



Oregon State Board of Geologist Examiners

REQUEST FOR PROPOSALS

Number 967-1001-13 Engineering Geology Guidelines

Date of Issuance: February 1, 2013

Proposals Due: March 1, 2013

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Section 1: Purpose and General Information

Background The mission of the Oregon State Board of Geologist Examiners (OSBGE) (www.oregon.gov/OSBGE/) is to help assure the safety, health, and welfare of Oregonians with regard to the public practice of geology through:

- Licensing of those engaged in the public practice of geology;
- Response to complaints from the public and members of the profession;
- Public education directed at appropriate regulatory communities;
- Cooperation with closely related Boards and Commissions;
- Attention to ethics; and
- Systematic outreach to counties, cities, and registrants.

As part of its work to carry out this mission, the Board developed a series of guidelines aimed primarily at registrants but that are also available to counties, cities, and citizens interested in the public practice of geology. The purpose of the guidelines has been to present best practices about various aspects of the public practice of geology. These guidelines have unfortunately become quite dated, and the Board sees a need to update the guidelines to reflect current standards, practices, and technology within the industry.

The first priority for the Board is to update the Guidelines for Preparing Engineering Geologic Reports in Oregon, circa 1990, and create a companion fact sheet summarizing key information about the practice of engineering geology in Oregon. The engineering geology guidelines address practices for the preparation of engineering geologic reports in Oregon by providing suggestions on inclusion of sufficient facts and interpretation of geologic materials, processes, and history to allow evaluation of the suitability of the site for a proposed use. Due to wide variation in the size and complexity of projects, the guidelines are intended to be flexible and tailored to each specific project. Some items addressed in the guidelines may not be applicable to all projects, especially small projects or low-risk sites. In addition, some items discussed in the guidelines may not be addressed by the engineering geologist but instead be covered in separate reports prepared by a geotechnical engineer, geophysicist, structural engineer, or hydrologist.

Procurement Authority and Method: The Agency is soliciting proposals pursuant to its authority under ORS 182.466(2), ORS 190.110, and its Contracting and Procurement policy.

Contract Terms: OSBGE anticipates a single Contract or Interagency Agreement (IAA) with an entity capable of completing the entire project. The Agency anticipates a project start date of spring or early summer 2013 and a 9 to 12 month total project time.

Method of Compensation: OSBGE anticipates that the payment method shall be either OPTION 1: a flat fixed price or OPTION 2: time and materials, based on the Contractor's negotiated hourly labor and material rates, up to a maximum not to exceed amount.

Minimum Proposer Qualifications: OSBGE invites private-sector, non-profit and governmental entities to submit proposals in response to this solicitation. If the Proposer ultimately selected is a governmental entity, then OSBGE would pursue an IAA with that entity.

For a private-sector Proposer, OSBGE would negotiate a personal services Contract with that Independent Contractor.

OSBGE will consider proposals where a scientific editor, registered geologist with certification in engineering geology, academician in geology, engineering geology or a related field, graduate student in geology, engineering geology or a related field or some combination of the above will be involved carrying out the project.

The Proposer must verify authorization to do business in the State of Oregon, including any required licenses or registrations for key personnel identified as conducting the work.

Schedule

Event	Due Date
▪ RFP Release – Date of Issuance	February 1, 2013]
▪ Written Questions Due	February 15, 2013 by 5 PM
▪ Answers to Proposal Questions	February 22, 2013 by 5 PM
▪ RFP Closing	March 1, 2013 by 5 PM
▪ Evaluation Period	March 2013
▪ <i>(final review @ OSBGE 3/22/13 meeting.)</i>	
▪ Award Notification (approx.)	April 1, 2013
▪ Contract Award (approx.)	April 15, 2013
▪ Contract Start (approx.)	April 15-May 1, 2013]

Definitions

For the purposes of this solicitation, the following definitions apply:

- **“Addendum”** means an addition to, deletion from, a material change in, or clarification of, the solicitation document. Addenda shall be labeled as such, issued by the Agency, and shall be made available to prospective Proposers as set forth in this document.
- **“Agency”** means the Oregon State Board of Geologist Examiners or OSBGE, which is the agency procuring the Services identified herein.
- **“Closing”** means the date and time on or before which Proposals must be received at the location identified on the Cover Page of this document to be considered.
- **“Contract”** means a procurement agreement between the Agency and an Independent Contractor..
- **“Engineering Geologist”** means a person who applies geologic data, principles and interpretation to naturally occurring materials so that geologic factors affecting planning, design, construction and maintenance of civil engineering works are properly recognized and utilized.
- **“IAA”** means Interagency Agreement, a form of procurement agreement between two or more governmental entities
- **“Public Practice of Geology”** means the performance for another of geological service or work, such as consultation, investigation, surveys, evaluation, planning, mapping and inspection of geological work, that is related to public welfare or safeguarding of life,

health, property and the environment, except as specifically exempted by ORS 672.505 to 672.705.

