(f) Permitting anyone to copy answers to the examination.

(g) Removing any secured examination materials from the examination facility.

(h) Allowing another person to take the examination in the examinee's place.

(i) Placing any identifying mark upon the examinee's examination papers other than the examinee's identification number or other identifiers as directed by the examination administrator.

(j) Use by an examinee of any written material, audio material, video material, digital material, or any other mechanism not specifically authorized during the examination for the purpose of assisting an examinee in the examination.

(k) Writing on anything other than designated examination material.

(l) Writing or erasing anything after time is called.

(2) At the discretion of the Board or its designees, if there is evidence of examination subversion by an examinee prior to, during, or after the administration of the examination, one or more of the following may occur:

(a) The examinee may be denied the privilege of taking the examination if examination subversion is detected before the administration of the examination.

(b) If the examination subversion detected has not yet compromised the integrity of the examination, such steps as are necessary to prevent further examination subversion shall be taken, and the examinee may be permitted to continue with the examination.

(c) The examinee may be requested to leave the examination facility if examination subversion is detected during the examination. If the examinee does not leave the facility, the examinee will be deemed a trespasser.

(d) The examinee may be requested to submit a written statement indicating that the examinee understands and intends to comply with the prohibitions of examination subversion.

(e) The examinee's examination results may be voided and the application fee forfeited.

(f) The examinee may not be allowed to sit for an examination for up to three years.

(3) If examination subversion is detected after the administration of the examination, the Board or its designee shall make appropriate inquiry to determine the facts concerning the examination subversion and the Board or its designee may take any of the actions described in section (2) herein.

(4) Notwithstanding OAR 820-010-0440, 820-010-0470, or any other rule, the Board or its designee may choose not to release or make available the examination results to examinee or any other person pending the outcome of an investigation into examination subversion.

(5) Removal of the examinee from or voiding the examinee's examination of any one part of a multiple part examination shall constitute removal from or voiding of all other parts of the multiple part examination.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: BEELS 1-2005, f. & cert. ef. 3-16-05

820-020-0045

Unprofessional Behavior

It is a violation of the rules of Professional conduct to engage in any unprofessional behavior. Unprofessional behavior includes:

(1) By word or conduct, intentionally attempting to place a client, licensee, board member, board employee or examination proctor in fear of imminent serious physical injury.

(2) Engaging in reckless, knowing or willful conduct that causes serious physical injury to a client, licensee, board member, board employee or examination proctor.

(3) Conviction of a felony or misdemeanor, punishable by imprisonment, which is substantially related to the fitness and ability of the applicant or licensee to engage in the practice of engineering or land surveying.

(4) Failing to comply with terms set in an examination non-disclosure agreement.

(5) Failing to make full payment to the Board of all Board assessed fees, fines and penalties.

(6) Failing to give written notification to the Board of any disciplinary action or sanction related to the practice of engineering or land surveying by any state licensing agency.

Stat. Auth.: ORS 670.310, 672.045 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: BEELS 1-2005, f. & cert. ef. 3-16-05

DIVISION 30

THE PRACTICE OF LAND SURVEYING

820-030-0060

Filing Time and Place

The registered professional land surveyors making a survey pursuant to ORS 209.250 shall submit for filing a complete record that contains all the elements listed in ORS 209.250(2)(3) in all affected counties within 45 days of establishment or reestablishment of any boundary monument or boundary reference monument. It is the interpretation of this Board that the 45-day limit shall commence with the setting of the first monument, not the completion of the project.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 2-1986, f. 3-26-86, ef. 3-31-86; BEELS 2-2001, f. & cert. ef. 9-14-01, Renumbered from 820-015-0020

820-030-0070

Surveyor's Seal and Signature Required

In both ORS 209.250(2)(c) and (3)(g) the intent is that each page of the map and the last page of the narrative, if the narrative is

a separate document, shall bear the seal and original signature of the professional land surveyor.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 1-1985, f. & ef. 8-5-85; BEELS 2-2001, f. & cert. ef. 9-14-01, Renumbered from 820-015-0035

DIVISION 40

THE PRACTICE OF ENGINEERING

820-040-0005

Definitions

The following definitions and guides have been adopted by the Board to assist registrants and the general public in their interpretation of specific portions of ORS 672.002 to 672.325.

