

Date : July 30, 2024
 Project : Yucca Valley / US-CA-5466
 Address : 56750 Mountain View Trail
 Yucca Valley, CA 92284
 APN : 0587-411-42
 Zoning : RS2 - Residential
 Client : Vertical Bridge
 750 Park of Commerce Drive, Suite 200
 Boca Raton, FL 33487
 Contact : Bill Lewis
 Assurance Development
 1499 Huntington Drive, #305
 South Pasadena, CA 91030
 629-765-5079
 Prepared by : Johnoah Yu, LEED AP BD+C
 Architect
 Draftlink
 27068 La Paz Road, #561
 Aliso Viejo, CA 92656
 949-379-9199

SHADE AND SHADOW REPORT

INTRODUCTION

Vertical Bridge proposes to construct a new 70'H Monopine. This project shall be at the southwest corner of the property.

This report shall analyze the following potential impacts to the surrounding area:

1. Impact to adjacent residential properties and structures

METHODOLOGY AND ENVIRONMENTAL SETTING

The proposed project is located at 56750 Mountain View Trail, Yucca Valley, CA, with geodetic coordinates 34.108742deg, -116.425317deg.

The study analyzes the gradual movement of shadow lines cast by the proposed project during a full season. It illustrates the amount of time adjacent areas stop receiving sunlight as a result of introducing the proposed structure.

This Report uses a digital sun pattern simulation, illustrating 1-hour increments from 9am to 6pm during the Summer Solstice, Fall Equinox, Winter Solstice, and Spring Equinox.

The Proposed Monopine is represented by a 22' wide cylinder to simulate worst-case scenario coverage.

SUMMER SOLSTICE REPORT (SEE SSR-1 & SSR-2)

Sheet SSR-2 shows a small portion of the existing solar panels at the southeast corner of building being affected by the proposed project. This occurs during Summer from 9:00 am to 11:00 am only

FALL EQUINOX REPORT (SEE SSR-3 & SSR-4)

Sheet SSR-4 shows the solar panels along the southern half of the building's east wing being affected by the proposed project. This occurs during Fall from 9:00 am to 11:00 am.

WINTER EQUINOX REPORT (SEE SSR-5 & SSR-6)

Sheet SSR-6 shows the solar panels along the northeast and southeast corners of the building being affected by the proposed project. This occurs during Winter from 9:00am to 11:00 am.

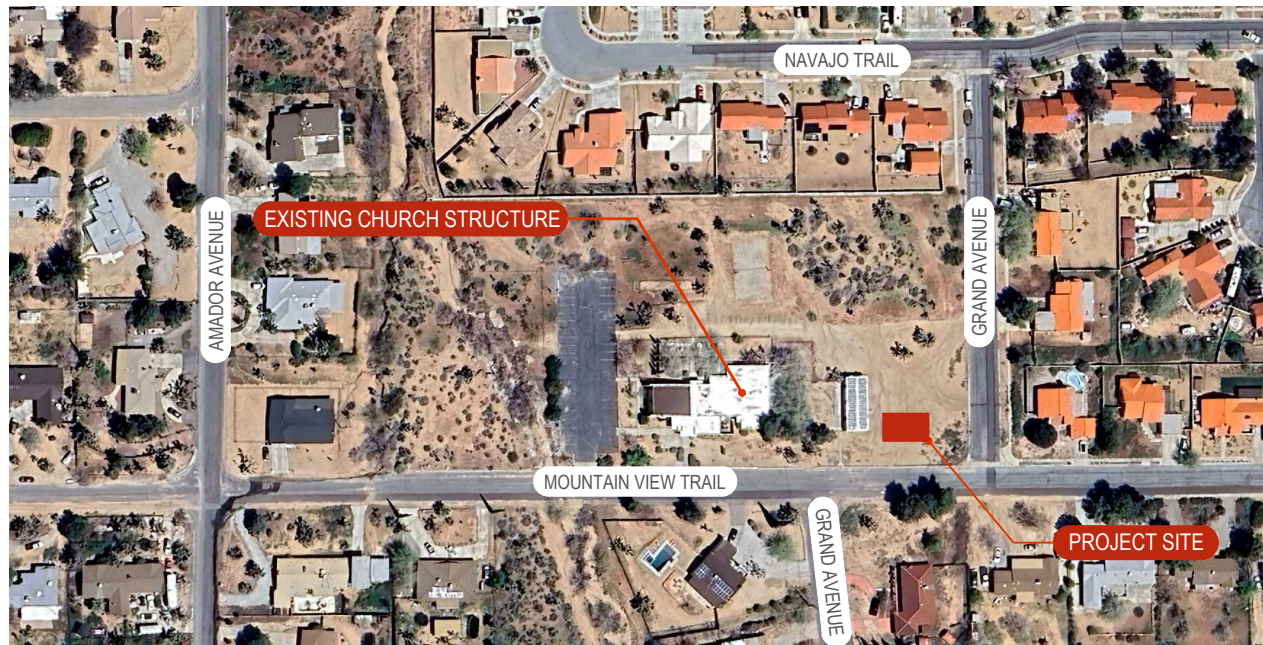
SPRING EQUINOX REPORT (SEE SSR-7 & SSR-8)

Sheet SSR-8 shows the solar panels along the southern half of the building's east wing being affected by the proposed project. This occurs during Spring from 9:00 am to 11:00 am.

CONCLUSION

No substantial Impact to adjacent properties. Shadow shall be cast partially to eastern residential properties that will start late afternoon (4pm) to dusk during Fall and Spring, and 3pm to dusk during winter. Refer to sheets 3, 5, 7 and 9 for more information.

PROJECT LOCATION / AERIAL MAP:



