

**Cultivation Relocation,  
Environmental Superiority Analysis,  
& Site Restoration**

**Denali Farms, LLC - July 2022**

**Background:** In 2014 an approximately 12,000 sf garden was established along the west property line, located within riparian setbacks. The garden began as dispersed pots, then in 2016 greenhouses were erected totaling approximately 10,000 sf. Cultivation ceased on site in September 2020 due to a violation, and the garden has remained dormant since. The garden beds and greenhouse frames remain in place. Subsequent surveys of the garden location revealed its proximity to the adjacent watercourses. In an effort to comply with CDFW, County, and Waterboard setback requirements, options were explored for relocating the garden to an environmentally superior location, outside of sensitive riparian habitat.

**Site description:** The cultivation garden is located on a south-east facing aspect, generally draining to the east. A intermittent class III stream originates south of the cultivation area and drains east toward a class II watercourse located within 75' of the garden. The garden itself is a series of five (5) short terraces cut into the hill slope for greenhouse flats. The degree of cut and fill grading is relatively minimal, with banks ranging 2' to 5' in height. Currently, the site is stable and well vegetated with grass and there is no sediment discharge concern to nearby watercourses. The garden is accessed by a 600' long ATV road that crosses two watercourses. The ATV road is steep and requires improved drainage to prevent erosion.

**Cultivation relocation:** The property was surveyed for suitable sites to relocate the garden in part or as a single conglomerate. However, due to constraints from topography, tree canopy, and setbacks, there were few suitable options. The first option (1) looked at expanding garden "D" located on a bench on a grass covered hillside. This option would have required significant grading in order to terrace the hillside, and there were concerns that sediment could be delivered to a class II stream to the south should erosion occur. The second option (2) looked at expanding west of garden "C" into the grasslands. This option would have required cutting trees and creating new access roads, and would take considerable grading. After consideration, it became clear that the most suitable and environmentally friendly areas for cultivating on the property were those previously developed to some degree. Upon examining the existing cultivation areas it was found that the greenhouses did not fully utilize the established clearings. A third option was explored which would expand cultivation within the footprint of the existing disturbed areas.

**Site superiority analysis:** Given the degree of earthwork and tree cutting required to establish new cultivation area(s), options One and Two would have the greatest environmental impact. The third option of expanding within the footprint of existing cultivation areas would be markedly less impactful. The clearings are already well established, and expanding within their footprint would not require any grading or timber conversion. Relocation will be achieved by lengthening select greenhouses and erecting three (3) new greenhouses within previously developed areas. Two of the greenhouses will be within the footprint of the south water bladder, and a third small greenhouse will be placed between the road and the existing greenhouses in garden "A." Using this approach will eliminate the need for new grading, timber conversion, or roads, and would respect setbacks from riparian areas. A 2022 biological

assessment of the proposed relocation also confirmed that no sensitive plant species would be impacted. See the Operations Plan for details on the dimensions of the existing greenhouses and the proposed increases in length.

**Historic development:** Prior to development, the cultivation area was composed of grasslands surrounded by mixed hardwood forest. Examination of the site and historic imagery shows that the site was a grassland prior to being developed and that no trees were cut, nor were nearby riparian areas disturbed. The cultivation area was developed with five (5) short terraces for greenhouses through standard cut/fill excavation in the hill slope. The resulting fill slopes range 2' to 5' in height. See dated satellite imagery and photos.



