

**VIRGINIA DEPARTMENT OF TRANSPORTATION**

**MATERIALS DIVISION**

**MEMORANDUM**

<b>GENERAL SUBJECT:</b> Manual of Instructions – Chapter 3	<b>NUMBER:</b> MD 435-20
<b>SPECIFIC SUBJECT:</b> Clarification to minimum standards for slope stability	<b>DATE:</b> July 1, 2020
	<b>SUPERSEDES:</b> n/a
<b>APPROVED:</b>	Charles A. Babish, PE State Materials Engineer Approved: _____

---

**EFFECTIVE DATE**

---

- This memorandum is effective July 1, 2020
- 

**PURPOSE/NEED/SCOPE/REQUIREMENTS**

---

Original text limited the requirements only to circular failure surfaces. As written, it now relates to all failure surfaces.

---

Changes are **Shaded**

---

**PROCEDURES**

---

- To establish minimum standards for slope stability determinations, the fourth paragraph of Section 305.03 has been changed. Refer to the following:

~~Circular~~ Failure surfaces shall be analyzed by methods such as the Modified Bishop, Simplified Janbu, Morgenstern-Price, ~~or Spencer methods.~~ Spencer, Infinite Slope, or other methods as pre-approved by VDOT. Both drained and undrained strengths shall be considered. All slope stability analyses shall consider the effects of groundwater, external loads, tension cracks, and other pertinent factors as applicable.

---

## NOTES

- 
- n/a
- 

## REFERENCES

- 
- n/a
- 

## COPY DISTRIBUTION:

Deputy Chief Engineer  
Division Administrators  
District Administrators  
District Location & Design Engineers  
District Construction Engineers  
District Maintenance Engineers  
District Bridge Engineers  
District Traffic Engineers

VDOT Resident Engineers  
Federal Highway Administration  
Virginia Ready Mix Association  
Precast Concrete Association of Virginia  
Virginia Transportation Construction Alliance  
Virginia Asphalt Association  
American Concrete Paving Association Mid-Atlantic Chapter  
Old Dominion Highway Contractors Association