

MEMORIAL DRIVE DRAINAGE AND MOBILITY DRAFT REPORT

Prepared for



TAX INCREMENT REINVESTMENT ZONE No. 17 TIRZ 17

LAN Project #: 120-10308-000-445



**Lockwood, Andrews
& Newnam, Inc.**

A LEO A DALY COMPANY

May 1, 2009

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EXECUTIVE SUMMARY

Lockwood, Andrews & Newnam, Inc. (LAN) was contracted by Tax Increment Reinvestment Zone No. 17 (TIRZ 17) to perform and mobility study on Memorial Drive between Beltway 8 Northbound Service Road (NSR) and West Bough Lane in Houston, Texas. LAN has been tasked with analyzing the intersections and investigating left-turn lane alternatives aimed at improving operations. A summary of alternatives is as follows:

Table ES-1 – Summary of Alternatives	
Alternative	Description
No Build	<ul style="list-style-type: none"> No Additional Improvements Proposed
Alternative 1	<ul style="list-style-type: none"> Add an eastbound left-turn lane at Town and Country Village East Driveway
Alternative 2	<ul style="list-style-type: none"> Add an eastbound left-turn lane at Town and Country Village West Driveway Add a westbound left-turn lane at Town and Country Village East Driveway

LAN recommends that two eastbound left-turn lanes be constructed on Memorial Drive (Alternative 2). This recommendation is based on intersection capacity utilization (ICU) level of service (LOS) as well as potential safety benefits. Left-turn lanes have been shown to minimize turn-related crashes and minimize delay to through traffic. Based on these potential benefits, LAN recommends the following:

- Install an eastbound left-turn lane on Memorial Drive and Town and Country Village West Driveway,
- Install an eastbound left-turn lane on Memorial Drive and Town and Country Village East Driveway, and
- Update pavement markings on Memorial Drive between Beltway 8 NSR and West Bough Lane.

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INTRODUCTION

Lockwood, Andrews & Newnam, Inc. (LAN) has been contracted by Tax Increment Reinvestment Zone No. 17 (TIRZ 17) to perform a traffic study on Memorial Drive between Beltway 8 Northbound Service Road (NSR) and West Bough Lane in Houston, Texas. Recent development, including the expansion of Town and Country Village north of the study area has increased traffic; as such, this traffic study was authorized to identify where traffic problems occur and recommend improvements on Memorial Drive. This report has been prepared to document the traffic study, present results found during the analysis and provide recommendations.

STUDY LOCATION

Memorial Drive is an east-west four-lane road that is currently free-flow between Beltway 8 NSR and West Bough Lane. Traffic signals are located at each end of the study area and are located at Beltway 8 NSR and West Bough Lane. The study area is identified in Figure 1 and involves four intersections:

- Memorial Drive and Beltway 8 NSR,
- Memorial Drive and Town and Country Village West Driveway,
- Memorial Drive and Town and Country Village East Driveway, and
- Memorial Drive and West Bough Lane.

Beltway 8 NSR is a four-lane, one-way road at the northbound approach to Memorial Drive and is the eastern intersection of a partial diamond type interchange. Town and Country Village West Driveway and Town and Country Village East Driveway are both four-lane driveways that form three-leg "T" intersections with Memorial Drive. Both driveways have dedicated left-turn and right-turn lanes at the southbound approaches with Memorial Drive. West Bough Lane forms a four-leg intersection with Memorial Drive. Memorial Drive has dedicated left-turn lanes

Memorial Drive Drainage and Mobility

eastbound and westbound at West Bough Lane, while West Bough Lane has a dedicated right-turn lane at the southbound approach with Memorial Drive. South of Memorial Drive, West Bough Lane, also called Broken Bough Drive, is a two-lane road. Figure 2 and Figure 3 show No Build Conditions on Memorial Drive.

Many private residences exist to the south and east of the study area. Town and Country Village north of the study area contains commercial developments including a gas station, grocery store, retail shops and restaurants. Town and Country Village West Driveway and Town and Country Village East Driveway lead directly to a strip center and grocery store, respectively. Recent expansion to Town and Country Village is estimated to add over 33 thousand daily trips.

