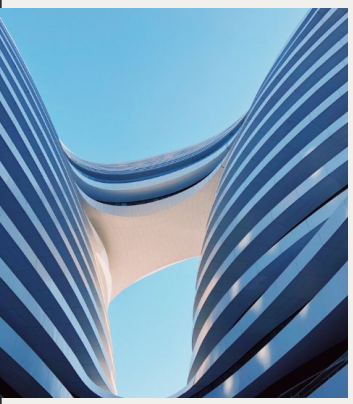
Terēan™
Seismic Revelations

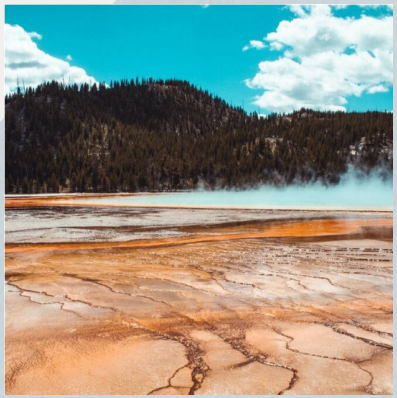
Decrease cost and increase the value of boreholes by independently and confidently mapping the subsurface across your entire project:



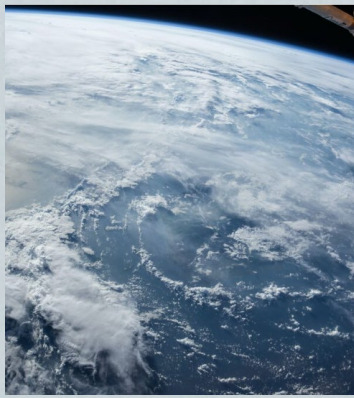
Geotechnics

Engineering

Mining



Energy



Research

We provide the seismic systems, software, training, and support anytime & on demand that your company needs to become subsurface imaging experts, but without the cost. **Let's talk about how we do it!**

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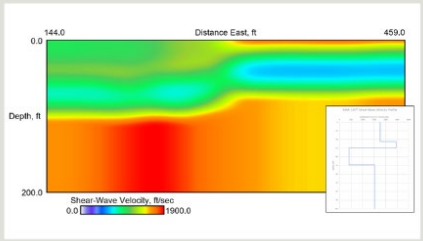
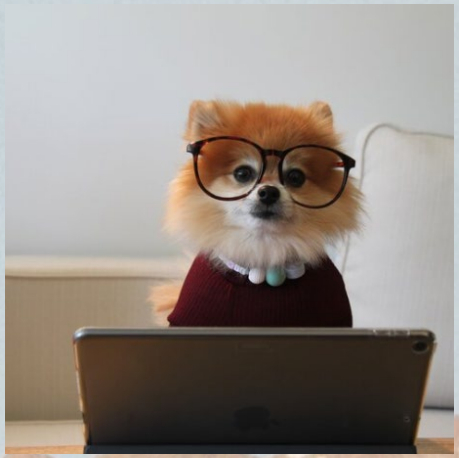
The ReMiDAQ™ Bundle is a complete and comprehensive solution to get your projects better subsurface information – for reducing cost and staff time. The flexibility you need to win more jobs.

Systems



Software

Training



Support

Terēan's ReMi™ Software & Systems

Save costs, time & independently & confidently:

- Determine earthquake hazard assessment / IBC site class in less than 30 mins
- Assess the depth, thickness & lateral variability of rock / soil layers
- Assist in determining liquefaction potential across your project site
- Predict rippability, excavation & overburden budgets
- Constrain the location of faults
- Map landslide planes

Get a comprehensive view of your entire project:

- Increase value of borehole information
- Decrease the costs of your borehole program
- ***Remove the "what's between the boreholes" question!***

Terēan Tech:
What drives ReMi™ software?

- Refraction Microtremor was invented in 2001 by Dr. John Louie, Emeritus Professor of Geophysics & Terēan's Chief Geophysicist. John worked with Bill Honjas, Terēan's Principal & Sr. Geophysicist, to release the method to practitioners worldwide.
- Known for its ease of use in the field and at the office, and for its accuracy, versus older methods such as MASW, a ReMi™ software analysis has become the standard for geotechnical projects.

