



## Exam Qualifications Committee

October 9, 2024 | 9:30 a.m.

### Virtually via Microsoft Teams:

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[\(833\) 322-1218,938143949#](#) United States (Toll-free)

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Phone conference ID: 938 143 949#

### In-person:

Board of Registration for Professional  
Engineers and Land Surveyors

605 11th Ave SE, Suite 201

Olympia, WA 98501

**Committee:** Mike Harney, PE, Chair  
James Wengler, PLS, CFedS  
Maureen Jackson, PE

**Support staff:** Ken Fuller, PE, Director  
Kristina Horton, PLS, Deputy Director  
Vonna Cramer, Licensing Lead  
Shanan Gillespie, Regulatory Board Manager

### Discussion topics

- Decoupling exams
- PE by comity app review
- PE by initial app review
- PE application review for possible language updates
- PLS state exam results
- OS state exam results

### Action items (from August 5, 2024)

- Staff to send applications, weekly, or as needed to each committee member for review
- Mr. Harney to write an article for the journal on the benefits of creating an NCEES record

### Strategic Planning Items

- Review comity regulations for each profession and how they relate to other states
- Investigate decoupling all exams

## PE by Comity application

### General Information

**Applicant:** [REDACTED]

**Synopsis:** Mr. [REDACTED] is requesting licensure via comity, he was a profession for the University of AZ, WAC 196-12-020(2) *Engineering teaching may be considered satisfactory experience up to a maximum of two years at the discretion of the board.*

Based on education and teaching he could be granted 7 yrs towards the 8yr. requirement ( 4yrs for BS, 1yr for MS/PhD & 2 yrs for teaching)

Mr. [REDACTED] has submitted a written statement of experience for review, the majority of the verifiers that he has worked for, had worked for him, or worked with are unattainable for verification.

### Exams

- FE: MA
  - 4/1977
- PE: MI
  - 4/1982

### Licensed

- MI
  - 9/1982
- CO
  - 8/1983

### Education

- University of Massachusetts – Bachelor of Civil Engineering
- University of Missouri Columbia – Masters Civil Engineering
- University of Maryland – PhD Civil Engineering



This is a required supporting document for a professional engineering license application.

**Applicant:** complete sections 1 and 2

**Verifier:** complete section 3

For questions email [engineers@brpels.wa.gov](mailto:engineers@brpels.wa.gov) or call: (360) 664-1575



23201-Supporting

### Applicant instructions

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**Olympia WA 98507-9025**

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- **Manufacturing employees:** You are not required to gain experience under a PE, but a PE must be employed by the firm. Your direct supervisor must verify your experience.

Name and license number of PE at time of your employment \_\_\_\_\_

### 1 Work experience information – applicant complete this section

Applicant name [Redacted]		
Former name (if applicable)	Branch applying for Civil	
Address, City, State, ZIP code [Redacted]		
Employed by Northern Arizona University College of Engineering Informatics and Applied Science		
Dates of employment (From, To) 7/1998-7/2018	Average hours per week 40+	Supervisor name John Tingerthal

### 2 Work experience details – applicant complete this section

Give details about the work you did for each section. One sentence descriptions are not acceptable. The work should:

- be progressive in difficulty and magnitude
- show sufficient breadth and scope
- reflect your ability to design and apply engineering principles where your judgments and decisions are trusted and relied upon

Describe your experience

A. Formulating conclusions and recommendations.

As a college professor, teacher and researcher the work at university was the cumulation of my career in engineering, public service and construction. At the university I taught basic civil engineering topics at the undergraduate level and project management, leadership and law at the graduate level as well as engaging in research and curriculum development. For a significant number of years I worked in the university president's office in the development of complex projects as the president's representative for the Advanced Research Development lab (Biotech Level 4 labs), the College of Engineering, The Conference Center and the remodelling of the domed stadium and other sports related facilities. This work required me to compile information from diverse sources, draw conclusions and make professional recommendations.

**Work experience descriptions** –continued

Describe your experience

**B. Identifying design and/or project objectives.**

My pre-professional and professional training was in a wide variety of municipal type engineering and construction projects. This basic training allowed me to set project objectives based on sound engineering principals and observed behaviour in practice. I learned always to refer to design documents and referenced codes and scientific principals rather than relying on assumed objectives. Because of my work in research and project management curriculum I am well grounded in setting achievable objectives.

**C. Identifying possible alternative methods and concepts.**

As a trained scientist, my PhD work is in communication systems methodology I understand the principals used to avoid confirmation bias. I am a trained practioner of Value Methodology and always look for root cause analysis and sytems improvements. In Value Mehtodoloy we gather information, we speculate, evalaute, develop and present our findings, In development of the Advanced Research and Development labs at Northern Arizona University we achieved LEED Platinum level by looking at many alternatives.

**D. Defining performance specifications and functional requirements.**

I spent a good portion of my career working on university R&D projects in biotechnology. These projects are perfomance based, requiring the highest levels of specification and performance testing. It is not possible to obtain the reuquired outcome without understanding the requirements of the end users and meeting interim tests and updates continually through the design, development, construction and start up of R&D facilities. After I retired from University I continue to work in agriculture R&D.

**E. Solving engineering problems.**

I am all engineer in my thinking The basic starting point is to stop, step back and define the problem. Gather all the available information and study, ask questions. Look at all the possible outcomes, who and what it effects, consider negative outcomes, avoid coming to a conclusion based on your preference for the solution (confirmation bias). I could list a dozen projects in the public and private sector where the clients asked me to solve complex problems, but it is rarely engineering, mostly self inflicted human relations.

