PROFESSIONAL

PRACTICE

A Guide to

the Practice of

Architecture,

Engineering, and

Land Surveying

in Massachusetts

Prepared Jointly by:

The Massachusetts Board of

Registration of Architects and the

Massachusetts Board of

Registration of Professional

Engineers and Land Surveyors

Introduction

Safeguarding the public in the design and construction of buildings and public works is a shared responsibility; the professional architect and professional engineer work to ensure the competence and integrity of the design while assuming the responsibility and liability appropriate to the services performed; the professional land surveyor works to ensure the competence and integrity of boundary surveys while assuming the responsibility and liability appropriate to the services performed; and the Commonwealth's Board of Registration of Architects and Board of Registration of Professional Engineers and Land Surveyors have the responsibility to regulate the professional conduct of architects, engineers, and land surveyors, including cases of fraud, gross negligence, incompetence, or misconduct.

This Guide has been assembled to assist licensees in understanding your professional responsibilities as architects, professional engineers, or professional land surveyors, and to direct you to sources of information that can help answer questions arising in day-to-day practice of your profession.

The Boards recognize the interdisciplinary nature of the design and building industry and therefore have updated this Professional Practice Guide, which was originally drafted by a Joint Committee of Architects, Engineers and Land Surveyors. Working on the premise that a common understanding of each other's duties and legal responsibilities is essential to providing competent design services, the Boards continue to focus on ways to enhance practitioners' educational and practical experiences, strengthen relationships among those in professional practice, and ultimately raise the quality of design services for the public good. It has been the Boards' objective to provide guidance as practitioners and to clarify the appropriate roles of their professions in the context of good judgment and state law.

In preparing this Guide, the Boards identify commonly asked questions regarding practice as architects, engineers, and land surveyors, and provide concise answers whenever possible. Where simple answers do not suffice, this Guide provides references to additional sources of information. Practitioners are advised that this Guide is intended only to clarify general principles, and any person having specific questions should address them to the appropriate Board of Registration or should seek assistance of their own legal counsel.

In updating this Guide, the Boards came to a better appreciation of collaboration among the various professional disciplines. To this end, you are encouraged to do the same. We hope that you will find the time to participate actively in your professional societies, work on multi-discipline teams whenever possible, and support the good work of our dedicated boards of registration.

Commonly asked questions about professional practice...

Question 1: Where can practitioners learn more about their specific legal responsibilities in the Commonwealth?

Each board of registration posts the relevant parts of the Massachusetts General Laws ("MGL") and the corresponding regulations on its website. Practitioners should be familiar with the following laws in particular:

Architects

MGL Chapter 13 sections 44A-44D MGL Chapter 112 sections 60A-60O

Architects, Engineers and Land Surveyors

MGL Chapter 7C
MGL Chapter 143
MGL Chapter 112

sections 44 - 58
sections 93-100
sections 61-65E

Engineers and Land Surveyors

 MGL Chapter 13
 sections 45 - 47

 MGL Chapter 112
 sections 81D-81T

Practitioners should also be familiar with the Code of Massachusetts Regulations (CMR) and in particular:

Architects

231 CMR <u>sections 1.00-4.00</u>

Architects, Engineers and Land Surveyors

<u>780 CMR</u> <u>sections 1, 13 - 127</u>

Engineers and Land Surveyors

250 CMR sections 2, 3, 5, 6 and 7



The following is a list of regulations directly affecting the practice of architecture, engineering, or land surveying.

	Architects	Engineers and Land Surveyors	Building Regulations
	231 CMR	<u>250 CMR</u>	780 CMR
Competence	<u>4.01</u>	<u>5.02</u>	
Conflict of Interest	4.01	5.02	
Full Disclosure & Public Statements	4.01	<u>5.02</u>	
 Compliance with Laws, Professional Conduct & Responsibility 	4.01	<u>5.02</u> and <u>7.02</u>	I 13 and 127
• Advertising & Solicitation	4.01	5.03 and 5.08	
Use of Seal & Limits on Practice	4.02	<u>5.01</u> and <u>5.03</u>	113
Restricted & Prohibited Use of Titles & Standards of Professional Practice	4.03	5.02 and 5.08	

An official copy of the Code of Massachusetts Regulations containing board regulations may be purchased at the <u>State House Book Store in Boston</u> (617-727-2834). This information should be shared with other members within your firm.

Question 2: Who may be called an architect, professional engineer, or professional land surveyor?

Only those persons duly registered by the respective boards may be called an architect, professional engineer or professional land surveyor (231 CMR, Architects and 250 CMR, Professional Engineers and Professional Land Surveyors).

For the use of the title Professional Engineers or Professional Land Surveyors, <u>250</u> CMR 5.08 states that:

No person, other than a Registrant holding a current License to practice in the applicable profession, shall advertise or hold themselves out as either a Professional Engineer or a Professional Land Surveyor, or use any other title to imply that they are qualified to practice engineering or land surveying in the Commonwealth, or in any other way hold themselves out as able to perform any of the Licensed Branches of engineering or land surveying.

250 CMR 5.08 shall not prohibit a person who is not registered/Licensed in Massachusetts but who holds a current License to practice in another state or Jurisdiction and who declares or otherwise qualifies his or her title in a manner that does not imply that the person is qualified to practice in Massachusetts (e.g., "Professional Engineer, Kansas" would be acceptable).

guideline on the use of engineering or land surveying job titles by unlicensed individuals working within the engineering and land surveying business community. A copy of that advisory is attached as Addendum #1.

