


Appendix L.
Sewer Overflow Response Plans

EASTERN MUNICIPAL WATER DISTRICT

PERRIS, CALIFORNIA

Maintenance Services Standard Operating Procedures Manual	Date: September 17, 2019
Subject: Sanitary Sewer Overflow Response Plan (SSORP)	Approved by:  _____

PURPOSE

The purpose of the Sanitary Sewer Overflow Response Plan (SSORP) is to minimize the impact of sanitary sewer overflows (SSO's) to the public and the environment. All sanitary sewer overflows must be responded to with minimal delay to begin the necessary steps to mitigate the overflow. Spill containment will be our highest priority, taking into consideration public health concerns. This document will be the guideline and standard operating procedures to follow in the event of a sanitary sewer overflow. This document will be reviewed on a regular basis and changes will be made when they are necessary.

1. To establish standard operating procedures for District Wastewater Collections staff in the event of a sanitary sewer overflows (SSO).
2. To provide clear and concise notification procedures to the appropriate District staff that will assist them in reporting SSO's to the appropriate regulatory agencies.

AUTHORITY

1. Assistant General Manager Operations and Maintenance
2. Wastewater Collection Manager

POLICY

1. It is the policy of the District to comply with all regulatory agency requirements in regards to reporting and cleanup procedures in the event of a SSO.

2. It is the policy of the Wastewater Collection Division to report all spills regardless of size or origin to the Integrated Operations Center as soon as possible.

DEFINITIONS

1. SSO (Sanitary Sewer Overflow)
2. IOC (Integrated Operations Center)
3. SSMP (Sewer System Management Plan)
4. ERC (Environmental and Regulatory Compliance)

NOTIFICATION PROCEDURES

1. The Wastewater Collection crew will respond immediately to the location of the SSO with the appropriate equipment needed to eliminate and contain the SSO.
2. After the Wastewater Collection staff arrives at the location of a SSO, the person in charge for the Wastewater Collection Division they will report to the IOC and give a condition assessment. After the IOC receives the information on the SSO they will begin the notification procedures.

SPILL RESPONSE PROCEDURES

1. Upon notification during working hours from the IOC Wastewater Collection staff will respond to the site of the problem with Combination Machine.
2. During non-working hours, the Wastewater Collection Division will have two properly trained employees on stand-by ready to respond to a SSO or other emergency within 20 minutes of notification from the IOC.
3. While performing stand-by duty Wastewater Collection staff will take a District vehicle home so that they are able to respond directly to the source of the problem or SSO.
4. The person in acting in the lead position will assess the problem and begin to direct the crew as how to correct the problem or eliminate the overflow. Digital or regular photographs will be taken of the SSO at the point of release whenever possible. This will aid in GPM estimation.

5. If the spill is from a private lateral, the person in charge will contact the IOC and obtain a 124# to bill the private party so that the District can be reimbursed for all cost associated with the SSO.
6. If the problem has evolved to a situation that emergency contractor support is needed for repair or traffic control, we will use the following approved contractors:

Street Sweeping

Wagner Water Works
PH: (951) 943-1199

Construction Services

EL-CO Contractors
Contact: John Wiles
PH: (909) 887-2610 or (909) 887-1013
Fax: (909) 880-9091
Cell: (909) 322-4635

Jeff Carpenter Inc.
PH: (951) 657-5115
After Hour Emergency: (213) 216-2117

J.R. Filanc Construction Company
Contact: David Kiess
PH: (760) 941-7130

Earthwork & Grading

Dependable Equipment Rental & Grading
Contact: Shane Copenhaver
PH: (951) 440-8507

Scorpion Backhoe, Inc.
Contact: James Scott
PH: (951) 325-2208

Sewer Line Inspection, Vactoring & Inspection Services

Innerline Engineering
Contact: Jim Aanderud
PH: (951) 658-8541
Cell: (800) 209-0000

Houston and Harris
Contact: Steve
PH: (909) 422-8990

Morris Tested
Contact: Jeff
PH: (714) 713-9411

National Plant Services, Inc.
PH: (800) 445-3614 or (562) 436-7600

Roto Rooter
Contact: Richard Rainey
PH: (951) 658-8541
24 Hour: (800) 491-7686

Starlite Reclamation
Contact: Chris Jaramillo
PH: (800) 576-9278
Cell: (951) 232-9312

Tunnel Vision
Contact: Starla Hylesworth
PH: (760) 269-5199

Wright Pumping
PH: (951) 654-4840

Restoration Services

Industrial Hygiene Mgmt., Inc.
PH: (626) 447-5237
Contact: Tom Harman Cell (626) 375-6142
Mark Hammer Cell (818) 237-0363

Pipe Rental (for Break By-Pass)

Godwin Pumps of American, Inc.
Contact: Nate
PH: (951) 681-3636
Cell: (951) 317-8250

Rain for Rent
Contact: L. Young
PH: (951) 653-2171

Xylem Pump Rental
PH: (951) 681-3636

EMERGENCY TRAFFIC CONTROL

In the event that the spill is located in a high traffic area, the District will contact the respective municipality for assistance. The following is a list of contacts for each city within the District's sewer service area. This list will be reviewed and updated as needed.

The City of Temecula
Brad Buron
Maintenance Superintendent – Public Works
During Working Hours: (951) 694-6411
After Hours: Temecula Police Department (951) 696-3000

The City of Murrieta

Maintenance Superintendent

During Working Hours: (951) 304-9273

After Hours: Murrieta Police Department (951) 304-2677

The City of Perris

Public Works Superintendent

During Working Hours: (951) 657-3280

Pager Number (951) 830-8599

Emergency Answering Service: (951) 359-2987

After Hours: Perris Police Department (951) 955-2444

The City of Hemet

Street Department Supervisor

During Working Hours: (951) 765-3712

After Hours: Hemet Police Department (951) 765-2400

The City of San Jacinto

Water and Sewer Division Supervisor

During Working Hours: (951) 487-7381

After Hours: San Jacinto Police Department (951) 654-2702

The City of Moreno Valley

Director of Transportation

During Working Hours: (951) 413-3140

After Hours: Moreno Valley Police Department (951) 275-2444

EMERGENCY RESPONSE EQUIPMENT

Vehicles

#600 Vactor Combination unit

#603 Vac-Con Combination unit

#21 Vactor PD unit

#604 Vactor Combination unit

#384 Vactor Combination unit

#377 High pressure hydro flusher

#165 Spill response trailer

#119 Easement cleaner

#290 6" Pump

#528 6" Pump

#112 6" Hose reel trailer & 1,200' of hose

Equipment

2" Trash pump & 100' of hose

3" Trash pump & 100' of hose

(2) Lateral cameras with mainline capabilities

BYPASS PROCEDURES

If proper flow is not restored within 5 minutes it is critical that the bypass procedures are followed immediately.

1. Locate the nearest manhole that can accept the additional flow.
2. Set up the 3-inch pump for collection lines and the 6-inch pump for transmission lines. This is just a guideline; larger pumps may be needed. The pump discharge hose should be secured or placed far enough into the manhole that it cannot come out during pumping. The pump and pump hose should be protected from traffic by barricades. If additional pumps are needed, they may be obtained by contacting the Mechanical Services Division or the Fleet Services Division.
3. Bypass should be conducted with a vacuum truck by pulling water from the overflowing manhole and discharging it into a downstream manhole.

CONTAINMENT PROCEDURES

Containment of the SSO is the top priority. The District's crew will attempt to keep the SSO in as small an area as possible. If reasonable, the crew should attempt to keep the SSO in the street and out of the storm drain. To insure that the SSO is contained, the crew will use the following methods:

1. Block the storm drain openings or divert the flow with sand or soil. If reasonable, we should keep the flow contained on the street.
2. Should the overflow take place in an area not normally accessible to the public (i.e. fields, etc.), the crew will use any reasonable means to pool the flow in that area for recovery.
3. Should the flow be too much to be contained on the street and is identified as a danger to the public, the crew will allow the flow to enter the storm drain or catch basin. The crew will make every reasonable attempt to dam up the spill in the storm drain or catch basin and recover it from that point.

REPORTING AND NOTIFICATION

Reporting and notification will be given to the proper authorities per the Environmental and Regulatory Compliance Division's SSORP by the IOC. The District's ERC Division will be responsible for all reporting to local and state regulatory agencies.

During working hours, reporting and notification will be made by the IOC by contacting ERC. In addition, the Community Involvement Division will be contacted regardless of the size of the SSO.

After hours, the person in charge of the stand-by crew will notify the IOC that there has been a SSO. The IOC will then contact the **Administrator on call**, on-duty personnel for the Community Involvement Division and the on-duty personnel for ERC.

The Wastewater Collections Division staff will be responsible for submitting a Daily Shift report, SSO Field report and any photographs taken to the Wastewater Collections Supervisor or Manager by the beginning of the next shift. This information will be supplied to ERC as soon as possible. A copy of all items related to the SSO will be kept on file with the Collection System Supervisor for two calendar years.

POSTING PROCEDURES

1. Public health and safety is of great concern to this Division and the District. We will do everything reasonable to ensure that areas of contamination are posted to warn the public of the potential hazards.
2. Posting locations of contamination will be done in all cases where the ground is still wet or pooled water is present and accessible by the public.
3. Signs will be placed in locations with high visibility so that they can be seen from all routes that the public might take to enter an area.
4. Signs will remain posted for a period of not less than five days unless directed by the Department of Environmental Health. Laboratory tests may be conducted to indicate appropriate site remediation has taken place.

RESTORATION PROCEDURES

We will make every effort to restore the environment to the condition that existed before the SSO occurred by using the following procedures:

1. If the SSO occurred in the street, we will apply bleach to the affected area, wash down and recover wash water or use a street sweeper to clean the asphalt.
2. Collect and dispose of any standing or pooled sewage that is accessible to the public.
3. Recover any sewage possible within storm drains/channels, curb, gutters, and culverts.
4. Clear surrounding area of paper, solids, and any other signs of a SSO.
5. We will replace vegetation, sidewalks, asphalt, fencing or any other items that were damaged as a result of the SSO or damage caused by the crews working to restore service.

6. In the event a building is flooded, the IOC will be directed to contact EMWD's Safety, Risk and Emergency Management Department. They will advise District crews as how to proceed with cleanup.

EASTERN MUNICIPAL WATER DISTRICT
PERRIS, CALIFORNIA

Regulatory Compliance Standard Operating Procedures Manual

SUBJECT: **SANITARY SEWER OVERFLOW RESPONSE PLAN FOR LIFT STATIONS**

1. Purpose

1.1 To provide clear and complete guidelines and instructions for implementing procedures in response to any equipment or process breakdown, which results in a sewer spill condition at a lift station.

1.2 Definition of SSO: Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system upstream of a treatment plant head-works. SSOs include:

1.2.1 Overflows or releases of untreated or partially treated wastewater that reach surface waters of the state. This includes all wastewater releases to storm drain pipes that are tributary to waters of the state that are not fully recovered.