**F. Interacting with professionals from other areas of practice.**

Over my career I have worked with dozens of architects, civil, structural, geotechnical,, electrical, mechanical, and military engineers, land surveyors, scientists, health care and medical professionals and government officials at all levels. In twenty years at a research university especially when given the opportunity to work in senior level development, you hone the skill needed to demonstrate that your professional judgments can be trusted and relied upon.

**G. Effectively communicating recommendations and conclusions.**

I have presented research work at conferences on may occasssons. I have made many sales pitches for professional services and grant requests. I have been called upon to answer in front of government hearings boards and panels and testify in state and federal trials. I have taught hundreds, if not thousands of lectures. I am a competent presenter and communicator.

**H. Demonstrating an understanding and concern for energy/environmental considerations and sustainability of resources.**

I was one of the founding members of the Arizona US Green Building Council Chapter and an early adopter of the LEED certification process. I have worked in the development of three LEED gold buildings and one LEED Platimum building. My home in Arizona was powered by wind I have been actively involved in my local community in issues such as flood and fire control and by support of the local wildlife refuge.

Applicant name [REDACTED]

Applicant mailing address [REDACTED]

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**3 Work experience verification** – supervisor/verifier complete this section. All sections must be completed.

PRINT or TYPE Verifier's name John Tingerthal		Title Professor	
(Area code) Phone number [REDACTED]		Email [REDACTED]	
Registration/license number Arizona	46387	Issue date 5/22/2007	Expiration date 6/30/2025

Answer the following  
Were you registered as a professional engineer at the time you supervised the applicant? . . . . .  Yes  No

Describe your level of supervision over the applicant's work:  
From 2012 to 2016, we were peers in the department. I supervised Professor [REDACTED] as while I was chair of the program from 2016 until his retirement in 2018.

If you are not the applicant's supervisor, please explain your working relationship to the applicant and how you are able to provide this verification:  
I am able to provide this verification because as a both peer and supervisor, I worked closely with Dr. [REDACTED] for over six years on a variety of projects. As a fellow faculty member, I observed his leadership and problem solving skills.

Check the work experience categories in which you believe the applicant is competent and prepared to be examined for admission to the profession:  
 A. Formulating conclusions and recommendations  
 B. Identifying design and/or project objectives  
 C. Identifying possible alternative methods and concepts  
 D. Defining performance specifications and functional requirements  
 E. Solving engineering problems  
 F. Interacting with professionals from other areas of practice  
 G. Effectively communicating recommendations and conclusions  
 H. Demonstrating an understanding and concern for energy/environmental considerations and sustainability of resources

How does the applicant's description of experience, including the scope and complexity of the work, match your evaluation?  
I agree with the applicant's description of his experience. I have observed his work and can attest that he has the ability to understand, manage and execute complex civil engineering work. He has a keen ability communicate among design, construction and governmental professionals in an effective and professional manner. I continue to work with Dr. [REDACTED] in academic pursuits.

Applicant name [REDACTED]

**Work experience verification** –continued

Answer the following

How long have you been the applicant's supervisor? . . . . . 3+ \_\_\_\_\_ years/months

Give a brief description of a typical project for which the applicant made engineering judgments and decisions and of the character of the duties required by the project.

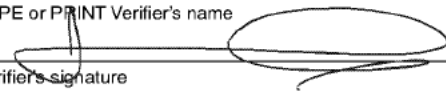
A typical academic project would be the development of engineering curricula. Dr. [REDACTED] developed the curriculum for our Introduction to Structures, Structural Steel Building Design & Soil Mechanics Courses. These projects required expertise in engineering knowledge domains, an understanding of pedagogical processes and university policy.

The applicant was also involved with the construction of buildings on campus. Although I did not supervise this work, I can attest that he was the University President's representative to the executive committee on the design of the College of Engineering Building and the Applied Research and Development Laboratory. His role required considerable engineering judgment and decision making.

*I declare under penalty of perjury under the law of Washington that the foregoing is true and correct.*

John Tingerthal

TYPE or PRINT Verifier's name

**X** 

Verifier's signature

8/30/2024 -- Flagstaff AZ

Date and place

**Please affix your stamp or seal in the space below.** If no seal or stamp is available, attach a copy of your current license. **If the stamp or license cannot be provided, provide a detailed explanation.**



**Statement of experience:** [REDACTED]

**During my post secondary education I worked as an engineering technician in concrete and soils, in field and lab work as well as a draftsman and design draftsman, when I graduated college in 1977 and completed my MSCE in 1978 I had a solid grasp of lateral civil engineering design and installation fundamentals.**

**In 1977 I passed the FE exam in Massachusetts (NCEES verified) Between 1978 and 1988 I worked in industrial engineering and construction in Michigan and throughout the midwest, in heavy manufacturing, power plants and waste water plants, including highway and bridge projects for multiple engineering and construction companies (several no longer operating), I qualified for and passed my PE license in Michigan by exam in April 1982 (NCEES verified) and my initial license was issued in September of 1982.**

Between 1978 and 1988:

On many occasions I was responsible for personally checking the accuracy of both horizontal and vertical building control and alignment. This would have been the work of licensed and unlicensed surveyors. This work would also have included the work of analyzing the effects of demolition, excavation and construction on the stability of adjacent structures both public and private.

in both engineering and design-build and general contracting I worked projects for large buildings and heavy manufacturing equipment including, boilers, presses, forges, pumps and penstocks as well as installing temporary foundations for heavy lifting and other temporary structures which required analysis of in-situ soil bearing capacity, slope stability with lateral earth pressures, dynamic stresses and sometimes contaminated and mixed fill situations. These conditions were often made worse by extreme weather conditions, (hydrological changes) tight time frames, small sites and restricted access.

