Comments on June 13, 2019 MPC Agenda Items Received through June 13, 2019

ITEM 4: 2019SP-027-001—ROOTS EAST SP

From: Susan Urmy [mailto:susan.urmy@gmail.com] Sent: Thursday, June 13, 2019 9:49 AM To: Zeigler, Robin (Historical Commission); Gilmore, Erica (Council Member); Hurt, Sharon (Council Member); Cooper, John (Council Member); Mendes, Bob (Council Member); Napier, Patrick (Planning) Subject: In regards to Multi-unit detached developments or "cottage" developments!

Hello, my name is Susan Urmy. I am a home owner and resident on West Eastland Ave. I am unable to attend the meetings due to the hours of my job, but I want to be apart of this decision and have my voice heard.

I have very deep concerns about the Multi-unit detached developments or "cottage" developments.

As anyone who drives by, eats at the restaurants or even walks their dogs on our street can see (and does comment to those of us who live there) how overwhelmed and congested with parking and traffic the street already is. Adding this development and ESPECIALLY putting one of the entrances and exits onto West Eastland will only further the already high stress rhythm of current traffic, parking, driving, walking, living ect. We do not want or approve of this street being an entrance or exit to new development or construction. Garages built or not. Further traffic and speeding on our street is a concern and not wanted at all. I would also like to address the site line of said buildings. If built I request they only be 2 stories high (and/or no higher than homes surrounding it) and for this construction to not take away what is left of the nature and character of our street and neighborhood!

Please respect our living conditions and our homes.

Sincerely, Susan Urmy

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Let the beauty of what you love be what you do. -rumi

ITEM 5: 2019S-043-001—HIGHLAND VIEW

From: Rob Cheplicki [mailto:rob.cheplicki@gmail.com] Sent: Wednesday, June 12, 2019 12:13 PM To: Planning Commissioners Cc: Kempf, Lucy (Planning); Rickoff, Abbie (Planning); Roberts, Mary Carolyn (Council Member); Murphy, Kathleen (Council Member); Johnson, Mina (Council Member) Subject: Re: Highland View: Case No. 2019S-043-001 (Transmission Tower Ice & Safety)

Document pertaining to Highland View: Case No. 2019S-043-001

Rob Cheplicki 6453 Fleetwood Drive Nashville TN 37209

<u>Comments on June 13, 2019 MPC Agenda Items</u> <u>Received through June 13, 2019</u>

SEE ATTACHMENTS ON FOLLOWING PAGES

From: Rob Cheplicki [mailto:rob.cheplicki@gmail.com] Sent: Wednesday, June 12, 2019 1:08 PM To: Planning Commissioners Cc: Kempf, Lucy (Planning); Rickoff, Abbie (Planning); Roberts, Mary Carolyn (Council Member); Murphy, Kathleen (Council Member); Johnson, Mina (Council Member); Don ODonniley; Kathy Cloninger Subject: Highland View: Case No. 2019S-043-001 Legal Documents Submission

These legal documents are being submitted and were prepared by Don O'Donniley and Joe Johnston the legal counsel representing Neighbors for Knob Hill as part of an official record regarding Highland View: Case No. 2019S-043-001

SEE ATTACHMENTS ON FOLLOWING PAGES

From: Mr Stokley Richardson [mailto:stokleyr@yahoo.com] Sent: Wednesday, June 12, 2019 4:54 PM To: Planning Commissioners Subject: Knob Hill case no 2019s-043-001

Please vote no to any Knob Hill development. Case No 2019-043-001

Stokley Richardson 5516 Bon Air Circle Nashville,TN 37209

From: Miriam Leibowitz [mailto:callmemiriam@gmail.com] Sent: Wednesday, June 12, 2019 7:47 PM To: Planning Commissioners Subject: Knob Hill Highland View 2019S-043-001

Dear Planning Commissioners,

Thank you for your careful consideration of case #2019S-043-001. As a 13 year resident and former president of the White Bridge Neighborhood, I ask that you deny this subdivision proposal due to the risk to public safety, including 2-3' shards of ice , lead contamination, loss of urban forestland, and runoff that will affect houses on my street, downhill from White Bridge Road.

Building on this land will have a negative impact on the surrounding neighborhood in all directions for the foreseeable future.

Please deny the request to build on Knob Hill and put a stop to bad development in our city.

Thank you, Miriam Leibowitz Meadowcrest Lane 37209

From: raul y [mailto:09rabindra@gmail.com] Sent: Wednesday, June 12, 2019 8:33 PM

CASE #2019S-043-001 "Highland View" Ice Damage and Safety Concerns

Dear Commissioners,

The following is a series of transmission tower videos and documents that should be considered when reviewing the Highland View concept plan.

Metro Nashville has a responsibility and obligation to protect the health, safety and welfare of current and future homeowners, and based on the concerns related to this development, the Planning Commission should be encouraged to vote against this concept.

- Neighbors for Knob Hill Nashville

Ice Falling from Transmission Towers

https://www.youtube.com/watch?v=48UyQtYYuUM&feature=youtu.be

https://www.youtube.com/watch?v=7Wp4gcAz7Ac&feature=youtu.be

Transmission tower collapse



Ice is culprit in toppling of 1,204' Kansas FM tower

March 30, 2009 - A 1,204-foot radio tower north of Wichita has collapsed, probably because of heavy ice.

The broadcast tower for KYQQ-FM fell on Saturday at a site near Winfield. Ks. No injuries or damage to surrounding structures was reported.



An initial examination by

Journal Broadcast Group's engineers showed heavy icing and wind from Saturday's storm as a possibly cause of the collapse. They are investigating whether other factors contributed. Icing on tower members was reported to be more than two inches.

By Sunday, the Spanish language broadcast signal, Radio Lobo 106.5, had been restored on an auxiliary site. The station is licensed to transmit at 100,000 watts.

Two Maltas, but one holds the world's record



Transmission Tower Safety concerns from the NAB regarding blasting, guy wires and soils.

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<i>←</i>	FACILITY SECURITY FCC Rule 73.127 and others state, "the licensee or per- mittee must retain control over all material transmit- ted in a broadcast mode via the station's facilities with the right to reject any material that it deems inappro- and While this rule covers programming on subcarrer While this rule covers programming on subcarrer

Based on this and other information that we have received and is readily available to all Metro agencies, commercial engineers and developers, my neighbors and myself urge the Planning Commission to vote against this concept until one is properly designed under the neighborhood and R40 policies and guidelines for this neighborhood.

This concept and development should not happen.

Respectfully,

Rob Cheplicki 6453 Fleetwood Drive Nashville TN 37209 **Neighbors for Knob Hill** knobroadcommunity@gmail.com

Atmospheric Icing and Tower Collapse in the United States

N. D. Mulherin

U.S. Army Cold Regions Research and Engineering Laboratory 72 Lyme Road, Hanover, New Hampshire, USA

Abstract

CRREL has established a database of communication tower collapses (TV, AM, FM, CATV, microwave, cellular, and so forth) that have occurred in the United States due to atmospheric ice accretion. The information was compiled primarily from newspapers articles and telephone interviews, but also from a multitude of other sources. The database currently lists 140 such failures of towers, ranging in height from 40 to 2000 ft above ground level (agl), dating as far back as 1959. For each case, I am compiling the following information: 1) structural characteristics of the tower, 2) the geographic location and topography, 3) a description of the collapse, 4) concurrent weather, and 5) damage. The database is growing and therefore not fully analyzed. In many cases, data in all these topic areas do not exist or are not available; some data I have yet to obtain. Trends in the current information are presented.

Keywords

Communication tower, Glaze, Ice accretion, Icing, Radio and television, Rime, Tower collapse, Tower failure

1. Introduction

A radio or telecommunication mast is composed of 1) an antenna, for sending or receiving electromagnetic signals such as TV, AM, FM, CATV, VHF, microwave, cellular, etc., and 2) its supporting structure, one or more steel towers with guy cables and anchors (though some towers are freestanding). This paper will use the term "tower" to refer to both an antenna and its supporting structures as a unit.

While established engineering practice requires that certain minimum loads be considered in their design, communication towers collapse for a variety of reasons. Some collapses can be attributed to human error, such as flawed design or construction, lack of regular maintenance, accidental damage, and so forth. Other causes include malicious mischief, metal fatigue, and the use of substandard material. However, most failures are caused by rare natural events (for example, blizzard, hurricane, tornado, and earthquake).

Ice storms are a natural hazard that cause towers to collapse. Ice can build up on towers from liquid precipitation such as freezing rain or drizzle, or from wet snow (precipitational icing), or from wind-transported, supercooled fog droplets that freeze when they contact a structure (in-cloud icing). Both types of icing are referred to as atmospheric icing.

Atmospheric icing is a design consideration for the radio and telecommunications industries. For optimum signal transmission or reception, antennas are typically elevated and exposed. These are prime conditions for wind loading and ice accumulation. Ice buildup on towers causes signal interference, structural fatigue from dynamic loading, guy wire stretch, ice-fall damage when the ice sheds, and complete tower failure. This paper describes a database created at CRREL to document icing-related tower failures in the United States. In this context, a tower failure is defined as the collapse of at least the antenna of a communication mast and can include the partial or total collapse of its supporting tower.

2. Sources of Information

While catastrophic failure of a communication tower is relatively rare, it occurs perhaps more often than is generally known or acknowledged. There is no organization that is responsible for maintaining a history of tower failures, icing-related or otherwise. I assembled the information in this database over approximately a decade of research, and believe it to be the most complete list of icing-related failures in existence. I was aided by individuals who shared with me their own unpublished lists of tower failures (Goudy 1992, Marshall 1992, Monts 1992, Laiho 1993). Their lists contained more well-known failures of towers throughout the world, from any and all causes. Duvall (1993) provided a list of 14 failures for which was known the maximum distance that debris landed from the tower base. From these lists, I extracted only those in the U.S that were icing related and began researching each one in more detail. Much of my information I obtained from interviews with station owners, transmitter engineers, tower designers, fabricators, and builders who had some personal knowledge of the events (telephone interviews have been completed for approximately 60% of the cases). These contacts led, in turn, to information on a great many more failures that were not widely known about. The survey form that I completed during each telephone interview appears in the Appendix.

I supplemented this first- and second-hand knowledge with storm records from the National Climatic Data Center (NCDC 1960-1994, NOAA 1959-1995) (for approximately 60% of the cases) and newspaper articles from state and local libraries (for approximately 70% of cases). When other sources were lacking, I obtained the names of towers, their coordinates, heights, or ground elevations from the U.S. Geological Survey's digital database of place names appearing on their 71/2-min quadrangle maps (USGS 1993) or from the National Oceanic and Atmospheric Administration's Digital Obstructions File (O'Brien 1994). NOAA's DOF lists all types of obstructions to aviation. Besides tall buildings, smokestacks, catenaries, grain elevators, and so forth, it lists 43,467 communication towers (or clusters of towers) in the 50 states.

3. Trends Derived from the Major Topics of the Database

To date, I have confirmed approximately 140 tower collapses in the United States, dating back to 1959, that occurred with a buildup of atmospheric ice on the structure. These are listed as Table 1. Approximately 15 more reports are, as yet, unconfirmed. The towers include television, radio (FM, AM, and two-way), and microwave receivers and transmitters, ranging in height from 40 to 2000 ft agl. I have obtained varying amounts data for each failure in the form of 1) structural characteristics of the tower, 2) its geographic location, 3) a description of the collapse, 4) concurrent weather, and 5) resulting damage. The picture is constantly changing as new failures occur and as past failures are added to the database; however, I will describe certain trends in the data from each of these main topics and summarize the current information.

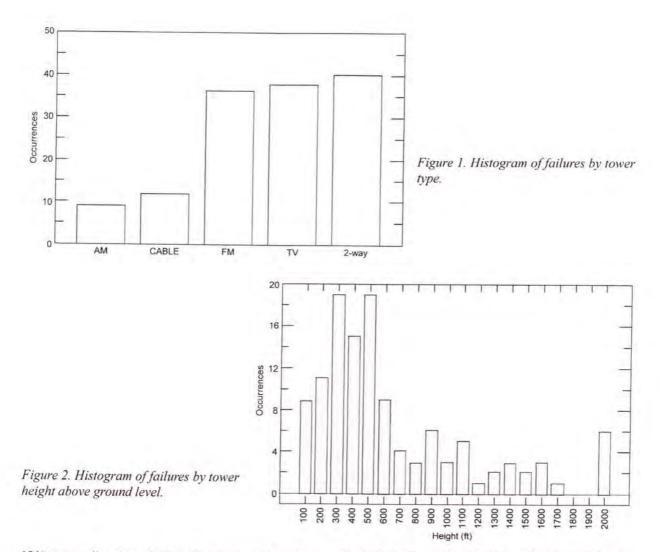
3.1 Structural Characteristics

Communication towers are usually triangular in cross section (though some are rectangular), with legs and cross bracing constructed of solid rod, tubular, or angular galvanized steel. They are usually supported against lateral loads by a network of guy cables attached to each of the legs at one or several elevations. The guys radiate downward to sets of three anchors in the ground. Depending on the tower's height and design loads, single, double, triple, or quadruple sets of three anchors provide ground attachment, each set being buried a greater radial distance from the tower's base. Although most towers have a constant horizontal cross section over their entire height, many towers are designed with either a continuous taper or with intermittent tapered sections from bottom to top. Freestanding towers (without guy cables and anchors) are nearly always tapered, of heavier construction, more expensive to build, and therefore not as numerous as guyed towers. Freestanding towers require less land area so they may be used at sites where land costs are high or space is limited.

Only one of the failures is known to have involved a freestanding tower, a 310-ft, two-way-radio tower that was approximately 17 years old. The average tower age, for the 77 cases in which that information is available, is 11.5 years, and the standard deviation is 10 years. Of those cases in which the structure cross section is known, most had a constant cross section, but a few tapered.

Communication towers usually serve many functions. Many stations broadcast both FM and AM frequencies from the same tower, and sometimes a television signal. Often a television station leases tower space to a separate radio station and any number of two-way user groups. For this report, I have classified each tower according to its primary use. Figure 1 shows the distribution of the tower types in this database. The largest number of failures involved television and FM broadcasters, and two-way transmitters; their total numbers are almost the same. Failures of AM broadcast and cable television receiver towers are noticeably fewer. The numbers somewhat reflect the much greater incidence of certain tower types, with the exception of twoway towers. Towers dedicated to AM or cable television are considerably less numerous than the other three types. Although two-way towers (including paging and mobile telephone towers) vastly outnumber television and FM towers, their collapse affects fewer people so perhaps there is less attention paid to their demise. We are less likely to find old newspaper articles and people do not recall as readily when a private company loses its two-way tower during a storm. For these reasons, I believe that failures of two-way towers are vastly underreported and therefore not well represented by these data. I have several reports of such failures that I have not been able to confirm, and therefore have not included in this summary.

A histogram showing the heights of 121 of the towers appears as Figure 2. Nearly a third, or 39 of the towers, were 300 ft tall or less. A similar number (43 of 121) were between 300 and 601 ft tall. One-fifth (24 of



121) were taller than 1000 ft. The mean and median heights for the 121 cases were 607 and 480 ft, respectively.

Other structural information in my database includes, when available, the tower's wind and ice design loads, face width, anchor pattern, number of guy levels, and other transmitting or receiving equipment on the tower.

2.2 Geographic Location and Topography

Figure 3 shows where icing failures have occurred across the U.S. The numeral shown in each state indicates the number of separate storms that caused all the failures within that state. For example, three towers fell in two separate storms in Texas; one in 1960 and two more in a 1978 storm. The map symbols indicate the height ranges of these towers.

The data indicate that icing-related tower failures have occurred almost exclusively east of the Rocky Mountains and 66% (93 of 140) occurred north of latitude N37° (i.e., north of Arizona, Oklahoma, Arkansas, Tennessee, and North Carolina). The most failures have occurred in the midwestern states and the Appalachian highlands. There have been at least six failures resulting from at least four separate storms in each of North and South Dakota, Minnesota, Iowa, Nebraska, and Kansas. Six failures have occurred in Illinois, although from only two storms.

The many failures in the southern Appalachian uplands of North and South Carolina and Alabama were generally the result of fewer storms per state, compared with those in the upper Midwest. Those southern storms were generally more widespread and severe. In February 1994, the southeastern U.S. was hit by an unusually devastating ice storm (Lott and Ross 1994). The storm caused over \$3 billion in damages and cleanup costs, and at least nine deaths. An estimated 2.2 million people in 11 states were without power at some point during the storm and, in some locations, power was not restored for a month (FEMA 1994). The lowland delta region of northwestern Mississippi, shown as a hatched area in Figure 3, was especially hard hit. Nearly every communication tower in Bolivar and Washington coun-

Table 1: Current list of icing-related tower failures in the U.S.

