Service duct wall-entry declaration

What is a service duct wall-entry declaration?

A service duct wall-entry declaration is a document prepared by a qualified professional (P.Eng. or Struct.Eng. or P.L.Eng. or P.Geo) which demonstrates that an assessment was performed, and if necessary a design was created, to mitigate differential settlement from impacting the service ducts for the expected life of the service.

Figure 1 – Service ducts sheared due to differential settlement.

Why do we need it?

All civil work and structures required for underground service connections on private property are owned and maintained by the customer. This includes service ducts. If designed incorrectly, service ducts may shear due to a differential settlement between the building perimeter and the building foundation (*See Figure 1 – Service ducts sheared due to differencial settlement*).

It's important that BC Hydro supplied service cables are not unintentionally severed due to differential settlement. Failure of the service ducts does not only introduce a safety hazard but will result in a lengthy repair and likely a prolonged outage for customers.

What are the accepted forms of declaration?

BC Hydro will accept either:

a) **A document containing a design, sealed by the qualified professional**, with detail clearly stating that the penetration design prevents the shearing of the supply service ducts due to differential settlement (*See Options A Example – Engineered Service Duct Wall Entry Design Detail on page 2*), or

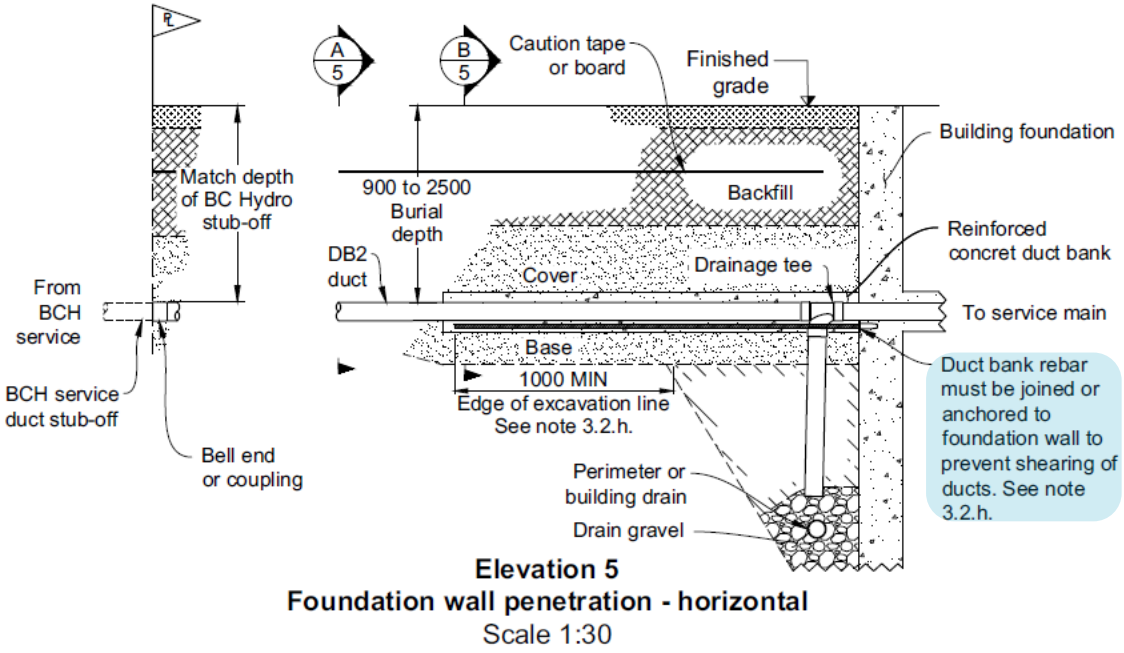
b) **A memo/report, sealed by the qualified professional**, clearly stating that the geotechnical assessment confirms that there is negligible risk of differential settlement impacting the service ducts for the expected lifetime of the installation (*See Option B Example – Differential Settlement Assessment Statement on page 2*).

Learn more

For more detailed information on BC Hydro's civil requirements, please refer to the ES54 Underground Civil Standards **Section S – Services** for customer civil and electrical work on private property for supply services.

For more information about civil work on private property visit Electric Tariff, Section 3.7.

OPTION A EXAMPLE – ENGINEERED SERVICE DUCT WALL ENTRY DESIGN DETAIL



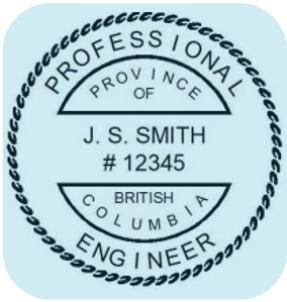
Elevation 5
Foundation wall penetration - horizontal
Scale 1:30

Example of Required Information

The material and information shown in this document are intended for informational purposes only, and we'll be updating it from time to time. It has been created to emphasize common requirements, errors and omissions that can cause delays in the design process and may not reflect current industry and professional standards or requirements. It is not a substitute for legal, engineering or professional advice.

OPTION B EXAMPLE – DIFFERENTIAL SETTLEMENT ASSESSMENT STATEMENT

I, J. S. SMITH, certify that a differential settlement assessment has been done for site 123 Example Street and there is negligible risk of differential settlement impacting the service ducts for the lifetime of the installation.



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