

11393



Project Description – APN 53524-112-002
Outdoor and Mixed Light Cultivation Permits
Owner: W.U.R.M. Assets, LLC. - Applicant: Grouse Mountain Green, LLC.

The Project is described below for APN 524-112-002, located on timberlands in northeastern Humboldt County in the vicinity of the community of Willow Creek in the lower South Fork Trinity River watershed (Figure 1), owned by W.U.R.M. Assets, LLC, and operated by the applicant, Grouse Mountain Green, LLC. This Project consists of an Outdoor Cultivation Special Permit (Type II) for 10,000 and a Mixed Light Cultivation use Permit for 22,000 ft² (Type III) under the pre-2016 existing cultivation provision. This Project Description includes documentation (date-stamped aerial imagery) of cannabis cultivation activity prior to January 1, 2016, which consisted of a total of ~12,600 ft² between two separate outdoor cultivation areas and a total of ~22,100 ft² between two separate mixed light cultivation areas (see pre-2016 cultivation documentation section below). A consolidation of all outdoor cultivation areas into area #3a or a nearby alternate location is proposed.

The existing conditions and proposed cultivation plan for APN 524-112-002, as detailed below, has been prepared, and is based on a site inspection and evaluation, by Joshua Strange, PhD, who is the Principal Biologist at Sweet River Sciences (email: joshua@sweetriversciences.com). Sweet River Sciences specializes in understanding complex river and water issues and technical information in order to provide easy to understand summaries, win-win solutions, innovative restoration designs, fundable study plans, sustainable water planning, land use planning and remediation, and reliable expertise with a proven record of excellence and success. Dr. Strange has over 15 years of experience in fisheries biology and aquatic ecology, and collaborates with a variety of specialists in forestry, geology, engineering, archeology, hydrology, water rights law, and statistical analysis.

APN 524-112-002 is a 136 acre parcel (Zoned TPZ) located adjacent to the paved public road USFS Route 6N06 (Figure 1). This parcel is near a ridgetop and thus contains relatively few streams with one marked blue line stream (Class II) and other potential Class III stream channels that would be unnamed tributaries to the lower South Fork of the Trinity River, all of which is visible in the parcel topography (Figure 2). The Class II stream provides domestic water from a previously developed Point of Diversion (POD), the location of which is show on the Site Plan (Figure 3). A permit application (1600/LSA) for the domestic water diversion and infrastructure (Figure 4) has been submitted to the CDFW. All irrigation water for cultivation is provided by a ~675,000 gallon off-channel, lined, rainwater catchment pond (Figure 4).

Cultivation occurs on natural terraces with gentle slopes (Figure 2) with minor clearing and grading for cultivation on top of the preexisting logging decks that were built, along with the road network, as part of prior timber harvest activities. Cultivation includes use of containers, holes, and raised beds with open air and hoop houses (Figure 5). Developments on the parcel include a residence with septic (Figure 6), several storage sheds, two processing shops, two diesel generators shed, solar power, hoop houses, a private road network, off-channel rainwater catchment pond for irrigation, and a basic domestic water system from the POD

(Figure 3). Electricity is provided primarily by generator power with proper fuel containment (Figure 7), which is augmented by solar power. The private roads on the property are generally in good condition, and a road assessment and improvement plan has been developed by Pacific Watershed Associates. There are no egregious erosional features on the private roads that need urgent remediation and there is only one stream crossing. Enrollment in the NCRWQCB cannabis program has been recently completed and a Water Resources Protection Plan is in development. A less-than-3-acre timber conversion evaluation has been conducted by Timberland Resource Consultants and the report is in preparation.

There are no schools, public facilities, or neighboring residences within the setbacks of the cultivation sites on the parcel (see setback section). No public access is permitted or proposed as part of this permit application. Cannabis related facilities are limited to residences, sheds for drying, processing (trimming), propagation, as well as covered storage for fertilizers and OMRI listed and MMRSA approved pesticides.



Figure 1. Vicinity overview map of APN 524-112-002 in relation to blue-water streams, USFS roads, neighboring parcels, and the South Fork of the Trinity River (Source: Humboldt County's GIS website).