- **“Proposal”** means a written response to this document.
- **“Proposer”** means an individual, corporation, business trust, partnership, Limited Liability Company, association, joint venture, governmental agency, public corporation or other legal or commercial entity that has submitted a Proposal in response to this document.
- **“Registrant/Registered Geologist”** means an individual that has met the requirements for licensure to publicly practice geology in the State of Oregon and actively maintains such registration with OSBGE.
- **“RFP”**, also Solicitation Document, means this document, including all attachments or other documents incorporated by reference, and any Addenda thereto.
- **“Scope of Work”** means the general character of the Supplies and Services, the work’s purpose and objectives, and Agency’s expectations.
- **“SPC”** or **“SPC”** means the person identified on the Cover Page of this document as the sole point of contact for the Agency. All questions regarding this solicitation shall be directed only to this person.
- **“Statement of Work”** means the specific provision in the final Contract which sets forth and defines in detail the agreed-upon objectives, expectations, performance standards, and other obligations.
- **“Successful Proposer”** means the person, organization or governmental entity to which the award is made.

Scope of Work: Following is a tentative Scope of Work intended to provide guidance to Proposer’s about the needs of the Agency. The Agency and the successful Proposer will negotiate a final Statement of Work for the Contract or IAA. Aspects of the proposed work could evolve based on such negotiations.

1. CONTRACTOR will compile in an EXCEL spreadsheet a listing of states and provinces with comparable guidelines. Along with the name of each state, list the date the guideline was compiled, the date of revising (if any), a link to the guideline, and a copy of the guideline if a link is not available.
2. CONTRACTOR will compile in an EXCEL spreadsheet a listing of professional organizations with comparable guidelines. Along with the name of each professional organization, list the date the guideline was compiled, the date of revising (if any), a link to the guideline, and a copy of the guideline if a link is not available.
3. CONTRACTOR will compile in WORD a new draft guideline starting with the existing OSBGE guideline and may incorporate elements as appropriate and prudent from guidelines published by other state, provincial, and professional organizations. Recommended additions or deletions from the existing OSBGE guideline must be clearly labeled along with a reason for the addition or deletion including a citation to a state, provincial, and professional organization guideline or other reference. The new draft guideline will be delivered to the OSBGE one month before a next scheduled quarterly meeting after the contract is awarded.

4. CONTRACTOR will also prepare in WORD a draft fact sheet to accompany the new draft guidelines for OSBGE review with the new draft guidelines. The draft fact sheet will also be delivered to the OSBGE one month before the first scheduled quarterly Board meeting after the contract is awarded.
5. CONTRACTOR will convene a panel of four (4) Oregon Certified Engineering Geologists (CEGs). One panel member must be from the Portland metropolitan area. One panel member must be from central Oregon. One panel member must be from the Oregon coast. One panel member must be from southern Oregon. If feasible, the panelists should represent consulting, government, and industrial sectors. The consulting and industrial panelists should come from different sized companies, i.e. one from a mid-to large sized company and one from a small consulting firm, to offer different professional experiences to the process. The list of recommended panel members must be submitted to the OSBGE for approval two months prior to the second scheduled quarterly Board meeting after the contract was awarded. Each approved panel member will be paid travel expenses and a fee of \$500 by the contractor. The contractor will be responsible for costs associated with room rental for the professional panel meeting.
6. CONTRACTOR will deliver the new draft guideline and the draft fact sheet to the professional panel one month before convening the panel. The CONTRACTOR will also notify the Board of the date and time of the panel meeting one month before convening the panel.
7. CONTRACTOR will facilitate the professional panel discussion of the new draft guideline and draft fact sheet. The contractor will compile the panel discussion minutes and written and oral comments by the panel discussion. The contractor will update the new draft guideline and draft fact sheet with the recommended additions and deletions by the professional panel, clearly indicating the change and the source of the change in the new draft guideline and draft fact sheet for submittal to the OSBGE one month before the third scheduled quarterly Board meeting after the contract was awarded.
8. OSBGE will provide comments to CONTRACTOR within one month following the third scheduled quarterly Board meeting after the contract was awarded. CONTRACTOR will update new draft guidelines and new draft fact sheet with OSBGE comments and changes in WORD for submittal to the OSBGE one month before the fourth scheduled quarterly Board meeting after the contract was awarded.

Section 2: Proposal Requirements

Minimum Proposal Requirements: A Proposal shall meet the minimum proposal requirements described herein. Only proposals that include complete information will be considered for evaluation. Minimum requirements are as follows:

- The Proposer shall sign and submit the Proposal Cover Sheet (see Attachment A).

