ARCHITECTURE THAT TRANSFORMS HISTORY:

REFRAMING THE BIRTHPLACE OF THE ATOMIC BOMB FOR A MORE CRITICAL FUTURE

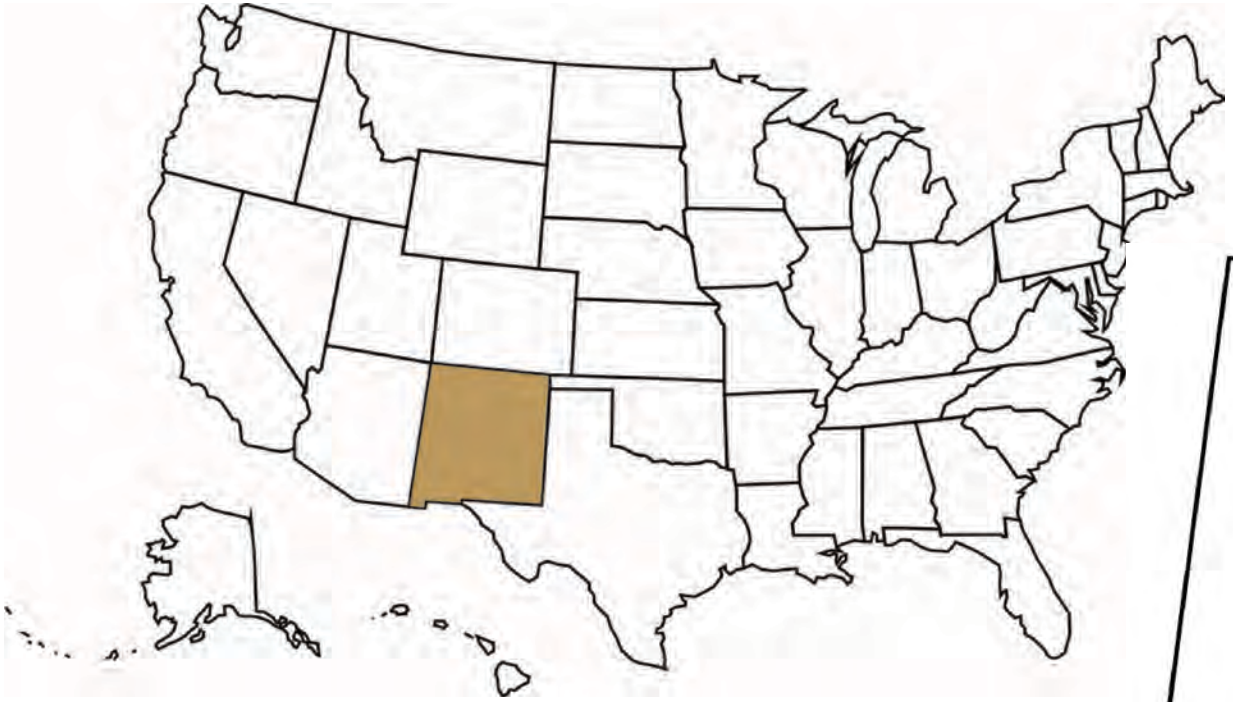
Tyler Gefroh

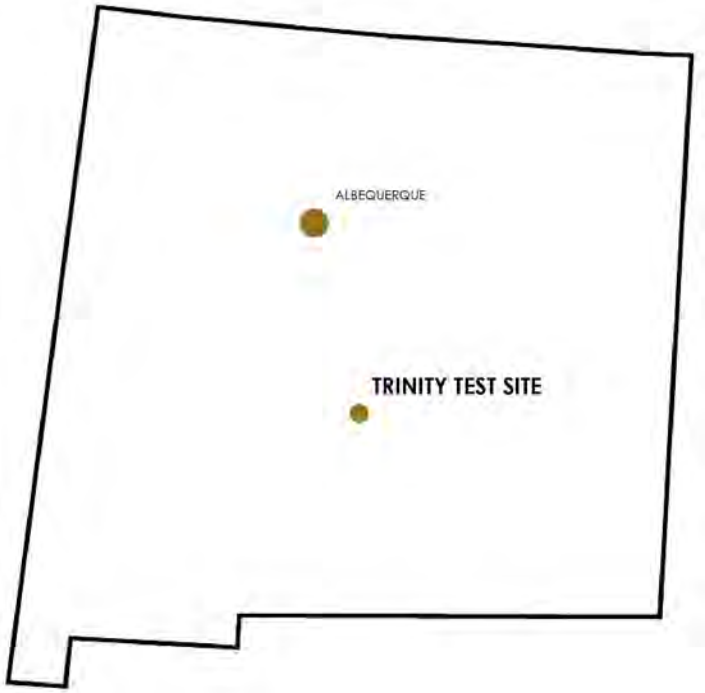
memory

memory = life

forgetting = death

Birthplace of the atomic bomb




ALBEQUERQUE
TRINITY TEST SITE

TRINITY SITE
WHERE
THE WORLD'S FIRST
NUCLEAR DEVICE
WAS EXPLODED ON
JULY 16 1945

Hiroshima after bomb

Countries with nuclear weapons

Sources: Arms Control Association, Federation of American Scientists, International Panel of Fissile Materials, U.S. Department of Defense, U.S Department of State and Stockholm International Peace Research Institute.

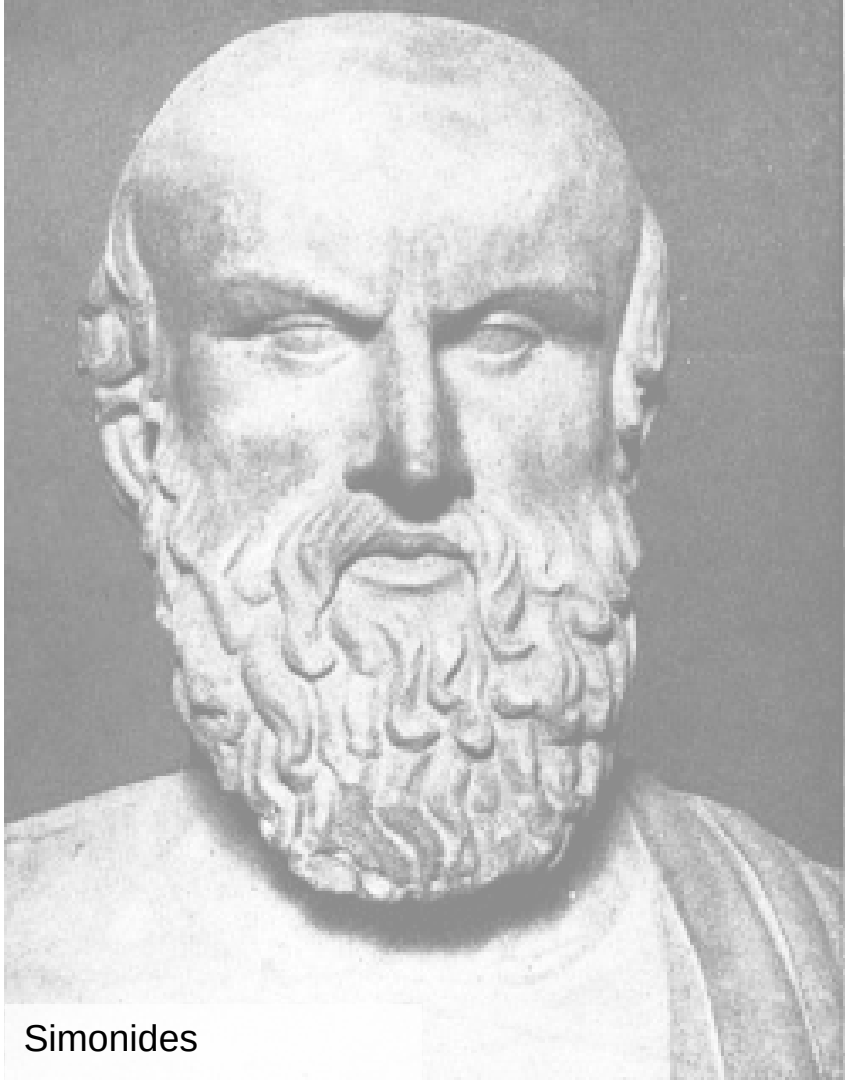
(Image: Getty/Express)

조선민주주의
인민공화국만세!

TRINITY SITE
WHERE
THE WORLD'S FIRST
NUCLEAR DEVICE
WAS EXPLODED ON
JULY 16, 1945
ERECTED 1965
WHITE SANDS MISSILE RANGE
J. FREDERICK THORLIN
MAJOR GENERAL U.S. ARMY
COMMANDING