Мо	Dy	Yr	Tower name	Туре	e Loca	ation	Height (ft)	No.	Mo	Dy	Yr	Tower name	Type	Loca	tion	Hei (f
11	28	59	WBRV	AM	Boonville	NY	250	71	1	22	83	WCIQ	TV	Mt Cheaha	AL	5
12		60		TV	Marfa	TX	200	72	3		83		2W	Baldwin	ND	5
12	50 Y	60	KSWS	TV	CapRock		1610	73	3		83		2W	Baldwin	ND	-
12	o						1010									
1		61	WCDC	TV	Adams	MA		74	3		83		FM	Baldwin	ND	
2		61	Antenna Systems	CT	Potsdam	NY	400	75	3		83		BK	Baldwin	ND	
2	26	61	Canton FD	2W	Canton	NY		76	3	6	83	KXMC	TV	Minot	ND	1
2	23	62		TV		KY		77	3	6	83	KSRE	TV	Minot	ND	1
1	16	67	KSDN	AM	Aberdeen	SD	270	78	3	6	83		2W	Minot	ND	
1	26	67	WICD	TV	Homer	IL	1335	79	3		83		CT	Winchester	CT	
-	26	67													MA	
- 1			Illini Elec	2W	Champaign	IL	310	80	3	9	83		TV	Mt Greylock		
4	30	67	KXMB	TV	St. Anthony	ND	882	81	3		83		TV	Sebago	ME	12
4	30	67	KEM Elec Co-op	2W	Linton	ND	370	82	11	28	83	KWWL	TV	Rowley	IA	20
2	6	69	NE Road Dept	2W	Flats	NE	300	83	3	18	84	KFDI	FM	Colwich	KS	1
2	26	69	KDIX	TV	Dickinson	ND	50	84	3	18	84	KLDH	TV	Dover	KS	1:
2		69	KXMB	TV	St. Anthony	ND	876	85	3	19	84		CT	Council Grove	KS	
2		71	WDOE	AM		NY	194	1 23	3	20	84		TV		ME	
		71			Dunkirk			86						E Eddington		-
2			WNPE	TV	Copenhagen	NY	925	87	3	20	84		TV	Dixmont	ME	2
2		71	KOIN	TV	Portland	OR	1000	88	3	20	84	radio tower	2W	Dixmont	ME	
2	28	71	KOIN	FM	Portland	OR	750	89	3	4	85	State of SD	2W	Parker	SD	4
12	16	72	Civil Defense	2W	Clarks Knob	PA	60	90	3	5	85	SPAT tower	TV	Fostoria	1A	4
1	8	73	Farmers Fertilizer	2W	Lovington	NM		91	12	1	86	NE G&P	2W	Bassett	NE	4
12		73	MidKansas	CT	Junction City	KS	500	92	12	2	86	KMNE	TV	Bassett	NE	15
12	3	73	MidKansas	CT		KS	500	93	12	2	86	NE Road Dept	2W	Rushville	NE	3
					Junction City			1.								
12	3	73	KS Hwy Patrol	2W	Clay Center	KS	245	94	12	2	86	NE Road Dept	2W	Tryon	NE	2
12	4	73	KJCK	FM	Junction City	KS	500	95	3	18	87	State of SD	2W	Miller	SD	2
12	4	73	KJCK	AM	Junction City	KS	500	96	12	15	87	WWPZ	AM	Petoskey	MI	4
12	4	73	KMKF	FM	Manhattan	KS	60	97	12	15	87	WAJC	FM	Indianapolis	IN	2
12	4	73	KRNT	TV	Alleman	IA	2000	98	12	26	87	KTUL	TV	Coweta	OK	19
12	4	73	KIFG	FM	Iowa Falls	LA	237	99	1	7	89	WGMR	FM	Phillipsburg	PA	2
12	4	73	Midwest Elec	2W	Des Moines	IA	100 C 40 C 20	and the second se	1	8	89		TV		PA	8
							100	100	1			WBRE		Mountaintop		
12	4	73	Farm Bureau	2W	Eldora	IA	230	101	2	8	89	WSTZ	FM	Raymond	MS	10
12	17	73	WKOX	AM	Framingham	MA	206	102	3	3	89	KFNF	FM	Oberlin	KS	4
1	11	75	Renville Cnty	CT	Bird Island	MN	550	103	3	8	89	WDSC	AM	Dillon	SC	
1	11	75	K & K	CT	Devils Lake	ND	500	104	12	10	89	WPTF	TV	Auburn	NC	19
1	11	75	KSFY/KELO	TV	Rowena	SD	1985	105	12	10	89	WRAL	TV	Auburn	NC	20
3	23	75														
			KLOH	FM	Jasper	MN	385	106	2	15	90	Falcon Cable	CT	Sedalia	MO	5
3	27	75	KRSW	FM	Chandler	MN	703	107	3	7	90	NE Road Dept	2W	Willowdale	NE	3
3	27	75	Watowan	CT	Godahl	MN	620	108	12	21	90	KHCD	TV	Manchester	KS	9
3	27	75	KXON	TV	Salem	SD	1569	109	3	12	91	WSHW	FM	Middle Fork	IN	5
3	27	75	KXEL	FM	Waterloo	IA	600	110	3	12	91	State of IN	2W	Geetingsville	IN	3
3	27	75	IA Safety Dept	2W	Storm Lake	IA	330	111	3	23	91	WDIO	TV	Duluth	MN	8
3	27	75	old tower	2W	Storm Lake	IA	320	112	11	1	91	KIA	FM	Mason City	1A.	8
12	21	75	NE Road Dept	2W	Tryon	NE	300	113	11	1	91	KCMR	FM	Mason City	LA	4
	4									÷.						2
3		76	WTMB	FM	Tomah	WI	406	114	11	4		CGordoCnty Sheriff	FM	Mason City	1A	
11	8	77	KDLO	TV	Garden City	SD	1405	115	11	1	91	KEZT	FM	Woodward	IA	10
11	9	77	KRSW/KLOH	FM	Chandler	MN	700	116	11	1	91	KNXR	FM	Rochester	MN	5
1	15	78	WKOX	FM	Framingham	MA	450	117	11	1	91	Falcon Cable	CT	Hiawatha	KS	4
2	6	78	KTNE	TV	Alliance	NE	1499	118	1		92	Polk Cnty Sheriff	2W	Tryon	NC	
2	10	78	KLOE	TV	Goodland	KS	790	119	3	18	93	Polk Cnty Sheriff	2W	Tryon	NC	2
		78	NLOL		Goodianu		120		2	10	94	WCLD	FM	Cleveland	MS	33
2	12					TX		120	-	10				Indianola	MS	1
2	12	78		-	and the second	TX	15	121	2		94	WDLJ	FM			17
3	25	78	WAND	TV	Argenta	IL	1314	122	2		94	home 2W tower	2W	Clarksdale	MS	
3	26	78	WJPT	TV	Bluffs	IL	1588	123	2	10	94	WAID	FM	Clarksdale	MS	3:
3	26	78	WCIA	TV	Dewitt	IL	303	124	2	10	94	WDMS	FM	Greenville	MS	50
3	26	78	Sammons	CT	Jacksonville	IL	440	125	2		94	Bolivar Cnty FD	2W	Pace	MS	19
12	28	82	Fulda Cable	TV		MN	126	126	2		94	WBAD	FM	Greenville	MS	30
12								127		10	94		AM	Greenville	MS	10
1	20	83	East MS Comm	2W	Meridian	MS	300							Greenville	MS	53
1	21	83	WAGI	FM	Forest City	NC	606	128			94	WIQQ	FM			
1	21	83	repeater tower	2W	Forest City	NC	300	129			94	KUUZ	FM	Greenville	MS	32
1	21	83	WQNS	FM	Clyde	NC	150	130	2		94	WSUH	AM	Oxford	MS	21
1	21	83	WESC	TV	Caesars Head	SC	1284	131			94	WMJW	FM	Cleveland	MS	39
1		83	WMUU	FM	Greenville	SC	200	132	2		94	WYMX	FM	Greenwood	MS	102
1	21						200					Time Warner	CT	Cleveland	MS	42
1	21	83	radio tower #1	2W	Red Mountain	AL		133	2		94					50
1	21	83	radio tower #2	2W	Red Mountain	AL		134	2	11	94	Engelkes Farms	2W	Hamburg	AR	31
1	21	83	radio tower #3	2W	Red Mountain	AL		135	2		94	TN DOT	2W	Camden	TN	
1				2W	Birmingham	AL		136	1	22	95	WHCF	FM	Bangor	ME	5
1	21	83	radio tower					137	2	22 5	96	WMUU	FM	Greenville	SC	20
1	21	83	radio tower #1	2W	Dbl Oak Mt.	AL				5	96	WMUU backup	BK	Greenville	SC	1
1	21	83	radio tower #2	2W	Dbl Oak Mt.	AL		138	2		96	WMUU 2W#1	2W	Greenville	SC	1
1	21	83	radio tower #3	2W	Dbl Oak Mt.	AL		139	2 2	5	96	WMUU 2W#2	2W	Greenville	SC	1
			LOUID LOWER I'M	-				140								

= Television

= FM radio

1 = AM radio

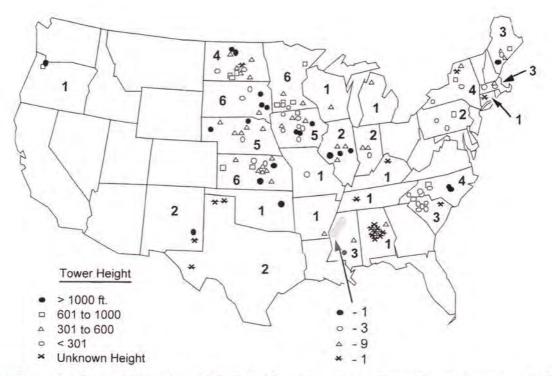


Figure 3. Icing-related tower failures since 1959. The boldfaced numeral in each state refers to the number of individual storms that caused the failures in that state.

ties collapsed. The 14 failures that I have confirmed to date for that storm are separately identified on the map. Many sources reported that these towers failed under radial ice thicknesses ranging from 4 to 6 in. Even though there was nearly no wind associated with that storm, the damage to trees, powerlines, and crops in Mississippi alone was estimated at more than \$2 billion. The damage to eight of those towers, ranging from 172 to 530 ft tall with an average height of 344 ft, totalled nearly \$1.8 million.

Other geographic and topographic information contained in this database includes the tower's coordinates, base elevation, height above average terrain (HAAT),* and a description of the terrain type upon which it was situated.

2.3 The Collapse

The database contains news and wit-

ness accounts of the collapse itself, such as the date and time of day, how the tower fell, how long after failure before personnel arrived to assess the damage, suspected cause of failure or whether a more formal engineering analysis was done to pinpoint the cause, and the maximum distance outward from the tower base that debris landed.

Figure 4 indicates that there have been several years in which major ice storms caused many failures over

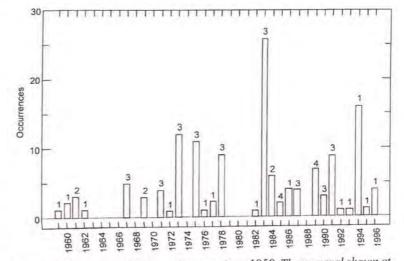
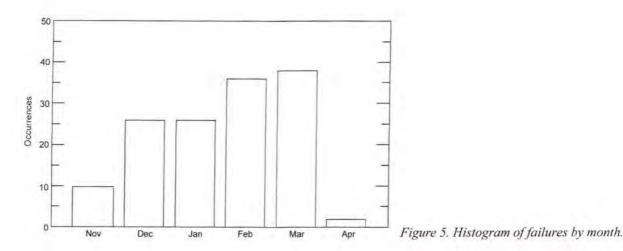


Figure 4. Histogram of failures by year since 1959. The numeral shown at the top of each column is the number of individual storms that caused the failures in that year.

^{*} HAAT, or effective antenna height, is an industry term that describes a station's transmission coverage. To calculate HAAT, the ground elevation above sea level (asl) is averaged at fixed points between 2 and 10 air miles along eight radial lines extending outward from the tower base. HAAT is this average value subtracted from the asl height of the antenna's center of radiated power (Ennis 1979). HAAT might also be used as a relative measure of a tower's exposure to wind and clouds, and therefore, in-cloud icing.



widespread areas. Large storms in 1973, 1975, 1983, and 1994 caused 48 of the 65 confirmed failures in those years. For example, the 1973 total of 12 failures was the result of three separate storms, but 10 towers fell in Kansas and Iowa during a single large storm in December. The worst year was 1983, for which I have recorded 26 failures in three separate storms. Two storms, one in January and another in March, were responsible for all but three of them. The January storm caused heavy, widespread damage and brought down 15 towers across North and South Carolina, Alabama, and Mississippi. Seven more towers fell in North Dakota over a threeday period in March. One massive glaze ice storm was responsible for all 16 failures in 1994. The most storms that caused collapses in any one year was four, causing seven towers to fall in 1989.

The 'failure season' is December through March, as can be seen in Figure 5. I have recorded 26 failures in each of December and January, but February and March are the highest incidence months, each having about 37 failures. The relatively few November failures occurred throughout the month, whereas the two in April occurred on the last day of that month in 1967, in a late-

spring storm of unusual intensity. In 40 cases, station personnel estimated the maximum distance that debris landed out from the tower base. Though they may have underestimated the distance to downplay the danger, the data show that when towers fall, the debris is usually contained within a radius of 50% of the tower's height agl (Fig.6). The tensile strength of the guy cables relative to the bending strength of the tower members usually ensures that the tower will fold into shorter segments as it falls. This is especially true for buckling failures due to massive ice accretion and low wind conditions. The mean and median collapse radii for the 40 cases were 31 and 20%, respectively, and the standard deviation was 23%. Only six towers had a fall radius larger than 50%, and those were generally the result of unusual circumstances. For example, the 450-ft WKOX tower in Massachusetts reportedly jumped 5 ft off its base and laid out full length on the ground when 80-mph winds caused the cable grips on an insulator to fail. Cable grips failed in several other cases but the towers always folded into a smaller radius. In the case of the

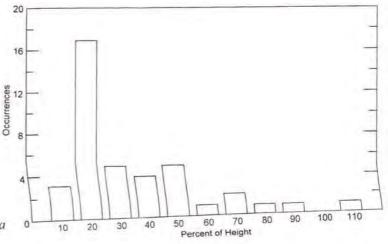


Figure 6. Histogram of collapse radius as a percent of tower height. 1164-ft KFDI tower in Kansas, only the top 79 ft of the tower fell when melting ice slid down a guy cable and smashed the cable grip at the anchor. As the top fell, it became entangled in a lower guy cable and slid down its length all the way to an outer anchor, resulting in a 60% collapse radius.

Although many failures occurred without warning and with station personnel on site (28 of 82 sites were known to be manned at the time of failure), only two resulted in injuries to station employees. There have been no injuries to passersby. The worst injury occurred in 1960 at a remote site in New Mexico when the 1610ft KSWS tower fell onto the transmitter building in which four people were working, one of whom suffered a broken knee. Three other buildings, which housed the employees' families, were damaged by falling debris, but no one in them was injured. The second injury occurred in the 1983 collapse of the 578-ft WCIQ tower atop Alabama's highest point, Mt. Cheaha. The transmitter technician sustained minor cuts while climbing out of the debris after the collapse. In earlier years, many transmitter sites were manned, but that is less common with today's more automated equipment, reducing the risk of employee injury in the future.

2.4 Concurrent weather

I made a qualitative appraisal of the on-site weather and ice conditions prior to tower collapse, using any or all of these four sources: 1) interviews with station personnel, 2) local newspaper articles, 3) Storm Data (NOAA 1959-1995), and 4) meteorological data from nearby weather stations. During my interviews with station personnel, I obtained their subjective estimates of the ground level wind speed, tower ice thickness and ice type. Newspaper articles about a collapse often provided additional qualitative information on tower conditions. Storm Data provided a county-specific overview of the storm conditions, the storm's progression, and its consequences. Storm Data also mentioned many tower failures that I had not previously known of, which were, in turn, researched and added to the database. I also used NCDC's Local Climatological Data publications, which provided quantitative meteorological measurements at nearby weather stations; I interpolated or extrapolated these to the collapse site.

My preliminary analysis suggests that most confirmed icing-related tower failures in the southern U.S. were the result of a few very large and very severe storms. All of the confirmed failures in the south (47 of 140) resulted from only 12 separate storms, whereas the 93 failures in the north occurred during 48 distinct storms.

The ice that destroyed towers in southern storms was more frequently the result of freezing precipitation from,

Table 2. Frequency of failures associated with ice type and wind speed.

lcing source	Southern U.S.*	Northern U.S.*
Precipitation	20	36
In-cloud	2	36
Mixed	8	18
Estimated wind speed (mph)	Central plains [†]	All other regions
Low (< 10)	37	20
Med (10 to 30)	13	12
High (> 30)	15	23

* Northern and southern U.S. as divided by latitude N37°.

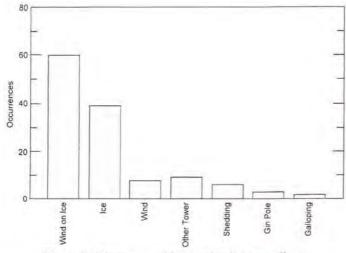
Including the states of Illinois, Minnesota, Iowa, Missouri, Oklahoma, Kansas, Nebraska, North Dakota and South Dakota.

for example, freezing rain and drizzle (Table 2). Of the 30 incidents occurring in the south for which ice type has been determined, 20 (67%) were the result of precipitational icing. Regions farther north experience lower temperatures for longer periods, so that in-cloud icing, or rime icing, is more prevalent (54 of 90 cases [60%] involved rime or a rime-glaze mix).

Failures in the central Great Plains more frequently occurred at low wind speeds. Fifty-seven percent (37 of 65) of those cases happened when the estimated winds were less than 10 mph, whereas only 36% (20 of 55 cases) in all other areas of the country were accompanied by such low winds.

Figure 7 shows the distribution of the factors that contributed to these failures. In most cases, I assessed the available wind and ice load information to determine the cause of failure; however, in a few cases other specific factors were cited. For example: a tower fell after being hit by an adjacent tower that fell; a gin pole used for tower construction was in place near the top of the tower (causing catastrophic imbalance when loaded with ice or wind-on-ice); or the tower was galloping (oscillating severely) under the combined wind and ice loads. Six failures were directly attributable to ice shedding under warming conditions. That is, either a cylindrical piece of ice slid down a guy and destroyed the cable grip at the anchor, or the sudden release of ice induced a catastrophic load imbalance.

When possible, I categorized the failures based on an assessment of the ice and wind loads derived from available information. I classified each failure as resulting primarily from ice load (if there was little wind and much ice), wind load (if there was much wind but little ice), or wind-on-ice load (if both were probably important). Note that this categorization does not take into consideration the specific loads that the towers were





designed for. In general, whenever the wind was greater than 10 mph, I concluded that wind was a factor, either by itself or in combination with the estimated iceload. As shown in the Figure 7, 56% of the failures that could be categorized (60 of 106) were associated with combined wind-on-ice load. In 37% of cases (39 of 106), I judged ice load alone to be the primary cause. In only seven failures do I believe that severe wind was instrumental and that the ice load was incidental to the failure.

2.5 Damage

For each failure, I attempted to document the type and estimated cost of property and business losses, whether injuries occurred, how long each owner was completely off the air, the percentage of original transmission area that was restored with a temporary antenna, and how long it was before the station was finally operating normally.

When a tower falls, the initial damage usually includes the complete loss of the tower and everything on it, and often includes damage to the transmitter and electrical feed housed at its base. Falling debris damages equip-

ment both on- and off-site, including commercial and residential buildings, vehicles, electrical transmission lines, and crops. In addition, the costs to commercial and public broadcasters accrue in the form of lost advertising revenue until the station is able to return to the air. The advertising rates that a station charges are based on the size of its listening or viewing area. This loss information is generally proprietary, because of the highly competitive nature of the industry. So important is maintaining market share that owners need to return to the air as soon as possible. This is usually done by installing a temporary, limited-coverage facility to serve until a permanent one can be reconstructed. Getting back on air requires paying a premium for overtime wages and restoration services which include damage assessment, cleanup, setup of temporary equipment, design of the new facility, applying for federal and municipal approvals, site preparation and, finally, reconstruction. Employees are sometimes laid off for months. In the 56 cases in which I have an estimated time for the station's return to normal operation, the average was 196 days and the standard deviation was 150 days. Three cases required more than 540 days to return to normal operations, 16 cases required 300 or more days, and one station was bankrupted and returned to the air under a different owner. The monetary damage can be enormous.

The database currently contains damage estimates for 73 of the 140 failures, which ranged be-

tween \$4000 in 1959 to \$10 million in 1989, and averaged more than \$713,000. The standard deviation, though, was more than \$1.5 million, indicating a large spread in the data, which can be attributed to 1) differences in the types of costs that were accounted for, 2) the wide range of sources from which the estimates were obtained, 3) no attempt to adjust for monetary inflation, and 4) some cases that involved only a partial collapse of the tower and therefore less damage. As one would expect, costs increase with tower height and this relationship is shown in Figure 8. The wide range in the estimated costs for all tower heights is best shown in semi-log form.