Part of my work of preparing temporary roads, structures and crane lifting pads was the analysis of soils from boring logs and this was a regular part of my work in design-build and general heavy construction. Choosing the correct materials to use in preparing and maintaining AND constantly inspecting temporary roads and structures was a **significant portion** of my work during the years 1978-1988. Materials such as gravel, crushed rock, concrete and steel were ordinary parts of the work, selecting the right products based on subsurface conditions and expected dynamic and static loads was often my responsibility or I reviewed the work of others before the start of construction.

Concrete is one principal component of heavy construction and understanding its components and their interaction during placement is fundamental to a quality final product, a safe work environment and a long lasting and safe structure. On at least a weekly basis (one day) during that decade I had to review and adjust mix designs, additives, placement methods and placement rates, curing times, shoring and re-

shoring and stripping based on schedule demands, weather conditions and temperatures. These required both engineering and practical economic judgments of the highest order,

I was often responsible for designing formwork, falsework and scaffolding, re-shoring or reviewing the designs of others for structural stability and safety concerns.

I am proud that during my career no one was ever seriously injured on any project I personally supervised or acted as an engineer on.

On multiple occasions I was the individual who performed the design calculations for shoring of excavations and designed the well-point dewatering systems under the supervision of registered engineers or I was the principal engineer responsible for the work.

In design-build I often wrote specifications for temporary structures and general project specifications or reviewed the specifications written by others before publication. I often wrote general and special conditions for bid documents.

On more than one occasion I was required to complete the calculation on a structural analysis for temporarily relieving the existing building design load from columns so that the building foundations could be underpinned to increase the load capacity of the building to add additional floors to a building.

In place construction does not always conform to the architects ideas and loads sometimes just do not look right to a good engineer. On more than a few occasions I have been called on to calculate HVAC and supplementary building loads to revise system layouts to meet dead and live load in-situ conditions.

Between 1978 and 1987 my work was more engineering than construction management, during that time I was never a superintendent or a project manager. In 1982 when I submitted my initial paperwork to the State of Michigan to sit for my PE exam I believe my submission would have been for three years of experience between 1978 and 1982 based on work similar to outlined above and I continued to work in a similar fashion between 1982 and 1987, with a change in work status in 1987.

In 1987 I managed a hard bid construction project at McConnell Airforce Base in Wichita, KS for a nuclear missile maintenance facility. This was my first project management role.

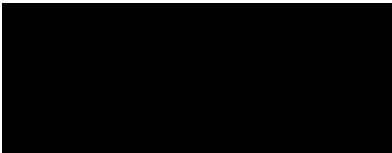
In 1988 I took on the roll of project director for CRSS Engineers for a design-build microelectronics plant in Gresham Oregon, and in 1989 I was project director at the US Embassy in Bogota, Columbia. These were more administrative and project management roles rather than engineering, although I had some role in writing project specifications in Gresham and making engineering decisions when we had product failures in the wall system in Bogota caused by improper specification of high plasticity



concrete used at the high altitude. This took a few months of collaborative effort across continents with engineers that I lead to solve the engineering problem I was also responsible for some technical specification translation from US to metric and English to Spanish.

In 1990, I accepted a role as a VP and divisional manager with an International Engineering and Construction firm and pretty much worked in administration until 1998 when I became a college professor, although during that time period I did occasionally write technical specifications, engage in value engineering studies, and consult on engineering technical problems with select clients.

Respectfully submitted, to the best of my knowledge is true and honest reflection of my engineering experience.

A large black rectangular redaction box covering the signature area.A smaller black rectangular redaction box covering the name.

**PE by initial**

Applicant is requesting PE by initial – has taken and passed both the FE & PE exam, but is not currently licensed.

FE – OR

PE – JPEC (NCEES Japan)

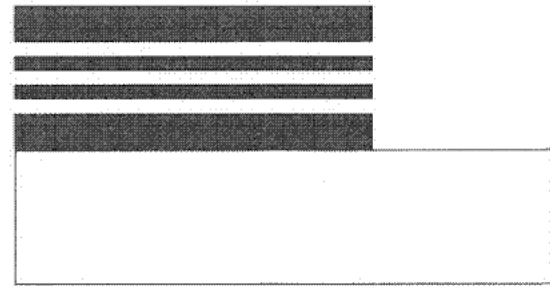
Education:

Foreign degree evaluation completed by NCEES – equivalent = 4yrs

# BRPELS

BOARD OF REGISTRATION  
FOR PROFESSIONAL ENGINEERS  
& LAND SURVEYORS

## Professional Engineering Experience and Verification



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23201-Supporting

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Name and license number of PE at time of your employment \_\_\_\_\_

### 1 Work experience information – applicant complete this section

Applicant name [Redacted]		
Former name (if applicable)		Branch applying for Civil
Address, City, State, ZIP code [Redacted]		
Employed by Kajima Corporation (for Overseas Operation Division)		
Dates of employment (From, To) From 6/2010 To present	Average hours per week 40 hours	Supervisor name Hiroyuki Tanaka

### 2 Work experience details – applicant complete this section

Give details about the work you did for each section. One sentence descriptions are not acceptable. The work should:

- be progressive in difficulty and magnitude
- show sufficient breadth and scope
- reflect your ability to design and apply engineering principles where your judgments and decisions are trusted and relied upon

Describe your experience

A. Formulating conclusions and recommendations.

I was assigned as Construction Manager from July 2010 to August 2012 for the high-rise reinforced concrete luxury apartment development project in Indonesia. In order to complete the project within the contract period satisfying all requirements, I formulated the overall construction method and construction sequence designing preliminary site layout with lifting plan including the safety and quality management plan and procedures. And I supervised the construction including control safety, quality and progress, and also problem solving during construction period.

