City of Manhattan Beach Distributed Antenna System (DAS)

November 16, 2017

Tonight's Request

- Approve and affirm the Director of Community Development's approval of 11 permit applications for AT&T's proposed wireless facilitates.

- Approve 4 permit applications in the Coastal Zone appealable area.

- Direct city staff to complete negotiations on Master License Agreement with AT&T.

Overview

Manhattan Beach DAS project consists of 15 DAS Nodes:

- 9 DAS nodes designed for concrete street light poles; the city is in escrow to purchase these 9 street light poles (among others) from SCE.
- 1 DAS node is designed for a banner pole which is a current city asset.
- 5 DAS nodes are designed for utility wooden poles currently owned by SCE, and not proposed for sale to the City.

Timeline

AT&T has worked with city staff since Spring 2014.

2014-2017: AT&T worked with City staff to identify locations that result in no impacts on existing street parking, minimize view and other aesthetic impacts to residents, and do not decrease existing sidewalk accessibility, while providing cellular telephone coverage to underserved areas.

August 15, 2017: City Council holds a discussion regarding four of the applications for facilities located in the Appealable Area of the Coastal Zone. **Hearing on those four applications was continued.**

August 25, 2017: AT&T provides the City a draft of the Master License Agreement.

September 26, 2017: City of Manhattan Beach hosts a Telecommunications Community Workshop, a public community forum for Manhattan Beach residents.

October 19, 2017: The City's Director of Community Development notifies AT&T and the public that the Director had approved eleven, and denied one, of the remaining twelve applications (for facilities located outside of the Appealable Area of the Coastal Zone).

Challenges

- Currently, AT&T service in the beach area of the City of Manhattan Beach generally west of Valley Drive is inadequate.

- The commercially-zoned properties are too far inland and the signals from existing macro antenna facilities within the City cannot be extended or changed to serve the target area.

- AT&T's wireless network in Manhattan Beach needs to be modernized and updated to handle growing capacity needs and data transmission: texts, photos, videos, traffic maps, internet access and phone calls. This is critical in the summer months with the increase of visitors to the beach area.

- Terrain is an issue from the east side to the west side (beach side) limiting our ability to serve from our current macro locations.

- Multi-story homes and businesses interfere with radio signals.

- As with any infrastructure siting process, topography, geography, and existing infrastructure all pose technical challenges when assessing the right solution.