Losses from a single tower failure have run as high as \$10 million. Two 2000-ft television towers at the same site outside Raleigh, North Carolina, fell approximately 1 hr apart in December 1989. Witnesses said that the wind was calm and the sun had come out after a severe sleet and freezing rain storm. When chunks of ice, some weighing an estimated 600 lb, began shedding from the warmed steel, reactional oscillations caused the heavily loaded structures to buckle. An insurance industry source

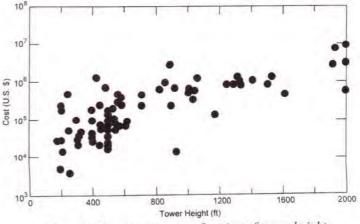


Figure 8. Damage costs as a function of tower height.

revealed that losses related to the first tower totaled \$8 million, while the second cost the insurer another \$10 million.

3. Possible Future Work

The database is as yet incomplete. Interviews have been completed for only 60% of the failures, newspaper articles have been obtained for only 70%, and an analysis of the weather data is complete for only 60% of cases. Several failures are still unconfirmed. At this time, CRREL does not have a mandate or the funding necessary to continue significant research effort on this subject. However, further work is needed and includes:

- Research of the total numbers of various tower types in the different states or regions of the country to gain a better understanding of rates of failure;
- Retrieval and analysis of meteorological data to profile better the typical storm conditions that cause towers to fall;
- Where higher-risk locations are found, examine whether the ice and wind-on-ice design loads are adequate;
- More-detailed analysis of damage costs to understand better the relationships between damage and parameters such as tower type, height, age, base elevation, icing type, wind speed, and so forth.

4. Summary of Findings

CRREL has an established database of icing-related communication tower collapses for the U.S. This database reveals where and when icing-related tower collapses have occurred in the United States. The record contains information dating back to 1959 on the failures of 140 towers, including radio, television, microwave, and two-way towers. Information was compiled from interviews with tower engineers, owners, station personnel, and others, from local newspaper articles, monthly storm publications, and digital databases maintained by the USGS and NOAA. For each failure, I am compiling information on the tower structure and its geographic location, the collapse sequence, the concurrent weather, and the resulting damage. The information is incomplete, although a summary is as follows:

Structural characteristics

- The largest number of failures involved FM, television, and two-way towers.
- Of the 121 towers for which we have height data, one-third were under 300 ft tall, another third were between 300 ft and 601 ft, and one-fifth were taller than 1000 ft.
- · Only one tower was known to be freestanding.
- The mean age of 77 towers that fell was 11.5 yr.

Geographic location

- Most of the failures occurred in the midwestern states and the Appalachian highlands.
- All except two failures occurred east of the Rocky Mountains.
- Two-thirds occurred north of latitude N37°.
- The failures in the southern U.S. are generally the result of fewer, but more severe, storms than those in the midwest.

Collapse

- Large storms in 1973, 1975, 1983, and 1994 caused 48 of the 65 failures that occurred during those years.
- The worst single year was 1983, in which 26 failures occurred.
- The most storms that caused failures in any one year was four, in 1989.
- More than 90% of the failures occurred between December 1 and March 31.
- When a tower falls, the debris is usually contained within a radius of 50% of the tower's height.
- Two failures have caused minor injury. There have been no serious injuries, and no passersby have been injured.

Concurrent weather

- Twice as many towers fell in four times as many storms in the northern U.S., compared with the southern U.S.
- Sixty-seven percent of the failures occurring in the south were the result of precipitational icing, whereas 60% of northern failures involved in-cloud icing.
- Fifty-seven percent of failures in the Great Plains occurred under low wind speed conditions, compared with 36% for all other areas of the country.
- I judged wind-on-ice loading to be instrumental in 56% of 106 failures, ice loading alone to be instrumental in 37% of cases, and wind loading alone (icing was incidental) in 7% of cases.

Damage

- The damage caused by tower collapse is both immediate and delayed in nature. Immediate costs include the loss of the tower and equipment on it, but also may include buildings, equipment, vehicles, the transmitter, power lines, and other adjacent property. Delayed costs include lost advertising revenue while the station is completely or partially off the air, employee layoffs, higher costs for restoration services, and overtime wages.
- The estimated mean time required for 57 stations to return to normal operations after a collapse was

196 days. Three cases required more than 540 days and 16 required 300 or more days.

• Damage costs for 73 failures, shown to increase as a function of tower height, averaged more than \$713,000, although the standard deviation was large, due to lack of data refinement.

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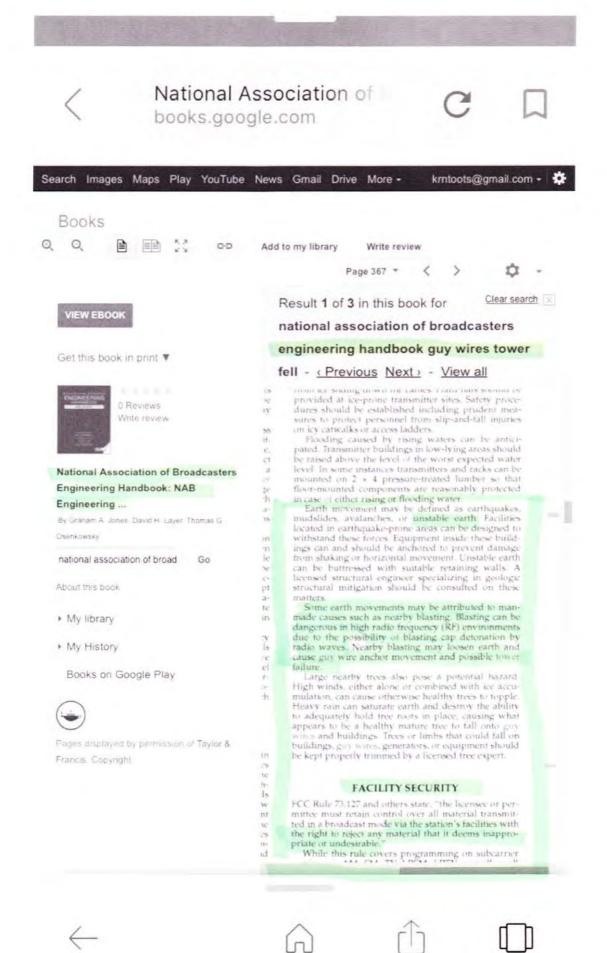
APPENDIX: SURVEY FORM USED TO RECORD INFORMATION OBTAINED **DURING TELEPHONE INTERVIEWS** Each question is more fully described by the italicized notation following it

Ower name: Station II I	ns are most important					
Tower name: <i>Station call letters</i> , <i>e.g.</i> , " <i>WTSL</i> Owner or studio address/telephone:		Interviewer:				
owner of studio address/telephone:		Date: Of interview				
		Interviewe	e name/title/telep	ohone:		
		1st- or 2nd	I-hand info?: To	indicate accuracy of info, e.g.,		
		eyewitness	to event? employ	ved at station at time?		
TOWER LOCATION/SITE DESCRIPTION:	· · · · · · · · · · · · · · · · · · ·					
Tower location: e.g., "3 mi south of 1-89 on R		Coordinat	es: N	W		
"top of Big Mt", or "at intersection of Elm and	d Main St."					
Location description: e.g., mountaintop, ope	n fields, forested,	Base eleva	tion (asl):	Top elevation (asl):		
urban, high plains						
FAILURE DESCRIPTION:						
Date and time of failure:	I	Ingineerin	g post mortem de	ne? Formal report available?		
Suspected cause of failure: e.g., "Light rime	icing caused by low I	Description of failure event: e.g., "Broken guy wire allowed				
loud ceiling followed by clearing skies and in	creasing wind. t	he main an	ntenna to snap of	Antenna snagged and slid down		
op NE guy attachment on the tower finally bro	oke after 2 hr of a	a lower guy, breaking the anchor attachment. Top 300 ft of				
ontinuous cable galloping."		tower then fell to the SW, bottom 500 ft fell to N."				
Vitnessed; or how long after did someone arriv		How long after collapse did an engineer arrive on site?				
o indicate what confidence we can have in the	estimation of the 7	To indicate what degree of confidence we can have in the				
ce and wind at the time.	e.	estimation of the failure mechanism.				
day distance of a second second	1					
lax distance that tower debris landed from			ice thickness and	type: e.g., "max. 1-in. radial		
Stimated windspeed: At or about time of fail cing source? In-cloud or precipitational	1112					
			per 300 ft of guys	", or "6 in hard rime at top N		
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Location, date and call letters of other collapses: Any communication tower, incl AM, FM, TV, microwave, cellular, two-way; either in the same vicinity or elsewhere, same or separate storm.

3. insurance company

4.



Lessons Learned from Losses: Radio & TV Towers

Class of Business

TV and Radio Transmission Towers

Amount of Loss

\$7.37 million (physical damage)

(business interruption)

Cause of Loss

Collapse from ice accumulation

Description of Risk

Broadcasting station with auxiliary buildings, equipment and a 1,858-foot triangular guy supported tower, and 73-foot antenna (total of 1,932 feet). Tower was supported by a series of 27 steel wire guys attached to nine anchor points.

Description of Loss

A severe, early winter ice storm resulted in extremely heavy ice buildup on the higher levels of the tower and guy wires. Ice was estimated to be 6-12 inches in diameter around the guy wires and tower cross members. The next morning, weather conditions improved and ice that had formed on the guy wire began sliding down the wires due to radiant heat from the sun. This condition significantly increased the tension and deflection of the guy wires.

Approximately mid-cable, this ice movement suddenly broke free of the cables, rapidly reducing the amount of tension. The tower, which had been deflected in the southerly direction, rapidly snapped back due to tension being exerted by the opposing guy wires. The tower began to oscillate, causing the antenna to snap off. Eventually the tower buckled under the stress and collapsed onto the building containing the transmitting equipment. The tower, building and equipment were damaged beyond repair.

Lessons Learned

- 1. The ice accumulation potential increases as the tower elevation increases.
- 2. Deicing equipment is used on the antenna only. Tower deicing is considered impractical and costprohibitive. (See addendum.)
- 3. Current design criteria do not require ice loads to be included in tower loading. The only defense against ice buildup is in the tower design. The best protection against icing is a well-constructed tower built to withstand ice loads for locations where ice accumulations are known to occur.

- 4. If ice accumulation is considered, its projected area must be included in the wind load design.
- 5. Salvage value of a collapsed tower is minimal.
- 6. A viable contingency plan significantly reduces the amount of downtime and subsequent loss of income.

Addendum: Ice Accumulation on Radio & TV Towers

There appears to be a rather widespread misconception throughout the insurance industry that deicing systems are readily available for radio and television towers and guys. In reality, there is no practical way to deice or to prevent an ice buildup on a tower of any significant height.

Tower manufacturers have tried many methods of handling this problem, including coating the members of the towers with various Teflon©type materials, such as Velox 140, so that the moisture would not bead and freeze. However, this method was found to be impractical due to its high cost, short life expectancy (only about one year), and the fact that some maintenance crews refuse to climb or work on the towers due to dangerously slippery conditions.

The Electronics Industries Association Standard EIA©222-D-1986, "Structural Standards for Steel Towers and Antenna Supporting Structures," does not mention deicing equipment, but specifically addresses ice loads on the "exposed surfaces of the structure, guy wires and appurtenances" under Section 2.1.2. The weight of the ice loads as well as the increased wind load area due to radial ice are considered in the design standard.

It is important to note that in areas where ice accumulations are known to occur, the antennas supported by the tower must be equipped with deicers. This is necessary to maintain the quality of the broadcast signal; it is feasible to prevent ice accumulations since the antennas are much smaller than the tower structure. Antenna deicing is critical from a business interruption standpoint, because heavy ice buildup can prevent signal reception or transmission.

The stability of a tower structure and its appurtenances rests with the tower design. In assessing the desirability of a risk, it is necessary to first determine what design criteria were used for wind and ice loading, then judge whether they are adequate for the location. Equally important is the age of the tower, the manufacturer/erector and the maintenance program in effect.

For further underwriting information, refer to IMUA's paper on Radio & TV Broadcasting Operations, published in 1992.

Close Window



1.

Tower-Design_Construc wirelessestimator.com

Ice is culprit in toppling of 1,204' Kansas FM tower

March 30, 2009 - A 1,204-foot radio tower north of Wichita has collapsed, probably because of heavy ice.

The broadcast tower for KYQQ-FM fell on Saturday at a site near Winfield. Ks. No injuries or damage to surrounding structures was reported.

An initial examination by



Journal Broadcast Group's engineers showed heavy icing and wind from Saturday's storm as a possibly cause of the collapse. They are investigating whether other factors contributed. Icing on tower members was reported to be more than two inches.

By Sunday, the Spanish language broadcast signal, Radio Lobo 106.5, had been restored on an auxiliary site. The station is licensed to transmit at 100,000 watts.

Two Maltas, but one holds the world's record

Dear Planning Commissioners,

I am writing to voice opposition to the current Highland View concept being presented by Roy Dale and Associates for a Texas developer. I believe there are numerous issues that are not being addressed in the concept plans based on several meetings I've attended with Roy Dale present. This one is related to the WSMV-Channel 4 television tower (originally called WSM-TV) located on Knob Hill. The tower was built on Knob Hill in 1957 after a catastrophic accident happened to its predecessor in another Nashville location.

WSM-TV TOWER

"WSM-TV's studios were originally located at 15th Avenue South and Compton Avenue in south Nashville, near the present Belmont University. In 1957, the station attempted to a build a larger tower in west Nashville, near Charlotte Avenue. During the construction process, the new tower's supporting wires failed. This caused the tower to collapse, which took the lives of several people.



"WSM-TV's studios were originally located at 15th Avenue South and Compton Avenue in south Nashville, near the present Belmont University. In 1957, the station attempted to a build a larger tower in west Nashville, near Charlotte Avenue. During the construction process, the new tower's supporting wires failed. This caused the tower to collapse, which took the lives of several people. Afterward, WSM-TV purchased its present property on Knob Road (farther west of the previous site)and built a tower there in a forested section away from potential damage to life and property." (Knob Hill)

I'm not suggesting that the tower is in danger of collapsing but there were specific reasons for this tower to be located on Knob Hill where the potential from something going wrong due to weather circumstances or during maintenance of the tower itself would do less harm in the tower's immediate area - or fall zone.



In this photo the tower mast is at the center of the three spokes.



(2017 Dale and Associates Highland @ The View Concept Overlay)

The red circle designates the area where homeowners on Knob Road and Fleetwood Drive were told by the original property owners, that there would be no building in that area because of the Channel 4 tower where you can also see in context an approximate overlay of the Highland View concept. The most baffling thing about this concept is the design shows at least 30 homes close to a tower that is over 1300' tall with multiple sets of guy wires stretching out in one and possibly two easements (West and North) within the fall zone of the tower.

Similar towers in our area with no subdivisions near them.



1200, ex-1560, off Route 12



The other Nashville blaster: WLAC 1510





Part of the WNQM and WWCR arrays

WSM Tower 808 ft Tall



WTVF, ex-WLAC-TV, channel 5

From here, we skirted the north end of the market, heading around Briley Parkway (which forms a loop around the north side of the city) to I-24, then one exit north to Old Hickory Boulevard (Tennessee 45), which offers sightlines to the other tall TV towers in town.

Shown at left is the one just east of I-24, home to WTVF (Channel 5) and WGFX (104.5); at right is the one west of I-24 that's home to UPN affiliate WUXP (Channel 30), oldies WMAK (96.3) and hot AC WRVW (107.5).

Under construction just next door is a new tower for DTV use, if memory serves.



WUXP and the new DTV tower

Similar towers in our area with no subdivisions near them.

The tower most like the Knob Hill would more then likely be the WSIX tower on a hill in Brentwood with no subdivision within the diameter of it's support system. It was built in the 1960s following the WSMV construction on a similar unpopulated hill area and remains that way.



WSIX Tower in Brentwood

It is even <u>more protected</u> than the WSMV tower is now, since the sell off of the Knob Hill property by Meredith Corporation in 2000

KNOB HILL WSMV Tower Views





CASE NO. 2019S-043-001 "Highland View" Meredith Corporation and WSMV/Channel 4 Television Tower

The former WSM-TV sits atop a hill off Knob Road, southeast of downtown, with a big tower that carries WSM-FM (95.5), WNPL (106.7 Belle Meade), Vanderbilt University's WRVU (91.1) and Fox affiliate WZTV (Channel 17) as well as WSMV itself.

Channel 4 still lives in this nice-looking brick building up on the hill, which was once home to the WSM radio studios as well. Today, channel 4 is a Meredith station, and it's still a market leader.

The common denominator in all of these photos is that there are no residential homes within a very wide diameter of any of these towers.

There are also issues on Knob Hill regarding several uncharted streams of which this is one.





This stream runs from well past the West Guy Wire easement as it splits off from another, joining a third near the Highland Park West Entrance

We were also told by the Mr. Dale at a community meeting that Cook Inlet media signed off on the 500 ft tower buffer which is odd because Meredith purchased the tower property in 1995.

EXBIBIT C

Page 3 of 3

Mik 9565rc419



18

WEST ANTENNA SUY EASEMENT

BEDINNING AT AN IRON PIN (OLD) LOCATED IN THE WEST BOUNDART LINE OF THE ILLS A CARE TRACT 2 SAME BEING A CORVER NEAREST THE REAP ENTRANCE TO THE TRANSMISSION BUILDING AREA: THENCE SOUTH 45'S' 08' RAST 56.53 FEET TO A POINT IN THE SOUTHERLY LINE OF SAID 11.53 ACRE TRACT 2: THENCE LEAVING SAID SOUTHERLY LINE AND RUNNING WITH A LINE PARALLEL TO AND 30 FEET SOUTHERST OF THE MOST SOUTHERLY CONTRIBUTED AND 120 FEET SOUTHERST OF THE MOST WESTERLY GUY ANCHORS SOUTH 57'S 03'S' WEST 1085'S 6FET TO A POINT; THENCE WITH A LINE PARALLEL TO AND 30 FEET NOTHWEST OF THE MOST WESTERLY GUY ANCHORS BOTH 27'2':3' WEST 17'.22 FEET TO A POINT; IN THENCE WITH A LINE PARALLEL TO AND 30'S FEET NOTHWEST OF THE MOST WESTERLY GUY ANCHORS 62'S' 12'S' AS'S 1881.23 FEET TO TA POINT; IN THE WESTERLY BOUNDARY LINE OF THE SAID 11.53 ACRE TRACT; THENCE WITH SAID WESTERLY LINE SOUTH 19'S' 24' WEST 50.16 FEET TO THE POINT OF BEDINING. CONTAINING 3.15 ACRES, MORE DALEST.