(1) "Ground Area" is defined as any projected or suspended occupied areas above the ground level in combination with areas in contact with the ground. Measurements in determining the ground area shall be taken from outside wall to outside wall and include the sum of the areas of all additions and the area of the original structure. The ground area of a building, or portion thereof, not provided with surrounding exterior walls is the usable area under the horizontal projection of the roof or floor above.

(2) "Height" is measured from the top surface of the lowest flooring to the highest interior overhead finish of the structure in determining whether a building exceeds the 20-foot height limitation. A basement floor is considered the lowest flooring when useable (i.e., storage, garage, etc.).

Stat. Auth.: ORS 670.310, 672.060, 672.129 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: BEELS 4-2005, f. & cert. ef. 9-23-05

820-040-0010

Electrical Engineering

(1) "Electrical engineering" is the design of the electric power, control, and fire and life safety systems with the following electrical services:

(a) Below 250 volts, 96 Kva and above;

(b) Above 250 volts, and less than 600 volts, 150 Kva and above;

(c) Above 600 volts.

(2) Example where the services of a registered engineer may be required include the design of electrical systems for the following:

(a) Hospitals;

(b) Nursing Homes;

(c) Homes for Aged (with medical care and/or central dining facilities);

(d) Retirement Homes (with medical care and/or central dining facilities);

(e) Auditoriums (includes Concert Halls and Assembly Places for 100 or more persons);

(f) Schools;

(g) Gymnasiums;

(h) Fraternal Buildings;

(i) Structures under the purview of UBC 1807 with Oregon amendments;

(j) Multi-family Dwellings;

(k) Planned Unit Developments;

(l) Retail Stores;

(m) Office Buildings.

(3) The Board recognizes that there may be some electrical systems in the above listed structures, which are not sufficiently complex to require the services of a registered engineer. These systems may be submitted to the Board prior to issue of a building permit, and the requirement for a registered engineer may be waived.

(4) The design of electrical systems for the following structures are exempted from the requirements of subsection (1) of this rule:

(a) Duplex dwellings and structures used in connection with or auxiliary to a single-family dwelling or a duplex dwelling.

(b) Farm buildings and structures used in connection with or auxiliary to a farm building, public, commercial, industrial, or stor-

age buildings where electric power use is limited to general purpose lighting, branch circuits not exceeding 60 amps, and the voltage not exceeding 250 volts.

(c) Any electrical contractor whose practice includes the installation and fabrication of electrical systems which he installs by virtue of a license issued under ORS 479.510 to 479.990, which requires an aggregate service capacity below that defined in subsection (1) of this rule is exempted from the requirements of subsection (1) of this rule.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: BEELS 2-2001, f. & cert. ef. 9-14-01

820-040-0020

Structural Engineering

"Structural Engineering" means that branch of professional engineering that provides analysis, design, evaluation or review of structures or their elements, parts or systems for support of external forces such as gravity, lateral loading, temperature, seismic influence, etc.

(1) Structural engineering services for significant structures, as referred to in ORS 672.002 to 672.325, shall mean structural engineering for the primary structural frame or load resisting system and its elements or parts. The primary frame shall be that portion of the structure, which provides the overall stability of the structure. Elements, components, or parts of the structure, which are not part of the primary frame do not require the services of a professional structural engineer.

(2) A "Structural Engineer" is a registered professional engineer who passes a structural engineering examination recognized by the Board and meets the other necessary qualifications for registration under ORS 672.002 to 672.325.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: BEELS 2-2001, f. & cert. ef. 9-14-01

820-040-0030

Traffic Engineering

(1) "Traffic Engineering" is that branch of engineering which applies technology, science, and human factors to the planning, design, operations, and management of roads, streets, bikeways, highways, their networks, terminals, and abutting lands. Its objective is to provide for the safe, rapid comfortable, economical, convenient, and environmentally compatible movement of people, goods and services. Traffic engineering embraces studies and activities in connection with roads, streets, and highway traffic controls, which include signs, signals, lighting, pavement markings, and the following:

(a) The planning, use, and design of traffic control devices and systems;

(b) The use of algorithms for the operation of traffic control system;

(c) The operational adjustment of traffic control devices and systems;

(d) The preparation of traffic engineering reports;

(e) The planning of traffic systems and networks, including environmental impacts, predictions of future needs, and interface with other modes of transportation;

(f) Traffic related engineering economic feasibility studies;

(g) The conduct of investigations and the preparation of recommendations relating to safety measures and improvements to be applied to highways including intersections, ramps, and railroad crossings;

(h) Interrelationships of highways to other travel modes and abutting lands;

(i) The operational and geometric design of roads, streets, bikeways, and highways.