Google 2012



Google 2014



Google 2016



Google 2019

Garden photos. December 2021



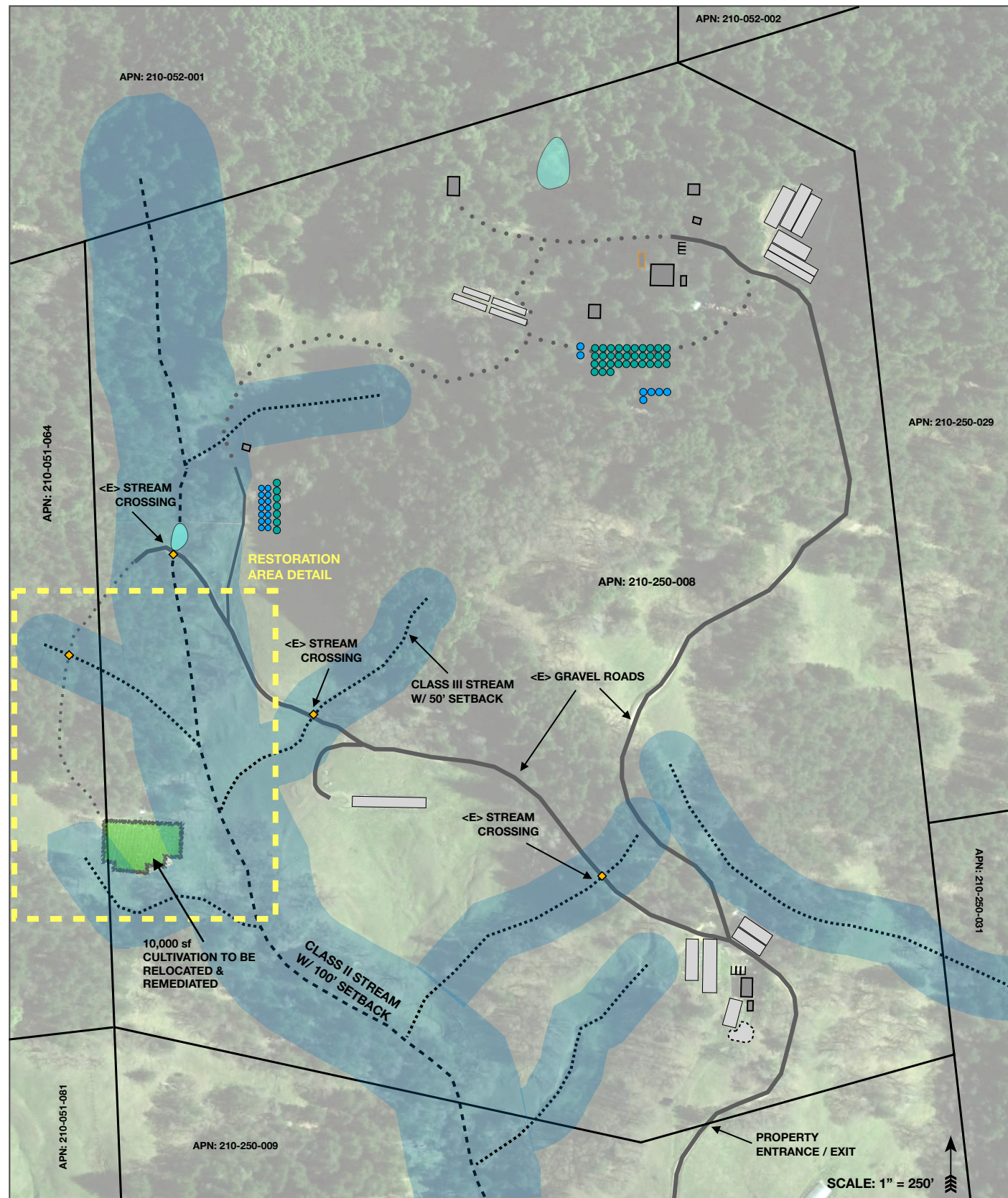
**Proposed restoration:** An assessment of the grading work and ground disturbance was conducted to determine the degree of material moved to create the greenhouse flats. Three of the five flats have cut-banks less than 2' in height, and the two lower flats are approximately 4' to 5' in height. A profile comparison relative to the adjacent native hill slope revealed that minimal earthwork was undertaken to create the flats. It is recommended that the fill slopes be removed by excavation, and the fill material be spread and compacted onto the flats. The resulting surface should blend with the adjacent natural contours. It's estimated no more than 15 to 20 yards of material will need to be moved to return the site back to its natural contours.

Care should be taken to protect the riparian areas from disturbance during restoration work. A temporary fence shall be erected as a barrier around the disturbance area, and fiber rolls shall be placed between the work area and the drainage. Prior to commencing earthwork, all cultivation equipment shall be removed, including any garden pots, fencing, cultivation soil, nutrient containers, irrigation line, greenhouse infrastructure, t-posts, fencing, tarps and all other foreign material. A bobcat or front-end loader will be sufficient to complete the work and will minimize disturbance. Once the site has been re-graded, the area will be revegetated with local native grass seed and covered with two to four inches of weed-free straw prior to the

rainy season. The ATV trail leading to the site will remain in place for fire access, but will have waterbars installed to prevent erosion. See the restoration site plan for details.

**DENALI FARM, LLC  
RESTORATION SITE PLAN  
APN: 210-250-008**

PARCEL OVERVIEW



RESTORATION DETAIL

