

APELSCIDLA BOARD MEETING AGENDA
July 2, 2019
10:00 a.m. – BR4 – 2nd Floor
Department of Professional & Occupational Regulation
9960 Mayland Drive
Richmond, Virginia 23233
(804) 367-8514

1. Call to Order
2. Emergency Evacuation Procedures
3. **Moment of Silence for Virginia Beach Colleagues**
4. Welcome and Introductions
 - April Drake, AIA, NCARB, LEED AP ID+C
 - Dylan Avatar, Business Development, SIGMA
 - **Jim Flaherty, Assistant Attorney General**
5. Approval of Agenda
6. Approval of Minutes
 - March 12, 2019, APELSCIDLA Board Meeting
 - March 12, 2019, Architects, Certified Interior Designers & Landscape Architects Section Meeting
 - May 9, 2019, **Professional Engineers and Land Surveyors Section Meeting**
7. Public Comment Period*
8. Review of Files
 - File Number 2018-03048, Michael Ray Richwine
Consent Order (**Langelotti**) – Disciplinary
 - File Number 2019-01954, Tyler Andrew Beach
IFF (Stone) – Licensing
 - File Number 2019-01955, Colin D. Reilly
IFF (Stone) – Licensing
 - File Number 2019-02262, Eric Michael Sears
IFF (Stone) – Licensing
 - File Number 2019-01994, Edward Alford Hickey Jr.
IFF (Allen & **Zmuda**) – Licensing

9. SIGMA Presentation
10. DOLI/ Land Surveyor Apprenticeship Program
 - **Timeline**
 - Email from DOLI dated May 28, 2019
 - **Opt In/Opt Out of DOLI website listing, email excerpts**
 - **Outline of steps to become an LS apprentice, June 11, 2019**
 - **Revised Virginia Surveyor Registered Apprenticeship Standards, June 11, 2019**
 - Revised RTI form
11. Guidance Document on § 33.1-105 Evidence as to Existence of a Public Highway
12. LS Exam Update
13. **DRAFT Drone Companies Selling Data for Design Purposes Letter**
14. NTSB Safety Recommendation Report Adopted November 14, 2018
15. Signing of Wall Certificates
16. Draft 2020 Meeting Schedule
17. **Election of Chair and Vice Chair**
18. Business Agreements Update
19. Request for CE Waiver Update
20. Regulatory Update
21. **Cease and Desist letters**
22. Periodic Regulatory Review
23. **Licensed and Certified Population**
24. **List of Acronyms**
25. Financial Statements
26. NCARB Updates
 - Annual Meeting, June 20-22
27. NCEES Updates
 - Joint Southern/Western Zone Meeting, May 16-18
 - Annual Meeting, August 14-17

28. CIDQ Updates
 - Annual Conference, November 8-9
 29. CLARB Updates
 - Annual Meeting, September 26-28
 30. Resolutions
 - Tara Welch Gallagher, P.E.
 - Richard H. Nettleton, P.E.
 - Katherine Anne Marie Lusich Nixon, P.E.
 - Christopher Kelly Rapp, P.E.
 31. Other Business
 32. Agency-wide Board Members Orientation, October 3-4, 2019
 33. APELS Centennial, June 2020
 34. Conflict of Interest / Travel Vouchers
 35. Day In the Life of an Landscape Architect – Ann Stokes
 36. Adjourn
- Arch-CID -LA Section meeting upon adjournment
 - File review upon adjournment

NEXT MEETING SCHEDULED FOR September 10, 2019

Agenda materials available to the public do not include disciplinary case files or application files pursuant to §54.1-108 of the Code of Virginia.

**Five minute public comment, per person, with the exception of any open disciplinary or application files. Persons desiring to participate in the meeting and requiring special accommodations or interpretative services should contact the Department at (804) 367-8514 at least ten days prior to the meeting so that suitable arrangements can be made for an appropriate accommodation. The Department fully complies with the Americans with Disabilities Act.*

Call to Order

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

Emergency Evacuation Procedures

Moment of Silence

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion and are not to be construed as regulation of official Board position.

Welcome & Introductions

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

Approval of Minutes

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

**BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS,
LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS
AND LANDSCAPE ARCHITECTS MEETING
MINUTES**

The Virginia Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers and Landscape Architects (APELSCIDLA Board) met on March 12, 2019, at the Department of Professional and Occupational Regulation, 9960 Mayland Drive, Richmond, Virginia, with the following members present for all or part of the meeting:

Architects

Robert Boynton
Mel Price
Christine Snetter

Land Surveyors

Doyle Allen
Vickie Anglin
Mike Zmuda

Landscape Architects

A. Cabell Crowther
Ann Stokes

Professional Engineers

James Kelly
Vinay Nair
Chris Stone

Interior Designers

Caroline Alexander
Cameron Stiles

Citizen Members

Hypatia Alexandria
Karen Reynes

Staff present for all or part of the meeting were:

Mary Broz-Vaughan, Acting Director
Kathleen (Kate) R. Nosbisch, Executive Director
Bonnie Davis, Administrative Assistant
Bonnie Adams, Director, Complaint Analysis & Resolution
Linda Rhodenhiser, Licensing Specialist, Post Adjudication and Licensing (PAL)
Tyler Weimorts, Licensing Specialist, Post Adjudication and Licensing (PAL)
Anne-Cabrie Forsyth, Licensing Specialist, Post Adjudication and Licensing (PAL)

Members of the audience:

Missy Sutton, Member Engagement Manager, Council of Landscape Architectural Registration Boards (CLARB)
Georg Dahl, Director, APELSCIDLA Representative, Virginia Society of Professional Engineers (VSPE)
Rob McGinnis, Member, Government Affairs Committee, American Society of Landscape Architects Virginia Chapter (VA ASLA)
John Palatiello, Executive Director, Virginia Association of Surveyors
Kevin Shreiner, President, Virginia Association of Surveyors (VAS)
Gary Faulhaber, First Vice President, Virginia Association of Surveyors
R. Corey Clayborne, Executive Vice President, American Institute of Architects (AIA Virginia)
Harry Falconer, Jr., Vice President Experience + Education, National Council of Architectural Registration Boards (NCARB)
Caitlin Stromberg, Manager Member Board Relations, NCARB

Elizabeth Peay, Assistant Attorney General, was present from the office of the Attorney General.

Ms. Stiles, Chair, called the meeting to order at 10:04 a.m.

Call to Order

Ms. Stiles advised the Board of the emergency evacuation procedures.

**Emergency
Evacuation
Procedures**

Ms. Nosbisch reported Ms. Stokes and Ms. Alexandria would be late. She introduced: Mary Broz-Vaughan, Acting Director of DPOR; Vinay Nair, new Professional Engineer Board member, who will be observing the meeting; Missy Sutton, Member Engagement Manager of CLARB, and members of the audience.

**Welcome and
Introductions**

Mr. Boynton moved to approve the amended agenda. Mr. Stone seconded the motion which was unanimously approved by members: Alexander, Allen, Anglin, Boynton, Crowther, Kelly, Price, Reynes, Snetter, Stiles, Stone, and Zmuda. Mr. Nair abstained.

**Approval of
Agenda**

Mr. Stone moved to approve the minutes of the following meetings:

- December 5, 2018, APELSCIDLA Board Meeting
- December 5, 2018, Architects, Certified Interior Designers & Landscape Architects Section Meeting
- December 5, 2018, APELSCIDLA Recognition Ceremony
- February 5, 2019, Professional Engineers and Land Surveyors Section Meeting

**Approval of
Minutes**

Ms. Snetter seconded the motion which was unanimously approved by members: Alexander, Allen, Anglin, Boynton, Crowther, Kelly, Price, Reynes, Snetter, Stiles, Stone, and Zmuda. Mr. Nair abstained.

Ms. Stokes arrived the meeting at 10:12 a.m.

**Arrival of
Board
Member**

Mr. Palatiello commended the Board for the agenda containing a number of important issues, primarily the Locality Boundaries and (Geographic Information System) GIS White Paper. He stated HB1649/SB1594 was signed by the Governor a few weeks ago. Because there has been a long standing issue with Virginia county boundaries, the counties are trying to create an efficient method to handle the disputes. This bill will affect school districts, tax rates, voting districts, etc. GIS is not an accurate boundary; the real boundary is on the ground. He requested the Board to issue a guidance document to localities to explain what can and cannot be done under code regarding GIS.

**Public
Comment
Period**

Mr. Schreiner echoed Mr. Palatiello's comments. He stated his biggest concern is that this bill may set precedence. If localities use GIS for boundary solutions, this could trickle down to the public, where the public may think it is acceptable to use GIS for boundaries. He is concerned that the bill may be misconstrued and affect the health, safety and welfare of the public.

Mr. Faulhaber stated he echoed Mr. Palatiello and Mr. Schreiner's comments, and the inaccuracies can be three to five feet or more.

Regarding **File Number 2018-02705, Ram Lal Pradhan**, the Board members reviewed the Consent Order as seen and agreed to by Mr. Pradhan. Mr. Crowther moved to accept the Consent Order which cites the following violation of the Board's regulations: 18VAC10-20-760.B.4 (Count 1). For this violation, Mr. Pradhan agrees to pay the following monetary penalty: \$500 for the violation contained in Count 1, and \$150.00 in Board costs, for a total monetary penalty of \$650. Ms. Snetter seconded the motion which was unanimously approved by members: Alexander, Allen, Anglin, Boynton, Crowther, Kelly, Price, Reynes, Snetter, Stiles, Stokes, and Zmuda. Mr. Nair abstained. As the presiding Board member, Mr. Stone was not present for the discussion or vote.

File Number
2018-02705,
Ram Lal
Pradhan

Regarding **File Number 2019-01435, Eric Stephen Cheesic**, the Board members reviewed the record of the Informal Fact-Finding Conference, which consisted of the application file, transcripts and exhibits, and the Summary of the Informal Fact-Finding Conference. Ms. Anglin moved to accept the recommendation of the presiding officer and deny Mr. Cheesic's application for professional engineer. Mr. Boynton seconded the motion which was unanimously approved by members: Alexander, Allen, Anglin, Boynton, Crowther, Kelly, Price, Reynes, Snetter, Stiles, Stokes, and Zmuda. Mr. Nair abstained. As the presiding Board member, Mr. Stone was not present for the discussion or vote.

File Number
2019-01435,
Eric Stephen
Cheesic

The Board reviewed the draft Related Technical Instruction (RTI) form. Ms. Alexander suggested the removal of "eight" from categories, and Ms. Anglin suggested the addition of "Photogrammetry" to the list of categories. Ms. Anglin moved to approve the RTI log with the noted changes. Mr. Stone seconded the motion which was unanimously approved by members: Alexander, Allen, Anglin, Boynton, Crowther, Kelly, Price, Reynes, Snetter, Stiles, Stokes, Stone, and Zmuda. Mr. Nair abstained.

Virginia
Surveyor
Apprentice-
ship
Standards –
DRAFT RTI
Form

Ms. Nosbisch stated Ms. Anglin received an inquiry regarding apprenticeship sponsors. The local Department of Labor and Industry (DOLI) representative stated there was not a viable program in Fairfax County. Ms. Eddington, Assistant Director, Division of Registered Apprenticeship, DOLI, replied in an email to Ms. Nosbisch that the Fairfax County Public Schools Adult and Community Education Surveying Program is approved to provide 600 of the 720 required RTI hours. She also stated that not all sponsors are listed in the DOLI website. The Board requested staff contact DOLI to determine why sponsors opt out of being listed on the website, and how does the Board know that DOLI has everything they need to for an approved program. The Land Surveyors determined an outline/step by step process to become a surveyor via the Virginia Surveyor Apprenticeship Standards should be developed. The Land Surveyors requested the item be placed on the Professional Engineers and Land Surveyors May 2, 2019 agenda and then be returned to the full Board meeting agenda for June 11, 2019.

DOLI / Land
Surveyor
Apprentice-
ship Program

Ms. Anglin provided an update on the change in datums. At the February 5, 2019 Professional Engineers and Land Surveyors Section meeting, she presented the proposed language, §55-287. Virginia Spatial Reference System which was approved by Virginia Association of Surveyors (VAS). At that meeting, Ms. Anglin requested input on Sections on §55-293. Position of Systems and §55-294. Limitation on Use of Systems. VAS will seek a patron to change the Code of Virginia.

**Change in
Datums
Update**

Mr. Palatiello, Mr. Shreiner, and Mr. Faulhaber addressed this item under Public Comment. Mr. Allen stated Mr. Palatiello presented the White Paper to the General Assembly, but the bill was passed. He stated the legislature is well intentioned at searching for an economical way to establish the boundary of counties. A boundary of any type must be established on the ground. A boundary established by GIS and one established on the ground are not one in the same. There will be problems and unforeseen consequences. The GIS boundaries will have an effect on the health, safety and welfare of the public. Ms. Anglin stated she has seen differences from two feet to fifteen feet in the two methods. As stated in Public Comment, this will affect school districts, voting, etc. The cost will be higher to fix it after the fact rather than having it surveyed from the beginning. Mr. Stone stated there will be unintended consequences. Ms. Price suggested a presentation using real data of two families moving into a neighborhood between two counties, where the families think they are in one school district, but according to GIS they will be in another school district. Mr. Palatiello stated Louisa and Goochland have still not used their authority to determine their boundary.

**Locality
Boundaries
and GIS
White Paper**

Ms. Alexandria, Board member, arrived to the meeting at 11:02 a.m.

**Arrival of
Board
Member**

Mr. Allen stated the Land Surveyor Section created a guidance document to help surveyors understand a problem he has seen his entire career. The Byrd Act created the Secondary Highway Systems in Virginia. He stated from the center of the road, fifteen feet each way for easement and maintenance to road, is misinterpreted. This guidance document clarifies it. Mr. Stone moved to approve the posting of the guidance document for the 30 day public comment period. Ms. Anglin seconded the motion which was unanimously approved by members: Alexander, Alexandria, Allen, Anglin, Boynton, Crowther, Kelly, Price, Reynes, Snetter, Stiles, Stokes, Stone, and Zmuda. Mr. Nair abstained. The item will be placed on the Board agenda of the June 11, 2019 meeting.

**Guidance
Document on
§ 33.1-105
Evidence as to
Existence of a
Public
Highway**

At the December meeting, Ms. Webster, Director of Exams, stated the Land Surveyor State Specific and Land Surveyor B exams would go out for RFP. Ms. Nosbisch reported the RFP has not yet gone out. More information will be provided at the June 11, 2019 Board meeting.

**LS Exam
Update**

The explosion in the northeast region of the Merrimack Valley, Massachusetts was discussed at the December Board meeting and at the PE-LS Section meeting in February. It was noted that some states do not have an industrial exemption like

**NTSB Safety
Recommendation
Report**

Virginia. The Board discussed the pros and cons of the industrial exemption and to change the exemption would require a change in statute. Mr. Stone stated the exemption was discussed at the Virginia Engineers Conference. Mr. Stone will speak with the American Council of Engineering Companies (ACEC) and the Virginia Society of Professional Engineers (VSPE) regarding the need for a legislative change.

Adopted
November 14,
2018

Ms. Nosbisch reported the PE-LS Section meetings will now begin at 10:00 a.m.

10:00 a.m.
Meeting Time

The signing of wall certificates was discussed at the December Board meeting and improvements are in process. The item will be placed on the Board agenda of the June 11, 2019 meeting.

Signing of
Wall
Certificates

Ms. Nosbisch reported the following business entities were issued Business Agreements for Registration:

Business
Agreements
Update

- Kleinfelder Inc, License# 0407006943, signed December 12, 2018
- STV Inc., License# 0407003505, signed January 2, 2019
- United Structural Consultants Inc., License# 0407007517, signed January 11, 2019
- Backen Gilliam & Kroeger Architect A Professional Corp, License# 0405002259, signed February 6, 2019

This process allows businesses to begin doing business in a more timely manner rather than wait for a quarterly Board meeting.

There were no requests for waiver of continuing education.

Request for
CE Waiver
Update

Some bills for deregulation were submitted in direct response to the JLARC report; they did not pass. Ms. Broz-Vaughan stated legislation that passed amended the required Callahan Act percentage to increase to twenty percent instead of ten percent and stated if the board goes above, it must issue refunds. She also spoke about the Board for Professional Regulation is required to study new regulations of professions during open session.

JLARC /
General
Assembly
Update

Ms. Broz-Vaughan reported that the agency is moving forward with technological advancements as recommended in the report. She informed the Board that a "quick pay" feature had been added to the website, making renewal payments easier. Ms. Broz-Vaughan stated that the feature went live March 3, 2019 at 10:00 am, and as of 9:00 am March 4, 2019, 55 licensees has renewed their license using the new feature.

Ms. Nosbisch stated there is nothing new to report on the existing regulatory package at this time.

Regulatory
Update

Ms. Stiles reviewed the licensee counts as of February 1, 2019: APELSCIDLA Businesses 4,283; Architects 7,438; Engineers 29,212; Land Surveyors 1,269; Land Surveyors B 75; Land Surveyor Photogrammetrists 119; Interior Designers 497; and Landscape Architects 935.

Licensed and Certified Population

Ms. Nosbisch stated the financial statements were provided for informational purposes.

Financial Statements

Ms. Nosbisch introduced Corey Clayborne, Executive Vice President, AIA Virginia; Harry Falconer, Jr., Vice President Experience + Education; and Caitlin Stromberg, Manager Member Board Relations both of NCARB.

NCARB Updates

Mr. Boynton stated there were more attendees at the NCARB Regional Summit last week than at the National meeting because NCARB provided funding for four attendees from each board. Ms. Snetter attended the Summit and took part in discussions on the future of the profession and how jurisdictions will prepare for it. Ms. Alexandria stated the Summit provided information on jurisdictional challenges and potential solutions, working together, and diversity.

Mr. Falconer stated NCARB is celebrating their 100th anniversary, and their office just moved to a new location: 1401 H Street, NW, Suite 500, Washington DC 20005.

Ms. Nosbisch reported she is on the Model Law Task Force; Virginia uses Model Law as a guideline.

The Board recessed from 11:45 a.m. until 12:00 p.m.

Recess

Ms. Nosbisch announced NCEES will be celebrating its 100th anniversary in 2020, and APELS will be celebrating its 100th anniversary in 2020.