In 2001, Prof. John Louie's refraction microtremor measurements were used in the design of the Galena Creek Bridge, I-580 Steamboat Hills, NV (NVjoe/TripAdvisor). Terēan's ReMi™ software has become the global standard for seismic site characterization.

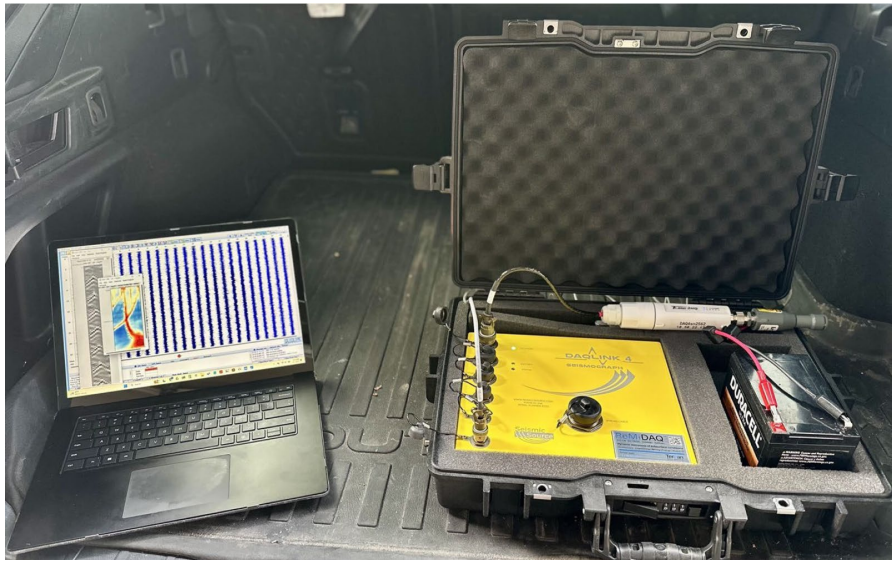
Meet Professor John N. Louie,
the Inventor of the Refraction Microtremor method

- **Dr. John N. Louie** is a Professor of Geophysics, Emeritus at the University of Nevada, Reno with over forty years of university teaching and research experience in geophysics and seismology.
- Over the last 25 years, Dr. Louie developed the Refraction Microtremor method - what drives ReMi™ software; a faster, more efficient way to determine the depth, thickness, variations and engineering properties of subsurface layers
- John is Co-founder and Chief Geophysicist for Terēan and is eagerly continuing his innovative developments for the benefit of our community.

ReMi™ Software & Systems
Quick & Easy to Use

Intuitively designed for geotechnical engineers , ReMi™ software is bundled with the ReMiDAQ™4 seismograph (terean.com/products) to provide a complete solution for subsurface imaging, determine IBC/ASCE site class and auto-generate a report at your project site in less than 30 minutes.

Simple and easy, your team will leave the field knowing have the results you need, accepted by building authorities around the world.



ReMi™ Software & Systems
Non-intrusive: Deploy anywhere with no permitting required

ReMi™ software gives design users a way to lower cost and increase value that is proven to work in traffic-heavy urban and difficult to access areas. Even in buildings.

Find the depth, thickness and lateral variations in layers, map faults and landslides, assess water tables & rippability, evaluate liquefaction potential.

Deploy anywhere:

- On concrete – no drilling necessary
- During onsite drilling – no time wasted
- Sub-bottom and in streams & rivers
- Transition zones, such as estuaries/swamps
- The list goes on…Have an idea? Let us know!