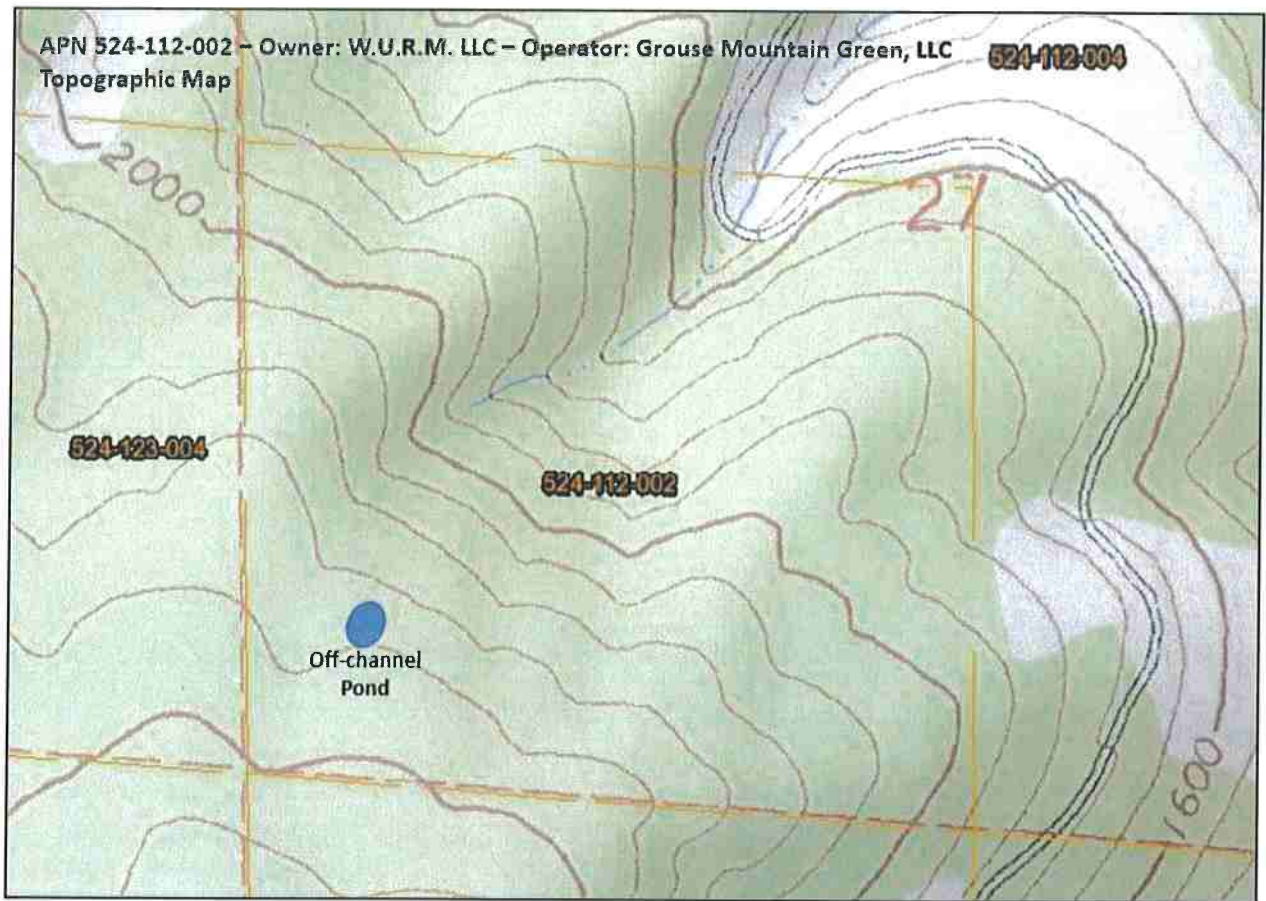


Figure 2. Contour map topography for APN 524-112-002, including the location of the off-channel rainwater catchment pond.

