

COPPER STATE ENGINEERING, INC.

C I V I L / G E O T E C H N I C A L S E R V I C E S

October 1, 2003

Mr. Paul Smith
Technical Solutions
3610 N. 44th Street, Suite 240
Phoenix, Arizona 85018

Subject: 6900 E. Camelback Office Building and Penthouse
CSE-993

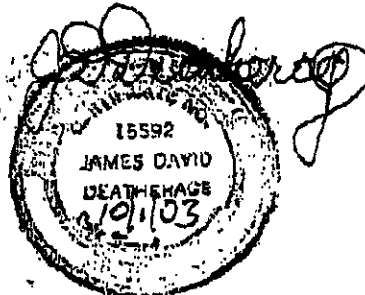
Dear Mr. Smith,

Copper State Engineering, Inc., (CSE), herewith submits a summary of the methods and results obtained during our site work on September 29, 2003 at the 6900 E. Camelback office building. The purpose of the work was to measure the height of the building relative to the finished floor elevation at ground level, with an accuracy of +/- one to two inches. CSE was given the finished floor elevation at ground level (1291.90) to use as a starting point. This elevation came from a Building Height Exhibit prepared by Registered Land Surveyor Mr. Jason Segneri dated 11/1/02, and is based on a bench mark elevation of 1277.619 NAVD '88 for the brass cap in the intersection of Scottsdale and Camelback Roads. CSE assumed this elevation for the starting point on the tiled floor just inside the center of the main entrance on the south east side of the building. Using a 25-foot long graduated fiberglass survey rod, a Nikon automatic level, and a 200-foot steel chain, CSE measured the height difference between the finished floor ground level and the highest piece of air handling equipment within the mechanical enclosure on top of the penthouse. CSE set up the series of automatic level shots from the top of the mechanical enclosure, on the deck of the penthouse, and on the ground outside the building. The steel chain was lowered from the deck of the penthouse to a point on a wool stake in the lawn directly underneath the penthouse. A temperature correction of 0.351 inches to the total height was included to compensate for the 105-degree F temperature of the calibrated steel chain.

The height to the top of the air handler was 138.81 feet above the first floor reference elevation, at an elevation of 1430.71. There were several antennas on top of the building. The highest antenna was 155.33 feet above the first floor reference elevation, at an elevation of 1447.2. Please contact CSE with questions or comments.

Respectfully submitted,
Copper State Engineering, Inc.

