

- Notes:**
- Capital improvements are based on modeling of 2007, 2015, and 2030 demands with consideration of prior master planning studies.
  - Definitions:
    - Replacement Projects replaces or repairs existing infrastructure with similar capacity.
    - Improvement Projects provide increased capacity or efficiency to existing systems.
    - Expansion / Economic Development Projects extend infrastructure to serve new developments.
  - Improvement and expansion mains are designated with model pipe number and pipe diameter.
  - Future Expansion lines are based on population projections and Future Land Use information provided by the City.
  - New Existing designation indicates facilities constructed since model calibration, in July, 2006.
  - Capital Improvement locations shown are conceptual. Actual locations must meet all City standards such as construction in public right-of-way except as approved by City Engineer. More precise main alignments will require alignment studies as part of the design.

**Legend**

- Tier 1 Boundary
- City Limits
- Road Centerline

**Valves**

- New Existing
- Improvement
- Expansion
- After 2030 Expansion
- Existing Control Valve
- Pressure Reducing Valve

**Reservoirs**

- New Existing
- Improvement
- Expansion
- Existing
- WTP Clearwell

**Pumps**

- New Existing
- Improvement
- Expansion
- Existing
- Wells

**Existing Distribution Mains**

**Diameter**

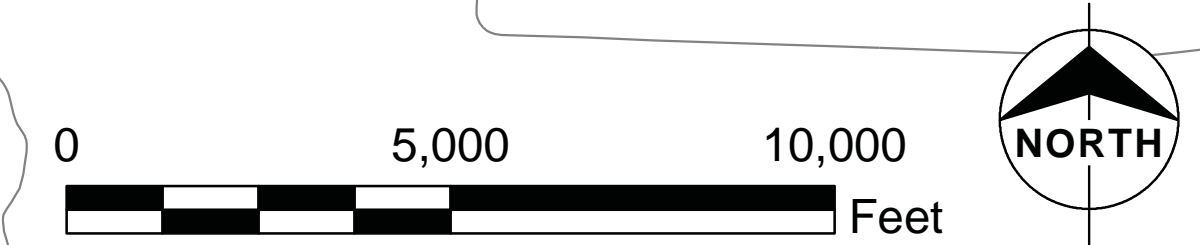
- < 8 Inch
- >= 10 Inch

**Future Distribution Mains**

**Capital Improvement Type**

- Future Raw Water
- New Existing
- Improvement
- After 2030 Improvement
- Expansion
- After 2030 Expansion

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**Figure 6.4**  
**Water System**  
**Capital Improvement Projects**  
**Rapid City, SD**