



NATURAL GAS PIPELINE. SEE LOWER FOUNTAIN HEIGHTS PLAN AND PROFILE DRAWINGS FOR CONTINUATION TO BIRDSALL ROAD.

- KEYED NOTES:**
- 1 2" PE NATURAL GAS PIPELINE BY UTILITY COMPANY
 - 2 2" NATURAL GAS PIPELINE ANGLE POINT
N = 1,287,536.32
E = 3,238,553.44
 - 3 MASTER FACILITY NATURAL GAS METER (ESTIMATED TOTAL GAS LOAD: 5,446 MBH, MED PRESS 2 PSI) INSTALL BOLLARDS PER CSU STANDARDS.
N = 1,287,508.43
E = 3,238,650.71
 - 4 75 L.F. OF 1" LISTED PE PIPE WITH YELLOW INSULATED COPPER TRACER WIRE TO HEADWORKS BUILDING AT MINIMUM DEPTH OF 24".
 - 5 285 L.F. OF 1-1/2" LISTED PE PIPE WITH YELLOW INSULATED COPPER TRACER WIRE AT MINIMUM DEPTH OF 24".
 - 6 BUILDING ISOLATION VALVE SIZED TO MATCH SERVICE LINE. INSTALL ABOVE GRADE ON RISER PIPE OUTSIDE OF BUILDING.
 - 7 4 L.F. OF 3/4" LISTED PE PIPE WITH YELLOW INSULATED COPPER TRACER WIRE TO PUMPING AND DISINFECTION BUILDING AT MINIMUM DEPTH OF 24".
 - 8 1-1/2" LISTED PE PIPE WITH YELLOW INSULATED COPPER TRACER WIRE
 - 9 BURIED ISOLATION VALVE ON DOWNSTREAM SIDE OF LAST SERVICE TEE.
 - 10 CAP END OF PIPE FOR FUTURE EXTENSION MIN. 5' PAST EDGE OF SHOULDER AND MARK W/ TEE POST.
 - 11 35 L.F. OF 3/4" LISTED PE PIPE WITH YELLOW INSULATED COPPER TRACER WIRE TO EQUIPMENT MAINTENANCE AND STORAGE BUILDING AT A MINIMUM DEPTH OF 24".
 - 12 30 L.F. OF 3/4" LISTED PE PIPE WITH YELLOW INSULATED COPPER TRACER WIRE AT A MINIMUM DEPTH OF 24".
 - 13 55 L.F. 1-1/2" LISTED PE PIPE WITH YELLOW INSULATED COPPER TRACER WIRE AT A MINIMUM DEPTH OF 24".
 - 14 72 L.F. OF 1-1/2" LISTED PE PIPE WITH YELLOW INSULATED COPPER TRACER WIRE AT A MINIMUM DEPTH OF 24".
 - 15 75 L.F. OF 1/2" LISTED PE PIPE WITH YELLOW INSULATED COPPER TRACER WIRE AT A MINIMUM DEPTH OF 24".
 - 16 CAP END OF PIPE FOR FUTURE EXTENSION AND MARK WITH A TEE POST.
 - 17 25 L.F. OF 1/2" LISTED PE PIPE WITH YELLOW INSULATED COPPER WIRE TO BLOWER BUILDING AT A MINIMUM DEPTH OF 24".
 - 18 18 L.F. OF 1/2" LISTED PE PIPE WITH YELLOW INSULATED COPPER WIRE TO FUTURE BLOWER BUILDING AT A MINIMUM DEPTH OF 24".
 - 19 2" LISTED PE PIPE WITH YELLOW INSULATED COPPER TRACER WIRE.
 - 20 15 L.F. OF 1-1/2" LISTED PE PIPE WITH YELLOW INSULATED COPPER TRACER WIRE AT A MINIMUM DEPTH OF 24".
 - 21 4 L.F. OF 3/4" LISTED PE PIPE WITH YELLOW INSULATED COPPER TRACER WIRE AT A MINIMUM DEPTH OF 24".
 - 22 100 L.F. OF 1-1/2" LISTED PE PIPE WITH YELLOW INSULATED COPPER TRACER WIRE AT A MINIMUM DEPTH OF 24".
- 9 X DENOTES BRANCH NODE