- Proposals shall respond to all elements of information requested, without exception. Proposals shall also specifically describe how the supplies and services described herein would be provided. Proposals that merely offer to provide the supplies and services as stated in this document shall be considered non-responsive and shall not be further considered.
- All Proposals shall be submitted using 8 ½ X 11 white paper and be typed without any unusual printing or unnecessary graphics. Proposal sections and pages shall be appropriately numbered per the outline below. Proposals may use various headings, but shall include at least the following headings in the following order and numbered as indicated below, followed by Proposer’s responses:
 - Part 1: Administrative Proposal Requirements, including Price Proposal Addendum
 - Part 2: Technical Proposal Requirements
 - Part 3: References
- Proposer shall provide 2 originals and 2 copies of the proposal, including all required supporting information and documents. Proposer shall also include one (1) CD containing a pdf version of the signed Proposal. The originals and all copies of the Proposal shall be submitted in a sealed envelope or box, labeled “Proposal to RFP #967-2012-01” and delivered to the SPC.

Administrative Proposal Requirements: In addition to the information provided in the Proposal Cover Sheet (see Attachment A), the Administrative Proposal must include:

- location(s) of where work will be completed if different than primary business office listed in the Cover Sheet,
- a preliminary schedule for the work,
- a total cost and budget details provided in the Price Proposal Addendum
- description of the organization or company and its capabilities to complete the work,
- listing of key personnel who will conduct the work
- listing of references; see also below.
 - **References:** As part of Attachment A, a Proposer shall provide the names, contact persons, telephone numbers, and emails for three (3) individuals with knowledge of the Proposer. These individuals must be able to describe and verify the quality of knowledge, skills and services of the Proposer. The Agency may use these references provided as part of the proposal evaluation process as described in Section 4.
 - **Format:** Administrative Proposals must not exceed ten (10) pages in length.

Technical Proposal Requirements: The Technical Proposal must include:

- a description of how the Proposer shall meet each of the technical requirements described in the Scope of Work,

- background information on the key persons identified in the Administrative Proposal as the parties who shall perform the work, including resume(s) of the key personnel illustrating qualifications and relevant experience,
 - a description of the key persons' understanding of the scope and approach.
- **References:** Agency may use the references provided as part of the Administrative Proposal to aid in the evaluation of the Technical Proposal.
 - **Format:** Technical Proposals must not exceed five (5) pages in length, not including resumes of proposed key personnel.

Price Proposal Requirements: Price proposals shall provide a total cost estimate along with hourly rates and price specifications by task, for travel, for supplies, etc. The Proposer shall include this information in the Price Proposal Addendum (Attachment B) to the Administrative Proposal. Price Proposals shall be firm for a period of 180 days from the deadline for proposal submission.

Section 3: Solicitation Process

General Information: The Agency shall post this original solicitation document, including all Addenda and Attachments, on its website and on the Oregon Procurement Information Network System (ORPIN). The Agency is not required to mail these documents to interested parties.

- **Website Usage:** Proposers without access to ORPIN and who do not elect to obtain access to ORPIN may download documents from <http://www.oregon.gov/OSBGE>.
- **ORPIN Usage.** The ORPIN web site is: <http://orpin.oregon.gov/open.dll/welcome>. Proposers unfamiliar with ORPIN may contact the State Procurement Office (SPO) at the Department of Administrative Services, 1225 Ferry St. SE - U140, Salem, OR 97301-4285; telephone (503) 378-4642. Proposers may also look for updates about ORPIN on the SPO website: <http://procurement.oregon.gov/>. Proposers are responsible for ensuring that their registration information is current and correct. SPO accepts no responsibility for missing or incorrect information contained in the supplier's registration information in ORPIN.

To be notified of any substantial clarifications or addenda, interested parties or Proposers will need to submit a written request to the SPC to be added to the Agency notice list for this solicitation. Any such notifications will be provided by e-mail from the Agency to those requesting to be on the interested parties list.

Any oral communications shall be considered unofficial and non-binding. Proposers shall rely only on written statements issued by the SPC.

Questions and Clarifications: Questions, including requests for clarifications about the meaning or interpretation of provisions of this solicitation, shall be submitted in writing, arrive by the date and time specified herein or any extension made by subsequent Addenda, and be

addressed to the attention of the SPC. Faxes (including Proposer's fax number) and emails sent to osbge.info@state.or.us are acceptable but the Agency will not be responsible for providing verification of receipt for faxes and emails.