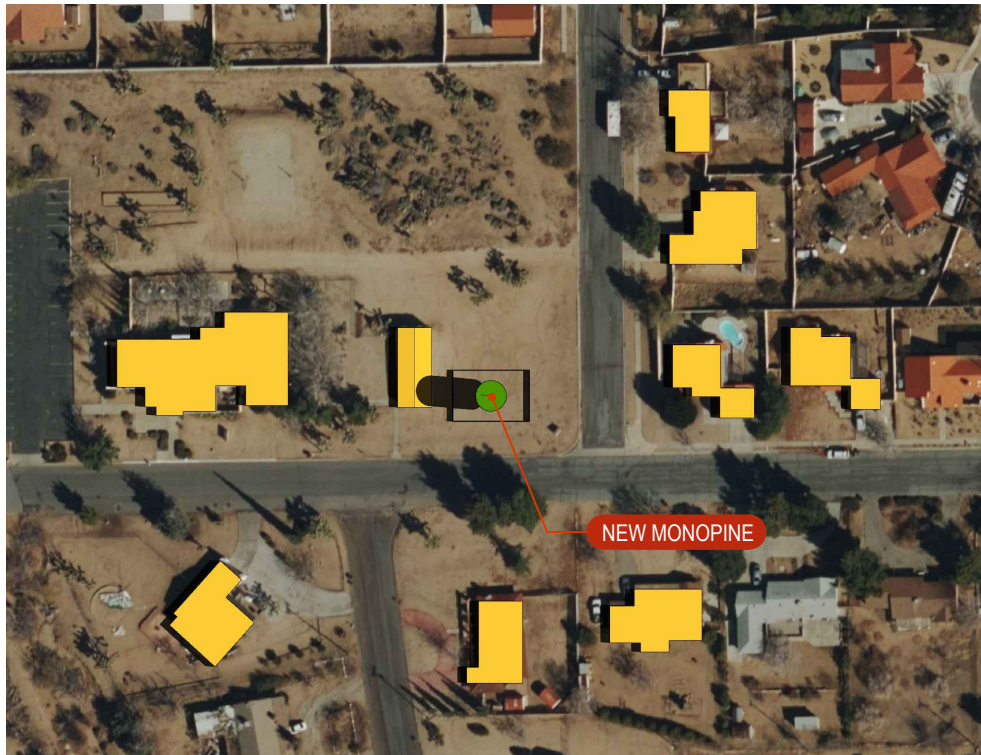
COPYRIGHT: GOOGLE MAPS, 2024

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SUMMER SOLSTICE

9:00 AM

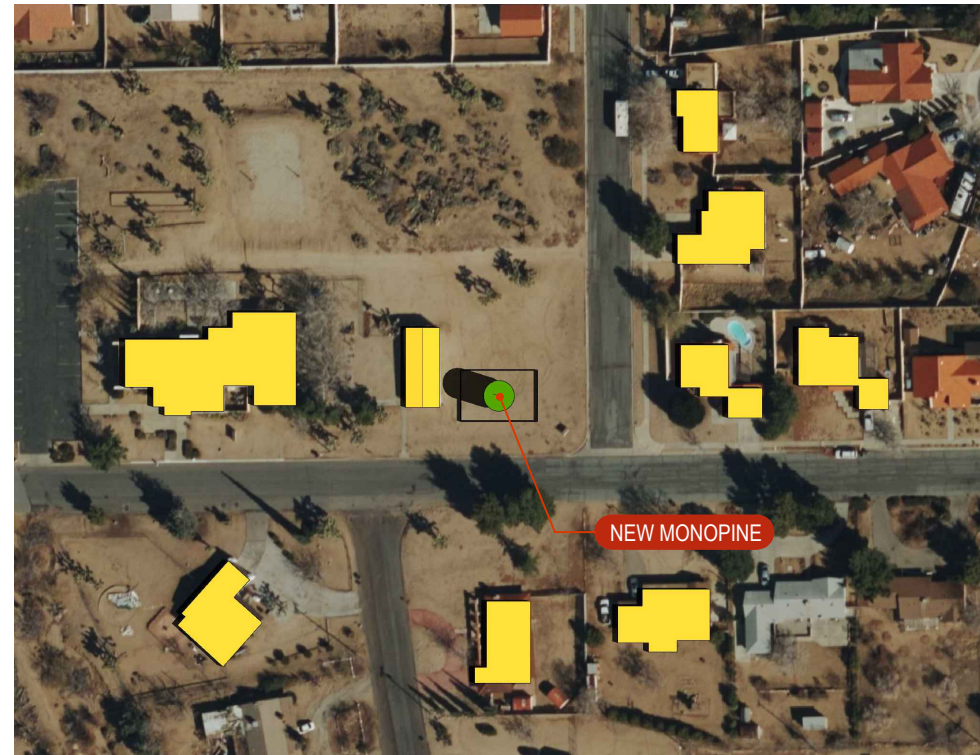
JUNE 20, 2024



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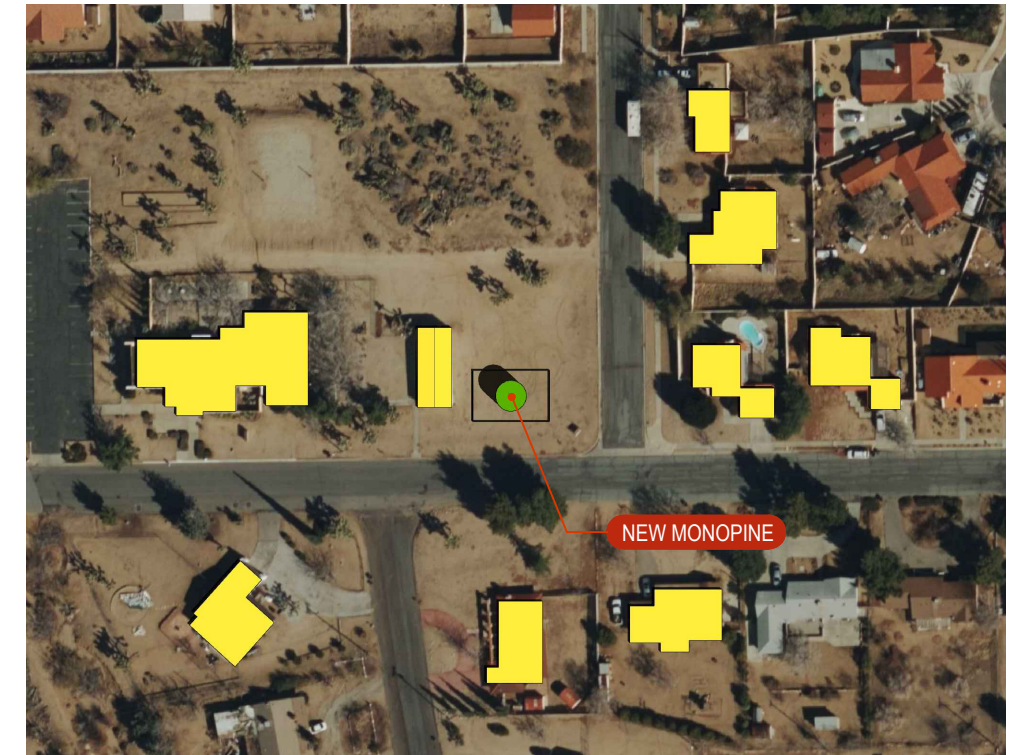
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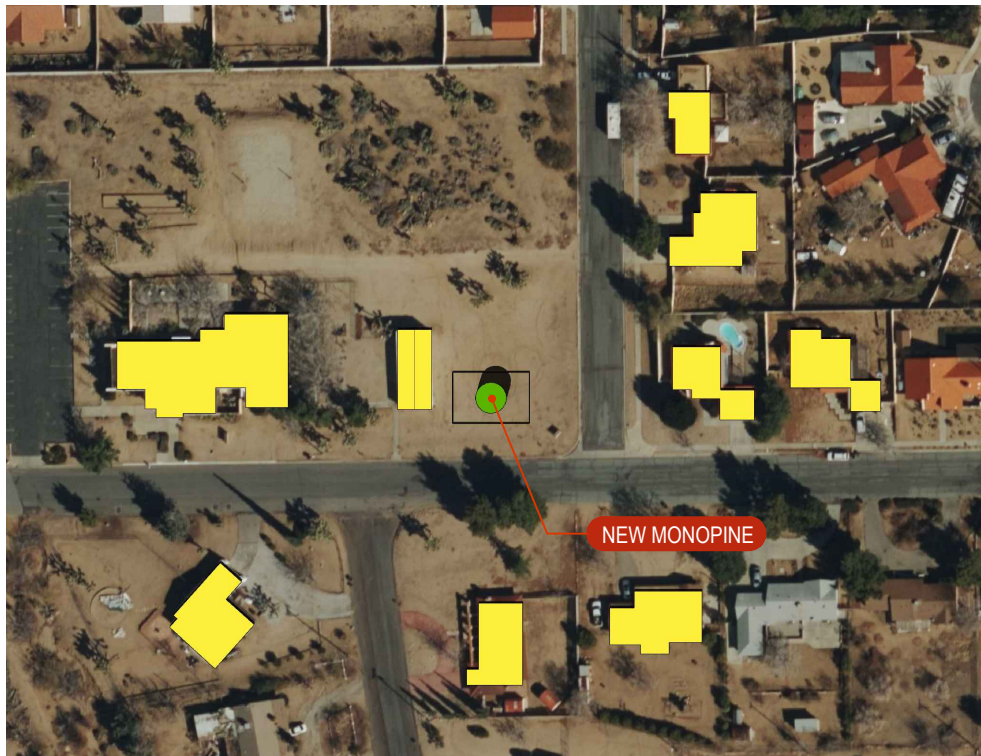
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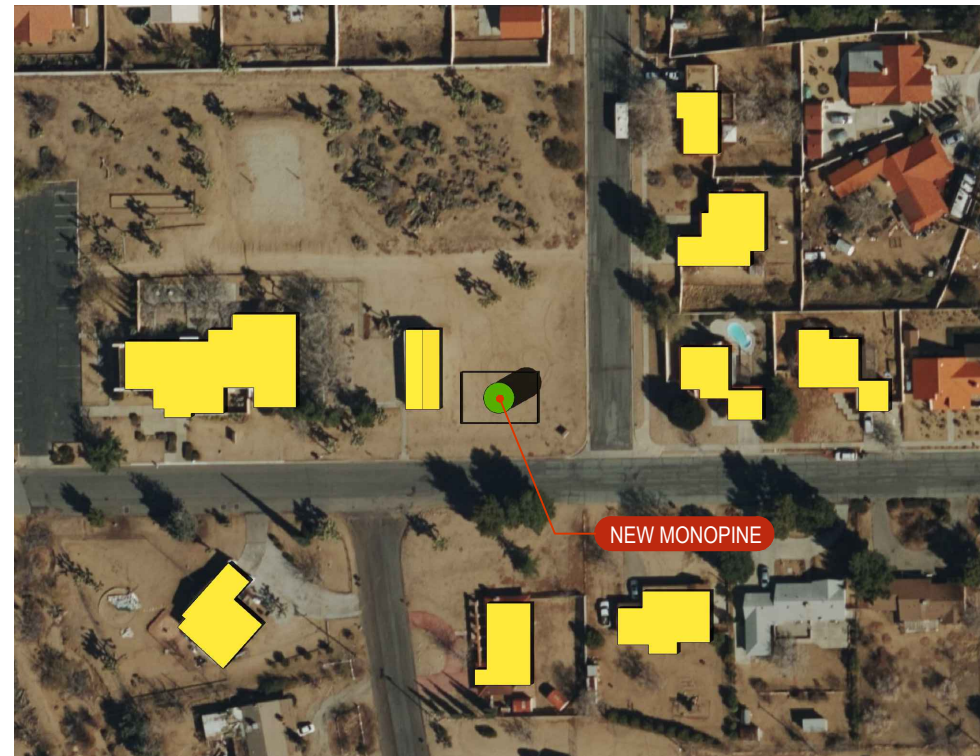
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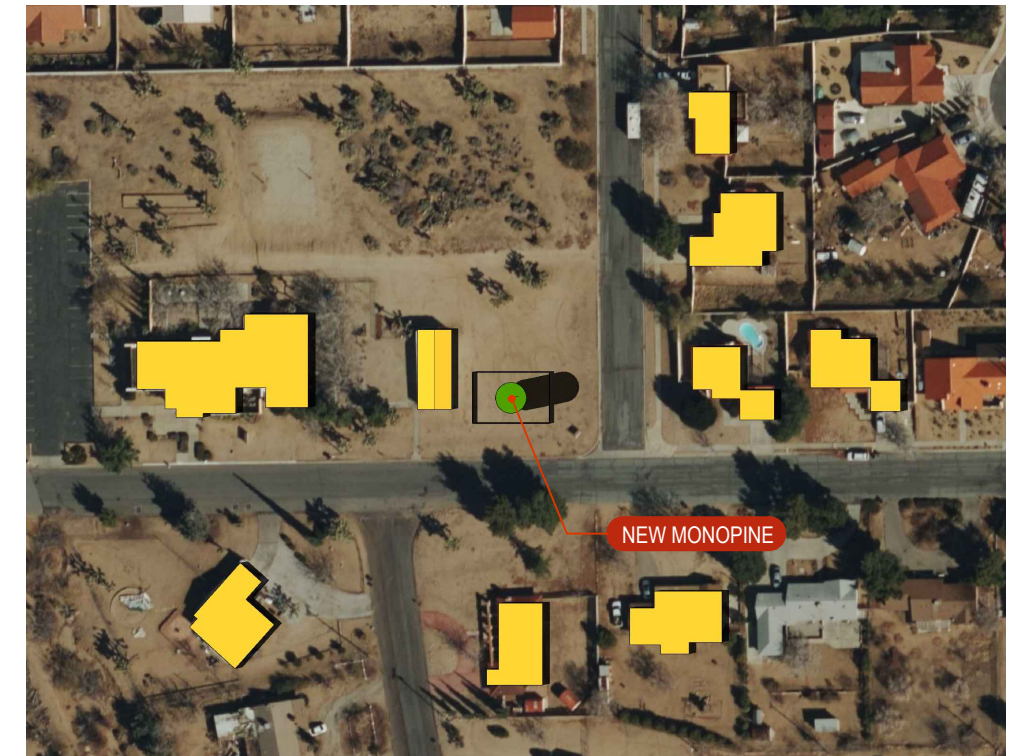
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SUMMER SOLSTICE

2:00 PM

JUNE 20, 2024



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YUCCA VALLEY**

56750 MOUNTAIN VIEW TRAIL
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SHEET NO.

SSR-1

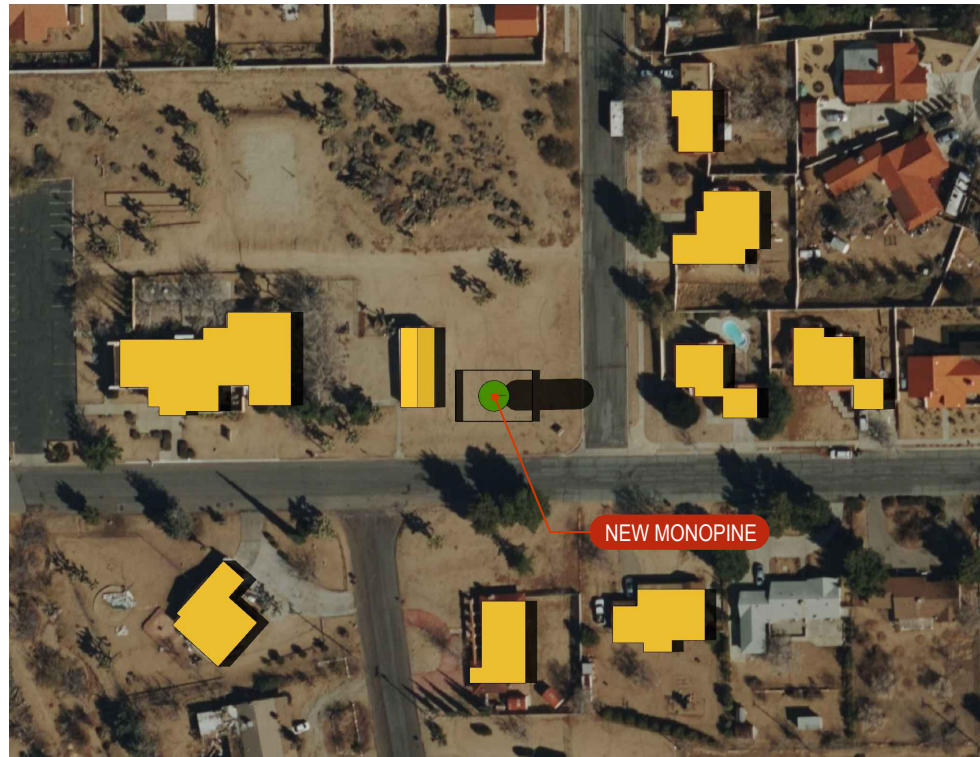
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SUMMER SOLSTICE