For the use of the title "architect," GL c. 112, s. 60K states:

No person shall, directly or indirectly, engage in the practice of architecture in this commonwealth, except as hereinafter set forth in section sixty L, or use the title "architect", "registered architect", "architectural designer", or display or use any words, letters, figures, title, sign, card, advertisement or other device to indicate that such person offers to engage or engages in the practice of architecture unless he is registered under the provisions of sections sixty A to sixty O, inclusive.

Also, regulation 231 CMR 4.03 governs the use of the title "architect:" It states:

Neither the title "Architect" or any modification of said title shall be affixed or otherwise used in conjunction with any surname, word or business title when such use would imply that an individual, associate, partner or corporate officer is an architect when, in fact, such individual, associate, partner, or corporate officer is not a registered architect. An individual shall not be deemed to have violated 231 CMR 4.03 if he or she uses the title "Intern-architect", as long as he or she is enrolled, active and in good standing in, the NCARB Intern-architect Development Program (IDP).

231 CMR 4.03 also requires architect firms to file notice of business names with the Board.

Question 3: When are architects, professional engineers or land surveyors required to use their seals?

The requirements for the use of the seal of a registered architect or the seal of a registered professional engineer are not identical and use of the seal is not interchangeable.

Under MGL c.143, s. 54A, all architectural work requires the seal of a registered architect and all engineering work requires the seal of a registered professional engineer, unless the project is exempted from that requirement by some provision of MGL c. 112, s. 60L or MGL c. 112, s. 81R which makes preparation of the plans and/or reports by a registered architect or professional engineer unnecessary.

Architectural work requiring a seal results from the "practice of architecture," defined as:

professional services in connection with the design, construction, enlargement or alteration of a building including consultations, investigations, evaluations, preliminary studies, aesthetic design, the preparation of plans, specifications and contract documents, the co-ordination of structural and mechanical design and site development, administration of construction contracts and any other similar service or combination of services in connection with the design and

construction of buildings, regardless of whether one or all of these services are being performed and regardless of whether these services are performed in person or as the directing head of an office or organization performing them; provided, that the practice of architecture shall not include the practice of engineering as defined in this chapter, but a registered architect may perform such engineering work as is incidental to the practice of architecture.

MGL c. 112, s. 60A.

Engineering work requiring a seal results from the "practice of engineering," which is defined as:

any professional service or creative work requiring engineering education, training and experience and the application of special knowledge of the mathematical, physical and engineering sciences to such professional services or creative work as consultation, investigation, evaluation, planning, design and supervision of construction for the purpose of assuring compliance with specifications and design in connection with any public or private utilities, structures, buildings, machines, equipment, processes, works or projects, but it shall not include the practice of architecture, as defined in section 60A, except that a registered professional engineer may do such architectural work as is incidental to his work, nor shall it include the practice of land surveying, except that a registered professional engineer qualified in the branch of civil engineering may perform land surveying incidental to his engineering work for locating or relocating any of the fixed works embraced within the practice of civil engineering excluding property line determination.

MGL c. 112, s. 81D.

Land surveying work requiring a seal results from the "practice of land surveying," which is defined as:

"any service or work, the adequate performance of which involves the application of special knowledge of the principles of mathematics, the related physical and applied sciences, and the relevant requirements of law for adequate evidence to the act of measuring and locating lines, angles, elevations, natural and manmade features in the air, on the surface of the earth, within underground workings, and on the beds of bodies of water for the purpose of determining areas and volumes, for the monumenting of property boundaries, for locating or relocating any of the fixed works embraced within the practice of civil engineering, and for the platting, and layout of lands and subdivisions thereof, including the topography, alignment and grades of streets, and for the preparation and perpetuation of maps, record plats, field note records and property descriptions that represent these surveys."

MGL c. 112, s. 81D.

Question 4: Are there exceptions when an architect's seal is not required

in the Commonwealth?

The seal of a registered architect is required for all plans or specifications except as stated in <u>MGL c. 112, s. 60L</u>. Under that section the following do not require an architect's seal:

- 1. The preparation of plans and specifications for and the supervision of the construction, enlargement or alteration of
 - (a) Any building containing less than thirty-five thousand cubic feet of enclosed space, the computation to be made according to rules to be established by the board;
 - (b) Any single or two-family house or any accessory building to such house;
 - (c) Any building used for farm purposes;
- 2. The preparation of plans and specifications for and the supervision of the alteration of any building not involving substantial and major structural change; (NOTE: Substantial and major structural change has been interpreted by the Board to include partitions and other fixed elements)
- 3. The preparation of any detailed or shop plans required to be furnished by a contractor, or the administration of construction contracts by persons customarily engaged in contracting work;
- 4. The employees of a registered architect or persons acting under the architect's direction carrying out their normal duties in preparing plans and specifications or in the administration of construction contracts;
- 5. A licensed professional engineer performing, agreeing to perform, or holding himself out as able to perform services included in the practice of architecture that are incidental to the engineering work;
- 6. Officers and employees of the United States of America, while working in the Commonwealth, engaging in the practice of architecture as employees of said United States of America, and officers and employees of the Commonwealth or any of its subdivisions engaging in the practice of architecture as employees of the Commonwealth or any subdivision thereof;
- 7. The practice of landscape architects, city planners and regional planners providing consultations and preparing master plans of parks, land areas, sites, organized groups of buildings or communities or preparing detailed plans and supervising planting, grading, paving, and structural features such as fences, steps, walls, pools, garden structures, and minor utilities normally included as a part of their work.
- 8. A partnership or corporation entering into agreements to perform or holding itself out as able to perform any of the services involved in the practices of architecture, so long as any such agreement is executed by the partner, partners, officer or officers who are the

registered architect or registered architects exercising professional and supervisory control over the particular services contracted for, provided that a registered architect who is such a partner or such an officer shall exercise professional supervisory control over the particular services contracted for by the partnership or corporation.

