

# Champion Pump Station

## General Site and Safety Considerations

Tuesday, December 01, 2015

### GENERAL SITE CONDITION/ACCESS

Vehicle Entrance and Exit to Site	Abuts 6th and Morgan - no parking at front door
Parking	Angled parking on Vine St.
Sight lighting Fixture	Adjacent street lighting

### SAFETY CONSIDERATIONS

General Site Safety Issues	With a 5-foot sidewalk and significant vehicular traffic on Morgan, high caution is warranted.
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### SITE SECURITY

Facility Fenced	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Privacy Fence	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Fence Material	N/A	Height of Fence	N/A
Method of Securing Access Gates	N/A	Fence Topping	N/A

Adequate security for keeping public off site?	No. High visibility of site may be a deterrent, but drug use needles are also present.
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Notes:



# General Site Photos

Tuesday, December 01, 2015



Site, looking north-northeast



Site access, looking east on Morgan



Station access doors at the north side, adjacent to Morgan



Iconic Champion Booster Pump Station

# Equipment Housing

Tuesday, December 01, 2015

<b>Equipment Housing</b>	<input checked="" type="checkbox"/> Building	<input checked="" type="checkbox"/> Enclosure	<input type="checkbox"/> Other		
Condition	<input checked="" type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Criticality	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	
Serviceability	<input checked="" type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	

Structural Materials	Concrete
Age	Unknown

Locking Doors	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Intrusion Alarm	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

## Dimensions:

Length	~30	ft
Width	~15	ft

## HVAC:

Heat	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Cooling	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Humidity Control	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Fan	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No

## Notes:

1. No floor drain. Drain was disconnected due to water draining across chamber of commerce parking area. The lack of drain has resulted in the station flooding.
2. Drainage is accommodated by collecting water in a basin and using a temporary pump to pump the water out to the landscape area.



# Equipment Housing Photos

Tuesday, December 01, 2015



Station access doors at north side of structure



View of interior showing pumps



View of electrical cabinet upon descending stairs into station



View of overhead hoists for removing pumps and components



View of south side of structure

# Flow Meter and Vault(s)

Tuesday, December 01, 2015

<b>Flow Meter</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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Condition	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
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Criticality	<input checked="" type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
Serviceability	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4

Asset Nos.	Unknown
Location.	In manhole/vault outside of station
Type/Manufacturer	Unknown
Age	Unknown

<b>Vault</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> N/A
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Description	Meter vault in sidewalk
Structural Materials	concrete
Dimensions	4' diameter precast manhole
Age	Unknown

Access Hatch Fall Protection	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Access Hatch Lock	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Intrusion Alarm	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No

Notes:

Meter is unreliable. Reportedly works with some pumps running but not others.



# Flow Meter and Vault(s) Photos

Tuesday, December 01, 2015



Manhole lid pulled to access meter



View of insertion meter from above



Peek inside chlorine injection vault, located adjacent to 6th St.

# CHAMPION PUMP #1

Tuesday, December 01, 2015

<b>Suction Zone</b>	1240	<b>Discharge Zone</b>	1340
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**Pumping System No.** 1

Condition  1  2  3  4  5

Criticality  1  2  3  4

Serviceability  1  2  3  4

Pump Type  Vert. Turb.  End Suction  Split case  In-line centrifugal

Mounting  Horizontal  Vertical

Pump from  Piping  Can  Basin/Clearwell

Pump to  Closed zone  Pressure tank  Reservoir

Asset no.	P-7-13-1
Manufacturer	Weinman
Model	6LI
Serial #	6677U
Age	Unknown

Rated Design Pt 800 gpm @ 165 feet TDH

Ability to Isolate Pump  Yes  No

How to Remove Pump Rail system to bottom of stairs

## MOTOR

ODP  TEFC  TENV  TEBC  Diesel Engine  Other

Horsepower 100 Voltage Phase rpm 1775

Manufacturer	US Electrical Motors
Model	Unknown
Serial #	Unknown
Age	Unknown

Inverter duty rated?  Yes  No  Unknown

Motor Driver  VFD  Soft Starter  FVNR Starter  None

### Notes:

1. Dual driver on pumping system no. 1 with electric motor and diesel engine. Diesel engine is not functional/reliable.
2. Pumping system no. 1 is not in service due to failed control valve.



# Valves and Gauges

Tuesday, December 01, 2015

<b>Check/Control Valve</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reported/Exterior Condition	Reportedly not functional
Asset Nos.	FCV-7-13-1-2
Type/Manufacturer	MUESCO CALIFORNIA, MODEL: 7082-7
Age	Unknown

<b>Isolation Valve(s)</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Reported/Exterior Condition	1/4 turn butterfly valves - can't get them to seat. Need geared operator.
Asset Nos.	FV-7-13-4-1, FV-7-13-4-3
Type/Manufacturer	BV/Kennedy
Age	Unknown

<b>Pressure Gauge(s)</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Asset Nos.	PIT-7-13-1, PIT-7-13-2
Type/Manufacturer	Pressure Transmitter/Ashcroft - Duratran
Age	Unknown