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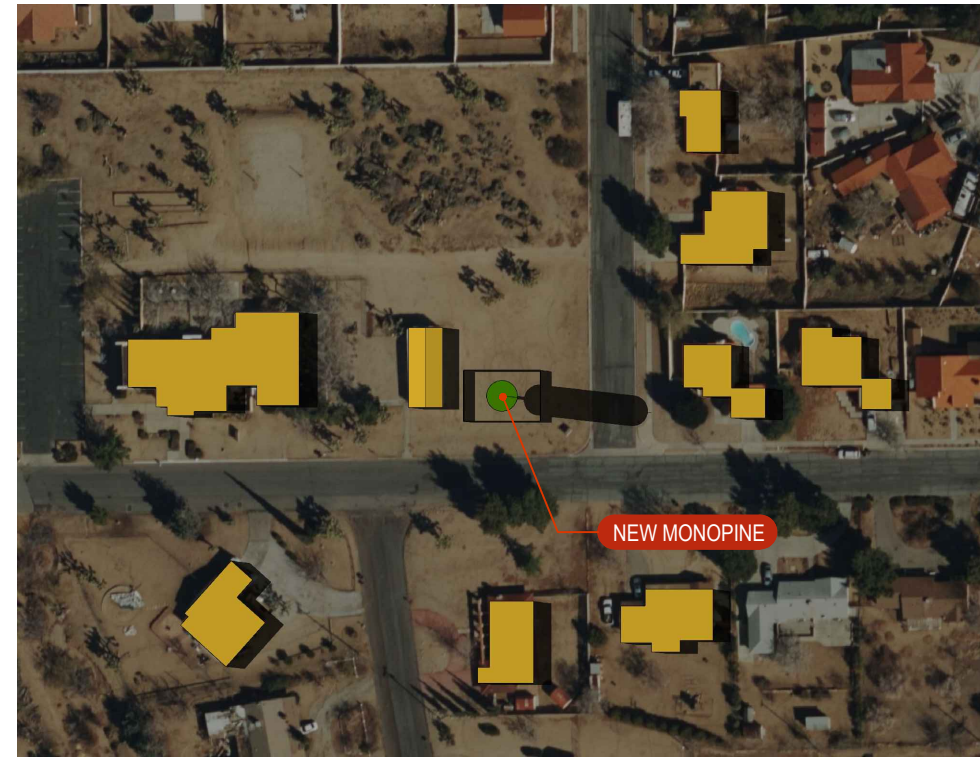
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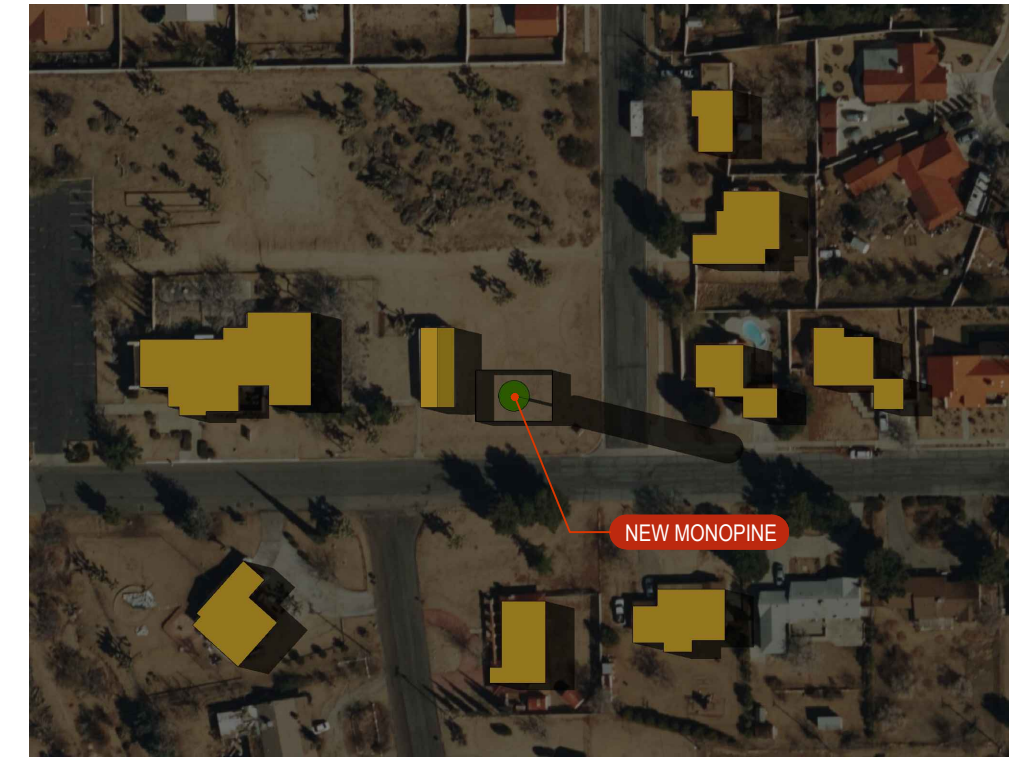
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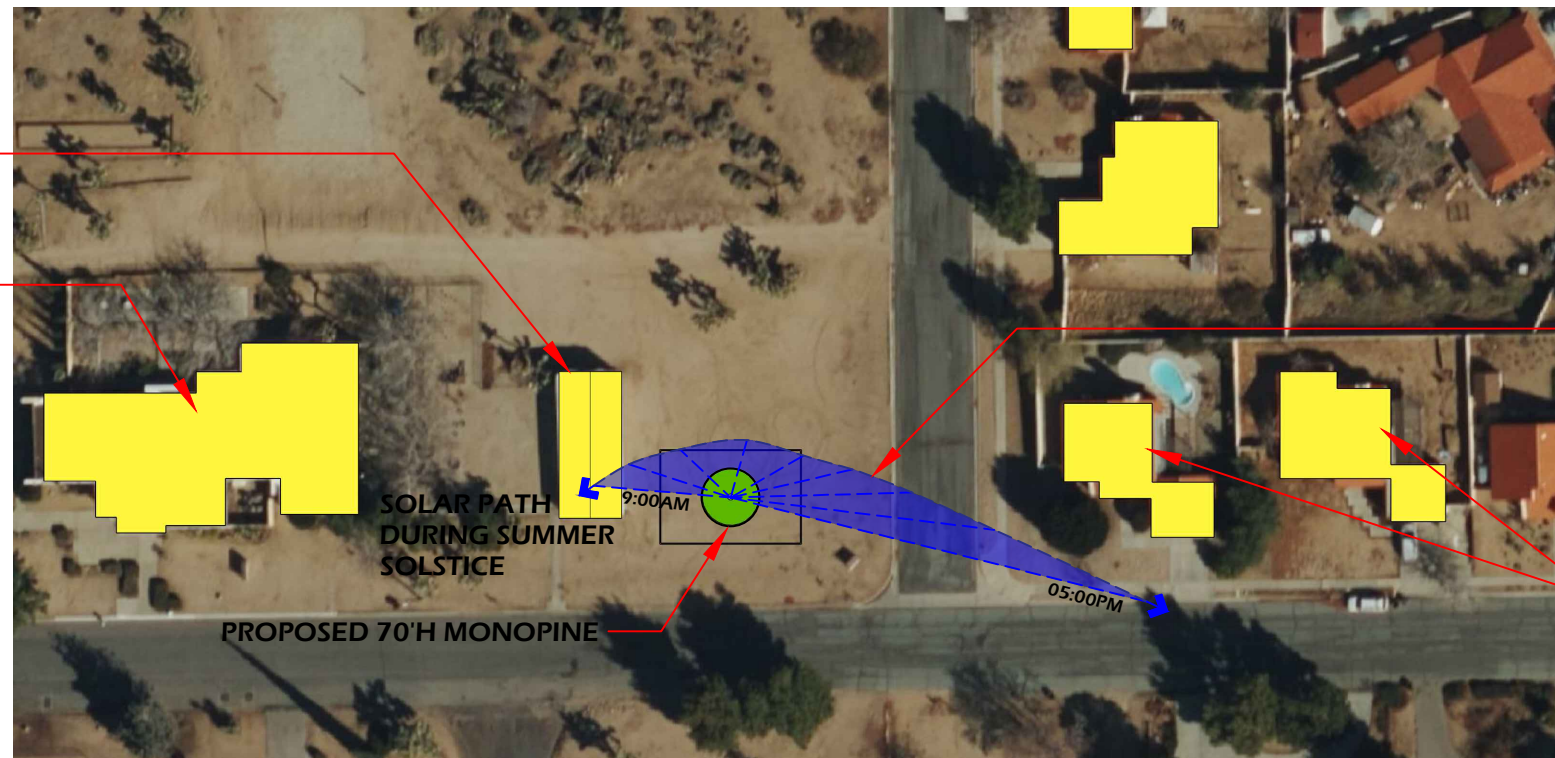
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PROJECT IMPACT TO SURROUNDING

EXISTING STORAGE SHED

EXISTING CHURCH STRUCTURE



THE SHADED AREA DEPICTS THE START AND END SWEEP OF SHADOW BASED ON THE TIME RANGE INDICATED IN THE ILLUSTRATION. IT DOES NOT DEPICT THE ENTIRE SHADOW AT A GIVEN POINT IN TIME.

