



COUNTY OF SAN LUIS OBISPO  
DEPARTMENT OF PLANNING & BUILDING  
TREVOR KEITH, *DIRECTOR*

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**THIS IS A NEW PROJECT REFERRAL**

**DATE:** 10/16/2018  
**TO:** 2<sup>nd</sup> District Legislative Assistant, Assessor, Building Division, APCD, CalFire / County Fire, Agricultural Commissioner, Public Works, Environmental Health, Sheriff, CA Fish and Wildlife, City of San Luis Obispo, RWQCB, US Fish and Wildlife, Los Osos Community Advisory Committee, AB52  
**FROM:** Ian Landreth ([ilandreth@co.slo.ca.us](mailto:ilandreth@co.slo.ca.us) or 805-781-1298)

**PROJECT NUMBER & NAME: DRC2018-00180 DAYSPRING\_NON LLC**

**PROJECT DESCRIPTION:** Proposed Minor Use Permit for 2.94 acre (128,000 sq/ft) outdoor cannabis cultivations and the construction of 45,000 sq/ft of greenhouse structures for 21,746 sq/ft of indoor cannabis cultivation and supportive uses including drying, curing, and preparation of product for offsite testing and distribution. The project is to be located at 7510 Los Osos Valley Rd. San Luis Obispo, CA 93405.

**APN(s): 067-061-049**

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**Return this letter with your comments attached no later than 14 days from receipt of this referral. CACs please respond within 60 days. Thank you.**

**PART I: IS THE ATTACHED INFORMATION ADEQUATE TO COMPLETE YOUR REVIEW?**

- ☐ YES (Please go on to PART II.)
- ☐ NO (Call me ASAP to discuss what else you need. We have only 10 days in which we must obtain comments from outside agencies.)

**PART II: ARE THERE SIGNIFICANT CONCERNS, PROBLEMS OR IMPACTS IN YOUR AREA OF REVIEW?**

- ☐ YES (Please describe impacts, along with recommended mitigation measures to reduce the impacts to less-than-significant levels, and attach to this letter.)
- ☐ NO (Please go on to PART III.)

**PART III: INDICATE YOUR RECOMMENDATION FOR FINAL ACTION.**

Please attach any conditions of approval you recommend to be incorporated into the project's approval, or state reasons for recommending denial.

IF YOU HAVE "NO COMMENT," PLEASE SO INDICATE, OR CALL.

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# GENERAL APPLICATION FORM

San Luis Obispo County Department of Planning and Building

## APPLICATION TYPE - CHECK ALL THAT APPLY

- ☐ Emergency Permit 
 ☐ Tree Permit 
 ☒ Minor Use Permit  
☐ Conditional Use Permit/Development Plan 
 ☐ Plot Plan  
☐ Curb, Gutter & Sidewalk Waiver 
 ☐ Other 
 ☐ Site Plan  
☐ Surface Mining/Reclamation Plan 
 ☐ Zoning Clearance  
☐ Amendment to approved land use permit 
 ☐ Variance

**DRC2018-00180**

Minor Use Permit  
 067-061-049 / 7510 LOS OSOS VALLEY RD  
 HELIOS DAYSPRINGS  
 CANNABIS

## APPLICANT INFORMATION Check box for contact

person assigned to this project

☒ Landowner Name William E. Szymczak Daytime Phone 310-294-7921  
 Mailing Address 11 Wildhorse Lane, Rolling Hills Estates, CA Zip Code 90274  
 Email Address: houseofholistics2013@gmail.com

☒ Applicant Name Helios Dayspring Daytime Phone 805-356-5151  
 Mailing Address 8570 Casanova Road Atascadero, CA Zip Code 93422  
 Email Address: houseofholistics2013@gmail.com

☒ Agent Name Kirk Consulting / Lisa Bugrova/ Jamie Jones Daytime Phone 805-461-5765  
 Mailing Address 8830 Morro Rd, Atascadero, CA Zip Code 93422  
 Email Address: Lisa@kirk-consulting.net

## PROPERTY INFORMATION

Total Size of Site: 198.8 Acres Assessor Parcel Number(s): 067-061-049  
 Legal Description: 7510 Los Osos Valley Rd, San Luis Obispo, CA 93405  
 Address of the project (if known): \_\_\_\_\_  
 Directions to the site (including gate codes) - describe first with name of road providing primary access to the site, then nearest roads, landmarks, etc.: Los Osos Valley Road  
 Describe current uses, existing structures, and other improvements and vegetation on the property:  
Avocado orchard, cattle, residence.

## PROPOSED PROJECT

Describe the proposed project (inc. sq. ft. of all buildings): See Project Description

## LEGAL DECLARATION

I, the owner of record of this property, have completed this form accurately and declare that all statements here are true. I do hereby grant official representatives of the county authorization to inspect the subject property.

Property owner signature [Signature] Date 10/9/18

**FOR STAFF USE ONLY**





# LAND USE PERMIT APPLICATION

San Luis Obispo County Department of Planning and Building

File No \_\_\_\_\_

Type of project: ☒ Commercial ☐ Industrial ☐ Residential ☐ Recreational ☐ Other

Describe any modifications/adjustments from ordinance needed and the reason for the request (if applicable): \_\_\_\_\_

Describe existing and future access to the proposed project site: Existing/Primary access to remain off of Los Osos Valley Road

Surrounding parcel ownership: Do you own adjacent property? ☒ Yes ☐ No  
If yes, what is the acreage of all property you own that surrounds the project site? 265.4

Surrounding land use: What are the uses of the land surrounding your property (when applicable, please specify all agricultural uses):

North: Agriculture South: Agriculture  
East: Agriculture West: Agriculture

## For all projects, answer the following:

Square footage and percentage of the total site (approximately) that will be used for the following:

Buildings: 45,000 sq. feet 0 % Landscaping: 0 sq. feet 0 %  
Paving: 0 sq. feet 0 % Other (specify) Commercial Ag- 147,200 sf cultivation use

Total area of all paving and structures: 45,000 ☒ sq. feet ☐ acres  
Total area of grading or removal of ground cover: 45,000 ☒ sq. feet ☐ acres

Number of parking spaces proposed: 16 Height of tallest structure: 14'4"

Number of trees to be removed: 0 Type: Greenhouse

Setbacks: Front 460' Right 1,256' Left 300' Back 2,608'

Proposed water source: ☒ On-site well ☐ Shared well ☐ Other \_\_\_\_\_

☐ Community System - List the agency or company responsible for provision: \_\_\_\_\_

Do you have a valid will-serve letter? ☐ Yes ☐ No (If yes, please submit copy)

Proposed sewage disposal: ☐ Individual on-site system ☒ Other Portable Toilets

☐ Community System - List the agency or company responsible for sewage disposal: \_\_\_\_\_

Do you have a valid will-serve letter? ☐ Yes ☐ No (If yes, please submit copy)

Fire Agency: List the agency responsible for fire protection: Cal Fire

## For commercial/industrial projects answer the following:

Total outdoor use area: 6 ☐ sq. feet ☒ acres

Total floor area of all structures including upper stories: 45,000 sq. feet

## ~~For residential projects, answer the following:~~

~~Number of residential units: \_\_\_\_\_ Number of bedrooms per unit: \_\_\_\_\_~~

~~Total floor area of all structures including upper stories, but not garages and carports: \_\_\_\_\_ sf~~

~~Total of area of the lot(s) minus building footprint and parking spaces: \_\_\_\_\_ sf~~





File No

The California Environmental Quality Act (CEQA) requires all state and local agencies to consider and mitigate environmental impacts for their own actions and when permitting private projects. The Act also requires that an environmental impact report (EIR) be prepared for all actions that may significantly affect the quality of the environment. The information you provide on this form will help the Department of Planning and Building determine whether or not your project will significantly affect the quality of the environment.

To ensure that your environmental review is completed as quickly as possible, please remember to:

- Answer **ALL** of the questions as accurately and completely as possible.
- Include **ANY** additional information or explanations where you believe it would be helpful or where required. Include additional pages if needed.
- If you are requesting a land division or a re-zoning, be sure to include complete information about future development that may result from the proposed land division or rezoning.
- Include references to any reports or studies you are aware of that might be relevant to the questions asked or the answers you provide.

Should a determination be made that the information is inaccurate or insufficient, you will be required to submit additional information upon request.

## Physical Site Characteristic Information

Your site plan will also need to show the information requested here:

- |    |   |  |
|----|---|--|
| 1. | Describe the topography of the site:<br>Level to gently rolling, 0-10% slopes: <u>25.8</u> acres<br>Moderate slopes - 10-20%: <u>173</u> acres<br>20-30%: <u>0</u> acres<br>Steep slopes over 30%: <u>0</u> acres |  |
| 2. | Are there any springs, streams, lakes or marshes on or near the site?<br>If yes, please describe: <u>There is 1 NHD stream and 2 NHD water bodies in the middle on the parcel.</u>                                | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No            |
| 3. | Are there any flooding problems on the site or in the surrounding area?<br>If yes, please describe: _____   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No            |
| 4. | Has a drainage plan been prepared?<br>If yes, please include with application.  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No            |
| 5. | Has there been any grading or earthwork on the project site?<br>If yes, please explain: <u>Single Family residence and Avocado orchard</u>  | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No            |
| 6. | Has a grading plan been prepared?<br>If yes, please include with application.   | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No            |
| 7. | Are there any sewer ponds/waste disposal sites on/adjacent to the project?  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No            |
| 8. | Is a railroad or highway within 300 feet of your project site?  | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No            |
| 9. | Can the proposed project be seen from surrounding public roads?<br>If yes, please list: <u>Los Osos Valley Road</u>   | <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No |



## Water Supply Information

1. What type of water supply is proposed?  
☒ Individual well    ☐ Shared well    ☐ Community water system
2. What is the proposed use of the water?  
☐ Residential    ☒ Agricultural - Explain Non-Cannabis Agricultural and Livestock, Cannabis cultivation  
☐ Commercial/Office - Explain \_\_\_\_\_  
☐ Industrial - Explain \_\_\_\_\_
3. What is the expected daily water demand associated with the project? See supplemental project description
4. How many service connections will be required? No service connections required
5. Do operable water facilities exist on the site?  
☒ Yes    ☐ No    If yes, please describe: Groundwater Well
6. Has there been a sustained yield test on proposed or existing wells?  
☒ Yes    ☐ No    If yes, please attach.
7. Does water meet the Health Agency's quality requirements?  
Bacteriological?    ☐ Yes    ☐ No  
Chemical?    ☐ Yes    ☐ No  
Physical    ☐ Yes    ☐ No  
Water analysis report submitted?    ☒ Yes    ☐ No
8. Please check if any of the following have been completed on the subject property and/or submitted to County Environmental Health.  
☐ Well Driller's Letter    ☐ Water Quality Analysis(☐ OK or ☐ Problems)  
☐ Will Serve Letter    ☒ Pump Test 24 Hours / 85 GPM  
☐ Surrounding Well Logs    ☐ Hydrologic Study    ☒ Other Well Completion Reports, Water Management Plan

Please attach any letters or documents to verify that water is available for the proposed project.

## Sewage Disposal Information

If an on-site (individual) subsurface sewage disposal system will be used:

1. Has an engineered percolation test been accomplished?  
☐ Yes    ☒ No    If yes, please attach a copy.
2. What is the distance from proposed leach field to any neighboring water wells? \_\_\_\_\_
3. Will subsurface drainage result in the possibility of effluent reappearing in surface water or on adjacent lands, due to steep slopes, impervious soil layers or other existing conditions?  
☐ Yes    ☒ No
4. Has a piezometer test been completed?  
☐ Yes    ☒ No    If 'Yes', please attach.
5. Will a Waste Discharge Permit from the Regional Water Quality Control Board be required?  
☐ Yes    ☒ No *(a waste discharge permit is typically needed when you exceed 2,500 gallons per day)*

If a community sewage disposal system is to be used:

1. Is this project to be connected to an existing sewer line?    ☐ Yes    ☐ No  
Distance to nearest sewer line: \_\_\_\_\_ Location of connection: \_\_\_\_\_
2. What is the amount of proposed flow? \_\_\_\_\_ GPD
3. Does the existing collection treatment and disposal system have adequate additional capacity to accept the proposed flow?    ☐ Yes    ☐ No



### **Solid Waste Information**

1. What type of solid waste will be generated by the project?  
☐ Domestic   ☐ Industrial   ☒ Agricultural   ☐ Other, please explain? \_\_\_\_\_
2. Name of Solid Waste Disposal Company: \_\_\_\_\_
3. Where is the waste disposal storage in relation to buildings? Adjacent to cultivation. See Site plan
4. Does your project design include an area for collecting recyclable materials and/or composting materials?   ☒ Yes   ☐ No  
On Site Organic Composting in grow Areas

### **Community Service Information**

1. Name of School District: San Luis Coastal Unified
2. Location of nearest police station: SLO CO SHERIFF-COAST PATROL 2099 10th St., Los Osos, CA
3. Location of nearest fire station: 94 Cuesta Camp 635 Santa Rosa St, San Luis Obispo, CA 93401
4. Location of nearest public transit stop: Downtown Transit Center, San Luis Obispo, CA 93401
5. Are services (grocery/other shopping) within walking distance (1/2 mile or closer) of the project?   ☐ Yes   ☒ No

### **Historic and Archeological Information**

1. Please describe the historic use of the property: Avocado orchard, cattle, barn, and single family residences
2. Are you aware of the presence of any historic, cultural or archaeological materials on the project site or in the vicinity?   ☐ Yes   ☒ No  
If yes, please describe: \_\_\_\_\_
3. Has an archaeological surface survey been done for the project site?   ☒ Yes   ☐ No  
If yes, please include two copies of the report with the application.

### **Commercial/Industrial Project Information**

***Only complete this section if you are proposing a commercial or industrial project or zoning change.***

1. Days of Operation: 6 Days of operation a week   8 am-6pm
2. How many people will this project employ? 7-11
3. Will employees work in shifts?   ☐ Yes   ☒ No  
If yes, please identify the shift times and number of employees for each shift \_\_\_\_\_
4. Will this project produce any emissions (i.e., gasses, smoke, dust, odors, fumes, vapors)?  
☐ Yes   ☒ No   If yes, please explain: \_\_\_\_\_
5. Will this project increase the noise level in the immediate vicinity?   ☐ Yes   ☒ No  
If yes, please explain: \_\_\_\_\_  
(If loud equipment is proposed, please submit manufacturers estimate on noise output.)
6. What type of industrial waste materials will result from the project? Explain in detail: N/A
7. Will hazardous products be used or stored on-site?   ☐ Yes   ☒ No  
If yes, please describe in detail: \_\_\_\_\_
8. Has a traffic study been prepared?   ☒ Yes   ☐ No   If yes, please attach a copy.
9. Please estimate the number of employees, customers and other project-related traffic trips to or from the project: Between 7:00 - 9:00 a.m. 1   Between 4:00 to 6:00 p.m. 1



10. Are you proposing any special measures (carpooling, public transit, telecommuting) to reduce automobile trips by employees ☐ Yes ☒ No

If yes, please specify what you are proposing: \_\_\_\_\_

11. Are you aware of any potentially problematic roadway conditions that may exist or result from the proposed project, such as poor sight distance at access points, connecting with the public road?

☐ Yes ☒ No If yes, please describe: \_\_\_\_\_

### Agricultural Information

Only complete this section if your site is: 1) Within the Agricultural land use category, or 2) currently in agricultural production.

1. Is the site currently in Agricultural Preserve (Williamson Act)? ☐ Yes ☒ No
2. If yes, is the site currently under land conservation contract? ☐ Yes ☒ No
3. If your land is currently vacant or in agricultural production, are there any restrictions on the crop productivity of the land? That is, are there any reasons (i.e., poor soil, steep slopes) the land cannot support a profitable agricultural crop? Please explain in detail: N/A

### Special Project Information

1. Describe any amenities included in the project, such as park areas, open spaces, common recreation facilities, etc.(these also need to be shown on your site plan): n/a
2. Will the development occur in phases? ☒ Yes ☐ No  
If yes describe: Greenhouses constructed as phase 2
3. Do you have any plans for future additions, expansion or further activity related to or connected with this proposal? ☐ Yes ☒ No If yes, explain: \_\_\_\_\_
4. Are there any proposed or existing deed restrictions? ☐ Yes ☒ No  
If yes, please describe: \_\_\_\_\_

### Energy Conservation Information

1. Describe any special energy conservation measures or building materials that will be incorporated into your project \*: \_\_\_\_\_

\*The county's Building Energy Efficient Structures (BEES) program can reduce your construction permit fees. Your building must exceed the California State Energy Standards (Title 24) in order to qualify for this program. If you are interested in more information, please contact the Building Services Division of the Department of Planning and Building at (805) 781-5600.

### Environmental Information

1. List any mitigation measures that you propose to lessen the impacts associated with your project:  
Efficient Irrigation Techniques and Scheduling, monitored drip system for outdoor cultivation
2. Are you aware of any unique, rare or endangered species (vegetation or wildlife) associated with the project site? ☒ Yes ☐ No  
If yes, please list: See Biological Resources Assessment and Supplemental Project Description



3. Are you aware of any previous environmental determinations for all or portions of this property?

☐ Yes ☒ No

If yes, please describe and provide "ED" number(s): \_\_\_\_\_

**Other Related Permits**

1. List all permits, licenses or government approvals that will be required for your project (federal, state and local): CDFA

(If you are unsure if additional permits are required from other agencies, please ask a member of the Planning Department staff currently assigned to the project





HELIOS DAYSPRING  
SUPPLEMENTAL DEVELOPMENT STATEMENT  
CANNABIS USE PERMIT  
7510 LOS OSOS VALLEY ROAD, SAN LUIS OBISPO, CA 93405  
APN (067-061-049)  
**PROJECT DESCRIPTION**

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**Parcel Size:** 198.8 Acres  
**APN:** APN (067-061-049)  
**Address:** 7510 Los Osos Valley Rd, San Luis Obispo, CA 93405  
**Land Use Designation:** AG  
**Williamson Act:** No  
**Water:** On-Site Wells  
**Existing Uses:** Avocado Orchard, Cattle Grazing, Single-Family Residence  
**Access:** Los Osos Valley Road

The subject property consists of one parcel totaling 198.8 acres, located at 7510 Los Osos Valley Road in San Luis Obispo (APN 067-061-049), accessed off Los Osos Valley Road in the San Luis Obispo Sub Planning Area and zoned Agriculture. Existing uses on the site include a residence, storage barn, avocado orchard and cattle grazing.

**Proposed Project**

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A request by Helios Dayspring for a Use Permit to authorize the outdoor cultivation of cannabis, totaling 128,000 sq. ft. of canopy (2.94 acres), and the construction of approximately 45,000 sq. ft. of greenhouses for 21,746 sf indoor cultivation and supportive uses (see Table 1 for project scope summary). The property will utilize CCM2016-00299. The proposed project has been designed in full compliance with LUO Section 4, Chapter 18322.30- Cannabis Activities as approved by the Board of Supervisors on November 27, 2017. Supporting cultivation operations will include drying, curing, and preparation of product for off-site testing and entry into the commercial marketplace. The proposed project is located at 7510 Los Osos Valley



Rd, San Luis Obispo, CA 93405, approximately 6 miles West of downtown San Luis Obispo (Figure 1).

**Table 1: Summary of Outdoor and Mixed Light Areas**

Structure Type	Use	Size	Count	Total SF	Canopy SF
Hoop House	Flowering	100' x 24'	80	192,000	128,000
	Drying/Curing	100' x 24'	12	28,800	n/a
<b>TOTAL Outdoor</b>				<b>220,800</b>	<b>128,000</b>
Greenhouse	Flowering	187' x 120' 78.4' x 30'	1	24,792	21,746
	Drying/Curing/Support	187' x 90' 108.6' x 30'	1	20,088	n/a
<b>TOTAL Mixed-Light</b>				<b>44,880</b>	<b>21,746</b>

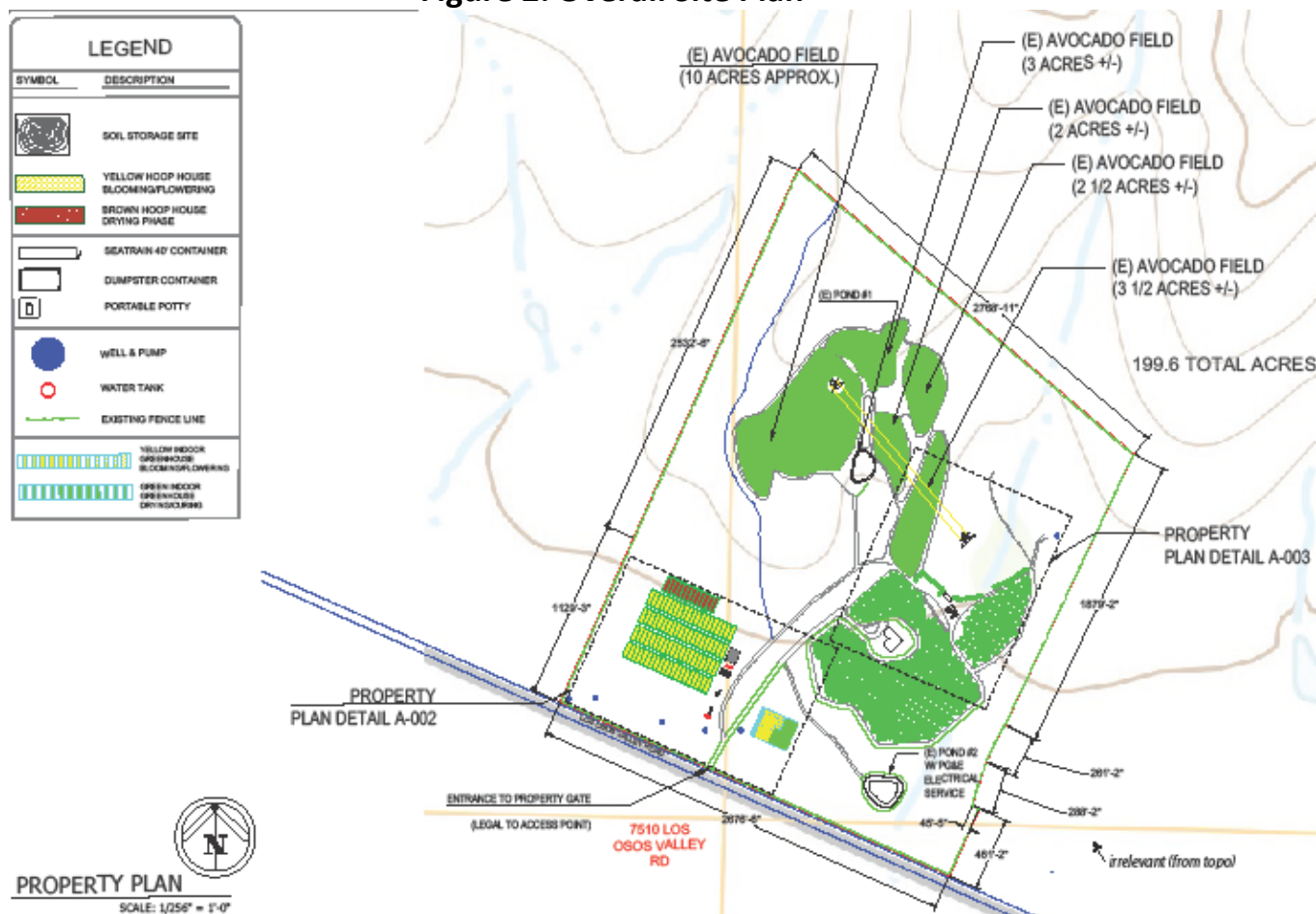
**Figure 1: Vicinity Map**



The Project site is approximately 198.8 acres in size and consists of one legal parcel located approximately 3.1 miles east of Turri Road on Los Osos Valley Road, which extends East and West of the project site. The area is sparsely developed with very low densities and larger parcel sizes (40+) acres. With the exception of the level agricultural valley along Los Osos Valley Road, the surrounding area's topography is relatively hilly with open space hillsides beyond the valley in both the north and south directions. The parcel's characteristics are 173 acres between 10-20% slope, and 25.8 acres of the site being between 0-10% slope. The average slope within the site is 15%. The entire project is proposed within the agricultural valley along Los Osos Valley Road.



**Figure 2: Overall Site Plan**



## Outdoor Cultivation

The outdoor cultivation consists of 80 hoop houses for 2.94 acres of flowering cannabis canopy located on the northwest corner of the parcel. An additional 12 hoop houses will be utilized for drying/curing. Secure fencing will be placed around the perimeter, with a compost and soil storage area encompassed in the fencing. Existing wells will be utilized to irrigate the cannabis cultivation, with six 10,000 gallon water tanks located adjacent to the hoophouses. Two 40' x 8' seatrain storage containers will be located east of the hoophouses to be utilized for pesticide storage and organic preventative nutrients. Portable toilets will be provided for use by agricultural staff. Waste storage will be contained within a dumpster to be located east of the hoop houses, along with 16 defined parking spaces located in the existing dirt road and designated by cones.



### **Indoor Cultivation (Mixed-Light)**

The indoor cultivation greenhouse consists of a 44,880 sq. ft. greenhouse to hold a cultivation, canopy of up to 22,000 sq. ft located east of the outdoor cultivation area. Additional greenhouse space will be utilized for drying, curing, and other supportive uses for the cultivation. See the energy use section below for details on lighting and other features of the greenhouses.

### **Processing and Export of Product**

Nursery plants will be provided from offsite to be planted on the site. Drying and curing will be located within hoopouses and additional greenhouse space not utilized for cultivation. Once harvested and dried, product will be packaged into totes and taken off-site for processing and distribution. There will be no processing, manufacturing, or distribution onsite.

### **Access**

The parcel is accessed from Los Osos Valley Road, a public road which extends to parcels East and West of the site. The road is paved all the way to the site's driveway. The gated entrance to the parcel will remain, and provides access to the cultivation area as well as the remainder of the parcel, which will remain an active avocado farm.

## **Site Operations Plan**

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### **Onsite Security Measures**

A Confidential Security Plan including both physical and operational security measures as required by 22.40.040A.2.a. is included for routing to the Sheriff's Department. The security plan is in compliance with State guidelines and 22.40.404.D-Security to restrict access to only those intended and to deter trespass and theft of cannabis and securely store all cannabis to prevent diversion, theft, and loss.

### **Odor Management Plan**

Odor from the outdoor cultivation areas is naturally mitigated by the project design in full compliance with requirements outlined in Ordinance Section 22.40.050.D.8-Nuisance Odors, as the cultivation is sited and operated in full compliance with setback requirements in regards to public right-of-way and property lines. Compliance with the County's monitoring program will ensure that any concerns



due to nuisance odors that may be raised will be addressed as appropriate. No additional mitigation other than proper location and operation in compliance with the ordinance is required for odor management of outdoor cultivation.

The greenhouses will be maintained with a Dynamic® Activated Carbon Matrix odor control and air handling system to provide internal pressurized air conditioning, temperature control, and extensive air filtration odor control. This system is compliant with Section 22.404.050D.8- Nuisance Odors by providing sufficient mechanical ventilation controls including misting and evaporative coolers that work in conjunction with an activated carbon filtration system installed within the structure. Refer to Plan Set page Z-101 for product specifications.

### **Signage/Site Posting**

No exterior signage distinctive to the cannabis operation is proposed. The existing gated entrance will remain. All required land use permit approvals, State, and County permits and licenses will be posted on the site.

### **Records**

Clear and adequate records will be maintained in compliance with all applicable State and County requirements.

### **Parking**

The property site provides ample parking space in existing level areas adjacent to the cultivation. See Sheet A-002 for location of 16 spaces to be used for the cultivation and any seasonal harvest staffing needs. This location is not in conflict with any adjacent properties or uses. See request for modification of nursery specialty parking standards 22.18 herein.

### **Employee Safety and Training Plan**

The proposed operations are agricultural in nature and conducted according to controls in place for the industry. No nursery, manufacturing, dispensary, or distribution activities are proposed. No public access to the site will occur at any time. Full operations on the site requires a total of 7 full time staff with the hours of 6:00 am to 6:00 pm. Three times a year, in May, July and September for harvest, four additional employees will be onsite (for a total of 11) with the same hours of operation. These harvest times are six days long where the cannabis is cut and hung for drying. Drying will occur inside hoop houses and additional greenhouse



space. Once dried, staff cut the product, then transfer it into totes where it is taken to an offsite processing facility for trimming and preparation for sale. An occasional fourth harvest may occur if there is not an early rain, at the same employee levels listed above. Bathroom facilities will be provided for employees, consisting of six porta potties near the cultivation areas.

Product transport is anticipated after each harvest, and will consist of 1 passenger van or utility vehicle accessing the site over the course of 1 week to deliver the product to company partners.

Standard agricultural safety and training will occur for all staff as well as additional security training to ensure full compliance with State standards for cannabis track and trace.

### **Neighborhood Compatibility**

Cannabis cultivation is a commercial agricultural operation that is consistent with previous and current agricultural use of the property and surrounding area. The site is not located within 1,000 feet from any pre-school, elementary school, junior high school, high school, library, park, playground, recreation or youth center, licensed drug or alcohol recovery facility, or licensed sober living facility. The project parcel and surrounding properties are all in agricultural production. There is no projected increase in noise level from this project. No potential neighborhood compatibility issues are anticipated as there are no nearby non-agricultural neighborhoods to the project site. As all cannabis cultivations will be required to comply with the County cannabis monitoring program and will be required to meet all conditions of approval for the 5-year use permit timeframe, in the the event neighbor concerns are raised during the operation of the project the applicant will work with County staff to address any identified compatibility issues.

### **Waste Management Plan**

Cannabis cultivation produces minimal waste. All packaging will be contained within onsite waste receptacles. All green waste consisting of dead and/or stripped of flower plants and soil will either be composted onsite or disposed of through the property's waste hauler and in full compliance with State requirements for disposal of any waste containing or potentially containing cannabis plant material. Onsite solid waste collection will occur within the fenced cannabis use area and is compliant with Section 22.10.050 for solid waste and recycling collection.



## **Setbacks**

Land Use Ordinance section 22.40.050 (D)(3)(b) requires outdoor cannabis cultivation sites to be setback 300 feet from all property lines and public rights of way. The cultivation area will be at a 360' foot setback from the Southern property line, 2,600' foot setback from the Northern property line, and a 1,256' foot setback from the Eastern property line. The western most setback is also over 300' even though it is owned by the same operator and a cannabis operation is proposed on the adjacent parcel. A Biological Resources Assessment conducted on the property determined the operation is properly sited to avoid any disturbance within 100' of the existing drainage and swale east of the project site.

The nearest sensitive receptors (schools, parks, libraries, licensed recover facilities, et. al) are located well outside the 1000-foot setback required by 22.30.D.1. The agricultural zoned parcel size of 198.8 acres meets the size requirement of 25 acres.

## **Storage and Hazard Response Plan**

Ordinance Section 22.40.050.C.4, the following is the storage and hazard response plan for all materials to be kept on site. Pesticide and fertilizer usage will be conducted according to the County of San Luis Obispo Department of Agriculture by obtaining an Operator Identification Number and complying with all application, reporting, and use requirements. Products used onsite will be stored in small containers on shelving inside metal containers. A list of material to be used is provided in the Cannabis Application Supplement as required by Section 22.40.050.C.3 and further product specifications are also included in this application package.

There will be a total of 3 seatrain containers, each at 40' x 10' or 400 sq. ft.: one for pesticides and one for nutrition, one for equipment storage, and the last for miscellaneous storage space, see Sheet A-002, A-003 for locations. See detail FQ-102 for floor plan details. Soil will also be stored and amended as necessary onsite; see Sheet A-002 for locations of soil and nutrition storage. Diesel storage (see Sheet A-003 and FQ-102) will be installed according to Building Department requirements with verified connections to ensure no spillage occurs. Any spills will be contained and properly cleaned in accordance with controls in place for the commercial farming industry.



### **Screening and Fencing**

County fencing requirements for cannabis require a 6' high secure and durable fence around all cannabis activities. It is also required that cannabis plants not be easily visible from offsite. The parcel frontage fenced with a white three panel fence with a secure key pad operated entrance gate. This fencing and entryway will remain.



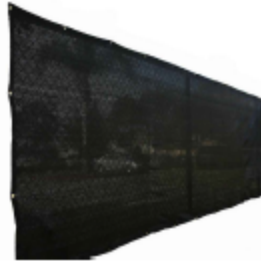
The cannabis use, located in the northwest portion of the parcel will first be screened within hoophouses or greenhouses, and the entire operation enclosed with a fence at least 6' high. A 12' tall polyethylene screen for both privacy and wind protection will also be installed around the outdoor cultivation area.

The photo below is representative of the type of hoop house construction that will be utilized at the property.



The entire operation will be fully enclosed and screened within a fence to prevent offsite visibility.





SECURITY & WIND BREAK 12'-0" HEIGHT FENCE  
MADE FROM POLYETHYLENE IN BLACK FOR PRIVACY

Neither the operation or security/wind screening fence will silhouette above any surrounding ridgeline.

### Traffic

An engineered trip generation study was conducted by Orosz Engineering Group Inc. At full capacity the operations will result in 22 average trips per day, with one evening peak hour trip. There will be an additional 4 commercial deliveries per year for soil and farm supplies. This is within standards for the road and standard agricultural operations for the property. Please see the following traffic analysis summary for the project:

Use	Unit	Trip Rate Source	ADT	Trip Rates		
				PM Peak Hour		
				In	Out	Total
7510 Los Osos Valley Road						
Hoop House (Growing)	5.1 AC	County of SLO	2	0	0	0
Hoop House (Drying)	0.9 AC Seasonal	County of SLO	0	0	0	0
Greenhouse (Growing)	45 KSF	County of SLO	0.27	0.007	0.018	0.025
Proposed Project	Size		ADT	Traffic Volumes		
				PM Peak Hour		
				In	Out	Total
7510 Los Osos Valley Road						
Hoop House (Growing)	5.1 KSF		10	0	0	0
Greenhouse (Growing)	45 KSF		12	0	1	1
Project Total			22	0	1	1



## Water Management Plan

Application requirements according to Section 22.40.050C.1 require a detailed water management plan including the proposed water supply, conservation measures, and any water offset requirements.

Section 22.40.050D.5 requires sites in a groundwater basin at Level of Severity III provide an estimate of water demand prepared by a licensed professional engineer. The site is not located in a Level of Severity III groundwater basin and therefore an engineered analysis is not required. This section also prohibits water transport by vehicle from offsite sources. As ample water is available onsite, no vehicle import transport of water will occur.

Section 22.40.040L.-Water Quality requires cannabis cultivation to comply with Regional Water Quality Control Board environmental measures. The property is in the Los Osos Water and San Luis Obispo/Avila Planning Areas and falls within the Laguna Lake and Warden Lake Watersheds. The project site is served by six existing groundwater wells that have historically served the property for agricultural uses, ranging from 10 to 85 gallons per minute. Refer to attached Well Completion reports and recent pump test data. No import of water is necessary or will occur in association with the proposed cannabis cultivation operations. There will be six 10,000 gallon water tanks included on the property near the outdoor cultivation sites for storage and connection to the existing irrigation system on the property. The high recharge potentials of these wells, and their historic capability to provide water for the existing agricultural cultivation support the land use of commercial cannabis cultivation.

The projected water usage utilizing published data from the Central Coast Regional Water Control Board cannabis development team is as follows:

Cultivation Hoophouse/Greenhouse					
	Use Factor (gallons)	sf	days/yr	gall/yr	AFY
Greenhouse FLOWER	0.1	21746	260	565396	1.74
Hoophouse FLOWER	0.03	128,000	150	576000	1.77
<b>TOTAL</b>		<b>149746</b>		<b>1141396</b>	<b>3.51</b>

Monthly use projections are included in the Cannabis Application Supplement.



## **Energy Use**

Section 22.40.050.C.6. requires identification of all proposed power sources and 22.40.050.D.7. requires mixed-light operations to comply with State regulations regarding energy requirements. The project site is served by PG&E, which is fully compliant with State regulations as approximately 30% of the energy delivered by PG&E is from renewable energy sources and 70% is from GHG-free sources.

Refer to PLN-2018-Cannabis Application Supplement for a detailed estimate of electrical usage for the mixed-light cultivation. The estimated energy usage provided is based on needs required for a 43,200 sq. ft. cultivating greenhouse. The proposed project includes use of only ½ for cultivation so the actual use numbers will be lower as HPS lights and additional equipment utilized in the mixed-light greenhouse for cultivation will not be used for the drying/curing and supportive use area.

## **Issues Requiring Special Consideration**

### **Biological Resources**

A Biological Resources Assessment (BRA) was conducted by Terra Verde Environmental Consulting, LLC for the proposed project and surrounding area. Two agricultural-use ponds and a drainage are located on the parcel, and these were evaluated to ensure the proposed project remained outside any necessary buffers to these potentially sensitive resources. The proposed cultivation area is vegetated with disturbed grassland and appropriately setback from any water feature on the site.

Given the placement of the project site on the parcel, setbacks to water features as part of the design, and incorporation of the following protective and preventative biological resource measures into the project design, no sensitive biological impacts are anticipated. The project has been designed to avoid impacts to sensitive resources and habitats; all proposed project activities will maintain a minimum 100-foot setback from the defined drainage located onsite. No crossing improvements to the existing drainage crossing are necessary.

In accordance with the Biological Resources Assessment prepared by Terra Verde Environmental Consulting LLC (August 2018), the following measures are hereby incorporated into the project at 7510 Los Osos Valley Road to support the



determination that as proposed, the project does not have a potential for causing a significant effect on the environment:

### *Biological Measure 1: Site Maintenance and General Operations*

The following general measures are recommended to minimize impacts during active construction:

- The use of heavy equipment and vehicles shall be limited to the proposed project limits and defined staging areas/access points. The boundaries of each work area shall be clearly defined and marked with high visibility fencing. No work shall occur outside these limits.
- In the vicinity of sensitive resources and habitats (e.g., hydrologic resources, special-status species, and CNDDDB sensitive natural communities), signs shall be posted at the boundary of the work area indicating the presence of sensitive resources.
- Staging of equipment and materials shall occur in designated areas at least 100 feet from drainages, swales, and stock ponds.
- Secondary containment such as drip pans shall be used to prevent leaks and spills of potential contaminants.
- Washing of concrete, paint, or equipment, and refueling and maintenance of equipment shall occur only in designated areas. Sandbags and/or absorbent pads shall be available to prevent spilled fuel from leaving the site.
- Any chemicals used shall be prevented from entering the jurisdictional areas.
- Construction equipment shall be inspected by the operator daily to ensure that equipment is in good working order and no fuel or lubricant leaks are present.

### *Biological Measure 2: Springtime Botanical Survey*

An appropriately timed botanical survey for special status plant species Cambria morning-glory shall be conducted to determine presence or absence of the species within the annual grassland habitat on the site. In the event the species is present, Measure 2a shall apply.

