

# Megalith: A Deterrent

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## LANDMARKERS FOR A NUCLEAR WASTE ISOLATION SITE

A landmark that circumvents consciousness and compels physiological and instinctive responses evades the communication barriers associated with inevitable loss of meaning.

### INTRODUCTION

This project proposes landmarks for a nuclear waste isolation site east of Carlsbad in the desert of New Mexico. Beneath this site lie millions of barrels of radioactive waste, which are required to remain undisturbed for the duration of a ten-thousand-year decay process. As an alternative approach to the monument-meaning problem in architecture, the proposed landmarks avoid the tendency to assert meaning through immediately consumable metaphors or simple singular associations, instead retain their mysterious character over time and evade total comprehension.

Megalith is a foreboding field of wind-driven subsonic stelae. The shapes of the stelae have no explicit historic reference, aside from the inclination to stand large stones upright, marking the ground for different reasons. For millennia, these mysterious monuments have provoked the proliferation of innumerable and incredible conception-myths ranging from prehistoric societies to medieval magicians and even alien races. This tendency works in favor of the nuclear waste isolation site, as it has in the past, as a warning beacon or marker of death, where speculation about place and function are continually reproduced.

### STELAE & SARCOPHAGUS

The stelae are cast in magnesium phosphate concrete, giving them a dull metallic luster, and helping to prolong their lifespan. Contoured voids within the masses capture and distort prevailing winds, creating harmonic resonance chambers that emit variable resonant and dissonant vibrations at 19 hertz, colloquially known as the “fear frequency.” Density of the field and harmonics of the chambers intensify from the perimeter of the site inward. At lower concentrations, the field provokes subtle apprehensiveness and significant reflection at the

periphery. Intensification and incongruence of these stimuli deter interlopers, creating an uninhabitable void at the center of the site for the duration of the decay process.

The buildings at the center of the site, containing access shafts to the waste storage vaults, are covered with a new structural skin. This sarcophagus, adopting a term from the analogous Chernobyl site, is sheathed in a synthetic sapphire mirror to resist scratching from windblown sand. The facade is imagined as an incredibly low-tech Klingon cloaking device that confounds the ideas of literal and phenomenal transparency. Its platonic form removes architectural registration and human scale from the buildings. The filleted edges and reflective qualities of the mirrored panels distort its surroundings, creating a material indeterminacy intended to further conceal its reality.

### PETRIFICATION

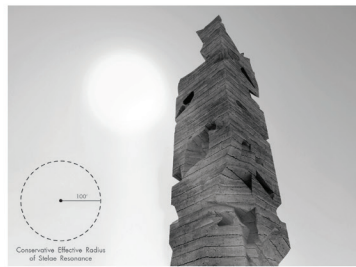
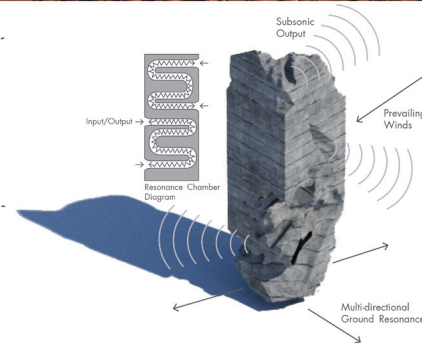
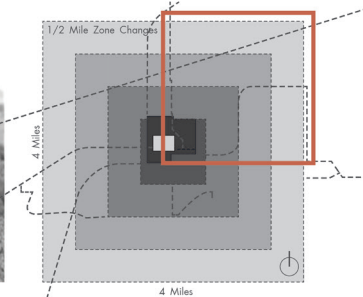
In this alternate reality, structures are worn by environmental exposure and age, viewed in an abandoned state much further into the future or possibly following a mass-extinction event. The atmospheric amplification of the site along with speculative sensory reception of the structures provoke a curated experience of irrational fear and subjective petrification. This static, yet irritated, state of the subject challenges the hegemony of movement or dislocation that have previously characterized its dubious relation to the architectural object. The physiognomy of this site elicits a tangible cultural resonance, where local folklore and legends of place continually replenish meaning over time.



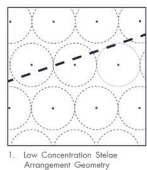
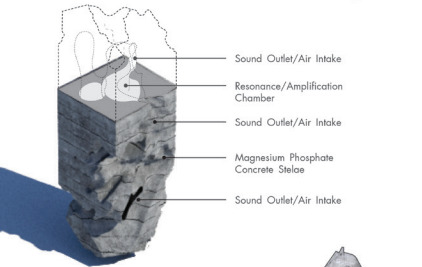
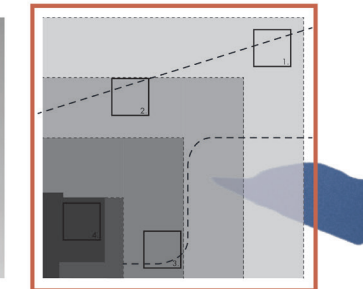
Stelae Field



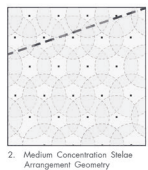
Stela Detail



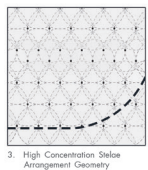
Stela View



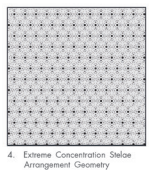
1. Low Concentration Stelae Arrangement Geometry



2. Medium Concentration Stelae Arrangement Geometry



3. High Concentration Stelae Arrangement Geometry



4. Extreme Concentration Stelae Arrangement Geometry

**SITE KEY**

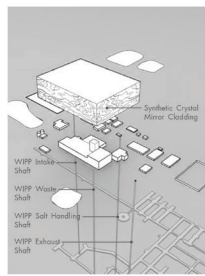
- Lowest Concentration of Stelae, Only 19hz Subsonic Frequency
- Medium Concentration of Stelae, Introduction of Dissonant Elements
- High Concentration of Stelae, High level of Subsonic Dissonance
- Extreme Concentration of Stelae, Total Subsonic Dissonance
- WPPP Main Building Location
- Roads To Be Removed

**PREVAILING WINDS**

JAN - West	JUL - South
FEB - West	AUG - South-SE
MAR - West	SEPT - South
APR - West	OCT - South
MAY - West	NOV - West
JUN - South-SE	DEC - West



Stelae Field and Sarcophagus



Sarcophagus Exploded Axonometric



Stela Elevation