mnemonics

- *the study and development of systems for improving and assisting the memory.*



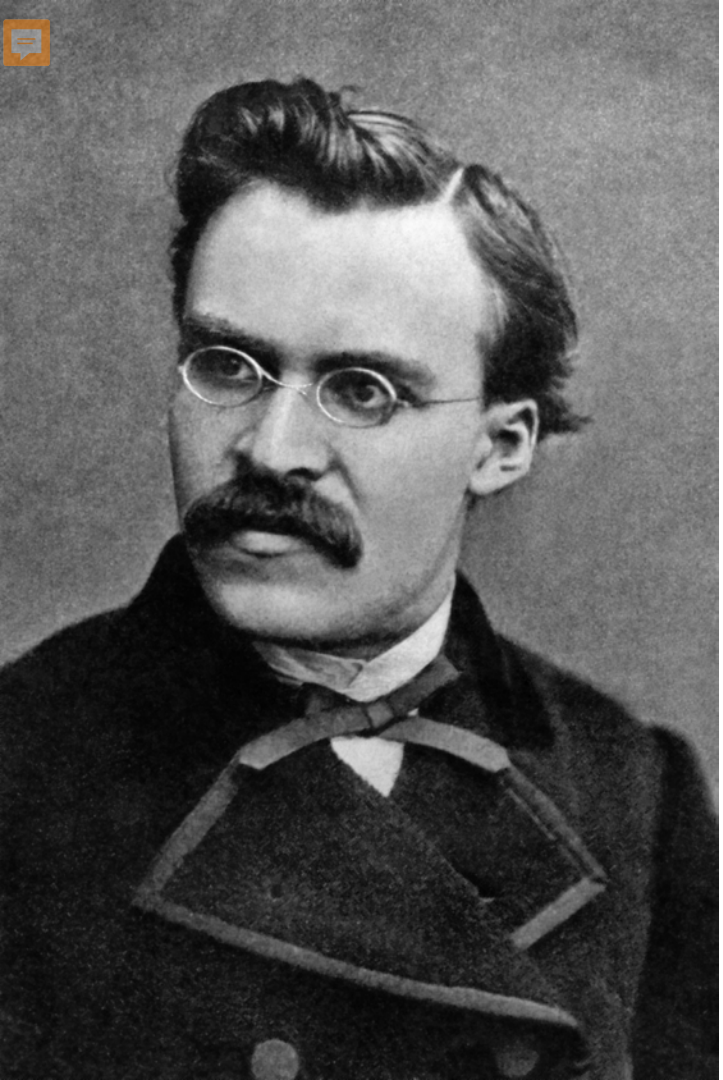
Simonides

Simonides outside of collapsing house

Officers' Me
R.A.F. S
Mel
Ea

Thur

y.
I got back
I felt very lonel
iged that you mean
to me. I loved
again. It was nice;
it?
We had a party
the mess at Marston. after dinner
celebrate our going, and by fi
o'clock when we left we were
very happy!
I shan't be able
to get to Wetherby from here, at