NCEES Updates

The Board discussed Charge 5 Memorandum of Understanding (MOU). Ms. Anglin moved not to approve the Professional Engineering and Surveying Interstate Licensure MOU. Mr. Zmuda seconded the motion which was unanimously approved by members: Alexander, Alexandria, Allen, Anglin, Boynton, Crowther, Kelly, Price, Reynes, Snetter, Stiles, Stokes, Stone, and Zmuda. Mr. Nair abstained.

The Board noted the 2019 approved list of calculators for the NCEES exams.

Mr. Zmuda reported he attended the NCEES Board Presidents' Assembly in February for the first time. He stated there were many updates, and it allowed him the time to speak with other boards.

Mr. Stone presented to approximately 130 attendees at the Virginia Engineers Conference on March 5-6th. He provided information on the APELSCIDLA regulations.

Virginia Engineers Conference March 5-6,

2019

Ms. Stiles reported Ms. Nosbisch and Ms. Broz-Vaughan met with Brian Soukup Esq, Vice President, Government and Public Affairs of the American Society of Interior Designers (ASID), and Emily Kelly, Director of Advocacy, Public Policy, and Legislative Affairs, International Interior Designer Association (IIDA) to discuss the JLARC report and the effect on interior designers.

CIDQ
Updates

Ms. Sutton stated CLARB:

- Is tracking legislation and deregulatory efforts in all but four states in North America
- Developed and administer the national exam; went fully computer based in 2012; future virtual reality take exam
- Is participating in national and federal coalitions to ensure continued regulation of the design professions; create smart regulation; support advocacy
- Is providing training, networking and information sharing opportunities for members; encouraged all board members to attend CLARB events, not just landscape architects

CLARB
Updates

Ms. Nosbisch noted that CLARB accomplishes so much with such a small staff; Ms. Sutton stated there are only ten full time employees and five part time employees.

The Board discussed a response template to solicitations for unlicensed work. Ms. Nosbisch stated a response template should not be sent out as a Board, but can be sent as an individual. Mr. Stone inquired about a cease and desist letter for unlicensed activity. Ms. Broz-Vaughan stated a letter from the agency, rather than the Board, was addressed in a bill approved by the General Assembly this year. The item will be placed on the Board agenda of the June 11, 2019 meeting for follow up.

Other
Business

Ms. Nosbisch noted Ms. Crowther's second term, Ms. Price's unexpired term, and Mr. Allen's first term are ending in June 2019. Ms. Price and Mr. Allen were advised to contact the Secretary's office if they wish to seek reappointment. Anyone interested in serving on the Board, may complete an application online for the landscape architect, architect, and land surveyor positions.

Ms. Nosbisch stated legislation was introduced in Maine which would provide immunity from civil liability when they volunteer their professional services in the wake of a natural disaster or catastrophe. There was a general inquiry as to which jurisdictions have something similar. In Virginia, Ms. Broz Vaughan referred to the Good Samaritan Law § 8.01-225, in Virginia.

Ms. Nosbisch stated that a legislative bill was recently introduced in California that proposes to add a requirement for businesses that offer surveying services to apply to the Board and receive a Certificate of Authority to offer those services. There was a general inquiry to jurisdictions if COA's benefit surveyors. Mr. Allen stated

it does benefit the responsible charge; you have to designate the surveyor in charge for that office. This has not hindered surveying. There were additional questions as to how much manpower/effort does it take to manage the operations solely related to processing, maintaining, and enforcing this requirement. It varies as we issue COAs for five different professions, and we share enforcement services. Also, there was an inquiry as to fees for COA's. The fees in Virginia are as follows:

Business	Initial Registration	Renewal (every 2 years)
Professional Corporation (PC)	\$ 30	\$ 25
Professional Limited Liability Company (PLLC)	\$ 100	\$ 50
Business Entity other than PC or PLLC	\$ 100	\$ 50

Ms. Nobisch thanked the Board members for completing their yearly statement of economic interests (SEI).

Statement of Economic Interest

Conflict of Interest forms and travel vouchers were completed by all Board members present.

Conflict of Interest Forms/ Travel Vouchers

Ms. Price provided a presentation on "A Day in the Life of an Architect." The Board members thanked her for her presentation.

Day in the Life of an Architect

Ms. Anglin received an email asking if a drone company can sell aerial photography and/or LIDAR type point data to an engineering/surveying company for design purposes in Virginia without a photogrammetrist/land surveyor's licensed person on staff. The Board noted that selling imagery to a licensed surveyor to reduce and create a design product is acceptable. Collecting imagery and reducing with a regulant on staff is not acceptable. The Board requested staff to draft an answer to the email and circulate it for changes.

Other Business continued

The meeting was adjourned at 1:32 p.m.

Adjourn

Cameron Stiles, Chair

Mary Broz-Vaughan, Acting Secretary

**ARCHITECTS, CERTIFIED INTERIOR DESIGNERS and
LANDSCAPE ARCHITECTS SECTION MEETING**

MINUTES

The Architect, Certified Interior Designer and Landscape Architect Sections of the Virginia Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers and Landscape Architects (APELSCIDLA Board) met on March 12, 2019, at the Department of Professional and Occupational Regulation, 9960 Mayland Drive, Richmond, Virginia, with the following members present for all or part of the meeting:

Caroline Alexander (CID)
Robert A. Boynton (Arch)
A. Cabell Crowther (LA)
Mel Price (Arch)
Christine Snetter (Arch)
Cameron Stiles (CID)
Ann Stokes (LA)

Staff present for all or part of the meeting were:

Marian Brooks, Board Administrator
Bonnie Davis, Administrative Assistant

Members of the audience:

Missy Sutton, Member Engagement Manager, CLARB
R. Corey Clayborne, Executive Vice President, AIA Virginia
Harry Falconer, Jr., Vice President Experience + Education, NCARB
Caitlin Stromberg Manager, Member Board Relations, NCARB
Rob McGinnis, Member, Government Affairs Committee, ASLA, Virginia Chapter

No representative was present from the Office of the Attorney General.

Ms. Stokes, Section Chair, called the meeting to order at 1:49 p.m.

Call to Order

Ms. Stiles moved to approve the agenda. Ms. Price seconded the motion which was unanimously approved by members: Alexander, Boynton, Crowther, Price, Snetter, Stiles, and Stokes.

Approval of Agenda

There was no public comment.

Public Comment

Ms. Stile reported earlier at the Board meeting that Ms. Nobsch and Ms. Broz-Vaughan met with Brian Soukup Esq, Vice President, Government and Public Affairs American Society of Interior Designers, and Emily Kelly, Director of Advocacy, Public Policy, and Legislative Affairs, International Interior Designer Association (IIDA) to discuss the JLARC report and the effect on interior designers.

**Certified Interior
Designer Section
Update**

Ms. Stiles stated the definition of interior design was presented at the CIDQ meeting and went through edits in November. The definition is still in the comment period.

CIDO Update

Ms. Sutton provided information on CLARB. She spoke about the goal of an agile, balanced board made up of licensed landscape architects and tap into other skills sets. The bylaws amendment requires three quarters approval and it was missed by one vote at the September meeting. It will be revisited at the annual meeting.

CLARB Update

Joel Albizo's, CEO of CLARB; last day will be March 29, 2019. The new CEO will be announced at the annual meeting in September.

Regional virtual meetings; Region 1 met virtually on February 26th.

The American Society of Landscape Architects (ASLA) met regarding licensure regulation; CLARB, met regarding regulation. NCEES and NCARB were invited to the annual meeting in September.

Four part webcast on Foresight: Foresight is different from a strategic plan; look at the future and at factors that may arise and if they happen now what decisions would you make now.

Mr. Crowther will be completing his second term in June.

**Landscape Architect
Section Update**

Mr. Clayborne stated AIA Virginia will be hosting the Art of Practice on March 22nd. The Art of Practice is a one day forum focused on creating and fostering a healthy firm culture – retention, succession planning, business development, etc. He stated AIA Virginia will celebrate Architects Week April 21-27th. AIA Virginia will also host a reception to socialize with students and faculty at Virginia Tech where the goal is to pursue license and architecture upon graduation.

**Architect Section
Update**

Ms. Price stated she will be running two workshops at the AIA National Convention on June 5, 2019.

The Sections reviewed the NCARB Continuing Education Guidelines. Ms. Brooks requested members to send their comments to Ms. Nobsisch by April 2, 2019.

NCARB Update

Mr. Falconer provided the handout "AXP Guidelines, January 2019, Documenting Your Experience Through Hours," and spoke about the AXP and IDP programs. He suggested the Board seriously consider the duration requirement. Virginia is one of ten states that still has duration requirements. Ms. Price stated the Board needs to adapt and be flexible. Ms. Alexander stated we need regulatory language to be ready for changes in the future. Ms. Snetter stated the handout provided by Mr. Falconer is very good; she

stated IPAL is something to really think about.

The sanctions issued for eight candidates who violated the Architect Registration Examination (ARE) Candidate Agreement were discussed.

Mr. Falconer reported NCARB has a new address, 1401 H Street, NW, Suite 500, Washington DC 20005.

There was no other business.

Other Business

Conflict of Interest forms were completed by all members present.

**Conflict of Interest
Forms**

There being no further business, the meeting was adjourned at 3:14 p.m.

Adjourn

Ann Stokes, Chair

Mary Broz-Vaughan, Acting Secretary

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official board position.
DRAFT AGENDA

**PROFESSIONAL ENGINEER & LAND SURVEYOR
SECTION MEETING**

MINUTES

The Professional Engineer and Land Surveyor Section of the Virginia Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers and Landscape Architects (APELSCIDLA Board) met on May 9, 2019, at the Department of Professional and Occupational Regulation, 9960 Mayland Drive, Richmond, Virginia, with the following members present:

Doyle B. Allen (LS)
Vickie Anglin (LS)
James Kelly (PE)
Vinay Nair (PE)
Christopher M. Stone (PE)
Michael Zmuda (LS)

Staff present for all or part of the meeting were:

Mary Broz-Vaughan, Acting Director
Kathleen (Kate) R. Nobsch, Executive Director
Bonnie Davis, Administrative Assistant

Elizabeth Peay, Assistant Attorney General, was present from the office of the Attorney General.

Members of the Public present for all or part of the meeting were:

Georg Dahl, Virginia Society of Professional Engineers (VSPE) STEM and Educational
Outreach Lead for Tidewater/Hampton Roads Chapter
David Gardy, Virginia Association of Surveyors

Ms. Anglin, Chair, called the meeting to order at 10:03 a.m.

Call to Order

Ms. Anglin advised the Section members of the emergency evacuation procedures.

**Emergency
Evacuation
Procedures**

Mr. Kelly moved to approve the agenda. Mr. Zmuda seconded the motion which was unanimously approved by members: Allen, Anglin, Kelly, Nair, Stone and Zmuda.

**Approval of
Agenda**

There was no public comment.

**Public Comment
Period**

The Board discussed the need for an apprenticeship outline to direct applicants on how to become an apprentice at its meeting on December 5, 2018 and referred the outline to the PE-LS Section meeting today. Ms. Davis was recognized for her work on the draft outline which was reviewed and approved by the Section, and will be placed on the full Board meeting agenda for final approval on June 11, 2019.

**Virginia Surveyor
Apprenticeship
Standards Outline**

The Board discussed why sponsors opt out of being listed on the Department of Labor and Industry (DOLI) website and how the Board knows that DOLI has everything they need for an approved program at its meeting on December 5, 2018 and referred the both items to the PE-LS Section meeting. DOLI's response stated that the DOLI apprenticeship sponsorship listing on the web is voluntary. Ms. Anglin stated she spoke with non-listed sponsors in her area and they did not understand why they were not listed. Ms. Anglin also noted that DOLI stated an addition 90 hours was needed. The Board understood the program was approved in September 2018. Ms. Anglin stated a local DOLI rep declined to sign up one of her staff to the apprenticeship program. Ms. Nobsch stated a timeline indicating previous meetings and program approvals will be developed for the full Board meeting agenda for June 11, 2019. Staff will request DOLI clarify how providers opt in/opt out of being listed as sponsor on the DOLI website. Staff at DOLI have recently indicated the program still doesn't meet requirements.

**DOLI/ Land
Surveyor
Apprenticeship
Program**

At the March 12, 2019, the Board requested staff draft a letter regarding the selling of data for design purposes. Ms. Peay suggested regulatory reference be cited in the letter. A revised draft letter will be placed on the full Board meeting agenda for June 11, 2019.

**Drone Companies
Selling Data for
Design Purposes
Letter**

Mr. Allen stated the guidance document is referencing a Section of Virginia Department of Transportation's (VDOT) Code. The Section was advised that the APELSCIDLA Board cannot provide a guidance document on another agency's code. Mr. Stone moved to rescind the guidance document; ask VDOT if they are willing to issue an Internal Memorandum (IM) regarding 33.1-105; use this guidance document and reference the APELSCIDLA regulations in the guidance document; and/or change our regulations during public comment. Mr. Kelly seconded the motion which was unanimously approved by members: Allen, Anglin, Kelly, Nair, Stone and Zmuda.

**Guidance
Document on §
33.1-105 Evidence
as to Existence of
a Public Highway**

Ms. Nobsch stated the Land Surveyor's exam statistics had been reviewed at the February 5, 2019 PE-LS meeting; the only new information is the April statistics. While presenting at the Virginia Association of Surveyors Annual meeting on April 26, 2019, a member of the audience requested pass rate information. Ms. Nobsch stated she will share the LS Exam pass rates to VAS.

LS Exam Update

Ms. Anglin read Governor Ralph Northam's Proclamation regarding the March 17-23, 2019 Surveyors Week in the Commonwealth of Virginia:

**LS Week
Proclamation**

WHEREAS, the role of the surveyor has been, and remains, of vital importance in the development of the United States and to our private property rights; and
WHEREAS, surveying requires both fieldwork and indoor work, in order to measure, maintain, monitor, verify, validate, and regulate boundaries of land, economic assets, and other properties; and

WHEREAS, since the colonial era, surveyors have been statesmen, leaders in the community, and influential citizens; and

WHEREAS, former surveyors include George Washington, Thomas Jefferson, and Abraham Lincoln; and

WHEREAS, surveyors remain essential to the development of the United States

and the Commonwealth of Virginia today; and
WHEREAS, Virginia is home to more than 1,200 licensed surveyors; and
WHEREAS, Surveyors Week is an opportunity to recognize the historic contributions of surveying, and appreciate the new technologies that are constantly modernizing the profession;
NOW, THEREFORE, I, Ralph S. Northam, do hereby recognize March 17-23, 2019, as SURVEYORS WEEK in our COMMONWEALTH OF VIRGINIA, and I call this observance to the attention of all our citizens.

Ms. Nosbisch and the Land Surveyors Section provided a four-hour Town Hall presentation at the Virginia Association of Surveyors Annual convention on April 26, 2019. She stated the presentation was well received and the Section was asked back for next year. Ms. Nosbisch congratulated Mr. Gardy who received two awards for plats. Ms. Anglin provided a presentation on April 25, 2019 called "2022 and You; a Surveyor's Perspective on Implementation"; change management and practical concerns implementing the new datum. At today's meeting, a discussion took place regarding new regulations for the 2022 datums. Regulations need to be in place by 2022 for consistency. They will also affect the counties' regulations. Ms. Anglin will provide the language from VAS once it is finalized.

VAS Presentation Update

Mr. Allen reported that with pending changes on the national exam from NCEES, the Board may be able to do away with a large portion of the Virginia State Specific Exam. The Section determined to wait for the changes at NCEES before deciding on how the State Specific Exam will be impacted.

It was noted that House Bill 1649 Boundary agreement, local; locality allowed to attach to their petitions to circuit court a GIS map was signed into law. Ms. Broz Vaughan requested Ms. Peay's interpretation of whether Virginia Code Title 15.2 and HB1649 were in conflict with each other as there is no consensus a conflict exists. Ms. Peay stated HB1649 becomes effective July 1, 2019, and if it is in conflict with Code 15.2, we must figure out how to make them work together. It was noted that when it is determined a bill is in conflict, it is typically taken up with the patron of the bill to be addressed in the next General Assembly.

A discussion took place regarding contractors using GPS – Party Chiefs setting up 3D models. Mr. Allen stated that Global Positioning System (GPS) is regulated. He stated locating physical improvements is a regulated activity. The skill set is in question. It was noted that nothing can be done until a complaint is filed with DPOR.

There was a concern with the computer based testing (CBT) PE exam at NCEES, that an applicant could take the PE exam without pre-approval from the Board. To date, this has not occurred, and taking the exam does not guarantee licensure; all requirements must be met.

Taking PE Exam without Pre-Approval

The article was provided for informational purposes.

Wireless Site Project Plans with Stolen PE Stamps?

**Jonathan L.
Kramer, on
March 24, 2019 on
Wireless Siting
and Law**

The Section recessed from 11:54 a.m. until 12:02 p.m.

Recess

Ms. Nosbisch met with Complaint Analysis & Resolution (CAR) and the Investigations Section and shared the following information with the Section: 42 complaints had been received between July 1, 2018 and April 24, 2019. 23 cases were closed by CAR; 19 were sent to Investigations; of those 19, nine open cases had technical review, 10 were closed (8 without technical review and 6 of the 8 were continuing education related.)

**Complaints
without Board
Member Review**

The Section reviewed the 2020 meeting dates. The information will be placed on the full Board meeting agenda for June 11, 2019.

**2020 PE-LS
Meeting Dates**

Ms. Nosbisch stated the proposed changes to the Bylaws will be voted on at the NCEES Annual meeting in August.

NCEES Updates

The Section reviewed the candidates for Southern Zone Assistant Vice President.

Mr. Allen stated he attended the NCEES Northeast and Central Zone meeting last weekend. He stated that the task force is conducting a study on moving to five divisions of the PS exam where each division will be scored separately. He stated the idea was well received and had positive feedback. If this moves forward, Virginia may eventually consider deleting the State Specific Exam, and look at potentially a home exam or online exam.

NCEES funded delegates will be Ms. Nosbisch, Mr. Zmuda, and Ms. Anglin. Mr. Nair, Ms. Alexandria, and Ms. Reynes will advise Ms. Nosbisch whether they are able to attend as a First Time Attendees. Mr. Stone will be self-funded; Mr. Allen will be funded by Colonial States Boards of Surveyor Registration.

