

**MEMPHIS AND SHELBY COUNTY OFFICE OF PLANNING AND
DEVELOPMENT
STAFF REPORT**

10

CASE NUMBER: SUP 10-232 L.U.C.B. **MEETING:** January 13, 2010

LOCATION: East side of Kirby Parkway; +/-437 feet north of Stout Road

COUNCIL DISTRICT: 2

SUPER DISTRICT: 9

OWNER OF RECORD / APPLICANT: TV6-W, LLC (William Orgel)

REPRESENTATIVE: Prime Development Group - Michael Fahy

REQUEST: Cell Tower – 150’ Tall – Flush Mounted Design

AREA: 4.76 Acres

EXISTING LAND USE & ZONING: A religious institution in the Floodway (FW) and Single Family Residential (R-10) and Floodplain (R-10{FP}) District, formerly R-S10

**OFFICE OF PLANNING AND DEVELOPMENT
RECOMMENDATION**

APPROVAL WITH CONDITIONS

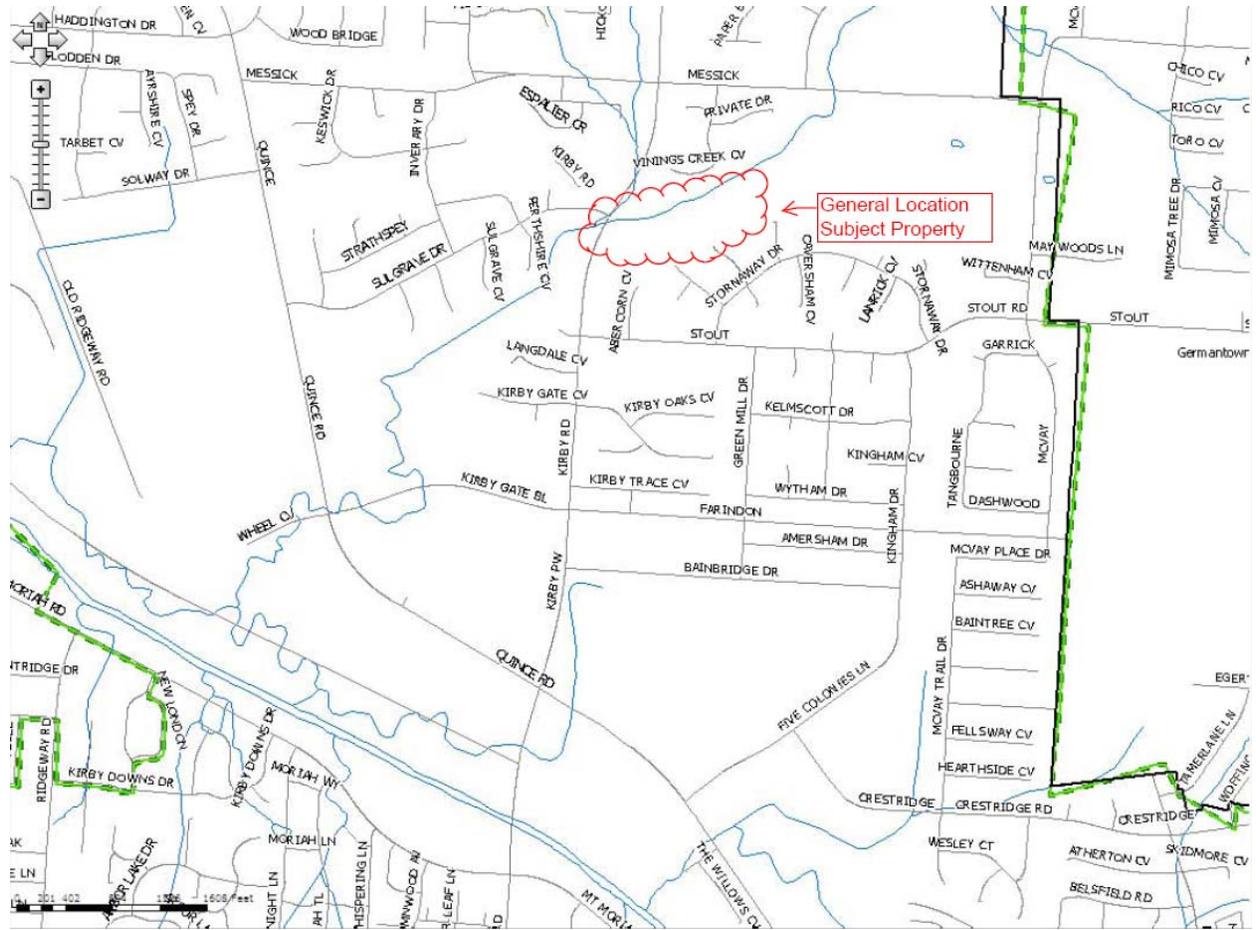
CONCLUSIONS

1. While the staff continues to support and encourage the use of existing towers (such as MLGW/TVA Towers), the response of the applicant does indicate an appreciation for the requirements of the ordinance and meets the intent of the requirements.
2. The applicant's placement of the tower and compound on this site is sensitive to the residential neighbors, the location is roughly equal in distance to the north and south property lines. Unfortunately, the physical encumbrances of the site limit the width and type of planting screen that can be used along the compound's southern boundary.

