CHAPTER 1 - INTRODUCTION AND GENERAL INFORMATION

1.1 PURPOSE

This Manual has been developed to serve as a guide for all persons involved in the performance of engineering surveys for the Tennessee Department of Transportation (TDOT). The Manual establishes minimum acceptable standards of accuracy and completeness, and will help to assure uniformity of method and product statewide.

The Manual is intended as a reference, not as a textbook or contract document. The Manual is not intended as a substitute for surveying knowledge, experience, or judgment. Although portions include textbook material, the Manual does not attempt to completely cover any facet of surveying.

The hope is that the Manual will be used as a reference by field survey parties, a planning document and reference by consultant firms employed by TDOT, and as a training tool for new employee orientation.

1.2 ORGANIZATION

The following links illustrate the organization and reporting order of the survey function within the Design Division of the Department of Transportation. The Department is divided into four operational sections designated as Regions 1, 2, 3, and 4. The Regional Survey organization is the same statewide and reports directly to the Regional Director. The headquarters Survey and Design Office is divided into four sections, one responsible for Region 1, one for Region 2, one for Region 3, and one for Region 4. The Survey and Design Offices are part of the Design Division in the Bureau of Engineering.

Tennessee Department of Transportation:
http://www.tdot.state.tn.us/orgchart.htm

Design Division:
http://www.tdot.state.tn.us/Chief_Engineer/assistant_engineer_design/design/index.htm

1.3 PUBLIC RELATIONS

1.3.1 GENERAL

Each employee is a representative of the Department of Transportation and is responsible for developing and maintaining public goodwill. The outdoor nature of surveying keeps personnel in the “public eye” much of the time. Work shall be accomplished efficiently and with a minimum of idle time. All direct contact with the public shall be pleasant, courteous, and businesslike. This includes answering questions, listening to criticism (justified or not) and listening to suggestions.

1.3.2 QUESTIONS FROM THE PUBLIC

All questions shall be referred to the Field Supervisor. He shall answer each question for which he knows the facts. If any doubt exists, he shall refer the person asking the question to the Regional Survey Office. Since exact alignment is determined during the design phase, conversation about possible route locations shall be avoided.
1.3.3 PROPERTY OWNERS

Dealing with property owners is a vital facet of public relations. The property owner will be directly affected by the survey and possible subsequent construction. The surveyor is usually the initial contact with the property owner and good relations developed by conscientious surveyors will carry over into all phases of the project.

1.3.4 RIGHT OF ENTRY

The Tennessee Code Annotated (Section 54-5-107) provides for entry to private property for the purpose of locating, laying out, or constructing any road to become a part of the state system of highways. There are certain steps, however, which shall be taken to secure permission for entry.

1.3.5 PRE-ENTRY CONTACTS

At least one week prior to commencing any survey activity on private property, contact letters shall be mailed to all property owners where entry is needed (Refer to Figures A-2, A-3, and A-4 in the Appendix). Property owner’s names and addresses shall be obtained using the latest records available from the county Tax Assessor’s Office. To promote good relationships, a diligent effort shall be made to contact each property owner or tenant prior to entering the property. However, personal contact is preferable in order to explain why entry is required, the purpose of the survey, the activities involved, and to determine facts pertinent to the survey. The Property Owner Contact Form (Refer to Figure A-1 in the Appendix) shall be used to document conversations with property owners (Refer to Section 3.6.3). Property owner information and contact method shall be entered into the CADD file (Refer to Section 3.4.2).

1.3.6 OBJECTION TO ENTRY

When a property owner or tenant objects to entry, DO NOT ENTER! If the property owner voices objection after the survey has begun, leave immediately. The Regional Survey Office shall be contacted and negotiations begun at that level. If entry cannot be gained, the Survey Coordinator shall be contacted. If efforts fail at that level, legal action can be taken.

1.4 LEGAL ASPECTS

1.4.1 RIGHT TO ENTER PRIVATE PROPERTY

The Tennessee Code Annotated (Section 54-5-107) authorizes the employees of the Department of Transportation, while engaged in locating, laying out, or constructing any road to become a part of the state system of highways, to do so without interference. In the event of such interference, an injunction to prohibit this conduct may be obtained. On entering property, the property must be protected from damage to the fullest extent possible. For additional information, refer to Section 1.3.4.

