

SILICON VALLEY'S AIRPORT



7/10/2020

Introduction to City of San Jose Construction Crane Policy

- March 2019 – City Council approved policy recommendations from Downtown Airspace & Development Capacity Study:
 - Set maximum Downtown area building heights at lowest FAA “TERPS” airspace elevations (replaces use of airline “OEI” airspace elevations, often more restrictive), contingent on FAA issuance of “No Hazard” determinations.



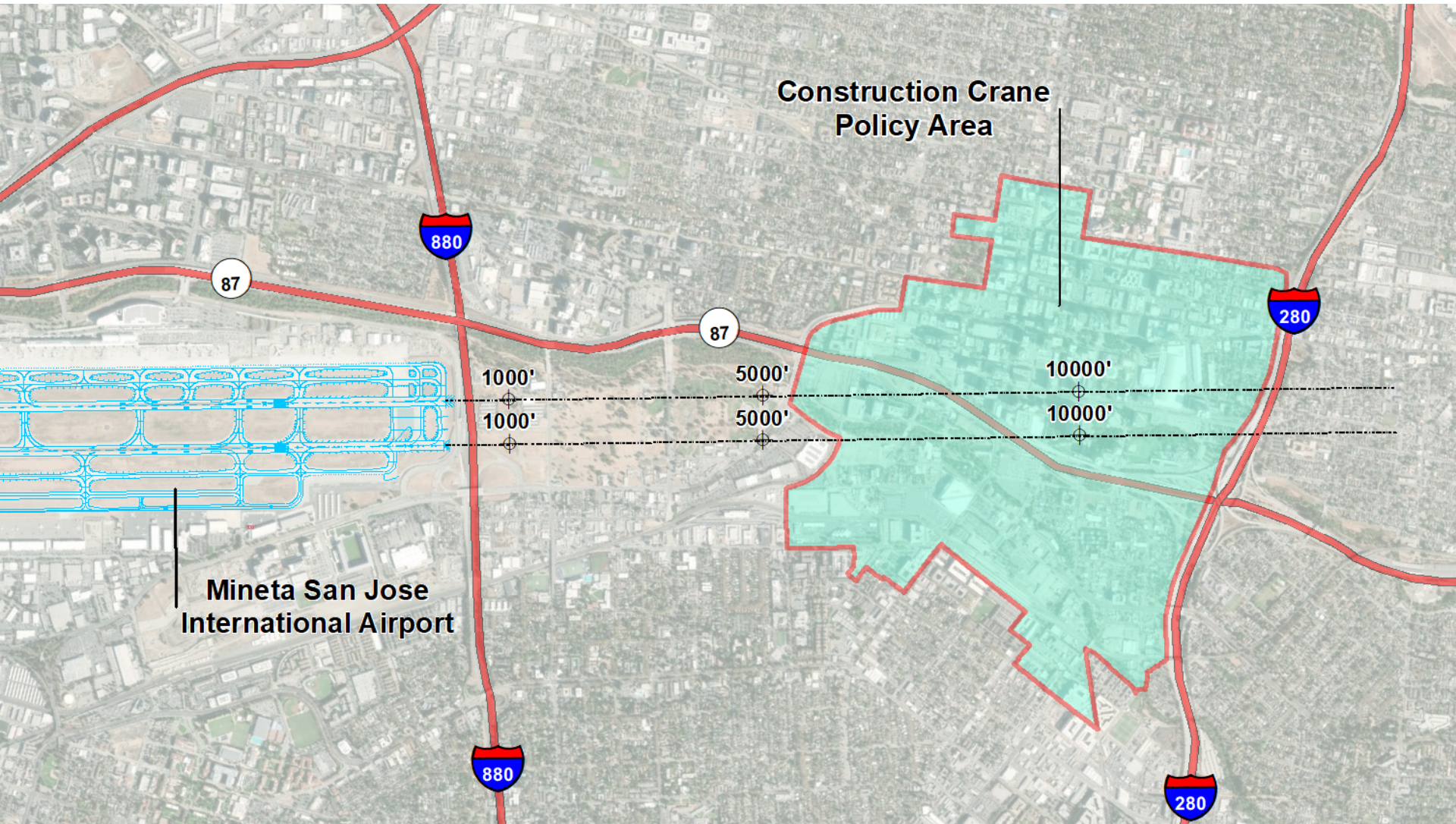
<https://www.flysanjose.com/downtown-heightlimits>

Background (cont'd)



- City staff also directed to refine City development review process to better protect the Airport, including:
“Developing a construction crane policy in the Downtown Core and Diridon Station area to minimize impacts on airline service during construction”.
- Preparation of Construction Crane Policy Study initiated by Airport Department in June 2020.

