

April 15, 2022

City of Aurora
Attn: Vern Adam, Engineering Services Manager
15151 E. Alameda Parkway
Aurora, CO 80012

RE: Horizon Uptown City Center, Master Utility Report – 218158MU1 – Conformance

Dear Vern,

The Horizon Uptown Filing 6 project is located east of Picadilly Road and south of E. 11th Avenue. This project is also north of the existing Horizon Uptown Filing 1 (EDN 219142). See Figure 1 for a Vicinity map.

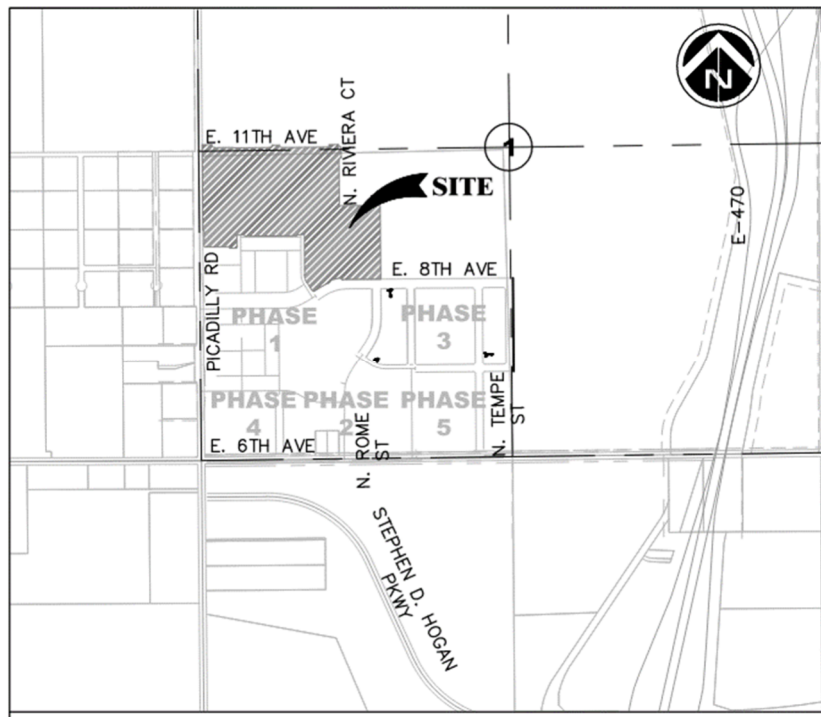


Figure 1 – Vicinity Map

Filing 6 will build 160 households within PA -14. These homes will add to the 146 units built within Horizon Uptown Filing 1 (EDN 219142) for a total of 306 units. Per the approved Horizon Uptown City Center Master Utility Study (MUS) (EDN 218158), PA-14 was planned for a total of 309 units. Therefore, Horizon Uptown Filing 6 conforms to the anticipated density within the approved report.

Filing 6 will extend a 12-in water line within E. 11th Avenue from the 12-in water line being constructed with the Horizon Uptown Offsite Utilities- Phase 2 project (RSN 1591286) within Picadilly Road. The 12-in water line will form a loop with the western connection to the 12-in water line in Picadilly Road to the 12-in water line stub at the intersection of N. Riviera Court and E. 8th Avenue, that has been constructed with the Horizon Uptown Filing 3 (EDN 220171) project. The 12-in water line loop conforms to the approved

MUS for the water line.

Filing 6 will extend a 15-in sanitary line within E. 11th Avenue from the 15-in sanitary line being constructed with the Horizon Uptown Offsite Utilities- Phase 2 project (RSN 1591286) within Picadilly Road. The 15-in sanitary line will be extended to the intersection of N. Riviera Court and E. 11th Avenue with a 10-in sanitary stub placed to the north and an 8-in sanitary stub placed to the east.

Horizon Uptown Filing 6 conforms in household density and utility line construction with the approved Horizon Uptown City Center Master Utility Study and Amendment 1 submitted with the Horizon Uptown Offsite Utility Improvements Phase 2.