9. A non-resident who holds a certificate of registration to practice architecture in the state in which he resides and in addition holds a certificate of qualification issued by the National Council of Architectural Registration Board agreeing to perform or holding himself or herself out as able to perform any of the professional services involved in the practice of architecture; provided, that he or sheshall not perform any of the professional services involved in the practice of architecture until registered as herein-before provided.

If one of the above exceptions does not clearly apply to the project in question, the seal of a registered architect is required.

Practitioners and the public should also note that local building officials can override the above exemptions and require drawings stamped by a design professional in special circumstances where required to protect public health and safety and if permitted by the State Building Code, which is a source of authority that cannot be superseded by local action.

Question 5: Are there exceptions when an Engineer's or Land Surveyor's seal is not required in the Commonwealth?

The seal of a registered professional engineer or land surveyor is required for all plans or specifications except as noted under MGL c. 112, s. 81R, which states:

Nothing in said sections shall be construed to prevent or to affect:--

- (a) the practice of any other legally recognized profession including the practice of architecture as defined in this chapter and the practice of any trade, including, in connection with the practice of the electrical, plumbing, heating, ventilating, air conditioning, refrigeration and all other trades, the preparation of plans, specifications or shop drawings by any person, firm, partnership, corporation or association practicing any such trade, for work to be installed or being installed by the same person, firm, partnership, corporation or association preparing such plans, specifications or shop drawings;
- (b) a person not a resident of and having no established place of business in the commonwealth from practicing or offering to practice therein the profession of engineering or land surveying, when such practice does not exceed in the aggregate more than thirty days in any calendar year; provided, such person is legally qualified by registration to practice the said profession in his own state or country in which the requirements and qualifications for obtaining a certificate of registration are not lower than those specified in said sections;

- (c) a person not a resident of and having no established place of business in the commonwealth or who has recently become a resident thereof, from practicing or offering to practice engineering or land surveying therein for more than thirty days in any calendar year, if he shall have filed with the board an application for a certificate of registration and shall have paid the fee required by said sections; provided, that such person is legally qualified by registration to practice engineering or land surveying in his own state or country in which the requirements and qualifications for obtaining a certificate of registration are not lower than those specified in said sections. Such practice shall continue only for such time as the board requires for the consideration of the application for registration;
- (d) the work of an employee or a subordinate of a person holding a certificate of registration under said sections, an employee of a person practicing lawfully under clause (b) or (c) of this section, or an employee of a firm, co-partnership, corporation or joint stock association engaging lawfully under clause (f) of this section; provided, such work does not include final designs or decisions and is done under the direct responsibility, checking and supervision of a person holding a certificate of registration under said sections or a person practicing lawfully under clause (b) or (c) of this section;
- (e) the practice of officers and employees of the government of the United States while engaged within the commonwealth in the practice of engineering or land surveying for said government;
- (f) the practice of engineering or land surveying in the commonwealth by a firm, copartnership, corporation or joint stock association; provided, that the person in charge of such practice by such firm, co-partnership, corporation or joint stock association is a professional engineer or land surveyor, holding a certificate of registration under said sections;
- (g) the performance of engineering work or services by employees of a corporation engaged in manufacturing, research or development operations, which work or services are performed in connection with the research or development activities of, or the manufacture, sale, installation, maintenance, repair or service of the products of, such corporation, or of its parents, affiliates or subsidiaries; provided, that such research or development activities which are not related to the manufacture, sale, installation, maintenance, repair or service of the products of such corporation, or of its parents, affiliates or subsidiaries, are not primarily in connection with the construction of fixed works which are to be made available for use by the general public;
- (h) the practice of landscape architects, city planners and regional planners, in so far as their work consists in the consultations and preparation of master plans of parks, land areas, sites, organized groups of buildings or communities, or the preparation of detailed plans and the supervision of planting, grading, paving, and such structural features as fences, steps, walls, minor pools, garden structures and minor utilities normally included as part of their work;
- (i) sales personnel from recommending applications to specific uses of products for which they act as sales representatives;
- (j) the performance of engineering work or services by any person employed by an

insurance company or by its agents, its affiliates or subsidiaries, or the performance of engineering work or services for insurance inspection and actuarial bureaus, provided such work or services in either case are incidental to the operation of an insurance company;

- (k) the work of an owner or managing agent of a building or any employee of such owner or agent making alterations or repairs to such building or supervising the same, or of a person engaged by such owner or agent to perform work of any other legally recognized trade exempted under clause (a) of this section;
- (l) the performance of engineering work and services by a person, firm or corporation subject to the jurisdiction of the department of public utilities or the department of telecommunications and cable which work and services are performed as part of their employment and for the benefit of such person, firm, or corporation; provided, however, that this subsection shall not apply to engineering work or services that could pose a material risk to public safety, as determined by the department of public utilities, performed by or on behalf of a gas company, as defined in section 1 of chapter 164, that distributes and sells gas within the commonwealth; or the performance of engineering work and services by employees of the Massachusetts Bay Transportation Authority which work and services are performed as part of their employment and for the benefit of the said authority.

If one of the above-noted exceptions does not clearly apply to the project in question, the seal of a registered professional engineer or land surveyor is required.

Practitioners and the public should also note that local building officials can override the above exemptions and require drawings stamped by a design professional in special circumstances where required to protect public health and safety and if permitted by the State Building Code, which is a source of authority that cannot be superseded by local action.

