



# The Power of Plants

## Protected Native Plant Surveys & Report

LA CONTENTA PROJECT  
Khaled S. Farah  
SoCal Professional Engineers, Inc.  
229 Cajon St., Ste. # 2  
Redlands, CA 92373

January 31, 2024

RE: Joshua Tree and Protected Native Plant Survey & Report  
APN 0601-201-40  
6720 La Contenta Road  
Yucca Valley, CA 92284

### Results of Joshua Tree/Protected Native Plant Census:

A survey of western Joshua trees (*Yucca brevifolia*) and other protected native plants was conducted in the field on August 3 and August 10, 2023, where ground-disturbing activities are expected to occur from the proposed construction of a communications building, extension of chain-link fencing, grading, and possibly installation of curbs and sidewalks if required. The locations of the building, new fencing, and curbs/sidewalks were marked by the engineer for the project with lath stakes prior to or concurrent with this field survey. The ground survey included measurements of the distance to disturbance of all Joshua trees within 40+ feet of construction activities, as well as photographs, assignment of plant ID numbers, and height and diameter measurements of any Joshua trees within 40 feet of that disturbance zone. The locations, measurements of height and diameter, and photos of other protected plants within the disturbance area were also taken, which included only Mojave Yuccas.

The original report (Aug. 17, 2023) has been revised here to reflect any effects on Joshua trees from the construction of a sidewalk and curbs that have since been required as part of permit approval. The Site Plan and report narrative have been updated here to include detailed plans and discussion of this additional construction requirement for a sidewalk and curb.

Included in this report are:

~ **Site Plan** (Attachment 1) for the proposed structures and the expected disturbance zones around each structure with locations of **Joshua Trees** within 40+ feet of ground disturbance marked on the plan, and all Mojave Yucca locations within the area of disturbance.

~ **Ground Photographs of all Joshua Trees within 40 feet of disturbance** (Attachment 2) which includes plant heights and widths, plant size classes, and plant ID numbers.

~ **Ground Photographs of all Mojave Yuccas within the areas of disturbance** (Attachment 2) which includes plant heights and diameters, and plant ID numbers.

### **Findings:**

Field surveys documented three Joshua trees that occur within 40 feet of the proposed disturbance areas, and eight Mojave Yuccas that occur within the footprint of proposed disturbance (plant ID numbers refer to those plants marked on the Site Plan and Ground Photos):

**Joshua tree #1** is 12' 4" south of the proposed new chain link fence. Because ground disturbance closest to the tree will consist of small holes dug for periodic fence posts, and due to the distance between the tree and the posts, construction of the fence is not expected to impact this tree. See ground photo for JT#1.

Height = 13' 4"

Width = 7'

**Joshua tree #2** is 14' 10" west of the proposed new chain link fence. Because ground disturbance closest to the tree will consist of small holes dug for periodic fence posts, and due to the distance between the tree and the posts, construction of the fence is not expected to impact this tree. See ground photo for JT#2.

Height = 16' 4"

Width = 8'

**Joshua tree #3** is 23.5 feet from the existing curb, placing it within 7.12 feet from the closest edge of the proposed finished sidewalk. Grading to pour the sidewalk is expected to displace soil to 8.5 inches deep at a distance of 6.9 feet from the Joshua tree. Grading for the proposed new curb is expected to displace soil up to 12 inches deep at a distance of 11.12 feet from the base of the tree. The proposed shallow depth of soil disturbance at 6.9 feet from the tree is not expected to harm the tree; the proposed grading disturbance at 11 feet from the tree is not expected to harm the tree, since disturbance in both cases will not circle the tree, but will only approach one edge of the tree at a distance where roots are expected to be deeper than the proposed disturbance. See ground photo for JT#3.

Height = 20'

Width = 12'

**Mojave Yucca #1** is within the footprint of proposed construction disturbance for the new building, and will be relocated to the front of the existing buildings as part of the landscape plan. See ground photo for MY#1.

Height = 7' 7"

Width = 12'

**Mojave Yucca #2** is within the footprint of proposed grading for erosion control, and will be relocated to the front of the existing buildings as part of the landscape plan. See ground photo for MY#2.

Height = 6' 6"  
Width = 10'

**Mojave Yucca #3** is within the footprint of proposed grading for erosion control, and will be relocated to the front of the existing buildings as part of the landscape plan. See ground photo for MY#3.

