

STATE OF IDAHO

BOARD OF PROFESSIONAL ENGINEERS AND PROFESSIONAL LAND SURVEYORS

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NEWS BULLETIN

Thirty-eighth Edition

INTRODUCTION

This News Bulletin is distributed a minimum of twice per year by the Idaho State Board of Registration of Professional Engineers and Professional Land Surveyors to inform the public and the State's Professional Engineers and Professional Land Surveyors of those events which significantly affect the professions.

BOARD REQUESTS INPUT REGARDING RULES AND PROPOSED LEGISLATION

The Board will be promulgating rules as described later in this NEWS BULLETIN, and it will be asking for the introduction of legislation to amend various sections of Idaho Code. The primary purpose of this NEWS BULLETIN is to inform the public and the license and certificate holders of the Board's intent on these matters and to ask for input regarding them.

ADMINISTRATIVE RULES CHANGE PROPOSALS

In 2002 the Legislature passed amendments to Idaho Code Section 54-1212 which, beginning on July 1, 2010, will require an applicant for assignment to the examination for certification as a land surveyor-in-training or an applicant for assignment to the examination for licensure as a professional land surveyor to either have a four-year degree in surveying acceptable to the Board, or have a four-year degree in a related science and "evidence satisfactory to the Board that the applicant possesses knowledge and skill approximating that attained through graduation from an approved four (4) year surveying curriculum . ." The language is parallel to the language that has existed since 1996 for assignment to the examinations for certification as an Engineer-in-Training and licensure as a professional engineer. Many years ago the Board promulgated administrative rules which prescribe the requirements that an applicant who has a degree in a related science must satisfy in order to satisfy the Board that they possess the knowledge and skill approximating that attained through graduation from an approved engineering curriculum. The Board intends to promulgate a similar rule relating to surveying so that applicants who have a four-year degree in a related science but do not possess a four-year degree in surveying will know what they must do in order to qualify.

The Board is beginning the rule-making process with Negotiated Rulemaking and will hold a hearing at 10:00 a.m. on July 26, 2006 at the Statehouse Inn in Boise to gather input. Written input will be accepted up to that date. A draft of the possible administrative rule is as shown below. The proposals are in legislative format in which language to be removed is struck-through and language to be added is <u>underlined</u>.

To be added to IDAPA 10.01.01.017.02:

c. Beginning July 1, 2010, an applicant who has completed a four (4) year bachelor degree program in a related science must have completed a minimum of the following college level academic courses, or their equivalents as determined by the Board, before the Board will consider them to possess knowledge and skill approximating that attained through graduation from an approved four (4) year surveying curriculum as required by Section 54-1212(4)(b), Idaho Code, for assignment to the examination for certification as a Land Surveyor-in-Training or as required by Section 54-1212(2)(b) for assignment to the examination for licensure as a professional land surveyor: three (3) semester credits in Surveying Law and Boundary Descriptions; three (3) semester credits in Route Surveying; three (3) semester credits in Public Land Surveying; three (3) semester credits in Surveying Software Applications; three (3) semester credits in Research and Evidence in Surveying; three (3) semester credits in Surveying Adjustments and Coordinate Systems; three (3) semester credits in Survey Office Practice and Business Law in Surveying.

To be added to IDAPA 10.01.01.019.01:

c. An applicant who was originally licensed in another jurisdiction after June 30, 2010 who has completed a four (4) year bachelor degree program in a related science must have completed a minimum of the following college level academic courses, or their equivalents as determined by the Board, before the Board will consider them to possess knowledge and skill approximating that attained through graduation from an approved four (4) year surveying curriculum as required by Section 54-1212(2)(b), Idaho Code, for licensure as a professional land surveyor: three (3) semester credits in Surveying Law and Boundary Descriptions; three (3) semester credits in Route Surveying; three (3) semester credits in Public Land Surveying; three (3) semester credits in Surveying Software Applications; three (3) semester credits in Research and Evidence in Surveying; three (3) semester credits in Surveying Adjustments and Coordinate Systems; three (3) semester credits in Subdivision Planning and Platting; three (3) semester credits in Geodesy; and three (3) semester credits in Survey Office Practice and Business Law in Surveying.

