# Cochise County
## Community Development
### Planning, Zoning and Building Safety Division

***Public Programs...Personal Service***
www.cochise.az.gov

## MEMORANDUM

**TO:** Cochise County Planning and Zoning Commission
**FROM:** Jesse Drake, Planning Manager JD
**FOR:** Paul Esparza, AICP, Planning Director
**SUBJECT:** Docket SU-16-05 (Canna Sunglow)
**DATE:** March 31, 2016 for the April 13, 2016 Meeting

## APPLICATION FOR A SPECIAL USE

The Applicant is requesting a Special Use authorization to approve a facility for the cultivation and infusion of medical marijuana on 3.46 acres of a 393 acre RU-4, Rural zoned property. The proposed uses are considered Special Uses in RU-4 Rural Zoning Districts under Sections 607.53 and 607.56 of the Zoning Regulations.

The subject parcel, APN 401-28-013W, is located at 14066 S Sunglow Rd, Pearce, AZ, approximately sixteen miles east of the Highway 191/Highway 181 junction. It is further described as being situated in Section 20 of Township 18 South, Range 29 East of the G&SRB&M, in Cochise County, Arizona. The Applicant is Canna Consultants Inc.

## I. DESCRIPTION OF SUBJECT PARCEL AND SURROUNDING LAND USES

| | |
|---|---|
| Parcel Size: | 3.46 acres of a 393 acre parcel |
| Zoning: | RU-4 (one dwelling per four acres) |
| Growth Area: | Rural |
| Comprehensive Plan Designation: | D |
| Area Plan: | None |
| Existing Uses: | Inactive resort site and vacant land |
| Proposed Uses: | Medical marijuana cultivation and infusion |

### Zoning/Use of Surrounding Properties

| Relation to Subject Parcel | Zoning District | Use of Property |
|---|---|---|
| North | RU-4 | Sunglow Rd, residence on NE, and vacant |
| South | RU-4 | Residence on SE remainder vacant |
| East | RU-4 | Coronado National Forest |
| West | RU-4 | Low-density residential |

**Planning, Zoning and Building Safety**
1415 Melody Lane, Building E
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floodplain@cochise.az.gov

## II. PARCEL HISTORY

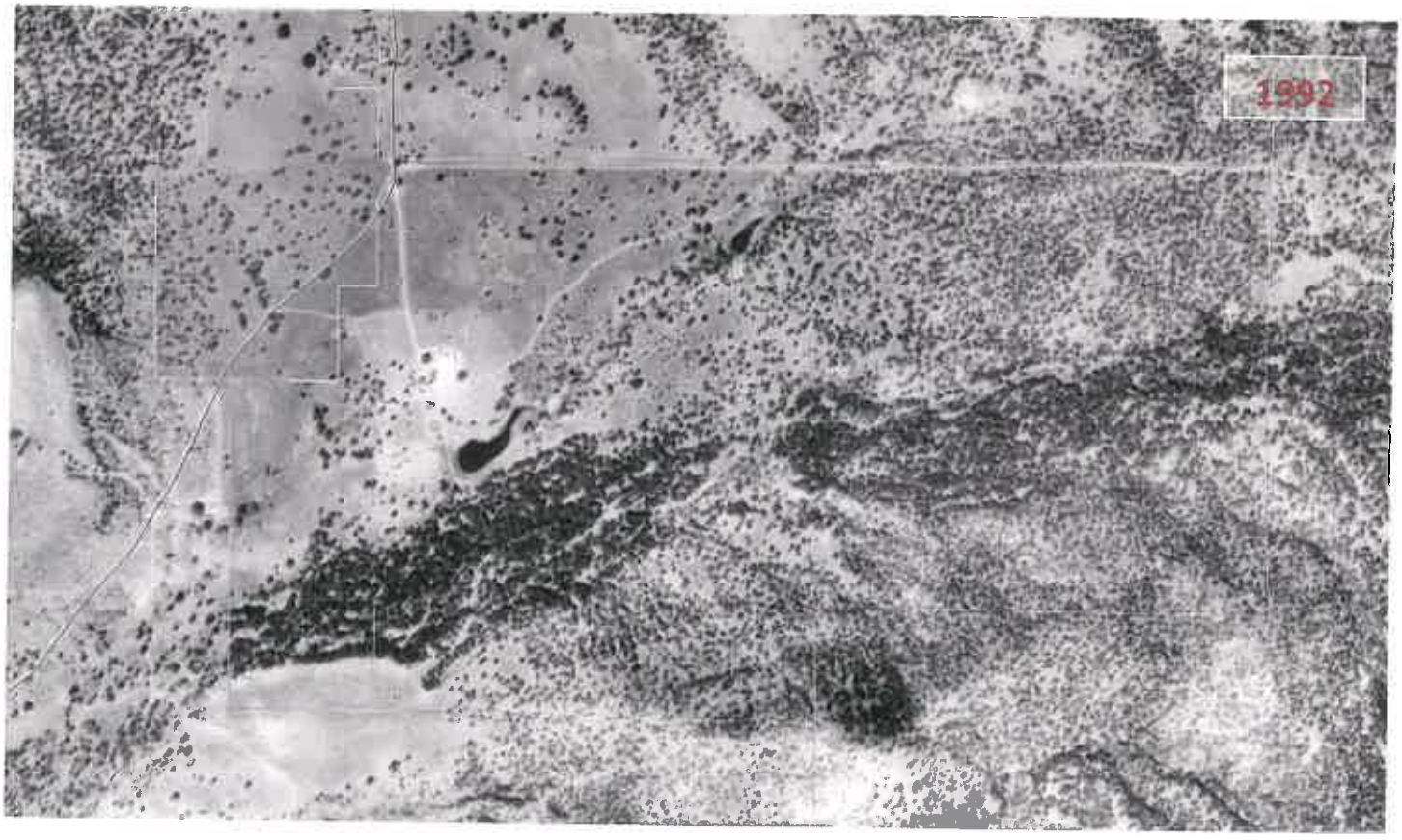
1926 – Equipment shed
1972 – Motel and clubhouse permit
1992 – Single story ranch house permit
2001 – Restroom building/concessions
2001 – Restaurant, ramada, awning, storage building, hay shed and paving permits

## III. NATURE OF REQUEST

The Applicant is requesting authorization for cultivation and infusion of medical marijuana in enclosed greenhouses on 3.46 acres of a 393 acre RU-4, Rural zoned property, formerly the Sunglow Ranch Resort near Pearce, AZ, located approximately 4.25 miles southeast of the intersection of Highway 181 and Turkey Creek Road. The parcel lies on the west side of the Chiricahua Mountains that are part of the Coronado National Forest. There will be no dispensary at this cultivation site.

The former Sunglow Ranch Resort facility is still in place and the applicant will be housing employees in the resort buildings. The applicant has plans to reopen the resort; those plans are not a part of this application.

The property is located in a very low density rural part of the county. The resort buildings appear in the earliest Google Earth historic photo dated 1992. The resort added more buildings and the residential structures on adjacent parcels appear in 2004. The site has remained in essentially the same condition since then as scene in the current conditions in the historical photo series below.



1995

2004

*Photo date January 2015, Google Earth*

The proposed project includes the installation of a 40,320 square foot enclosed commercial greenhouse as Phase I, plus a post processing and storage warehouse and secure perimeter fencing. The application includes future greenhouse expansion of up to a maximum of two acres. The approximately 6000 sq. ft. secured warehouse building will have at more than one function. The primary use will be the production and processing of the plants, including trimming and packaging functions that will convert the plants into medical forms of flowers or into concentrates, infusions, tinctures, salves, balms and capsules. The final products will then be packaged and shipped to a partnering dispensary for retail sale in the Phoenix metro area. No products will be sold to the public at this location. The building will also be used for storage and recordkeeping and will house the employee restroom inside the secured perimeter. Occasional bulk materials, such as soil may be stored within the secured perimeter fence until it is used in the greenhouse or stored in the warehouse, but all cannabis plants and products will remain locked and enclosed either in the greenhouses or in the warehouse.

Slatted, view obscuring perimeter fencing will surround the marijuana cultivation and processing facility that will take approximately 3.4 acres of the 393-acre larger parcel. The applicants plan to further screen the facility with the addition of native vegetation that will soften the visual impact of the perimeter fencing. These additional plants will be watered with onsite recycled water from a variety of sources such as grey water reuse, recaptured irrigation and rainwater catchment. All activities related to the marijuana cultivation and processing will take place within the secure fenced perimeter of the facility.

The enclosed greenhouses will be locked and secured with a high tech security system including access control, security video monitoring cameras, panic buttons and keycard access in addition to the perimeter fencing. Each approximately 1.85 acre greenhouse structure will be built with a twin wall polycarbonate and steel truss system. Use of this technology will add insulation and will limit water loss due to evaporation.

When there is a need to have nighttime internal illumination of the greenhouses to control the plant's growing cycle, a black, completely opaque screening system will be used to cover the greenhouses to prevent any light transmission so that no light will be visible on the exterior of the structure, preserving dark night skies. The construction of the greenhouses, warehouse and fencing are anticipated to be completed within one year.

*Sunglow Ranch entry feature*

Initially, the applicants plan to use the existing Sunglow Ranch Resort facility as living quarters for between 8 and 15 employees who will be on the site at all times. Four times a year the crop will be harvested and processed. During this time, additional staff will be brought in for 10 to 14 days. Over time staffing levels could change, with the maximum anticipated to be 25 employees. Employee parking will be provided inside the perimeter fencing; and sufficient turning radius is provided inside the perimeter fencing for all deliveries. The resort has twelve buildings that can house up to thirty people plus a dining hall, kitchen, a swimming pool and fitness area and several outbuildings including a stable.

The applicants are planning on providing free extracts to approved and qualifying patients in need in the Phoenix area and plan to make local community charitable contributions as funds allow.

The property takes access from South Sunglow Road, parts of which are county-maintained. Forest Service Road 334 abuts the entire length of the northern edge of the property but the applicant has no plans to use this road at any time for the cultivation or production facility.

**Water**

The parcel is outside the Douglas Irrigation Non-Expansion Area. There are currently three registered wells on the property: Numbers 55-212808, 55-632520 and 55-806523. The greenhouse structure will have automated controls to maintain a constant humidity and temperature to reduce water loss through environmental transpiration and evaporation. The double-walled panels of the structure help to maintain a controlled internal environment. A drainage and runoff recapture system will be used to collect and reuse all irrigation water. The site with the proposed greenhouse facility will have a total roof water catchment area of 48,551 square feet, more than an acre of water catchment surface. As water is collected from the roof of the greenhouse, it will be stored in water catchment cisterns inside the perimeter fencing.

Water requirements for the cannabis plant are not well studied in scientific literature and can vary widely due

to the plant's size, maturity, life cycle and whether the plants are grown in a controlled environment or outdoors. In order to get a more accurate estimate, the applicant's water analysis, based on experience with other cannabis projects, is computed based on a final crop yield rather than per plant estimates. The applicant estimates a crop yield of 0.03 to 0.04 lbs per square foot, or 1500 pounds annually.

Water usage generally falls into the range of 0.50 to 0.75 gallons/gram for standard soil gardens without irrigation recapture systems. The controlled environment together with drip irrigation and irrigation water recapture has, in other similar applications resulted in significant water reductions.

The water usage for this facility is conservatively estimated to be 0.80 gallons of water, per gram, estimating a 365 day growing season. This is a conservative estimate since the actual growing period is normally 300 days per year.

Water estimates for the site include additional water usage for evaporative cooling, up to 50 gallons per day per greenhouse bay; and water for toilets and hand washing, at 100 gallons per day for the cultivation area.

The applicant used the American Rainwater Catchment Systems Association and American Society of Professional Engineers Code and Specifications to calculate the actual rainwater catchment that could be expected, and took into account reductions for leakage, evaporation, considerations of roof material, and losses due to absorption and wetting by contact with various surfaces throughout the catchment system as the water flows to the catchment reservoir. In all cases the most conservative method was used for the calculations.

Rainfall estimates were based on weather data from Pearce, Arizona and figures provided by neighborhood residents, and a nearby vineyard owner. The Water Analysis used a figure of 12.09 inches of annual rainfall to calculate an estimated low rainfall. A high annual rainfall estimate was estimated to be 18 inches per year.

To further reduce water usage, the applicant is proposing an irrigation recapture system known as the EPIC system (Environmental Passive Integrated Chamber) to manage overall water usage on the site. The system uses raised beds, drip irrigation and a drainage system in a way that limits the need for watering and helps to produce more robust plants. This system allows for the recapture, filtration and reuse of any and all irrigation water. EPIC is a proven system has been used throughout the world for turf management, agricultural recapture, landscaping, green roofs and other uses. Case studies are available which show water savings can range from 50% to 85%. The proposed greenhouse facility estimates water savings in the range of 70% to 85% with the proposed EPIC design.

The annual water requirements without the EPIC system are estimated to be.....546,000 gallons.

The annual accessory water requirements are estimated to be.....182,500 gallons.

The total annual **high water usage** using the EPIC system (70%) is estimated to be...346,300 gallons.

The total annual low water usage using the EPIC system (85%) is estimated to be.....264,400 gallons.

The annual **low rainwater catchment** using 12.9" per year is estimated to be.....363,163 gallons.

The annual high rainwater catchment using 18" per year is estimated to be.....544,745 gallons.

From this analysis using the highest water usage of the EPIC system (70%) and the lowest rainwater catchment estimate of 12.9 inches annually, the proposed cultivation facility would have an excess rainwater catchment of 16,863 gallons of water annually for the combined cultivation and accessory water requirements. No groundwater pumping would be required for the cultivation facility to be fully operational.

The historic overall water usage at the resort when at full capacity ranged between 2,000 to 3,000 gallons per day as verified by the current manager and six-year employee of the resort. Any water catchment not used in cannabis production can be integrated into toilet systems throughout the ranch with minimal costs. Given that toilet flushing can account for at least 27% of the total water usage in a household, supplementing the toilet system with rainwater catchment at those times of year when catchment is plentiful, such as monsoon season, could decrease overall water usage when the ranch is at full capacity by 500 to 750 gallons of water per day.

Any excess rainwater catchment not used would be available to slowly recharge groundwater or, after testing for water quality, could be discharged to surface flow in the on-site ponds. All recaptured irrigation and grey water is intended to be used throughout the cultivation operation and on Sunglow Ranch wherever possible.

Sufficient rainwater storage areas will be required to properly catch, store and reuse this water and it is estimated that water storage will need to be able to accommodate up to 100,000 gallons during the wet and rainy months. The volume of water available for catchment will vary throughout the year, but it is estimated, using the Pearce, AZ weather predictions of 12.09 inches of precipitation per year, that up to 365,000 gallons of water could be captured annually. With well managed storage tanks and associated irrigation timed appropriately, the cultivation operation could sustain itself on rainwater catchment alone, depending on when the operations commence and on when precipitation arrives. The applicant estimates that the cultivation facility could be sustained solely on rainwater catchment within six months of the initiation of production. The combined water conservation measures have the potential to decrease the overall Sunglow Ranch water footprint to less than that of 2014. The applicant's proposal seeks to maximize combined water conservation strategies and minimize groundwater draw.

The Arizona Department of Water Resources estimates that the average residential usage is 100 gallons per person per day. The US Census lists the average persons per household as 2.69 between 2010 and 2014. If built out to residential standards with the current RU-4 zoning, including removing 20% of the site for required subdivision infrastructure, the site would be able to accommodate 78 homes. The total water usage for this site built out to residential use would then be 7,658,430 gallons per year.

*View east on Turkey Creek Rd from Hwy 181*

*View west on Hwy 181 from Turkey Creek Rd*

*View north on Hwy 181 from Turkey Creek Rd*

*View S on S Kuykendall Rd. from Hwy 181 at Turkey Crk Rd*

*Narrow bridge on South Turkey Creek Road*

*Seasonal stream crossing on Sunglow Road*

## IV. ANALYSIS OF IMPACTS – COMPLIANCE WITH SPECIAL USE FACTORS

Section 1716.02 of the Zoning Regulations provides a list of ten factors with which to evaluate Special Use applications. Staff uses these factors to help determine the suitability of a given Special Use request, whether to recommend approval for a Special Use Permit, as well as to determine what Conditions and/or Modifications may be needed.

Nine of the ten factors apply to this request. The project, as submitted, complies with all nine of the conditions. The one remaining factor is not relevant to this application.

### A. Compliance with Duly Adopted Plans: Complies

The proposed project satisfies the criteria for Comprehensive Plan D-Rural areas since the proposal is in an outlying rural area between unincorporated communities that have a low growth rate, and is in a very low density area is surrounded by low density residential and vacant lands.

The proposal also supports the following Comprehensive Plan Elements:

The Agriculture and Ranching Element goal that seeks to "Protect and promote the agricultural economy of Cochise County, its agricultural and ranching lands, and related land uses."; and the policy to "Continue encouraging development of agricultural processing, both on-site and at industrial scale, to support production of value-added agriculture products in Cochise County.

The Economic Development Element policy to "Continue to communicate with the business community, and be responsive to the changing needs of established and new businesses.'"

The Rural Character Element: One goal of the Rural Character Element is to "Provide for a continuation of traditional rural ways of life, such as farming, ranching, and other agricultural-related activities, and provide for diverse and viable economic and development opportunities that are consistent with the character of Cochise County's rural areas."

The project site is not within the boundaries of any area plan.

### B. Compliance with the Zoning District Purpose Statement: Complies

The proposed project satisfies the following zoning district purpose statements:

**601.01** To preserve the character of areas designated as "Rural" in the Cochise County Comprehensive Plan;

**601.02** To encourage those types of non-residential and non-agricultural activities which serve local needs or provide a service and are compatible with rural living;

**601.03** To preserve the agricultural character of those portions of the County capable of resource production;

**C. Development Along Major Streets: Not Applicable**

The property is located on South Sunglow Road, a portion of which is a non county-maintained road. The parcel does not take access from any Major thoroughfare or arterial street.

**D. Traffic Circulation Factors: Complies**

No of right-of-way dedication or off-site improvements are required. Access for the subject parcel is from Highway 191 north to Highway 181/Turkey Creek Road, east to Sunglow road, south to site. A portion of Sunglow Road is county-maintained, but not where it traverses the subject parcel. The proposed use is consistent with similar agricultural uses in the County.

**E. Adequate Services and Infrastructure: Complies**

Electrical service is provided to the site by Sulphur Springs Valley Electric Cooperative; septic is installed with one new septic system planned; and water is supplied by three existing private wells. The applicant has been advised that although no off-site improvements are required, the roads east of Highway 181 are primitive roads which receive very minimal maintenance with no change planned in the maintenance schedule planned for the foreseeable future.

**Traffic Analysis**

This type of use is akin to a small-scaled agricultural use: average trip generation rates specifically for this type of growing operation have not been developed on either a national or state-level at this time. The applicant anticipates up to 25 employees, at full-build out of this project, which has the potential to generate an estimated range of 38-112 vehicle trips per day. The applicant anticipates a heavy pick-up truck to be used for deliveries and agricultural activities on the site; no large commercial vehicles are anticipated at this time by the applicant.

> Note: Vehicle trips are different than number of vehicles that travel to the site. Average vehicle trips per day also include incidental traffic generated due to the presence of any particular use (e.g. mail, deliveries, trash pick-up) and averages seasonal variations in trips generated.

Greenhouses tend to stabilize the typical seasonal variations inherent in open agricultural activities. The applicant is proposing a staged greenhouse development with development of an estimated 3.46 total acres, as market demand allows. The applicant also anticipates employees staying on site, possibly on the existing housing units that are part of the guest ranch. Typically having employees located on site reduces employee travel demand thus creating an internal capture rate that off-set any additional residential use travel demand.