Applicant name [REDACTED]

**2 Work experience descriptions – continued**

Describe your experience

**B. Identifying design and/or project objectives.**

The project was development of high-rise apartment including 30 and 24FL residences(49,387m<sup>2</sup>), cafeteria(888m<sup>2</sup>), and car park building(6,515m<sup>2</sup>). It was mainly reinforced concrete structure, and masonry brick wall for exterior wall were specified. I reviewed and adopted climbing scaffoldings for the apartments, which enabled exterior finishing of apartment and exterior civil works on the ground concurrently, contributing to efficient progress of the project.

**C. Identifying possible alternative methods and concepts.**

I needed to achieve topping off of the superstructure of the high-rise apartment within one year, which would have been impossible using conventional reinforced concrete as per the original design. Therefore, I recommended using a half PC(Pre-Cast) slab, which reduced the amount of on-site work for shoring, installation rebars, and formwork, and shortened the construction period and achieved the target of topping off.

**D. Defining performance specifications and functional requirements.**

For designing the half PC slab panel, I specified 70mm for concrete panel thickness and 2,450mm for panel width as standard taking into consideration preventing cracks and damages during transportation, economical tower crane capacity (hoisting weight and boom length), transportation vehicle size and traffic regulation. And I designed the panel layout reviewing hoisting jibs and accessories.

**E. Solving engineering problems.**

The project was located in downtown Jakarta, the concrete slump loss due to high temperature in daytime and traffic jam was considered as issues of a significant impact on concrete casting of the high-rise building. I recommended the best choice of concrete design mix verifying workability by carrying out trial mix with several types of concrete mixes with admixtures, and large-volume concrete casting was carried out at night, which solved the problem.

**F. Interacting with professionals from other areas of practice.**

As the construction manager, I interacted ISO auditors explaining the compliance status of the construction quality and safety management system during external audits by certification body, submitted documents, and answered questions. And also, I responded to the safety authorities when their visiting and inspection.

**G. Effectively communicating recommendations and conclusions.**

I created the detailed construction schedule using Microsoft Project, one of PMIS (Project Management Information System) software tools and progress diagrams, and visually shared the progress of construction, quality inspection, construction drawings, and procurement. And so obstacles and problems related to construction progress were effectively identified and I supervised them resolved in timely manner.

**H. Demonstrating an understanding and concern for energy/environmental considerations and sustainability of resources.**

The other reason I recommended half-PC slab instead of conventional RC slab of the original design for the superstructure of the high-rise apartments was that by manufacturing the half-PC in a factory using steel molds, I was able to reduce the use of formwork plywood at site. Thus it contributed to reduce consumption of wooden resources.

Applicant name [REDACTED]

Applicant mailing address [REDACTED]

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**3 Work experience verification** – supervisor/verifier complete this section. All sections must be completed.

PRINT or TYPE Verifier's name Hiroyuki Tanaka		Title General Manager	
(Area code) Phone number [REDACTED]		Email [REDACTED]	
State where you are licensed Oregon	Registration/license number 57979PE	Issue date 07/21/1998 (registered)	Expiration date 06/30/2026

Answer the following  
Were you registered as a professional engineer at the time you supervised the applicant? .....  Yes  No

Describe your level of supervision over the applicant's work:

The applicant was assigned as an international personnel in 2010. I have been directly supervising the applicant who was assigned to the local subsidiary since I was the technical manager at the Southeast Asia regional headquarters in Singapore.

If you are not the applicant's supervisor, please explain your working relationship to the applicant and how you are able to provide this verification:

- Check the work experience categories in which you believe the applicant is competent and prepared to be examined for admission to the profession:
- A. Formulating conclusions and recommendations
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  - D. Defining performance specifications and functional requirements
  - E. Solving engineering problems
  - F. Interacting with professionals from other areas of practice
  - G. Effectively communicating recommendations and conclusions
  - H. Demonstrating an understanding and concern for energy/environmental considerations and sustainability of resources

How does the applicant's description of experience, including the scope and complexity of the work, match your evaluation?

During that period, the applicant acted his role as the construction manager of a large-scale development project, selecting and designing appropriate construction methods to achieve the project requirements, and supervising the site construction. In addition, the applicant assisted the project manager appropriately and acquired the skills necessary to become the next project manager. The applicant's description of his experience is consistent with my evaluation.

Applicant name [REDACTED]

**3 Work experience verification** – continued

Answer the following

How long have you been the applicant's supervisor? ..... 14 years/ 2 months years/months

Give a brief description of a typical project for which the applicant made engineering judgments and decisions and of the character of the duties required by the project.

The applicant was appointed to the Overseas Business Headquarters in 2010, and has expanded his experience and scope of responsibility from construction manager to general manager through project manager, based on approximately 12 years of engineering experience in Japan. The applicant has extensive experience in factories and warehouses construction, and implemented measures against expansive soil, which is important for the building operation, quality control of structure work including concrete and steel structure and finishing work. And the applicant has created construction plans that did not affect the client's operations within the client's existing factory.


*I declare under penalty of perjury under the law of Washington that the foregoing is true and correct.*

Hiroyuki Tanaka

TYPE or PRINT Verifier's name

09/23/2024 Singapore

Date and place

**X** 

Verifier's signature

**Please affix your stamp or seal in the space below. If no seal or stamp is available, attach a copy of your current license. If the stamp or license cannot be provided, provide a detailed explanation.**



# BRPELS

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23281-Supporting

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Employed by Kajima Corporation (for Overseas Operation Division)		
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- show sufficient breadth and scope
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Describe your experience

A. Formulating conclusions and recommendations.

I was assigned as Project Manager at the construction site in September 2012 - October 2013. And I was assigned as Project Manager in the construction department at head office, where I designed construction programs, schedules and preliminary layout with value engineering proposals, for tender and supervised on-going projects with providing technical recommendation and guidance in November 2013 - March 2018. One of the conclusions and recommendations I made was that I conducted the site survey and recognized effects of expansive soil that were different from the original soil investigation result, so I conducted additional soil investigation and recommended to change the slab on grade to the structure slab on pile with expansion absorption board under the slab.