Height = 7' 2"  
Width = 10' 6"

**Mojave Yucca #4** is within the footprint of the proposed project, inside the new fence but not within the proposed grading plan. If this smaller yucca does not impede construction activities, it could be left in place; otherwise, it can be relocated to the front of the existing buildings as part of the landscape plan. See ground photo for MY#4.

Height = 3' 8"  
Width = 5' 6"

**Mojave Yucca #5** is in line with the new proposed fence, and will be relocated to the front of the existing buildings as part of the landscape plan. See ground photo for MY#5.

Height = 5' 3"  
Width = 9' 3"

**Mojave Yucca #6** is within the footprint of proposed construction disturbance in the parking area, and will be relocated to the front of the existing buildings as part of the landscape plan. See ground photo for MY#6.

Height = 6' 2"  
Width = 9' 6"

**Mojave Yucca #7** is 23' 5" from the existing curb, placing it within 1.5 feet of possible construction activities for the proposed sidewalk. This plant could be relocated to the front of the existing buildings as part of the landscape plan. Another option would be to transplant only those stems that conflict with construction, while leaving the westernmost parts of the plant intact, since this is a large and old plant with multiple stems. See ground photo for MY#7.

Height = 7' 2"  
Width = 10' 4"

**Mojave Yucca #8** is within the footprint of proposed construction activities for the sidewalk. This plant could be relocated to the front of the existing buildings as part of the landscape plan. As with Mojave Yucca #7, another option would be to transplant only those stems that conflict with construction, while leaving the westernmost parts of the plant intact, since this is a large and old plant with multiple large stems (Mojave Yuccas are known to live up to 2,500 years, so old does not mean senescent; Mojave Yuccas #7 and #8 are each likely over 400 years old). See ground photo for MY8.

Height = 6' 2"

Width = 10' 9"

### **Summary of Results:**

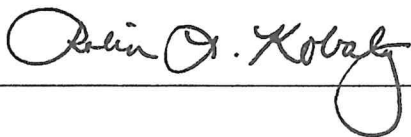
Three western Joshua trees occur within 40 feet of proposed disturbance from construction activities for the project, but none are expected to be harmed by project construction. As a precaution to protect JT3 during sidewalk construction, it is recommended that flexible construction fencing be installed around the tree to prevent accidental contact of equipment with the tree, and to prevent compaction of soil beneath the tree.

Larvae of the only moth that pollinates the Joshua tree fall from the flowers to the ground under the tree, burrow down about 2-3 inches into the soil, and pupate there into adult moths. When they emerge and mate, they fly to the flowers, lay eggs within the flowers, and continue the cycle. As a help to that process, it is recommended that the top 3 inches of soil removed for sidewalk construction be spread around the opposite side of the tree to a depth of about 1 inch (so as not to bury the existing underground larvae too deep). This could help to mitigate any impacts to the tree's only pollinator.

Eight Mojave Yuccas are expected to be impacted by construction activities proposed for this project. Five are within the footprint of construction activities for the new building and fence, and are planned to be transplanted. Three other Mojave Yuccas are expected to be impacted by construction of the proposed sidewalk, and are planned for relocation of either the entire plants, or only those stems that are too close to the sidewalk.