### *Biological Measure 2a: Mitigation Plan for Special-Status Plants\*only required if Measure 2 identifies special-status plants within project area.*

To the maximum extent feasible, impacts to special-status plant species shall be avoided. Any special-status plant populations within 50 feet of proposed disturbance shall be clearly fenced or flagged to avoid inadvertent access to or impacts within exclusion areas. If impacts are unavoidable and a mitigation plan is necessary for the protection of special-status plants it shall, at a minimum:

- Discuss the proposed construction methods, construction schedule, and the implementation schedule of activities proposed as part of the plan.
- Quantify and describe the anticipated impacts to special-status plant species (i.e., acreage and/or number of individuals), as applicable.
- Include a requirement for photographic documentation and a post-implementation reporting.
- Identify each special-status plant species observed on site, including a description of the mitigation activities proposed for each. As appropriate, the measures shall include:



- a detailed description of topsoil salvage procedures and long-term soil stockpile storage methods;
- methods and timing of any proposed seed collection and storage;
- locations and demarcation of full-time avoidance areas during construction;
- locations and methods for restoration, replanting, and/or reseeding (e.g., decompaction, recontouring, scarification, mulching, hand broadcasting, hydroseeding, etc.); and
- short- and/or long-term monitoring protocols and/or vegetative growth success criteria for restoration.

The plan shall be prepared by a qualified botanist or restoration biologist and be approved by the County of San Luis Obispo prior to implementation.

### **Biological Measure 3: Surveys and Monitoring for Special-status Wildlife**

A qualified biologist shall conduct a pre-activity survey prior to the start of construction to ensure special-status wildlife are not present within proposed work areas. In the event that special-status species are found, they shall be allowed to leave the area on their own volition or relocated (as permitted) to suitable habitat areas located outside the work area(s). If necessary, resource agencies will be contacted for further guidance. Preconstruction surveys and monitoring shall be conducted as follows:

#### ***Measure 3A: Preconstruction Survey for American Badger***

A qualified biologist shall conduct a pre-activity survey within 30 days prior to the start of initial project activities to ensure American badger are not present during the start of construction. If dens are discovered, they will be inspected to determine if they are currently occupied. If dens are determined to be inactive by the qualified biologist, they will be excavated by hand to prevent re-occupation prior to construction. If the qualified biologist determines that potential dens may be active during the non-breeding season, the entrances of the dens shall be blocked with soil, sticks, and debris for three to five days to discourage the use of these dens prior to project disturbance. The den entrances shall be blocked to an incrementally greater degree over the three- to five-day period. After the qualified biologist determines that badgers have stopped using active dens within the project boundary, the dens shall be hand-excavated with a shovel to prevent re-use during construction. If badgers are found during their breeding and rearing season (May to December), dens shall be avoided by a 150-foot buffer to protect them from construction activities. If these dens cannot be avoided after the breeding season has concluded, the above procedure will be followed.

#### ***Measure 3B: Surveys and Monitoring for CRLF, Western Pond Turtle, and Western Spadefoot Toad***

A qualified biologist shall complete a preconstruction survey for these species within 48 hours prior to the start of all work within 100 feet of suitable habitat. Surveys shall include an inspection of all work areas, staging areas, and access routes.

In addition, a qualified biologist shall conduct full-time monitoring during all vegetation clearing and initial earth disturbance within 100 feet of suitable habitat on site. If CRLF and/or western pond turtles are discovered in the work areas, they shall be allowed to leave the area on their own volition or be relocated by a qualified biologist with appropriate authorization from CDFW and/or the USFWS to pre-determined suitable habitat areas located outside the immediate impact area.



#### **Biological Measure 4: Protection for CRLF and Western Pond Turtle**

Prior to commencement of clearing/grading/construction/improvement activities, the applicant shall make all efforts to schedule work activities during the dry season when impacts to CRLF and aquatic habitats would be minimal. This would include the following:

- Avoid work during the rainy season (October 15 through April 15). If work must occur in the rainy season, no work shall occur during or immediately after rain events of 0.25-inch or greater.
- A follow-up CRLF survey shall be conducted prior to the start of work following any rain event of 0.25-inch or greater.
- Avoid nighttime work. If nighttime work is deemed necessary, a qualified biologist shall be on site until it is determined that no potential impacts to CRLF would occur based on conditions and the scope of work.

Work shall halt if CRLF are discovered within disturbance areas and resource agencies shall be contacted. If western pond turtles are discovered in the work areas, they shall be relocated by a qualified biologist to pre-determined suitable habitat areas located outside the immediate impact area.

#### **Biological Measure 5: Protection for VPFS and California Linderiella**

All work activities shall occur at least 250 feet from Pond 2.

A 250' buffer shall be measured from the edge of Pond 2. All fencing and project use areas shall be located outside of the 250' buffer.

#### **Biological Measure 6: Preconstruction Survey for Sensitive and Nesting Birds**

If work is planned to occur between February 1 and September 15, a qualified biologist shall survey the new proposed expansion area for nesting birds within one week prior to activity beginning on site. If nesting birds are located on or near the project site, they shall be avoided until they have successfully fledged or the nest is no longer deemed active. A non-disturbance buffer of 50 feet will be placed around non-listed, passerine species, and a 250-foot buffer will be implemented for raptor species. All activity will remain outside of that buffer until a qualified biologist has determined that the nest is no longer active or that proposed construction activities would not cause adverse impacts to the nest, adults, eggs, or young. If special-status avian species are identified, no work will begin until an appropriate buffer is determined in consultation with the CDFW, and/or the USFWS.

### **Cultural Resources**

Due to the presence of a defined drainage onsite, an archeological report was prepared by Heritage Discoveries Inc. (August 2018). No disturbance will occur within a 100' buffer of the defined drainage on the site. The surface survey determined negative results for presence of sensitive resources. No further archaeological studies are required for this site.

### **Parking Modification and Required Findings**

The project will require 7 full-time staff with seasonal increases to 11. The project is designed to accommodate staff with sixteen 16' x 8' parking spaces on the



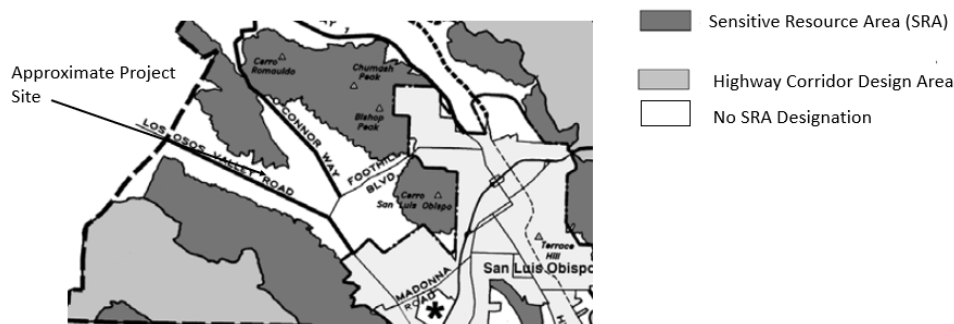
property on an existing level dirt area within the agricultural site. Due to the limited nature of the staff required for the operation, parking standards as outlined in Chapter 22.18, Nursery Specialties are not appropriate for the project. The following findings are provided for use in a request for modification of parking standards of Chapter 22.18, Nursery Specialties.

In accordance with Chapter 22.18.18.020.H, the following three findings support the request to modify the parking standards:

- a. The characteristics of the project, which consists of a cannabis cultivation consisting of outdoor and indoor uses, with seasonal temporary staff, do not necessitate the number of parking spaces, types of design or improvements required by this chapter. The agricultural cultivation staff can be accommodated in the existing level dirt area adjacent to the cultivation that will be marked and designated for parking.
- b. The proposed parking area that consists of an unpaved parking lot with cone designations adjacent to the cultivation area is adequate to accommodate all parking needs on site generated by the use, as the operation will be staffed by seven staff cultivating an agricultural product and there are no site constraints as far as space availability for the cultivation use.
- c. No traffic safety problems will result from the proposed modification of the parking standards as there is ample existing parking on the site for the existing cannabis cultivation business, the parking location is located well away from any public right of way, and there is adequate space surrounding the parking area for any turning movement.

## Visual Resources

County Ordinance Section 22.108.020 defines highway corridor design standards for certain agricultural structures on land within the design area, and are subject to Sensitive Resource Area combining designation for protection of critical resources such as the Morros.





The project is located in the level agricultural use portion of the property adjacent to Los Osos Valley Road and is outside of this defined area, as shown in the schematic above. To provide further verification the project site is not visible from other potentially visually sensitive locations such as Foothill Boulevard or within the primary cone of vision for travelers on Los Osos Valley Road, a visual resource assessment was prepared to show four different locations of the project site as seen from Los Osos Valley Road and Foothill Blvd. Utilizing the existing large avocado orchard and mature trees located east of the site as reference, this study clearly shows that the site is not discernable from offsite until almost immediately upon it. The proposed project is a commercial agriculture operation proposed in the level portion of the site appropriate for this use.

### **CEQA Exemption**

Section 15304 of the State CEQA Guidelines allows for projects involving the minor alteration of land such as this cultivation project on previously disturbed agricultural land to be exempt from the provisions of CEQA. No enlargement of the access driveway, parking area, or existing use area is proposed. The project application includes the following environmental studies and analysis:

- Orosz Engineering Group, Inc. October 9, 2018. Los Osos Valley Road, San Luis Obispo Cannabis Cultivation Trip Generation Report.
- Terra Verde Environmental Consulting, LLC. August 2018. Biological Resources Assessment Los Osos Valley Road Cannabis Cultivation Project.
- Heritage Discoveries, Inc. August 15, 2018. An Archaeological Surface Survey at 7510 Los Osos Valley Road, San Luis Obispo.
- Visual Resource Assessment. 7510 Los Osos Valley Road. Kirk Consulting
- Central Coast Regional Water Quality Control Board Cannabis Development Team Water Use Numbers for Cannabis.

Avoidance and monitoring actions have been incorporated into the project to ensue the commercial agricultural cannabis operation does not result in significant impacts to biological resources. The project will not have any significant adverse effects on the environment.



**Mixed-Light Energy Use Estimate  
7510 Los Osos Valley Road**

		Grow Lights	3 phase Exhaust Fan	2 speed Exhaust Fan	Wall Pumps	Drive Motor-Roof	Drive Motor-Vent	Shutters	Air Flow Fans	Odor Mitigation Pump	FogCo Zone Valves	Unit Heaters	Drive Motors	CO2 Burners
<b>GREENHOUSE</b>														
Total kWh Quantity		900	40	10	4	10	4	10	30	1	12	2	6	6
Voltage		277	460	115	115	115	480	120	460	480	480	120	115	115
Amperage		3.77	1.7	6.8	11	0.68	0.87	0.28	0.6	12	1	2.1	2.5	2.5
Wattage/device		626.6	31.3	7.8	5.1	0.8	1.7	0.3	8.3	5.8	5.8	0.5	1.7	1.7
Total Wattage		563940	1252	78	20.4	8	6.8	3	249	5.8	69.6	1	10.2	10.2
Hr/month of usage	Jan	60	120	360	360	360	360	360	360	360		240	360	120
	Feb	60	120	360	360	360	360	360	360	360		240	360	120
	Mar	60	120	360	360	360	360	360	360	360		240	360	120
	Apr	30	120	360	360	360	360	360	360	360		240	360	120
	May	30		360	360	360	360	360	360	360		240	360	120
	Jun	30		360	360	360	360	360	360	360	120			120
	Jul	30		360	360	360	360	360	360	360	120			120
	Aug	30		360	360	360	360	360	360	360	120			120
	Sep	30		360	360	360	360	360	360	360	120			120
	Oct	60		360	360	360	360	360	360	360	120			120
	Nov	60	120	360	360	360	360	360	360	360		240	360	120
	Dec	60	120	360	360	360	360	360	360	360		240	360	120
kWh/year		406037	901	337	88	35	29	13	1076	25	33	3	44	15
														Total kWh/year 408636

43,200 sqft Greenhouse Electrical Load Estimate Spreadsheet v8

Source or utility name	Expected kWh drawn annually
PG&E	408,636
Total Annual kWh	408,636

Facility-wide Electrical Load Estimates				
Lighting	Count	Voltage (V)	Current (A)	Power (kW)
HPS lights in the Flower Zone	600	277	3.77	626.6
	0			0.0
Cooling	Count	Voltage (V)	Current (A)	Power (kW)
54" 1-HP single speed 3 phase exhaust fans	40	460	1.7	31.3
24" 3/4-HP two speed exhaust fans	10	115	6.8	7.8
Evaporative pad wall pumps	4	115	11	5.1
Drive motor for roof vents in corridor (1/20 HP)	10	115	0.68	0.8
Drive motor for vent on evap pad wall	4	480	0.87	1.7
Shutters on upper gable wall	10	120	0.28	0.3
Vertical air flow fans for mixing	30	460	0.6	8.3
Fogco Odor Mitigation Pump, VFD 10.6 gal/min	1	480	12	5.8
Fogco Zone Valves	12	480	1	5.8
Heating	Count	Voltage (V)	Current (A)	Power (kW)
Unit heaters in the grow area, apx (Delta - T to supply)	0	0	0	0.0
Unit heaters in the Central Corridor, apx	2	120	2.1	0.5
Shade & Heat Curtain/ Light Dep Curtain	Count	Voltage (V)	Current (A)	Power (kW)
Drive motor for Shade Curtain	6	115	2.5	1.7
Drive motor for Blackout Curtain	6	115	2.5	1.7
CO2 Generators	Count	Voltage (V)	Current (A)	Power (kW)
CO2 Burners	10	120	1.00	1.2
Maximum coincident load: the largest load you can expect at any time				
	(kW or KVA)			698
	(Amps)			2541
Total of equipment minus lighting	(kW or KVA)			72
	(Amps)			279





October 9, 2018

OEG Ref 18-802

Helios Dayspring  
8570 Casanova Road  
Atascadero, CA 93422

Subject: DRC2018-00085 Dayspring MUP, Los Osos Valley Road, San Luis Obispo  
Cannabis Cultivation Trip Generation Report

Dear Mr. Dayspring:

Orosz Engineering Group, Inc. (OEG) has prepared the following trip generation analysis for the subject project to address the comments received from the Public Works Department of the County of San Luis Obispo's on the projects. The following report provides a summary of the proposed uses and trip generation for the proposed project.

#### **PROJECT DESCRIPTION**

The project sites are located at three close-by locations along Los Osos Valley Road within San Luis Obispo County— 6860 (2 locations A & B), 7510 and 8901. At each site, there are various stages of growing/cultivation, curing and drying that is proposed to occur in Hoop Houses and Greenhouses. The proposed development (maximum space for each function) on each property is summarized below:

##### **6860 A Los Osos Valley Road**

- 192,000 SF Hoop House (growing)
- 24,000 SF Hoop House (curing/drying)
- 20,700 SF Greenhouse (growing)

##### **6860 B Los Osos Valley Road**

- 228,000 SF Hoop House (growing)
- 24,000 SF Hoop House (curing/drying)
- 66,700 SF Greenhouse (growing)

##### **7510 Los Osos Valley Road**

- 220,800 SF Hoop House (growing)
- 38,400 SF Hoop House (curing/drying)
- 45,000 SF Greenhouse (growing)

##### **8901 Los Osos Valley Road**

- 198,480 SF Hoop House (growing)
- 24,000 SF Hoop House (curing/drying)
- 22,440 SF Greenhouse (growing)
- 22,440 SF Greenhouse (curing/drying)



## PROJECT TRIP GENERATION

We have conducted research of available published data from the Institute of Transportation Engineers (ITE) and various published traffic study documents. The research has found that with the exception of Cannabis Dispensaries (where people come to pick up product), other cannabis growing related facilities function similarly to other similar uses (greenhouses, office, labs, maintenance, manufacturing, etc.).

ITE does not have published trip generation rates for greenhouses. However, our research found that the County of Santa Barbara in 2013 published traffic generation data for greenhouses that house a variety of agriculture. Those rates are used to estimate the traffic trips associated with the enclosed growing areas (greenhouses). For the processing/office/administrative functions, the ITE Land Use Code for Manufacturing (140) was found to be similar in function. For non-storefront dispensaries, the County is basing the trip generation on the number of employees, delivery trucks and supply/other deliveries. The County has developed cannabis trip generation rates based on a combination of these sources. The trip generation rates and project trip generation for this project is summarized in Table 1. Detailed trip generation summaries for each site are provided at the rear of this report.

**Table 1**  
**Trip Generation Rate Summary**

Use	Unit	Trip Rate Source	ADT	Trip Rates		
				PM Peak Hour		
				In	Out	Total
Hoop House (Growing)	Acre	County of SLO	2	0	0	0
Hoop House (Drying)	Seasonal	County of SLO	0	0	0	0
Greenhouse (Growing)	KSF	County of SLO	0.27	0.007	0.018	0.025
Greenhouse (Drying)	Seasonal	County of SLO	0	0	0	0

Proposed Projects	ADT	Traffic Volumes		
		PM Peak Hour		
		In	Out	Total
6860 A Los Osos Valley Road	15	0	0	0
6860 B Los Osos Valley Road	29	0	1	1
7510 Los Osos Valley Road	22	0	1	1
8901 Los Osos Valley Road	15	0	0	0





October 9, 2018

OEG Ref 18-802

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8570 Casanova Road  
Atascadero, CA 93422

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- 45,000 SF Greenhouse (growing)

##### **8901 Los Osos Valley Road**

- 198,480 SF Hoop House (growing)
- 24,000 SF Hoop House (curing/drying)
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			ADT	PM Peak Hour		
Proposed Projects				In	Out	Total
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8901 Los Osos Valley Road			15	0	0	0



### SUMMARY

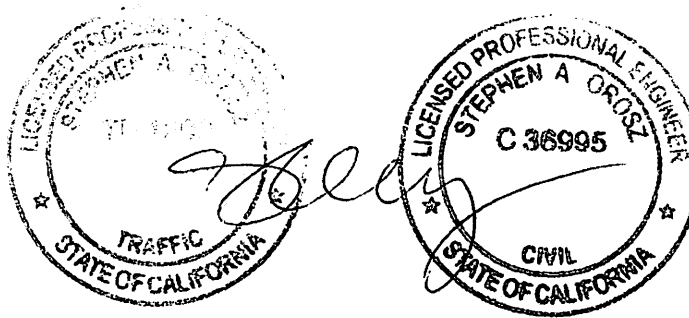
Based on the analysis above, the projects are anticipated to generate a total of 81 Trips per day (ADT) including 2 PM Peak Hour Trips on a typical weekday (no vehicles entering the site and 2 vehicles leaving the sites during the peak hour). The majoring of the traffic would be oriented to the southeast (75-80% toward San Luis Obispo) with a smaller amount of traffic oriented to the northwest toward Los Osos/ Baywood Park (20-25%).

Should you have any questions, feel free to contact us.

Sincerely,



Stephen A. Orosz, P.E.  
Traffic Engineer





Use	Unit	Trip Rate Source	Trip Rates				
			ADT	PM Peak Hour			
				In	Out	Total	
6860 A Los Osos Valley Road							
Hoop House (Growing)	4.4 AC	County of SLO	2	0	0	0	
Hoop House (Drying)	0.55 AC Seasonal	County of SLO	0	0	0	0	
Greenhouse (Growing)	20.7 KSF	County of SLO	0.27	0.007	0.018	0.025	
			Traffic Volumes				
Proposed Project	Size		ADT	PM Peak Hour			
				In	Out	Total	
6860 A Los Osos Valley Road							
Hoop House (Growing)	4.4 AC		9	0	0	0	
Greenhouse (Growing)	20.7 KSF		6	0	0	0	
Project Total			15	0	0	0	



Use	Unit	Trip Rate	Source	Trip Rates				
				ADT	PM Peak Hour			
					In	Out	Total	
6860 B Los Osos Valley Road								
Hoop House (Growing)	5.25	AC	County of SLO	2	0	0	0	
Hoop House (Drying)	0.55	AC Seasonal	County of SLO	0	0	0	0	
Greenhouse (Growing)	66.7	KSF	County of SLO	0.27	0.007	0.018	0.025	
				Traffic Volumes				
Proposed Project	Size			ADT	PM Peak Hour			
					In	Out	Total	
6860 B Los Osos Valley Road								
Hoop House (Growing)	5.25	KSF		11	0	0	0	
Greenhouse (Growing)	66.7	KSF		18	0	1	1	
Project Total				29	0	1	1	



Use	Unit	Trip Rate Source	Trip Rates					
			ADT	PM Peak Hour				
				In	Out	Total		
7510 Los Osos Valley Road								
Hoop House (Growing)	5.1	AC	County of SLO	2	0	0	0	
Hoop House (Drying)	0.9	AC Seasonal	County of SLO	0	0	0	0	
Greenhouse (Growing)	45	KSF	County of SLO	0.27	0.007	0.018	0.025	

Proposed Project				Traffic Volumes			
				ADT	PM Peak Hour		
					In	Out	Total
7510 Los Osos Valley Road							
Hoop House (Growing)		5.1	KSF	10	0	0	0
Greenhouse (Growing)		45	KSF	12	0	1	1
Project Total				22	0	1	1



Use	Unit	Trip Rate Source	Trip Rates			
			ADT	PM Peak Hour		
				In	Out	Total
8901 Los Osos Valley Road						
Hoop House (Growing)	4.6 AC	County of SLO	2	0	0	0
Hoop House (Drying)	0.55 AC Seasonal	County of SLO	0	0	0	0
Greenhouse (Growing)	22.44 KSF	County of SLO	0.27	0.007	0.018	0.025
Greenhouse (Drying)	22.44 Seasonal	County of SLO	0	0	0	0

Proposed Project	Size		Traffic Volumes			
			ADT	PM Peak Hour		
				In	Out	Total
8901 Los Osos Valley Road						
Hoop House (Growing)	4.6 AC		9	0	0	0
Greenhouse (Growing)	22.44 KSF		6	0	0	0
Project Total			15	0	0	0





## Parcel Information

**APN:** 067-061-049

**Assessee:** NON LLC

**Care Of:** %BILLY ANDREWS

**Address:** 4082 MARINA LAGOON DR LAUGHLIN  
NV 89029

**Description:** RHO CAN D LOS OSOS PTNS LT 45 & 46

**Site Address:**  
07510 LOS OSOS VALLEY RD

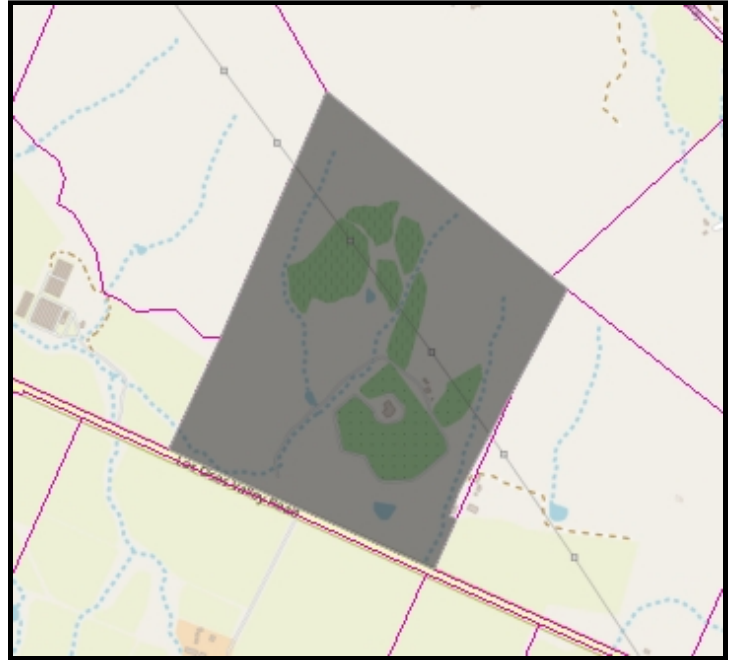
**Tax Rate Area Code:** 112002

**Estimated Acres:** 206.91

**Community Code:** SLOSLO

**Supervisor District:** Supdist 2

**Avg Percent Slope:** 15



Selected Parcel

## Land Use Information

### Land Uses Combining Designations

AG	
	GSA Seismic Hazard Area GSA Geologic Hazard Area  Sensitive Resource Area



Parcel location within San Luis Obispo County

## Permit Information

Permit	Description	Application Date
DRC2018-00180	Land Use	10/10/2018 10:54:09 AM
PMT2017-00682	Determination	8/30/2017 3:26:05 PM
PMTR2015-03510	PMTR - Residential Permit	4/25/2016 9:51:45 AM
ZON2015-00143	Zoning Clearance	9/17/2015 1:40:56 PM
PMT2013-02845	PMTTC - Commercial Permit	5/14/2014 2:41:17 PM





## Parcel Summary Report

APN: 067-061-049

---

COD2012-00207	Code Enforcement	11/7/2012 3:10:07 PM
GRA2011-00006	Determination	1/31/2012 11:50:37 AM
SUB2005-00076	Subdivision	10/5/2005 4:04:39 PM
PMT2004-03884	PMTR - Residential Permit	6/23/2005 9:52:16 AM
PRE2004-00241	Pre-Application	4/26/2005 4:18:55 PM
PMT2003-03004	PMTR - Residential Permit	3/31/2004 12:00:00 AM
PMT2003-01941	PMTG - Grading Permit	12/9/2003 12:00:00 AM
PMT2003-01940	PMTR - Residential Permit	12/9/2003 12:00:00 AM
PMT2003-00814	Determination	9/9/2003 12:00:00 AM
96102	PMTR - Residential Permit	7/20/1995 12:00:00 AM

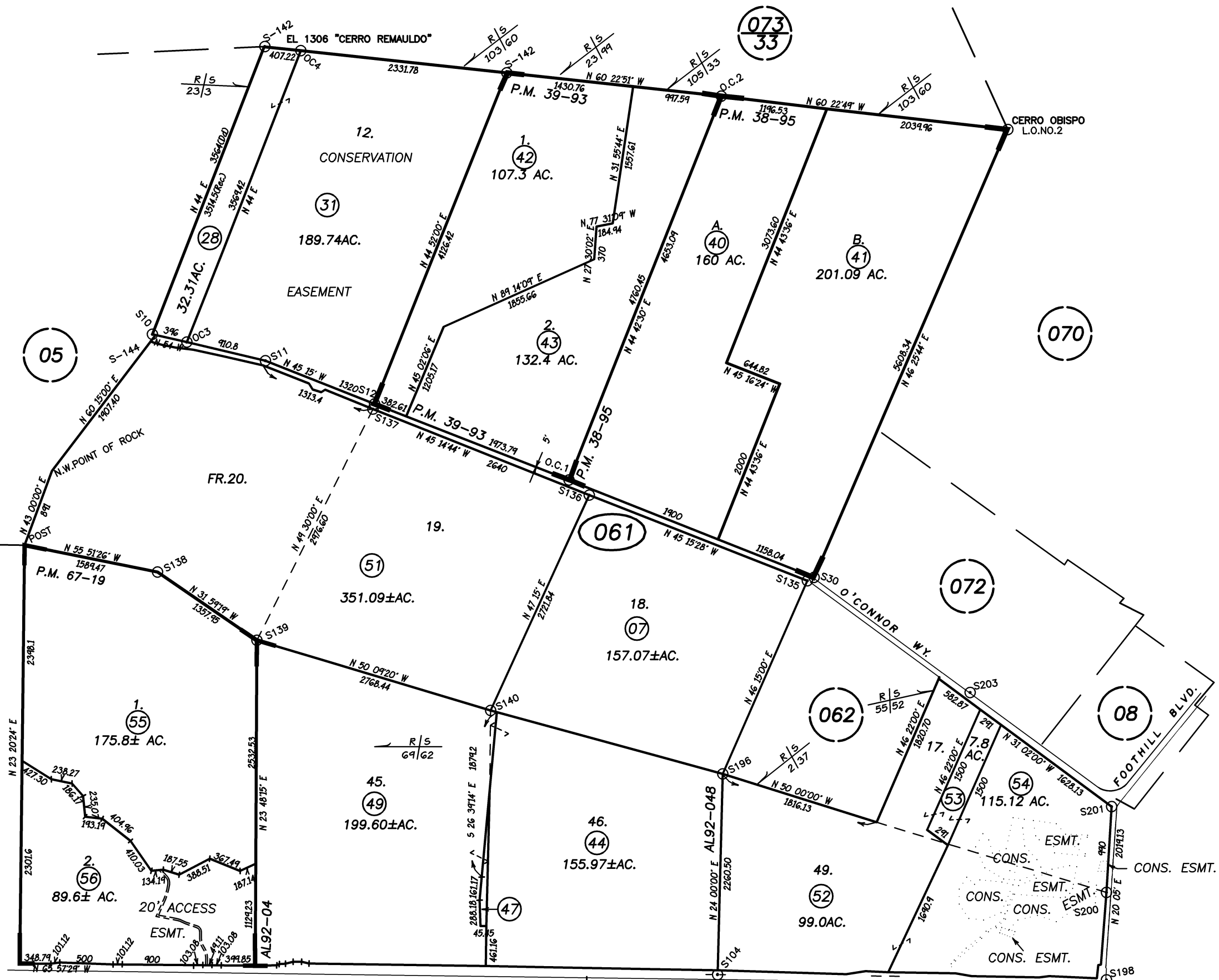
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### Clerk Recorder Documents

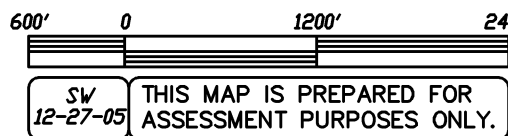
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Clerk Document	Date	Document Type
2003-R-094852	08/21/2003	O
1996-R-005004	02/01/1996	O
1994-R-009995	02/16/1994	O
1994-R-009994	02/16/1994	T
1994-I-000070	01/10/1994	C





REVISIONS	
I.S.	DATE
NA	12-27-05
NA	02-15-05
NA	09-27-06
07-205	10-16-06
NA	04-30-07
NA	12-12-11
NA	01-20-12
NA	02-28-16







# Interactive Data Viewer



## Legend

- SLO County Parcels
- Roads**
  - CalTrans
  - Maintained by SLO CO
  - Private Maintenance
  - Federal or State Maintenance

-3,009.33      0      1,504.66      3,009.33 Feet      1: 18,056

WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere  
© County of San Luis Obispo Planning and Building Department



The County of San Luis Obispo does not assume liability for any damages caused by errors or omissions in the data and makes no warranty of any kind, express or implied, that these data are accurate and reliable.

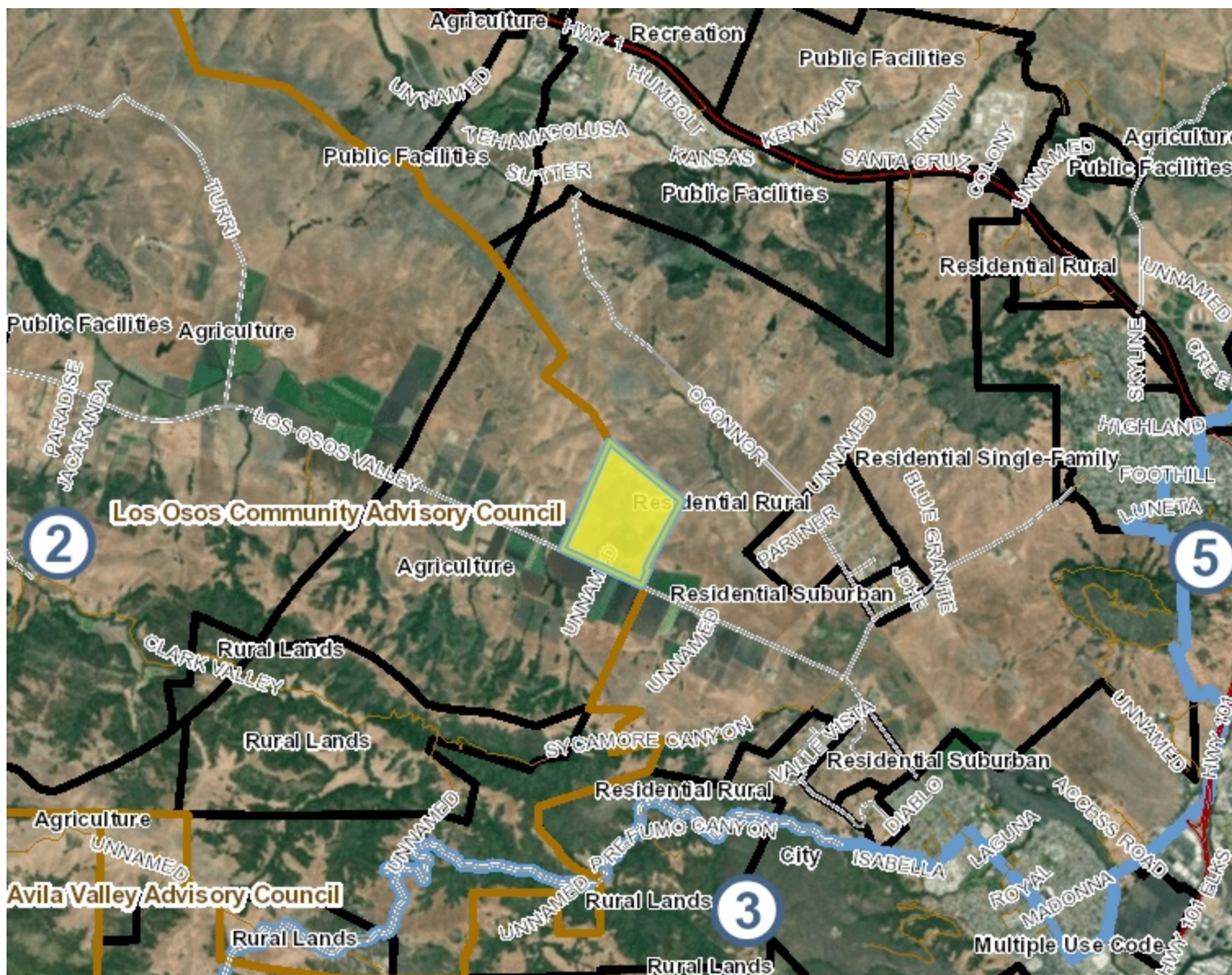
Map for Reference Purposes Only



Referral -- Page 38 of 62



# Interactive Data Viewer



## Legend

### Roads

- CalTrans
- Maintained by SLO CO
- Private Maintenance
- Federal or State Maintenance

### Community Advisory Groups

- Community Advisory Group Boundary
- Cayucos Citizens Advisory Council Subarea
- Creston Advisory Body Sub Areas

- Supervisor Districts
- Land Use Outlines

-12,037.30 0 6,018.65 12,037.30 Feet 1: 72,224

WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere  
 © County of San Luis Obispo Planning and Building Department



The County of San Luis Obispo does not assume liability for any damages  
 caused by errors or omissions in the data and makes no warranty of any kind,  
 express or implied, that these data are accurate and reliable.