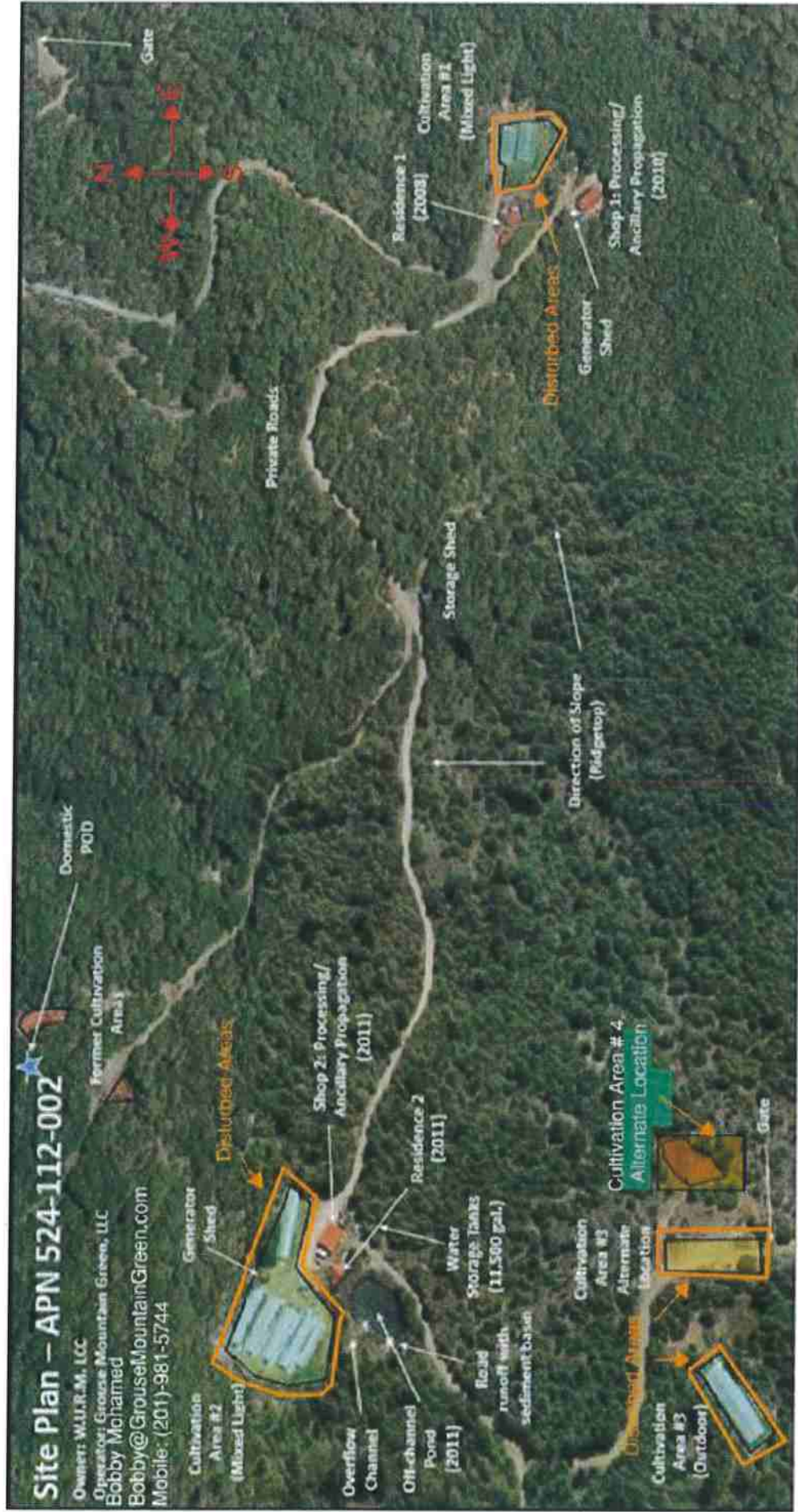


Figure 3. Site plan for APN 524-112-002.



Figure 4. Ground level photos of POD for domestic water source for APN 524-112-002. These pipes are in close proximity to each other and are combined into the same settling tank.



Figure 5. Off-channel rainwater catchment pond that provides irrigation water for APN 524-112-002.



Figure 6. Example photo of cultivation areas (#1) on APN 524-112-002.



Figure 7. Primary residence on APN 524-112-002.

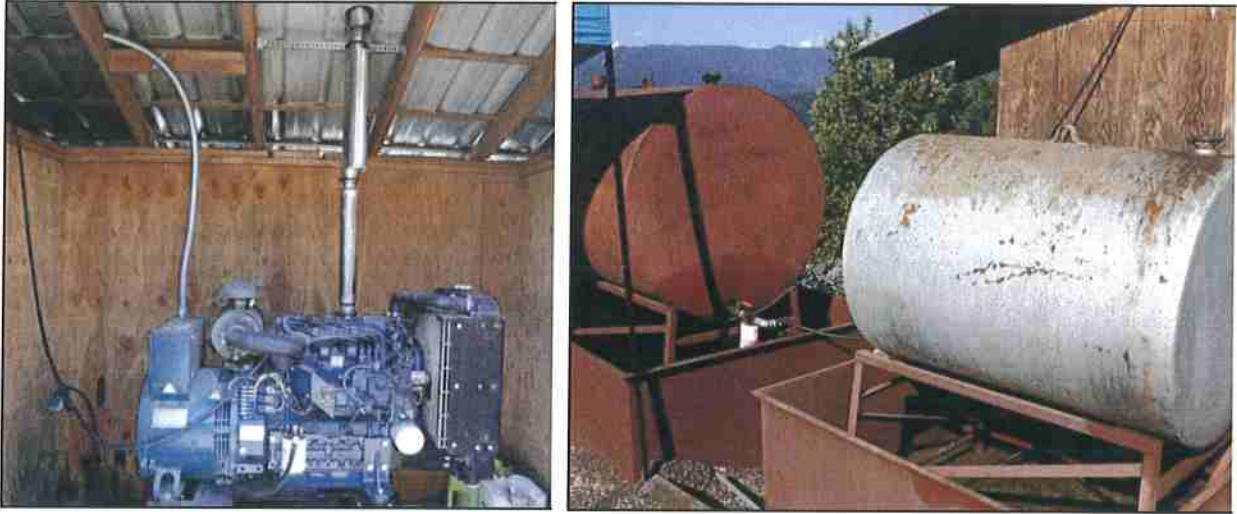


Figure 8. Generator in shed with separate fuel containment on APN 524-112-002 at Site #2.

Operations Plan – APN 524-112-002 Outdoor and Mixed-Light Cultivation Permits

The applicant's proposed project for APN 524-112-002 includes applications for an (pre-2016) outdoor cultivation Special Permit for 10,000 ft² and a mixed light cultivation Use Permit for 22,000 ft² pursuant to CMMLUO 55.4.8.2. This parcel is approximately 136 acres and is zoned TPZ.

Cultivation Plan

Water Operations

This property has two primary sources of water: (1) a point of diversion (POD) from an unnamed Class II/III tributary for domestic water, and (2) an off-channel rainwater catchment pond for irrigation water. The location of the POD and pond are shown on the Site Plan.

Drinking and domestic water for the residences and processing facilities on this property is supplied by the Class III tributary POD (subject of a pending CDFW 1600 permit). Domestic water use on this property is estimated at 400 gallons per day, although that amount could be higher during the peak of processing season.

The preexisting off-channel rainwater catchment pond has a volume of ~675,000 gallons and outfitted with a rubber liner to prevent seepage loss. A retroactive grading permit and stability analysis is in preparation by Trinity Valley Engineers, which will include recommendations for any necessary upgrades. The off-channel pond is stable and is fed by rain and snow fall during the wet season with a negligible amount of overland flow recruited into the pond. All irrigation water for this property during the full May 15th to October 15th forbearance period comes from the pond and is pumped or gravity fed into tanks that serve the various cultivation areas.

Total estimated agricultural irrigation water use is approximately 550,000 gallons for the growing season, although this is highly contingent on annual and monthly variation in meteorological conditions, cannabis strains, and cultivation techniques. The applicant irrigates at an agronomic rate that does not produce runoff.