Ms. Anglin reviewed the licensee counts as of April 1, 2019: Engineers 29,185; Land Surveyors 1279; Land Surveyors B 70; Land Surveyor Photogrammetrists 120.

License Counts

The Section noted that the University of Maryland course requirements for a BS degree in Public Safety Administration would not satisfy Virginia's requirements for an individual to sit for the PE exam to become licensed as a Fire Protection Engineer. The Section also noted that the University of Maryland course requirements for a BS degree in Environmental Management would not satisfy Virginia's requirements for an individual to sit for the PE exam to become licensed as a Professional Engineer.

Other Business

The Section reviewed the use of Now or Formerly (N/F) on boundary plats. It was noted that N/F is not used with current owner of subject property, but it is

commonly used with adjoining property because the adjoining properties can change owners between the surveyor's research and the recordation. It was also noted that localities' requirements may be above and beyond the regulations.

Ms. Nosbisch reported that in the National Society of Professional Engineers magazine there was an article about the Massachusetts pipeline fire. She stated Governor Baker signed emergency legislation requiring licensed Professional Engineers sign and seal plans for utility work before it's done, rather than leaving the review to people with engineering backgrounds who are uncertified.

Conflict of Interest forms and travel vouchers were completed by all Section members present.

**Conflict of
Interest / Travel
Vouchers**

There being no further business, the meeting was adjourned at 12:42 p.m.

Adjourn

Vickie Anglin, Chair

Mary Broz-Vaughan, Secretary

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion and are not to be construed as regulation or official Board position.
DRAFT AGENDA

Public Comment

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

Review of Files

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

SIGMA Presentation

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

LS Apprenticeship Program

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

Land Surveyor Apprenticeship Program Timeline

As of June 3, 2019

6/13/2016 Board meeting

Board approved the course outline

7/24/2016 email from Ms Donati/DOLI

Bev Donati (DOLI) emailed her feedback on the document; stated from reading the notes, there are registered sponsors in addition to Fairfax County in N Va; there are no registered sponsors outside of the region; if she remembered correctly in the past those outside of NOVA were VDOT apprentices retired 8/1/16

7/27/2016 email from Ms Donati/DOLI

Bev emailed 18VAC10-20-300 #6 still has 480 hrs of ARE (apprenticeship related

LS Stds Approved September 14, 2016 Board meeting

new curriculum

9/14/2016

Board approved Apprenticeship Program document

1/8/2018 email from Mr Cecere/DOLI

Mr Cecere/DOLI states there is an issue with required versus recommended
He stated Fairfax doesn't meet DOLI's stds of 144 hrs

1/16/2018 LS Apprenticeship Program Review meeting

Kathleen/DOLI stated DOLI curriculum recommends 720 classroom hours; to be a our regs 1/1/16 state minimum of 480 hrs of survey related classroom...

our Apprentice Stds 9/14/16 state 144 hrs of ea of 5 yrs for total of 720 hrs

our Apprentice Stds = 600 contact hrs S1=96 S2=96+30 S3=96+30 S4=96+30

S5=96+30; 480+120=600

Fairfax County Public Schools is only approved LS Apprenticeship program

2/9/2018 LS Apprenticeship meeting

our regs stated apprenticeship program shall include min of 480 hrs of classroom

DOLI requested board increase to 720 to match industry

February 18, 2018 letter from DOLI

US DOL & DOLI min stds recommend RTI be min of 144 hr per yr for each yr of OJT.

During the LS mtg on 9/15/15 Ms Donati stated that fed & state regs require min of 144

RTI hrs; this is consistent with 286 occupations currently registered in Va Reg

Apprenticeship program. According to Va Surveyor Apprenticeship Stds dated 9/14/16

work process outline has 500 hrs of OJT in health & safety procedures. We offer the

changed to "a minimum of 144 hrs for ea of 5 yrs of apprenticeship is recommended.

This instruction in technical subjects may be accomplished thru media..."

2/21/18 letter to DOLI requesting waiver

our regs require a min of 480 hrs and Bev Donati/DOLI approved/signed off on 120 hrs to 600 hrs in our 2016 program which meets our current regs of a min of 480 hrs

US DOL Title 49 states in part a min of 144 hrs for ea yr of apprenticeship is

we requested waiver for LS Apprenticeship program

3/20/18 letter from DOLI

DOLI's Min Stds recommend RTI be a min of 144 hrs/yr for ea yr of OJT

LS Apprenticeship program dated 9/14/16 work processes outline 500 hr of OJT in

health & safety procedures - DOLI suggested to increase RTI in this area to meet min

Land Surveyor Apprenticeship Program Timeline As of June 3, 2019

attend OSHA 10 or OSHA 30 courses

attending health & safety webinars

add additional RTI in math courses or additional time in lab projects

DPOR can contact ETSU or the Surveying Engineer Technology dept at Univ of Maine for an online program

Univ of Main has approved an online surveyors program beginning Sept 2018.

Waiver was denied

3/20/2018 Revised LS Apprenticeship program - Board meeting

Changes included: Classroom Apprenticeship Related Instruction

~~A registered Apprentice is required by the Voluntary Apprenticeship Act (Code 40.1-117—40.1-126) to attend 144 hours for each of the 5 years for a total of 720 contact hours apprenticeship related instruction classes during the course of their~~

A minimum of 144 hours for each of the five years of apprenticeship is recommended.

This instruction in technical subjects may be accomplished through media such as classroom, occupation or industrial courses, electronic media, or other instruction

Ms. Nosbisch stated Fairfax County has only LS apprenticeship program at this time, but DOLI states there are non b/c program must have 700+ hours

6/8/2018 email from Ms Eddington/DOLI

revised Min Stds; RTI was changed from 144 hrs recommended to required

7/31/2018 LS Apprenticeship meeting

Mr Cecere/DOLI stated DOLI reps communicate to public that TCC LS Career Cert Program is only online DOLI approved statewide program as a survey tech/survey Fairfax County Public Schools revised their 2018/19 Apprenticeship catalog DOLI now recognizes FCPS LS Apprenticeship program for party chief (8000hrs); APELSCIDLA does not recognize this category

Mr Cecere stated LS Apprenticeship Program does not have 720 contact hrs; he suggested requiring sponsor to document hrs in health & safety procedures (and other work processes) as required in the regulations

Committee agreed to require employers to document 150 RTI experience hrs over 5 yrs on the job training/learning & work courses outside the classroom to obtain 720 hrs

8/9/2018 PE-LS Section meeting

LS Apprenticeship program has 600 RTI; need 720 RTI hrs

DOLI agreed that 150 hrs of sponsor documented OJT regarding specific topics could be used to meet the 720 RTI hours.

Ms Eddington/DOLI noted Univ of Maine is approved 100% online program

Ms Morrison/DOLI stated Richmond Public Library offers free course work

9/13/18 Board meeting

RTI log reviewed

LS Apprenticeship Stds added:

SCHEDULE OF RELATED TECHNICAL INSTRUCTION (RTI) PROCESSES

Separate from work processes, 150 hours to be documented on a separate form in identified categories as adopted by the APELSCIDLA Board.

Land Surveyor Apprenticeship Program Timeline As of June 3, 2019

Approved September 13, 2018

added: Schedule of RTI Processes: Separate from work processes, 150 hrs to be documented on a separate form in identified categories as adopted by APELSCIDLA. Removed 30 hr project in Survey 5; added RTI log

9/21/2018 Board meeting

DOLI & LS Apprenticeship Committee compromised on using 150 hrs of RTI removed 30 hr project from Surveying 2 and added 30 hr project back in to Surveying 5 multiple changes to RTI log

11/6/2018 LS Section meeting

Section provided RTI language

12/5/2018 Board meeting approved LS Apprenticeship Stds with these changes

Work Processes (OJT) changed to OJL (learning)

The Apprenticeship Program is comprised of the work of the apprentice, the leadership of the sponsor, the supervising land surveyor, classroom education, verified RTI, and on the job learning components all under the auspices of Department of Occupational and Labor Industry (DOLI). Any apprenticeship candidate seeking sponsorship should approach a licensed land surveyor regarding an apprenticeship agreement with DOLI.

WHO IS THE SPONSOR?

The sponsor can be an employer that has an approved apprenticeship program registered with the DOLI, operated by the sponsor, and registered in the sponsor's

WHO IS A SUPERVISOR?

A supervisor shall be a Virginia licensed land surveyor, and shall have responsible charge for the apprentice's work. The supervisor is responsible for verification of on the job learning and related technical instruction (RTI). The supervisor may also be the

RELATED TECHNICAL INSTRUCTION (RTI) FOR LAND SURVEYORS

A minimum of 150 hours of RTI is required and allows for in-depth instruction in specified categories to be verified by supervising land surveyor, and in the case of drainage, hydrology, and hydraulics topics a Virginia licensed professional engineer.

APPRENTICESHIP RELATED INSTRUCTION:

A minimum of 144 hours for each of the five years of apprenticeship is recommended. This instruction in technical subjects may be accomplished through media such as classroom, occupation or industrial courses, electronic media, or other instruction approved by the DOLI and accepted by the APELSCIDLA Board.

For a current listing of approved educational program providers, see the APELSCIDLA

The minimum term of the Land Surveyor registered apprenticeship shall be 10,000 hours (five years) of work experience, which may include the 150 required RTI hours, as stipulated in the Work Processes Outline and shall consist of reasonably continuous employment, supplemented by required approved related instruction. When the apprentice is required to work overtime, these hours will not be credited to the term of

Survey 2 - 30 hr project removed

Board approved the draft Apprenticeship Stds

Land Surveyor Apprenticeship Program Timeline As of June 3, 2019

Approved December 5, 2018

Removed project from Surveying 2; added project back for Surveying 5 added RTI log; added RTI for LS: a minimum of 150 hrs of RTI is required..." TERM OF REG Emailed March 11, 2019 from DOLI: Fairfax Cty ACE is approved to provide 600 of 720 hrs req'd for RTI; sponsor will need to source the addl 120 hr of RTI; this may be done by adding safety training, technical writing, etc.

Emailed dated April 25, 2019 from DOLI: states, "for your 10,000 hr surveying apprenticeship to be complete, we will need to see the additional 90 hrs covered over the term of the apprenticeship, perhaps safety. That will bring this to 10000 hrs OJT & 720 RTI, once that is added, & you get Final Stds, we can get signatures

2/5/2019 PE-LS Section meeting

changes to RTI form

reviewed DOLI apprenticeship website; only 2 sponsors listed; Fairfax is not one of

3/11/19 Email response from Ms Eddington/DOLI

Fairfax County ACE program is approved to provide 600 of the 720 hrs required for Sponsor will need to source the addl 120 hrs of RTI by adding safety training, technical writing, etc.; DOLI consultant can assist in the process

Only 2 sponsors listed on apprenticeship website; not all sponsors are listed; when sponsor registers with DOLI they have the option to opt out of the website, which many The list of approved providers only shows full programs that support Registered Apprenticeship; partial offerings are not listed.

3/12/2019 Board meeting

changes to RTI; approved with changes

it was noted that a local DOLI rep stated there is not a viable program in Fairfax DOLI emailed stating Fairfax is approved to provide 600 of the 720 required RTI hrs and not all sponsors are listed, so opt out

4/25/19 email from Ms Morrison/DOLI clarifying Ms Eddington's email

As a voluntary program, being listed on the website is also voluntary. For security reasons, a sponsor may opt out of being published. To know if they are registered, please direct that inquiry to Kathleen or myself. Registration in DOLI database means Also, for your 10,000 hour Surveying apprenticeship to be complete, we will need to see the additional 90 hours covered over the term of the apprenticeship, perhaps in safety. That will bring this to 10000 hours OJT and 720 RTI. Once that is added in,

5/9/2019 PE-LS Section meeting

discussed why sponsors opt out of being listed on DOLI website

DOLI sponsorship listing is voluntary

non-listed sponsors in N Va are unsure why they are not listed

DOLI states we need additional 90 hours

local DOLI rep declined to sign up N Va staff to the apprenticeship program

Land Surveyor Apprenticeship Program Timeline As of June 3, 2019

5/16/2019 email from Ms Eddington/DOLI

I wanted to follow up on the email from Trish. We have received information from our Northern Virginia Consultants regarding employers that are interested in registering Surveyors. We want our consultants to work with employers on the related technical requirements. If Fairfax offers a 600-hour partial program, we will focus on the additional 120 RTI hour requirement with the employer. Perhaps this could be viable.

5/28/19 email from Ms Morrison/DOLI

When there is a Board or licensing or Collective Bargaining (union program) set of standards that speak to the administration of a Registration Program, we mesh with that entity. The RA Standards and the Board/industry standards are meshed so that We have done this with the Board of Cosmetology, Barbers, Nail Technicians, Estheticians and the Board for Opticians. Those Boards insert any language that was above and beyond RA language and both DPOR and DOLI sign off.

More requirements can be put in, but we cannot lessen RA Requirements. It appears that your employer/members are happy with the 10,000 OJT model. At 600 hours RTI, the employers are just 120 contact hours (or equivalent if a project is required) short of the 5-year outline for Registered Apprenticeship. Each employer can choose anything relevant for those 120 RTI hours. Your program standards can generically refer to the RTI requirement for the core curriculum and then employer choice for the balance.

Hopefully, more Surveyor RTI will become available all over the state so that other regions can have apprentices. Any type of technical or safety training or anything It appears that perhaps on page 7, those two paragraphs could be blended. I am not sure what the Board is referring to as the 150 hours of Related Technical Instruction and then the following paragraph referring to the 5 years @ 144 as Apprenticeship Related Instruction. We use the term Related Technical Instruction for all applications and occupations for our program. Perhaps combine the language to mirror what is being taught at Woodson High School, (I have been told that they have 600 hours of core curriculum for Land Surveying) and insert that 120 additional hours will be added by each individual employer as pertains to their business need. Also, all relevant Then, your Chair and Commissioner Davenport both sign. We are getting numerous requests from employers and potential apprentices, so it appears enthusiasm is

Materials contained herein are for discussion purposes only and are not to be construed as an official Board position.

Fwd: Surveyors

1 message

Nosbisch, Kathleen <kate.nosbisch@dpor.virginia.gov>
To: Bonnie Davis <bonnie.davis@dpor.virginia.gov>

Tue, May 28, 2019 at 12:32 PM

For the full board meeting 6/11.

Thanks,
Kate

----- Forwarded message -----

From: **Morrison, Patricia** <patricia.morrison@doli.virginia.gov>
Date: Tue, May 28, 2019 at 10:56 AM
Subject: Re: Surveyors
To: Nosbisch, Kathleen <kate.nosbisch@dpor.virginia.gov>
Cc: Kathleen Eddington <kathleen.eddington@doli.virginia.gov>

Kate, we are just a few details away from having this finalized. I don't think our attendance is necessary at this point. However, to simplify, I'll offer the following information:

When there is a Board or licensing or Collective Bargaining (union program) set of standards that speak to the administration of a Registration Program, we mesh with that entity. The RA Standards and the Board/industry standards are meshed so that all details are in concert.

We have done this with the Board of Cosmetology, Barbers, Nail Technicians, Estheticians and the the Board for Opticians. Those Boards insert any language that was above and beyond RA language and both DPOR and DOLI sign off.

More requirements can be put in, but we cannot lessen RA Requirements. It appears that your employer/members are happy with the 10,000 OJT model. At 600 hours RTI, the employers are just 120 contact hours (or equivalent if a project is required) short of the 5-year outline for Registered Apprenticeship. Each employer can choose anything relevant for those 120 RTI hours. Your program standards can generically refer to the RTI requirement for the core curriculum and then employer choice for the balance. Hopefully, more Surveyor RTI will become available all over the state so that other regions can have apprentices. Any type of technical or safety training or anything specific to each employer may be used. Consultants and our Education Specialists can help facilitate.

It appears that perhaps on page 7, those two paragraphs could be blended. I am not sure what the Board is referring to as the 150 hours of Related Technical Instruction and then the following paragraph referring to the 5 years @ 144 as Apprenticeship Related Instruction. We use the term Related Technical Instruction for all applications and occupations for our program. Perhaps combine the language to mirror what is being taught at Woodson High School, (I have been told that they have 600 hours of core curriculum for Land Surveying) and insert that 120 additional hours will be added by each individual employer as pertains to their business need. Also, all relevant college coursework, or other occupation specific training can be awarded prior credit so this will probably be far easier than it appears.

Then, your Chair and Commissioner Davenport both sign. We are getting numerous requests from employers and potential apprentices, so it appears enthusiasm is building.

Hope this guidance suffices. Have a great meeting!

On Fri, May 24, 2019 at 12:36 AM Nosbisch, Kathleen <kate.nosbisch@dpor.virginia.gov> wrote:

Hi Kathleen,

We are going to discuss this at our next board meeting on June 11th and would like to invite you and Patricia to attend. We thought we had the apprenticeship program finalized multiple times over the past few years and it seems to be a moving target and there seems to be further confusion about the sponsors and why they wouldn't want to be listed on DOLI's website.

Thanks and have a great holiday weekend,

Kate

On Thu, May 16, 2019 at 5:02 PM Kathleen Eddington <kathleen.eddington@doli.virginia.gov> wrote:

Good afternoon Kate,

I wanted to follow up on the email from Trish. We have received information from our Northern Virginia Consultants regarding employers that are interested in registering Surveyors. We want our consultants to work with employers on the related technical requirements. If Fairfax offers a 600-hour partial program, we will focus on the additional 120 RTI hour requirement with the employer. Perhaps this could be viable statewide in the future.

Please let me know your thoughts.

Regards,

Kathleen

Kathleen E. Eddington

Assistant Director, Division of Registered Apprenticeship

Virginia Department of Labor and Industry

600 East Main Street, Suite 207

Richmond, VA 23219

Phone: (804) 786-2382

Email: kathleen.eddington@doli.virginia.gov

Website: <http://www.doli.virginia.gov>



Greetings! I have been contacted by several students from Woodson High in Fairfax who are seeking registration in the Department of Labor and Industry Registered Apprenticeship program. I thought I would provide guidance here as it looks like there will be some new sponsors.

