

Disclaimer for Construction Plans and Design Report Examples

The information you have accessed or received is provided “as is” for informational purposes only. The Arizona Department of Environmental Quality (ADEQ) or the authors do not provide any warranties of any kind regarding this information. In no event shall Arizona or its contractors or subcontractors be liable for any damages, including but not limited to, direct, indirect, special or consequential damages, arising out of, resulting from, or in any way connected with this information, whether or not based upon warranty, contract, tort, or otherwise, whether or not arising out of negligence, and whether or not injury was sustained from, or arose out of the results of, or reliance upon the information.

The example design report and construction plans are provided for the express purpose of assisting engineers in creating these documents for submittal to ADEQ, and to display the minimum requirements necessary for ADEQ approval. Other agencies, cities, counties, contractors, developers and other entities may require different or additional criteria and should be referenced accordingly. The complexity of your design may require additional information. This example may be revised from time to time and the design engineer should ensure that they have the most recent copy prior to creating their design. If you have any questions regarding this information, please contact our office at WQD_DWR@azdeq.gov.

It is the responsibility of the Professional Engineer to ensure that the design is adequate and meets the requirements of the project.

Well Example

GENERAL NOTES

1. In accordance with A.A.C. R18-5-504, all construction materials will be lead free, excluding leaded joints for cast iron pipes.
2. All water treatment chemicals and water components in contact with potable water will conform to National Sanitation Foundation 60 and 61 respectively. All plastic pipes and fittings will have the National Sanitation Foundation seal in accordance with Engineering Bulletin No. 10.
3. The system is designed using good engineering practice in accordance to Engineering Bulletin No. 10, as stated in A.A.C R18-5-502.
4. The minimum pipe cover is 3 ft given by the Engineering Bulletin No. 10.
5. All pipes, valves and other appurtenances will conform to the current AWWA standards in accordance with Engineering Bulletin No. 10.
6. All connections have national standard threads in accordance with MAG 360-1.
7. All new waterlines shall be pressure tested in accordance with current AWWA C605 for PVC and AWWA C600 for DIP.
8. All new water system components or equipment will be disinfected and flushed in accordance to Engineering Bulletin No. 8 Disinfection of Water Systems or AWWA C651-14.
9. After disinfection, all water system components or equipment will be bacteriologically tested by the Bacti test through an Arizona Department of Health Services certified laboratory.
10. All paint systems and cathodic protection equipment used to protect against corrosion conform to current AWWA D102 standards.

BASIS OF BEARING

The site is located within Gilbert, AZ at the respective coordinates: Lat 33.24772615 N, Long 111.84106692 W. The township is 1S 6E, Section 14 SWSW. The site is located in the X-shaded flood zone and not within the 100 year flood zone.