Respectfully submitted,

**The Power of Plants, DBA**



Date: 31 January 2024

Name: Robin L. Kobaly

Title: President, The Power of Plants

Desert Native Plant Specialist

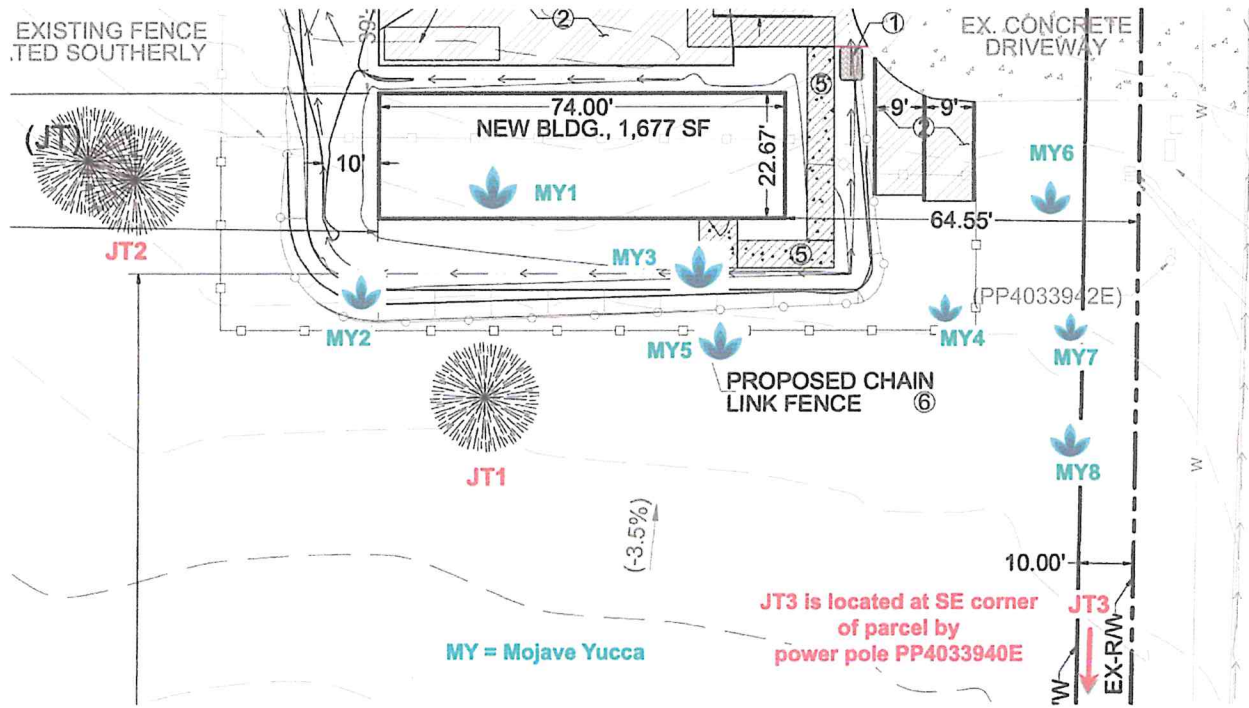
