SECTION 02300
UTILITY TUNNELS

PART 1 - GENERAL

1.1 SUMMARY:

A. Section Includes:

1. Utility tunnels for steam and condensate piping, chilled water piping, compressed air piping, telephone and data raceway systems, and other systems as applicable.

B. Related Sections:

1. Section 02200 - Earthwork.
2. Section 02221 - Trenching, Backfilling, Compacting.
4. Section 02695 - Steam Distribution Systems.
5. Section 02785 - Electric Power Transmission.
6. Section 02790 - Communication Transmission.
7. Section 02795 - Compressed Air Systems.

1.2 SYSTEM DESCRIPTION:

A. Cast-in-place concrete for lid, walls and floor. Provide non-slip texture on floor. All cast-in-place concrete used in tunnel construction shall be vibrated in place.

B. Waterproof lid and floor.

C. Waterproof or dampproof walls as appropriate to water table.

D. Provide 4" minimum gravel subgrade below floor.

E. Provide floor sloped a minimum of 0.125" to 0.25" per foot to floor drains connected to sanitary sewer system, or sump as conditions may require.

F. Provide sufficient lighting to achieve a minimum of 20 footcandles in all locations.
G. Provide access hatches at 100 ft. o.c. of size acceptable to the University of Colorado at Boulder Utility Engineer. Provide units for H20 loading where subject to vehicle traffic.

H. Layout piping and other utilities as acceptable to the University of Colorado at Boulder Utility Engineer.

PART 2 - PRODUCTS

2.1 MATERIALS:

A. Comply with applicable requirements of other Division 2 through 16 sections.

B. Only Bilco brand custom tunnel hatches or approved alternative with brass cap lock protector shall be allowed. Coordinate with UCB Plumbing and Steam Shop and UCB Utility Manager.

PART 3 - EXECUTION

3.1 INSTALLATION:

A. Comply with applicable requirements of other Division 2 through 16 sections.

END OF SECTION 02300