Also, in order to clarify the requirements in effect since July 1, 1996 for comity licensure as a professional engineer, the following amendment is proposed to IDAPA 10.01.019.01b:

b. An applicant who was originally licensed in another jurisdiction after June 30, 1996 and who has completed a four (4) year bachelor degree program in engineering not accredited by EAC/ABET or a four (4) year bachelor degree program in engineering technology, or in a related science degree program other than engineering must have completed a minimum of fifteen (15) semester credits of Engineering Science at a Sophomore and Junior level, six (6) semester credits of Engineering Design related courses at a Senior level, twelve (12) semester credits of Advanced Mathematics including Calculus and Differential Equations, and twelve (12) semester credits of basic science courses including Chemistry, calculus-based Physics and other appropriate basic science courses before the Board will consider them to possess knowledge and skill approximating that attained through graduation from an approved four (4) year engineering curriculum as required by Section 54-1212(1)(b), Idaho Code.

STATUTORY AMENDMENTS TO THE IDAHO COORDINATE SYSTEM OF LAND DESCRIPTION LAW

The following amendments are suggested and the entire chapter is shown in order to better understand the context of the changes. The purpose of the amendments is to eliminate obsolete language that was necessary when the law was last amended.

55-1701. Establishing coordinate system -- Designating zones. The system of plane coordinates which has been established by the national ocean service/national geodetic survey, formerly the United States coast and

geodetic survey, or its successors, for defining and stating the positions or locations of points on the surface of the earth within the state of Idaho is to be known and designated as the "Idaho coordinate system of 1983" and the "Idaho coordinate system of 1927." "The Idaho coordinate system of 1927" may be used through December 31, 1995. On and after January 1, 1996, only the "Idaho coordinate system of 1983" shall be used.

For the purpose of the use of this system the state is divided into an "east zone," a "central zone," and a "west zone."

The area now included in the following counties shall constitute the East Zone: Bannock, Bear Lake, Bingham, Bonneville, Caribou, Clark, Franklin, Fremont, Jefferson, Madison, Oneida, Power and Teton.

The area now included in the following counties shall constitute the Central Zone: Blaine, Butte, Camas, Cassia, Custer, Gooding, Jerome, Lemhi, Lincoln, Minidoka and Twin Falls.

The area now included in the following counties shall constitute the West Zone: Ada, Adams, Benewah, Boise, Bonner, Boundary, Canyon, Clearwater, Elmore, Gem, Idaho, Kootenai, Latah, Lewis, Nez Perce, Owyhee, Payette, Shoshone, Valley and Washington.

55-1702. Zone references. As established for use in the east zone, the Idaho coordinate system of 1927 or the Idaho coordinate system of 1983 shall be named, and in any land description in which it is used it shall be designated the "Idaho coordinate system of 1927, east zone" or "Idaho coordinate system of 1983, east zone."

As established for use in the central zone, the Idaho coordinate system of 1927 or the Idaho coordinate system of 1983 shall be named, and in any land description in which it is used it shall be designated the "Idaho coordinate system of 1927, central zone" or "Idaho coordinate system of 1983, central zone."

As established for use in the west zone, the Idaho coordinate system of 1927 or the Idaho coordinate system of 1983 shall be named, and in any land description in which it is used it shall be designated the "Idaho coordinate system of 1927, west zone" or "Idaho coordinate system of 1983, west zone." For limitations on the use of the coordinate systems of 1927 and 1983, see section 55-1710 [55-1701], Idaho Code.