Applicant name [REDACTED]

## 2 Work experience descriptions – continued

Describe your experience

### B. Identifying design and/or project objectives.

I was assigned as Project Manager of an electric power plant equipment factory (September 2012 -October 2013) and a food factory (March -October 2013). I worked on tender proposal and technical supervision for the following projects: a logistic warehouse, steel plate coil plant (2014), a precision spring factory (2015), high-rise apartment, an aluminum recycling factory (2016), two stories warehouse (2017), a beverage factory, fragrance factory (2018), and so on.

### C. Identifying possible alternative methods and concepts.

For the high-rise apartment building, the perimeter reinforced concrete column were to be casted as a single component with the facade decoration. I was concerned the vertical alignment of the concrete column could not meet the allowable alignment of the decoration, I recommended that the decorative part to be separated to PC(Pre-Cast) component and then installed later to ensure acceptable alignment.

### D. Defining performance specifications and functional requirements.

Highly expansive soil was confirmed in a soil investigation at the warehouse project supervised in 2017. I studied the distribution of the degree of expansion in detail by a on-site expansion test. As the test result and feedback from past knowledge, I recommended 50mm expansion absorption boards for the area swelling less than or equal 3.6% and 270mm absorption pallets for the area more than that.

### E. Solving engineering problems.

In the original design, the exterior brick masonry walls with plaster and paint finish were integrated with the concrete structure, but I was concerned about future water leakage from the boundaries between the concrete columns and beams and the brick walls due to the building's behavior. I recommended to separate the brick walls and the structure with only dowel bar and install elastic waterproofing coating and sealant joints.

### F. Interacting with professionals from other areas of practice.

I reviewed the validity of project cash flow together with the finance department based on the tender conditions and my proposal of project schedule, and considered the need for contractor's proposals for payment terms including advance payments and shortened payment periods, ensuring to accurate and competitive tender proposals.

### G. Effectively communicating recommendations and conclusions.

For the steel plate coil plant in 2014, I visited the similar plant constructed by our group company in Thailand, getting feedback on key points regarding regarding construction planning, program and scheduling, and quality control. And, I took them into account efficiently in my proposal of the steel plate coil plant in Indonesia during the tender proposal. It resulted to be awarded because the technical proposal was highly evaluated.

### H. Demonstrating an understanding and concern for energy/environmental considerations and sustainability of resources.

I implemented using fly ash concrete to reduce cement usage, reducing the use of formwork plywoods by changing to PC panels for the exterior walls, planning and implementation of formwork reuse. And I reused remaining concrete for the production of secondary exterior concrete components such as concrete curb to reduce the concrete wastage.



Applicant name [REDACTED]

Applicant mailing address [REDACTED]

**Verifier instructions**

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    - Put the form in an envelope
    - Seal the envelope and sign across the flap
    - Return the sealed envelope to the applicant
- Or you can scan and email it directly to: [engineers@brpels.wa.gov](mailto:engineers@brpels.wa.gov)

**3 Work experience verification** – supervisor/verifier complete this section. All sections must be completed.

PRINT or TYPE Verifier's name Hiroyuki Tanaka		Title General Manager	
(Area code) Phone number [REDACTED]		Email [REDACTED]	
State where you are licensed Oregon	Registration/license number 57979PE	Issue date 07/21/1998 (registered)	Expiration date 06/30/2026

Answer the following  
Were you registered as a professional engineer at the time you supervised the applicant? .....  Yes  No

Describe your level of supervision over the applicant's work:

The applicant was assigned as an international personnel in 2010. I have been directly supervising the applicant who was assigned to the local subsidiary since I was the technical manager at the Southeast Asia regional headquarters in Singapore.

If you are not the applicant's supervisor, please explain your working relationship to the applicant and how you are able to provide this verification:

- Check the work experience categories in which you believe the applicant is competent and prepared to be examined for admission to the profession:
- A. Formulating conclusions and recommendations
  - B. Identifying design and/or project objectives
  - C. Identifying possible alternative methods and concepts
  - D. Defining performance specifications and functional requirements
  - E. Solving engineering problems
  - F. Interacting with professionals from other areas of practice
  - G. Effectively communicating recommendations and conclusions
  - H. Demonstrating an understanding and concern for energy/environmental considerations and sustainability of resources

How does the applicant's description of experience, including the scope and complexity of the work, match your evaluation?

The applicant was assigned as a project manager in charge of individual projects in 2012, and after completion of those projects, moved to the head office construction department, where he used his knowledge and experience to make engineering proposals for the tender proposal to contribute business objectives. He also supervised construction engineering aspects for on-going projects. The applicant's description of his experience matches my evaluation.

Applicant name [REDACTED]

**3 Work experience verification**—continued

Answer the following  
How long have you been the applicant's supervisor? ..... 14 years / 2 months years/months

Give a brief description of a typical project for which the applicant made engineering judgments and decisions and of the character of the duties required by the project.

The applicant has been assigned in many construction works such as factories and warehouses including their external structures. The applicant has designed the construction plan, preliminary site layout, construction procedures and schedules so that the project can be carried out smoothly and effectively. The applicant has also carried out engineering supervision such as the design and review of shoring, retaining walls, measures against expansive soil, improvement of concrete quality and other quality control, ensuring that the project requirements are satisfied.

