Build NCC
Caltrans
SANDAG

Tree and Plant Removal and Replanting

Frequently Asked Questions

Caltrans and SANDAG Build NCC highway crews are removing remaining trees and plants along the outside shoulders of Interstate 5 (I-5) within Caltrans Right-of-Way to accommodate one new Carpool/HOV Lane in each direction between Lomas Santa Fe Drive in Solana Beach and Palomar Airport Road in Carlsbad. By working together early on, the Caltrans and SANDAG Build NCC project team were able to limit the project and construction footprint to help reduce the number of trees and plants required to be removed.

Please see a list of Frequently Asked Questions below:

1. **Why is tree and vegetation removal necessary along Interstate 5?**

   As part of the ongoing Build NCC construction program, I-5 will be widened an average of eight to ten feet on each side of the existing freeway to accommodate one new Carpool/HOV Lane in each direction. It is necessary to remove vegetation and trees within Caltrans Right-of-Way to install new drainage infrastructure and to create new freeway embankments on the outside shoulders that will support the added Carpool/HOV Lane.

2. **What efforts were made to minimize the number of trees that need to be removed?**

   Caltrans and SANDAG took great care in developing design plans that reduced the footprint of the project and limited construction access within vegetated areas. Grading was designed to minimize removal of significant vegetation. Slopes were engineered to be slightly steeper to reduce the project and construction footprint as well, using a ratio of 1.5:1 (horizontal/vertical) slopes instead of a typical 2:1 slope. Additionally, retaining walls were designed to reduce the amount of slope disturbance.

   During the design process, large established trees within the project footprint were evaluated on a case-by-case basis to determine if they could be protected in place and incorporated into the final design plans. Additionally, during active construction, trees just outside the construction zone are specifically marked for protection purposes and are continuously monitored to ensure their roots have not been impacted. In some cases, trees alongside construction limits may need to be removed for safety purposes.

3. **How many trees will be replanted?**

   Plans call for approximately 1,550 new trees and thousands of new plants and groundcover to be replanted along I-5 within the cities of Solana Beach, Encinitas, and Carlsbad, by the end of construction in 2023.

Example of a mature Torrey Pine tree

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4. What types of trees and vegetation will be replanted?

The California Coastal Commission approved the project's planting plan, which is comprised of only drought-tolerant, non-invasive native species including: Torrey Pines, Coast Live Oaks, Coastal Sagebrush, Lemonade Berry, Toyon, and more. Build NCC crews also will hydroseed all cleared or graded areas with a coastal sage scrub seed mix. Images of some of these plants can be viewed in the Interstate 5 North Coast Corridor Design Guidelines.

5. How did Caltrans and SANDAG determine what type of trees and vegetation to replant?

As I-5 is located within the coastal zone in north San Diego County, Caltrans and SANDAG are required as part of their California Coastal Commission permit to replant only native, drought-tolerant, and non-invasive species. As a result, the trees and vegetation types chosen through the Interstate 5 North Coast Corridor Design Guidelines considered the local topography, weather, existing vegetation, and unique native species found in north coastal communities. The landscape plan also was designed to be sustainable, require low maintenance and minimal irrigation, promote fire safety and weed suppression, blend with native slope vegetation and urban landscapes, control erosion and improve water quality, and use appropriate native plants with long life spans.

New plantings along southbound I-5

6. When will replanting begin?

Build NCC is a "Construction Manager General Contractor (CMGC)" project model, which provides great flexibility for Caltrans and SANDAG to work with the contractor to advance aspects of the project.

The Build NCC contractor is actively advancing planting in areas that that will no longer be disrupted by construction, therefore allowing plants more time to grow and acclimate, giving each new tree, shrub, and seeded area the best chance at establishing itself in the coastal environment. Completed areas include slopes in southern Encinitas and northern Solana Beach surrounding the San Elijo Lagoon highway bridge.

7. What type of water will be used for these plants?

All newly planted trees and shrubs in Encinitas and Carlsbad will be irrigated with 100 percent recycled water. Regulatory permits require that all new plantings be monitored and maintained for a period of five years after construction is completed.

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8. What happens if plants do not survive after construction is completed? Who is responsible for plant maintenance?

All trees, shrubs, and seeded slopes will be maintained through a five-year plant establishment period. A plant establishment period is a contractual agreement that outlines the amount of time that a contractor is responsible for maintaining the health of the trees and plants after construction is completed. If a plant fails, the contractor is responsible for replacement. Additionally, Caltrans and SANDAG will be replanting trees on "stepped" slopes. "Stepped" slopes require more time and care to construct, but also protect the slope from erosion and support replanted trees in establishing themselves.

9. What happened to the oleander shrubbery located within the I-5 median? Will it be replaced?

As part of initial construction, Caltrans and SANDAG Build NCC highway construction crews cleared and removed oleander located within the original I-5 highway median. In mid-2020, crews completed construction of a new, mesa buff colored concrete barrier median and planted a native shrub species called baccharis sarothroides (colloquially referred to as desert broom). This native flowering shrub is self-sustaining and drought-tolerant, and is expected to grow to approximately two feet in height above the highway median over the next few years, serving as a visual barrier between opposing freeway traffic.

Desert broom being planted in the I-5 median (May 2020)