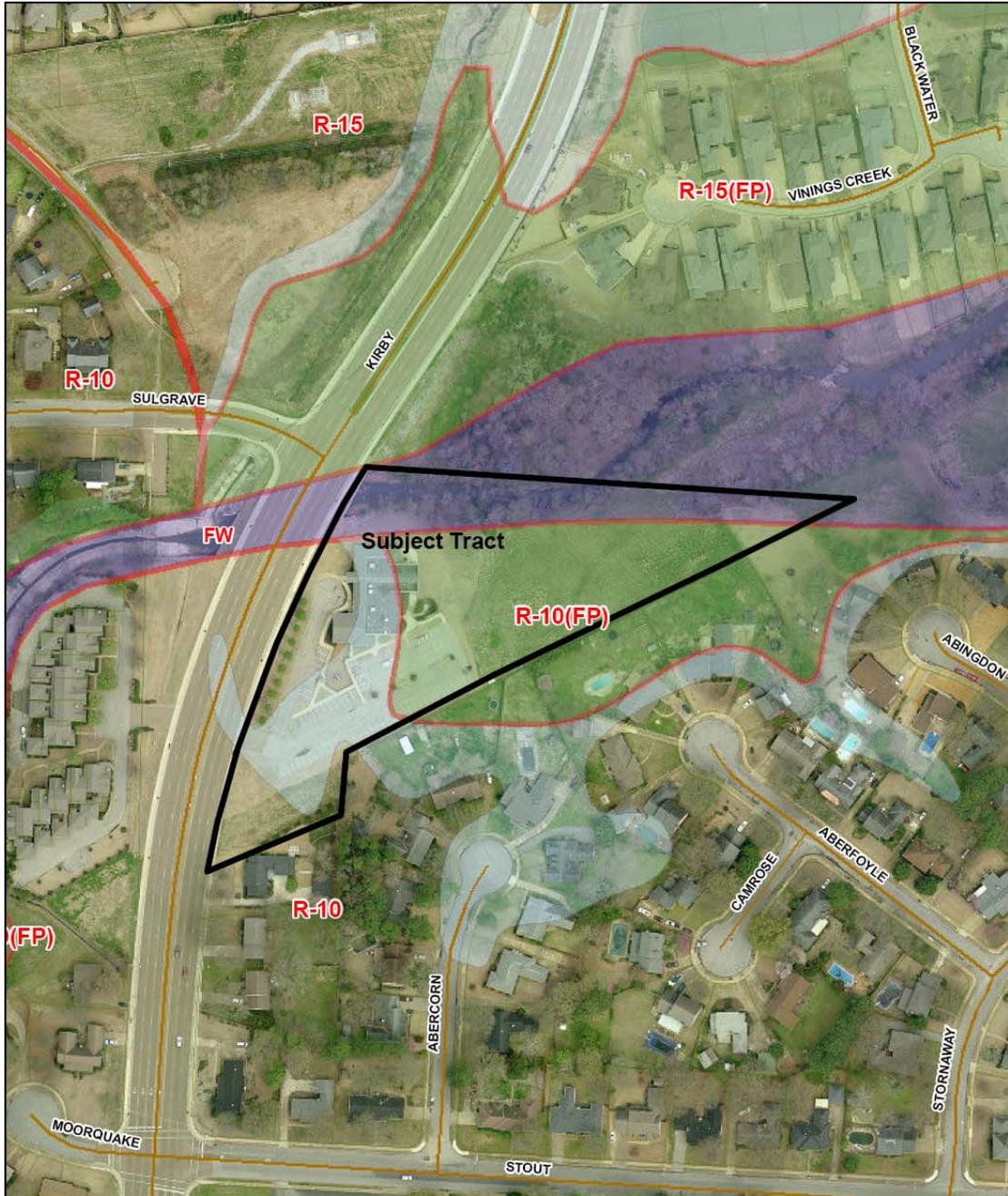
Staff: Don Jones

E-Mail: john.jones@memphistn.gov

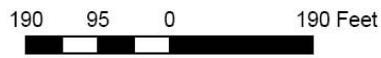
Generalized Location Map



SUP 10 232



Map Date: 12/22/10
Shelby County ReGIS 678.2470



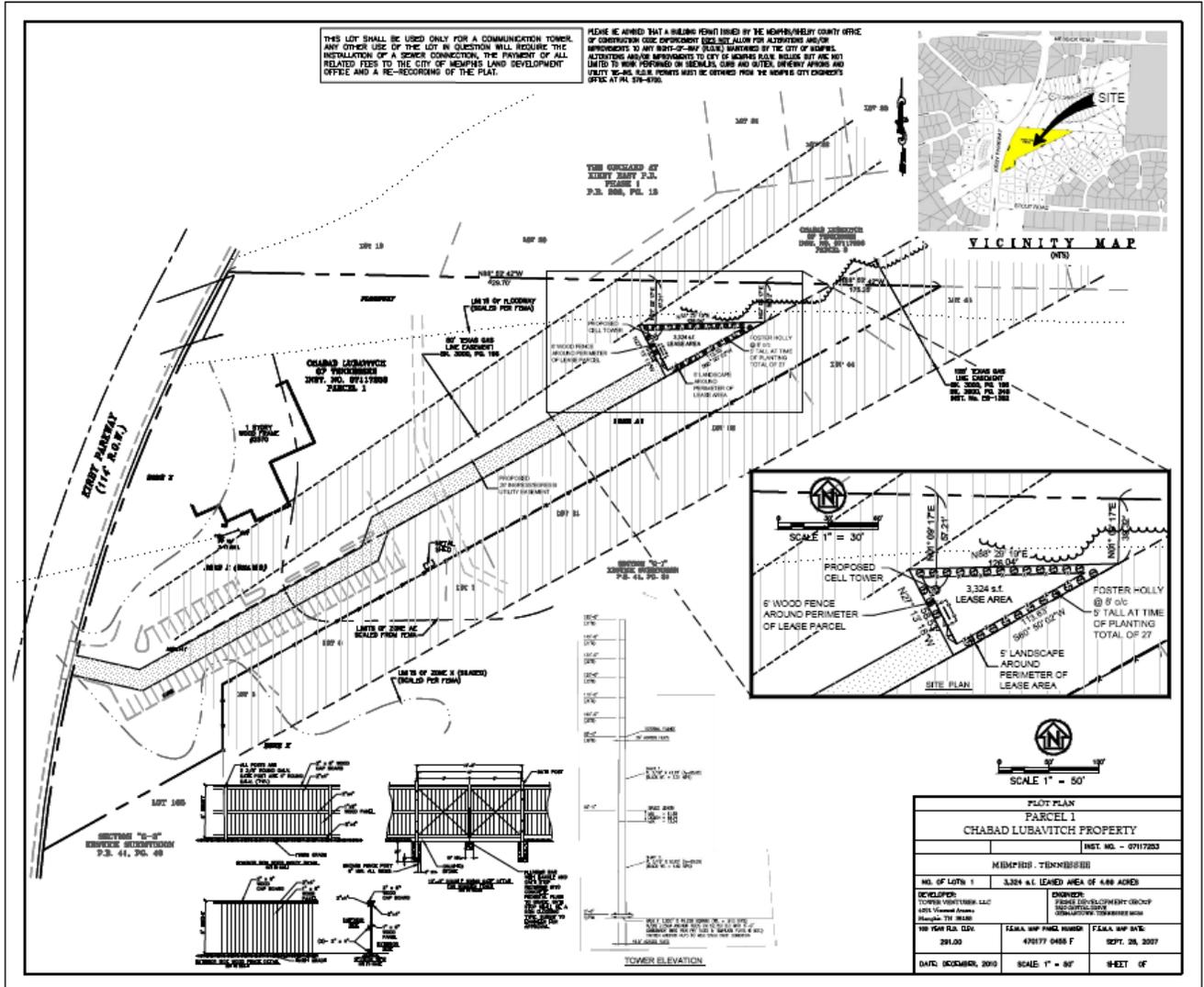


Looking east from Church Parking Lot



Looking south from edge of equipment compound





Customer Name: T V VI-LLC
Site: STOUT STABLES-MEMPHIS-SHELLBY COUNTY-TN