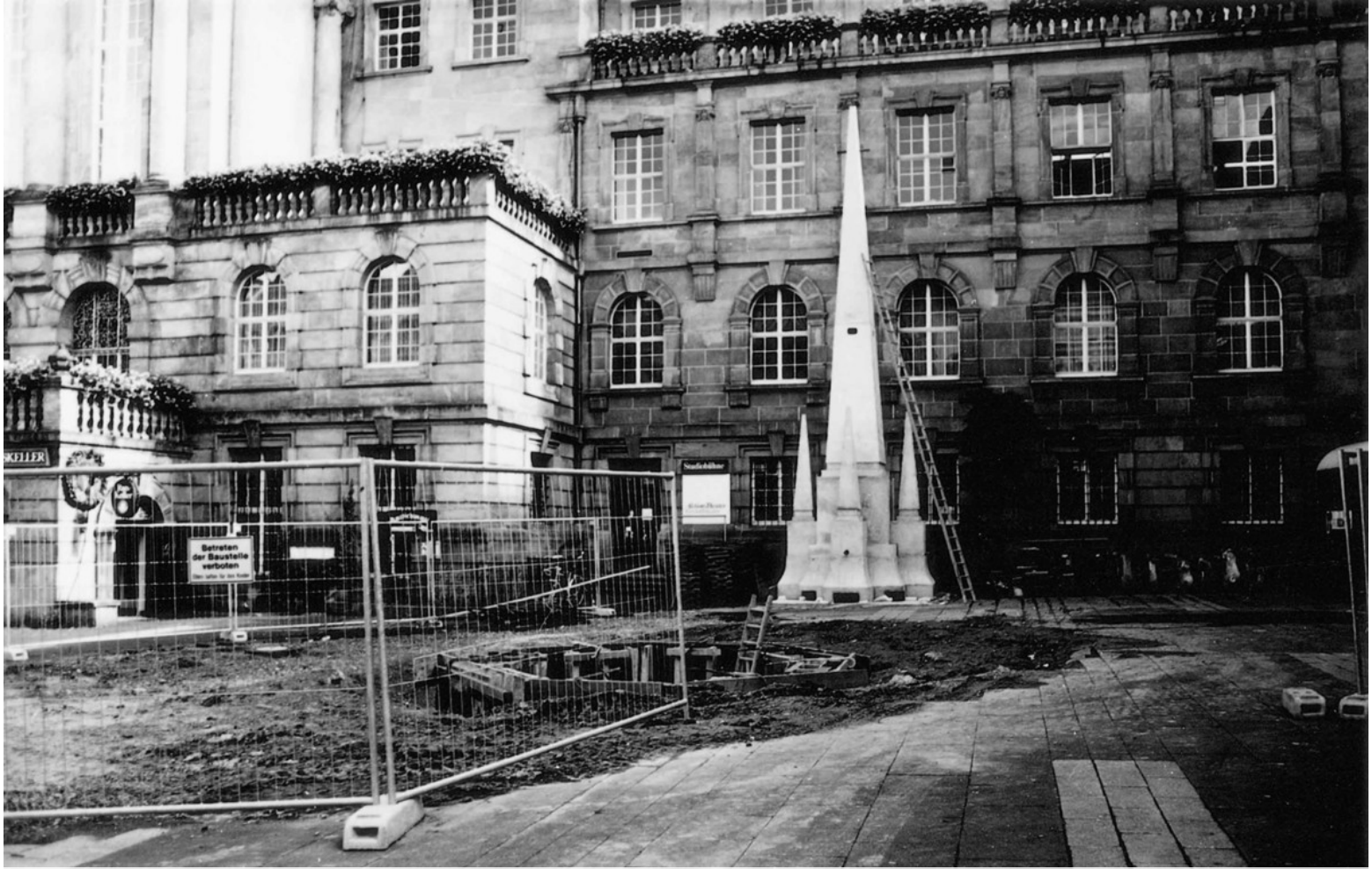
Monumental

Antiquarian

Critical

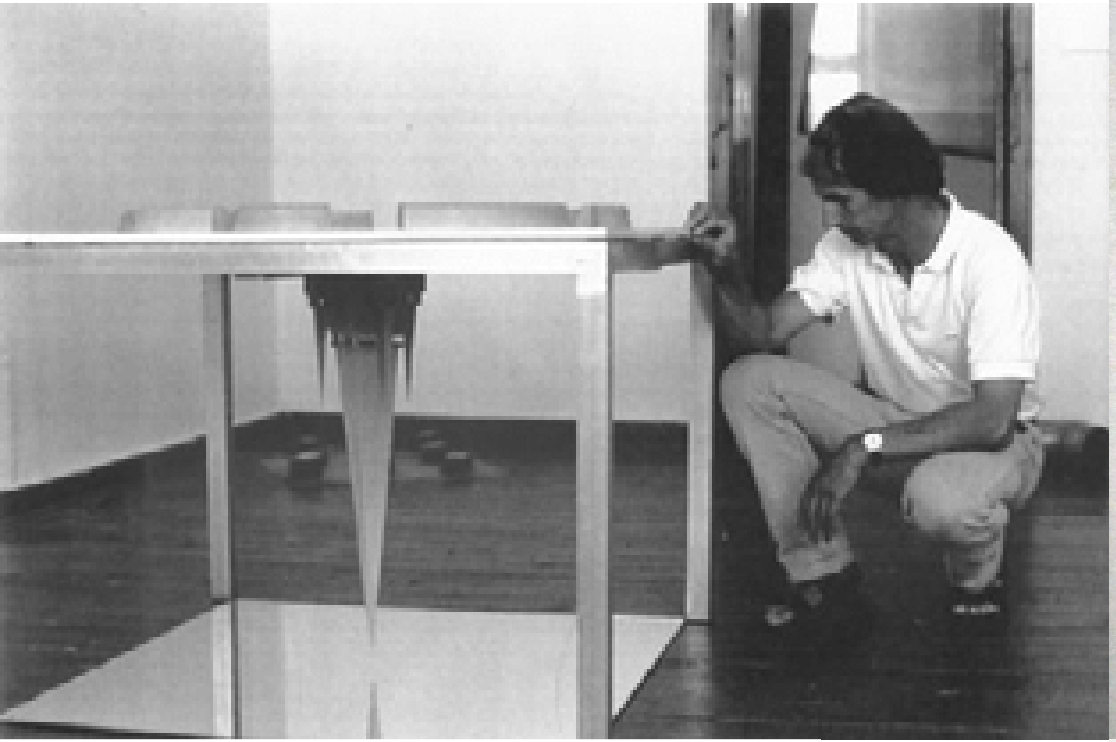
Victory Column, Berlin

Ole Worm's cabinet of curiosities, from *Museum Wormianum,* 1655

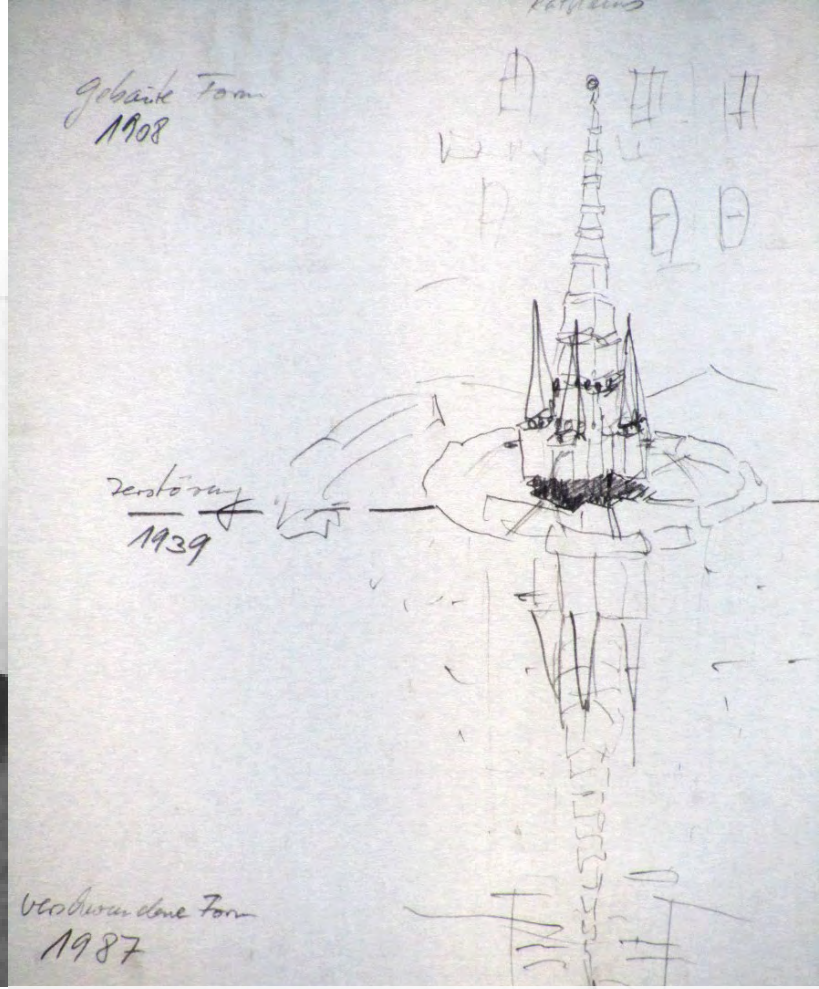


Cast mold of “negative form” Fountain sitting upright

“Negative Form”