EXISTING RESIDENCE



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FALL EQUINOX

9:00 AM

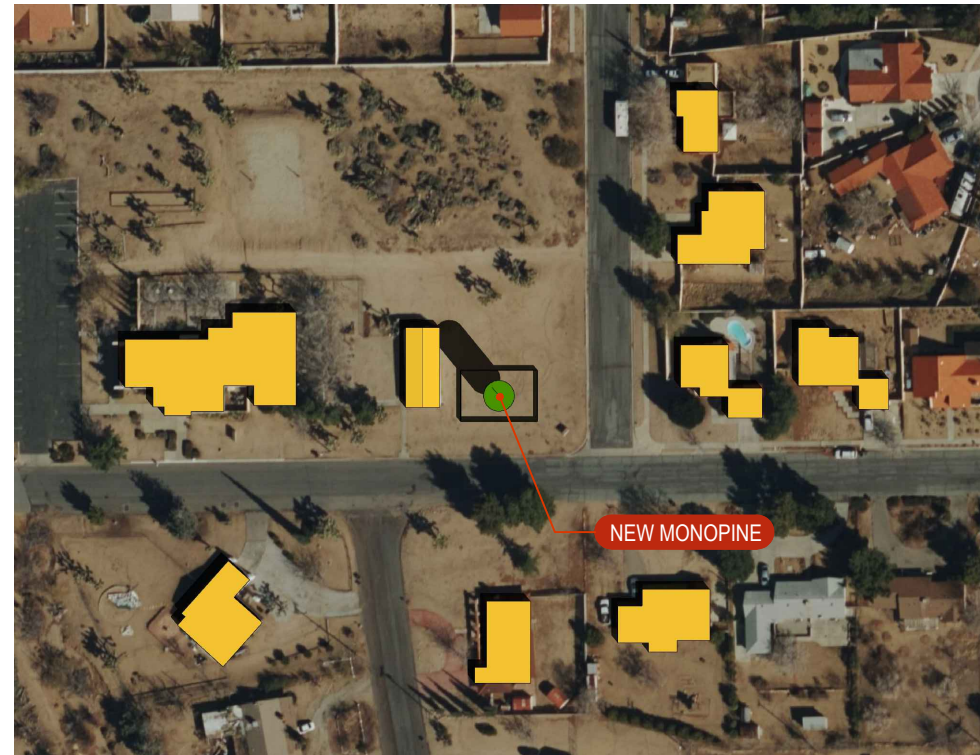
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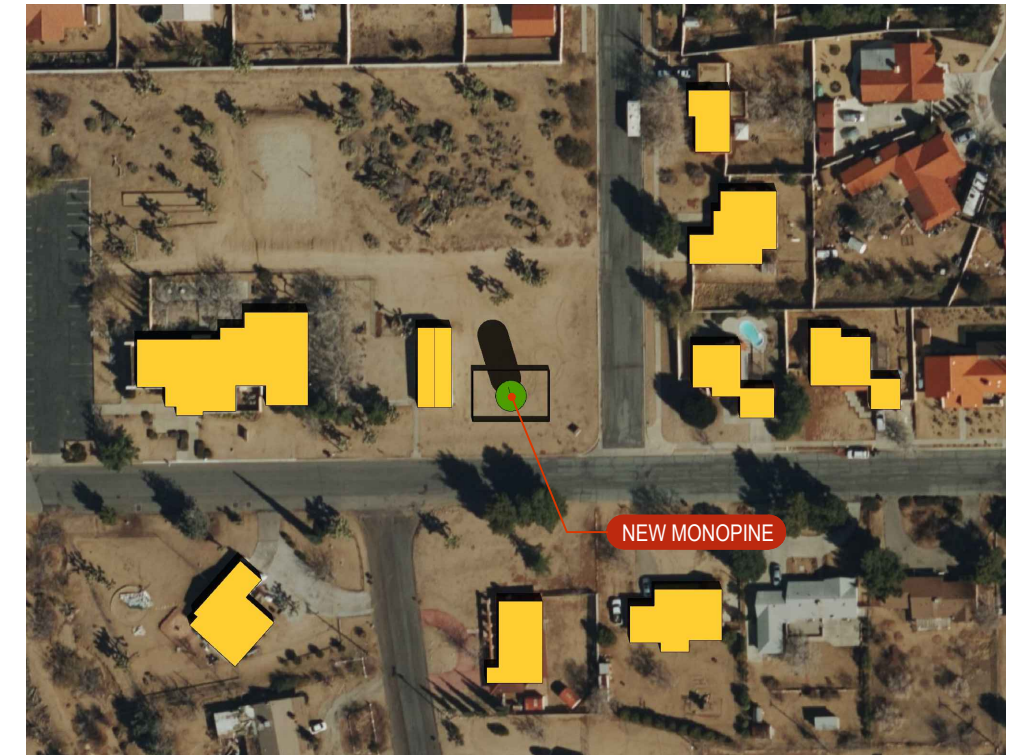
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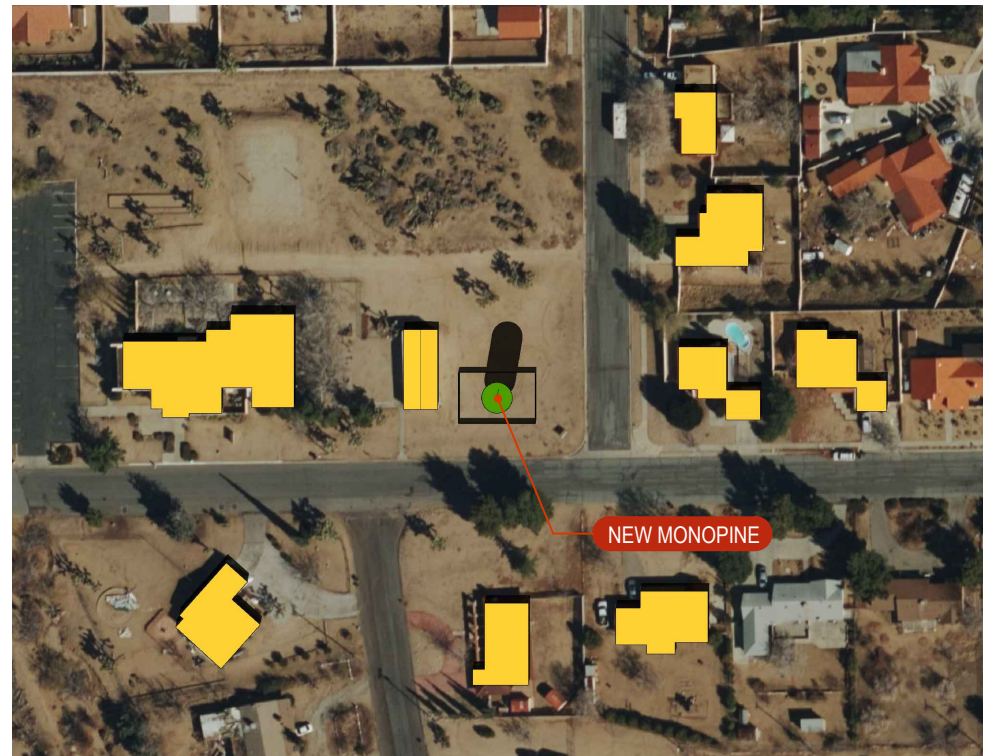
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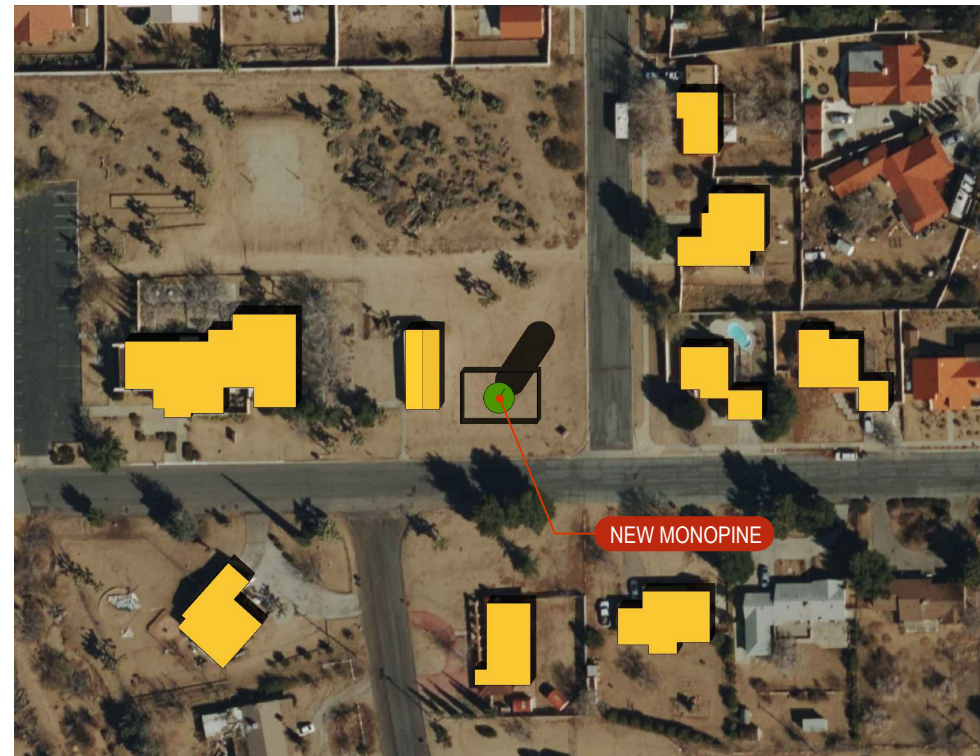
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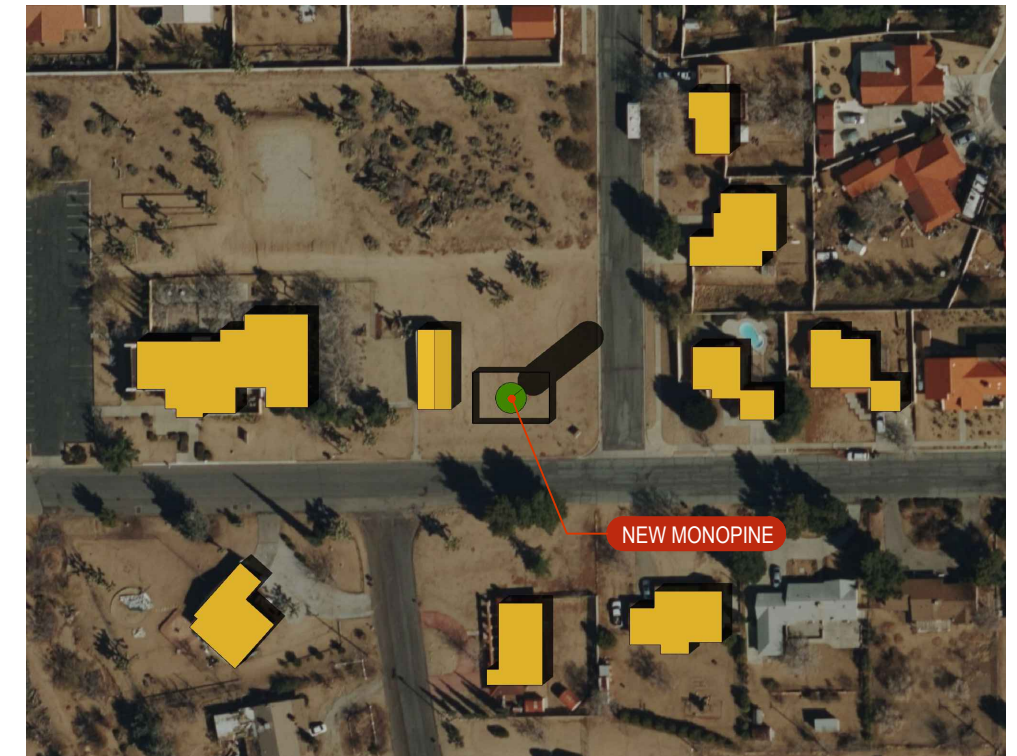
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SSR-3

