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7. Author(s) Gerald Ullman, Robert Brydia, Leonard Ruback, Anthony Voigt, and Dusty Arrington				8. Performing Organization Report No. Report 5-9049-05-1	
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16. Abstract Dynamic travel time signs (DTTS) provide current travel times to a specific destination via one or more routes. These signs aid motorists in making route choice decisions en route. Through this project, three DTTS were fabricated and installed on I-35 in Austin, TX. Two signs were located southbound on overhead sign bridges at global positioning system coordinates 30.745981, -97.636638 and at 30.515859, -97.687471. The third sign was located northbound at coordinates 30.02644, -97.851073.					
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**CONSTRUCTION AND INSTALLATION OF TRAVEL TIME SIGNS ON
I-35 IN AUSTIN**

by

Gerald Ullman
Senior Research Engineer
Texas A&M Transportation Institute

Robert Brydia
Research Scientist
Texas A&M Transportation Institute

Leonard Ruback
Research Scientist
Texas A&M Transportation Institute

Antony Voigt
Research Engineer
Texas A&M Transportation Institute

And

Dusty Arrington
Associate Transportation Researcher
Texas A&M Transportation Institute

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TEXAS A&M TRANSPORTATION INSTITUTE
College Station, Texas 77843-3135

DISCLAIMER

This research was performed in cooperation with the Texas Department of Transportation (TxDOT). The contents of this report reflect the views of the authors, who are responsible for the facts and the accuracy of the data presented herein. The contents do not necessarily reflect the official view or policies of TxDOT. This report does not constitute a standard, specification, or regulation.

The engineer in charge of the project was Gerald Ullman, P.E. #66876.

The United States Government and the State of Texas do not endorse products or manufacturers. Trade or manufacturers' names appear herein solely because they are considered essential to the object of this report.

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DYNAMIC TRAVEL TIME SIGNS

INTRODUCTION

Dynamic travel time signs (DTTS) provide current travel times to a specific destination via one or more routes. These signs aid motorists in making route choice decisions en route. Work had occurred under a previous contract (5-9049-03) to fabricate and install DTTS at three locations on I-35 in the Austin metropolitan area. This report documents the results of a follow-on effort to complete that fabrication and installation.

The project consisted of three tasks:

- Task 1. Complete Installation of DTTS at Site 1 (Southbound I-35 before Georgetown, TX).
- Task 2. Complete Installation of DTTS at Site 2 (Southbound I-35 in Round Rock, TX).
- Task 3. Complete a Temporary Installation of DTTS at Site 3 (Northbound I-35 near Kyle, TX).

DTTS INSTALLATION AT SITE 1 (SOUTHBOUND I-35 BEFORE GEORGETOWN, TX)

Site 1 is located on southbound I-35 north of Georgetown, Texas. The DTTS was fabricated and installed on an overhead sign bridge located at global positioning system (GPS) coordinates 30.745981, -97.636638. Installation occurred the evening of August 31, 2015. Figure 1 illustrates the installation process. Installation included testing of the dynamic message sign (DMS) inserts by the manufacturer (Figure 2). A utility service pole, all ground conduit and wiring, control cabinet and wireless modem compatible with the Texas Department of Transportation (TxDOT) Lonestar (Figure 3) were successfully installed. The sign has been turned over to TxDOT for operation.



Figure 1. Travel Time Sign Being Installed at Site 1.



Figure 2. Installed Sign at Site 1 Illustrating Successful Testing of the DMS Insets.



Figure 3. Wireless Modem Installed in Control Cabinet for Travel Time Sign Operation at Site 1.

DTTS INSTALLATION AT SITE 2 (SOUTHBOUND I-35 IN ROUND ROCK, TX)

Site 2 is located on southbound I-35 in Round Rock, Texas. The DTTS was fabricated and installed on an overhead sign bridge located at GPS coordinates 30.515859, -97.687471. Installation occurred the evening of August 30, 2015. Figure 4 illustrates the installation process. Installation included testing of the DMS inserts by the manufacturer (Figure 5). All ground conduit and wiring, control cabinet and wireless modem compatible with TxDOT Lonestar (Figure 6) were successfully installed. The sign has been turned over to TxDOT for operation.



