



April 25, 2017

## MEMO

To: John C. Rooney, P.E.

Re: Traffic Study – Knapp Elementary School Signage Assessment.

From: Ara P. Molitor, P.E.

### INTRODUCTION

Purpose: Determine if parking and stop control near Knapp School is relevant:

- Bus Loading Restriction – 7am-4pm School Days on Grange Ave.
- No Parking - 7am-4pm School Days on 17<sup>th</sup> Street.
- 4-Way Stop – 17<sup>th</sup> and Grange Ave.
- 2-Way Stop – 17<sup>th</sup> and Quincy Ave.

Method: Field observations, accident analysis, and Authority questioning.

### FIELD OBSERVATIONS

The former location of Knapp Elementary School was south of 17<sup>th</sup> Street and just west of Grange Ave. All of the existing stop control and parking restriction signs associated with the school are still in place for the former school location and former school functionality. In other words Knapp Elementary School used to be a traditional RUSD school with a certain percentage of students being bused into the school and the remaining students coming from the neighborhood.

The parking restrictions for the former school site still exist;

- There are no restrictions on the east side of Quincy Ave.
- The south side of 17<sup>th</sup> between Grange and Quincy is posted: No Parking Loading Zone on School Days 7:00 AM to 4:00 PM (2 full blocks)
- On the west side of Grange Ave. is posted: No Parking Stopping or Standing on School Days 7:00 AM to 4:00 PM Except School Buses.
- In addition to the school zone restrictions, on the north side of 17<sup>th</sup> Street from Grange to the alley between Grange and Thurston there is posted: 2 HR Parking 9:00 AM to 6:00 PM Ex. Sun & Hol. This is the only restriction post on the opposite side of the street in the area of the school. This was established for the businesses that once existed there. There are no longer any businesses operating in the two store fronts at this time.

The new Knapp Elementary School was constructed and is now open and is still located south of 17<sup>th</sup> Street but now it is just east of Quincy Ave. approximately 1 block west of its original location. The school is designated as a “Neighborhood School” meaning that there are no bused students other than a few special needs student whom get dropped off in their parking lot. The

majority of the students attending the school walk to and from school although there are a small percentage of students who get dropped off and picked up by family or other child care.

The current student population is approximately 340 students of the approximate 550 possible for full capacity (about 60% capacity). The school day runs from 7:15 AM to 3:22 PM, with 2 sessions of 4 Year Old Kindergarten. The first session leaves at 10:25 AM and the second session starts at 12:12 PM. It was observed that there were less than 15 vehicles parked along the south side of 17<sup>th</sup> Street during student pick up times. It was also observed that there were approximately 5 vehicles at the same time parked on the east side of Quincy at the same time. In addition there was approximately the same number of vehicles waiting on the other side of the streets, where there are no parking restrictions on 17<sup>th</sup> St. and on Quincy Ave. There was never an incident noticed where the pickup times got chaotic and dangerous for the students. In previous studies completed at other schools (elementary and middle) it has been witnessed that this is always not the case.

Quincy Ave which borders the school on the west is a dead end street and the newly formed parking lot south of the school is one-way exiting onto Quincy. The Stop control for Quincy and 17<sup>th</sup> Street is for 17<sup>th</sup> Street to stop and Quincy has warning signs for School Crossing. 2 blocks away at 17<sup>th</sup> and Grange there exists a 4-way stop.

## ANALYSIS

A traffic count was not taken with this study. It was observed during the Field Observation period that traffic is extremely light at all times. At the schools start and end times traffic was still not considered heavy by any means, there was more pedestrian traffic than vehicle traffic. Accidents reports were requested for all of 2012 to the present. There were a total of 5 accidents for a 5+ year time period. No injuries or fatalities reported. None of the accidents were correctable by traffic signage or restriction change. The accident analysis time period was with the “Old” school setup which does not give a clear picture of current field conditions.

## RECOMMENDATIONS

This study recommends:

- Converting the intersection at Quincy and 17<sup>th</sup> to a 4-way Stop – to match current school location conditions.
- Converting the intersection at 17<sup>th</sup> and Grange Ave. to a 2-way Stop with Grange Ave. stopping for 17<sup>th</sup> Street.
- Parking restriction Changes:
  - **Removal** of restrictions on west side of Grange from 17<sup>th</sup> Street south to alley entrance.
  - **Removal** of restrictions south side of 17<sup>th</sup> Street between Thurston Ave. and Grange Ave.
  - **Removal** of restrictions on the north side of 17<sup>th</sup> Street between Thurston Ave. and Grange Ave.
  - **Addition** of: “No Parking loading Zone on School Days 7:00 AM to 4:00 PM” on east side of Quincy Ave. south of 17<sup>th</sup> Street.