Process

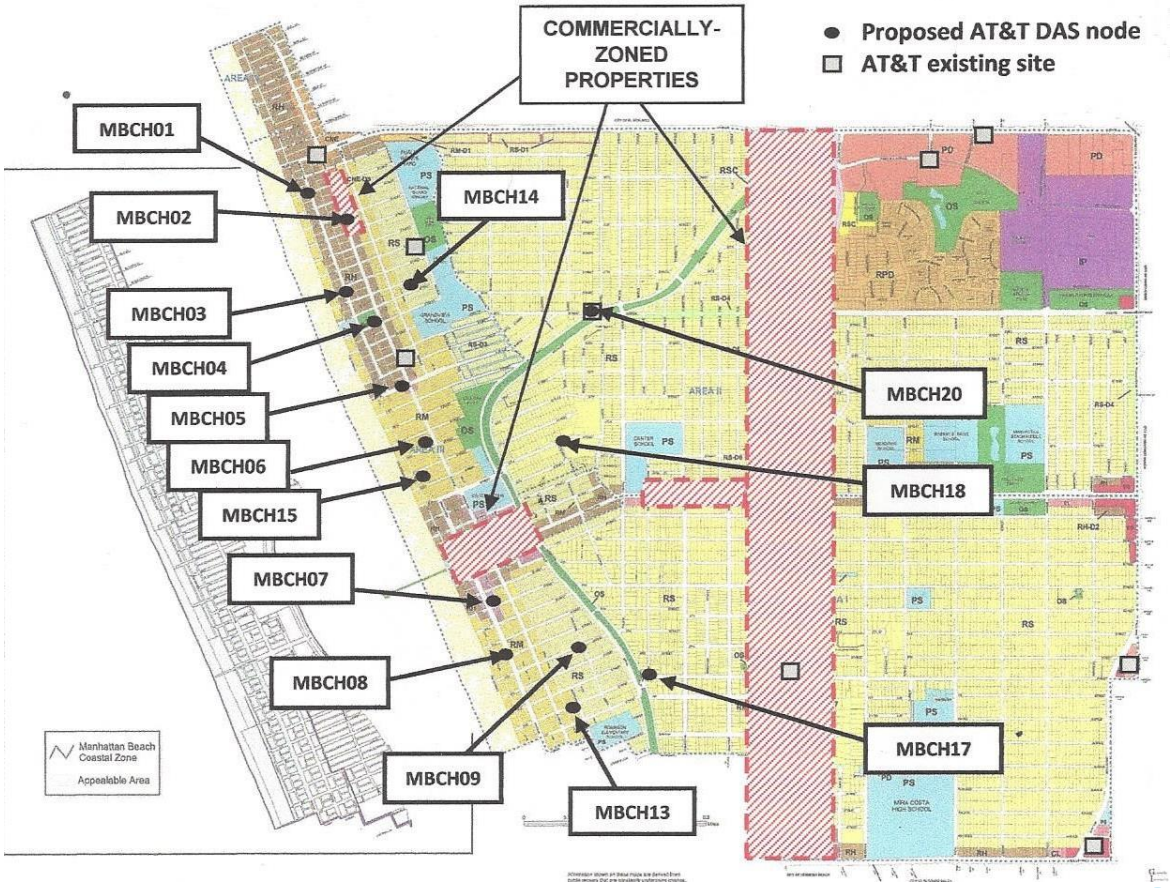
- AT&T is committed to improving wireless network infrastructure to deliver the quality high-speed services our customers demand in Manhattan Beach.
- To meet the needs of its customers, AT&T is proposing to densify its Manhattan Beach wireless network through the deployment of a distributed antenna system.
- During the past three years, AT&T worked with City staff to identify locations that result in no impacts on existing street parking, minimize view and other aesthetic impacts to residents, and do not decrease existing sidewalk accessibility, while providing cellular telephone coverage to underserved areas.
- AT&T conducts an alternative site analyses for each site. The final determination of a particular site is the culmination of a collaborative process to choose a least intrusive site that is optimal for filling coverage gaps in order to deliver reliable, high quality service for our wireless customers.
- AT&T has worked closely with city staff on design modifications and relocation of the proposed sites. City staff conducted and on-site visit of each of the proposed sites.

Manhattan Beach DAS Project Visuals

Node Location Overview

Proposed Design Types (15 Node Locations)

- Replacement Street Light Poles (9)
- Replacement Banner Pole (1)
- Utility Wood Poles (5)



Typical DAS Node Design
For a Street Light, Banner Pole & Utility Pole

- Two antennas
- One equipment cabinet
- Two Ground Handholds (Power & Fiber/Coax Connections)

Example: Replacement Streetlight Pole

MBCH05: Marine Avenue at Bayview Drive

Example: Banner Pole

MBCH02: Highland Avenue at 32nd Place

Example: Utility Wood Pole

MBCH07: Manhattan Avenue at 11th Street

Why DAS System Was Chosen for Manhattan Beach

- ✓ Closes wireless service gaps throughout the beach portion of Manhattan Beach.
- ✓ Addresses community concerns: no impacts on existing street parking, minimizes sightline impacts and does not decrease existing sidewalk accessibility.
- ✓ Minimizes the size of wireless facilities to serve an area using small antennas and reduced on-site equipment.
- ✓ Increases network capacity to meet increasing demand from residents and visitors in the Manhattan Beach pier and beach areas.
- ✓ Enables faster wireless Internet speeds.
- ✓ Improves wireless experience in places where large cell towers are not the best solution.


AT&T