pipe.

- 14. Control of over break.
- 15. Grouting of cavities where applicable.
- 16. Grout mix design and method of grouting.
- 17. Reuse/dumping of cuttings and slurry.
- 18. Layout of monitoring points for detection of surface movement.
- 19. Pipe welding equipment, operating manual, data printout sample.
- 20. Alignment and welding of pipe string.
- 21. Pipe stringing arrangement and conveyor system.
- 22. Drill fluid production and frequency of vacuum trucks to transport drilling fluid from one location to another and drill mud cleaning proposal if recirculation is proposed.
- 23. Drill fluid disposal.
- 24. Environmental protection, including sizing and layout of drill fluid containment berm in case of spill.

## 2.1.4.3 Working Drawings and Design Calculations:

A. The Contractor shall submit drawings to the Engineer for approval in advance of commencing the site activity in accordance with Section 01300 of the specification. These shall comprise but not necessarily be limited to:

## **Plan View**

- 1. The location of all existing buildings, utilities and other services within a minimum 10m radius or greater as may be required to the drilled hole.
- 2. obstacles
- 3. drill axis
- 4. co-ordinates of the entry and exit points
- 5. shortest distance between obstacles and drill axis
- 6. horizontal curvature
- 7. lateral tolerance
- 8. planned work area for rig site and pipe stringing area
- 9. North Arrow