Question 6: What is the impact of the Massachusetts State Building Code on the exceptions listed above to the requirement of a seal?

The design, permitting and construction of structures are also regulated in the Commonwealth by state laws (MGL c. 143, ss. 93-100) and regulations contained in the Massachusetts State Building Code (780 CMR). Architects, professional engineers and professional land surveyors are urged to become familiar with these laws and regulations, as well as the other state laws and regulations governing the practices of architects, professional engineers and professional land surveyors. Design professionals are directed to read 780 CMR, "Construction Control," in particular. See Addendum #2 for a more detailed discussion of the impact of the MA Building Code on professional practice of architects and engineers.

Question 7A: May an architect seal the work of others? When may the seal of the registered architect be used?

The licensing law for architects permits a licensee's seal to be placed only on work prepared by the licensee personally or by someone who has been directly and personally supervised by that licensee.

Specifically, the architect's official seal is intended for personal use in conjunction with plans, specifications, and other instruments of architectural services prepared under the licensee's personal supervision and responsible control and for which the licensee will be responsible, and is not transferable. MGL- c. 112, s. 60G(e) and 231 CMR 2.02, 4.02(2)-(3). "Responsible control" is defined as:

That amount of control over and detailed professional knowledge of the content of technical submissions during their preparation as is ordinarily exercised by a registered architect applying the required professional standard of care. Except as permitted by 231 CMR 4.01(5): Professional Conduct, review and correction of technical submissions after they have been prepared by others does not constitute the exercise of responsible control because the reviewer has neither control over nor detailed professional knowledge of the content of such submissions throughout their preparation.

231 CMR 2.02.

An architect exercises "responsible control" in compliance with the regulations if the technical submissions were prepared by another person in the office where the architect practices regularly, or the architect has records demonstrating that the architect has detailed knowledge of the content of the technical submissions.

BUT NOTE: reviewing and correcting technical submissions is not sufficient by itself to meet the requirement for responsible control. 231 CMR 4.01(5)(b).

Question 7B: May a professional engineer or professional land surveyor seal the work of others? When may the seal of the registered professional engineer be used?

The professional engineer's or professional land surveyor's seal is to be used only by the Registrant personally, and only on Instruments of Service, such as drawings and/or documents, produced by the Registrant personally or under the Registrant's Direct Charge and Supervision. 250 CMR 5.02(2)(e), 5.03(3) and 5.04. Requirements for "Direct Charge and Supervision" are set forth in 250 CMR 5.04. Each of the requirements in Section 5.04 must be met in order for a Registrant to seal work performed by an unlicensed individual. For professional engineers, MGL c. 112, s. 81P prohibits the placement of a professional engineer's seal and/or signature on plans or drawings that have not been prepared either by the named licensee or by someone in their office or under their immediate and responsible direction.

Question 8: What constitutes an acceptable seal?

According to current laws and regulations, seals for architects, professional engineers, and professional land surveyors, or embossing presses for professional engineers and professional land surveyors, must meet Board requirements.

For licensed architects, seal requirements are set forth in 231 CMR 4.02(1), which specifies that the seal must be a rubber stamp that conforms exactly to the figure in that regulation. For requirements for electronic signatures, please refer to policies of the Architect Board or contact the Board.

Stamp/seal requirements for professional engineers and professional land surveyors are set forth in 250 CMR 5.03. Per 250 CMR 5.03(2), the seal of a professional engineer and professional land surveyor must be a symbol or image in the form of a rubber stamp, embossed seal or digitized seal (computer generated image), or other form approved by the Board. A professional engineer may include his or her licensed discipline on the professional seal but is not required to do so. If a professional engineer includes a discipline on the seal, it must be the discipline reflected on his or her certificate of registration and cannot be any other discipline.

Also, for professional engineers, any document bearing the registrant's seal must also be appropriately dated and signed with either a legible handwritten Signature adjacent to (not obscuring) the seal or a properly encrypted digital Signature, in compliance with 250 CMR. 250 CMR 5.03(6). When a digital Signature is applied to an Instrument of Service, it must have an electronic authentication process attached to it that is uniquely associated with the Registrant, can be authenticated by the recipient, and is uniquely linked to the underlying documents in a manner that will invalidate the digital Signature if any part of the document is changed. See 250 CMR 5.03(11). Registrants, municipal officials and the public should be aware that with modern technology it is easy for an unauthorized individual to edit plans that are in electronic form, such as pdfs, and to apply a registrant's seal and image of the Registrant's signature to an electronic file without the registrant's permission. For this reason, an electronic document which contains the visible image of a professional seal and signature, but does not have an electronic authentication process attached to it, is not an authentic, certified document and should not be relied upon as such.

Question 9: May a professional engineer perform engineering work outside of the discipline/branch of engineering in which he is licensed?

Yes, the licensing law for professional engineers does not limit a professional engineer to the discipline in which the registrant is registered but allows the

registrant to practice in branches of engineering in which the registrant is competent even though outside that discipline indicated on their seal. 250 CMR 5.02(2)(b). However, those regulations clearly state that the Registrant shall practice only in areas of competence for which the Registrant is qualified by education and experience. The Board is the only authority with jurisdiction to determine a registrant's professional competency. If a professional engineer does practice outside his or her licensed branch of engineering, the engineer must be prepared to demonstrate to the Board's satisfaction his or her competence to perform those services. Documentation of competence to the Board shall include, at a minimum, records of specific education and experience obtained by the registrant in that additional branch of engineering. Determinations of personal competency require investigation into all relevant facts. Therefore, the Board will not issue individual determinations of personal competency outside of the complaint resolution process.