Drainage and Water Resource Protections

Water resources and cultivation areas were assessed by Sweet River Sciences and the road network was assessed by Pacific Watershed Associates as part of the permitting process for the North Coast Regional Water Quality Control Board (NCRWQCB) and the California Department of Fish and Wildlife (CDFW). This included multiple inspections during the dry and wet seasons. There are is one blue line stream on the parcel, which is a tributary to the South Fork Trinity River, but no active road stream crossings. The 1600 Lake and Streambed Alteration Permit application to the CDFW covers the Point of Diversion from the surface stream for domestic water supply. The NCRWQCB's cannabis program requires the development of a Monitoring and Reporting Plan and Water Resources Protection Plan, which focuses on protecting water resources from erosion and sediment delivery from cultivation areas, infrastructures, and road. The road network assessment and remediation plan developed by PWA will bring the road up

to standard condition requirements. The road network was constructed by prior landowners as part of timber harvest operations. Presently the road is functional with no significant areas for immediate remediation, which is due in part to the predominance of upland rocky soils. The road remediation plan includes the construction or further maintenance of 33 rolling dips. These remediation actions are designed to improve road drainage to decrease existing and potential sediment delivery to tributaries the South Fork Trinity River in northeastern Humboldt County.

All cultivation areas are located on landings constructed and utilized by the previous property owner for timber harvest activities, which has been evaluated in a timberland conversion report by a Registered Professional Forester at Timberland Resource Consultants. Although some surficial grading occurred at each cultivation site, there was no evidence of extensive recent cut or fill and the potential for surface erosion from the cultivation areas to reach watercourses was determined to be relatively low. The cultivation areas and the off-channel pond have minimal potential for sediment delivery to watercourses. However, the following general treatments will be conducted:

- General BMPs to be implemented at all cultivation areas: spreading straw and seed on all un-vegetated slopes; conduct minor grading to prevent runoff concentration as needed.

Storage of Regulated Products

No synthetic chemical fertilizers or pesticides will be used, and in the event of an emergency need, use would be from MMRSA approved list of chemical pesticides under their cannabis program requirements. Such products would be used according to the label specifications and any applicators will receive training and certification by Department of Pesticide Regulation along with appropriate protective gear.

Cultivation practices rely on regular foliar and root area spraying of compost tea as a preventive treatment to prevent problems with parasitic microbes, especially fungal. In the event of a fungal outbreak, OMRI approved organic pesticide products such as Neem Oil or Green Cleaner will be used. Plant fertilization will only be from organic OMRI approved products that will be added to the growing soil medium prior to the growing season as solids and also as liquid to irrigation tanks for fertigation during the growing season. All organic fertilizers will be stored out of the elements in the shop or the shipping container sheds.

Portable gasoline tanks for equipment will be stored in covered sheds. Diesel generators to provide electricity for drying and processing at the shop will be housed appropriately to contain noise at acceptable levels (e.g., <60 decibels at property boundaries) and provide protection from the element, including a proper fuel containment system for the diesel fuel tank. All generators and fuel tanks will have proper containment and cover from the elements.

Cultivation Activities and Schedules

The outdoor cultivation area of 10,000 ft² was comprised of four separate flats within the footprint of logging deck landings, but is proposed to be consolidated into one outdoor

cultivation area (see Site Plan). These flats are properly sited relative to County and agency guidelines. These outdoor cultivation areas are grown without supplemental lighting and have consisted of one crop per year grown in holes filled with growing medium (potting soil). The growing medium will be reused for years with annual amendments prior to the growing season and fertigation during the growing season following bio-dynamic practices. It is proposed to consolidate outdoor growing into cultivation area #3 or a proposed adjacent alternate location.

The mixed-light cultivation area of 22,000 ft² is comprised of two separate flats (see Site Plan), also within the footprint of logging deck landings. These flats are properly sited relative to County and agency guidelines. Cultivation methods include the use of raised bed with growing medium and covered hoops for day-length control and protection from the element to allow for year-round cultivation, although a fallowing period occurs during the height of the winter. This allows for two to three cycles per year from approximately March through October. These mixed-light cultivation areas are grown with a combination of supplemental lighting and light deprivation. Light deprivation tarps will also be used to cover the hoops when supplemental lighting is used at night to prevent light pollution. Supplemental day-length lighting is provided by a string of low-volt lights powered by generators that will be covered with underlying fuel containment. Heating for inside the hoops as needed will be provided by propane based forced air heating systems. The growing medium will be reused for years with annual amendments prior to the growing season and fertigation during the growing season following bio-dynamic practices. Irrigation water is distributed from the pond or its connected tanks via 1 inch poly tubing. There are no schools, public facilities, Tribal Cultural resources, or neighboring residences in the vicinity (i.e., 600 and 300 foot setbacks) of the processing areas.

Processing Plan

The location of processing facilities is shown on the Site Plan Map. Shops will be used for drying and pre-processing steps. The processing cabin will be used to house seasonal employees and conduct on-site processing of dried flowers. Facilities for employees include a kitchen with potable water, hand washing stations and showers, flush toilets with septic, and sleeping quarters. The cabins are wired and lighted with electricity provided by diesel generators. No processing of concentrates will occur. These buildings were built to code and back-permitting will be pursued under the Alternative Owner Builder ordinance. Additional permitted developments may be pursued as necessary to ensure compliance with processing and employment regulations. For processing, employees will be trained and have access to safety protocols and protective equipment.

There are no schools, public facilities, Tribal Cultural resources, or neighboring residences in the vicinity (i.e., 600 and 300 foot setbacks) of the processing areas.