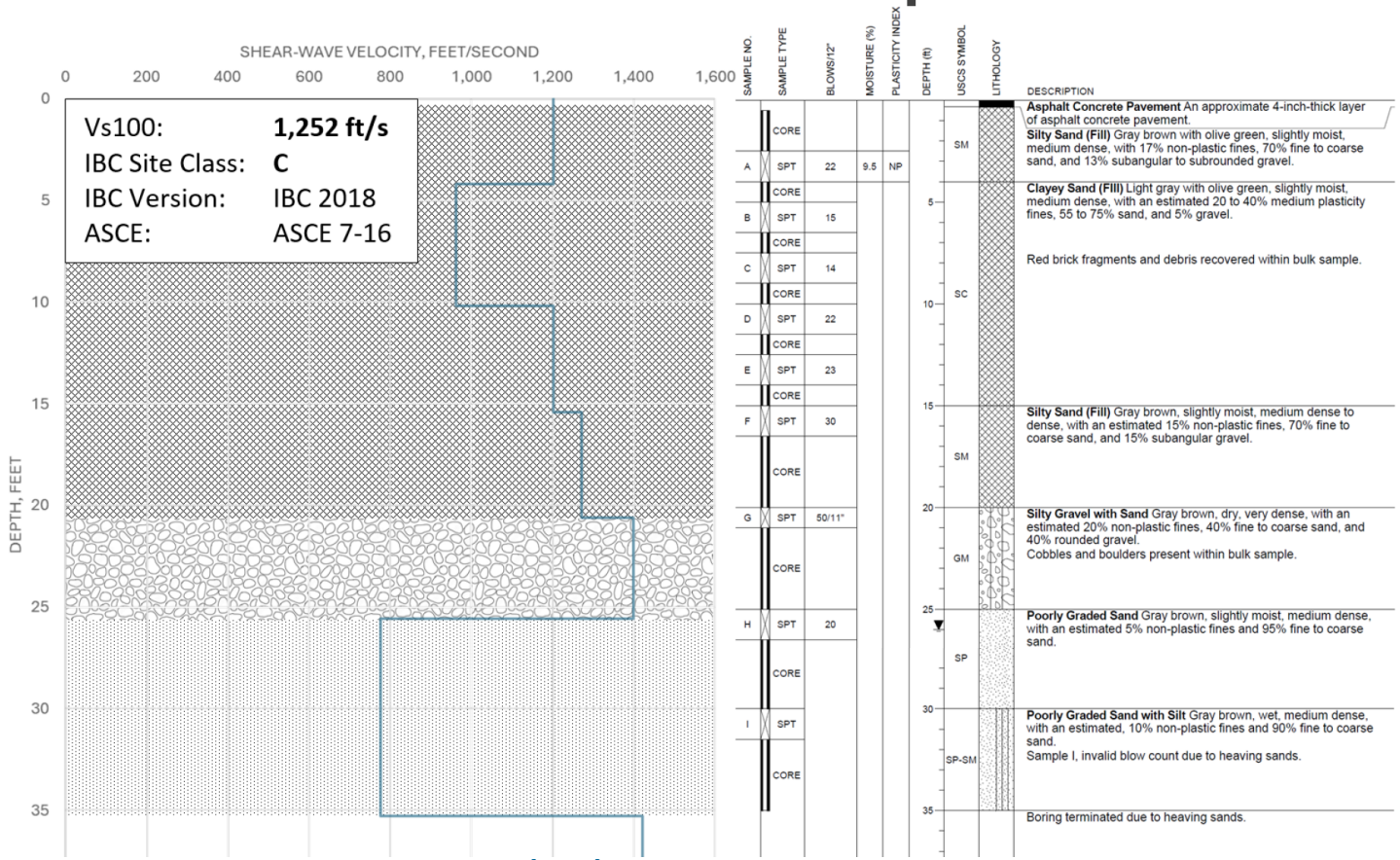
775.258.1991 | INFO@TEREAN.COM

Courtesy of Black Eagle Consulting
Reno, Nevada, USA

Black Eagle Consulting
An RMA Company

Terēan™

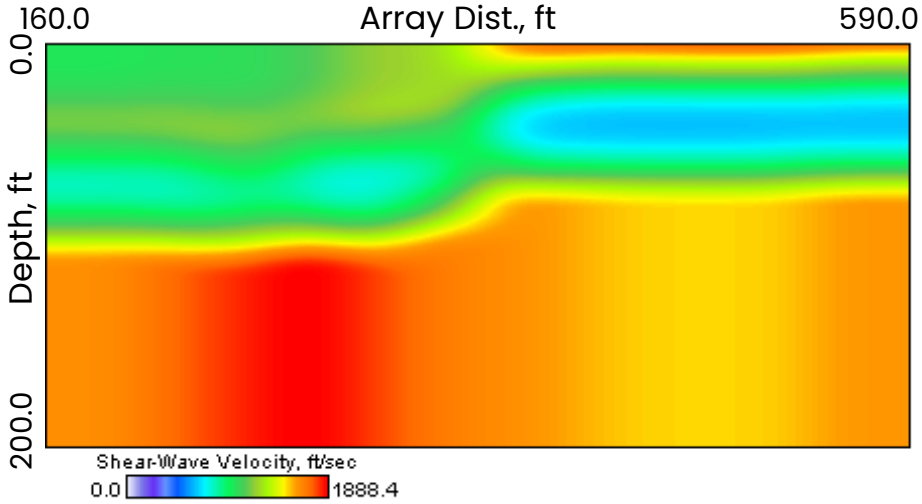
ReMi™ Software - Liquefaction



ReMi 1dS™ software analysis (left) correlates with borehole data to provide a comprehensive subsurface view of your entire project, ***eliminating the "What's between the boreholes?" question*** (right). The result is more information from fewer boreholes, saving cost and time while producing better project results.

