

GUIDELINES FOR REVIEW
OF
QUALIFYING GEOTECHNICAL EXPERIENCE

For the purpose of determining qualifications for adding the branch by prior practice, Geotechnical engineering includes tasks from the following list. The list is not intended to be inclusive or in any way limit the scope of other professionals.

(A) Development of programs of geotechnical investigation including but not limited to:

- (1) Communication with other design consultants to determine their geotechnical input needs
- (2) Performance of literature searches, site history analyses, or similar tasks related to surface and subsurface conditions
- (3) Formulation or engineering evaluation of field exploration and laboratory testing programs to accomplish the scope of the investigation
- (4) Preparation or engineering evaluation of proposals.

(B) Performance of geotechnical field and laboratory studies including, but not limited to:

- (1) Direction and/or modification of field exploration programs, as required upon evaluation of the conditions being encountered;
- (2) Classification and evaluation of subsurface conditions.
- (3) Understanding the purposes for and being qualified to perform routine field and laboratory tests for:
 - (a) soil strength
 - (b) bearing capacity
 - (c) expansion properties
 - (d) consolidation characteristics
 - (e) soil collapse potential
 - (f) erosion potential
 - (g) compaction characteristics
 - (h) material acceptability for use in fill
 - (i) pavement support qualities
 - (j) freeze-thaw properties
 - (k) grain-size
 - (l) permeability/percolation properties

(C) Analysis of geotechnical data and engineering computations including but not limited to:

- (1) Analysis of field and laboratory test results regarding:
 - (a) soil strength
 - (b) bearing capacity
 - (c) expansion properties
 - (d) consolidation characteristics
 - (e) soil collapse potential
 - (f) erosion potential
 - (g) compaction characteristics
 - (h) material acceptability for use in fill
 - (i) pavement support qualities
 - (j) freeze-thaw properties
 - (k) grain-size
 - (l) permeability/percolation properties
 - (m) ground water conditions

- (n) soil dynamic properties
- (2) Performance of computations using test results and available data regarding:
 - (a) bearing capacity
 - (b) foundation type, depth, dimensions
 - (c) allowable soil bearing pressures
 - (d) potential settlement
 - (e) slope stability
 - (f) retaining systems
 - (g) soil treatment
 - (h) dewatering/drainage
 - (i) floor support
 - (j) pavement design
 - (k) site preparation
 - (l) fill construction
 - (m) liquefaction potential
 - (n) ground response to seismic forces
 - (o) ground water problems; seepage
 - (p) underpinning

(D) Performance or engineering evaluation of construction, post-construction and site monitoring including but not limited to:

- (1) Performance or supervision of geotechnical testing and observation of site grading;
- (2) Analysis, design and evaluation of instrumentation programs to evaluate or monitor various phenomena in the field, such as settlement, slope creep, porewater pressures and ground water variations;
- (3) Geotechnical observation during construction and/or installation, including but not limited to, spread foundations, drilled piers, piles, slurry walls, anchors, bulkheads, shoring, underpinning and subdrains;
- (4) Engineering evaluation of soil related distress.

(E) Preparation or engineering evaluation of geotechnical reports including but not limited to:

- (1) Preparation of appropriate plans, logs, test results and other exhibits;
- (2) Documentation of testing and observation;
- (3) Preparation of written reports, which present findings, conclusions and recommendations of the investigation;
- (4) Preparation of specifications and guidelines for achieving the intent of item (E) (3) above.

PHOTOGRAPH

APPROX. 2" X 2"

AFFIX WITH TAPE
OR GLUE.
DO NOT STAPLE.

**OREGON STATE BOARD OF EXAMINERS FOR
ENGINEERING AND LAND SURVEYING
728 HAWTHORNE AVE NE, SALEM OR 97301
(503) 362-2666**

Email address: osbeels@osbeels.org

**PROFESSIONAL GEOTECHNICAL ENGINEER
APPLICATION FOR REGISTRATION
BASED ON PRIOR PRACTICE**

Postmark Deadline for application is one year after the Board first gives the exam,
per OAR 820-010-0200(8). Please check the web site for future exam dates.