If only operating as the proposed use (medical marijuana greenhouses and processing operations) the traffic impacts will be much less than the previously existing guest-ranch activities; once the resort activities resume the traffic patterns would likely remain similar to previous use with occasional seasonal spikes in traffic for guest-ranch events or harvesting time. As a growing and infusion operation only, with no dispensary operation, the requested use is not likely to change the type of use that has historically been on this site nor the type and volume of traffic associated with an agricultural greenhouse operation.

**Traffic Report at Commercial Permit Phase**

Trip generation at this location for the proposed use is not significant enough to warrant a full Traffic Impact Analysis; however, this proposal is complicated by the potential concurrent use of the existing guest ranch activities. This traffic analysis has considered only the proposed addition of the medical marijuana activities,

not the combined potential uses. Although the guest ranch is already an allowed use at this site the combined activities may trigger the need for specific on or off-site improvements. It is premature at this conceptual stage to identify and determine what those might be.

At the Commercial permit stage the applicant is requested to provide a Basic Traffic Statement that expands more fully their conceptual plan. This report does not need to be completed by a Traffic Engineer but does need to include the following items:

1. A brief description of the proposed project. Include a map that shows the access driveways and internal circulation as well as on-site parking areas. Tentative range of dates for implementation for phasing of site activities and construction should be included.
2. Provide information about the construction phase of this project; tentative construction schedule, number of construction trucks per day, size of trucks, days and times anticipated for construction traffic.
3. Describe mitigation measures for controlling dust, if needed.
4. Provide information about the proposed re-opening of the guest ranch activities: include tentative timing, scale of potential events, measures to separate (as appropriate) the growing operation traffic and the guest-ranch vehicle, pedestrian and equestrian activities.
5. Illustrate, assess and design the primary driveway access to the county-maintained segment of Sunglow Ranch Rd. Identify if traffic control of any kind might be needed or if temporary improvements are needed during construction phases or if permanent improvements are desired to enhance the guest-ranch activities.

It may be that the construction phase is not significant enough to warrant any additional mitigation; however, at the conceptual stage it is hard to make that assessment. The applicant is advised that if there are clustered construction trucks making turning movement warning drivers to slow and pay attention may be needed and/or other appropriate methods of traffic control to ensure safety for both the traveling public and the construction vehicle drivers.

Information provided in the Special Use Authorization application is sufficient for several of these items and it is requested that the permit information provided be incorporated into this Report.

**Legal Access**

The applicant is advised that the ownership of the access roads to the parcel (Turkey Creek Rd. and Sunglow Rd.) is often private, not dedicated right-of-way to the County. The portion of Sunglow Road that traverses this parcel is not county-maintained. The historic and long-standing use of these roads allows the County to exercise a 66 foot width under A.R.S. §28-6705 for maintenance activities. No improvements to the existing primitive road condition could occur on this roadway until, and unless, full right-of-way is acquired and the roadway brought up to current County standards. There are no plans for this to occur in the foreseeable future.

The applicant is aware that there is a 15-foot wide private easement on either side of Sunglow Road as it traverses the subject parcel along the northwest corner in Section 20. The applicant is advised to assure themselves of any necessary easements to access their site from the end of any county maintained road and to be aware of any additional private or public easements that might exist on the subject parcel to other property owners adjacent or beyond their property. Such easements would need to remain available for use pursuant to those requirements of those easements e.g. equestrian. The County makes no statements on the legitimacy of any asserted easements and advise the applicants to address this issue specifically with their title company should they purchase or lease this site.

There is no requirement in Cochise County that fully perfected right-of-way be in place prior to approving or operating commercial land uses.

Note: at this time only about 52% of the county's maintained roadway system has fully dedicated roadways. Very few of the private roadways that make up the majority of the County's transportation network have full public easements at this time.

**Private Maintenance Agreement**

The applicant's access appears to be off of a partially non-county maintained roadway. If so, the applicant will be required, in keeping with the requirements of Zoning Regulation 1807.02 A., to provide a Private Maintenance Agreement at the Commercial Permit stage. This agreement will require the applicant to keep this segment of roadway in "passable" condition which means in a condition on which the average vehicle can travel on the roadway. This agreement does not require that the roadway be maintained to a county-maintained standard or to an all-weather condition.

Like all other native surfaced roadways in the County the access roads to this site are subject to changing conditions which include sudden and severe flooding, ruts, erosion and blowing dust. There is no expectation that the applicant will maintain the private segment of the roadway in any better condition than the County can manage to do in severe weather conditions. However, the applicant will likely have a higher motivation to bring the roadway back into passable condition than other property owners in order to provide access to their customers and the Private Maintenance Agreement formalizes the higher degree of obligation that they would have as a business owner along this residential roadway.

It may be that the applicant's parcel boundary coincides with the county-maintained portion of Sunglow Ranch Rd. A full assessment of where this boundary is and what requirements are needed for meeting Road Design Standards or a Private Maintenance Agreement will be done as part of the Commercial Permit review.

**F. Significant Site Development Standards: Complies**

The applicant has not requested any waivers from site development standards. All site development standards must be met to obtain a non-residential use permit, should this request be approved. The property has adequate area for parking. All of the existing structures on the site meet all of the zoning regulations as they pertain to land clearing, set-backs, parking, coverage and loading areas. Any future construction of will be required to meet all site development standards and building permit regulations. Since the 3.4 acre proposed site is planned to have a commercial greenhouse and a storage warehouse improvement, the County Floodplain Engineer is requesting a drainage analysis be submitted to demonstrate that there is no adverse impact to adjacent parcels nor any portion of the existing Sunglow Ranch property located downstream of the proposed improvement. The proposed rainwater catchment areas should be designed and strategically placed to detain or retain excess runoff due to the improvements.

In addition to County regulations, the applicant will be required to meet all regulations and requirements established by the State of Arizona for these types of facilities including security cameras, perimeter fencing and secured access to the cultivation greenhouses.

**G. Public Input: Complies**

The Applicant sent letters to all property owners within 1,500-feet of the subject parcel to notify them of this application and also held a neighborhood open house meeting at the site on March 15, 2016 to address neighborhood concerns. Twelve people attended the open house, one left after several minutes, two were in support, one was in attendance for information only and did not express an opinion for or against. The remaining eight attendees were opposed to the proposal. Their concerns centered on (not ranked):

- Water usage
- Construction impacts
- Impacts to wildlife
- Traffic and road conditions
- Economic benefits to the county

**H. Hazardous Materials: Complies**

Organic pest control will be used at the site including organic neem oil, various herbs and extracts including garlic, rosemary, and lavender oil. Pest control will include companion planting of natural insect repellent plants such as marigolds, rosemary, chrysanthemums and garlic and beneficial insects such as lady bugs. Some organic pesticides and organic nutrients are considered potentially hazardous. The applicant will be using a limited amount of organic pesticides and has mitigated the impact of the use of these products by using only Arizona Pesticide Applicator Licensed personnel for pesticide application.

Solvents such as food grade ethanol, butane or carbon dioxide will be used during the extraction process. These solvents will be recaptured and reused. All solvent storage will comply with safety requirements for container type, labeling, location of storage and access, and fire safety protocol.

**I. Off-Site Impacts: Complies**

The proposed facility is not anticipated to produce off-site impacts. The State of Arizona has lighting requirements for medical marijuana facilities. The applicant will be using black, opaque, light obscuring material to fully enclose the greenhouses if internal lighting will be used at night. This shielding material will eliminate any light trespass and protect the area's dark night skies. The greenhouses will use re-circulating carbon scrubbing air filtering equipment to minimize any odors on the exterior of the greenhouses. Noise will be produced by greenhouse ventilation fans, but at a level that will not be heard at the Sunglow Ranch buildings or by neighboring property owners.

Drainage patterns on the property will not be changed and the wash flowing into the pond on the property will remain unobstructed. Other than the addition of rainwater catchment systems that will be storing water for reuse in cisterns all other water on the property will continue to enter and exit the property as in the existing, pre-proposal condition.

The proposal will have the same visual impact as any other agricultural greenhouse use that would be allowed by right as a principal permitted use in this zoning district.

**J. Water Conservation: Complies**

All new structures in the applicant's proposal will incorporate rainwater catchment systems and irrigation water drainage and runoff recapture systems.

## V. PUBLIC COMMENT

The Planning Department staff mailed notices to neighboring property owners within 1,500-feet of the subject property. Staff posted the notice to the County website on March 11, 2016, published a legal notice in the *Bisbee Observer* on March 24, 2016 and posted the property on March 10, 2015. In response to applicant and County mailings, staff received 105 letters in support, and 54 letters in opposition to this request. The opposition was based primarily on (not ranked):

Put it somewhere else
Don't want and "industrial" complex
Water concerns
Safety/crime/ fears of illegal drug activity
Habitat preservation
Rural character and lifestyle preservation
Traffic
Pollution
Off sight lights, noise and odors
Concerns about property values
Don't approve of marijuana/already have facilities in the county
No benefit to the residents in the area

## VI. SUMMARY AND CONCLUSION

This request is for a Special Use authorization to approve a 3.5 acre greenhouse facility on a 393 parcel, for the cultivation and infusion of medical marijuana. The property, the Sunglow Ranch Resort site, is located at

14066 S Sunglow Rd, Pearce, AZ.

No waivers or modifications have been requested. Any State of Arizona requirement for cultivation, security and lighting requirements will be met.

**Approval of this land use does not guarantee that the applicant will be successful in obtaining a license with the State of Arizona for medical marijuana cultivation; obtaining County land use approval is only one part of the State application process.**

**Factors in Favor of Approving the Special Use**

1. With the recommended Conditions of Approval, the proposed use would fully comply with the nine Special Use factors used by staff to analyze this request;
2. The proposal complies with the Adopted Comprehensive Plan Agriculture and Ranching, Economic Development and Rural Character Elements;
3. The proposal complies with the Zoning ordinance Category D purpose statement;
4. The proposal will employ water conservation measures;
5. The proposal will provide jobs for up to three to five employees in Phase One and up to 24 employees at full build-out;
6. Traffic impacts due to this use will be significantly less than if the parcel were built-out to a minimum of 78 residential dwellings allowed by right under the existing zoning.
7. Staff received 105 letters in support of this application.

**Factors Against Allowing the Special Use**

1. Staff received 54 letters in opposition to this application.

## VII. RECOMMENDATION

Based on the factors in favor of approval, Staff recommends **Conditional Approval** of the Special Use request, subject to the following Conditions:

1. Within 30-days of approval of the Special Use, the Applicant shall provide the County a signed Acceptance of Conditions form and a Waiver of Claims form arising from ARS Section 12-1134. Prior to operation of the Special Use, the Applicant shall apply for a building/use permit for the project within 12-months of approval. The building/use permit shall include a site plan in conformance with all applicable site development standards (except as modified) and with Section 1705 of the Zoning Regulations, the completed Special Use permit questionnaire and application, and appropriate fees. A permit must be issued within 18-months of the Special Use approval, otherwise the Special Use may be deemed void upon 30-day notification to the Applicant;
2. It is the Applicant's responsibility to obtain any additional permits, or meet any additional Conditions, that may be applicable to the proposed use pursuant to other federal, state, or local laws or regulations;
3. Any changes to the approved Special Use shall be subject to review by the Planning Department and may require additional Modification and approval by the Planning and Zoning Commission;
4. At the commercial permit stage a Drainage Analysis will be required demonstrating that the proposal will have no adverse impacts to adjacent parcels and any downstream properties;
5. At the commercial permit stage the applicant shall indicate on their site plan the location and size of any proposed rainwater catchment areas;
6. Design plans for any improvements disturbing one acre or more will need to be submitted, reviewed and

approved before construction begins;

7. Prior to, or concurrent with the Commercial Permit application, the applicant will be requested to provide a Basic Traffic Report to assess potential site impacts and needed mitigation;
8. The Commercial Permit will be conditioned with necessary traffic mitigation after analysis of the Traffic Report and more detailed review of the roadway network serving the subject parcel; and
9. Prior to, or concurrent with the Commercial Permit application, the applicant will be requested to meet the requirements of the Road Design Standards and/or provide a Private Maintenance Agreement for that portion of South Sunglow Road that is not county-maintained as determined by the Cochise County Highway Department.

Sample Motion:

> *Mr. Chairman, I move to approve Special Use Docket SU-16-05, with the Conditions of Approval as recommended by staff; the Factors in Favor of Approval constituting the Findings of Fact.*

## VIII. ATTACHMENTS

*A. Special Use application*
*B. Site plan*
*C. Location map*
*D. Water Usage Analysis*
*E. Lighting cut sheet*
*F. Hazardous Materials Attachment*
*G. Applicant's February 27, 2016 neighborhood notification letter*
*H. Report on March 15, 2016 neighborhood meeting*
*I. Agency comments*
*J. Public Comment*

# COCHISE COUNTY
## COMMUNITY DEVELOPMENT

*"Public Programs... Personal Service"*

SU-16-05
(CANNA SUNGLOW)

**COCHISE COUNTY PLANNING DEPARTMENT**
**COMMERCIAL USE/BUILDING PERMIT/SPECIAL USE PERMIT QUESTIONNAIRE**
**(TO BE PRINTED IN INK OR TYPED)**

TAX PARCEL NUMBER 401-28-013W

APPLICANT Canna Consultants

PHYSICAL ADDRESS
14066 S. SUNGLOW RANCH RD
PEARCE AZ 85625

ADDRESS 1 South Dearborn, Suite 2100, Chicago, IL 60603

CONTACT TELEPHONE NUMBER 312-212-4233 (Office) or 847-750-6210 (Cell)

EMAIL ADDRESS: ld@cannaconsultantsillinois.com

PROPERTY OWNER (IF OTHER THAN APPLICANT) KABRUCAZ, L.L.C.

ADDRESS 340 Nursery Lane, Trout Run, PA 17771

DATE SUBMITTED 2-23-16

| | |
|---|---|
| Special Use Permit Public Hearing Fee (if applicable) | $ 300.00 |
| Building/Use Permit Fee | $ |
| **Total paid** | $ 300.00 |

## PART ONE - REQUIRED SUBMITTALS

1. Cochise County Joint Application (attached).

2. Questionnaire with all questions completely answered (attached).

3. A minimum of (6) copies of a site plan drawn to scale and completed with all the information requested on the attached Sample Site Plan and list of Non-residential Site Plan Requirements. **(Please note that nine (9) copies will be required for projects occurring inside the Uniform Building Code enforcement area. In addition, if the site plan is larger than 11 by 17 inches, please provide one reduced copy.)**

4. Proof of ownership/agent. If the applicant is not the property owner, provide a notarized letter from the property owner stating authorization of the Commercial Building/Use/Special Use Application.

5. Proof of Valid Commercial Contractor's License. (Note: any building used by the public and/or employees must be built by a Commercial Contractor licensed in the State of Arizona.)

6. Hazardous or Polluting Materials Questionnaire, if applicable.

**OTHER ATTACHMENTS THAT MAY BE REQUIRED DEPENDING ON THE SCOPE OF THE PROJECT**

1. Construction Plans (possibly stamped by a licensed Engineer or Architect)
2. Off-site Improvement Plans
3. Soils Engineering Report
4. Landscape Plan
5. Hydrology/Hydraulic Report
6. Traffic Impact Analysis (TIA): **Where existing demonstrable traffic problems have already been identified such as high number of accidents, substandard road design or surface, or the road is near or over capacity, the applicant may be required to submit additional information on a TIA.**
7. Material Safety Data Sheets
8. Extremely Hazardous Materials Tier Two Reports
9. Detailed Inventory of Hazardous or Polluting Materials along with a Contingency Plan for spills or releases

The Commercial Permit Coordinator/Planner will advise you as soon as possible if and when any of the above attachments are required.

COCHISE COUNTY
COMMUNITY DEVELOPMENT
"Public Programs Personal Service"

**Special Use Project Application**

## PART TWO – QUESTIONNAIRE

### SECTION A – General Description

1. What is the existing use of the property?

   *The property is currently non-operational. Sunglow Ranch was previously a luxury ranch resort. It is zoned RU-4 and has several existing living quarters, a commercial kitchen, pool and fitness area, and existing utilities on site.*

2. What is the proposed use or improvement?

   *The new proposed use is to reopen Sunglow Ranch and also establish a site for a medical cannabis cultivation facility on a small portion of the 393 acres. The new proposed cultivation facility will feature a commercial greenhouse as well as a post processing and storage warehouse. The existing living areas on Sunglow Ranch may initially be utilized for employee housing prior to reopening Sunglow Ranch in the future. Security fencing with Teflon privacy slats will be installed around the medical cannabis production area. This will cover a footprint of 314' x 470' or roughly 3.4 total acres.*

   *Given the bordering national forest and natural beauty existing on the property, the proposed expansion was planned in a way to minimize any environmental impact as well as visual impact to the surrounding properties. The area was chosen based on the location of existing washes, trees, and in order to limit any detrimental factors to the landscape and area. This coincides with our water and power friendly design criteria mentioned below which guided the project development. Additional native plantings will be incorporated around the 3.4 acre structure to limit views and maintain the scenic landscape. These new native plantings will be irrigated using recycled water derived from sources including rainwater catchment, recaptured irrigation water, as well as grey water reuse whenever possible.*

3. Describe all activities that will occur as part of the proposed use. In your estimation, what impacts do you think these activities will have on neighboring properties?