Professional engineers may not hold themselves out as registered in any discipline of engineering other than the discipline that appears on their certificate of registration/license. If an engineer wishes to be registered by the Board in an additional discipline of engineering, the engineer must submit an application for licensure and meet all current requirements for registration in that discipline. Engineers should consult 250 CMR 3.08 for further information.

Question 10: May business entities such as firms, partnerships or corporations provide professional design services?

When a partnership seeks to perform architectural services in Massachusetts, at least one partner must be registered as an architect in this state. MGL c. 112, § 60L(8); 231 CMR 4.04(3)(b). When a corporation seeks to perform architectural services in Massachusetts, at least one of the officers established by the articles of incorporation or the corporation's by-laws must be a Massachusetts registrant and that officer must sign the contracts. MGL c. 112, § 60L(8); 231 CMR 4.04(2)(b). Under the law governing Professional Corporations (Chapter 156A of the General Laws), a majority of directors of architecture firms organized as Professional Corporations must be licensed by the Board. All contracts of an architectural firm for the performance of architectural services must be signed by a Massachusetts licensed architect. MGL c. 112, § 60L(8); 231 CMR 4.00. As discussed in Question 7A above, a licensed architect must either personally perform, or personally supervise the preparation of, any plans drawn which require the seal of a registered architect and must sign and stamp all such plans.

MGL c. 7C, s 44, which regulates state funded buildings and construction

projects, states that the person in charge of the performance of architectural or engineering services related to a public building project by the firm must be a registered architect or professional engineer for the project. It further states that for such projects, the majority of the directors or partners or a majority of the stock ownership and the chief executive officer must be persons who are registered architects or engineers.

While the Board only licenses individuals as professional engineers or land surveyors, business entities providing or offering to provide engineering or land surveying services must meet the requirements of 250 CMR 5.05 which requires that a licensed engineer or land surveyor who has management responsibility over that part of the business act as the Registrant-in-charge. The Registrant-in-charge for the Business Entity must exercise Direct Charge and Supervision over those persons assisting in the preparation of Instruments of Service as set forth in 250 CMR 5.04. The Registrant-in-charge further must be an active participant in the contracting, reporting, publishing, scheduling, etc. of professional services offered or provided by the Business Entity.

Question 11: May an architect, professional engineer or land surveyor do work in each other's disciplines?

Architects and professional engineers may perform work in each other's discipline which is "incidental" to their practice. The definition of the "practice of architecture" in MGL c. 112, s. 60A states that a registered architect may perform such engineering work as is incidental to the practice of architecture. The definition of the "practice of engineering" in MGL c. 112, s. 81D states that a registered professional engineer may do such architectural work as is incidental to the engineer's work.

Professional civil engineers may also perform land surveying work which is "incidental" to their practice. The definition of the "practice of engineering" in MGL c. 112, s. 81D states that "a registered professional engineer qualified in the branch of civil engineering may perform land surveying incidental to his engineering work for locating or relocating any of the fixed works embraced within the practice of civil engineering *excluding property line determination*" (emphasis added). For further guidance regarding common tasks which may be performed by professional engineers qualified in the branch of civil engineering and by professional land surveyors, see Addendum #3.

The law does not elaborate on the definition of "incidental." Therefore, the architect, engineer and land surveyor must be guided by professional judgment and accepted standards of practice in determining the meaning of "incidental." Licensed

architects, professional engineers and professional land surveyors should practice within their areas of professional competence and consult with other design professionals when the work falls outside their competence.

Question 12: Can a professional engineer certifyⁱ a site plan or an as-built plan which references and/or utilizes a property line determination that was previously completed by a professional land surveyor?

No, a professional engineer cannot certify a site plan or an as-built plan which references and/or utilizes a property line determination that was previously completed by a professional land surveyor. Although state law allows a professional engineer qualified in civil engineering to perform land surveying work incidental to his or her engineering work, such as topographical measurements, the law clearly states that a professional engineer cannot make property line determinations. M.G.L. c. 112, s. 81D. As stated in Board regulation 250 CMR 5.01, "the delineation of existing or proposed structures, features or Boundaries relative to property lines requires the determination of property lines and therefore must be performed by a Professional Land Surveyor." When a professional engineer obtains an electronic or hardcopy of a pre-existing survey plan and adds his or her engineering work to that plan, the professional engineer is representing where the property line exists relative to his/her work for the purpose of the professional engineer's project. However, the professional engineer cannot be certain that the pre-existing survey accurately reflects the current conditions of the property and is sufficiently reliable to be used for the professional engineer's current project. For example, potential issues with the prior survey include:

- a. Boundary lines have changed since date of survey;
- b. A survey of adjacent property conflicts with prior survey;
- c. Overburden of survey for different purpose (e.g. mortgage inspection survey);
- d. Not in conformance with rules of evidence and 250 CMR;
- e. Court decree overturning prior survey;
- f. Legitimate claims of occupation and encroachments;
- g.On-site construction after date of prior survey.

For this reason, except in the limited situations described below, a professional engineer cannot certify a site plan showing property lines.

The only exceptions to the above-stated rule are when:

(1) the professional land surveyor is a member of a project development team, the survey was commissioned for the project, and the professional engineer's work is added to said survey. A complete design package submitted by the project development team would

ⁱ Use of the word "certify" includes the act of signing, sealing and/or stamping a plan by the Professional Engineer.

include the survey stamped by the professional land surveyor and the engineering plan(s) stamped by the professional engineer indicate the survey as "background" information.