Map for Reference Purposes Only



Referral -- Page 39 of 62



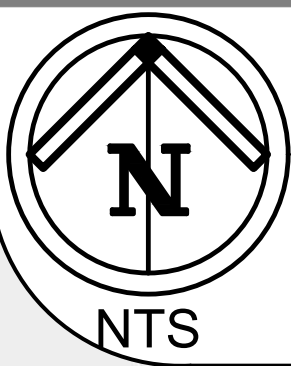
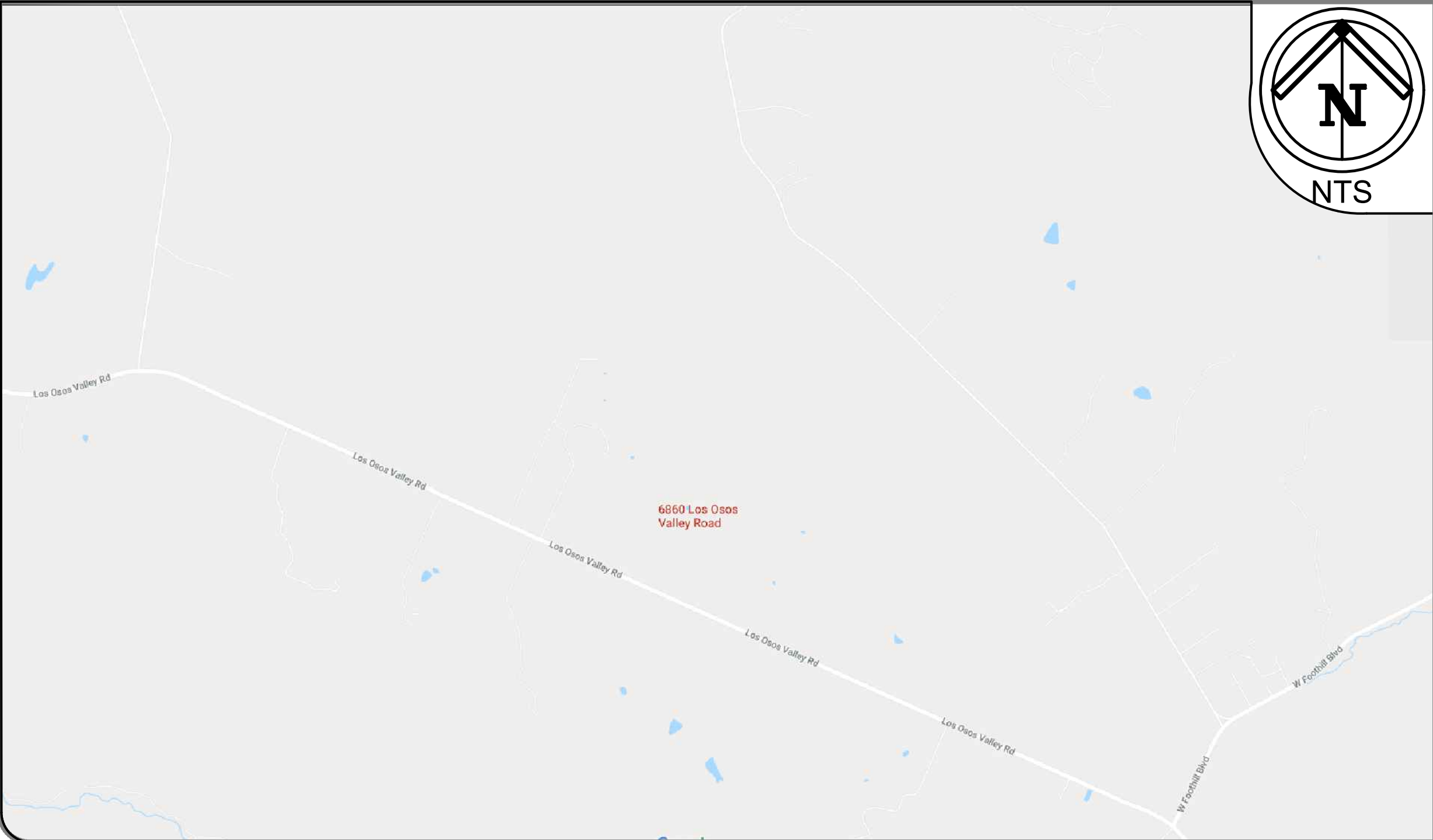
6860 LOVR

6860 LOS OSOS VALLEY RD

SAN LUIS OBISPO, CA 93405

APN: 067-061-056

VICINITY MAP



SCOPE OF WORK: 067-061-056

3 Acres Outdoor Cultivation in New & Existing Hoophouses  
16,000 SF Outdoor Nursery in New Hoophouses  
16,000 SF Outdoor Drying in New Hoophouses  
1 ACRE Existing Indoor (Greenhouses) Cultivation  
18,400 SF Indoor (Greenhouses) Nursery  
400 SF Organic Preventive Storage  
400 SF Nutrition Storage

SCOPE OF WORK: 067-061-055

3 Acres Outdoor Cultivation in New  
16,000 SF Outdoor Nursery in New Hoophouses  
16,000 SF Outdoor Drying in New Hoophouses  
20,700 SF Indoor (Greenhouses) Nursery  
400 SF Organic Preventive Storage  
400 SF Nutrition Storage

SHEET INDEX:

G-001	TITLE SHEET
A-001	SITE PLAN
A-002	SITE PLAN DETAIL A
A-003	IRRIGATION & AGGREGATE WATTAGE PLAN DETAIL
A-6.0	FLOORPLANS & RENDERERS FOR GREEN HOUSES & HOOP HOUSES
A-6.1	ELEVATIONS GREENHOUSE & HOOP HOUSES
S-1.0	HOOP HOUSE CONSTRUCTION FABRICATION
S-2.0	GREENHOUSE FOUNDATION PLAN
FQ-101	HOOPHOUSE INTERIOR (WORK & EQUIPMENT CLEARANCE)
FQ-102	SEA STORAGE CONTAINER FLOOR PLAN
Z-101 +	DATASHEETS

6860 LOVR

6860 LOS OSOS VALLEY RD  
SAN LUIS OBISPO, CA 93405

PROJECT:

DRAWN BY: GA

DATE: 8/20/18

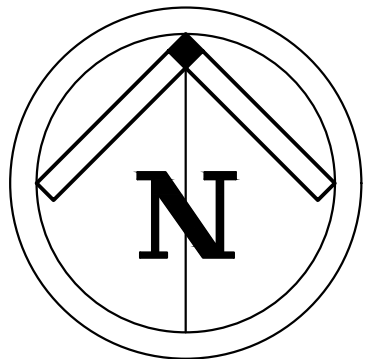
REV BY: ----

REV DATE: ----

SHEET NUMBER:

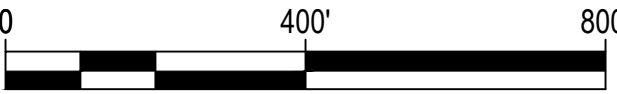
G-001



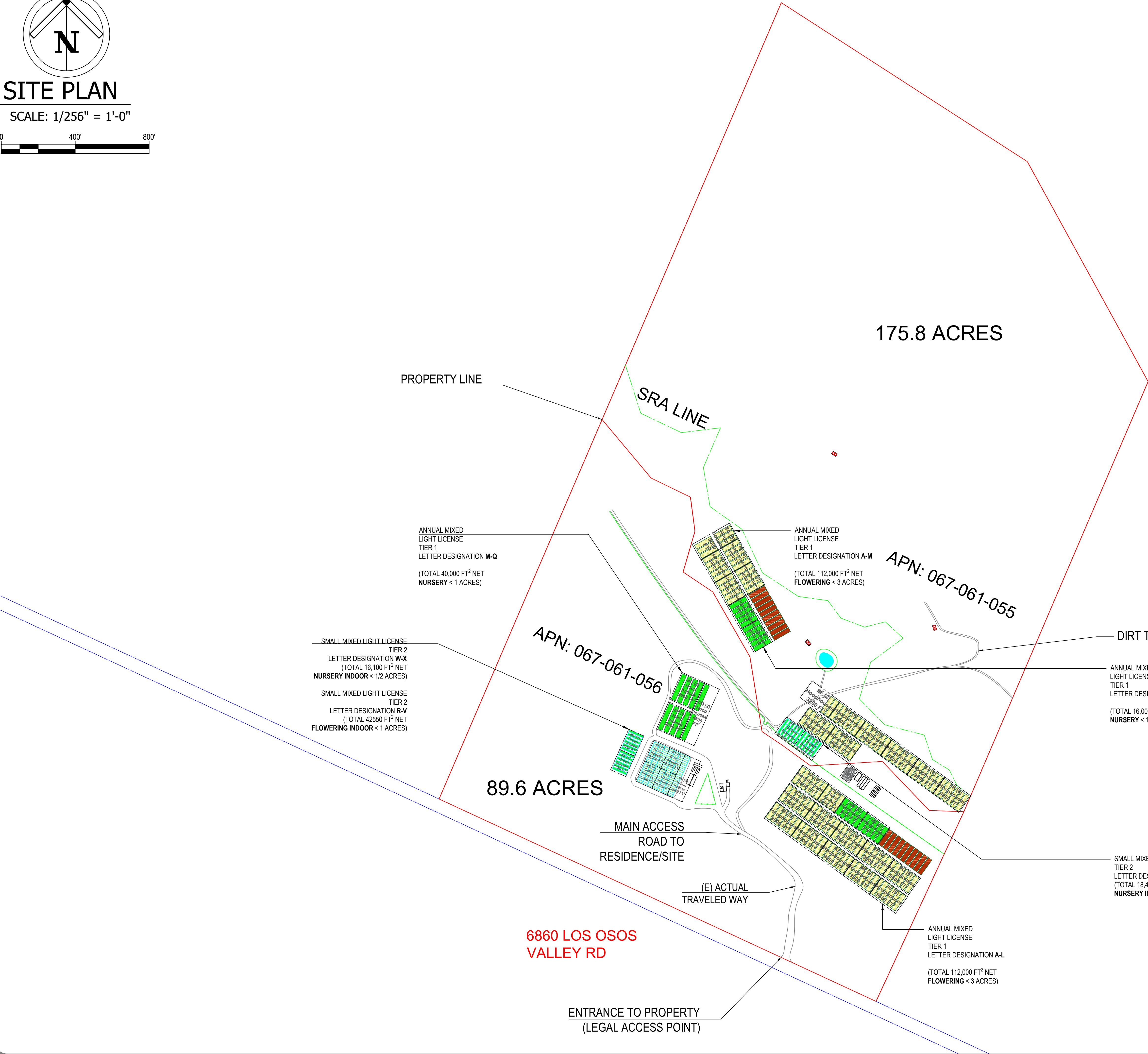


SITE PLAN

SCALE: 1/256" = 1'-0"



LEGEND	
SYMBOL	DESCRIPTION
	SOIL STORAGE SITE
	YELLOW HOOP HOUSE BLOOMING/FLOWERING
	GREEN HOOP HOUSE VEGETATIVE PHASE
	BROWN HOOP HOUSE DRYING PHASE
	WELL & PUMP
	WATER TANK
	NEW FENCE LINE
	EXISTING FENCE LINE
	WELL
	YELLOW INDOOR GREENHOUSE FOR BLOOMING/FLOWERING
	GREEN INDOOR GREENHOUSE FOR VEGETATIVE PHASE/STATE



PROJECT: 6860 LOVR

6860 LOS OSOS VALLEY RD  
SAN LUIS OBISPO, CA 93405

DRAWN BY: GA

DATE: 8/20/18

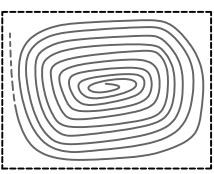
SHEET NUMBER: A-001



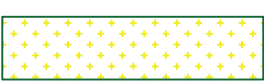
NOTE: (E) DENOTES EXISTING STRUCTURE  
(N) DENOTES NEW STRUCTURE

LEGEND

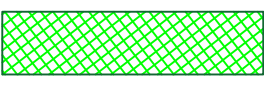
SYMBOL DESCRIPTION



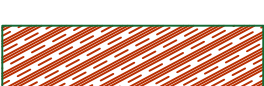
SOIL STORAGE SITE



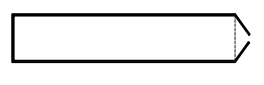
YELLOW HOOP HOUSE  
BLOOMING/FLOWERING



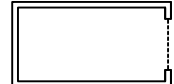
GREEN HOOP HOUSE  
VEGETATIVE PHASE



BROWN HOOP HOUSE  
DRYING PHASE



SEATRIN 40' CONTAINER



DUMPSTER CONTAINER



PORTABLE POTTY



SECURITY CAMERA



DIESEL 5,000 LITER



WELL & PUMP



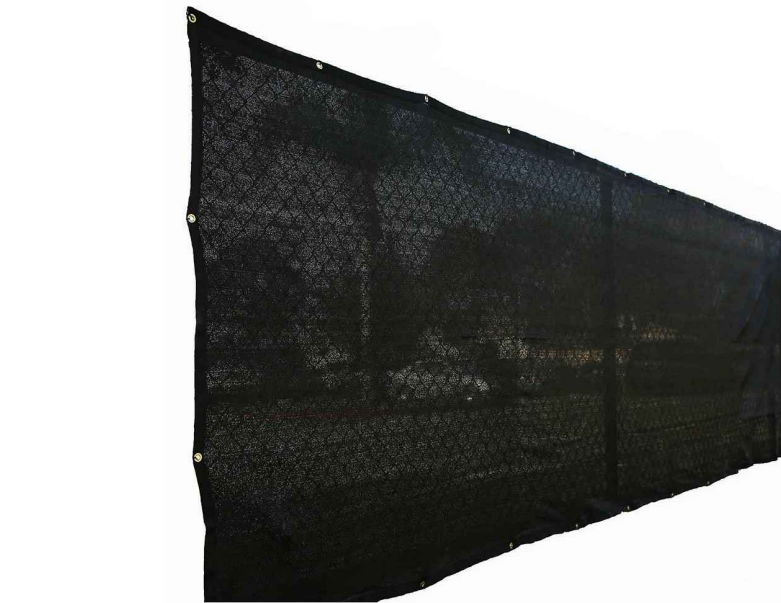
WATER TANK



NEW FENCE LINE



EXISTING FENCE LINE



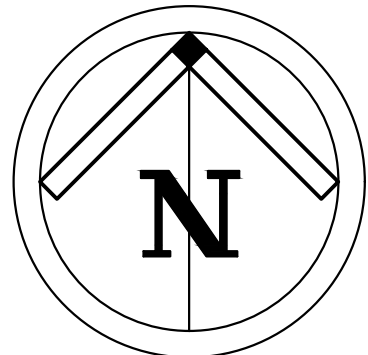
WIND BREAK 12'-0 FENCE  
MADE FROM POLYETHYLENE  
IN BLACK FOR PRIVACY



YELLOW INDOOR  
GREENHOUSE FOR  
BLOOMING/FLOWERING



GREEN INDOOR  
GREENHOUSE FOR  
VEGETATIVE PHASE/  
STATE



SITE PLAN DETAIL A-002

SCALE: 1/128" = 1'-0"



APN: 067-061-055

APN: 067-061-056

[26] 100'X24' NEW HOOP HOUSES  
USE PURPOSE FLOWERING/BLOOMING  
62,400 FT<sup>2</sup>

ON PARCEL 067-061-055

[10] 100'X24' NEW  
HOOP HOUSES  
USE PURPOSE  
DRYING 24000 FT<sup>2</sup>

ON 067-061-055

[10] 100'X24' NEW  
HOOP HOUSES  
USE PURPOSE  
NURSERY  
24000 FT<sup>2</sup>

ON 067-061-055

[10] 150'X24' EXISTING HOOP HOUSES  
USE PURPOSE NURSERY  
36,000 FT<sup>2</sup>

ON 067-061-056

[1] 230'X90' NEW GREEN HOUSE  
USE PURPOSE NURSERY  
20,700 FT<sup>2</sup>

ON 067-061-055

(E)[1] MANU-  
FACTURED  
BUILDING USE:  
OFFICE  
900 FT<sup>2</sup> (APPROX.)

(E)[1] MANU-  
FACTURED  
BUILDING USE:  
FERTILIZER STORAGE  
600 FT<sup>2</sup> (APPROX.)

(E)[1] MANUFACTURED  
HOME  
1188 FT<sup>2</sup>

(N) SOIL STORAGE COMPOST

(N) [1] DUMPSTER CONTAINER

(N) [3] SEATRIN 40' CONTAINERS  
#1 FOR NUTRITION STORAGE  
#2 FOR ORGANIC PREVENTATIVE STORAGE  
#3 FOR TRANSPORTATION  
(SEE DETAIL ON FQ-102)

(N) 6 PORTA POTTIES  
(N) [1] 1,000 GALLON DIESEL TANK  
(SEE FQ-102 FOR DETAIL)

[44] 100'X24' NEW HOOP HOUSES  
USE PURPOSE FLOWERING/BLOOMING  
168,000 FT<sup>2</sup>

ON 067-061-055

[1] 230'X80' EXISTING GREEN HOUSE  
USE PURPOSE NURSERY  
18,400 FT<sup>2</sup>

ON 067-061-056

[1] 230'X210' EXISTING GREEN HOUSE  
USE PURPOSE FLOWERING/BLOOMING  
48,300 FT<sup>2</sup>

ON 067-061-056

(E)[1] WALK IN-COOLER  
600 FT<sup>2</sup>  
(APPROX.)

(E)[1] WAREHOUSE  
2,400 FT<sup>2</sup> (APPROX.)

(E) Actual Travel Way

[70] 100'X24' NEW HOOP HOUSES  
USE PURPOSE FLOWERING/BLOOMING  
168,000 FT<sup>2</sup>

FOR PARCEL 067-061-056

(N) [16] 8'X16' SPACE  
PARKING LOT ON EXISTING  
DIRT WITH  
CONE DESIGNATIONS

EXISTING PROPERTY LINE  
BETWEEN PARCEL APN# 067-061-055 &  
APN# 067-061-056

[10] 100'.24' NEW  
HOOP HOUSES  
USE PURPOSE  
NURSERY 24000 FT<sup>2</sup>  
PARCE 067-061-056

[10] 100'.24' NEW HOOP HOUSES  
USE PURPOSE DRYING  
24000 FT<sup>2</sup>

6860 LOVR

6860 LOS OSOS VALLEY RD  
SAN LUIS OBISPO, CA 93405

PROJECT:

DRAWN BY: GA

DATE: 8/20/18

SHEET NUMBER:

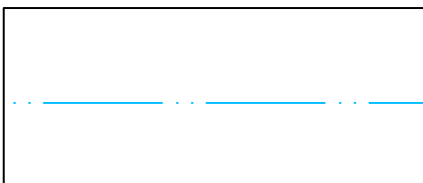
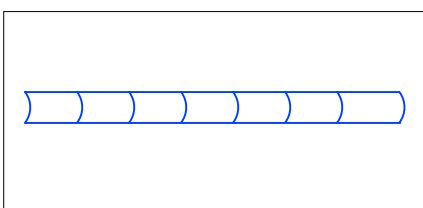
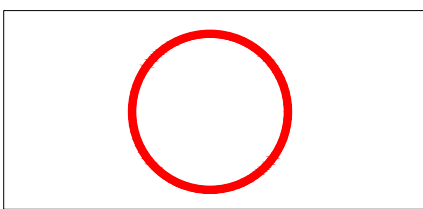
A-002



EQUIPMENT LEGEND  
WATTAGE

SYMBOL	DESCRIPTION
	EQUIPMENT & WALKWAY ACCESS
	400 WATT LIGHT BULBS

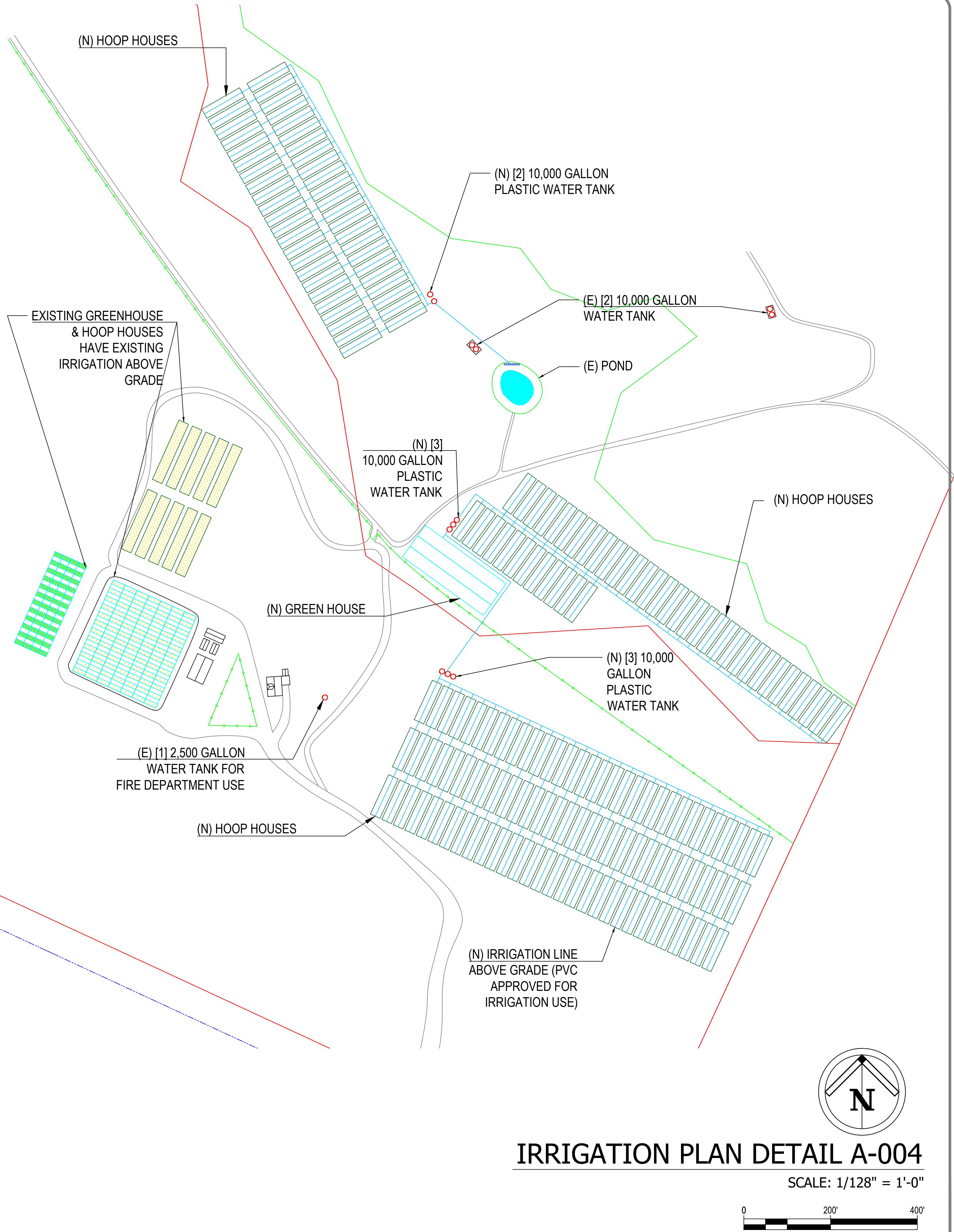
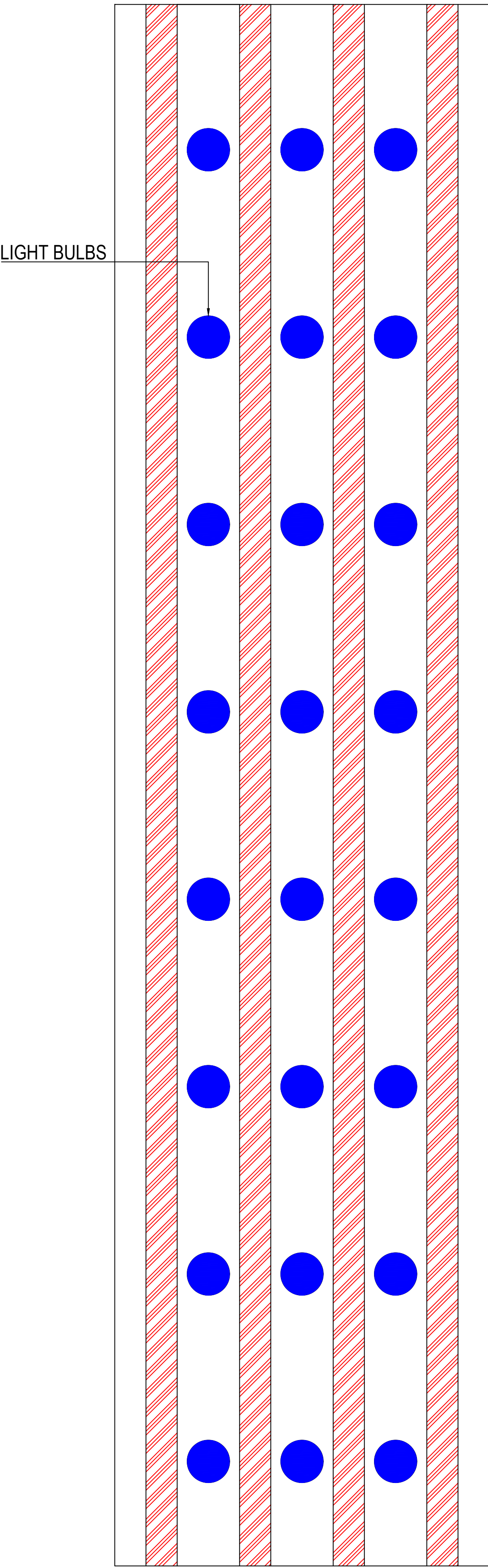
EQUIPMENT LEGEND  
IRRIGATION

SYMBOL	DESCRIPTION
	IRRIGATION LINE
	WELL & EXTERIOR PUMP
	10,000 GALLON WATER TANK-PLASTIC

HOOP HOUSE AGGREGATE WATTAGE DETAIL

SCALE: 3/16" = 1'-0"

Hoophouse Aggregate Wattage Calculations				
# of Lights	Watts/Light	=Watts	÷ Canopy Area Ft <sup>2</sup>	=Watts/Ft <sup>2</sup>
24	500	12000	1600	7.5



IRRIGATION PLAN DETAIL A-004

SCALE: 1/128" = 1'-0"

PROJECT:

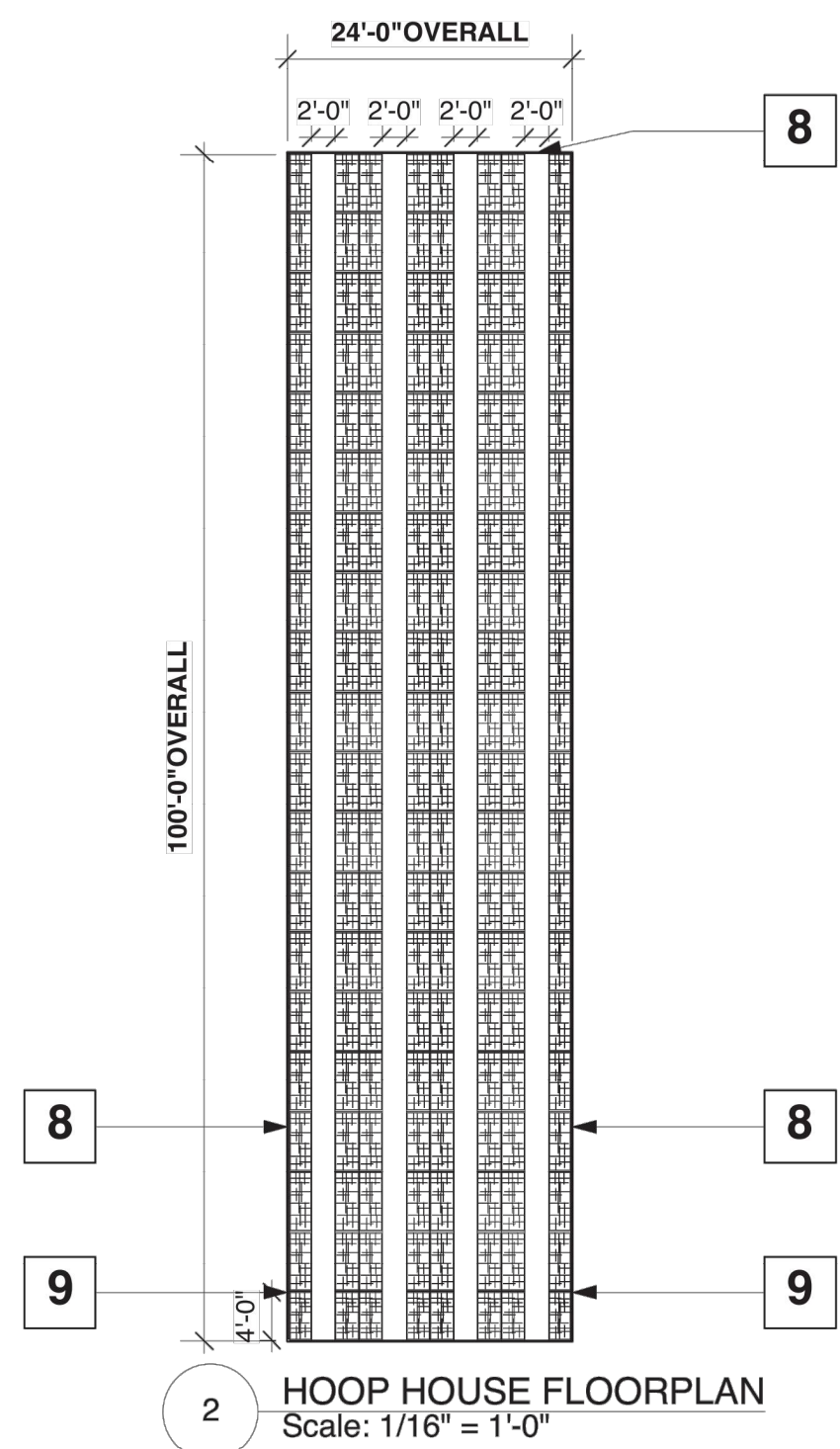
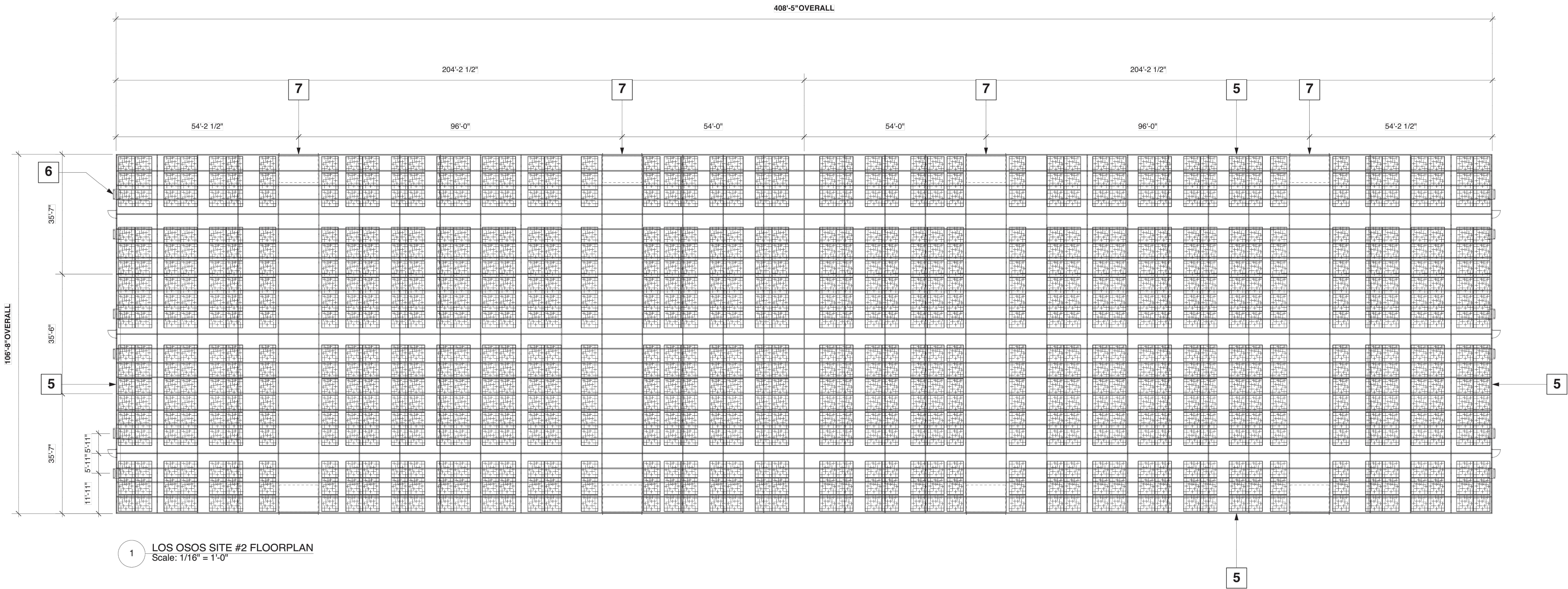
6860 LOVR  
6860 LOS OSOS VALLEY RD  
SAN LUIS OBISPO, CA 93405

DRAWN BY: GA  
DATE: 8/20/18

SHEET NUMBER:

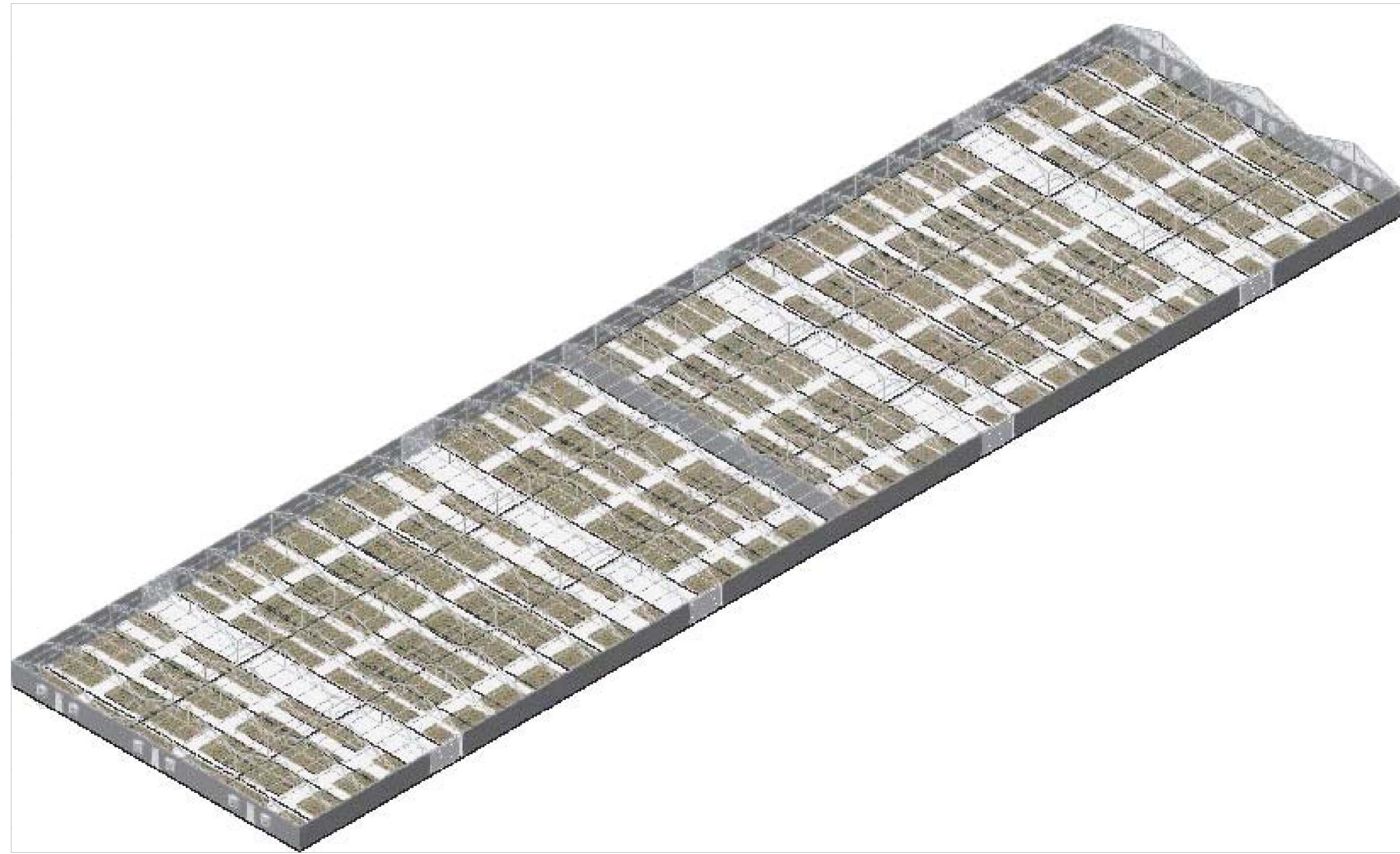
A-003



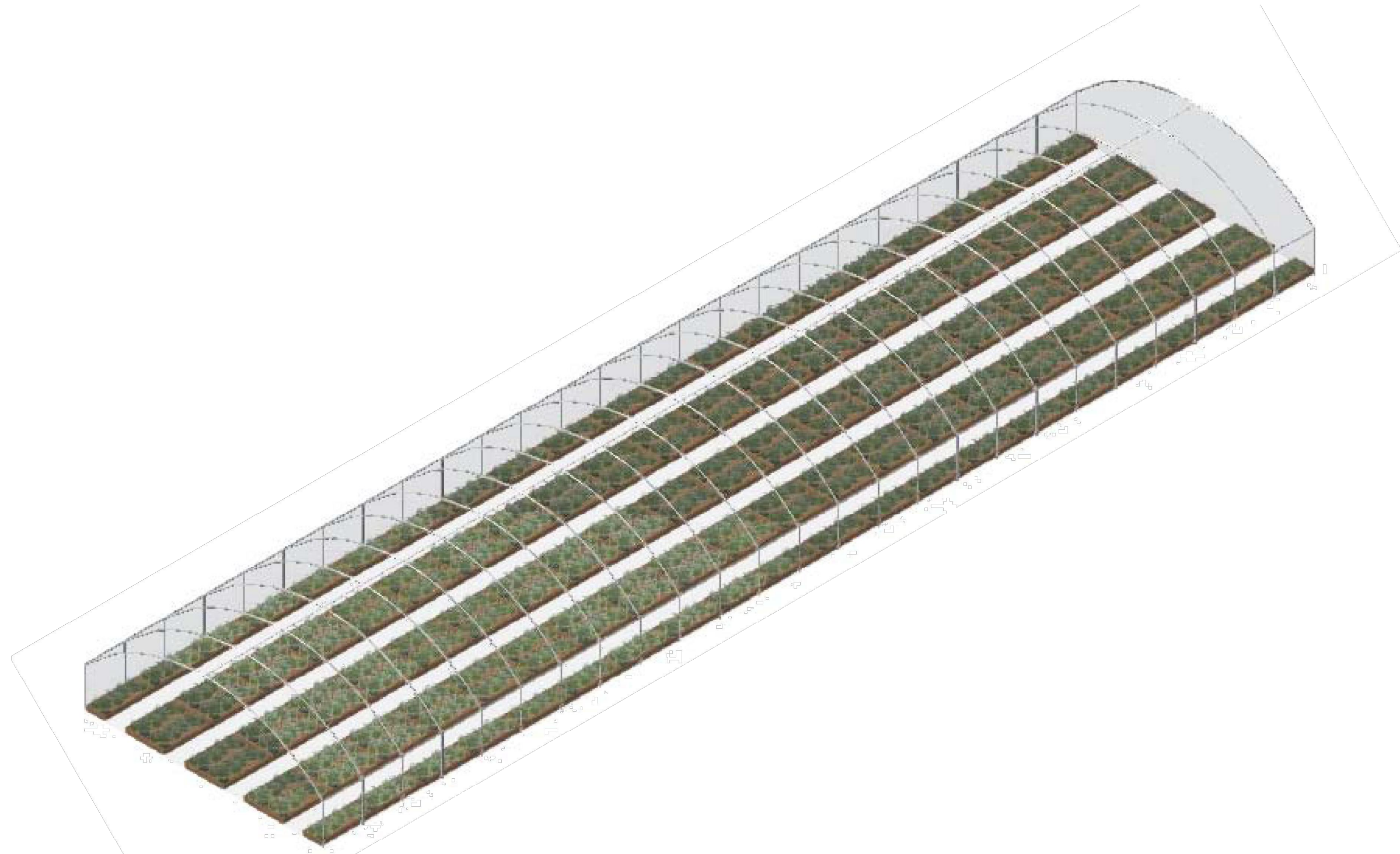


REFERENCE NOTES:	
1	2" S.Q. STEEL PURLINS
2	3" S.Q. STEEL COLUMN
3	TENZALOY COLUMN CAP
4	8MM CLEAR POLYCARBONATE TWINWALL
5	ALUMINUM WALL
6	INTAKE SHUTTERS
7	GARADGE DOOR
8	GREENHOUSE FILM
9	14-GUAGE 1.66" O.D. PIPE

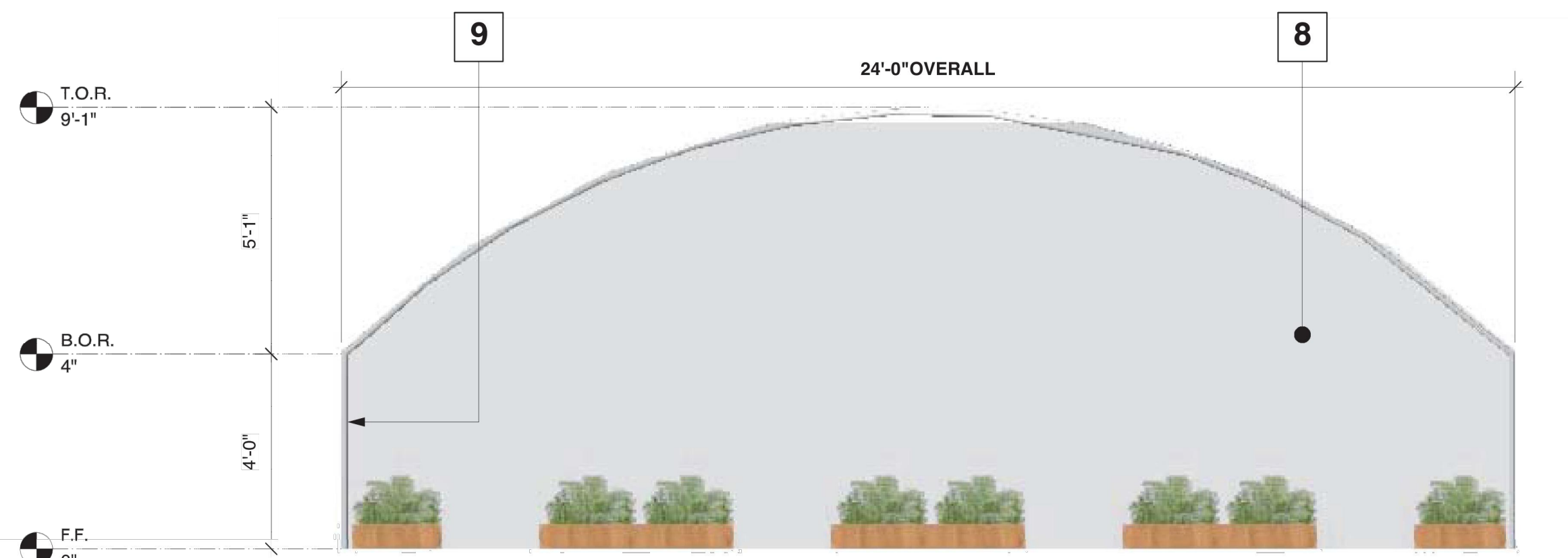




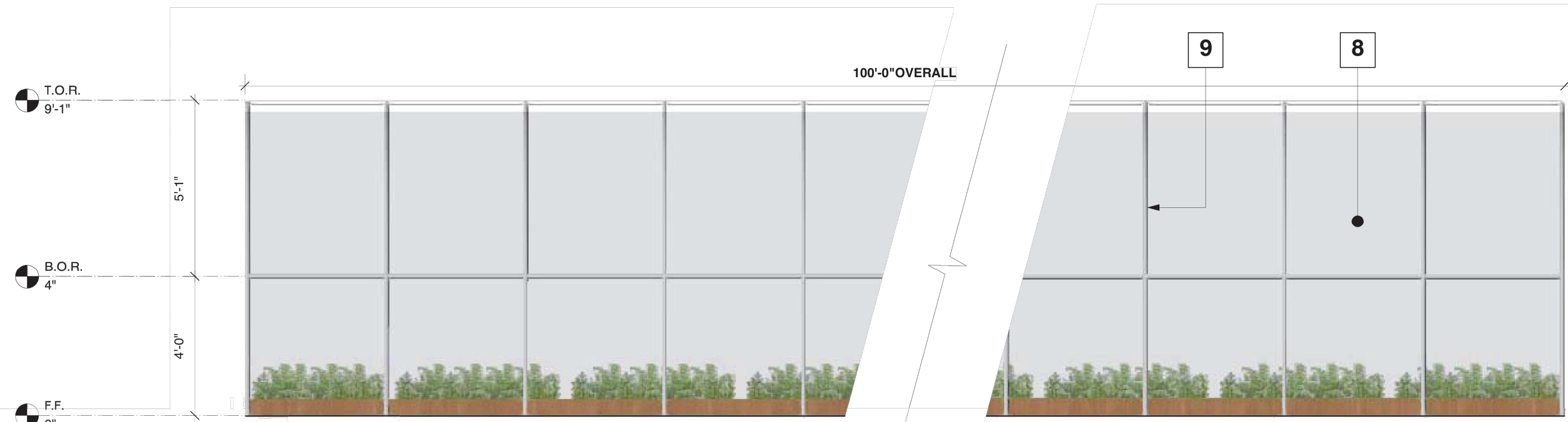
1 LOS OSOS SITE #2 INDOOR GROW  
Scale: 1/32" = 1'-0"