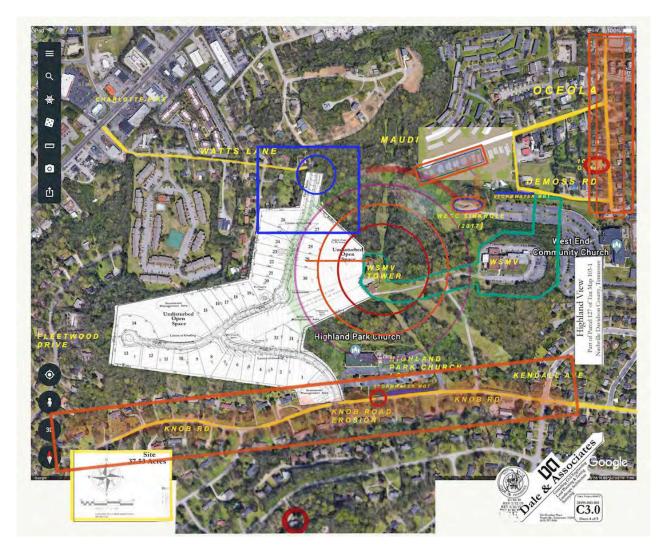
EXHIBIT C Mar 9565:0417 Legal Description--Anchors and Guy Wires Easement

16

NORTH ANTENNA GUY EASEMENT

BEDINING AT AN IRON PIN INEWI SAME BEING A NORTHEOSTERLY DONER IN THE NORTHEOSTERLY ISURROUNDING THE TRANSMISSION AREA: THENCE NORTH 45'36 24 WEST 66.08 FEET TO AN IRON PIN INEWI: THENCE NORTH 87'44'17' VEST 12.57 FEET TO AN IRON PIN INEWI: THENCE NORTH 87'44'17' VEST 12.57 FEET TO AN IRON PIN INEWI: THENCE NORTH 87'44'17' VEST IS.57 FEET TO AN IRON PIN INEWI: THENCE NORTH 87'44'17' VEST IS.57 FEET TO AN IRON PIN INEWI: THENCE NORTH 87'44'17' VEST IS.57 FEET TO AN IRON PIN 2'22'25' WEST 1147'41 FEET TO A POINT THENCE WITH A LINE 98 FEET RATH OF THE WOS' NORTHERLY BUNGARS NORTH 77'46'53' EAST 176.97 FEET TO A POINT INEWE WITH A LINE 38 FEET RATH TO A POINT IN THE NORTHERLY BOUNDARY LINE OF SAID 11.53 ACRE TACT; THENCE CONTINUING WITH SAID TRACT SOUTH 80'75'55' WEST 35'7 FEET TO AN IRON PIN INEW; THENCE NORTH 3'5'12' VEST ISB.28 FEET TO THE POINT OF BEDINNING. CONTAINING 3.58 ACRES. MORE DR LESS.

5



Currently there are at least six homes near the West Transmission Tower Easement as well as two roads. The developer claimed during community meetings that he does not know if blasting will be needed or what effect it would have on the tower and it's support system.

And of course, there is the "elephant on the hill" – the ice.

Ice Falling from Transmission Towers

https://www.youtube.com/watch?v=48UyQtYYuUM&feature=youtu.be

Ice Falling from Transmission Towers

https://www.youtube.com/watch?v=7Wp4gcAz7Ac&feature=youtu.be

Ice Falling from Transmission Towers



For multiple reasons regarding the tower, why it was originally built on Knob Hill (those reasons have never changed, only the tower's ownership) as well as serious concerns regarding critical slopes, underground streams, the documented ability for soil slippage and the developer's request for variances, this concept plan is extremely problematic.

Metro Nashville has a responsibility and obligation to protect the health, safety and welfare of current and future homeowners, and based on the concerns related to this development, the Planning Commission should be encouraged to vote against this concept.

- Neighbors for Knob Hill Nashville

I, as well as my neighbors along with council members Mary Carolyn Roberts, Kathleen Murphy, Mina Johnson and State Representative John Ray Clemmons oppose this development. There are enough legal reasons to deny the developer's supposed and debatable "right to build" opinion regarding this concept as well as unanswered questions. We urge the Commission deny the developer's request to build Highland View.

Respectfully,

Rob Cheplicki 6453 Fleetwood Drive Nashville TN 37209 **Neighbors for Knob Hill** knobroadcommunity@gmail.com

The O'Donniley Law Firm 2603 Belmont Blvd. Nashville, TN 37212 615/647-7716

R. Don O'Donniley, Esq. rdodone@gmail.com

May 28, 2019

Al Thomas, Fire Marshall Nashville Fire Department P.O. Box 196332 63 Hermitage Ave. Nashville, TN 37219

RE: Highland View Proposed Cluster Subdivision

Dear Marshall Thomas,

We represent property owners adjacent to the WSMV tower on Knob Hill. They have formed an association to enable them to participate in the review of the proposed Highland View Cluster Subdivision development. The owner has retained an engineer (Dale and Associates) who has submitted a "concept plan" to the Metro Planning Commission. It is our understanding that your department offered a comment, the "concept" was approvable contingent on the development meeting fire department standards. A copy of the "Concept Plan" with the Fire Departments' review comments has been enclosed for your convenience.

The neighborhood association retained Dr. Robert (Bob) Stammer to examine the "concept". We have enclosed a complete copy of Dr. Stammer's report. Dr. Stammer expressed several concerns which we would ask you to examine carefully. In summary, he finds the proposed development's access roads may be too steep for fire apparatus to negotiate; particularly ladder trucks. In addition, the narrow lanes could easily be blocked and there is a lack of shoulders. On information and belief, we urge you to examine each point he has enumerated that directly affects fire service and review his findings in detail. We submit several of his findings support a conclusion that the proposal should not be approved.

After you have reviewed Dr. Stammer's report, we ask you to reconsider your departments' position. Thank you for your consideration.

Sincerely,

Ungalt 1

Joseph H. Johnston, Esq.

R Don D' Donuly

R. Don O'Donniley, Esq.



2019S-043-001 (Concept Plan, Cluster Subdivision) Legal Objections Submitted for the Record

Objection: At the April 25, 2019 Metro Planning Commission (MPC) meeting, staff gave direction to the MPC that I was not proper to consider the General Plan, Nashville Next, as a standard for review of proposed subdivision. As a matter of law, this was plain error. The MPC's adopted Subdivision Regulations contains the following:

2. Conformance to Applicable Rules and Regulations. In addition to the requirements established herein, divisions of land shall comply with all applicable laws, ordinances, resolutions, rules, policies or regulations, including, but not limited to the following:

- a. All applicable provisions of Tennessee law, regulations, or policy.
- b. The Zoning Code, Building and Housing Codes, and all other applicable Metro laws.
- c. The adopted General Plan, including its constituent elements, and the Major Street Plan.
- d. The rules of the Metropolitan Health Department and the Tennessee Department of Health and Environment.
- e. The rules of the Tennessee Department of Transportation if the subdivision or any lot contained therein abuts or encompasses a state highway or proposed state route.
- f. The standards and regulations adopted by all other boards, commissions, and agencies of the county, where applicable.

As a matter of law, the Subdivision Regulations require a proposed subdivision be compliant with the standards promulgated In Nashville Next.

"West Nashville also contains areas of steep slopes, including hills that define the character of West Meade and Hillwood. Many of these areas arealso comprised of unstable soils that are stabilized by tree cover.

Nashville Next, West Nashville Community Plan, Page 11, adopted August 11, 2017

The Growth and Preservation Concept Map identifies Knob Hill as a apportion of the "Green Network"

Id, Page 12, Adopted Aug. 24, 2017

SPA 07-T#-NM-02

Transitioning-Infill

Building Types

House

Plex House (limited to two family

Zoning

Design Based Zoning

Nashville Next, West Nashville Community Plan, supplemental Policies, Knob Hill Page 30, adopted Aug.24, 2017

Objection: The Staff Report for June 13, 2019 fails to apply the correct legal standard for determining if the proposed cluster subdivision complies with Metro's Zoning Code, Subdivision Regulations and the General Plan (Nashville Next). The burden of proof lies with the applicant. The property in question is zoned R-40 and the analysis of R-20 level development in cluster lots should have been reviewed on the basis of whether it preserves the natural environment better than the existing zoning. An alternative development pattern is not a guaranteed entitlement owed to an applicant simply because they allege they have met submittal requirements.

17.08.020 - Zoning districts described.

Β.

Residential Districts. The residential districts allow a range of densities from very low (less than one unit per acre) to as high as sixty units per acre. These districts offer a diversity of housing types (including singlefamily, two-family and multifamily developments) throughout all density ranges established by the general plan.

Residential districts are to be applied in a manner consistent with the general plan. Residential districts should be applied according to the compatibility of the associated density with the topographic and soil conditions that prevail in the area, or when so recommended by the general plan, the prevailing development pattern of the area.

The Subdivision Regulations state: "1-6. 1. Interpretation. These regulations are intended to promote the health, safety, and welfare of the persons within this jurisdiction, and toward that purpose, these regulations may be liberally construed.

Transect Category	Subdivision Standards	
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T1 Natural	No specific regulations apply to these lands. They are intended to remain permanently preserved open space, so subdivision for development is not desired.
T2 Rural	Rural Character Subdivision Regulations provide for significant preservation of resources (natural, historical, cultural), views, and the rural character of an area. This type of subdivision is limited to those areas designated as Rural.
T3 Suburban	Conventional suburban subdivision regulations. There may be opportunities within this category to apply the Walkable Subdivision regulations.
T4 Urban	Walkable Subdivisions allow for the restoration and continuation of urban patterns of development as well as for the introduction of urban patterns in
T5 Centers	additional areas.
T6 Downtown	- Advantation of Advances Education
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Note the proposed cluster lot subdivision lies in the T3 Suburban where the Subdivision Regulations limit platting to "Conventional Suburban Subdivision Regulations. Cluster regulations are a method for providing the transfer of development rights from an area within th property constrained by slopes or floodways to other portions of the tract not environmentally constrained. This is not a conventional suburban subdivision regulation,

Appendix B. Critical Lots – Plans and Procedures

 Designation of Critical Lots. Lots are designated critical during the concept plan review process based on soil conditions, degree of slope, flooding, or other lot features, and to address concerns related to the feasibility of construction as described in Sections 3-3.2 and 3-3.3.

The applicant has not complied by identifying critical lots.

General Plan: Volume II, Elements, Natural Resources & Hazard Adaptation

Goals: "Goals set broad direction for the plan by applying guiding principles to Nashville Next's seven elements.

Policies: Policies extend goals goals by providing more detail.

Actions: Actions are short term steps to carry out these Policies and achieve these Goals

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IT (a promise) LACKS GOALS, POLICIES AND ACTIONS.

Nashville Next

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Nashville invests in and increases its natural environment....through mitigation and adaptation strategies.

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Preserve and expand upon Nashville's existing tree canopy including urban trees, street trees, and larger tracts of forested lands.

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The remaining 37 acres is undisturbed. The objection is based on the fact none of the proposed; lots have been identified as critical,. Metro's own GIS data base produced a map that clearly showed slopes greater than 20% would be included and were required to be designated as critical. Once identified as critical, special procedures are required when the site is submitted for approval.

APPROVED FOR ENTRY:

R Dy O'Domily

R. Don O'Donniley, Esq. BPR# 10077

H John Tan (mally permission 1400)

Joseph H. Johnston, Esq. BPR# 4706

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Preserve and expand upon Nashville's existing tree canopy including urban trees, street trees, and larger tracts of forested lands.

Objection: The steep grades found on the site requires the proposed development be considered as containing lots that are required to be considered critical.

The Knob Hill site proposed for development is characterized by steep slopes and poor (Mimosa) soils. The cluster development is on the western portion of the tract which was undeveloped until the studio and tower were built @1959 – 1960. At the time of construction, then WSM selected the site because it was undeveloped and there was little conflict with surrounding residential development. Subsequently, two additional structures located on the western edge of the original parcel were developed as churches, Given the broadcast studio, tower and two churches, it cannot be argued the site has not recovered the economic value of development rights purchase. Now, a proposal.

The remaining 37 acres is undisturbed. The objection is based on the fact none of the proposed; lots have been identified as critical,. Metro's own GIS data base produced a map that clearly showed slopes greater than 20% would be included and were required to be designated as critical. Once identified as critical, special procedures are required when the site is submitted for approval.

APPROVED FOR ENTRY:

A Don O'Don her

R. Don O'Donniley, Esq. BPR# 10077

The planter way \$ 800

Joseph H. Johnston, Esq. BPR# 4706

Attachments: Resumes of R. Don O'Donniley and Joseph H. Johnston

Education

Nashville School of Law, J.D. (Graduated in top 5% of class, awarded honor for top criminal law student) Vanderbilt University, M.A. University of Tennessee, M.S.P.

Middle Tennessee State University, B.S.

Bar Admission

Licensed Attorney in Tennessee, Admitted 1982, Active Status (Sup. Ct. Reg. # 010077)

Court Admissions

- United States Supreme Court
- United States Tax Court
- United States Immigration Court
- United States Court of Appeals, 6th Circuit
- United States District Court, Middle TN District

Tennessee

Supreme Court, Court of Appeals, Circuit and Chancery Courts, and General Sessions Courts

Legal Experience

Nashville, Tennessee

1982-1990, 2009 to present

- Hearing Officer Metropolitan Property Appraisal (Contract)
- Appeals Tribunal TDLWD, Appeals Hearing Officer (Contract, Part-time)
- Land Use and Zoning cases for public and private clients
- Inverse Condemnation, Condemnation, and Regulatory takings
- Drafted municipal codes
- Drafted real estate option agreements and contracts. Completed numerous real estate closings.
- Estate cases. Created precedent (860 S.W.2d. 267) that is still followed.
- Personal Injury claims and litigation
- Domestic Relation cases
- Worker's compensation cases
- Handled numerous complex immigration & asylum cases successfully. These cases involve the Southeast Asian community in Nashville following the Vietnam, Cambodian, & Laos conflicts.

2

Formed national mutual aid non-profit corporation and counsel of record for several immigrant non-profits.

Incorporated for profit corporations, attorney for several profit corporations

Other Experience

Town of Lake Park, Florida (Palm Beach Area)

Economic Development Director

Guided economic development, planning & zoning, real estate development strategies, and sustainability consulting.

Town of Cutler Bay, Florida (Miami Area)

Community Development Director

- Created Comprehensive Master Development Plan that was implemented into force. Directed the drafting of new regulations that implemented the new master plan.
- Drafted and initiated first ordinance requiring sustainable (green) building practices
- Voting Member Technical Coordinating Committee, MPO for Transportation Planning Miami Dade
- Supervised budget of over 2 million dollars for planning, zoning, code enforcement, and building codes (20 staff)

City of South Miami, Florida

Director of Planning and Community Redevelopment Authority Departments

- Directed the revision of the Land Development Code. Drafted the City's Historic Overlay Zone and ordinances creating the city's first historic zone & two commercial historic zones.
- Staff to Environmental Review Board (Design and site plan review)
- Supervised combined departmental budget of nearly 3 million dollars.
- Member of the Regional Area Transit Design Improvement Committee

Bay County, Florida (Panama City Beach Area)

Community Development Director

- Authored and oversaw the adoption of Florida's fourth Sector Plan that was developed jointly with the St. Joe Company and Airport Authority (new International Airport). Drafted the first Zoning Code. Administered 911 addressing staff.
- Directed Bay County , Panama City, Panama City Beach, Lynn Haven Metro Planning Organization for Transportation
- Adopted current Florida Building Code with updated Wind Zone regulations
- Supervised budget of about 1 million dollars.

City of Ormond Beach, Florida (Daytona Beach Area)

Planning Director

Administered regulations. Initiated a revision of the Land Development Code

2008-2009

2006-2008

2004-2006

2001-2004

1999-2001

3

- Chaired TOPS for four jurisdictions; a state transportation initiative involving multiple jurisdictions in the region
- Chaired the site plan review committee
- Chaired the Metropolitan Planning Organization Technical Coordinating Committee. (Voluisia County, Daytona, Ormond Beach. Holly Hills, Deltona,

Cumberland County Joint Planning Commission, Fayetteville, North Carolina 1998-1999 Director

- Administered regulations and long range plan. Drafted new ordinances. Supervised the development of a GIS system. . Administered 911 Address Assignment Program.
- Directed Metropolitan Planning Organization for Cumberland County and five municipalities including Fayetteville, NC
- Advisor to Joint Planning Commission, Board of Zoning Appeals, & and five other municipalities through joint ٠ participation agreement.

Lauderhill, Florida (Ft. Lauderdale Area)

Community Development Director

- Supervised budget of over 1 million dollars, with staff of 37
- Directed planning, code enforcement, building permitting, building codes, and economic development
- Member of Technical Coordinating Committee, MPO .
- Eastward Ho (State Route 7 Corridor Plan) Technical staff

Jefferson County, Missouri (St. Louis Area)

Planning & Zoning Director and Building Supervisor directing building permitting & inspections

- Member of East West MPO Technical Coordinating Committee (St Louis, Bellville, East St Louis, Jefferson County ٠
- Wrote County General Plan
- Wrote County subdivision and zoning regulations (only four counties in MO have subdivision and zoning regulations)
- Helped recruit and locate Defense Mapping Agency to the County

Barta and Associates, Nashville & Memphis Tennessee

Office Manager (Nashville), Senior Planner and Attorney

- Design and submittal of shopping centers ٠
- Represented private clients in zoning and subdivision proposals before boards and commissions ٠
- Site selection, design and project management of five elementary schools and one high school
- Public projects included Prepared a comprehensive plan, conducted a special census, design and supervision for state ٠

1990-1996

1988-1990

1996-1998

penitentiary, analysis of Development Regulations of a County Ordinance, Transportation Plan for Murfreesboro, TN.

Metropolitan Planning Commission, Nashville, Tennessee

Senior Planning Manager (1970-1987)

- After employment in 1965, selected to attend graduate school. Youngest Division Director in the agency's history.
- Key player in multiple milestones of Nashville's development. Directed and drafted portions of the first Comprehensive Plan. Directed and prepared the capital budget. Drafted and implemented the first Air Quality Program mandated by the EPA. Drafted subdivision and zoning regulations, many of which are still in force. Secured and administered various federally funded grants. Developed long-range population and economic indicator estimates for the year 2000 that was used to guide development of the metro area.
- Assigned as staff to City Demonstration Agency (Model Cities) ; Assistant Director of CDA

Metropolitan Traffic and Parking Commission

1964-1965

1965-1987

Jr. Traffic Engineer

Conducted traffic and accident data analysis.