(2) the professional engineer consults with the professional land surveyor who performed the prior survey, and the professional land surveyor confirms that the survey information on the filed plan reflects current conditions of the property and is sufficiently reliable to be used for the purpose of the professional engineer's project, and the professional land surveyor stamps the land surveying work.

Question 13: Is the architect, professional engineer, or professional land surveyor required to display certificates of registration?

Registered architects are required to display their certificates of registration in a conspicuous place in their places of business. <u>MGL c. 112, s. 60E</u>. There is no current posting requirement for professional engineers and professional land surveyors.

Question 14: Is continuing education a requirement for renewing registration in the Commonwealth?

Architects are required to obtain continuing education hours each calendar year as a condition of the annual renewal of the license. 231 CMR 3.06. Licensees should consult the current regulation at 231 CMR 3.06 for specific requirements.

At present, professional engineers and professional land surveyors are not required to complete continuing education as a condition of renewing their license. However, Board regulations require Registrants to stay current with theoretical, technological and practical developments within their profession and maintain personal competency for acceptable practice throughout a Registrant's career. 250 CMR 5.02(2)(f).

Question 15: When is an architect, professional engineer, or professional land surveyor required to obtain insurance coverage for his/her professional liability?

In general, architects, professional engineers and land surveyors are not required by law to maintain professional liability insurance except as described here:

- On certain public projects see, for example, <u>MGL c. 7C, s. 51(e)</u>, design professionals are required to maintain professional liability insurance covering negligent errors, omissions and acts in specified amounts.
- For **architects**, limited liability companies (LLC) and limited liability partnerships that perform or offer architectural services must maintain insurance covering negligent acts, errors, and omissions; practitioners

should consult the regulations to determine the amount of insurance required. 231 CMR 4.04(7).

Decisions to maintain professional liability insurance, however, typically are based on the personal and business needs of the practitioner and should only be made after consulting experts in the field.

Question 16: Who is responsible for enforcing the regulations and statutes governing professional practice as an architect, professional engineer, and professional land surveyor in the Commonwealth?

The governing body that enforces the laws and regulations pertaining to professional licensure is the appropriate board of registration. Design professionals should also consult other authorities having jurisdiction over the form of business and building regulation.

However, your personal involvement as a registered professional is key to each board's success in discharging its duties. All registered professionals have a responsibility to uphold the governing laws, regulations, and professional standards. Registered professionals also have an ethical and moral responsibility to help govern and regulate the practice of their discipline and to assist those charged directly by the Governor or courts in discharging their duties to safeguard the health and safety of consumers.

ADDENDUM #1



Board of Registration of Professional Engineers and Land Surveyors Advisory on the Use of Job Titles that include the term "Engineer" or "Surveyor"

In response to questions received from the engineering and land surveying business community, the Board of Registration of Professional Engineers and Land Surveyors ("the Board") issues this advisory opinion on the use of engineering or land surveying job titles by unlicensed individuals working within the engineering and land surveying business community.

Massachusetts state law prohibits an individual who is not licensed as a professional engineer in the Commonwealth from using a job title which implies to the public that the individual is capable of performing engineering services. See M.G. L. c. 112, §§ 81D, 81T. Similarly, state law prohibits an individual who is not licensed as a professional land surveyor in the Commonwealth from using a job title which implies to the public that the individual is capable of practicing land surveying. These laws are implemented by Section 5.08 of Board regulations which states the following:

5.08: Use of Title Engineer or Land Surveyor

No person, other than a Registrant holding a current License to practice in the applicable profession, shall advertise or hold themselves out as either a Professional Engineer or a Professional Land Surveyor, or use any other title to imply that they are qualified to practice engineering or land surveying in the Commonwealth, or in any other way hold themselves out as able to perform any of the Licensed Branches of engineering or land surveying.

For companies that offer engineering or land surveying services to the public, a job title that includes the term "engineer" or "surveyor" implies to the public that the individual holding that job title is qualified to perform engineering or surveying work without supervision and therefore requires licensure by the Board. See Opinion of the Attorney General, dated August 12, 1965 & Opinion of the Attorney General dated March 9, 1971. For this reason, the Board cautions against engineering or land surveying firms allowing unlicensed employees to hold themselves out to the public as a "Civil Engineer," "Electrical Engineer," "Graduate Engineer/Surveyor," "Project Engineer," or "Associate Engineer/Surveyor." If the Board receives a complaint about a title being used by an unlicensed employee in an engineering or land surveying firm, the Board would consider whether there is clear notice to the public that the unlicensed individual is not qualified to provide unsupervised engineering or land surveying services. If the title contains the term "engineer" or "surveyor" and is used in a manner that could mislead or deceive the public into believing that the unlicensed individual is qualified to practice engineering or surveying, the Board may initiate disciplinary proceedings against the unlicensed individual and his or her employer.

There are a few statutory exemptions to the general rule that the job title "engineer" or "surveyor" requires licensure by the Board.

Exemptions to general rule that use of the term "engineer" or "surveyor" in job title requires licensure as a professional engineer:

The individual is licensed as a 1st, 2nd or 3rd class Engineer by the Boiler & Pressure Vessel Licensing Program under M.G.L. c. 146, and uses the title Engineer as authorized by that licensing law.

The individual holds a certificate as an Engineer-In-Training/Surveyor-In-Training issued by the Board and uses the title "Engineer-In-Training"/"Surveyor-In-Training."

The individual is an employee of a manufacturing company and is lawfully performing engineering work under the Manufacturing Exemption in G.L. c. 112, s. 81R.