55-1703. Plane coordinates. The plane coordinates of a point on the earth's surface, to be used in expressing the position or location of such point in the appropriate zone of this system, shall consist of two (2) distances, expressed in United States survey feet and decimals of a foot when using the Idaho coordinate system of 1927 and expressed in meters and decimals of a meter when using the Idaho coordinate system of 1983. For state plane coordinate system 27 (SPCS 27), one (1) of these distances, to be known as the "x-coordinate," shall give the position in an east-and-west direction; the other, to be known as the "y-coordinate," shall give the position in a north-and-south direction. For state plane coordinate system 83 (SPCS 83), oOne (1) of these distances, to be known as "northing" or "N" shall give the position in a north-and-south direction; the other, to be known as the "easting" or "E" shall give the position in an east-and-west direction. These coordinates shall be made to depend upon and conform to the plane rectangular coordinate values for the monumented points of the North American national geodetic horizontal network as published by the national ocean service/national geodetic survey or its successors, and such plane coordinates shall have been computed on the systems defined in this chapter. Any such station may be used for establishing a survey connection to either the Idaho coordinate system of 1927 or the Idaho coordinate system of 1983, and after December 31, 1995, only to the Idaho coordinate system of 1983.

55-1704. Tracts extending into two zones. When any tract of land to be defined by a single description extends from one into another of the above coordinate zones, the position of all points on its boundaries may be referred to either of such zones, the zone which is used being specifically named in the description.

55-1705. Adoption of national ocean service/national geodetic survey definition. (1) For the purpose of more precisely defining the Idaho coordinate system of 1927, the following definition by the national ocean service/national geodetic survey is adopted:

The Idaho coordinate system of 1927, east zone, is a transverse mercator projection of the Clarke spheroid of 1866 having a central meridian 112–10' west of Greenwich, which meridian has a reduced scale of one part in 19,000. The origin of coordinates is at the intersection of the meridian 112–10' west of Greenwich and the parallel 41–40' north latitude. This origin is given the coordinates: x=500,000 feet and y=0 feet.

The Idaho coordinate system of 1927, central zone, is a transverse mercator projection of the Clarke spheroid of 1866, having a central meridian 114-00' west of Greenwich which meridian has a reduced scale of one part in 19,000. The origin of coordinates is at the intersection of the meridian 114-00' west of Greenwich and the parallel 41-40' north latitude. This origin is given the coordinates: x=500,000 feet and y=0 feet.

The position of the Idaho coordinate system of 1927, west zone, is a transverse mercator projection of the Clarke spheroid of 1866, having a central meridian 115-45' west of Greenwich, which meridian has a reduced scale of one part in 15,000. The origin of coordinates is at the intersection of the meridian 115-45' west of Greenwich and the parallel 41-40' north latitude. This origin is given the coordinates: x=500,000 feet and y=0 feet.

(2) For the purpose of more precisely defining the Idaho coordinate system of 1983, the following definition by the national ocean service/national geodetic survey is adopted:

The Idaho coordinate system of 1983, east zone, is a transverse mercator projection of the North American datum of 1983 based on the geodetic reference system of 1980 (GRS 80), having a central meridian 112–10' west of Greenwich, which meridian has a reduced scale of one part in 19,000. The origin of coordinates is at the intersection of the meridian 112–10' west of Greenwich and the parallel 41–40' north latitude. This origin is given the coordinates: N=0 meters and E=200,000 meters.

The Idaho coordinate system of 1983, central zone, is a transverse mercator projection of the North American datum of 1983 based on the geodetic reference system of 1980 (GRS 80), having a central meridian 114–00' west of Greenwich, which meridian has a reduced scale of one part in 19,000. The origin of coordinates is at the intersection of the meridian 114–00' west of Greenwich and the parallel 41–40' north latitude. This origin is given the coordinates: N=0 meters and E=500,000 meters.

The Idaho coordinate system of 1983, west zone, is a transverse mercator projection of the North American datum of 1983 based on the geodetic reference system of 1980 (GRS 80), having a central meridian 115–45' west of Greenwich, which meridian has a reduced scale of one part in 15,000. The origin of coordinates is at the intersection of the meridian 115–45' west of Greenwich and the parallel 41–40' north latitude. This origin is given the coordinates: N=0 meters and E=800,000 meters.