Application Fee: \$230

Please Type or Print.

1. Last (Family) Name:		First Name:		Middle:	
-------------------------------	--	--------------------	--	----------------	--

Oregon PE License.

2. Social Security #:		6. Oregon PE License #	
3. Birthdate Mo/Day/Yr:		7. Business Name:	
4. Resident Address:		Business Address:	
City, State, Zip		City, State, Zip:	
Home Phone:		Business Phone:	
5. E-mail Address:		8. Fax Number:	

The following section corresponds with the Experience Record Sheets, please list in reverse chronological order your current position/employer. Time is calculated in years and months. You must provide evidence of at least four (4) years of Geotechnical Engineering as defined by rule: (OAR 820-040-0040)

Employer				POSITION HELD	Geotechnical Engineering Work	
No.	Dates From & To	Name	Location City & State		Years	Months
TOTAL						

REFERENCE SUMMARY: Please list **all** references below. References shall have **at least one-year** personal knowledge of your Geotechnical Engineering practical experience. List **no** less than **three (3) names** of registered Professional Engineers and submit with the application (Oregon registrants desired, if possible). References shall **not** be **related** to you by birth or marriage. You must provide a reference *for each major engagement*, including your present employer or partner. If **all** your geotechnical experience is with your present firm, at least one reference from outside the firm is requested. Indicate the project number of each reference from the SUMMARY OF EXPERIENCE above.

PROJECT NUMBER	NAME	PE License Number	STATE	MAILING ADDRESS WITH ZIP CODE

I certify under penalty of perjury that the information on this application and all appended sheets is true and correct.

Signature of Applicant

Date

The following items must be provided with the application:

- Payment of **\$230** (Applications are **not** reviewed until fees are paid in full)
- Experience record sheet
- References: All three (3) in original sealed envelopes

<p>Postmark Deadline for application is one year after the Board first gives the exam, per OAR 820-010-0200(8). Please check the web site for future exam dates.</p>
--

(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

820-040-0040

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

OREGON STATE BOARD OF EXAMINERS FOR ENGINEERING AND LAND SURVEYING

Standard Reference Form for Prior Practice Geotechnical Engineer **ONLY**

(Please print or **type**)

APPLICANT SECTION: Complete items 1 through 4 and forward to Reference for verification of Geotechnical Engineering work experience.

1. Application for Registration:

Prior Practice as a Geotechnical Engineer

Date of Application: _____

Applicant's Name: _____

Oregon PE certificate Number _____

Street Address: _____

City: _____ State: _____ Zip: _____

Telephone:(_____)_____

Work Telephone:(_____)_____

2. My contacts with the reference have been in the following capacities. From:_____ (mo/year) To:_____ (mo/year)

As my employer or supervisor

As an associate in an engineering firm

In professional society activities

Other: _____

3. Applicant's Geotechnical engineering duties and responsibilities:

4. If you have been employed by this reference, or have been a member of the same firm or agency - please supply the following information:

Inclusive dates of employment: Full Time Part Time From:_____ (mo/year) To:_____ (mo/year)

Name and address of firm/agency:_____

Applicant's position:_____

Reference's position:_____

Firm/agency telephone: (____)_____

REFERENCE SECTION: To be completed by reference. Please complete the following items and return to the applicant as described in REFERENCE INSTRUCTIONS.

1. Is the information stated by the applicant correct as stated? **YES I DO NOT HAVE ADEQUATE KNOWLEDGE TO REPLY NO**

If **NO**, please explain: (In particular, note stated time periods, duties, responsibilities, and relationship of the applicant to you.)

2. I have knowledge of the applicant's Geotechnical engineering work From:_____ (mo/year) To:_____ (mo/year)

Comments:_____

REFERENCE SECTION (Continued)

3. Did or Do you supervise the applicant's work? **YES NO** From:_____ (mo/year) To:_____ (mo/year)

Comments:_____

4. From your personal knowledge indicate your appraisal of the applicant's potential to practice Geotechnical engineering by placing an 'X' in the appropriate boxes below. If "unsatisfactory" box is checked, please attach a note of explanation.