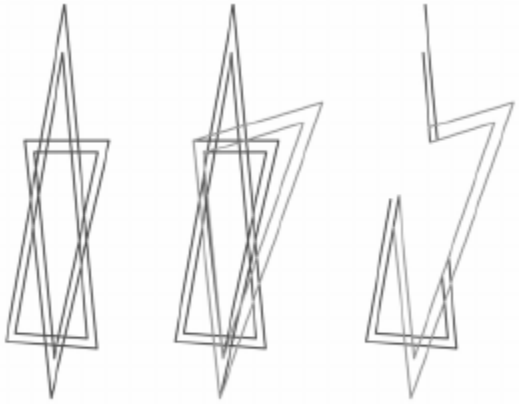


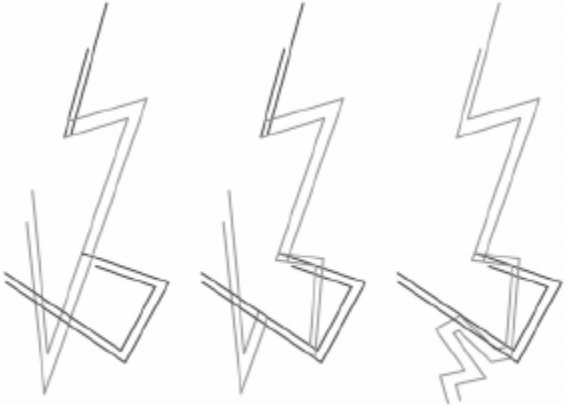
Model of “negative form” Fountain



Sketch of “negative form” Fountain

Jewish Museum, Berlin

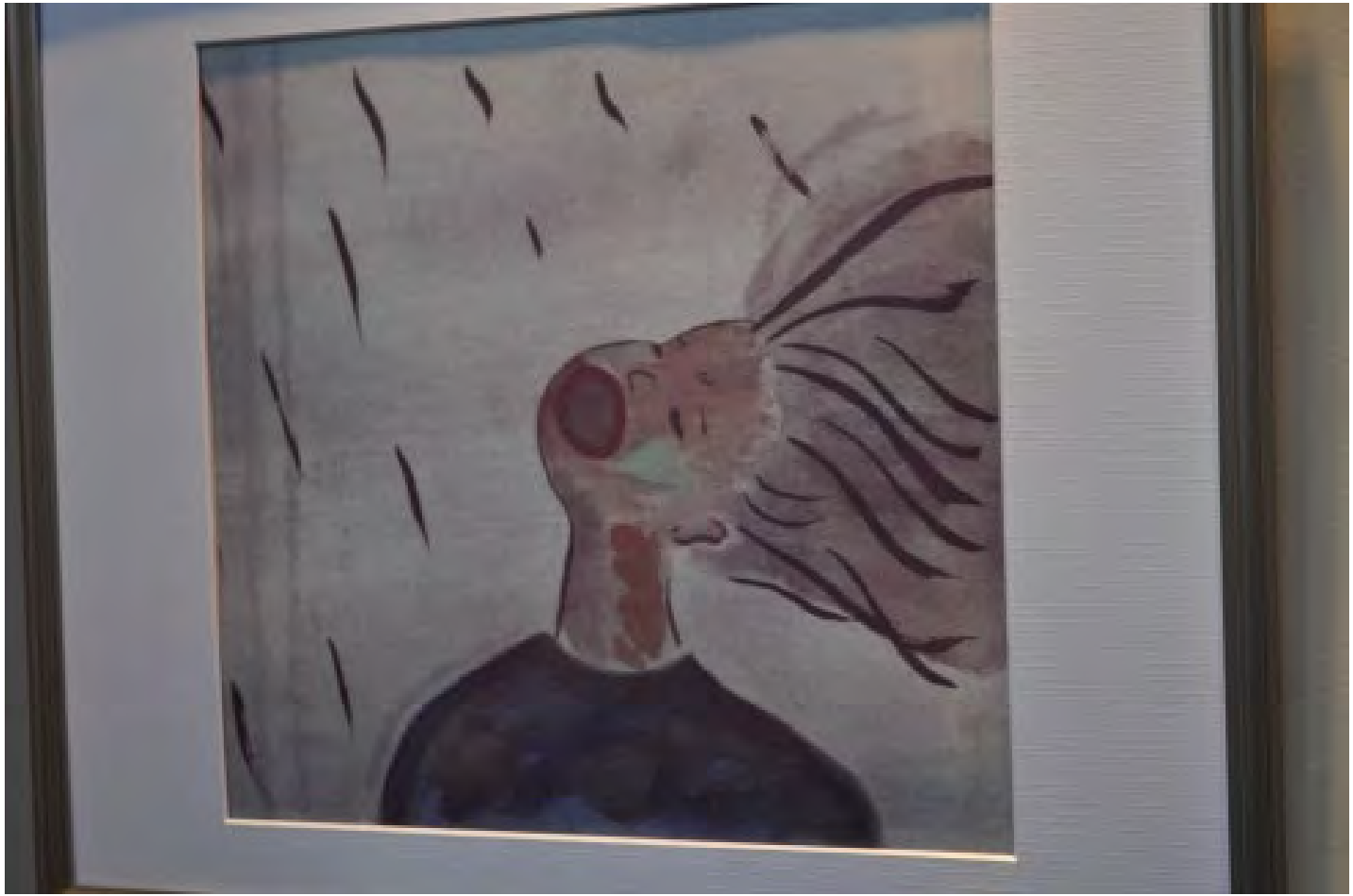

STRETCHING
STRETCHING
CUTTING

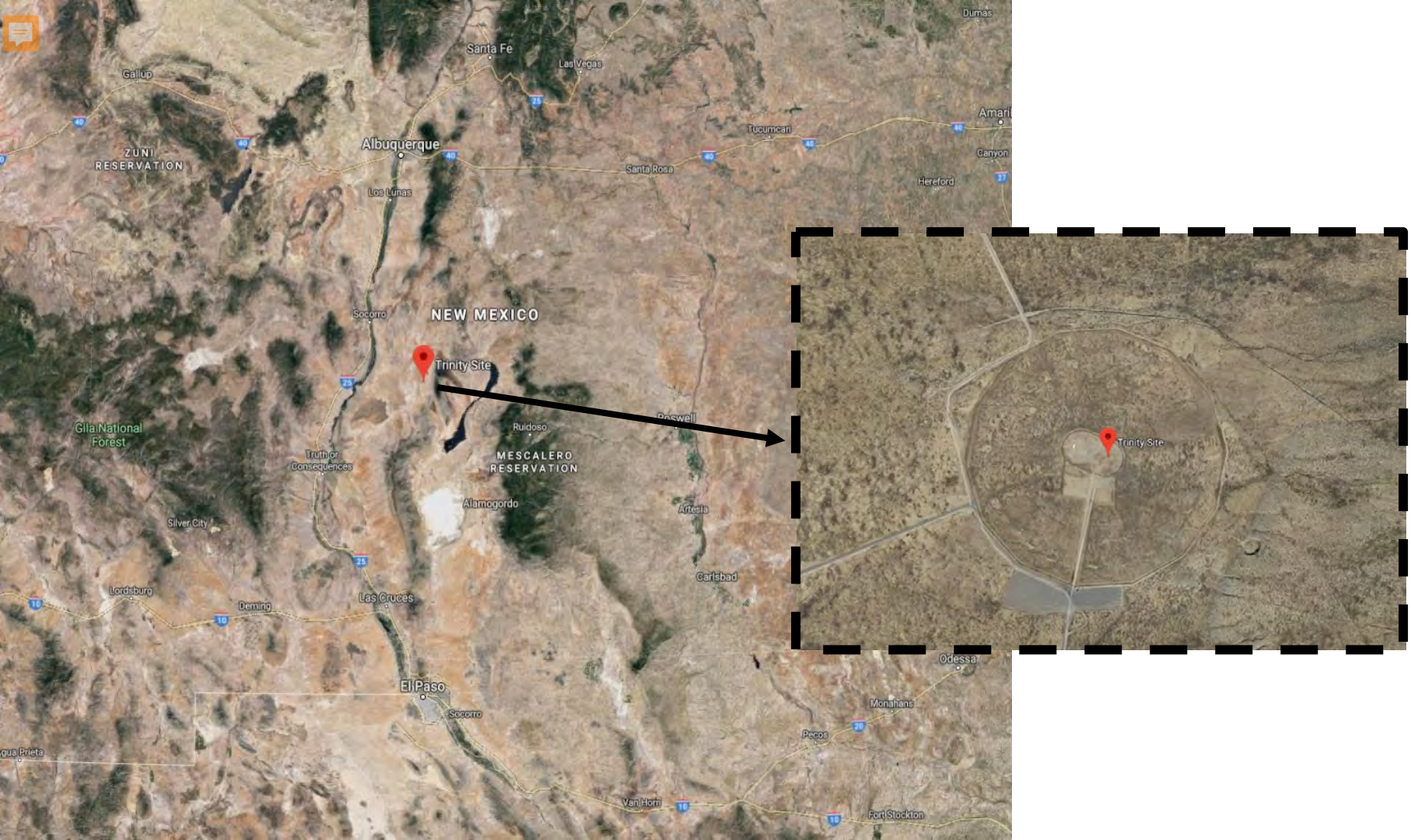

ROTATE
SQUEEZE
DISTORT AND FOLD

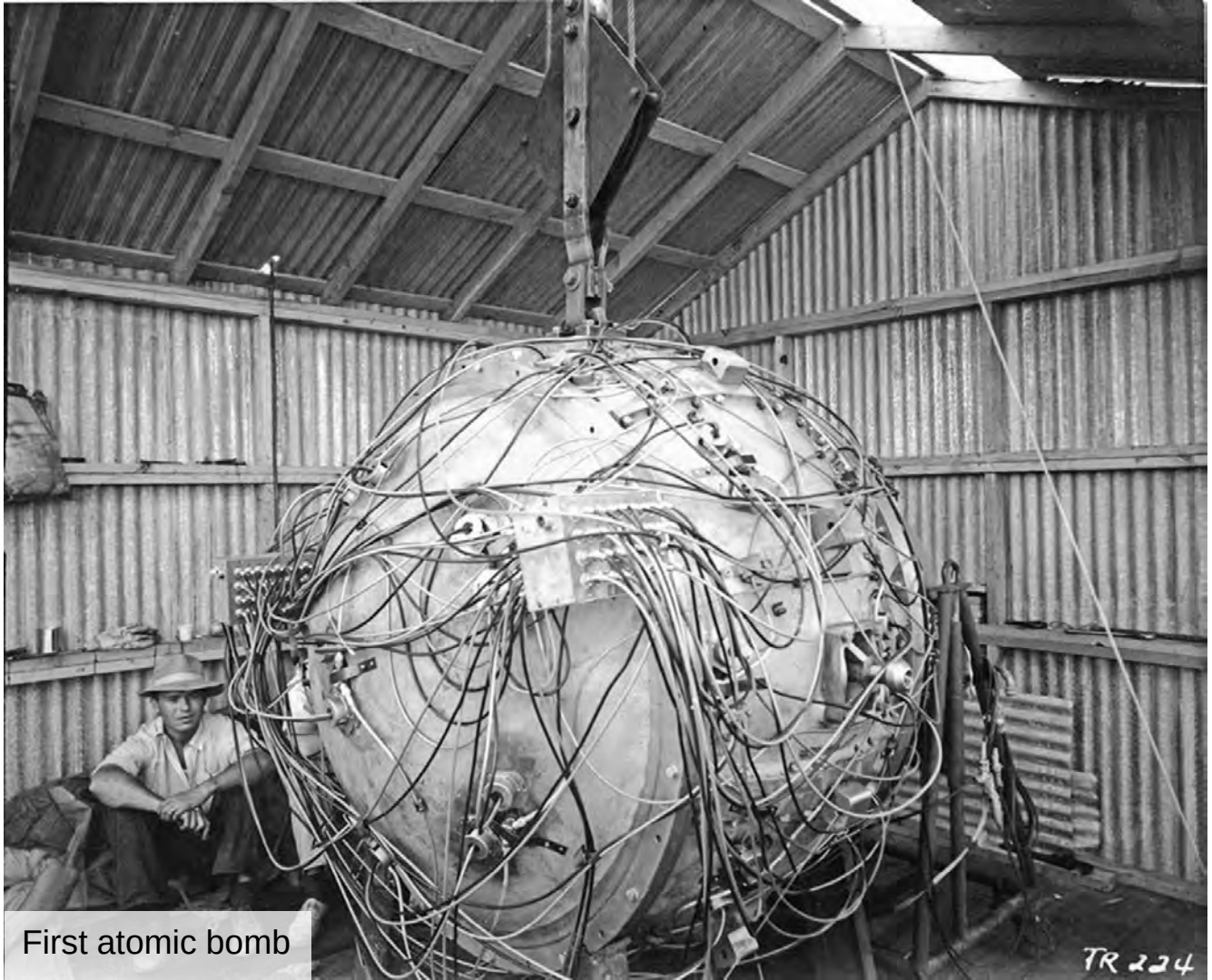
Artefact

Artefact

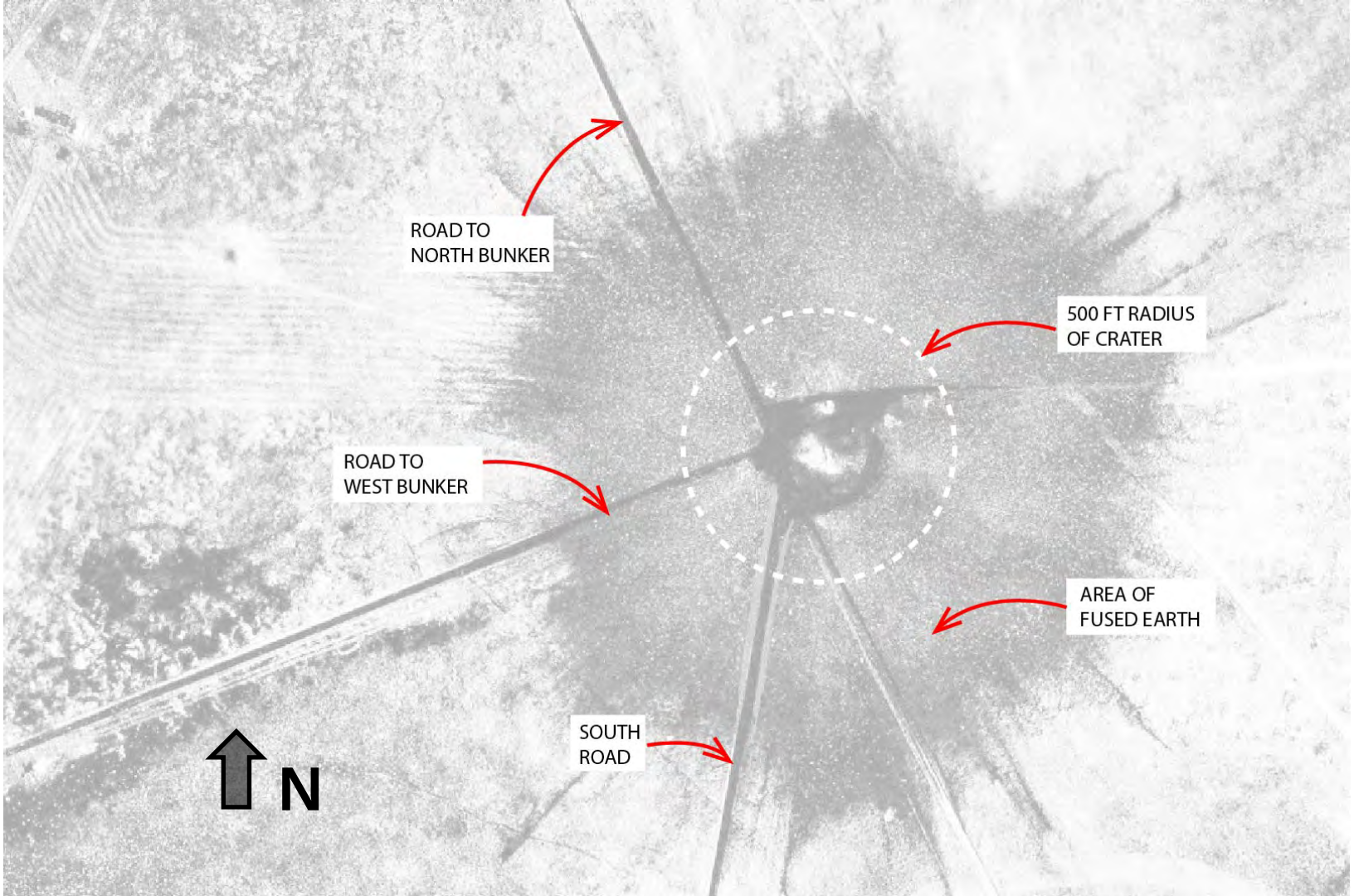
Young Sadako Sasaki




Santa Fe
Las Vegas
Gallup
Albuquerque
ZUNI RESERVATION
Tucumcari
Amarillo
Canyon
Santa Rosa
Hereford
Los Lunas
Socorro
NEW MEXICO
Trinity Site
Roswell
Ruidoso
Gila National Forest
Truth or Consequences
MESCALERO RESERVATION
Alamogordo
Artesia
Silver City
Carlsbad
Lordsburg
Deming
Las Cruces
El Paso
Socorro
Odessa
Monahans
Pecos
Van Horn
Fort Stockton
Trinity Site