Figure 4. Travel Time Sign Being Installed at Site 2.



Figure 5. Installed Sign at Site 2 Illustrating Successful Testing of the DMS Insets.

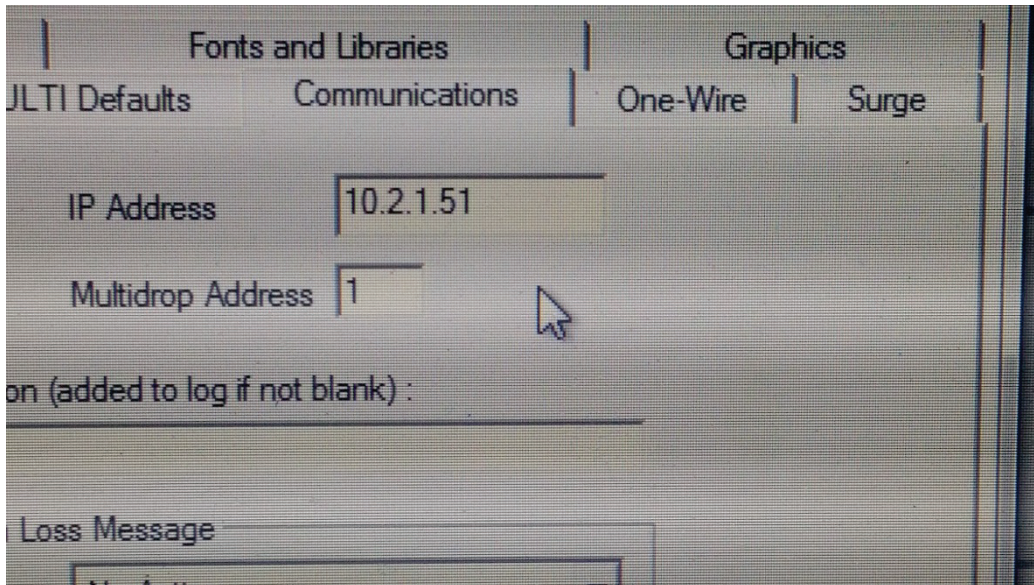


Figure 6. Wireless Modem Installed in Control Cabinet for Travel Time Sign Operation at Site 2.

TEMPORARY INSTALLATION OF DTTS AT SITE 3 (NORTHBOUND I-35 NEAR KYLE, TX)

Site 3 is located on northbound I-35 near Kyle, Texas. The DTTS was fabricated and installed on temporary wooden support poles approximately at GPS coordinates 30.02644, -97.851073. The sign was installed on temporary poles at the request of the Austin District. The overhead sign bridge that was originally selected for permanent installation had been hit and damaged. The Austin District is in the process of repairing the sign bridge and moving it slightly onto new footings. Once repairs are made, the district plans to move the sign from the temporary roadside supports onto the overhead sign bridge.

Installation occurred on August 29, 2015. Figure 7 illustrates the installation process. Installation included testing of the DMS inserts by the manufacturer (Figure 8). A utility service pole, all ground conduit and wiring, control cabinet and wireless modem compatible (see Figure 9) with TxDOT Lonestar were successfully installed. In addition, metal beam guardrail fence (MBGF) was installed at this site to provide positive protection of the temporary sign poles. Figure 10 illustrates the location and length of MBGF installed. The sign has been turned over to TxDOT for operation.



Figure 7. Travel Time Sign Being Installed at Site 3.



Figure 8. Installed Sign at Site 3 Illustrating Successful Testing of the DMS Insets.



Figure 9. Wireless Modem Installed in Control Cabinet for Travel Time Sign Operation at Site 3.