Sincerely,



Alaina Kneebone Marler
Project Manager

attachments

REFERENCES

1. *City of Aurora Water, Sanitary Sewer & Storm Drainage Infrastructure Standards and Specifications*, January 2022
2. *Horizon Uptown City Center Draft Master Utilities Report*, Matrix Design Group Inc., September 18, 2018 EDN 218158MU1, 2008-3009 O5S
3. *Horizon Uptown City Center Draft Master Utilities Maps*, Matrix Design Group Inc., September 18, 2018 EDN 218158
4. *Horizon Uptown Subdivision Filing No. 1, Offsite Utility Improvements*, Matrix Design Group Inc., March 20, 2019 EDN 219057.
5. *Horizon Uptown Offsite Utility Improvement – Phase 2*, Dewberry Engineers Inc, RSN 1591286

HORIZON CITY CENTER
TABLE 4.1: LAND USE SUMMARY WITH WATER DEMANDS

Parcel	Area (AC)	Land Use	Units	People / Unit	Average Day Factor (gppd / gpad)	Average Day (gpd)	Average Day Demand (gpm)	Max Day Factor	Maximum Day (gpd)	Maximum Day Demand (gpm)	Max Hour Factor	Maximum Hour (gpd)	Maximum Hour Demand (gpm)
Town Center													
PA-1*	0.00	Residential	435	2.77	101	121,700	85	2.8	340,760	237	4.5	547,650	380
PA-1*	28.98	Commercial			1500	43,470	30	2.8	121,716	85	4.5	195,615	136
PA-1 Total	28.98						115			321			516
PA-2*	0.00	Residential	268	2.77	101	74,978	52	2.8	209,939	146	4.5	337,403	234
PA-2*	18.47	Commercial			1500	27,705	19	2.8	77,574	54	4.5	124,673	87
PA-2 Total	18.47						71			200			321
Crossroads													
PA-3	10.48	Commercial			1500	15,720	11	2.8	44,016	31	4.5	70,740	49
PA-4	19.52	Commercial			1500	29,280	20	2.8	81,984	57	4.5	131,760	92
PA-5	6.77	Commercial			1500	10,155	7	2.8	28,434	20	4.5	45,698	32
PA-6	13.41	Commercial			1500	20,115	14	2.8	56,322	39	4.5	90,518	63
PA-7	12.32	Commercial			1500	18,480	13	2.8	51,744	36	4.5	83,160	58
PA-8	17.30	Commercial			1500	25,950	18	2.8	72,660	50	4.5	116,775	81
PA-9	18.18	Commercial			1500	27,270	19	2.8	76,356	53	4.5	122,715	85
PA-10	16.49	Commercial			1500	24,735	17	2.8	69,258	48	4.5	111,308	77
PA-11	2.25	Fire Station			1500	3,375	2	2.8	9,450	7	4.5	15,188	11
SUN-1													
PA-12	37.36	Residential	360	2.77	101	100,717	70	2.8	282,008	196	4.5	453,227	315
PA-13	27.98	Residential	269	2.77	101	75,258	52	2.8	210,723	146	4.5	338,662	235
PA-14	32.15	Residential	309	2.77	101	86,449	60	2.8	242,057	168	4.5	389,020	270
PA-15*	32.60	Residential	313	2.77	101	87,568	61	2.8	245,190	170	4.5	394,056	274
PA-15*	5.80	Commercial			1500	8,700	6	2.8	24,360	17	4.5	39,150	27
PA-15 Total	38.40						67			187			301
SUN-2													
PA-16	23.16	Residential	272	2.77	101	76,097	53	2.8	213,073	148	4.5	342,438	238
PA-17	29.00	Residential	340	2.77	101	95,122	66	2.8	266,341	185	4.5	428,048	297
PA-18	20.71	Residential	243	2.77	101	67,984	47	2.8	190,356	132	4.5	305,928	212
PA-19	17.27	Residential	203	2.77	101	56,793	39	2.8	159,021	110	4.5	255,570	177
PA-20	14.00	School			1200	16,800	12	2.8	47,040	33	4.5	75,600	53

* - PA includes both commercial and residential uses.