1.2.2 Overflows or releases of untreated or partially treated wastewater that do not reach surface waters of the state.

1.2.3 Wastewater backups into buildings and on private properties that are caused by blockages or flow conditions within the Enrollee owned portion of a sanitary sewer.

2. Authority

2.1 General Manager

2.2 Deputy General Manager of Operations and Administration

2.3 Director of Maintenance

3. Policy

3.1 It is the policy of the District to comply with all applicable environmental regulations requiring that any incident of equipment or process breakdown that may result in a sanitary sewer overflow, shall be reported to Environmental Regulatory Compliance (ERC) Department immediately. Additionally the District will implement corrective actions to prevent future occurrences of sanitary sewer overflows. This SOP applies to all District employees and contractors tasked with operating or maintaining any equipment or process within the District.

3.2 This Standard Operating Procedure will be in conjunction with the Collections Department Sanitary Sewer Overflow Prevention and Response Plan SSOPRP.

4. Governing Directive

4.1 State of California Department of Health Services - California Health and Safety Code - Section 5411.5.

4.2 State of California Regional Water Quality Control Boards - California Water Code - Section 13271 and 2250, and Order No. 96-04 (for the San Diego Region only).

4.3 District Environmental Compliance Policy referenced in the General Manager's Regulatory Compliance Policy Memorandum dated July 22, 1998.

4.4 California State Water Resources Control Board.

5. Procedures

Anytime a breakdown of any equipment or process failure occurs which will result in a spill, District staff shall follow these procedures:

5.1 Response

5.1.1 Mechanic shall respond to emergency without delay, upon notification of potential problem.

5.1.2 Mechanic shall assess the problem and may request additional assistance from: Mechanical Services, Collections Department, or a Contracted Septage Pumper, to control the incident (provide additional pumping, vector service, provide damming around spill, diverting flow, etc).

5.1.3 Mechanic shall notify Integrated Operations Center (ICC), Supervisor or Manager, of the condition as soon as possible. Refer to **Section 5.5.1 Reporting and Notification** for further clarification.

5.1.4 Mechanic shall make the necessary repairs to remediate cause of equipment or process failure.

5.2 Posting

5.2.1 Posting of warning signs will be performed by the Collections Department in accordance with the SSOPRP.

5.3 Restoration

5.3.1 The Mechanical & Collections Department will make every attempt to restore the site as outlined within the SSOPRP.

5.4 Documentation

5.4.1 Mechanic shall initiate and assist with any or all of the documentation of events as they unfold. Documentation shall include the following information:

- A. Beginning and Ending time.
- B. Location
- C. Conditions causing problem.
- D. Did spill reach surface waters or storm drain?
- E. Estimated volume of spill.
- F. Estimated volume of spill recovered.
- G. Damage to structures or other facilities.
- H. Recommended follow-up.
- I. Photographs of the overflow structure and effected area(s).

5.5 Reporting and Notification

5.5.1 Employees are directed to contact the IOC regarding the spill. IOC shall immediately notify Environmental Regulatory Compliance (ERC) Department, and Regulating Agencies as directed.

6. References

- 6.1 Order No. 2006-0003-DWQ. Please see section 1.2 for definition of an SSO.
- 6.2 Sanitary Sewer Overflow Prevention and Response Plan (SSOPRP).
- 6.3 California Regional Water Quality Control Board - Sanitary Sewer Overflow Report.
- 6.4 E.M.W.D.'s Sanitary Sewer Overflow Report.

J: SWRRESP



EASTERN MUNICIPAL WATER DISTRICT

Lift Station Emergency Response Plan

Cottonwood Lift Station

2864 W. Cottonwood Ave, San Jacinto CA 92582

PREPARED BY SEWER LIFT STATION DIVISION

Updated June 2017

EMERGENCY CONTACT LIST

IOC – (951) 928-3777 ext. 6265

Jesse Soto

Sewer Lift Stations Supervisor
(951) 928-3777 ext. 6332

Dave Brown

Mechanical Services Manager
(951) 928-3777 ext. 6269

Tony Hughes

Director of Maintenance
(951) 928-3777 ext. 6298

EMERGENCY CONTRACTORS

PUMP AND PIPE RENTAL:

XYLEM DEWATERING SOLUTIONS

Contact: Jim Rufing

Phone: (951) 681-3636

Cell: (562) 572-4738

james.rufing@xylem.com

RAIN FOR RENT

Contact: Jeremy Mattson

Phone: (909) 332-0316

Phone 24 Hours: (951) 653-2171

PUMPER TRUCKS:

WRIGHT SEPTIC

Phone: (951) 654-4840 (24 hours)

ROTO ROOTER

Phone: (909) 658-8541

Phone: 24 Hours: (800) 491-7686

WHITE HOUSE SANITATION

Phone: (951) 674-6565

CRANE SERVICES:

HILL CRANE SERVICES INC.

3333 Cherry Ave Long Beach, CA 90807; 2675 S. Willow Ave. Bloomington, CA 92316

Contact: Steve Wilkerson, Project Manager

Phone: (909) 820-9886

steve.wilderson@hillcraneservices.com

Contact: Will Alexander

Phone: (909) 820-9886

Direct: (909) 347-0026

will.alexander@hillcraneservices.com

EASTERN MUNICIPAL WATER DISTRICT
PERRIS, CALIFORNIA

Regulatory Compliance Standard Operating Procedures Manual

SUBJECT: **SANITARY SEWER OVERFLOW RESPONSE PLAN FOR LIFT STATIONS**

1. Purpose

1.1 To provide clear and complete guidelines and instructions for implementing procedures in response to any equipment or process breakdown, which results in a sewer spill condition at a lift station.

1.2 Definition of SSO: Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system upstream of a treatment plant head-works. SSOs include:

1.2.1 Overflows or releases of untreated or partially treated wastewater that reach surface waters of the state. This includes all wastewater releases to storm drain pipes that are tributary to waters of the state that are not fully recovered.

1.2.2 Overflows or releases of untreated or partially treated wastewater that do not reach surface waters of the state.

1.2.3 Wastewater backups into buildings and on private properties that are caused by blockages or flow conditions within the Enrollee owned portion of a sanitary sewer.

2. Authority

2.1 General Manager

2.2 Deputy General Manager of Operations and Administration

2.3 Director of Maintenance

3. Policy

3.1 It is the policy of the District to comply with all applicable environmental regulations requiring that any incident of equipment or process breakdown that may result in a sanitary sewer overflow, shall be reported to Environmental Regulatory Compliance (ERC) Department immediately. Additionally the District will implement corrective actions to prevent future occurrences of sanitary sewer overflows. This SOP applies to all District employees and contractors tasked with operating or maintaining any equipment or process within the District.

3.2 This Standard Operating Procedure will be in conjunction with the Collections Department Sanitary Sewer Overflow Prevention and Response Plan SSOPRP.

4. Governing Directive

4.1 State of California Department of Health Services - California Health and Safety Code - Section 5411.5.

4.2 State of California Regional Water Quality Control Boards - California Water Code - Section 13271 and 2250, and Order No. 96-04 (for the San Diego Region only).

4.3 District Environmental Compliance Policy referenced in the General Manager's Regulatory Compliance Policy Memorandum dated July 22, 1998.

4.4 California State Water Resources Control Board.

5. Procedures

Anytime a breakdown of any equipment or process failure occurs which will result in a spill, District staff shall follow these procedures:

5.1 Response

5.1.1 Mechanic shall respond to emergency without delay, upon notification of potential problem.

5.1.2 Mechanic shall assess the problem and may request additional assistance from: Mechanical Services, Collections Department, or a Contracted Septage Pumper, to control the incident (provide additional pumping, vector service, provide damming around spill, diverting flow, etc).

5.1.3 Mechanic shall notify Integrated Operations Center (ICC), Supervisor or Manager, of the condition as soon as possible. Refer to **Section 5.5.1 Reporting and Notification** for further clarification.

5.1.4 Mechanic shall make the necessary repairs to remediate cause of equipment or process failure.

5.2 Posting

5.2.1 Posting of warning signs will be performed by the Collections Department in accordance with the SSOPRP.

5.3 Restoration

5.3.1 The Mechanical & Collections Department will make every attempt to restore the site as outlined within the SSOPRP.

5.4 Documentation

5.4.1 Mechanic shall initiate and assist with any or all of the documentation of events as they unfold. Documentation shall include the following information:

- A. Beginning and Ending time.
- B. Location
- C. Conditions causing problem.
- D. Did spill reach surface waters or storm drain?
- E. Estimated volume of spill.
- F. Estimated volume of spill recovered.
- G. Damage to structures or other facilities.
- H. Recommended follow-up.
- I. Photographs of the overflow structure and effected area(s).

5.5 Reporting and Notification

5.5.1 Employees are directed to contact the IOC regarding the spill. IOC shall immediately notify Environmental Regulatory Compliance (ERC) Department, and Regulating Agencies as directed.

6. References

- 6.1 Order No. 2006-0003-DWQ. Please see section 1.2 for definition of an SSO.
- 6.2 Sanitary Sewer Overflow Prevention and Response Plan (SSOPRP).
- 6.3 California Regional Water Quality Control Board - Sanitary Sewer Overflow Report.
- 6.4 E.M.W.D.'s Sanitary Sewer Overflow Report.