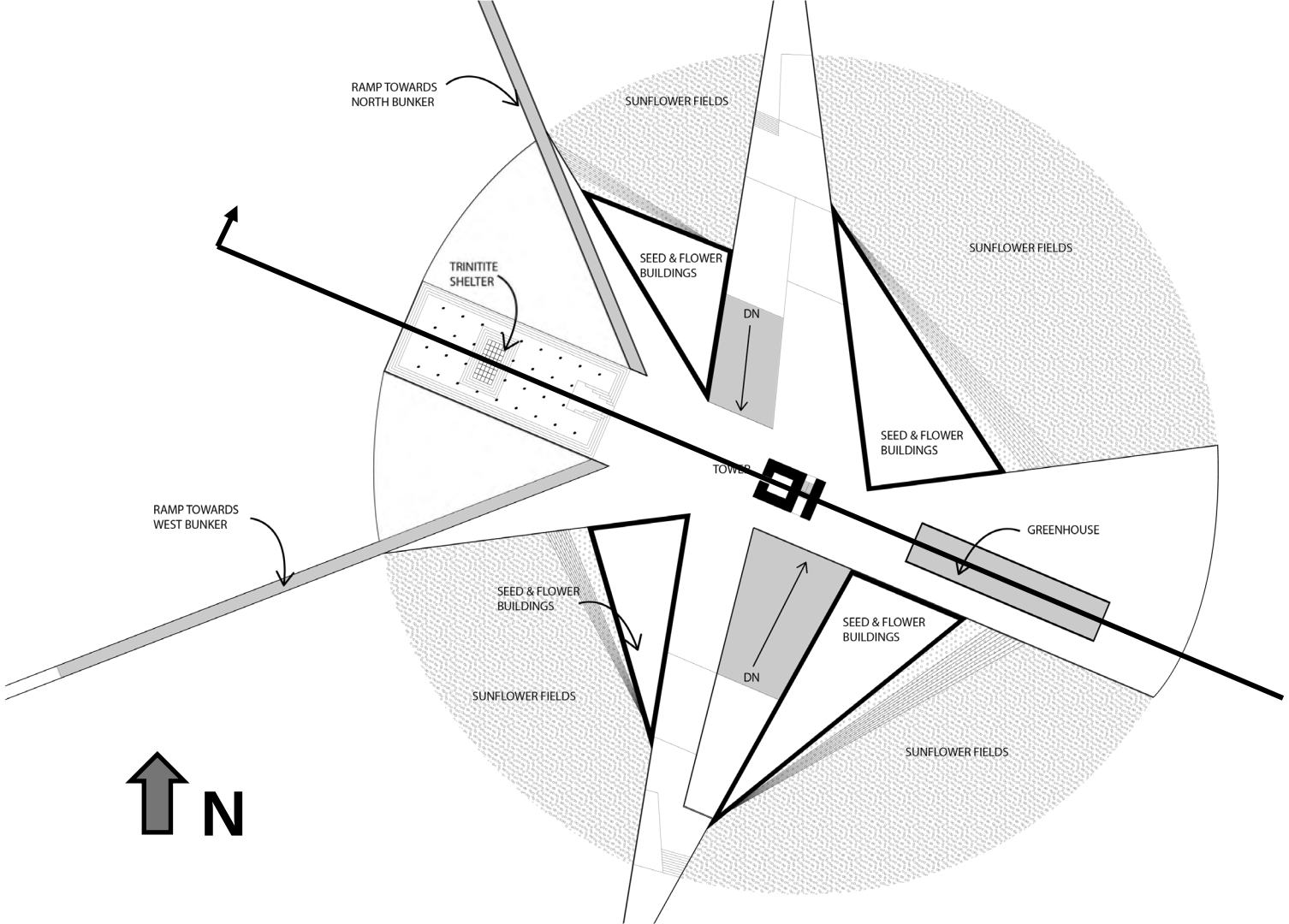


First atomic bomb

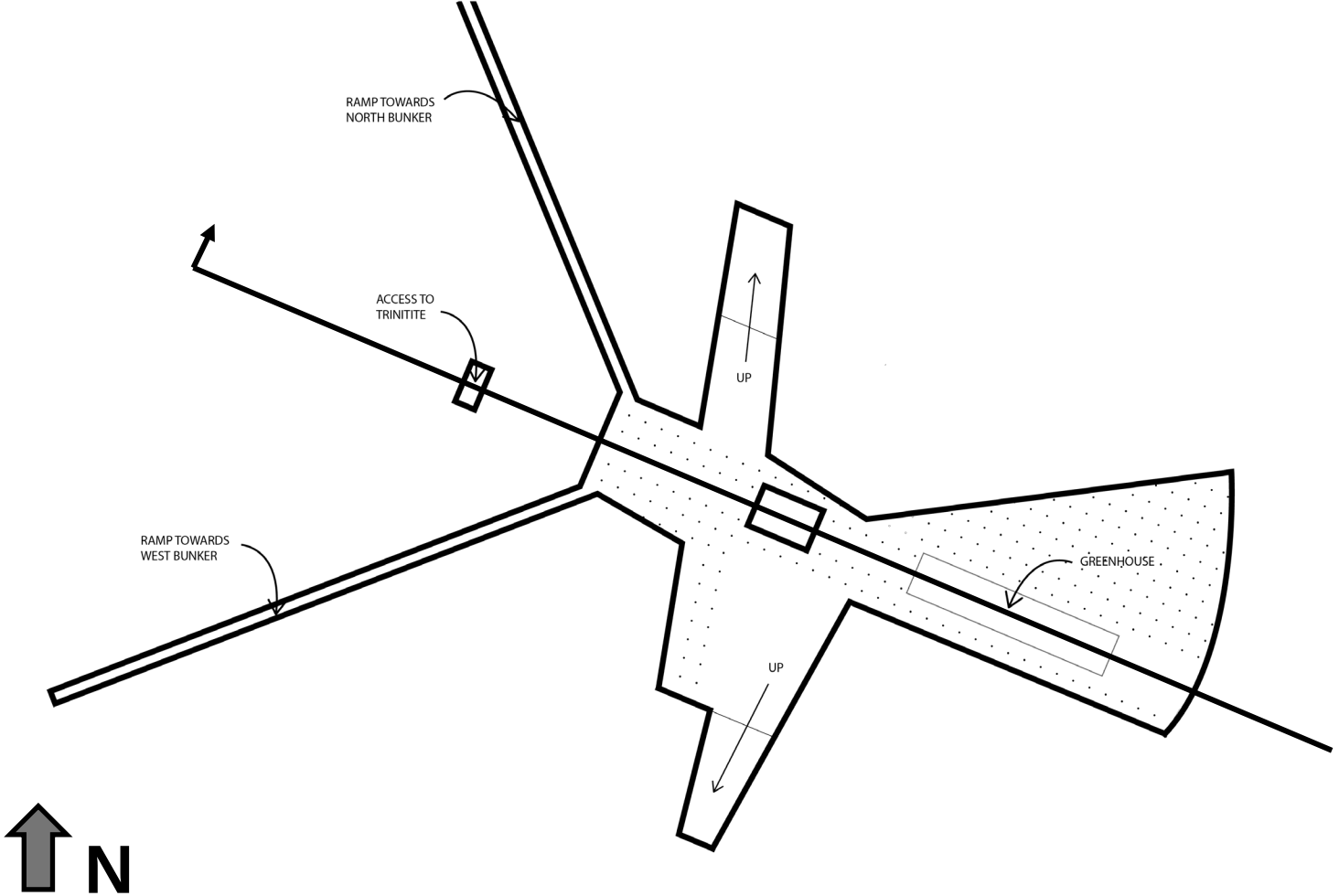

ROAD TO
NORTH BUNKER
500 FT RADIUS
OF CRATER
ROAD TO
WEST BUNKER
AREA OF
FUSED EARTH
SOUTH
ROAD
N

N

LEVEL 1

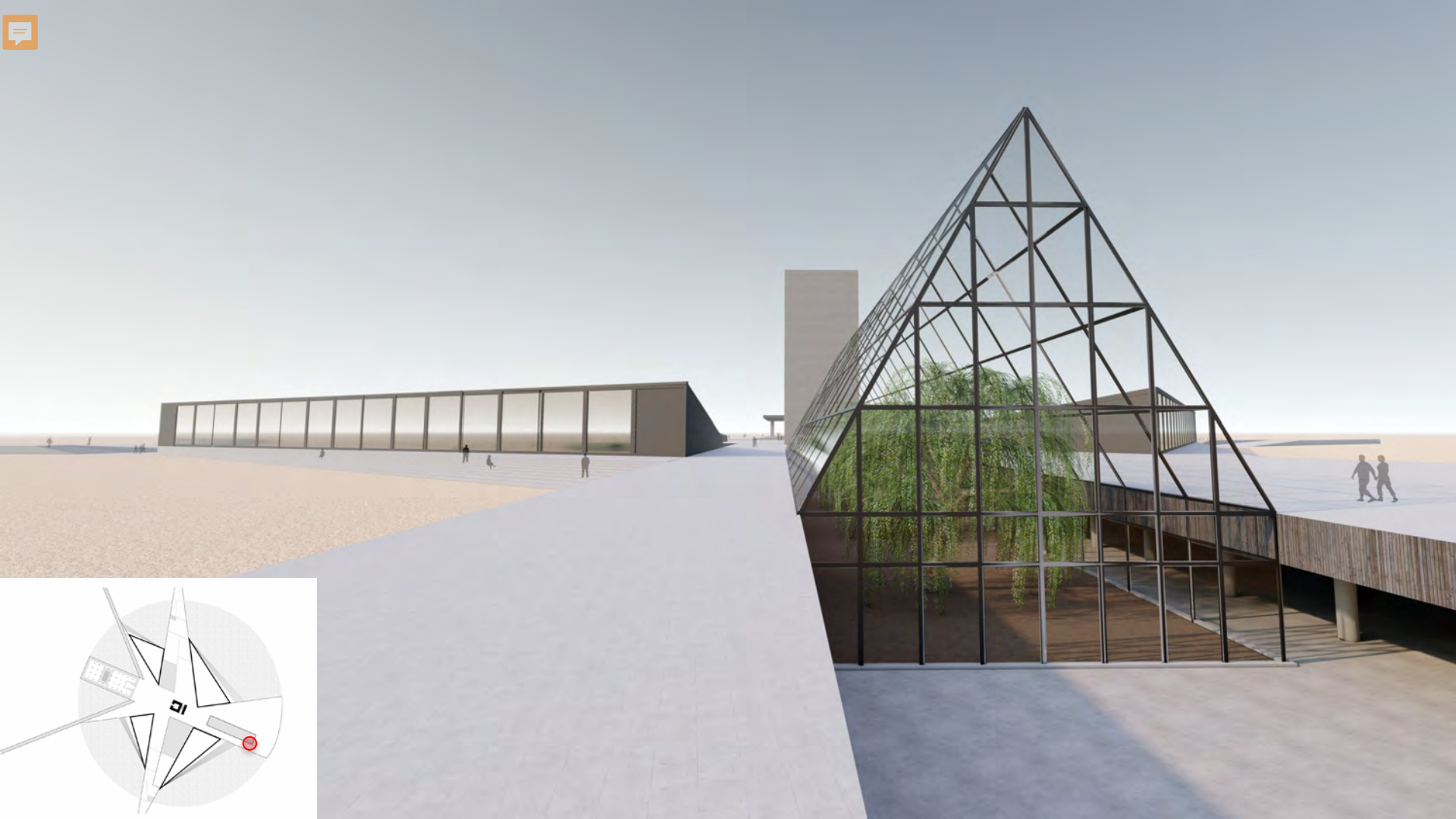

RAMP TOWARDS
NORTH BUNKER
SUNFLOWER FIELDS
SUNFLOWER FIELDS
SEED & FLOWER
BUILDINGS
TRINITITE
SHELTER
DN
SEED & FLOWER
BUILDINGS
TOWER
RAMP TOWARDS
WEST BUNKER
GREENHOUSE
SEED & FLOWER
BUILDINGS
SEED & FLOWER
BUILDINGS
DN
SUNFLOWER FIELDS
SUNFLOWER FIELDS
N