Notes:



# Piping

Tuesday, December 01, 2015

## Common Suction Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	Unknown - buried
Pipe material	Ductile iron pipe
Age	Unknown

## Pump Specific Suction Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	8"
Pipe material	Ductile iron pipe
Age	Unknown

## Pump Specific Discharge Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	6"
Pipe material	Ductile iron pipe
Age	Unknown

## Common Discharge Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	Unknown - buried
Pipe material	Ductile iron pipe
Age	Unknown

Notes:



# Pump/Valve/Piping Photos

Tuesday, December 01, 2015



Pumping System No. 1 showing both diesel and electric drivers



Pumping System No. 1 split case pump



Pumping System No. 1 electric motor nameplate



Pumping System No. 1 pump control valve (failed)

# CHAMPION PUMP #2

Tuesday, December 01, 2015

<b>Suction Zone</b>	1240	<b>Discharge Zone</b>	1340
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**Pumping System No.** 2

Condition	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input checked="" type="checkbox"/> 5
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Criticality	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input type="checkbox"/> 4
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Serviceability	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4
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Pump Type	<input type="checkbox"/> Vert. Turb.	<input type="checkbox"/> End Suction	<input checked="" type="checkbox"/> Split case	<input type="checkbox"/> In-line centrifugal
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Mounting	<input checked="" type="checkbox"/> Horizontal	<input type="checkbox"/> Vertical	
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Pump from	<input checked="" type="checkbox"/> Piping	<input type="checkbox"/> Can	<input type="checkbox"/> Basin/Clearwell
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Pump to	<input type="checkbox"/> Closed zone	<input type="checkbox"/> Pressure tank	<input checked="" type="checkbox"/> Reservoir
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Asset no.	P-7-13-2
Manufacturer	WEINMAN
Model	8LI
Serial #	8325U
Age	Unknown

Rated Design Pt	2300	gpm @	165	feet TDH
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Ability to Isolate Pump	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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How to Remove Pump Rail system to bottom of stairs

## MOTOR

<input checked="" type="checkbox"/> ODP	<input type="checkbox"/> TEFC	<input type="checkbox"/> TENV	<input type="checkbox"/> TEBC	<input type="checkbox"/> Diesel Engine	<input type="checkbox"/> Other
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Horsepower	150	Voltage		Phase		rpm	
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Manufacturer	Baldor
Model	
Serial #	
Age	

Inverter duty rated?	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Unknown
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Motor Driver	<input type="checkbox"/> VFD	<input type="checkbox"/> Soft Starter	<input checked="" type="checkbox"/> FVNR Starter	<input type="checkbox"/> None
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### Notes:

1. Pumping system no. 2 is not operational due to a failed control valve.



# Valves and Gauges

Tuesday, December 01, 2015

<b>Check/Control Valve</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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Reported/Exterior Condition	No issues noted.
Asset Nos.	FCV-7-13-2-2
Type/Manufacturer	Cal-Val
Age	11-OCT-11

<b>Isolation Valve(s)</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
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Reported/Exterior Condition	No issues noted.
Asset Nos.	FV-7-13-2-1, FV-7-13-2-3
Type/Manufacturer	BV/American Darling, 12-150B(infl) and 8-150-BC(eff) with handwheels
Age	

<b>Pressure Gauge(s)</b>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
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Asset Nos.	
Type/Manufacturer	
Age	

Notes:



# Piping

Tuesday, December 01, 2015

## Common Suction Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	Unknown - buried
Pipe material	Ductile iron pipe
Age	Unknown

## Pump Specific Suction Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	12"
Pipe material	Ductile iron pipe
Age	Unknown

## Pump Specific Discharge Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	8"
Pipe material	Ductile iron pipe
Age	Unknown

## Common Discharge Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	Unknown - buried
Pipe material	Ductile iron pipe
Age	Unknown

Notes:



# Pump/Valve/Piping Photos

Tuesday, December 01, 2015



Pumping System No. 2



Pumping System No. 2 split-case pump



Pumping System No. 2 control valve



Pumping System No. 2 control valve nameplate



# CHAMPION PUMP #3

Tuesday, December 01, 2015

<b>Suction Zone</b>	1240	<b>Discharge Zone</b>	1340
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**Pumping System No.** 3

Condition  1  2  3  4  5

Criticality  1  2  3  4

Serviceability  1  2  3  4

Pump Type  Vert. Turb.  End Suction  Split case  In-line centrifugal

Mounting  Horizontal  Vertical

Pump from  Piping  Can  Basin/Clearwell

Pump to  Closed zone  Pressure tank  Reservoir

Asset no.	P-7-13-3
Manufacturer	WEINMAN
Model	4LI
Serial #	6626U
Age	Unknown

Rated Design Pt 1600 gpm @ 165 feet TDH

Ability to Isolate Pump  Yes  No

How to Remove Pump Rail system to bottom of stairs

## MOTOR

ODP  TEFC  TENV  TEBC  Diesel Engine  Other

Horsepower 50 Voltage Phase rpm

Manufacturer	Baldor
Model	
Serial #	
Age	Unknown

Inverter duty rated?  Yes  No  Unknown

Motor Driver  VFD  Soft Starter  FVNR Starter  None

Notes:



# Valves and Gauges

Tuesday, December 01, 2015

<b>Check/Control Valve</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Reported/Exterior Condition	No issues noted.	
Asset Nos.	FCV-7-13-3-2	
Type/Manufacturer	Cla-Val, Model 4-60-11BY	
Age	Unknown	

<b>Isolation Valve(s)</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Reported/Exterior Condition	No issues noted.	
Asset Nos.	FV-7-13-3-1, FV-7-13-3-3	
Type/Manufacturer	BV/ Kennedy, 8-150B (inf) has hand wheel, 6-150B (eff) 1/4 turn handle	
Age	Unknown	

<b>Pressure Gauge(s)</b>	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Asset Nos.		
Type/Manufacturer		
Age	Unknown	

Notes:

1. PRV to prevent over pressurizing the boosted zone is adjacent to Pumping System No. 3. It consists of a 6" Muesco angle control valve, PRV-7-13-2.



# Piping

Tuesday, December 01, 2015

## Common Suction Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	Unknown - buried
Pipe material	Ductile iron pipe
Age	Unknown

## Pump Specific Suction Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	8"
Pipe material	Ductile iron pipe
Age	Unknown

## Pump Specific Discharge Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	6"
Pipe material	Ductile iron pipe
Age	Unknown

## Common Discharge Pipe

Reported/Exterior Condition	No issues noted.
Pipe size	Unknown - buried
Pipe material	Ductile iron pipe
Age	Unknown

Notes:



# Pump/Valve/Piping Photos

Tuesday, December 01, 2015

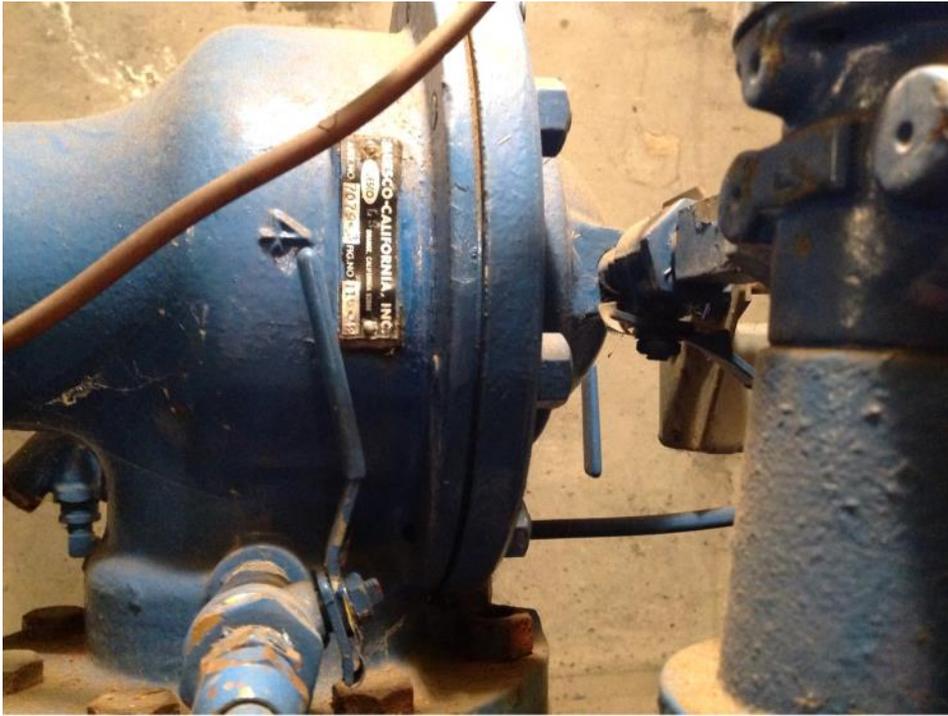


Pumping System No. 3 with pump control valve at left and PRV at top right



Pumping System No. 3





Common system pressure reducing valve



Pumping System No. 3 discharge piping



Pumping System No. 3 pump control valve



Pumping System No. 3 pump control valve nameplate



Common pumping system air release valve

# Backup Power

Tuesday, December 01, 2015

## BACKUP POWER

Source	<input checked="" type="checkbox"/> None	<input type="checkbox"/> Pig tail for portable	<input type="checkbox"/> On-site, permanent
Transfer Switch	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Type	<input type="checkbox"/> Manual	<input type="checkbox"/> Auto	

Notes:

## STANDBY GENERATOR

Condition	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Criticality	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	
Serviceability	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	
Asset No.					
Manufacturer					
Model					
Serial #					
Age(s)					
Location					
Electrical capacity	KW		Voltage		Phase(s)
Fuel type	<input type="checkbox"/> Diesel	<input type="checkbox"/> Nat. Gas	<input type="checkbox"/> Propane	<input type="checkbox"/> Gasoline	<input type="checkbox"/> Other
Full load fuel demand			gal/hr		
Fuel stored on-site			gal		

Notes:

