

THE NEWSLETTER FOR THE SUTRO TOWER NEIGHBORHOOD | JULY 2016



Erosion Control Work Under Way at Sutro

Workers finished a new 62-foot-long retaining wall on the south and east sides of the Sutro Tower building, as part of a project approved by the San Francisco Planning Commission to control soil erosion on the property. The permit request for the project was submitted in 2013 and the building permit issued last year.

Other elements of the project include three new catch basins and 220 feet of new pipe to manage drainage, and significant new landscaping with native plants. Nineteen dead or diseased eucalyptus trees were removed and will be replaced by 30-40 coastal live oak, toyon, silk tassel, and wax myrtle, along with 13,600 square feet of hydro-seeding. Planting will occur later this summer after additional concrete is poured for stairs and walkways for safer security patrols. The exact number of trees and shrubs will be

determined based on field conditions as planting proceeds.

"We want to have all the new native vegetation planted before the rainy season begins," said Eric Dausman, chief operating officer of Sutro Tower, Inc. Additional trees and shrubs also will be planted on Sutro Tower and San Francisco Public Utilities Commission (SFPUC) property between Summit Reservoir and the Sutro Tower building for aesthetic purposes once the City approves the plan and upon finalization of an agreement reached with the SFPUC.

The new retaining wall is 8-1/2 feet high and supported by 13 piers. The wall and piers contain 169 tons of concrete. Since Sutro Tower was built more than 40 years ago, up to 18 inches of soil has eroded from some portions of the south side of the hill.

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FCC Begins Auction of TV Broadcast Spectrums

elevision stations around the country, including the stations broadcasting from Sutro Tower, are eligible to participate in an unprecedented "incentive auction" to help the Federal Communications Commission meet the nation's accelerating need for wireless broadband capacity. When the multi-billion-dollar auction is complete, there will be less congestion on wireless networks, laying the groundwork for fifth generation (5g) wireless services and applications according to the FCC publications on the topic.

While the Commission stated that the impact on Sutro Tower and its antennas is not yet known, it is widely surmised that the results will require replacement or relocation of many of the antennas on the tower.

The broadcast incentive auction, authorized by Congress in 2012, is comprised of two separate but interdependent auctions — a reverse auction, which will determine the lowest price at which some broadcasters may voluntarily relinquish their spectrum usage rights; followed by a traditional auction, which will determine the highest price wireless companies are willing to pay for licenses to use those relinquished spectrums to deliver high-speed data

2016 Maintenance Schedule

utro Tower's 2016 maintenance work includes the annual work on one of the tower's legs – this year it's the North leg — as well as any maintenance identified as needed by the structural engineers who inspect the tower. This work includes removing old paint and any rust and coating steel with a high-quality epoxy paint, or replacing bolts that are nearing the end of their useful life. .

To minimize the noise impact on neighbors, tower workers are using quieter tools as much as possible

CAUTION
WORKERS
ABOVE

and use their louder heavy-duty air tools only when absolutely necessary in order to meet maintenance requirements. We have agreed with the neighborhood associations not to work on holiday weekends.

services. There will be rounds of bidding in each auction until supply matches demand. TV stations that successfully sell their spectrum rights then can choose to go off the air, share a channel with another station, or move from their current channel to a channel in a different band.

"When broadcasters switched from analog to digital in 2008, they freed up spectrum above 700 MHz, which was given to wireless; now the wireless companies want to expand again."

This means there are a lot of unknowns. "We won't know until after the auction is over how it affects
Sutro Tower," said Charles
Meisch, spokesperson for the Federal Communications Commission in Washington, D.C. "It depends on the bidding behavior of the TV stations and of those seeking the newly available spectrum."

Americans' demand for wireless broadband continues to grow each year. Today, there are more connected devices than there are people living in the country, and about 70 percent of Americans use data-hungry smart phones. "The incentive auction will align the use of broadcast spectrum with 21st century consumer demands for video and broadband services," the FCC stated in setting up the auction in response to congressional mandate. "At the same time, it will preserve a robust broadcast TV industry while enabling stations to generate additional revenues that they can invest into programming and services to the communities they serve."

Basically, some frequencies now used for UHF broadcasting will be sold for wireless usage, and broadcast frequencies will be "repacked" in a smaller portion of the spectrum. "More spectrum is needed for wireless carriers to set up 5g LTE service," said Anant Sahai, an expert in wireless communications and networking and electrical engineering professor at University of California, Berkeley. "When broadcasters switched from analog to digital in 2008, they freed up spectrum above 700 MHz, which was given to wireless; now the wireless companies want to expand again."