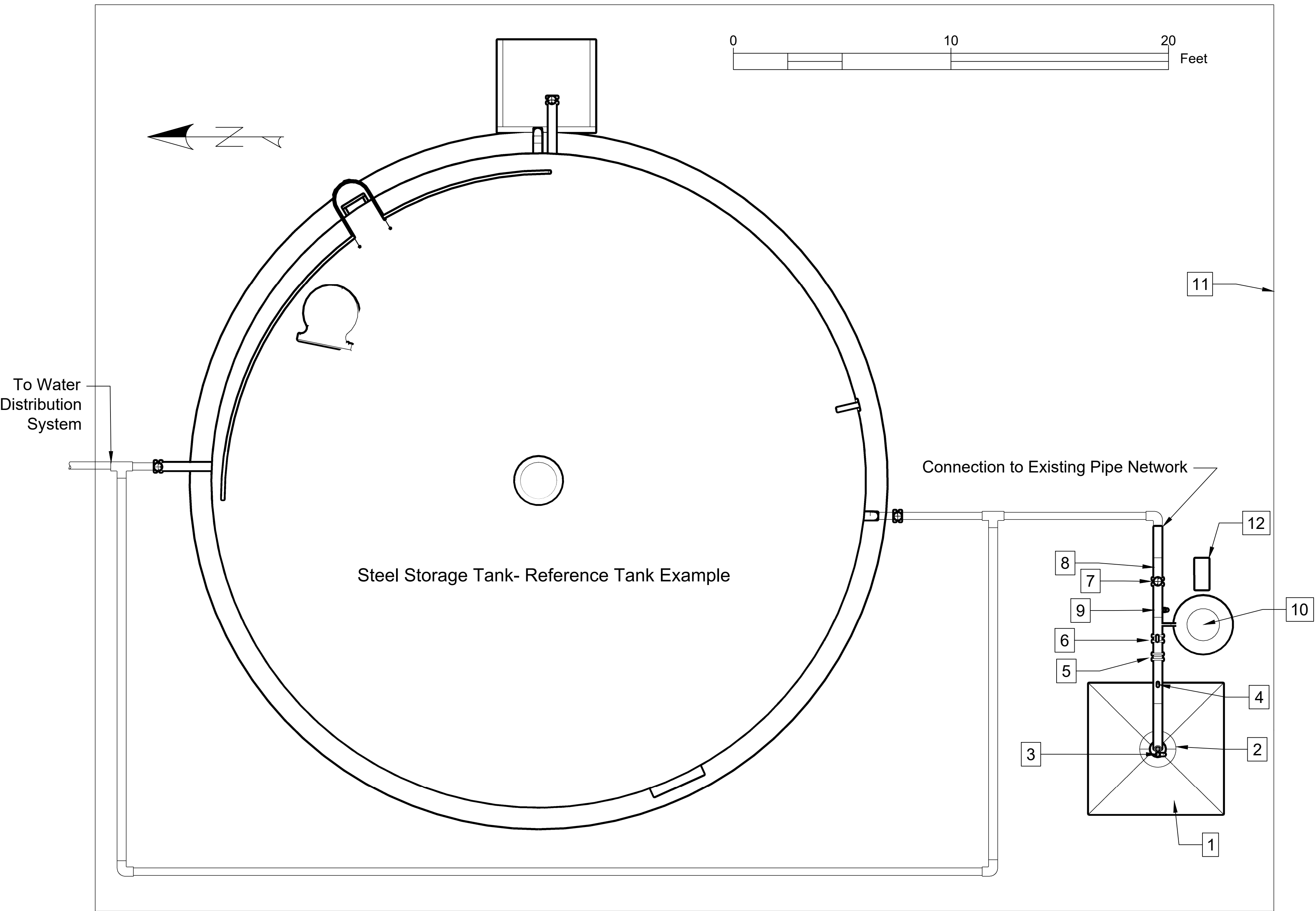
MATERIALS AND QUANTITY

Materials	Quantity
8" Steel Well Casting	385'
4" Shut-off Valve	1
4" Positive Acting Check Valve	1
Air Release Valve w/ Pressure Gauge	1
4" 90° Bend Joint	1
Flow Meter	1
Pipe Support	3
Sampling Tap	1
Air vent w/ 16-mesh non-corrodible screen, 1.5" diameter	1
6'X6' Concrete Slab w/ minimum 6" thickness and 1/4" per 1' slope	1
4" PVC C900 Piping	395'
6' Fence w/ Locked Gate	192'
Sanitary Well Seal, 8" diameter- Steel Plate w/ Welded Connections	1
Cement Grout (per square ft)	10'
Submersible Pump	1
Emergency Chlorination Tank- 150 Gal	1

LEGEND

1 6'X6' Concrete Slab	5 4" Check Valve	9 Sampling Tap
2 Sanitary Well Seal	6 Flow Meter	10 Emergency Chlorination Tank
3 Air Vent w/ 16-mesh screen	7 4" Shut-off Valve	11 6' Fence
4 Air Release Valve w/ Pressure Gauge	8 4" Pipe	12 Electric Panel