Mr. Venetsanos, if you could advise your students that the first step is to have their employers register with DOLI through their local Consultant, that would be essential to having them become apprentices. As I understand it, the Board at DPOR wishes to have this as a 5-year, 10,000 on the job training hours program. Please have the companies call either of the following consultants for assistance:

Crystal Thrower - 703-392-0900 ext. 102

Cetrel Coleman - 703-392-0900 ext. 131

I would be happy to speak with you more on the RA program. Please feel free to call. Thank you for supporting Registered Apprenticeship.

--

May is Business Appreciation Month in Virginia. Celebrate small business this month by attending a networking event, awards dinner, or training workshop. Listed below are events happening in Virginia.

[Click here to view a list of events by date.](#)

Patricia (Trish) Morrison, Director

Division of Registered Apprenticeship

Department of Labor and Industry

[600 E. Main St., Suite 207](#)

[Richmond, VA 23219](#)

804-786-1035

patricia.morrison@doli.virginia.gov

www.doli.virginia.gov

--

Kate Nobsch, Hon. AIA Virginia

Kathleen R. Nobsch

Executive Director

Morrison, Patricia

to Kathleen, me, Kathleen ▾

Wed, Jun 5, 1:06 PM (2 days ago)



The RTI approval happens on our end. I would not state specific RTI providers in your standards because as they change, quit, augment, you have inaccurate info. We update our website annually upon the review of the RTI providers.

The language about the 600 hours is to help clear up and steer employers as we are limited in those who offer your core curriculum.

Because I am in a database conversion, none of our new programs are showing up on the website as of yet. We have to do a huge conversion of our existing data, into the new database (which is in process) and then we can work on the algorithm that will allow us to post these new sponsors. Our old database had an automated feature, but we are losing that.

We do have the job postings site which is free to all registered sponsors. If they wish to advertise an apprenticeship vacancy for free, they just need to email me and I'll supply them with the template.

Nosbisch, Kathleen

to Patricia, me, Kathleen ▾

Wed, Jun 5, 12:22 PM (2 days ago)



Hello Ladies,

Trish,

Thank you for your input. We will add this language to the opening paragraph of the Apprenticeship Standards for the Board's approval on 6/11. We are also going to add a sentence about the RTI form and have a copy of the form at the back of the standards.

Two points of clarification as we are striving to put this baby to bed. Do the hybrid sponsors show up on the DOLI website and if not, wouldn't it be helpful to individuals seeking an apprenticeship if they did?

Also, the language for the FCPS that you proposed you and Kathleen work on - where will this language be displayed? On DOLI's website? Is this something we would need to add to the standards which then also requires board approval? Does it need approved by FCPS?

Morrison, Patricia

to me, Kathleen, Kathleen ▾

Wed, Jun 5, 10:31 AM (2 days ago)



Great Bonnie, we are very close!

We do state on our website that the programs listed are complete programs, HOWEVER there is also the urging to go to each provider's site to research any partial offerings. Most of our sponsors use a hybrid approach with core curriculum coming from known sources and the supplemental RTI is added as appropriate.

Currently, with only FCPS as the main RTI provider, it will be a challenge to meet the needs of employers in areas other than NOVA. But we are hoping that this reactivation of the RA program will drive new providers and offerings. Kathleen and I will try to work out language on the FCPS that spells this out. We will share that with you soon.

My only other suggestion would be to use these two sentences for opening your paragraph after your heading:

A minimum of 120 hours of RTI is required to be included by each employer (in addition to the 600 core curriculum hours) for a total of 720 hours. Employers may seek RTI that meets their industry needs.

Will this work for the Board?

Outline of How to become a Land Surveyor through the Virginia Surveyor Apprenticeship Standards

June 11, 2019

Registered Apprenticeship combines carefully defined and employer-specific training under the guidance of a highly skilled mentor at the worksite. On-the-job training is supplemented with related classroom instruction. Upon successful completion, apprentices are awarded a Certificate of Completion.

Find A Sponsor Near You

Please select ANY OCCUPATION (or specific occupation). Then select City/County OR Zip Code or ANY LOCALITY to search for a list of sponsors in your area. You may also press the down arrow to expand the travel range for sponsors if desired.

PLEASE NOTE: Search results will display those Registered Apprenticeship Sponsors who authorized sharing their company information. **Job seekers should not limit their search to these participants.** Any employer can sign up today to become a Registered Apprenticeship Sponsor. Thank you for your interest in Registered Apprenticeship.

LAND SURVEYOR 23233 within 150 Miles

2 Record(s) found for LAND SURVEYOR within 150 mile(s) of 23233:

Occupation	Sponsor	Address	City	State	Zipcode
LAND SURVEYOR	BOHLER ENGINEERING	22636 DAVIS DRIVE SUITE#250	STERLING	VA	20164
LAND SURVEYOR	WALTER L. PHILLIPS	207 PARK AVENUE	FALLS CHURCH	VA	22046

- Speak with your employer to see if your place of employment is a registered apprenticeship sponsor or if there is interest in becoming a sponsor.
- If you work for a Registered Apprenticeship sponsor, have your employer contact a local Virginia Department of Labor and Industry apprenticeship consultant to register you as an apprentice.
- All apprentices are registered through a Department of Labor and Industry apprenticeship consultant.
- Written agreement with Sponsor for employment who is registered with DOLI
- "Apprentice" means a person at least 16 years of age who is covered by a written agreement with an employer and approved by the Commissioner. The agreement shall provide for not less than 2,000 hours of reasonably continuous employment for such person, for his participation in an approved schedule of work experience through employment, and for the amount of related instruction required in the occupation.

- apprentice obtains practical supervised experience;
- Supervisor shall be a Virginia licensed land surveyor, have responsible charge for the apprentice's work; will be responsible for verification of on the job learning and related technical instruction (RTI). The supervisor may also be the sponsor.
- apprentice should progress through different levels of responsibility and experience related to the procedures in both the field and office environments until a thorough knowledge of the procedures is attained
- minimum hours required for advanced operations of the listed procedures
- apprentice will have additional hours achieving competency in the advanced operations and procedures
- Credit for previous experience towards these years must be given based on the procedures as set forth in the Standards.
- A condensed schedule of the major divisions of the profession based on approximate hours is recorded in the Work Processes Outline as adopted by the APELSCIDLA Board.
- apprentice's sponsor provides on-the-job training through qualified journeypersons.

1.	Application, care and practices of proper steel and cloth tape measurement procedures with the understanding of obtainable precision and accuracy in determining horizontal distances.	200 Hours
2.	Application, care, and adjustment of surveying equipment.	200 Hours
3.	Recording of hand and electronic field notes, including the use of reference sketches, describing control points and other pertinent field data.	800 Hours
4.	Application, care, use, operation, and adjustment procedures for vertical and horizontal angles when performing topographic contouring and open or closed traversing.	700 Hours
5.	Application, care, and use of equipment for selecting turning points, identifying topographical features on site surveys.	800 Hours
6.	Establishing observation points, performing interior angle and deflection angles, controls for R/W and boundary identification, determine error of closure and accuracy.	1,000 Hours
7.	Observation for azimuth determination, establishing GPS control sites, HARN stations, identifying picture points of aerial photography.	500 Hours
8.	Application and use of field and office equipment including software programming for the development of plans or plats from field surveys.	1,000 Hours
9.	Interpret plans for establishment of: boundaries and R/W, drainage and utility layout, horizontal and vertical curves, slope and grade stakes.	1,000 Hours
10.	Field and office procedures for area and volume determinations.	500 Hours
11.	Application, care, and adjustment procedures for establishing elevation profiles and cross sections using differential, trigonometric, and GPS leveling procedures.	800 Hours
12.	Application, care, and procedures for conducting research of land records, deeds, wills, and plats. Understanding, applying, and relating local or states codes, statutes, and regulations that influence or control surveying procedures.	400 Hours
13.	Application, computation, and field procedures for establishing state plane coordinates.	400 Hours
14.	Other general or advanced surveying operations that lead to the complete development of the surveying apprentice but does not clearly fit into the previous thirteen items.	1,200 Hours
15.	Health and Safety Procedures.	500 Hours
TOTAL =		10,000 Hours

In order to receive credit for completing the surveyor apprenticeship program, all applicants must provide the APELSCIDLA Board with proper documentation indicating that the program (including classroom instruction and on the job learning), has been successfully completed.

Successful completion of the Registered Apprenticeship Program earns the apprentice nationally recognized state certification as a journey person.

Surveyor in Training (SIT)

To sit for the FLS exam, apprentice must have successfully completed Board approved survey apprenticeship program, with a minimum of 480 hours and minimum of 6 years approved LS experience

After passing FLS exam, receive SIT designation

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion and are not to be construed as regulation or official Board position.
DRAFT AGENDA

Board for Architects, Professional Engineers, Land
Surveyors, Certified Interior Designers and Landscape
Architects



Virginia Surveyor

Registered Apprenticeship Standards

Revised: ~~December 5, 2018~~ June 11, 2019



Department of Professional and Occupational Regulation

9960 Mayland Drive, Suite 400
Richmond, Virginia 23233
(804) 367-8506
www.dpor.virginia.gov

Originally approved by the APELSLA (now APELSCIDLA) Board on September 19, 1996;
revised January 3, 2003, revised September 14, 2016, revised March 20, 2018, revised
September 13, 2018, December 5, 2018

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

Table of Contents

- I. Purpose and Forward
- II. Overview / Definitions
- III. Special Inclusions Specific to the Virginia Surveyor Registered Apprenticeship **Program Standards**
- IV. Apprenticeship Related **Technical** Instruction (Course Outline)
- V. Work Processes (On-the-Job **Learning Training**)
- VI. Apprentice Textbooks Relative to Related **Technical** Instruction
- VII. Reference Materials List
- VIII. Signature Page
- IX.** Minimum Standards for Apprenticeship
- IX.X. Related Technical Instruction form**

PURPOSE

The purpose of these Standards is to establish minimum requirements for the training of the Land Surveyor Apprentice in accordance with the regulations of the Architects, Professional Engineers, Land Surveyors, Certified Interior Designers and Landscape Architects (APELSCIDLA Board).

FORWARD

To insure the development of highly skilled Land Surveyors throughout the Commonwealth, these Standards were developed in conjunction with the APELSCIDLA Board, the Virginia Apprenticeship Council, and the Virginia Department of Labor and Industry (DOLI).

To assure that the intent of these Standards is implemented, each Apprentice should be encouraged to develop his skills to the highest level of his ability. The training should be thorough, well planned and designed to enhance the profession.

II. OVERVIEW / DEFINITIONS

ABOUT THE VIRGINIA SURVEYOR REGISTERED APPRENTICESHIP PROGRAM STANDARDS –

This program was initially developed in conjunction with the Board for Architects, Professional Engineers, Land Surveyors & Landscape Architects-APELSLA (*now APELSCIDLA*), the Virginia Department of Transportation (VDOT), the Woodson Related Instruction Team, and the Apprenticeship Training Division, as approved July 25, 1996.

The Apprenticeship Program Standards is are comprised of the work of the apprentice, the leadership of the sponsor, the supervising land surveyor, classroom education, verified RTI, and on the job learning-training components all under the auspices of Department of Occupational and Labor Industry (DOLI). Any apprenticeship candidate seeking sponsorship should approach a licensed land surveyor regarding an apprenticeship agreement with DOLI.

THE LAND SURVEYOR (PROFESSIONAL) –

"Land surveyor" means a person who, by reason of his knowledge of the several sciences and of the principles of land surveying, and of the planning and design of land developments acquired by practical experience and formal education, is qualified to engage in the practice of land surveying, and whose competence has been attested by the Board through licensure as a land surveyor. §54.1-400 of the Code of Virginia

The "practice of land surveying" includes surveying of areas for a determination or correction, a description, the establishment or reestablishment of internal and external land boundaries, or the determination of topography, contours or location of physical improvements, and also includes the planning of land and subdivisions thereof. The term "planning of land and subdivisions thereof" shall include, but not be limited to, the preparation of incidental plans and profiles for roads, streets and sidewalks, grading, drainage on the surface, culverts and erosion control measures, with reference to existing state or local standards.

§54.1-400 of the Code of Virginia

WHAT IS REGISTERED APPRENTICESHIP?

Registered Apprenticeship is a learning program in those industrial and craft occupations that require a wide and diverse range of skills and knowledge. As practiced by modern industry, apprenticeship is a business oriented system in which the employee entering a certain industry is given intensive instruction and applied work experience in all of the theoretical and practical aspects of the given skilled occupation, craft or trade.

WHO IS THE SPONSOR?

The sponsor can be an employer that has an approved apprenticeship program registered with the DOLI, operated by the sponsor, and registered in the sponsor's name.

WHO IS A SUPERVISOR?

A supervisor shall be a Virginia licensed land surveyor, and shall have responsible charge for the apprentice's work. The supervisor is responsible for verification of on the job learning training and related technical instruction (RTI). The supervisor may also be the sponsor.

WHO IS A REGISTERED APPRENTICE?

An apprentice is a person at least 16 years of age who, as a principal occupation, is engaged in learning and working in an occupation as stated in the Standards, and who is covered by a written agreement with a Sponsor providing for the employment in accordance with the rules and regulations governing Apprenticeship in Virginia and who is registered with the Virginia Department of Labor and Industry.

§ 40.1-120. Definitions.

As used in this chapter, the following terms shall have the following meanings unless the context indicates otherwise:

"Apprenticeable occupation" means a skilled occupation having the following characteristics:

- 1. It is customarily learned in a practical way through a structured systematic program of on-the-job supervised work experience;*
- 2. It is clearly identifiable and recognized throughout an industry;*
- 3. It involves manual, mechanical or technical skills which require a minimum of 2,000 hours of on-the-job work experience of new apprenticeable trades not otherwise established; and*
- 4. It requires related instruction to supplement the on-the-job work experience.*

"Apprentice" means a person at least 16 years of age who is covered by a written agreement with an employer and approved by the Commissioner. The agreement shall provide for not less than 2,000-hours of reasonably continuous employment for such person, for his participation in an approved schedule of work experience through employment, and for the amount of related instruction required in the occupation.

ON-THE-JOB LEARNING-TRAINING FOR LAND SURVEYORS

Registered Apprenticeship is on the job learning training that allows individuals to prepare for a skilled profession through supervised on the job learning training combined with Land Surveyor related classroom technical instruction.

RELATED TECHNICAL INSTRUCTION (RTI) FOR LAND SURVEYORS

A minimum of ~~150-120~~ hours of RTI is required and ~~allows for in-depth instruction in specified categories to be verified by supervising land surveyor, and in the case of drainage, hydrology, and hydraulics topics a Virginia licensed professional engineer to be included by each employer (in addition to the 600 core curriculum hours) for a total of 720 hours. Employers may seek RTI that meets their industry needs. This information should be recorded on the RTI form which can be found at the end of this document.~~

~~APPRENTICESHIP RELATED INSTRUCTION:~~

~~A minimum of 144 hours for each of the five years of apprenticeship is recommended. This instruction in technical subjects may be accomplished through media such as classroom, occupation or industrial courses, electronic media, or other instruction approved by the DOLI and accepted by the APELSCIDLA Board. For a current listing of approved educational program providers, see the APELSCIDLA website.~~

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

APELSCIDLA BOARD

Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers and Landscape Architects (APELSCIDLA). Formerly referred to as “APELSLA” in the original document.

The 15-member Board which examines, licenses and regulates the approximately 26,000 Architects, Professional Engineers, Land Surveyors, Certified Interior Designers, and related business entities in Virginia. The Board was established in 1920 for Architects, Engineers and Surveyors. Landscape Architects were added in 1980 Interior Designers joined in 1990, and Citizen members were added in 2018.

FROM THE APELSCIDLA REGULATIONS (JANUARY 1, 2016) –

The education and/or experience, and examination requirements for the designation are as follows:

18VAC10-20-300. Requirements for Surveyor-In-Training (Sit) Designation.

A. In order to be approved to sit for the Fundamentals of Land Surveying (FLS) exam, applicants must satisfy one of the following:

- 1. Be enrolled in a board-approved or ABET-accredited surveying or surveying technology curriculum, have 12 months or less remaining before completion of degree requirements, and provide a certificate of good standing from the dean of the school or his designee;*
- 2. Have earned an undergraduate degree from a board-approved or ABET-accredited surveying or surveying technology curriculum;*
- 3. Have earned a board-approved undergraduate degree related to surveying and possess a minimum of one year of approved land surveying experience;*
- 4. Have earned a board-approved undergraduate degree in a field unrelated to surveying and possess a minimum of two years of approved land surveying experience;*
- 5. Have earned a board-approved associate's degree related to surveying and possess a minimum of four years of approved land surveying experience;*
- 6. Have successfully completed a board-approved survey apprenticeship program. The apprenticeship program shall include a minimum of 480 hours of surveying-related classroom instruction with a minimum of six years of approved land surveying experience; or*
- 7. Have graduated from high school with evidence of successful completion of courses in algebra, geometry and trigonometry, and possess a minimum of eight years of approved land surveying experience.*

B. Applicants seeking approval to sit for the FLS exam pursuant to subdivisions A 3 through 7 of this section may apply board-approved college credits to help meet the experience requirement. The maximum rate of college credit substitution for experience shall be one year of experience credit for each 40 hours of board-approved college credits completed. College credits applicable toward the completion of any degree used

to satisfy a requirement of subsection A of this section shall not be eligible for experience substitution.

C. An applicant who qualified for the FLS exam under subdivision A 1 of this section will be issued the SIT designation upon the board's receipt of the applicant's degree verification. All other applicants shall receive the SIT designation upon passing the FLS exam.

Important Note: The Registered Surveyor Apprenticeship ~~Program~~ Standards ~~was~~ were developed to assist those applicants performing surveying or services to acquire the education and experience necessary to improve their eligibility for the Fundamentals of Surveying Examination. Completion of this program intends, but does not guarantee that the applicant will be approved by the APELSCIDLA Board to sit for the examination. The APELSCIDLA Board also evaluates each applicant's work experience to make the determination to allow individuals to sit for the examination. In order to receive credit for completing the surveyor apprenticeship program, all applicants must provide the APELSCIDLA Board with proper documentation indicating that the program (including classroom-related technical instruction and on the job-learning job training), has been successfully completed.

Everyone submitting an application to the APELSCIDLA Board is strongly encouraged to be thorough, complete, and accurate when filling out the education and experience sections of the application.