(2) Functional Areas: Four areas have been identified as functional classifications within traffic engineering. Each of the functional areas is further described as follows:

(a) "Traffic operations" is the science of analysis, review, and application of traffic data systems, including accident and surveillance records, and volume and other data gathering techniques necessary for traffic planning. It includes the knowledge of operational

characteristics of persons and vehicles to determine the need for installation of traffic control devices, and the treatment of the functional characteristics of the controls such as traffic signal timing. It includes the assessment of vehicular and human factors, their relationship with other traffic characteristics, the determination of safe transportation systems, and the need for inherently safe features and controls;

(b) "Traffic design" consists of the design of traffic control devices and operational design. Traffic control device design includes those activities necessary to determine the appropriate and proper application of signs, pavement markings, signals, and signal systems, as well as to determine their location, and, if necessary, construction methods. It includes the preparation of plans, specifications, and estimates for the installation or modification of the various devices. Operational design concerns the visible features of a roadway. It may be thought of as the tailoring of the highway to the terrain, to the urban landscape, and to the requirements of the roadway user. It deals with such roadway elements as cross section, curvature, sight distance, channelization, and clearances, and thus depends directly on traffic flow characteristics;

(c) "Traffic planning" includes the determination of travel pattern of persons and goods based upon engineering judgments derived from the study and analysis of traffic characteristics involving present, future, and potential land-use plans; and recommendations for transportation systems and networks of roadways. Traffic planning may include origin and destination studies; functional classification plans; travel forecasts; system, land or mode capacity studies; trip generation and distribution; modal split; traffic assignment; terminal and route location; and economic analysis. The prime responsibility of the traffic planner is to determine travel patterns and networks in concert with the several modes of transportation and their terminals;

(d) "Traffic engineering research" includes the investigation of theoretical and applied aspects of all areas of traffic engineering for the purpose of developing new knowledge, new interpretations, and new applications. Traffic research may include hypothetical testing; impact studies; development of traffic hardware; theory formulation;

methods of analysis, synthesis, and evaluation of existing phenomena and knowledge; and development of objectivity and thoroughness so that the validity of research findings can be demonstrated.

(3) A "Traffic Engineer" is a registered professional engineer who passes a traffic examination recognized by the Board and meets the other necessary qualifications for registration under ORS 672.002 to 672.325.

Stat. Auth.: ORS 670.310, 672.005 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: EE 2-1986, f. 3-26-86, ef. 3-31-86; BEELS 2-2001, f. & cert. ef. 9-14-01, Renumbered from 820-010-0475; BEELS 4-2005, f. & cert. ef. 9-23-05

820-040-0040

Geotechnical Engineering

(1) Geotechnical Engineering is defined as the investigation and the evaluation of the physical and engineering properties of earth materials, such as soil and rock, including impacts of ground water and earthquakes, and their application to the design and construction of civil engineering works, such as foundations, earth dams, retaining walls, and similar, using soil and rock mechanics and earthquake engineering principles and related engineering laws, formula, and procedures. Further, the practice involves the application of soil and rock mechanics and related engineering laws and procedures to an evaluation of the performance of constructed civil engineering works as influenced by earth materials, groundwater, and earthquakes and to an evaluation of the performance, including stability, of natural and man-made slopes, including man-made fills and embankments, and for the design of mitigation measures to reduce risk and/or hazards as disclosed by the evaluation.

(2) A "Geotechnical Engineer" is a registered professional engineer who passes a geotechnical engineering examination recognized by the Board and meets the other necessary qualifications for registration under ORS 672.002 to 672.325.

Stat. Auth.: ORS 670.310 & 672.255

Stats. Implemented: ORS 672.002 - 672.325

Hist.: BEELS 1-2003, f. & cert. ef. 1-28-03; BEELS 1-2005, f. & cert. ef. 3-16-05