

SECTION 31 23 13

SUBGRADE PREPARATION

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Grading, shaping, and compacting subgrade prior to placing a base or surface course.
- B. Related Sections:
 - 1. Section 31 23 00 – Excavation and Fill

1.02 REFERENCES

- A. North Dakota Department of Transportation “Standard Specifications for Road and Bridge Construction”
 - 1. Section 203 – Excavation and Embankment.
 - 2. Section 230 – Reshaping Roadway and Subgrade Preparation

1.03 SEQUENCING AND SCHEDULING

- A. Subgrade preparation shall be performed prior to placement of the concrete curb and gutter.
- B. Complete subgrade for streets, driveways, walks, and parking lots immediately after installation of pipe as part of trench backfill and compaction.
- C. Subgrade preparation shall be performed prior to placement of the aggregate base course.

PART 2 PRODUCTS

NOT USED

PART 3 EXECUTION

3.01 GENERAL

- A. Subgrade preparations shall be performed to produce the required density, grade, and cross-section.

3.02 PREPARATION

- A. Inspection of subgrade by test rolling with a loaded tandem axle dump truck.
- B. The road bed will be considered unstable if yielding and rutting is greater than 1-1/2 inches.

3.03 COMPACTION

- A. The top 12 inches of the subgrade shall be compacted to 95% of the maximum density as determined by the Standard Proctor (ASTM D698)
- B. Density and moisture tests will be taken on the compacted subgrade at the location and testing rates determined by the Engineer. Nuclear density testing shall be considered an approved method.

3.04 FINISH OPERATIONS

- A. Subgrade tolerance shall not vary by more than 0.05 feet from the prescribed elevation at any 1 point where a measurement is made.