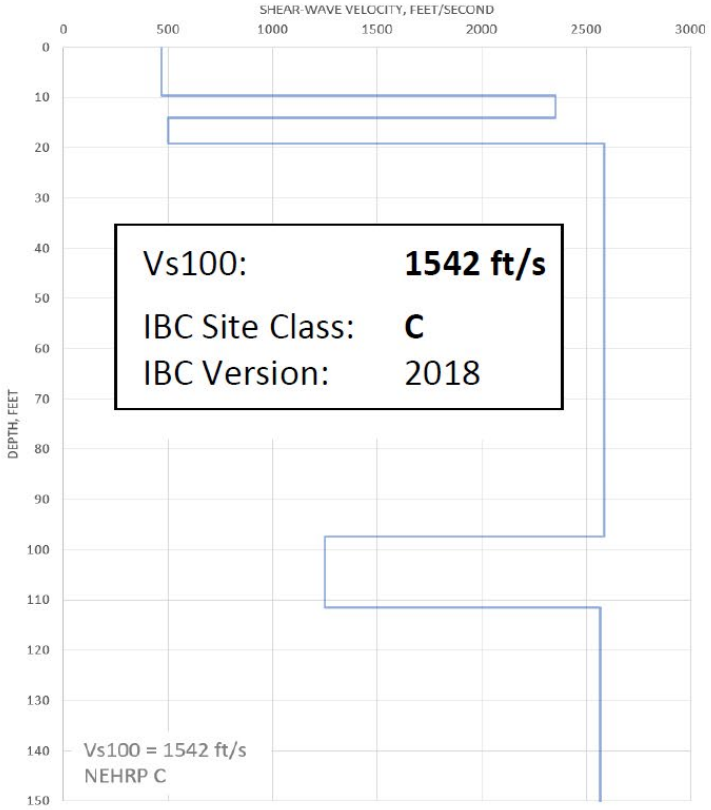
ReMi™ software – Fault Location

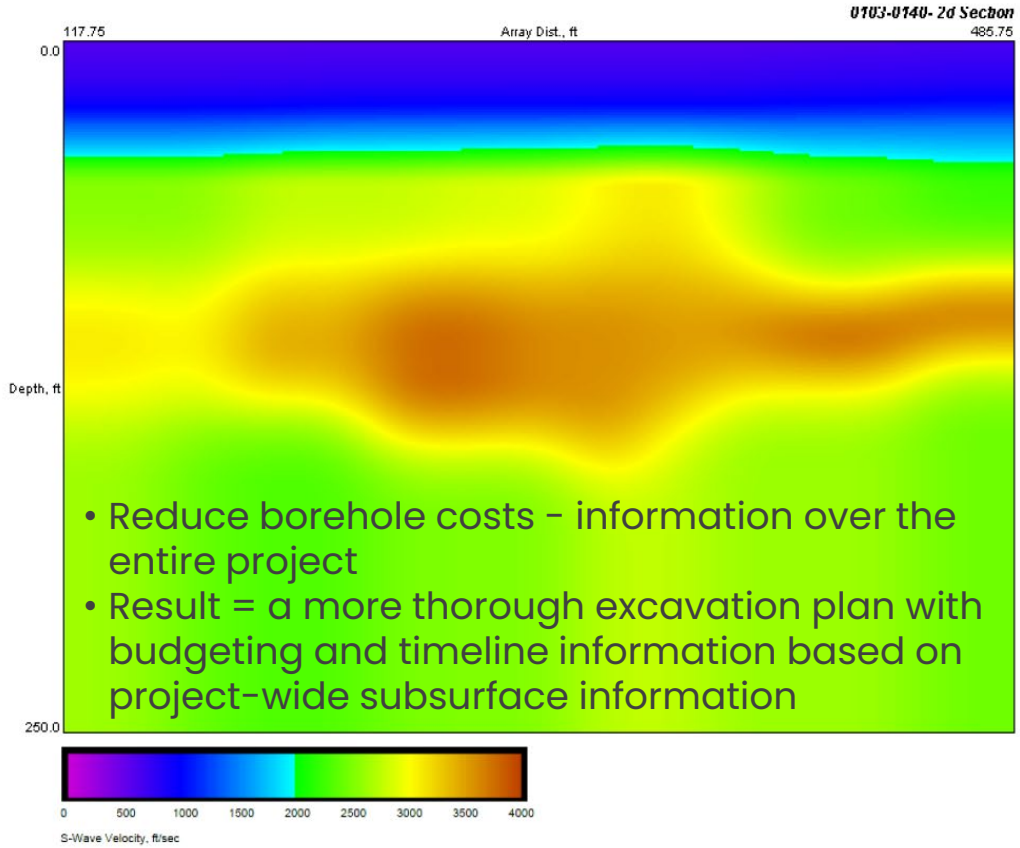
- Inferred fault locations (dePolo) & SW Geo constrained fault location
- 24-channel ReMi™ array