   *Overall, impact should be minimal, with all medical cannabis activities taking place within the confined security fence, warehouse, or the proposed greenhouses when compared to the fully operating ranch and resort. Medical cannabis will be grown, harvested, and processed into medical forms of flowers, concentrates, and infusions. These products will then be packaged and shipped to an attached and partnering dispensary located in the Phoenix area, with all post processing occurring inside a secured outbuilding that is shown on the site plan. No*

*products will be sold to the public at this location. Minimal staff will be required at most times to maintain the proposed operation, and because all products will be shipped off site and sold in the Phoenix area, we do not anticipate these activities impacting neighboring properties any more so than the resort did as recently as 2015. All activities relating to the production of medical cannabis will occur inside this fenced perimeter in order to comply with state law and to limit any potential interactions with adjacent properties as well as Sunglow Ranch. Furthermore, work will be scheduled during the day whenever possible to minimize activating any motion sensing exterior lighting after dark.*

*In the future, Sunglow Ranch will be reopened for public access, with limited access to the cultivation area as required by state law. No current timeline has been established for reopening the resort and will depend on various factors including operating capital, employee housing, cultivation production, and workforce requirements.*

4. Describe all intermediate and final products/services that will be produced/offered/sold.
   *Medical cannabis and associated medical cannabis products such as extractions, infusions, tinctures, salves, balms, and capsules will be produced and transported to the partnering dispensary in the Phoenix area. No medical products will be sold on site. Medical cannabis will be grown in the locked and enclosed greenhouses, secured with a high tech security system including access control, security cameras, panic buttons, keycard access, and perimeter fencing. Harvested cannabis will be dried and processed in the proposed outbuilding, which will also be included in the secured fencing area with keycard access required for entry. All products will be transported to the Phoenix area for retail sales through our partnering dispensary. No products or services will be offered or sold on site, and as a result, the location and proposed operation will receive minimal traffic, accounting for significantly less than the resort when operational. A large portion of extracts produced will be given away to patients specifically in need through our partnering dispensary. These will include veterans, cancer patients, and children within the medical cannabis program, and their medication will be donated at no cost to the patient. Furthermore, the principal officers on this project have pledged donations to both the local school systems and the local community as funds allow.*

5. What material will be used to construct the building(s)? Note, if an existing building(s), please list the construction type(s), i.e., factor built building, wood, block, metal)
   *The proposed new construction will include a single greenhouse structure sized roughly 240' x 336'. A portion of this structure will be equipped with a black out system in order to elongate day length with supplemental lighting, while simultaneously preventing any light pollution from impacting the area and night sky. All greenhouses will be constructed with twin wall polycarbonate and steel truss systems to maximize climate control and prevent the need for excessive cooling by placing a layer of air between the greenhouse and exterior environment. This creates an efficient and cost effective layer of insulation and limits water usage and loss due to evaporation, while providing a secure location*

*to cultivation medical cannabis which can be locked and secured with a access control, video monitoring, as well a multi faceted alarm system.*

*A roughly 6,000SF warehouse will also be constructed to house all post processing, storage, and security operations. Construction methods will be either a metal building with significant insulation, wood frame, or a concrete building using block or insulated forms. This will be determined after further examining local construction costs and licensed crews availability prior to filing for any building permits. An environmentally friendly building with efficient cooling and heating systems to maintain a suitable climate is the basic guiding design criteria. This warehouse building will be positioned inside the secured, fenced perimeter and will serve as a home base for all recordkeeping, tracking systems, security, and the main location where on site work will be occurring including trimming, packaging, and other post processing activities. This structure will also include a restroom for employees with an accompanying septic system as shown on the site plan in Part Three and required by state law.*

*Sunglow Ranch was previously a luxury resort. As a result, many structures and all utilities already exist on site and will require minimal upgrades. Sunglow Ranch includes 12 buildings operating as living quarters, a dining hall and kitchen area, a pool and fitness area, as well as several outbuildings including a stable area and three wells. The goal is to reopen the resort in the future after operations and funds allow for such an endeavor. This includes retaining current employees serving as caretakers as well as reinstating previous contracts with local businesses for various services vital to the ranch and hospitality services which would be provided to guests.*

*The site plan showing new structures, as well as detailed drawings for existing structures including their design and construction materials are included in Part Three.*

6. Will the project be constructed/completed within one year or phased?

   *The initial project including the proposed greenhouse, fencing, and warehouse will be completed within one year. We anticipate a construction time ranging from 6 to 10 months following the approval and issuance of building permits. The site plan can be found in the attached Part Three.*

7. Provide the following information (when applicable):
   A. Days and hours of operation:

      *The greenhouse complex will be staffed at all times, with live in employees to watch over the operation 24/7/365 in the existing Sunglow Ranch living quarters which can house up to thirty people simultaneously. Traffic will be minimal as a result. For example, a majority of the time an estimated five cars or transport vehicles will arrive or leave throughout the day for operational purposes due to on-site housing for management. The traffic that does exist will mainly be comprised of those live in employees frequenting local businesses. These periods will include operating with a*

*highly skilled and efficient crew residing on site, numbering from 8-15 employees.*

*During high traffic periods, additional staff will be brought in to help with preparation and post processing which should mainly occur quarterly for 10 to 14 days at a time.*

*This number will increase and resemble traffic from 2014 and 2015 upon reopening of the ranch to guests.*

B. Number of employees: Initially *8-15* Future *25+*

1) Number per shift Seasonal changes

*Quarterly harvest times will result in increased traffic and employees on site. This should only occur for 10 to 14 days at a time, repeating quarterly. A majority of the time, the operation will be maintained by a crew of 8-15 who mainly live onsite. Every intention and opportunity will be taken to fill these staffing positions with local community members, and we have already committed to several local community members who help maintain Sunglow Ranch for the current owners.*

*Depending on market forces and the accompanying structuring of operations, these employee positions may increase to 25. Labor intensive, hands on activities can greatly increase the required man power and staffing requirements. From packaging, to market demand for hand trimmed flowers, several factors can increase or decrease these employee numbers which can change between years including changes in the state laws regulating medical cannabis.*

*This does not account for the staff required when the resort is reopened which would provide additional opportunities in the areas of health, wellness, care, culinary, cleaning, and recreational activities.* All attempts would be made to reinstate past contracts when Sunglow was operational.

C. Total average daily traffic generated

1) How many vehicles will be entering and leaving the site

*Generally, 5-12 vehicles will enter and/or leave the site daily and will represent the common scenario 90% of the time. During periods of increased traffic, which will occur quarterly, this number could increase to 30, and would be hard pressed to exceed 40 vehicles on any given day throughout the year. Additional parking has been planned to accommodate these vehicles inside the fenced perimeter. Vehicles parking on site should not exceed 20 at any one time and will likely average in the range of 3-9.*

2) Total Trucks (e.g., by type, number of wheels, or weight)

*Excluding the delivery of equipment and materials during construction, we do not anticipate regular deliveries with large 10 or 18 wheelers on site. During construction and the initial delivery of bulk media and growing materials, there will be truck traffic required. Over the course of the 6 to 10 month construction time, there will be approximately 150 trucking trips required to bring in construction equipment and initial supplies of bulk growing media. After this period, we do not anticipate traffic to exceed one or two each month, if at all. There may be use for a small pickup truck, which will be four-wheeled and used for the loading and unloading of bulk materials when necessary. Occasionally a cargo van or medium truck will be used for deliveries to Sunglow Ranch. Roadway conditions will be monitored continuously in order to provide safe and continuous access.*

3) Estimate which direction(s) and on which road(s) the traffic will travel from the site?

*All traffic will travel on S. Sunglow Road when entering or leaving the facility. Depending on the traffic route chosen for security purposes and the final destination, traffic will use either E. Turkey Creek Road to 181 traveling west to 191 north to I-10 or an E. Turkey Creek Road to 181 traveling north to 186 connecting to I-10. Delivery times and routes are varied for security purposes.*

4) If more than one direction, estimate the percentage that travel in each direction

*Delivery vehicles will use each route as needed. Employee traffic will depend on their residence location. It would be reasonable to expect the traffic to split fairly evenly between the two abovementioned routes.*

5) At what time of day, day of week and season (if applicable) is traffic the heaviest

*Traffic will be heaviest quarterly for 10 to 14 days at a time. Every attempt will be made to stagger this post processing period and limit traffic to a minimum; however, a majority of the time, traffic to and from the facility will be almost non-existent due to the parcel structures and staff quarters on site which will be utilized by management and the main operations team prior to reopening Sunglow Ranch.*

Circle whether you will be on a public water system or (**private well**). If private well, show the location on the site plan.

*Three private wells currently exist at this location and are shown on the attached site plan in Part Three. Preliminary well explorations have indicated the water supply will be sufficient and*

*exceed requirements at the site presently and in the future. Further collaboration with a hydrologist will be undertaken before proceeding with any construction and the proposed operation. Sunglow Ranch does not reside within the Douglas INA.*

*Well 1 Registration Number: 55-806523*
*Well 2 Registration Number: 55-632520*
*Well 3 Registration Number: 55-212808*

D. Estimated total gallons of water used:

*For cultivation purposes, we anticipate:*
*6,000 – 8,000 gallons per day at peak usage and production capacity*
*3,000 – 4,000 gallons per day during non peak usage*
*Roughly 2,000,000 gallons per year*

Will you use a septic system? *Yes*

If yes, is the septic tank system existing?

*Three existing septic systems and one grease trap are currently onsite. One additional septic system will be required for the warehouse in the cultivated area. The locations can be seen Part Three.*

E. Does your parcel have permanent legal access?

*Yes, this parcel borders S. Sunglow Road with an existing easement for properties further down the road. The parcel also has a 25' easement on the northern property border for Road #334; however, this road will not be used at any time for traffic related to cultivation or production purposes and currently a buffer zone of native vegetation is planned between this road and the fenced cultivation area in order to limit any impact.*

F. For Special Uses only – provide deed restrictions that apply to this parcel, if any.

*To our knowledge, there are no deed restrictions that apply to this parcel.*

8. Identify how the following services will be provided

| **Service** | **Utility Company/Service Provider** | **Provisions to be made** |
|---|---|---|
| Water | Existing Wells:<br>*Well 1 Registration Number: 55-806523*<br>*Well 2 Registration Number: 55-632520*<br>*Well 3 Registration Number: 55-212808* | Rainwater Catchment Installation |
| Sewer/Septic | Existing Septic (4 Tanks Total) | Additional Septic for Warehouse Bathroom |
| Electricity | SSVEC (Sulphur Springs Valley Electric Co-Op) | Solar Energy Upgrade and Installation |

| | | |
|---|---|---|
| Natural Gas | Onsite Propane | Additional Storage Tank |
| Telephone | VTC (Valley Telecomm) | None |
| Fire Protection | Sunsites -Pearce Fire District | None |

*Additional water and electricity services will be installed to increase the environmentally friendly aspects of the operation, as well as provide long term sustainability. With a desire to implement an environmentally sustainable operation which is green friendly and complements the natural beauty of the landscape, solar power will be used to supplement electricity whenever possible, as well as utilizing rainwater catchment and greywater reuse wherever possible. Water storage cisterns will be installed near the greenhouse facilities to store and reuse captured rainwater from an installed gutter system on each newly constructed structure and implemented on existing structures where feasible. Overflow will be used to recharge the wells if sufficient rainfall exceeds our water storage capacity. Greywater reuse will be used to irrigate companion plantings as well as native vegetation surrounding the cultivation area to maintain a rich landscape and limit visual impact.*

## SECTION B – Outdoors Activities/Off-site Impacts

1. Describe any activities that will occur outdoors.

   *All main activities will take place within the secured greenhouses and existing structures within the fenced perimeter. No main activities will take place outdoors aside from the unloading of bulk materials within the secured perimeter fencing and may include composting piles which will be devoid of any useable or recoverable cannabis or cannabis products and will be processed according to state law. Sufficient turning radius for deliveries has been included in the fenced area.*

2. Will outdoor storage of equipment, materials or products be needed?

   *Yes, occasional bulk materials such as soil will be stored within the secured, fenced perimeter until they can be utilized in the greenhouse or moved to permanent storage within the warehouse. Water storage will also be located permanently outside the greenhouse and warehouse; however, it will remain inside the fenced perimeter as well. All other materials will be stored within the proposed structures or proposed greenhouse complex. This outdoor storage will be minimal and likely only last a couple days at a time until supplies can be properly prepared and incorporated into the greenhouses. All cannabis products will always remain locked and enclosed either in the greenhouses or warehouse according to state law. Composting piles will also be located outside, but within the fenced perimeter.*

3. Will any noise be produced that can be heard on neighboring properties?

   *No noise will be produced which can be heard at neighboring properties. Ventilation fans will be used for the greenhouses to maintain a controlled climate and space; however, this will not occur at a level that will be heard on any neighboring properties or even the Sunglow Ranch properties.*

4. Will any vibrations be produced that can be felt on neighboring properties?

   *No vibrations will be produced at this location.*

5. Will odors be created?

   *Cannabis odors will be created with the cultivation of such plants. Re-circulating carbon scrubbers will be used inside the greenhouse and dry areas to minimize odors. Odor levels will be dependent on the amount of air extracted and discharged; however, we do not anticipate noxious odors due to the large size of the parcel, use of air filtering equipment, and the limited number and proximity of neighbors.*

6. Will any activities attract pests, such as flies?

   *Agricultural pests will inevitably be attracted to the greenhouses. By creating a climate suitable for plants, you also simultaneously create a climate for pests to proliferate. Integrated pest management practices will be utilized by our expert team which includes large scale hydroponic producers as well as several with master's degrees in plant sciences with experience managing large greenhouse operations for state universities. These practices will focus on organic control*

*methods including organic pesticides such as neem oil, various herbs and extracts including garlic, rosemary, and lavender oil, companion planting including marigolds, rosemary, chrysanthemums, and garlic which have scientifically demonstrated pest resistance and repulsion abilities, as well as beneficial insects such as lady bugs and beneficial bacteria which feed on these pests, their eggs, and larvae. Furthermore, any pests should not be able to survive outside of these greenhouse climates during most times of the year, and these pests are not the type which irritate humans or animals, and exist only as agricultural pests.*

7. Will outdoor lighting be used?

   *Minimal outdoor lighting will be used as required by state law. This lighting will be minimal, as mentioned, not only to limit light pollution to surrounding areas, but also to maintain proper light cycles for the greenhouse facilities. These lights will include motion sensors and will be off unless triggered directly. Furthermore, these lights can be manual turned off if necessary in instances of animals or malfunction and are mainly focused inside the fenced perimeter for cultivation. Due to this location, they should not be triggered accidentally. IR cameras will be present on-site to prevent the need of constantly illuminated security lights, while maintaining a high level of security and monitoring.*

   *We do not anticipate light pollution being a problem at this facility due to cannabis' photoperiod sensitivity which requires an elongated dark period to maintain flowering production. Any disruption in this cycle can cause significant delay and even result in unusable medicine; therefore, as a cultivation center, we have an additional incentive to minimize all sources of light pollution. Porch lights currently exist on each of the existing residential housing structures, however due to the above fact, their use will be limited.*

   *See the Attached Appendix A for manufacturer's specifications.*

8. Do signs presently exist on the property?

   *Yes, a large Sunglow Ranch sign exists when entering the ranch on S. Sunglow Road.*

9. Will any new signs be erected on site?

   *Yes, a small sign will be erected on site which states there is no public access beyond this point, only allowing authorized personnel on the driveway accessing the cultivation area. Additional signage will be present on the cultivated area as required by state law which declares restricted access areas and other mandatory signage.*

10. Show on site drainage flow on the site plan. Will drainage patterns on site be changed?

    *Due to the small parcel and location chosen for cultivation purposes, drainage patterns on site will not be changed. The wash feeding the pond on the property will remain unobstructed. The addition of the proposed greenhouses will include rainwater catchment systems and will store that water for reuse in water cisterns. All other water on the property will continue to flow as it did originally. The*

*existing structures and large overall parcel size greatly simplifies the process and construction required on the site.*

*A rough drainage flow plan can be found in Part Three.*

Will washes be improved with culverts, bank protection, crossings, or other means?

*No, currently there are not any reasons for cultivation related traffic to cross or encroach on these areas. Water flow will be monitored continuously to determine if and when any improvements will be required.*

11. What surface will be used for driveways, parking and loading areas? (i.e., none, crushed aggregate, chipseal, asphalt, other)

    *Ideally, to retain the integrity and current nature of the parcel, dirt roadways would be preferred. If required by the county, a gravel drive will be installed connecting S. Sunglow with the cultivated area or other features as required. An additional parking area featuring compacted dirt or crushed aggregate if required will be installed to deal with periods of high traffic discussed above and can be seen on the site plan in Part Three. Loading areas will occur in that same parking space, within the security perimeter, and will be coordinated so as not to occur on days of high traffic. Sufficient turning radius has been accounted for even for the largest of trucks. Additional driveway and easement improvements may be implemented as required to maintain ease of access to the property and operation; however, this traffic is expected to be minimal and should not require expansion or improvements at this time and will be reassessed constantly or upgraded at the request of the county.*

12. Show dimensions of parking and loading areas, width of driveway and exact location of these areas on the site plan. (See site plan requirements checklist.)

    *Parking and loading areas, in addition to the driveway are shown on the attached site plan in Part Three. Due to potential deliveries, all areas within the fenced perimeter near the main gate will be compacted dirt and drivable to allow for proper turning radius.*

13. Will you be performing any off-site construction (e.g., access aprons, driveways, and culverts)?

    *No, at this time we do not believe it to be necessary to perform any offsite construction due to the amount of work that has already been completed on the land. Any requirements from the county will be implemented and improved as necessary to meet all aspects of the special use and building permits including roadway maintenance.*

If yes, show details on the site plan. Note: The County may require off-site improvements reasonably related to the impacts of the use such as road or drainage improvements.

## SECTION C – Water Conservation and Land Clearing

1. If the developed portion of the site is one acre or larger, specific measures to conserve water on-site must be addressed. Specifically, design features that will be incorporated into the development to reduce water use, provide for detention and conserve and enhance natural recharge areas must be described. The Planning Department has prepared a Water Wise Development Guide to assist applicants. This guide is available upon request. If the site is one acre or larger, what specific water conservation measures are proposed? Describe here or show on the site plan submitted with this application.

   *Conservation of water and creating an environmentally friendly and sustainable operation is a critical aspect of this project, and the above coincides with the charitable nature of giving free extracts to individuals the most in need and the natural beauty of the land.*

   *One of the principals is an environmental engineer who focused on wastewater treatment, reuse, and water quality standards. Due to this, every effort will be implemented to encourage the economical and sustainable reuse of water. This will include the design and implementation of an efficient and highly controlled drip irrigation system in the greenhouse and production spaces. Our large scale experience including the management of university greenhouses and edible produce facilities (lettuce, herbs, etc) will allow for the creation of this highly efficient system, delivering just the right amount of irrigation directly to each plant and significantly limiting waste.*

   *Rainwater catchment systems will be installed on newly constructed greenhouses to provide a source of water for reuse. Well insulated, twin wall polycarbonate will aid in preventing loss through evaporation. Finally, grey water reuse will be implemented inside the newly constructed greenhouses wherever feasible, and mainly used for watering of companion plants used for pest control as well as any ornamentals and native vegetation outside the facility. The medical cannabis, due to intended human consumption, requires a higher level of water quality, and therefore the grey water cannot be reused on these crops which must retain a food-grade status, in addition to providing an organic regimen for nutrients and pest control.*

   *Ultimately, high quality medical products and environmentally sustainable practices are of the highest importance to this operation and are demonstrated by the many environmentally friendly methods implemented and charitable donations to the neediest patients including veterans, cancer patients, and children within the medical program.*

2. How many acres will be cleared?

   *Roughly 2 acres of greenhouses will be installed. The entire proposed area including the warehouse and secured, fenced perimeter will encompass roughly 4 acres. The appropriate land clearing permits will be obtained prior to any onsite work.*

   *Exact dimensions and acerage can be found in Part Three on the site plans.*

## SECTION D – Hazardous or Polluting Materials

Does the proposed use have any activities involve Hazardous or Polluting materials?

*This operation will include very limited use of hazardous or polluting materials due to our proposed methods. These potentially hazardous materials will mainly consist of organic pesticides and organic nutrients which are substantially better for the environment and human health than their associated chemical and petroleum based counterparts. Highly skilled pesticide applicators will be utilized; who are already licensed in other states and will obtain their Arizona Pesticide Applicator License prior to the usage of any organic pesticides. This organic approach uses beneficial insects as well as companion planting which will severely limit the amount of additional organic pesticides required through the proper use of an Integrated Pest Management plan. Furthermore, a majority of the nutrients used will be in the form of manures and soil amendments, which also severely limit the amount of liquid fertilizers required for healthy growth and production. Main fertilizers will be derived from organic or renewable sources. These amendments will be sourced from high quality local sources whenever possible to limit the carbon footprint of the operation as well as encourage the growth of the local economy.*

*Additional solvents will be used for extraction. This may include food grade ethanol, butane, or carbon dioxide. These solvents will be recaptured, so little to no effects are anticipated due to their reuse. All storage will comply with the solvent requirements including container type, location, access, and fire safety.*

*The "Hazardous Materials Attachment" is included in Part Six. Alternative but comparable materials may be substituted due to production requirements as needed for the cultivation operation.*

## SECTION E - Applicant's Statement

I hereby certify that I am the owner or duly authorized owner's agent and all information in this questionnaire, in the Joint Permit Application and on the site plan is accurate. I understand that if any information is false, it may be grounds for revocation of the Commercial Use/ Building/ Special Use Permit.

Applicant's Signature C. L. DB

Print Applicant's Name C. Lucien DeBatty Vice President of Canna Consultants

Date signed 2-23-16

# LETTER OF AUTHORIZATION

Cochise County Planning and Zoning
1415 Melody Lane, Bldg E
Bisbee, Arizona 85603

Dear Zoning Committee,

As a partner of KABRUCAZ L.L.C., the owner of record for the Sunglow Ranch property located at 14066 S Sunglow Rd, Pearce, AZ 85625 with APN: 401-28-013W, we authorize Canna Consultants to act as an agent to petition the Planning, Zoning, and Building Committee of Cochise County to consider a Special Use Permit to operate a Medical Cannabis Cultivation facility for the above listed property.