III. Special Inclusions to the “Minimum Standards for Registered Apprenticeship” as specifically related to the Virginia Surveyor Registered Apprenticeship **Program Standards:**

TERM OF REGISTERED APPRENTICESHIP

The minimum term of the Land Surveyor registered apprenticeship shall be 10,000 hours (five years) of work experience, which may include the ~~150-120~~ required RTI hours, as stipulated in the Work Processes Outline and shall consist of reasonably continuous employment, supplemented by required approved related **technical** instruction. When the apprentice is required to work overtime, these hours will not be credited to the term of apprenticeship.

SCHEDULE OF WORK PROCESSES

A condensed schedule of the major divisions of the profession based on approximate hours is recorded in the Work Processes Outline as adopted by the APELSCIDLA Board.

SCHEDULE OF RELATED TECHNICAL INSTRUCTION (RTI) PROCESSES

Separate from work processes, ~~150-120~~ hours to be documented on a separate form in identified categories as adopted by the APELSCIDLA Board; this form can be found at the end of this document.

SAFETY AND HEALTH TRAINING

Before starting in the profession at any site or in any facility, the Sponsor shall instruct the Apprentice in safe and healthful work practices and shall insure that the registered apprentice is trained in facilities and other environments that meet the Virginia Occupational Safety and Health Standards for General Industry and the Construction Industry developed pursuant to the Federal Occupational Safety and Health Act.

IV.

APPRENTICESHIP RELATED TECHNICAL INSTRUCTION

Approved by the APELSLA (*now APELSCIDLA*) Board, July 25, 1996,
and revised December 19, 2002; June 13, 2016, September 21, 2018

Please Note:

All Math instruction as set forth by the APELSCIDLA Board,
must be provided by a secondary or college or above teacher.
All Surveying instruction as set forth by the APELSCIDLA Board,
must be provided by a licensed Land Surveyor, or other professional.

Survey 1 - 96 Hours	Survey 2 - 96 Hours
Weeks 1 - 8 Introduction to the Course APELSCIDLA Rules and Regulations Survey Mathematics Weeks 9 - 16 Errors in Measurement Distance Measurement includes Taping/Corrections Angular Measurement Differential Leveling Weeks 17 - 24 Traverse Computations Horizontal Curves Vertical Curves Weeks 25 - 32 Topographic / Photogrammetric Surveys Geodesy / GPS / GIS Emerging Surveying Technologies Fundamentals of Surveying Exam Review	Week 1 License and trade info Weeks 2-7 Introduction and study of Theory of Errors in Observations and Coordinate Geometry (COGO); analysis and adjustments of survey measurements; exam Weeks 8-12 Horizontal Curves; formula derivations; note keeping for layout; compound reverse curves; exam Weeks 13-17 Control Surveys and Geodetic Reductions; horizontal and vertical control networks; NGRS; exam Weeks 18-23 Map Projections and State Plane Coordinates; Lambert Conformal and Transverse Mercator; exam Weeks 24-28 Astronomic Azimuth Determination; applied astronomy and celestial coordinate systems; exam Weeks 29-32 Global Positioning System; field procedures; various observing methods and their achievable accuracies; exam

Survey 3 - 96 Hours + 30 hour Project	Survey 4 - 96 Hours + 30 hour Project
<p>1-Leveling and Profiles 2-Vertical Curves 3-Cross-Sections Leveling And Typical Sections 4-7 Earthwork Volumes Linear Projects Grading Plans Borrow Pit and Contour Method 8-Unit Exam/History of Surveying 9-10-Public Lands Survey System 11-12-Maps & Photographs 13- Subdivision Design 14-Research, Schemes, 15-Preliminary Layout 16-Street Design 17-Lot Computations, Curves 18-Plans and Profiles 19-Street Grading Plan 20- Introduction to Virginia Sediment and Erosion Control; Stormwater Best Management Practices 21-Lot Grading 22-Siting the Dwelling 23-Unit Exam. Sketching the Lot Grading Plan 24-Sketching the Lot Grading Plan (cont.) 25-Plotting Drainage Divides 26-S.U.E., Sub-Surface Utilities Engineering, Laws and the segment of Land Surveying related to SUE 27-Unit Exam. Ethics & Minimum Standards 28-Ethics & Minimum Standards (cont.) 29-Construction Layout 30-Construction Layout (cont.) 31-Business, Economics, Finance 32-Business, Economics, Finance, (cont.) 33-Unit Exam. Critique</p>	<p>Weeks 1-2 Introduction to Hydrology Stormwater Runoff Urban Water Cycle Soils/Land Cover & Topographical Changes Stream Impacts Water Quality Impacts Weeks 3-7 The Rational Formula The Anderson Formula NRCS(Natural Resources Conservation Service) Technical Release 55 (TR-55) Week 8 Review & Test: Weeks (1-7) Weeks 9-12 Introduction to Hydraulics Fluid Properties Fluid Statics/Dynamics Open Channel Flow Weeks 13-15 Manning's Equation Storm Sewer Hydraulics Sanitary Sewer Design Week 16 Review & Test: Weeks (9-15) Weeks 17-18 Inlet Design On Grade/Sump Conditions Weeks 19-21 Systems Head Losses VDOT Standard Step Culvert Hydraulics Inlet/Outlet "barrel" Control Week 22 Review & Test: Weeks (19-21) Weeks 23-26 Virginia Runoff Reduction Method Stormwater Management Water Quantity Requirements Water Quality Requirements Best Management Practices (BMP) Weeks 27-31 State (DEQ)/Regulations</p>

<p>Project: CADD based preparation of site and subdivision type docs, plats, plans, etc. Prerequisite CADD experience.</p>	<p>MS4/Virginia Stormwater Management Program (VSMP) VPDES General Permit Chesapeake Bay TMDL Sediment and Erosion Control Certifications Local Ordinances Fairfax County Stormwater Chesapeake Bay Week 32 Review & Test: Weeks (23-31) Project: Stormwater, BMP, water quality design – using structural and non-structural</p>
--	---

<p>Survey 5 - 96 Hours + 30 hour Project</p>	
<p>Weeks 1, 2, 3-Course Introduction/Syllabus/ Virginia Statutory Law related to the practice of Land Surveying, AP/PLS/CIDLA, Types of Surveys 4, 5-Dillon Rule in VA, Subdivision and Zoning Ordinances 6, 7-Byrd Act; Statute of Frauds, and Estoppel, Rights of Way, Discontinuance, Vacation, and Abandonment, Types of Deeds; Levels of Warranty; Quiet Title Action; Quitclaim Deeds 8-Quarter Exam 9, 10-Legal Descriptions 11, 12-Reconstruction of Intent, Order of Construction, Weight of Evidence 13-Conveyances; Sequential and Simultaneous 14-Reconstruction of Intent Applications in Boundary Solutions: Sequential/Simultaneous 15-Deed Research/CPAN and Project outline-kickoff 16-Quarter Exam/Intro to Case Law Research 17-Unwritten Rights: Boundary by Adverse Possession; Agreement; Acquiescence and Acceptance 18-Review Deed Research Project and Q&A on Research Process (30Hour Project)/Introduction of FINAL PAPER concept; requirements & topics 19, 20-Littoral/Riparian Boundary & Rights, Case Study 21, 22-Easements 23-ALTA/NSPS Land Title Survey 24-Quarter Exam 25-Railway and Utility Plans 26, 27-VDOT Plans and Alignments 28- Project Management 29-Virginia Condominium Act/Review of FLS and PLS Content areas 30, 31- Due Diligence/Records Management, The Weight of Tax Assessment Maps, Informal Consolidations-NOT, Use of GIS, Ethics for the Surveyor 32-Presentation of Legal Principle Research Papers and/or Final Examinations</p> <p>Project: Land Records Research</p>	

V.

Work Processes (On-The-Job Learning Job Training)

Surveyor (Land, Professional)

018.167-018

Approved by the APELSLA (now APELSCIDLA) Board, July 25, 1996, and revised
December 19, 2003

The apprentice shall obtain practical supervised experience in the following areas of surveying procedures. The apprentice should progress through the different levels of responsibility and experience related to the procedures in both the field and office environments until a thorough knowledge of the procedures is attained. The hours indicated shall be the minimum hours required for advanced operations of the listed procedures. It is expected that the apprentice will have additional hours achieving competency in the advanced operations and procedures.

Please Note:

This program is five years in duration. Credit for previous experience towards these years must be given based on the procedures as set forth in the Standards.

- | | |
|---|-------------|
| 1. Application, care and practices of proper steel and cloth tape measurement procedures with the understanding of obtainable precision and accuracy in determining horizontal distances. | 200 Hours |
| 2. Application, care, and adjustment of surveying equipment. | 200 Hours |
| 3. Recording of hand and electronic field notes, including the use of reference sketches, describing control points and other pertinent field data. | 800 Hours |
| 4. Application, care, use, operation, and adjustment procedures for vertical and horizontal angles when performing topographic contouring and open or closed traversing. | 700 Hours |
| 5. Application, care, and use of equipment for selecting turning points, identifying topographical features on site surveys. | 800 Hours |
| 6. Establishing observation points, performing interior angle and deflection angles, controls for R/W and boundary identification, determine error of closure and accuracy. | 1,000 Hours |
| 7. Observation for azimuth determination, establishing GPS control sites, HARN stations, identifying picture points of aerial photography. | 500 Hours |

8. Application and use of field and office equipment including software programming for the development of plans or plats from field surveys.	1,000 Hours
9. Interpret plans for establishment of: boundaries and R/W, drainage and utility layout, horizontal and vertical curves, slope and grade stakes.	1,000 Hours
10. Field and office procedures for area and volume determinations.	500 Hours
11. Application, care, and adjustment procedures for establishing elevation profiles and cross sections using differential, trigonometric, and GPS leveling procedures.	800 Hours
12. Application, care, and procedures for conducting research of land records, deeds, wills, and plats. Understanding, applying, and relating local or states codes, statutes, and regulations that influence or control surveying procedures.	400 Hours
13. Application, computation, and field procedures for establishing state plane coordinates.	400 Hours
14. Other general or advanced surveying operations that lead to the complete development of the surveying apprentice but does not clearly fit into the previous thirteen items.	1,200 Hours
15. Health and Safety Procedures	500 Hours
TOTAL =	10,000 Hours

Materials contained in this agenda are proposed topics for discussion and are not to be construed as regulation or official Board position. DRAFT AGENDA

VI. APPRENTICE TEXTBOOKS RELATIVE TO RELATED TECHNICAL INSTRUCTION

Basic Text: “Land Surveyor Reference Manual”, second edition, Andrew L. Harbin
ISBN: 0-912045-09-4, Professional Publications, Inc.

References: “Solutions Manual for the Land Surveyor Manual”, second edition,
Andrew L. Harbin
ISBN: 0-912045-42-6, Professional Publications, Inc.

“Surveying”, ninth edition, Moffet & Bouchard
ISBN: 0-06-500059-5, Harper Collins Publishers, Inc.

“Elementary Surveying”, current edition, Paul R. Wolf and Russell Brinker
ISBN: 0-06-500399-3, Harper Collins Publishers, Inc.

“Basic Occupational Mathematics”, David Newton
ISBN: 0-8251-1676-7, J. Weston Walch Publisher

“Brown’s Boundary Control and Legal Principles”, 6th Edition, Robillard,
Wilson, and Brown
ISBN: 978-0-470-18354-0, Wiley Publishing

“Evidence and Procedures for Boundary Location”, 3rd Edition, Brown,
Robillard, Wilson
ISBN: 0471552194, Wiley Publishing

All Other Texts as the Instructors Deem Necessary

VII.

VIRGINIA SURVEYOR APPRENTICESHIP ~~PROGRAM~~STANDARDS

REFERENCE MATERIALS LIST

PLEASE NOTE:

THE FOLLOWING PUBLICATIONS ARE SUGGESTED BY THE APELSCIDLA BOARD AS REFERENCES FOR LAND SURVEYOR STUDENTS IN PREPARATION FOR THE L.S.I.T. EXAMINATION

1. ACSM Definitions of Land Surveying and Associated Terms
2. Basic Geodesy, by J.R. Smith
3. Black's Law Dictionary
4. Boundaries and Adjacent Properties, Skeleton
5. Boundary Control and Legal Principles, Brown
6. Chesapeake Bay Preservation Act
7. Code of Virginia:
 - Title 2.1, Chapter 32
 - Title 3.1, Chapter 17.2
 - Title 6.1, Chapter 7.3
 - Title 7.1, Chapter 2
 - Title 8.01, Chapter 3, 4, 14, and 26
 - Title 11, Chapter 1
 - Title 13.1, Chapter 7
 - Title 15.1, Chapter 10, 11, and 24
 - Title 17, Chapter 2
 - Title 18.2, Chapter 5
 - Title 21, Chapter 6
 - Title 28.1, Chapter 5
 - Title 33.1, Chapter 1
 - Title 33.2
 - Title 38.2, Chapter 46
 - Title 41.1
 - Title 43, Chapter 1
 - Title 45.1, Chapter 10 and 22.1
 - Title 49, Chapter 1
 - Title 54.1, Chapter 1, 2, 3, and 4
 - Title 55, Chapter 1, 4, 4.1, 4.2, 5, 6, 8, 10, 17, 18, 19, 20, and 24
 - Title 56, Chapter 2
 - Title 62.1, Chapter 1, 2, and 8

8. Evidence Procedures for Boundary Locations, Brown and Eldridge
9. Federal Register, Volume 40, No. 23, February 3, 1975
10. GPS Satellite Surveying, Alfred Leick
11. GPS Theory and Practice, B. Hoffman-Wellenhof, H. Lichtenegger, and J. Collins
12. Guide to GPS Positioning, David Wells & Canadian GPS Associates
13. Minimum Standard Detail, Requirements for ALTA/ASCM Land Title Surveys
14. Route Surveying, Hickerson
15. Rules and Regulations for the Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers and Landscape Architects
16. Surveying, Moffit/Bouchard
17. Surveying and Boundaries, Clark
18. Surveying Handbook, Hickerson
19. The Navstar Global Positioning System, by Tom Logsdon
20. Federal Clean Water Act
21. Virginia Chesapeake Bay Local Assistance Department, Local Assistance Manual, Current Edition
22. Virginia Chesapeake Bay Preservation Area Designation and Management Regulations (VR 173-02-01)
23. Virginia Department of Transportation Drainage Manual
24. Virginia Department of Transportation Road and Bridge Standards
25. Virginia Department of Transportation Survey Manual
26. Virginia Erosion and Sediment Control Handbook, Current Edition
27. Virginia State Library Board, Standards for Plats
28. Writing Legal Descriptions, Wattles

VIII. Signature Page

These Standards are hereby approved:

BOARD FOR ARCHITECTS, PROFESSIONAL ENGINEERS, LAND
SURVEYORS, CERTIFIED INTERIOR DESIGNERS & LANDSCAPE
ARCHITECTS

Chairperson

Date

Registered with the Virginia Apprenticeship Council:

Secretary

Date

Adopted by:

Sponsor Representative

Date

MINIMUM STANDARDS FOR APPRENTICESHIP

Registered with the Virginia Apprenticeship Council
According to Chapter 6, Title 40.1
Code of Virginia

Effective July 1, 2018
and
Recognized by the U. S. Department of Labor
Office of Apprenticeship

These Minimum Standards for Apprenticeship are hereby adopted for use by:

Sponsor: _____

Date: _____

Signature of Sponsor's Representative: _____

These Standards for Apprenticeship are hereby approved:

Secretary of the Virginia Apprenticeship Council: C. Kay Davenport

CONTENTS

1. Interpretations and Implementation of Standards	11. Related Instruction
2. Definitions	12. Initial Probationary Period
3. Apprenticeship Programs	13. Periodic Evaluation
4. Apprenticeship Agreements	14. Hours of Work
5. Equal Employment Opportunity	15. Apprentice Wages
6. Term of Apprenticeship Suspension or Cancellation	16. Transfer, Layoff/Reinstatement
7. Credit for Previous Experience	17. Certificate of Completion
8. Supervision of Apprentices	18. Student Apprentices
9. Responsibilities of Apprentices	19. Number of Apprentices to be Trained In Program
10. On-The-Job Training	20. Additional Sponsor Apprentice Qualifications
	21. Modifications

1. INTERPRETATIONS AND IMPLEMENTATION OF STANDARDS

- a. The Minimum Standards For Apprenticeship ("Standards") are based on, and conform to:
 - i. Regulations Governing the Administration of Apprenticeship Programs in the Commonwealth of Virginia", Chapter 20 of the Virginia Administrative Code." (Regulation 16VAC20-21-10 et. seq.)
 - ii. "Voluntary Apprenticeship Act", §§40.1-117 through 40.1-126 of the Code of Virginia.
- b. Each registered apprenticeship program must comply, at a minimum, with all items in these Standards. (Regulation 16VAC20-21-30)
- c. Each apprenticeship agreement will be governed by the terms and conditions in these Standards. (Regulation 16VAC20-21-70; VA Code §40.1-121)
- d. If a sponsor and apprentice have a difference of opinion in the interpretation of the Standards which cannot be satisfactorily resolved, either of them may consult with the Commissioner through the Apprenticeship Director, for clarification of the matter in question. (Regulation 16VAC20-21-120)

2. DEFINITIONS

- a. Apprentice - A person at least 16 years old, (whose employment is currently in compliance with all State and Federal laws) who is learning and working in an apprenticeable occupation and is covered by a written Apprenticeship Agreement with an employer, registered with the Virginia Department of Labor and Industry (DOLI). (Regulation 16VAC20-21-20; VA Code §40.1-120)
- b. Apprenticeable Occupation - A skilled occupation which is customarily learned in a practical way through a structured systematic program of on-the-job supervised work experience; is clearly identifiable and recognized throughout an industry; involves manual, mechanical or technical skills which require a minimum of 2,000 hours of on-the-job work experience; requires related instruction to supplement the on-the-job work experience. (Regulation 16VAC20-21-20, VA Code §40.1-120)
- c. Apprenticeship Agreement - (Agreement) An approved written agreement between a sponsor and apprentice (and guardian if apprentice is under 18), as defined in Regulation 16VAC20-21-20. By signing the Agreement, all parties agree to accept all terms and requirements contained in the Standards, the sponsor's Program Registration, the Act and the Regulations. (Regulation 16VAC20-21-70; VA Code §40.1-121)
- d. Sponsor - An employer, association of employers, joint apprenticeship committee or organization of employees that has an approved apprenticeship program registered with the DOLI. A program shall be operated by the sponsor and registered in the sponsor's name. (Regulation 16VAC20-21-20; VA Code §40.1-120)
- e. Supervisor of Apprenticeship - The person designated by the sponsor to perform the duties outlined in the Standards and will be designated on the Program Registration.
- f. Program Registration - An approved written description of the terms and conditions of apprentices' employment, training and supervision under a sponsor's apprenticeship program for a specific apprenticeable occupation, in accordance with the Act, Regulations, Standards, and any additional State Board Apprenticeship Standards which apply. The Program Registration shall incorporate a written Schedule of Work Processes. (Regulation 16VAC20-21-50)
- g. Virginia Apprenticeship Council (VAC) - Advisory organization which provides guidance on regulations and policies. Members are appointed by the Governor. The U.S. Department of Labor's Office of Apprenticeship has granted VAC authority to issue Certificates of Completion upon completion of the program. (Regulation 16VAC20-21-20, VA Code §§40.1-117 & 40.1-118, items 1, 3, 4, 5)
- h. Virginia Department of Labor and Industry (DOLI) - The agency which administers the Voluntary Apprenticeship Act and its related

regulations in Virginia. DOLI acts as the official agent of the VAC. (Regulation 16VAC20-21-20, VA Code §40.1-125)

- i. Commissioner - The Commissioner of the Virginia Department of Labor and Industry as defined by VA Code §40.1-2.