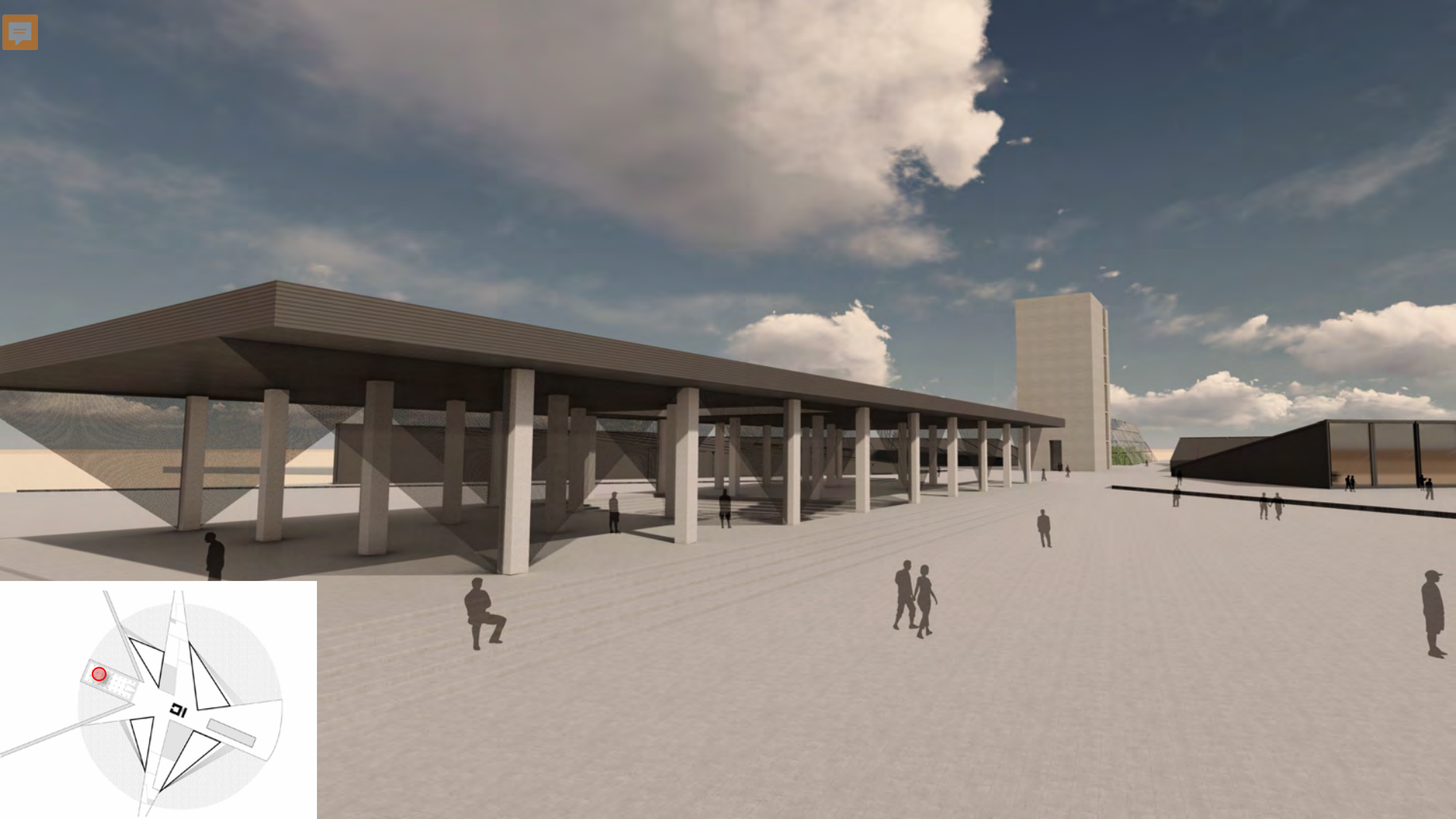
LOWER LEVEL

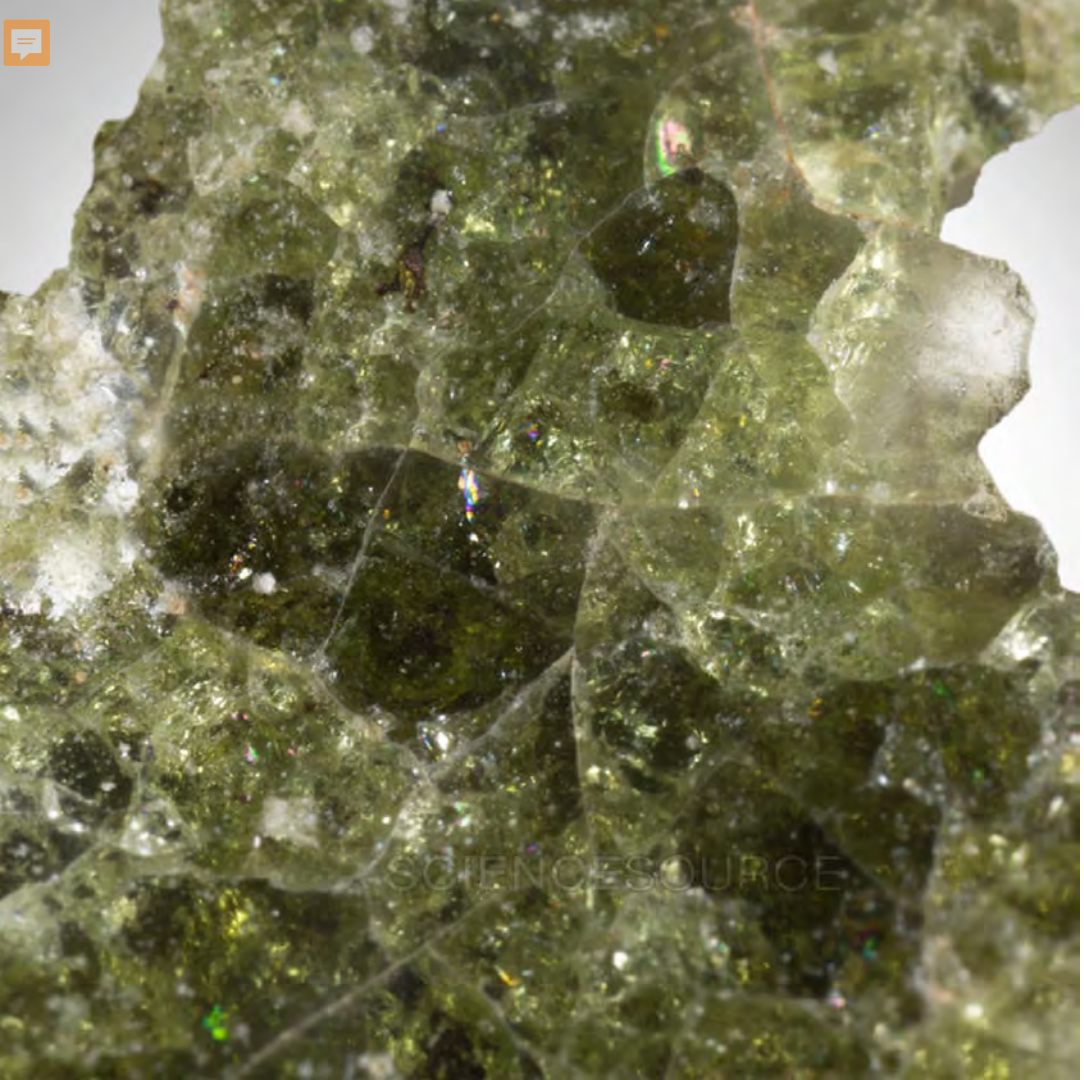

RAMP TOWARDS
NORTH BUNKER
ACCESS TO
TRINITITE
UP
RAMP TOWARDS
WEST BUNKER
GREENHOUSE
UP
N

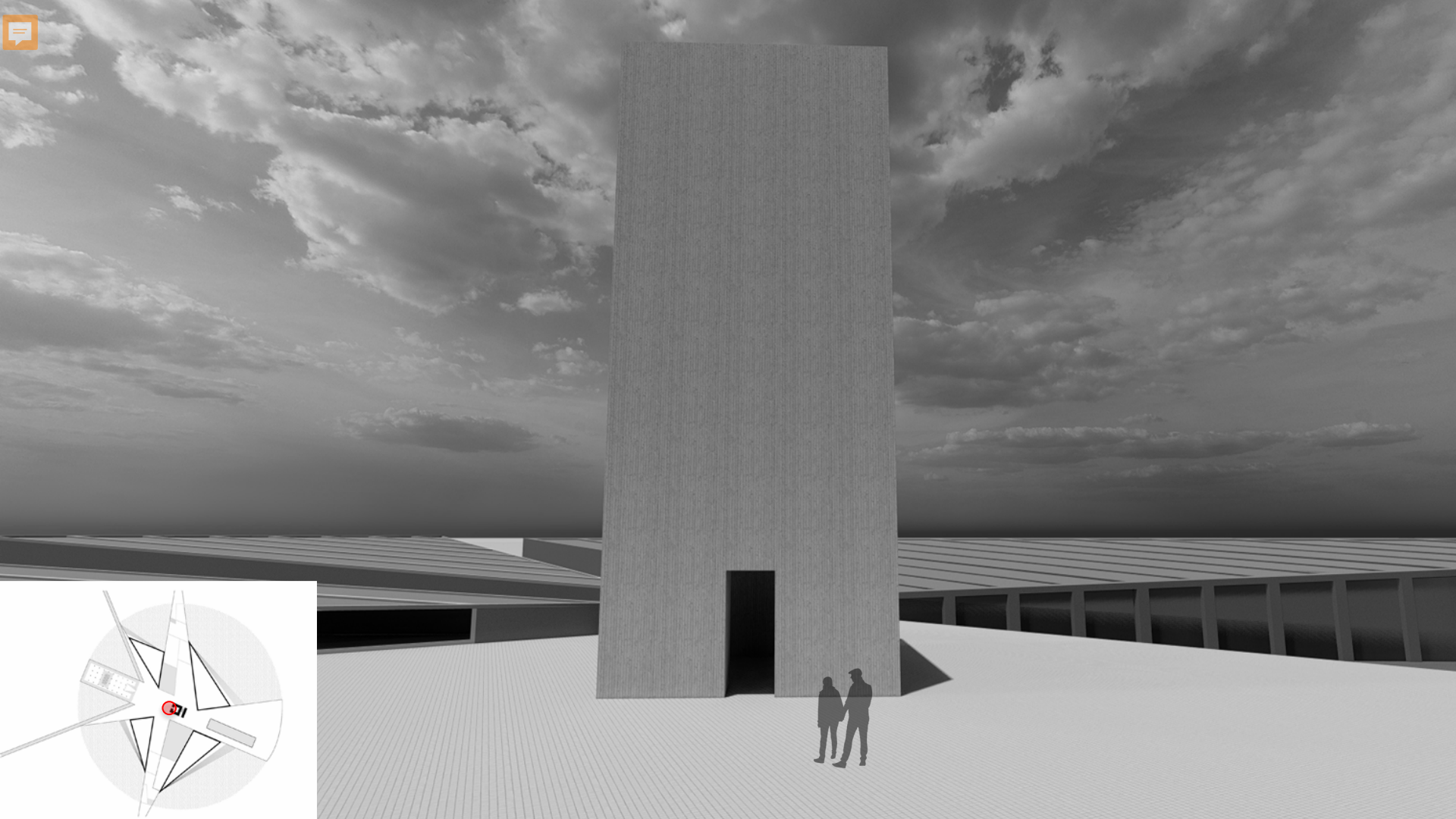
SECTION

ALAMOGORDO CARAVAN 85 MILES
HIGHWAY 380/54 133 MILES
STALLION RANGE CENTER 17 MILES
CARRIZOZO 75 MILES
43 MILES
ALBUQUERQUE 120 MILES
LAS CRUCES 171 MILES
EL PAS CARAVAN MILES
INTERSTATE 25 16 MILES
CAUTION
ROAD CLOSED