San Jose Crane Policy Area



Conceptual Airspace Surfaces

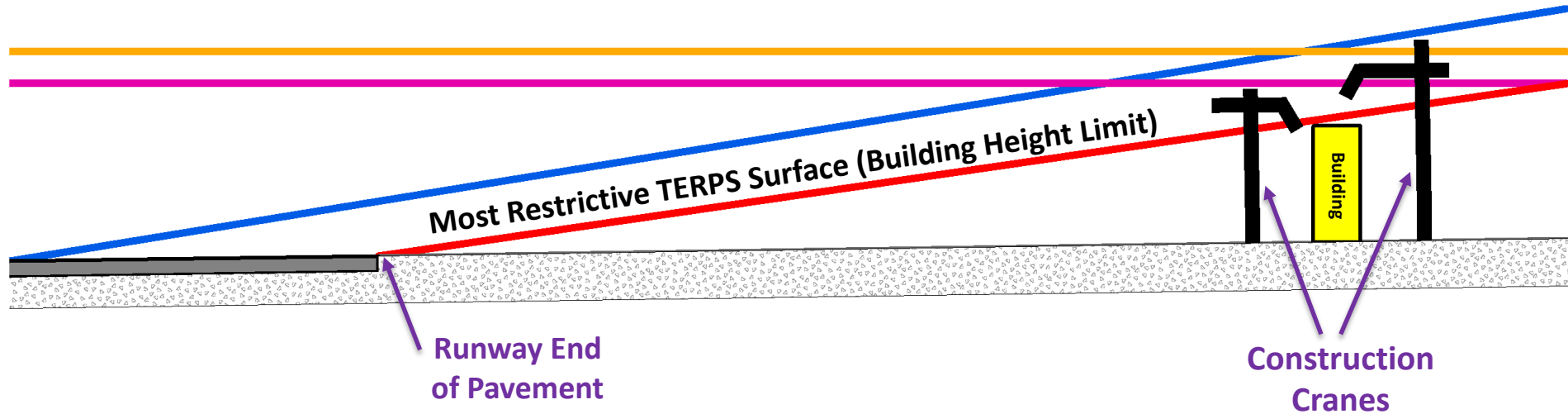


Image Source: Landrum & Brown

Construction Crane Issues



- Downtown San Jose is directly under flight paths of aircraft arrivals and departures at SJC.
- FAA typically allows construction cranes to exceed TERPS airspace elevations by imposing certain temporary modifications to flight procedures. Such modifications pose constraints to airline service.
- Experience has shown that “temporary” cranes can remain in place for years.
- With taller permittable building heights and current and anticipated development in Downtown and Diridon area, presence of construction cranes will be an ongoing condition for next decade or more.

Initial Construction Crane Feedback



- **Mobile cranes**

- Can be raised/lowered quicker than tower cranes
- May be appropriate for certain phases of a project



- **Tower cranes
(downtown high-rise development)**

- Generally takes up to one-day to lower a crane enough to avoid impacts
- Tower cranes are raised or lowered in 20 foot sections
- Most projects use multiple cranes, which need to have adequate vertical & horizontal separation