Memorial Drive Drainage and Mobility

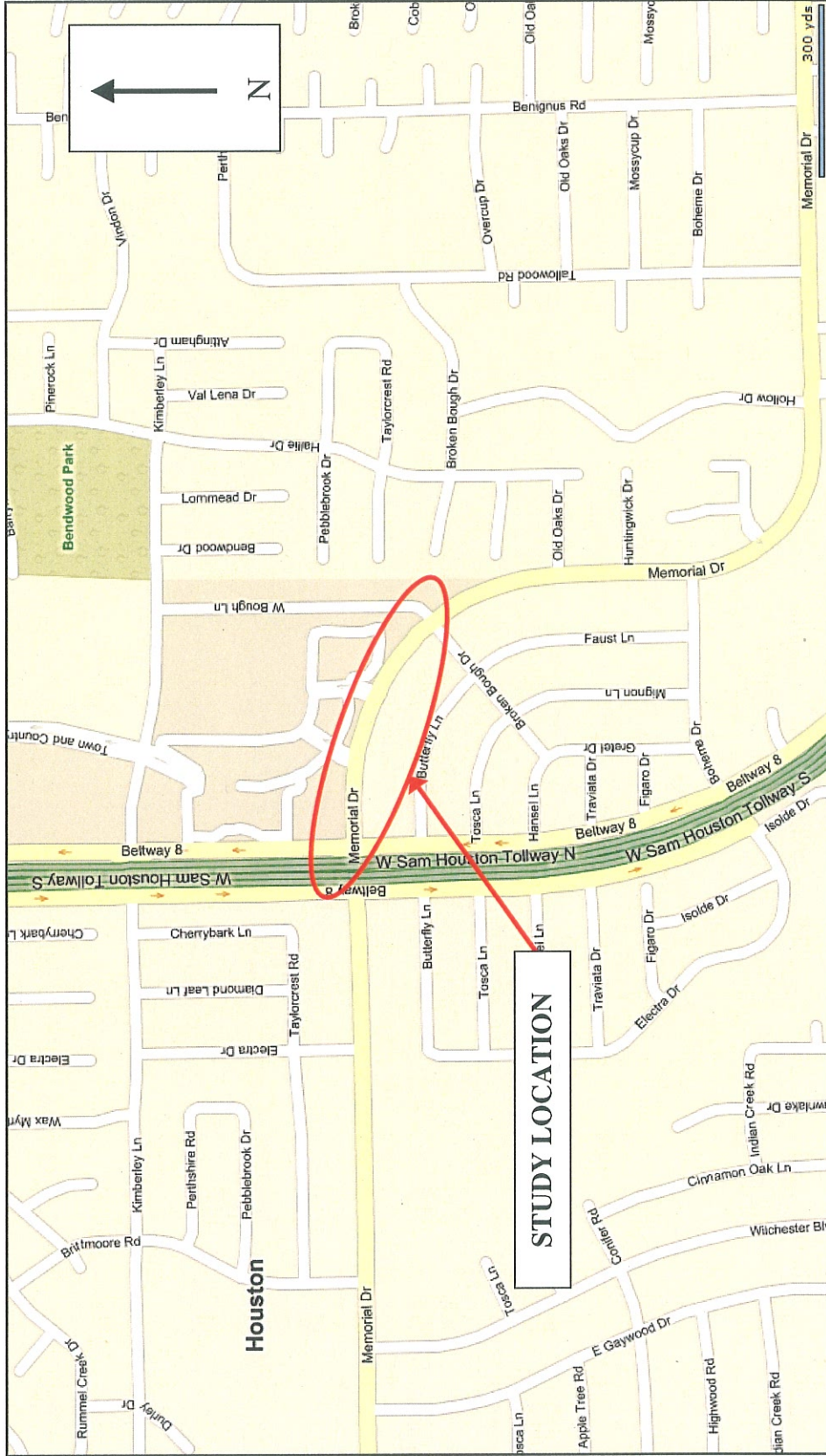


Figure 1 – Memorial Drive Study Location