Masters Degree from UCR in Biology/Plant Ecology

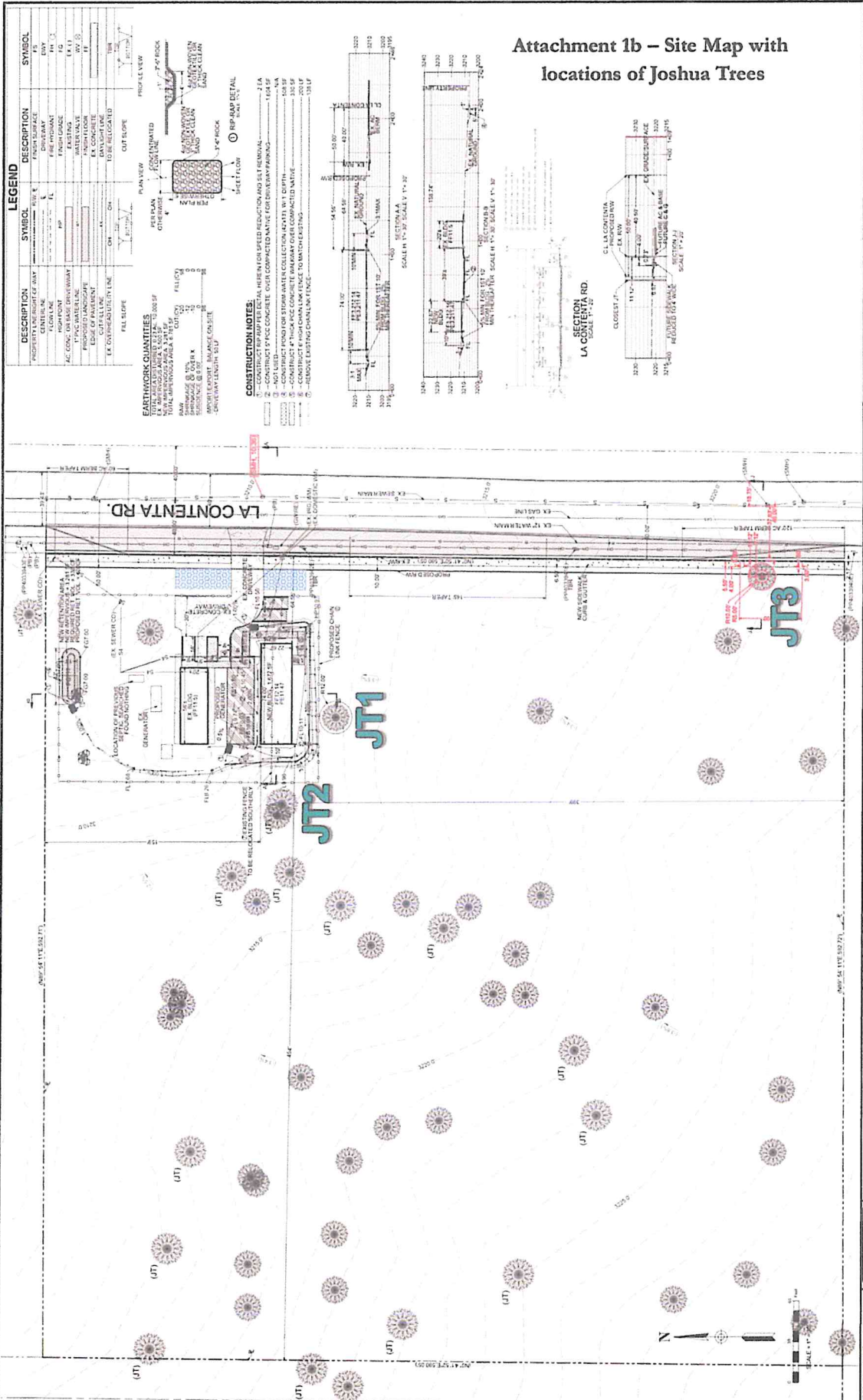
Former California Desert District Botanist for U.S. Bureau of Land Management (21 years)

