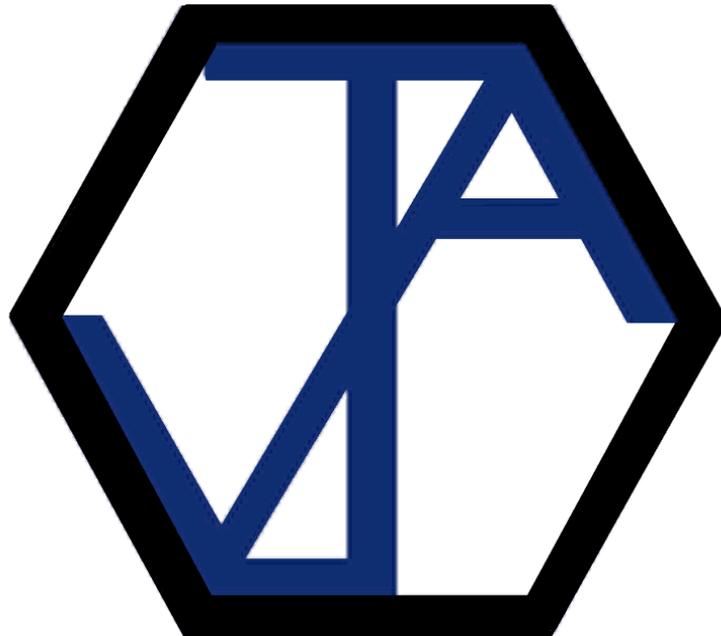


# **Direct-Hit Facility**

**Pacific Elevators Ltd.**

**Designed & Developed By:**



**Villholth Jensen & Associates Ltd.**  
**Consulting Engineers**

**3965 Sunset Blvd  
North Vancouver, BC  
V7R 3Y4**

**Tel: 604-985-0781 | 604-522-4697**

**Fax: 604-985-7921 | 604-572-3568**

**[www.vja.bc.ca](http://www.vja.bc.ca)  
E-mail: [info@vja.bc.ca](mailto:info@vja.bc.ca)**



---

**Prime Consultant:** Villholth Jensen & Associates Ltd  
**Project:** Direct-Hit Facility  
**Client:** Pacific Elevators Ltd

---

## Overview - The Client:

---

Pacific Elevators Ltd. is a grain-shipping company with shiploading facilities in Vancouver, Canada. Because of continuing increases in grain export, the old facilities were in need of upgrade and expansion. The new Direct-Hit Facility components would be installed in the existing facility.



*Direct-Hit Facility (Pacific Elevators Ltd.)*

## Overview - The Consultant:

---

Villholth Jensen & Associates Ltd (VJA), established in 1986, is a successful Vancouver consulting engineering firm. The company has extensive local and international experience. Areas of expertise include design and development of Ports and Marine Structures, Civil and Structural Engineering, Coastal and Offshore Engineering, along with all aspects of Project Management. VJA's list of clients includes BC Ferry Corporation, BC Hydro, Placer Dome, Public Works Canada, and Vancouver Port Corporation, to name but a few.

Another name in that list of clients is Pacific Elevators Ltd., a company with whom VJA has a long-standing association. Past projects for Pacific Elevators include work to stabilize foundations, and a structural analysis and repair assessment. VJA has a history of providing efficient, effective, and practical solutions. As a result, Pacific Elevators did not hesitate to award the Direct-Hit Facility contract to VJA.



*Existing Wharf with Old Shiploading Gallery which was Demolished*



---

## Project - Specifications:

---

The Direct-Hit Facility required the following:

- wharf modifications
- new galleries
- new closed-belt conveyor system

## Project - Design & Construction:

---

Initial phases of the Direct-Hit Facility project began in November 1995 when VJA started the detailed design of the wharf modifications and new galleries.

Meanwhile, a Swedish company was awarded the contract for the supply, fabrication, and delivery of the closed-belt conveyor and shiploader system.

As the design phase progressed, the first local tenders were called in April 1996, with actual construction work beginning in August 1996. This work included wharf modifications, specifically the demolition of the old existing shiploading gallery, and construction of new concrete beams designed to support the crane rails for the new shiploader. At the same time, civil work to modify the basement for the trackshed conveyor was also initiated.



*Arrival of Shiploader Components*



*Erection of Shiploader in Progress*

## Project - Installation:

---

Components for the shiploader and trackshed conveyor were transported from Sweden to Vancouver in the Fall of 1996. Actual installation of these components began in early 1997, continuing into early 1998. VJA's senior consulting engineers took an active role in supervising the installation of the shiploader and trackshed conveyor. Also, VJA met with Pacific Elevator senior personnel on a regular basis, providing frequent project status updates.



*Erection of New Gallery Structure*



---

## Project - Successful Completion:

---

The final preparation and installation of the shiploader belt began in July 1998, with the shiploader being successfully completed for commissioning in September 1998. Today, Pacific Elevator's new Direct-Hit Facility is an active part of the thriving Port of Vancouver, loading and unloading grain at the terminal on the south shore of Burrard Inlet. The new closed-belt conveyor system receives grain directly from railcars in the trackshed basement. Grain is then conveyed to the new shiploader. Once loaded, the grain-laden freighters depart Pacific Elevator's shipyards and sail towards their eventual destination.



*Shiploader Gantry*



*Ship Being Loaded at New Direct-Hit Facility*

---

## In Conclusion:

---

Pacific Elevator's Direct-Hit Facility is only one example of VJA's commitment to quality. Our team of Professional Consulting Engineers is committed to the efficient planning and engineering of projects, combining technical skill with environmental sensitivity.

For more information about our services, please visit our web site at [www.vja.bc.ca](http://www.vja.bc.ca), or call us at (604) 985-0781.