J. David Deatherage, P.E.
Senior Geotechnical Engineer



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JOB CSE993

SHEET NO. 6900 E. Camelback OF

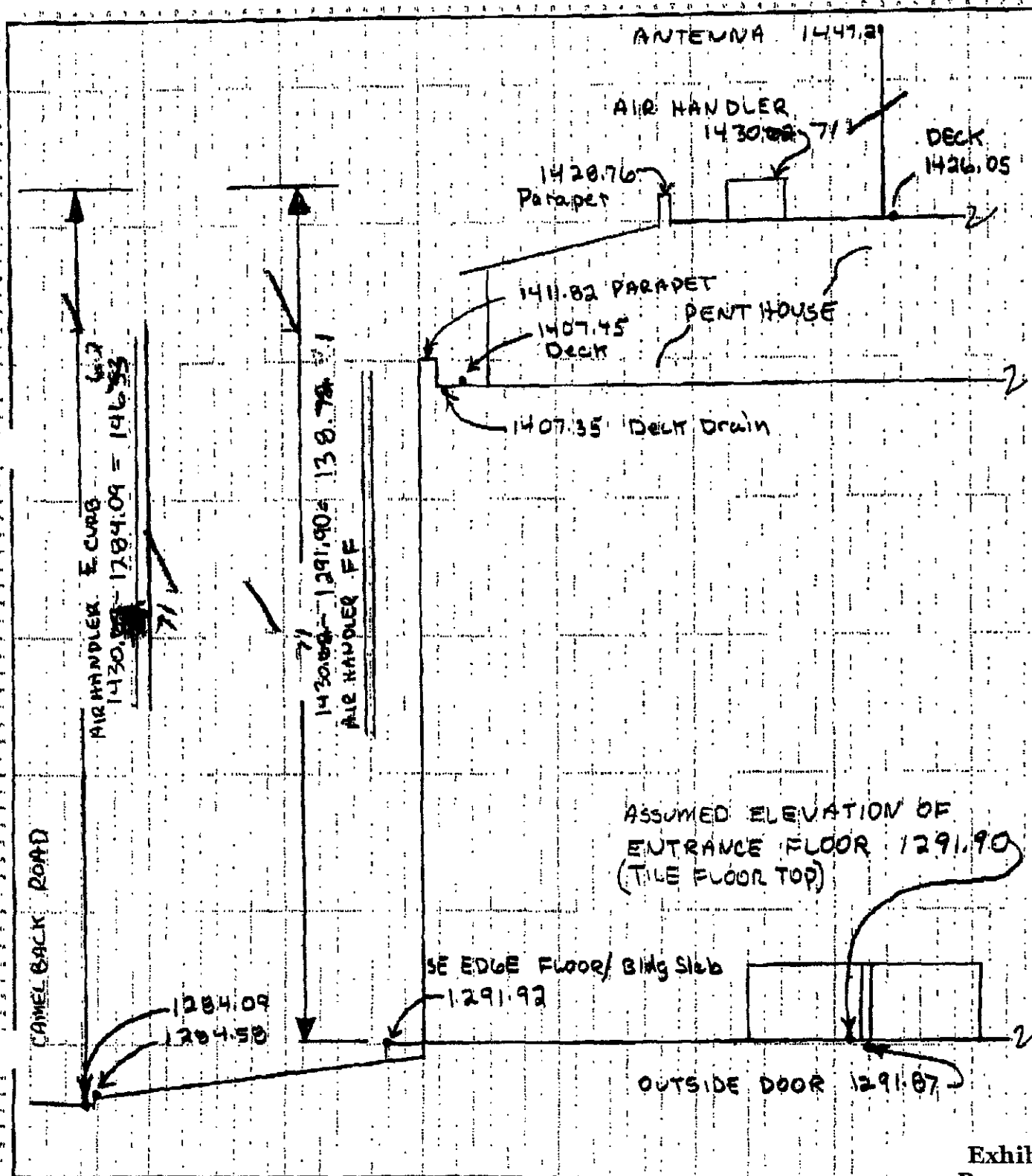
CALCULATED BY JDD

DATE

CHECKED BY

DATE 10/1/03

SCALE

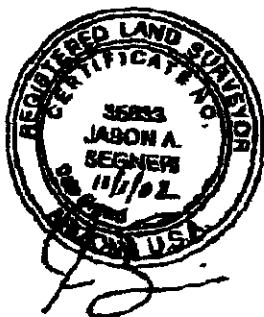




6900 EAST CAMELBACK ROAD
TOP OF MECHANICAL SCREEN ELEVATION = 1428.6
TOP OF PARAPET ELEVATION = 1411.7
FINISHED FLOOR AT GROUND LEVEL ELEVATION = 1291.90
BUILDING HEIGHT (GROUND LEVEL TO THE TOP OF THE
MECHANICAL SCREEN) = 136.7

7150 EAST CAMELBACK ROAD
TOP OF METAL ROOF ELEVATION = 1378.1
TOP OF PARAPET ELEVATION = 1367.7
FINISHED FLOOR AT GROUND LEVEL ELEVATION = 1281.98
BUILDING HEIGHT (GROUND LEVEL TO THE TOP OF THE
METAL ROOF) = 96.1

BENCHMARK:
MARICOPA COUNTY BRASS CAP IN A HAND HOLE AT THE INTERSECTION OF SCOTTSDALE ROAD
AND CAMELBACK ROAD. ELEVATION = 1277.619 NAVD '88



NOTE:
THE ABOVE INFORMATION WAS MEASURED WITHOUT ROOF ACCESS THROUGH THE USE OF AN
ELECTRONIC TOTAL STATION. ANGLES WERE RECORDED FROM MULTIPLE LOCATIONS TO THE ROOF.
THE RECORDED ANGLES WERE USED TO TRIANGULATE THE ROOF ELEVATIONS AS SHOWN ABOVE.

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BUILDING HEIGHT EXHIBIT

JOB NO. 02120	PROJ. NO. 212000-0000000000	DATE 11-01-02
SCALE HTS	CONTR. JMS	CHECK ELS
SHEET 1 OF 1		