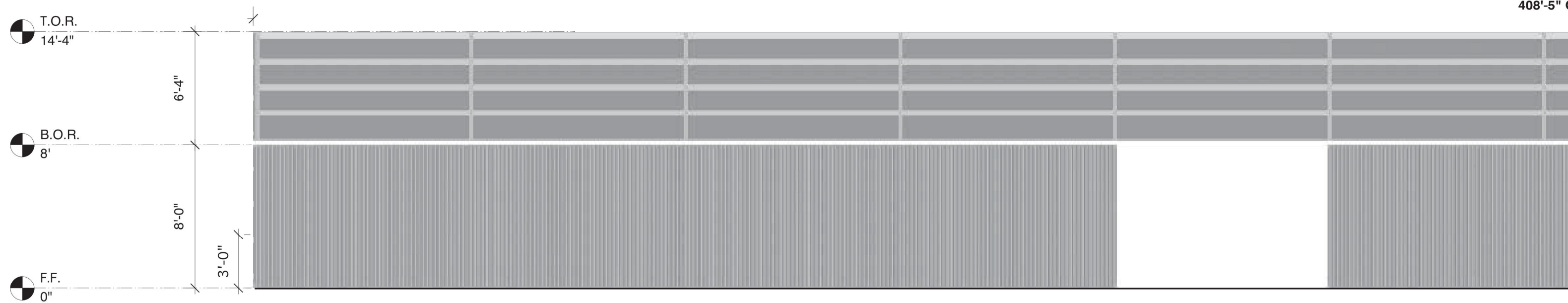
2 STANDARD HOOP HOUSE  
Scale: 1/8" = 1'-0"



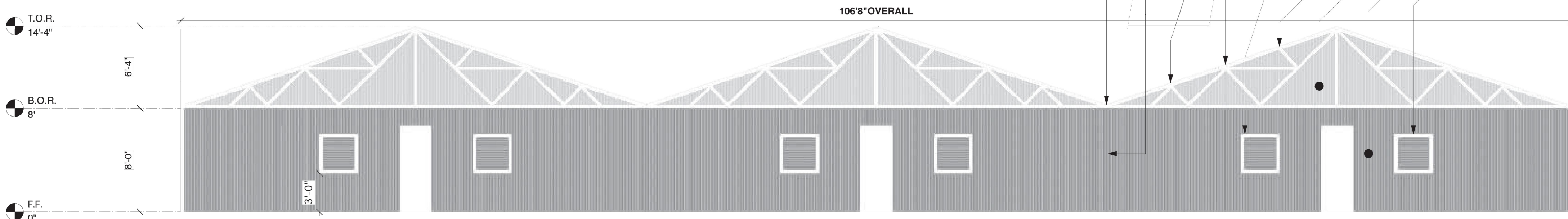
3 HOOP HOUSE SOUTH ELEVATION  
Scale: 3/8" = 1'-0"



4 HOOP HOUSE EAST ELEVATION  
Scale: 3/8" = 1'-0"



5 LOS OSOS SITE #2 EAST ELEVATION  
Scale: 3/16" = 1'-0"



6 LOS OSOS SITE #2 SOUTH ELEVATION  
Scale: 3/16" = 1'-0"

REFERENCE NOTES:

- |   |                                  |
|---|----------------------------------|
| 1 | 2" S.Q. STEEL PURLINS            |
| 2 | 3" S.Q. STEEL COLUMN             |
| 3 | TENZALOY COLUMN CAP              |
| 4 | 8MM CLEAR POLYCARBONATE TWINWALL |
| 5 | ALUMINUM WALL                    |
| 6 | INTAKE SHUTTERS                  |
| 7 | GARADGE DOOR                     |
| 8 | GREENHOUSE FILM                  |
| 9 | 14-GUAGE 1.66" O.D. PIPE         |



CONSTRUCTION WASTE MANAGEMENT PLAN

CONSTRUCTION WASTE MANAGEMENT. RECYCLE AND/OR SALVAGE FOR REUSE A MINIMUM OF 65% OF THE NONHAZARDOUS CONSTRUCTION AND DEMOLITION WASTE IN ACCORDANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS CODE CHAPTER 4 DIVISION 4.4 PER 2016 CRC

CODE COMPLIANCE

**CODES:** ALL CONSTRUCTION SHALL CONFORM TO THE FOLLOWING CODES:  
-2016 CALIFORNIA BUILDING CODE (CBC), BASED ON THE 2015 IBC  
-2016 CALIFORNIA RESIDENTIAL CODE (CRC), BASED ON THE 2015 IRC  
-2016 CALIFORNIA MECHANICAL CODE (CMC), BASED ON THE 2015 UMC  
-2016 CALIFORNIA PLUMBING CODE (CPC), BASED ON THE 2015 UPC  
-2016 CALIFORNIA ELECTRICAL CODE (CEC), BASED ON THE 2014 NEC  
-2016 CALIFORNIA GREEN BUILDING STANDARDS CODE  
-2016 CALIFORNIA ENERGY CODE  
-2016 CALIFORNIA RESIDENTIAL ENERGY STANDARDS  
-2016 CALIFORNIA GREEN BUILDING CODE (CGBG)  
-2016 CALIFORNIA FIRE CODE (CFC), BASED ON THE 2015 IFC  
-NFPA NATIONAL FIRE CODES  
**PROJECT CONDITIONS OF APPROVAL**  
-COUNTY OF SAN LUIS OBISPO STANDARD CONIDITIONS, AMENDMENTS AND SELECTED CODE REQUIREMENTS ON FILE AT THE COMMUNITY DEVELOPMENT DEPARTMENT, PLANNING AND BUILDING DIVISION  
-ALL OTHER CODES AND ORDINANCES ADOPTED BY THE COUNTY OF SAN LUIS OBISPO AGENCIES HAVING JURISDICTION OVER THIS PROJECT

STATEMENT OF COMPLIANCE

THIS PROJECT HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE COUNTY OF SAN LUIS OBISPO ADOPTED CODE AND ORDINANCE REQUIREMENTS INCLUDING, BUT NOT LIMITED TO THE CALIFORNIA STATE ACCESSIBILITY STANDARDS AND I/WE WILL BE RESPONSIBLE FOR ALL CLARIFICATIONS DEEMED NECESSARY DURING THE CONSTRUCTION PHASES.

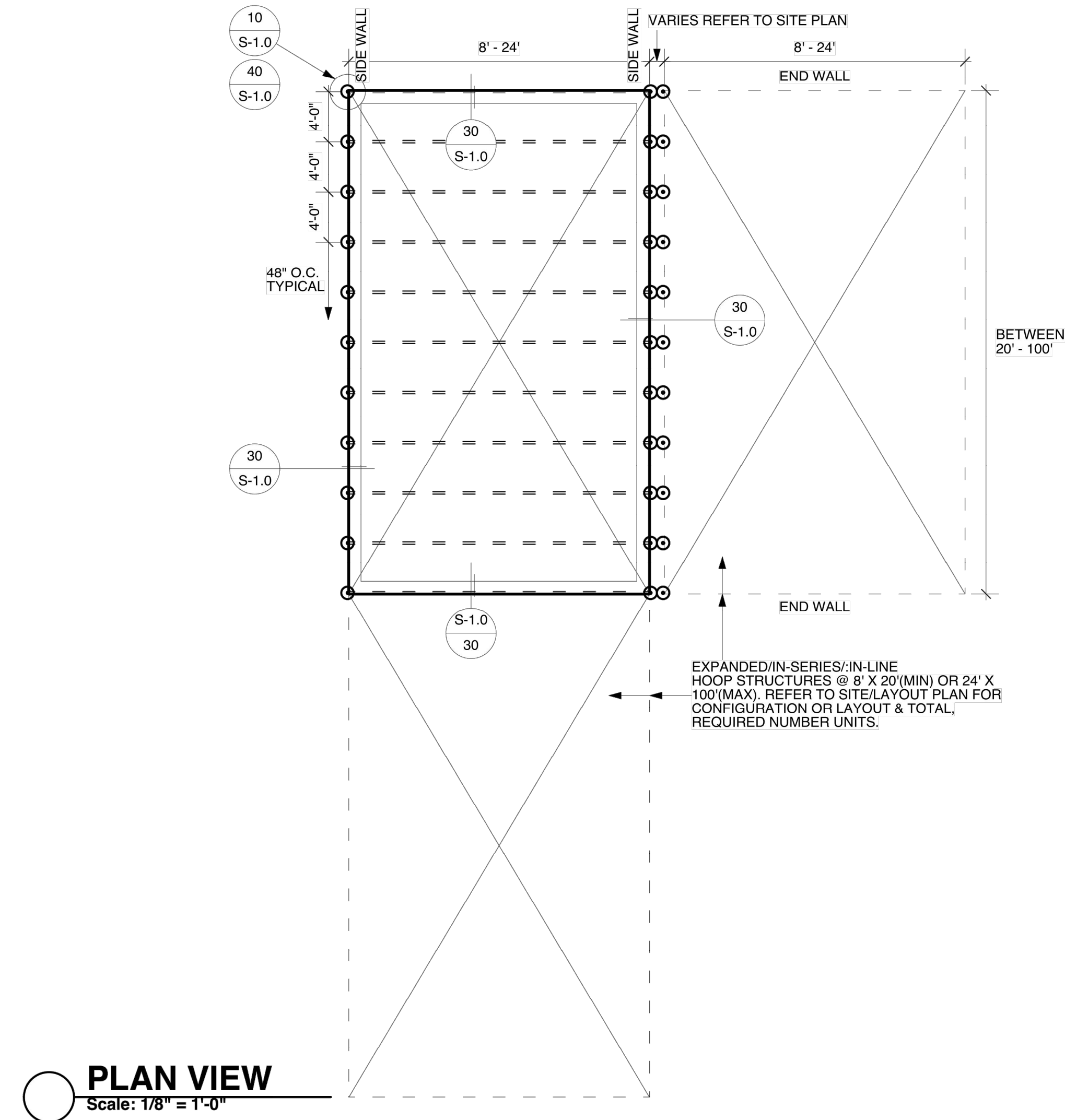
THIS PROJECT SHALL COMPLY WITH TITLE 24 AND 2016 CALIFORNIA BUILDING CODE (CBC), CALIFORNIA MECHANICAL CODE (CMC), CALIFORNIA PLUMBING CODE (CPC), CALIFORNIA ELECTRICAL CODE (CEC), AND CALIFORNIA ENERGY CODE (CENC).

EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES

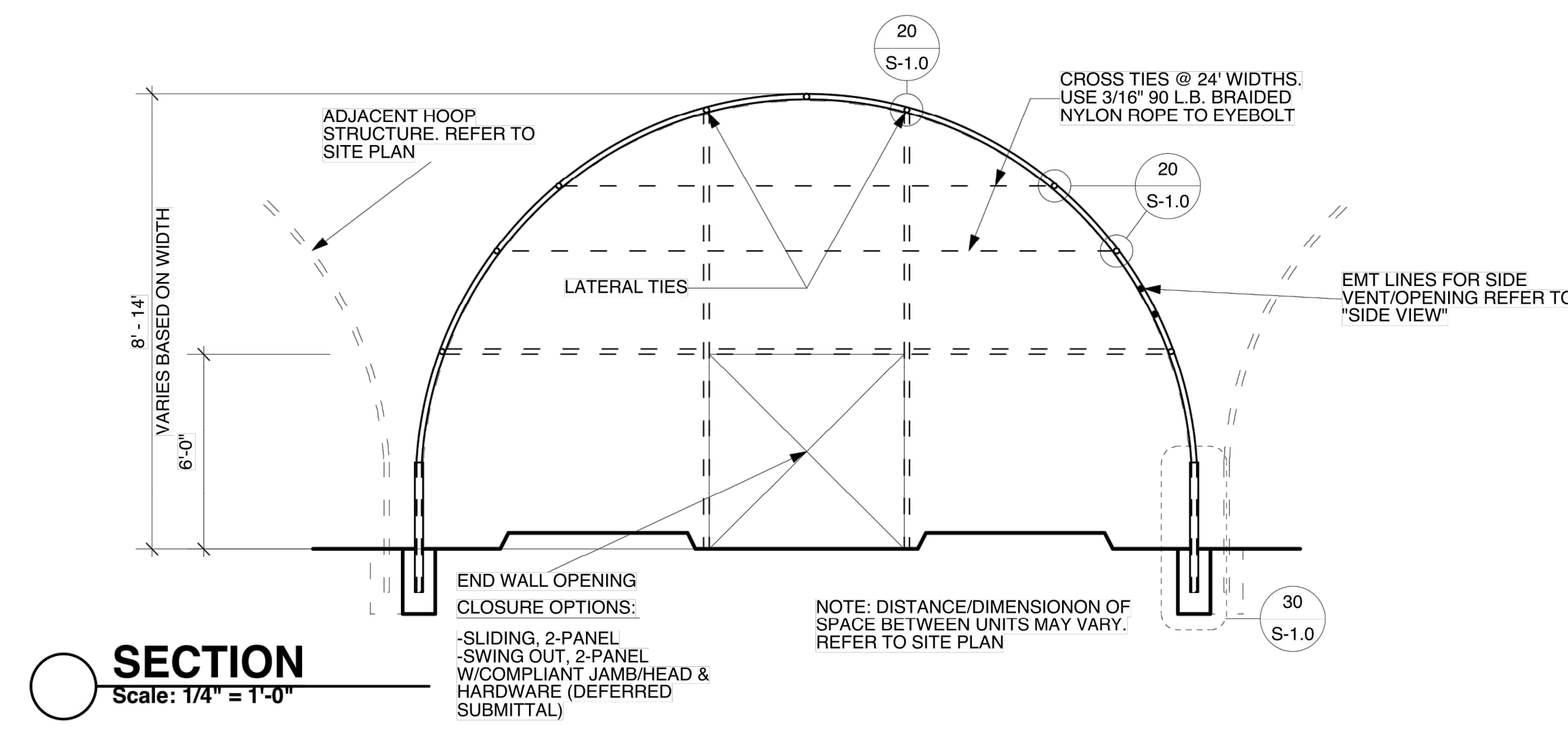
EROSION CONTROL MEASURES SHALL BE IMPLEMENTED AND MAINTAINED DURING ALL CONSTRUCTION AND GROUND DISTURBING ACTIVITIES PER THE COUNTY OF SAN LUIS OBISPO STANDARDS.

EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES MUST BE IN PLACE AND FUNCTIONAL PRIOR TO THE FIRST INSPECTION. NO INSPECTIONS CAN BE PERFORMED IF THEY ARE NOT IN PLACE OR HAVE FAILED TO PROVIDE EROSION CONTROL. FAILURE TO MAINTAIN EROSION CONTROL WILL CAUSE INSPECTIONS TO BE DELAYED UNTIL EROSION CONTROL MEASURES ARE FUNCTIONAL.

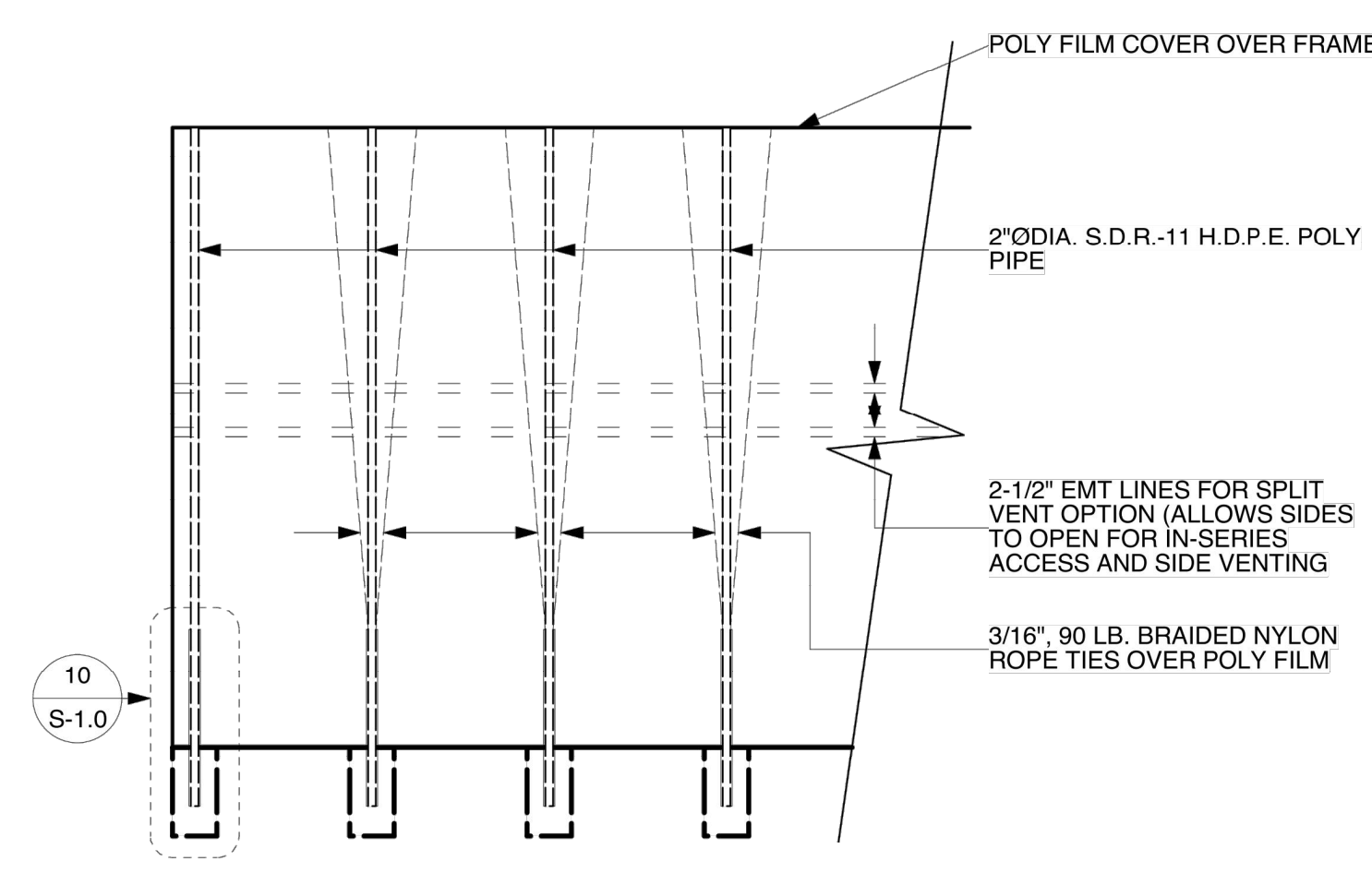
**NOTE:** SUBJECT TO CHANGE AS PROJECT CONSTRUCTION PROGRESSES AND GENERAL CONTRACTOR TAKES ON RESPONSIBILITY



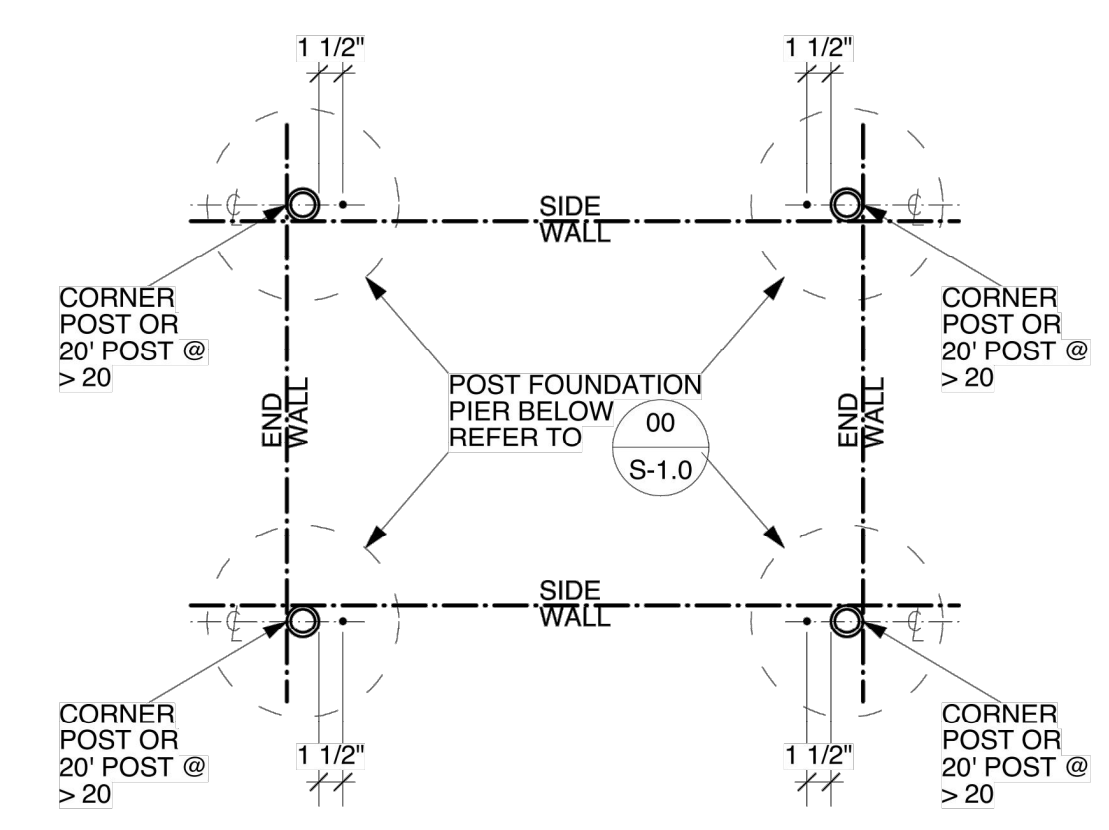
PLAN VIEW  
Scale: 1/8" = 1'-0"



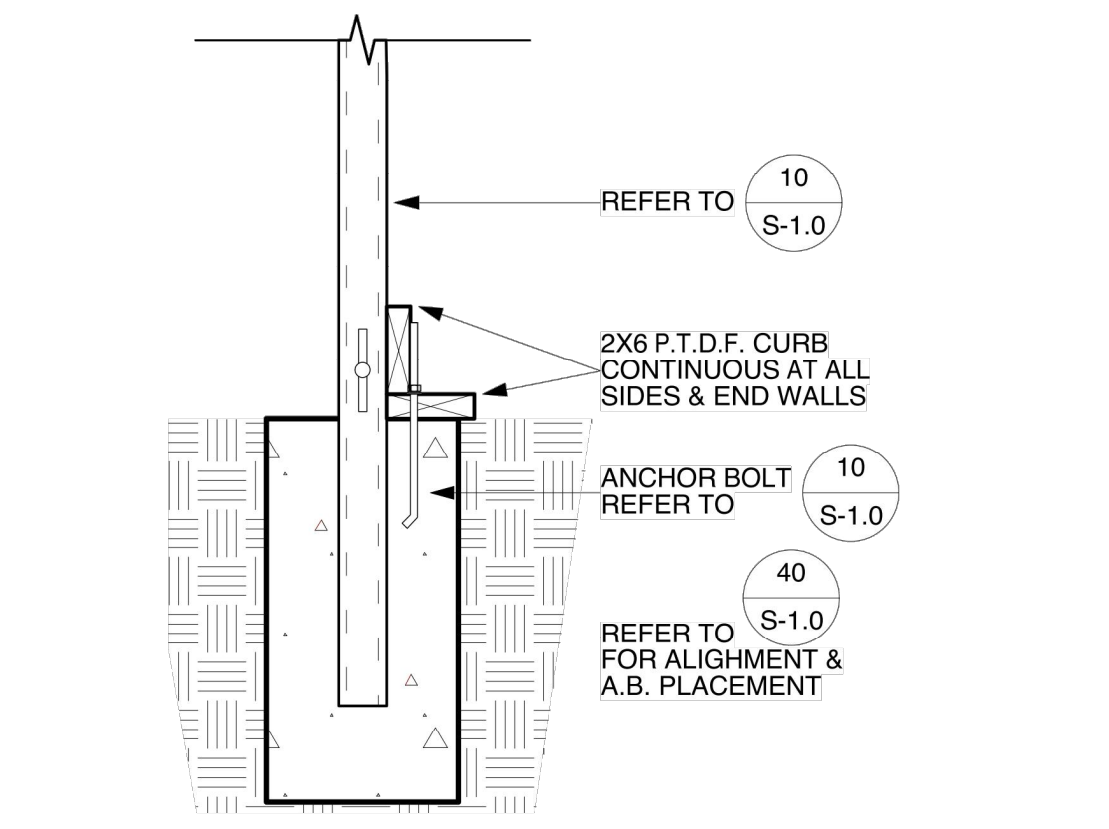
SECTION  
Scale: 1/4" = 1'-0"



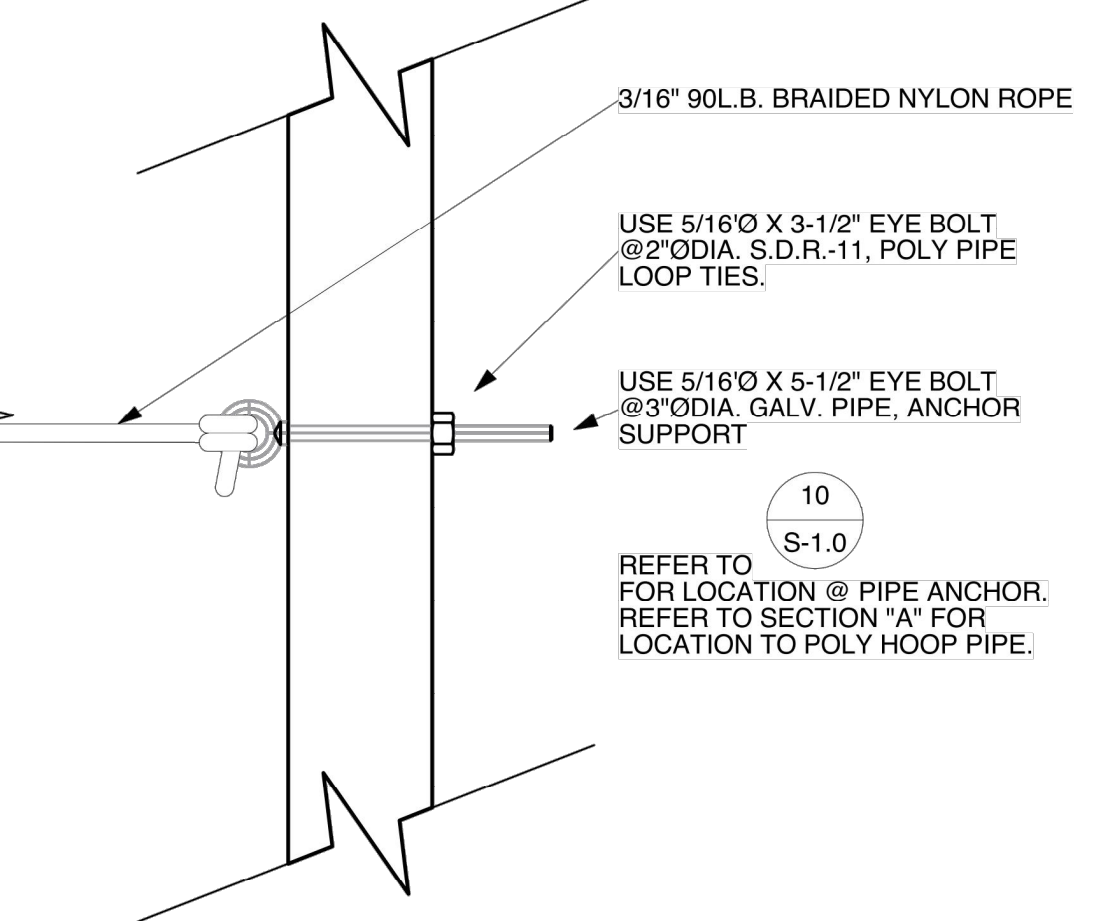
SIDE VIEW  
1/4" 50



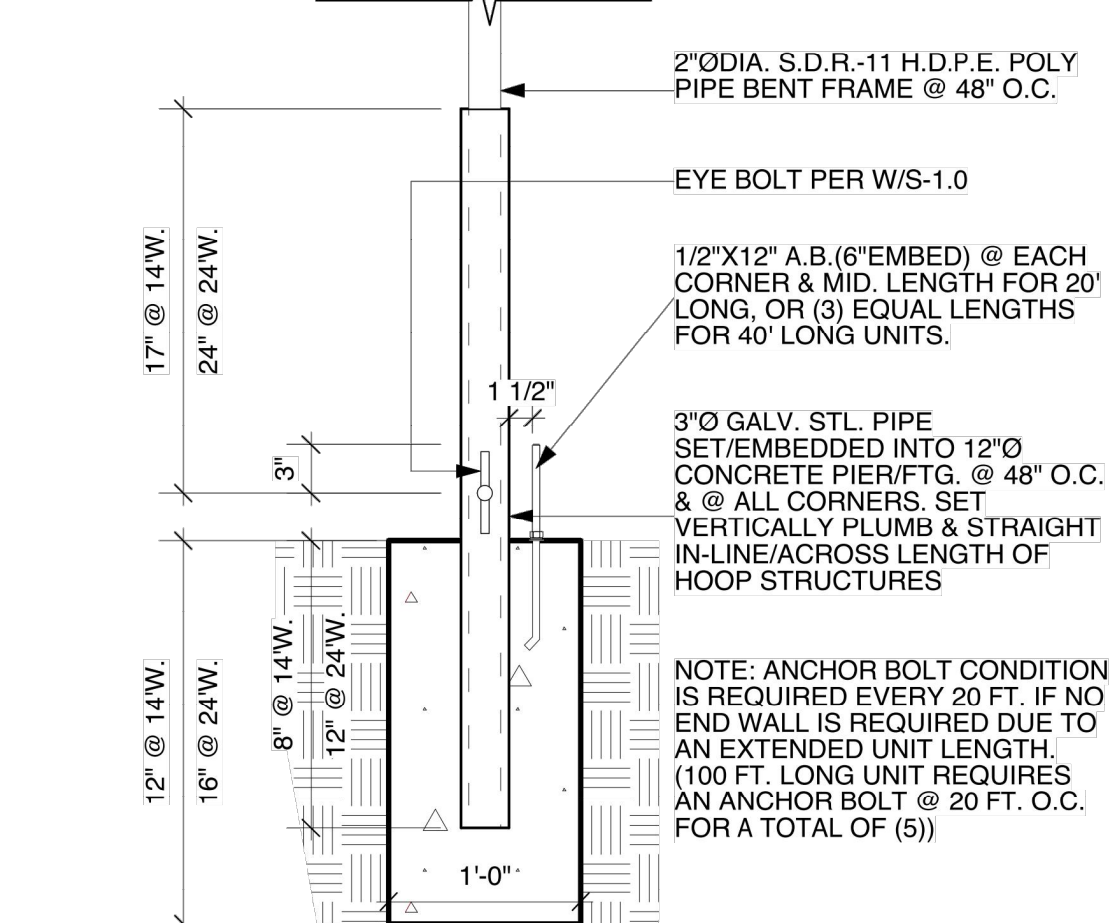
FOUNDATION PIERS  
40



REDWOOD CURB  
1" 30



EYE BOLT  
20



FOOTING  
1" 10



CONSTRUCTION WASTE MANAGEMENT PLAN

CONSTRUCTION WASTE MANAGEMENT. RECYCLE AND/OR SALVAGE FOR REUSE A MINIMUM OF 65% OF THE NON-HAZARDOUS CONSTRUCTION AND DEMOLITION WASTE IN ACCORDANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS CODE CHAPTER 4.4 PER 2016 CRC

CODE COMPLIANCE

**CODES:** ALL CONSTRUCTION SHALL CONFORM TO THE FOLLOWING CODES:  
-2016 CALIFORNIA BUILDING CODE (CBC), BASED ON THE 2015 IBC  
-2016 CALIFORNIA RESIDENTIAL CODE (CRC), BASED ON THE 2015 IRC  
-2016 CALIFORNIA MECHANICAL CODE (CMC), BASED ON THE 2015 UMC  
-2016 CALIFORNIA PLUMBING CODE (CPC), BASED ON THE 2015 UPC  
-2016 CALIFORNIA ELECTRICAL CODE (CEC), BASED ON THE 2014 NEC  
-2016 CALIFORNIA GREEN BUILDING STANDARDS CODE  
-2016 CALIFORNIA ENERGY CODE  
-2016 CALIFORNIA RESIDENTIAL ENERGY STANDARDS  
-2016 CALIFORNIA GREEN BUILDING CODE (CGBG)  
-2016 CALIFORNIA FIRE CODE (CFC), BASED ON THE 2015 IFC  
-NFPA NATIONAL FIRE CODES  
-PROJECT CONDITIONS OF APPROVAL  
-COUNTY OF SAN LUIS OBISPO STANDARD CONIDITIONS, AMENDMENTS AND SELECTED CODE REQUIREMENTS ON FILE AT THE COMMUNITY DEVELOPMENT DEPARTMENT, PLANNING AND BUILDING DIVISION  
-ALL OTHER CODES AND ORDINANCES ADOPTED BY THE COUNTY OF SAN LUIS OBISPO AGENCIES HAVING JURISDICTION OVER THIS PROJECT

STATEMENT OF COMPLIANCE

THIS PROJECT HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE COUNTY OF SAN LUIS OBISPO ADOPTED CODE AND ORDINANCE REQUIREMENTS INCLUDING, BUT NOT LIMITED TO THE CALIFORNIA STATE ACCESSIBILITY STANDARDS AND I/WE WILL BE RESPONSIBLE FOR ALL CLARIFICATIONS DEEMED NECESSARY DURING THE CONSTRUCTION PHASES.

