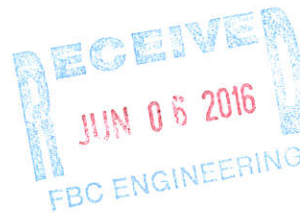




KERRY R. GILBERT
& ASSOCIATES



May 20, 2016

Mr. Richard Stoellis, P.E.
County Engineer
Fort Bend County, Texas
301 Jackson St, 4th Floor
Richmond, TX 77469

Re: Veranda – Wildwood Park Rd. Street Dedication – Centerline Radius Variance

Dear Mr. Stoellis,

On behalf of HW 589 Holdings, LLC., we, BGE|Kerry R. Gilbert & Associates, respectfully submit a variance request to allow for the use of a reduced centerline radius (750') on a collector road instead of the required 850' centerline radius as required in Section 5.4 of the Fort Bend County Subdivision Regulations.

The plat requiring the variance is a ± 2.5 acre street dedication plat for a portion of the Wildwood Park Rd. extension in Veranda, located south-south east of the roundabout being constructed on Veranda Trails Parkway. Veranda is a new subdivision, approximately 589 acres in size, located in the City of Richmond's Extra Territorial Jurisdiction and is located south of Williams Way Boulevard, north of the Fort Bend Country Club and Del Webb Richmond, and west of Riverpark West. Wildwood Park Rd. is a proposed collector road through this tract per both the Fort Bend County and City of Richmond Major Thoroughfare Plans.

This plat, along with the Veranda General Plan, and eight section plats have been submitted to the City of Richmond and have received preliminary approval from both their Planning & Zoning Commission and City Commission with no comments. As part of the development agreement with the City, all collectors within the development will have a 70' R.O.W. width and include a 41' paving section. On either side of the collector R.O.W., there will be landscape reserves and no lots will be taking frontage off the designated collector streets, well above the minimum standards set out in the County's Subdivision Regulations regarding collector streets.

In looking at the existing portion of Wildwood Park Rd. through Riverpark West, we would anticipate a similar design speed of 30 or 35 mph for the portion of the roadway within Veranda. Also, the portion of the plat with the reduced radius is located on the west end of the plat connecting to the roundabout, which creates an additional measure of traffic calming and should assist in drivers reducing their speed as they approach the roundabout. In researching other available standards for minimum centerline radii, the AASHTO manual has many tables illustrating the minimum acceptable centerline radii for roadways with lower design speeds. Table 3-13b, attached, shows the minimum acceptable radii for low speed urban streets as a comparison of the roadway's superelevation and design speed. From the table, a roadway with a design speed of 30 mph with 0% superelevation would require a radius of 300' or greater, and one with a 35 mph design speed and no superelevation would require no less than a 454' radius.

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As previously stated, the plat has already received preliminary plat approval from the City of Richmond, and the physical location immediately adjacent to the roundabout should provide additional traffic calming and speed reduction as drivers approach the intersection. The proposed 750' radius also meets and exceeds national standards for roadways with lower design speeds as shown in the attached AASHTO table, and the design is similar to numerous other collector road sections in the county that have been previously approved and constructed without issue. Examples of which include Flewellen Way in Cross Creek Ranch, Avalon Dr. in Avalon at Riverstone, and Harvest Garden Blvd. in Harvest Green, amongst numerous others. For these reasons, we respectfully request a variance for this street dedication plat to allow a 750' centerline radius instead of the required 850' radius as outlined in the Fort Bend County Subdivision Regulations Section 5.4.

Please feel free to contact me if you have any comments or questions.

Sincerely,

A handwritten signature in black ink, appearing to be 'KM', written over a horizontal line.

Kent Milson
(Attachment: AASHTO (2011) – Table 3-13b)

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Table 3-13b. Minimum Radii and Superelevation for Low-Speed Urban Streets

U.S. Customary							
e (%)	$V_d = 15$ mph	$V_d = 20$ mph	$V_d = 25$ mph	$V_d = 30$ mph	$V_d = 35$ mph	$V_d = 40$ mph	$V_d = 45$ mph
	R (ft)	R (ft)	R (ft)	R (ft)	R (ft)	R (ft)	R (ft)
-6.0	58	127	245	429	681	1067	1500
-5.0	56	121	231	400	628	970	1350
-4.0	54	116	219	375	583	889	1227
-3.0	52	111	208	353	544	821	1125
-2.8	51	110	206	349	537	808	1107
-2.6	51	109	204	345	530	796	1089
-2.4	51	108	202	341	524	784	1071
-2.2	50	108	200	337	517	773	1055
-2.0	50	107	198	333	510	762	1039
-1.5	49	105	194	324	495	736	1000
0	47	99	181	300	454	667	900
1.5	45	94	170	279	419	610	818
2.0	44	92	167	273	408	593	794
2.2	44	91	165	270	404	586	785
2.4	44	91	164	268	400	580	776
2.6	43	90	163	265	396	573	767
2.8	43	89	161	263	393	567	758
3.0	43	89	160	261	389	561	750
3.2	43	88	159	259	385	556	742
3.4	42	88	158	256	382	550	734
3.6	42	87	157	254	378	544	726
3.8	42	87	155	252	375	539	718
4.0	42	86	154	250	371	533	711
4.2	41	85	153	248	368	528	703
4.4	41	85	152	246	365	523	696
4.6	41	84	151	244	361	518	689
4.8	41	84	150	242	358	513	682
5.0	41	83	149	240	355	508	675
5.2	40	83	148	238	352	503	668
5.4	40	82	147	236	349	498	662
5.6	40	82	146	234	346	494	655
5.8	40	81	145	233	343	489	649
6.0	39	81	144	231	340	485	643
6.2	39	80	143	229	337	480	637
6.4	39	80	142	227	335	476	631
6.6	39	79	141	226	332	472	625
6.8	39	79	140	224	329	468	619
7.0	38	78	139	222	327	464	614
7.2	38	78	138	221	324	460	608
7.4	38	78	137	219	322	456	603
7.6	38	77	136	217	319	452	597
7.8	38	77	135	216	317	448	592
8.0	38	76	134	214	314	444	587
8.2	37	76	134	213	312	441	582
8.4	37	75	133	211	309	437	577
8.6	37	75	132	210	307	434	572
8.8	37	74	131	208	305	430	567
9.0	37	74	130	207	302	427	563
9.2	36	74	129	205	300	423	558
9.4	36	73	129	204	298	420	553
9.6	36	73	128	203	296	417	549
9.8	36	72	127	201	294	413	544
10.0	36	72	126	200	292	410	540
10.2	36	72	126	199	290	407	536
10.4	35	71	125	197	288	404	531
10.6	35	71	124	196	286	401	527
10.8	35	71	123	195	284	398	523
11.0	35	70	123	194	282	395	519
11.2	35	70	122	192	280	392	515
11.4	35	69	121	191	278	389	511
11.6	34	69	120	190	276	386	508
11.8	34	69	120	189	274	384	504
12.0	34	68	119	188	272	381	500

Notes:

1. Computed using Superelevation Distribution Method 2.
2. Superelevation may be optional on low-speed urban streets.
3. Negative superelevation values beyond -2.0 percent should be used for unpaved surfaces such as gravel, crushed stone, and earth. However, a normal cross slope of -2.5 percent may be used on paved surfaces in areas with intense rainfall.