1.0 Introduction

The purpose of this Traffic and Safety Analysis is to evaluate the current collision patterns along Spenard Road and identify safety improvement alternatives to the roadway from Fireweed Lane to 36th Avenue. This study will also evaluate existing pedestrian/bicycle and transit facilities along the corridor and make recommendations that can be incorporated into the traffic and safety improvements. The corridor experienced 392 recorded collisions specific to Spenard Road and cross streets between 1996 and 1998 and has been identified as a highway safety project.

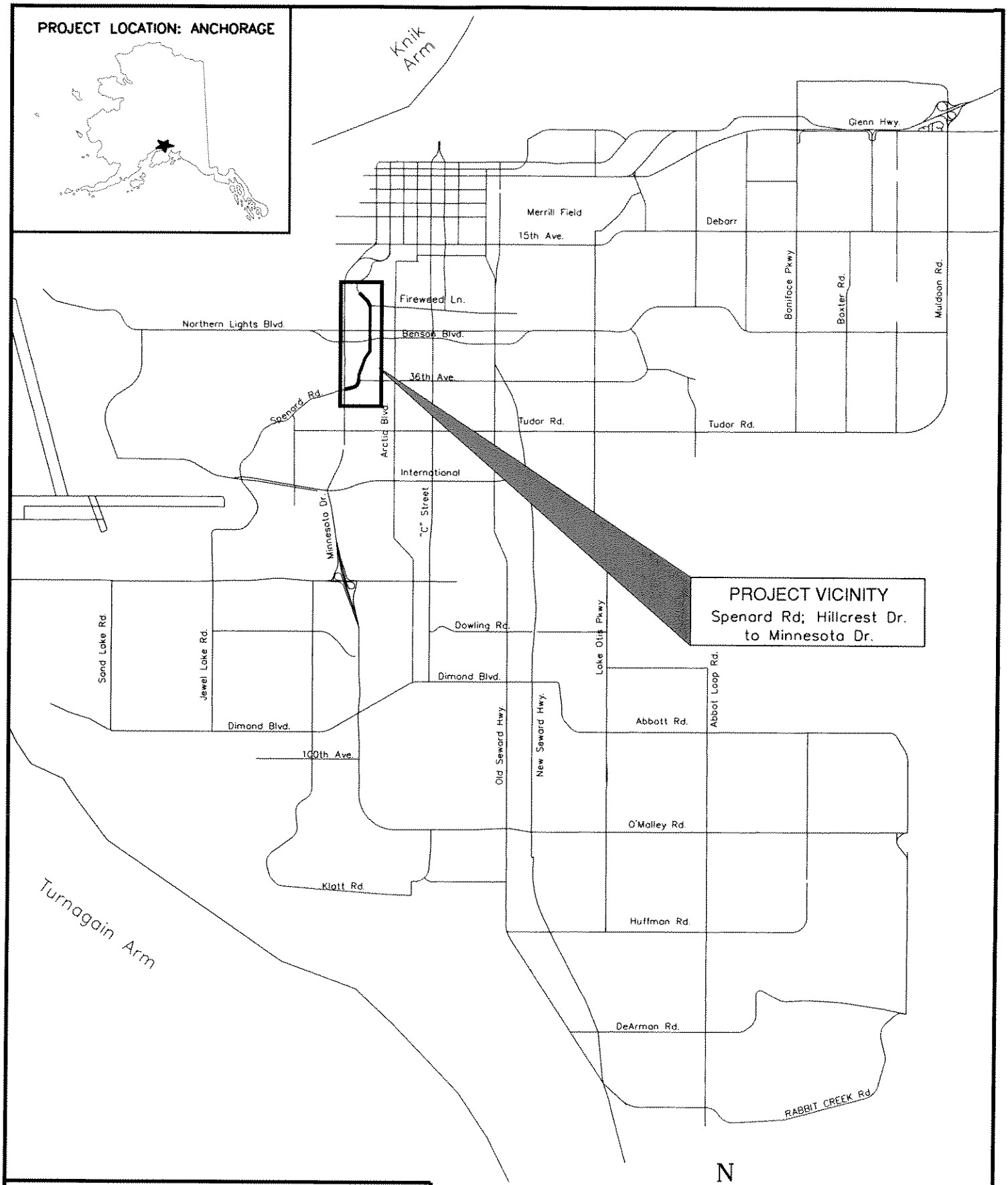
This report is the formal documentation of the traffic and safety study effort portion of the Engineering Analysis Report. This document was prepared to record the evaluations and recommendations of the analysis and provide a reference for the Engineering Analysis Report and subsequent design tasks.