Project: HDTRW												Date: 6/27/12					
FUEL GAS SYSTEM																	
Note: Calculations are per IFGC 402.3, 3. Other approved engineering methods. Formulas used are IFGC section 402.4 Equations 4-1 and 4-2. Allowable pressure drop is 1 PSI (27.72 IN W.C.) per IFGC Table 402.4(20).												FUEL GAS		NG			
												MINIMUM EQUIPMENT PRESSURE		27.72	INCHES W.C.		
												METER OR TANK DISCH. PRESSURE		55.44	INCHES W.C.		
												REGULATOR SETTING					
												ELEVATION		5420	FT.		
												PRESSURES (INCHES W.C.)		Comments			
BRANCH	SUPPLY BRANCH	DESCRIPTION	BRANCH LOAD MBH	PIPE SIZE	PIPE LENGTH (FEET)	FITTINGS AND VALVES						EQUIVALENT LENGTH (FEET)	PRESSURES (INCHES W.C.)				
						ELBOW		TEE	VALVES				LOSS PER FOOT	BRANCH DROP	INLET PRESSURE	OUTLET PRESSURE	
						90° EL	45° EL	BRANCH	THRU	PLUG	BALL	GLOBE	CHECK				
A	METER	Main	5446	2	31.00	2				2				47.17	0.1229	5.798	55.440
B	A	West	3900	2	12.00			1						22.30	0.0673	1.500	49.642
C	B	Headworks	1200	1	75.00	2				1				81.86	0.1339	10.963	48.141
D	B	Biosolids Main	2100	2	270.00	1								275.17	0.0215	5.915	48.141
E	D	Biosolids 1	1050	1 1/2	40.00	2				1				50.37	0.0179	0.903	42.226
F	D	Biosolids 2	1050	1 1/2	125.00	2				1				135.37	0.0179	2.426	42.226
G	A	East Main	1546	2	273.00		2							277.82	0.0122	3.376	49.642
H	G	Clarifier Main	630	1 1/2	285.00			1						293.04	0.0089	2.020	46.266
I	H	EM Main	430	1 1/2	55.00			1						63.04	0.0034	0.216	44.246
J	I	BB Main	240	1 1/2	72.00			1						80.04	0.0012	0.093	44.030
K	J	BB2	120	1/2	55.00	1				1				60.64	0.0206	1.251	43.937
L	J	BB1	120	1/2	20.00	1				1				25.64	0.0191	0.489	43.937
M	I	EM	190	3/4	35.50	1				1				42.97	0.0123	0.530	44.030
N	H	OP	200	3/4	33.00	1		1		1				40.47	0.0136	0.549	44.246
O	G	PD Main	916	1 1/2	650.00		2							653.76	0.0128	8.369	46.266
P	O	PD Future	458	1 1/2	100.00	1		1		1				114.39	0.0036	0.406	37.896
Q	O	PD	458	3/4	4.00	2		1		1				13.53	0.0628	0.849	37.896

REVISIONS			REVISIONS		
NO.	DATE	DESCRIPTION	NO.	DATE	DESCRIPTION
13	11/29/2012	ISSUED FOR VALUE ENGINEERING REVIEW AND PRICING	1	07/11/2011	ISSUED FOR BUILDING PERMIT RESUBMITTAL TO PPRBD (HEADWORKS BUILDING)
14	11/29/2012	ISSUED FOR VALUE ENGINEERING REVIEW AND PRICING	2	08/05/2011	ISSUED FOR CONSTRUCTION PER PPRBD BUILDING PERMIT #68510 (HEADWORKS BLDG)
15	01/07/2013	ISSUED FOR BUILDING PERMIT SUBMITTAL TO PPRBD (EQUIP. MAINT. & STOR. BLDG.)	3	11/25/2011	ISSUED FOR BUILDING PERMIT SUBMITTAL TO PPRBD (EQUIP. MAINT. & STOR. BLDG.)
16	03/14/2013	ISSUED FOR CONSTRUCTION PER PPRBD BLDG PERMIT #85132 (BIOSOLIDS HANDLING COMPLEX)	4	01/09/2012	ISSUED FOR CONSTRUCTION PER PPRBD BUILDING PERMIT #83002 (EQUIP. MAINT. & STOR. BLDG.)
			5	01/29/2012	ISSUED FOR PD BUILDING VALVE ENGINEERING REVIEW AND COMMENTS
			6	04/18/2012	ISSUED FOR BUILDING PERMIT SUBMITTAL TO PPRBD (PUMPING AND DISINFECTION BLDG)
			7	05/21/2012	ISSUED FOR CONSTRUCTION PER PPRBD BLDG PERMIT #8993 (PUMP AND DISINFECTION BLDG)
			8	06/21/2012	ISSUED FOR BUILDING PERMIT SUBMITTAL TO PPRBD (BLOWER BLDG.)
			9	06/29/2012	ISSUED FOR BUILDING PERMIT SUBMITTAL TO PPRBD (OPERATIONS BLDG.)
			10	07/11/2012	ISSUED FOR BUILDING PERMIT SUBMITTAL TO PPRBD (BLOWER BLDG.)
			11	07/17/2012	ISSUED FOR CONSTRUCTION PER PPRBD BLDG PERMIT #29081 (BLOWER BLDG)
			12	08/15/2012	ISSUED FOR CONSTRUCTION PER PPRBD BUILDING PERMIT #35220 (OPERATIONS BLDG)

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MASTER MECHANICAL SITE PLAN

HAROLD D. THOMPSON REGIONAL WATER RECLAMATION FACILITY

LOWER FOUNTAIN METROPOLITAN SEWAGE DISPOSAL DISTRICT

DRAWN: SKC

DESIGNED: MAM

CHECKED: RJS

DATE: MAY 2011

PROJECT NO.: 20166.310

GMS FILE NO.: 2599

GMS, INC.

CONSULTING ENGINEERS

611 N. WEBER, SUITE 300

COLORADO SPRINGS, COLORADO 80903

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