Submission of Proposals: Proposals must be received by the SPC no later than the closing date and time specified herein at the address listed on the front page of this document. Proposals may be delivered via U.S. Mail, courier, or via ORPIN. Late, faxed or electronically transmitted (with the exception of ORPIN) Proposals shall not be accepted.

Withdrawal of Proposals: If a Proposer wishes to withdraw a submitted Proposal, it should do so prior to the closing date and time. The Proposer shall submit a request to withdraw in writing, signed by the Proposer and on the Proposer's letterhead, to the SPC.

Opening of Proposals: Proposals will be opened at the Board office by the SPC as they arrive.

Cost of Preparing Proposals: All costs incurred in preparing and submitting a Proposal in response to the solicitation are the responsibility of the Proposer and shall not be reimbursed by Agency.

Public Records: The Proposer shall recognize that this solicitation document and Proposals submitted to the Agency in response are public documents.

Reservation of Agency Rights: Agency shall not be liable for any claims or be subject to any defenses asserted by Proposer based upon, resulting from, or related to, Proposer's failure to comprehend all requirements of the solicitation. Furthermore, Agency reserves all rights regarding this solicitation, including without limitation, the right to:

- Amend, delay or cancel the solicitation without liability if Agency finds it is in the best interest of the Agency to do so;
- Reject any or all Proposals received upon finding that it is in the best interest of the Agency to do so;
- Determine the Proposal that is in the best interest of the Agency;
- Waive any minor informality or non-conformance with the provisions or procedures of the solicitation,
- Seek clarification of any Proposal, if required;
- Request information in addition to that required herein when Agency, in its sole discretion, considers this necessary or advisable;
- Reject any Proposal that fails substantially to comply with all prescribed procedures and requirements;
- Negotiate a Statement of Work based on the Scope of Work described in Section 1 and to negotiate separately in any manner necessary to serve the best interest of the public;
- Amend any Contracts or IAAs that result from the solicitation;
- Engage consultants by selection or procurement independent of the solicitation process or any Contracts or agreements under it to perform the same or similar services; and
- To extend any Contracts or IAA that result from the RFP without an additional solicitation process.

Section 4: Evaluation and Award

Evaluation Process: Agency shall evaluate and score all Proposals on the completeness, quality, and applicability of their content in accordance with the following Sections (explained in more detail below):

- Evaluation of Minimum Requirements (Pass/Fail)
 - Evaluation of Administrative Proposal, excluding Price Proposal (Scored)
 - Evaluation of Technical Proposal (Scored)
 - Evaluation of Price Proposal (Scored)
 - Reference Checks (Pass/Fail)
 - Final Ranking of Proposals
- **Evaluation Committee:** Agency shall establish an Evaluation Committee which may consist of Agency staff, Board members, government partners and community partners to review, evaluate and score each Proposal.
 - **Disqualification:** Any attempt by a Proposer to improperly influence a member of the Evaluation Committee during the proposal review and evaluation process shall result in proposal rejection.

Evaluation of Minimum Requirements (Pass/Fail): The SPC shall review all Proposals on a pass/fail basis and determine if each Proposal meets the minimum proposal requirements described herein. Proposer's failure to comply with the instructions or to submit a complete Proposal may result in the Proposal being deemed non-responsive. Only those Proposals determined to responsive to the Minimum Requirements shall be forwarded to the Evaluation Committee. See also the Reservation of Agency Rights in Section 3.

Evaluation of Administrative and Technical Proposals (Scored): The Evaluation Committee shall score all Proposals using the quantity and quality of information provided by the Proposer. The Evaluation Committee may request additional clarification from Proposers for any portion of the Proposals. If a Proposal is unclear, Proposer may be asked to provide clarification. Proposers shall remain available during the evaluation period to respond to requests for additional clarification. Proposers shall submit written signed clarification(s) within 48 hours of request (Monday through Friday, state-observed holidays excluded) following receipt of the request. Failure to provide clarification may result in a lower score or no further evaluation of the proposal by the Committee.

Evaluation of Price Proposal (Scored): Proposer shall provide a Price Proposal Addendum as part of the Administrative Proposal using the form attached to this document as Attachment B. The SPC shall provide the Evaluation Committee with a listing of proposals by price, ranked from lowest cost as first to highest cost as last. However, although price is a consideration in determining the apparent successful Proposer, the Evaluation Committee shall also consider factors such as qualifications, performance history, expertise, knowledge and the ability to exercise sound professional judgment. Due to the highly technical nature of some of the

proposed tasks, the Proposer with the lowest Price Proposal may not necessarily be awarded a Contract or IAA.

The Evaluation Committee reserves the right to request clarifications of any pricing information included in Proposer's Price Proposal. The Proposer shall provide the requested clarification within 48 hours (Monday through Friday, state-observed holidays excluded) or the Proposal may be rejected as non-responsive at the sole discretion of Agency. Failure to provide clarification may result in a lower score or no further evaluation of the proposal by the committee.