# Attachment 1a – Site Map with locations of Joshua Trees and Mojave Yuccas

Includes all Joshua Trees within 40 feet of proposed project, and  
all Mojave Yuccas within the footprint of proposed project

6720 La Contenta Road, Yucca Valley, CA 92284



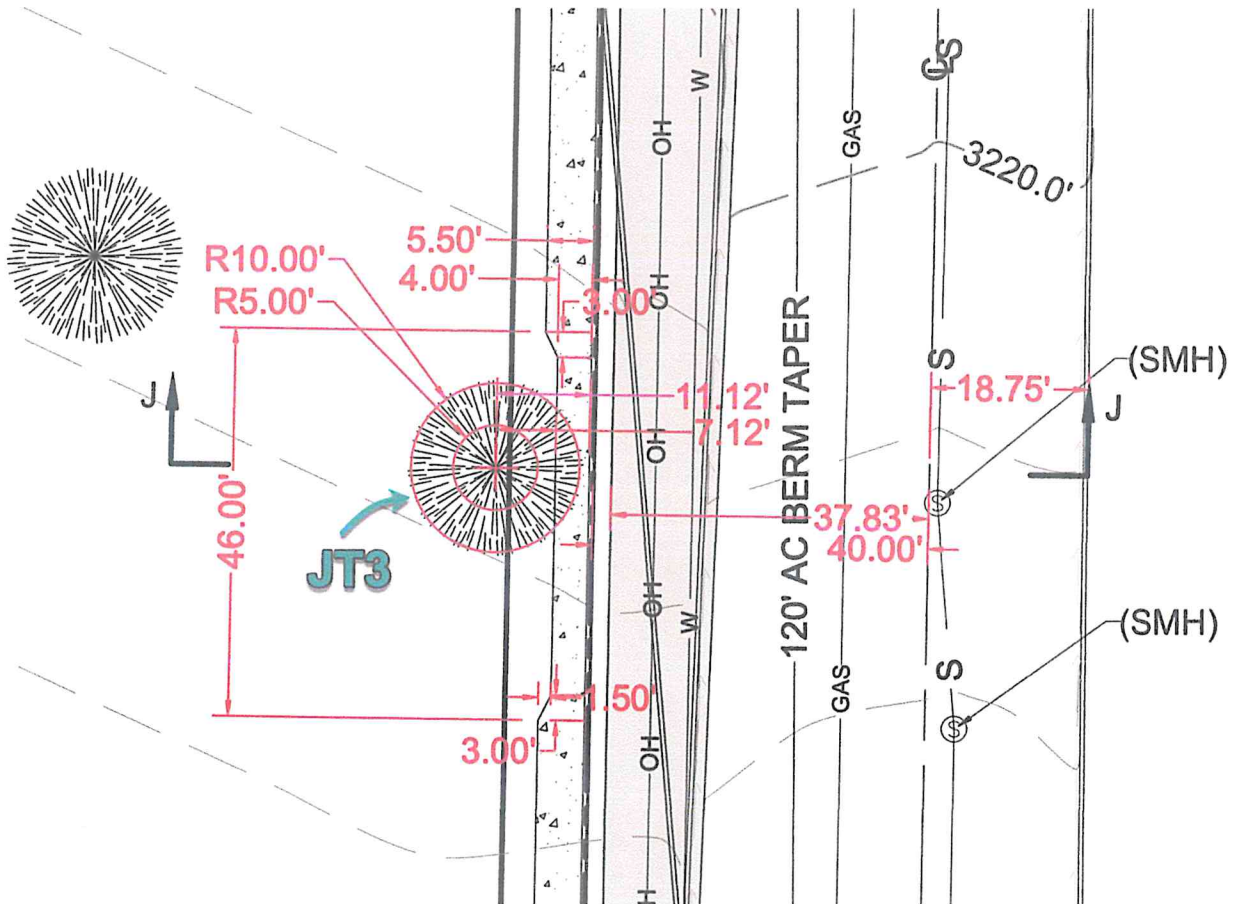
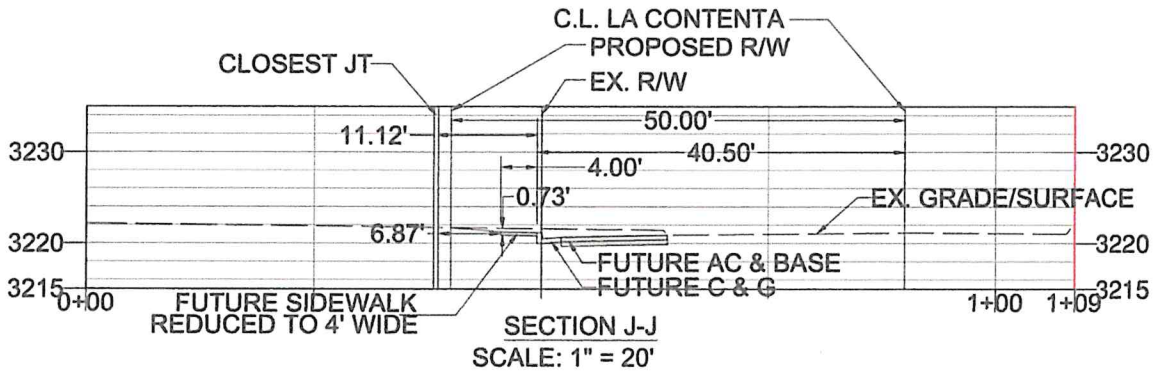


Attachment 1b – Site Map with locations of Joshua Trees

<b>TOWN OF YUCCA VALLEY</b> TIME WARNER CABLE 4725 LA CONTENTA RD., YUCCA VALLEY, CA 92284 475. 933.5242		SHEET <b>2</b> OF 3 SHEETS DRAWING NO. <b>GP-2</b>
PLANS PREPARED BY: <b>Engineers, Inc.</b> 300 CANAL ST., REDLANDS, CA 92374 951.771.2115 • info@caleng.com PREPARED BY: <b>PHILIP FAGAN</b> REG. ENGINEER		CHECKED BY: _____ DATE: _____ REVISIONS: _____ APPROVED BY: _____ DATE: _____
		BEETCH MARK NO. _____ FROM A MANHOLE COVER ACCESS FROM EX. DRAWING OF SUBJECT MAP SHEET 3410 24 1-800-277-2889

Attachment 2 – Detail of Proposed Sidewalk and Curb with Location of Joshua Tree #3

SECTION  
LA CONTENTA RD.  
SCALE: 1" = 20'



Joshua Tree #3 is 7.12 feet from the closest edge of the proposed finished sidewalk. Grading to pour the sidewalk is expected to displace soil to 8.5 inches deep at a distance of 6.9 feet from the Joshua tree. The proposed curb is 11.12 feet from the base of JT3; grading for the curb at that distance is expected to displace soil up to 12 inches deep.