Security Plan

Security is provided by a combination of controlling the limited entry points, lack of public visibility, and surveillance. The remote location and forested and hilly terrain serve to obscure any view of cultivation areas from public roads or access points and also make off-road vehicle access impossible. No public access is allowed or proposed. The property has only two access

entry points at the top and bottom of the road system, which both have sturdy locked metal gates. Hidden and open video surveillance and motion detecting warning systems will be used to alert to the presence of vehicular or foot traffic and to document any suspicious activity on the roads, gates, processing facilities, and cultivation areas. No cash will be stored on site. Employees will have access to an emergency contact list and evacuation plan.

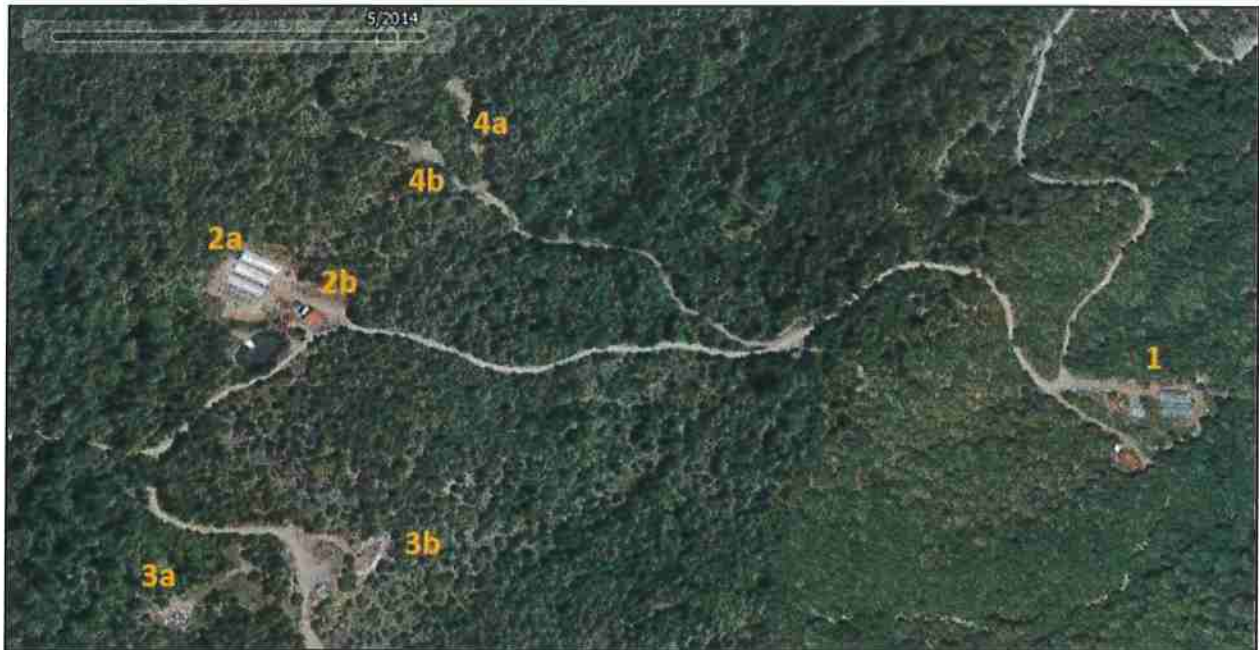
**Cultivation Setbacks – APN 524-112-002
Outdoor and Mixed-Light Cultivation Permits**

There are no schools, public facilities, Tribal Cultural resources, or neighboring residences in the vicinity (i.e., 600 and 300 foot setbacks) of the processing areas (see documentation below).