Sincerely,

Sylvie A Fance

Bruce H Thompson

Kathryn M Thompson

# LETTER OF AUTHORIZATION

Cochise County Planning and Zoning
1415 Melody Lane, Bldg E
Bisbee, Arizona 85603

Dear Zoning Committee,

As a partner of KABRUCAZ L.L.C., the owner of record for the Sunglow Ranch property located at 14066 S Sunglow Rd, Pearce, AZ 85625 with APN: 401-28-013W, we authorize Canna Consultants to act as an agent to petition the Planning, Zoning, and Building Committee of Cochise County to consider a Special Use Permit to operate a Medical Cannabis Cultivation facility for the above listed property.

Sincerely,

Bruce H. Thompson
KABRUCAZ L.L.C.

Kathryn M. Thompson
KABRUCAZ L.L.C.

**Notary Confirmation**

State of Arizona

County of Pinal

This instrument was signed or acknowledged before me on February 18th 2016
Date

By Bruce H. Thompson and Kathryn M. Thompson
Print Name of Signers

Larinda McGhan
Notary Public
Pinal County, Arizona
My Comm. Expires 08-27-19

Notary Signature

# LETTER OF AUTHORIZATION

Cochise County Planning and Zoning
1415 Melody Lane, Bldg E
Bisbee, Arizona 85603

Dear Zoning Committee,

As a partner of KABRUCAZ L.L.C., the owner of record for the Sunglow Ranch property located at 14066 S Sunglow Rd, Pearce, AZ 85625 with APN: 401-28-013W, we authorize Canna Consultants to act as an agent to petition the Planning, Zoning, and Building Committee of Cochise County to consider a Special Use Permit to operate a Medical Cannabis Cultivation facility for the above listed property.

Sincerely,

Barry L. Schoenly
KABRUCAZ L.L.C.

## Notary Confirmation

State of Arizona

County of Pinal

This instrument was signed or acknowledged before me on February 18th, 2016
Date

By Barry L. Schoenly
Print Name of Signer

Larinda McGhan
Notary Public
Pinal County, Arizona
My Comm. Expires 08-27-19

Larinda McGhan
Notary Signature

# LETTER OF AUTHORIZATION

Cochise County Planning and Zoning
1415 Melody Lane, Bldg E
Bisbee, Arizona 85603

Dear Zoning Committee,

As a partner of KABRUCAZ L.L.C., the owner of record for the Sunglow Ranch property located at 14066 S Sunglow Rd, Pearce, AZ 85625 with APN: 401-28-013W, we authorize Canna Consultants to act as an agent to petition the Planning, Zoning, and Building Committee of Cochise County to consider a Special Use Permit to operate a Medical Cannabis Cultivation facility for the above listed property.

Sincerely,

Sylvia A. Lance
KABRUCAZ L.L.C.

Notary Confirmation

State of Arizona

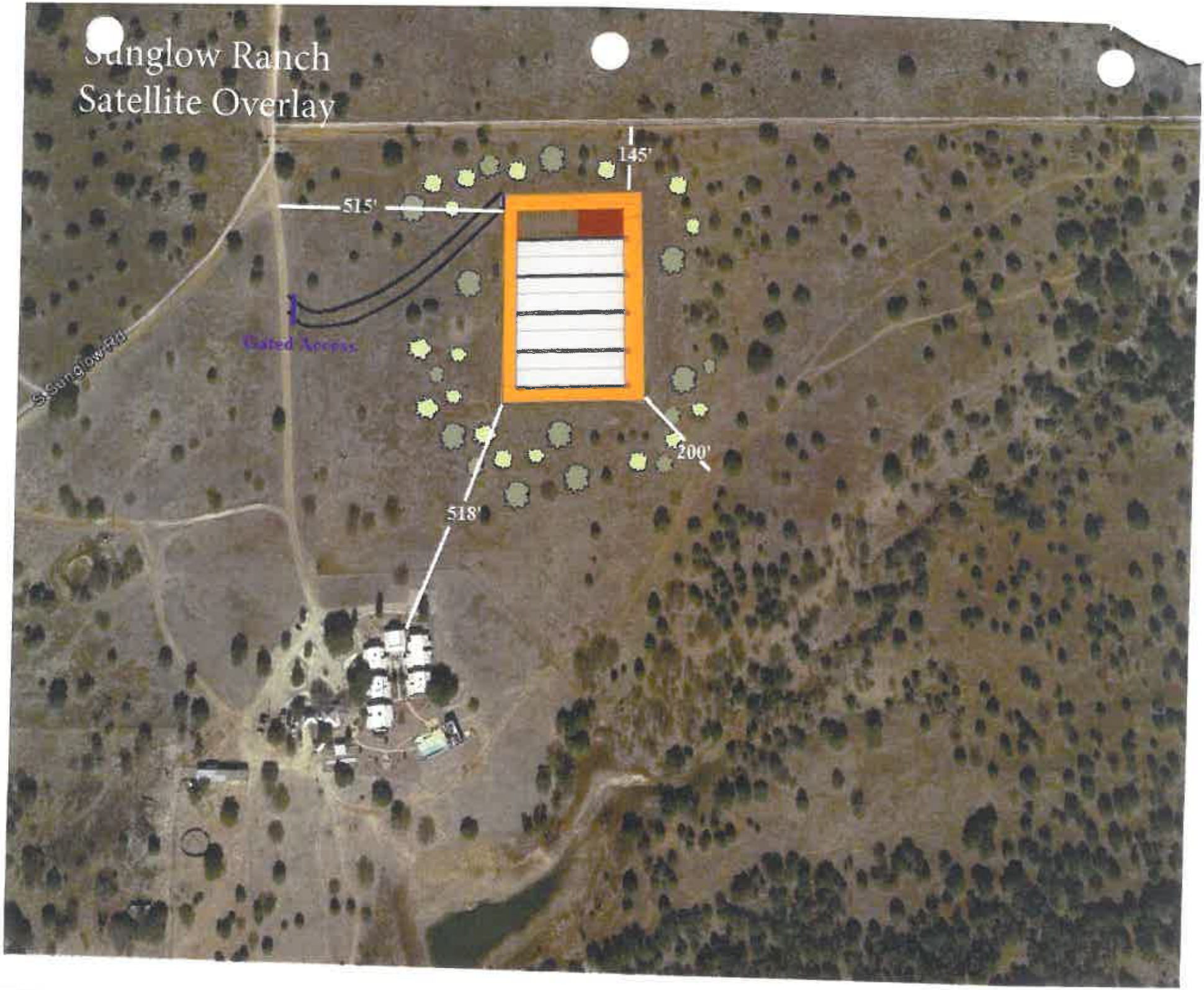
County of Pinal

This instrument was signed or acknowledged before me on February 18th, 2016
Date

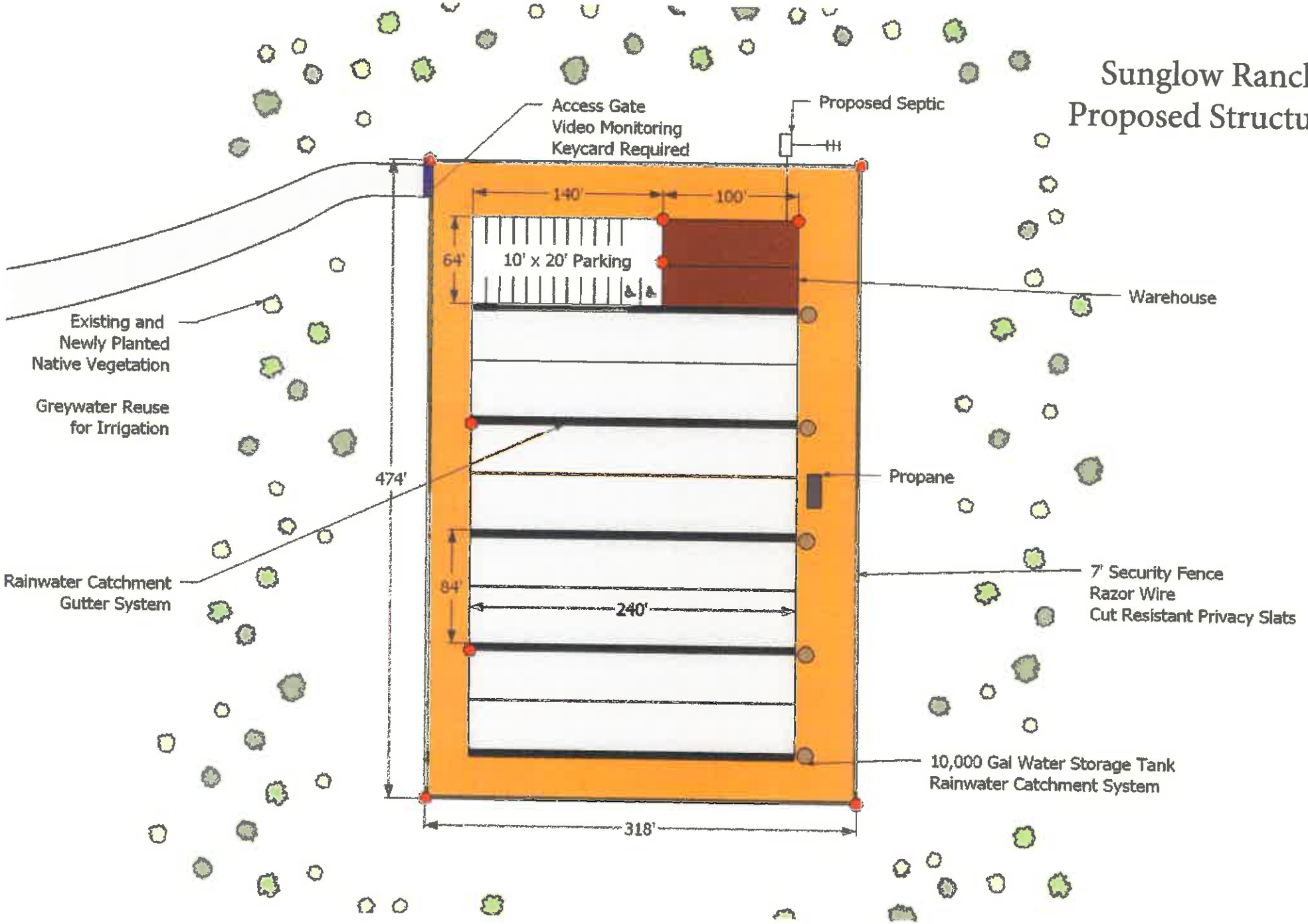
By Sylvia A. Lance
Print Name of Signer

Larinda McGhan
Notary Public
Pinal County, Arizona
My Comm. Expires 08-27-19

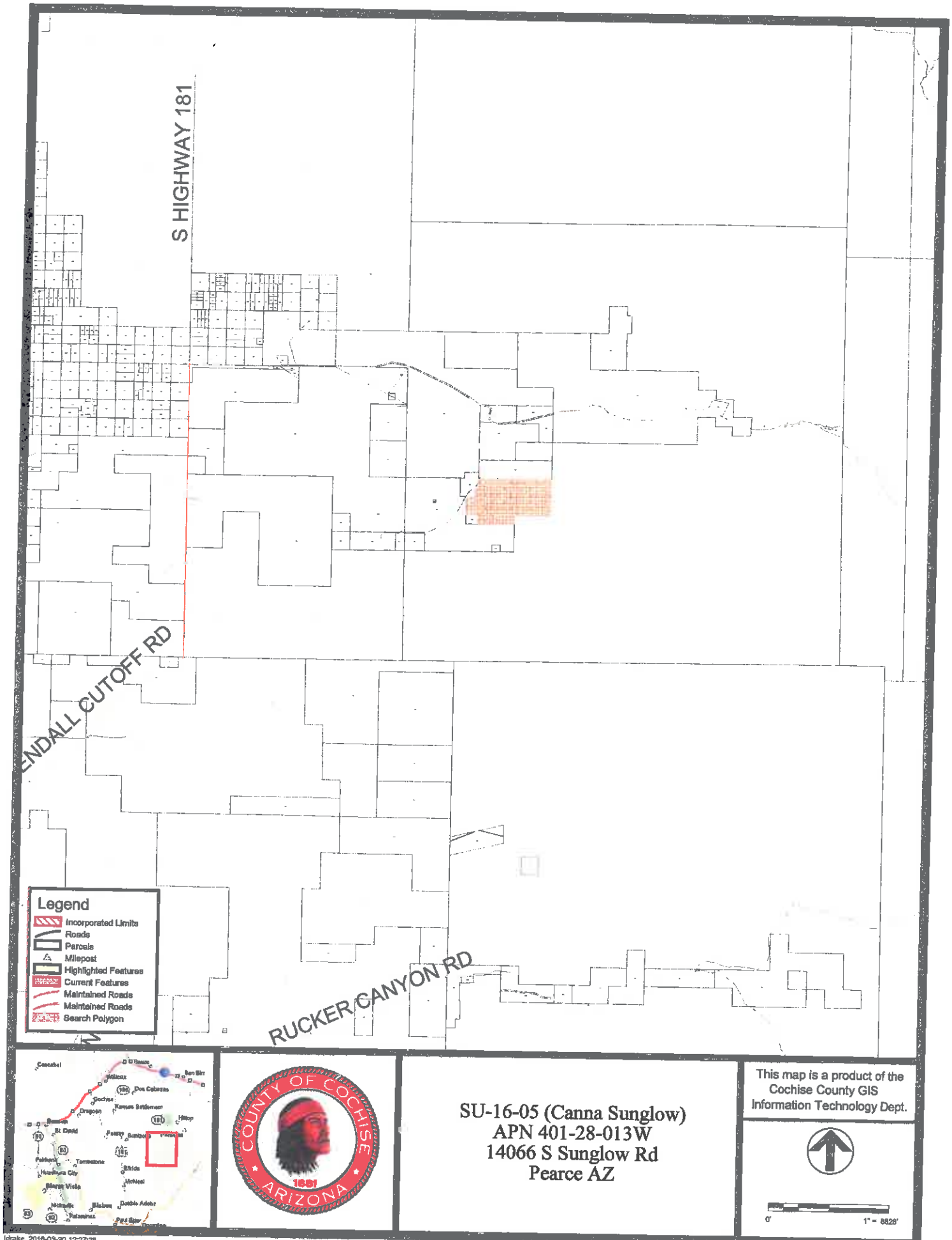
Larinda McGhan
Notary Signature


Sunglow Ranch
Satellite Overlay
145'
515'
Gated Access
S Sunglow Rd
200'
518'

# Sunglow Ranch
# Proposed Structures



Sunglow Ranch Proposed
Cultivation Area
Site Overview




SU-16-05 (Canna Sunglow)
APN 401-28-013W
14066 S Sunglow Rd
Pearce AZ

This map is a product of the Cochise County GIS Information Technology Dept.

0' 1" = 8828'

jdrake, 2016-03-30 12:27:28
(\\Ccappml3\geodesy\Encompass\Admin\Meta\View.Mdb)

This document is a graphic representation of our working records.
Please report potential map corrections for review to Cochise County GIS.

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MEDICAL CANNABIS CONSULTING

# OVERALL WATER USAGE ANALYSIS
# RAINWATER CATCHMENT OFFSET ON GROUNDWATER DRAW

## SUNGLOW RANCH RESORT
## MEDICAL CANNABIS CULTIVATION

## *INTRODUCTION*

As the Vice President of Canna Consultants and an Environmental Engineer versed in water quality and water resource allocation, the following analysis and estimates for water usage at the proposed location were completed in order to address specific concerns and demonstrate the feasibility and potential of our design. This location, if approved for the requested land use, will utilize a small portion of the 393 acres currently owned by Sunglow Ranch for a medical cannabis cultivation site. After speaking with local community members, we have downsized our proposed operations as a sign of good faith and to make sure no detrimental activities occur, mainly focusing on water volume and overall water usage for the operation. All new structures proposed will incorporate rainwater catchment systems and irrigation water recapture systems in the greenhouse. All assumptions and design criteria have been listed below, and the analysis and conclusion is included for review by interested parties concerned about the water allocation and specific requirements for a facility of this type.

The physical greenhouse structure will utilize automated environmental controls which maintain a constant RH and temperature for minimal water loss through environmental transpiration and evaporation. The greenhouse also features twinwall polycarbonate panels which provide significant insulative value and therefore less energy and resources are required to maintain a controlled environment. A drainage and runoff recapture system will be utilized to collect and reuse all irrigation water. This system will be based on the principals of the EPIC system which allow for passive irrigation control through the use of gravity and water's natural instinct to flow and infiltrate low lying areas.

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## ASSUMPTIONS

**Rainwater Catchment Area** - Phase I Activities Include:

- 40,320SF of Greenhouse Area
- 3,600SF of Headhouse Area (Replaces 6,500SF Outbuilding)
- 641SF of additional catchment at Sunglow Café
- 1,740SF of additional catchment at Sunglow Pool House
- 2,250SF of additional catchment at Sunglow Stables

**Cannabis Water Requirements** – Depending on the year, cultivar, and planting methods, yields can fluctuate drastically between operations and operators. For the purpose of water requirements, estimations based on final yield are much more accurate than per plant estimates, as per plant estimates do not account for plant size, maturity, and life cycle which greatly vary water demand requirements. For these calculations, from our experience with our projects in various other operations, we anticipate a yield in the range of 0.03 – 0.04 lbs/SF, which translates to approximately 1,500 lbs annually.

Water requirements for cannabis are not well documented in scientific literature. Few sources have published documented case studies, and these vary widely between outdoor, greenhouse, and indoor cultivation methods. From our experience as a medical cannabis consulting firm and working on other similar projects, greenhouse irrigation is more closely related to indoor cultivation than outdoor. A controlled environment limits evaporation, transpiration, and other loss to the environment, and coupled with various water delivery methods such as drip irrigation and irrigation water recapture, results in significant reductions in water usage. So, while this figure is not well documented, several published values do exist, and we have verified their validity through various operations in other medical states. These figures range from 0.33 gallons/gram, to 1 gallon/pound/day, up to 1 gallon/gram[1]. While we have found this usage generally falls into the range of 0.50 to 0.75 gallons/gram for standard soil gardens without irrigation recapture systems, for this calculation, a value of 1 gallon/pound/day of water was utilized. With that, this document estimates the usage for continuous growing cycles encompassing all 365 days throughout the year which results in an estimate of 0.80 gallons/gram.

This is again a conservative overestimate, and in actuality, will more likely resemble 300 growing days annually. While this will again result in less water usage than described within this document, in order to have a conservative and careful analysis, these overestimations were included in all figures and calculations to simulate a restrictive worst case scenario, when combined with the high and low usage estimates.

Additional water usage will be required for operations and include the evaporative cooling systems, toilet flushing, as well as hand washing stations and is labeled accessory water usage below in the results. For this, evaporative cooling systems may use up to 50 gal/day/ greenhouse bay (sized 42' x 120'). Additional water usages for toilet and hand washing systems have been estimated at 100 gal/day for the cultivation area.

**Rainwater Catchment Design** - Completed According to ARCSA (American Rainwater Catchment Systems Association) and ASPE (American Society of Professional Engineers) Code and Specifications.[2]

$$Catchment\ Volume\ [Gallons] = A\ x\ (Rainfall - B)\ x\ Roof\ Area\ [Square\ Feet]$$

$$A = System\ Efficiency\ Coefficiency = 0.85$$

$$B = \frac{0.08in}{month}\ or\ B = \frac{2.0in}{year}$$

$A =$ System Efficiency Coefficient - Covers loss to due to leakage, evaporation, and roof or covering material.

$B =$ Adsorption and Wetting Loss – Covers loss due to adsorption and wetting various contact surfaces as the water flows from the catchment structure into the catchment reservoir. This value varies depending on the analysis method (monthly or annually).