*I declare under penalty of perjury under the law of Washington that the foregoing is true and correct.*

Hiroyuki Tanaka

TYPE or PRINT Verifier's name

09/23/2014 Singapore  
Date and place

**X** [Signature]  
Verifier's signature

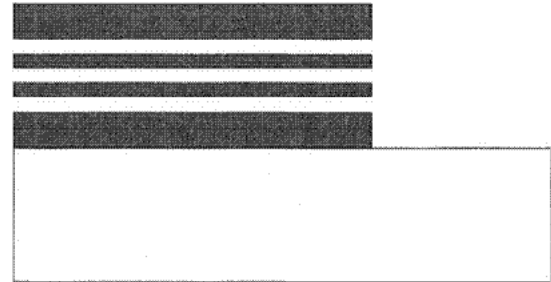
**Please affix your stamp or seal in the space below. If no seal or stamp is available, attach a copy of your current license. If the stamp or license cannot be provided, provide a detailed explanation.**



# BRPELS

BOARD OF REGISTRATION  
FOR PROFESSIONAL ENGINEERS  
& LAND SURVEYORS

## Professional Engineering Experience and Verification



This is a required supporting document for a professional engineering license application.

**Applicant:** complete sections 1 and 2.

**Verifier:** complete section 3

For questions email [engineers@brpels.wa.gov](mailto:engineers@brpels.wa.gov) or call: (360) 664-1575



23201-Supporting

### Applicant instructions

- Complete sections 1 and 2
- Send a copy of this form (with section 1 and 2 completed) to each of your verifiers. Your verifiers must complete section 3 and send it back to you in a sealed envelope (don't open). Or they can email it to: [engineers@brpels.wa.gov](mailto:engineers@brpels.wa.gov)
- When you have all your forms back from your verifiers, mail the sealed envelopes to:  
**Board of Registration for Professional Engineers and Land Surveyors**  
PO Box 9025  
Olympia WA 98507-9025

**Work experience** must be gained under the direct supervision of a professional engineer (PE), except for federal government or manufacturing employees.

- **Federal government employees:** You are not required to gain experience under a PE. Your direct supervisor must verify your experience.
- **Manufacturing employees:** You are not required to gain experience under a PE, but a PE must be employed by the firm. Your direct supervisor must verify your experience.

Name and license number of PE at time of your employment \_\_\_\_\_

### 1 Work experience information – applicant complete this section

Applicant name [REDACTED]		
Former name (if applicable)		Branch applying for Civil
Address, City, State, ZIP code [REDACTED]		
Employed by Kajima Corporation (for Overseas Operation Division)		
Dates of employment (From, To) From 6/2010 To present	Average hours per week 40 hours	Supervisor name Hiroyuki Tanaka

### 2 Work experience details – applicant complete this section

Give details about the work you did for each section. One sentence descriptions are not acceptable. The work should:

- be progressive in difficulty and magnitude
- show sufficient breadth and scope
- reflect your ability to design and apply engineering principles where your judgments and decisions are trusted and relied upon

Describe your experience

A. Formulating conclusions and recommendations.

I was assigned as Deputy General Manager of the construction department in the subsidiary in Indonesia in April 2018 - November 2022. As the head of Architecture, Structure and Civil Construction, I performed designing construction methods, programs and schedules including preliminary site layout and quality and safety management from tender stage, and supervised all projects to fulfill the project requirement reviewing detailed construction method during construction. And I improved the company's standard procedures and requirement on quality, safety and environment control.

Applicant name [REDACTED]

**2 Work experience descriptions**—continued

Describe your experience

**B. Identifying design and/or project objectives.**

Some of the projects I supervised include a precision parts factory (May 2022 - December 2022), a silicon wafer shipping box factory (August 2021 - April 2022), a data center building (February 2020 - August 2021), a construction heavy machinery factory (February 2020 - October 2020), an extract mince food factory (May 2019 - January 2020), an office building (B2FL-8FL, September 2017 - April 2019), the other projects including tender proposal and so on.

**C. Identifying possible alternative methods and concepts.**

For the mince factory expansion in the existing factory close to the site boundary, I considered the site was very narrow and there was not enough space to bring in the jack-in pile machine specified in the design. I recommended the small diameter bored pile using small drilling machine, which would reduce vibrations during construction and would not affect the client's production activities.

**D. Defining performance specifications and functional requirements.**

For PC pile with driving for the heavy machinery factory, the embedded length was specified as 10m and 15m. I reviewed the soil investigation report showed some layers with N value of 40-50 were distributed partially at depth of 5-10m. I considered that the specified length could not be secured, I recommended driving pile with pre-boring. Based on the test piling, I set pre-boring 13m for 15m piles and 8m for 10m piles getting designer's approval.

**E. Solving engineering problems.**

For the problem of hair cracks appearing on the concrete surface, I reviewed design mix and investigate queries, and found the quality of fine aggregate from Cimalaka, one of Indonesia's aggregate producing areas, varies and may contain mud. I standardized that fine aggregate from the area cannot be used for the superstructure, and its use in substructure will also be subject to mud content test and comparative test by taking standard samples.

**F. Interacting with professionals from other areas of practice.**

For the precision machinery factory construction, the client wanted to rent vacant space in the site of their group company factory to build the their factory. I worked with the client to discuss whether it was legal under the regulations with the industrial estate and the competent authorities clarifying necessary application and documents. I also conducted a joint on-site survey to confirm the exact location to be rented and shared it with stakeholders.

**G. Effectively communicating recommendations and conclusions.**

It is one of the most important to consider information about Mechanical and Electrical work for designing construction plan and details. I have communicated with electrical and mechanical specialists to obtain information about their priority area, cabling and ducting route and concerns to take into account in construction plan, structure and finishing details, and ensured smooth construction.