The kind of spectrum that is becoming available is low-band spectrum that is valuable for its robust qualities and capacity to penetrate thick walls and travel far distances, the New York Times reported. The FCC has set an initial spectrum clearing target of 126 MHz for the first round of its reverse

SEE AUCTION ON PAGE 4

S.F. Grand Jurors **Tour Sutro Tower**

embers of the San Francisco Civil Grand Jury came to Sutro Tower for a get-acquainted fact-finding trip in June.

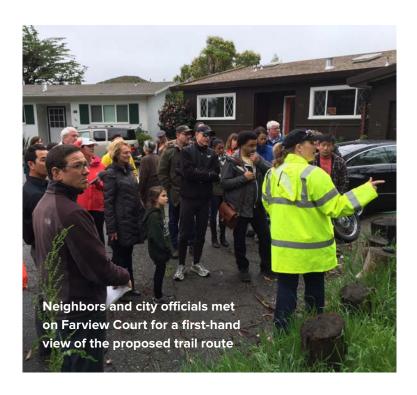
The Civil Grand Jury is selected each year by the presiding judge of the San Francisco Superior Court to investigate city agencies and functions, and to make public recommendations for improvement or greater efficiency. In addition to visiting public agencies and facilities, the current Jury has examined private institutions important to the city's well-being, such as Recology's recycling center and, now, Sutro Tower.

The Jury wanted "to better understand the tower's functions and future plans," said juror Wassim Nassif. "We had a most memorable, educational tour of the Sutro Tower grounds. The Jury learned a lot about this facility and its importance to the citizens of our great City."

Jurors were particularly interested in Sutro Tower's 24/7 security, the television stations' control rooms, and the emergency power generators.



New Trail Planned at Mt. Sutro



he San Francisco Recreation and Park Department is planning a Bay Area Ridge Trail connector from Twin Peaks to the Mt. Sutro Open Space Reserve. Most of the route is on Rec Park land or on San Francisco Public Utilities Commission land around the Summit Reservoir, with a small part potentially going along Sutro Tower property outside the security fence.

Since February, city officials have held meetings and walkthroughs attended by dozens of neighbors, trail enthusiasts and others.

The connector trail would formalize the unofficial paths currently frequented by pedestrians and bicyclists. As issues and concerns have been raised, Rec Park has made adjustments to the proposed route.

Sutro Tower Inc. is cooperating with the city and with the nonprofit Parks Alliance to address steps needed to put a public trail on currently restricted private property.

Fog Test Continues

Fog catching tests by
the nonprofit FogQuest
that began last fall are
continuing at Sutro Tower.
Mesh fog collectors trap
and gather the moisture
of fog. Fogquest collected
300 liters by March. In
foggy spring weather, the
catchers produced 3.6
liters of water per square
meter, including 4.5 liters
in June, compared to
1 liter in winter.

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AUCTION CONTINUED FROM PAGE 2

auction, including ten blocks of bandwidth currently licensed to broadcasters in the San Francisco Bay Area.

"By adding 126 MHz to wireless, people will experience faster, more reliable cell phone service -- many carriers can augment their service without having to build more towers," Professor Sahai said, adding that "another carrier may emerge to compete with the existing wireless companies" once the bidding is under way.

"The spectrum we're seeking is in the UHF band, channels 30-51," said the FCC's Meisch. "Stations in that range will go to another channel, or go off the air, or can share spectrum with other channels."

He explained: "Channel sharing is something that digital broadcasting made possible. A station can give up its license but agree with another licensee to share its bandwidth. Many stations will broadcast on new frequencies.

Television service providers (cable or satellite companies) will figure out how to make that happen so it's invisible for consumers, though over-the-air viewers will have to rescan their tuners to figure out what channel is where. We'll be doing a lot of consumer education."

The first round of the reverse auction began on May 31. "There's no fixed end date," FCC spokesperson Meisch said, "but it's reasonable to expect that the auction would conclude perhaps this fall. After that, it's a multi-year process. There's a lot of lead time."

Sellers and buyers — and the amount raised — won't be revealed by the FCC until the auction is complete. The first \$1.7 billion of proceeds is set aside to pay the costs of the auction, conversion of bandwidth to wireless usage, and the physical construction necessary for repacking TV signals; additional proceeds beyond what goes to television stations for lost spectrum will go to the Treasury.

Questions? Visit www.sutrotower.com/for-our-neighbors/, or contact Sutro Tower Chief Operating Officer Eric Dausman at 415-681-8850 or info@sutrotower.com.