Reference Checks for the Proposer (Pass/Fail): Proposer shall provide three (3) References that can rate Proposer's performance in these categories:

- Understanding of engineering geology
- Understanding of geologist registration in relation to the public practice of geology
- Ability to organize and synthesize technical information
- Coordination and communications skills

The SPC or Evaluation Committee may conduct reference checks by phone, emailed evaluation forms or both. Also, the committee reserves the right to request references in addition to those provided by the Proposer or to otherwise investigate the past performance of any Proposer.

Ranking of Proposals: The Evaluation Committee shall use the following scoring system, with maximum points available identified below, and provide its recommendations to OSBGE:

Administrative Proposal	40
Technical Proposal	40
Price Proposal	20
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TOTAL MAXIMUM POINTS	100

References (Pass/Fail)

- **Preference for Oregon Supplies and Services:** If the Agency receives Proposals identical in price, fitness, availability and quality and chooses to award a Contract or IAA, then the Agency may give preference to Oregon supplies and services in accordance with the procedures outlined in OAR 125-246-0300 and OAR 137-046-0300.
- **Preference for Minority, Women-Owned, and Emerging Small Businesses:** The Agency supports the participation of Minority, Women-owned and Emerging Small Businesses in its procurement processes and notified the Advocate for Minority, Women and Emerging Small Business of this RFP as required under ORS 200.035. If the Agency receives Proposals identical in price, fitness, availability and quality and chooses to award a Contract or IAA, then the Agency may give preference to a Minority, Women-Owned, or Emerging Small Business over other Proposers. See Attachment C for Disadvantaged Business Enterprise Certification that must be filed

out and included in the Proposal if the Proposer wishes for the Agency to be notified of its certification.

Award Notification: Following the identification of an apparent successful Proposer, Agency may elect to notify this Proposer and request a signed Contract or IAA. If the apparent successful Proposer does not accept the Contract or IAA offered within seven (7) business days of the apparent successful Proposer's receipt of the Contract or IAA, or such later date as Agency may authorize, Agency may make another selection. All Proposers shall be notified of the status of their Proposal. If all Proposals are rejected, the evaluation committee shall promptly notify all Proposers. No information shall be given to any Proposer (or any other individual) relative to their standing with other Proposers during the RFP process.

Negotiation: Agency will negotiate with the successful Proposer to reach agreement on any Contract or IAA resulting from this RFP. Negotiable terms and conditions generally would include:

- Method of Payments
- Term of Contract
- Extensions
- Indemnification
- Termination
- Invoicing
- Pricing/Rates
- Insurance
- Project Delivery Schedule

In the event that mutually agreeable terms cannot be reached within a reasonable time period, as judged by Agency, then Agency reserves the right to cancel the award with the Proposer.

Section 5: Attachments

Guidelines for Preparing Engineering Geologic Reports in Oregon

Attachment A – Proposal Cover Sheet

Attachment B – Price Proposal Addendum Form

Attachment C – Disadvantaged Business Enterprise Certification

All Attachments are incorporated by reference herein.

GUIDELINES FOR PREPARING ENGINEERING GEOLOGIC REPORTS IN OREGON

**Adopted by
The Oregon State Board of Geologist Examiners
May 8, 1990**

This is a suggested guide for the preparation of an engineering geologic report in Oregon. The engineering geologic report should include sufficient facts and interpretation regarding geologic materials, processes, and history to allow evaluation of the suitability of the site for the proposed use. Because of the wide variation in size and complexity of projects and scope of work, the guidelines are intended to be flexible and should be tailored to the specific project. The guidelines are intended to be fairly complete; however, not all items would be applicable to small projects or low-risk sites. In addition, some items may be addressed in separate reports prepared by a geotechnical engineer, geophysicist, structural engineer, or hydrologist. The guidelines are based on a publication developed by the Guidelines Committee of the Utah Section of the Association of Engineering Geologists, a series of guidelines published by the California Division of Mines and Geology in the CDMG Note series, and the Bulletin of the Association of Engineering Geologists (Slosson, 1984).