3. APPRENTICESHIP PROGRAMS

- a. Program Approval - Sponsors must have written notice of registration before establishing any Apprenticeship Agreements to employ and train individual apprentices. (Regulation 16VAC20-21-30, items A, C, D)
- b. Program Termination - Programs may be canceled by sponsor request or de-registered by the DOLI. Canceled programs may be reinstated upon sponsor request, if they meet registration requirements. De-registered programs may be reinstated if the DOLI determines that there is adequate evidence that the program is being operated in accordance with the Act and Regulations. (Regulation 16VAC20-21-70 & 16VAC20-21-80)
- c. Program Evaluation - DOLI shall review and evaluate each sponsor's program as required. (Regulation 16VAC21-30, item H)

4. APPRENTICESHIP AGREEMENTS

- a. Each Apprenticeship Agreement is a contract between, and must be signed by, the apprentice (and guardian if apprentice is under 18 years of age) and the sponsor's authorized representative, and registered with the DOLI. (Regulation 16VAC20-21-70 item 1, VA Code §40.1-122)
- b. A signed Apprenticeship Agreement indicates that both apprentice (and guardian) and sponsor understand and agree to all apprenticeship requirements.
- c. To be valid, each Apprenticeship Agreement must:
 - i. Comply with Regulation 16VAC20-21-70, VA Code §40.1-121.
 - ii. Contain all required signatures. (Regulation 16VAC20-21-70 item 1, VA Code §40.1-121)
 - iii. Be approved by the DOLI. (Regulation 16VAC 20-21-30, VA Code §40.1-122)
 - iv. Be registered and filed by the sponsor. (Regulation 16VAC20-21-30, item C.1 & 2)
- d. All required signers must receive a copy of the signed Apprenticeship Agreement and Standards.

5. EQUAL EMPLOYMENT OPPORTUNITY

- a. Sponsors and potential sponsors must not discriminate (based on race, color, religion, national origin, sex or physical handicap, which is unrelated to the person's qualifications and ability to perform the job) in recruiting, selecting, employing or training apprentices. (Regulation 16VAC20-21-30 item B.2; and 16VAC20-21-50, item B.23)
- b. Sponsors must take affirmative action to provide equal opportunity in operating apprenticeship programs. Programs must operate as required under the Virginia State Plan, and they must comply with Title 29 of the Code of Federal Regulations, Part 30. (Regulation 16VAC 20-21-30, item B.2)

6. TERM OF APPRENTICESHIP

- a. The minimum term for any apprenticeship program shall be 2,000 hours of reasonably continuous employment, or if the Competency or Hybrid term is proposed, DOLI will review on a case by case basis and may approve if requirements are addressed. (Regulation 16VAC20-21-50, item B. 2.a.; VA Code §40.1-120)
- b. Employment must be supplemented by the amount of related instruction required in the occupation. A minimum of 144 hours of related instruction is required for each year of apprenticeship to be completed by the end of the term. (Regulation 16VAC20-21-50, item B.4.)
- c. When the apprentice is required to work overtime, these overtime hours WILL/WILL NOT be credited to the term of apprenticeship. (Regulation 16VAC20-21-50, item B.2.)

7. CREDIT FOR PREVIOUS EXPERIENCE

- a. An applicant for apprenticeship may be allowed credit on the term of apprenticeship documented for prior experience whether with the sponsor or elsewhere.
- b. The sponsor's Supervisor of Apprenticeship must review and approve the applicant's record of previous experience before such experience will be credited. (Regulation 16VAC20-21-50, item B.14)

8. SUPERVISION OF APPRENTICES

- a. Each sponsor must designate a Supervisor of Apprenticeship. (Regulation 16VAC20-21-20)
- b. The Supervisor of Apprenticeship must assure that:
 - i. All programs are registered with the DOLI.
 - ii. All apprentices receive a company orientation that includes: Standards of Apprenticeship, any additional industry standards, company policies, safety rules and regulations.
 - iii. All apprentices receive instruction in safe and healthful working methods in each operation as it is encountered throughout the term of apprenticeship.
 - iv. All apprentices are adequately trained and supervised in all areas by qualified personnel. (Regulation 16VAC20-21-50, item B.11)
 - v. Each apprentice's progress is reviewed and documented prior to moving to a new wage level. (Regulation 16VAC20-21-50, items B.5, B.6)
 - vi. Credit for previous experience is granted when appropriate. (Regulation 16VAC20-21-50, item B.14)
 - vii. Each apprentice is notified of related instruction requirements and the name and location of each approved related instruction provider. (Regulation 16VAC20-21-50, item B.4)
 - viii. Related Instruction Provider(s) is contacted to review each apprentice's educational progress before the expiration of each wage period. (Regulation 16VAC20-21-50, item B.6)
 - ix. Records are prepared and filed at specified intervals of apprentice's aptitude, skill and progress. Submits prompt and complete written notification to DOLI of any change in apprentice status. (Regulation 16VAC20-21-30.E; 16VAC20-21-50, item B.6.)
 - x. Any other duties needed to develop and maintain an effective apprenticeship program. (Regulation 16VAC20-21-50)

9. RESPONSIBILITIES OF APPRENTICES

- a. Apprentices are employees and have basic employee responsibilities. Each apprentice must make every effort to become a well-qualified journeyworker.
- b. Each apprentice must be on time for work, learn all work processes, complete all work assignments, and take initiative to ask appropriate questions.
- c. Each apprentice must be registered for related instruction, attend regularly and be on time.
- d. Each apprentice should review these Standards and the sponsor's Program Registration to ensure that he/she is trained and paid according to these documents.
- e. Each apprentice has the responsibility to consult with the Supervisor of Apprenticeship to assure that all accurate and appropriate records are updated and DOLI is notified promptly of any changes in status.
- f. Each apprentice must use appropriate conduct during related instruction process and on the job site.
- g. Each apprentice must obtain licensing applications following completion of the apprenticeship Program.

10. ON-THE-JOB TRAINING

- a. The apprentice shall be given instruction and work experience as established by industry practice and as listed in the work processes.

- b. The work experiences do not need to be in the precise order as listed in the work processes.
- c. The work processes must be recorded in the Program Registration.

11. RELATED INSTRUCTION

- a. Each apprentice shall receive related instruction and shall provide the Supervisor of Apprenticeship with evidence of satisfactory participation and progress following completion of each designated portion.
- b. A minimum of 144 hours of related instruction is recommended for each year of apprenticeship, to be completed during the full term. (Regulation 16VAC20-21-50, item B.4; 16VAC20-21-70, item 5.b.)
- c. The Apprenticeship Agreement can be suspended or canceled when an apprentice does not satisfactorily complete either the on-the-job training or related instruction. Exceptions may be allowed for sickness or injury. (Regulation 16VAC20-21-70, item 8.b.(1)&(2))

12. INITIAL PROBATIONARY PERIOD

- a. Each apprentice must serve between 500 and 2,000 hours of the apprenticeship term as an initial probationary period. The specific number of hours is stated in each Program Registration. (Regulation 16VAC20-21-50, items B.2 & B.10; 16VAC20-21-70, item 8.a)
- b. During the probationary period cancellation of the Apprenticeship Agreement may be requested by the sponsor or the apprentice. Notice of such actions must be given to the DOLI. (Regulation 16VAC20-21-50, item B.20-22; 16VAC20-21-60, item B.2.b)
- c. Full credit will be given for the initial probationary period toward completion of the apprenticeship program. (Regulation 16VAC20-21-50, item B.10)
- d. All apprentices registered under these Standards shall be subject to an initial probationary period of _____hours of employment.

13. PERIODIC EVALUATION

The progress of each apprentice's job performance and related instruction shall be subject to a periodic review prior to the expiration of each wage period. Should a review reveal a lack of interest or ability on the part of the apprentice, the apprentice will be informed of the deficiency and may be placed on probation for a sufficient period to determine improvement or failure. At the end of the probationary period, if the apprentice has not shown acceptable improvement, the apprenticeship agreement may be suspended or canceled. The sponsor must promptly notify the apprentice and the DOLI in writing of any suspension or cancellation. (Regulation 16VAC20-21-50, items B.6 & B.22; 16VAC 20-21-70, item 8.b)

14. HOURS OF WORK

- a. Hours of work for apprentices shall be determined by the Sponsor and apprentice with full-time being the norm. Part-time schedules are permitted and must be recorded the same as for all other employees.
- b. Time spent at related instruction MAY OR MAY NOT be considered as hours of work. The sponsor's decision must be documented in the Program Registration. (Regulation 16VAC20-21-70, item b.7)
- c. Sponsors shall not require apprentices to work hours that would interfere with attending related instruction except in emergencies.

15. APPRENTICE WAGES

- a. The term of each apprenticeship program shall be divided into periods, with wages that progressively increase as the apprentice progresses in skill and productivity. Wages will be established in accordance with federal and state wage laws. (Regulation 16VAC 20-21-50, items B.5 & B.14; 16VAC20-21-70, item 7; 16VAC20-21-80, item C.1.(iii))
- b. Wages are based on the basic rate paid to journeyworkers and must reflect any credit given for previous experience. Overtime shall be based on the same percentage as that paid all other hourly employees. (Regulation 16VAC20-21-50, item B.5)

- c. The minimum wages paid all apprentices employed under these Standards must be recorded in the Program Registration. (16VAC20-21-50, item B.5)
- d. Apprentices who are given credit for previous training or experience shall be paid the wage rate commensurate with the period to which such credit advances them. (Regulation 16VAC20-21-50, items B.5 & B.14)

- c. Physical Capability _____
- d. Other _____
- e. See attached _____

*minimum permitted by law is 16 years of (whose employment is currently in compliance with all State and Federal laws)

16. TRANSFER, LAYOFF/REINSTATEMENT, SUSPENSION OR CANCELLATION

- a. Transfer - If a sponsor is no longer able to fulfill his obligation for training of an apprentice, the apprentice may be transferred or registered with credit for previous training to another sponsor. DOLI must be notified in writing and must approve all transfers. (Regulation 16VAC20-21-30.E;16VAC20-21-50, item B.15; 16VAC20-21-80, item B.)
- b. Layoff/Reinstatement - Apprentices may be laid-off in the commensurate ratio of apprentices to journeyworkers. Apprentices laid-off under these Standards shall be entitled to seniority privileges and shall be reinstated in the seniority standing before any new apprentices are registered. DOLI must be notified in writing of all apprentices laid-off and/or reinstated.
- c. Suspension and Cancellation - Apprenticeship agreements may be suspended or canceled at any time for appropriate reason. The sponsor must notify DOLI in writing within 45 days stating the reason for the suspension or cancellation. (Regulation 16 VAC 20-21-70, item 8.b. (1 & 2); 16VAC20-21-30, item E; 16VAC20-21-50, item B.20)

21. MODIFICATIONS

The sponsor must notify the DOLI promptly in writing of any proposed program modifications and request approval from the DOLI. Any program modifications shall not alter or affect apprenticeship agreements in effect at the time of modification without the consent of all parties affected. (Regulation 16VAC20-21-30, item H.2, 16VAC20-21-50, item B.20)

The apprenticeship program may be cancelled by DOLI for due cause. The sponsor may withdraw his program by submitting a written request to the DOLI. (Regulation 16VAC20-21-80, item B.1)

17. CERTIFICATE OF COMPLETION

Upon the completion of the term of apprenticeship and having met the requirements of the program, the VAC shall be requested by the sponsor to prepare a Certificate of Completion, to be issued in the name of the apprentice who has successfully completed training and the term of apprenticeship. (Regulation 16VAC20-21-30, item E; 16VAC20-21-50, item B.17)

18. STUDENT APPRENTICES

- a. Student apprentices are defined as a high school student participating in Registered Apprenticeship
- b. Youth Registered Apprentices are defined as a high school student participating in Registered Apprenticeship where the related instruction is provided in large part by the Career and Technical Education division within the School division.
- c. All apprenticeships requirements and restrictions described in the Standards shall apply to student apprentices, except the following:
 - i. For high school students, a letter of permission from their principal is required;
 - ii. Student status must be maintained. If a student leaves school prior to graduation his/her student apprenticeship will be canceled;
 - iii. Work hours and related instruction requirements may be different for student apprentices than non-student apprentices.

19. NUMBER OF APPRENTICES TO BE TRAINED IN THE PROGRAM

The number of apprentices shall be determined by the adequacy of facilities, the need of journeyworkers in the community and reasonable assurance of employment in the occupation establishment upon completion of training. To ensure adequate training the ratio of apprentices to journeyworkers shall not exceed: one (1) apprentice to _____ journeyworker(s). The default ratio is 1 apprentice to 1 journeyworker. A variance may be requested of the Director of Registered Apprenticeship and will be evaluated on a case by case basis. (Regulation 16VAC20-21-50, items B.8 & B.9) All variances must also be approved by the Commissioner of the DOLI.

20. ADDITIONAL SPONSOR APPRENTICE QUALIFICATIONS (optional)

- a. Age Minimum* _____
- b. Education _____

Guidance Document – Existence of a Public Highway

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

LS Exam Update

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

July 2, 2019

Charles L. Smith, III, LS
Blakeway Corporation
630 N. Witchduck Rd.
Virginia Beach, VA 23462
Email: chuck_smith@blakewaycorp.com

Dear Mr. Smith:

On March 12, 2019, the Board for Architects, Professional Engineers, Land Surveyors, Certified Interior Designers and Landscape Architects (APELSCIDLA) reviewed your email inquiry sent to Board Member, Ms. Anglin, on March 8, 2019.

In response to your question if a UAS (Drone) company can sell aerial photography and/or LIDAR type point data to an engineering/surveying company for design purposes in Virginia without a photogrammetrist/land surveyor's licensed person on staff? The answer is no, it cannot be used for design purposes. If the product is to be for design purposes, the work must be performed by a licensed professional. For more information, please refer to the APELSCIDLA Regulation 18VAC10-20-392. Photogrammetric surveys.

If you are aware of such work being used for design, you may wish to file a complaint against the licensed professional using the work inappropriately, you can file a complaint by emailing ComplaintAnalysis@dpor.virginia.gov or by calling (804) 367-8504.

If you have any questions, you can reach me at (804) 367-8514.

Most sincerely,

Kathleen (Kate) R. Nosbisch
Executive Director
Virginia APELSCIDLA Board

KN/bd



National Transportation Safety Board

Washington, DC 20594

Safety Recommendation Report

Natural Gas Distribution System Project Development and Review (Urgent)

Ongoing Investigation

On September 13, 2018, about 4:00 p.m. eastern daylight time, a series of explosions and fires occurred after high-pressure natural gas was released into a low-pressure gas distribution system in the northeast region of the Merrimack Valley, Massachusetts. The distribution system was owned and operated by Columbia Gas of Massachusetts (Columbia Gas), a subsidiary of NiSource, Inc. The system overpressure damaged 131 structures, including at least 5 homes that were destroyed in the city of Lawrence and the towns of Andover and North Andover. Most of the damage was a result of structure fires ignited by gas-fueled appliances. Several structures were destroyed by natural gas explosions. One person was killed and at least 21 individuals, including 2 firefighters, were transported to the hospital. Seven other firefighters received minor injuries.

The cast-iron, low-pressure natural gas distribution system was installed in the early 1900s and had been partially improved with both steel and plastic pipe upgrades since the 1950s. The low-pressure distribution system in the affected area relied on 14 regulator stations to control natural gas at the required pressure into structures serviced by the system. Each of the regulator stations reduced the natural gas pressure from about 75-pounds per square inch, gauge (psig) to about 12 inches of water column (about 0.5 psig) for delivery to customers.¹

Prior to the accident, Columbia Gas had an overarching plan consisting of multiple projects to replace 7,595 feet of low-pressure, existing cast-iron and plastic natural gas main with 4,845 feet of low-pressure and high-pressure plastic gas main on South Union Street and neighboring streets.

On September 13, prior to the overpressure event, a Columbia Gas-contracted work crew, which included a Columbia Gas inspector, executed one of the Columbia Gas-designed and -approved pipe-replacement projects at the intersection of South Union Street and Salem Street in South Lawrence. The project was to install a plastic distribution main and abandon in place a cast-iron distribution main. The distribution main that was abandoned still had the regulator-sensing lines that were used to detect pressure in the distribution system and provide input to the regulators to control the system pressure. Once the contractor crews disconnected the distribution main that was being abandoned, the section containing the regulator-sensing lines began losing pressure.

¹ *Inches of water column* is a unit of pressure measurement that is typically used for low-pressure gas systems, such as a low-pressure natural gas distribution system.

