

# GPS Calibration Report

*Project : b4409\_calib*

<b>TIP Number</b>	B-4409		
<b>User name</b>	tblowder	<b>Date &amp; Time</b>	11:25:36 AM 11/21/2006
<b>Coordinate System</b>	US State Plane 1983	<b>Zone</b>	North Carolina 3200
<b>Horizontal Datum</b>	NAD 1983 (Conus)		
<b>Vertical Datum</b>	NAVD 88	<b>Geoid Model</b>	Geoid03 (Conus) NC Sub Grid
<b>Coordinate Units</b>	US survey feet		
<b>Distance Units</b>	US survey feet		
<b>Height Units</b>	US survey feet		

## LOCAL SITE INFORMATION

Localized around	B4409-2
Latitude	N/A
Longitude	N/A
Site Scale Factor	N/A
Height	N/A

## Datum Transformation Parameters

<b>Method</b>	Three Parameter
<b>Translation along x axis</b>	14.061sft
<b>Translation along y axis</b>	-80.704sft
<b>Translation along z axis</b>	57.669sft

## Updated Default Projection (Transverse Mercator) Definition

Updated default projection not requested

## Horizontal Adjustment Parameters

<b>Northing coordinate of rotation center</b>	522608.947sft
<b>Easting coordinate of rotation center</b>	1666040.979sft
<b>Rotation about the center point</b>	0°00'00"
<b>Translation north</b>	0.064sft
<b>Translation east</b>	0.000sft
<b>Scale factor</b>	1.00013302

## Vertical Adjustment Parameters

<b>Northing coordinate of origin point</b>	522609.011sft
<b>Easting coordinate of origin point</b>	1666040.979sft
<b>Vertical separation at origin</b>	0.172sft
<b>Slope north</b>	16.444ppm
<b>Slope east</b>	-0.291ppm

## Geoid Model Definition

Geoid03 (Conus) NC Sub Grid

## Residual Differences Between GPS (WGS84) And Local Coordinates

### Summary

	<b>Maximum error</b>	<b>Root Mean Square error</b>	<b>Point</b>
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<b>Horizontal</b>	0.000sft	0.000	B4409-2_GPS
<b>Vertical</b>	0.000sft	0.000	B4409-2_GPS
<b>Three-dimensional</b>	0.000sft	0.000	B4409-2_GPS

### Point Residuals

<b>WGS84 Coordinates</b>	<b>Calculated point FOR DISPLAY ONLY</b>	<b>Local Coordinates</b>
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<b>Point</b>	B4409-2_GPS
<b>Latitude</b>	35°10'50.87950"N
<b>Longitude</b>	80°07'03.64531"W
<b>Height</b>	166.762sft

<b>Northing</b>	522609.011sft
<b>Easting</b>	1666040.979sft
<b>Elevation</b>	266.950sft
<b>Horz error</b>	0.000sft
<b>Vert error</b>	0.000sft
<b>3D error</b>	0.000sft

<b>Point B4409-2</b>	
<b>Northing</b>	522609.011sft
<b>Easting</b>	1666040.979sft
<b>Elevation</b>	266.950sft
<b>Utilized</b>	Horz and Vert
<b>Quality</b>	Survey quality

<b>Point</b>	B4409-1_GPS
<b>Latitude</b>	35°10'41.28858"N
<b>Longitude</b>	80°07'03.30675"W
<b>Height</b>	180.892sft

<b>Northing</b>	521639.037sft
<b>Easting</b>	1666058.163sft
<b>Elevation</b>	281.070sft
<b>Horz error</b>	0.000sft
<b>Vert error</b>	0.000sft
<b>3D error</b>	0.000sft

<b>Point B4409-1</b>	
<b>Northing</b>	521639.037sft
<b>Easting</b>	1666058.163sft
<b>Elevation</b>	281.070sft
<b>Utilized</b>	Horz and Vert
<b>Quality</b>	Survey quality