I. GENERAL INFORMATION

The following items should be addressed:

- A. Client or party that commissioned the report.
- B. Name(s) of geologist(s) who did the mapping and other investigation on which the report is based, and dates when the work was done.
- C. Location and size of area, and its general setting with respect to major or regional geographic and geologic features.
- D. Purpose and scope of the report and geologic investigation, including the proposed use of the site. Also, identify level of the study, i.e., feasibility, preliminary, final, etc.
- E. Topography and drainage within or affecting the area.
- F. General nature, distribution, and abundance of exposures of earth materials within the area.
- G. Nature and source of available subsurface information and geologic reports or maps. Suitable explanations of the available data should provide a technical reviewer with the means of evaluating the reliability. Reference to cited works or field observations should be made, to substantiate opinions and conclusions.
- H. Disclosure of known or suspected geologic hazards affecting the area, including a statement regarding past performance of existing facilities (such as buildings or utilities) in the immediate vicinity.
- I. Locations of test holes and excavations (drill holes, test pits, and trenches) shown on maps and sections and described in the text of the report. The actual data, or processed data upon which interpretations are based, should be included in the report to permit technical reviewers to make their own assessments regarding reliability and interpretation.
- J. All field and laboratory testing procedures (by ASTM designation, if appropriate) and test results.
- K. Disclosure statement of geologist's financial interest, if any, in the project or the client's organization.

- L. The signature and seal of the certified engineering geologist who prepared the report.

II. GEOLOGIC MAPPING AND INVESTIGATION

- A. Geologic mapping of the area should be done at a scale that shows sufficient detail to adequately define the geologic conditions present. For many purposes, available published geologic maps are unsuitable to provide a basis for understanding the site conditions, so independent geologic mapping is needed. If available published geologic maps are used to portray site conditions, they must be updated to reflect geologic or topographic changes that have occurred since map publication. It may be necessary for the geologist to extend mapping into adjacent areas to adequately define significant geologic conditions.
- B. Mapping should be done on a suitable topographic base or aerial photograph, at an appropriate scale with satisfactory horizontal and vertical control. The date and source of the base should be included on each map or photo.
- C. The geologist doing the investigation and preparing the map should report the nature of bedrock and surficial materials, the structural features and relationships, and the three-dimensional distribution of earth materials exposed and inferred within the area. A clear distinction should be made between observed and inferred features and relationships.
- D. The report should include one or more appropriately positioned and scaled cross sections to show subsurface relationships that cannot be adequately described in words alone. Fence or block diagrams may also be appropriate.

III. GEOLOGIC DESCRIPTIONS

The report should contain brief but complete descriptions of all natural materials and structural features recognized or inferred within the subject area. Where interpretations are added to the recording of direct observations, the basis for such interpretations should be clearly stated.

Describe all field mapping and exploration procedures (surface geologic reconnaissance, drilling, trenching, geophysical survey, etc.).

The following checklist may be useful as a general, though not necessarily complete, guide for descriptions:

A. *Bedrock.*

1. Identification of rock types.
2. Relative and absolute age and, where possible, correlation with named formations and other stratigraphic units.
3. Surface and subsurface expression, areal distribution, and thickness.
4. Pertinent physical characteristics (e.g., color, grain size, nature of stratification, strength, variability).
5. Distribution and extent of zones of weathering; significant differences between fresh and weathered rock.
6. Special engineering geologic characteristics or concerns (e.g., factors affecting proposed grading, construction, and land use).

B. *Structural features—stratification, faults, discontinuities, foliation, schistosity, folds.*

1. Occurrence, distribution, dimensions, orientation, and variability, both within and projecting into the area.
2. Relative ages, where pertinent.
3. Special features of faults (e.g., topographic expression, zones of gouge and breccia, nature

- of offsets, age of movements, youngest faulted unit and oldest unfaulted unit).
4. Other significant structural characteristics or concerns.

C. Surficial deposits—alluvial, colluvial, eolian, glacial, lacustrine, marine, residual, mass movement, volcanic (such as cinders and ash), and fill.

1. Identification of material, grain size, relative age, degree of activity of originating process.
2. Distribution, dimensional characteristics, variations in thickness, degree of soil development, surface expression.
3. Pertinent physical and engineering characteristics (e.g., color, grain size, lithology, compactness, cementation, strength, thickness, variability).
4. Special physical or chemical features (e.g., indications of volume change or instability, such as expansive clays or peat).
5. Other significant engineering geologic characteristics or concerns.

D. Surface and shallow subsurface hydrologic conditions, including groundwater, springs, and streams and their possible effect on the site. Indicate how conditions may be affected by variations in precipitation, temperature, etc.

1. Distribution, occurrence, and variations (e.g., drainage courses, ponds, swamps, springs, seeps, aquifers).
2. Identification and characterization of aquifers; depth to groundwater and seasonal fluctuations, flow direction, gradient, recharge and discharge areas.
3. Relationships to topographic and geologic features.
4. Evidence for earlier occurrence of water at localities now dry (e.g., vegetation, mineral deposits, historical records).
5. Other significant engineering geologic characteristics or concerns, such as fluctuating water table and the effects of proposed modifications on future hydrologic processes.