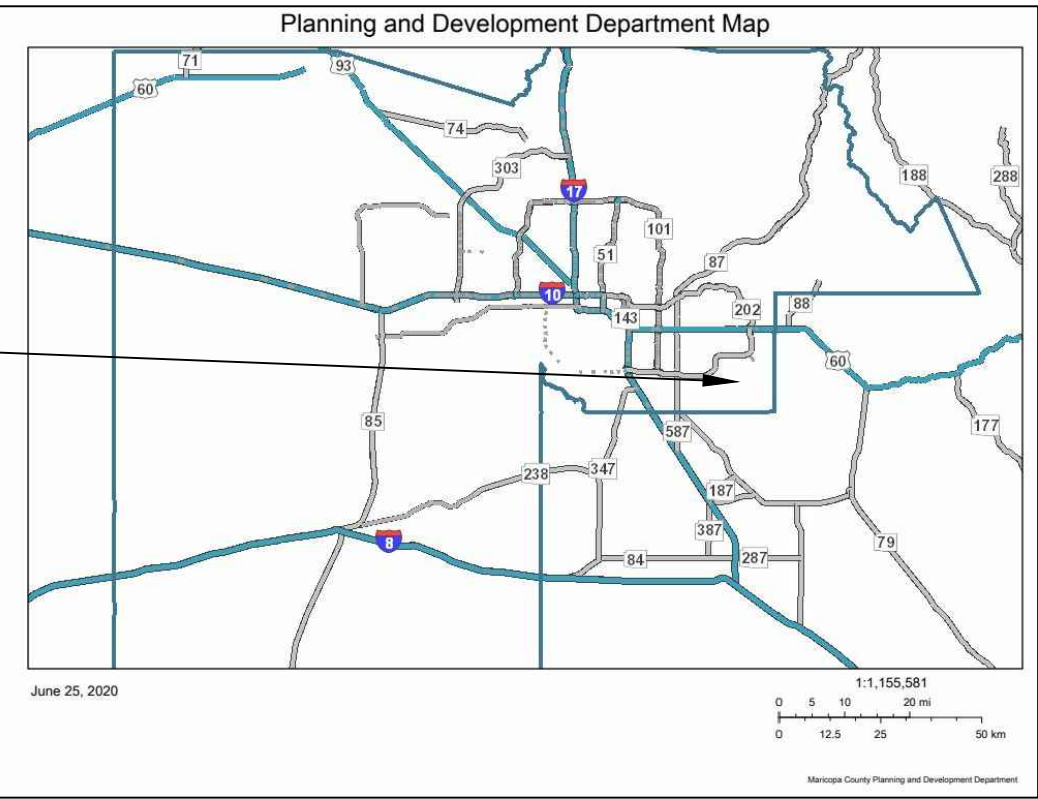
WELL PLAN VIEW



SITE LOCATION



VICINITY MAP



Well Example

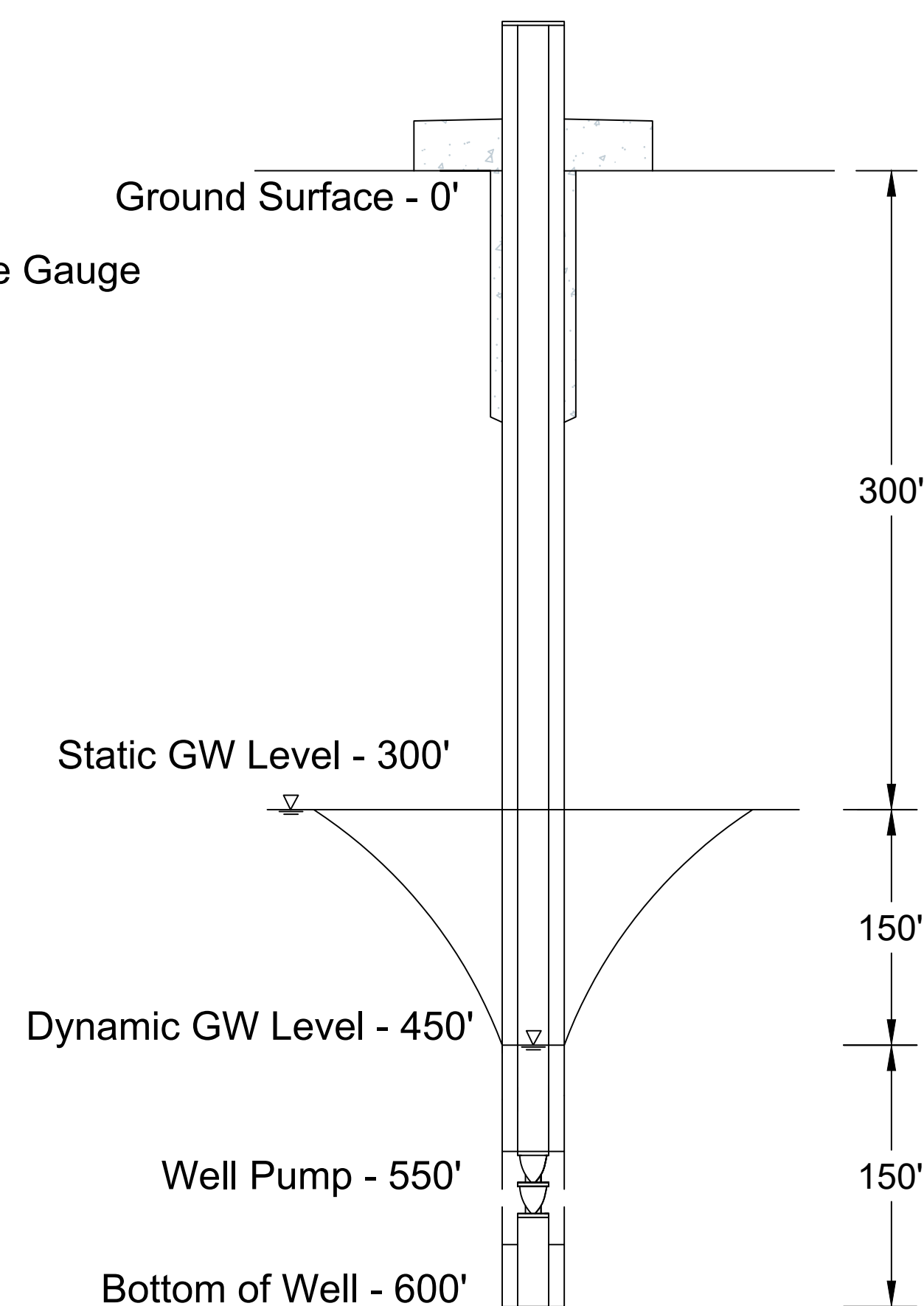
GENERAL NOTES

1. In accordance with A.A.C. R18-5-502(C), wells will be at least 50 ft away from a sewer main. Wells can be at least 20 ft away from the sewer main if pressure tested without excessive leakage to (a) 50 psi to be used for gravity sewers; or (b) 150 psi to be used for force mains. Additionally, a well will be constructed at least 100 ft from (a) a septic tank or subsurface disposal; (b) discharge or activity regulated under the Individual Aquifer Protection Permit; (c) a underground storage; (d) hazardous waste facilities regulated under the Arizona Hazardous Waste Management Act.
2. The well is located at a distance greater than 500' from a surface water.
3. The well shaft does not pass through limestone, sandstone or fractured rock.

