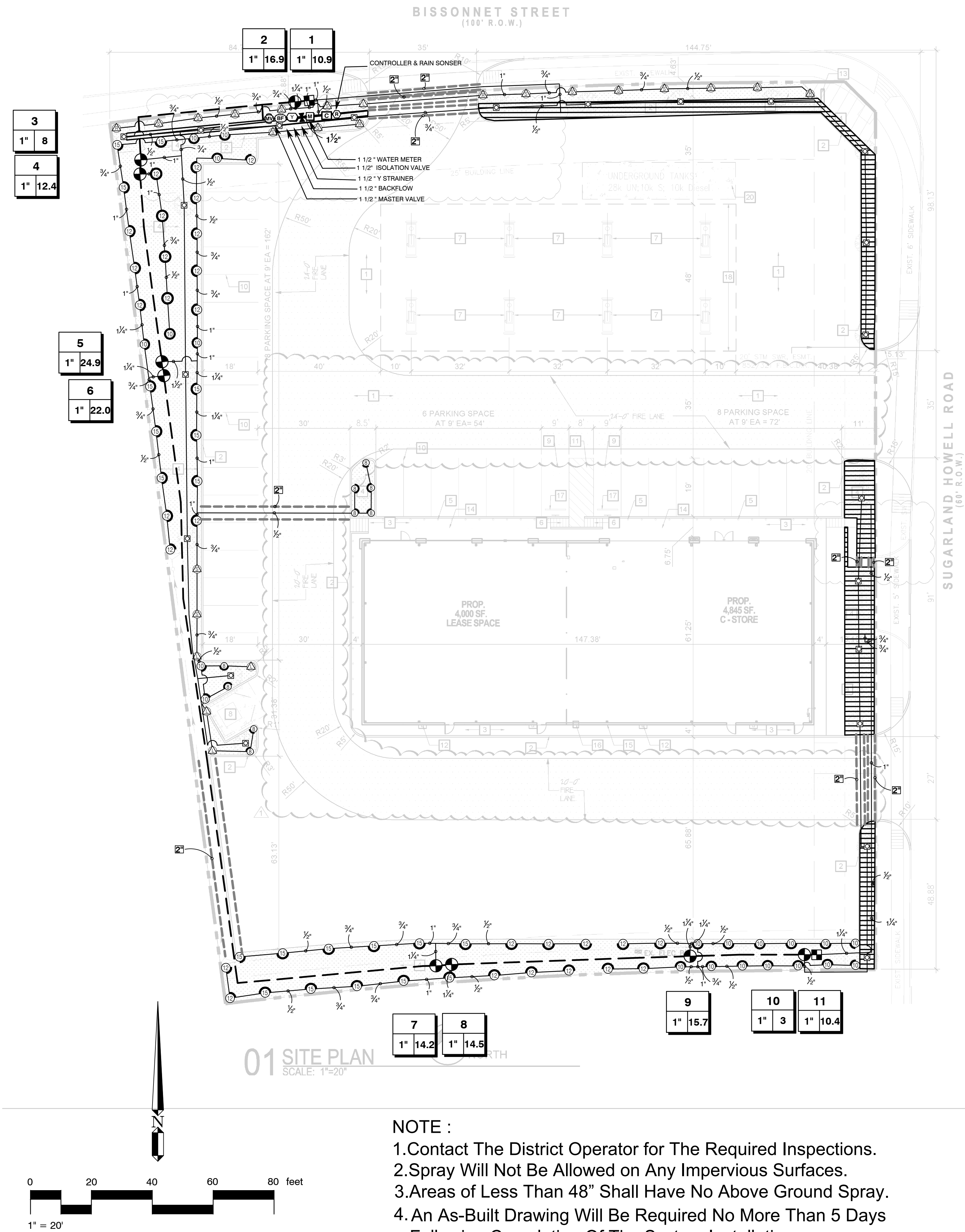
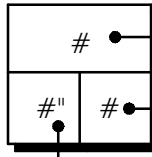




IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	ARC	PSI	RADIUS
	Hunter PROS-04 LCS-515	5	LCS	30	5x15'
	Hunter PROS-04 RCS-515	4	RCS	30	5x15'
	Hunter PROS-04 SS-530	15	SST	30	5x30'
	Hunter PROS-04 08H	4	180	30	8'
	Hunter PROS-04 08Q	5	90	30	8'
	Hunter PROS-04 10F	1	360	30	10'
	Hunter PROS-04 10H	16	180	30	10'
	Hunter PROS-04 10Q	4	90	30	10'
	Hunter PROS-04 12F	4	360	30	12'
	Hunter PROS-04 12H	20	180	30	12'
	Hunter PROS-04 12Q	4	90	30	12'
	Hunter PROS-04 15H	18	180	30	15'
	Hunter PROS-04 15Q	2	90	30	15'
	Hunter PCB 50	22	360	30	3'
SYMBOL	MANUFACTURER/MODEL	QTY	PSI		
	Hunter ICZ-101-40 1"	2			
	Area to Receive Dripline Hunter HDL-06-12-CV	2,129 l.f.	20		
SYMBOL	MANUFACTURER/MODEL	QTY			
	Hunter ICV-G 1"	9			
	Shut Off Valve 1 1/2"	1			
	Hunter ICV-G 1-1/2"	1			
	Febco 825Y 1-1/2"	1			
	Hunter PCC-1200	1			
	Hunter RAIN-CLIK	1			
	Y-Strainer 1 1/2"	1			
	Water Meter 1-1/2"	1			
	Irrigation Lateral Line: PVC Schedule 40 1/2"	1,390 l.f.			
	Irrigation Lateral Line: PVC Schedule 40 3/4"	401.6 l.f.			
	Irrigation Lateral Line: PVC Schedule 40 1"	394.5 l.f.			
	Irrigation Lateral Line: PVC Schedule 40 1 1/4"	116.4 l.f.			
	Irrigation Lateral Line: PVC Schedule 40 1 1/2"	11.6 l.f.			
	Irrigation Mainline: PVC Schedule 40 1 1/2"	553.9 l.f.			
	Pipe Sleeve: PVC Schedule 40 2"	284.9 l.f.			
					