— Total units in PA-14= 309

HORIZON CITY CENTER
Table 5.1: AVERAGE DAILY FLOW - BY BLOCK

Block	Design Point	Land Use	Acreage	Residential Units	People per Unit	Equivalent Populations (people / acre)	Population (Equiv for non-residential)	Average Daily Flow per Capita (gpd)	Average Daily Flow (gpd/acre)	Average Daily Flow (gpm)	Peak Factor	Peak Flow (gpm)	Infiltration (10%)	Total Peak Flow (gpm)
Town Center			47.45	703										
PA-1	1A	Residential	-	435	2.77	0	1205	68		56.90	4.00	227.60	5.69	233.29
	1A	Retail/Commercial	28.98	-	-	22	638	-	1500	30.19	4.00	120.75	3.02	123.77
PA-2	2A	Residential	-	268	2.77	0	742	68		35.06	4.00	140.22	3.51	143.73
	2A	Retail/Commercial	18.47	-	-	22	406	-	1500	19.24	4.00	76.96	1.92	78.88
Crossroads			116.72											
PA-3	1	Retail/Commercial	10.48	-	-	22	231	-	1500	10.92	4.00	43.67	1.09	44.76
PA-4	1	Retail/Commercial	19.52	-	-	22	429	-	1500	20.33	4.00	81.33	2.03	83.37
PA-5	1A	Retail/Commercial	6.77	-	-	22	149	-	1500	7.05	4.00	28.21	0.71	28.91
PA-6	5A	Retail/Commercial	13.41	-	-	22	295	-	1500	13.97	4.00	55.88	1.40	57.27
PA-7	5A	Retail/Commercial	12.32	-	-	22	271	-	1500	12.83	4.00	51.33	1.28	52.62
PA-8	5A	Retail/Commercial	17.30	-	-	22	381	-	1500	18.02	4.00	72.08	1.80	73.89
PA-9	5	Retail/Commercial	18.18	-	-	22	400	-	1500	18.94	4.00	75.75	1.89	77.64
PA-10	8	Retail/Commercial	16.49	-	-	22	363	-	1500	17.18	4.00	68.71	1.72	70.43
PA-11	1	Fire Station	2.25	-	-	22	50	-	1500	2.34	4.00	9.38	0.23	9.61
SUN-1			135.89	1251										
PA-12	2	Residential	37.36	360	2.77	-	997	68	0	47.09	4.00	188.36	4.71	193.07
PA-13	2	Residential	27.98	269	2.77	-	745	68	0	35.19	4.00	140.75	3.52	144.27
PA-14	3	Residential	32.15	309	2.77	-	856	68	0	40.42	4.00	161.68	4.04	165.72
PA-15	4	Residential	32.60	313	2.77	-	867	68	0	40.94	4.00	163.77	4.09	167.86
PA-15	7	Retail/Commercial	5.80	-	-	22	128	-	1500	6.04	4.00	24.17	0.60	24.77
SUN-2			104.14	1058										
PA-16	6	Residential	23.16	272	2.77	-	753	68	0	35.58	4.00	142.32	3.56	145.87
PA-17	6	Residential	29.00	340	2.77	-	942	68	0	44.47	4.00	177.90	4.45	182.34
PA-18	5	Residential	20.71	243	2.77	-	673	68	0	31.79	4.00	127.14	3.18	130.32
PA-19	5A	Residential	17.27	203	2.77	-	562	68	0	26.55	4.00	106.21	2.66	108.87
PA-20	6	School	14.00	-	0.00	18	252	-	1200	11.67	4.00	46.67	1.17	47.83
OFFSITE			124.50	310										
OFFSITE (NW)	3A	Retail/Commercial	60.00	-	-	22	1320	-	1500	62.50	4.00	250.00	6.25	256.25
OFFSITE (S)	6	Retail/Commercial	32.25	-	-	22	710	-	1500	33.59	4.00	134.38	3.36	137.73
OFFSITE (S)	6	Residential	32.25	310	2.77	-	859	68	0	40.55	4.00	162.20	4.05	166.25

Note:

Offsite (NW) Commercial Area estimate provided by the City of Aurora.

Offsite (S) Residential and Retail/Commercial Population and Area estimate provided by the City of Aurora.