- ReMi™ software 2d S-wave velocity image (right) from fault study in Las Vegas Valley, USA. Caliche layer, shown in orange, overlies displaced velocity reversal, shown in blue.
- The fault is manifested as a lateral velocity discontinuity at about the centerer of the image. Southwest Geo *saved cost and time* by performing the work independently & confidently!

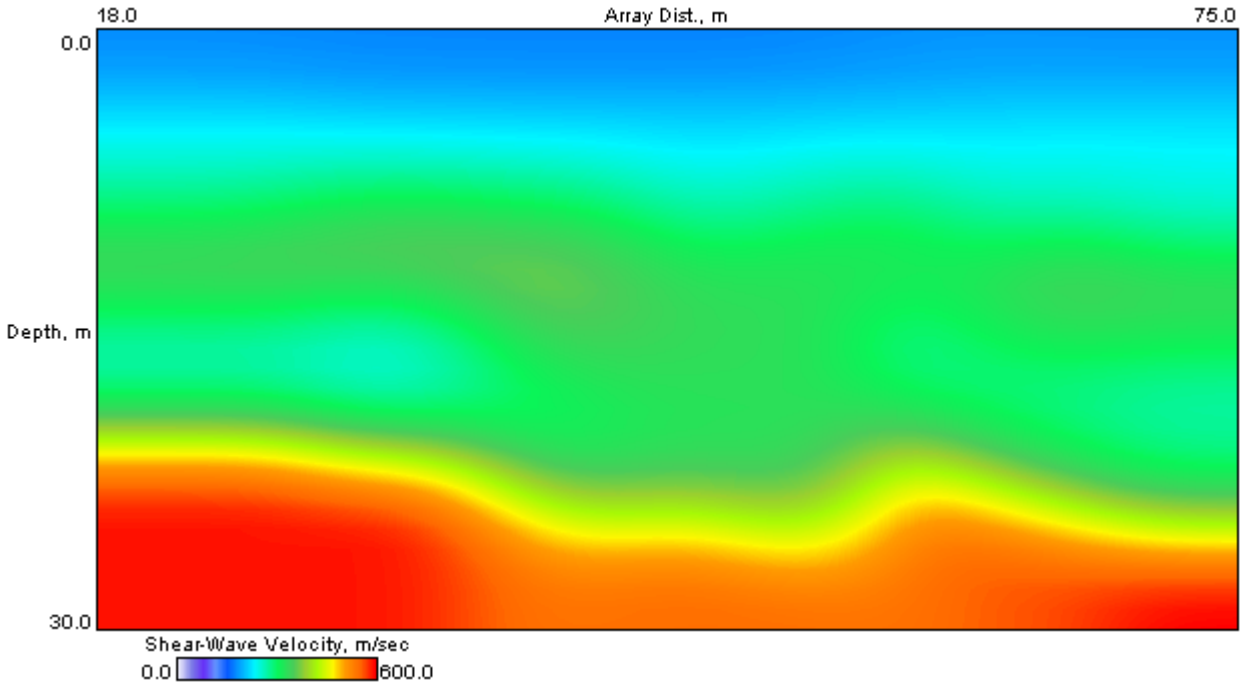
ReMi™ software – Rippability





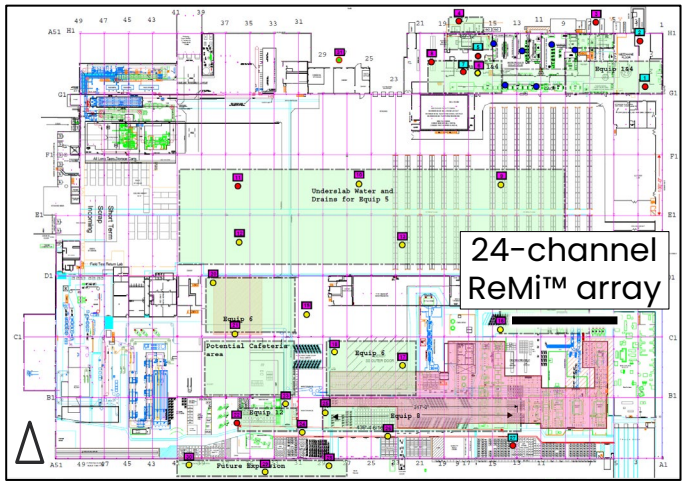
Strata Design, Portland, OR, USA, used ReMi™ software to determine IBC site class and depth and thickness of layers (left) and variation in depth and thickness of subsurface layers, revealing D8 rippability (right). ReMi™ software includes proprietary technology that allows practitioners to determine rippability of subsurface materials using S-waves.

ReMi™ software – Depth & Thickness



Suelo-Estructura, Guadalajara, Jalisco, Mexico used Terēan ReMi 2dS™ software to find the depth and thickness of layers and bedrock topography. Variations in subsurface bedrock topography are required for rippability, determining overburden removal costs, and placement of engineered structures.

