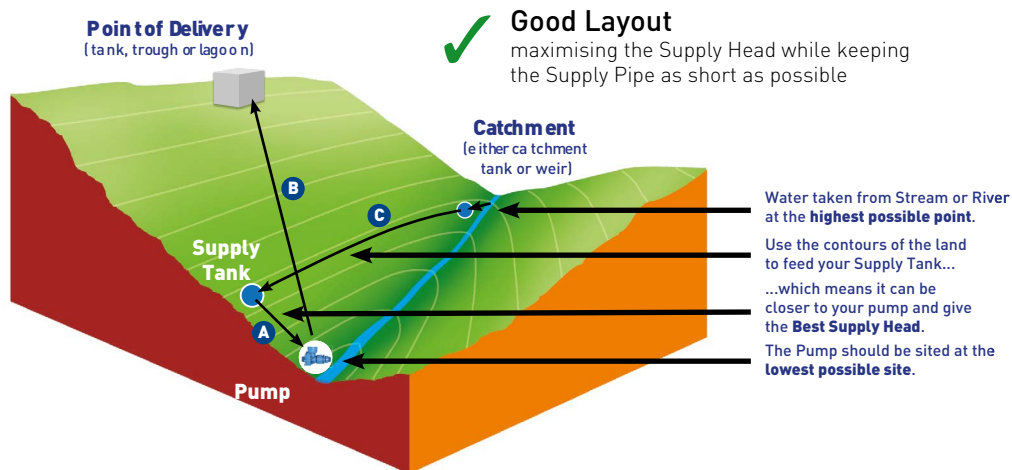


# PLANNING YOUR SYSTEM INSTALLATION

System Layout | Measuring | Costing & Ordering Materials

## System Layout Principles

**Your first task is to find the highest water catchment point and the lowest point you can place your pump to maximise the Supply Head.**



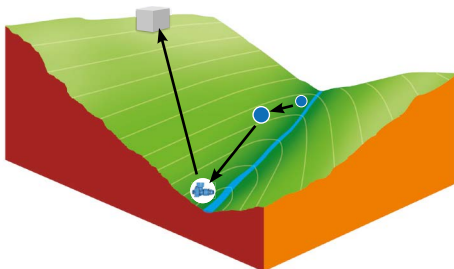
Planning your layout correctly is essential to an efficient system and ensures that you can maximise the potential water delivery. The main principles are:

**Maximising the Supply Head is most important**  
(the difference in height from your supply tank to the pump)

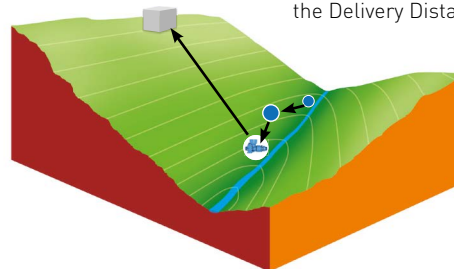
**The greater the Supply Head, the more water you can pump**

