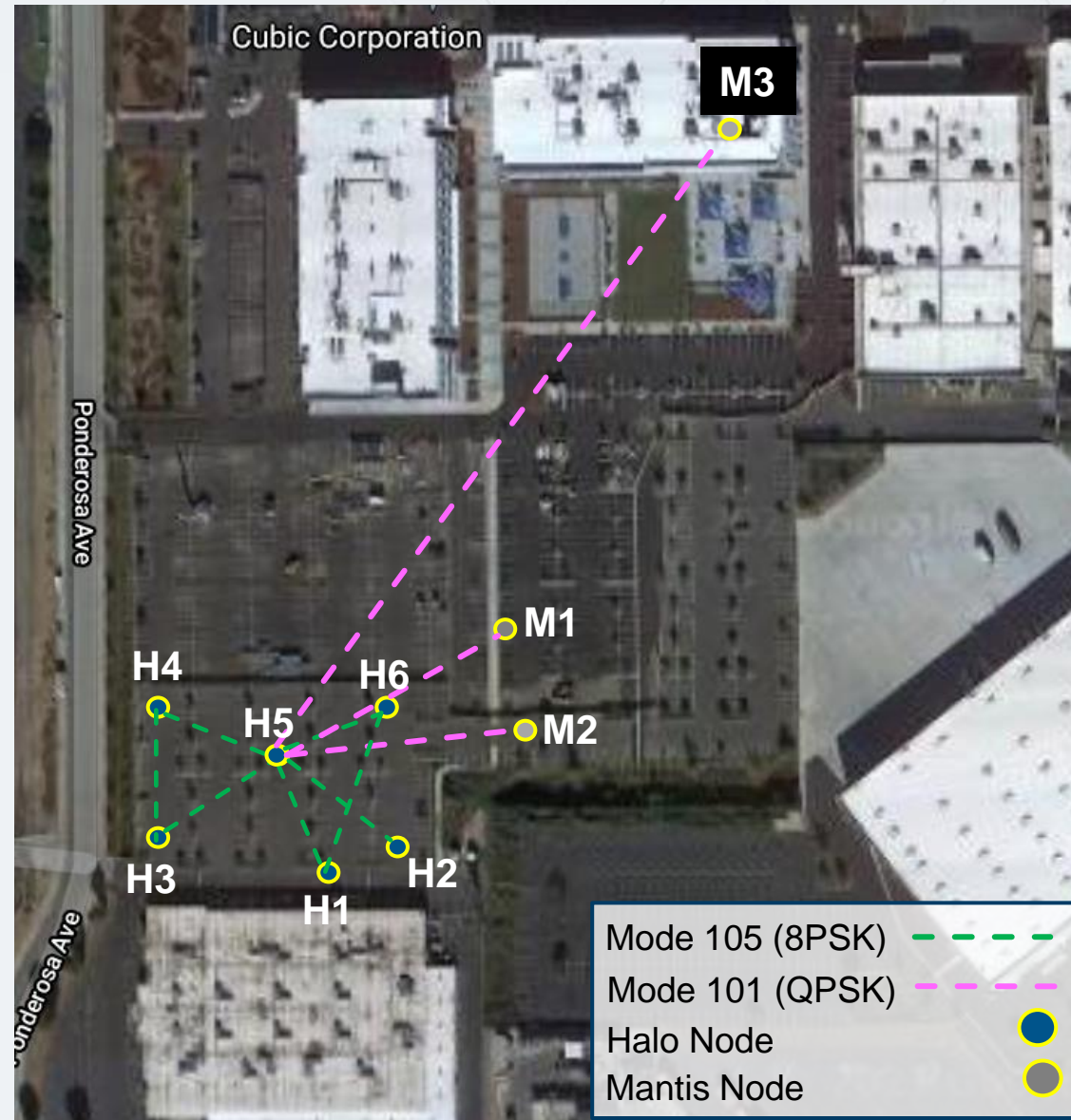


# Demo Configuration – Cubic Campus

- Halo Node 1 (32°49'10"N, 117°7'52"W)
- Halo Node 2 (32°49'10"N, 117°7'51"W)
- Halo Node 3 (32°49'10"N, 117°7'55"W)
- Halo Node 4 (32°49'12"N, 117°7'55"W)
- Halo Node 5 (32°49'11"N, 117°7'53"W)
- Halo Node 6 (32°49'12"N, 117°7'52"W)
- Mantis Node 1 (32°49'12"N, 117°7'51"W)
- Mantis Node 2 (32°49'11"N, 117°7'50"W)
- Mantis Node 3\* (32°49'18"N, 117°7'48"W)

\*Mantis Node 3 is located on the rooftop; all other nodes are mounted on trailers in the parking lot.

All antennas are directional. All Halo Node antennas can have multiple simultaneous beams in different directions.



# Halo Node 1 (32°49'10"N, 117°7'52"W)

- Beam 1: Az = 25°, El = 0°
- Beam 2: Az = 330°, El = 0°

Azimuth angles are clockwise from north.

0° angles were entered into the form as 0.01°, since 0° was not accepted.

All angles are estimates and may vary slightly within +/- 5°.





# Halo Node 2 (32°49'10"N, 117°7'51"W)

- Beam 1: Az = 305°, El = 0°

Azimuth angles are clockwise from north.

0° angles were entered into the form as 0.01°, since 0° was not accepted.

All angles are estimates and may vary slightly within +/- 5°.



# Halo Node 3 (32°49'10"N, 117°7'55"W)

- Beam 1: Az = 0°, El = 0°
- Beam 2: Az = 50°, El = 0°

Azimuth angles are clockwise from north.

0° angles were entered into the form as 0.01°, since 0° was not accepted.

All angles are estimates and may vary slightly within +/- 5°.





# Halo Node 4 (32°49'12"N, 117°7'55"W)

- Beam 1: Az = 120°, EI = 0°
- Beam 2: Az = 180°, EI = 0°

Azimuth angles are clockwise from north.

0° angles were entered into the form as 0.01°, since 0° was not accepted.

All angles are estimates and may vary slightly within +/- 5°.