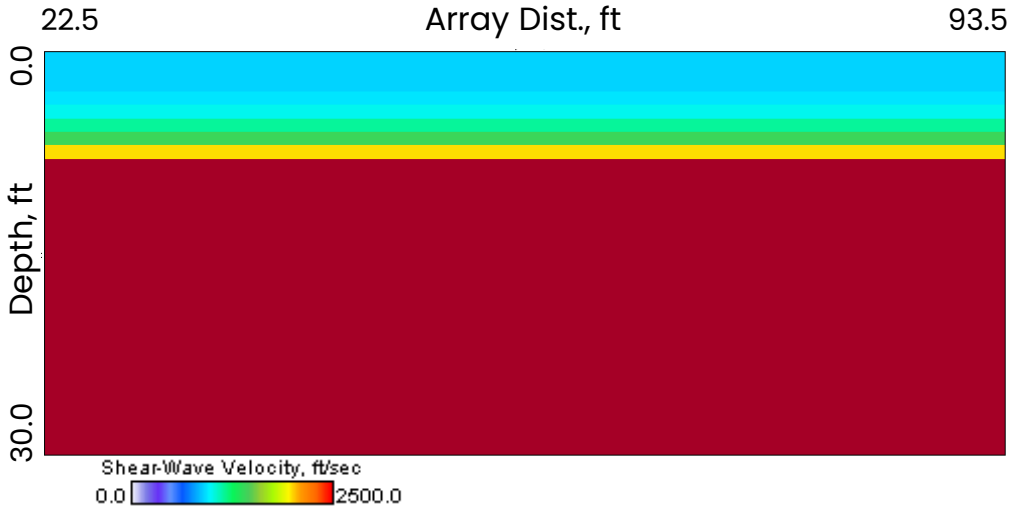
ReMi™ software – “In-structure”



Blueprint of manufacturing plant structure with location of 24-channel ReMi™ array inside building (left).

Project Goal: Confirm the lateral continuity of subsurface beneath slab foundation within structure during ongoing construction activity.

- ReMi™ software 2d S-wave velocity image (right) confirmed the lateral continuity of subsurface layers, including concrete and other fill, overlaying high velocity limestone (right).
- ReMi™ software was able to non-intrusively confirm continuity of the subsurface between boreholes, saving both cost and time.



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Thank you!

Let's talk about how Terēan can assist you in reducing cost, meeting timelines, and getting better results for your current engineering projects.

Terēan.com

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