2.0 Background

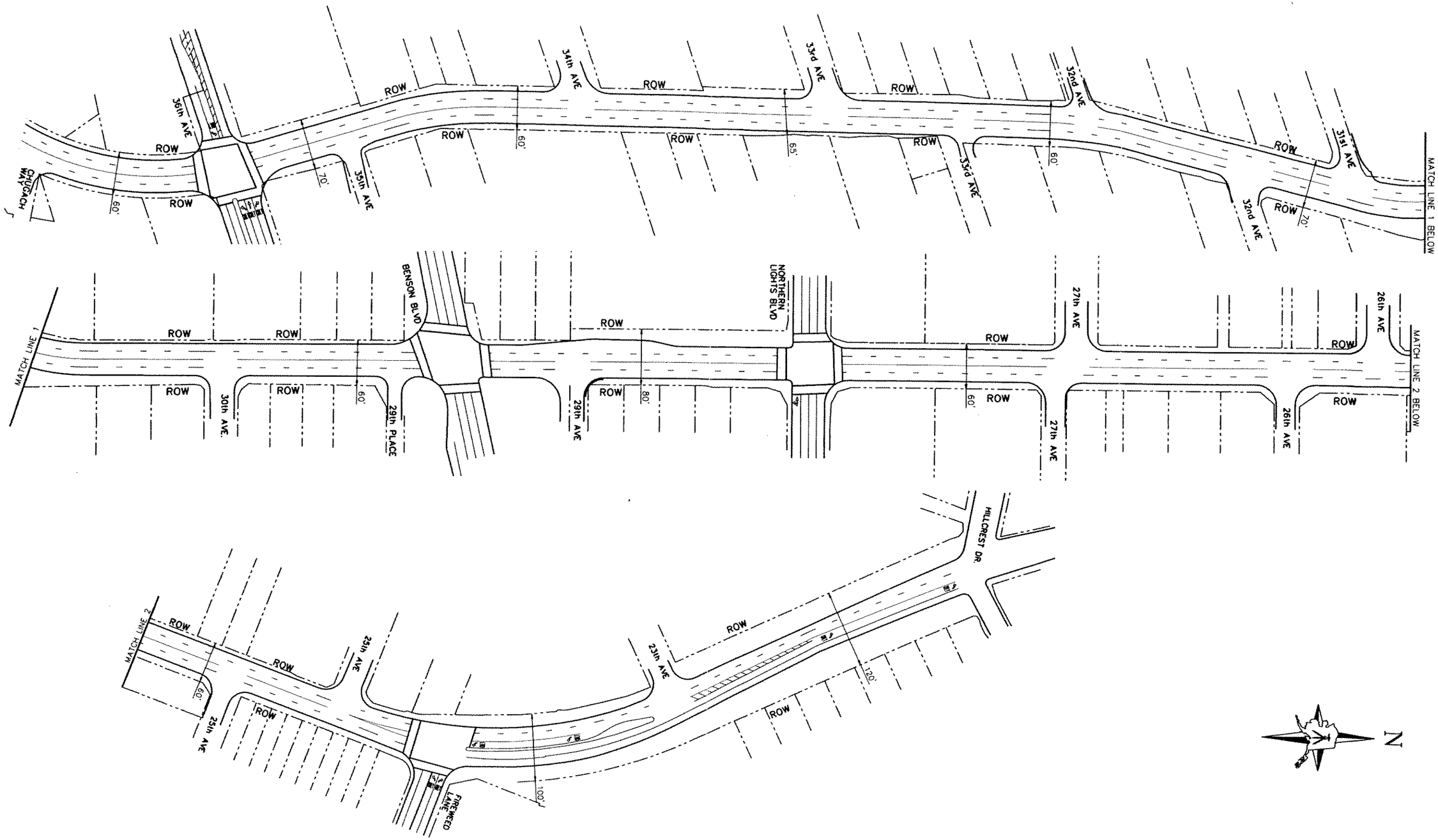
Spenard Road from Fireweed Lane to 36th Avenue is a four lane undivided two-way minor arterial as classified in the Official Streets and Highways Plan *(1)*. Reference Figure 2.1 for the project location. Spenard Road between Fireweed Lane and 36th Avenue consists of a 48 foot wide roadway (face-of-curb to face-of-curb). There are 20 intersections with cross streets from Fireweed Lane to 36th Avenue. Four of these intersections are signalized: Fireweed Lane, Northern Lights Blvd., Benson Blvd. and 36th Avenue. Many of the minor side street intersections are offset 50-100 ft. In addition to the cross streets, numerous driveways of varying width serving adjoining business front Spenard Road.