International Experience

- Jin Magazine 2004-2007: Wrote numerous columns addressing business, economic development, & tourism; outlining the American perspectives & experiences. Jin was read by the most influential business leaders in Tianjin, PRC. Monthly circulation of 50,000
- Guest lecturer at Tianjin University and Hebei University, Transportation Planning

Teaching Experience

Team Taught Planning and Urban Development with Rev Bill Barnes at Scarritt College. Introduction to Planning, Austin Peay State University Design Juror, University of Miami School of Architecture FL Bar, Environmental and Law Use Section; presented CLE on Large Project/ Large Area Planning (emphasis on Sector Planning)

Computer Experience

Word, Word Perfect, Outlook, Excel, Power Point, Arc View, Group Wise, Sketch Up

Publications

- The Tennessee Planner, "Fire Service: An Element of Urban Planning", TAPA, 1976
- Florida Planning, "Developing Code Strategies for Declining Cities," FAPA, January 1999
- Florida Planning, "A Strategy for Code Enforcement", FAPA, November 1999
- Florida Planning, "Putting Inter-local Planning Agreements to Work", FAPA, December 2000
- Overview, "Florida Fiber Network, The New Utility", FL Planning & Zoning Association, Spring 2001
- · Overview, "The Structure Relationship Ratio", FL Planning & Zoning Association, Winter 2002
- Florida Planning, "Where We Are and Where We Are Not", FAPA, February, 2007

Conference Presentations

- FL APA Annual Conference, "Shifting Sands of Wetland Regulations", Speaker 2001
- FL Bar Association, Environment and Land Use Law Section, Speaker 2002
- FL APA Annual Conference, "Bay Sector Plan: "From Form Based to Form/Function Codes", Speaker 2007
- FL APA Annual Conference "Ways to Measure Sustainability at the Local Level", Speaker 2008

Professional Membership

Licensed Attorney, TN Board of Professional Responsibility Charter Member, American Planning Association Charter Member, American Institute of Certified Planners TN American Planning Association Tennessee Bar Association National Association Non-Profits Organization (NANOE), Member of the Board of Governors Who's Who International (Winner of the 2018 Albert Nelson Marquis Lifetime Achievement Award) Joseph H. Johnston, Esq. 2815 Belmont Boulevard P.O. Box 120874 Nashville, Tennessee 37212 (615) 947-6363

VITA

I. Education/Employment

1966: George Washington University, B.A. degree, Political Science

1966-1969: U.S. Peace Corps Thailand, Malaria Eradication

1970-1972: Vanderbilt University Medical School, Anatomy Department, Lab Technician

1972-1973: Vanderbilt University Institute for Public Policy; Program Developer

1973-1976: Vanderbilt University Law School, J.D. degree

1976: Tennessee Law License, BPR No. 4706

1976-1980: Associate Attorney, E.E. "Bo" Edwards and Associates

1980-present: Solo Practitioner, Civil Litigation

II. Areas of Practice

- Employment Law
- Civil Rights
- Constitutional Law
- Land Use
- Administrative Law

BEFORE THE METROPOLITAN PLANNING COMMISSION

In re: Concept Plan for Highland View Project No. 2019S-043-001

Declaration of Joseph H. Johnston, Esq. on Behalf of Neighbors for Knobb Hill Association

I, Joseph H. Johnston, Esq., under penalty of perjury, declare that I am one of two attorneys representing the Neighbors of Knobb Hill Association before the Metropolitan Planning Commission in regard to the Highland View Concept Plan, Project No. 2019S-043-001.

On May 19, 2019, co-counsel Don O'Donniley, Esq. and I wrote a letter to the Metro public Health Department requesting information and records relating to a lead contamination incident that occurred on Knobb Hill as a result of lead based paint chips being blown throughout the area from the WMSV tower during a particularly violent storm. See copy attached hereto. We have received no response to this inquiry as of this date.

On May 28, 2019, we sent a letter to Metropolitan Fire Marshall along with a copy of an engineer's report from Robert E. Stammer, Jr. raising concern that the slopes and terrain on land proposed for Highland View Subdivision were too severe to accommodate Metro fire trucks and this might create a fire safety hazard. See copy attached hereto. We have received no response to this letter as of this date.

Date

BEFORE THE METROPOLITAN PLANNING COMMISSION

In re: Concept Plan for Highland View Project No. 2019S-043-001

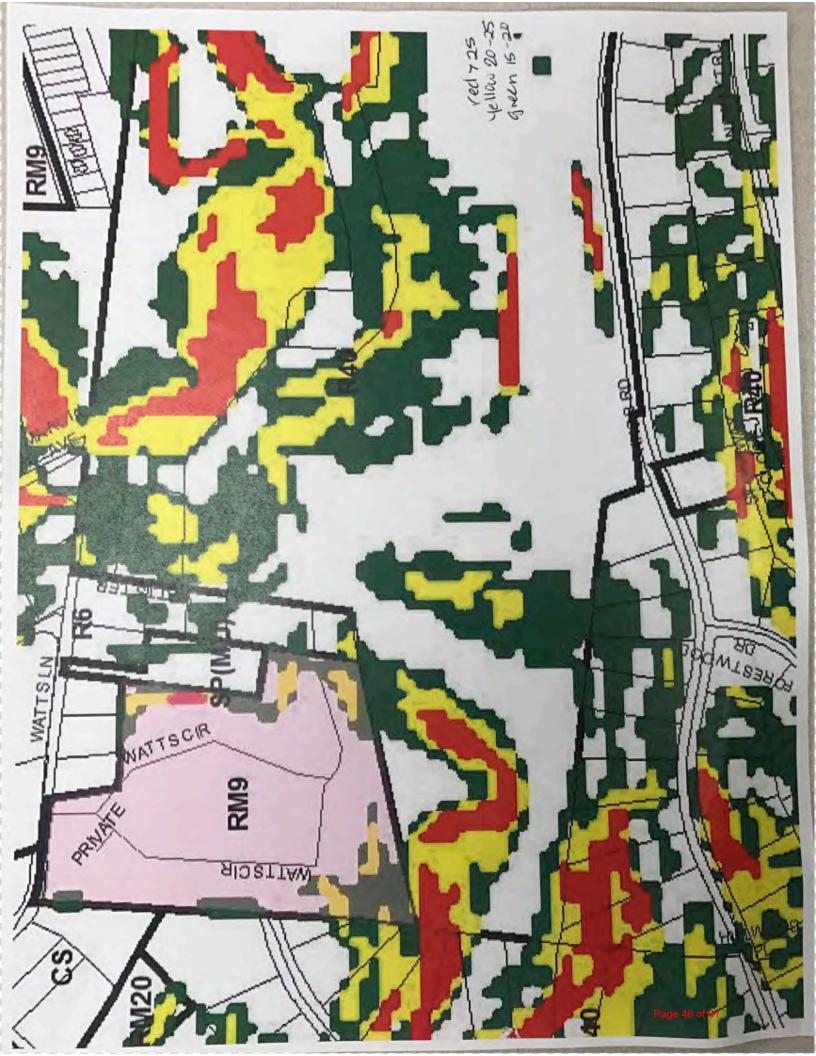
Declaration of Rob Cheplicki Regarding Map of Knob Hill Slopes I, Rob Cheplicki, under penalty of perjury, hereby declare, that on or about the week before Christmas, 2016, I was reviewing the file maintained by the Metropolitan Planning Commission on proposed development of a subdivision on Knob Hill in Nashville, Tennessee, when I found a color-coded map of the area depicting slopes. I took a photograph of this map with my iPhone. See copy attached.

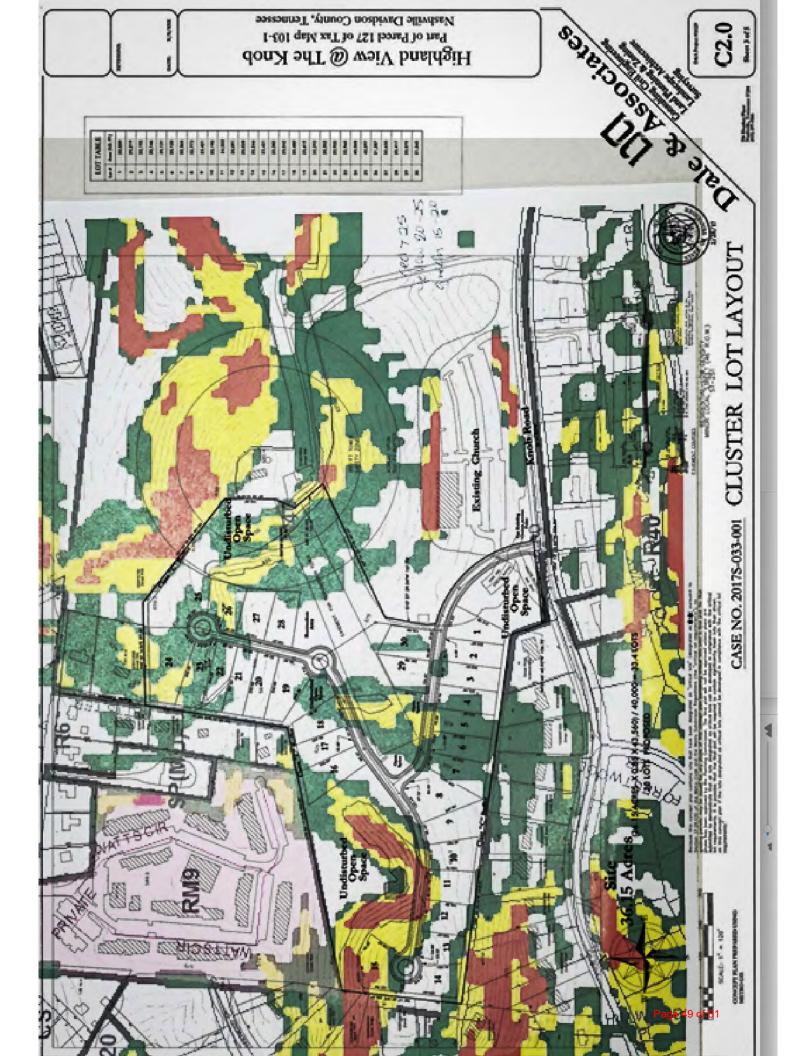
This map shows the grades and slopes of the terrain throughout the Knob Hill area. I showed a copy of this map to Ms. Lucy Kempf, a staff member of the Planning Commission. She asked me where I got this map. She expressed surprise when I told her that I had photographed it from the Planning Commission's file. She then told me that I could not use this map because I was not an engineer-expert.

heplicla Kob

Rob Cheplicki

Date





Robert E. Stammer, Jr., Ph.D., P.E.

212 Derby Glen Lane

Brentwood, TN 37027-4865

(615) 504-4691

REVIEW FINDINGS AND OPINIONS

TO: Don O'Donniley, Esq. The Metro Nashville-Davidson County Planning Commission

FR: Robert E. Stammer, Jr., Ph.D., P.E.

RE: Review of Current Concept Plan for Highland View (A Cluster Lot Subdivision)

REPORT DATE: May 21, 2019

The following report documents my qualifications, actions, findings and opinions relating to my review of this concept plan.

Qualifications

1. I am a transportation engineer with a Bachelors Degree in Civil Engineering from Vanderbilt University, a Masters Degree in Civil Engineering (Transportation) and approximately 75% of the graduate courses for the Master of Planning degree from Georgia Institute of Technology and a Doctor of Philosophy Degree from the University of Tennessee in Civil Engineering (Transportation). I am a Registered Professional Engineer in the States of Tennessee and Alabama. I teach both undergraduate and graduate transportation engineering courses for the Civil and Environmental Engineering Department of Vanderbilt University's School of Engineering. I first taught a transportation course at Vanderbilt as an adjunct professor in 1978 while being employed full-time by the TN Department of Transportation. I taught the same introductory course a second time in 1979. I left TDOT to attend the University of Tennessee in 1979 to pursue a Ph.D. in Civil Engineering (Transportation). After completing my Ph.D. work, I was employed by Vanderbilt University as a full-time, tenure-tract, transportation engineering professor in the fall of 1981 and have been continuously employed by Vanderbilt University's Department of Civil and Environmental Engineering since 1981. I am currently a Professor Emeritus and have held administrative appointments as Assistant Dean and Associate Dean for the School of Engineering and as an Assistant Provost for Academic Affairs in Athletics during my Vanderbilt career.

2. My professional transportation engineering career from 1972 to the present year of 2019 represents 47 years of professional experience. My professional experience spans employment in academia, in government (Tennessee Department of Transportation), and with three private consulting practices. The first consulting job was with a Nashville consulting firm, John Coleman Hays and Associates, in Nashville in the summer of 1972. The second firm was an Atlanta transportation consulting firm, Traffic Planning Associates in 1974, while finishing my graduate studies at Ga. Tech, and the third has been as President of my own firm, Stammer Transportation Engineering, Inc., since the firm's founding in 1987.

Actions

1. The five-page Concept Plan prepared by Dale and Associates provided on the Metro Planning Department's "Development Tracker" website was reviewed.

2. A personal site visit was performed and the existing roads surrounding the proposed development were driven. In addition to roads being driven and features such as lane width, shoulder conditions and near road hazards being observed, the current, very steep terrain of the proposed development was also duly noted.

Findings

My findings, and subsequent opinions, are based upon my 1) May 15, 2019 site visit, 2) 47 years of transportation engineering and civil engineering experience, 3) education and training, 4) review of all the additional materials stated earlier, and 6) accepted fundamental engineering principles. The findings are grouped into six categories as follows:

- 1. Road Travel Lane Widths and Conditions
- 2. Eminent Traffic Calming Actions
- 3. Road Shoulders and Clear Zones
- 4. Vertical Slope Challenges for Roads, Lots and Driveways
- 5. Cul-de-sac Length
- 6. Drainage Issues

1. Road Travel Lane Widths and Conditions

The adjacent, existing roads that would serve traffic form this proposed development are very narrow (typically 9 feet in width) with winding horizontal alignments and multiple vertical curves. The proposed roads or travel lanes are expected to be of similar width and will face both horizontal and vertical challenges. Typical lane widths on most highways are 12 feet wide, and a lane width less than 10 feet is very narrow and more dangerous. Edge of pavement (EOP) or fog lines were generally not noted on the current existing roads.

A road's actual design speed is calculated considering a number of factors such as horizontal and vertical alignment, lane widths, shoulders, clear zones and other design factors. Although design plans or more extensive calculations are needed to calculate exactly the expected design speeds for both the existing adjacent roads and the proposed new development roads, my experience and site visit observations indicate that drivers are already driving faster than the current road design speeds in this area. Thus, motorists already are driving faster on adjacent roads than the recommended design speeds for roads having this type of topography. More roads would then likely add more speeding vehicles on the new rolling roads and further reduce the safety of everyone living or traveling in the area.

Other critical road design issues in the proposed Highland View development must address how emergency vehicles, such as a Fire Department's Ladder Truck, would be able to negotiate 9 feet narrow lanes and complete turning movements at new intersections. Turning radii have not been checked, but are important safety considerations that must be addressed.

2. Eminent Traffic Calming Actions

Knob Road is already posted as a "Traffic Calming Neighborhood" by virtue of an existing sign. But signs alone do not stop "cut through" traffic. Looking at the connectivity of the proposed new roads in the reviewed Highland View Concept Plan clearly indicates that similar "cut through" opportunities will exist with the currently proposed Highland View roads. Thus, the currently proposed Highland View roads would likely require significant additional traffic calming measures to slow motorists and improve both motorist and resident safety. Addressing this safety potential initially to prevent later remediation is advised.

3. Road Shoulders and Clear Zones

Shoulders and Clear Zones provide valuable safety features for motorists. Shoulders provide structural support to travel lanes and furnish a "pull over" area to improve motorist safety. Similarly, the clear zone concept further addresses the need to remove or protect motorists against any obstacles posing hazards to an errant vehicle. If the proposed development roads are not built to a higher standard of care, but are similar to the current adjacent roads with 1) little to no shoulders, and 2) nearby hazards (e.g., trees, steep drop-offs, etc.) that pose safety hazards, motorist safety is compromised immediately. Safety in road design is always critical.

Safe highway practices dictate that clear zones of varying widths be present to increase the safety of motorists should a vehicle leave the roadway for any reason. Another way of stating this is that a safe roadside recovery area clear of obstructions and dangerous hazards increases motorist safety. A safe roadside recovery area is typically composed of a paved or gravel shoulder and/or an additional "non steep" foreslope where both shoulder and any additional foreslope are hazard free.

3

AASHTO "Roadside Design Guide" guidelines appear to not be met for the existing roads and questions remain whether the proposed roads will meet the AASHTO guidelines.

Another finding from my earlier site visit is that there is already evidence of erosion of soil and even shoulders in the immediate area due to swift runoff occurring over steep terrain. Hydrology issues will be addressed more directly in Finding 6 that follows.

4. Vertical Slope Challenges for Roads, Lots and Driveways

Because of the extreme topography and ground slopes in this location, massive earthwork will be needed to avoid exceeding maximum allowable vertical slopes for roads, lots, and driveways. Meeting all mandated Metro maximum road, lot, and driveway slope requirements will be challenging. But even if maximum, allowable Metro slopes are not exceeded, the massive earthwork that will be required is going to have a profound effect on the existing vegetation and ground cover.

5. Cul-de-sac Length

Although the available scale makes accurate measurements challenging, the cul-de-sac on Court "B" appears to be slightly longer than Metro's mandated 700 feet maximum.

6. Drainage Issues

As mentioned earlier, there was observed evidence of considerable soil erosion already in this area. Because of the severe terrain differences, steep roads and lots, the potential removable of existing vegetation and trees that would slow both runoff volumes and flow speeds, hydraulic considerations must be considered very carefully.

Opinions

My opinions, to a reasonable degree of engineering certainty, are as follows:

1. Narrow travel lanes (i.e., 9 feet), few adequate shoulders, and hazards in areas that need to be safe "clear zones" are problematic and present serious safety concerns in the Concept Plan.

2. Consider requiring extensive use of white edge-of-pavement (EOP) lines on any new roads to better delineate the existence narrow roads and to improve driver safety.

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3. Remove all roadside hazards in clear zones or add guardrails to protect motorists.

4. Adequately addressing concerns regarding intersection turning radii and overall safety of larger emergency vehicles (e.g., a Fire Ladder Truck) operating on narrow and steep roads must be addressed. When rainy and icy conditions are considered, this raises more critical concerns.

5. The rather straight and direct connection of the proposed major subdivision road will attract additional cut-through traffic volumes and likely will require remedial traffic calming devices. Consider re-alignment of the proposed roads.

6. The steep topography presents major safety and development challenges for multiple features such as roads, lots, and driveways. As mentioned earlier in Opinion 4, these safety concerns become even greater with steep terrain when roads and driveways are not dry, but wet or icy.

7. Extensive required earthwork will negatively impact existing trees and ground cover and thus have adverse impacts on aesthetics, and can produce silt and surface runoff problems.

8. Court "B" cul-de-sac length may be greater than the allowable 700 feet maximum and should be re-examined.

9. Observed soil erosion in the area "already" raises additional concerns that this problem will occur again. Thus, special attention needs to address the sizing of drainage ditches, culverts, and the requirements for runoff retention areas.