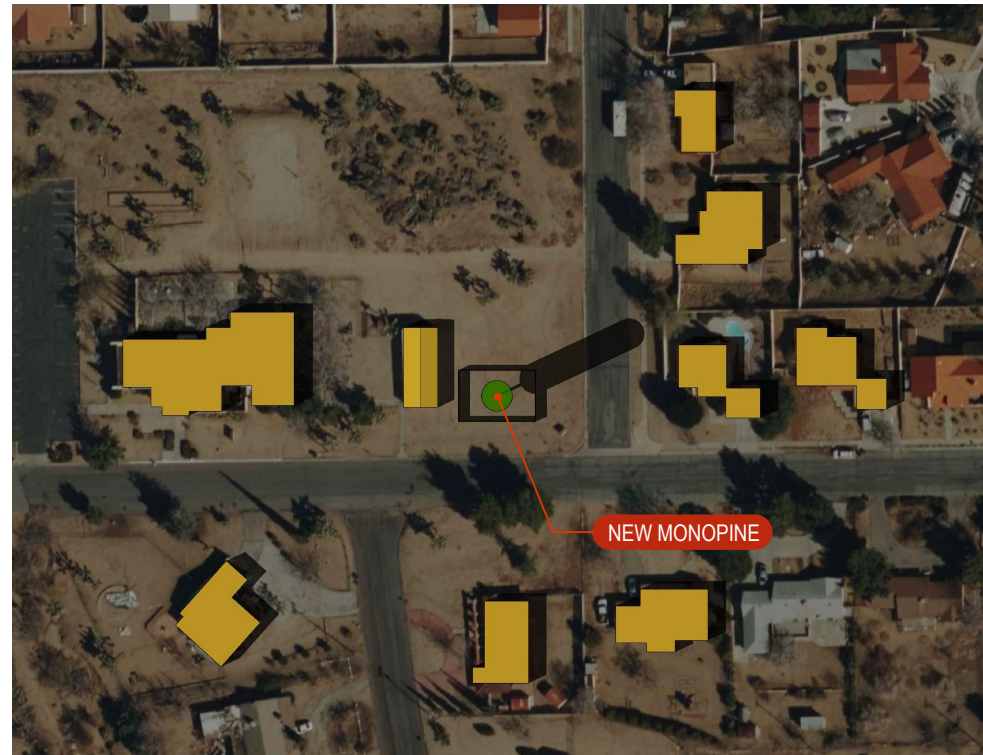
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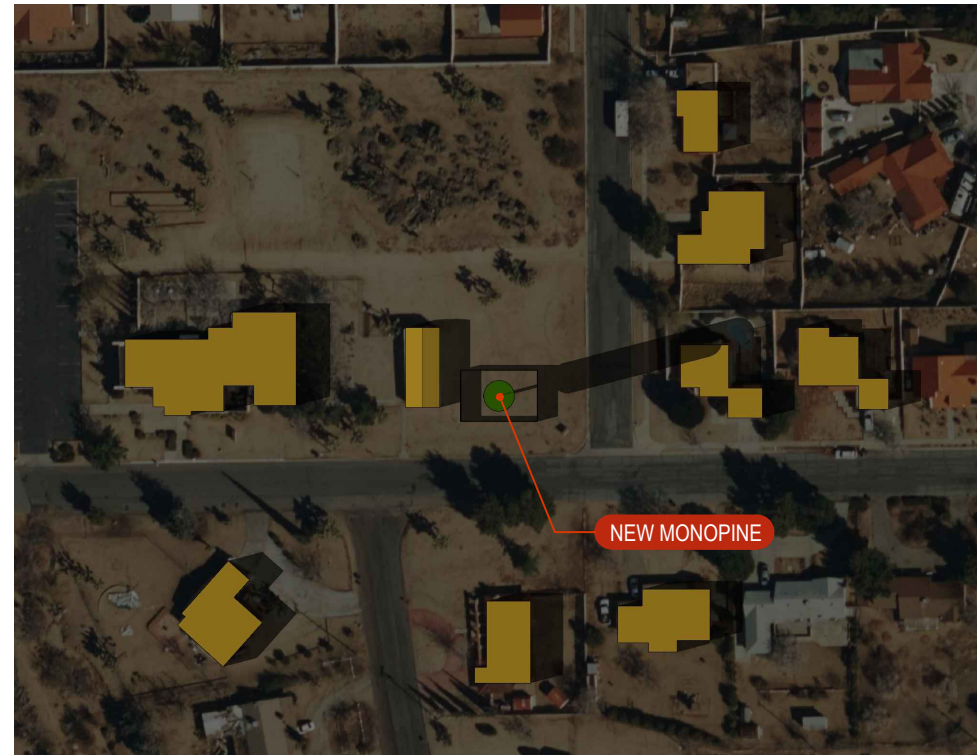
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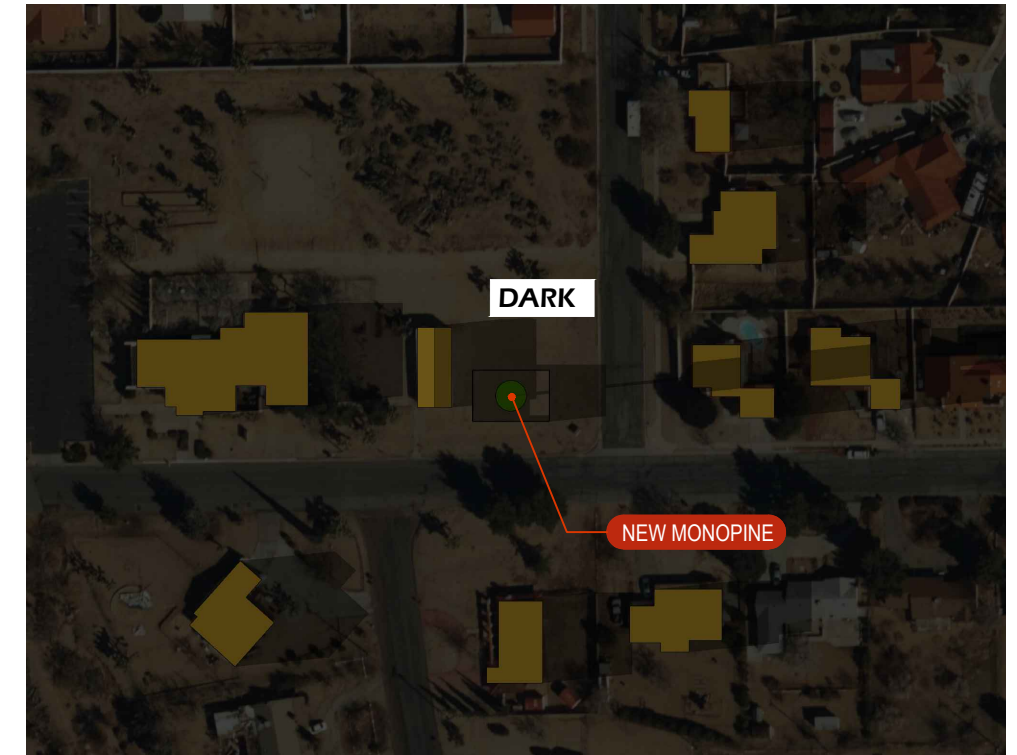
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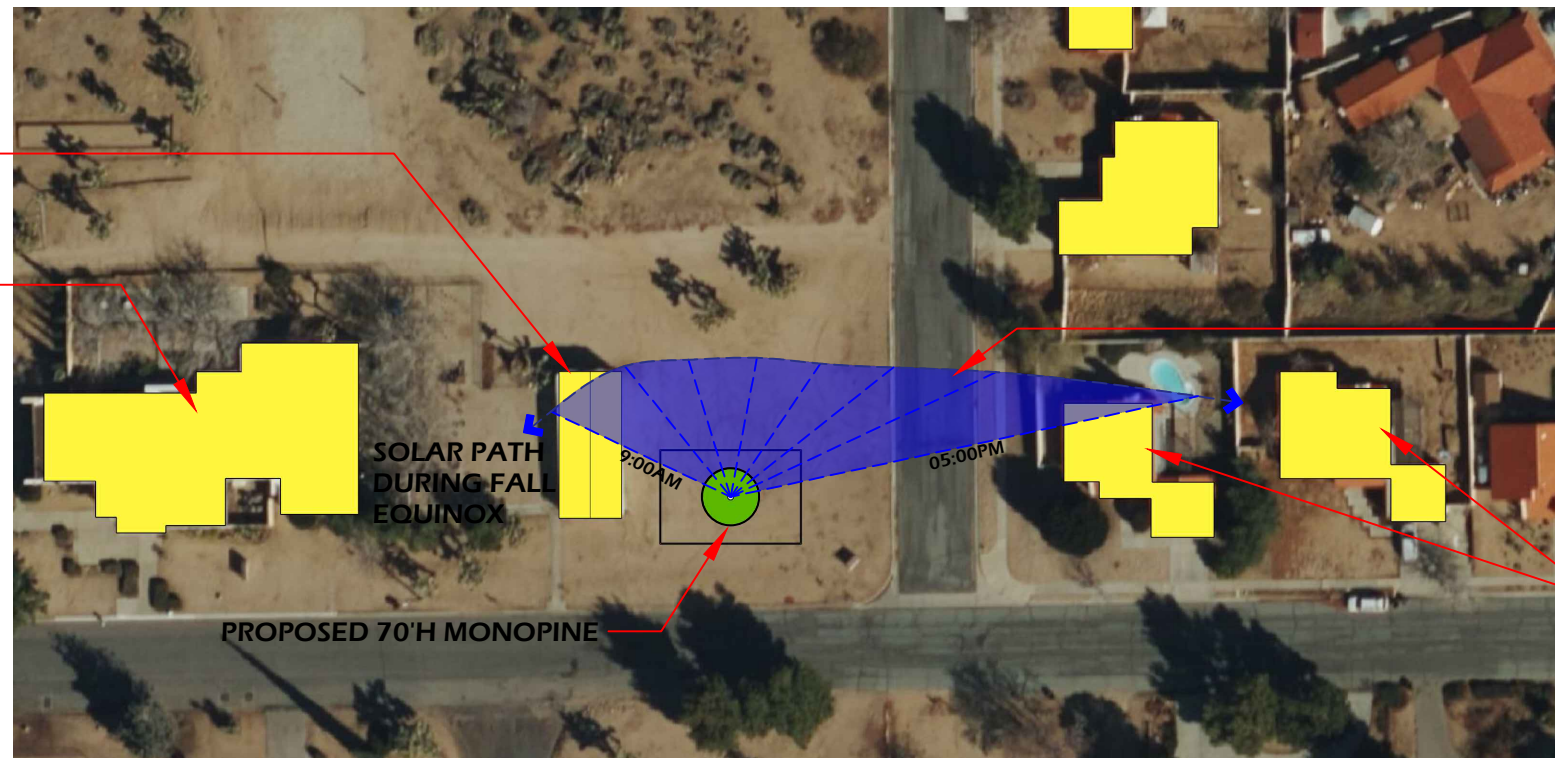
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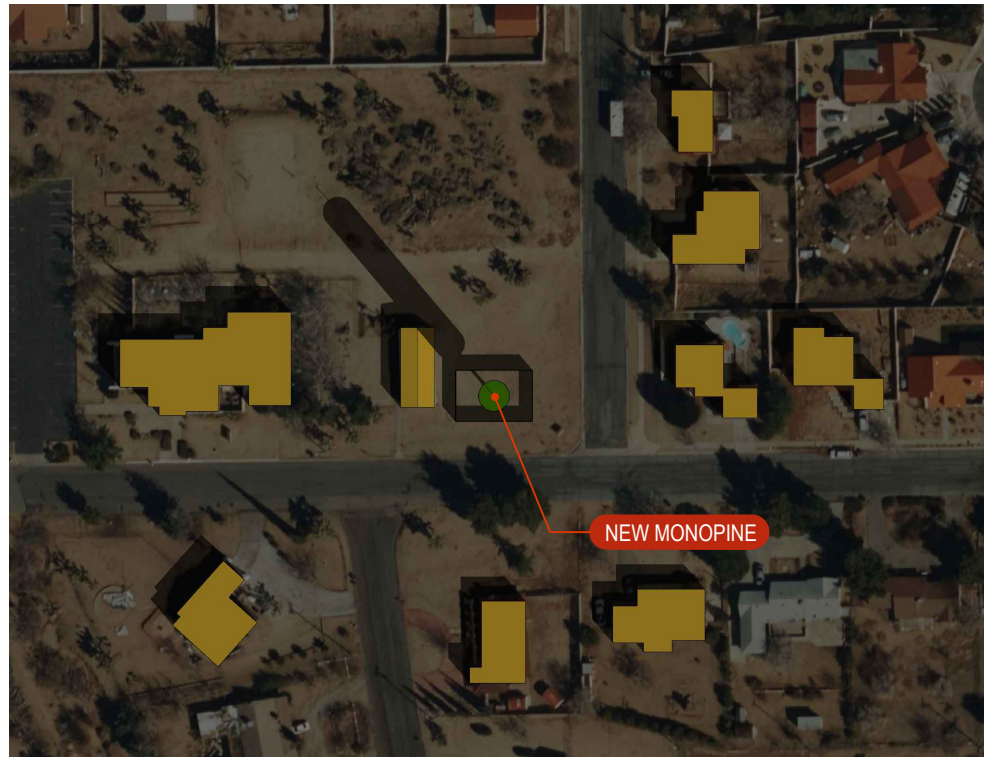
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WINTER SOLSTICE