## Ground Photographs of Joshua Trees

6720 La Contenta Road, Yucca Valley, CA 92284



**Joshua Tree #1 – Size Class 3.**  
*Census Map ID = JT#1*  
Height = 13' 4"  
Width = 7'



**Joshua Tree #2 – Size Class 3.**  
*Census Map ID = JT#2*  
Height = 16' 4"  
Width = 8'

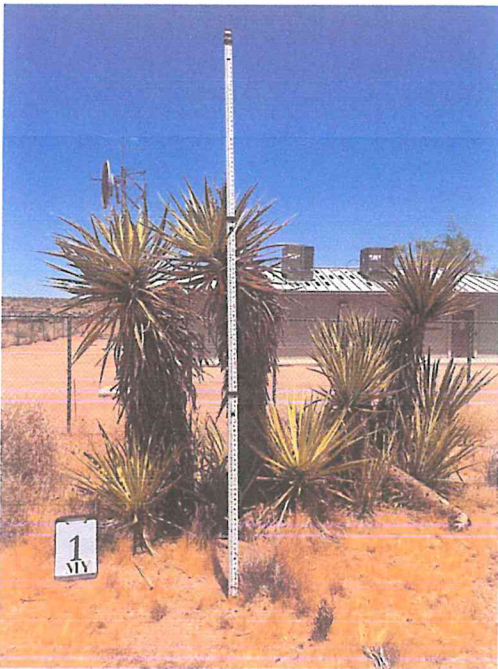


**Joshua Tree #3 – Size Class 3.**  
*Census Map ID = JT#3*  
Height = 20"  
Width = 12'



Attachment 3

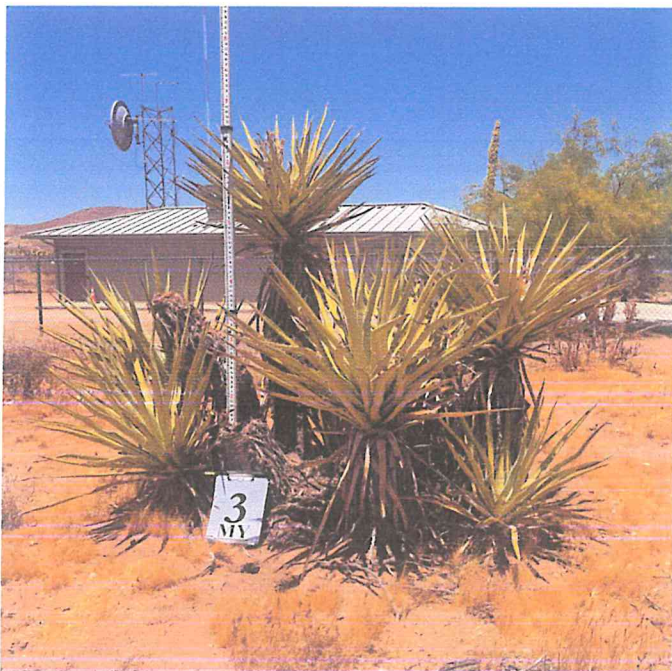
Ground Photographs of Mojave Yuccas



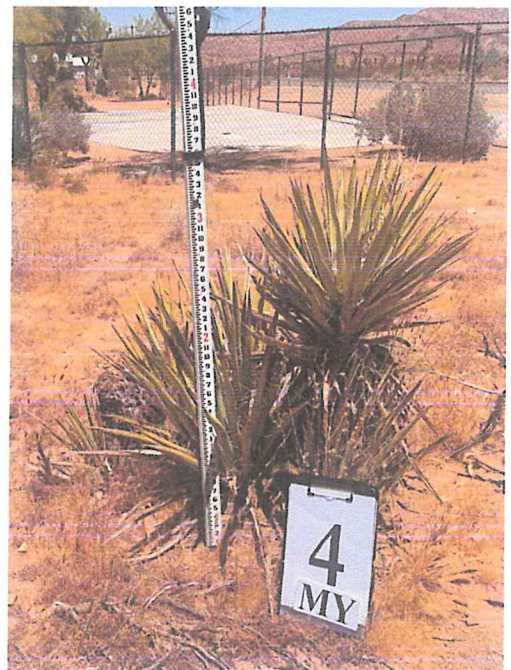
Mojave Yucca #1 – Census Map ID = MY#1  
Height = 7' 7"  
Width = 12'