10. Finally, open spaces are desirable and can be pleasant natural areas. However, they can also be a maintenance and safety nuisance. Who will maintain these if this subdivision is built? This issue should be addressed initially before a problem occurs.

Summary

There are many concerns and issues, as listed earlier in this review, concerning the approval of this subdivision. Until all are resolved, approval is not advised.

Property owners obviously want to develop fully their parcels with as many lots as possible to maximize sales and profit, but not all parcels lend themselves to being developed. Neighbors and others are obviously concerned about all types of problems that can arise from new developments. The many challenges of developing this parcel further increase these concerns. From my reviewed thus far, approval of the design offered in the reviewed Highland View Concept Plan should be denied.

I reserve the right to review any additional plans, data and facts that may become available, and then amend, update, and revise statements and opinions in this review. I will be glad to clarify and answer any questions regarding the engineering opinions offered.

5

The O'Donniley Law Firm 2603 Belmont Blvd. Nashville, TN 37212 615/647-7716

R. Don O'Donniley, Esq.

May 19, 2019

Wendy Long, Director, M.D. M.P.H. Metropolitan Department of Health and Environment 2500 Charlotte Ave. Nashville, TN 37209

RE: Highland View at the Knob (2019S-043-001) REQUEST FOR INVESTIGATION

Dear Dr. Long,

A developer represented by Dale and Associates has submitted a proposed Cluster Subdivision for a site adjacent to the WSMV tower off White Bridge. The Metro Planning Commission will be forced to approve or disapprove the proposed "Cluster" Subdivision on June 13, 2019. Time is of the essence to respond to our request.

Our clients are resident owners of properties which also abut or adjoin the proposed development. In June 2017, cleaning of the WSMV tower resulted in some lead being deposited nearby. A professional company was apparently retained to perform remediation and clean lead particles on nearby residences. It is our understanding Dr. Sanmi Areola was involved from your agency.

Our request is for your staff to conduct a site survey to determine if any of the site is contaminated by lead. We have enclosed a reduced copy of the proposed development which has WSMV's determination of areas subject to damage from ice blowing from the tower during inclement weather. Your response, based on your investigation's findings, is information the MPC will need before the June 13th meeting that will help it decide whether to approve or disapprove the development. The problems of undisclosed environmental hazards are highlighted by the experience

encountered at Edgehill Village where hazards discovered during development resulted in substantial remediation expense that could have been avoided.

Thank you for your cooperation. We look forward to your response.

Joseph H. Johnston, Esg.

R. Don O'Donniley, Esq.

Cc:

Lucy Kempf, Director, MPC Roy Dale, Dale and Associates Rob Cheplecki, Cathy Bolinger, Co-Chair, Neighbors for Knob Hill Association

To: Planning Commissioners; Johnson, Mina (Council Member); Murphy, Kathleen (Council Member); Kempf, Lucy (Planning); Roberts, Mary Carolyn (Council Member); Rickoff, Abbie (Planning) Cc: rob.cheplicki@gmail.com Subject: OPPOSE the concept plan of Highland View, case #2019S-043-001

To whom it may concern:

A new development is not necessary on the last green area we have left in the Hillwood area. Please do not approve this new residential construction site.

Let's keep and maintain this last green area unique and valuable of the last part of the mountain.

Demo old houses and new construction at the foothill of the mountain will be much beneficiary.

Raul Y 615.828.6241 Stoneway close Nashville TN 37209

From: Cal, Doris (Council Office) Sent: Thursday, June 13, 2019 8:33 AM To: Planning Commissioners Cc: Mary C. Roberts; Murphy, Kathleen (Council Member); Hayes, Roseanne (Council Office); Kempf, Lucy (Planning); Adams, Kelly (Planning) Subject: MPC letter for June 13, 2019 meeting

Good morning,

This correspondence is sent to you by request of Councilmember Kathleen Murphy. Please distribute for the Planning Commissions meeting for today June 13, 2019.

Doris Cal

Metro Council Office One Public Square, Suite 204 Nashville, TN 37219 Direct: 615.880.3348 Office: 615.862-6780

SEE ATTACHMENT ON FOLLOWING PAGE

From: Rickoff, Abbie (Planning) Sent: Thursday, June 13, 2019 10:40 AM To: Planning Commissioners Subject: Letter for 2019S-043-001

Please see attached letter from the applicant for 2019S-043-001.



METROPOLITAN COUNCIL

Member of Council

June 13, 2019

Mr. Greg Adkins, Chairman, and Members of the Metro Planning Commission Howard Office Building Sonny West Conference Center Nashville, TN 37210

Dear Chairman Adkins and Members:

Re: Case 2019S-043-001

The above-referenced item is on the Planning Commission's Agenda for Thursday, June 13, 2019. Although I am not the immediate Councilmember for this district, it is of utmost concern that I request disapproval of this item. I believe there is safety and stormwater issues that needs addressing; as well as a tower near the property that can cause major issues.

I am in opposition and would appreciate your disapproval. Thank you for your assistance in this matter.

Regards,

Lathleen Murphy

Kathleen Murphy Councilmember, District 24

KM/dc

One Public Square, Suite 204

Nashville, Tennessee 37219

Office: 615/862-6780

Page 58 of 81 Fax: 615/862-6784

Abbie Rickoff, AICP

Planner II | Land Development Metropolitan Nashville Planning Department 800 Second Avenue South | P.O. Box 196300 Nashville, TN 37219-6300 phone: 615.862.7217

SEE ATTACHMENT ON FOLLOWING PAGE

From: Kyle Miller [mailto:kylemillermix@gmail.com] Sent: Thursday, June 13, 2019 11:51 AM To: Planning Commissioners Cc: Rickoff, Abbie (Planning); Kempf, Lucy (Planning) Subject: Highland View opposition case #2019S-043-001

Hello,

My name is Kyle Miller, I live at 125 Demoss Rd. Nashville, TN.

I am writing to express my opposition to the proposed subdivision Highland View case #2019S-043-001.

See below many concerns shared with other residents in the neighborhood.

I live next door to the Demoss Rd Homes SP which has been engineered by the same firm and am greatly concerned about the adverse impact not only will the Demoss SP have on the well being on my home at 125 Demoss, but also the Higland Ridge sibdivision will surely add to our already overstressed stormwater drainage situation on Demoss Rd, Maudina Ave and Oceola Ave.

Please at the very least defer Highland Ridge until modern studies can take place to determine viability. I have little confidence in releying on land studies that were completed 45 years ago as applied to current development

Thank You

- 6. **Soil erosion and water drainage**. Neighbors in our area are especially worried about this. Blasting. Trees coming down. Trees are our best asset to keep soil intact and preventing flooding. Knob Hill is "mimosa soil" which has poor rating. All over Nashville and specific to the Nations and the Oceola neighborhood on the northern side of Knob Hill, where new construction has caused flooding, runoff damage, and residents are suffering the consequences at their own expense.
- 7. TV Tower. Neighbors below the Meredith owned WSMV TV tower farther away than the planned subdivision have had ice darts during the winter and lead paint from tower sandblasting blow onto them. The tower is designed to withstand 120 mile-an-hour winds with a full coat of ice, but a tornado could give it a worse test. One cable anchor sits next to an active spring bubbling out of Knob Hill's limestone. The TV tower has borne more than 60 years of wear and tear . . . and it replaced a prior tower that collapsed during construction and killed four people.

Dale and Associates, Inc 516 Heather Place Nashville, TN 37204

June 10, 2019

Metro Planning Commission 800 Second Avenue South Nashville, TN 37219

Re: Response to Robert Stammer, Jr. Report

Dear Sirs,

Briefly I have reviewed the comments in the report from Robert Stammer, JR P.E. as prepared on May 21, 2019 and subsequently submitted to Metro Planning.

This report incudes several misinterpretations and includes several "concerns", but no rational reason to deny a subdivision of property. The proposed subdivision of Highland View has been reviewed by all relevant Metro Agencies and recommended to be approved by every agency with respect to roadway, public water, public sewer, sidewalks, street connections, storm drainage, grading, erosion and tree preservation, slopes, lots size and lot configuration, the number of lots, fire protection, public safety, land use, and all other considerations which are part of the review and approval process as mandated by State Law.

Being more specific as it relates to Mr. Stammer's report, The Concept Plan for Highland View indicates the general placement of lots, roads, sidewalks, utilities and other infrastructure. The final design of the roads are required to meet the standards of the Metro Department of Public Works. These design standards require new roads to be wider than indicated in the report submitted by Robert Stammer and are also required to meet the standards of horizontal and vertical alignment as well. Proposed roads will have curbs, gutters, grass strips, and sidewalks. These roads will provide a high level of clear zones because of the required roadway widths and the construction of sidewalks and associated grass strips.

There are no new roads to be constructed with shoulders and ditch sections.

The proposed roadway design will also meet the requirements of emergency services which includes proper paving widths and large radius for intersections and the cul de sac

As mentioned by Mr Stammer, signs alone do not slow down traffic on the current Knob Road nor do signs stop cut through traffic. The construction of this currently entitled property will have negligible impact of traffic volumes on an already medium volume street and the proposed connection to a street network on the north side of the property increases levels of safety. The proposed northerly connector will have a mid-stream turnabout to discourage cut through traffic and to also provide a measure of traffic calming.

There is no massive or extensive grading proposed on this property. Existing vegetation for areas outside of the proposed right of way will be preserved to the greatest extent possible with cut and fill slopes kept to a minimum.

Any grading on the property will be indicated on construction plans that will be reviewed and approved by Metro Water Services and TDEC. Proper erosion measures will be installed to insure extensive requirements of the Metro Stormwater Regulations are met. In addition any sensitive streams will be protected by properly sized water quality buffers.

Large open spaces and preserved trees will be maintained as needed by the Home Owners Association of the Highland View Subdivision.

Primarily, the concerns raised by Mr. Stammer are no reason to deny a Concept Plan, but are only design concerns which are all required to be addressed during the Final Construction Document Phase which are submitted, reviewed, and eventually approved by the various expert Departments of the Metropolitan Government of Nashville and Davidson County.

Regards,

Roy M. Dale

Roy M. Dale, P.E.

- 8. Accountability for damages. Neighbors get zero chance to safeguard any development process after the Planning Commission approves a concept plan. We need our homes protected from damage during construction, and for years afterward. If you have a story to tell about dealing with this issue, please write the Commissioners about your situation.
- 9. **Deferment.** Knob Hill is complicated by poor quality soil, steep slopes, underground streams, runoff issues, tree issues, rare habitat and wooded refuge . . . we need to study the impact of a subdivision and consider if Knob Hill can serve Nashville in better ways. Let's take time, now, to plan wise development with neighborhood agreement. Since Nashville may change its Tree Policy in early June, let's postpone this concept plan, to synch the plan with changes in this vital part of our ecology.

Thank You, Kyle Miller 125 Demoss Rd

From: Alan Green [mailto:nashvillemidi@gmail.com] Sent: Thursday, June 13, 2019 11:58 AM To: Planning Commissioners Subject: REJECT Knob Hill Development

Dear Metro Planning Commission Members,

As a resident of the Hillwood/White Bridge neighborhood, I am writing today to urge you to reject the planned development of Knob Hill. I have included a recent letter to you from Rep. John Ray Clemmons since he has so effectively articulated many of our concerns.

Respectfully, Alan Green 844 Neartop Drive, 37205

<<<>>> June 11, 2019

Members of the Metro Planning Commission:

I write to communicate my concerns about the Highland View concept plan on behalf of my constituents residing in and around the subject property in West Nashville.

The residents of the neighborhood where this project will be developed strongly object to a cluster lot layout on Knob Hill. Their opposition has substantial merit. Half-sized lots are inconsistent with the character of the surrounding neighborhood and the goals for West Nashville, specifically for Knob Hill. The five special policies emphasize the importance of R40 lot size, minimal grading of steep slopes, protecting existing tree coverage, and preserving the character of the West Nashville suburban neighborhood. The five policies clearly refer to Knob Hill as a unique piece of land, offering green space, view shed, and valuable tree covered slopes. Open Space Policy states, "Should the existing use [of Knob Hill] cease, the intent is for the site to be retained as open space and placed in public use if the opportunity should arise."

If development occurs, the five policies provide clear guidance that it must follow existing patterns of low density, single family homes, averaging one dwelling per acre. Parcels could be slightly smaller to create protected open space and prioritizes protection of steep slopes, mature vegetation and view sheds. "Slightly smaller" does not equate to "half size."

The argument that cluster lot layout is a way to protect sensitive environment should carry no weight here. Doubling the numbers of lots would do nothing to protect the sensitive environment on Knob Hill. The concept plan is using the cluster lot option to effectively re-zone the hill R20, and this is inappropriate on Knob Hill given its steep slopes, streams, woods, view shed, and abundant wildlife habitat.

The neighborhood residents have communicated their willingness to work with a developer should a development on Knob Hill be proposed that is compatible with R40 zoning and aligns with the character of surrounding streets.

On behalf of my constituents, I respectfully request the Planning Commission reject the cluster lot option on Knob Hill. If you are not inclined to heed the concerns of neighborhood residents, please defer the case so that more data may be collected to truly determine the impact of construction on this property.

Thank you, in advance, for your thoughtful consideration of my correspondence.

Sincerely, Rep. John Ray Clemmons

From: Johnson, Mina (Council Member) Sent: Thursday, June 13, 2019 12:02 PM To: Planning Commissioners Subject: Item #5: 2019S-043-001 Highland View

Planning Commissioners,

I will plan to attend today's public hearing and speaking of Subdivision regulations and

Although Planning Commissioners must be familiar with the Tennessee Code, in sections 13-4-303 and 13-3-403 that provides local planning commissions with the authority to adopt subdivision regulations, I wanted to share it to refresh your memory.

These sections also provide the planning commission with broad authority regarding the scope of their regulations. The nature of this authority is directly tied to the role that subdivision regulations should play in implementing a community's comprehensive planning program. Both municipal and regional planning commissions are granted similar authorities.

Generally speaking, their regulations:

"May provide for the harmonious development of [their jurisdiction] and its environs; for the coordination of streets ... with other existing or planned streets; for adequate open spaces for traffic, recreation, light, and air; and for [the planned] distribution of population and traffic which will tend to create conditions favorable to the publics health, safety, convenience and prosperity."

13-4-303. Subdivision regulations Adoption.

(a) In exercising the powers granted to it by this part, the planning commission shall adopt regulations governing the subdivision of land within the municipality. Such regulations may provide for the harmonious development of the municipality and its environs, for the coordination of streets within subdivisions with other existing or planned streets or with the plan of the municipality or of the region in which the municipality is located, for adequate open spaces for traffic, recreation, light and air, and for a distribution of population and traffic which will tend to create conditions favorable to health, safety, convenience and prosperity, and identify areas where there are inadequate or nonexistent publicly or privately owned and maintained services and facilities when the planning commission has determined the services are necessary in order for development to occur.

(b) Such regulations may include requirements of the extent to which and the manner in which streets shall be graded and improved, and water, sewer and other utility mains, piping, connections or other facilities shall be installed as a condition precedent to the approval of the plat. The regulations or practice of the commission may provide for the tentative approval of the plat previous to such improvements and installation, but any such tentative approval shall not be entered on the plat. Such regulations may provide that, in lieu of the completion of such work previous to the final approval of a plat, the commission may accept a bond, in an amount and with surety and conditions satisfactory to it, providing for and securing to the municipality the actual construction and installation of such improvements and utilities within a period specified by the commission and expressed in the bonds, and the municipality is hereby granted the power to enforce such bonds by all appropriate legal and equitable remedies. Such regulations may provide, in lieu of the completion of such work previous to the final approval of a plat, for an assessment or other method whereby the municipality is put in assured position to do the work and make the installations at the cost of the owners of the property within the subdivision.

(c) Before adoption of its subdivision regulations or any amendment thereof, a public hearing thereon shall be held by the commission.

The SUBDIVISION REGULATIONS of the Nashville-Davidson County Metropolitan Planning Commission Adopted March 9, 2006

1-6 Interpretation 1. Interpretation. These regulations are intended to promote the health, safety, and welfare of the persons within this jurisdiction, and toward that purpose, these regulations may be liberally construed.

Nashville Next (General Plans for Nashville & Davidson County)

Volume III: Community Character Manual

Introduction

Tennessee law requires each municipality to create a plan for future growth and development. NashvilleNext provides a high-level, countywide view of how growth and preservation are managed to improve quality of life for residents and promote economic prosperity over a 25-year planning horizon, from 2015 through 2040. Volume III of NashvilleNext provides a close look at each part of the county. Each of the 14 communities in Davidson County have a separate plan that considers its history and role in the region, with recommendations for improved transportation and open space features. Each Community Plan also includes detailed Character Policies for every property in the county that link the countywide vision from NashvilleNext to zoning and subdivision regulations. – page 7

Th is part of Volume III, the Community Character Manual, provides detailed guidance for the form and function of each of these Character Policies. Future land use decisions—including recommendations on zone changes and subdivision requests—are made based on the Community Character Policies in each Community Plan. – page 7

How NashvilleNext gets implemented

Each part of the plan guides the tools the Planning Commission uses to shape Nashville's built environment: zoning, subdivision rules, and other land development decisions; mandatory referrals to review changes in public rights of way, facilities or utilities; and capital improvements. Other plans, including other departments' Master Plans, provide more

detailed guidance on these decisions. Each volume can also be used to align with other partners. For example, the Health, Livability & Built Environment Element aligns closely with the Metro Public Health Department's Community Health Improvement Plan. - Page 10

Use of the Community Plans

The 14 Community Plans are used together with the Community Character Manual to make decisions on a daily basis. Key decisions guided by the community plans include:

- Public and private investment decisions about where to build infrastructure and buildings;
- Planning Commission's recommendations and Metro Council's actions on zone change proposals;
- Planning Commission's actions on subdivisions;
- Planning Commission's decisions on surplus properties; and
- Planning Commission's recommendations to Metro Council for the city's annual Capital Improvements Budget

(CIB) and Capital Spending Plan (CSP). The CIB allocates money for public facilities such as roads or public buildings. The CSP is the Mayor's recommended list of the projects in the CIB that should be funded in a given year. Both must be approved by Metro Council. -page 12

Community Plans are policy documents. While not regulatory, like zoning, they are used as the basis for guiding some regulations, such as rezoning or subdivision of property. – page 14

In the Subdivision Regulations, Community Plan policy is used for determining which set of rules apply to a particular property. For example, in areas designated Neighborhood Maintenance by the Community Plan, the Subdivision Regulations apply standards to require compatibility of new lots with the surrounding parcels. – page 14

Structure of Community Character Policies

The Community Character Policies guide decisions on future zone change and subdivision requests to achieve the planning policies and principles of their Transect Categories. – page 19

Function of Community Character Policies

To provide direction for implementation tools such as zoning. Future zone change requests in any given community are judged for their conformance with the Community Character Policies in the Community Plan. Subdivision request decisions are also guided by Community Character Policy. – page 24

Potentially Appropriate Zoning to Implement the Policy

There are also additional tools available, such as amendments, rezoning, subdivisions, and public investments, to ensure that future development incorporates as many of the designated community character objectives as possible. – page 76 **Relationship of Community Character Policies to Regulatory Tools and Other Standards**

The Community Character Policies provide guidance on the form and character of future development. They are used to judge the appropriateness of proposed zone change and subdivision requests. When a zone change request is made, Planning Department staff 's recommendation to the Planning Commission and Metro Council is based on the zone change's conformance with the Community Character Policy. Zone change requests are also considered, however, in light of any applicable Metropolitan Development and Housing Agency redevelopment districts and/or historical districts in place for the property. Meanwhile, when a subdivision request is made for a property, Planning Department staff 's recommendation to the Planning Commission on the subdivision request is based, in part, on the request's conformance with the Community Character Policy. – page 301&302 Mina Johnson Councilmember, District 23

(615) 429-7857 Sign up for District 23 Update

ITEM 10: 2019CP-005-002—EAST NASHVILLE COMMUNITY PLAN AMENDMENT

From: Jack Cawthon [mailto:jack@jacksbarbque.com] Sent: Wednesday, June 12, 2019 12:08 PM To: McCaig, Anita D. (Planning) Cc: Harvey "Mac" McDonald; Bill Munson; Matthew Strader Subject: East Nashville Community Plan Amendment. 2019CP-005-002

On behalf of NNxNE.org, we are in support of land-us policy change for the East Nashville Community Plan 2019CP-005-002.

