Project Description:

Kelowna International Airport (YLW) is constructing a new Combined Operations Building (COB) to replace the existing structure. Construction is currently ongoing, starting with the demolition of the old COB building.

The current crane plan is to move them around close to the perimeter of the building and within the building's footprint to erect the building in quadrants. The crane will be positioned in a handful of different locations throughout the erection of the building, but not exceeding the borders shown in the plan view for Drawing No. COB CRANE OLS R3. To easily communicate the height limits for the crane, three zones have been designated. When the crane is erected in the zones, the crane will be limited to the heights given in the profile view in Drawing No. COB CRANE OLS R3. An additional limitation is in place when the crane is in the red zone, where the crane is limited to rotating away from or parallel to Runway 16-34.

To control the height of the crane in each zone, the crane is equipped with a display that shows the tip height, and the operator will have on hand the OLS height restrictions for each zone. This information will be included in the crane plan they will be creating before the start of the lifts and will be reviewed prior to operating the crane. The operator is not to allow the crane to exceed these heights at any time.

Crane Details:

Crane Type:	Grove TMS870 (mobile)
Day Protection:	Crane is equipped with an orange & white checkered flag on the tip of the boom.
Night Protection:	Crane boom will be lowered outside working hours. No crane lifts are planned for during the night.
Timeline:	Construction started on April 1 st , 2024, with the demolition of the old COB building. The crane is expected to arrive onsite on January 6 th , 2025.
Location:	As the cranes are mobile and will be moving to the required position for each lift, no specific location can be provided. The attached Drawing No. COB CRANE OLS R3 has three zones designated for the crane to operate in with height limits for each zone.

Calculation Details:

All measurements and calculations are done with AutoCAD Civil 3D. The OLS is designed with respect to the centreline elevations along Runway 16-34. Existing ground elevation is from LiDAR.