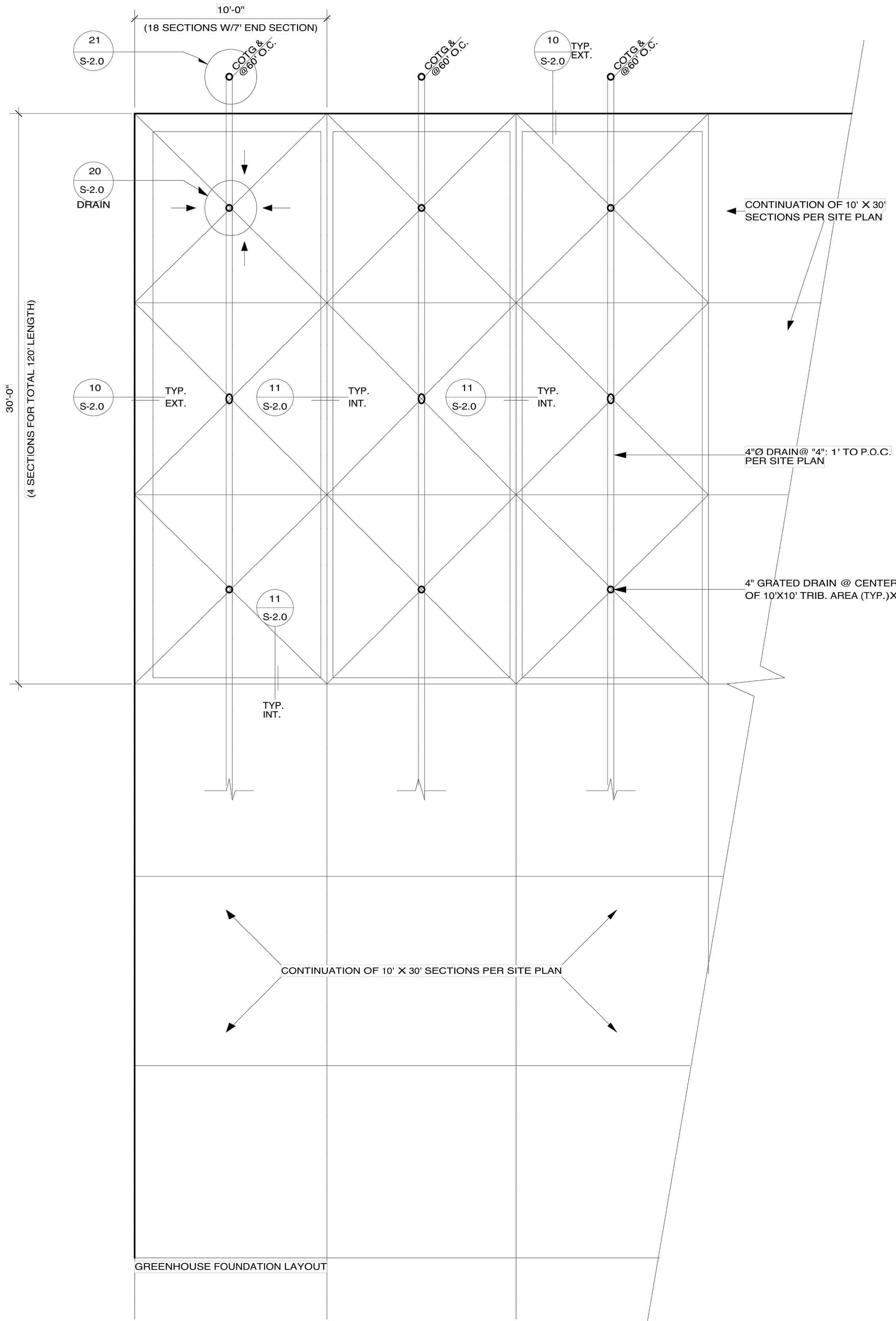
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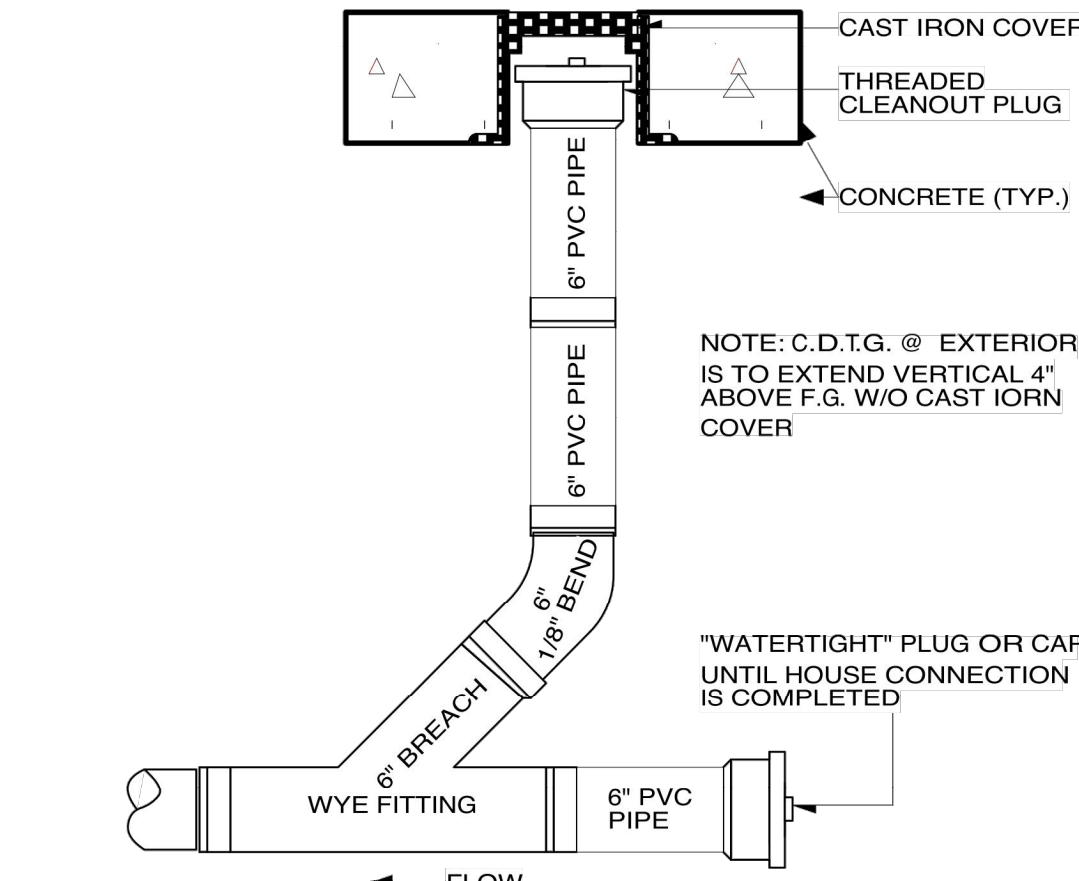
**NOTE:** SUBJECT TO CHANGE AS PROJECT CONSTRUCTION PROGRESSES AND GENERAL CONTRACTOR TAKES ON RESPONSIBILITY



PLAN VIEW  
Scale: 1/4" = 1'-0"

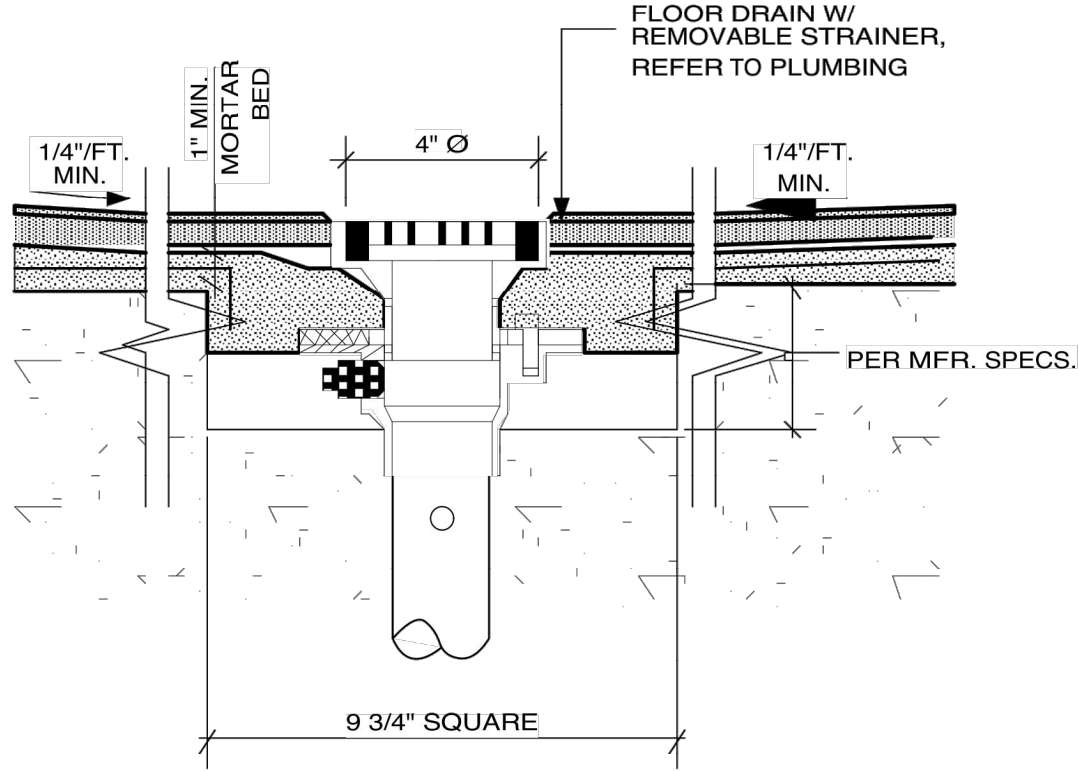
NOTE: REFER TO THE SPECIFIC/DEVELOPED SITE PLAN FOR COMPLETE CONFIGURATION & LAYOUT

NOTE: THIS PLAN IS FOR THE CONSTRUCTION OF CONCRETE SLAB-ON-GRADE FOUNDATIONS TO BE USED IN CONJUNCTION WITH A PRE-MANUFACTURED & PRE-FABRICATED GREENHOUSE ENCLOSURE. THE SPECIFIC TYPE, MANUFACTURER & SPECIFICATIONS ARE TO BE REVIEWED AND VERIFIED FOR COMPLIANCE TO THE PROPOSED FOUNDATION SUPPORT DESIGN PRIOR TO PURCHASE & CONSTRUCTION OF SAID FOUNDATIONS, RELATED FOOTINGS, PAD/GRADING PREPARATION, ETC.



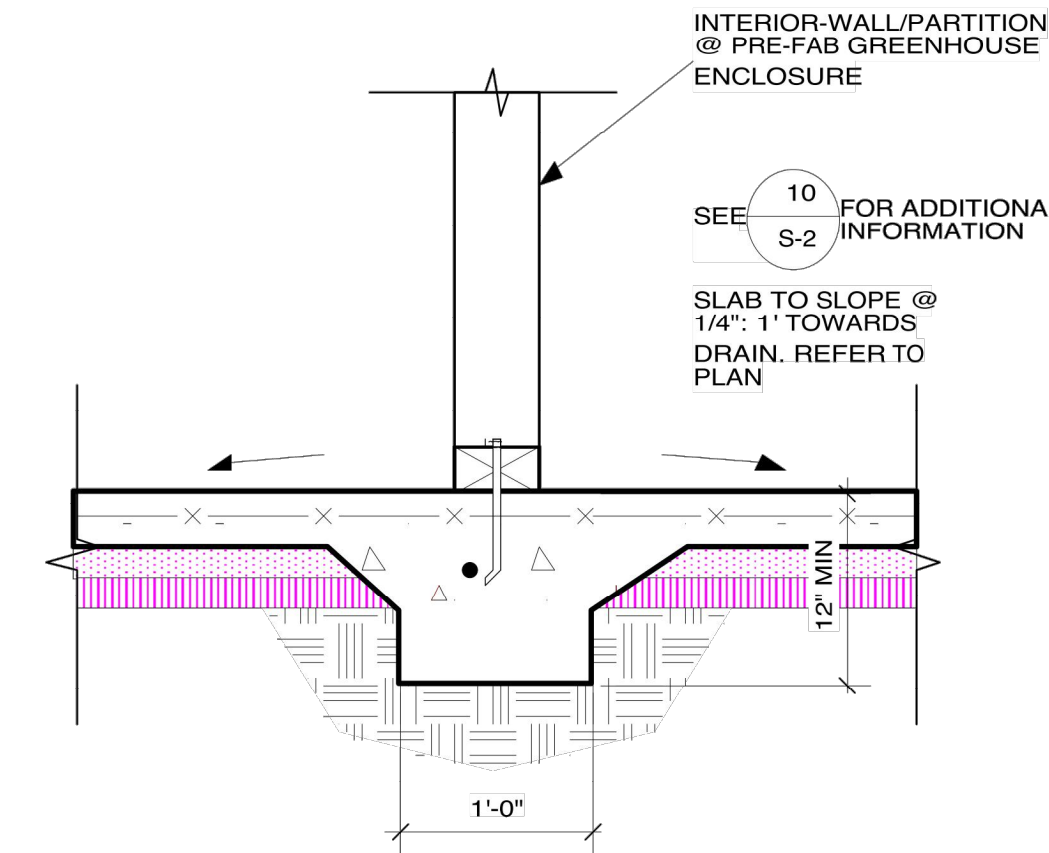
CLEANOUT @ SLAB

21



DRAIN

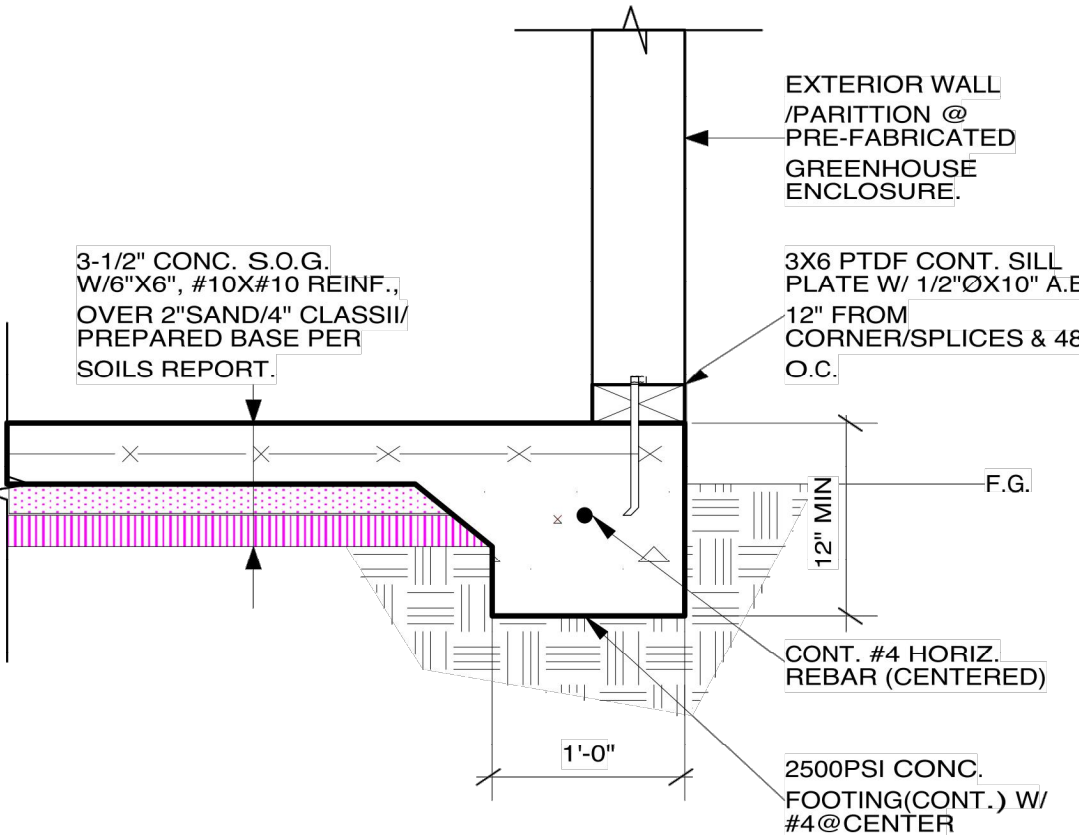
20



INTERIOR FOOTING

1"

11



EXTERIOR FOOTING

1"

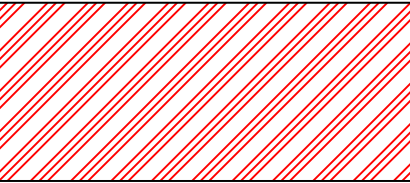
10



EQUIPMENT LEGEND

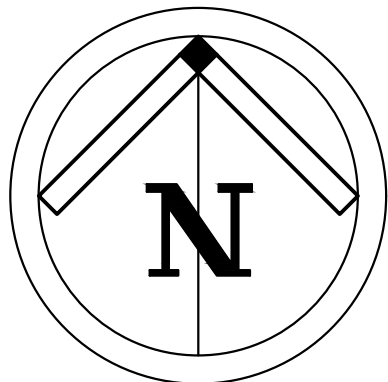
SYMBOL

DESCRIPTION

EQUIPMENT & WALKWAY ACCESS

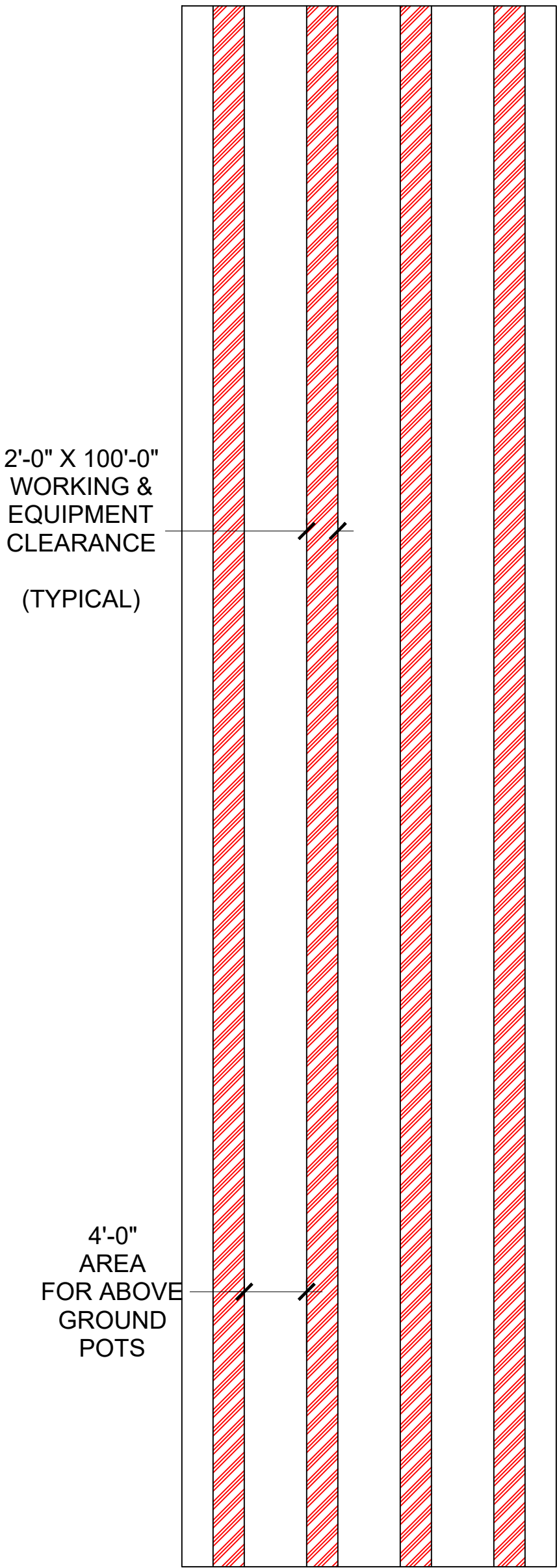
SQUARE FOOTAGE FOR FLOWERING:

HOOP HOUSE SIZE100'X24'=2400 FT<sup>2</sup>  
WALKING & EQUIP= 800 FT<sup>2</sup>  
NET SQUARE FEET= 1600 FT<sup>2</sup> GROW AREA



HOOP HOUSE INTERIOR

SCALE: 1/8" = 1'-0"



NOTE: EMAIL CONFIRMATION FROM CDFA

**From:** CDFA CalCannabis Scientists@CDFA <cdfa.CalCannabis\_Scientists@cdfa.ca.gov>  
**Sent:** Thursday, July 5, 2018 1:59 PM  
**To:** Lisa Bugrova  
**Subject:** RE: Canopy Definitions

Hello Lisa,

Yes, it is appropriate to calculate the canopy based on the net space utilized for canopy within the hoops as long as each row has clearly identifiable boundaries. Please refer to the updated definition of canopy in section 8000 of the emergency regulations found here:  
<https://static.cdfa.ca.gov/MCCP/document/060418%20CalCannabis%20Text%20of%20Proposed%20Emergency%20Regulations%20Readopt.pdf>.

TEXT OF EMERGENCY REGULATIONS - static.cdfa.ca.gov

static.cdfa.ca.gov

TEXT OF EMERGENCY REGULATIONS . Page 1 of 65 Changes are indicated by strikeout and underline.  
CALIFORNIA CODE OF REGULATIONS . TITLE 3. FOOD AND AGRICULTURE

ELECTRICAL LOAD EXAMPLES OF 42,000 SQUARE FEET GREENHOUSE

43,200 sqft Greenhouse Electrical Load Estimate Spreadsheet v8

Facility-wide Electrical Load Estimates					
Lighting	Count	Voltage (V)	Current (A)	Power (kW)	
HPS lights in the Flower Zone	600	277	3.77	626.6	
	0			0.0	
Cooling	Count	Voltage (V)	Current (A)	Power (kW)	
54" 1-HP single speed 3 phase exhaust fans	40	460	1.7	31.3	
24" 3/4-HP two speed exhaust fans	10	115	6.8	7.8	
Evaporative pad wall pumps	4	115	11	5.1	
Drive motor for roof vents in corridor (1/20 HP)	10	115	0.68	0.8	
Drive motor for vent on evap pad wall	4	480	0.87	1.7	
Shutters on upper gable wall	10	120	0.28	0.3	
Vertical air flow fans for mixing	30	460	0.6	8.3	
Fogco Odor Mitigation Pump, VFD 10.6 gal/min	1	480	12	5.8	
Fogco Zone Valves	12	480	1	5.8	
Heating	Count	Voltage (V)	Current (A)	Power (kW)	
Unit heaters in the grow area, apx (Delta - T to supply)	0	0	0	0.0	
Unit heaters in the Central Corridor, apx	2	120	2.1	0.5	
Shade & Heat Curtain/ Light Dep Curtain	Count	Voltage (V)	Current (A)	Power (kW)	
Drive motor for Shade Curtain	6	115	2.5	1.7	
Drive motor for Blackout Curtain	6	115	2.5	1.7	
CO2 Generators	Count	Voltage (V)	Current (A)	Power (kW)	
CO2 Burners	10	120	1.00	1.2	
Maximum coincident load: the largest load you can expect at any time				(kW or KVA)	698
				(Amps)	2541
Total of equipment minus lighting				(kW or KVA)	72
				(Amps)	279

ACREAGE CALCULATIONS APN: 067-061-055					
TYPE	USE	SIZE <sup>FT</sup>	QUANTITY	TOTAL GROSS SIZE <sup>FT</sup>	
HOOP HOUSE	FLOWERING	100'X24'	70	168,000	
	WORKING CLEARANCE	100'X8'	70	56,000	
^ SEE DETAIL HOOP HOUSE INTERIOR				TOTAL NET <sup>FT2</sup>	
				112,000	
				+ <sup>FT2</sup> /ACRE	43,560
				TOTAL NET ACRE	
				2.57	
TYPE	USE	SIZE <sup>FT</sup>	QUANTITY	TOTAL GROSS SIZE <sup>FT</sup>	
HOOP HOUSE	VEGETATIVE STATE	100'X24'	10	24,000	
	WORKING CLEARANCE	100'X8'	10	8,000	
^ SEE DETAIL HOOP HOUSE INTERIOR				TOTAL NET <sup>FT2</sup>	
				16,000	
				+ <sup>FT2</sup> /ACRE	43,560
				TOTAL NET ACRE	
				0.37	
TYPE	USE	SIZE <sup>FT</sup>	QUANTITY	TOTAL GROSS SIZE <sup>FT</sup>	
HOOP HOUSE	DRYING	100'X24'	10	24,000	
	^ WORKING CLEARANCE	100'X8'	10	8,000	
^ SEE DETAIL HOOP HOUSE INTERIOR				TOTAL NET <sup>FT2</sup>	
				16,000	
				+ <sup>FT2</sup> /ACRE	43,560
				TOTAL NET ACRE	
				0.37	
TYPE	USE	SIZE <sup>FT</sup>	QUANTITY	TOTAL GROSS SIZE <sup>FT</sup>	
INDOOR GREEN HOUSE	VEGETATIVE STATE	230'X90'	1	20,700	
	^ WORKING CLEARANCE	230'X10'	1	2,300	
^ SEE DETAIL HOOP HOUSE INTERIOR				TOTAL NET <sup>FT2</sup>	
				18,400	
				+ <sup>FT2</sup> /ACRE	43,560
				TOTAL NET ACRE	
				0.42	

ACREAGE CALCULATIONS APN: 067-061-056				
TYPE	USE	SIZE <sup>FT</sup>	QUANTITY	TOTAL GROSS SIZE <sup>FT</sup>
HOOP HOUSE	FLOWERING	100'X24'	70	204,000
	WORKING CLEARANCE	100'X8'	70	68,000
				TOTAL NET <sup>FT2</sup>
				136,000
				+
				<sup>FT2</sup> /ACRE 43,560
	^ SEE DETAIL HOOP HOUSE INTERIOR			TOTAL NET ACRE
				3.12
TYPE	USE	SIZE <sup>FT</sup>	QUANTITY	TOTAL GROSS SIZE <sup>FT</sup>
HOOP HOUSE	VEGETATIVE STATE	100'X24'	10	60,000
	WORKING CLEARANCE	100'X8'	10	20,000
				TOTAL NET <sup>FT2</sup>
				40,000
*HOOP HOUSE	VEGETATIVE STATE	*150'X24'	*10	<sup>FT2</sup> /ACRE 43,560
	WORKING CLEARANCE	*150'X8'	*10	+
ASTERISK * DENOTES EXISTING HOOP HOUSES				TOTAL NET ACRE
				0.92
TYPE	USE	SIZE <sup>FT</sup>	QUANTITY	TOTAL GROSS SIZE <sup>FT</sup>
HOOP HOUSE	DRYING	100'X24'	10	24,000
	^ WORKING CLEARANCE	100'X8'	10	8,000
				TOTAL NET <sup>FT2</sup>
				16,000
				<sup>FT2</sup> /ACRE 43,560
				+
				TOTAL NET ACRE
				0.37
TYPE	USE	SIZE <sup>FT</sup>	QUANTITY	TOTAL GROSS SIZE <sup>FT</sup>
*INDOOR GREEN HOUSE	FLOWERING	*230'X210'	1	48,300
	WORKING CLEARANCE	*230'X25'	1	5,750
ASTERISK * DENOTES EXISTING HOOP HOUSES				TOTAL NET <sup>FT2</sup>
				42,550
				<sup>FT2</sup> /ACRE 43,560
				+
				TOTAL NET ACRE
				0.98
TYPE	USE	SIZE <sup>FT</sup>	QUANTITY	TOTAL GROSS SIZE <sup>FT</sup>
INDOOR GREEN HOUSE	VEGETATIVE STATE	230'X80'	1	18,400
	^ WORKING CLEARANCE	230'X10'	1	2,300
ASTERISK * DENOTES EXISTING HOOP HOUSES				TOTAL NET <sup>FT2</sup>
				16,100
				<sup>FT2</sup> /ACRE 43,560
				+
				TOTAL NET ACRE
				0.37

PROJECT :

DRAWN BY: GA  
DATE: 8/20/18

SHEET NUMBER:

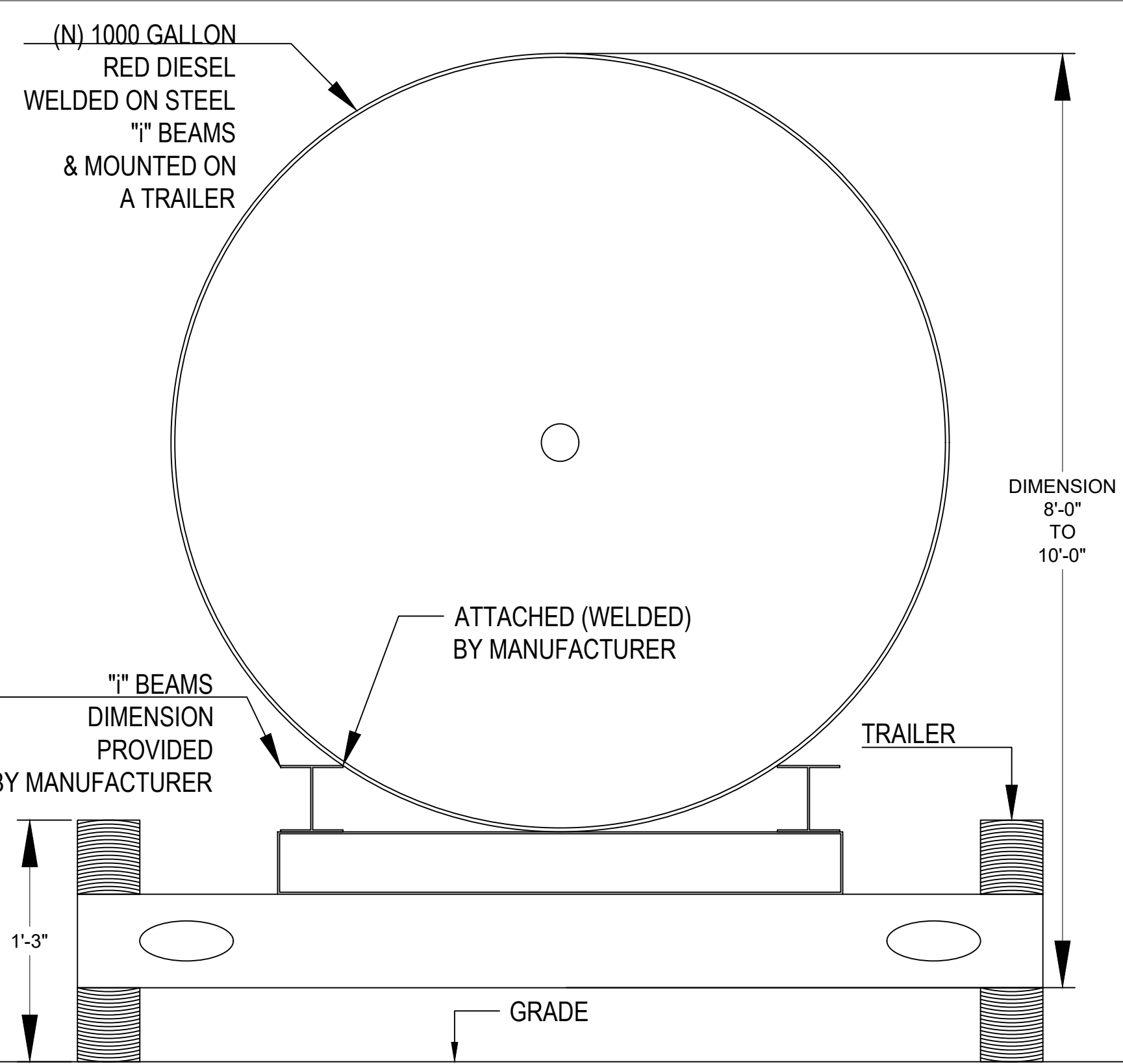
FQ-101

6860 LOVR  
6860 LOS OSOS VALLEY RD  
SAN LUIS OBISPO, CA 93405



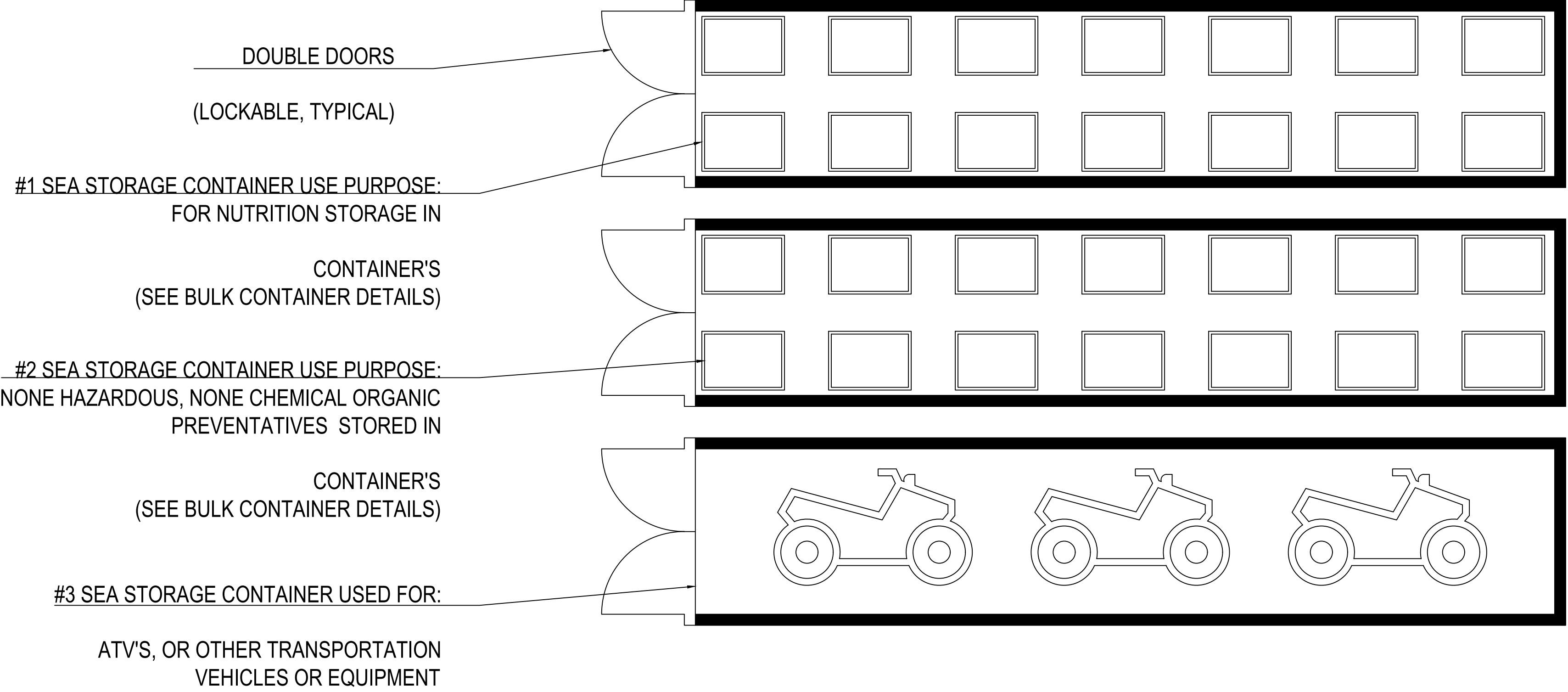
CONTAINER FLOOR PLANS

SCALE: 1 1/2" = 1'-0"



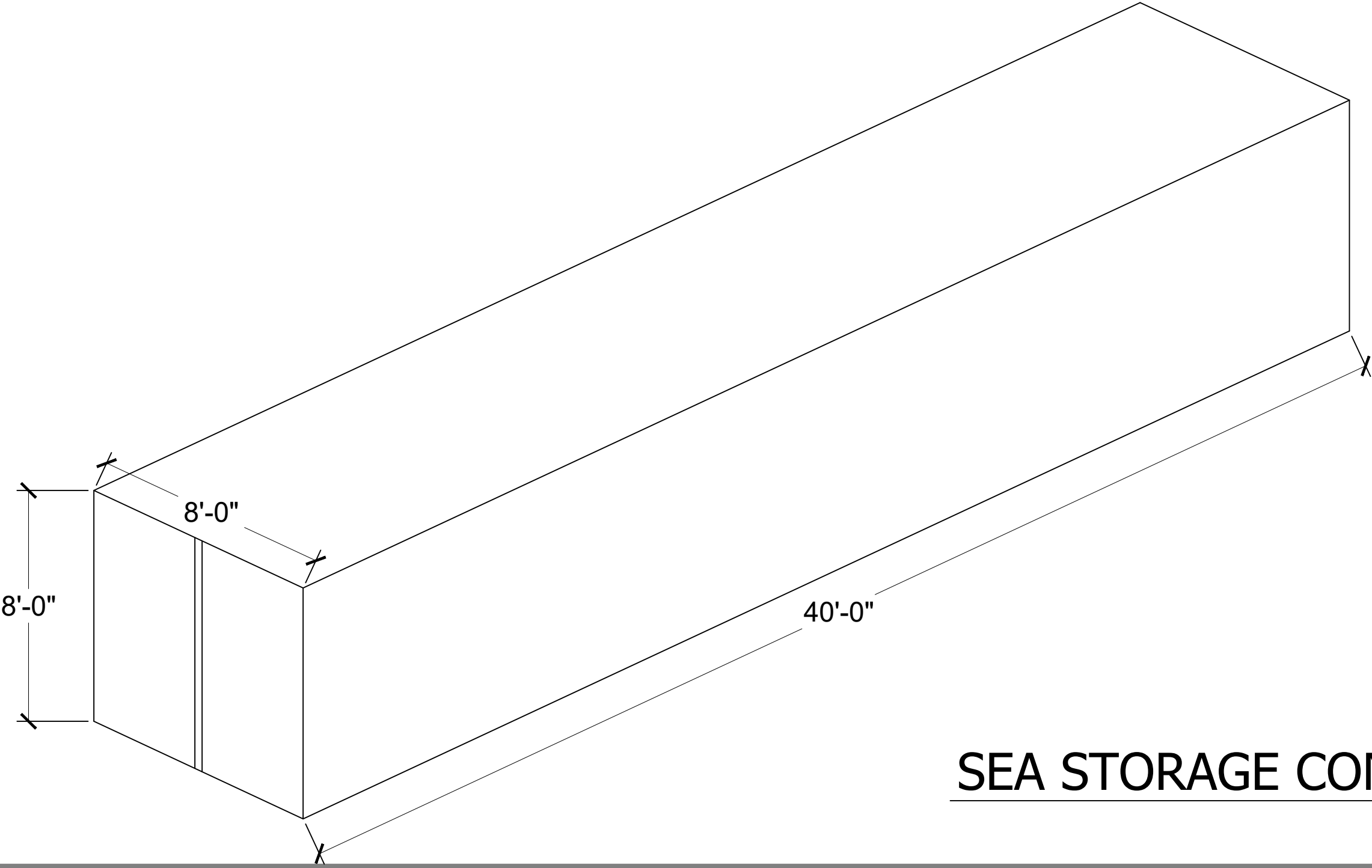
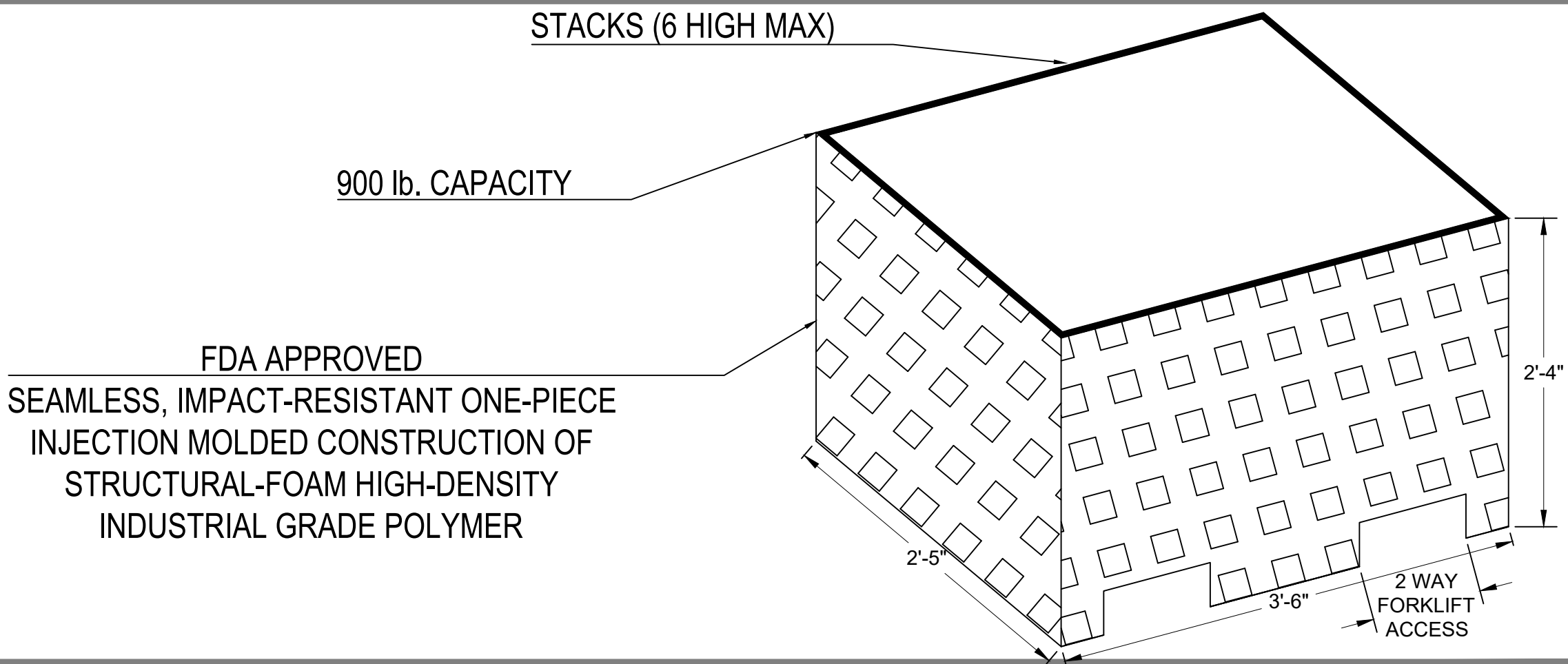
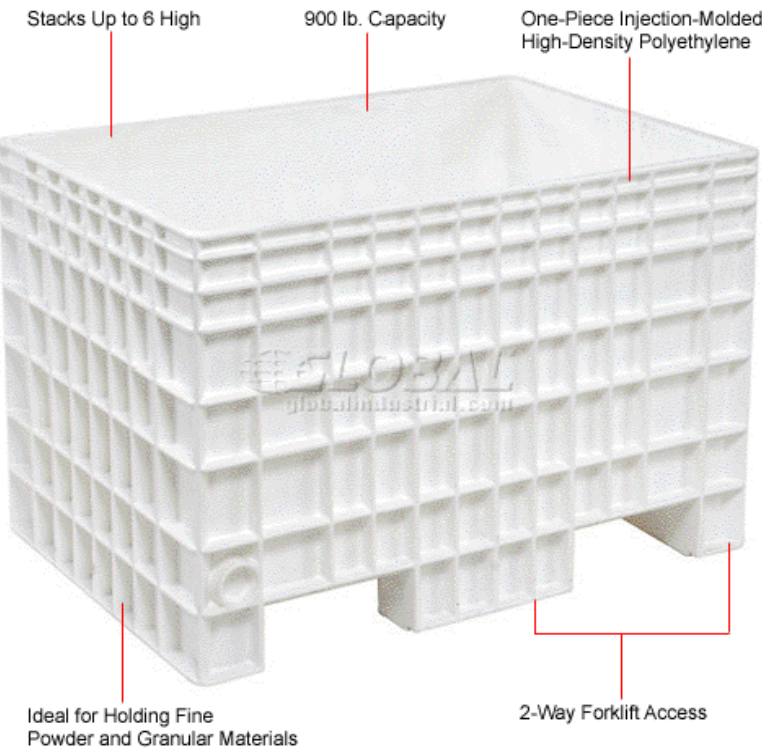
CONTAINER FLOOR PLANS

SCALE: 1/4" = 1'-0"



BULK CONTAINER DETAILS

SCALE: 1" = 1'-0"



SEA STORAGE CONTAINER DIMENSIONS

SCALE: 1/4" = 1'-0"

PROJECT:

DRAWN BY: GA

DATE: 8/20/18

SHEET NUMBER:

FQ-102

6860 LOVR

6860 LOS OSOS VALLEY RD  
SAN LUIS OBISPO, CA 93405



DATASHEETS

Odor Control and Air Handling Systems

The proposed greenhouse ventilation and air treatment system will provide internal pressurized air conditioning, temperature control and extensive air filtration odor control. The primary system utilizes a dynamic, polarized media air-cleaning component installed on the air intake side. An atomized water mist evaporates and will release an odor-neutralizing component into the air to eliminate odors. This works in conjunction with an activated carbon filtration system installed in the duct system on the air exhaust side of the system at an individual scale. Dynamic air cleaners are used due to their ability to remove harmful spores and bacteria, as well. This type system is best suited for the required odor removal, affect a high plant yield and quality, and lessen the overall maintenance of the system.