- (32) The position of the Idaho coordinate system shall be as marked on the ground by triangulation, traverse and global positioning satellite system stations established in conformity with the standards adopted by the national ocean service/national geodetic survey for A-order, B-order, first-order and second-order work, whose geodetic positions have been rigidly adjusted on the North American datum of 1927 and further refined on the North American datum of 1983, and whose coordinates have been computed on the system herein defined. Any such station may be used for establishing a survey connection with either the Idaho coordinate system of 1927 or the Idaho coordinate system of 1983, and after December 31, 1995, only to the Idaho coordinate system of 1983.
- 55-1706. Five kilometer triangulation limitation. No coordinates based on the Idaho coordinate system, purporting to define the position of a point on a land boundary, shall be presented to be recorded in any public land records or deed records unless such coordinates have been established in conformity with the nationally prescribed standards for third-order, class II horizontal control surveys, and provided that these surveys have been tied to or originated off monumented A-order, B-order, first-order or second-order horizontal control stations which are adjusted to and published in the national network of geodetic control and are within five (5) kilometers of the said boundary points or land corners. The prescribed standards of accuracy for A-order, B-order, first-order or second-order geodetic surveying are prepared and published by the federal geodetic control committee (FGCC) of the United States department of commerce. Standards and specifications of the FGCC or its successor in force on date of said survey shall apply. Publishing existing control stations, or the acceptance with intent to publish the newly established stations, by the national ocean service/national geodetic survey shall constitute evidence of adherence to the FGCC specifications. Limitations specified in this section may be modified by a duly authorized state agency to meet local conditions.

- 55-1707. Use of term. The use of the term "Idaho coordinate system of 1927, east, central, west zone" or "Idaho coordinate system of 1983 east, central, west zone" on any map, report or survey, or other document, shall be limited to coordinates based on the Idaho coordinate system as defined in this chapter.
- 55-1708. Coordinate descriptions supplemental. Whenever coordinates based on the Idaho coordinate system are used to describe any tract of land which in the same document is also described by reference to any subdivision, line or corner of the United States public land surveys, the description by coordinates shall be construed as supplemental to the basic description of such subdivision, line or corner contained in the official plats and field notes filed of record, and in the event of any conflict the description by reference to the subdivision, line or corner of the United States public land surveys shall prevail over the description by coordinates unless said coordinates are upheld by adjudication, at which time the coordinate description shall prevail. Every recorded map, survey or conveyance or other instrument affecting title to real property which delineates, describes or refers to such property or any part thereof by reference to coordinates based upon the designated Idaho coordinate system shall also describe the property by reference and tie to either section corner or quarter corner monuments of the United States public land surveys.
- 55-1709. Description by coordinate not mandatory. Nothing contained in this chapter shall require any purchaser or mortgagee of real property to rely wholly on a land description, any part of which depends exclusively upon the designated Idaho coordinate system.

STATUTORY AMENDMENTS TO THE LICENSING LAW RELATING TO "RESPONSIBLE CHARGE"

For many years the Board has been on record as interpreting the law on the issue of "responsible charge" to mean that a license holder could not merely review the work of an unlicensed person, seal and sign the work, and assume responsibility for it. The Board has held that the license holder must have been involved in the project as it develops in order to be in responsible charge. The exception to the need for project involvement during its development is for "standard design plans", which are those projects which are intended to be replicated in numerous jurisdictions in the same basic configuration. An example of such a standard design plan might include fast food restaurants where it does not make sense to require that the plans be developed "from scratch" but rather, adapted to meet the unique circumstances of the specific sate on which it will be constructed. In order to make clear the Board interpretation of these issues, the Board proposes the amendments shown below.

The definition of "Responsible Charge" in Idaho Code Section 54-1202 would be amended as follows:

(h) Responsible Charge. The term "responsible charge" means the control and direction of the professional engineering aspects of the investigation, studies, design, construction or operation of engineering works, or the control and direction of the professional land surveying aspects of the record research, field retracement, office calculations, boundary determination and mapping of land surveying work, requiring initiative, professional skill and independent judgment and detailed professional knowledge of the content of relevant documents during their preparation. Except as allowed under section 54-1223 of this chapter, reviewing, or reviewing and correcting documents after they have been prepared by others does not constitute the exercise of responsible charge.