Total Population 15,223

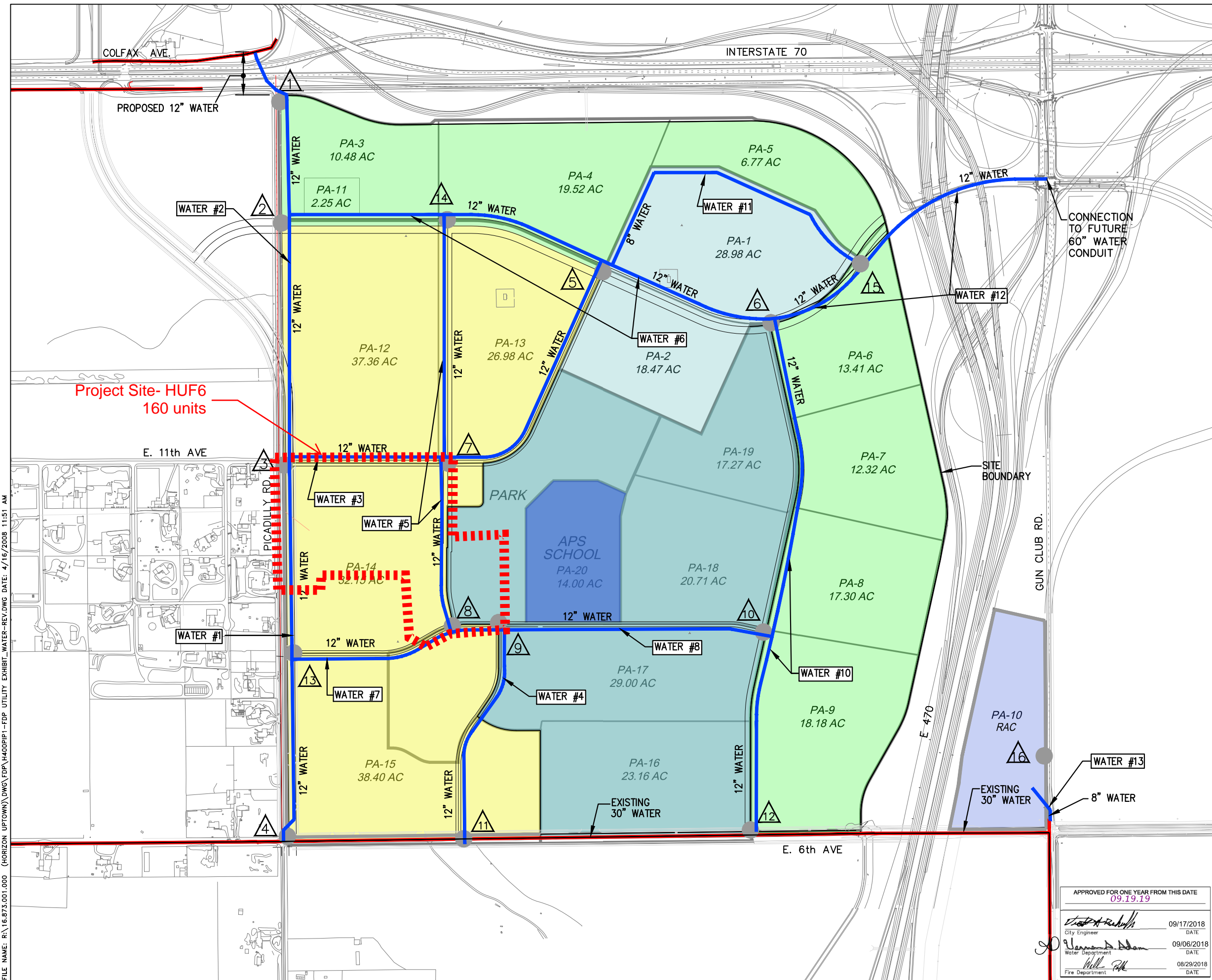
Total 719.35

2,877.39

Total (gpd) 1,035,862

4,143,448

— Total units in PA-14= 309



Framework Development Plan Horizon City Center

SWC of I-70 and E-470
Aurora, Colorado
January 10, 2018

LEND LEASE COMMUNITIES LLC
3800 MOUNT PYRAMID COURT, SUITE 400
ENGLEWOOD, CO 80112
www.lendlease.com

RNL STANTEC ARCHITECTURE, INC.
1050 17TH STREET, SUITE A200
DENVER, CO 80202
www.stantec.com

MATRIX DESIGN GROUP
1601 BLAKE STREET, #200
DENVER, CO 80202
www.matrixdesigngroup.com

