



# MTC Utility Tunnel

A design for the Church of Jesus Christ of Latter-day Saints



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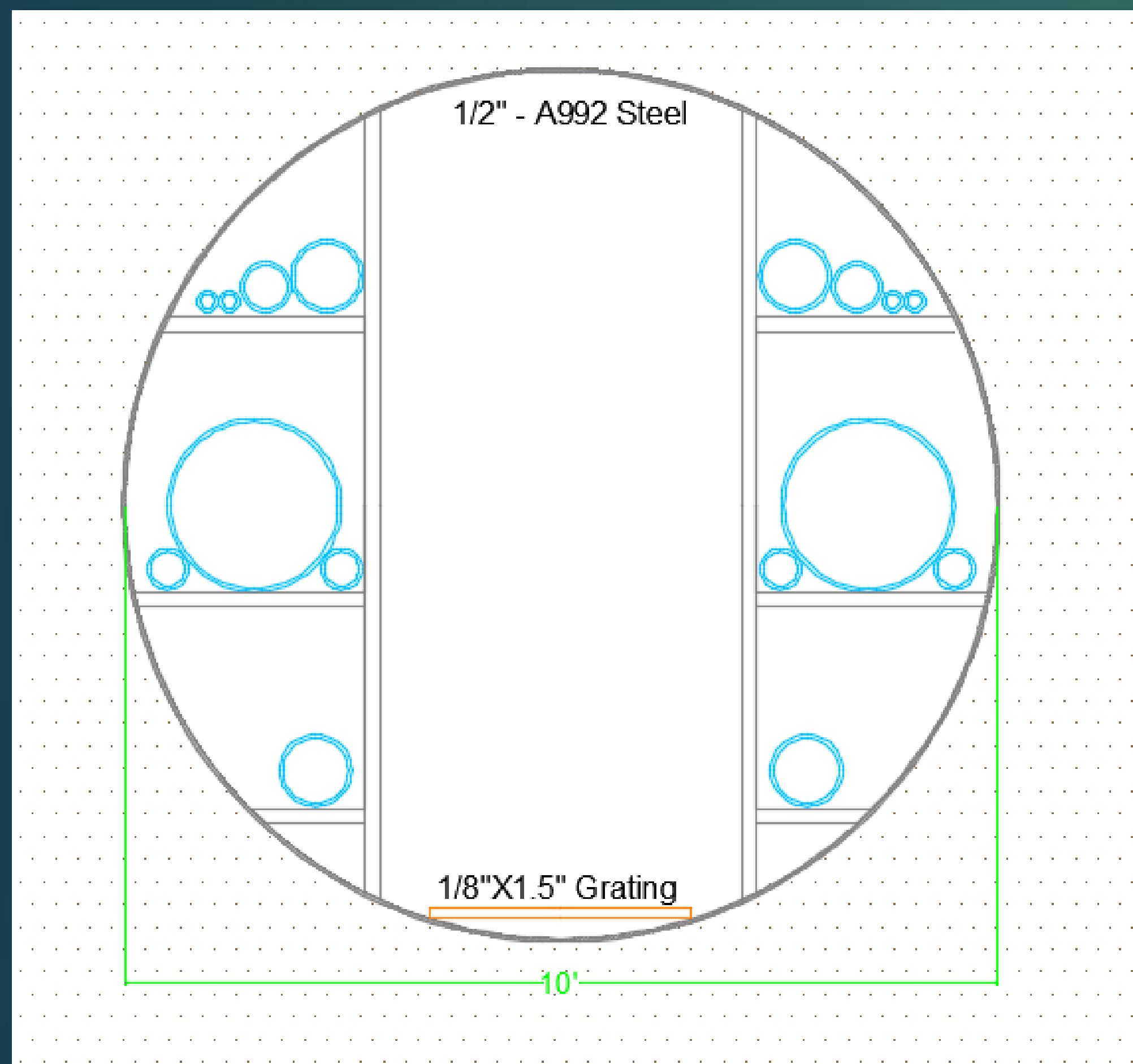
## - PROBLEM -

- ▶ MTC expansion facilities will require additional utilities
- ▶ Provided by way of underground tunnel crossing University Parkway near 900 E
- ▶ Construction to be completed within six weeks (July 4<sup>th</sup> – August 17<sup>th</sup>)
- ▶ Major constraints: cost and time
- ▶ One lane of traffic must remain open in each direction



## - DESIGN ALTERNATIVES -

- Open trench
- ▶ Traditional and familiar methods
  - ▶ Difficult to complete in six weeks
  - ▶ High impact, lower cost
- Trenchless
- ▶ Specialized method
  - ▶ Completed in three weeks
  - ▶ Minimized impact, higher cost



## - SOLUTION -

### Trenchless Jack and Bore

- ▶ Popular method of installation that simultaneously jacks tunnel while rotating helical augers within the casing removes spoil
- ▶ Often used when tunneling under utilities, rivers, and railroads
- ▶ Minimized impact (eliminates road repair, traffic delays, rerouting utilities)
- ▶ Some risk of raveling and settlement
- ▶ Time to complete: 4 weeks
- ▶ Estimated cost: \$1.3 million