The following would be added to Idaho Code Section 54-1223:

(5) A professional engineer licensed in Idaho may review the work of a professional engineer who is licensed in another jurisdiction of the United States, or a foreign country, on a project which is a site adaptation of a standard design plan to determine that the standard design plan meets the standard of care and is applicable to the intended circumstance, with or without modification. The Idaho professional engineer shall demonstrate responsible charge, as defined in this chapter, by performing professional services related to their assignment including developing or obtaining a complete design record with design criteria, calculations, code research, and any necessary and appropriate changes to the standard design plan necessary to properly apply the standard design to the intended circumstance. The non-professional services, such as drafting, need not be redone by the

Idaho professional engineer, but must clearly and accurately reflect the Idaho professional engineer's work. The burden is on the Idaho professional engineer to show such compliance. The Idaho professional engineer shall have control of and responsibility for the entire work product, shall seal, sign and date it as required in this chapter, and shall be in possession of all original documents or certified copies of documents related to their work for the project.

"Standard Design Plan" would be defined as follows in Idaho Code Section 54-1202:

Standard Design Plan. The term "Standard Design Plan" shall mean a building, structure or facility which is intended to be constructed at multiple locations, and for which some or all of the plans must be prepared by a professional engineer.

STATUTORY AMENDMENTS TO THE LICENSING LAW RELATING TO SUBORDINATES

Under current law, employees and subordinates are exempt from the licensing requirement so long as their "work does not include final engineering design or land surveying decisions and is done under the direct responsibility, checking, and supervision of, and verified by, a person holding a certificate of registration..." The Board has been concerned that without a definition of "subordinate" that license holders might contract with unlicensed persons who are neither "employees" nor "subordinates". In order to clarify this situation, the Board proposes the following definition of "subordinate" be added to Idaho Code Section 54-1202.

Subordinate. The term "subordinate" shall mean a person who assists a professional engineer or professional land surveyor within the same government or business entity or sole proprietorship, in the practice of professional engineering or professional land surveying, without being in responsible charge of the work.

STATUTORY AMENDMENTS TO THE LICENSING LAW RELATING TO RIGHT-OF-ENTRY

Under current law, federal surveyors have a right to enter land to perform their work, but surveyors in private practice do not. The Idaho Society of Professional Land Surveyors has asked the Board to sponsor legislation which would grant private surveyors a right-of-entry so they may enter onto land in order to access corners or monuments necessary to complete their work. The Board has drafted the following amendments to address the issue.

54-1230. PUBLIC <u>OR PRIVATE</u> SURVEYING -- RIGHT OF ENTRY.

- (a) Any person employed in the execution of any survey authorized by the congress of the United States may enter upon lands within this state for the purpose of exploring, triangulating, leveling, surveying, and of doing any work which may be necessary to carry out the objects of then existing laws relative to surveys, and may establish permanent station marks, and erect the necessary signals and temporary observatories, doing no unnecessary injury thereby.
- (b) A professional land surveyor licensed pursuant to the provisions of this chapter, and their subordinates, who in the course of his work finds it necessary to go upon the land of a party or parties other than the one for whom such professional land surveyor is making the survey shall not be guilty of trespass but shall be liable for any damage done to such lands or property. The person making a survey under this section shall make every reasonable effort to give oral or written notice of the survey to the owner of the land before entering the land. 54-1231. PUBLIC OR PRIVATE SURVEYING -- ASSESSMENT OF DAMAGES FOR ENTRY. If the parties interested cannot agree upon the amount to be paid for damages caused thereby, either of them may

If the parties interested cannot agree upon the amount to be paid for damages caused thereby, either of them may petition the district court in the county in which the land is situated, which court shall appoint a time for a hearing as soon as may be, and order at least twenty (20) days' notice to be given to all parties interested, and, with or without a view of the premises, as the court may determine, hear the parties and their witnesses and assess damages.

54-1232. PUBLIC <u>OR PRIVATE</u> SURVEYING -- TENDER OF DAMAGES FOR ENTRY. The person so entering upon land may tender to the injured party damages therefore, and if, in case of petition or complaint to the court, the damages finally assessed do not exceed the amount tendered, the person entering shall recover costs; otherwise the prevailing party shall recover costs.