**H. Demonstrating an understanding and concern for energy/environmental considerations and sustainability of resources.**

For the projects above mentioned in Section B, in order to reduce carbon dioxide emissions during construction, I recommended fly ash concrete, used fly ash which is a by-product of power plants, to reduce the amount of cement used in the construction. Thereby contributing to reduce carbon dioxide in construction process by a reduction in carbon dioxide emissions during the cement production process.

Applicant name [REDACTED]

Applicant mailing address [REDACTED]

**Verifier instructions**

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**3 Work experience verification** – supervisor/verifier complete this section. All sections must be completed.

PRINT or TYPE Verifier's name Hiroyuki Tanaka		Title General Manager	
(Area code) Phone number [REDACTED]		Email [REDACTED]	
State where you are licensed Oregon	Registration/license number 57979PE	Issue date 07/21/1998 (registered)	Expiration date 06/30/2026
Answer the following Were you registered as a professional engineer at the time you supervised the applicant? ..... <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Describe your level of supervision over the applicant's work:  The applicant was assigned as an international personnel in 2010. I have been directly supervising the applicant who was assigned to the local subsidiary since I was the technical manager at the Southeast Asia regional headquarters in Singapore.  If you are not the applicant's supervisor, please explain your working relationship to the applicant and how you are able to provide this verification:			
Check the work experience categories in which you believe the applicant is competent and prepared to be examined for admission to the profession: <input checked="" type="checkbox"/> A. Formulating conclusions and recommendations <input checked="" type="checkbox"/> B. Identifying design and/or project objectives <input checked="" type="checkbox"/> C. Identifying possible alternative methods and concepts <input checked="" type="checkbox"/> D. Defining performance specifications and functional requirements <input checked="" type="checkbox"/> E. Solving engineering problems <input checked="" type="checkbox"/> F. Interacting with professionals from other areas of practice <input checked="" type="checkbox"/> G. Effectively communicating recommendations and conclusions <input checked="" type="checkbox"/> H. Demonstrating an understanding and concern for energy/environmental considerations and sustainability of resources			
How does the applicant's description of experience, including the scope and complexity of the work, match your evaluation?  The applicant was assigned as Deputy General Manager, the head of architecture, structure, and civil construction, and was responsible for supervising not only his assigned project but also all project of the subsidiary in Indonesia. The applicant utilized his knowledge and experience as an engineer and built good relationships of trust with stakeholders. The applicant's description of his experience matches my evaluation.			

Applicant name [REDACTED]

**3 Work experience verification** – continued

Answer the following  
How long have you been the applicant's supervisor? ..... 14 years/ 2 months years/months


Give a brief description of a typical project for which the applicant made engineering judgments and decisions and of the character of the duties required by the project.

The applicant designed, reviewed and recommended to construction plans, methods, program and schedules, and quality and safety controls for the projects from the tender stage until the completion as the head of architecture, structure and civil construction.  
Also, the applicant is a certified first class architect/building engineer and first class construction management engineer, in addition, he is a certified concrete engineer and concrete diagnosis engineer in Japan, and has extensive knowledge of concrete. For concrete work in Southeast Asia, where the concrete quality is unstable, he has improved the quality control of concrete work standardizing the selection of aggregates in design mix and concrete unit weight at the time of receiving concrete .

*I declare under penalty of perjury under the law of Washington that the foregoing is true and correct.*

Hiroyuki Tanaka

TYPE or PRINT Verifier's name

**X** 

Verifier's signature

09/23/2024 Singapore

Date and place

**Please affix your stamp or seal in the space below.** If no seal or stamp is available, attach a copy of your current license. **If the stamp or license cannot be provided, provide a detailed explanation.**





Note: Please when printing select "Print actual size".

## STATE OF OREGON

BOARD OF EXAMINERS FOR ENGINEERING &  
LAND SURVEYING

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### Hiroyuki Tanaka

This certifies that the person named  
above is registered as an authorized:

**Professional Engineer**

Especially qualified discipline:

**Civil Engineering**

License Number  
**57979PE**

Expiration Date  
**06/30/2026**

THE OREGON STATE BOARD OF EXAMINERS FOR  
ENGINEERING & LAND SURVEYING

Hiroyuki Tanaka

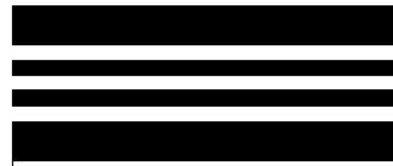
Registration	License	Expires
PE -Civil Engineering	57979PE	06/30/2026





BOARD OF REGISTRATION  
FOR PROFESSIONAL ENGINEERS  
& LAND SURVEYORS

# Professional Engineer Registration Application



Apply for a Professional Engineer license in Washington.  
Fees are non-refundable.

Online: <https://professions.dol.wa.gov>

Or by mail with a check or money order payable to BRPELS:

**Professional Engineers and Land Surveyors**  
**PO Box 3777**  
**Seattle WA 98124-3777**



23201-APPLICATIONS

For questions or help email [engineers@brpels.wa.gov](mailto:engineers@brpels.wa.gov) or call: (360) 664-1575

### Application type (check one)

- by General Application (exam or initial license)—\$65
- by Comity (if you have a current license in another state)—\$110

Licenses are available for self-printing with an online account.  
If you want us to print and mail your license add a \$5 print fee for each copy to your payment.

- \$0 self-print license online.
- \$5 each. DOL print and mail license. Quantity \_\_\_\_\_ Total \$ \_\_\_\_\_

### Applicant

TYPE or PRINT Name as you would like it to appear on your license			
Full legal name (First, Middle, Last)			
Social Security number* (or ITIN, Green Card, Canadian SIN)		Date of birth	
Military? (check if applicable) Current or former: <input type="checkbox"/> Military member <input type="checkbox"/> Military spouse or domestic partner			
Mailing address			
City		State	ZIP code
(Area code) Contact phone number	Email		
Branch of engineering			

\*You are not required to have a Social Security Number (SSN) or Individual Taxpayer Identification Number (ITIN or TIN) to apply for or be issued a license. If you do not have an SSN or ITIN, leave that section blank. If you do have a SSN, ITIN or TIN, you are required by federal and state law to provide it on the application (42 U.S.C. 666(a)(13) and RCW 74.20A.320).