	SATISFACTORY	UNSATISFACTORY	UNKNOWN
Technical Competence			
Professional Integrity			
Professional Judgment			

5. Does the applicant's work meet the definitions as shown in the reference instructions? _____

6. If a registered Geotechnical engineer, would you employ the applicant in a position of trust? _____

7. Please add any comments as to character, professional ethics, etc. which might be helpful to the Board in evaluating this applicant.

a. What is his/her reputation as a professional? _____

b. Do you have any reservations concerning this individual? _____

c. Do you have any qualifying remarks or comments? _____

d. Do you recommend that we check further? (If yes Why?) _____

8. **REMARKS.** The Board requests that you comment on information regarding the applicant's Geotechnical engineering experience and abilities, and estimate of potential in the practice of engineering. Please direct your remarks to the geotechnical practice applied for in the applicant section. _____

9. **(If this item is not filled out completely, this form will not be considered.)**

Reference Name: _____ Telephone: (____) _____

Current OREGON registration: PE Certificate No. _____ Branch: _____ Year: _____

***(IF Not registered in Oregon) complete the information below.**

State of current registration: _____ No. _____ Branch: _____ Year: _____

Name of firm/agency: _____ Position in firm/agency: _____

Firm Address: _____ Firm telephone: (____) _____

Signature: _____ Date: _____

You are invited to provide the Name, Address, and Telephone Number of any other person(s) who may have specific knowledge of the applicant's work experience, abilities, professional integrity, or any other information that would be of value to the Board.

Name: _____ Name: _____

Address: _____ Address: _____

Telephone: _____ Telephone: _____

REFERENCE INSTRUCTIONS

Your name appears as a reference that can attest to the applicant's ability and professional experience as a Geotechnical engineer (as indicated in Prior Practice APPLICANT SECTION). In addition to the written record submitted by the applicant, the Board of Examiners for Engineering and Land Surveying needs the testimony of those who can, from personal knowledge, attest to the competency of the applicant in the discipline for which he/she has applied. Thus, the Board respectfully requests your aid in fulfilling its responsibility to the extent of asking you to answer fully and with the utmost frankness answer the questions on this form.

References shall have at least one-year personal knowledge of the applicant's practical experience related to Geotechnical Engineering, and shall not be related to the applicant by birth or marriage. Your answers should be fair both to the State of Oregon and to the applicant. Note that the purpose of answering these questions is the safeguarding of life, health, and property of the public against the practice of professional engineering by unqualified persons in accordance with Oregon Revised Statutes and Oregon Administrative Rules. The responsibility of the Board is real and others must share its enforcement in order to make the law effective.

Please do not allow the applicant to see your answers or comments, and do not communicate to the applicant the results of your evaluation.

The Board takes this form very seriously and will use the information in the determination as to whether a certificate should be granted or denied. **If this form is not completely filled out it will not be considered.**

PLEASE COMPLETE THE FOLLOWING ITEMS AND RETURN THE FORM TO THE APPLICANT IN A SEALED ENVELOPE. Place your stamp on the return envelope along the sealed edge (See example below). This will ensure the information contained is kept confidential until received by the Board. The applicant will return the reference form, unopened to the Board of Examiners for Engineering and Land Surveying in one compiled application packet.

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) Geotechnical Engineer: A Geotechnical Engineer is defined as a professional engineer especially qualified in civil engineering, licensed to practice in the state of Oregon who is additionally licensed as a Geotechnical Engineer.

Stat. Auth.: ORS 670.310 & ORS 672.255
Stats. Implemented: ORS 672.002 - 672.325
Hist.: BEELS 1-2003, f. & cert. ef. 1-28-03

NOTE TO APPLICANT: THIS REFERENCE FORM SERVES AS A MASTER PLEASE MAKE COPIES AS NECESSARY.