Right-of-way (ROW) width ranges from 60 feet (ft.) to 120 ft. Figure 2.2 shows the existing roadway configuration and ROW widths. Right-of-way information is based on Municipality of Anchorage (MOA) grid maps.

Spenard Road from Minnesota Drive to Hillcrest Drive is owned by the MOA. The roadway has a posted speed limit of 35 mph. Spenard Road serves numerous abutting businesses and surrounding neighborhoods. Land use along Spenard Road is commercial, zoned B-3, General Business District.



SPENARD ROAD
HILLCREST DR TO MINNESOTA DR
LOCATION AND VICINITY MAP
FIGURE 2.1



LEGEND:

PREPARED BY:
LOUNSBURY & ASSOCIATES

STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

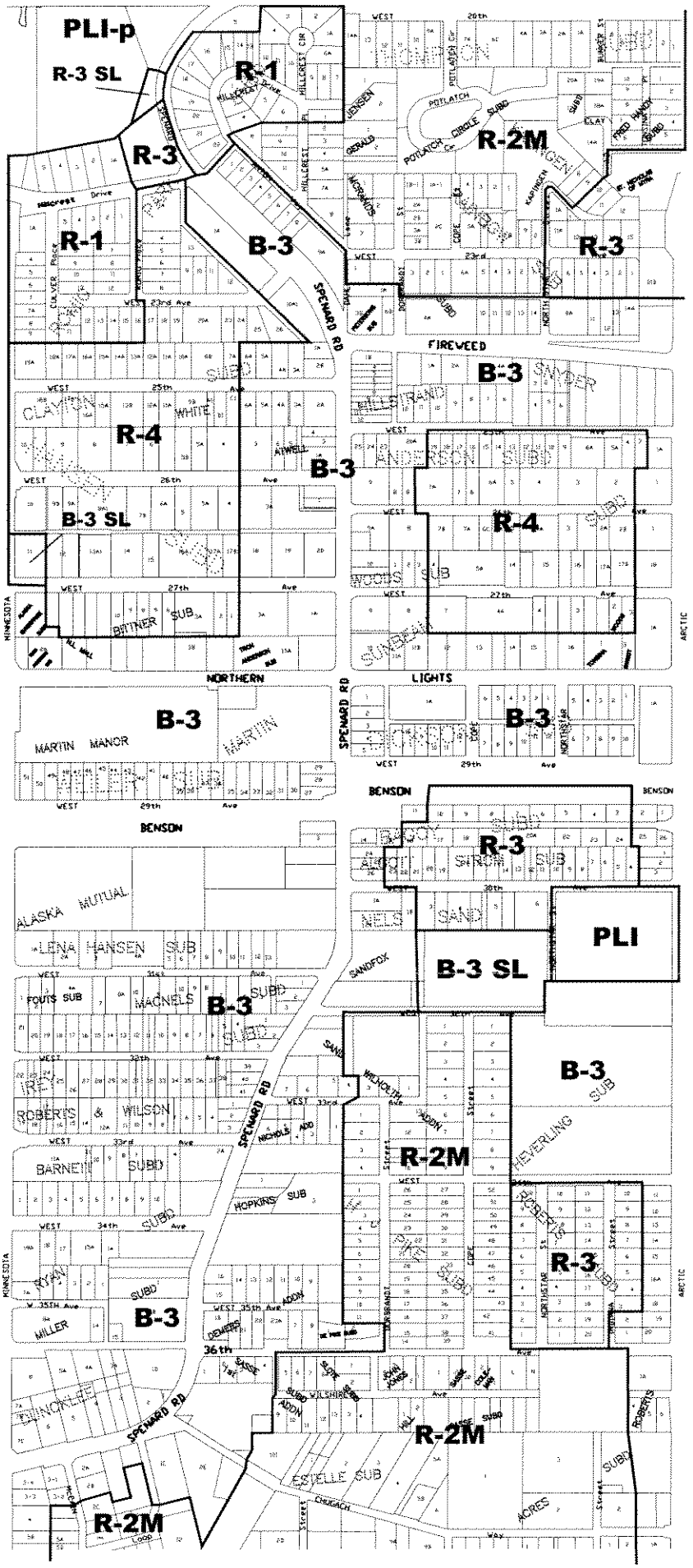
SPENARD ROAD – HILLCREST DR TO MINNESOTA DR

EXISTING LANE CONFIGURATION/ROW WIDTH

SCALE: N.T.S. DATE: JULY 00

PROJECT# HRO-0001(172)/53986

FIGURE 2.2



N

Legend:

PLI-p	Public Lands and Institution District-Park
R-1	One-Family Residential District
R-2M	Multiple-Family Residential District
R-3	Multiple-Family Residential District
R-4	Multiple-Family Residential District
B-3	General Business District
-SL	Special Limitations by Ordinance

SPENARD ROAD
MINNESOTA DR TO HILLCREST DR
CORRIDOR ZONING
FIGURE 2.3

In addition, there are areas near Spenard Road zoned R-2M, R-3 and R-4, all Multi-Family Residential. Figure 2.3 illustrates the corridor zoning.

3.0 Collision Analysis

A collision analysis was performed for Spenard Road between Chugach Way and Hillcrest Drive for the 3-year period 1996-1998. A total of 392 collisions were reported during this time frame. A summary of all reported collisions can be found in Appendix A. Collision diagrams for Spenard Road from Chugach Way to Hillcrest Drive can be found in Appendix B.

The collision analysis was divided into two categories, spot analysis and segment analysis. Spot locations are short sections of roadway or intersections. Segment locations are longer than spot locations and consist of sections of similar roadway characteristics.

3.1 Spot Analysis

The spot analysis revealed 19 locations with three or more collisions over the 3-year period. The spot locations were all roadway intersections or a combination of roadway intersections and driveways. Table 3.1 lists the location, calculated accident rate based on million vehicles entering (MVE), the statewide average accident rate for the location type, and the critical accident rate based on a 95.0% confidence level. The statewide average accident rate is based on the ADOT&PF Formulas and Factors for the fiscal year 1999 Highway Safety Improvement Program. The MVE was determined from Municipality of Anchorage Annual Traffic Reports for the years 1996-1998. Appendix A contains the formulas and factors along with accident rate calculations.