The individual is licensed in another state and lawfully practicing with a Temporary Permit or clearly qualifies his or her title in a manner that makes clear the individual's states of licensure. G.L. c. 112, s. 81R(b) and (c) and 250 CMR 5.08.

The individual is using "engineer" or "surveyor" in a manner which makes clear that the individual is not qualified to practice engineering without supervision. For example, under certain circumstances, the titles "apprentice engineer" or "junior engineer" would not imply to the public that the holder of that title is capable of independently practicing engineering and therefore may be permissible.

As stated above, this advisory is issued in response to questions received from members of the engineering and land surveying business community. Nothing in this advisory shall be construed to waive or modify any applicable provision of law or regulation. In addition, advisory opinions may be rescinded or modified by the Board at any time.

ADDENDUM #2



How are the Massachusetts Statutes and Regulations governing Professional Practice interconnected to the Massachusetts Building Code?

The Massachusetts State Building Code at 780 CMR adopts as its Model Code the International Building Code (IBC) with Massachusetts Amendments [A]. The IBC has been adopted by all 50 states. As Massachusetts Amendments are found throughout the Model Code, it is important that practitioners familiarize themselves with what is unique. *Chapter 1 Scope and Administration* is unique to Massachusetts. The intent of 780 CMR is stated as follows:

[A] 101.3 Intent

The purpose of 780 CMR is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural <u>strength</u>, <u>means of egress facilities</u>, stability, sanitation, adequate light and <u>ventilation</u>, energy conservation, and safety to life and property from fire and other hazards attributed to the built environment, and to provide safety to fire fighters and emergency responders during emergency operations.

Section 107 Submittal Documents and Construction Control outlines requirements unique to Massachusetts.

Section 107.6.2 Registered Design Professional Services outlines requirements and responsibilities for Design and Construction.

Because this widely adopted Model Code needs to adapt to many jurisdictions that may have differing definitions of the practice of architecture or the practice of engineering, it uses the generic term "Registered Design Professional" and does not specify whether that professional is an architect, a Professional Engineer, etc. The Massachusetts State Building Code defines the term "Registered Design Professional" and "Registered Design Professional in Responsible Charge" as "[a]n individual who is licensed or otherwise authorized to practice in their respective design profession as defined by the statutory requirements of the professional registration laws of the Commonwealth."

As discussed elsewhere in this Guide, <u>General Laws Chapter 112</u>, <u>Section 60A</u> is the Massachusetts Statute that defines the Practice of Architecture, and <u>Chapter 112</u>, <u>Section 81D</u> defines the Practice of Engineering.

In traditional interdisciplinary design projects, the different disciplines assemble their respective documents and drawings to create a complete set. The architect typically signs and seals the A-Series drawings, the Professional Engineer signs and seals their drawings, etc., and the content of these documents falls within the parameters of the statutory definitions of their respective practices.

The definition of the Practice of Architecture, Chapter 112, Section 60A includes certain coordination of interdisciplinary design, development, and administration with respect to the design and construction of buildings:

the co-ordination of structural and mechanical design and site development, administration of construction contracts and any other similar service or combination of services in connection with the design and construction of buildings, regardless of whether one or all of these services are being performed and regardless of whether these services are performed in person or as the directing head of an office or organization performing them;...

The Board of Registration of Architects has established Rules of Professional Conduct to ensure appropriate adherence to and disclosure of life safety issues and consumer protections. A sample of them is outlined below:

https://www.mass.gov/doc/231-cmr-4-rules-of-professional-conduct/download

Per: 231 CMR 4.00: RULES OF PROFESSIONAL CONDUCT

4.01: Rules of Professional Conduct...

(1) <u>Competence</u>.

..

(b) In designing a project, an architect shall take into account all applicable state and municipal building laws and regulations. While an architect may rely on the advice of other professionals (e.g., attorneys, engineers, and other qualified persons) as to the intent and meaning of such regulations, once having obtained such advice, an architect shall not knowingly design a project in violation of such laws and regulations.

There are instances where the Board of Registration of Architects requires a Registered Architect to report safety concerns to a local building inspector or public official charged with enforcing applicable state or municipal building laws and regulations.

4.01: Rules of Professional Conduct

(3) Full Disclosure.

...

- (c) If, in the course of his or her work on a project, an architect becomes aware of a decision taken by his or her employer or client, against the architect's advice, which violates applicable state or municipal building laws or regulations and which will, in the architect's judgment, materially affect adversely the safety to the public of the finished project, the architect shall:
- 1. report the decision to the local building inspector or other public official charged with the enforcement of the applicable state or municipal building laws and regulations,
- 2. refuse to consent to the decision, and
- 3. in circumstances where the architect reasonably believes that other such decisions will be taken notwithstanding his or her objection, terminate his or her services with reference to the project.

In the case of a termination in accordance with 231 CMR 4.01(3)(c) the architect shall have no liability to his or her client or employer on account of such termination.

The Board of Registration of Professional Engineers and Land Surveyors has also established rules of professional conduct in <u>250 CMR 5.02</u> which place upon the Professional Engineer an ethical duty to the public, the profession and clients.

Per: 250 CMR 5.02: Professional Conduct

- (1) Responsibility. A Registrant shall hold paramount the health, property and welfare of the public in the performance of the Registrant's professional duties.
- (a) If the professional judgment of any Registrant is overruled under circumstances where the health, property or welfare of the public may be endangered, that Registrant shall notify the Registrant's employer, client or such other authority as may be appropriate.
- (b) A Registrant shall provide professional services that are truthful, based upon independent

professional judgment, founded upon adequate knowledge of the issues, and based upon competence in the subject matter.