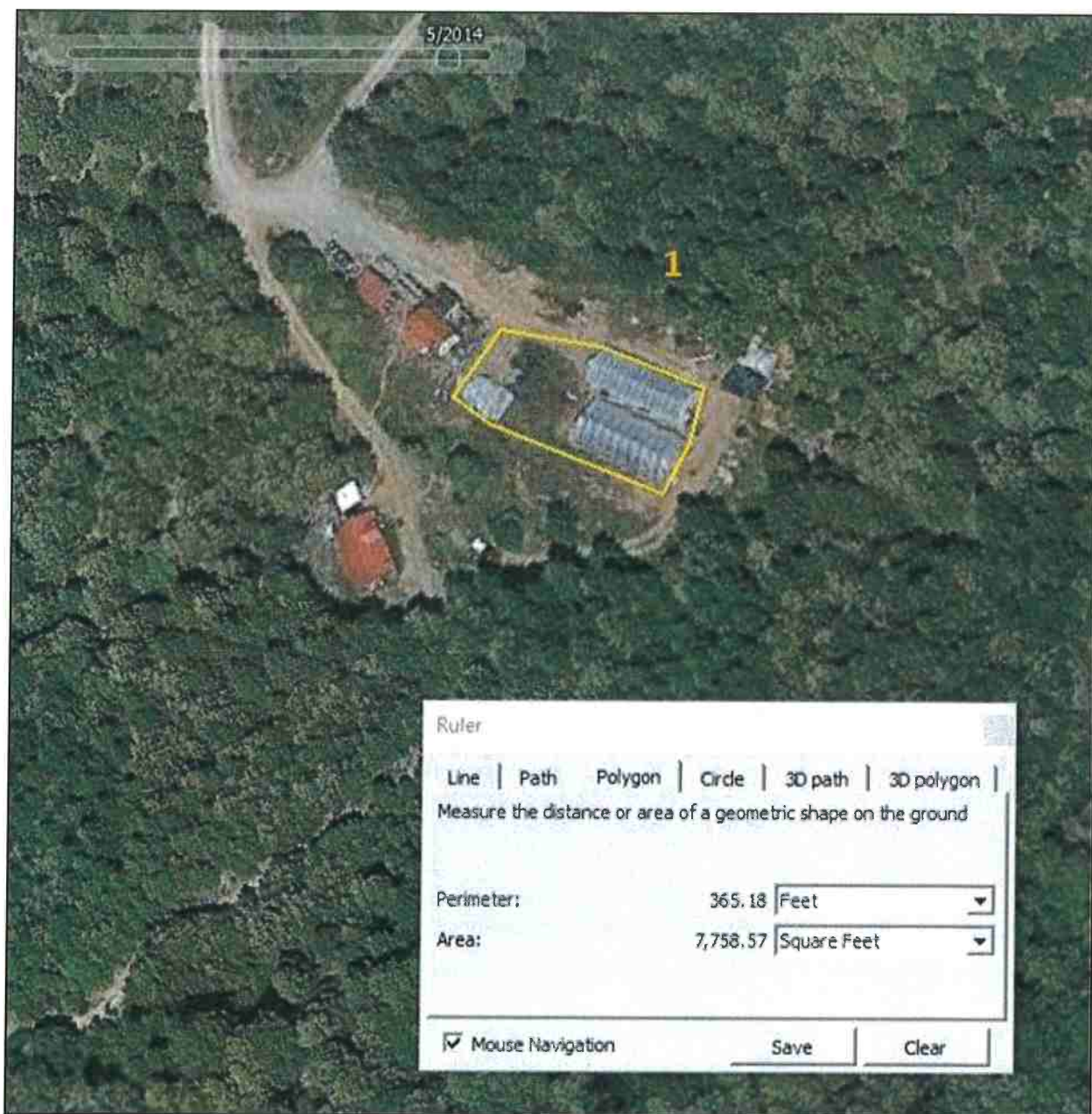


Pre-2016 Cultivation Documentation and Area – APN 524-112-002 Outdoor and Mixed-Light Cultivation Permits

Attached below is image documentation of the cannabis cultivation activity prior to January 1, 2016 for APN 524-112-002, Zoned TPZ, in northeastern Humboldt County, Cultivation operations commenced prior to 2016 using logging deck landings cleared by the previous owner as part of timber harvest activities. Total outdoor cultivation area prior to January 1, 2016 for APN 524-112-002 was ~12,600 ft² between two separate cultivation areas (see images and captions below), and the proposed outdoor cultivation Special Permit is for 10,000 ft², with a proposed consolidation of all outdoor cultivation areas into area #3a. Total mixed light cultivation area owned by W.U.R.M. Assets, LLC, and operated by the applicant, Grouse Mountain Green, LLC, prior to January 1, 2016 for APN 524-112-002 was ~22,100 ft² between two separate cultivation areas (see images and captions below), and the proposed mixed light cultivation Use Permit is for 22,000 ft².



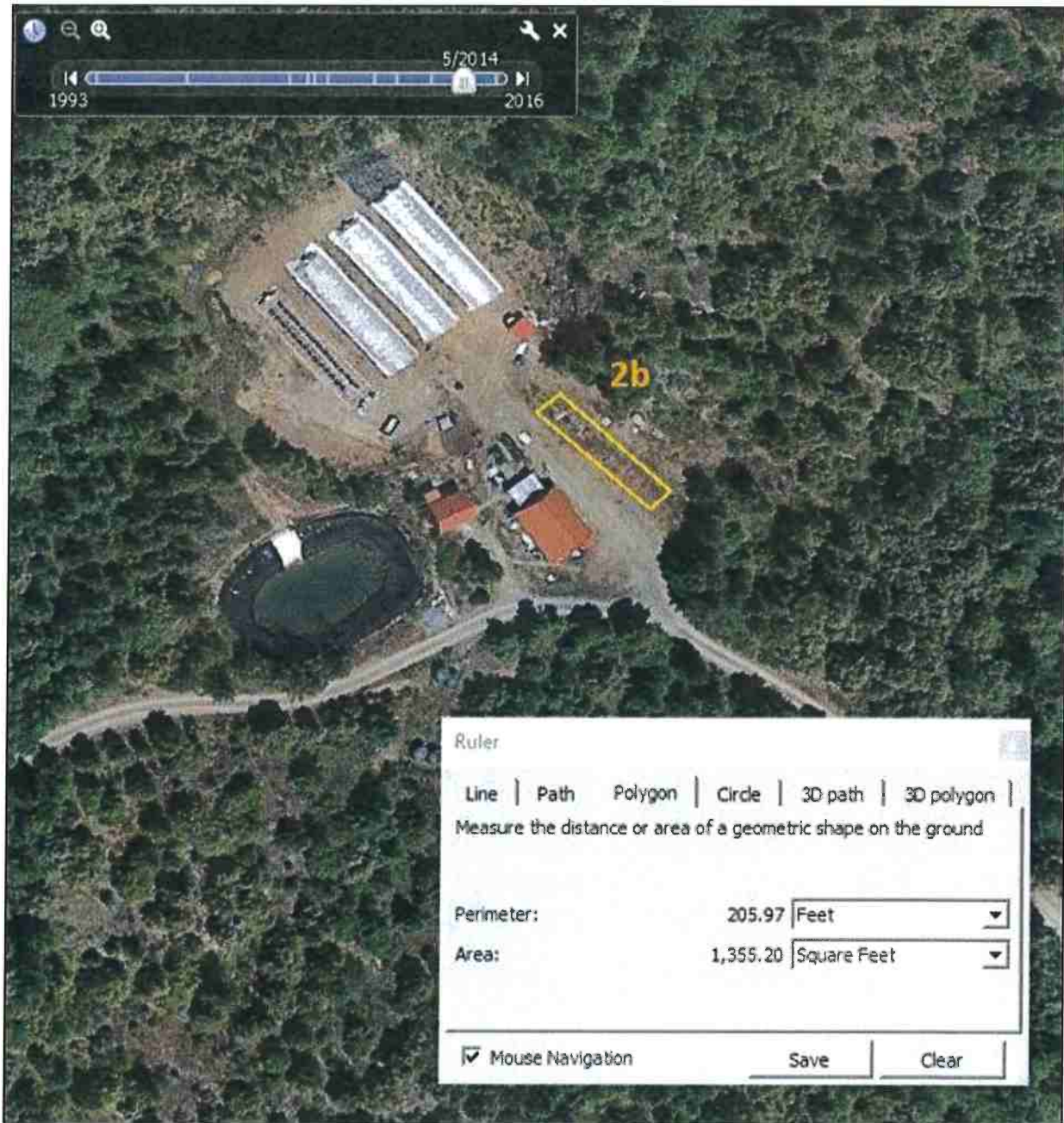
Layout of pre-2016 cultivation areas 1 through 4 for APN 524-112-002 owned by W.U.R.M. Assets, LLC and operated by Grouse Mountain Green, LLC (Image: Google, May 2014).



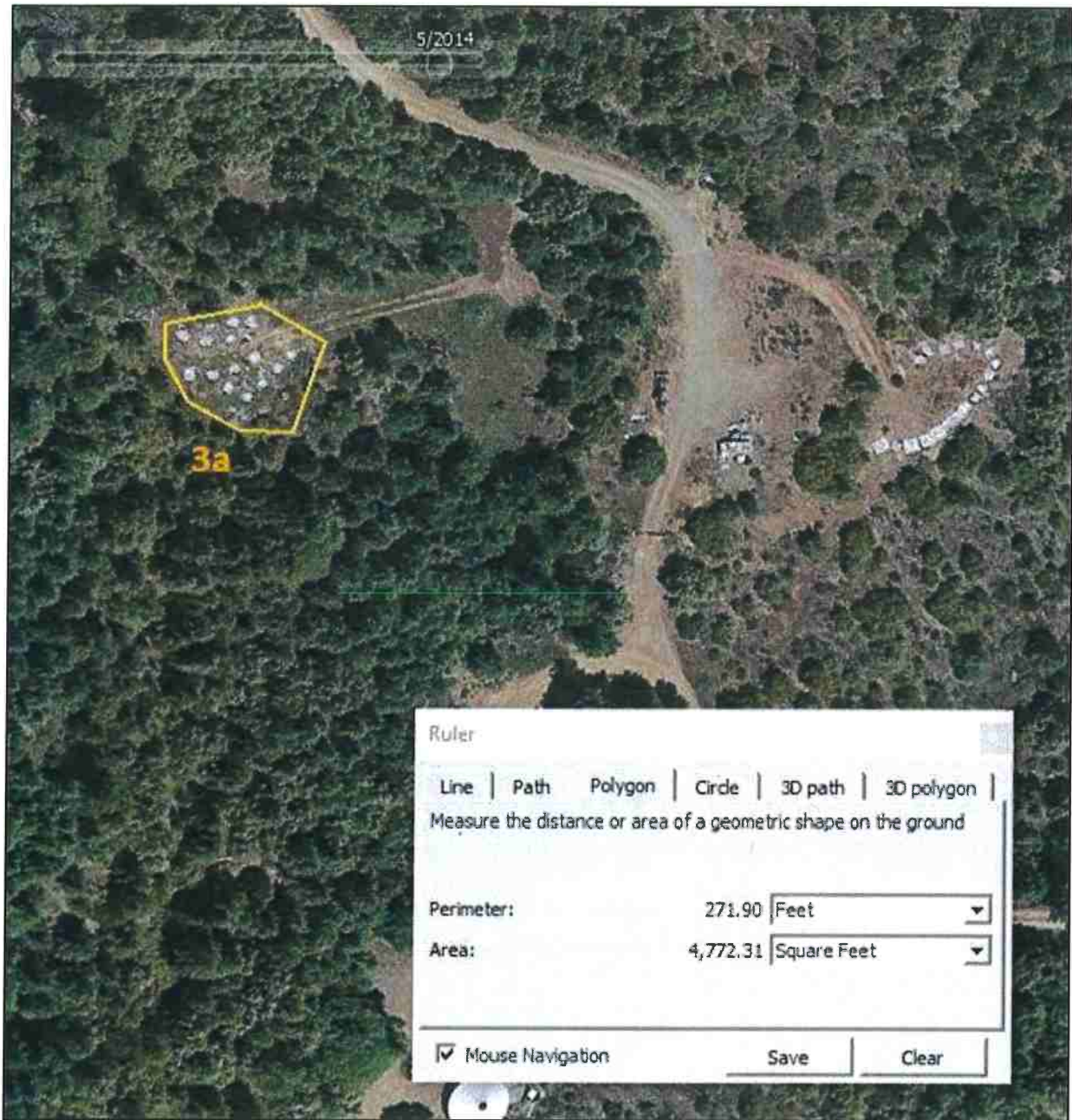
Area and perimeter of pre-2016 and existing mixed light cultivation area #1 at ~7,750 ft² (APN 524-112-002 owned by W.U.R.M. Assets, LLC and operated by Grouse Mountain Green, LLC. Image: Google, May 2014).