In order to find the critical scenario, these values were compared to the theoretical limits of rainwater collection outlined on the following page.

The previous equation was given in the design criteria cited; however, these values were also compared to the theoretical rainwater catchment amount which is simply a factor of the precipitation and square footage used for capture with a conversion factor of 7.48 gal/CF. The more conservative value of the two was used to perform this analysis and calculations.

$$Catchment\ Volume\ [Gallons] = Rainfall\ [Feet]\ x\ Roof\ Area\ [Square\ Feet]\ x\ Conversion\ Factor$$

To determine the excess water storage and volume in each tank, the below equation was used.

$$V_t = V_{t-1} + Catchment\ Volume - Demand$$

$V_t$ = Theoretical Volume of Water in the Holding Tanks at the End of the Month
$V_{t-1}$ = Theoretical Volume of Water in the Holdings Tanks at the End of the Previous Month
*Demand* = Calculated based on yield and water usage estimates listed above for conservative and realistic scenarios.

**Rainfall Data** – While Pearce data was used for calculations, Sunglow Ranch resides approximately 1,000' higher in elevation and therefore we anticipate slightly higher rainfall levels throughout the year. Due to the desire to obtain a conservative, yet representative number, this potential additional precipitation has been estimated based on figures given during the neighborhood meetings, and according to a vineyard owner nearby, a more realistic target ranges from 16" to 18" annually. The Pearce monthly rainfall data used for calculations and estimations can be found below.[3]

| Pearce, AZ | January | February | March | April | May | June |
|---|---|---|---|---|---|---|
| Monthly Precipitation (in) | 0.77 | 0.7 | 0.49 | 0.23 | 0.2 | 0.5 |

| Pearce, AZ | July | August | September | October | November | December | Annual |
|---|---|---|---|---|---|---|---|
| Monthly Precipitation (in) | 2.83 | 3.08 | 1.18 | 0.83 | 0.5 | 0.77 | 12.09 |

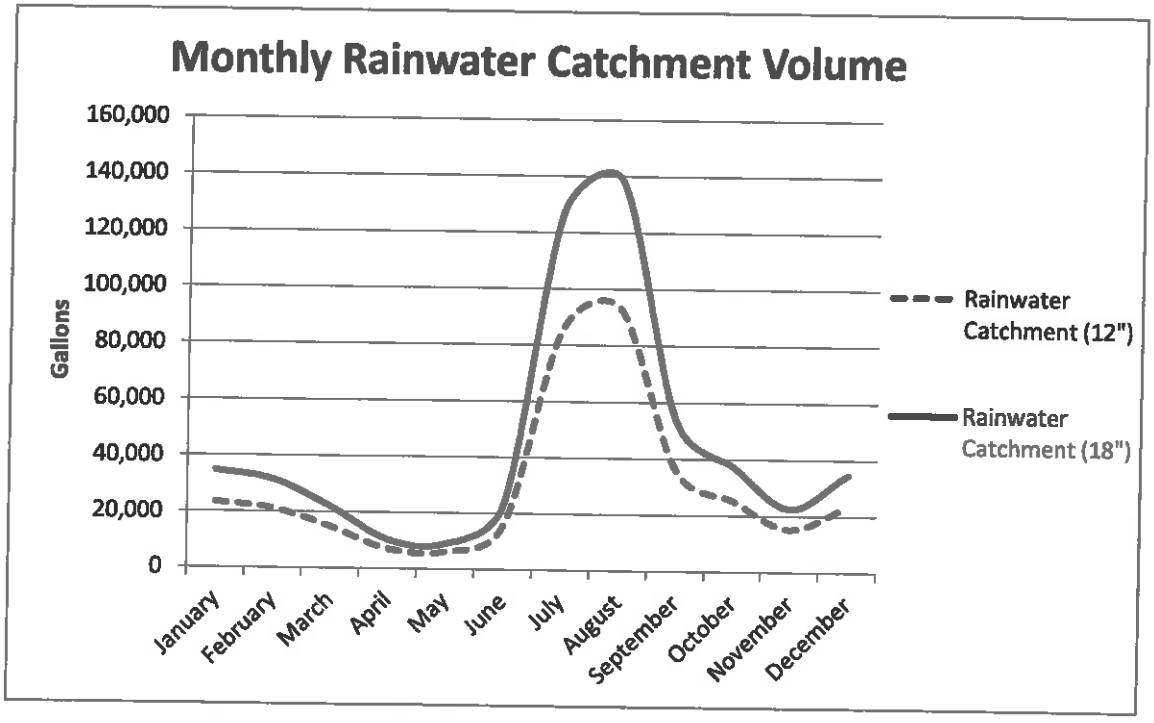
**Irrigation Recapture** – Canna Consultants has proposed using an irrigation recapture system to further manage overall water usage on the site. Incorporated with raised beds and drip irrigation, this system, known as the EPIC system (Environmental Passive Integrated Chamber), combines the world's most efficient irrigation and drainage system through non-pressurized, gravity driven, capillary physics of washed sand via direct interface of the EPIC subsurface pipe that never clogs. In essence it allows for the recapture, filtration, and reuse of any and all irrigation water. A liner prevents any lose to the environment and creates a small reservoir beneath each planting bed which decreases irrigation frequency and collects any runoff that would normally be lost without such a system in place.

The EPIC system has been proven effective for various uses throughout the world including turf management, agricultural recapture, landscaping, green roofs, and various other systems. Case studies are available which show water savings can range from 50% up to 85%. Generally the water recaptured and its reuse potential is dependent on the water quality and standards required for reuse. Due to our organic production methods, it is anticipated this water will still be of high quality when recaptured, and it would be very reasonable to see water savings in the range of 70-85% given our current design and operational plan. A presentation demonstrating these facts, the EPIC system design, and usage opportunities is included in Appendix A at the end of this analysis.

## RESULTS

***Water Requirements and Rainwater Catchment (Gallons)***

| Anticipated Yield – Processed Flowers (Annual) | Irrigation Water Requirements (Annual – No EPIC) | Accessory Water Requirements (Annual) | Total High Water Usage (EPIC @ 70%) | Total Low Water Usage (EPIC @ 85%) | Annual Rainwater Catchment Volume (Low) | Annual Rainwater Catchment Volume (High) |
|---|---|---|---|---|---|---|
| 1,500 lbs | 546,000 | 182,500 | 346,300 | 264,400 | 363,163 | 544,745 |



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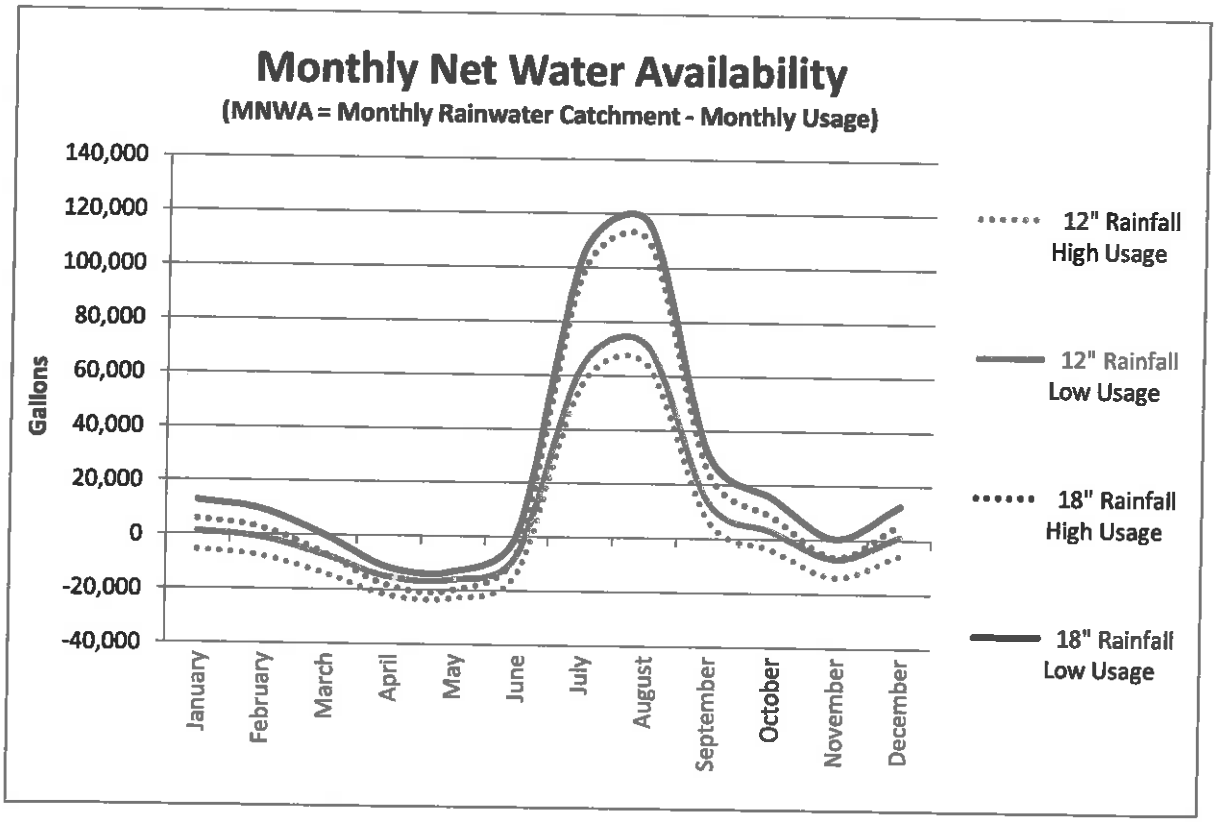
***Annual Net Water Availability (Gallons)***
*(NWA = Rainwater Catchment – Total Usage)*

| 12" Rainfall High Usage | 12" Rainfall Low Usage | 18" Rainfall High Usage | 18" Rainfall Low Usage |
|---|---|---|---|
| +19,587 | +101,487 | +198,445 | +280,345 |

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## ANALYSIS

This document was prepared to analyze the current water resources and conditions at Sunglow Ranch and to test rainwater irrigation feasibility with scientific and repeatable data sets and calculations. With any project and estimates, ongoing analysis, measuring, and accurate data is paramount to maintaining the designed systems and planning for future operations. Given this, any expansions beyond the initial Phase I construction of a 40,320SF greenhouse structure will require in depth environmental analysis studies which monitor water usage, well health, water quality, and rainfall catchment volumes to determine the feasibility of expansion when and if required. We do not anticipate expansion activities will be required in the near future, if at all.

In Arizona, average residential usage generally falls into the range of 100 gallons/person/day.[4] Given this value and our realistic analysis for Phase I, it should be noted that the agricultural irrigation effects, when coupled with our water reuse strategies, could substantially decrease overall water usage at the site. Overall water usage, when the resort is at full capacity, ranged between 2,000 and 3,000 gallons daily as verified by the current manager and employee of Sunglow Ranch for the past six years. Our additional catchment can be integrated into toilet systems throughout the ranch with minimal costs. Given toilet flushes can combine to account for upwards of 27% of total water usage in a household[5], supplementing this system with rainwater when catchment is plentiful could decrease overall usage when the ranch is at full capacity by 500 to 750 gallons a day, representing annual potential savings of more than 100,000 gallons. Overflow can be used to slowly recharge groundwater sources or tested and discharged to surface flow in the forms of two ponds on the property, dependent on water quality testing prior to any discharge.

Sufficient rainwater storage areas will be required to properly catch, store, and reuse this water for irrigation purposes. While our special use application originally stated 60,000 gallons of water storage, this will likely be increased to around 100,000 gallons throughout the property to accommodate as much available rainfall during the wet and rainy months as possible, as demonstrated by these calculations.

The volume of water available, like the weather, fluctuates depending on the season and the rainfall for that month. At a low, in May where there is an estimated 0.2" of rainfall, this would translate to around 6,000 gallons of rainwater collected throughout the month for the given Phase I catchment area. During the rainy months at a high in August with an estimated 3.08" of precipitation, this would translate to approximately 93,000 gallons of water for Phase I sized structures. Annually, if using Pearce rainfall data, this could result in a rainwater catchment volume of approximately 365,000 gallons using the most conservative equations and models listed in the assumptions portion. With well managed storage tanks and associated irrigation and fertigation efforts timed appropriately, the operation could sustain itself on rainwater catchment sources alone depending upon when precipitation arrives; and further depending on when operations begin. At the very least, this level could be reached within six months of initiating production. With strategic irrigation plans, recapture efforts, and proper timings, a rainwater only operation is not only feasible but also greatly desired by the owners and operators of the proposed cultivation operation and has the potential to decrease Sunglow Ranch's water overall water footprint when compared to recent operations in 2014.

Irrigation recapture efforts through the use of the EPIC system or a similar engineered design, will allow for a closed system in which all irrigation waters are used directly by the plants or recaptured for testing, dilution, and reuse throughout the facility. The reservoir created underneath each raised bed planting area will greatly limit needed watering and maintain healthier, more robust plants. In the case the beds are irrigated to the point of runoff, prior to catchment at the end of this system, this runoff water will flow through a sand or similar filter and then will be recaptured for reuse either on the medical cannabis, companion plants, landscaping features, or toilet and other services, again greatly increasing the water efficiency of the operation. The reuse category will be determined by the water quality and testing; however, it is our intention to reuse all of this recaptured irrigation and grey water throughout the cultivation operation and potentially on Sunglow Ranch wherever possible. The use of organic only production methods will greatly limit the potential to recapture unusable water due to the exclusion of salts, chemicals, and their effects when stored for any significant amount of time.

## CONCLUSION

While water usage and water conservation are major concerns in this area of Cochise County, the program developed for this project looks to maximize water conservation strategies, as well as minimize groundwater draw for all irrigation and agricultural purposes to achieve a truly green and environmentally friendly operation. The substantial rainwater catchment systems proposed will likely provide all the water required for cultivation purposes and additional catchment can be used to supplement water usage at the resort. Overall, the implementation of these features and this project has great potential to significantly decrease Sunglow Ranch's water footprint when compared to levels in 2014. Not only that, but additional recharge efforts to underground sources include well recharge and surface water discharge have the potential to increase overall water availability to all adjacent properties, as opposed to that water quickly running off and flowing deeper into the valley.

With this design and after performing this analysis, we do not anticipate any water issues developing in the near future due to these proposed systems. Any expansions beyond the initial 40,320SF greenhouse structure will be studied in depth as more data becomes available regarding water quality, rainfall, aquifer monitoring, flow rates, and volume estimates.

## CITATIONS

(1) "Cal NORML Challenges Fish & Wildlife Figures on Marijuana Water Consumption." 3 Aug. 2015. Web. 10 Mar. 2016. <http://www.canorml.org/news/Cal_NORML_Challenges_Fish_and_Wildlife_Figures_on_Marijuana_Water_Consumption.html>.

(2) E. W. Bob Boulware P.E., et al. *RAINWATER CATCHMENT DESIGN AND INSTALLATION STANDARDS* (August 28, 2009). Web. 10 Mar. 2016. <http://www.harvesth2o.com/adobe_files/ARCSA_Rainwater%20Code.pdf>.

(3) - Western Regional Climate Center. "PEARCE SUNSITES, ARIZONA." - *Climate Summary*. Web. 10 Mar. 2016. <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?azpear>.

(4) - "Residential_Home." *Residential_Home*. 28 Oct. 2015. Web. 10 Mar. 2016. <http://www.azwater.gov/AzDWR/StatewidePlanning/Conservation2/Residential/Residential_Home2.htm>.

(5) - "Land and Water Use in the United States." *EPA Water Sense*. June 2008. Web. <https://www3.epa.gov/watersense/docs/ws_indoor508.pdf>

# APPENDIX A : EPIC SYSTEM INFORMATION

EPIC Solutions

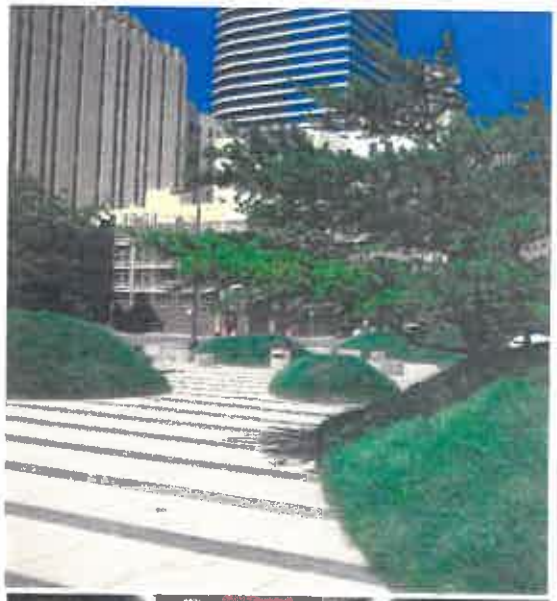
# Who is Epic Green Solutions?

- An innovative International Environmental Company.
- Focusing on Water Resource Management.
- Operating in the USA and MENA with headquarters in the UAE.
- Offers Water Management Solutions that are...
  - Ecological
  - Sustainable
  - Cost Effective
  - Profitable

EPIC Solutions

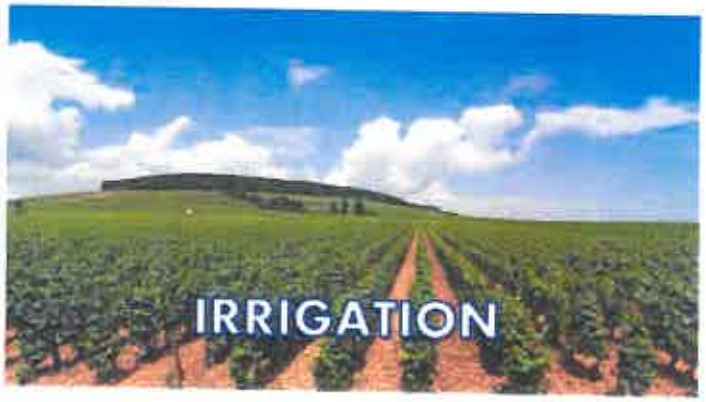
# EPIC System™ Technology

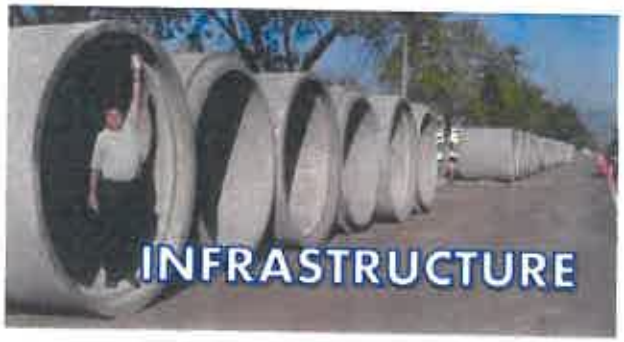
- Subsurface Irrigation
- Storm Water Management
- Green Parking Applications
- Park & Athletic Field Capabilities
- Intensive Green Roofs
- Greywater & Saline Applications
- LEED Credit Contribution
- Return on Investment (ROI)



EPIC Solutions

# Solving the World's Water Problems of...






Freshwater – Rainwater – Greywater – Saltwater

**Solutions Towards WATER Sustainability**

EPIC Solutions

# Worldwide Applications

***120° F***
United Arab Emirates (UAE)

***-40° F***
Minnesota, USA

EPIC Solutions

# The Benefits

- Conserve & Re-use Water
- Reduce Energy Consumption
- Decrease Construction Costs
- Improve Return On Investments

EPIC Solutions

# EPIC System™
## Environmental Passive Integrated Chamber

EPIC Systems™ Manage, Cleanse & Reuse Water through ***Living Systems***

- Use 50-85% Less Water for Irrigation
- Non-clogging Drainage System
- Water Storage in Sand Profile
- Capillary Physics Delivery ("wicking")
- EPIC Chambers Transport Water
- Greywater Safe Irrigation
- Salt Water Capability
- Internationally Patented
- Supports All Vegetation

EPIC Solutions

# From Greenhouses to Open Fields
## Efficient & Sustainable Irrigation Solution

## 50% to 85% Irrigation Water Saving

EPIC Solutions

# Greywater Utilization
## EPIC System™ Innovations

Rain/Greywater Re-use (Private Estate, CA)

Municipal Greywater (Folsom, CA)

Greywater Irrigation (Private Estate, NV)

Greywater Re-use (UC Davis, CA)

Heath/Zenith

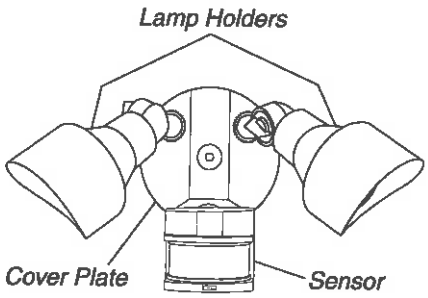
# DUALBRITE® Motion Sensor Light Control

Model 5597

## Features

- Turns on lighting when motion is detected.
- Automatically turns lighting off.
- DUALBRITE® Timer.
- Photocell keeps the lighting off during daylight hours.
- LED indicates motion was sensed (day or night).