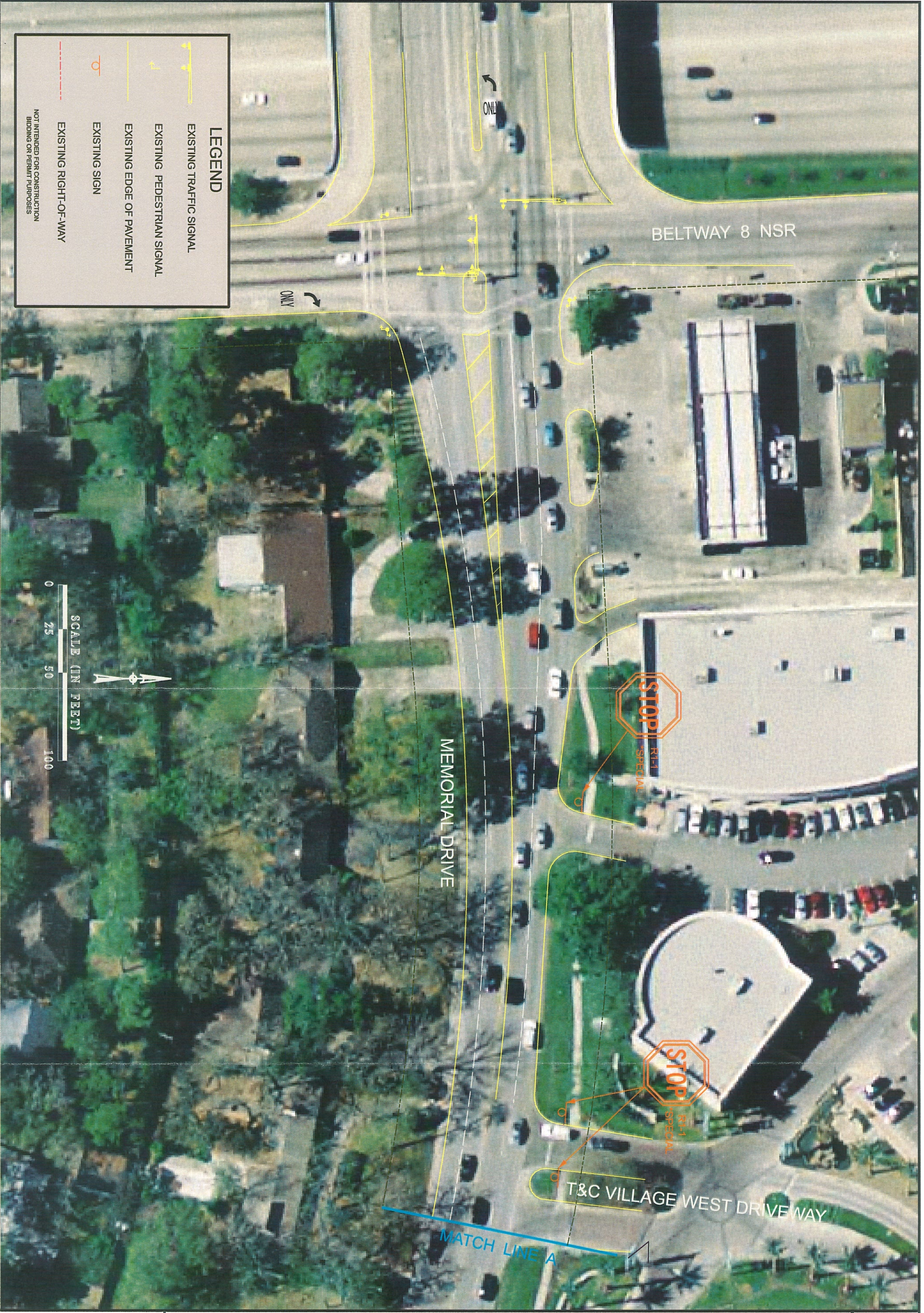


FIGURE 2 - WEST DRIVEWAY EXISTING CONDITIONS

MEMORIAL CITY TIRZ 17

NO BUILD

DATE: May 2009