As the pressure in the abandoned distribution main dropped about 0.25 inches of water column (about 0.01 psig), the regulators responded by opening further, increasing pressure in the distribution system. The regulators opened completely when they no longer sensed system pressure, allowing the full flow of high-pressure gas to release into the distribution system supplying the neighborhood. As a result, natural gas was delivered to customers at a pressure well above the maximum-allowable operating pressure which led to the ignition of fires and explosions in homes.

Minutes before the fires and explosions occurred, the Columbia Gas monitoring center in Columbus, Ohio, received two high-pressure alarms for the South Lawrence gas pressure system: one at 4:04 p.m. and the other at 4:05 p.m. The monitoring center had no control capability to close or open valves; its only capability was to monitor pressures on the distribution system and advise field technicians accordingly. Following company protocol, at 4:06 p.m., the Columbia Gas controller reported the high-pressure event to the Meters and Regulations group in Lawrence. A local resident made the first 9-1-1 call to Lawrence Emergency Services at 4:11 p.m.

In response, three technicians were dispatched to perform field checks on 14 regulators. Columbia Gas shut down the regulator at issue by about 4:30 p.m. The critical valves of the natural gas distribution system were closed by 7:24 p.m. Beginning about midnight, crews consisting of two Columbia Gas technicians escorted by two emergency response personnel began shutting off the meters at each house to isolate the homes from the natural gas distribution system. All meters were shut off by the following morning.

Engineering Work Package Approval Process

Omissions in the engineering work package and construction documentation for the project near South Union Street and Salem Street were discovered during the National Transportation Safety Board (NTSB) investigators' review. Although Columbia Gas used its project workflow process to develop, review, and approve the engineering plans, the work package did not include consideration of the existence of regulator-sensing lines within the scope of work—in particular, the regulator-sensing lines connected to the distribution lines that were slated to be abandoned. This omission was not identified by the Columbia Gas constructability review.

Constructability reviews are a recognized and generally accepted good engineering practice for the execution of professional design services and are intended to provide an independent and structured review of construction plans and specifications to ensure there are no conflicts, errors, or omissions.² The review should be performed by qualified professionals to identify deficiencies and incorporate improvements into the construction documents. Many jurisdictions also require that plans be approved (sealed) by a professional engineer licensed to perform engineering in the jurisdiction.³

² J.G. Kirby, R.P. Cannalte, D.K. Hicks, and E.J. Japel, *Constructability and Design Reviews: Analysis and Recommendations for Improvement*, US Army Corps of Engineers Constructional Engineering Research Library Technical Report P-89/15 (Washington, DC: US Army Corps of Engineers, 1989).

³ (a) According to the National Society of Professional Engineers (NSPE), in order to use the PE seal, an engineer must earn a 4-year degree in engineering from an accredited engineering program, pass the Fundamentals of

According to the Columbia Gas project workflow process, a company field engineer is responsible for the development of design and engineering modifications to the pipeline system.⁴ The plans are packaged as a project package that is circulated to other departments for the constructability review.⁵ Columbia Gas requires the Engineering department and the Construction department to approve all projects, but the Land Services department and the Meter and Regulation department review the packages on an “as needed basis,” depending on the project.

While the engineering design package for the South Union Street project underwent a constructability review, NTSB investigators found that the constructability review did not identify the impact on pressure regulation and control. The Columbia Gas field engineer who developed the engineering plans told NTSB investigators that he developed them without reviewing engineering drawings that documented the regulator-sensing lines.

The field engineer said that the Meter and Regulation department within Columbia Gas had the maps containing control line information and he was unaware if his department had access to such records. Furthermore, the field engineer had limited knowledge about the importance of the regulator-sensing lines or the consequences of losing the capability to sense the main pressure via the regulator-sensing lines. The constructability review records for the overarching South Union Street and Salem project indicate that the plans were seen and approved by the Engineering department and the Construction department. The Meters and Regulation department and the Land Services department were not required to review the project because the field engineer did not believe at the time that the proposed scope of work was applicable to or affected these departments.⁶ The NTSB believes a comprehensive constructability review, which would require all departments to review each project, along with the seal of approval from a professional engineer (PE), would likely have identified the omission of the regulator-sensing lines, thereby preventing the error that led to the accident. By sealing the project plans, the PE takes responsibility for the accuracy and completeness of the engineering package. Neither the Commonwealth of Massachusetts nor Columbia Gas policy require a registered PE to develop or review public utility engineering plans.⁷

According to the National Society of Professional Engineers (NSPE), in most states PE's are not required to review and approve project plans, such as those used in this accident, because they have industrial, public utility, or other exemptions. The NSPE has advocated for the phasing out of existing industrial exemptions in state licensing laws. According to the NSPE:

Engineering exam, complete 4 years of progressive engineering experience under the guidance of a registered PE, and pass the Principles and Practice of Engineering exam. (b) The qualifications required for licensure as a PE in the United States are set by each jurisdiction through the state's engineering statute, and rules established by the state board of licensure of professional engineers implementing those statutory requirements. The law and the rules differ in each state.

⁴ The field engineer was not a registered professional engineer.

⁵ Columbia Gas often refers to the project package as a “pouch.”

⁶ The Columbia Gas Capital Design Job and Constructability Review Checklists allow the Engineering department to determine what departments outside of the Engineering and Construction departments review the project.

⁷ Massachusetts Public Health Regulations, Title XVI, Chapter 112, Section 81R.

[m]any engineers in industry have responsibility for activities that directly affect the public health, safety, and welfare. But exemptions place these individuals and organizations performing engineering services outside of the licensing system. Exempt individuals and organizations are not subject to the same legal and ethical requirements as those who are licensed.⁸

The NTSB believes that it is critical that an engineer with the appropriate qualifications and experience review engineering plans for a gas company, if not develop them. The Commonwealth of Massachusetts exemption for the requirement of PE licensure to perform “industrial” and public utility work foreclose an opportunity to detect this design oversight. The seal of a PE should be required on all public utility engineering plans to reduce the likelihood of accidents such as this occurring.⁹

The PE licensure is a regulatory instrument for advancing the public good, protecting employers and the public, and ensuring that the engineering work was performed consistent with a standard of care and in accordance with a strict code of ethics. A PE seal on a plan would illustrate that the plan had been approved by an accredited professional with the requisite skills, knowledge, and experience to provide a comprehensive review. Therefore, the NTSB recommends that the commonwealth of Massachusetts eliminate the professional engineer licensure exemption for public utility work and require a professional engineer’s seal on public utility engineering plans. Additionally, the NTSB recommends that NiSource revise the engineering plan and constructability review process across all its subsidiaries to ensure that all applicable departments review construction documents for accuracy, completeness, and correctness, and that the documents or plans be sealed by a PE prior to commencing work.

Pipeline System Records

NTSB investigators also learned that the engineering plans used during the construction work did not document the location of regulator-sensing lines. A review of the engineering work package indicated that the location of the nearest regulator was identified on the plans and maps but did not indicate the location of the regulator-sensing lines.

Documentation and record-keeping are critical parts of a pipeline safety management system (PSMS) program. In fact, American Petroleum Institute Recommended Practice 1173, *Pipeline Safety Management Systems*, states in Section 14.1:¹⁰

The pipeline operator shall maintain a procedure for the identification, distribution, and control of documents required by its PSMS. The procedure shall specify responsibilities for document approval and re-approval and shall identify the

⁸ NSPE, *Industrial Exemption*, <https://www.nspe.org/sites/default/files/IndustrialExemptionFINAL2017.pdf>, accessed October 23, 2018.

⁹ The seal of a PE signifies that the document has been developed or reviewed by an individual who has met the necessary prerequisites of engineering education, experience, and examination.

¹⁰ American Petroleum Institute, *Pipeline Safety Management System Requirements*, API Recommended Practice 1173, First edition, July 2015 (Washington, DC: American Petroleum Institute, 2015).

controls needed to assure that the documents required by the PSMS, including revisions, translations, and updates:

- a) are reviewed and approved for adequacy prior to issue and use;
- b) identify changes and revision status;
- c) remain legible and readily identifiable; and
- d) are readily available and accessible to workers performing an activity.

Obsolete documents shall be removed from all points of issue or use, or shall otherwise be identified to assure against unintended use if they are retained for any purpose.

Had accurate alignment sheets with comprehensive system information been available and used during the construction project, engineers and work crews would have been able to identify the regulator-sensing lines and ensure their relocation prior to abandoning the pipeline main.¹¹ Therefore, the NTSB recommends that NiSource review and ensure that all records and documentation of its natural gas systems are traceable, reliable, and complete.

Management of Change

Columbia Gas's implementation of management of change (MOC) is limited to the management of its Distribution Integrity Management Plan (DIMP), a program required by Pipeline and Hazardous Materials Safety Administration (PHMSA) regulations to enhance safety by identifying and mitigating risks that could cause serious consequences to the integrity of the pipeline system." Columbia Gas does not practice MOC for managing maintenance and construction changes to pipeline operations. Engineering department personnel rely upon checklists within its workflow documentation to manage change within the work packages generated through the department.

NTSB interviews of Columbia Gas managers and staff revealed that the company did not conduct separate risk assessments for each construction project. Performing risk assessments and developing risk mitigation plans or procedures are critical components of in a PSMS program. API RP 1173 states in Section 8.4.1.¹²

The pipeline operator shall maintain a procedure for management of change (MOC). For each MOC, the pipeline operator shall identify the potential

¹¹ The alignment sheet is a document that represents the "as built" location of the pipeline and includes the description of the pipe laid. The pipeline is typically represented as a single line or centerline and typically drawn to scale. The description will include the outside diameter of the pipe, grade, weight-per-foot, and wall thickness, as well as the type of connection used to join the individual lengths or joints of pipe. The sheet may indicate whether the land is forest or in cultivation. Stations along the pipeline indicate distance from the starting point to that "station" and are reference points, as there also will be various crossings designating oil and gas pipelines of varying sizes, water lines, sewer lines, and underground cables, etc. Other topographical features might be listed as well such as the type of soil, hilly, rolling hills, and wetlands, etc.

¹² American Petroleum Institute, *Pipeline Safety Management System Requirements*, API Recommended Practice 1173, First edition, June 2014 (Washington, DC: American Petroleum Institute, 2014).

risks associated with the change and any required approvals prior to the introduction of such changes.

MOC procedures require an analysis of implications, among several other elements. Additionally, a risk identification and assessment are necessary to establish the appropriate prevention and mitigation measures to reduce the likelihood of consequences should an incident occur. Columbia Gas failed to perform such an analysis and failed to establish appropriate controls to mitigate the risks of the work that was being performed.

NTSB investigators also learned that, until about 4 years ago, Columbia Gas required that a technician monitor any gas main revision work which required depressurizing the main. The technician—typically from the Meter and Regulation department—would use a gauge to monitor the pressure readings on the impacted main and would communicate directly with the crew making the change. If a pressure anomaly occurred, the technician could quickly act to prevent an overpressurization action. Columbia Gas offered no explanation as to why this procedure was phased out. Although the Columbia Gas monitoring center in Columbus, Ohio, received high-pressure alarms and reported the event to the Meters and Regulations department 2 minutes after receiving the first alarm, there were no technicians prestaged or positioned to immediately close valves when the overpressurization occurred.

Had Columbia Gas adequately performed MOC and placed personnel at critical points along the system, Columbia Gas could have immediately addressed the issue and mitigated the consequences of the event.

Therefore, the NTSB recommends that NiSource apply management of change processes to all changes to adequately identify system threats that could result in a common mode failure. Additionally, the NTSB recommends that NiSource develop and implement control procedures during modifications to gas mains to mitigate the risks identified during MOC operations. Gas main pressures should be continually monitored during these modifications and assets should be placed at critical locations to immediately shut down the system if abnormal operations are detected.

Recommendations

As a result of this report, the National Transportation Safety Board makes the following safety recommendations:

To the Commonwealth of Massachusetts:

Eliminate the professional engineer licensure exemption for public utility work and require a professional engineer's seal on public utility engineering drawings. (P-18-005)

To NiSource, Inc.:

Revise the engineering plan and constructability review process across all of your subsidiaries to ensure that all applicable departments review construction documents for accuracy, completeness, and correctness, and that the documents or plans be sealed by a professional engineer prior to commencing work. (P-18-006) (Urgent)

Review and ensure that all records and documentation of your natural gas systems are traceable, reliable, and complete. (P-18-007) (Urgent)

Apply management of change process to all changes to adequately identify system threats that could result in a common mode failure. (P-18-008) (Urgent)

Develop and implement control procedures during modifications to gas mains to mitigate the risks identified during management of change operations. Gas main pressures should be continually monitored during these modifications and assets should be placed at critical locations to immediately shut down the system if abnormal operations are detected. (P-18-009) (Urgent)

BY THE NATIONAL TRANSPORTATION SAFETY BOARD

ROBERT L. SUMWALT, III
Chairman

BRUCE LANDSBERG
Vice Chairman

EARL F. WEENER
Member

T. BELLA DINH-ZARR
Member

JENNIFER HOMENDY
Member

Adopted: November 14, 2018

Signing of Wall Certificates

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

2020 Meeting Dates

Date	Time	Board	Rm
February 4, 2020	10:00 AM	PE-LS	BR2
March 17, 2020	10:00 AM	APELSCIDLA	BR4
March 17, 2020	11:00 AM	Arch-CID-LA	HR5
May 6, 2020	10:00 AM	PE-LS	BR2
June 2, 2020	10:00 AM	APELSCIDLA	BR4
June 2, 2020	11:00 AM	Arch-CID-LA	HR5
August 5, 2020	10:00 AM	PE-LS	BR2
September 1, 2020	10:00 AM	APELSCIDLA	BR4
September 1, 2020	11:00 AM	Arch-CID-LA	HR5
November 4, 2020	10:00 AM	PE-LS	BR2
December 1, 2020	10:00 AM	APELSCIDLA	BR4
December 1, 2020	11:00 AM	Arch-CID-LA	HR5

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion and are not to be construed as regulation or official Board position.

Election of Chair and Vice Chair

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation for official Board position.
DRAFT AGENDA

Business Agreements Update

Business Name	License#	Signed
TE, Inc t/a TEI of WA Inc	407007580	3/22/19
James F. Turner Engineers LP	407007560	4/30/19
Snowden Engineering, Inc	407007607	5/16/19
Siemens Industry, Inc	407005951	5/22/19
The Consulting Engineers Group-FL, Inc	407007622	5/24/19

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

CE Waiver Requests

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

Regulatory Update

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

COMPLIANCE & INVESTIGATIONS POLICY #800-05
NOTICE OF CEASE AND DESIST

Effective Date: July 1, 2019

I. **PURPOSE:** The purpose of this policy is to establish the method by which the Department of Professional and Occupational (DPOR) considers and issues Cease and Desist Notices pursuant to § 54.1-111(C) of the Code of Virginia and to ensure DPOR remains compliant with the jurisdictional requirements established through Title 54.1.

II. **POLICY STATEMENT:** It shall be the policy of DPOR to issue, where applicable, Cease and Desist Notices in accordance with § 54.1-111(C) of the Code of Virginia.

III. **DEFINITIONS:**

Cease and Desist Notice – A record of notification to be presented to individuals or entities where it has been established through investigation that the individuals or entities failed to comply with §§ 54.1-111(A)(1)-(5), or (8) of the Code of Virginia.

Investigative Staff – Individuals employed by DPOR pursuant to § 54.1-306(A) of the Code of Virginia.

Unlicensed Individual or Entity – Party who is not licensed, certified or registered with DPOR and practiced in the Commonwealth of Virginia in a profession regulated by DPOR requiring a license, certification or registration pursuant to § 54.1-111 of the Code of Virginia.

Complainant – Party who filed a complaint with DPOR against the unlicensed individual or entity.

IV. **RELATED DOCUMENTS:**

Compliance and Investigations Procedure Manual
Investigation Section Procedure Manual
Cease and Desist Notice

V. **GENERAL PROVISIONS:**

In accordance with § 54.1-111(C) of the Code of Virginia, the Director of DPOR hereby designates Investigative Staff with the authority to issue cease and desist notices.

In determining whether the issuance of Cease and Desist Notices is appropriate, Investigative Staff shall consider and apply the following factors and guidance:

COMPLIANCE & INVESTIGATIONS POLICY #800-05
NOTICE OF CEASE AND DESIST

- Unlicensed individual or entity action(s) appear to be indicative of ignorance or an unintentional violation of the licensure, certification or registration requirements of §§ 54.1-111(A)(1)-(5), or (8) of the Code of Virginia.
- Unlicensed individual or entity proactively seeks compliance
 - Individual or entity begins the appropriate license, certification or registration process through the DPOR; and
 - application is received by DPOR with receipt of the application verified by Investigative Staff
- Unlicensed individual or entity proactively mitigates the nature of the violation of law, which may reduce the likelihood of criminal prosecution (e.g., return of funds to Complainant)
- Complainants are not willing to participate as witnesses in the criminal court process
- Commonwealth's Attorneys decline prosecution

Prior to Investigative Staff issuing any Cease and Desist Notice, the investigation and accompanying case file record must demonstrate and support a violation of §§ 54.1-111(A)(1)-(5), or (8) of the Code of Virginia.

DRAFT AGENDA
DRAFT AGENDA
DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion and are not to be construed as regulation or official Board position.

Periodic Regulatory Review

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

Licensed and Certified Population

As of June 1, 2019

APELSCIDLA Businesses	4,465
Architects	7,441
Professional Engineers	29,399
Land Surveyors	1,285
Land Surveyors B	72
Land Surveyor Photogrammetrists	121
Certified Interior Designers	498
Landscape Architects	940

Materials contained in this agenda are proposed topics for discussion and are not to be construed as regulation or official Board position.