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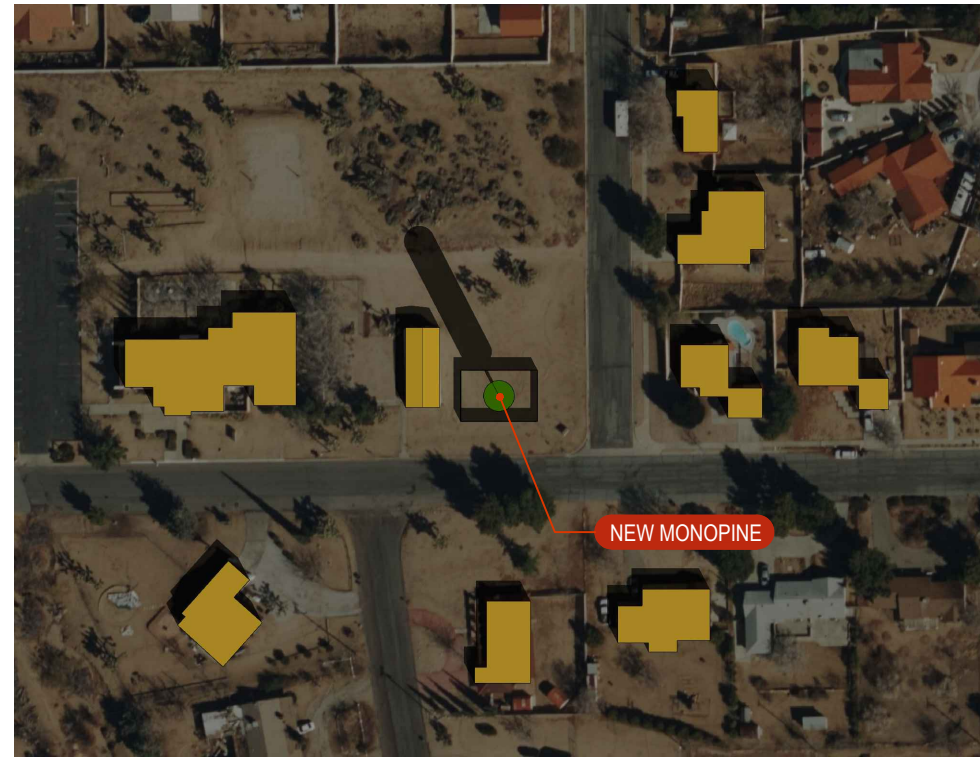
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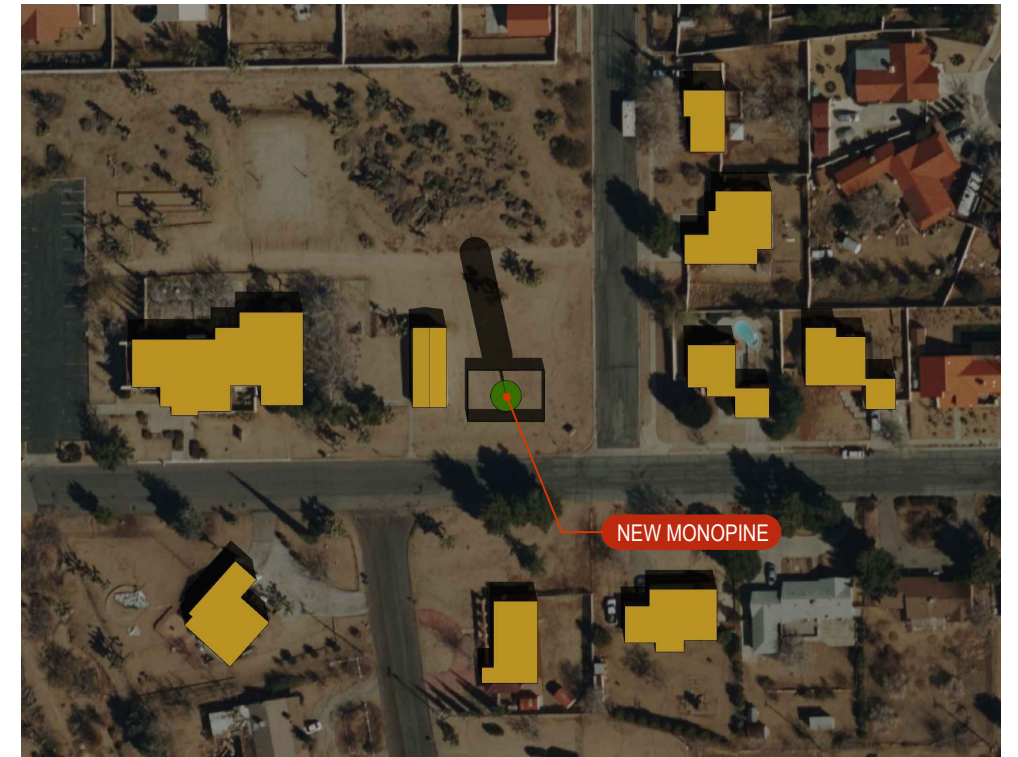
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DECEMBER 21, 2024



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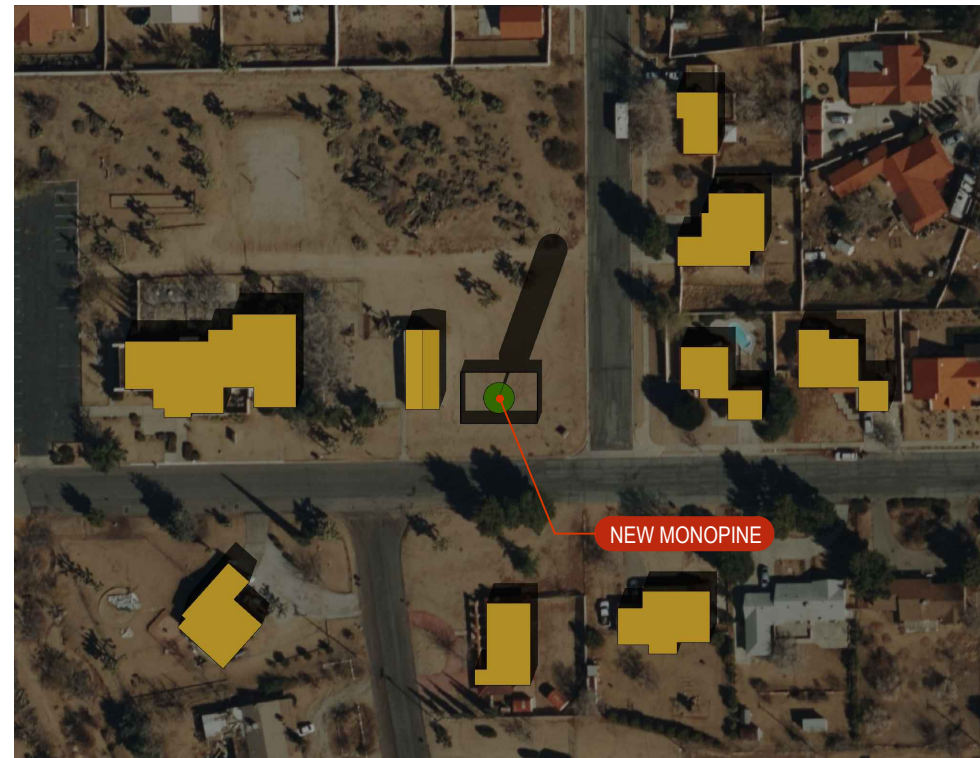
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WINTER SOLSTICE