1.4.2 CLAIMS FOR DAMAGE TO PRIVATE PROPERTY

In the event a property owner feels he or she is due compensation for damage done to his or her property, he or she should seek restitution through the Division of Claims Administration, Treasury Department. The property owner is responsible for the contact. However, Field Supervisors shall cooperate fully in supplying information of their activities while on the property in question. The address of the State Claims Administration is:
1.4.3 CITIZEN’S RIGHT TO VIEW DOCUMENTS

The Department maintains an open records policy and any citizen has the right to observe and copy most documents that are relative to his inquiry. However, most documents are public property, and possession is not to be surrendered without specific approval from the director of the Design Division.

1.4.4 RIGHT TO CONTROL TRAFFIC DURING SURVEY

There is no specific law authorizing members of a survey party to control traffic. However, state personnel are legally empowered to survey “without interference.” All reasonable measures shall be used to preclude interference with vehicular movement, and lane closures shall not be considered until all other alternatives have been exhausted. In the event that traffic control measures are necessary, they shall be provided by Regional Maintenance personnel. The Regional Maintenance Supervisor shall be contacted for traffic control services. Very short closures or special situations may be handled by the survey party. In the event that traffic control measures are necessary, they shall be determined by the procedures outlined in the Manual on Uniform Traffic Control Devices (MUTCD). The MUTCD is distributed by the Traffic Engineering Office of the Maintenance Division, 400 James K. Polk Building, Nashville Tennessee and is available online at the following website:

http://mutcd.fhwa.dot.gov/

1.5 SAFETY

Survey personnel perform their work in many different hazardous environments including rugged terrain and high-speed traffic. The promotion of a safe atmosphere requires the acknowledgment of hazards and attention to safe practices by all employees. However, the Field Supervisor in charge of the party must assure safe conditions exist. As a part of this responsibility, he or she shall make sure all Personal Protection Equipment (PPE) and safety practices are maintained and in use.

Safe placement of vehicle, equipment and personnel shall be in compliance with the MUTCD. PPE shall be used any time employees are out of their vehicles. PPE includes, but is not limited to, a hard hat, a class III reflective safety vest, and substantial footwear. As with all TDOT vehicles, the use of seat belts by all parties in vehicles is mandatory. Any safety questions can be directed to the TDOT Safety Director, 400 James K. Polk Building, Nashville Tennessee or the Regional Safety Coordinators.

1.6 PROJECT NAMING CONVENTIONS

Project descriptions in any file and in all correspondence shall be in sequence as follows:

- FAI number (if an interstate)
- State route number (if a state route)
- U.S. route number (if a U.S. route)
- County name
Local road name
Project limits (from and to)

Examples:
- SR-6 (US-16, Thomasville Rd.), from 0.5 mi south of Thompsons Station, to 1.3 mi north of Turtle Dove Creek, Williamson County
- SR-6 (US-16, Thomasville Rd.), bridge and approaches over Turtle Dove Creek, LM 2.45, Williamson County

The project number, PIN, and county shall be included in all correspondence.

Refer to Section 3.4.2 for Planimetric file naming procedure.

1.7 PROCEDURE FOR SUBMITTING SURVEYS

1.7.1 SUBMITTAL

The Field Office Supervisor or Consulting Engineer will submit all completed surveys to the Regional Survey Supervisor.

1.7.2 NEW SURVEYS

If the project is to be designed by the Regional Design Office, the Regional Survey Supervisor will submit the survey to the Regional Design Engineer. If the project is to be designed by Headquarters Design or by a Consultant, the survey will be submitted to Headquarters. Surveys may be sent directly to the Consultant if time is a factor.

1.7.3 ADDITIONAL INFORMATION AND SURVEY UPDATES

The completed additional information and / or survey updates should be forwarded to the appropriate design engineer with a copy of this transmittal to the Survey Coordinator.

1.7.4 FIELD AND OFFICE SURVEY CHECKLIST

An example of the survey checklists can be found in the Appendix on pages A-70 through A-77 and the most current checklists can be found at the following TDOT website:

http://www.tdot.state.tn.us/Chief_Engineer/assistant_engineer_design/design/survey.htm