This dynamic, low static pressure air cleaner system offers efficient passive filters, which, in turn, are more energy efficient. The advantage is primarily due to the ability to eliminate the traditional large scale, pellet-based carbon systems and improve upon the resistance to airflow for lower energy consumption. Additionally, the ACM systems due not shed carbon dust therefore no additional filtration is required downstream to further restrict airflow. Most importantly, for agricultural operation, the ceramic carbon does not absorb moisture to load prematurely in humid or wet conditions making it more efficient. This system has a number of other benefits: it reduces foreign contaminants, reduces costs from CO2 and energy, and avoids crop contamination.

Additionally, in conjunction to the dynamic system, smaller type units, or carbon filtered wall exhaust/supply fans may also be used to compliment the main system and to provide individual, or specific ventilation treatment and conditioning to any single green house that would require an elevated air flow or more extensive filtration without involving the entire greenhouse complex. During different levels of propagation, odor levels can fluctuate and be more intense then at other levels, therefore, this applied method is both efficient and relative to crop development. These smaller type units utilize an absorbent carbon filter for odor removal and energy efficiency.

This system will be employed in all interior greenhouse cultivation areas. The system will be monitored for air-quality with a consistent maintenance program to insure efficiency and air quality are kept at an acceptable and compliant level of operation.



For precise control of gas phase contaminants without the energy penalty



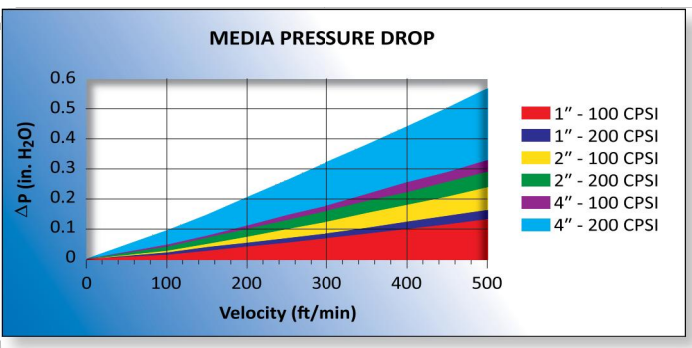
Activated carbon filtration systems have been used for decades in critical applications for the removal of harmful odors and chemical gases. Carbon works through a process called adsorption – the deposition of a gas on solid. Because of its molecular structure, Carbon is an excellent natural adsorber. For this reason, hospitals, museums, and clean manufacturing facilities all rely on the power of activated carbon to capture contaminants.

**Featuring Versacomb™ Technology.** Versacomb carbon matrix material was developed using advanced composites and extrusion technologies to increase carbon utilization. The patented, revolutionary design utilizes an activated carbon/ceramic honeycomb matrix that features unrestricted air channels to provide a pathway for air to flow with low resistance. Because the carbon and ceramic are baked for long periods at extremely high temperature, they are tightly bound together, eliminating dust shedding and the need for downstream filters. Today, Dynamic Carbon Matrix is a perfect solution for a wide range of applications. Dynamic Carbon Matrix systems require less space, operate with a very low pressure drop and require no post filters, enabling Dynamic Carbon Matrix to be used today in a variety of applications where carbon filtration was previously not an option.



State of the art carbon technology eliminates unwanted odors, removes corrosive gases, removes target contaminants, and supplies purified air more efficiently.

In composition, the material is composed of a carbon/ceramic mixture that is extruded and then baked to produce parts a variable number of channels (cells) through which air can pass. The cells per square inch (CPSI) can vary from 16 to 400 although the weight percent of the carbon is kept constant.



Dynamic Carbon Matrix can be used in:

- Specialty Applications: such as museums, hospitals, labs, manufacturing, embassies.
- Problem Applications: to address issues such as entrainment of kitchen fumes or engine exhaust fumes.
- General Applications: cleaning the air of gas phase contaminants in commercial buildings or for reduced outdoor air applications.
- Industrial Applications: including pulp and paper, petrochemical plants and refineries, as well as municipal and private wastewater treatment plants.



Outstanding Performance:

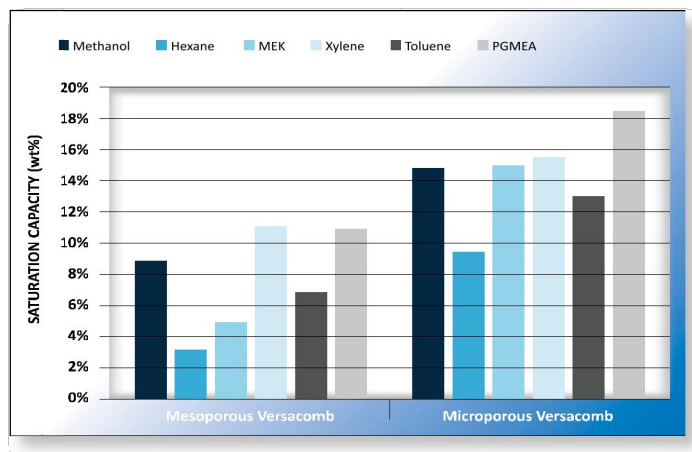
Carbon effectiveness and longevity are functions of weight and contact time. More weight means more capacity for odor removal and a longer service life. One gram of activated carbon has 10,000 square feet of internal surface area. One pound of activated carbon has a surface area equal to about 125 acres. Based on the contaminants of concern and their concentration levels, the media life for Dynamic Carbon Matrix is predictable. In addition, the media can be engineered on a job-by-job basis to meet specific performance requirements such as static pressure drop, maximum face velocity and residence time. Common target contaminants include Hydrogen Sulfide, Chlorine, Sulfur Dioxide, Chlorine Dioxide and other acid gases and odors.

Physical Properties

- Density – 26.6 lb/ft³
- Crush Strength – 300 psi minimum
- Dust-free under normal operation

Removal Capacity

- Hydrogen Sulfide – 40% by weight
- Sulfur Dioxide – 15% by weight
- Xylene – 13% by weight
- Toluene – 9% by weight



Dynamic Carbon Matrix is available in various types of carbon material for different applications:

Gases Controlled	Untreated Mesoporous	KI Mesoporous	Untreated Microporous	KI Microporous	A Mesoporous
Diesel Fumes Vehicle Exhaust Ozone VOCs Hydrocarbons Tobacco Odor	Hydrogen Sulfide Sulfur Dioxide Carbonyl Sulfide Chlorine Sulfides Xylene Toluene Mercaptans	Cooking Odors Food Odors Diesel Fumes Vehicle Exhaust Ozone VOCs Hydrocarbons Tobacco Odor	Chinese Drywall Hydrogen Sulfide Sulfur Dioxide Carbonyl Sulfide Chlorine Sulfides Xylene Toluene Mercaptans	Ammonia Amines	



Dynamic Carbon Matrix systems offer many advantages over pellet based systems

The most widely used commercial carbon filtration systems consist of 1"-2" deep trays filled with carbon pellets. Large arrays are typically used and air handling systems require powerful fans to overcome very high resistance to airflow. And because carbon pellet systems can shed carbon dust, downstream filters become necessary which can further restrict airflow.

Extended life pellets were introduced in the marketplace over a decade ago, and are formulated to maintain their shape and integrity for a period of four years of operation. Over time, pellets are subject to diurnal and seasonal swings in temperature and humidity, as well as constant vibrations. Granular residue will eventually plug screen material and lead to channeling in the media, which can allow untreated, contaminant laden air to enter the protected space.



Dynamic Carbon Matrix systems can be retrofitted into existing pellet cassettes (V-banks) and HVAC units and provide significant advantages including:

- Dynamic Carbon Matrix systems have up to a 60% lower pressure drop, reducing blower horsepower by up to 50% compared to pellet systems.
- Half the size and a fraction of the weight of a pellet based system.
- Easier to use and maintain because they do not require vacuum trucks, pellet handling or confined space entry that is associated with media change out.
- Dynamic Carbon Matrix systems have significantly smaller footprints and much lower weights, making installation easier and less costly than traditional pellet systems.
- Fast and effective contact at velocities up to six times greater than traditional pelletized carbon beds.
- Unlike pellet based systems which typically break through after about 66% utilization of the pellet media, properly rotated Dynamic Carbon Matrix systems use 100% of the media as the media modules are replaced over time.

Engineered Solutions

Dynamic Carbon Matrix systems can provide a purified air cleaning solution to prevent corrosion of valuable electronic equipment in process industries — helping reduce downtime and costly repairs. In addition, Dynamic Carbon Matrix removes odors and protects the environment from subsequent destruction of dilute solvents. Dynamic Air Quality Solutions will provide a comprehensive solution of equipment, activated carbons, service, and technical know-how. Backed by state-of-the-art research capabilities, our team of scientists and engineers understands the unique chemistry between the air we breathe and its effects on your environment.

Dynamic Air Quality Solutions  
P.O. Box 1258  
Princeton, New Jersey 08542  
(800) 578-7873, (609) 924-8524 fax  
www.DynamicAQs.com



DYN-236 (6/16)

PROJECT :

DRAWN BY: GA  
DATE: 8/20/18

SHEET NUMBER:

Z-101

6860 LOVR  
6860 LOS OSOS VALLEY RD  
SAN LUIS OBISPO, CA 93405

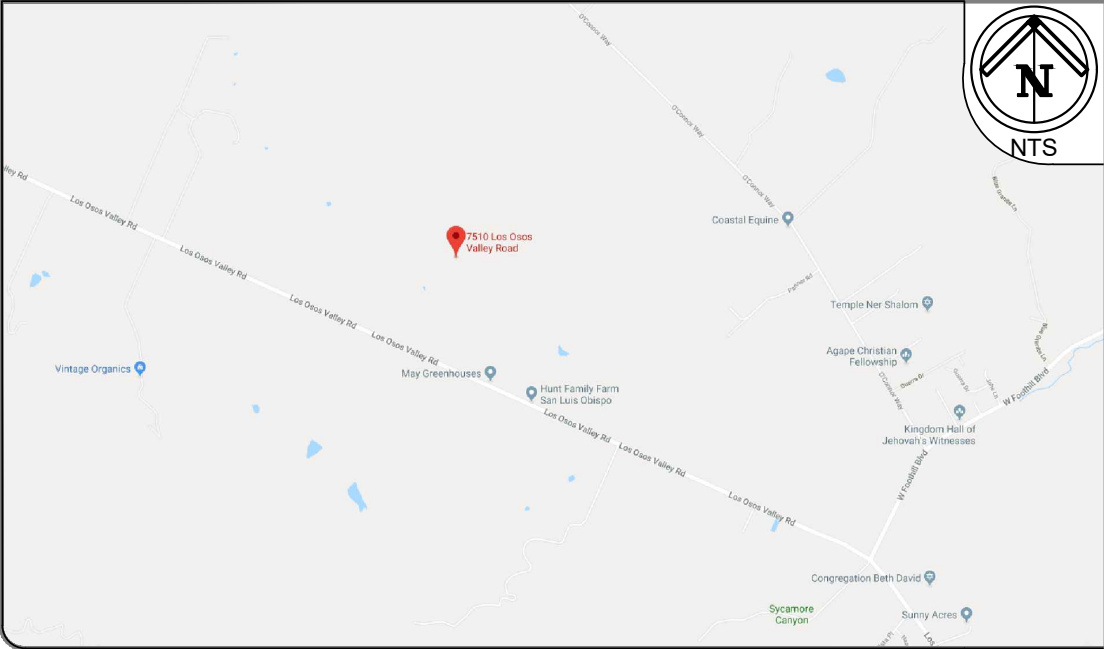


CULTIVATION

7510 LOS OSOS VALLEY RD

SAN LUIS OBISPO, CA 93405

APN: 067-061-049

VICINITY MAP	SCOPE OF WORK:	SHEET INDEX:
	3 Acres Outdoor Cultivation in Existing Hoophouses 91,200 SF Outdoor Nursery in Existing Hoophouses 38,400 SF Outdoor Drying in Existing Hoophouses 31,875 SF Indoor (Greenhouses) Cultivation 11,250 SF Indoor (Greenhouses) Nursery 320 SF Pesticide Storage 320 SF Nutrition Storage 320 SF Transportation Equipment Storage	G-001 TITLE SHEET A-001 SITE PLAN A-002 SITE PLAN DETAIL A A-003 SITE PLAN DETAIL B A-004 IRRIGATION & AGGREGATE WATTAGE PLAN DETAIL A-6.0 FLOORPLANS & RENDERERS FOR GREENHOUSE & HOOP HOUSES A-6.1 ELEVATIONS GREENHOUSE & HOOP HOUSES S-1.0 HOOP HOUSE CONSTRUCTION FABRICATION S-2.0 GREENHOUSE FOUNDATION PLAN FQ-101 HOOPHOUSE INTERIOR (WORK & EQUIPMENT CLEARANCE) FQ-102 SEA STORAGE CONTAINER FLOOR PLAN. DIESEL TANK ELEVATIONS Z-101+ DATASHEETS

CULTIVATION

7510 LOS OSOS VALLEY RD

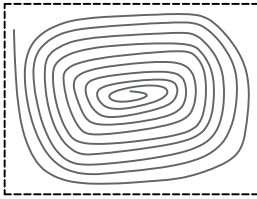
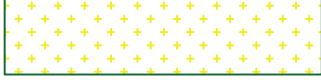
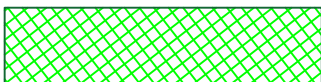
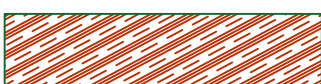

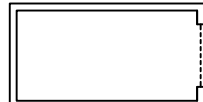
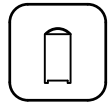



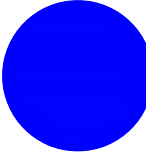


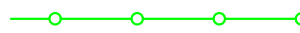

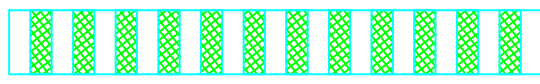
SAN LUIS OBISPO, CA 93405

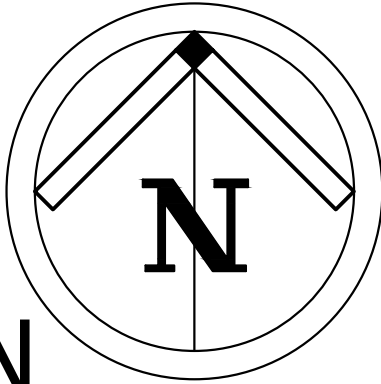
PROJECT:

DRAWN BY:	GA
DATE:	8/4/18
REV BY:	D.D
REV DATE:	10-1-2016
SHEET NUMBER:	G-001



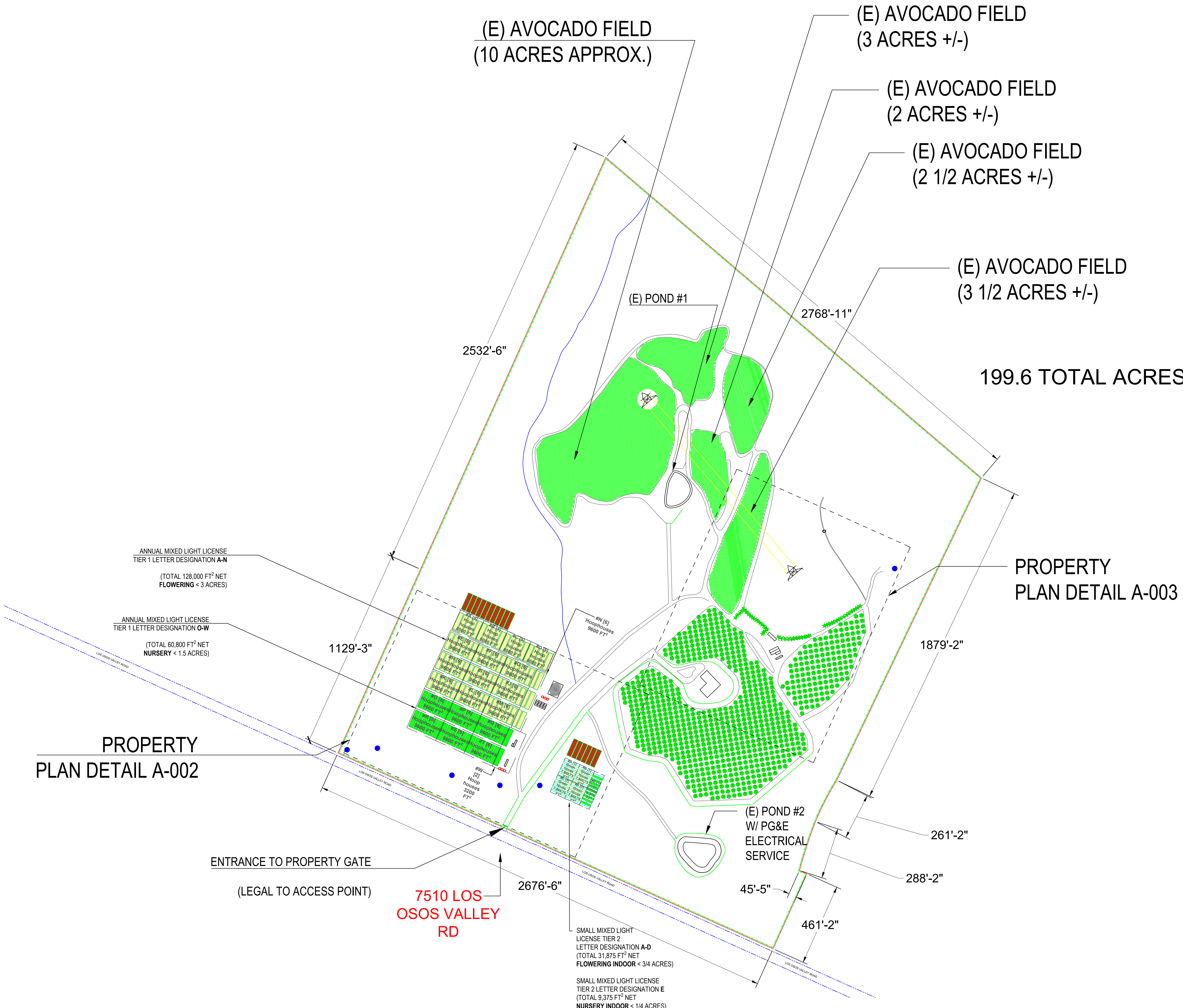
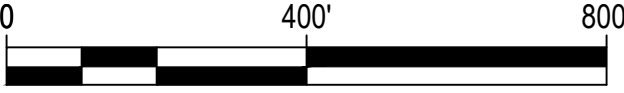
LEGEND

SYMBOL	DESCRIPTION
	SOIL STORAGE SITE
	YELLOW HOOP HOUSE BLOOMING/FLOWERING
	GREEN HOOP HOUSE VEGETATIVE PHASE
	BROWN HOOP HOUSE DRYING PHASE
	SEATRRAIN 40' CONTAINER
	DUMPSTER CONTAINER
	PORTABLE POTTY
	SECURITY CAMERA
	DIESEL 1,000 GALLON
	PG&E ELECTRICAL SERVICE
	WELL & PUMP
	WATER TANK
	NEW FENCE LINE
	EXISTING FENCE LINE (IF APPLICABLE)
	YELLOW INDOOR GREENHOUSE BLOOMING/FLOWERING
	GREEN INDOOR GREENHOUSE NURSERY/VEGETATIVE



PROPERTY PLAN

SCALE: 1/256" = 1'-0"



CULTIVATION  
7510 LOS OSOS VALLEY RD  
SAN LUIS OBISPO, CA 93405

PROJECT:

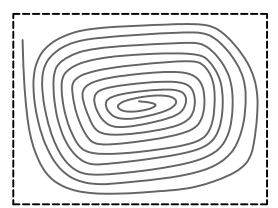

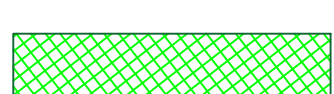
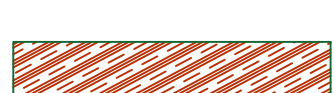
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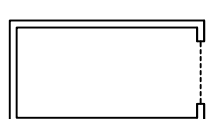
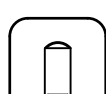

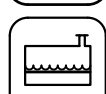
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**A-001**


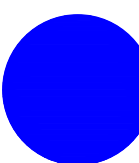


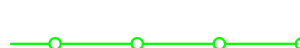



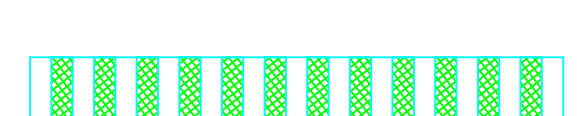
LEGEND

SYMBOL DESCRIPTION

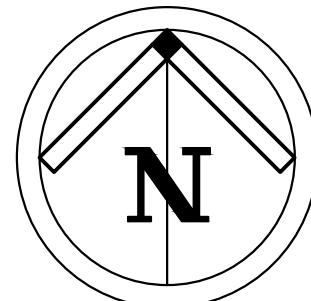
- SOIL STORAGE SITE
- YELLOW HOOP HOUSE  
BLOOMING/FLOWERING
- GREEN HOOP HOUSE  
VEGETATIVE PHASE
- BROWN HOOP HOUSE  
DRYING PHASE

- SEATRIN 40' CONTAINER
- DUMPSTER CONTAINER
- PORTABLE POTTY
- SECURITY CAMERA
- DIESEL 5,000 LITER

- PG&E ELECTRICAL SERVICE
- WELL & PUMP
- WATER TANK
- NEW FENCE LINE
- EXISTING FENCE LINE

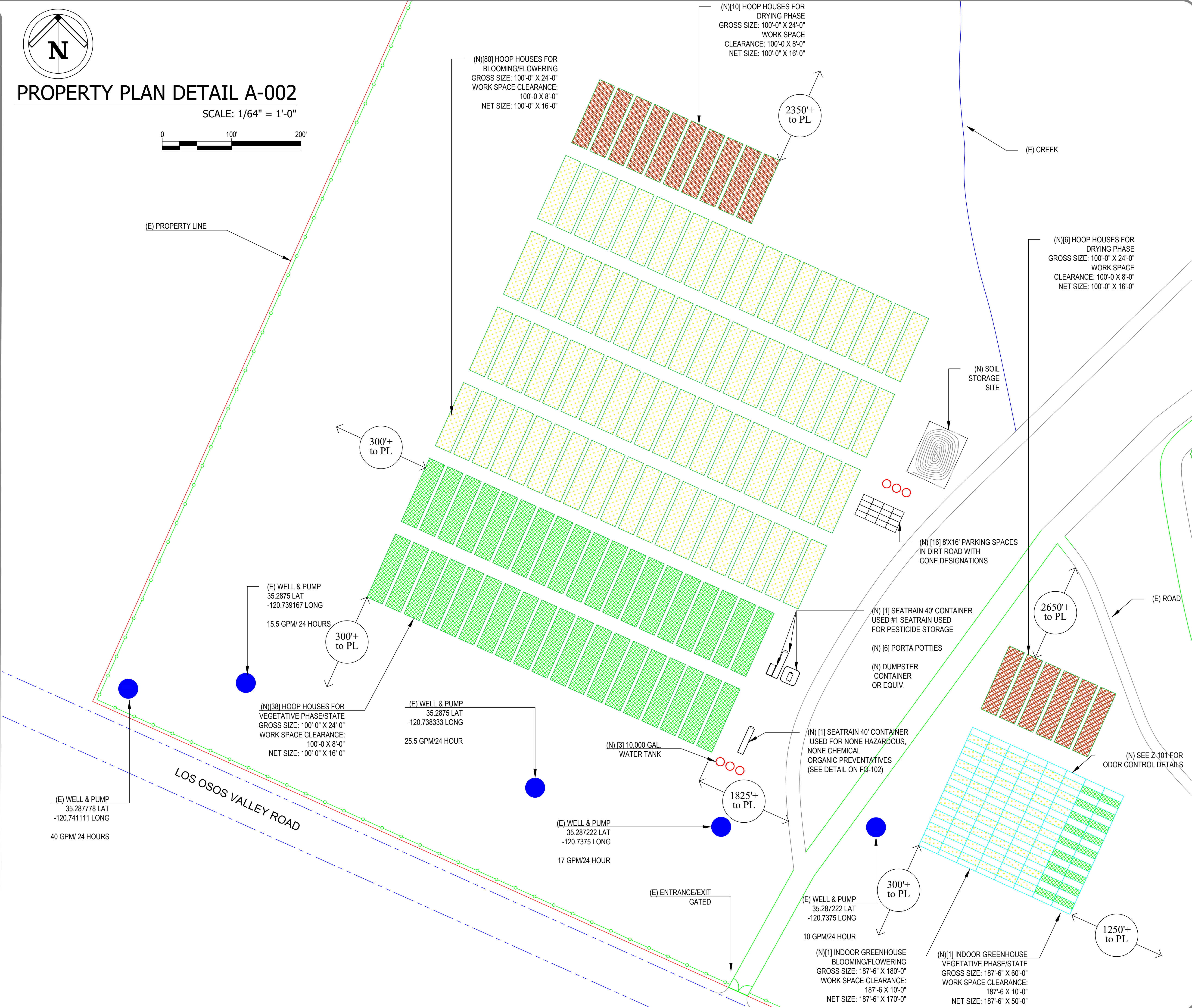
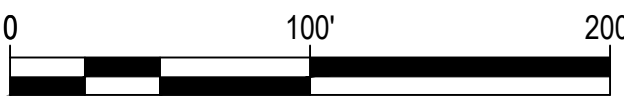
- YELLOW INDOOR  
GREENHOUSE  
BLOOMING/FLOWERING
- BROWN INDOOR  
GREENHOUSE  
VEGETATIVE PHASE

  
SECURITY & WIND BREAK 12'-0" HEIGHT FENCE  
MADE FROM POLYETHYLENE IN BLACK FOR PRIVACY  
(SEE ATTACHED SECURITY PLAN)



PROPERTY PLAN DETAIL A-002

SCALE: 1/64" = 1'-0"



CULTIVATION

7510 LOS OSOS VALLEY RD  
SAN LUIS OBISPO, CA 93405

PROJECT:

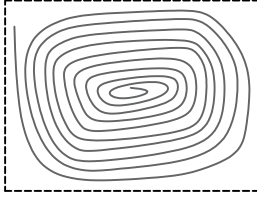

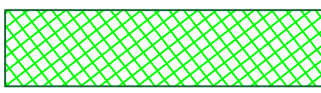
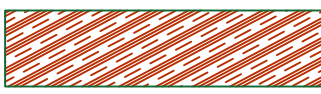
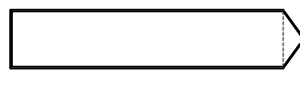




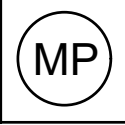
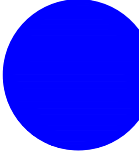


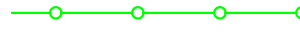


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DATE: 8/4/18

SHEET NUMBER:

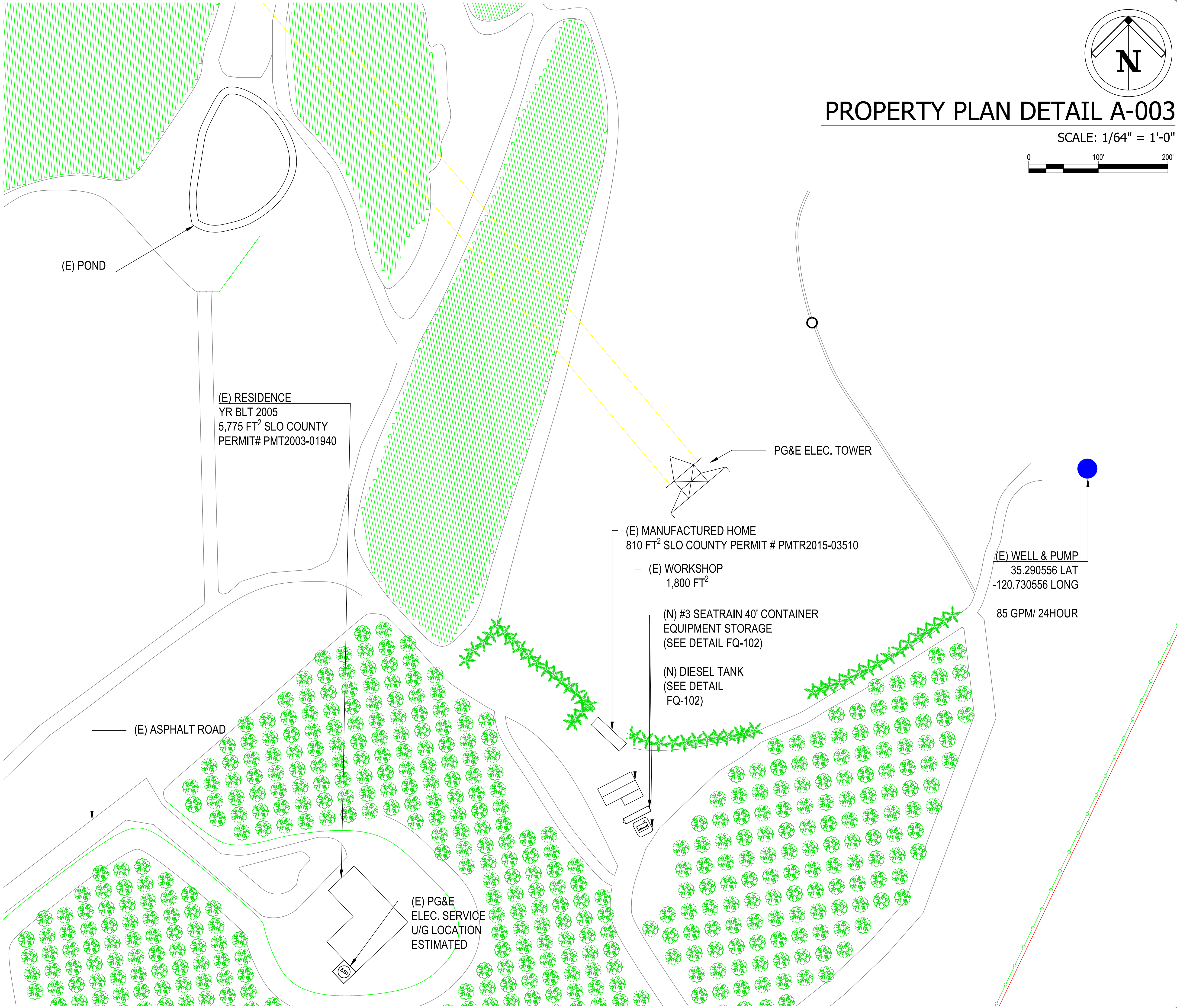
A-002



LEGEND

SYMBOL	DESCRIPTION
	SOIL STORAGE SITE
	YELLOW HOOP HOUSE BLOOMING/FLOWERING
	GREEN HOOP HOUSE VEGETATIVE PHASE
	BROWN HOOP HOUSE DRYING PHASE
	SEATRAIN 40' CONTAINER
	DUMPSTER CONTAINER
	PORTABLE POTTY
	SECURITY CAMERA
	DIESEL 5,000 LITER
	PG&E ELEC. SERVICE
	WELL & PUMP
	WATER TANK
	NEW FENCE LINE
	EXISTING FENCE LINE
	YELLOW INDOOR GREENHOUSE BLOOMING/FLOWER
	BROWN INDOOR GREENHOUSE DRYING

Note: (E) denotes Existing  
(N) denotes New



CULTIVATION

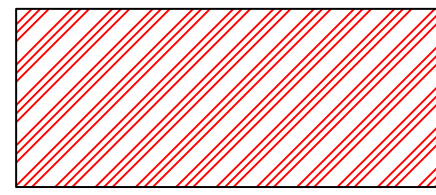
7510 LOS OSOS VALLEY RD  
SAN LUIS OBISPO, CA 93405

PROJECT:

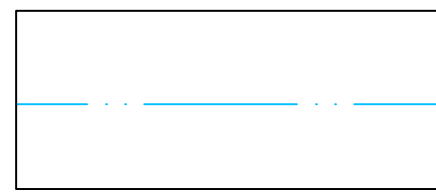
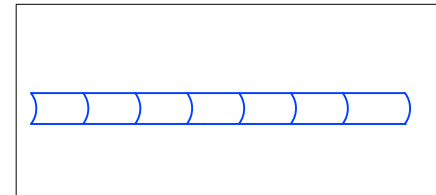
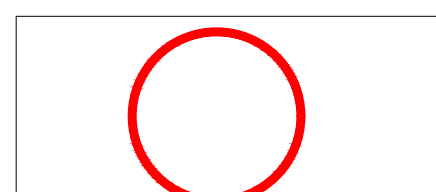
DRAWN BY: GA  
DATE: 8/4/18  
SHEET NUMBER:  
**A-003**



EQUIPMENT LEGEND  
WATTAGE

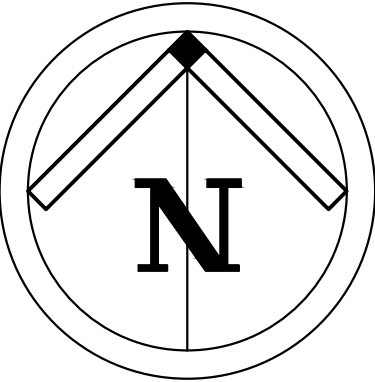
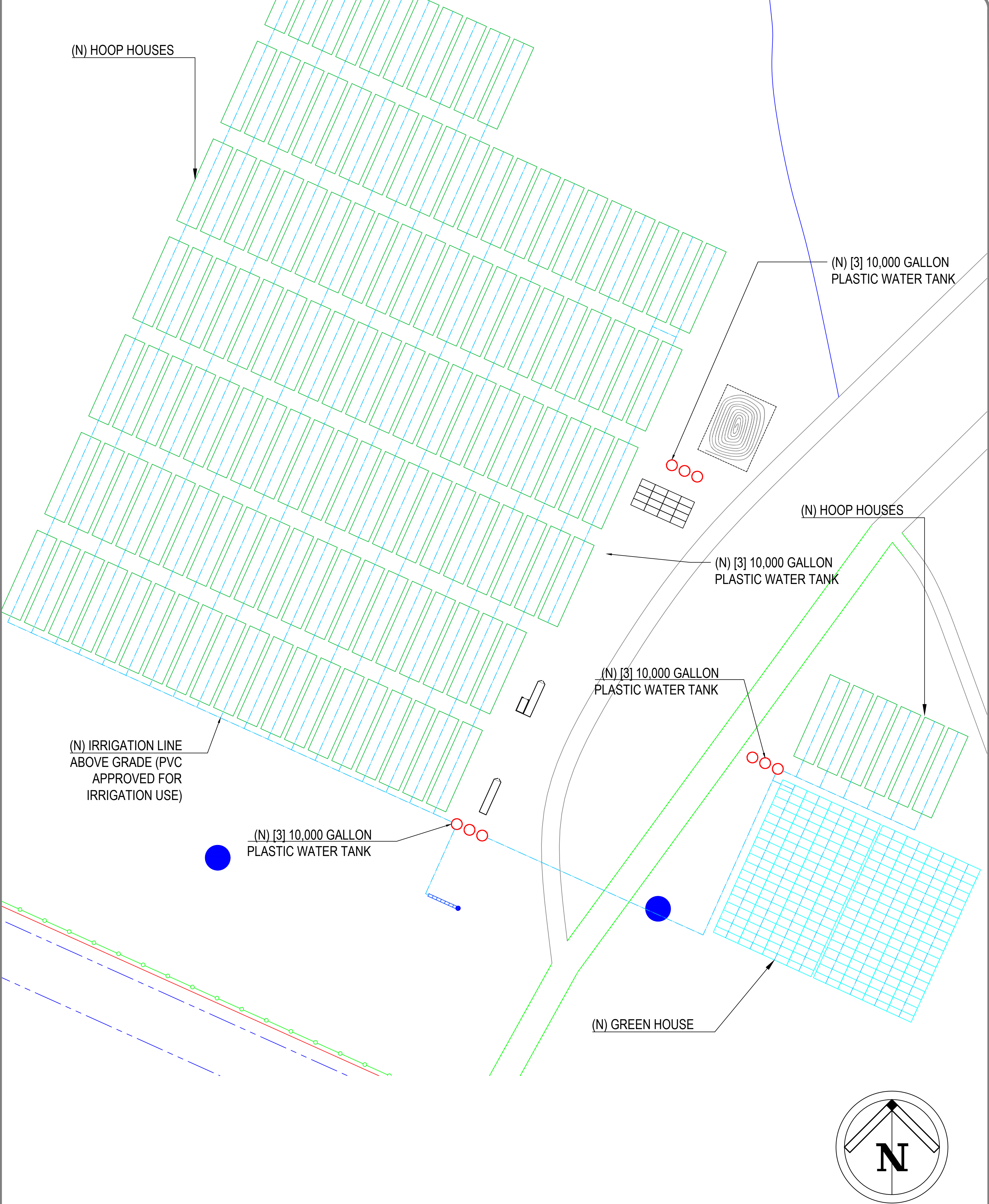
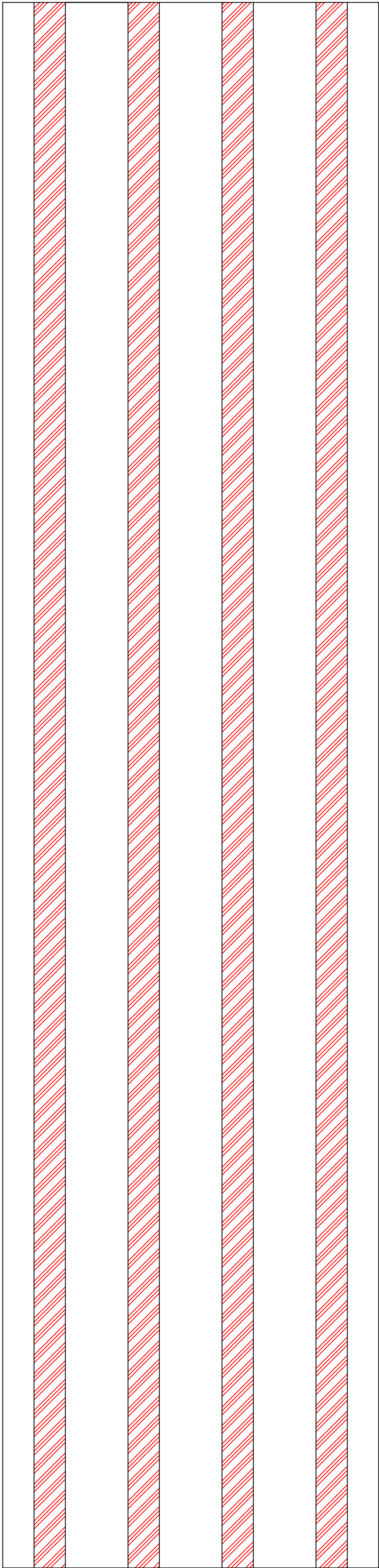
SYMBOL	DESCRIPTION
	EQUIPMENT & WALKWAY ACCESS

