

**WORK PERFORMED DATE:** 5/12/20  
**PROJECT NAME:** Cottonwood Highlands Filing 7  
**PROJECT NUMBER:** 181027

Information obtained from:  
 Phone number:  
 Source Reference Date:

**PRESSURE LOSS CALCULATIONS - FOR LARGEST AND/OR FURTHEST ZONE IN THE SYSTEM (WORST CASE)**

**TAP '1' - VALVE NUMBER** **36**  
**GPM** **35.0**  
 STATIC PRESSURE AT CITY MAIN 80.00 psi  
 ① **MIN. LOW OPERATING PRESSURE** **72.00 psi**

<u>SERVICE LINE -TYPE K COPPER TUBE</u>	<u>FRICTION LOSS</u>
feet of 4" pipe	0.00 psi
feet of 3-1/2" pipe	0.00 psi
0 feet of 3" pipe	0.00 psi
0 feet of 2-1/2" pipe	0.00 psi
8 feet of 2" pipe	(0.09) psi
0 feet of 1-1/2" pipe	0.00 psi
0 feet of 1" pipe	0.00 psi
feet of 3/4" pipe	0.00 psi

<u>EQUIPMENT</u>	
2" WATER METER	(2.40) psi
2" BACKFLOW PREVENTER	(12.00) psi
2" MASTER VALVE	(3.60) psi
0" (MISC)	0.00 psi

<u>MAINLINE</u>	
feet of 4" pipe (Cl. 200)	0.00 psi
2400 feet of 3" pipe (Cl. 200)	(2.71) psi
feet of 2-1/2" pipe (Sch. 40)	0.00 psi
0 feet of 2" pipe (Sch. 40)	0.00 psi

FITTINGS (20% MAINLINE LOSS) (0.54) psi  
 1.5" REMOTE CONTROL VALVE (1.30) psi

<u>LATERAL LINE LOSSES (Class 200):</u>		
feet of 3" pipe	40 gpm	0.00 psi
feet of 2-1/2" pipe	40 gpm	0.00 psi
feet of 2" pipe	40 gpm	0.00 psi
5 feet of 1-1/2" pipe	30 gpm	(0.08) psi
200 feet of 1" pipe	10 gpm	(2.61) psi

ELEVATION CHANGE -9.00 feet 3.90 psi  
*(Enter a negative # for elevation loss, positive # for elevation gain)*

② **SYSTEM LOSSES** **(21.44) psi**

**SUMMARY:**

① **AVAILABLE OPERATING PRESSURE:** **72.00 psi**

② **SYSTEM LOSSES:** **(21.44) psi**

**REMAINING PRESSURE:** **50.56 psi**

IRRIGATION HEAD OPERATING PRESSURE: (45.00) psi

 **RESIDUAL PRESSURE AFTER** **5.56 psi**

**LAST IRRIGATION HEAD:**

**NO REGULATOR NEEDED**