J: SWRRESP

SEWER FACILITY PROFILE

DATE: 8/28/2018	PUMP#	HP	ELEC/GAS	GPM	CMMS#
	1	50	ELEC	850	N/A
FACILITY: L3135 COTTONWOOD LIFT	2	50	ELEC	850	N/A
	3		ELEC		
STREET ADDRESS: 2864 W. COTTONWOOD AVE, SAN JACINTO	4		ELEC		
	5		ELEC		
FAIRBANKS MORSE 80 FT TDH	6		ELEC		

GENERATOR – HP 382 kW 250

PORTABLE GENERATOR # 813-814 CABLE SIZE

LOCATION # OMC

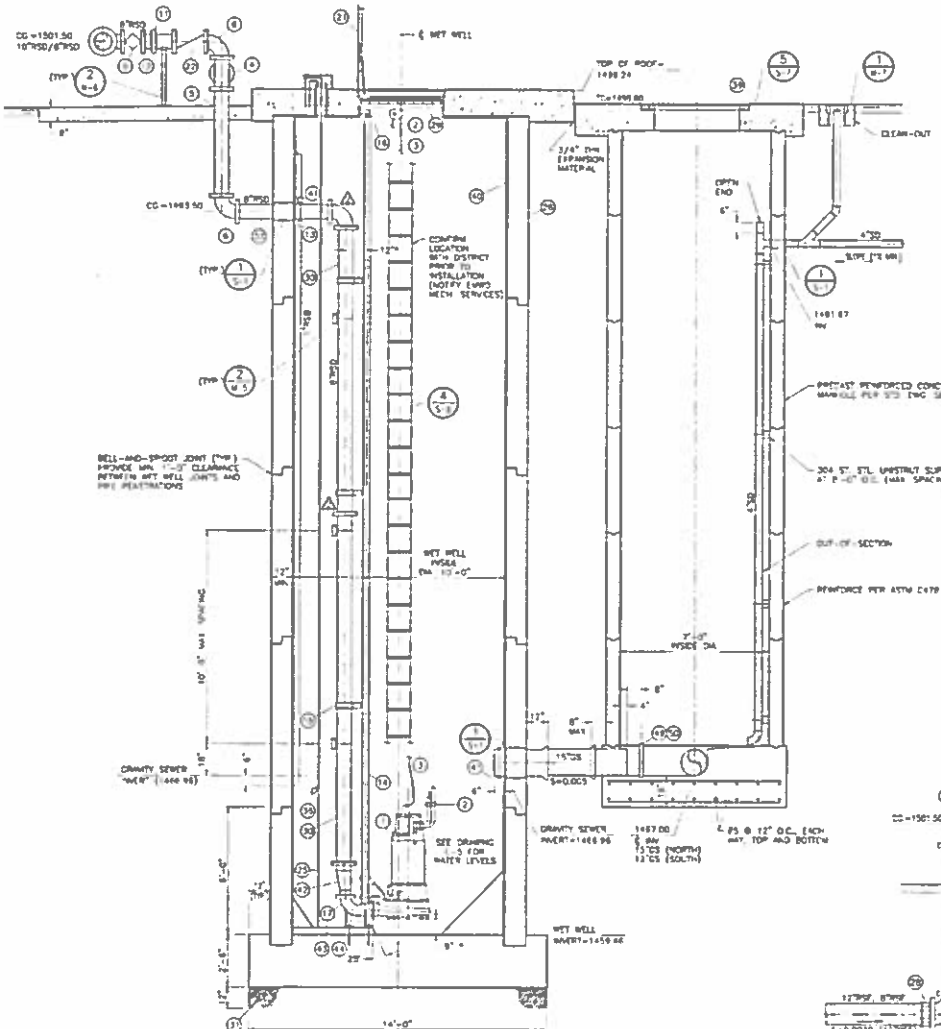
THIS LOCATION PUMPS TO: L3132 SANDERSON LIFT.

(LOCATION/FACILITY)

SPILL POINT LOCATION: THE INLET MANHOLES LOCATED ON COTTONWOOD AVE ARE THE FIRST SPILL POINTS .

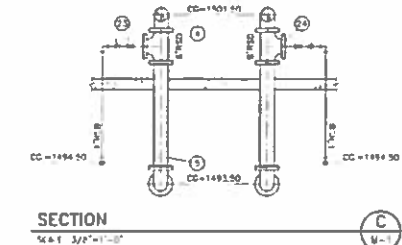
**DECANT LOCATION: DECANT POINT WILL BE THE SEPTAGE PIT LOCATED AT SANDERSON LIFT.
 LOCATIONS THAT FLOW INTO THIS LIFT STATION: Local business and residential services gravity into lift.**

		IN/FT			IN/FT
FLOAT HIGH ALARM:	80	IN		FLOAT LOW ALARM:	N/A IN
PLC HIGH ALARM:	80	IN			
LEAD PUMP ON AT:	65	IN		OFF AT:	35 IN
LAG PUMP ON AT:	70	IN		OFF AT:	50 IN
SECOND LAG ON AT:		IN		OFF AT:	IN
THIRD LAG ON AT:		IN		OFF AT:	IN

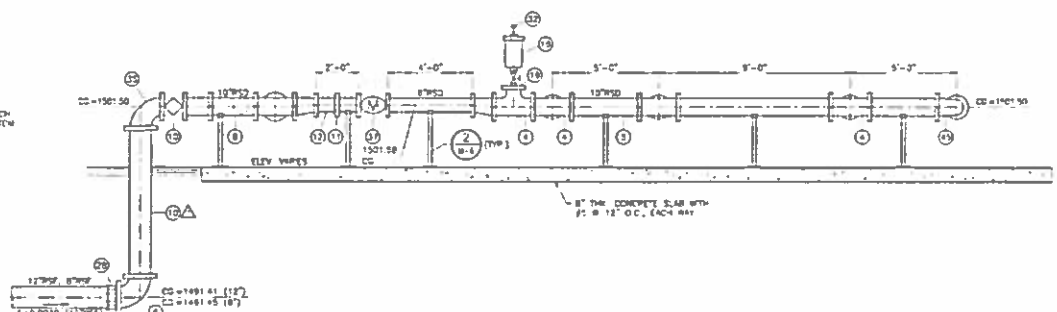


WET WELL No.1 SECTION
SCALE: 3/8"=1'-0"

- MATERIAL, EQUIPMENT, AND WORK DESCRIPTIONS FOR DRAWINGS M-1, M-2, AND M-3 (CONT.)
- 37 8" MAGNETIC FLOW METER PER SPECIFICATION SECTION 15 TO FURNISH SPARE 8" FLANGED END SPARE (LENGTH TO MATCH LENGTH OF (170 WATER) TO BE INSTALLED WHEN WATER IS REMOVED FROM SERVICE - CONTRACTOR TO SET IN PLACE, THEN REMOVE TO VERIFY FIT
 - 38 4"x10" FLANGED ECCENTRIC REDUCER (TOP LEVEL)
 - 39 MANHOLE ACCESS HATCH - DOUBLE LEAF, ALL STAINLESS STEEL CONSTRUCTION. HATCH SHALL BE PROVIDED IN ACCORDANCE WITH SPECIFICATION SECTION DRE10 REQUIREMENTS.
 - 40 INTERIOR OF ALL REINFORCED CONCRETE PIPE AND UPPER CONCRETE SURFACES OF WET WELL ROOF SHALL BE PROTECTED PER SPECIFICATION SECTION CRES3 OR COATED WITH FIELD-APPLIED LINING SYSTEM AS MANUFACTURED BY SANCOR (OR SALES/REPAIR SEWERCAPO) 2105 AND 2101 IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - 41 PIPE PENETRATION BROT SHALL BE PROVIDED AT ALL PIPE PENETRATIONS THROUGH FLOOR SLAB.
 - 42 4"x6" STD WT. 316 STAINLESS STEEL ECCENTRIC INCREASER WITH WELD NECK FLANGES.
 - 43 CONCRETE FLOOR AND CURB RE- (SLOPE TOP 1%) PLUS POLYMER MODIFIED ASPHALT FURFURED WITH 3/8" COMPACT AGGREGATE. FOR OVERLAYS THICKER THAN 4", PROVIDE 1% SLOPE IN EACH DIRECTION AT 12" O.C. EACH WAY WITH #2 HOOK BOLDS AT 18" O.C. EACH WAY. DRILL AND EPoxy DOWN 18" UNIFORM W/DO CONCRETE FOUNDATION.
 - 44 316 STAINLESS STEEL (EPoxy) ANCHOR BOLTS (SIZE, SPACING, AND EMBEDMENT SHALL BE PER MANUFACTURER'S REQUIREMENTS).
 - 45 10"x4" DI FLANGED BY REDUCING (LEW)
 - 46 PILE PIPE WITH BRICK AND MORTAR (12" HD PIPE W/4")
 - 47 NON-SHARING CIRCUIT TRANSITION FROM (15"X11") RECTANGULAR CHANNEL TO 15" DIA ROUNDED CHANNEL BEYOND SLICE GATE.
 - 48 (15"X11") RECTANGULAR CHANNEL.
 - 49 STAINLESS STEEL SLIDE GATE PER SPECIFICATION 11295.
 - 50 STAINLESS STEEL (WELDED) SLIDE GATE FRAME PER SPECIFICATION 11295.



SECTION C & T
SCALE: 3/8"=1'-0"



SECTION B & T
SCALE: 3/8"=1'-0"

INSPECTED BY E.M.W.D. RICK STEPHENS.

Underground Service Alerts
CALL TOLL FREE
1-800-827-2800
IF YOU HAVE ANY QUESTIONS
CALL US AT 1-800-827-2800

KRIEGER STEWART
INCORPORATED
2000 University Ave • Torrance, CA 90501 • 310-204-0000

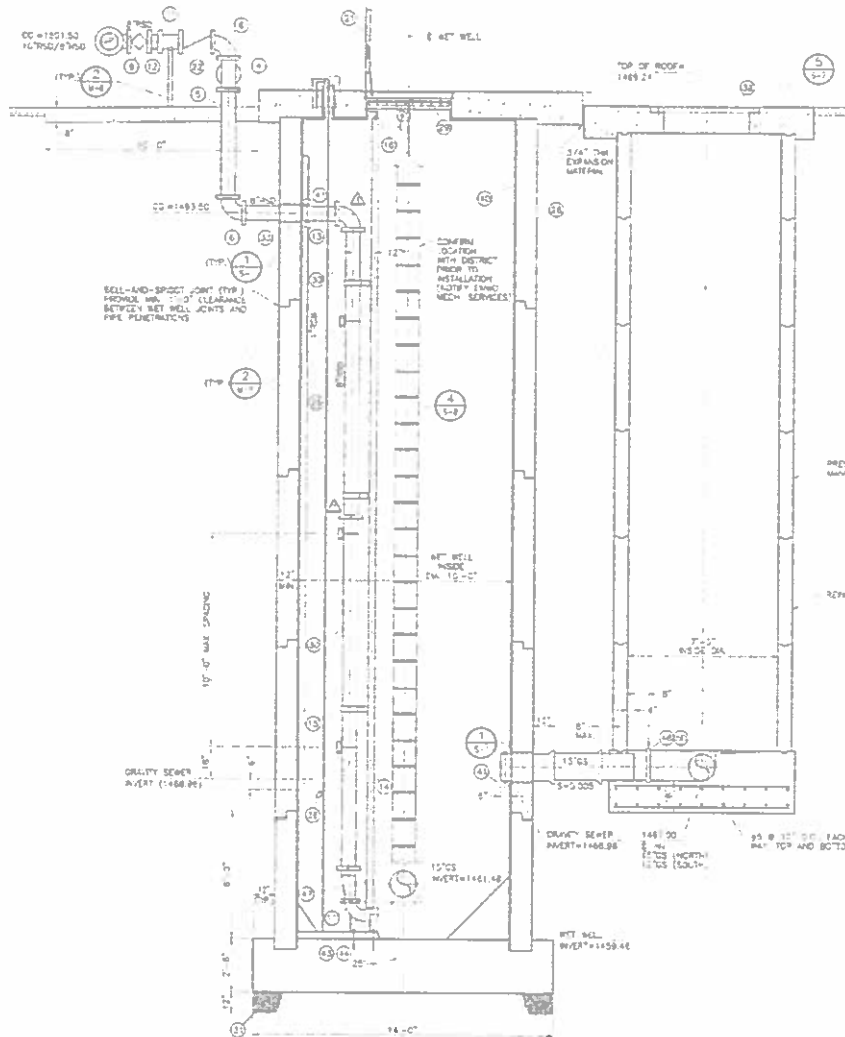
NO.	DATE	BY	DESCRIPTION	APPROVAL
1	1/15/24	JPM	ADDED CALLOUT	
2	1/15/24	JPM	CHANGED SIZE OF 2 WELLS TO 14" DIA & 10' DEPTH	
3	1/15/24	JPM	CHANGED SIZE OF 2 WELLS TO 14" DIA & 10' DEPTH	
4	1/15/24	JPM	ADJUSTED CALLOUTS (E.C.S. WELLS)	



APPROVED BY: *Rick Stephens*
REGISTERED PROFESSIONAL ENGINEER - CIVIL
STATE OF CALIFORNIA
REFERENCES:
APPROVALS:
PROJECT NO.:
DATE: 1/15/24
SCALE: AS SHOWN

DESIGNED	CHECKED	DATE
JPM	JPM	
JPM	JPM	
JPM	JPM	
JPM	JPM	

EASTERN MUNICIPAL WATER DISTRICT
COTTONWOOD AVE. SEWAGE LIFT STATION
WET WELL SECTIONS AND DETAILS
SHEET NO. M-2
DATE: 1/15/24



WET WELL No.2 SECTION
SCALE 3/8\"/>

A
M-T

PRECAST REINFORCED CONCRETE
MANHOLE PER D.I.C. SPEC. 231-53

REINFORCE PER ASTM C1128

NO. 231-53, APPROVED BY THE DISTRICT ENGINEER, EASTERN MUNICIPAL WATER DISTRICT, COTTONWOOD AVE. SEWAGE LIFT STATION, 1994

INSPECTED BY E.M.W.D.: RICK STEPHENS

Underground Service Alert
Call: TUEA FREE
1-800-827-8888
THIS WORKING DAYS BEFORE YOU DIG

VERIFY SCALES
ONE (1) OF EACH SCALE ON ORIGINAL DRAWING
IF NOT ONE EACH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

KRIEGER & STWART INCORPORATED
3802 University Ave. • Phoenix, AZ 85018 • 602-994-2800

NO.	DATE	REVISIONS	APPROVED BY
1	12/20/2005	ORIGINAL WET WELL VES TO 1.25' & A.D.C.	
2	12/20/2005	ALTER WET WELL FROM 8'-0\"/>	



APPROVED BY: [Signature]
REGISTERED ENGINEER No. 11222, DATE 12/20/05
REFERENCES:

EASTERN MUNICIPAL WATER DISTRICT
APPROVALS: PROJECT ENG: [Signature], DESIGNER: [Signature], SUPERVISOR: [Signature], APPROVED: [Signature]

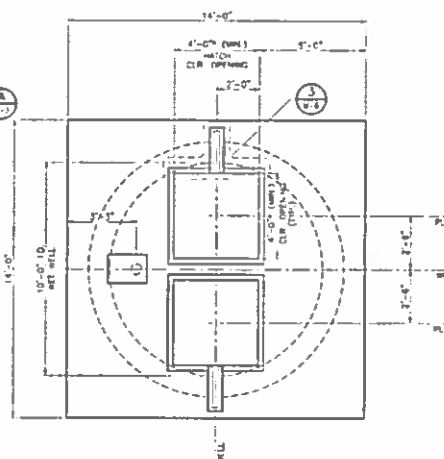
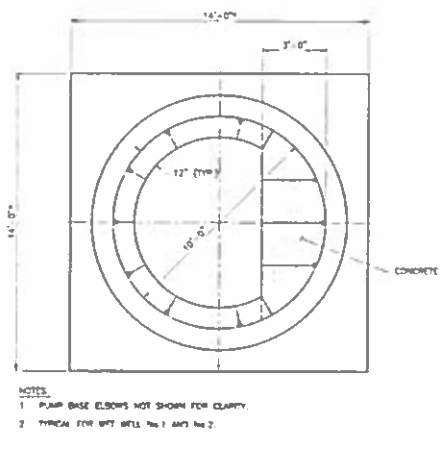
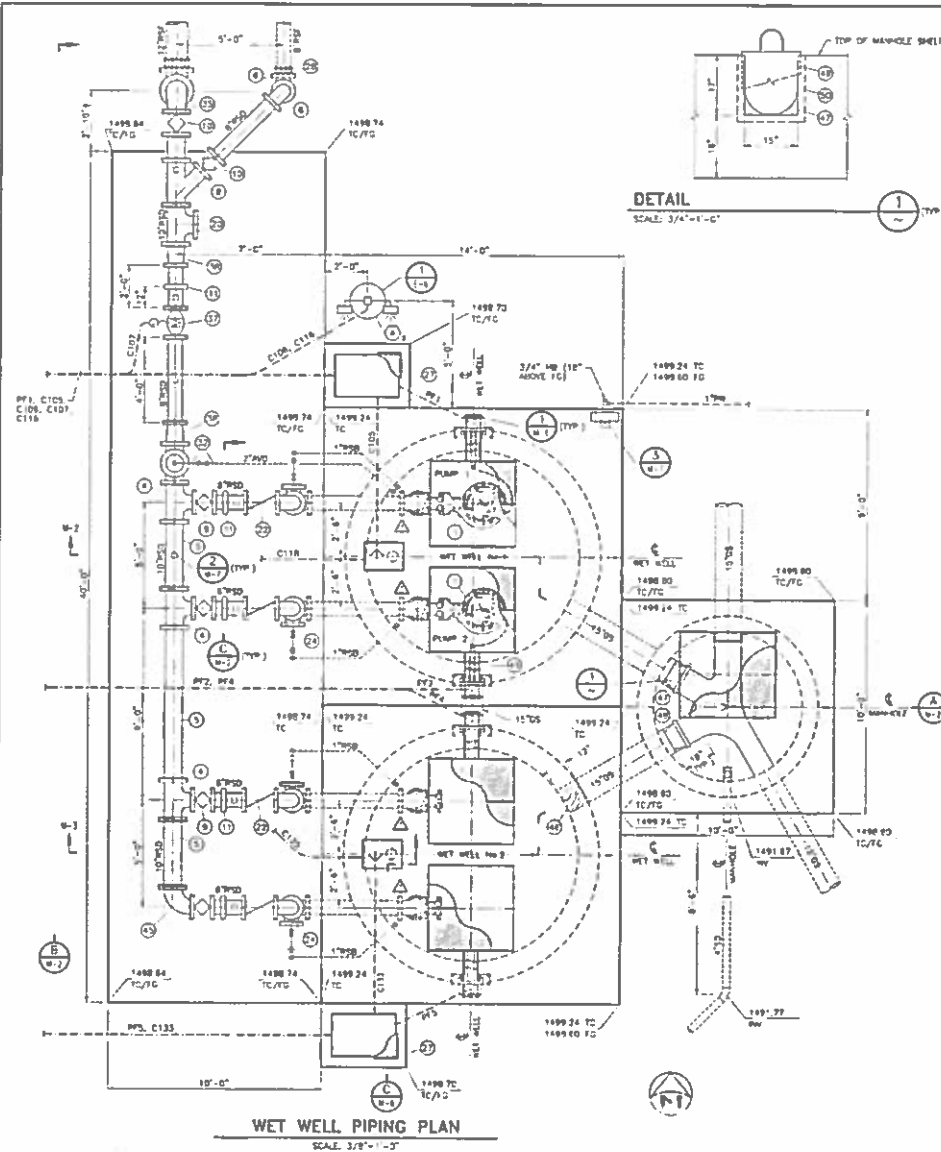
DESIGNED	DATE
DRAWN	DATE
CHECKED	DATE
APPROVED	DATE
DISTRICT	DATE
SUBMITTED	DATE

EASTERN MUNICIPAL WATER DISTRICT
COTTONWOOD AVE. SEWAGE LIFT STATION
WET WELL No.2 SECTION

18"	11"
3/4"	7"
5/8"	10"
1/2"	6"
1/4"	5"
3/16"	4"
1/8"	3"
1/16"	2"
1/32"	1"

SCALE: AS SHOWN

M-3



MATERIAL, EQUIPMENT, AND WORK REQUIREMENTS FOR DRAWINGS M-1, M-2, AND M-3

1. SUBMERGIBLE AIR SERVICE PUMP WITH CENTER DISCHARGE. CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ALL REQUIRED MODIFICATIONS TO DISCHARGE PIPING AND HATCH LOCATION/SIZE IF PUMPING UNIT FURNISHED HAS SIDE (TANGENTIAL) DISCHARGE.
2. POWER AND CONTROL CABLES TO PUMPING UNIT. SUPPORT CABLES WITH ALL STAINLESS STEEL. KILLING CABLES FROM SUPPORT LOOP EXCESS PUMP CABLE 15' MIN. LENGTH OVER SUPPORT. SEE POWER AND CONTROL CABLES TOGETHER PER MANUFACTURER'S RECOMMENDATIONS.
3. 5/16" DIAMETER (MINIMUM) 316 STAINLESS STEEL LIFTING CABLE LOCATED THROUGH PUMP LIFTING ASSEMBLY AND SECURED WITH 316 STAINLESS STEEL LOCKING CLEVIS. PROVIDE CONNECTOR AT END OF CABLE TO CREATE END LOOP AND HANG FROM CABLE SUPPORT. CABLE SHALL HAVE A MINIMUM BENT CONTACT OF 2000 LBS. OR 4 TIMES PUMPING UNIT WEIGHT WHICHEVER IS GREATER.
4. 8"x8" DI FLANGED DI TEE
5. DIP FLANGED END SPOOL LENGTH AS REQUIRED.
6. 80" DI FLANGED ELBOW
7. NOT USED
8. 10"x4" DI FLANGED WYE
9. 8" WORM GEAR OPERATED NON-LUBRICATED PLUG VALVE WITH HANDWHEEL.
10. FORCE MAIN ISOLATION VALVE, WORM GEAR OPERATED NON-LUBRICATED PLUG VALVE WITH HANDWHEEL.
11. METALLIC GROOVED COUPLING (STYLE 31)
12. DIP SPOOL, FLANGED END Y GROOVED END, LENGTH AS REQUIRED.
13. STANDARD WY 316 STAINLESS STEEL 90° FLANGED ELBOW
14. 50"x4"x1/2" 316 STAINLESS STEEL PIVY CLERK RAILS FOR SUBMERGIBLE PUMP
15. METALLIC GATE BAR SUPPORT (NUMBER OF THREE REQUIRED) - 316 STAINLESS STEEL. ATTACH TO PIPE PER MANUFACTURER'S RECOMMENDATIONS.
16. LOWER CLERK RAIL SUPPORT - ALL STAINLESS STEEL. ATTACH TO CONCRETE WITH 316 STAINLESS STEEL EPLOY ANCHORS.
17. PUMP DISCHARGE ELBOW FURNISHED BY PUMP MANUFACTURER. ANCHOR ELBOW WITH 316 STAINLESS STEEL ANCHOR BOLTS (CAST-IN-PLACE OR DRILL AND EPOXY) ANCHOR BOLT SIZE, NUMBER, AND EMBEDMENT PER PUMP MANUFACTURER.
18. 2" COMBINATION SERVICE AIR AND VACUUM VALVE WITH 2" ISOLATION GATE VALVE, GATE FLUSH ATTACHMENTS, AND 2" AIR DISCHARGE PIPING TO WET WELL.
19. DI BLEND FLANGE, TAPPED FOR 2" AIR VALVE
20. 1ST STATION TEMPORARY BYPASS CONNECTION 10"x10"x10" DI TEE WITH FLANG FLANGE.
21. PUMP ACCESS HATCH - DOUBLE LEAF, ALL STAINLESS STEEL CONSTRUCTION. HATCH SHALL BE PROVIDED IN ACCORDANCE WITH SPECIFICATION SECTION 17001 REQUIREMENTS. HATCH SIZE SHOWN. 5" MINIMUM. PROVIDE LARGER SIZE IF NECESSARY FOR PUMPING UNIT FLANGING. HATCH SHALL BE CAST-IN-PLACE.
22. 2" TRING CHECK VALVE WITH OUTSIDE LEVER AND SPRING
23. 1" STAINLESS STEEL BALL VALVE, GASKET AND FITTINGS FOR RAW SERVICE BACKFLOW (RSB) TO WET WELL FOR MANUAL BREAK DOWN OF RAW SERVICE LINE. PIPING SHALL BE 1" SCHEDULE 40, 316 STAINLESS STEEL.
24. DI BLEND FLANGE, TAPPED FOR 1" FLUSH LINE.
25. REMOVABLE 3/4" SCHEDULE 40, 316 STAINLESS STEEL BUBBLER PIPE, FITTING TO PART OF WET WELL. TAP BUBBLER PIPE 12" ABOVE WET WELL INVERT FOR BUBBLER AIR. ATTACH FLANG CABLES TO BUBBLER PIPE WITH WELDN TIES.
26. REINFORCED CONCRETE RING (RWR) WITH BELL-AND-SPOUT JOINTS AND RUBBER GASKETS PER SPECIFICATION SECTION 17021. RWR SHALL BE PROVIDED WITH 1" LEAD REINFORCER LAYER CAST INTO CONCRETE DURING FABRICATION OR COATED WITH FIELD-APPLIED LINING SYSTEM AS MANUFACTURED BY SANCHI OR SAUERBORN. SEE PARAG 2105 AND 2107 IN STREET JURISDICTION WITH MANUFACTURER'S PRINTED INSTRUCTIONS.
27. 2" x 3" ELECTRICAL PULL BOX WITH HOG PARKWAY COVER BROOKS OR EQUAL DEPTH AS REQUIRED.
28. PROVIDE REINFORCED FLANGE ADAPTER FOR TRANSITION FROM DIP TO 8-100 PVC FORCE MAIN PIPE MATERIAL.
29. ALUMINUM SAFETY GRATING, RATED FOR 300 LB/SF LIVE LOAD. SEE NOTE 21 HEREIN.
30. 8" SCHEDULE 40, 316 STAINLESS STEEL SPOOL, FLANGED END & FLANGED END, LENGTH AS REQUIRED.
31. PUMP/PO ACCURATE BASE PER SSPIC SECTION 200-2.2. PLACE ON SUBGRADE WHICH HAS BEEN SCARIFIED TO A MINIMUM 12" DEPTH AND COMPACTED TO 95% MINIMUM RELATIVE COMPACTION. EQUIPMENT FINISHED ACCORDING TO 95% MINIMUM RELATIVE COMPACTION.
32. 2" AIR VALVE DRAW (AVD) PIPING. JUCIVE DRIDGE PIPING AND FITTINGS SHALL BE SCHEDULE 40 HOG STEEL. BELLOW GASKET PIPING AND FITTINGS SHALL BE SCHEDULE 80 PVC. TRANSITION BETWEEN HOG STEEL AND PVC AT BELLOW GASKET HOG ELBOW.
33. 8" SCHEDULE 40, 316 STAINLESS STEEL SPOOL, FLANGED END & FLANGED END, LENGTH AS REQUIRED. SHIP ONE FLANGE LOOSE FOR FIELD WELDING AFTER INSTALLATION IN WET WELL.
34. NOT USED
35. 10"x12" DI FLANGED 90° REDUCING ELBOW
36. WET WELL HIGH WATER LEVEL (HWL) FLOAT SWITCH PER SPECIFICATION REQUIREMENTS. SEE SHEET M-2 FOR CONSTRUCTION.

NOTES
 1. PUMP BASE ELBOWS NOT SHOWN FOR CLARITY.
 2. TYPICAL FOR WET WELLS No. 1 AND No. 2.

NOTES
 1. TYPICAL FOR WET WELLS No. 1 AND No. 2.

Underground Service Alert
 CALL TOLL FREE
 1-800-827-8888
 FOR WORKING DAYS BEFORE YOU DIG

VERIFY SCALES
 SHOWN ON SHEET OR
 DRAWING. DRAWING
 0"=1'-0"
 IF NOT ONE FEET ON
 THIS SHEET, VERIFY
 SCALES ACCORDINGLY

KRIEGER & STEWART
 INCORPORATED
 1802 University Ave • Riverside, CA 92501 • 951-514-2800

REVISIONS			
NO.	DATE	DESCRIPTION	APPROVED

APPROVED BY: *John P. McLeod*
 REGISTERED ENGINEER No. 10115 STATE OF CALIF.
 DATE: 12/15/2010

REFERENCES

EASTERN MUNICIPAL WATER DISTRICT

DESIGNED BY: *W. J. ...*

APPROVALS

SCALE: AS SHOWN

EASTERN MUNICIPAL WATER DISTRICT
 IMPROVED COUNTY CALIFORNIA
 COTTONWOOD AVE. SEWAGE LIFT STATION

WET WELL PLAN

DATE: 12-22-10
 M-1



COTTONWOOD LIFT

DANGER
480 VOLTS

HEAVY EQUIPMENT
CONTAINED BELOW
DO NOT ENTER



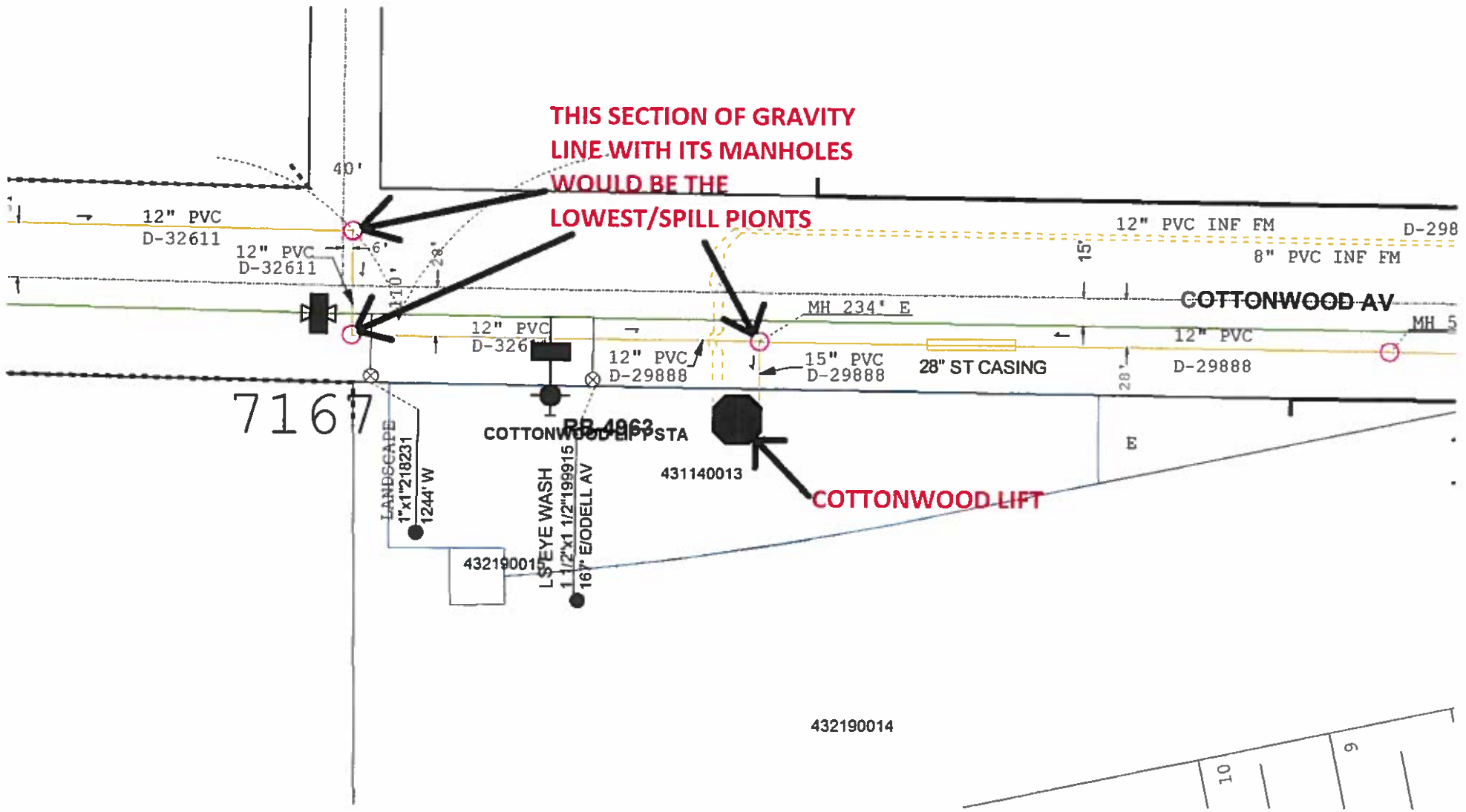
THIS INLET MANHOLE CAN BE USED TO BYPASS LIFT BY INSTALLING A SUBMERSIBLE OR END SUCTION PUMP.

**10" BYPASS
CONNECTION POINT**



**THIS SECTION OF GRAVITY
LINE WITH ITS MANHOLES
WOULD BE THE
LOWEST/SPILL POINTS**

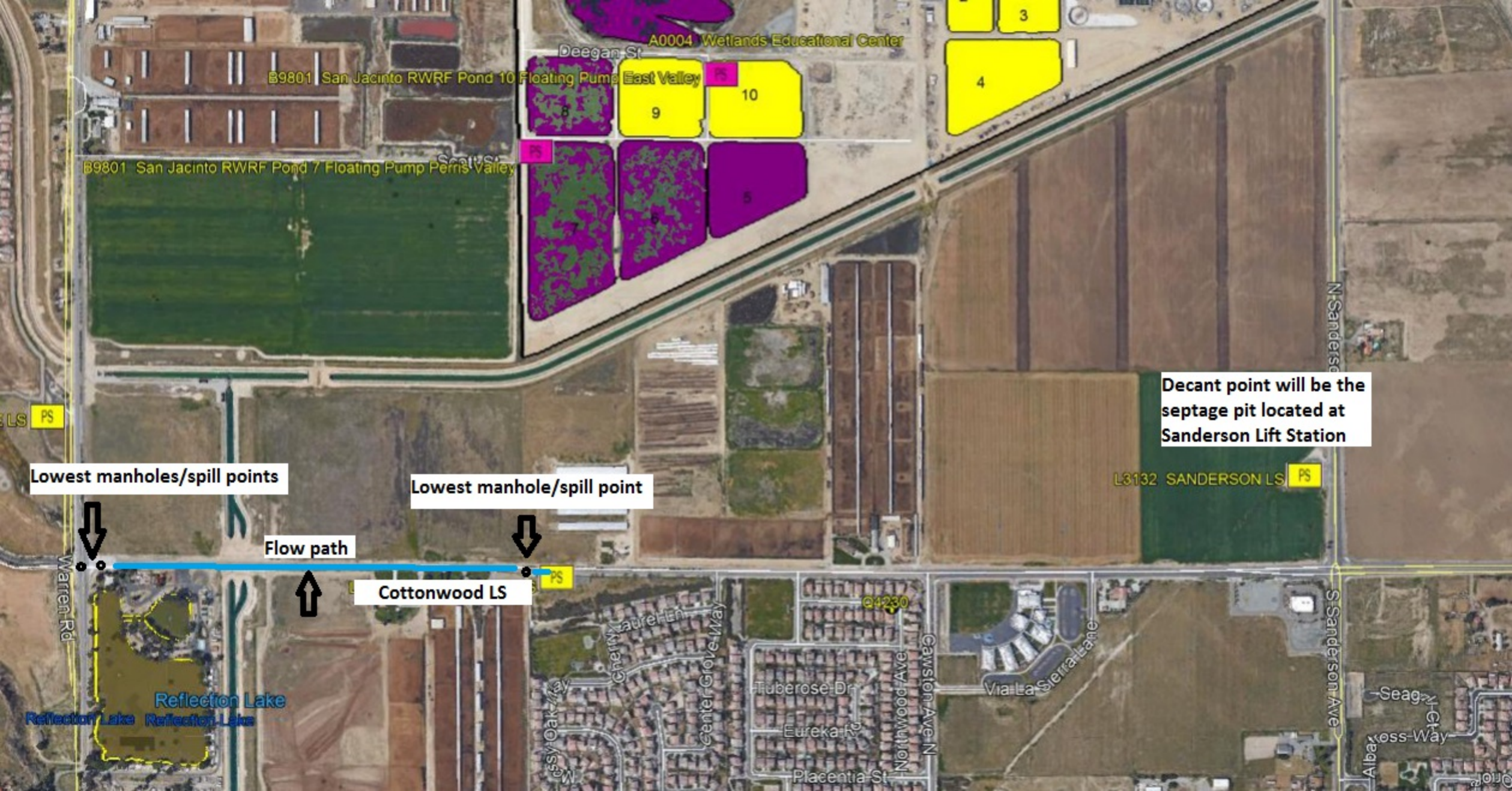
COTTONWOOD LIFT



7167

432190014

10
9



A0004 Wetlands Educational Center
Deegan St
B9801 San Jacinto RWRP Pond 10 Floating Pump East Valley

B9801 San Jacinto RWRP Pond 7 Floating Pump Perris Valley
Scaly St

Decant point will be the septage pit located at Sanderson Lift Station

Lowest manholes/spill points

Lowest manhole/spill point

Flow path

Cottonwood LS

L3132 SANDERSON LS

Reflection Lake
Reflection Lake
Reflection Lake

Warren Rd

Cosy Oak Dr
Cherry Laurel Ln
Center Grove Way

Q4230
Cawston Ave N
Placentia St
Eureka Dr
Tuberose Dr

Via La Sierra Lane

N Sanderson

S Sanderson Ave

Seag
Alba
Cross Way

Heidra[®] 300 Hydraulic Submersible Pumps

The Heidra 300 hydraulic submersible pump is a self-contained, hydraulic-powered 12" (300 mm) submersible pump with a diesel-driven hydraulic power unit available for heavy duty municipal and industrial dewatering and solids handling pumping applications.

A variable displacement hydraulic piston pump on the power pack delivers hydraulic fluid to a fixed displacement piston motor that drives the pumpend's shaft, bearings and cast steel impeller. Simple engine throttle adjustments allow changes to pump flow and head performance.



HS300 pumpend pictured with optional critically silenced powerpack.

Features

- Cast iron pumpend with cast chromium steel impeller designed for general pumping with solids handling up to 3.75" (95 mm) in diameter.

- Capable of flow rates to 6,000 GPM (1,363.3 m³/h) and heads to 200' (61 m).

- Unique double mechanical seal immersed in isolated oil bath for unlimited dry running capability.

- Integral 200 gallon (757 l) fuel tank capacity provides over 24 hours of continuous operation.

- Safety shutdown system incorporated into engine controls prevents equipment damage from engine fault or failure.

- Standard PrimeGuard Controller provides programmable operations including setting maintenance timers.

- Integrated steel cage on pumpend protects pump while submersed, provides a lifting bale for easy transfer and provides an anchor spot for the hydraulic fittings.

- "Quick Disconnect" hydraulic fittings simplify setup, installation and shutdown.

- Standard JD6068H engine. Other models, including electric drive versions, available.

Specifications

Submersible Pump

Hydraulic Motor	Fixed Piston
Drive Pressure	Up to 4500 PSI (310 BAR)
Hydraulic Flow	Up to 85 GPM (19.3 m ³ /h)
Hydraulic Line Length	Up to 100' (30.5 m) longer runs with larger diam. hose
Solids Handling	Up to 3.75" (95 mm) in diameter
Pump Speed (RPM)	Up to 1800 RPM
Impeller Diameter	14.25" (362 mm)
Discharge Flange	12" (300 mm) ASA 150
Hydraulic Connections	4 - 1.25" (32 mm), 1 - 0.75" (19 mm) quick disconnect
Strainer	Nylon coated with 2.75" (70 mm) apertures

Power Pack

Engine	JD6068H water-cooled diesel 275 HP (205 kW) @ 2,000 RPM
Fuel Consumption	13.5 GPH (51 l/h)
Fuel Tank Capacity	200 gallons (757 l)
Output Hydraulic Flow	85 GPM (19.3 m ³ /h)
Output Pressure Control	4500 PSI (310 BAR)
Hydraulic System	Four pipe, closed loop hydrostatic drive
Reservoir	80 gallons (303 l)
Control Valve	Pressure compensated on/off valve
Connections	1.25" (31.75 mm) quick disconnect feed (x2) and return (x2); 0.75" (19 mm) quick disconnect case drain
Supply Line Filter	125 micron, pleated gauze
Return Line Filter	20 micron

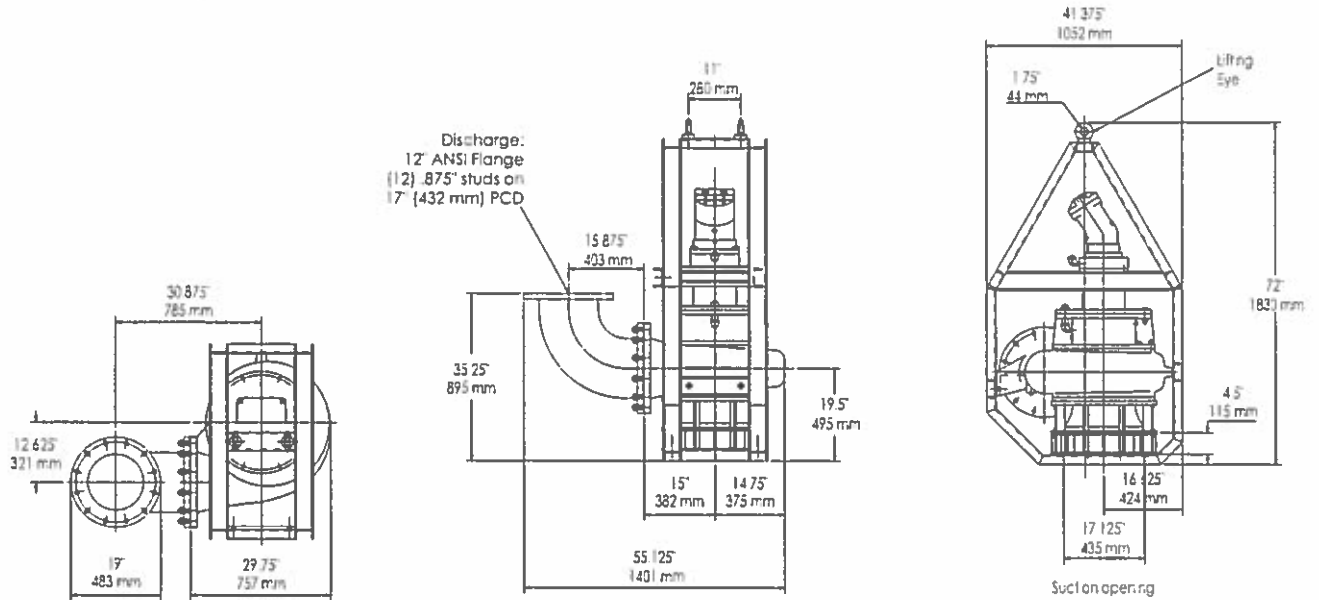
Materials of Construction

Pumpend	Cast iron
Impeller	Cast steel
Wearplates	25% Chromium iron front wearplate, nitride hardened cast iron rear wearplate
Mechanical Seal	Solid silicon carbide