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DECEMBER 21, 2024



WINTER SOLSTICE

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DECEMBER 21, 2024



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SSR-5

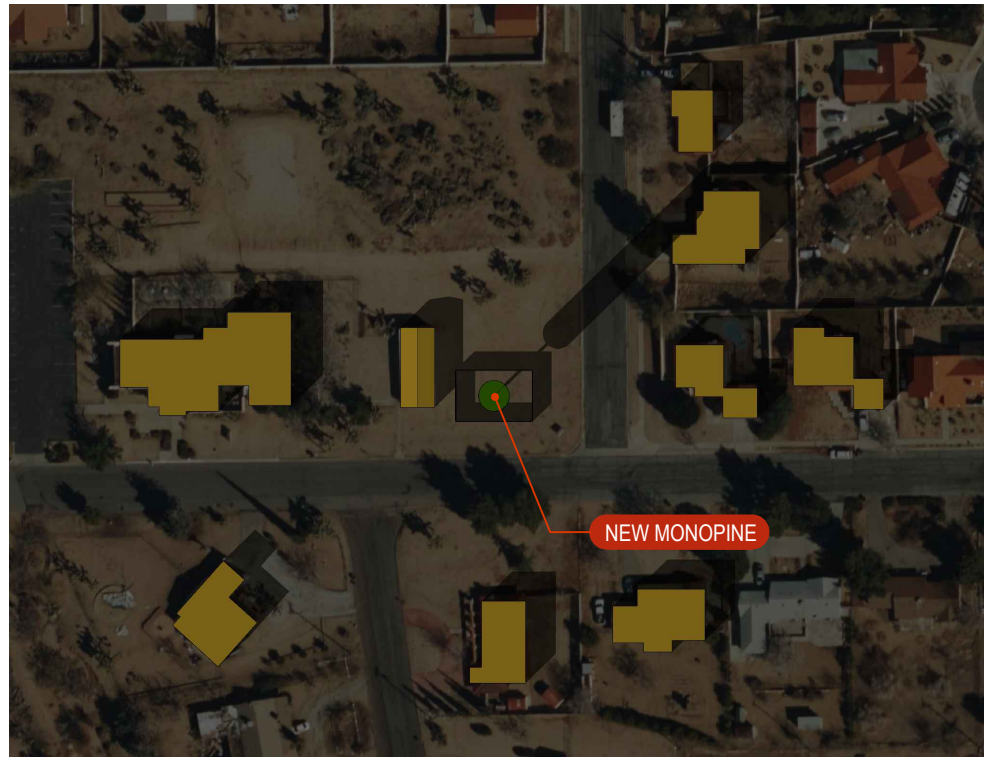
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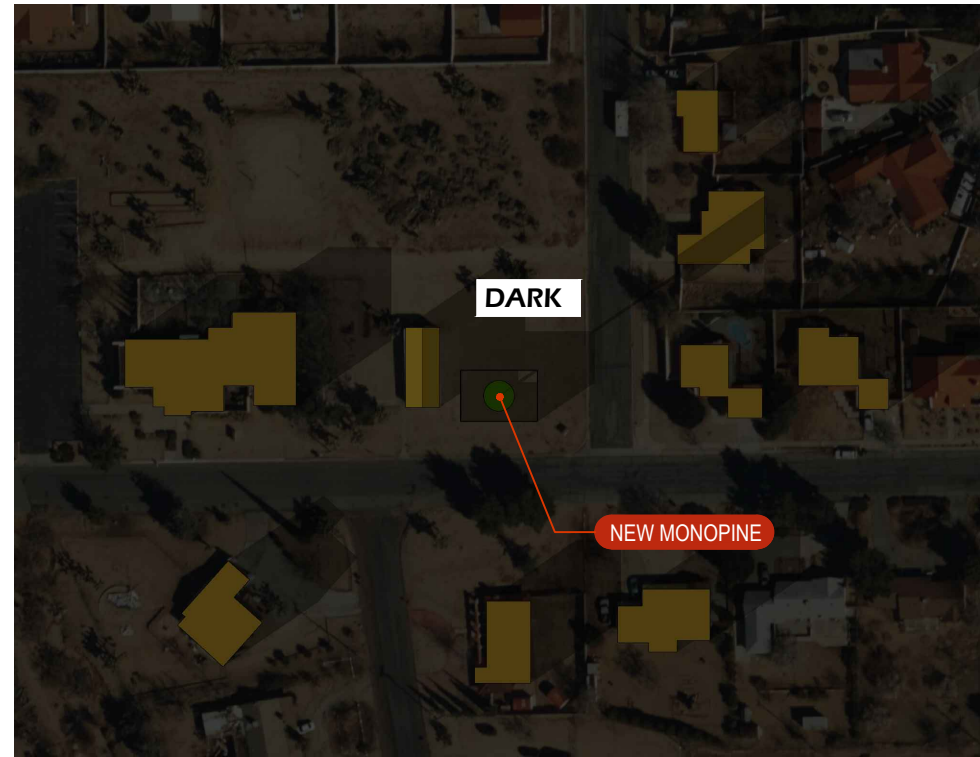
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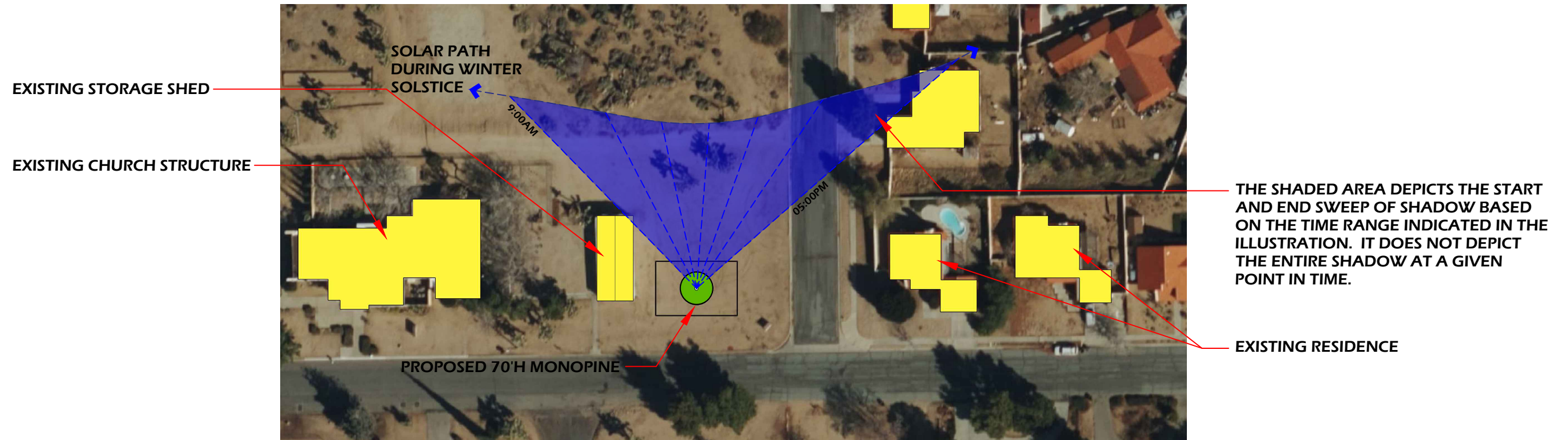
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SPRING EQUINOX

9:00 AM

MARCH 19, 2024



SPRING EQUINOX

10:00 AM

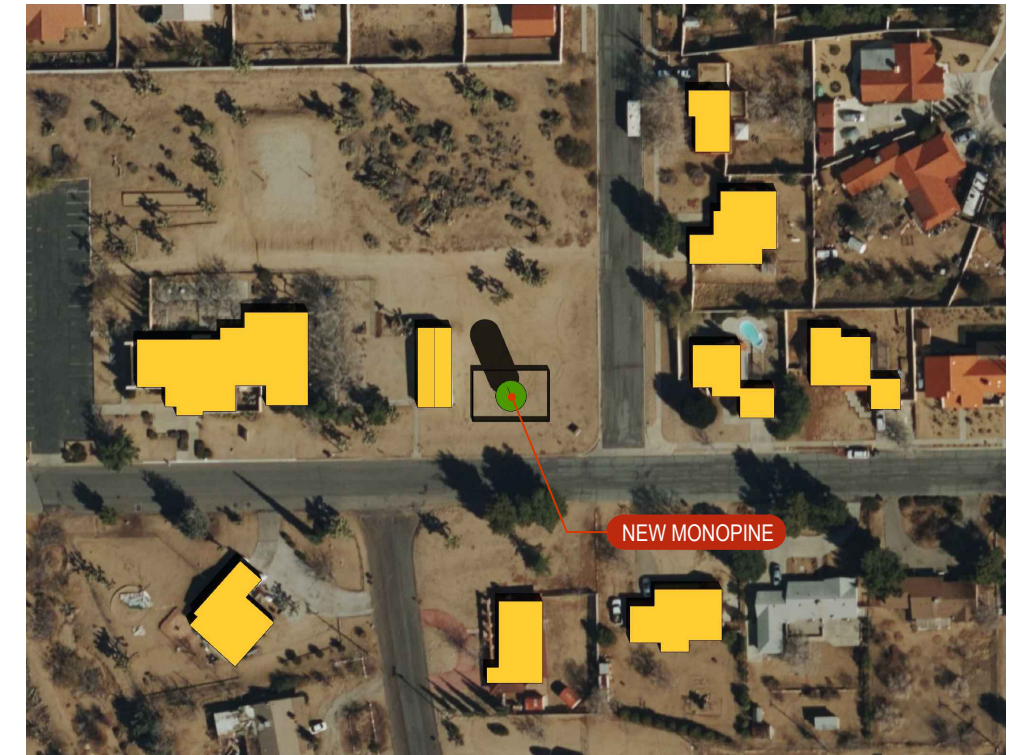
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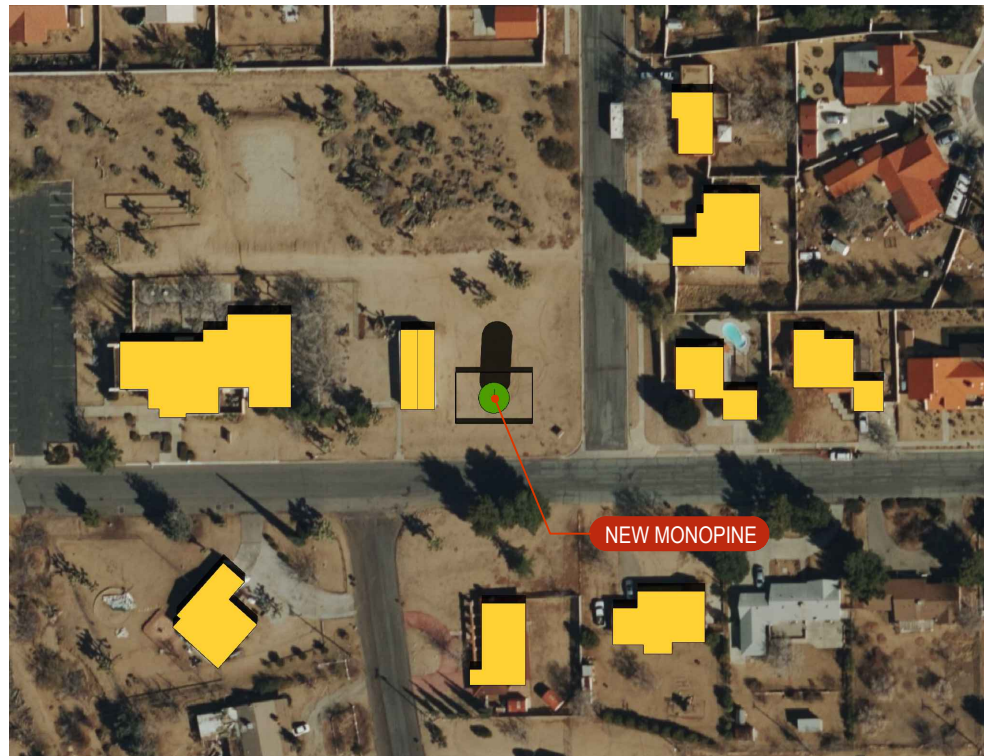
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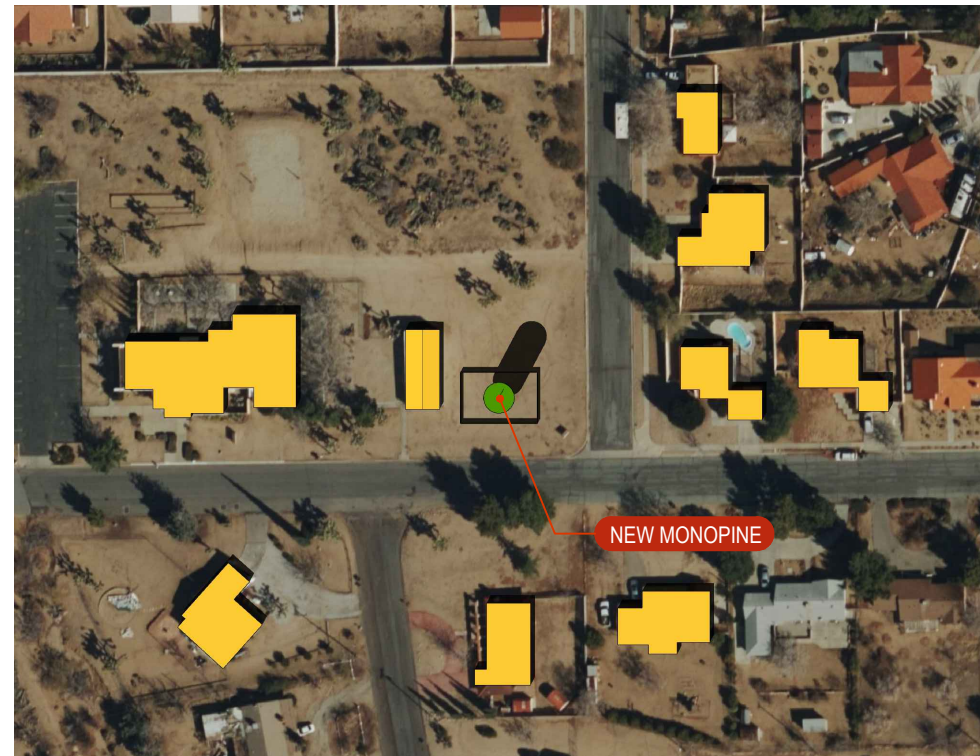
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MARCH 19, 2024



