



United States  
Department of  
Agriculture

Soil  
Conservation  
Service

210 Walnut Street  
693 Federal Building  
Des Moines, IA 50309

April 23, 1986

NATIONAL ENGINEERING MANUAL  
210-V AMENDMENT IA21 - PART 540

SUBJECT: FIELD SURVEY DOCUMENTATION  
TOTAL STATION INSTRUMENTS

Purpose. This notice transmits page IA540-2(1)

Effective Date. This amendment is effective upon receipt.

Explanation of Changes. This amendment is to be used for field survey notes when using electronic total station instruments and computer systems for field surveys.

Filing Instructions. Pages IA540-2(1) should be filed immediately following Page 540-2. This amendment should be noted on the Iowa Supplement Tabulation Sheet. Page IA540-2 dated February 1981 should be destroyed.

  
J. Michael Nethery  
State Conservationist

Attachment

A  
F  
EN2  
RC&D  
MNTC - 5  
SCE - Midwest States  
*Contracts*



The Soil Conservation Service  
is an agency of the  
United States Department of Agriculture



## §IA540.03 Format

- (a) Technical Release 62 and the Engineering Field Manual shall be used as guides for format and content of engineering field notes. Title 450, General Manual, Part 407, (450-GM) contains minimum notekeeping requirements for the common conservation practices as well as recommended format to be used on individual practice sheets.
- (b) Bound field books shall be used for all Class V through VIII jobs and all project and contract work unless electronic total station instruments are used.
- (c) Electronic total station instruments may be used for design surveys, preconstruction surveys for computing quantities, construction staking, and final checkout including seeding quantities. The following will be required:
  - (1) The SCS Engineering Field Book is to be used as required in §540.03(b) with the total station instruments for bench mark description, staking description and other important information.
  - (2) One hard copy of the original survey will be printed when the information from the total station instrument is dumped into the computer. Each page of the hard copy will be identified by county, project, site, stamped Original Total Station Instrument File, dated and signed by the party chief. If any corrections are made this information is to be added to the computer file (floppy disk) and one hard copy of this is made, stamped Corrected Total Station Instrument File, dated, and signed by the corrector.
  - (3) A backup floppy disk will always be made to protect the file. Both disks will be kept at the project office until the job is completed and has been accepted. At this time the hard copies and one copy of the disk will be placed in the construction files and sent to the state office. Only the hard copy print outs (original and corrected) will be sent to the archives.