The Massachusetts Building Code recognizes that there are situations not contemplated and as a result do not have requirements that adequately address life safety issues. In the instances where specialized buildings and structures have unique code requirements or national recognized standards not required in the Building Code, the registered design professional shall provide sufficient information to building officials to support their approval:

104.12 Matters Not Provided For

In recognition of the inherent difficulty of drafting a functional code that contemplates every situation that may arise in the area of building safety, this section provides the building official, the Building Code Appeals Board, or the BBRS itself, with reasonable discretion to ensure that all life safety issues that may arise in the enforcement of 780 CMR may be appropriately addressed. Matters not specifically provided for in 780 CMR regarding structural, egress, fire, energy, sanitary or other requirements essential to occupant safety shall be determined by the building official or, in the case of an appeal, the Building Code Appeals Board. The details of action granting modifications shall be recorded and entered in the files of the building official. For highly specialized buildings and structures that conform to unique code requirements or nationally recognized standards not required in 780 CMR, registered design professionals shall provide sufficient information to the building official to support their approval.



ADDENDUM #3



BOARD OF REGISTRATION OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS ADVISORY

Approved April 28, 2022 Updated November 17, 2022

The purpose of this advisory is to clarify tasks that may be performed by Professional Land Surveyors ("PLS") and Professional Engineers qualified in the Branch of civil engineering ("PE (Civil)") in the Commonwealth of Massachusetts.

This advisory issued by the Board of Registration of Professional Engineers and Land Surveyors ("Board") seeks to clarify which common tasks are properly performed by the respective professions. Please note that this list is not exhaustive of tasks that may be performed by either profession. Further, please review all footnotes for any applicable limitations on the performance of any task by Professional Land Surveyors and Professional Engineers (Civil).

Nothing in this advisory shall be construed to waive or modify any applicable provisions of law or regulation or other obligations. It seeks only to provide guidance to licensees and the general public as to different tasks that may be performed by Professional Land Surveyors and Professional Engineers (Civil). The Board may modify this advisory periodically based upon any changes in the professions.

<u>Task</u>	PLS	PE (Civil)
Boundary Line Survey ¹	Yes	No
Topographic Survey	Yes	Yes ²
Survey Control	Yes	No
Hydrographic Survey	Yes	Yes ²
Property Descriptions	Yes	No
Drainage Design	No	Yes

Construction Layout	Yes	Yes ³
Soil Evaluation for Septic System Design	Yes ⁴	Yes ⁴
Septic System Design	No	Yes
Highway Design	No	Yes ⁵
Subdivision Design	Yes ⁶	Yes ⁵
Utility Service Design	No	Yes
Condominium Site and Unit Plan	Yes ⁷	Yes ⁷
As-Built Survey	Yes	Yes ⁸

FEMA Elevation Certificates	Yes	Yes

¹ Per 250 CMR 2.09(3), a Boundary is "a legal demarcation between real property title or rights and includes but is not limited to proposed or existing property lines, Regulatory Lines, lease lines, easement lines, and Jurisdictional Lines."

- ³ Professional Engineers (Civil) performing construction layouts must ensure that their work is in compliance with 250 CMR 5.01(2) and may not perform work that is related to the determination of property lines. "A Professional Engineer qualified in the Branch of civil engineering may also perform land surveying incidental to his or her engineering work relative to locating or relocating any of the Fixed-works embraced within the practice of civil engineering, but excluding the determination of property lines." 250 CMR 5.01(2)(a). "The delineation of existing or proposed structures, features or Boundaries relative to property lines requires the determination of property lines and therefore must be performed by a Professional Land Surveyor." 250 CMR 5.01(2)(b). See also M.G.L. c. 112, § 81D.
- ⁴ Both Professional Land Surveyors and Professional Engineers must meet the criteria outlined in 310 CMR 15.017 to be approved as a Soil Evaluator prior to engaging in Soil Evaluations for Septic System Designs.
- ⁵ Survey work which includes, but is not limited to, Boundary lines, lot lines, street lines, right of way lines, easement lines, and record plans, must be prepared by a Professional Land Surveyor.
- ⁶ Grading, utility, and drainage design shall be prepared by a Professional Engineer.
- ⁷ The condominium site plan must be prepared by a Professional Land Surveyor. Unit plans may be prepared by a Professional Engineer (Civil).
- ⁸ Professional Engineers (Civil) preparing as-built surveys must ensure that their work is performed in compliance with 250 CMR 5.01(2)(a) and 250 CMR 5.01(2)(b). Pursuant to said regulations, "[a] Professional Engineer qualified in the Branch of civil engineering may also perform land surveying incidental to his or her engineering work relative to locating or relocating any of the Fixed-works embraced within the practice of civil engineering, but excluding the determination of property lines. The delineation of existing or proposed structures, features or Boundaries relative to property lines requires the determination of property lines and therefore must be performed by a Professional Land Surveyor." For further guidance, please see Board FAQ: Can a Professional Engineer (PE) certify a site plan or an as-built plan which references and/or utilizes a property line determination that was previously completed by a Professional Land Surveyor (PLS)?

² Professional Engineers (Civil) shall not perform a topographic or hydrographic survey if there is mapping which requires survey ground control; there is mapping that must comply with the Land Surveying Procedures and Standards set forth in 250 CMR 6.00 et. seq.; or if there are existing or proposed structures, features or Boundaries shown relative to property lines. All topographic surveys related to or featuring land boundaries or property lines must be performed by a Professional Land Surveyor.