



## **PROPRIETARY ANALYSIS AND DESIGN SOFTWARE**

North Bay Seismic Design (NBSD) has developed software tools for the evaluation, analysis, and design of bridge, building, and earth retaining structures. All of these software tools were created for the purposes of providing the primary or secondary means of evaluating the adequacy of existing or new structures or component thereof, and to provide an transparent, accurate, fast, and code compliant evaluation of the structure in question in a ready-for-submittal format.

These tools are all parametric for all relevant data (dimensions, location, material properties, etc), and during the development stage were designed to clearly provide all formulas, dimensions, parameters used, location in structure, element being designed (welds, plates, reinforcement, etc) in order to provide a completely transparent and easily verifiable calculation path for use internally within the company or externally by third party independent verification.

Tools on the NBSD Software List are the intellectual property of NBSD; within the office and its employees, the actual software will be used, modified, or improved internally exclusively by approved staff who will be responsible for it. For submittals, **pdf's of the results obtained will be provided exclusively for all submittals** unless the software was developed exclusively for the project (offshore wind turbine models, etc); the pdf's provided will provide all relevant information (units, dimensions, shear and bending moment diagrams, code references, etc) for use by the clients directly and indirectly for the specific condition being evaluated.

In essence, NBSD software is closely guarded intellectual property, and will be protected as such. We also use and try to excel at the use of other commercially available programs for structural analysis and design, but will rely on internally developed software to control our projects, grow our staff professionally, and provide our clients with flexible, transparent, and accurate structural engineering professional services using highly relevant software tools developed locally within the community.