

7.1 Standard to be achieved

7.1.1 Major Sumps

- Required for significant water inflows, e.g, low spot on large benches requiring pontoon pumps as advised by Supervisor or Pumper
- Dug with excavator.
- Floor of sump to be min 30m x 30m – to allow room for pump & highwall clearance (floating Sykes pumps are approx 16m x 5m in size).
- Depth of sump shall allow water to be efficiently managed so as to not impact operation of the selected pump as advised by Supervisor or Pumper
- Pump to be kept a minimum of 10m from walls.
- Sumps will have vertical sides against highwalls / endwalls.
- All non-contained sides sloped at approx slope 1Vertical:2Horizontal (25° to 30°) – to allow foot access.
- Access road to top of sump (8m minimum width) with a 20m wide turning area at top of sump to allow dozer access to push in and relocate pump and for light/medium vehicles to access for refuelling and operation.
- Access road to approach from the top side (lowwall side), at least 10m from walls, alongside pipeline.
- Bunds to be built around sump along top of sloped walls to allow water to run into the sump – these will be site specific in their location.
- Fuel tank will be located above sump with bunds for fuel truck to reverse against and to hold fuel spills.
- Trench to be dug along highwall if necessary to allow water to drain into sump
- Trenches to be bunded.
- Delineation – PVC pipe with reflectors on star pickets (or equivalent) to be put around edge of sump as soon as sump is dug.
- Warning signs to be placed at entrance to sump area (Restricted Access – Notify OCE / Supervisor Before Entering).
- Position and depth of sump to be picked up by surveyors.
- Sump to be marked on plan.
- When an old sump is no longer required it is to be filled with rock to prevent equipment walking into a hole filled with slurry.
- If personnel are required to work within the 10m standoff from the highwall a risk assessment / Geological Checklist is to be completed and a spotter is to be used.

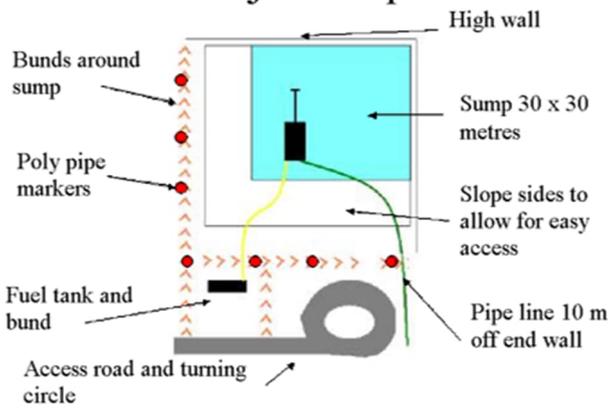
7.1.2 Minor Sumps

- Required for minor water inflows, e.g, localised areas on bench requiring small trailer mounted pumps as advised by Supervisor or Pumper
- Typically less than 5m x 5m.
- Depth of sump shall allow water to be efficiently managed so as to not impact operation of the selected pump as advised by Supervisor or Pumper
- Will have 3 vertical sides.
- One side will be sloped at approx 1Vertical:2Horizontal (25° to 30°) to allow egress.
- Bunds to be placed around all accessible sides leaving small openings for pump and to allow water to run into sump.
- Delineation – PVC pipe with reflectors on star pickets (or equivalent) to be put around edge of sump as soon as sump is dug.
- Pump to be located on high side of sump.
- Access road to top of sump (minimum 3m wide) for light/medium vehicles with a 10m wide turning area at top of sump.
- When an old sump is no longer required it is to be filled with rock to prevent equipment walking into a hole filled with slurry.
- If personnel are required to work within the 10m standoff from the highwall a risk assessment is to be completed and a spotter is to be used

7.2 Performance to be achieved

- Equipment is not to be moved away until it has completed its part of the construction according to this standard. The Supervisor of the dig unit is responsible for verifying that this standard has been achieved before the unit walks away.
- Sump is not to be used until it is completed to this standard.

Major Sump



i Document Reference - MAC-PRD-STD-008