It has been work in process for two organizations the Dickerson Road Merchants and SkyLine North Business Assoc, now NNxNE.org for 25 years.

This land-use policy change would make both sides of interstate 65/24 have the same policy, which would be a dream come true.

Thank you, please vote yes.

Jack Cawthon, Co-Chair NNxNE.org Sent from my iPhone Jack@jacksbarbque.com www.jacksbarbque.com 615 207 4333

From: Mark [mailto:markagovea@gmail.com] Sent: Wednesday, June 12, 2019 2:05 PM To: Planning Commissioners Subject: Dickerson Road South Corridor - Approve

Hi Planning Commission,

I own 612 B N 2nd St in McFerrin Park, my property backs up to the Riverchase apartment complex. I am in FULL SUPPORT of the policy change you are reviewing, which includes up to 15 stories at the Riverchase property.

I also sit on the board of the McFerrin Park Neighborhood Association. I am not speaking in behalf of the association but my personal feelings are that of FULL SUPPORT.

Please recommend approval of the policy change and approve this crucial change to the future of Dickerson Road and the adjoining neighborhoods.

Thank you!

Mark Govea

Mark A Govea

512-632-6001

From: Jeff Drifmeyer [mailto:jeff.drifmeyer@gmail.com] Sent: Thursday, June 13, 2019 6:48 AM To: Briggs, Michael (Planning) Cc: Adam Vollrath; McFerrinParkAssociation@gmail.com Subject: Draft Dickerson Rd Corridor study

13 June2019

Dear Mr. Michael Briggs, Nashville Planning

After last evening's presentation by the developers of River Chase I am pleased to provide the following additional comments on your draft Dickerson Road Corridor study. In short, the document is missing key information essential to the decision making process and needs to be amended in order to be comprehensive.

For example, the owner states that River Chase now consists of some 200 living units today, to be replaced by 1400 living units under the proposed development. – a whopping 7 fold increase in population in a small area. Conservatively, River Chase will house on the order of approximately 3,000 residents. Also conservatively, that population will likely own some 1500 automobiles, or more. Even if the developer incorporates parking for all these vehicles, this increased volume of traffic will be making at least one round trip into and out of River Chase daily, if not multiple trips. To this increased resident traffic must be added the considerable traffic volume from customers of new businesses to be located on the ground floor of new River Chase buildings. These might range from a few dozen trips per day for a medical or dental office for example, to hundreds of vehicle trips daily for bars, clubs, cafés etc. The marked increase in density, both people and automobiles, as a result of River Chase development is but a small fraction of the increase as River Chase is just one small development along the Dickerson corridor.

Inexplicably, the draft Dickerson Rd corridor transportation study makes no mention of current or future population density, traffic volume or mass transit ridership. A transit study seems woefully incomplete without this information. Please revise the report to include such key information in order that the Planning commission can make fully informed decisions.

In so doing, please ensure that planning actions are fully transparent. Also last evening, we heard that the River Chase developer was reportedly disinvited by the Planning dept. from attending McFerrin Park neighborhood Association meeting(s). As we all try to move forward to optimize inevitable growth to provide viable, diverse communities in which transit works well, it is essential that all parties be fully transparent. As a government entity, planning has a special obligation to inform the citizens on whose behalf you labor.

We look forward to moving ahead with a comprehensive, revised Dickerson Rd corridor study public document that projects and guides development of our community. Thank you for your consideration.

Respectfully submitted,

Jeff Drifmeyer

From: Davis, Ashonti [mailto:DavisA17@aetna.com] Sent: Thursday, June 13, 2019 9:29 AM To: Planning Commissioners Cc: Briggs, Michael (Planning) Subject: RE: Item 10 - Dickerson Rd Study

Dear Members of the Planning Commission,

I am writing to express my support of the Dickerson Road charette and subsequent plan <u>as well as some of the concerns</u> <u>expressed by my neighbors</u>. Overall, the Planning Staff engaged with stakeholders impacted by the Dickerson Road study and provided ample opportunity for public input throughout the process. As a member of the Steering Committee, I appreciate the ways in which the Planning Staff thoughtfully considered the feedback and incorporated feedback into the plan. However, my neighbors In McFerrin Park and Highland Heights are legitimately concerned about the plan permitting up to 15, 12, and 6 stories on the portions of Dickerson Road immediately adjacent to these established single-family neighborhoods. Specifically, I ask the Planning Commission to adopt the plan but to revise the heights immediately surrounding McFerrin Park and Highland Heights (near the intersection of Trinity Lane and Dickerson Road). The plan does a great job of balancing heights in the Cleveland Park neighborhood (which sits in between McFerrin Park and Highland Heights); the plan permits heights of 3 and 4 stories along the portion of Dickerson Road that is adjacent to Cleveland Park. A further step down in heights along McFerrin Park and Highland Heights would strike a balance between encouraging more robust development along the Dickerson Road corridor as well as protecting these established neighborhoods.

I sincerely appreciate your consideration of my comments. I also appreciate the efforts of the Planning Staff in putting this plan together.

Kindest Regards, Ashonti Davis 321 Edwin St, 37207

From: Adam Nicholson <<u>adam4nicholson@gmail.com</u>> Date: June 13, 2019 at 10:59:03 AM CDT To: <<u>lisa.milligan@nashville.gov</u>> Subject: Letter of Support for Dickerson Road South Corridor Study

Hello Ms Milligan,

The attached letter from Transit Now Nashville is in support of the Dickerson Road South Corridor Study being passed today.

Thank You,

Adam Nicholson Vice President Transit Now Nashville



SEE ATTACHMENT ON FOLLOWING PAGE

From: Bill Holbrook [mailto:holbrook.bill@gmail.com] Sent: Thursday, June 13, 2019 11:19 AM To: Briggs, Michael (Planning) Subject: Dickerson South Study

Mr. Briggs,

I am writing you to ask you to reconsider the T5-MU designation for the proposed change to the Riverchase Apartments area. I live less the 100 yards from the Riverchase Apartments boundaries and feel the 15 stories would ruin the character of the neighborhood that has existed here for well over a hundred years.

I went last night to hear the developer speak about their proposed plans and I have many concerns, firstly that 15 story buildings would be considers for both the east and south sides of Dickerson pike that would essentially wall me in here on Treutland Avenue. Secondly, they wish to replace the 220 units with 1400 units with no geological study done to see if underground parking would be an option. Additionally, the developer stated that no mixed use would be in the Riverchase space and that they only need that designation to get around the height requirements. Lastly, that these new apartments would be open and available to STRP with no restrictions like the rest of this neighborhood, is alarming to say the least.

I am all for redevelopment of Riverchase and the Dickerson Road Corridor but, let's not sacrifice the existing neighborhood at the expense of more STRPs with no parking plan.

I have spoken with many of my neighbors about this and I can tell you, the community want's responsible and reasonable growth. NOT, the tallest building outside of the downtown core

Bill Holbrook (615) 521-4665 holbrook.bill@gmail.com



June 13, 2019

Metropolitan Planning Commision Howard Office Building 700 2nd Ave S, Nashville, TN 37210

RE: Dickerson Road Corridor Study

Dear Planning Commissioners,

We write to you in support of the Dickerson Road Corridor Study - between Spring Street and Pages Branch. Transit Now Nashville is an all volunteer local grassroots non-profit organization whose mission is to engage the Nashville community to promote a vibrant transit system.

Through participation in the community meetings and now seeing the study posted online, it is clear that many of the residents' concerns, expectations and needs are being met with this effort.

A few major points we would especially like to endorse:

- Transit supportive density is planned west of Dickerson Rd, which coordinates well with the River North development
- Dickerson Road and connector streets prioritize walking, biking and transit infrastructure to serve as options to the existing automile oriented environment
- Existing neighborhood character is preserved east of Dickerson Road

It is our hope that the Dickerson Road Corridor Study is approved and will serve as a guide for development in the years to come, promoting a more livable, walkable and economically inclusive neighborhood.

Thank You,

Board of Directors Transit Now Nashville

ITEM 42: 2019Z-111PR-001

From: Justin Gregory [mailto:jmgregory@gmail.com] Sent: Wednesday, June 12, 2019 6:42 PM To: Planning Commissioners Subject: 2019Z-111PR-001

Hello,

I won't be able to make the regular commission meeting tomorrow, so I'm writing to voice my support for this zoning change (2019Z-111PR-001). I live two doors down from the proposed development, and am excited about the possibility of bringing more high-quality housing and greater residential density to our area if this zoning change is approved.

In particular, I'm excited about the new sidewalk that would be added in front of the development. Monticello Dr. is a collector street for the neighborhoods north of Trinity Lane, and people tend to drive much too fast through it, well in excess of posted speed limits. (There was a serious wreck in right front the proposed development just a few weeks ago). At the same time, there are lots of people who live in these neighborhoods who walk along Monticello Dr. to get to the stores on Trinity Lane, and because there is no sidewalk for the short span between Monticello St. and Trinity Lane, they have no choice but to walk in the street — on a road with blind curves and cars driving too fast.

The proposed development would add sidewalk to Monticello Dr. along the rezoned property, which will make Monticello Dr. a much safer street to walk on for that particular stretch. Even better would be for the city to finish out the sidewalk along the remaining stretch — a low-hanging fruit that will hang even lower if this change is approved.

Thanks, Justin Gregory

ITEM 46: 2019Z-116PR-001 and ITEM 47: 2019Z-117PR-001

From: Sara Cox [mailto:saramaycox@gmail.com] Sent: Wednesday, June 12, 2019 1:59 PM To: Planning Commissioners; Napier, Patrick (Planning) Cc: Davis, Scott (Council Member) Subject: In opposition of Case #: 2019Z-116PR-001 and 2019Z-117PR-001

Dear Mr. Napier and the Metro Planning Commission,

I am writing to you today in opposition to the rezoning request for 213 and 321 Cleveland Street. The applicant is requesting to rezone his properties to CL. My main concerns with this proposal are:

1. It would remove two homes that are currently being used as residences from the housing stock. We are in a housing crisis, we should not be removing homes from use in order to operate offices and coffee shops.

2. The CL classification allows for a number of uses by-right that I think would be incompatible (nonresidential drug treatment facilities being the most shocking) with a street that is comprised of a majority single family residences.

3. This zoning change is not in agreement with our community plan.

4. I think spot zoning these properties for commercial will set a precedent for the rest of the street and drastically change the entire look and feel of the street in the long term.

I humbly ask you to deny this zoning request.

Best, Sara Cox 216 Cleveland Street Nashville, TN 37207

ITEM 1: 2018Z-010TX-001—BL2018-1416 TREE ORDINANCE

From: Elizabeth West [mailto:eliza.west@icloud.com] Sent: Wednesday, June 12, 2019 12:07 PM To: Planning Commissioners

Subject: I support trees and Nashville! - I support BL1416 I thank you all for considering this bill. I grew up in Nashville and have lived in New York, DC, Florida, Vermont, Paris and Amsterdam. What I have always loved about coming home to Nashville is the feeling of community and its beauty. I understand that as we grow, we must find places for those moving here, especially as we become an "it" city, but there are ways to do that while retaining the best of Nashville and not turning it into any other city. This bill is necessary for Nashville. I am sure you are all aware of the many benefits of urban tree canopy, but just a reminder:

Trees give us cleaner air, promote more physical activity, reduce stress, and lower crime rates. They are natural air conditioners, reducing electricity costs, and create better water quality and help with storm management. Homes landscaped with trees sell more quickly and are worth 5% to 15% more than homes without trees. Where the entire street is tree-lined, homes may be worth 25% more. Trees enhance economic stability by attracting businesses; people linger and shop longer when trees are present. They also reduce noise pollution by as much as 40%. We are far behind other comparable cities and I'm worried that if we don't act now, it will be harder to recover from our lack of regulation.

I am planting my own roots here again in Nashville longterm, and I don't want to feel saddened so often by the loss of our beautiful trees and natural surroundings and the feeling of community that I so treasure.

Thank you very much,

Elizabeth West

From: Moira Tomaso [mailto:motomaso@me.com] Sent: Wednesday, June 12, 2019 1:57 PM To: Planning Commissioners

Subject: I SUPPORT TREES - I SUPPORT BL1416

I am strongly in favor of regulations to maintain Nashville's mature tree canopy and to regulate the removal of trees, especially by developers.

Moira & Steve Tomaso 929A S Douglas Ave Nashville, TN 37204 From: Shannon Beauchamp [mailto:sbeauchamp82@gmail.com] Sent: Wednesday, June 12, 2019 2:19 PM **To: Planning Commissioners** Subject: I SUPPORT TREES - BL2018-1416 I support this Bill. Nashville needs more trees to reduce heat, absorb CO2, decrease the effects of a warming planet and beautify Our beautiful city! Shannon Beauchamp 1505 Paris Ave Nashville, Tn 37212 From: Amanda [mailto:gdolphinproj@yahoo.com] Sent: Wednesday, June 12, 2019 2:40 PM **To: Planning Commissioners** Subject: I SUPPORT TREES - I SUPPORT BL1416 Please and thank you. The "bowl" of Nashville, it's beauty, and it's attractiveness to newcomers as well as tourists depends on our existing tree canopy. Amanda Dobra Hope P.O. Box 210951 Nashville, TN 37221 "Be the change you want to see in the world" From: Kelly Ryan [mailto:kellyryan712@gmail.com] Sent: Wednesday, June 12, 2019 2:47 PM **To: Planning Commissioners** Subject: I SUPPORT TREES- I SUPPORT BL1416 Kelly Rutledge 2008 18th Ave S Nashville, TN 37212 Best, **Kelly Rutledge** From: Debbie Dickson [mailto:ddickson@hghill.com] On **Behalf Of Jimmy Granbery** Sent: Wednesday, June 12, 2019 3:05 PM **To: Planning Commissioners** Cc: Kempf, Lucy (Planning); O'Connell, Freddie (Council Member); Allen, Burkley (Council Member); Henderson, Angie (Council Member); Withers, Brett (Council Member); Davis, Anthony (Council Member); Johnson,

Page 73 of 81

Mina (Council Member); Mendes, Bob (Council Member) Subject: BL 2018-1416-Tree Density, Removal and Replacement

Please see the attached letter from Jimmy Granbery regarding the Tree Ordinance – Item No. 1 for the Planning Commission meeting on June 13, 2019.

Jimmy Granbery

Chair/CEO

H.G. Hill Realty Company, LLC ■ 3011 Armory Drive ■ Suite
130 ■ Nashville, TN 37204

tel (615) 252-8121 🔳 fax (615) 244-1627

SEE ATTACHMENT ON FOLLOWING PAGE

From: Brant Miller [mailto:forestbrant@comcast.net] Sent: Wednesday, June 12, 2019 3:07 PM To: Planning Commissioners Subject: I SUPPORT TREES - I SUPPORT BL2018-1416 Dear Planning Commission:

I urge you to support BL1416, which you will be voting on this Thursday afternoon. This bill is needed to strengthen the standards for landscape buffering and tree requirements, including tree density. It will improve Nashville's tree canopy and urban forest, and improve the environment and living conditions for all Nashvillians.

Thank you! Brant Miller

13566 Old Hickory Blvd.

Antioch, TN 37013

From: Noni Nielsen [mailto:n_n_nielsen@yahoo.com] Sent: Wednesday, June 12, 2019 3:28 PM To: Planning Commissioners Subject: Support for BL1416

As board president of Nashville Tree Foundation, I urge you

to protect and enhance our urban forest (a "public utility" per Exec Oder 40) by supporting BL1416.

Thank you.

Noni Nielsen

1201 Nichol Lane, Nashville 37205

From: Clay Ezell [mailto:clay@compostcompany.com] Sent: Wednesday, June 12, 2019 3:33 PM To: Planning Commissioners Cc: VTu1906101@aol.com Subject: I SUPPORT TREES - BL2018-1416 I'm writing in FAVOR of BL2018-1416, improving tree density in our city. This would bring all the benefits of a protected, and in the future, improved canopy over Nashville. The benefits of this are numerous, and I hope that you'll vote for a tree-filled future for our city. Thank you,

Clay Ezell

509 Third Avenue South

Nashville, 37210

From: Sarah Henning [mailto:sarahkayhenn@yahoo.com] Sent: Wednesday, June 12, 2019 3:39 PM To: Planning Commissioners

Subject: Please increase tree requirements - I SUPPORT BL1416"

Hi - Sarah Henning here, my husband and I have been renting in Nashville for three years, and we just bought a home at 844 Rose Park Drive, 37206.

I encourage you to pass BL1416 to increase tree planting requirements, which are currently too low.

When looking for a home all we wanted was a modest ranch house in East Nashville with a tree in the back yard. That took ages to find, because so many of the ranches have been torn down and so many trees have been removed.

It's the South - tree cover is essential to enjoying our yard and our neighborhood. Plus, as density and traffic continues to increase, Nashville needs the carbon offset. But those are just a couple of practical reasons. The real reason you should pass this is because these big, old trees and lush greenery are part of Nashville's lure. The people who move here do so because of the beautiful, unique neighborhoods.

I've lived in virtually treeless places with generic architecture almost all of my life - I moved here because I wanted something different, something special. If Nashville turns into just another generic city, then why stay here when I can find generic elsewhere for much, much cheaper?

It's time for Nashville to set higher expectations for developers. Please pass BL1416.