# Halo Node 5 (32°49'11"N, 117°7'53"W)

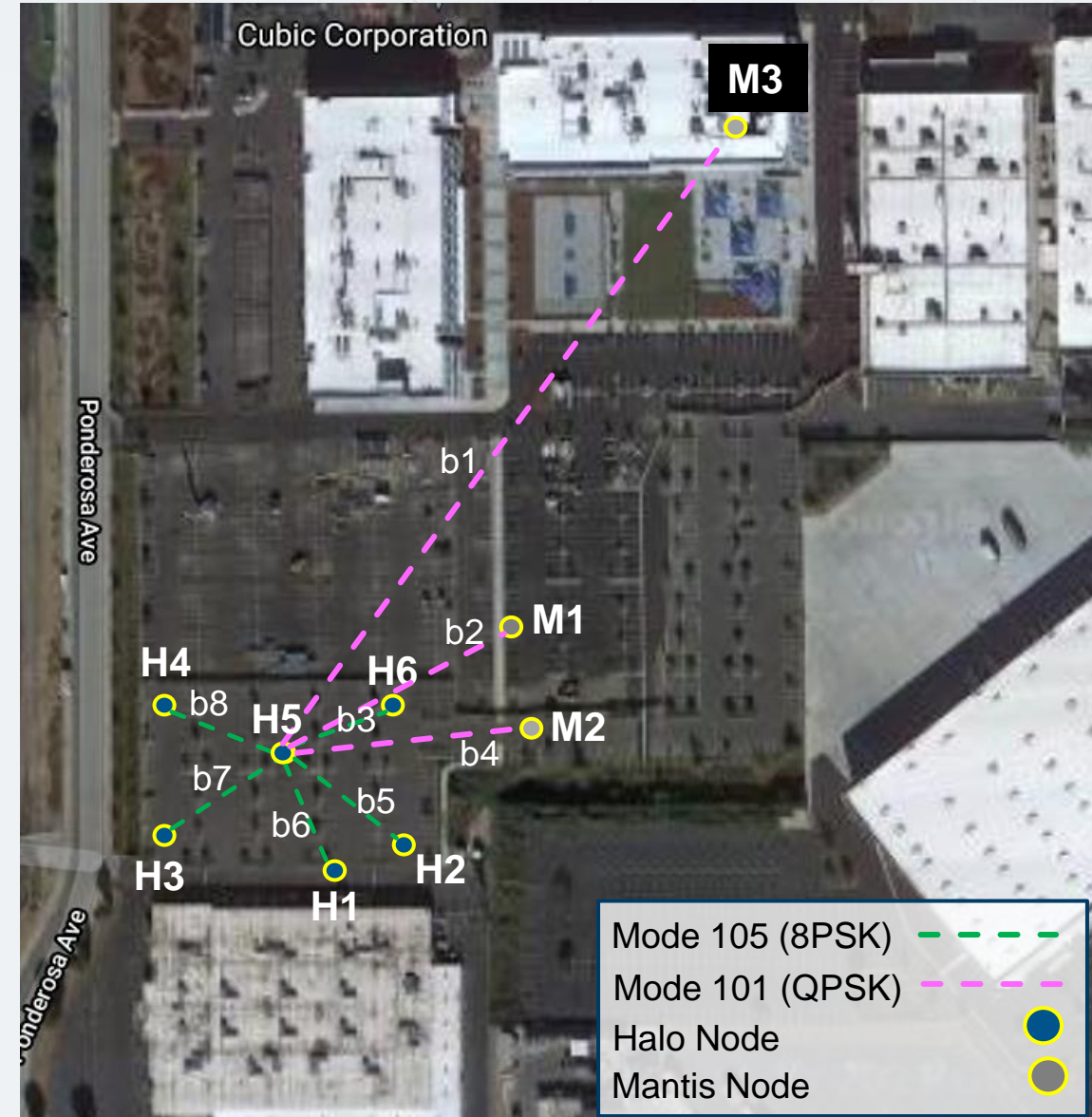
- Beam 1: Az = 35°, El = 3°
- Beam 2: Az = 60°, El = 0°
- Beam 3: Az = 60°, El = 0°
- Beam 4: Az = 85°, El = 0°
- Beam 5: Az = 130°, El = 0°
- Beam 6: Az = 160°, El = 0°
- Beam 7: Az = 235°, El = 0°
- Beam 8: Az = 290°, El = 0°

Azimuth angles are clockwise from north.

Elevation angles are up from horizontal.

0° angles were entered into the form as 0.01°, since 0° was not accepted.

All angles are estimates and may vary slightly within +/- 5°.





# Halo Node 6 (32°49'12"N, 117°7'52"W)

- Beam 1: Az = 200°, EI = 0°
- Beam 2: Az = 250°, EI = 0°

Azimuth angles are clockwise from north.

0° angles were entered into the form as 0.01°, since 0° was not accepted.

All angles are estimates and may vary slightly within +/- 5°.



# Mantis Node 1 (32°49'12"N, 117°7'51"W)

- Beam 1: Az = 240°, El = 0°

Azimuth angles are clockwise from north.

0° angles were entered into the form as 0.01°, since 0° was not accepted.

All angles are estimates and may vary slightly within +/- 5°.





# Mantis Node 2 (32°49'11"N, 117°7'50"W)

- Beam 1: Az = 265°, El = 0°

Azimuth angles are clockwise from north.

0° angles were entered into the form as 0.01°, since 0° was not accepted.

All angles are estimates and may vary slightly within +/- 5°.



# Mantis Node 3 (32°49'18"N, 117°7'48"W)

- Beam 1: Az = 215°, El = -3°\*

Azimuth angles are clockwise from north.

Elevation angles are up from horizontal.

\*Since the STA form did not allow nonnumeric characters (-), it says 3, but this should be negative/below the horizontal.

All angles are estimates and may vary slightly within +/- 5°.