**The greater the Supply Head, the higher you can pump it.**

**✗** A short (plastic) Feed Pipe and long (metal) Supply Pipe is an inefficient and expensive layout.

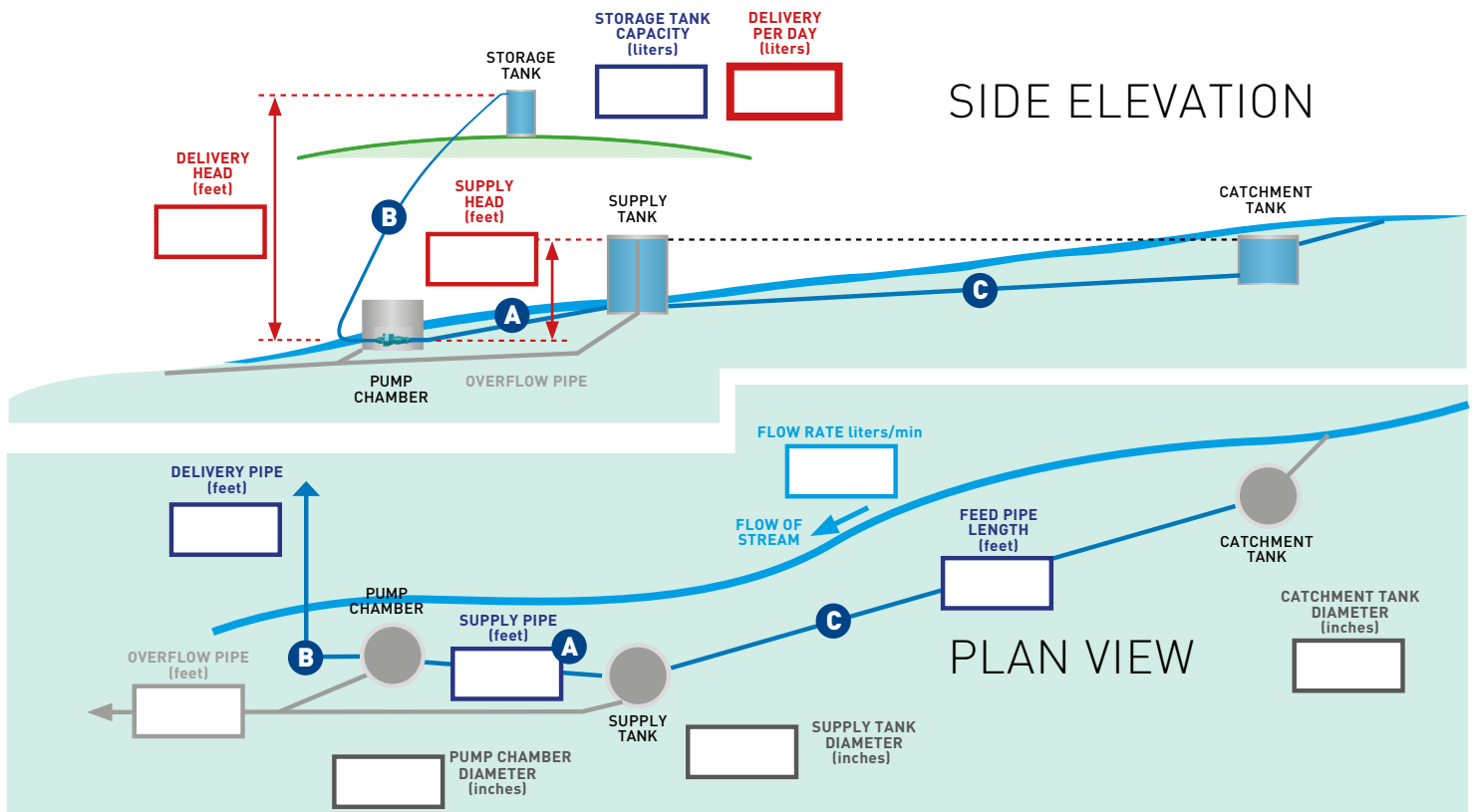


**✗** Resist placing the pump closer to the delivery point if it means reducing the Supply Head. The Supply Head is **much more critical** than the Delivery Distance.



# Measuring

Consult the **INSTALLATION GUIDE** for methods of measuring heights. Enter essential measurements in the boxes below. To calculate your potential water delivery enter the amounts in the **RED BOXES** below and consult the **PUMP PERFORMANCE CHART** on the next page.



## Recommended Materials

Above 15 meters delivery head, **IT IS ESSENTIAL THAT STEEL PIPE IS USED FOR THE SUPPLY PIPE** (from the supply tank to the pump) or at least 20% of the Supply Pipe must be steel (the steel portion must be at the pump end of the supply pipe). 2" MDPE can be used for the rest of the supply pipe.

- A Supply Pipe** - 2" (internal diameter) Steel Pipe should be used for the Supply Pipe
- A Supply Pipe** - 2" MDPE (Medium Density Polyethylene) (see limitations above)
- B Delivery Pipe** - 1" MDPE (Medium Density Polyethylene) Pipe
- C Feed Pipe** - 4" Soil Pipe should be used for systems with 1 or 2 Pumps  
6" Soil Pipe should be used for systems with 3+ Pumps

**Inlet Pipe** (Stream to Catchment) and **Overflow Pipe** (from Pump Chamber) should be the same as the Feed Pipe. **Catchment Tank / Supply Tank** - Min. 36" depth & 36" diameter. Cover tanks to protect from debris and wildlife. **Pump Chamber** - We recommend 48" Concrete Ring (with lid) if available to give adequate room for installation/maintenance. Brick or block construction is an alternative.



# System Materials/Parts List

**A** (Supply Pipe) 2" Galvanised Steel Thread & Socket Pipe

**A** (Supply Pipe) 2" MDPE Pipe (if required)

**B** (Delivery Pipe) 1" MDPE Pipe

**C** (Feed/Inlet/Overflow Pipe for 1-2 pump systems) 4" Soil Pipe

**C** (Feed/Inlet/Overflow Pipe for 3+ pump systems) 6" Soil Pipe

Papa Pump Kit

Storage Tank Capacity  liters

Concrete Ring with steps 48" x 36" with tongue and groove joints

Concrete Cover Slab with 24" x 24" access

Manhole Cover 24" x 24"

Double Socket Coupler either 4"  or 6"

Double Socket & Single Socket 90° bend either 4"  or 6"

Plain Socket Plug either 4"  or 6"

Tee either 4"  or 6"

Notes:

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No of meters	Cost per meter (\$)	Total (\$)
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Quantity	Unit Cost (\$)	Total (\$)
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**TOTAL (\$)**