- LEGEND**
- W — PROPOSED WATER
 - W — EXISTING WATER
 - BASIN BOUNDARY
 - 1 NODE

This electronic plan is a facsimile of the signed and sealed pdf plan


Jason Rutt, CO PE #36971
8/20/18
Date

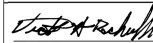


OVERALL WATER EXHIBIT

SHEET 1

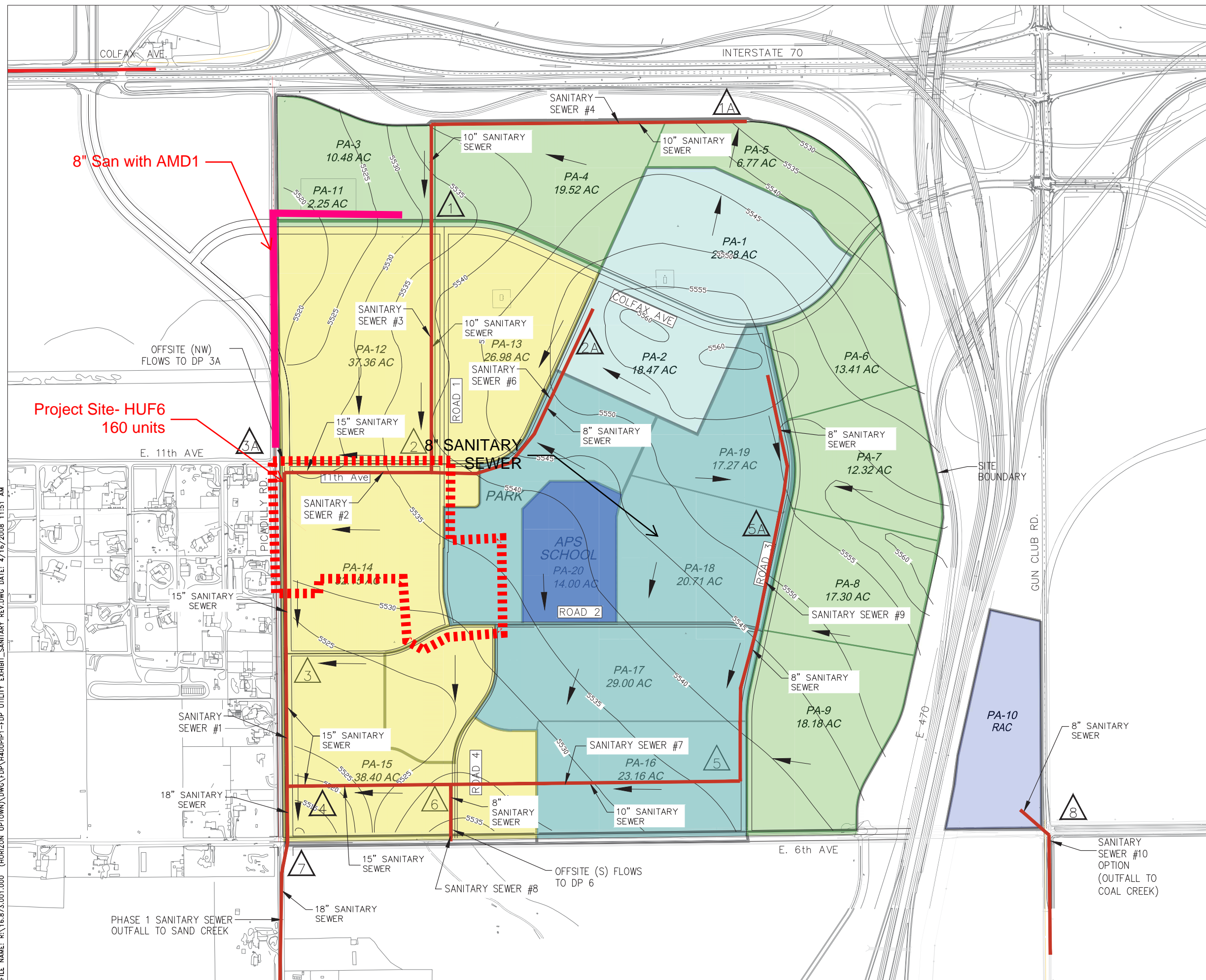


ORIGINAL SCALE: 1" = 300'-0"
NOTE: SCALE IS APPROXIMATE

Horizon City Center

APPROVED FOR ONE YEAR FROM THIS DATE 09.19.19	
	09/17/2018 DATE
City Engineer	
	09/06/2018 DATE
Water Department	
	08/29/2018 DATE
Fire Department	

FILE NAME: R:\16.873.001.000 (HORIZON UPTOWN)\DWG\FDP\H400P1-FDP UTILITY EXHIBIT_SANITARY REV.DWG DATE: 4/16/2008 11:51 AM



Framework Development Plan Horizon City Center

SWC of I-70 and E-470
Aurora, Colorado
January 10, 2018

LEND LEASE COMMUNITIES LLC
3800 MOUNT PYRAMID COURT, SUITE 400
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RNL
STANTEC
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1050 17TH STREET, SUITE A200
DENVER, CO 80202
www.stantec.com

Matrix
DESIGN GROUP
1601 BLAKE STREET, #200
DENVER, CO 80202
www.matrixdesigngroup.com

LEGEND

- P-SS PROPOSED SANITARY SEWER
- BASIN BOUNDARY
- DESIGN POINT
- FLOW ARROW
- 5560 PROPOSED CONTOUR

This electronic plan is a facsimile of the signed and sealed pdf plan

Jason Rutt
Jason Rutt, CO PE #36971

8/20/18
Date

OVERALL SANITARY SEWER EXHIBIT

SHEET 2



ORIGINAL SCALE: 1" = 300'-0"
NOTE: SCALE IS APPROXIMATE

Horizon City Center

APPROVED ON 09.19.18