EQUIPMENT LEGEND  
IRRIGATION

SYMBOL	DESCRIPTION
	IRRIGATION LINE
	WELL & EXTERIOR PUMP
	10,000 GALLON WATER TANK-PLASTIC

HOOP HOUSE DETAIL

SCALE: 3/16" = 1'-0"



IRRIGATION PLAN DETAIL A-004

SCALE: 1/64" = 1'-0"

CULTIVATION  
7510 LOS OSOS VALLEY RD  
SAN LUIS OBISPO, CA 93405

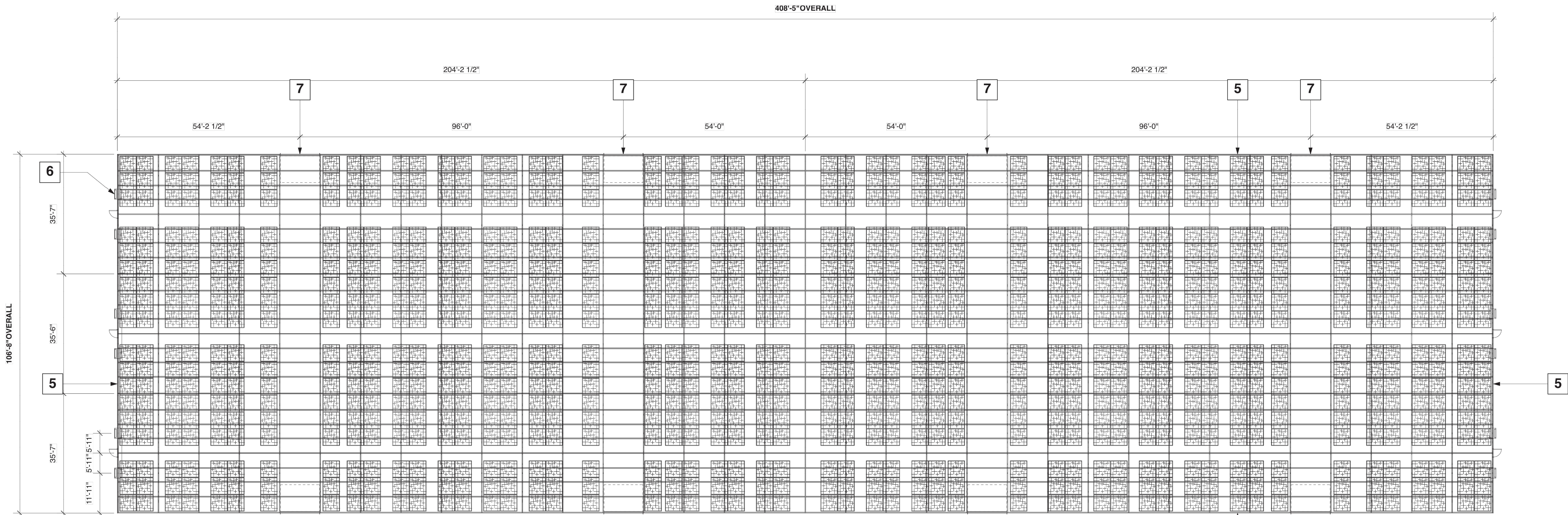
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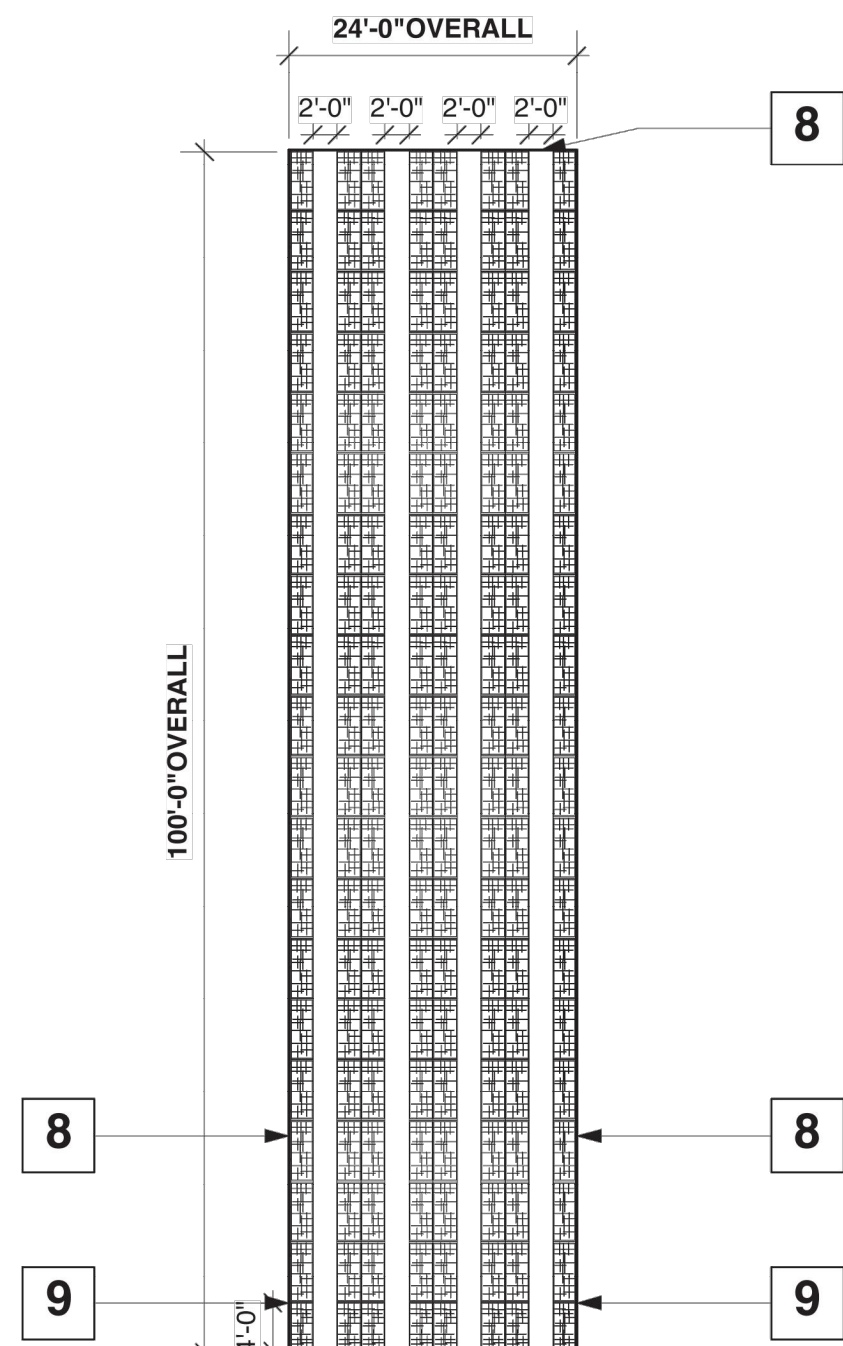
SHEET NUMBER:

A-004





1 LOS OSOS SITE #2 FLOORPLAN  
Scale: 1/16" = 1'-0"



2 HOOP HOUSE FLOORPLAN  
Scale: 1/16" = 1'-0"

REFERENCE NOTES:	
1	2" S.Q. STEEL PURLINS
2	3" S.Q. STEEL COLUMN
3	TENZALOY COLUMN CAP
4	8MM CLEAR POLYCARBONATE TWINWALL
5	ALUMINUM WALL
6	INTAKE SHUTTERS
7	GARADGE DOOR
8	GREENHOUSE FILM
9	14-GUAGE 1.66" O.D. PIPE

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LICENSED ARCHITECT

ROBERT B. BIRD

C 13651

11-30-18

EXPIRATION

STATE OF CALIFORNIA

LOS OSOS SITE #1

7510 LOS OSOS VALLEY RD

SAN LUIS OBISPO, CA 93405

APN: 067-061-049

FLOORPLANS

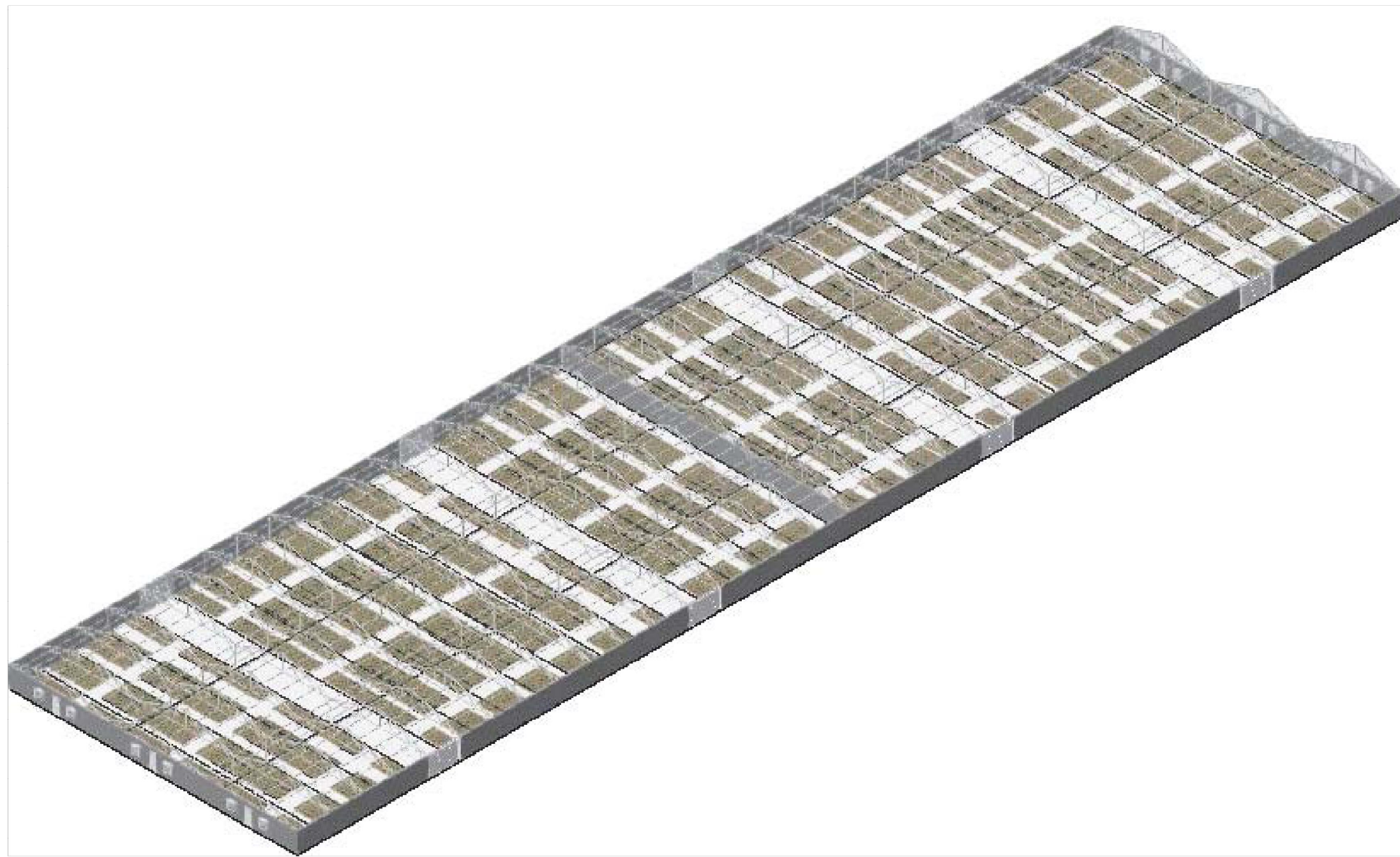
AND RENDERS

18 MAY 2018

A-6.0

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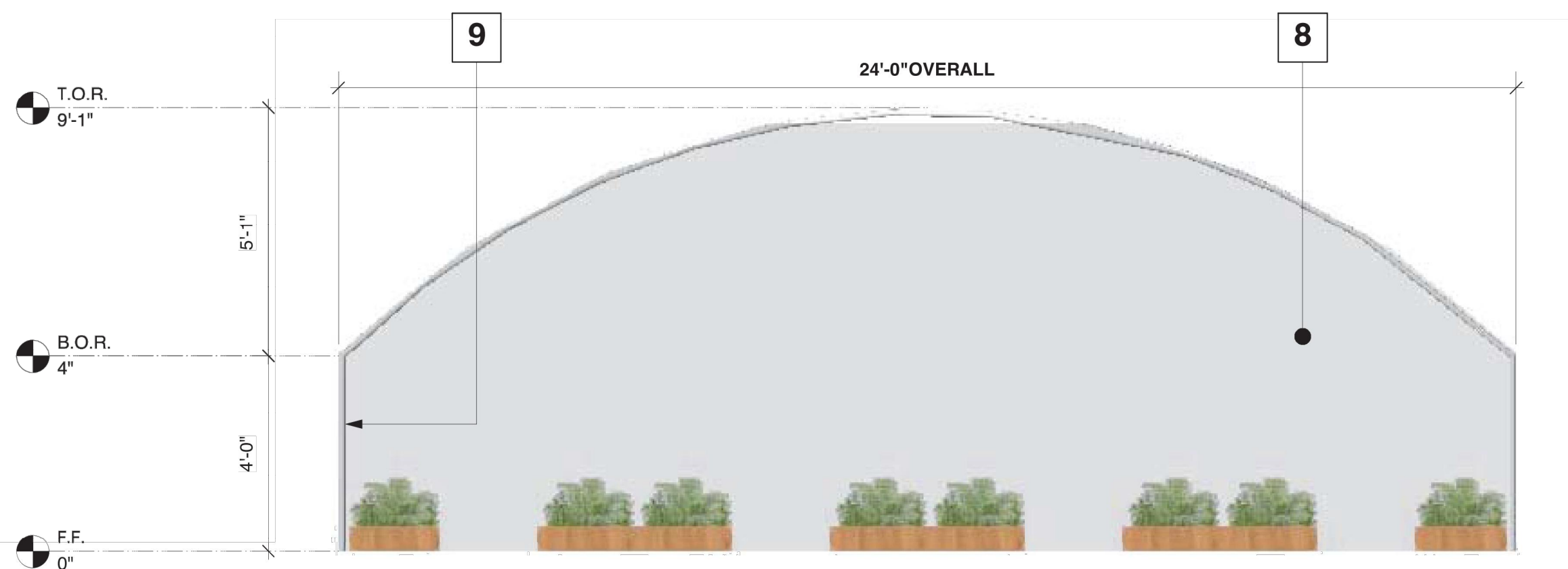




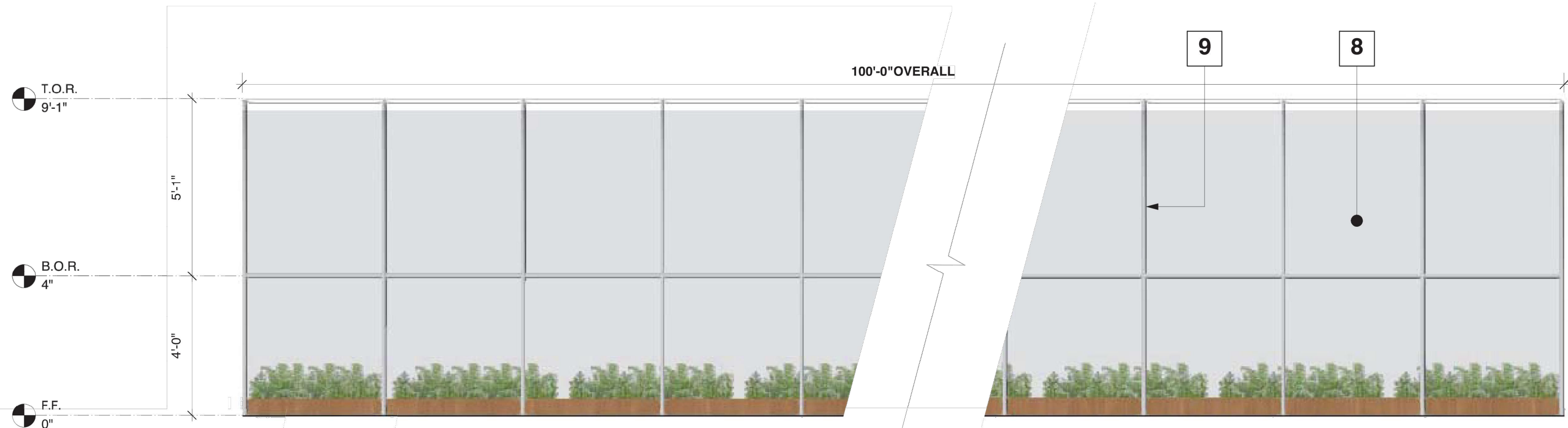
1 LOS OSOS SITE #2 INDOOR GROW  
Scale: 1/32" = 1'-0"



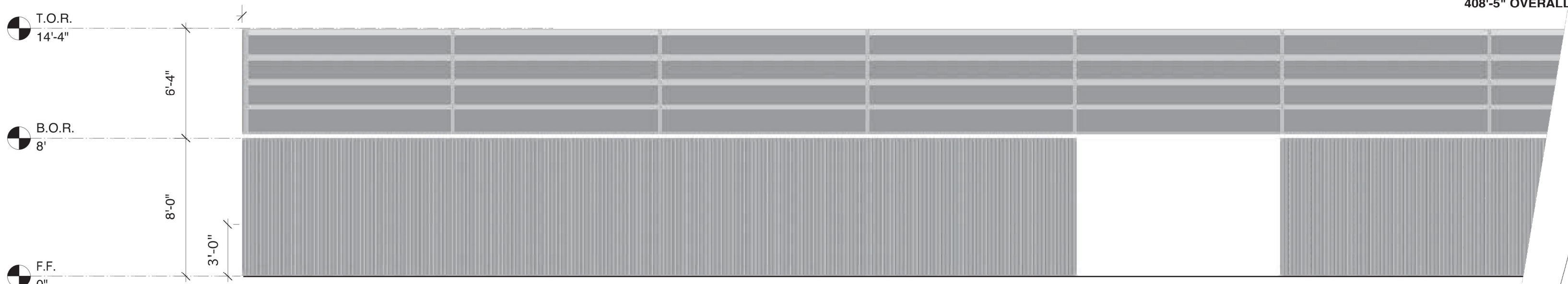
2 STANDARD HOOP HOUSE  
Scale: 1/8" = 1'-0"



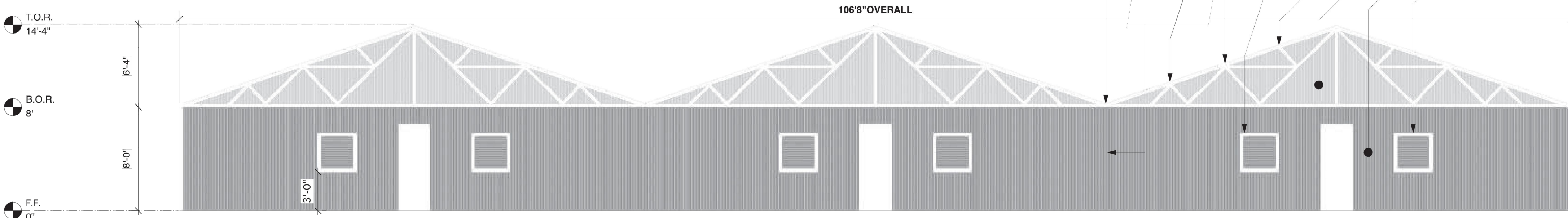
3 HOOP HOUSE SOUTH ELEVATION  
Scale: 3/8" = 1'-0"



4 HOOP HOUSE EAST ELEVATION  
Scale: 3/8" = 1'-0"



5 LOS OSOS SITE #2 EAST ELEVATION  
Scale: 3/16" = 1'-0"



6 LOS OSOS SITE #2 SOUTH ELEVATION  
Scale: 3/16" = 1'-0"

REFERENCE NOTES:

- |   |                                  |
|---|----------------------------------|
| 1 | 2" S.G. STEEL PURLINS            |
| 2 | 3" S.G. STEEL COLUMN             |
| 3 | TENZALOY COLUMN CAP              |
| 4 | 8MM CLEAR POLYCARBONATE TWINWALL |
| 5 | ALUMINUM WALL                    |
| 6 | INTAKE SHUTTERS                  |
| 7 | GARADGE DOOR                     |
| 8 | GREENHOUSE FILM                  |
| 9 | 14-GUAGE 1.66" O.D. PIPE         |



CONSTRUCTION WASTE MANAGEMENT. RECYCLE AND/OR SALVAGE FOR REUSE A MINIMUM OF 65% OF THE NONHAZARDOUS CONSTRUCTION AND DEMOLITION WASTE IN ACCORDANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS CODE CHAPTER 4 DIVISION 4.4 **PER 2016 CRC**

**CODES: ALL CONSTRUCTION SHALL CONFORM TO THE FOLLOWING CODES:**

- 2016 CALIFORNIA BUILDING CODE (**CBC**), BASED ON THE 2015 **IBC**
- 2016 CALIFORNIA RESIDENTIAL CODE (**IRC**), BASED ON THE 2015 **IRC**
- 2016 CALIFORNIA MECHANICAL CODE (**CMC**), BASED ON THE 2015 **UMC**
- 2016 CALIFORNIA PLUMBING CODE (**CPC**), BASED ON THE 2015 **UPC**
- 2016 CALIFORNIA ELECTRICAL CODE (**CEC**), BASED ON THE 2014 **NEC**
- 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE
- 2016 CALIFORNIA ENERGY CODE
- 2016 CALIFORNIA RESIDENTIAL ENERGY STANDARDS
- 2016 CALIFORNIA GREEN BUILDING CODE (**CGBC**)
- 2016 CALIFORNIA FIRE CODE (**CFC**), BASED ON THE 2015 **IFC**
- NFPA NATIONAL FIRE CODE

**-PROJECT CONDITIONS OF APPROVAL**

- COUNTY OF SAN LUIS OBISPO STANDARD CONDITIONS, AMENDMENTS AND SELECTED CODE REQUIREMENTS ON FILE AT THE COMMUNITY DEVELOPMENT DEPARTMENT, PLANNING AND BUILDING DIVISION
- ALL OTHER CODES AND ORDINANCES ADOPTED BY THE COUNTY OF SAN LUIS OBISPO AGENCIES HAVING JURISDICTION OVER THIS PROJECT

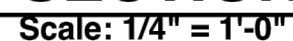
THIS PROJECT HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE COUNTY OF SAN LUIS OBISPO ADOPTED CODE AND ORDINANCE REQUIREMENTS INCLUDING, BUT NOT LIMITED TO THE CALIFORNIA STATE ACCESSIBILITY STANDARDS AND I/WE WILL BE RESPONSIBLE FOR ALL CLARIFICATIONS DEEMED NECESSARY DURING THE CONSTRUCTION PHASES.

THIS PROJECT SHALL COMPLY WITH TITLE 24 AND 2016 CALIFORNIA BUILDING CODE (CBC), CALIFORNIA MECHANICAL CODE (CMC), CALIFORNIA PLUMBING CODE (CPC), CALIFORNIA ELECTRICAL CODE (CEC), AND CALIFORNIA ENERGY CODE (CEnc).

EROSION CONTROL MEASURES SHALL BE IMPLEMENTED AND MAINTAINED DURING ALL CONSTRUCTION AND GROUND DISTURBING ACTIVITIES PER THE COUNTY OF SAN LUIS OBISPO STANDARDS.

EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES MUST BE IN PLACE AND FUNCTIONAL PRIOR TO THE FIRST INSPECTION. NO INSPECTIONS CAN BE PERFORMED IF THEY ARE NOT IN PLACE OR HAVE FAILED TO PROVIDE EROSION CONTROL. FAILURE TO MAINTAIN EROSION CONTROL WILL CAUSE INSPECTIONS TO BE DELAYED UNTIL EROSION CONTROL MEASURES ARE FUNCTIONAL.

**NOTE: SUBJECT TO CHANGE AS PROJECT CONSTRUCTION PROGRESSES  
AND GENERAL CONTRACTOR TAKES ON RESPONSIBILITY**





CONSTRUCTION WASTE MANAGEMENT. RECYCLE AND/OR SALVAGE FOR REUSE A MINIMUM OF 65% OF THE NONHAZARDOUS CONSTRUCTION AND DEMOLITION WASTE IN ACCORDANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS CODE CHAPTER 4 DIVISION 4.4 **PER 2016 CRC**

**CODES:** ALL CONSTRUCTION SHALL CONFORM TO THE FOLLOWING CODES:

- 2016 CALIFORNIA BUILDING CODE (**CBC**), BASED ON THE **2015 IBC**
- 2016 CALIFORNIA RESIDENTIAL CODE (**CR**C), BASED ON THE **2015 IRC**
- 2016 CALIFORNIA MECHANICAL CODE (**CMC**), BASED ON THE **2015 UMC**
- 2016 CALIFORNIA PLUMBING CODE (**CP**C), BASED ON THE **2015 UPC**
- 2016 CALIFORNIA ELECTRICAL CODE (**CEC**), BASED ON THE **2014 NEC**
- 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE
- 2016 CALIFORNIA ENERGY CODE
- 2016 CALIFORNIA RESIDENTIAL ENERGY STANDARDS
- 2016 CALIFORNIA GREEN BUILDING CODE (**CGBC**)
- 2016 CALIFORNIA FIRE CODE (**CF**C), BASED ON THE **2015 IF**C
- AFRA NATIONAL FIRE CODE

**PROJECT CONDITIONS OF APPROVAL:**

**COUNTY OF SAN LUIS OBISPO STANDARD CONITIONS, AMENDMENTS AND SELECTED CODE REQUIREMENTS ON FILE AT THE COMMUNITY DEVELOPMENT DEPARTMENT, PLUMBING DIVISION**

**-ALL OTHER CODES AND ORDINANCES ADOPTED BY THE COUNTY OF SAN LUIS OBISPO AGENCIES HAVING JURISDICTION OVER THIS PROJECT**

THIS PROJECT HAS BEEN DESIGNED IN ACCORDANCE WITH AND MEETS THE COUNTY OF SAN LUIS OBISPO ADOPTED CODE AND ORDINANCE REQUIREMENTS INCLUDING, BUT NOT LIMITED TO THE CALIFORNIA STATE ACCESSIBILITY STANDARDS AND I/WE WILL BE RESPONSIBLE FOR ALL CLARIFICATIONS DEEMED NECESSARY DURING THE CONSTRUCTION PHASES.

THIS PROJECT SHALL COMPLY WITH TITLE 24 AND 2016 CALIFORNIA BUILDING CODE (CBC), CALIFORNIA MECHANICAL CODE (CMC), CALIFORNIA PLUMBING CODE (CPC), CALIFORNIA ELECTRICAL CODE (CEC), AND CALIFORNIA ENERGY CODE (CEnc).

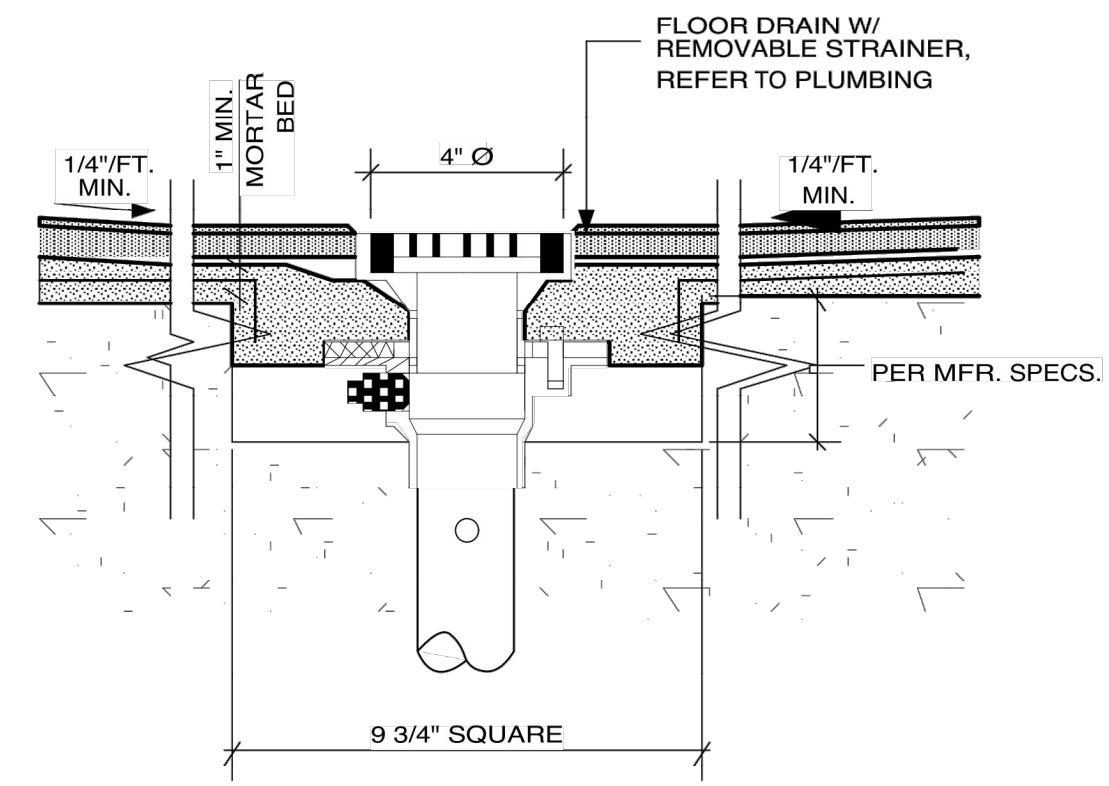
EROSION CONTROL MEASURES SHALL BE IMPLEMENTED AND MAINTAINED DURING ALL CONSTRUCTION AND GROUND DISTURBING ACTIVITIES PER THE COUNTY OF SAN LUIS OBISPO STANDARDS.

EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES MUST BE IN PLACE AND FUNCTIONAL PRIOR TO THE FIRST INSPECTION. NO INSPECTIONS CAN BE PERFORMED IF THEY ARE NOT IN PLACE OR HAVE FAILED TO PROVIDE EROSION CONTROL. FAILURE TO MAINTAIN EROSION CONTROL WILL CAUSE INSPECTIONS TO BE DELAYED UNTIL EROSION CONTROL MEASURES ARE FUNCTIONAL.

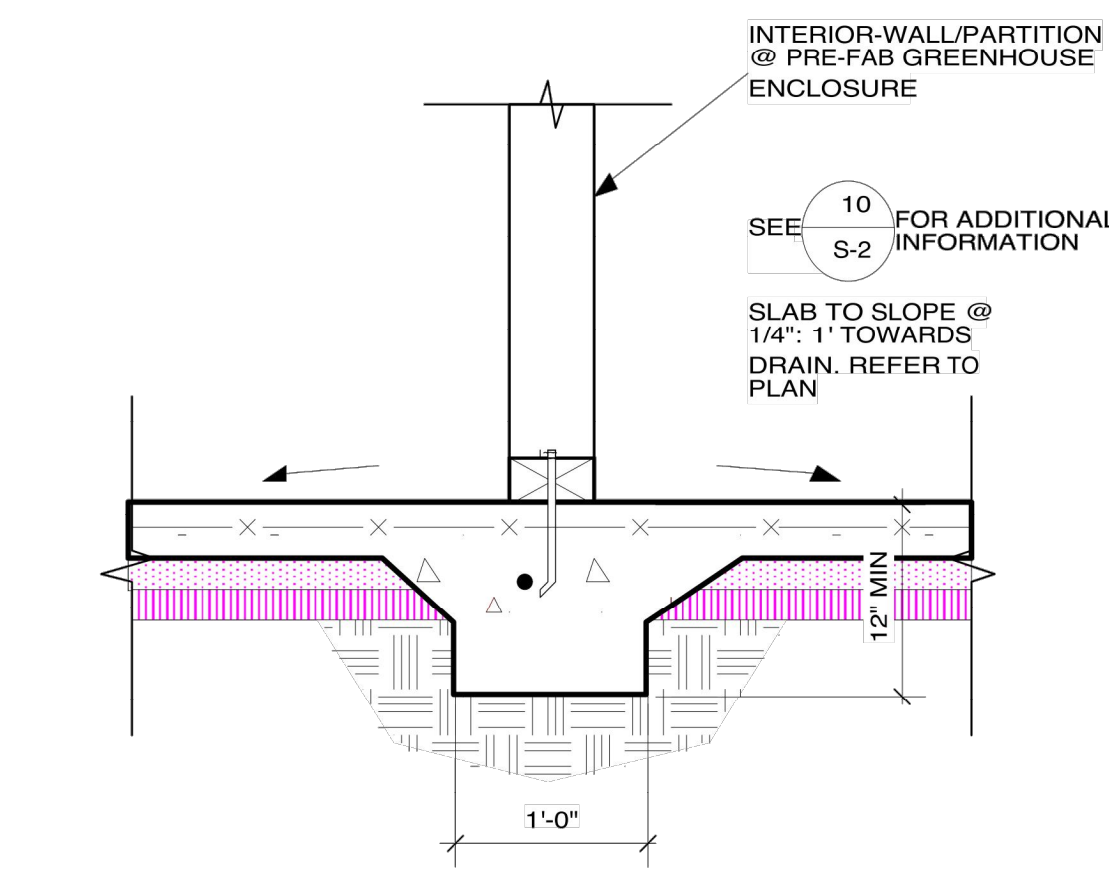
**NOTE: SUBJECT TO CHANGE AS PROJECT CONSTRUCTION PROGRESSES  
AND GENERAL CONTRACTOR TAKES ON RESPONSIBILITY**



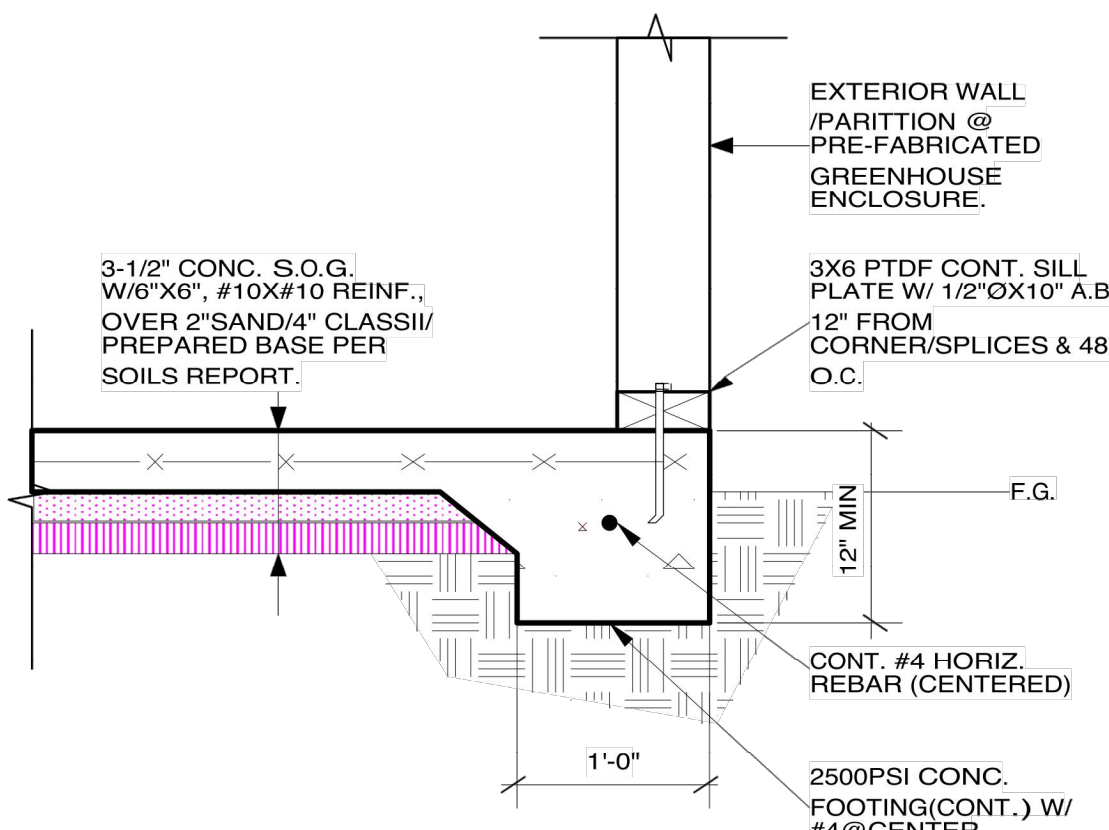
## 21



## 20



1"	11
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1"	10
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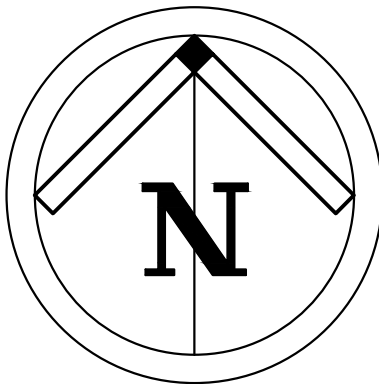


EQUIPMENT LEGEND

SYMBOL	DESCRIPTION
<div></div>	EQUIPMENT & WALKWAY ACCESS

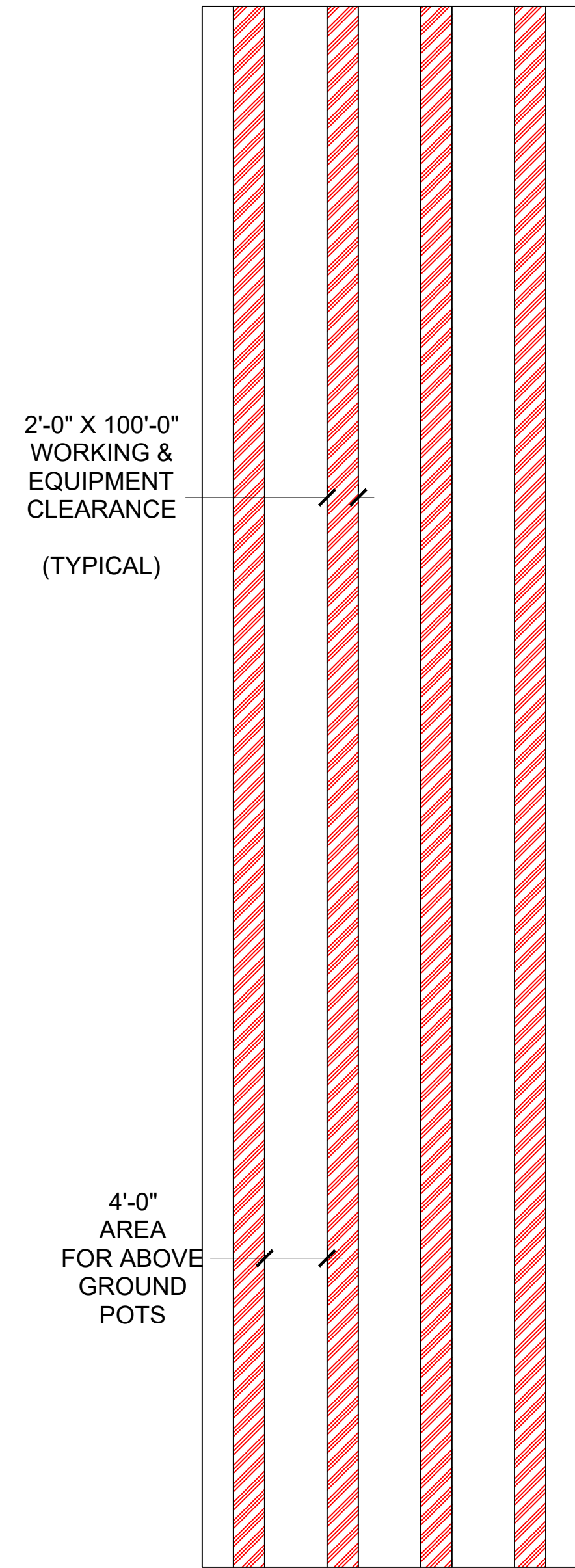
SQUARE FOOTAGE FOR FLOWERING:

HOOP HOUSE SIZE100'X24'=2400 FT<sup>2</sup>  
WALKING & EQUIP= 800 FT<sup>2</sup>  
NET SQUARE FEET= 1600 FT<sup>2</sup> GROW AREA



HOOP HOUSE INTERIOR

SCALE: 1/8" = 1'-0"



NOTE: EMAIL CONFIRMATION FROM CDFA

**From:** CDFA CalCannabis Scientists@CDFA <cdfa.CalCannabis\_Scientists@cdfa.ca.gov>  
**Sent:** Thursday, July 5, 2018 1:59 PM  
**To:** Lisa Bugrova  
**Subject:** RE: Canopy Definitions

Hello Lisa,

Yes, it is appropriate to calculate the canopy based on the net space utilized for canopy within the hoops as long as each row has clearly identifiable boundaries. Please refer to the updated definition of canopy in section 8000 of the emergency regulations found here:  
<https://static.cdfa.ca.gov/MCCP/document/060418%20CalCannabis%20Text%20of%20Proposed%20Emergency%20Regulations%20Readopt.pdf>.