Mojave Yucca #2 – Census Map ID = MY#2  
Height = 6' 6"  
Width = 10'



Mojave Yucca #3 – Census Map ID = MY#3  
Height = 7' 2"  
Width = 10' 6"

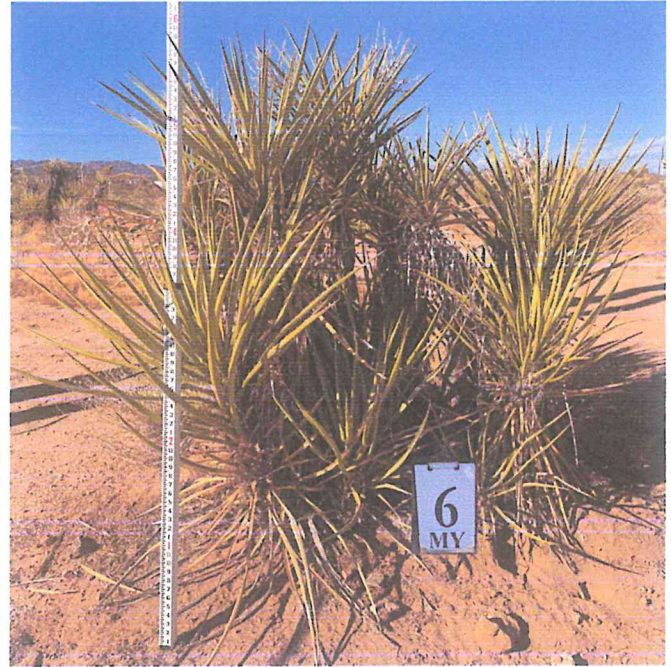


Mojave Yucca #4 – Census Map ID = MY#4  
Height = 3' 8"  
Width = 5' 6"

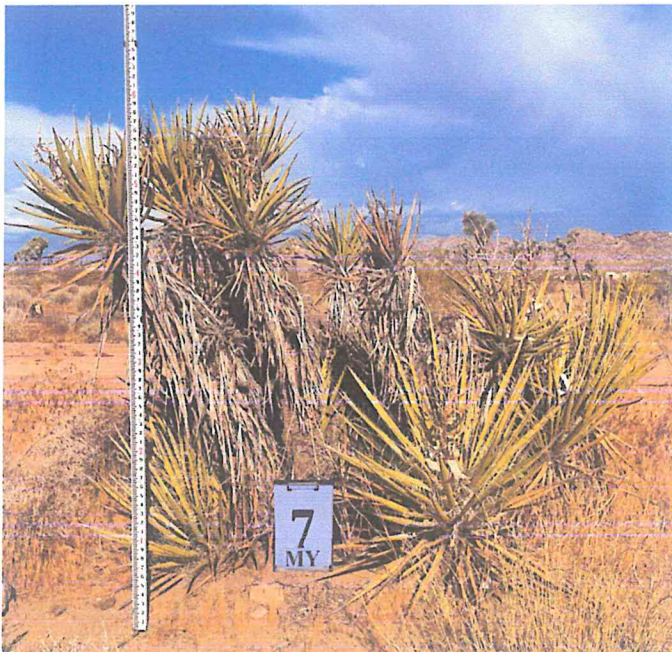
## Ground Photographs of Mojave Yuccas



**Mojave Yucca #5** – Census Map ID = MY#5  
Height = 5' 3"  
Width = 9' 3"



**Mojave Yucca #6** – Census Map ID = MY#6  
Height = 6' 2"  
Width = 9' 6"



**Mojave Yucca #7** – Census Map ID = MY#7  
Height = 7' 2"  
Width = 10' 4"



**Mojave Yucca #8** – Census Map ID = MY#8  
Height = 6' 2"  
Width = 10' 9"