54-1233. PUBLIC <u>OR PRIVATE</u> SURVEYING — COSTS OF ASSESSMENT OF DAMAGES. The costs to be allowed in all such cases shall be the same as allowed according to the rules of the court, and provisions of law relating thereto.

STATUTORY AMENDMENTS TO THE LICENSING LAW RELATING TO SEALING PRELIMINARY DOCUMENTS

In a recent matter brought to the attention of the Board, an engineer prepared a preliminary engineering report, and because it was clearly identified as "preliminary", he did not seal, sign and date it, even though it was the final work product for that phase of the work. The Board has drafted the following amendments to address that issue. In addition, there has been confusion on the part of some license holders as to whether they should seal, sign and date the original of a document so that the seal, signature and date are reproduced when the original is copied, or whether they should only place the seal on the original and sign and date the copies. The Board is of the opinion that the intent is to seal, sign and date the original so that the seal, signature and date are reproduced when a copy of the original is made. The Board has drafted the following amendments to address that issue.

Proposed amendments to Idaho Code Section 54-1215(3)(b) and 54-1215(3)(c) are as follows:

- (b) The seal, signature and date shall be placed on all final specifications, land surveys, reports, plats, drawings, plans, design information and calculations, whenever presented to a client or any public or governmental agency. Any such document presented to a client or public or governmental agency that is not final and does not contain a seal, signature and date shall be clearly marked as "preliminary," "draft," "not for construction" or with similar words to distinguish the document from a final document. In the event the final work product is preliminary in nature, such as a preliminary engineering report, the final work product shall be sealed, signed and dated as a final document.
- (c) The seal, signature and date shall be placed on all original documents in such a manner that it is reproduced when the original document is copied. The application of the registrant's seal, signature and date shall constitute certification that the work thereon was done by him or under his responsible charge. Each plan or drawing sheet shall be sealed and signed by the registrant or registrants responsible for each sheet. In the case of a business entity, each plan or drawing sheet shall be sealed and signed by the registrant or registrants involved. The principal in responsible charge shall sign and seal the title or first sheet. Copies of electronically produced documents, listed in paragraph (b) of this subsection, distributed for informational uses such as for bidding purposes or working copies, may be issued with the registrant's seal and a notice that the original document is on file with the registrant's signature and date. The words "Original Signed By:" and "Date Original Signed:" shall be placed adjacent to or across the seal on the electronic original. The storage location of the original document shall also be provided. Only the title page of reports, specifications and like documents need bear the seal, signature and date of the registrant.

STATUTORY AMENDMENTS TO THE LICENSING LAW RELATING TO SCHEDULING OF HEARINGS

Current law requires to Board to hold a hearing within six (6) months after the date a complaint is received unless that time is extended by the board for justifiable cause. Because of limited resources and because two cases recently had to be dismissed for failure to extend the time within the prescribed time limits, the Board will propose the following amendment to Idaho Code Section 54-1220(2):

(2) All eharges formal complaints, unless dismissed by the board as unfounded or trivial, or unless settled informally, shall be heard by the board within six (6) twelve (12) months after the date they were received at the board office unless such time is extended by the board for justifiable cause.

STATUTORY AMENDMENT TO INCREASE BOARD PAY FROM \$50 PER DAY TO \$75 PER DAY In 1986 the Board member honorarium was raised from \$35 per day to \$50 per day. The Board proposes that

Idaho Code Section 54-1205 be amended to raise the honorarium from \$50 per day to \$75 per day as shown below. The anticipated effective date for this amendment would be July 1, 2008.

54-1205. Compensation and expenses of board members. Each member of the board shall be compensated as provided by section 59-509(hi), Idaho Code, when attending to the work of the board or any of its committees and for the time spent in necessary travel; and, in addition thereto, shall be reimbursed for all actual travel, per diem, incidentals and clerical expenses necessarily incurred in carrying out the provisions of this chapter.