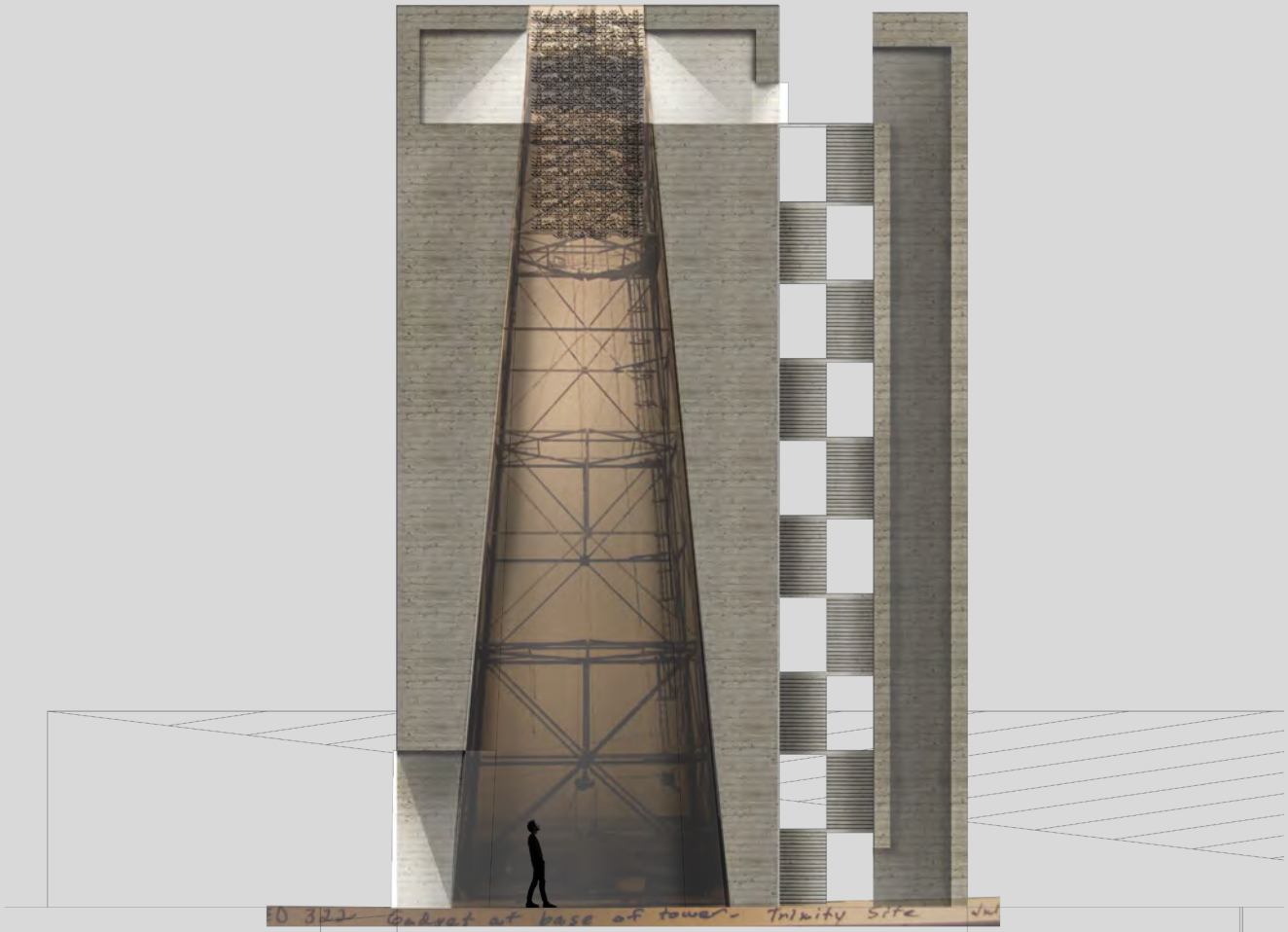


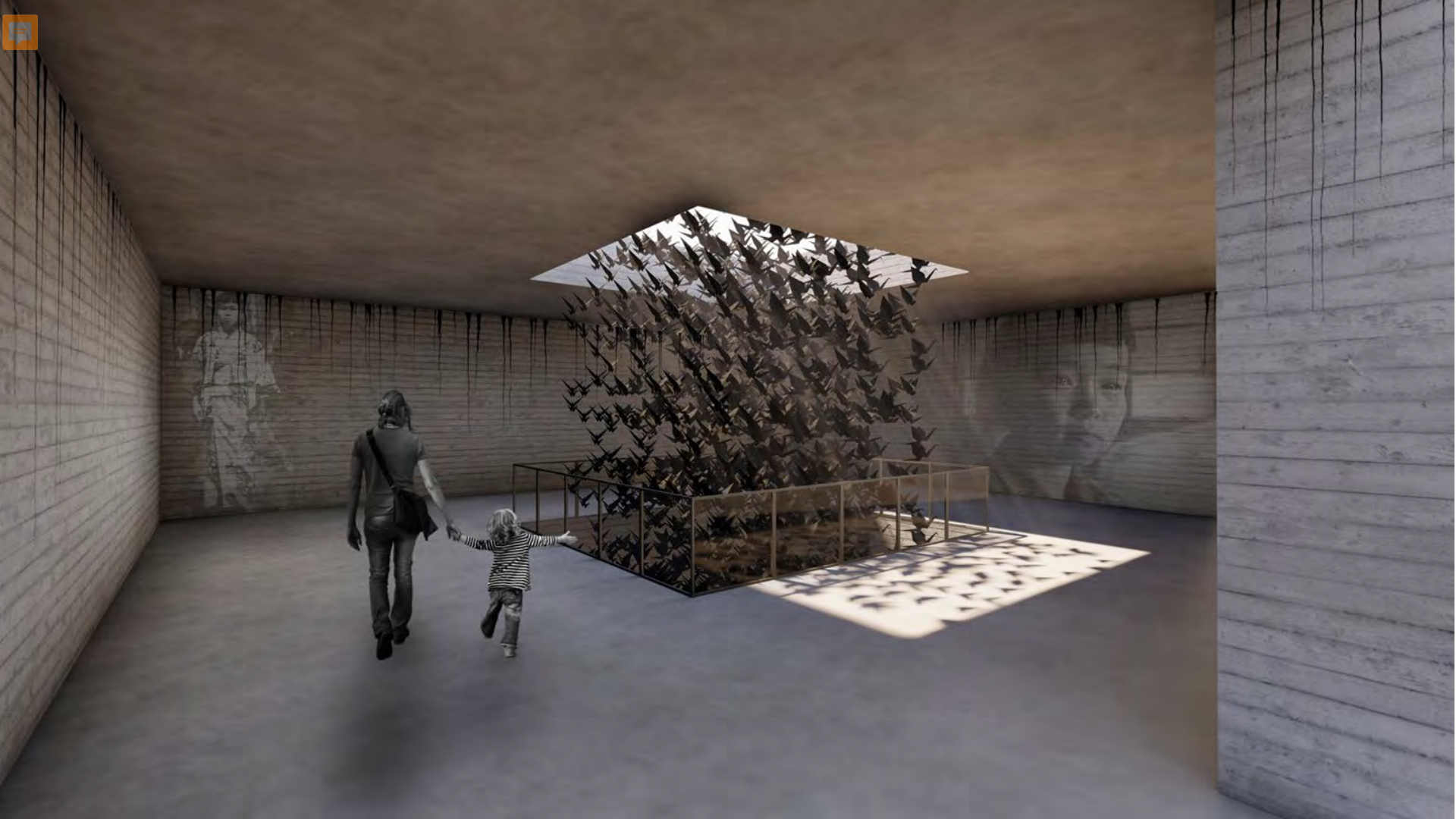

SCIENCE SOURCE

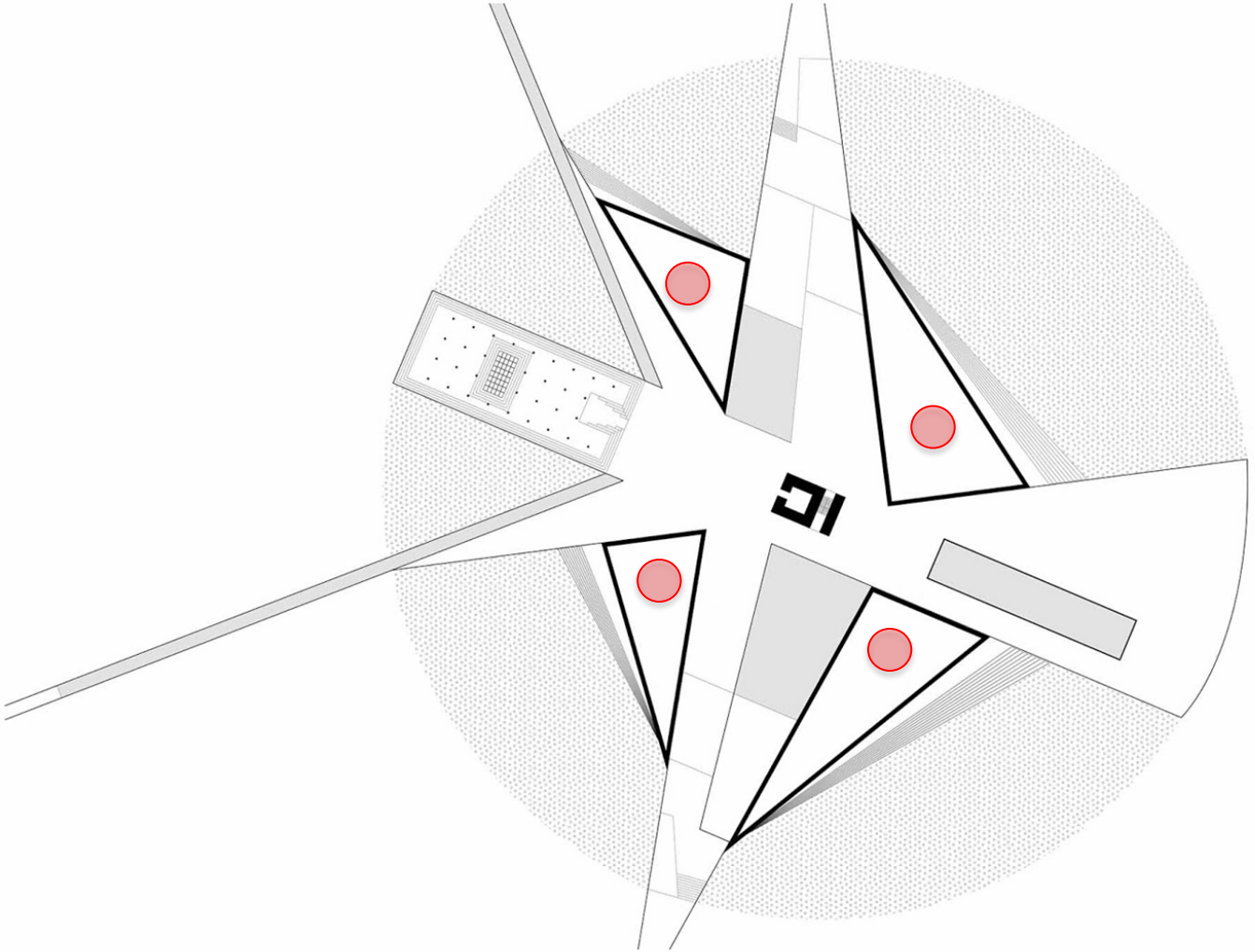


Footings of original tower

Original tower


0 322 Cabrat at base of tower - Trinity Site





ARCHITECTURE THAT TRANSFORMS HISTORY:
REFRAMING THE BIRTHPLACE OF THE ATOMIC BOMB FOR A MORE CRITICAL FUTURE

TRINITY MEMORIAL GROUNDS

JORNADA DEL MUERTO DESERT, NEW MEXICO

Memories allow us to keep things alive even after they have passed. Whether its people, places or moments in time, humanity has always found it necessary to retain what once was. Architecture has played a significant role in this effort from monuments focusing on names, heroes, and patriotism to abstract symbols of mourning and loss. How do we continue to evolve the way in which collective memory and history becomes part of present life and action as a motivating force for change, and how can architecture contribute? This is especially important when tackling some of the most important issues currently facing humanity, such as a nuclear disaster. By examining the significance of memory and forgetting throughout history and its relationship to loss of life, this thesis looks to transform the birthplace of the atomic bomb from a site once responsible for producing an instrument of destruction, into a site that becomes an instrument of peace and acknowledgment. With a critical approach, my design serves as a collection of representations and metaphors of various stories relating to the destructive consequences of the atomic bomb.

THE AREA THAT ONCE SUSPENDED THE FIRST NUCLEAR BOMB, IS NOW OCCUPIED WITH A FIELD OF 1,000 CRYSTAL CRAVING VASES OF SAND, THESE CRAVES SYMBOLIZE SEEDS OF NEO-CAPITALISM, BLACK RAIN, TRACES OF HISTORY, AND THE STING WOMB OF A LONG CIVIL

THE BASE OF THE 70 FOOT TOWER PHYSICALLY MARKS THE EXACT LOCATION OF THE FIRST NUCLEAR BOMB DETONATION. A CIRCULAR OPENING IN THE CEILING ABOVE IS SUSPENDED THE ORIGINAL BOMB BOOM IT WAS DETONATED TO THE AIR ON THE SPECIAL

THE GREENHOUSES ON THE EAST END OF THE GROUNDS HOUSE FOUR WEEPING WILLOW TREES, ALL OF WHICH ARE CLONES/SEEDLINGS FROM THE SEEDS OF THE TREES THAT SURVIVED THE BOMBINGS IN HIROSHIMA AND NAGASAKI. THE SEEDS ARE A SHARED SYMBOL OF HOPE BETWEEN THE SITES OF THE BOMB ORIGIN AND THE BOMB'S DESTINATION.

UNDERGROUND PROVIDES AN ENCOUNTER TO THE HORRIFIC CONSEQUENCES OF THE ATOMIC BOMB AS HIROSHIMA AND NAGASAKI, AS WELL AS ACCESS TO THE BASE OF THE FOUR WEEPING WILLOW TREES.

THE SEED AND FLOWER BUILDINGS ALLOW VISITORS TO COORDINATE TO THE TRANSFORMATION OF THE SITE. SUNFLOWERS HARVEST SOLAR RADIATION FROM THE EARTH'S SOIL, LITERALLY TAKE ACTION OF PLANTING AND HARVESTING SUNFLOWERS, SERVE AS A HEALING PROCESS FOR THE SITE.

THE YEAR OF THE BOMB BY TRINITY WAS SO HOT IT MELTED THE SAND OF THE DESERT INTO A GLASS MATERIAL NOW KNOWN AS TRINITITE. THE RIVERS SHELTER DOME VISITORS A GLIMPSE OF THE AMAZING PHENOMENON.

GROUND LEVEL

UNDERGROUND LEVEL