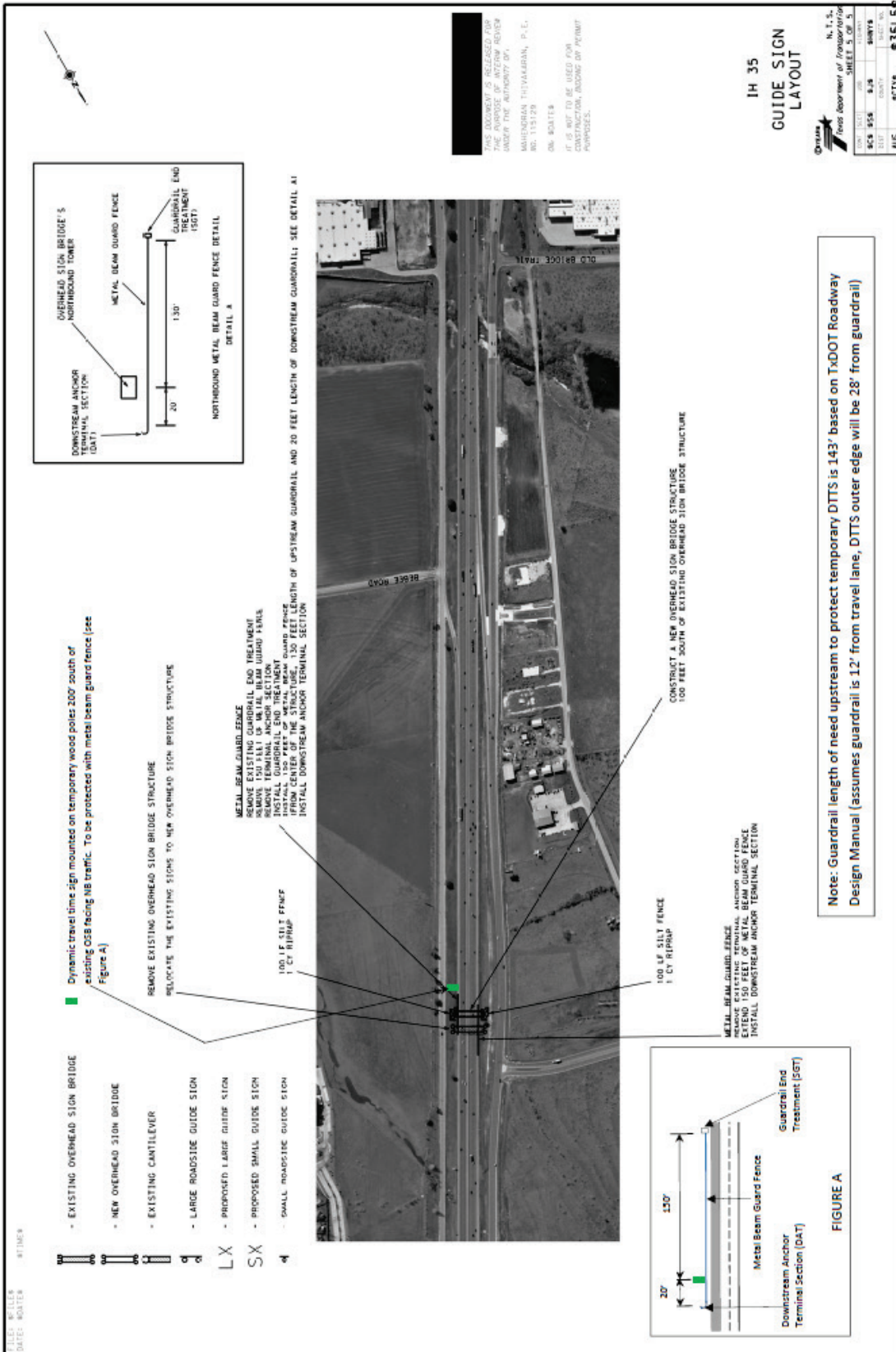


Figure 10. Temporary DTTS and MBGF Installation Notes.