DRAFT AGENDA

DRAFT AGENDA

Acronyms

AAA-The Alberta Association of Architects
ACA-Architectural Accreditation Council of Australia
AAEE-American Academy of Environmental Engineers
AAES-American Association of Engineering Societies
AANB-Architects Association of New Brunswick
AAPEI-Architects Association of Prince Edward Island
AAPQ-Association of Architects in Private Practice in Quebec
ABET-Accreditation Board for Engineering & Technology
ACCA-Advisory Committee on Council Activities
ACE-Architects' Council of Europe
ACEC-American Council of Engineering Companies
ACEC-American Council of Engineering Companies
ACSA-Association of Collegiate Schools of Architecture
ACSM-American Congress on Surveying and Mapping
ADA-Americans with Disabilities Act
AEI-Architectural Engineering Institute
AERB-Architects Education & Registration Board (NZ)
AIAA-American Institute of Aeronautics and Astronautics
AIA-American Institute of Architects
AIAS-American Institute of Architecture Students
AIBC-Architectural Institute of British Columbia
AICHE-American Institute of Chemical Engineers
AIME-American Institute of Mining, Metallurgical, and Petroleum Engineers
ALHI –Board of Asbestos, Lead and Home Inspectors
ALHI–Board of Asbestos, Lead and Home Inspectors, Geology, waterworks/wastewater
ANS-American Nuclear Society
ANSI-American National Standards Institute
AOSE-Authorized Onsite Soil Evaluator (currently under VDH moving to DPOR 7/1/09)
APEC-Asia-Pacific Economic Cooperation
APEC-Asia-Pacific Economic Cooperation
ARB-Architects Registration Board (UK)
ARE-Architect Registration Examination
ASABE-American Society of Agricultural and Biological Engineers
ASAC-Applied Science Accreditation Commission
ASBOG-Association of State Boards of Geology
ASC-Architectural Society of China
ASCE-American Society of Civil Engineers
ASCE-American Society of Civil Engineers
ASEE-American Society for Engineering Education
ASHRAE-American Society of Heating, Refrigerating, and Air-Conditioning Engineers
ASID-American Society of Interior Designers
ASINEA-Asociacion de Instituciones de Ensenanza de la Arquitectura
ASLA-American Society of Landscape Architects (54.1-403)
ASME-American Society of Mechanical Engineers

ASPRS-American Society of Photogrammetry and Remote Sensing
BAPS-Board Administrative Proceedings
BCHOP-Barber, Cosmetology, Hearing Aid and Optician Board
BOCA-Building Officials and Code Administrators International
BOCA-Building Officials and Code Administrators International
BPOR-Board of Professional and Occupational Regulation
CACB-Canadian Architectural Certification Board
CACE-Council of Architectural Component Executives
CAFTA-Central American Free Trade Agreement
CAR-Complaint and Resolution Division
CASE-Council of American Structural Engineers
CCAC-Committee of Canadian Architectural Councils
CCPE-Canadian Council of Professional Engineers; Operates as Engineers Canada
CCUSA-Canadian Council of University Schools of Architecture
CCVID-Council of Certified Virginia Interior Designers
CEAB-Canadian Engineering Accreditation Board
CELSOC-Consulting Engineers and Land Surveyors of California
CESB-Council of Engineering Specialty Boards
CIC-Committee of International Councils
CIDA-Council for Interior Design Accreditation
CID-Compliance and Investigation Division
CIDP-California IDP
CIDQ-Council for Interior Design Qualification
CLARB-Council of Landscape Architectural Registration Boards
CLEAR-Council on Licensure, Enforcement, and Regulation
CLES-Commerce License Enforcement System
CLSA-California Land Surveyors Association
COMECA-Consejo Mexicano de Acreditación de la Enseñanza de la Arquitectura
COMPIA-Comite Mexicano Para la Practica Internacional de la Arquitectura
CONARC-Consejo Nacional de Registro y Certificación
COV-Code of Virginia
CPC-Continuing Professional Competency
CSBSR-Colonial States Boards of Surveyor Registration
CSC-Central States conference, Region 5 (NCARB)
CSI-Construction Specifications Institute
DPB-Department Planning/Budget
DLAS-Division of Legislative Automated Systems
EAC-Engineering Accreditation Commission (under ABET) engineering degree
EAGLES-Elective Access Government License/Enforcement System (Versa)
EESA-Education Evaluation Services for Architects
ECEI-Engineer Credentials Evaluation International
EHS Sr.-Environmental Health Specialist
EI-Engineer Intern
EIA-Economic Impact Analysis
EIT-Engineer-in-Training
ELSES-

EPE-Committee on Examinations for Professional Engineers
EPP-Committee on Examination Policy and Procedures
EPS-Committee on Examinations for Professional Surveyors
ETS-Educational Testing Service
ETS-Enforcement Tracking System
EXCOM-Executive Committee
FARB-Federation of Associations of Regulatory Boards
FCARM-La Federacion Nacional de Colegios de Arquitectos de la Republica Mexicana
FE-Fundamentals of Engineering Examination
FIDER-Foundation for Interior Design Education and Research
FIG-International Federation of Surveyors
FLS-now FS Fundamentals of Surveying Examination
FPAA-Federacion Panamericana de Asociaciones de Arquitectos
FS-Fundamentals of Surveying Examination
GMP-Guidance Memorandum Policy
HBCU-Historical Black Colleges and Universities
HKIA-Hong Kong Institute of Architects
IBD-Institute of Business Designers
ICBO-International Conference of Building Officials
ICOR-Interprofessional Council on Registration
ICOR-Inter-professional Council on Registration
IDPCC-Intern Development Program Coordinating Committee
IDP-Intern Development Program
IEEE-Institute of Electrical and Electronics Engineers
IIE-Institute of Industrial Engineers
ISA-The Instrumentation, Systems, and Automation Society
JAEIC-Japan Architectural Education and Information Center
JIA-Japan Institute of Architects
JPEC-Japan PE/FE Examiners Council
L.S.-Land Surveyor
LAAB-Landscape Architectural Accreditation Board (housed under ASLA)
LARE-Landscape Architect Registration Examination
LAS
LRD-Licensing and Regulation Division
LSI-Land Surveyor Intern
LSIT-Land Surveyor-in-Training
LS-Land Surveyors
MAC-Middle-Atlantic Conference, Region (NCARB)
MAPPS-Management Association for Private Photogrammetric Surveyors
MBA-Member Board Administrator (NCEES)
MBE-Member Board Executive (NCARB)
MBM-Member Board Members (NCARB)
MCSC-Mid-Central States Conference, Region 4 (NCARB)
MLE-Model Engineer
MSPS-Michigan Society of Professional Surveyors
NAAB-National Architectural Accrediting Board

NAAB-National Architectural Accrediting Board
NAA-Newfoundland Association of Architects
NABAR-National Administration Board of Architectural Registration (of China)
NABIE-National Academy of Building Inspection Engineers
NAE-National Academy of Engineering
NAFE-National Academy of Forensic Engineers
NBAER-National Board of Architects Examination and Registration
NBC-National Building Code (Canada)
NCARB-National Council of Architectural Registration Boards (Region 2 Mid-Atlantic)
NCEES-National Council of Examiners for Engineering and Surveying
NCIDQ-National Council for Interior Design Qualifications
NCSEA-National Council of Structural Engineers Association
NCSL-National Conference of State Legislatures
NICE-National Institute of Ceramic Engineers
NICET-National Institute for Certification in Engineering Technologies
NIEE-National Institute for Engineering Ethics
NSAE-National Society of Architectural Engineers
NSPE-National Society of Professional Engineers
NSPS-National Society of Professional Surveyors
NWTAA-Northwest Territories Associations of Architects
OAA-Ontario Association of Architects
OAQ-Ordre des Architectes du Quebec
P&D-Committee on Procedures and Documents
P.E.-Professional Engineer
P.L.S.-Professional Land Surveyor
PLS-now PS Principles and Practice of Surveying Examination
P.S.-Professional Surveyor
PAIA-Royal Australian Institute of Architects
PAKS-Professional Activities and Knowledge Study
PCC-Committee on Professional Conduct
PCS-Professional Credential Services (exam admin for LS, LA, PE)
PDP-Professional Development Program
PEC-Preliminary Engineering Conference
PE-Principles and Practice of Engineering Examination
POAs
POLC-Participating Organizations Liaison Council
PPE-Principles and Practice Engineering
PPG-Public Participation Guidelines
PS-Principles and Practice of Surveying Examination
RAC-Related Accreditation Commission (under ABET) ex: industrial safety
RAIC-Royal Architectural Institute of Canada
RAP-Regulatory Advisory Panel
RCEPP-Registered Continuing Education Providers Program
RIBA-Royal Institute of British Architects
RIS-Regulation Information System
ROF-Report of Findings

S.E.-Structural engineer
SAA-Saskatchewan Association of Architects
SAE-Society of Automotive Engineers
SAME-Society of American Military Engineers
SARA-Society of American Registered Architects
SCC-State Corporation Commission
SC/NCARB Southern Conference, Region 3 (NCARB)
SCT-Secretary of Commerce and Trade
SEAOC-Structural Engineers Association of California
SEI-Structural Engineering Institute
SFPE-Society of Fire Protection Engineers
SI-International System of Units
SI-Surveyor Intern
SIT-Surveyor-in-Training
SIT-Surveyors in Training
SME-Society for Mining, Metallurgy, and Exploration, Inc.
SME-Society of Manufacturing Engineers
SNAME-Society of Naval Architects and Marine Engineers
SPE-Society of Petroleum Engineers
TAC-Technology Accreditation Commission (ABET engineering technology degree
TEP-Transatlantic Economic Partnership
TMS-The Minerals, Metals, and Materials Society
UBC-Uniform Building Code
UIA-Union of International Architects
UPLG-Committee on Uniform Procedures and Legislative Guidelines
USCIEP-United States Council for International Engineering Practice
VAS-Virginia Association of Surveyors
VTCA-Virginia Transportation Construction Alliance
WCARB-Western Conference, Region 6 (NCARB)
WMFO
WWWOSSP

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

**Department of Professional and Occupational Regulation
Statement of Financial Activity**

**Board for APELSCIDLA
954160**

2018-2020 Biennium

April 2019

	April 2019 Activity	Biennium-to-Date Comparison	
		July 2016 - April 2017	July 2018 - April 2019
Cash/Revenue Balance Brought Forward			2,051,104
Revenues	128,015	1,179,413	1,342,185
Cumulative Revenues			3,393,289
Cost Categories:			
Board Expenditures	8,497	83,346	111,631
Board Administration	55,225	416,219	573,223
Administration of Exams	2,767	22,777	32,011
Enforcement	6,379	67,043	65,749
Legal Services	859	4,096	3,436
Information Systems	54,501	286,349	416,184
Facilities and Support Services	18,171	108,498	146,566
Agency Administration	22,513	282,149	256,688
Other / Transfers	0	-21	0
Total Expenses	168,912	1,270,456	1,605,489
Ending Cash/Revenue Balance			1,787,800

Actual Callahan Percentage at End of Previous Biennium	55.1%
Target Callahan Percentage at End of Current Biennium	40.6%

Number of Regulants

Current Month	43,935
Previous Biennium-to-Date	41,784

Department of Professional and Occupational Regulation
 Supporting Statement of Year-to-Date Activity
 Board for APELSCIDLA - 954160
 Fiscal Year 2019

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Fiscal YTD Charges	Planned Annual Charges	Current Balance	Projected Charges at 6/30	Projected Variance Favorable (Unfavorable)	
																	Amount	%
Board Expenditures	9,962	10,473	7,983	9,245	15,143	13,834	12,518	14,474	9,502	8,497	0	0	111,631	183,356	71,725	131,203	52,153	28.4%
Board Administration	82,728	54,366	55,776	53,283	52,841	52,873	55,487	55,360	55,284	55,225	0	0	573,223	801,873	228,650	649,117	152,756	19.0%
Administration of Exams	5,914	3,695	2,830	2,942	2,771	2,776	2,750	2,754	2,812	2,767	0	0	32,011	40,541	8,530	36,774	3,767	9.3%
Enforcement	8,858	6,232	5,982	6,005	6,542	6,243	6,603	6,460	6,445	6,379	0	0	65,749	94,789	29,040	74,442	20,347	21.5%
Legal Services	0	859	0	859	0	0	859	0	0	859	0	0	3,436	3,436	0	4,123	-687	-20.0%
Information Systems	27,000	66,438	42,668	20,759	39,393	42,869	67,113	38,671	16,772	54,501	0	0	416,184	576,061	159,878	490,212	85,849	14.9%
Facilities / Support Svcs	8,331	14,211	15,397	13,921	16,172	14,829	15,884	14,772	14,878	18,171	0	0	146,566	190,219	43,653	173,178	17,041	9.0%
Agency Administration	39,001	23,849	24,514	23,127	26,025	24,171	27,186	22,486	23,818	22,513	0	0	256,688	366,187	109,499	292,337	73,850	20.2%
Other / Transfers	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Charges	181,795	180,122	155,151	130,140	158,886	157,594	188,399	154,977	129,511	168,912	0	0	1,605,489	2,256,463	650,974	1,851,387	405,076	18.0%

NCARB Update

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

NCEES

DRAFT AGENDA

Materials contained in this agenda are proposed topics for discussion and are not to be construed as regulation or official Board position.

DRAFT AGENDA

CIDQ Update

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

CLARB Update

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion and are not to be construed as regulation or official Board position.
DRAFT AGENDA

Commonwealth of Virginia



BOARD for ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS and LANDSCAPE ARCHITECTS

RESOLUTION IN MEMORY OF

Tara Welch Gallagher

WHEREAS, **Tara Welch Gallagher** faithfully and diligently served as a licensed Professional Engineer in the Commonwealth of Virginia from January 5, 2009 to May 31, 2019; and

WHEREAS, **Tara Welch Gallagher** endeavored at all times to render decisions with fairness and good judgment in the best interest of the citizens of the Commonwealth and this profession; and

WHEREAS, the APELSCIDLA Board is grateful for the dedication and service of **Tara Welch Gallagher** to the citizens of the Commonwealth; and

WHEREAS, the APELSCIDLA Board expresses sympathy in the passing of **Tara Welch Gallagher** which occurred on May 31, 2019;

NOW THEREFORE BE IT RESOLVED, this second day of July 2019, that the APELSCIDLA Board expresses utmost regard and respect for **Tara Welch Gallagher** and her professional legacy; and, so that all may know of the Board's expression of condolences, it is ORDERED this resolution be made a part of the official minutes of the Board and that a copy hereof be presented to the family of **Tara Welch Gallagher**.

Cameron Stiles, Chair

Mary Broz-Vaughan, Acting Secretary

Commonwealth of Virginia



BOARD for ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS and LANDSCAPE ARCHITECTS

RESOLUTION IN MEMORY OF

Richard H. Nettleton

WHEREAS, **Richard H. Nettleton** faithfully and diligently served as a licensed Professional Engineer in the Commonwealth of Virginia from February 4, 1982 to May 31, 2019; and

WHEREAS, **Richard H. Nettleton** endeavored at all times to render decisions with fairness and good judgment in the best interest of the citizens of the Commonwealth and this profession; and

WHEREAS, the APELSCIDLA Board is grateful for the dedication and service of **Richard H. Nettleton** to the citizens of the Commonwealth; and

WHEREAS, the APELSCIDLA Board expresses sympathy in the passing of **Richard H. Nettleton** which occurred on May 31, 2019;

NOW THEREFORE BE IT RESOLVED, this second day of July 2019, that the APELSCIDLA Board expresses utmost regard and respect for **Richard H. Nettleton** and his professional legacy; and, so that all may know of the Board's expression of condolences, it is ORDERED this resolution be made a part of the official minutes of the Board and that a copy hereof be presented to the family of **Richard H. Nettleton**.

Cameron Stiles, Chair

Mary Broz-Vaughan, Acting Secretary

Commonwealth of Virginia



BOARD for ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS and LANDSCAPE ARCHITECTS

RESOLUTION IN MEMORY OF

Katherine Anne Marie Lusich Nixon

WHEREAS, **Katherine Anne Marie Lusich Nixon** faithfully and diligently served as a licensed Professional Engineer in the Commonwealth of Virginia from February 25, 2010 to May 31, 2019; and

WHEREAS, **Katherine Anne Marie Lusich Nixon** endeavored at all times to render decisions with fairness and good judgment in the best interest of the citizens of the Commonwealth and this profession; and

WHEREAS, the APELSCIDLA Board is grateful for the dedication and service of **Katherine Anne Marie Lusich Nixon** to the citizens of the Commonwealth; and

WHEREAS, the APELSCIDLA Board expresses sympathy in the passing of **Katherine Anne Marie Lusich Nixon** which occurred on May 31, 2019;

NOW THEREFORE BE IT RESOLVED, this second day of July 2019, that the APELSCIDLA Board expresses utmost regard and respect for **Katherine Anne Marie Lusich Nixon** and her professional legacy; and, so that all may know of the Board's expression of condolences, it is ORDERED this resolution be made a part of the official minutes of the Board and that a copy hereof be presented to the family of **Katherine Anne Marie Lusich Nixon**.

Cameron Stiles, Chair

Mary Broz-Vaughan, Acting Secretary

Commonwealth of Virginia



BOARD for ARCHITECTS, PROFESSIONAL ENGINEERS, LAND SURVEYORS, CERTIFIED INTERIOR DESIGNERS and LANDSCAPE ARCHITECTS

RESOLUTION IN MEMORY OF

Christopher Kelly Rapp

WHEREAS, **Christopher Kelly Rapp** faithfully and diligently served as a licensed Professional Engineer in the Commonwealth of Virginia from July 14, 1999 to May 31, 2019; and

WHEREAS, **Christopher Kelly Rapp** endeavored at all times to render decisions with fairness and good judgment in the best interest of the citizens of the Commonwealth and this profession; and

WHEREAS, the APELSCIDLA Board is grateful for the dedication and service of **Christopher Kelly Rapp** to the citizens of the Commonwealth; and

WHEREAS, the APELSCIDLA Board expresses sympathy in the passing of **Christopher Kelly Rapp** which occurred on May 31, 2019;

NOW THEREFORE BE IT RESOLVED, this second day of July 2019, that the APELSCIDLA Board expresses utmost regard and respect for **Christopher Kelly Rapp** and his professional legacy; and, so that all may know of the Board's expression of condolences, it is ORDERED this resolution be made a part of the official minutes of the Board and that a copy hereof be presented to the family of **Christopher Kelly Rapp**.

Cameron Stiles, Chair

Mary Broz-Vaughan, Acting Secretary

Other Business

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

Agency-wide Board Members Orientation October 3-4, 2019

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

APELS Centennial

June 2020

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

Conflict of Interest / Travel Vouchers

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

A Day in the Life of a Landscape Architect

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA

Adjourn

DRAFT AGENDA
Materials contained in this agenda are proposed topics for discussion
and are not to be construed as regulation or official Board position.
DRAFT AGENDA