### Legal background

Answer the following  
Answer the questions below. If you answer "Yes," attach a detailed explanation.

1. Within the last 5 years, in this state or any other jurisdiction, have you had any action (fine, suspension, revocation, censure, surrender, etc.) taken against any professional or occupational license, certification, or permit held by you? .....  Yes  No
2. Within the last 5 years, in this state or any other jurisdiction, have you defaulted, or been convicted of, or entered a plea of no contest to a gross misdemeanor or felony crime? (Don't include traffic convictions) .....  Yes  No



Applicant name \_\_\_\_\_

**Certification**

Answer the following

- 1. Are you having a NCEES experience record sent? .....  Yes  No  
If yes, please provide NCEES record number: \_\_\_\_\_
- 2. Do you authorize any business associates (past and present) and any governmental agencies (local, state, or federal) to release to BRPELS any information, files, or records which may be required for a background investigation? .....  Yes  No
- 3. Do you understand that if you provide any false information in this application we may deny, suspend, or revoke your license to practice in Washington? .....  Yes  No

**Education**

Name and location of colleges, universities, technical schools attended	Dates of attendance From To	Curriculum	Degree/Date

**Previous and current registration**

Answer the following

- Written FE exam in state of \_\_\_\_\_ NCEES exam?  Yes  No
- Written PE exam in state of \_\_\_\_\_ NCEES exam?  Yes  No

- Go online to [account.ncees.org](http://account.ncees.org) and follow the instructions to request license/exam verification.
- If your state board is not listed on this site, contact them to request verification be sent to us.
- If you are requesting to waive the FE exam, please review [WAC 196-12-010](#) for requirements.

**Experience record summary**

List all of your employers beginning with the most recent. You must account for all time since leaving college (if applicable) or beginning your engineering career to now. You must also include periods while unemployed, or non-engineering work. Attach additional sheets if necessary.

- For full time employment of 32 or more hours/week indicate "FT". For part time under 32 hours/week indicate "PT".
- If the work is not to be verified, indicate "No." Any experience not verified will not be counted toward the experience requirement.

	Time period (begin with most recent) From (month-year) To (month-year)	Employer	Full time or part time?	To be verified? (yes or no)
1				
2				
3				
4				
5				
6				
7				

*I declare under penalty of perjury under the law of Washington that the foregoing is true and correct.*

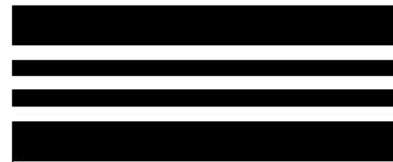
\_\_\_\_\_  
TYPE or PRINT Name

**X**

\_\_\_\_\_  
Applicant signature

\_\_\_\_\_  
Date and place

**Providing any false information in this application may be cause for denial, suspension, or revocation of your professional license in the state of Washington.**



This is a required supporting document for a professional engineering license application.

**Applicant:** complete sections 1 and 2

**Verifier:** complete section 3

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23201-Supporting

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PO Box 9025  
Olympia WA 98507-9025

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Name and license number of PE at time of your employment \_\_\_\_\_

### 1 Work experience information – applicant complete this section

Applicant name		
Former name (If applicable)		Branch applying for
Address, City, State, ZIP code		
Employed by		
Dates of employment (From, To)	Average hours per week	Supervisor name

### 2 Work experience details – applicant complete this section

Give details about the work you did for each section. One sentence descriptions are not acceptable. The work should:

- be progressive in difficulty and magnitude
- show sufficient breadth and scope
- reflect your ability to design and apply engineering principles where your judgments and decisions are trusted and relied upon

Describe your experience

A. Formulating conclusions and recommendations.

Applicant name \_\_\_\_\_

**2 Work experience descriptions** – continued

Describe your experience

B. Identifying design and/or project objectives.

C. Identifying possible alternative methods and concepts.

D. Defining performance specifications and functional requirements.

E. Solving engineering problems.

F. Interacting with professionals from other areas of practice.

G. Effectively communicating recommendations and conclusions.

H. Demonstrating an understanding and concern for energy/environmental considerations and sustainability of resources.

Applicant name \_\_\_\_\_

Applicant mailing address \_\_\_\_\_

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PRINT or TYPE Verifier's name		Title	
(Area code) Phone number		Email	
State where you are licensed	Registration/license number	Issue date	Expiration date

Answer the following  
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  - F. Interacting with professionals from other areas of practice
  - G. Effectively communicating recommendations and conclusions
  - H. Demonstrating an understanding and concern for energy/environmental considerations and sustainability of resources

How does the applicant's description of experience, including the scope and complexity of the work, match your evaluation?

Applicant name \_\_\_\_\_

**3 Work experience verification**—continued

Answer the following

How long have you been the applicant's supervisor? . . . . . \_\_\_\_\_ years/months

Give a brief description of a typical project for which the applicant made engineering judgments and decisions and of the character of the duties required by the project.

*I declare under penalty of perjury under the law of Washington that the foregoing is true and correct.*

\_\_\_\_\_  
TYPE or PRINT Verifier's name

**X**

\_\_\_\_\_  
Verifier's signature

\_\_\_\_\_  
Date and place

**Please affix your stamp or seal in the space below.** If no seal or stamp is available, attach a copy of your current license. **If the stamp or license cannot be provided, provide a detailed explanation.**

