



R&M CONSULTANTS, INC.
9101 Vanguard Drive, Anchorage, Alaska 99507

(907) 522-1707, FAX (907) 522-3403, www.rmconsult.com

**HSIP 2012 GLENN HIGHWAY AND MULDOON ROAD
INTERCHANGE IMPROVEMENTS
DESIGN TOPOGRAPHIC SURVEY
PROJECT No. 54713**

HORIZONTAL CONTROL

Coordinate System:

This project is located entirely within the Anchorage Bowl 2000 adjustment, a local surface grid coordinate system, expressed in U.S. Survey Feet, developed by the Alaska Department of Transportation.

Basis of Coordinates:

The Basis of Coordinates is NGS Station "OMALLEY", located near the intersection of the New Seward Highway and O'Malley Road. Said station has Anchorage Bowl 2000 coordinates of 303,939.2310 N., 353,362.5446 E.

Basis of Bearings:

The Basis of Bearings is a local plane bearing between NGS Station "OMALLEY" and NGS Station "LOOP 2 USE RM 3 1964". NGS Station "LOOP 2 USE RM 3 1964" bears N 01°43'26.4" E a distance of 49,488.45 U.S. Survey Feet from NGS Station "OMALLEY". NGS Station "LOOP 2 USE RM 3 1964" has Anchorage Bowl 2000 coordinates of 353,405.2778 N., 354,851.3982 E.

Translation Parameters:

To convert the local Bowl 2000 coordinates to NAD83 (92) Alaska State Plane, Zone 4, coordinates, expressed in U.S. Survey Feet; translate using +2,296,868.6878' N., +1,312,517.4904' E., and scale using 0.9998910192.

VERTICAL CONTROL

The Vertical Datum is the Municipality of Anchorage (M.O.A.) Vertical Datum 1972 N.G.S. Adjustment. The Basis of Vertical Control is M.O.A. Bench Mark "GAAB 10", Elevation = 252.18 feet. BM "GAAB 10" is a 2 1/2 inch Brass Cap and bolt set vertically, facing north, at the northwest corner of an unoccupied commercial building (previously occupied by a Kentucky Fried Chicken outlet). See M.O.A. Benchmark Book pages D-6 and M-18. Project elevations were determined by differential level loops, performed by R&M Consultants, Inc., between Benchmark "GAAB 10" and the project control points.