Valve Callout					
● Valve Number					
● Valve Flow					
● Valve Size					

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	HEADS	PIPE	WIRE	DESIGN PSI	FRICTION LOSS	VALVE LOSS	PSI	PSI @ POC	PRECIP
1	Hunter ICZ-101-40	1"	Area for Dripline	10.85	1,086 l.f.	97.3	42.7	20	2.22	8.51	30.7	44.8	0.96 in/h
2	Hunter ICV-G	1"	Turf Spray	16.9	15	235.6	37.9	30	4.62	3	37.6	52.3	1.61 in/h
3	Hunter ICV-G	1"	Bubbler	8	16	549.9	82.0	30	5.36	2.8	38.2	52.2	1.7 in/h
4	Hunter ICV-G	1"	Turf Spray	12.39	5	58.1	86.7	30	2.42	3	35.4	49.9	0.76 in/h
5	Hunter ICV-G	1"	Turf Spray	24.93	29	366.6	148.8	30	4.09	5.96	40.0	57.7	0.94 in/h
6	Hunter ICV-G	1"	Turf Spray	22.03	17	224.3	153.4	30	5.51	4.22	39.7	56.7	0.92 in/h
7	Hunter ICV-G	1"	Turf Spray	14.17	9	122.7	420.0	30	1.9	3	34.9	51.8	0.81 in/h
8	Hunter ICV-G	1"	Turf Spray	14.54	10	130.6	425.2	30	2.38	3	35.4	52.5	0.84 in/h
9	Hunter ICV-G	1"	Turf Spray	15.72	17	173.5	503.6	30	1.74	3	34.7	53.0	1.52 in/h
10	Hunter ICV-G	1"	Bubbler	3	6	184.1	541.1	30	3.54	2.25	35.8	49.9	1.7 in/h
11	Hunter ICZ-101-40	1"	Area for Dripline	10.44	1,043 l.f.	171.1	545.1	20	3.31	8.26	31.6	47.5	0.96 in/h
	Common Wire						553.9						

WATERING SCHEDULE

NUMBER	MODEL	TYPE	PRECIP	SUN	MON	TUE	WED	THU	FRI	SAT	IN./WEEK	MIN./WEEK	GAL./WEEK	GAL./DAY
1	Hunter ICZ-101-40	Area for Dripline	0.96 in/h		21 min		21 min		21 min		1	63	684	228
2	Hunter ICV-G	Turf Spray	1.61 in/h											
3	Hunter ICV-G	Bubbler	1.7 in/h	15 min				15 min		15 min	1.25	45	360	120
4	Hunter ICV-G	Turf Spray	0.76 in/h											
5	Hunter ICV-G	Turf Spray	0.94 in/h											
6	Hunter ICV-G	Turf Spray	0.92 in/h											
7	Hunter ICV-G	Turf Spray	0.81 in/h											
8	Hunter ICV-G	Turf Spray	0.84 in/h											
9	Hunter ICV-G	Turf Spray	1.52 in/h											
10	Hunter ICV-G	Bubbler	1.7 in/h	15 min				15 min		15 min	1.25	45	135	45
11	Hunter ICZ-101-40	Area for Dripline	0.96 in/h		21 min		21 min		21 min	15 min	1	63	658	219
	TOTALS:			30	42		42	30	42	30		216	1,836	612.1

CRITICAL ANALYSIS

P.O.C. NUMBER: 01	
Water Source Information:	
FLOW AVAILABLE	
Water Meter Size:	1-1/2"
Flow Available	75 GPM
PRESSURE AVAILABLE	
Static Pressure at POC:	62 PSI
Elevation Change:	5.00 ft
Service Line Size:	3"
Length of Service Line:	20 ft
Pressure Available:	59 PSI
DESIGN ANALYSIS	
Maximum Station Flow:	24.93 GPM
Flow Available at POC:	75 GPM
Residual Flow Available:	50.07 GPM
Critical Station:	5
Design Pressure:	30 PSI
Friction Loss:	3.72 PSI
Fittings Loss:	0.37 PSI
Elevation Loss:	0 PSI
Loss through Valve:	5.96 PSI
Pressure Req. at Critical Station:	40.0 PSI
Loss for Fittings:	0.24 PSI
Loss for Main Line:	2.43 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	12.2 PSI
Loss for Master Valve:	1.5 PSI
Loss for Water Meter:	1.29 PSI
Critical Station Pressure at POC:	57.7 PSI
Pressure Available:	59 PSI
Residual Pressure Available:	1.3 PSI



281 341-0499



SHEET DESCRIPTION:
IRRIGATION DESIGN

Casey Reimann
04/26/2023

PROJECT:
Strike #3 Gas Station
14215 Bissonnet ST.
HOUSTON TX 77083

REVISIONS:
None

DATE:
04/26/2023

JOB NUMBER:
D1-04262023

DRAWN BY:
CASEY REIMANN

CHECKED BY:
CLR

SCALE:
1" = 20'

SHEET:
LI.00