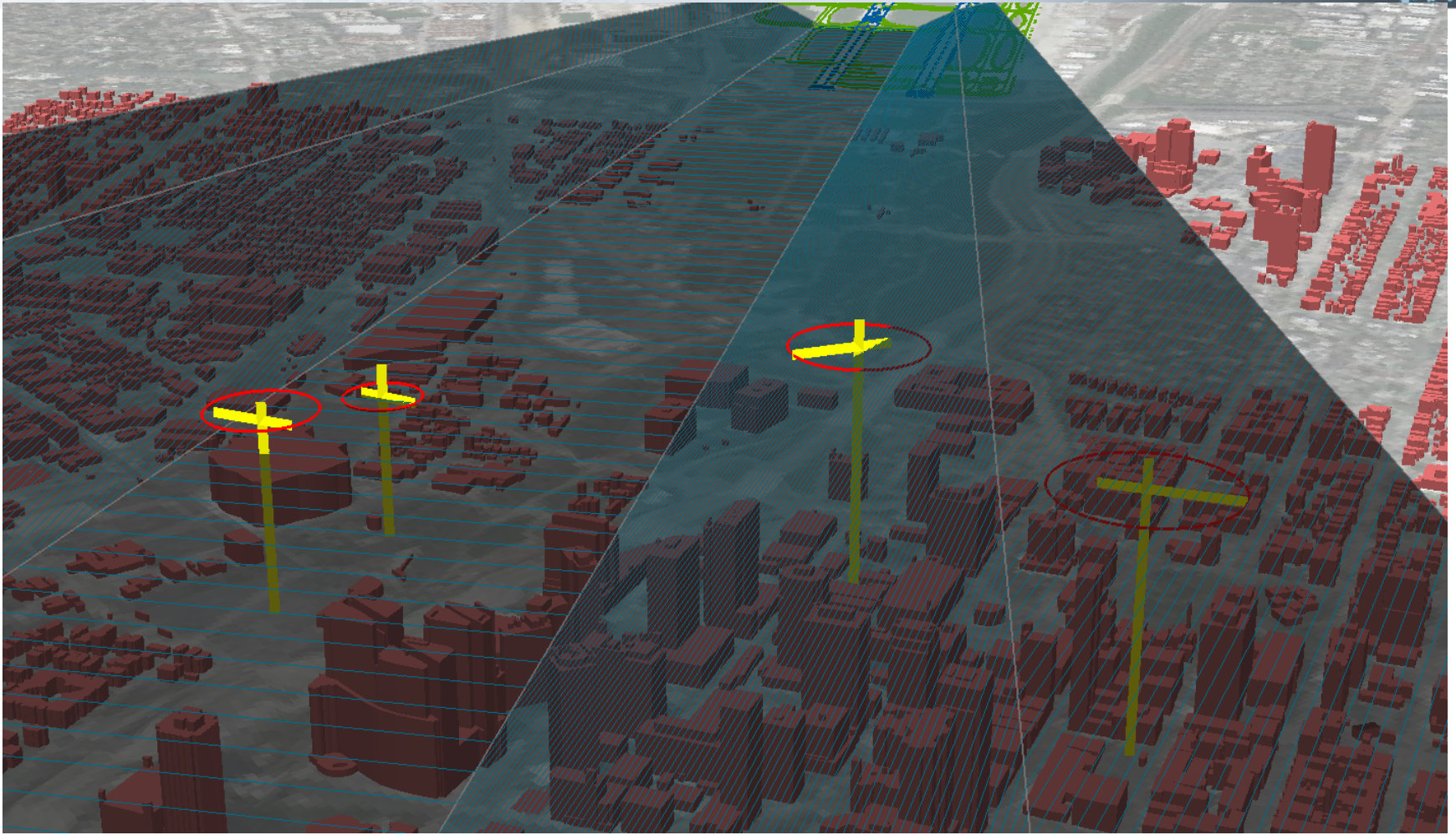


Potential Crane Policy Elements



- Determine acceptable temporary constraints to airline service, utilize information from Downtown Airspace & Development Capacity Study
- Consider duration, or triggers for, raising construction cranes to maximum height.
- Provide guidance on filing temporary cranes for required FAA airspace review (FAR Part 77).
 - Multiple points on a temporary crane location must be filed
 - Highest point may not be the most impactful
 - Radius of jib
- Add to Development Permit Conditions of Approval to comply with City Crane Policy.

Construction Crane Penetrations (3D example)



Note: Fictional crane objects and heights depicted for purposes of illustrating penetrations to the protected airspace surfaces.

- Technical analysis provided by Landrum & Brown (same consultant used in Downtown Airspace & Development Capacity Study).
- Determine those FAA TERPS airspace procedures most commonly used by airlines and assess impacts.
- Provide updates to, and solicit feedback from, Developers & Construction Roundtable.
 - Request stakeholder assistance to share information on different types of crane technology, construction methods to minimize crane duration, real-world time to raise and lower cranes
- Produce composite crane height limit map, similar to Downtown building height limit map
 - All crane heights will be contingent on FAA issuance of “No Hazard” determinations.

- Policy updates at Monthly Developers Roundtable
 - Next Meeting August 14th, 2020, 8:00 – 9:00 a.m.

- Complete policy for implementation by late 2020.

- Prior to policy completion, Airport staff working with individual approved projects to formulate an agreement on construction crane use.

- Questions/Comments/Feedback

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