OVERVIEW
At Facebook’s Menlo Park Headquarters, the company values collaboration amongst its employees, staff, and management. To promote this culture in their expanding headquarters complex, Facebook, along with Frank Gehry’s Gehry Partners, designed a space that would create “One Big Room” with many opportunities for employees to interact. This design concept resulted in an expansive 400,000 square foot open office floor plate, designed to house approximately 3,500 employees over an on-grade, open, 1,500 spot parking area. This building is seamlessly connected to an open plan building previously completed in 2016 for a total of more than 800,000 square feet of open office space on a single floor plate.

The project presented a multitude of structural engineering challenges to be solved within a tight design schedule, including complicated roof loading, complex geometry, the need to share information between several structural analysis computer programs, and intricate detailing. This project had a unique workflow for design documentation, coordination, and construction administration, where the 3D Revit model served as the structural contract document and where 3D models served as the construction administration submittals. Close collaboration between Facebook, the design team, and the builders allowed the building to open on time, despite an aggressive 18 month construction schedule, in the summer of 2016.

FOOTPRINT / 400,000 SF
LOCATION / MENLO PARK, CALIFORNIA
COMPLETED / 2018

TEAM
Dwiter / Facebook
Architect / Gehry Partners
Contractor / Level 10 Construction

Structural Engineer / Forell/Elsesser Engineers

GREEN ROOF
The building’s green roof has 3.6 acres of undulating terrain and a half-mile meandering pathways among hundreds of full-size trees. The planting is occasionally interrupted by story-tall sawtooth skylights that bring plentiful natural light into the office below.

TOWN SQUARE
This gathering space is sunken within the center of the building. It houses two signature cafes and provides outdoor space complete with a grove of 40 ft tall redwood trees. The Galax Cafe is constructed of diagonal 18x18’ tulip beams, columns, and braces and is clad in glass. The Bryan Cafe has jagged stepping roofs and is supported by round tube steel columns and braces.

BOWL SPACE
This gathering space, with an amphitheater style layout is constructed of terraced concrete seating areas and planters, is covered by a 160 ft x 112 ft canopy supported by four 24’ square tubel steel cantilever columns.

DRAMATIC CANTILEVER CAFE
One of the building’s feature cafes cantilevers almost 50 feet beyond the building footprint. This large cantilever is designed to minimize vibration because it serves as an eating space with seated occupants. Finite element analysis was used to study the effects of vibration on occupant comfort due to footfall. To support this large cantilever and control vibration in the cafe space, three story-tall trusses were utilized.

FEATURE STAIRS
Among the building’s 25 uniquely designed stairs are three interior feature stairs, which incorporate unsupported switchbacks. To limit vibration and deflection under service conditions, the stairs have specialty detailed connections that remained pinned under dead and live load but slide in a seismic event to accommodate inter-story drift.