Drawings

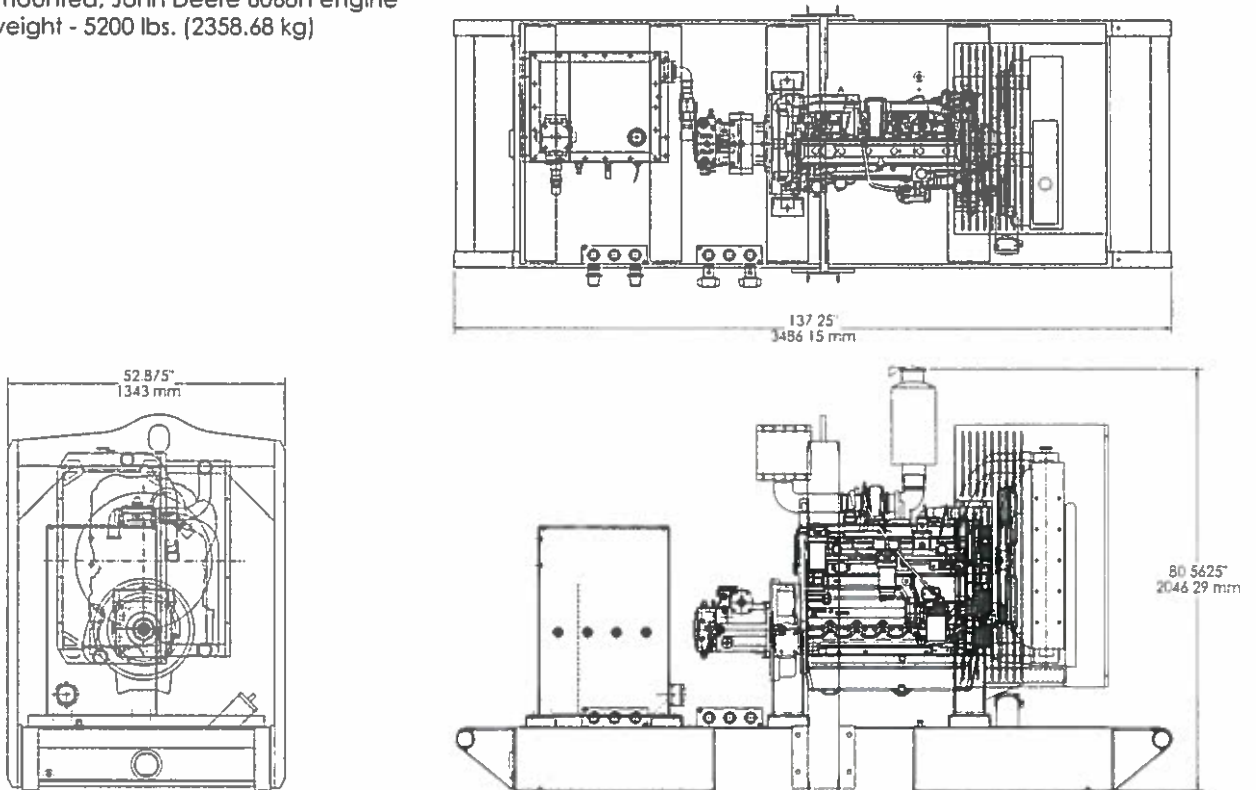
Submersible Pump

Pumpend dry weight - 2075 lbs. (941.2 kg)



Skid-Mounted Power Pack

Skid-mounted, John Deere 6068H engine
Dry weight - 5200 lbs. (2358.68 kg)



Home Office:
Godwin Pumps of America, Inc.
One Floodgate Road
Bridgeport, NJ 08014 USA
(856) 467-3636 • Fax: (856) 467-4841
Email: sales@godwinpumps.com
www.godwinpumps.com

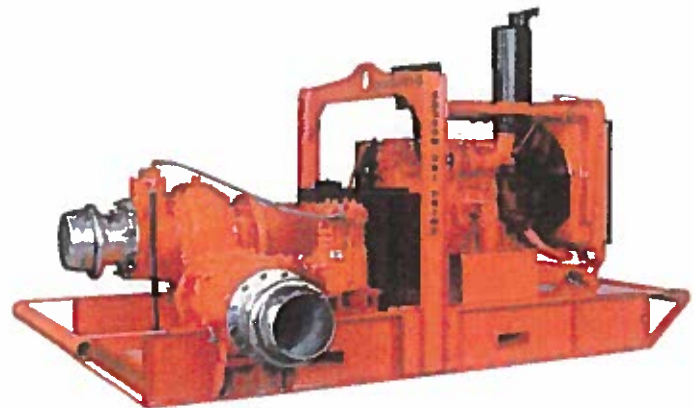


CD300M Dri-Prime® Pump

The Godwin Dri-Prime CD300M pump offers flow rates to 5990 USGPM and has the capability of handling solids up to 3.7" in diameter.

The CD300M is able to automatically prime to 28' of suction lift from dry. Automatic or manual starting/stopping available through integral mounted control panel or optional wireless-remote access.

Indefinite dry-running is no problem due to the unique Godwin liquid bath mechanical seal design. Solids handling, dry-running, and portability make the CD300M the perfect choice for dewatering and bypass applications.



Features and Benefits

- Simple maintenance normally limited to checking fluid levels and filters.
- Dri-Prime (continuously operated Venturi air ejector priming device) requiring no periodic adjustment. Optional compressor clutch available.
- Extensive application flexibility handling sewage slurries, and liquids with solids up to 3.7" in diameter.
- Dry-running high pressure liquid bath mechanical seal with high abrasion resistant solid silicon carbide faces.
- Pedestal-mounted centrifugal pump with Dri-Prime system coupled to a diesel engine or electric motor.
- All cast iron construction (stainless steel construction option available) with cast steel impeller.
- Also available in a critically silenced unit which reduces noise levels to less than 70 dBA at 30'.
- Standard engine Caterpillar C9 (T3 Flex). Also available with John Deere 6068HFC94 (IT4).

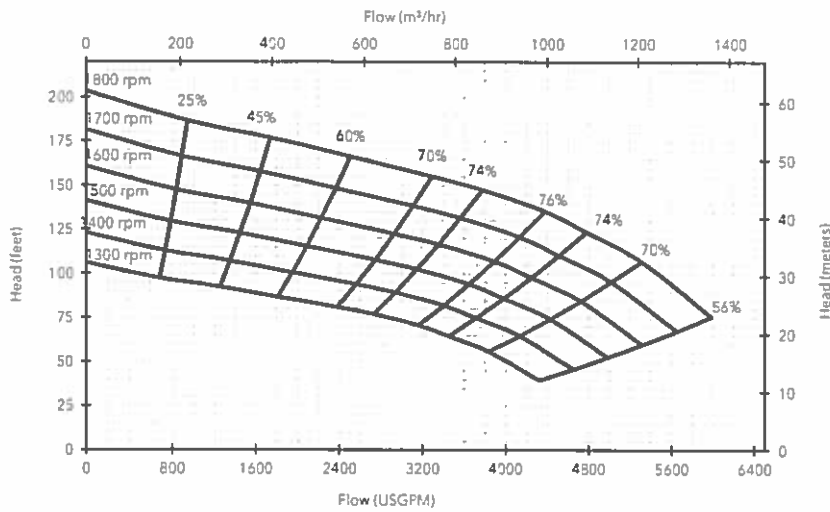
Specifications

Suction connection	12" 125# ANSI B16.1
Delivery connection	12" 150# ANSI B16.5
Max capacity	5990 USGPM †
Max solids handling	3.7"
Max impeller diameter	14.3"
Max operating temp	176°F*
Max pressure	88 psi
Max suction pressure	58 psi
Max casing pressure	132 psi
Max operating speed	1800 rpm

* Please contact our office for applications in excess of 176°F.

† Larger diameter pipes may be required for maximum flows.

Performance Curve



Engine option 1

Caterpillar C9 (1.3 Flex), 300 HP @ 1800 rpm

Impeller diameter 14.3'

Pump speed 1800 rpm

Suction Lift Table

Total Suction Head (feet)	Total Delivery Head (feet)				
	61	99	132	141	156
10	6076	5283	4121	3540	2589
15	5917	5019	3646	3064	2108
20	5283	4755	2906	2113	1057
25	4227	3963	2642	2113	-

Fuel capacity: 240 US Gal

Max Fuel consumption @ 1800 rpm: 15.1 US Gal/hr

Max Fuel consumption @ 1600 rpm: 14.3 US Gal/hr

Weight (Dry): 9,500 lbs

Weight (Wet): 11,230 lbs

Dim.: (L) 160" x (W) 71" x (H) 97"

Performance data provided in tables is based on water tests at sea level and 20°C ambient. All information is approximate and for general guidance only. Please contact the factory or office for further details.

Materials

Pump casing & suction cover	Cast iron BS EN 1561 - 1997
Wearplates	High Chromium Cast Iron HC403:1977
Pump Shaft	Carbon steel BS 970 - 1991 817M40T
Impeller	Cast Steel BS3100 A5 Hardness to 200 HB Brinell
Non-return valve body	Cast iron BS EN 1561 - 1997
Mechanical seal	Double Mech seal; Silicon carbide face; Viton elastomers; Stainless steel body

Engine option 2

John Deere 6068HFC94 (H4), 219 HP @ 1800 rpm

Impeller diameter 14.3'

Pump speed 1800 rpm

Suction Lift Table

Total Suction Head (feet)	Total Delivery Head (feet)				
	61	99	132	141	156
10	6076	5283	4121	3540	2589
15	5917	5019	3646	3064	2108
20	5283	4755	2906	2113	1057
25	4227	3963	2642	2113	-

Fuel capacity: 240 US Gal

Max Fuel consumption @ 1800 rpm: 10.8 US Gal/hr

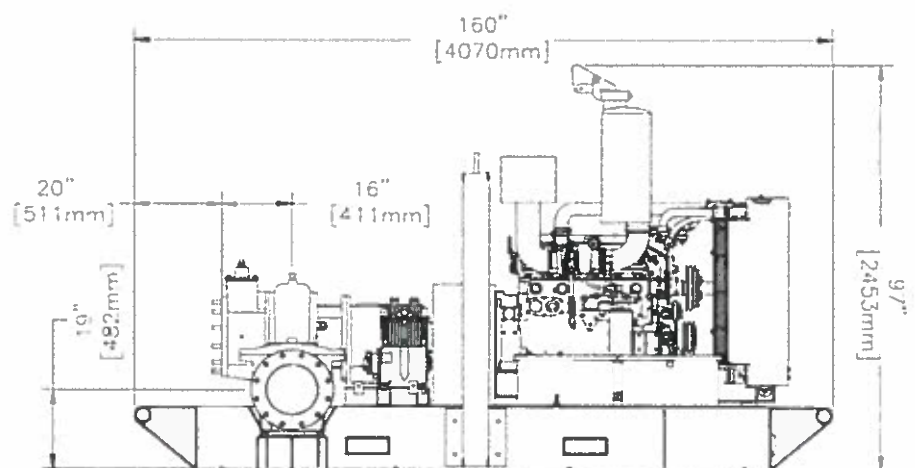
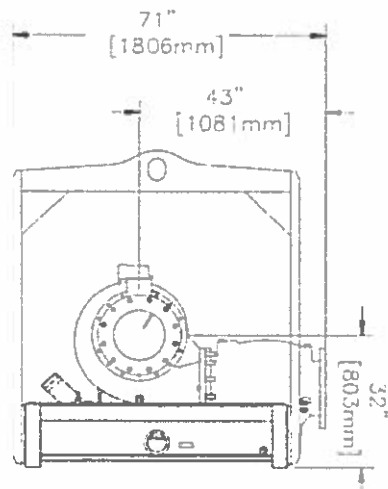
Max Fuel consumption @ 1400 rpm: 8.8 US Gal/hr

Weight (Dry): 10,100 lbs

Weight (Wet): 11,830 lbs

Dim.: (L) 160" x (W) 71" x (H) 91"

Performance data provided in tables is based on water tests at sea level and 20°C ambient. All information is approximate and for general guidance only. Please contact the factory or office for further details.