This package includes:

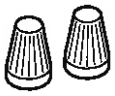



Light Control

Rubber Plug



Plastic Hanger

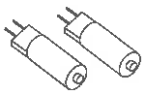


2 Wire Connectors

Mounting Bolt

Mounting Strap

Gasket



2 Lamps (installed)

6 Screws (3 sizes included)

## Requirements

- The light control requires 120-volts AC.
- If you want to use Manual Mode, the control must be wired through a switch.
- **Some codes require installation by a qualified electrician.**
- This product is intended for use with the enclosed gasket and with a junction box marked for use in wet locations.

# OPERATION

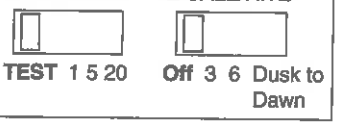
| Mode: | On-Time | Works: Day | Night |
|---|---|---|---|
| **Test** | 5 Seconds | x | x |
| **Auto** | 1, 5, or 20 Min | | x |
| **Manual** | To Dawn* | | x |
| **Accent** | 3, 6 Hr, to Dawn | | x |

* resets to Auto Mode at dawn.

**Note:** When first turned on wait about 1 ½ minutes for the circuitry to calibrate.

### TEST

Put ON-TIME switch on the sensor bottom to TEST and the DUALBRITE® switch OFF.




### AUTO

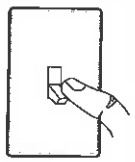
Put the ON-TIME switch in the 1, 5, or 20 minute position.

### MANUAL MODE

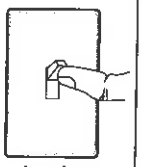
Manual mode only works at night because daylight returns the sensor to AUTO.

Flip the light switch off for one second then back on to toggle between AUTO and MANUAL MODE.

Manual mode works only with the ON-TIME switch in the 1, 5, or 20 position.



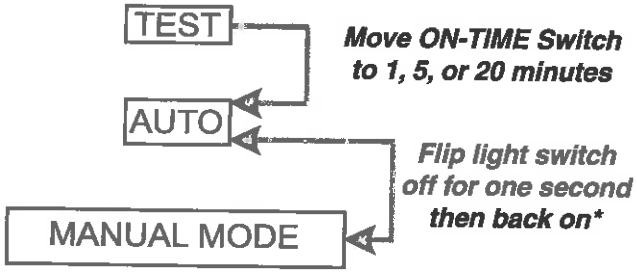
1 Second OFF *then...*



... back on.

© 2012 HeathCo LLC

### Mode Switching Summary




* If you get confused while switching modes, turn the power off for one minute, then back on. After the calibration time the control will be in the AUTO mode.

### DUALBRITE® Timer

Light comes on half bright for selected time after dusk (Off, 3 hr., 6 hr., until dawn). Selecting OFF disables this feature. The motion sensing features will continue to work as described in this manual. If motion is sensed, the light turns on full bright for the ON-TIME (1, 5, or 20 minutes) then returns to dim mode.

# INSTALLATION

**⚠ CAUTION: Keep the sensor at least 2" (51 mm) away from the bulbs.**

**⚠ CAUTION: To Avoid Fire Or Burn Hazards:**

- Allow fixture to cool before touching. The bulb and the fixture operate at high temperatures.
- Keep fixture at least 2" (51 mm) from combustible materials. Do not aim at objects closer than 3' (1 m).
- Use only T4 100W (max.), G8 tungsten halogen bi-pin 120 VAC bulbs.

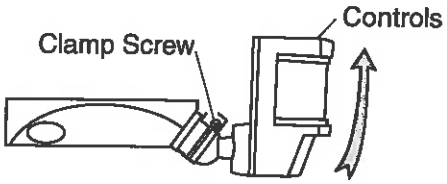
For easy installation, select an existing light operated by a wall switch for replacement. *IMPORTANT:* Do NOT use with dimmers or timers.

For best performance, mount the fixture about 8 feet (2.4 m) above the ground. **NOTE:** If fixture is mounted higher than 8 feet (2.4 m), aiming the sensor down will reduce coverage distance.

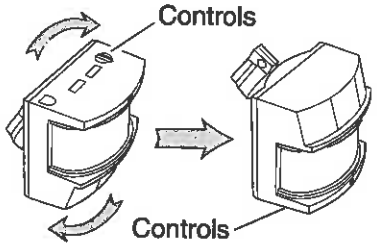
**For under eave installation, the sensor head must be rotated** as shown in the next two steps for proper operation and to avoid the risk of electrical shock.

For eave mount only:

1. Swing the sensor head towards the clamp screw joint.




2. Then rotate the sensor head clockwise 180° so the controls face down.

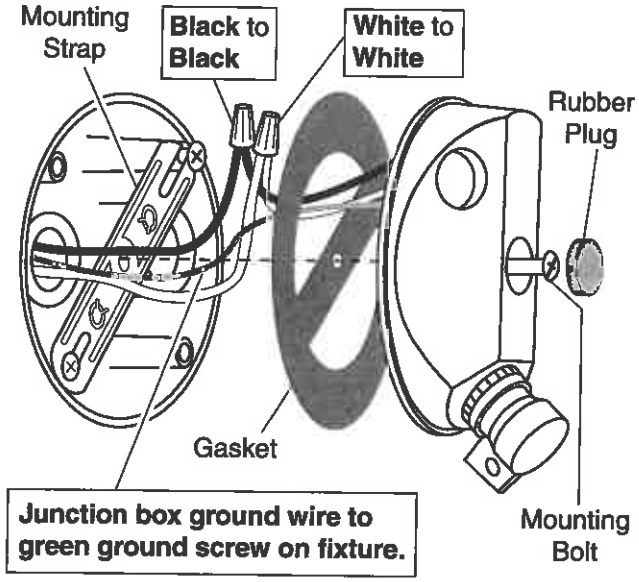



If the sensor pops out of the ball joint, loosen the clamp screw and push the sensor back into the ball joint. Tighten the clamp screw when done.

## Wire the Light Control

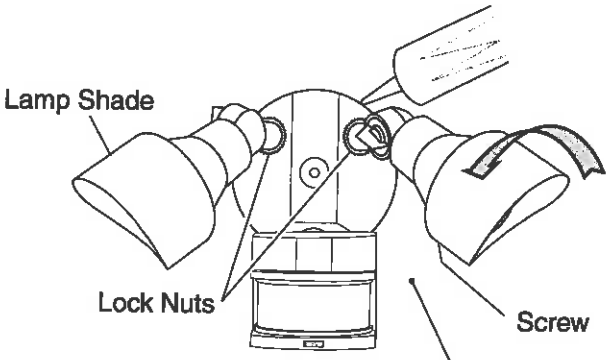
**⚠ WARNING: Turn power off at circuit breaker or fuse.**

1. Remove the existing light fixture.
2. Install the mounting strap as shown using two screws that fit your junction box.
3. The plastic hanger can be used to hold the fixture while wiring. The small end of the plastic hanger can be threaded through the hole in the center of the cover plate. The small end then goes into one of the slots on the mounting strap.
4. Route the light control's wires through the large gasket holes.
5. Twist the junction box wires and fixture wires together as shown. Secure with wire connectors.




## Mount the Light Control

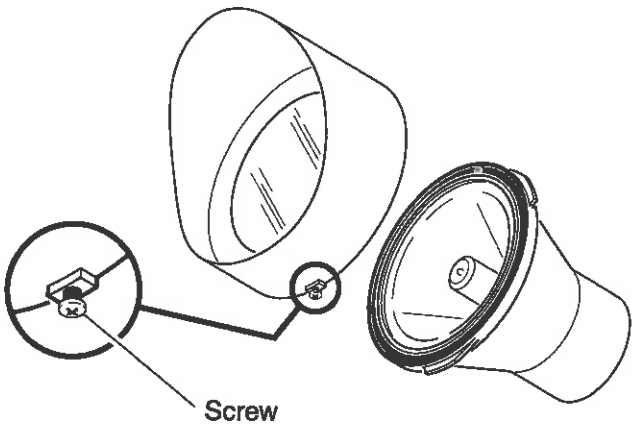
1. Place the mounting bolt through the front of the junction box cover. Push the small gasket hole over the mounting screw.
2. Make sure the wire connectors and wires are inside the junction box. Align the mounting screw with the center hole in the mounting strap. Secure the fixture to the mounting strap.
3. Push the rubber plug firmly into place.
4. If a wet location junction box was not used, caulk the wall plate mounting surface with silicone weather sealant.




Keep lamps at least 2" (51 mm) from the sensor and 2" (51 mm) from combustibles.

**⚠ CAUTION: To avoid water damage and electrical shock, keep lamp holders 30° below horizontal.**

5. Adjust the lamp holders by loosening the lock nuts, but do not rotate the lamp holders more than 180° from the factory setting.
6. Adjust lamp shades by loosening the screws several turns, turn shades counterclockwise and remove. Reinstall the shades in the desired position and tighten screws.

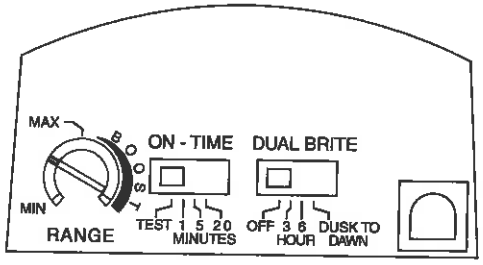


# TEST AND ADJUSTMENT

1. **Turn on the circuit breaker and light switch.**

**NOTE:** Sensor has a 1 ½ minute warm up period before it will detect motion. When first turned on, wait 1 ½ minutes.

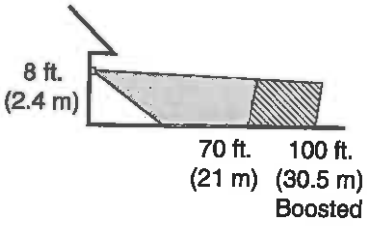
2. Turn the RANGE control to the minimum position (MIN), DUALBRITE® to OFF, and the ON-TIME control to the TEST position.



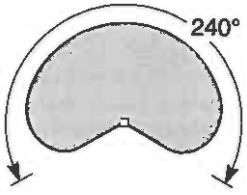

**Bottom of Sensor**

**Avoid aiming the control at:**

- Objects that change temperature rapidly, such as **heating vents and air conditioners.** These heat sources could cause false triggering.
- Areas where **pets or traffic** may trigger the control.
- **Nearby large, light-colored objects** reflecting light may trigger the shut-off feature. Do not point other lights at the sensor.

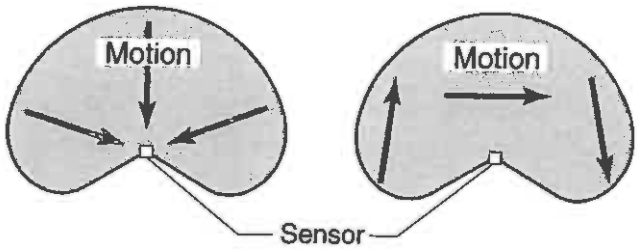



*Maximum Range*



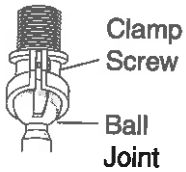

*Maximum Coverage Angle*

**NOTE:** If fixture is mounted higher than 8 ft. (2.4 m), aiming the sensor down will reduce coverage distance. The detector is less sensitive to motion directly towards it.

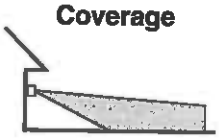



*Least Sensitive* *Most Sensitive*

3. Loosen the clamp screw in the sensor ball joint and gently rotate the sensor.
4. Walk through the coverage area noting where you are when the lights turn on (also, the LED will flash several times when motion is detected). Move the sensor head up, down, or sideways to change the coverage area. **Keep the sensor at least 2" (51 mm) away from the lamps.**
5. Adjust the RANGE as needed. RANGE set too high may increase false triggering.
6. **Secure the sensor head by tightening the clamp screw.** Do not overtighten the screw.



**Aim Sensor Down for Short Coverage**



**Aim Sensor Higher for Long Coverage**

7. Set the amount of TIME you want the lights to stay on after motion is detected (1, 5, or 20 minutes).
8. Set the DUALBRITE® switch to the amount of time after dusk you want the lights on at low level (Off, 3, 6 Hrs., Dusk-to-Dawn).

**⚠ WARNING - Risk of fire. Do not aim the bulbs at a combustible surface within 3 ft. (1 m).**

# Cochise County
## Community Development
### Planning, Zoning and Building Safety Division

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**PART SIX**

**Hazardous Materials Attachment**

Firm's current name: Canna Consultants

Current location: 1 South Dearborn, Suite 2100, Chicago, IL 60603

Fire district: Sunsites-Pearce

Nearest main intersection with street names: S. Sunglow Road and E. Turkey Creek Road

Distance: 0.75 miles Direction: West

Firm's previous location(s)

Previous name(s) of firm/operation: NA

Previous location(s): NA Date(s): NA

Previous compliance/accident history: NA

Date(s): NA

1. List hazardous and polluting materials (including raw materials, products, wastes, emissions, discharges, etc.) that will be brought to, stored, manufactured, produced, generated, processed or otherwise used at or released or transferred from the site and the quantities you will store. Material Safety Data Sheets (MSDS) are required for all such substances.

Material Chicken Manure Quantity 500 lbs, amounts may vary

Material Neem Oil Quantity Less than 25 gallons

Material Ethanol Quantity Less than 100 gallons

Material OMRI listed soil amendments (MSDS Included) Quantity Various

2. How will substances be stored? (For example, automotive batteries require impervious flooring, flammables require NFPA 30 cabinets, gas cylinders need restraints, and many chemicals have specific requirements, such as secondary containment areas for liquids. These requirements are found in the MSDS or can be requested from ADEQ.)

**Planning, Zoning and Building Safety**
1415 Melody Lane, Building E
Bisbee, Arizona 85603
520-432-9300
520-432-9278 fax
1-877-777-7958
planningandzoning@cochise.az.gov

**Highway and Floodplain**
1415 Melody Lane, Building F
Bisbee, Arizona 85603
520-432-9300
520-432-9337 fax
1-800-752-3745
highway@cochise.az.gov
floodplain@cochise.az.gov

All storage of potentially hazardous will occur inside a hazardous material designated area.

All materials will be kept in their original packaging and containers until they are ready for use.

Mainly organic fertilizers, pesticides, and fungicides will be used.

Ethanol or solvent usage will comply with all storage and ventilation requirements listed in the MSDS/AHJ

3. What methods will ensure proper containment during use or ventilation? (Waste and by-products as well as substances have specific needs to control damage from those products.)

Appropriate Re-entry Interval (REI) time-frames will be followed according to the manufacturer's specifications.

All pesticide applications will be completed by certified pesticide applicators where necessary.

Proper disposal methods, if required, will be followed according to the manufacturer's specifications. Extractions using solvents will feature a closed loop system and recapture for reuse.

Solvent usage will comply with all storage and ventilation requirements listed in the MSDS and AHJ

4. Is any welding being performed and where? (Flammables must be kept away from sources of ignition such as electricity, arcs, sparks, hot metal or open flame. Gas cylinders must be secured.)

No welding will be performed on site.

5. How will waste/ excess substances be disposed of? (Commercial operators may not use the County transfer stations' hazardous waste program. They handle only household materials.)

Where ever possible, waste will be composted and reintroduced into the greenhouse operations in regards to organic fertilizers and soil amendments. Organic pesticides will be disposed of according to manufacturer's specifications and arrangements will be made with a commercial solid waste disposal entity. Solvent for extractions will be recaptured and reused indefinitely.

6. What evacuation, treatment and notification will be made if there are any releases to groundwater or air? (Notification may be required to the Sheriff's Department, adjacent neighborhoods, State Fire Marshal, local fire district, ADEQ, and/ or EPA.)

Organic (OMRI certified) pesticides and fertilizers will greatly limit any effects on the groundwater or surrounding air. We do not anticipate any issues due to the chosen methods of production. If required, notification will be given, in person or by phone, to adjacent properties, as well as informing the required agencies, such as sheriff, fire, and EPA as necessary .

Signature C. C [illegible]

Date 2-23-16

CANNA
CONSULTANTS

MEDICAL CANNABIS CONSULTING

1 SOUTH DEARBORN STREET SUITE 2100
CHICAGO, ILLINOIS 60603-2302
WWW.CANNACONSULTANTS.COM
TEL: 312-212-4233
FAX: 312-212-4401

Saturday, February 27th, 2016

Dear Property Owner,

This letter is a formal notice regarding a special use application for the property located at 10466 S. Sunglow Road, also known as Sunglow Ranch, with APN: 401-28-013W. We are a group in the process of purchasing and reopening Sunglow Ranch. With this, we are attempting to reach out and start new business relationships with both previous and new vendors for services at Sunglow and inform them about this project. These services will include recreational activities and group outings such as horseback riding, hiking, biking, birding, and astronomy; wine tastings and stocking locally produced products; and other guest services including culinary, cleaning, laundry, transportation, and catering services. To help with initial funding and ultimately reopen Sunglow Ranch to the public as described above, we have partnered with a group looking to cultivate medical cannabis on a small portion of the parcel. The information below discusses this impact and their proposal to aid the local community.

The proposed medical cannabis cultivation operation at the above location will be for cultivation purposes only and closed to the public. A small 3.5 acre development will be leased from Sunglow's 393 total acres for the cultivation of medical cannabis. This operation will utilize a polycarbonate, commercial greenhouse and small outbuilding surrounded by chain link security fence, topped with razor wire and cut resistant privacy slats to maximize security. Significant security system upgrades will be implemented as required by state law including night vision camera systems, alarm systems, panic buttons, and card access control.

Ultimately, the goal is to reopen Sunglow Ranch and restore services similar to how it was operating as recently as 2015. This would include guest services and reinitiating previous business relationships in the areas of food, waste, recreational, cultural, cleaning, environmental, and other services required to maintain a resort for guests visiting the area. All construction activities, contracts, and hiring will focus on local entities, giving priority to established business currently in the area.

The location on the parcel has been strategically chosen to provide an unobtrusive cultivation site while also limiting any environmental impact to maintain the ranch as a desirable retreat. Solar power will be used to supplement the greenhouse. The use of organic farming methods will be implemented, sourcing soil amendments and manures locally wherever possible to limit the overall carbon footprint. Several onsite wells will supply irrigation water, and water recycling strategies such as rainwater catchment, grey-water recycling, and drip irrigation systems will create a sustainable and environmentally friendly operation. Additional native plantings will include various trees and shrubs, which will be introduced outside the fenced perimeter and irrigated with recycled water. These native plantings will also serve to limit views of the greenhouse from surrounding areas and blend into the native scenery.