E. Seismic considerations.

1. Description of the seismotectonic setting of the area (including size, frequency, and location of historic earthquakes), current seismic zoning, and expected seismic risk.
2. Potential for area to be affected by surface rupture (including sense and amount of displacement, and width of surface deformation zone).
3. Probable response of site to likely earthquakes (estimated ground motion).
4. Potential for area to be affected by earthquake-induced landslides or liquefaction.
5. Potential for area to be affected by regional tectonic deformation (subsidence or uplift).

IV. ASSESSMENT OF GEOLOGIC FACTORS

Assessment of existing geologic conditions and processes with respect to intended use of the site constitutes the principal contribution of the report. It involves (1) the effects of the geologic features upon the proposed grading, construction, and land use and (2) the effects of these proposed modifications upon future geologic conditions and processes in the area.

The following checklist includes topics that ordinarily should be considered in discussions, conclusions, and recommendations in geologic reports:

A. General suitability of proposed land use to geologic conditions.

1. Areas to be avoided, if any, and mitigation alternatives.

2. Topography and slope.
3. Stability of geologic units.
4. Flood and tidal inundation, erosion, and deposition.
5. Problems caused by geologic features or conditions in adjacent properties.
6. Other general problems.

B. Identification and extent of known or probable geologic conditions that may result in risk to the proposed land use (such as flood inundation, shallow groundwater, storm surge, surface- and groundwater pollution, snow avalanche, landslide, debris flow, rock fall, expansive soil, collapsible soil, subsidence, erosion, deposition, earthquake shaking, fault rupture, tectonic deformation, liquefaction, seiche, tsunami, volcanic eruption).

C. Recommendations for site grading.

1. Prediction of what materials and structural features will be encountered in proposed cuts.
2. Prediction of stability based on geologic factors; recommended avoidance or mitigation alternatives to cope with existing or potential landslide masses.
3. Excavation considerations (hard or massive rock, groundwater flows).
4. General considerations of proposed fill masses in canyons or on sidehills.
5. Suitability of on-site material for use as compacted fill.
6. Recommendations for positioning fill masses, provision for subdrainage, buttressing, and the need for erosion protection on fill slopes.
7. Other recommendations required by the proposed land use, such as the angle of cut slopes, position of drainage terraces, need for rock-fall and/or erosion protection on cut slopes.

D. Drainage considerations.

1. Protection from inundation or wave erosion along shorelines.
2. Soil permeability, suitability for septic systems.
3. Protection from sheet flood or gully erosion, and debris flows or mud flows.

E. Limitations of study, and recommendations for additional investigations. Considering the scope of work and intended use of the site, provide a statement of the limitations of the study and the need for additional studies outside the stated scope of work.

1. Borings, test pits, and/or trenches needed for additional geologic information.
2. Percolation tests needed for design.
3. Program of subsurface exploration and testing that is most likely to provide data needed by the soils or civil engineer.
4. Program for long-term monitoring of the site to evaluate geologic conditions (survey hubs, inclinometers, extensometers, etc.).

V. RECOMMENDED TECHNIQUES/SYSTEMS TO CONSIDER

- A. Engineering geology mapping can be done using the Genesis-Lithology-Qualifier (GLQ) system (Keaton, 1984), rather than the conventional Time-Rock system commonly used in geologic mapping. The GLQ system promotes communication of geology information to non-geologists. The Unified Soil Classification System (U.S. Army Corps of Engineers, 1960; American Society for Testing and Materials, 1984) has been used in engineering for many years and has been incorporated into the GLQ system.

- B. The Unified Rock Classification System (Williamson, 1984) provides a systematic and reproducible method of describing rock weathering, strength, discontinuities, and density in a manner directly usable by engineers.
- C. Systems for mapping landslide deposits are described by Wieczorek (1984) and by McCalpin (1984).
- D. Commonly accepted grading requirements are described in Chapter 70 of the Uniform Building Code.

REFERENCES CITED

- American Society for Testing and Materials, 1984, Standard practice for description and identification of soils (visual-manual procedure): ASTM Standard D-2488-84, p. 409–423.
- Keaton, J.R., 1984, Genesis-lithology-qualifier (GLQ) system of engineering geology mapping symbols: Bulletin of the Association of Engineering Geologists, v. 21, no. 3, p. 355–365.
- McCalpin, J., 1984, Preliminary age classification of landslides for inventory mapping: 21st Annual Symposium on Engineering Geology and Soils Engineering, Proceedings, University of Idaho, Moscow, ID, p. 99–111.
- Slosson, J.E., 1984, Genesis and evolution of guidelines for geologic reports: Bulletin of the Association of Engineering Geologists, v. 21, no. 3, p. 295–316.
- U.S. Army Corps of Engineers, 1960, The unified soil classification system: U.S. Army Technical Memorandum 3–357.
- Utah Section of the Association of Engineering Geologists, 1986, Guidelines for preparing engineering geologic reports in Utah: Utah Geologic and Mineral Survey Miscellaneous Publication M, 2 p.
- Wieczorek, G.F., 1984, Preparing a detailed landslide-inventory map for hazard evaluation and reduction: Bulletin of the Association of Engineering Geologists, v. 21, no. 3, p. 337–342.
- Williamson, D.A., 1984, Unified rock classification system: Bulletin of the Association of Engineering Geologists, v. 21, no. 3, p. 345–354.

