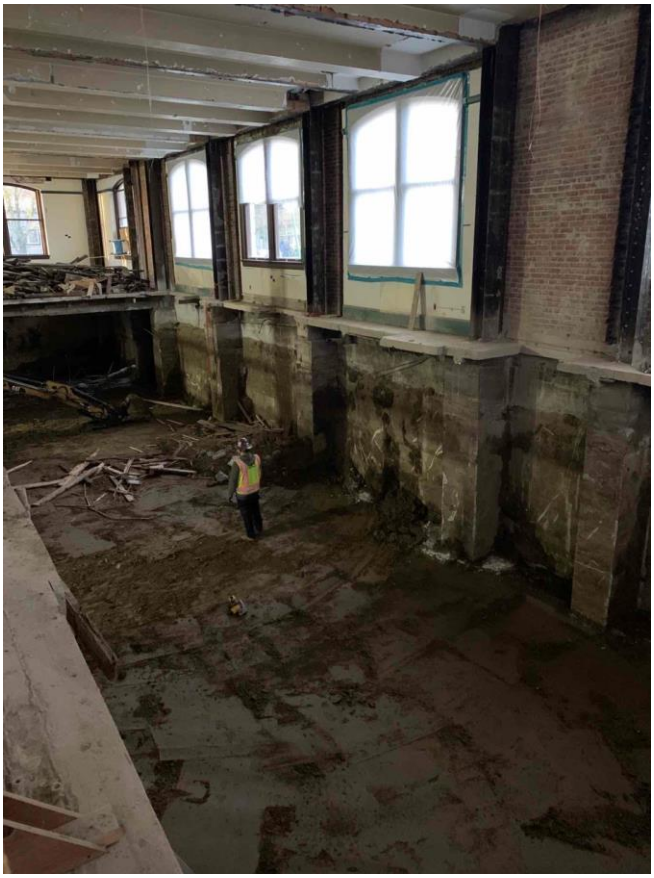
Oregon Supreme Court Interior Modernization Project

Photo Gallery and Additional Project Details

Basement excavation/demolition/abatement

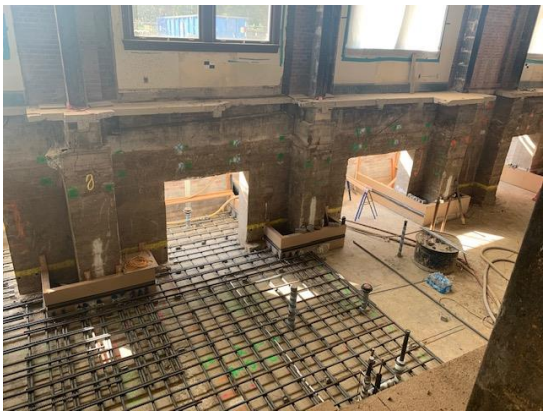
Excavation of the basement crawl space at west and south (an L-shape area) removed 793 cubic yards of dirt.



Crawlspace, post excavation – looking south

Excavated basement

One of the remote-control “robot” Brokk machines onsite, used for demolition



Previously unexcavated area of the basement (below Supreme Court staff attorney area)

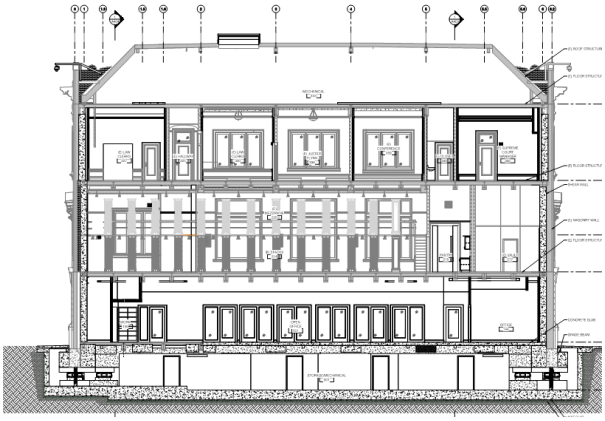
Previously unexcavated basement, partially poured

Basement, partially poured

Base isolators as fabricated for the Supreme Court Building, at the manufacturing facility. The isolators help reduce stresses on the building during an earthquake.

Main entrance with plywood protection

The "moat" – a two-foot open space around the foundation to allow for seismic movement (letting the "pendulum base isolators" do their work).

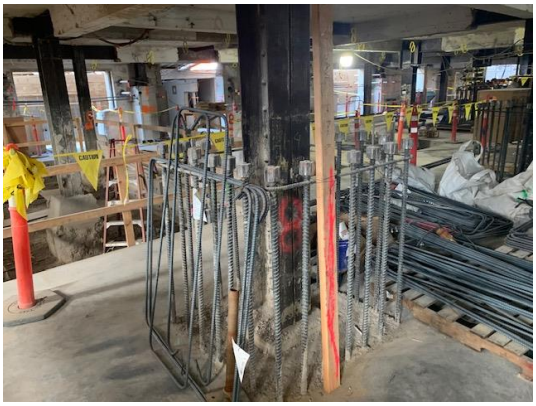


North/South architectural building section, looking west, showing basement moat area around the perimeter of the building. You can also see the ring beam around the perimeter. Read more about the ring beam below.

What Makes This Project Interesting? Base Isolation Technology

"To me, the most interesting thing is the engineering know-how behind this unique base isolation system. Buildings have been built similarly for the last 100 years. Base isolation flips the engineering and makes it so that the forces are reduced at the foundation making it so that the rest of the building does not have to resist as much seismic load. This kind of thinking is inspiring because it is out of the box. When I think about how far other technologies have come, you know there is a lot of potential for construction and engineering methodology to change and evolve as well." *Eli Cox-Skall, Hoffman Construction, Project Engineer*

One of several temporary shoring towers



Exposed existing steel beam

The ring beam, partially complete. The ring beam frames the building perimeter, extending from the original exterior wall both outward and inward, just beneath the first floor. It bears the structural forces around the perimeter, where those forces are highest.

Shoring tower with jack (basement level). As support structures, including retaining walls, are removed and replaced, builders had to install temporary towers in the basement to support the weight of the building.

Rebar at ring beam at interior side of wall, prep for concrete pour

Ring beam at exterior side of wall at south

What Makes This Project Interesting? Temporary Structures

"To me, the most interesting work thus far has been (designing, locating, sequencing, and installing) the temporary structures required just to complete the work laid out on the plans… This has been a collaborative effort between design partners and trade partners to come up with the safest and most efficient plans. We've installed steel headers at basement walls, immense shoring towers to withstand the weight that the original retaining wall columns were designed to hold, slab edge shoring to brace materials such as the hollow clay tile…all while normal construction activities were taking place." *Nolan Smith, Hoffman Construction, Project Engineer*