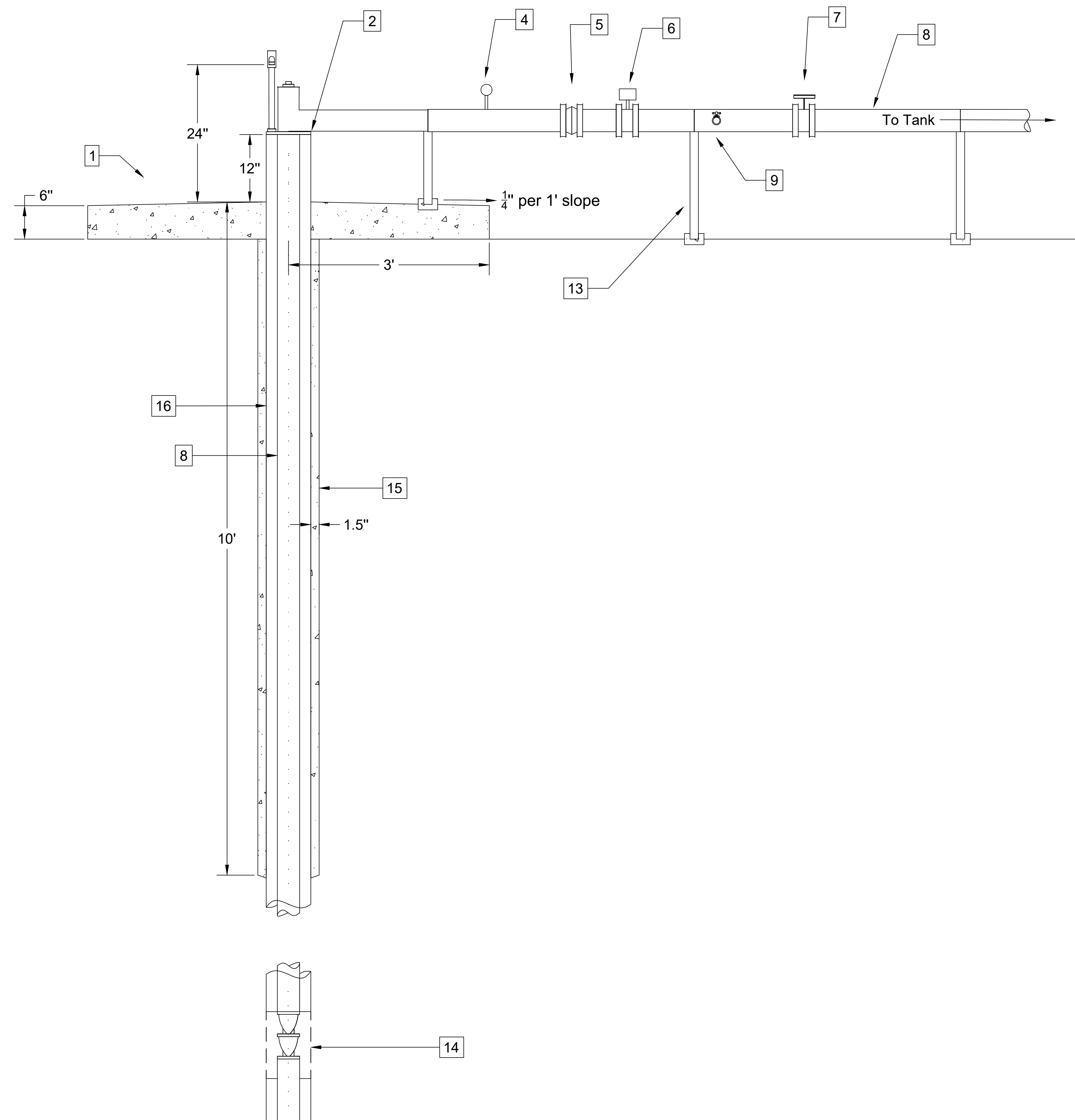
LEGEND

- 1 6'X6' Concrete Slab
- 2 Sanitary Well Seal
- 3 Air Vent w/ 16-mesh
- 4 Air Release Valve w
- 5 4" Check Valve
- 6 Flow Meter
- 7 4" Shut-off Valve
- 8 4" Pipe
- 9 Sampling Tap
- 13 Pipe Support
- 14 Submersible Pump
- 15 Cement Grout
- 16 Steel Well Casting

PUMPING SCHEMATIC

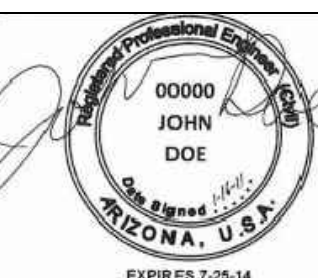


WELL PROFILE VIEW



Well Details

Well ID: ADWR#55-XXXXXX



Revisions

No.	Description	Date

Designed by:
Drafted by:
Checked by:
Date: June 2020

Project No	Sheet
0407224	2