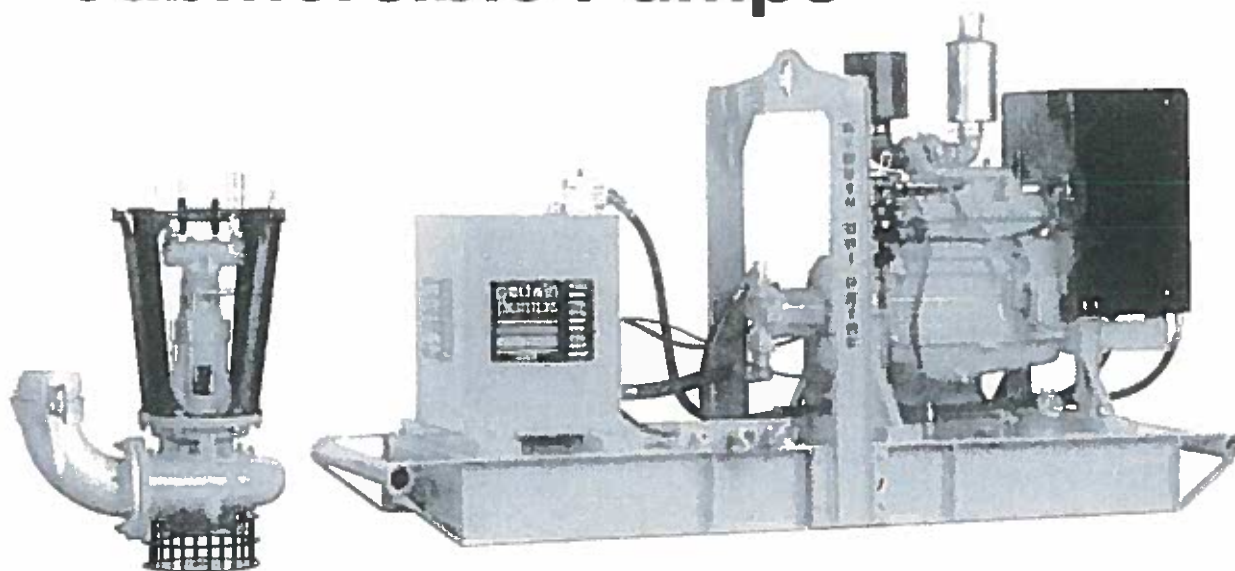
xylem
Let's Solve Water

84 Floodgate Road
Bridgman, NJ 07804 USA
Tel: 908 467 2636 Fax: 908 467 4991
Email: sales@go-wump.com

Reference number: 95-1013-3000
Date of issue: February 26, 2014
Issue: 5

www.godwinpumps.com

Heidra® 200 Hydraulic Submersible Pumps



The Heidra 200 hydraulic submersible pump is a self-contained, diesel powered 8" (200mm) pump available for heavy duty municipal and industrial dewatering and solids handling pumping applications. The Heidra 200 offers flow rates up to 3100 gpm (703.7 M³/hr.) with up to 180' (54.9M) of total dynamic head and solids handling capability of 3-1/8" (79mm) in diameter. The unit consists of a sturdy cast iron submersible pumpend and hydraulic power pack mounted on a rugged steel skid. A variable displacement hydraulic piston pump on the power pack delivers hydraulic fluid to a fixed displacement piston motor that drives the pumpend's shaft, bearings, and cast steel impeller. Simple engine throttle adjustments allow changes to pump flow and head performance.

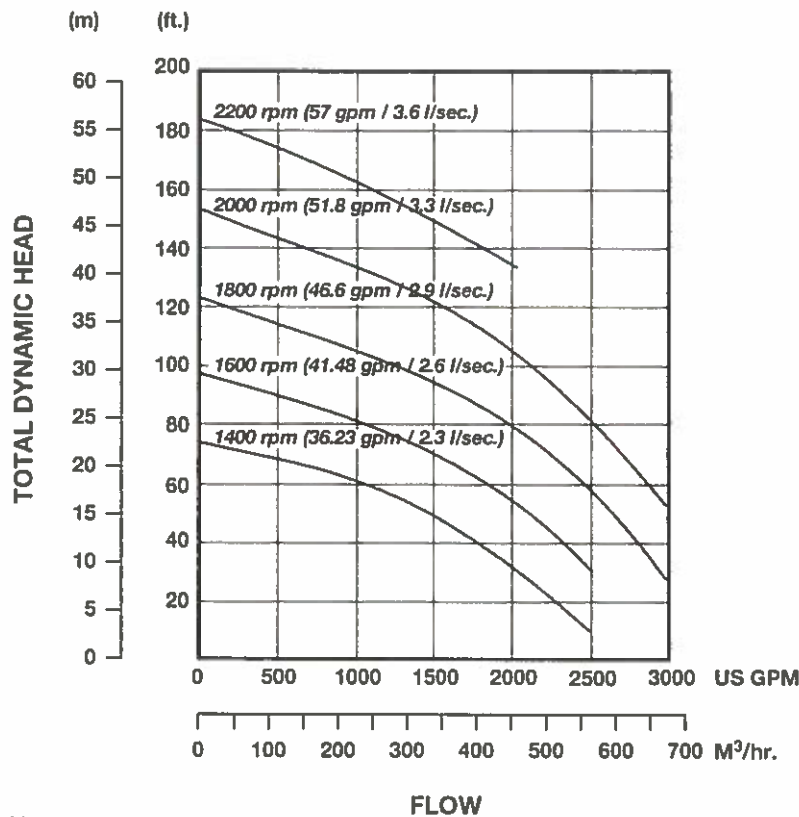
Features

- Rugged construction of cast iron pumpend with cast chromium steel impeller.
- Flow rates to 3100 gpm (703.7 M³/hr.) and heads to 180 feet (54.9M).
- Unique double mechanical seal immersed in isolated oil bath for unlimited dry running capability.
- Integral 175 gallon (662 liter) fuel tank capacity provides over 24 hours of continuous operation.
- Safety shutdown system incorporated into engine controls prevents equipment damage from engine fault or failure.
- Impeller designed for general pumping with solids up to 3-1/8" (79mm) in diameter.
- "Quick-Disconnect" hydraulic fittings simplify setup, installation, and shutdown.
- Standard John Deere 6068T or Caterpillar 3116TA engine. Also available with other diesel engines or electric drive motor.

godwin
pumps



Heidra[®] 200 Performance Curve



Notes:

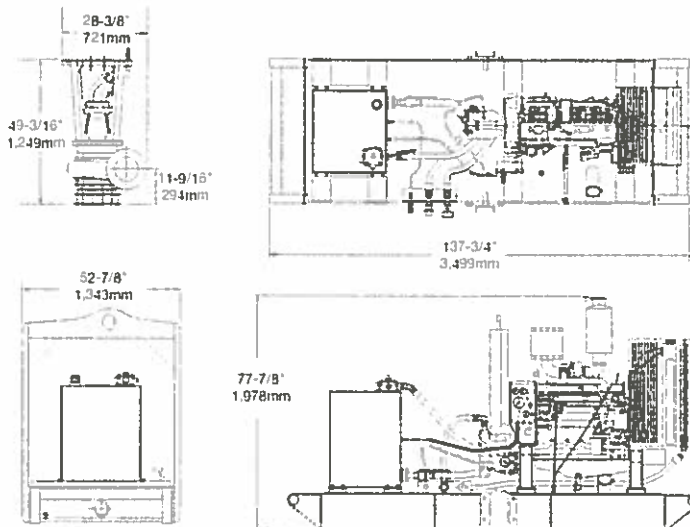
1. Impeller diameter: 11-3/8" (290 mm)
2. Performance curves based on diesel engine speed
3. Requires hydraulic system pressure to 4000 psi (276 BAR)

Performance data based on water testing at sea level and 68° F. Larger diameter pipes may be required for maximum flows.

Dimensions

Heidra 200 — shown with John Deere 6068T, Skid Base
 Pump Weight: 780 lbs. (354 kg.)

Complete pumpset is supplied with one each of 1-1/4" X 50' (32mm x 15.25M) high pressure feed and return hoses and one 1/2" X 50' (13mm x 15.25M) low pressure case drain hose.



Specifications

Submersible Pump:

- Hydraulic Motor: Fixed Piston
- Drive Pressure: Up to 4000 psi (276 BAR)
- Hydraulic Flow: Up to 57 gpm (3.6 l/sec.)
- Hydraulic Line Length: 100 feet / 30.5M (longer runs with larger hose)
- Solids Handling: Up to 3-1/8" (79mm) diameter
- Pump Speed: Up to 2200 rpm
- Impeller Diameter: 11-3/8" (290mm)
- Discharge Flange: 8" (200mm) ASA 150
- Hydraulic Connections: 1-1/4" (32mm) Quick Disconnect
- Strainer: Nylon coated with 2-3/4" (70mm) apertures

Power Pack:

- John Deere 6068T Engine
- Horsepower: 147 hp (110 kw) @ 2200 rpm
- Fuel Consumption: 7.2 gph (27 lph)
- Caterpillar 3116TA Engine
- Horsepower: 143 hp (107 kw) @ 2200 rpm
- Fuel Consumption: 7.6 gph (29 lph)
- Fuel Tank Capacity: 175 gallons (662 liters)
- Output
- Hydraulic Flow: 57 gpm (3.7 l/sec.)
- Pressure: 4000 psi (276 BAR)
- Control: From engine speed and pressure compensated

- Hydraulic System: Two pipe, open circuit
- Reservoir: 80 gallon (303 liters)
- Control Valve: Pressure compensated on/off valve
- Connections: 1-1/4" (32mm) Quick Disconnect feed and return
- 1/2" (13mm) Quick Disconnect case drain
- Supply Line: 125 micron, pleated gauze
- Return Line: 20 micron



One Floodgate Road, Bridgeport, NJ 08014, USA
 (856) 467-3636 • Fax: (856) 467-4841
 Quenington, Cirencester, Glos., GL7 5BX, UK
 +44 (0)1285 750271 • Fax: +44 (0)1285 750352

E-mail: sales@godwinpumps.com
 www.godwinpumps.com

BRANCH LOCATIONS:

- Norwich, CT • Buffalo, NY • Pittsburgh, PA • Chicago, IL
- Washington, DC • Richmond, VA • Virginia Beach, VA
- Charleston, WV • Raleigh, NC • Charlotte, NC
- N. Charleston, SC • Atlanta, GA • Houston, TX
- San Antonio, TX • Helena, MT • Los Angeles, CA

Heidra[®] and the color orange for pumps are registered trademarks of Godwin Pumps of America, Inc. Specifications and illustrations are subject to revision without notice. © Copyright 2002-2003 Godwin Pumps of America, Inc.