All principal officers are heavily involved with charitable organizations and come from military families. With such, they have agreed to donate a large portion of extracts produced at the facility to veterans with PTSD, low income cancer patients, epileptics, and diabetics. Often, high dosages and treatment regimens are required for these serious ailments, and those most in need rarely have the capabilities to afford such treatment options. Highlighting the compassionate use of medical cannabis, the principal officers have agreed to give these veterans, children, and others most in need within the medical program, free extracts at no cost to the patient. These treatment regimens can include dosages upwards of 2 grams of extract daily for the most serious and aggressive cancers. This would result in a weekly cost of $400 to $1,000 depending on the quality of extracts at current pricing levels. To us, as compassionate advocates of cannabis and its medical uses, this cost is unacceptable, and as a result, we have made it our mission to implement this donation program which will be the first of its kind in the nation.

Further charitable actions have been discussed with several local organizations. All principal officers greatly value the importance of education, and donations have been offered to the local school districts including Pearce Elementary and Valley Union High School on an ongoing basis. These donations will be complimented with local hiring practices which would generate 20+ jobs in the cultivation area and additional opportunities upon reopening the resort to guests. All cultivation employees must undergo background checks as required by the State of Arizona.

If you have any questions or would like to express your opinion regarding the proposed use at this site, please feel free to contact us at the below locations, and we will be happy to discuss the operation in more detail. We greatly encourage any and all feedback from the surrounding neighbors and want to work with you to solve any issues beforehand. Please feel free to call the number listed on this letter, email us at the address below, or call and/or visit Sunglow Ranch directly where we can arrange to meet with you in person. You are also welcome to contact the county. Their information has been included below. Please reference Sunglow or SU-16-05.

Canna Consultants
Attn: Luke DeBatty
1 South Dearborn, Suite 2100
Chicago, IL 60603
ld@cannaconsultantsillinois.com

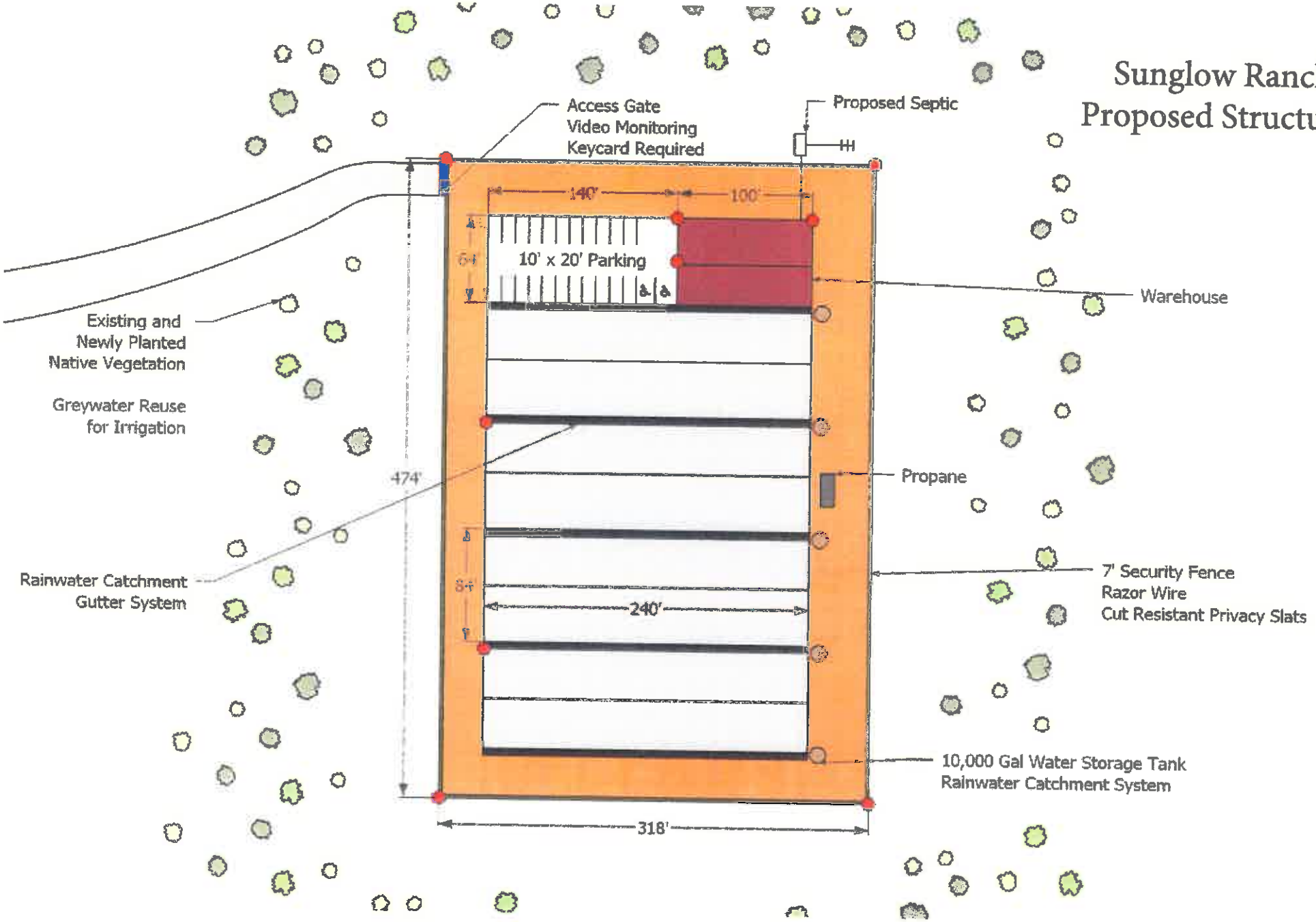
Cochise County Planning, Zoning, and Building Safety
Attn: Jesse Drake
1415 Melody Lane, Building E
Bisbee, AZ 85603
JDrake@cochise.az.gov

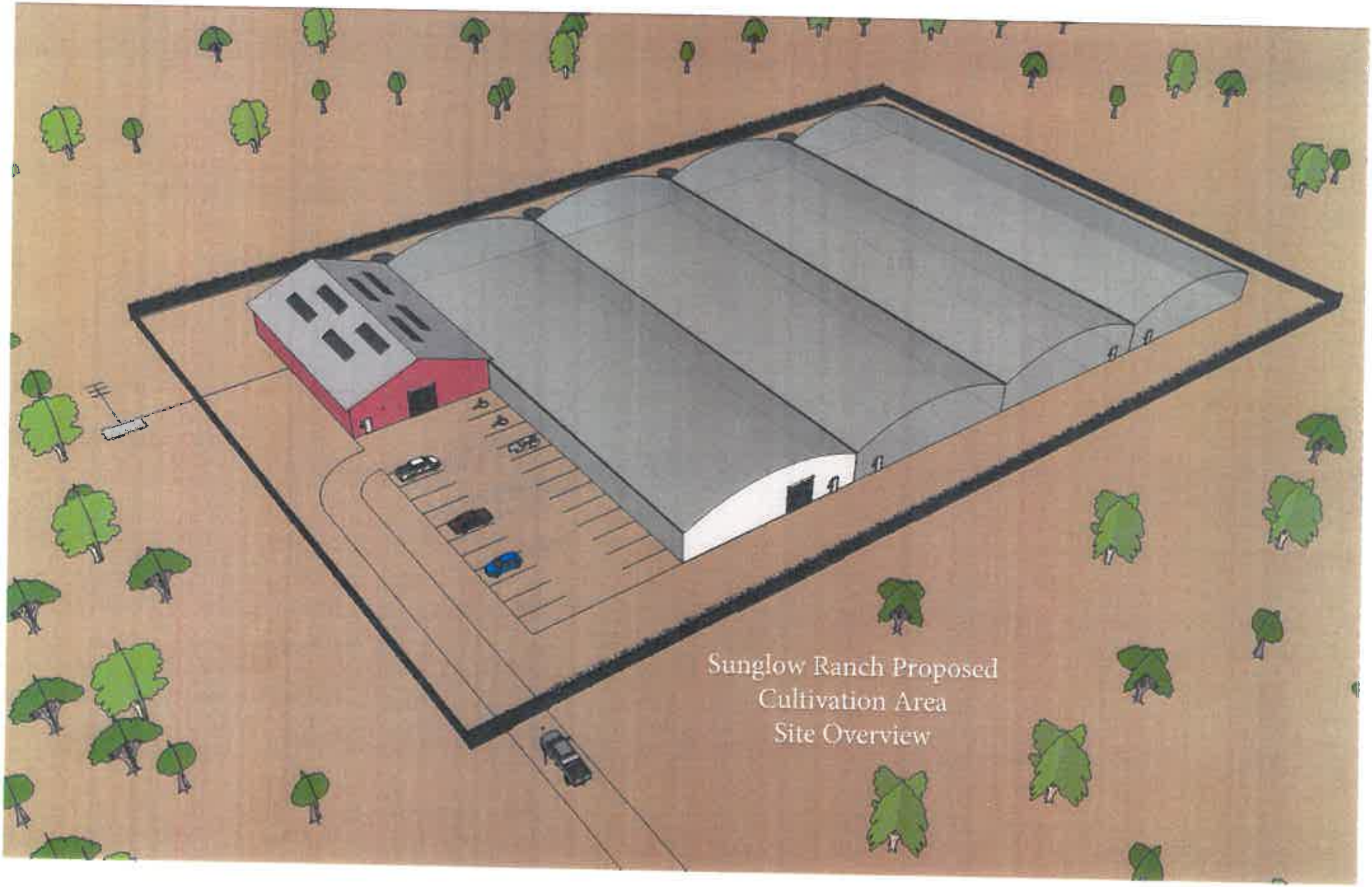
Thank you for your time, and we greatly look forward to working closely with Cochise County, the local school districts, and the Pearce-Sunsites community to bring a safe, compassionate, and economically beneficial operation back to the area.

Sincerely,

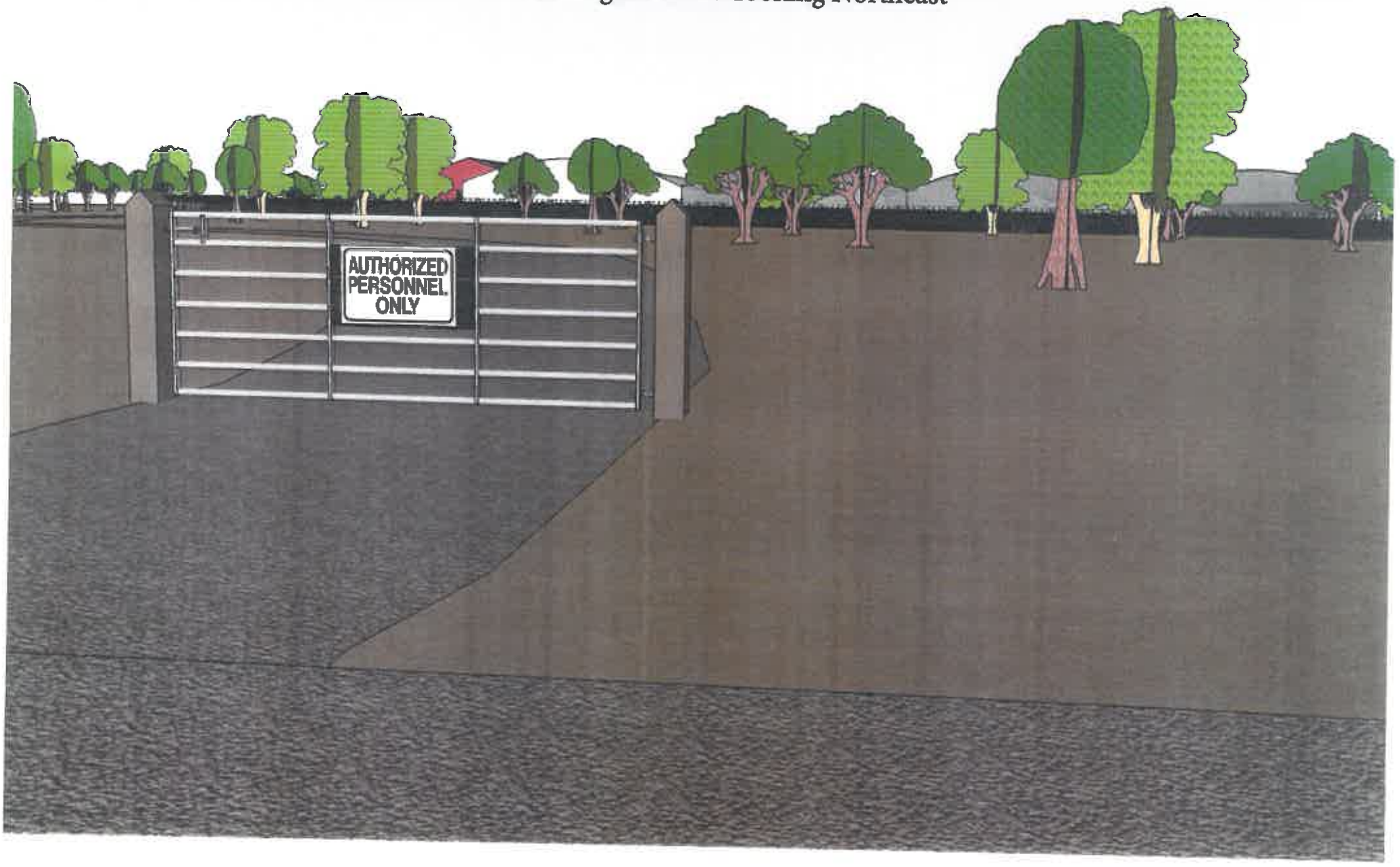
LUKE DEBATTY
SR. VICE PRESIDENT

# Sunglow Ranch
# Proposed Structures




Sunglow Ranch Proposed
Cultivation Area
Site Overview

View from Proposed Access Location
S. Sunglow Road Looking Northeast



CANNA
CONSULTANTS

MEDICAL CANNABIS CONSULTING

WWW.CANNACONSULTANTS.COM
TEL: 312-212-4233
FAX: 312-212-4401

Dear Community Member,

Thank you for taking the time to consider our proposal. We are a group in the process of purchasing and reopening Sunglow Ranch. With this, we are attempting to reach out to the local community and inform them about the entirety of our proposal. Ranch services, upon reopening, will include recreational activities and group outings such as horseback riding, hiking, biking, birding, and astronomy; wine tastings and stocking locally produced products; and other guest services including culinary, cleaning, laundry, transportation, and catering services. To help with initial funding and achieve this, we have partnered with a group looking to cultivate medical cannabis on a small portion of the parcel and are applying for a special use permit with the county for this reason. The information below discusses this cultivation impact and proposal to aid the local community.

**Land Use Impact**

- 3.5 acre cultivation site on a total of 393 acres currently owned by Sunglow Ranch.
- The cultivation area will feature a polycarbonate, commercial greenhouse and will be closed to the public.
- The 3.5 acre cultivation site will be surrounded by fencing, replanted with native vegetation, and situated in a location to minimize environmental and neighborhood impacts.
- Implementation of water conservation strategies including rainwater catchment, drip irrigation, and grey-water reuse. Additional solar power will be installed as well.
- Organic production methods, sourcing local materials such as manures, soils, and other amendments from nearby quality sources whenever available.

**Operations**

- Both Sunglow Ranch and the cultivation site will follow a local hiring policy for additional staff positions. The cultivation staff is required by state law to undergo background checks and must be licensed by the State of Arizona to enter the cultivation area.
- Management includes two master's degrees in plant sciences, a large edible produce farm supervisor, a multi acre commercial greenhouse complex manager, and an environmental engineer.
- Medical research program developed by management and supervised by an Arizona Physician.

**Security**

- The security system and procedures were designed by an expert who previously designed, installed, and managed systems for nuclear power plants and West Point Military Academy.
- Security system will include camera monitoring with low light visibility, gated access, keycard entry, and a perimeter alarm system.
- Staff onsite at all times for constant monitoring and additional security of the cultivation area.

**Charitable Activities**

- Significant contributions to the surrounding community, Cochise County, and local school districts including Pearce Elementary School and Valley Union High School.
- A portion of medical extracts created at the facility will be donated to veterans with PTSD, low income cancer patients, epileptics, and diabetics within the medical cannabis program, under supervision of our partnering Arizona Physician.

**Sunglow Neighborhood Meeting**

**SU-16-05 – Sunglow Canna**

Attendance:

Approximately 12 neighbors attended our meeting on Tuesday, March 15th, from 12pm – 2pm at Sunglow Ranch. Of those, one left after several minutes of discussion. Two were in support. One was there for information and did not express either support or opposition. 8 were in opposition.

Topics of Discussion:

Their main concern was water usage which was discussed for a large majority of the time. Most of the concern was about groundwater draw and the status of wells throughout the area. While the initial water report was given out to all who attended, there was little interest in hearing about the water conservation measures and our goal to be 100% sustainable on rainwater catchment, irrigation recapture, and grey water reuse, as all of the attendees in opposition did not believe this was feasible despite any numbers or figures given to them. A nearby neighbor claimed our well only provides 1 gallon per minute and our use of 6 gallons per plant will far outweigh that capacity. The current manager and caretaker stated the well does produce substantially more than one gallon per minute, and I disagree with the water usage estimates they are using for cannabis as a result of past experiences and similar projects in other locations. We were not able to reach a consensus on this topic.

The second biggest concern was logistical including how the facility will be constructed. There is a 16 ton weight limit on the road which we are aware of and was brought up at the meeting. The greenhouse structure is broken down and several options are available for construction methods which would be significantly less intrusive and involved than the casitas and current structures that are standing at Sunglow. There was also a concern that we would build a portion or the entire greenhouse, and then abandon the property, so a mention of a demolition bond was brought up. This due diligence regarding constructability, water quality, water volume, and land survey will all be completed prior to construction and application for commercial development and building permits. The outlay for all these tests is very significant and if we are unable to obtain a land use permit, would result in this outlay and these funds being wasted.

Several other smaller issues were mentioned in passing. These include:

- Concern - We will impact the biodiversity in the area.
    - Response – This will be a small facility located away from the national forest and hiking trails. We have reworked our phases, and Phase I will be approximately 40,320SF of greenhouse canopy on a roughly 1.5-2 acre plot. The 200,000+ acre national forest will remain and therefore the diversity in the area will not be impacted. Current animal residents including deer, ducks, and geese will continue to be present on site and use the lower pond for watering, as they do daily. The property does, in fact, house a long standing resort, of which construction and operation clearly did not, nor does affect abundant wildlife that is continually present. Also planned are additional steps to make the future facilities even more environmentally friendly.

- Concern – The latest fire which ravaged the area was allegedly started by individuals evading the border patrol.
    - Response – This occurred without having our proposed facility on location, and with the extra security, has the potential to decrease instances like this in the area. There has not been a single issue with migrants or those evading the border patrol at Sunglow for the duration the current manager and caretaker has been present on site, which is now over 6 years. We do not believe a fully booked and staffed resort with an additional security and camera monitored facility will draw those whose desire is not to be discovered or seen.

- Concern – Sunglow Ranch ran out of water two years ago and had to truck in water.
    - Response – This is true however extenuating circumstances resulted in this. At the time, the Ranch was fully booked and a guest left a hose on while watering their horses. This hose ran for approximately 48 hours and depleted reserves in the water storage tanks. As a result several water trucks were brought in over the course of a month to supplement usage while the ranch was fully booked and the well was given the chance to recharge. The current caretaker and longest running employee, including manager in previous absence of ownership, stated 4 trucks were utilized in his 6 years, 6 day a week employment. Trucking in water occasionally would in fact be a viable way to offset water usage for everyone in the area considering dry wells seem to be a great concern.