Attachment A - Proposal Cover Sheet

PROPOSAL COVER SHEET & CERTIFICATION

Minimum Proposal Requirements: In addition to this cover sheet, this Proposal includes:

- Current resumes for each of the Proposers Key Persons;
- All Minimum Proposal Requirements described in Section 2;
- All Administrative Proposal Requirements described in Section 2;
- All Technical Proposal Requirements described in Section 2 and the Scope of Work (Section 1);
- Price Proposal Addenda as described in Section 2; and
- References (3), as described in Sections 2

REFERENCES

Company Name	Contact Name	Phone	Email

<i>Proposer Name (Printed)</i>		
<i>Business Address of Record</i>		
<i>Person with Signing Authority to Obligate the Proposer Contractually (Printed)</i>		
<i>Title of Person Signing</i>		
<i>Date Submitted</i>	<i>Telephone Number</i>	
<i>Identify Name of Person Authorized to Negotiate the Contract on Behalf of Proposer (if different)</i>	<i>Identify Title of Person Authorized to Negotiate the Contract on Behalf of Proposer (if different)</i>	<i>Telephone Number</i>
		<i>Email Address</i>
<i>Identify Name of Person to be Contacted for Clarification of Proposal (if different)</i>	<i>Identify Title of Person Authorized to be Contacted for Clarification of Proposal (if different)</i>	<i>Telephone Number</i>
		<i>Email Address</i>

Representations, Attestations, and Certifications: The undersigned further acknowledges, attests and certifies individually and on behalf of the Proposer that:

- **Authorized Representative:** The signatory of this Proposal Cover Sheet is a duly authorized representative of the Proposer, has been authorized by Proposer to make all representations, attestations, and certifications contained in this Proposal document and all Addenda, if any, issued, and to execute this Proposal document on behalf of Proposer.
- **Signature:** By signature below, the undersigned Authorized Representative hereby certifies on behalf of Proposer that all contents of this Proposal Cover Sheet and the submitted Proposal are truthful, complete and accurate. Failure to provide information required by the RFP may ultimately result in rejection of the Proposal.

THIS OFFER SHALL BE SIGNED IN BLUE OR BLACK INK BY AN AUTHORIZED REPRESENTATIVE OF THE PROPOSER.

I, the official named below, certify that I am duly authorized to legally bind the Proposer to the conditions listed above

Authorized Signature: _____
Print Name: _____
Title: _____

Attachment B - Price Proposal Addendum

Proposal for Project Costs

Proposers will provide proposed hourly rate information, a total cost for the project, and associated budget details. The proposed cost shall include all costs associated with each project element listed in the Scope of Work.

Proposer Note: This form is to be submitted as a stand-alone document in the Administrative Proposal.

Proposer Name (Printed): _____

Business Address of Record: _____

Person with Signing Authority to Obligate the Proposer Contractually (Printed):

This Person's Signature Confirming Approval of this Price Proposal:

For Key Personnel, Provide:

Hourly Rate, Regular = _____

Hourly Rate, Travel = _____

Task #	Brief Task Description	Anticipated Cost Factors: Tasks, Supplies, Services, Travel, Etc.	Estimated Overall Cost
1	Gather & Review State/Province Guidelines		
2	Gather & Review Professional Organization Guidelines		
3	Prepare Draft Updated Guideline		
4	Prepare Draft Fact Sheet		
5	Form CEG Review Panel		
6	Distribute Materials for CEG Panel Review		
7	Facilitate CEG Review Panel		
8	Finalize Guidelines & Fact Sheet		
Total Estimated Cost:			

Attachment C - Disadvantaged Business Enterprise Certification

Note: Completion of this form and inclusion in a Proposal submitted in response to the RFP is OPTIONAL; See also Section 4.7.

Has your firm been certified by the State of Oregon as a Disadvantaged Business Enterprise?

Yes

No

If yes, attach a copy of the current certification letter.

I hereby certify that the information provided on this form is true and accurate to the best of my knowledge.

Proposer Business:

Signature

Name & Title (printed)

Date:
