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<b>SUBJECT:</b>	
Chapter 1	Introduction
Chapter 2	Materials and Structural Design
Chapter 3	Hydrology
Chapter 4	Channels
Chapter 5	Culvert
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Chapter 7	Storage Facilities
Chapter 8	Storm Drain Systems
Appendix A	Risk Assessment
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Appendix C	Pipe Flow Design Charts
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Appendix E	Computer Programs and References

The Drainage Manual has been revised to add more information and show current Mn/DOT procedures and practices. This manual replaces the previous manual in its entirety.

**INSTRUCTIONS:**

1. Place the transmittal record sheet in the front of the manual and record the transmittal letter number, date, and subject.
2. Insert in the new manual: The index and the above listed chapters.
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4. Any questions concerning missing manual sheets or extra transmittal letters should be directed to Map and Manual Sales, Room G-19, M.S. 260, (651) 296-2216. Please furnish in writing any address changes to: Mail Room G-21 Transportation Building, M.S. 275, 395 John Ireland Blvd., St. Paul, MN 55155. Any questions concerning mailing of this material should be directed to the Mail Room G-21 (651) 296-2420.

  
Donald J. Flemming  
State Bridge Engineer



# **DRAINAGE MANUAL**



**MINNESOTA DEPARTMENT OF TRANSPORTATION**

Developed by  
Office of Bridges and Structures



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