P.O. BOX 8597 FORT WORTH, TX 76124-0597
PHONE: (800) 433-1818 FAX: (817) 255-8856

JOB DATA			
Page 1 of 1	Job No.	Q101101002	
By TW	Design No.	M10-0640	
CHK'd By	Date	Nov 2 2010	
	Rev. No.	0	Rev. Date
Structure	150-FT CANISTER POLE		
Ref. No.	...na\2010\10-0600\M10-0640\Q101101002.out		
Design Standard	ANSI/TIA-222-G-2005 Addendum 2		

GENERAL DESIGN CONDITIONS	
Design Wind Speed: 90.00(mph)	Structure Class: II
Ice Wind Speed: 30.00(mph)	Exposure Category: C
Service Wind Speed: 60.00(mph)	Topographic Category: 1
Ice Thickness: 1.00(in)	-

POLE SPECIFICATIONS	
Pole Shape Type:	18-SIDED
Taper:	0.12083 IN/FT
Shaft Steel:	ASTM A572 GRADE 65
Base PL Steel:	ASTM A572 (50 KSI)
Anchor Rods:	2 1/4" X 7'-0" LONG #18J ASTM A615 GRADE 75

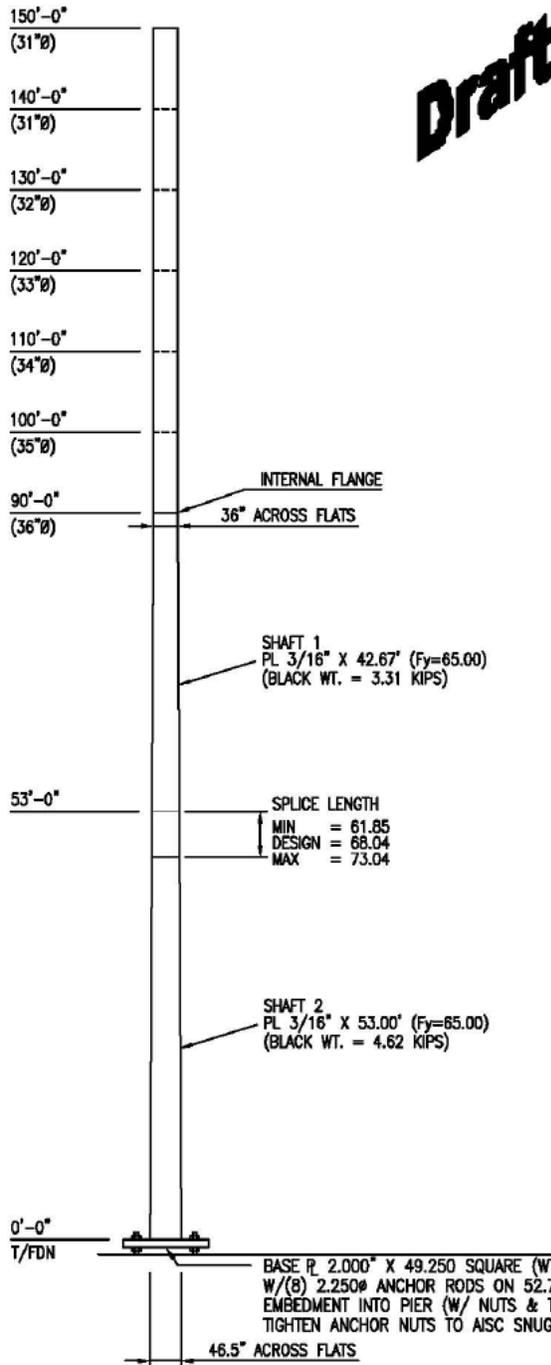
** SHALL MEET CHARPY V-NOTCH TEST: 15 FT.LBS @ -20°F