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MARCH 19, 2024



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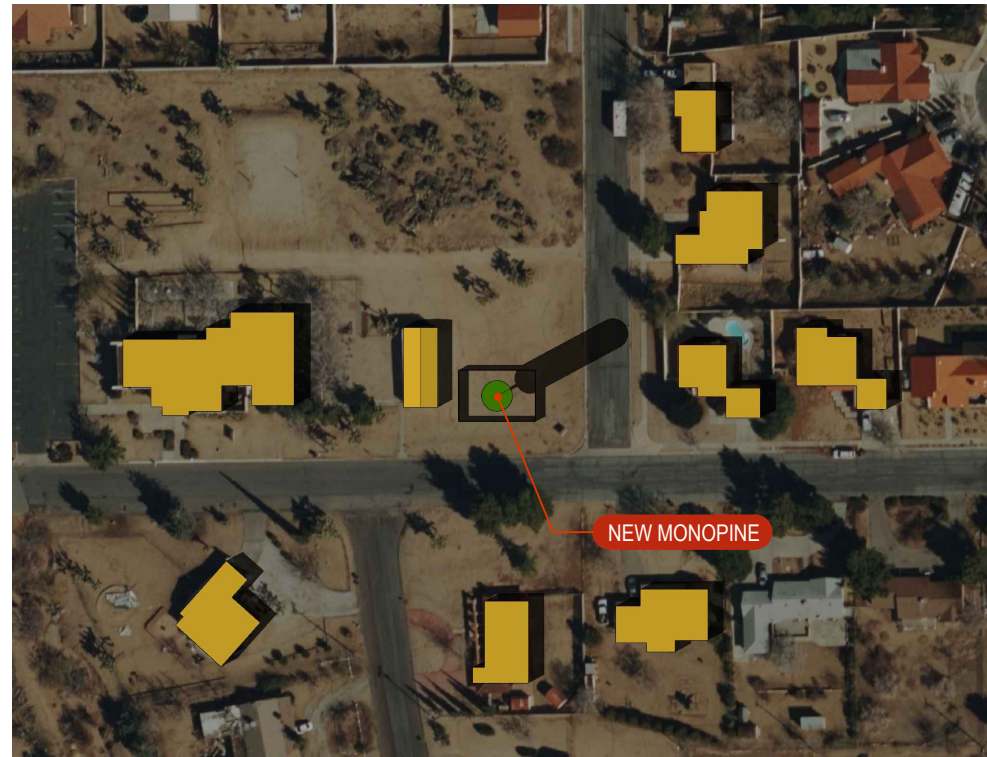
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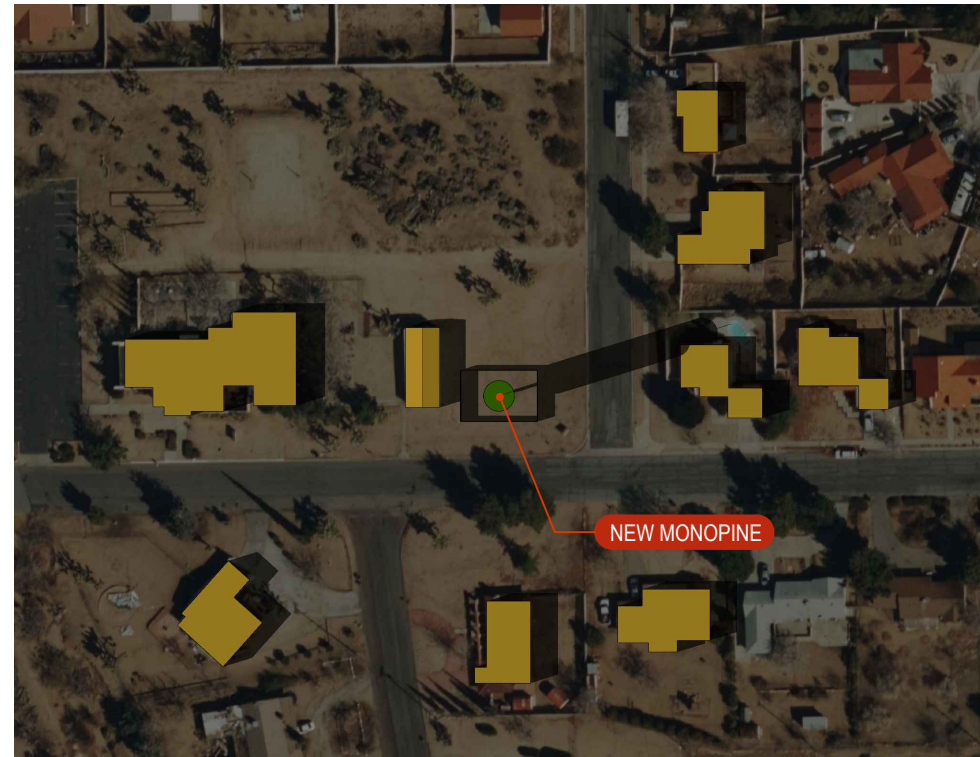
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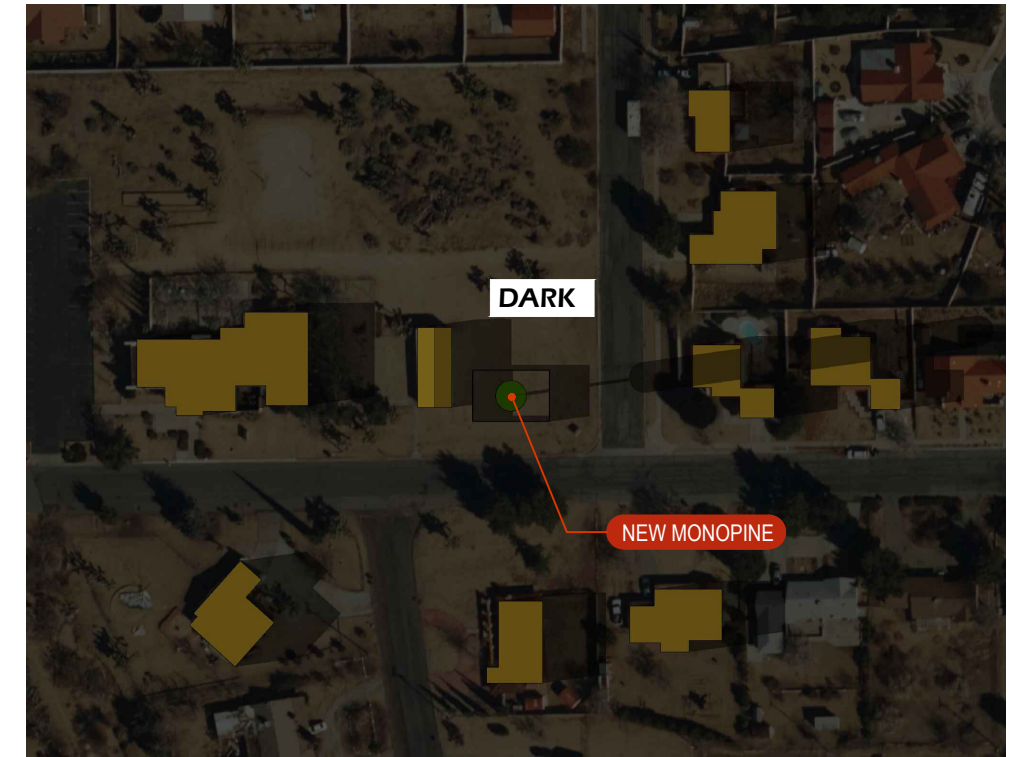
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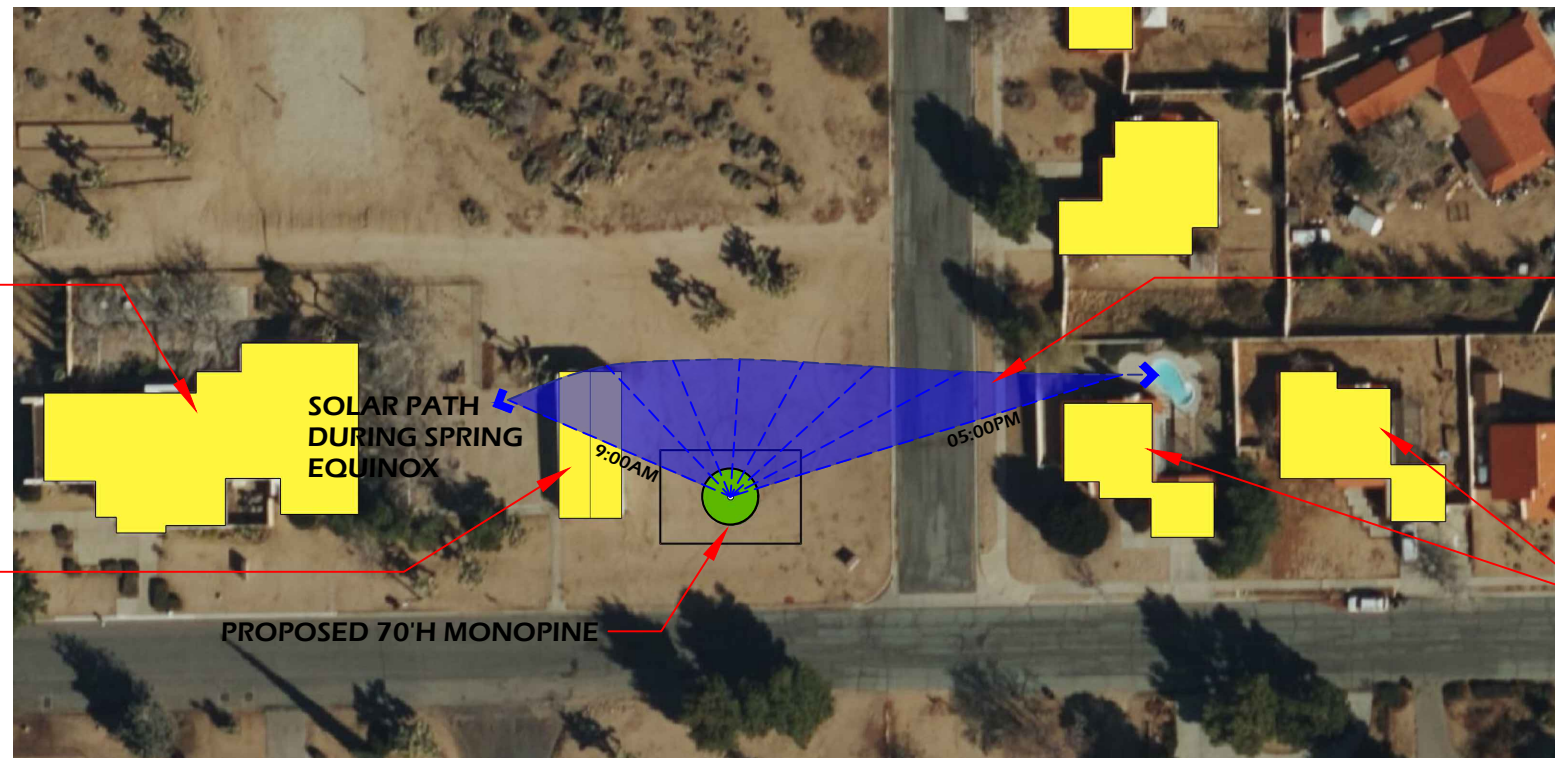
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PROJECT IMPACT TO SURROUNDING

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