TEXT OF EMERGENCY REGULATIONS - [static.cdfa.ca.gov](https://static.cdfa.ca.gov)

[static.cdfa.ca.gov](https://static.cdfa.ca.gov)

TEXT OF EMERGENCY REGULATIONS . Page 1 of 65 Changes are indicated by strikeout and underline.  
CALIFORNIA CODE OF REGULATIONS . TITLE 3. FOOD AND AGRICULTURE

ELECTRICAL LOAD EXAMPLES OF 42,000  
SQUARE FEET GREENHOUSE

43,200 sqft Greenhouse Electrical Load Estimate Spreadsheet v8

Facility-wide Electrical Load Estimates				
Lighting	Count	Voltage (V)	Current (A)	Power (kW)
HPS lights in the Flower Zone	600	277	3.77	626.6
	0			0.0
Cooling	Count	Voltage (V)	Current (A)	Power (kW)
54" 1-HP single speed 3 phase exhaust fans	40	460	1.7	31.3
24" 3/4-HP two speed exhaust fans	10	115	6.8	7.8
Evaporative pad wall pumps	4	115	11	5.1
Drive motor for roof vents in corridor (1/20 HP)	10	115	0.68	0.8
Drive motor for vent on evap pad wall	4	480	0.87	1.7
Shutters on upper gable wall	10	120	0.28	0.3
Vertical air flow fans for mixing	30	460	0.6	8.3
Fogco Odor Mitigation Pump, VFD 10.6 gal/min	1	480	12	5.8
Fogco Zone Valves	12	480	1	5.8
Heating	Count	Voltage (V)	Current (A)	Power (kW)
Unit heaters in the grow area, apx (Delta - T to supply)	0	0	0	0.0
Unit heaters in the Central Corridor, apx	2	120	2.1	0.5
Shade & Heat Curtain/ Light Dep Curtain	Count	Voltage (V)	Current (A)	Power (kW)
Drive motor for Shade Curtain	6	115	2.5	1.7
Drive motor for Blackout Curtain	6	115	2.5	1.7
CO2 Generators	Count	Voltage (V)	Current (A)	Power (kW)
CO2 Burners	10	120	1.00	1.2
Maximum coincident load: the largest load you can expect at any time				(kW or KVA) 698
				(Amps) 2541
Total of equipment minus lighting				(kW or KVA) 72
				(Amps) 279

ACREAGE CALCULATIONS

ACREAGE CALCULATIONS

TYPE	USE	SIZE <sup>FT</sup>	QUANTITY	TOTAL GROSS SIZE <sup>FT</sup>
HOOP HOUSE	FLOWERING	100'X24'	80	192,000
	WORKING CLEARANCE	100'X8'	80	64,000
^ SEE PAGE FQ101 FOR CLEARANCE				TOTAL NET <sup>FT2</sup> 128,000
				÷ <sup>FT2</sup> /ACRE 43,560
				TOTAL NET ACRE
				2.94
TYPE	USE	SIZE <sup>FT</sup>	QUANTITY	TOTAL GROSS SIZE <sup>FT</sup>
HOOP HOUSE	VEGETATIVE STATE	100'X24'	38	91,200
	WORKING CLEARANCE	100'X8'	38	30,400
^ SEE PAGE FQ101 FOR CLEARANCE				TOTAL NET <sup>FT2</sup> 60,800
				÷ <sup>FT2</sup> /ACRE 43,560
				TOTAL NET ACRE
				1.40
TYPE	USE	SIZE <sup>FT</sup>	QUANTITY	TOTAL GROSS SIZE <sup>FT</sup>
HOOP HOUSE	DRYING	100'X24'	16	38,400
	^ WORKING CLEARANCE	100'X8'	16	12,800
^ SEE PAGE FQ101 FOR CLEARANCE				TOTAL NET <sup>FT2</sup> 25,600
				÷ <sup>FT2</sup> /ACRE 43,560
				TOTAL NET ACRE
				0.59
TYPE	USE	SIZE <sup>FT</sup>	QUANTITY	TOTAL GROSS SIZE <sup>FT</sup>
INDOOR GREEN HOUSE	FLOWERING	187'-6""X180'	1	33,750
	^ WORKING CLEARANCE	187'-6""X10'	1	1,875
				TOTAL NET <sup>FT2</sup> 31,875
				÷ <sup>FT2</sup> /ACRE 43,560
				TOTAL NET ACRE
				0.73
TYPE	USE	SIZE <sup>FT</sup>	QUANTITY	TOTAL GROSS SIZE <sup>FT</sup>
INDOOR GREEN HOUSE	VEGETATIVE STATE	187'-6""X60'	1	11,250
	^ WORKING CLEARANCE	187'-6""X10'	1	1,875
				TOTAL NET <sup>FT2</sup> 9,375
				÷ <sup>FT2</sup> /ACRE 43,560
				TOTAL NET ACRE
				0.22

CULTIVATION

7510 LOS OSOS VALLEY RD  
SAN LUIS OBISPO, CA 93405

PROJECT:

DRAWN BY: GA  
DATE: 8/4/18

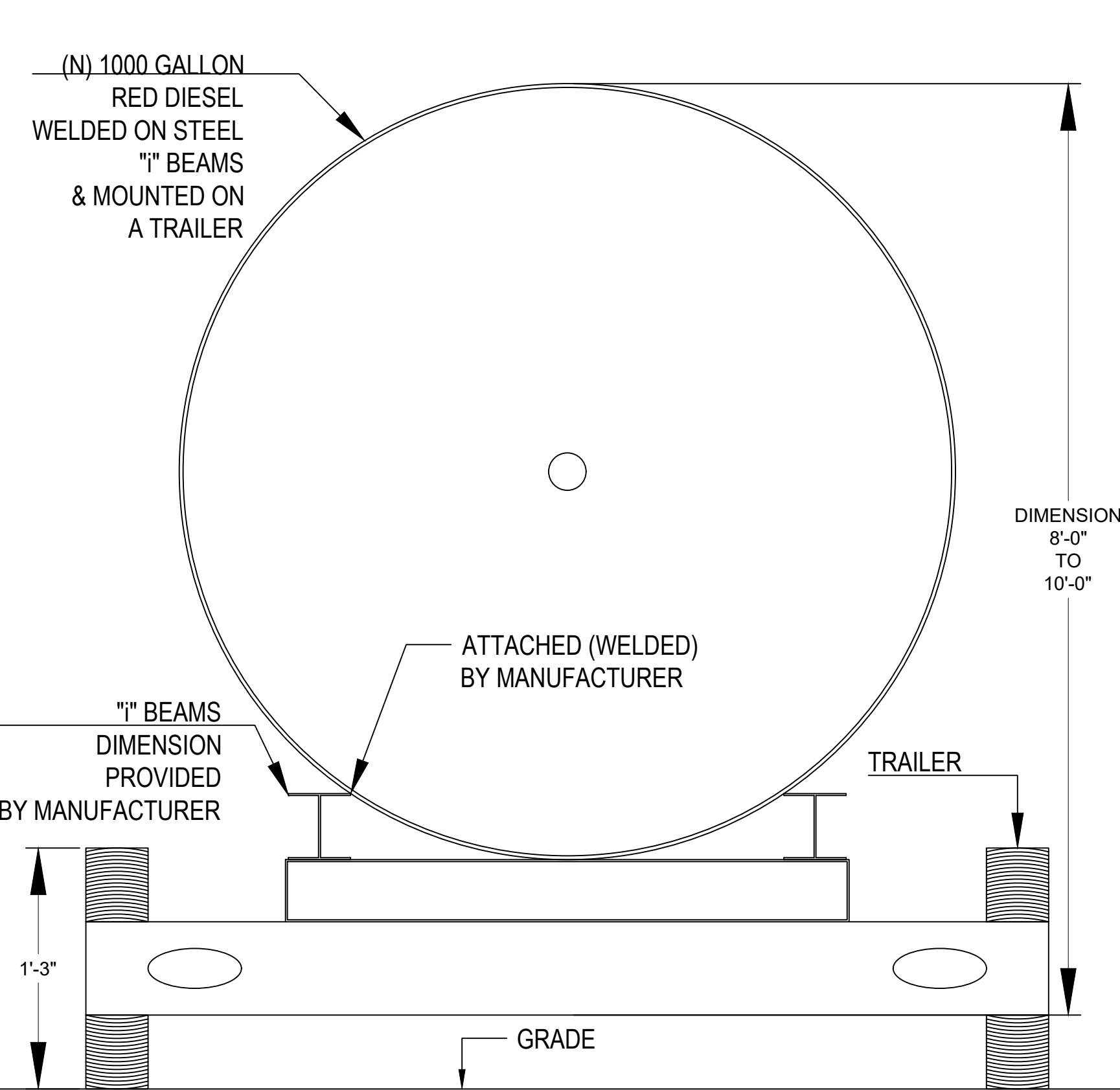
SHEET NUMBER:

FQ-101



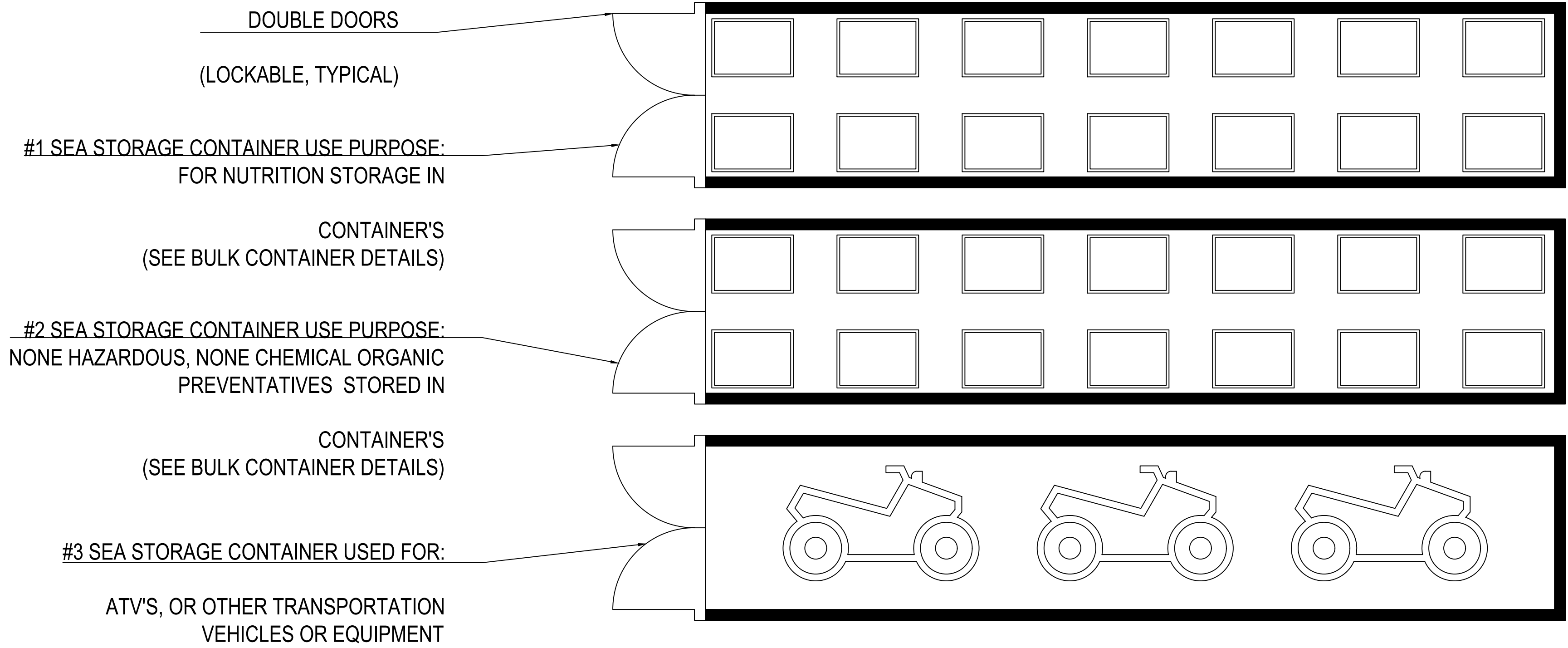
CONTAINER FLOOR PLANS

SCALE: 1 1/2" = 1'-0"



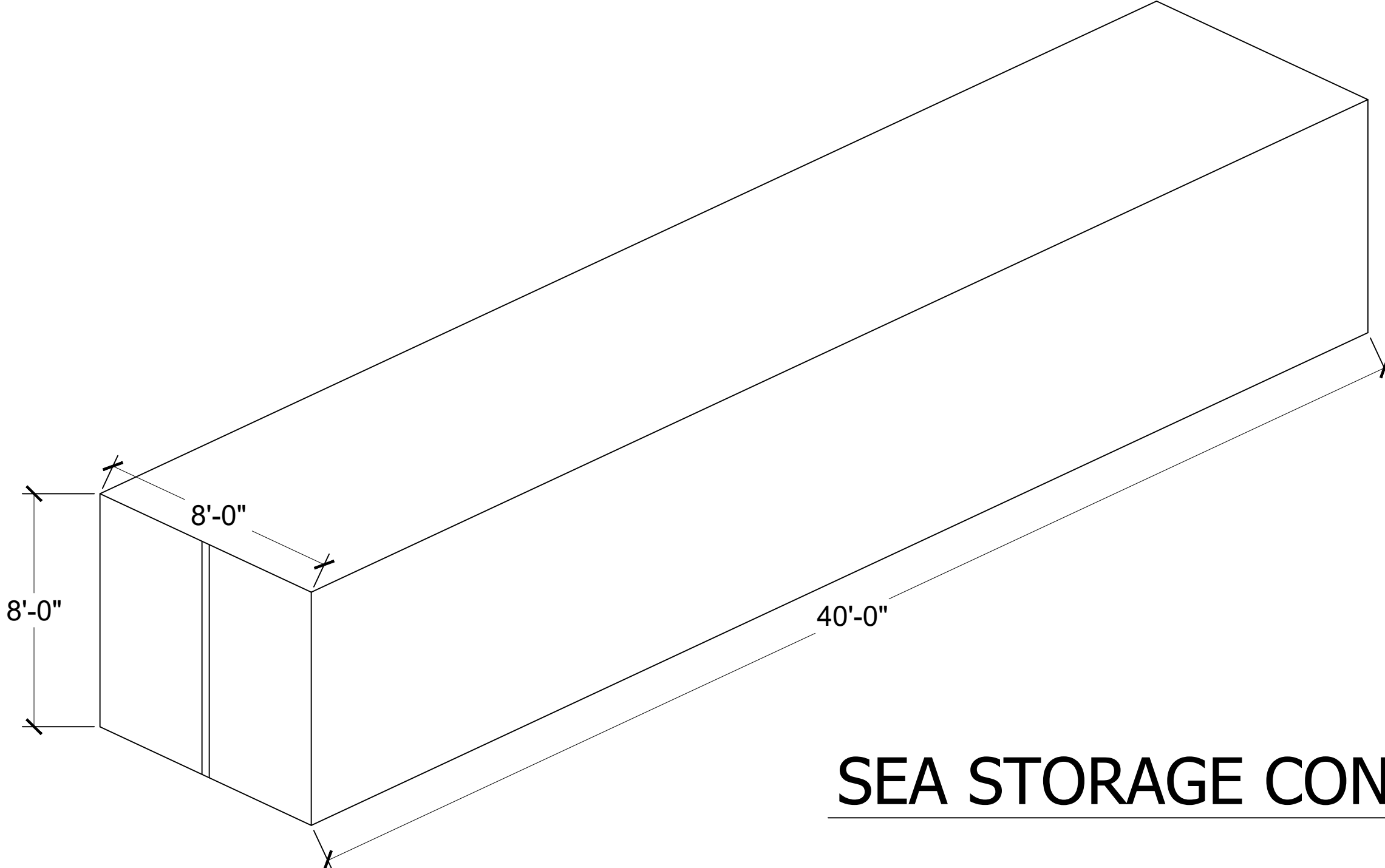
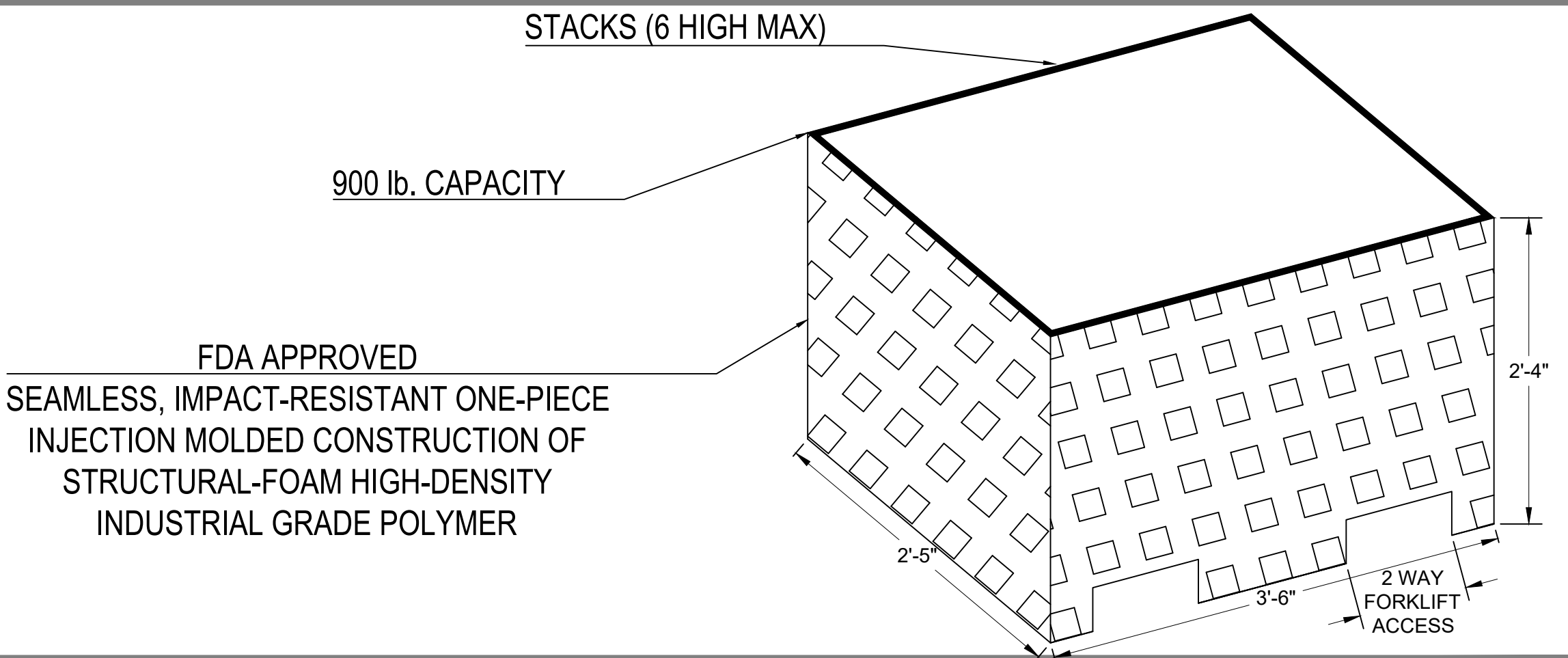
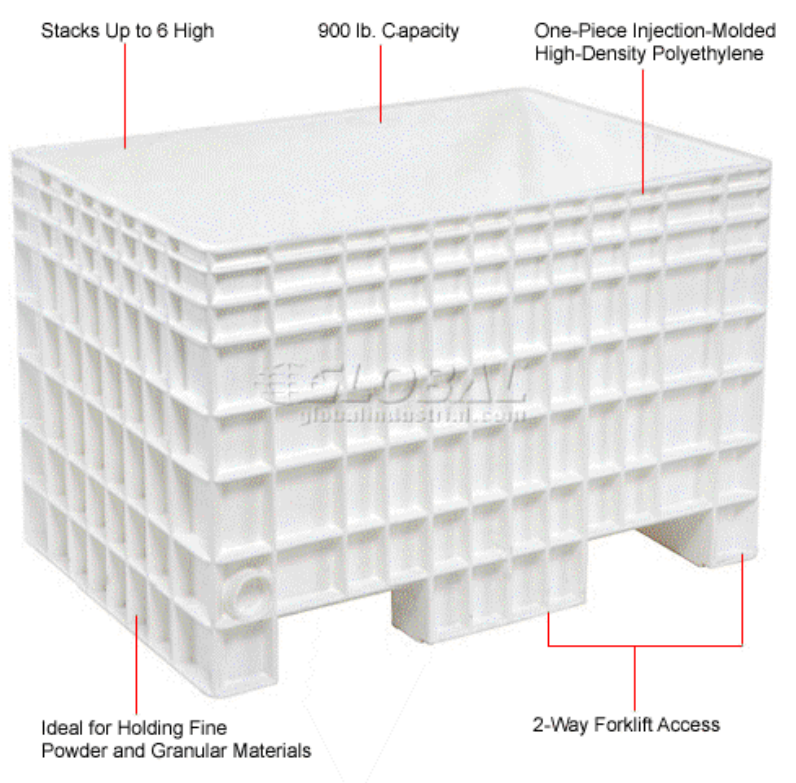
CONTAINER FLOOR PLANS

SCALE: 1/4" = 1'-0"



BULK CONTAINER DETAILS

SCALE: 1" = 1'-0"



SEA STORAGE CONTAINER DIMENSIONS

SCALE: 1/4" = 1'-0"

PROJECT:

DRAWN BY: GA

DATE: 8/4/18

SHEET NUMBER:

**CULTIVATION**

7510 LOS OSOS VALLEY RD  
SAN LUIS OBISPO, CA 93405

**FQ-102**



# DATASHEETS

## Odor Control and Air Handling Systems

The proposed preheator/ventilation and air treatment system will provide internal pressurized air conditioning, temperature control and extensive air filtration odor control. The primary system utilizes a dynamic, polarized media air-cleaning component installed on the air intake side. An atomized water mist evaporates and will release an odor-neutralizing component into the air to eliminate odors. This works in conjunction with an activated carbon filtration system installed in the air filter system on the air exhaust side of the system at an individual scale. Dynamic air cleaners are used to remove harmful spores and bacteria, as well. This type system is best suited for the required odor removal, affect a high plant yield and quality, and lessen the overall maintenance of the system.


This dynamic, low static pressure air cleaner system offers efficient passive filtration which, in turn, are more energy efficient. The advantage is primarily due to the ability to eliminate the traditional large scale, pellet-based carbon systems and improve upon the resistance to airflow for lower energy consumption. Additionally, the ACM systems does not shed carbon dust therefore no additional filtration is required downstream to further restrict airflow. Most importantly, for agricultural operation, the ceramic carbon does not absorb moisture to load prematurely in humid or wet conditions making it more efficient. This system has a number of other benefits: it reduces foreign contaminants, reduces costs from CO2 and energy, and avoids crop contamination.


Additionally, in conjunction to the dynamic system, smaller type units, or carbon filtered wall exhaust/supply fans may also be used to compliment the main system and to provide individual, or specific ventilation treatment and conditioning to any single green house that would require an elevated air flow or more extensive filtration without involving the entire greenhouse complex. During different levels of propagation, odor levels can fluctuate and be more intense then at other levels, therefore, this applied method is both efficient and relative to crop development. These smaller type units utilize an absorbent carbon filter for odor removal and energy efficiency.


This system will be employed in all interior greenhouse cultivation areas. The system will be monitored for air-quality with a consistent maintenance program to insure efficiency and air quality are kept at an acceptable and compliant level of operation.

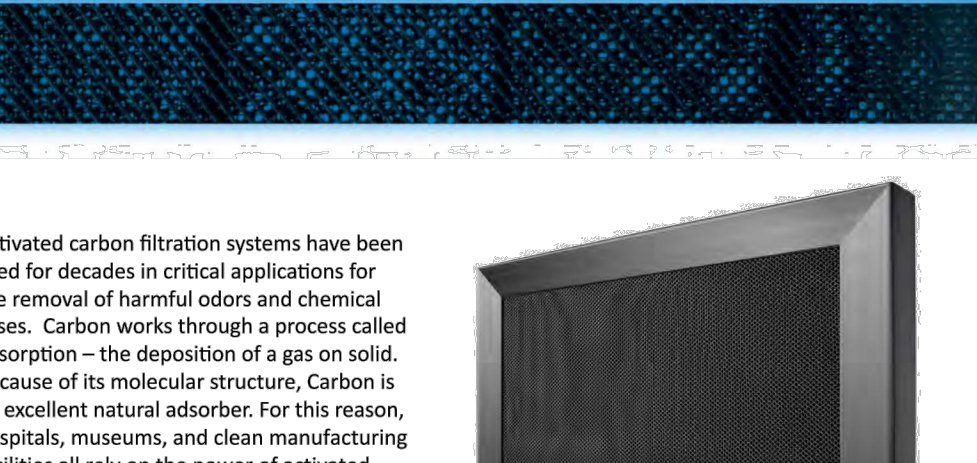
**Dynamic**  
Activated Carbon Matrix

For precise control of gas phase  
contaminants without the energy penalty



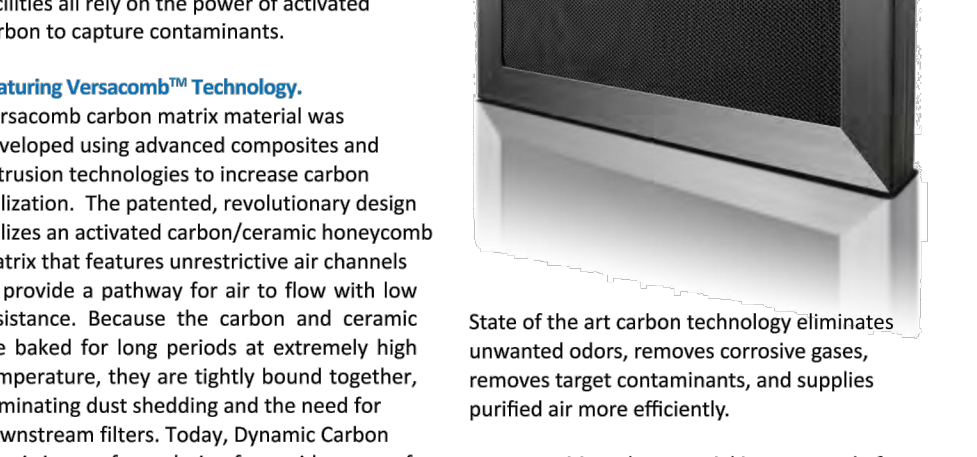






**Activated carbon filtration systems** have been used for decades in critical applications for the removal of harmful odors and chemical gases. Carbon works through a process called adsorption—the deposition of a gas on a solid. Because of its molecular structure, Carbon is an excellent natural adsorber. For this reason, hospitals, museums, and clean manufacturing facilities all rely on the power of activated carbon to capture contaminants.

**Featuring Versacomb™ Technology.** Versacomb carbon matrix material was developed using advanced composites and extrusion technologies to increase carbon utilization. The patented, revolutionary design utilizes an activated carbon/ceramic honeycomb matrix that features unrestrictive air channels to provide a pathway for air to flow with low resistance. Because the carbon and ceramic are baked for long periods at extremely high temperature, they are tightly bound together, eliminating dust shedding and the need for downstream filters. Today, Dynamic Carbon Matrix is a perfect solution for a wide range of applications. Dynamic Carbon Matrix systems require less space, operate with a very low pressure drop and require no post filters, enabling Dynamic Carbon Matrix to be used today in a variety of applications where carbon filtration was previously not an option.



State of the art carbon technology eliminates unwanted odors, removes corrosive gases, removes target contaminants, and supplies purified air more efficiently.

In addition, the material is composed of a carbon/ceramic mixture that is extruded and then baked to produce parts a variable number of channels (cells) through which air can pass. The cells per square inch (CPSI) can vary from 36 to 400 although the weight percent of the carbon is kept constant.

**Dynamic Carbon Matrix can be used in:**

- Specialty Applications: such as museums, hospitals, labs, manufacturing, embassies.
- Problem Applications: to address issues such as entrainment of kitchen fumes or engine exhaust fumes.
- General Applications: cleaning the air of gas phase contaminants in commercial buildings or for reduced outdoor air applications.
- Industrial Applications: including pulp and paper, petrochemical plants and refineries, as well as municipal and private wastewater treatment plants.

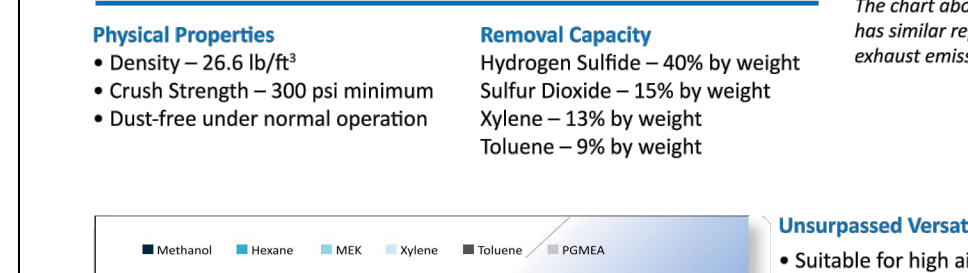
**Outstanding Performance:** Carbon effectiveness and longevity are functions of weight and contact time. More weight means more capacity for odor removal and a longer service life. One gram of activated carbon has 10,000 square feet of internal surface area. One pound of activated carbon has a surface area equal to about 125 acres. Based on the contaminants of concern and their concentration levels, the media life for Dynamic Carbon Matrix is predictable. In addition, the media can be engineered on a job-by-job basis to meet specific performance requirements such as static pressure drop, maximum face velocity and residence time. Common target contaminants include Hydrogen Sulfide, Chlorine, Sulfur Dioxide, Chlorine Dioxide and other acid gases and odors.

**Physical Properties**

- Density – 26.6 lb/ft<sup>3</sup>
- Crush Strength – 300 psi minimum
- Dust-free under normal operation

**Removal Capacity**

Hydrogen Sulfide – 40% by weight  
Sulfur Dioxide – 15% by weight  
Xylene – 13% by weight  
Toluene – 9% by weight



**Unsurpassed Versatility:**

- Suitable for high airflow applications (>500 fpm).
- Suitable for high temperature applications up to 500°F.
- Suitable for damp conditions up to 99% RH.
- Can be mounted horizontally or vertically with airflow in either direction.
- Maximum gaseous contaminant removal and protection from gas-phase contaminants.
- Can be installed and disposed of without the need for any special safety precautions.

**Dynamic Carbon Matrix systems offer many advantages over pellet based systems.** The most widely used commercial carbon filtration systems consist of 1"-2" deep trays filled with carbon pellets. Large arrays are typically used and air handling systems require powerful fans to overcome very high resistance to airflow. And because carbon pellet systems can shed carbon dust, downstream filters become necessary which can further restrict airflow.

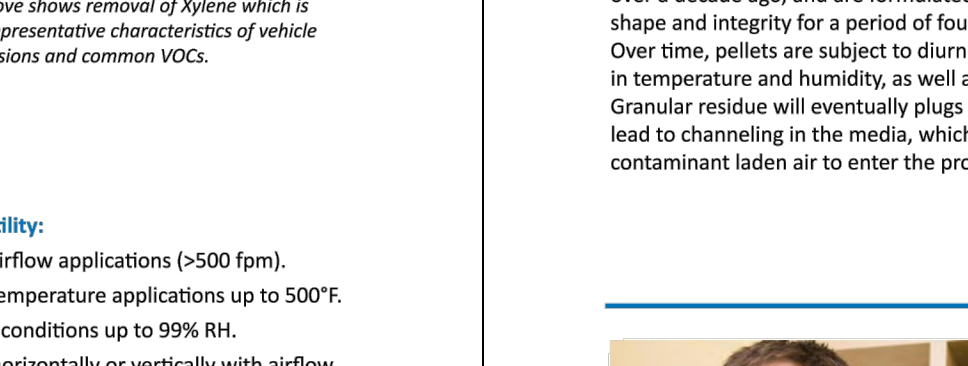
Extended life pellets were introduced in the marketplace over a decade ago, and are formulated to maintain their shape and integrity for a period of four years of operation. Over time, pellets are subject to diurnal and seasonal swings in temperature and humidity, as well as constant vibrations. Granular residue will eventually plug screen material and lead to channelling in the media, which can allow untreated, contaminant laden air to enter the protected space.

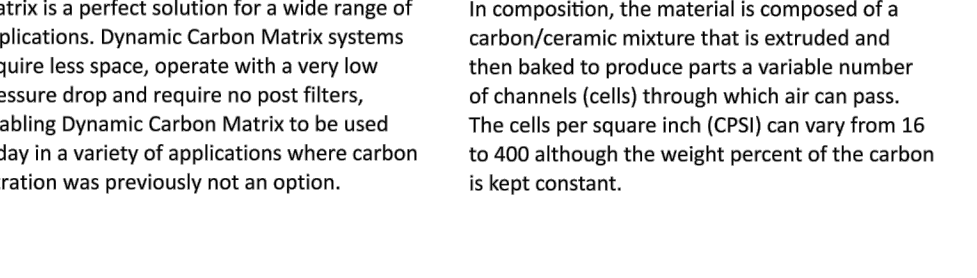
**Dynamic Carbon Matrix systems can be retrofitted into existing pellet cassettes (V-banks) and HVAC units and provide significant advantages including:**

- Dynamic Carbon Matrix systems have up to a 60% lower pressure drop, reducing blower horsepower by up to 50% compared to pellet systems.
- Half the size and a fraction of the weight of a pellet based system.
- Easier to use and maintain because they do not require vacuum trucks, pellet handling or confined space entry that is associated with media change out.
- Dynamic Carbon Matrix systems have significantly smaller footprints and much lower weights, making installation easier and less costly than traditional pellet systems.
- Fast and effective contact at velocities up to six times greater than traditional pelletized carbon beds.
- Unlike pellet based systems which typically break through after about 66% utilization of the pellet media, properly rated Dynamic Carbon Matrix systems use 100% of the media as the media modules are replaced over time.

**Engineered Solutions**

Dynamic Carbon Matrix systems can provide a purified air cleaning solution to prevent corrosion of valuable electronic equipment in process industries – helping reduce downtime and costly repairs. In addition, Dynamic Carbon Matrix removes odors and protects the environment from subsequent destruction of dilute solvents. Dynamic Air Quality Solutions will provide a comprehensive solution of equipment, activated carbons, service, and technical know-how. Backed by state-of-the-art research capabilities, our team of scientists and engineers understands the unique chemistry between the air we breathe and its effects on your environment.





**MEDIA PRESSURE DROP**


Pressure Drop (in. H<sub>2</sub>O) vs Velocity (ft/min)

Legend: 1" - 100 CPSI (Red), 1" - 200 CPSI (Blue), 2" - 100 CPSI (Green), 2" - 200 CPSI (Yellow), 4" - 100 CPSI (Cyan), 4" - 200 CPSI (Magenta)

**Dynamic Carbon Matrix is available in various types of carbon material for different applications:**

Gases Controlled	Untreated Mesoporous	KI Mesoporous	Untreated Microporous	KI Microporous	A Mesoporous
	Diesel Fumes Vehicle Exhaust Ozone Chlorine Hydrocarbons Tobacco Odor	Hydrogen Sulfide Sulfur Dioxide Carbonyl Sulfide VOCs Sulfides Xylene Toluene Mercaptans	Cooking Odors Food Odors Diesel Fumes Chlorine Exhaust Ozone VOCs Xylene Hydrocarbons Tobacco Odor	Chinese Drywall Hydrogen Sulfide Sulfur Dioxide Carbonyl Sulfide Chlorine Sulfides Xylene Toluene Mercaptans	Ammonia Amines

**Dynamic Air Quality Solutions**  
P.O. Box 1258  
Princeton, New Jersey 08542  
(800) 578-7873, (609) 924-8524 fax  
www.DynamicAQ5.com



DYN-236 (6/16)

PROJECT: CULTIVATION

7510 LOS OSOS VALLEY RD  
SAN LUIS OBISPO, CA 93405

DRAWN BY: GA

DATE: 8/4/18

SHEET NUMBER:

# Z-101