Area and perimeter of pre-2016 and existing mixed light cultivation area #2a at ~13,000 ft² (APN 524-112-002 owned by W.U.R.M. Assets, LLC and operated by Grouse Mountain Green, LLC. Image: Google, May 2014).



Area and perimeter of pre-2016 and existing mixed light cultivation area #2b at ~1,250 ft² (APN 524-112-002 owned by W.U.R.M. Assets, LLC and operated by Grouse Mountain Green, LLC. Image: Google, May 2014).



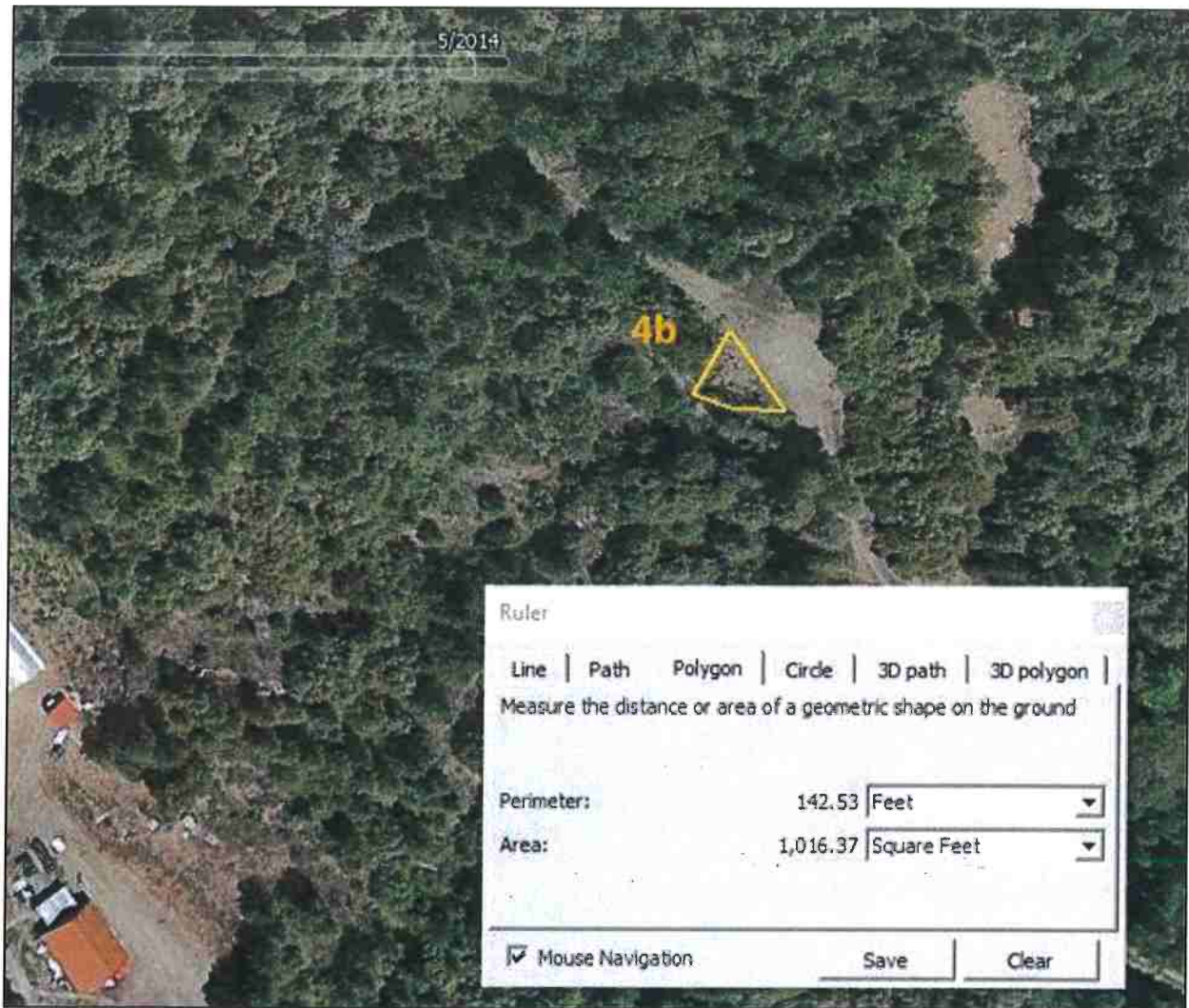
Area and perimeter of pre-2016 and existing outdoor cultivation area #3a at ~4,750 ft² (APN 524-112-002 owned by W.U.R.M. Assets, LLC and operated by Grouse Mountain Green, LLC. Image: Google, May 2014).



Area and perimeter of pre-2016 and existing outdoor cultivation area #3b at ~4,050 ft² (APN 524-112-002 owned by W.U.R.M. Assets, LLC and operated by Grouse Mountain Green, LLC. Image: Google, May 2014).



Area and perimeter of pre-2016 and existing outdoor cultivation area #4a at ~2,800 ft² (APN 524-112-002 owned by W.U.R.M. Assets, LLC and operated by Grouse Mountain Green, LLC. Image: Google, May 2014).



Area and perimeter of pre-2016 and existing outdoor cultivation area #4b at ~1,000 ft² (APN 524-112-002 owned by W.U.R.M. Assets, LLC and operated by Grouse Mountain Green, LLC. Image: Google, May 2014).