- Concern – Traffic will damage the roadway.
    - Response – Sunglow Ranch has been closed for approximately two years. The road is comparable to when the ranch was open as confirmed by the current manager and several other local visitors. No real difference can be seen when comparing conditions now to conditions when the resort was open and a large volume of traffic was more consistently using Turkey Creek and S. Sunglow Road.

- Concern – We will be partnered with a dispensary in Phoenix and therefore Cochise County will not see the tax revenue from this operation.
    - Response - I disagreed with this statement as property tax, taxes associated with Sunglow Ranch, local services, amenities, and recreational activities such as horseback riding, wine tours, alcohol and restaurant sales, will all contribute to the local economy and provide a significant tax base for the area. Furthermore, the benefits of employment, accompanying taxes, as well as all charitable contributions to school districts, community, and county from the proposed operation were also touched on.

- Concern – There is not sufficient staff that will be willing to travel to Sunglow for work.
    - Response – The current manager and caretaker will be in charge of hiring for the ranch. While the distance to Sunglow is a concern, he already has many interested parties asking about positions when Sunglow is reopened and does not foresee any significant staffing issues. Ideally, if employees meet all state requirements, staff can work in both the cultivation area as well as Sunglow Ranch to provide ample hours and livable wages for all employees. The ranch did in fact operate for many years with full staffing.

The meeting was prematurely adjourned at the request of the neighbors. They were all thanked for coming and providing their input despite any disagreements. Some were open to discussions, while most had their minds made up before the neighborhood meeting and a few were very displeased when we did not pull the special use application then and there. Several who attended the meeting and supported the project stayed around Sunglow and discussed the project in more detail. These topics ranged from the medical cannabis program in Arizona, water reuse strategies including irrigation recapture, jobs, as well as charitable donations to the school districts and our free extracts for patients program.

# Sulphur Springs Valley Electric Cooperative, Inc.

A Touchstone Energy® Cooperative

## REVIEW

**To:** Jesse Drake-Planning Manager-Cochise County Community Development

**From:** Ruth Bigelow-Right of Way Agent

**Date:** February 26, 2016

**Re:** SU-16-05 (Cana Sunglow) Medical Marijuana-401-28-013W

---

- SSVEC has no issues with this Special Use Permit

If you have any questions concerning this review please contact me at 520-384-5513 or rbigelow@ssvec.com

# Cochise County
## Community Development
### Planning, Zoning and Building Safety Division

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# INTEROFFICE MEMO

**Date:** Mar 18, 2016

**To:** Jesse Drake , Planning Manager

**From:** Joaquin Solis, P.E., Floodplain Engineer

**For:** Karen Riggs, P.E. RLS, Highway & Floodplain Director, Floodplain Administrator

**Subject:** Review for Special Use Permit 16-05/Parcel 401-28-013W, Canna Sunglow medical marijuana

The Cochise County Floodplain Division has reviewed the special use permit application and site plan. The following will need to be addressed prior to commercial permitting:

1. Since the 3.4 acres is proposed to have a commercial greenhouse and a storage warehouse improvement, a drainage analysis will need to be submitted to demonstrate that there is no adverse impact to adjacent parcels and existing Sunglow Ranch properties (located downstream of the proposed improvement). The proposed rainwater catchment areas should be designed and strategically placed to detain or retain excess runoff due to the improvements.
2. Design plans for these and any improvements disturbing one acre or more will need to be submitted, reviewed and approved before construction begins.

**Planning, Zoning and Building Safety**
1415 Melody Lane, Building E
Bisbee, Arizona 85603
520-432-9300
520-432-9278 fax
1-877-777-7958
planningandzoning@cochise.az.gov

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# INTEROFFICE MEMO

**Date:** March 1, 2016

**To:** Jesse Drake, Planning Manager

**From:** Teresa Murphy, Right-of-Way Agent

**Subject:** **SU-16-05 (Canna Sunglow)**

**Background:** The applicant is requesting a Special Use authorization to approve a facility for the cultivation and infusion of medical marijuana on 3.46 acres of a 393 acres RU-4, Rural zoned property. The proposed uses are considered Special Uses in RU-4 Rural Zoning Districts under Sections 607.53 and 607.56 of the Zoning Regulations. The subject parcel, APN 401-28-013W, is located at 14066 South Sunglow Road, Pearce, AZ, approximately sixteen miles east of the Highway 191/ Highway 181 junction. It is further described as being situated in Section 20, Township 18 South, Range 29 East of the Gila and Salt River Base and Meridian, in Cochise County, AZ. Right-of-Way Staff was contacted by Planning and Zoning to review the permit and provide comments regarding right-of-way dedication needs for county maintained roads.

**Analysis:**

- Access for the subject parcel is from Highway 191 North to Highway 181/Turkey Creek Road, East to Sunglow Road, South to site
- A portion Sunglow Road is county maintained but not where it traverses the subject parcel.
- There is a 30 foot easement recorded in Instrument No. 0002-03511.

**Recommendation:**

- No need for right-of-way dedication is required for Sunglow Road at this time.

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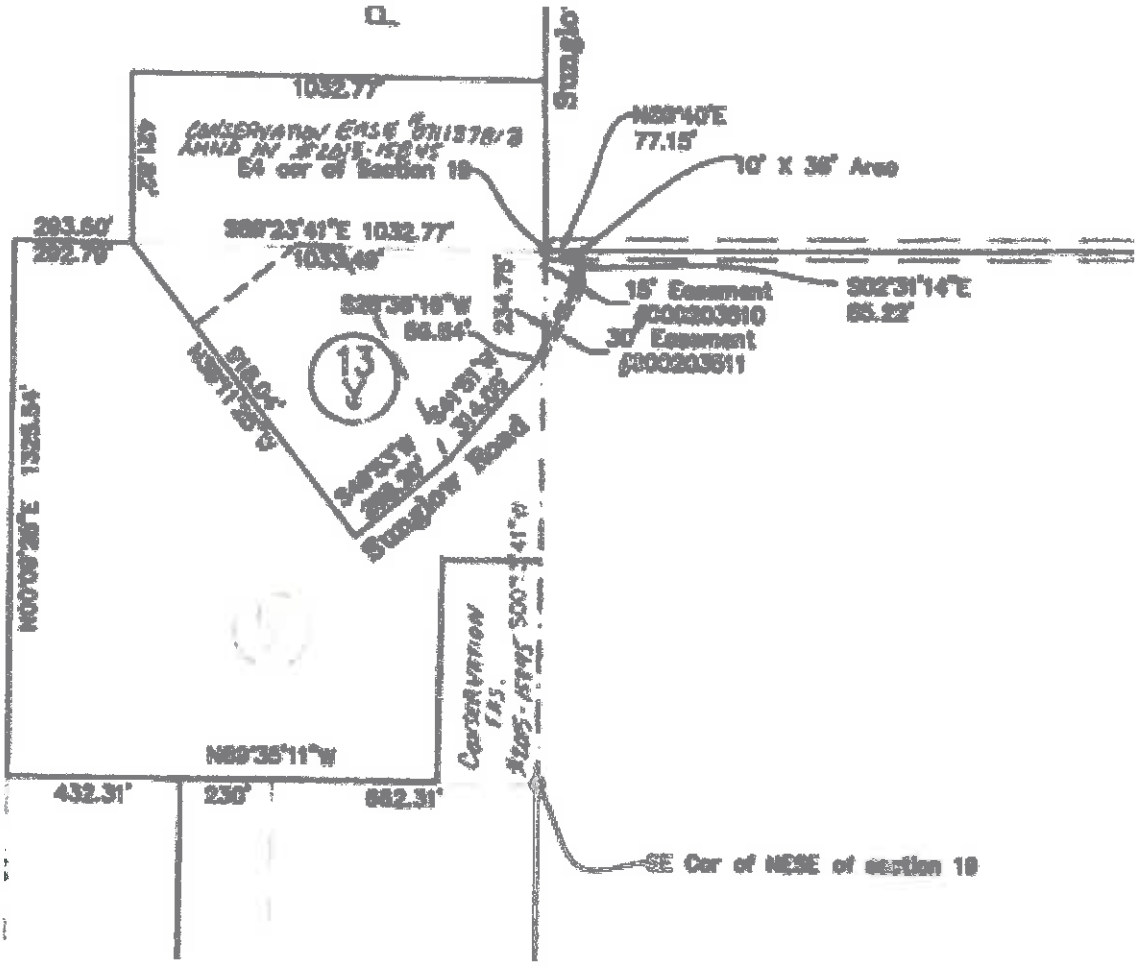
Bisbee, Arizona 85603
520-432-9300
520-432-9278 fax
1-877-777-7958
planningandzoning@cochise.az.gov

## Drake, Jesse

**Subject:** FW: SU-16-05 (Canna Sunglow)

**From:** Murphy, Teresa
**Sent:** Tuesday, March 29, 2016 10:43 AM
**To:** Drake, Jesse
**Subject:** RE: SU-16-05 (Canna Sunglow)

The private easement is for Sunglow Road (15' on either aide) as it traverses the subject parcel along the Northwest corner in Section 20.




**Teresa Murphy**
Cochise County Community Development
Highway and Floodplain Division

## Drake, Jesse

**From:** Murphy, Teresa
**Sent:** Monday, March 21, 2016 8:12 AM
**To:** Lamberton, Karen L
**Cc:** Drake, Jesse
**Subject:** RE: Canna SunGlow Ranch Docket SU 16-05

The portion of Sunglow Road that traverses this parcel is not county maintained. We do not recommend donating right-of-way unless it is a county maintained road. I took a look at the older inquiries and we didn't want to get involved in the access issues then either.

**Teresa Murphy**
Cochise County Community Development
Highway and Floodplain Division

**From:** Lamberton, Karen L
**Sent:** Sunday, March 20, 2016 8:51 PM
**To:** Murphy, Teresa
**Cc:** Drake, Jesse
**Subject:** Canna SunGlow Ranch Docket SU 16-05

My recollection is that there was an issue out there on access rights for the Sunglow Ranch. I think it was researched around January of 2010. You might see if Terry has a file on it. I have some notes but my recollection is the matter was punted to the ROW agents and handled outside of the docket at that time: CP 10-5003. We might need ROW on this one.

**Karen L. Lamberton, AICP**
County Transportation Planner
Community Development Department
1415 Melody Lane, Building F
Bisbee, AZ 85603
520-432-9240 phone
520-432-9278 fax

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## Drake, Jesse

**From:** Cratsenburg, Diane E
**Sent:** Tuesday, March 22, 2016 4:51 PM
**To:** Drake, Jesse
**Subject:** RE: SU comments

Forgot to note that the informational permits have no fee – added it in red to my original email, below.

Diane Cratsenburg
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**From:** Drake, Jesse
**Sent:** Tuesday, March 22, 2016 4:44 PM
**To:** Cratsenburg, Diane E
**Subject:** RE: SU comments

Thank you!

**From:** Cratsenburg, Diane E
**Sent:** Tuesday, March 22, 2016 4:44 PM
**To:** Drake, Jesse
**Cc:** Ellis, Ronald J; Lamberton, Karen L; Donovan, Dennis L; Wisehart, Melvin D
**Subject:** SU comments

16-04 – 6952 S Covered Wagon Rd, Willcox - Kriaris – no off-site improvement requirements.

16-05 – 14066 S Sunglow Rd – Canna Consultants - no off-site improvements required – applicant should be advised that these are primitive roads which receive very minimal maintenance with no change planned in the foreseeable future.

16-06 –11429 N Moore Rd – Frazier –
* Applicant may have to provide apron at Moore/Courtland intersection at commercial permitting, which would have a fee of $125 and would involve placement of a chip seal apron on the south side of W Courtland Rd at N Moore Road.
* No permit history for the existing driveways located at roughly 0.33 and 0.44 miles south of Courtland Road and noted on the Overall Site Plan submitted with the Special Use authorization request. An informational ROW encroachment permit (no fee) will be needed to document the existing driveways. A permit with a fee of $100 would be required should the applicant wish to establish any additional driveways to access the parcel.

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# MEMORANDUM

**Date:** March 23, 2016

**To:** Jesse Drake, Planning Manager

**From:** Karen L. Lamberton, AICP County Transportation Planner

**Subject:** Canna Medical Marijuana at Sunglow Ranch/SU-16-05/Parcel #401-28-013W

The applicant, Canna Consultants, is requesting a Special Use authorization to approve a facility for the cultivation and infusion of medical marijuana on a portion of a 393 acre site. The property is zoned RU-4, Rural, and the proposed growing and infusion processes are considered a Special Use in that zone under Sections 607.53 and 607.56 of the Zoning Regulations.

**Special Use Authorization Conditions**
We have no objection to issuing the requested Special Use Authorization with the following conditions and advisory notes to the applicant:

1. Prior to, or concurrent with, the Commercial Permit application the applicant will be requested to provide a Basic Traffic Report to assess potential site impacts and needed mitigation.
2. The Commercial Permit will be conditioned with necessary traffic mitigation after analysis of the Traffic Report and more detailed review of the roadway network serving the subject parcel.

**Background**
The applicant is proposing to cultivate and infuse medical marijuana on the site in a series of buildings and greenhouses, constructed and phased in over time. A dispensary is not planned at this time: this is presented as a growing operation only. The subject parcel consists of 393 acres previously in use as a guest ranch resort (Sunglow Ranch). The site is located west of the Chiricahua Mountain range and National Forest.

**Traffic Analysis**
This type of use is akin to a small-scaled agricultural use: average trip generation rates specifically for this type of growing operation have not been developed on either a national or state-level at this time. The applicant anticipates up to 25 employees, at full-build out of this project, which

has the potential to generate an estimated range of 38-112 vehicle trips per day. The applicant anticipates a heavy pick-up truck to be used for deliveries and agricultural activities on the site; no large commercial vehicles are anticipated at this time by the applicant.

Note: Vehicle trips are different than number of vehicles that travel to the site. Average vehicle trips per day also include incidental traffic generated due to the presence of any particular use (e.g. mail, deliveries, trash pick-up) and averages seasonal variations in trips generated.

Greenhouses tend to stabilize the typical seasonal variations inherent in open agricultural activities. The applicant is proposing a staged greenhouse development with development of an estimated 3.46 total acres, as market demand allows. The applicant also anticipates employees staying on site, possibly on the existing housing units that are part of the guest-ranch. Typically having employees located on site reduces employee travel demand thus creating an internal capture rate that off-set any additional residential use travel demand.

If only operating as the proposed use (medical marijuana greenhouses and processing operations) the traffic impacts will be much less than the previously existing guest-ranch activities; once the resort activities resume the traffic patterns would likely remain similar to previous use with occasional seasonal spikes in traffic for guest-ranch events or harvesting time. As a growing and infusion operation only, with no dispensary operation, the requested use is not likely to change the type of use that has historically been on this site nor the type and volume of traffic associated with an agricultural greenhouse operation.

**Traffic Report at Commercial Permit Phase**

Trip generation at this location for the proposed use is not significant enough to warrant a full Traffic Impact Analysis; however, this proposal is complicated by the potential concurrent use of the existing guest-ranch activities. This traffic analysis has considered only the proposed addition of the medical marijuana activities, not the combined potential uses. Although the guest-ranch is already an allowed use at this site the combined activities may trigger the need for specific on or off-site improvements. It is premature at this conceptual stage to identify and determine what those might be.

At the Commercial permit stage the applicant is requested to provide a Basic Traffic Statement that expands more fully their conceptual plan. This report does not need to be completed by a Traffic Engineer but does need to include the following items:

1. A brief description of the proposed project. Include a map that shows the access driveways and internal circulation as well as on-site parking areas. Tentative range of dates for implementation for phasing of site activities and construction should be included.
2. Provide information about the construction phase of this project; tentative construction schedule, number of construction trucks per day, size of trucks, days and times anticipated for construction traffic.
3. Describe mitigation measures for controlling dust, if needed.
4. Provide information about the proposed re-opening of the guest ranch activities: include tentative timing, scale of potential events, measures to separate (as appropriate) the growing operation traffic and the guest-ranch vehicle, pedestrian and equestrian activities.
5. Illustrate, assess and design the primary driveway access to the county-maintained segment of Sunglow Ranch Rd. Identify if traffic control of any kind might be needed or if temporary improvements are needed during construction phases or if permanent improvements are desired to enhance the guest-ranch activities.

It may be that the construction phase is not significant enough to warrant any additional mitigation; however, at the conceptual stage it is hard to make that assessment. The applicant is advised that if there are clustered construction trucks making turning movement warning drivers to slow and pay attention may be needed and/or other appropriate methods of traffic control to ensure safety for both the traveling public and the construction vehicle drivers.

Information provided in the Special Use Authorization application is sufficient for several of these items and it is requested that the permit information provided be incorporated into this Report.

**Legal Access**

The applicant is advised that the ownership of the access roads to the parcel (Turkey Creek Rd. and Sunglow Rd.) is often private, not dedicated right-of-way to the County. The historic and long-standing use of these roads allows the County to exercise a 66 foot width under A.R.S. §28-6705 for maintenance activities. No improvements to the existing primitive road condition could occur on this roadway until, and unless, full right-of-way is acquired and the roadway brought up to current County standards. There are no plans for this to occur in the foreseeable future.

The applicant is advised to assure themselves of any necessary easements to access their site from the end of County maintained and to be aware of any private or public easements that might exist on the subject parcel to other property owners adjacent or beyond their property. Such easements would need to remain available for use pursuant to those requirements of those easements e.g. equestrian. The County makes no statements on the legitimacy of any asserted easements and advise the applicants to address this issue specifically with their title company should they purchase or lease this site.

There is no requirement in Cochise County that fully perfected right-of-way be in place prior to approving or operating commercial land uses.

Note: at this time only about 52% of the county's maintained roadway system has fully dedicated roadways. Very few of the private roadways that make up the majority of the County's transportation network have full public easements at this time.

**Private Maintenance Agreement**

The applicant's access appears to be off of a non-county maintained roadway. If so, the applicant will be required, in keeping with the requirements of Zoning Regulation 1807.02 A., to provide a Private Maintenance Agreement at the Commercial Permit stage. This agreement will require the applicant to keep this segment of roadway in "passable" condition which means in a condition on which the average vehicle can travel on the roadway. This agreement does not require that the roadway be maintained to a county-maintained standard or to an all-weather condition.

Like all other native surfaced roadways in the County the access roads to this site are subject to changing conditions which include sudden and severe flooding, ruts, erosion and blowing dust. There is no expectation that the applicant will maintain the private segment of the roadway in any better condition than the County can manage to do in severe weather conditions. However, the applicant will likely have a higher motivation to bring the roadway back into passable condition than other property owners in order to provide access to their customers and the Private Maintenance Agreement formalizes the higher degree of obligation that they would have as a business owner along this residential roadway.

It may be that the applicant's parcel boundary coincides with the county-maintained portion of Sunglow Ranch Rd. A full assessment of where this boundary is and what requirements are needed for meeting Road Design Standards or a Private Maintenance Agreement will be done as part of the Commercial Permit review.

**Advisory Note for the Applicant**

The conceptual plan is adequate for this Special Use application but will not be adequate at the Commercial Permitting stage. At the commercial permit stage additional details, including a sight distance triangle, per Zoning Regulation 1807.06 and/or Roadway Design Standards D-300, will be needed on the site plan or as a separate illustration. Details on the driveway width, driveway access radii will also be needed: design should comply with the County's Roadway Design Standards.

Failure to provide required details on the site plan or the requested Traffic Report at the Commercial Permit stage may result in the application being found deficient and returned for revisions. Checklists and examples available from the Planning and Zoning Dept. office.

Should the scope or scale of operation change during the process of review by the State and Federal agencies the applicant is advised that conditions related to off-site impacts may change.