Thanks for your time - Sarah Henning

From: Susan Bailey [mailto:susanbailey6530@gmail.com] Sent: Wednesday, June 12, 2019 4:03 PM To: Planning Commissioners Subject: Tree density bill BL2018-1416



Re: BL 2018-1416 (Tree Density, Removal and Replacement)

Dear Members of the Planning Commission:

As a long time Nashvillian and Chairman & CEO of H.G. Hill Realty Company, I am asking that you vote in favor of BL 2018-1416 as substituted. This bill is far from perfect and I still have some reservations with its implementation, though given the time and energy that the staff spent working to revise and amend it to closely align with Nashville Next, I believe it is prudent for the substitute to move forward to Council for consideration. Admittedly, I continue to believe the following provisions could be problematic and may require additional revision:

TREE BANK: I believe that the current ordinance offers inadequate detail and accountability for the tree bank in terms of:

a) the authority and administration of the tree bank regarding who determines the location and species;

b) inability (per the code) for trees to be planted in a location other than public land vs. the preferred ability for a developer to "transfer" through TDU trees to another property with ownership by the same company; and,

c) the details of the administration of the tree bank should be enumerated and finalized prior to the implementation of any revisions to the tree ordinance.

GREEN ROOF TREES: In the current and proposed ordinance, there is no written exclusion of trees being counted on green roofs, *however*, the interpretation has consistently been not to allow for trees planted on a green roof to count toward TDU. Trees on green roofs provide very similar benefits to trees planted at grade with canopy, evapotranspiration, shade, air quality and carbon sequestration, water filtration and retention.

In light of these concerns, I would ask that the Commission and the Council consider committing to review the ordinance's functionality following its passage to determine if further revisions are necessary.

I want to personally thank the Planning Commission staff for their continued work on this important issue. I understand how difficult it is to develop this type of legislation, and to respond to the concerns voiced from various ends of the spectrum. All of us at H.G. Hill Realty look forward to working with you and the Council throughout this process for the betterment of our community.

Sincerely,

low W. Mr

Jimmy Granbery Chairman and CEO

3011 Armory Drive, Suite 130 Nashville, TN 37204-3721 Phone: (615) 252-8100 Fax: (615) 244-1627 www.hghill.com

Please support this bill-for the look and benefit of our neighborhoods and for the enjoyment and benefit of my neighbors. I live in the Sylvan Heights neighborhood at 211 37th Ave N, Apt A1, Nashville TN 37209

From: Jane Boram [mailto:jane2302@att.net] Sent: Wednesday, June 12, 2019 4:37 PM To: Planning Commissioners Subject: TREE DENSITY Bill 2018-1416 - Please Promote & approve

Hello Commissioners as a resident in Nashville for the last 28 yrs., I URGE you to promote TREE DENSITY for our city. Having had Red-Bud tree cut down by a Developer in trying to build a house next to us (the tree was on our property line he was supposed to replace it and never did!), we feel passionately about our neighborhood trees. In fact, my neighborhood is called

WOODLAND IN WAVERLY - one of the 1st streetcar neighborhoods in Nashville. We have historic guidelines thank Goodness!

But it does't stop greedy, sloppy Construction Management (?!?) like PHNX, INC., Ron Tolander, the man who promised us another Red-Bud Tree, but laughed at us when he planted one in the front yard of the new home he built next, what we consider out-of-sync-architectually to our HIstoric Home (built in 1906), a Princess Anne. "There's Your Tree," he laughingly noted.

Developers & Construction Managers don't care about a CANOPY for Nashville's Tree-Line. They care only about profits. It takes a PLANNING COMMISSION and serious Council Members to insure trees continue to be replaced when cut-down.

Please push for Bill # 2018-1416 to be considered Law. Thanks for Listening! - Jane Boram

2206 Grantland Ave., Nashville, TN 37204-2214 615-500-2446

From: Susan Sasser [mailto:susansasser@bellsouth.net] Sent: Wednesday, June 12, 2019 4:54 PM To: Planning Commissioners

Subject: I SUPPORT TREES - I SUPPORT BL1416 As a 7th generation native Nashvillian, I support BL1416 wholeheartedly! Please vote to ensure a healthy and beautiful quality of life for generations to come in Nashville. Please help developers be good community stewards. Please vote in favor of BL1416! Thank you, Susan Sasser 880 Bresslyn Rd. Nashville, TN 37205 From: Cally Charping [mailto:callycharping@gmail.com] Sent: Wednesday, June 12, 2019 6:14 PM **To: Planning Commissioners** Subject: I SUPPORT TREES - BL2018-1416 Though I will be unable to attend the Planning meeting I want you to know that I support this bill. I have a small, urban yard in 12South but manage to have 12 different species of trees on it. It can be done. Cally From: Beauchamp, Dan [mailto:daniel.beauchamp@vumc.org] Sent: Wednesday, June 12, 2019 7:48 PM **To: Planning Commissioners** Subject: I SUPPORT TREES - BL2018-1416 Please pass the bill, Dan Beauchamp From: jayjoe1976 [mailto:jayjoe1976@yahoo.com] Sent: Wednesday, June 12, 2019 7:53 PM **To: Planning Commissioners** Subject: I SUPPORT TREES - I SUPPORT BL1416 Jeremy Joesup 1320 Neely's Bend Rd Madison TN 37115 From: Berdelle Campbell < btccampbell@comcast.net> Subject: Support for proposed new Tree ordinance for Nashville Date: June 12, 2019 at 4:41:54 PM CDT To: "Planning.Commissioners@nashville.gov" <Planning.Commissioners@Nashville.gov> Planning Commissioners: I write in SUPPORT of BL 1416, the new proposed TREE

I have a life-long appreciation for trees - in forests, in parks, on farms, in yards, in cities, especially neglected areas of cities. My awareness of and my particular concern for Nashville`s tree canopy goes back more than 40 years. That's when my husband and I made the decision to become a part of the restoration efforts for Historic Germantown.

ORDINANCE for Nashville.

Trees was an item on a seemingly endless long "To Do" list.

Along the way I had the opportunity to be a part of a group of "city folk" that recognized the dire need for a tree ordinance. At that time there was NOTHING regulating or controlling what happened or didn't happen to or for trees in Nashville. Thus, the beginnings of the first efforts toward that first tree ordinance. The finished draft sent to Council for approval was a very different creature from the AMENDED bedraggled, chopped, version that emerged from the final Council vote.

The document was so diminished, so weak my first reaction was that we not ask that it be passed, not accepted.

Wiser heads said if we let this go we would be back with NOTHING. That would be worse than having something and go to work on improving it.

So here we are decades later before we finally get to that point of seeing an improved ordinance. And WHAT AN IMPROVEMENT.

I congratulate and say THANKS to all who are responsible for the ordinance that is B L 1416.

Sincerely. Berdelle Campbell 1217 5th Ave N Historic Germantown 37208 From: Jason Adkins [mailto:jasonmadkins@gmail.com] Sent: Wednesday, June 12, 2019 8:31 PM **To: Planning Commissioners** Subject: I support trees! Please support our urban canopy! Jason Adkins 14 GARDEN st Nashville 37210 **From: Nicholas Lorenson** [mailto:n.e.lorenson@gmail.com] Sent: Wednesday, June 12, 2019 9:13 PM **To: Planning Commissioners**

Subject: I SUPPORT TREES - I SUPPORT BL1416

Nick Lorenson 301 Demonbreun St, Apt 1907 Nashville, TN 37201 From: Margaret Dodson [mailto:dodson09@gmail.com] Sent: Wednesday, June 12, 2019 9:17 PM **To: Planning Commissioners** Subject: Approve BL2018-1416 To Whom It May Concern: I cannot attend tomorrow's meeting, but I write in absolute support of BL1416 in favor of tree preservation. I am a Nashville native and I am very supportive of smart and intentional growth. Acting to preserve our trees will help make Nashville a wonderful city for generations to come. This bill favors the many, not just the few, and should be approved. Sincerely, Margaret From: ginny stohl [mailto:gstohl@hotmail.com] Sent: Wednesday, June 12, 2019 9:18 PM **To: Planning Commissioners** Subject: Tree Density Bill Please support this bill and protect our tree canopy in Nashville. We've already lost thousands of trees to development and it needs to stop for our health, our future generations, and to preserve the beauty of our city. PLEASE support this bill! Thank you. **Ginny Stohl** 1049 Parkwood Terrace Nashville, TN 7220 From: Barbara Futter [mailto:befutter@gmail.com] Sent: Wednesday, June 12, 2019 9:21 PM **To: Planning Commissioners** Subject: More trees please! Dear planning commissioners, Please approve an increase in density of trees. More trees creates better air quality which improves our health. More trees increases shade which reduces our energy bills which then improves are financial health. More trees creates less rain run off which improves our soil and greenery. It makes so much sense. Therefore, please increase the density of trees.

Barbara Futter 3410 Springbrook Dr Nashville, TN 37204

From: Barbara Smith [mailto:barbarahsmith1@gmail.com] Sent: Wednesday, June 12, 2019 10:10 PM **To: Planning Commissioners** Subject: Tree density - please increase Please consider increasing tree density from 14 to a factor of 22 for commercial and multifamily properties. We need to be kind to our planet and also preserve and protect what makes our city special. Thank you for your service and representation. You are appreciated! From: Layne, Lois [mailto:lois.layne@wku.edu] Sent: Wednesday, June 12, 2019 10:35 PM Hill area **To: Planning Commissioners** Subject: Support Trees and support BL2018-1416 Please support the tree bill, BL 2018-1416. Nashville needs to increase its tree canopy to support livability. This bill helps do this by to increasing the tree density factor for commercial and multi family development. Thank you for giving serious consideration to this bill and voting to support it. Sincerely, Lois Layne 817 Russell St. Nashville, TN 37206 From: Elizabeth Sanford [mailto:esanford@comcast.net] Sent: Wednesday, June 12, 2019 11:03 PM **To: Planning Commissioners** ___ Subject: Tree Density Bill BL2018-1416 Dear Planning Commissioners, I'm writing to encourage you all to show your support for the green heart of Nashville by voting to approve Tree Density Bill BL2018-1416. As the petition to save the cherry trees demonstrated, Nashvillians value their tree canopy and understand that trees are a vital asset to our city. I'm a Nashville native who urges you to consider the future of our city by approving this important bill and sending it

back to the Council to be voted into law.

Thank you for your time and consideration.

From: Carol Williams [mailto:wachtel@bellsouth.net] Sent: Thursday, June 13, 2019 6:13 AM To: Planning Commissioners Subject: Regarding Bill 2018-1416 Planning Commissioners:

A sensitivity to the tree issue is desperately needed by the Planning Commission at this time in Nashville. Please support our efforts to maintain,save and replenish Nashville's tree canopy. Thank you, Carol Williams 800 Russell Street Nashville, TN 37206 From: Schneider, Janet [mailto:jschneider@email.usn.org] Sent: Thursday, June 13, 2019 6:27 AM To: Planning Commissioners Subject: Please do not allow more building in the Knob Hill area

As a member of the HIllwood neighborhood, I ask that you please not allow the disrupting and demolishing of an eco system that is so vital to the productive and healthy way of life in West Nashville, and beyond.

Why in the world would we sacrifice a healthy and secure place for our citizens to live in order to build yet one more huge complex, often cheaply built, in such a fragile area, in order to fill the pockets of people who really don't care about the quality of life for Nashville residents. Please don't allow this building to proceed. Why would there even be a question? Thank you for reading. Respectfully, Janet Schneider

Janet Schneider Director of College Counseling University School of Nashville Nashville, TN 37205 615-321-8020

jschneider@usn.org

From: Bill Perkins [mailto:billp68@aol.com] Sent: Thursday, June 13, 2019 7:15 AM To: Planning Commissioners Subject: I SUPPORT TREES - BL2018-1416 Bill Perkins 416 Humphreys St. Wedgewood-Houston 37203

This bill is great first step to help protect the tree canopy in the inner core neighborhoods which have been ravaged by development.

THX

From: Beth Kindig [mailto:bkindig@comcast.net] Sent: Thursday, June 13, 2019 7:39 AM **To: Planning Commissioners** Subject: I SUPPORT TREES - BL2018-1416 Please support BL2018-1416. Nashville has lost far too many trees in this development boom. It's past time to do something about it. Thank you-**Beth Kindig** From: Amy Dorfman [mailto:amy.dorfman@icloud.com] Sent: Thursday, June 13, 2019 8:34 AM **To: Planning Commissioners** Subject: Tree density bill To members of the planning commission: I support this bill increasing the tree density. Reducing carbon and beautifying our neighborhoods-that sounds like a good direction. Franklin is at 26. Thank you, Amy Dorfman Vanderbilt University **Resident of Green Hills** From: David Sesler [mailto:Ronald.Sesler@ardenthealth.com] Sent: Thursday, June 13, 2019 8:54 AM **To: Planning Commissioners** Subject: WE SUPPORT TREES - WE SUPPORT BL1416 Subject: I SUPPORT TREES - BL2018-1416 Hi Planning Commissioners, Thank you for all you do for our city. I support BL1416 and

urge you pass this important bill to follow Atlanta's lead and keep our city looking and feeling like our reputation portrays.

Best regards, **David Sesler Business Intelligence Operations Manager** p 615.296.3633 | c 615.403.5755 www.ardenthealth.com



From: Barbra Deck [mailto:67bdeck@gmail.com] Sent: Thursday, June 13, 2019 8:54 AM

To: Planning Commissioners

Subject: Support BL2018-1416, the tree bill Dear Council Members,

I support the above mentioned tree bill and believe we need to stop or at least limit the cutting of older, native species such as maples when development occurs. Any trees cut should be replaced. Notice how hot a paved or concreted area is and notice that all parking spaces with shade are always taken.

Barbra Deck

From: Patricia Wallace [mailto:patwwallace@comcast.net] Sent: Thursday, June 13, 2019 9:09 AM **To: Planning Commissioners** Cc: Noni Nielsen Subject: BL1416 I urge you to protect and enhance our urban forest (a "pubic utility" per Executive order 40) by approving BL1416. Thank you, Patricia W. Wallace 105 Leake Ave. 37205 **From: Scotty Saunders** [mailto:scottysaunders@comcast.net] Sent: Thursday, June 13, 2019 9:27 AM **To: Planning Commissioners**

I am in favor of this bill except for items five and six. I think that's just a way to line the pockets of landscape architects and add more taxes to the public. If you want to plant trees on your property you should just be able to plant them as long as you reach the required density which is good for everybody.

I'm sure these kinds of details can be worked out in the council as they work towards passing this. Please let it move forward.

Thank you.

Scott Anthony Saunders 4609 Dakota Avenue

Nashville, TN 37209

615-573-5746

From: Sean Schaffer [mailto:sean3656@gmail.com] Sent: Thursday, June 13, 2019 9:48 AM To: Planning Commissioners; Pulley, Russ (Council Page 79 of 81

Member); Ashley Subject: In support of bill BL2018-1416 Dear Planning Commissioners:

I am writing to voice my overwhelming support for BL2018-1416. It is my firm belief that part of what makes Nashville a great place to live is it's tremendous tree canopy even in areas considered to be urban and in close proximity to the downtown area.

As you are well aware Nashville has seen a tremendous amount of growth recently and with that has come the infill of property formerly containing a single family home with some amount of green space and mature trees being torn down and replaced with multi-family homes with very little if any green space and though required, often no tree replacement. The leaders of this great city should be very concerned about the loss of our tree canopy and it appears that with this bill, they can take a solid first step toward living up to our label of Tree City USA.

Please vote in favor of approving this bill to help keep Nashville green and beautiful for future generations. Sincerely,

Sean Schaffer 3656 Mayflower Place 37204 From: Aaron Dalton [mailto:aaron@imaginationwins.com] Sent: Thursday, June 13, 2019 10:13 AM

To: Planning Commissioners Subject: I SUPPORT TREES - BL2018-141 Dear Planning Commission,

As a resident of the Nashville Metro area, I believe preserving and expanding our tree canopy - especially with native trees that are suited to local conditions and support wildlife - is essential to having a healthy, attractive, comfortable city.

Nashville's tree density is below that of many of its peer cities, which makes our city hotter and less comfortable during many summer days.

Nurturing, protecting, and expanding our tree canopy will make Nashville more appealing to residents and tourists alike.

Thanks for your consideration of this email. I encourage you to support BL2018-1416!

Aaron Dalton

Brentwood, TN

From: Richard Hitt [mailto:richardhitt@gmail.com] Sent: Thursday, June 13, 2019 10:17 AM To: Planning Commissioners Subject: I SUPPORT TREES - BL2018-1416 Planning Commission,

I am not a Nashville resident, but I spend a lot of time there working and socializing. I hope you will approve the tree canopy bill so that we can continue to take steps to improve the tree canopy. This is difficult in areas of rapid population growth but is is very important. I also hope that Metro will use native trees as much as possible because they are generally better for the environment since they serve as host plants for many beneficial insects. Richard Hitt, Ph.D, President

Middle Tennessee Wild Ones Chapter

From: Linda Pfenning [mailto:lspfenning2017@gmail.com] Sent: Thursday, June 13, 2019 10:49 AM To: Planning Commissioners Subject: I SUPPORT TREES - BL2018-1416 Linda S. Pfenning Lewisburg, TN

I support planting a variety of native trees and plants, not just one species, anywhere in the country and cities of Tennessee, under the supervision and advisement of professionals from several science fields.

In my hometown in Michigan, decades ago they planted all one variety of maple in a big section of the city cemetery, and now there is a disease afflicting all of them. It has been stated that the trees should have been of a mixed variety as would occur in nature.

However, at one time I griped about all the bushes and trees planted along the corridors of the Cool Springs Galleria in Franklin, because they blocked my vision, especially on the curves. My opinion is that landscaping should never block the vision of drivers or make a highlyused area unsafe in other ways.

Thank you for all you are doing to help our outdoor community stay healthy!

From: Emilee Warner [mailto:emileekwarner@gmail.com] Sent: Thursday, June 13, 2019 10:52 AM

To: Planning Commissioners Subject: I SUPPORT TREES - BL2018-1416 **Emilee Warner** 701 Maplewood Lane Nashville, TN 37216 From: Patricia Miller [mailto:plantatree@comcast.net] Sent: Thursday, June 13, 2019 11:55 AM **To: Planning Commissioners** Subject: I SUPPORT TREES - I SUPPORT BL2018-1416 **Dear Planning Commission:** I urge you to support BL1416, which you will be voting on this Thursday afternoon. This bill is needed to strengthen the standards for landscape buffering and tree requirements, including tree density. It will improve Nashville's tree canopy and urban forest, and improve the environment and living conditions for all Nashvillians. Thank you! Patricia Miller 13566 Old Hickory Blvd. Antioch, TN 37013 From: Katherine Chasnov [mailto:kchasnov@gmail.com] Sent: Thursday, June 13, 2019 11:57 AM **To: Planning Commissioners** Subject: I SUPPORT TREES - BL2018-1416 Just wanted to reach out to provide my support for the proposed increase in tree density in Nashville. More trees are better for everyone, and make for a more attractive city for both the residents and tourists to enjoy.