ANTENNA LIST					
No.	Elev.(FT)	Antenna	Mount Type	AZ (°)	COAX
1	145.00	(3) APXY18-206517S (72"X6.6"X3.2"D)	- SHIELDED	(12)LD7P-50A	-
-	145.00	(6) ATMAA1412D-1A20 (12"X10"X4"D)	- SHIELDED	-	-
2	135.00	(5) DBXNH-8585B-VTM (73"X11.9"X7.1"D)	- SHIELDED	(12)LD7P-50A	-
3	125.00	(5) P65-15XLHRR (51"X12"X6"D)	- SHIELDED	(6)LD5P-50A	-
-	125.00	(3) T108-190B111-001 (15"X7"X6"D)	- SHIELDED	-	-
4	115.00	(3) P65-15XLHRR (51"X12"X6"D)	- SHIELDED	(6)LD5P-50A	-
-	115.00	(3) T108-190B111-001 (15"X7"X6"D)	- SHIELDED	-	-
5	105.00	(3) LLPX310R (43"X11.8"X4.5"D)	- SHIELDED	(8)LD4P-50A	-
-	105.00	(3) WAP450 (26"X7"X6"D)	- SHIELDED	-	-
-	105.00	(3) PTP58600 (14.5"X14.5"X3.8"D)	- SHIELDED	-	-
6	95.00	(3) 6'X13' PANELS	- SHIELDED	(12)LD7P-50A	-

Elevation	90 MPH WIND		60 MPH WIND	
	Lateral Deflection (Inches)	Rotation (sway) (degrees)	Lateral Deflection (Inches)	Rotation (sway) (degrees)
90'	28.3	2.6	7	0.64

SHAFT SECTION DATA					
Shaft Section	Section Length (feet)	Plate Thickness (in.)	Lap Splice (in.)	Diameter Across Flats (Inches)	
				Top	Bottom
1	42.67	0.1875	-	36.00	41.15
2	53.00	0.1875	68.04	40.10	46.50

NOTE: DIMENSIONS SHOWN DO NOT INCLUDE GALVANIZING TOLERANCES
THIS STRUCTURE WAS NOT DESIGNED FOR USE WITH A FLAG.
ANTENNA FEED LINES RUN INSIDE OF POLE
MIN SPLICE LENGTH = 1.5 * THE INSIDE WIDTH OF THE BASE OF THE UPPER SECTION



FACTORED BASE REACTION

MOMENT:	1063.54 FT-KIPS.
SHEAR:	13.13 KIPS
AXIAL:	25.00 KIPS
EST. SHAFT + BASE PLATE WEIGHT:	8.7 KIPS (BLACK WEIGHT)

STAFF ANALYSIS:

General Location and Site Characteristics:

The subject property is a religious institution which is located on the east side of Kirby Parkway between Stout Road on the south and Messick Road on the north. The first +/- 400 feet of the site is developed with building and parking. The remaining area of the site east of the surface parking lot is vacant.

The subject site is a triangle with Kirby Parkway forming the base of the triangle and then extending eastward some 700 feet. In addition to its unusual configuration, the site includes a number of natural and man-made encumbrances. Along the north boundary line is the Floodway of a tributary to Nonconnah Creek. The existing tree coverage on this property runs along and within this floodway.

Along the south property line is one of two 50' foot Texas Gas Easements. The second of the two bisects this site and leaves a narrow strip of land between the two easements in the center of the site. The site also contains a small drainage feature which runs north-south between the Floodway and the lots in the Keswick Subdivision.

Area Overview

The Land Use and Zoning Map indicates that the subject property is located in the middle of predominately residentially developed area. To the north of the subject property are the lots associated with the Orchards at Kirby Parkway East Planned Development which date to 2003. The lots that abut the subject property from this planned development are unusually deep lots in excess of 300 feet. These lots accommodate the natural drainage way and a Gas Easement.

To the south of the subject site are the lots in Keswick Subdivision, Sections G-1 and G-3 which date to approximately 1969. The subdivision plat for these lots likewise deeper than the average R-10 lot due to the existence of the 50 foot wide gas line easement that runs through the north edge of the lots.

West of the subject site on the opposite side of Kirby Parkway is the Copperfield Planned Unit Development which consists of 12 attached residential uses.

Requirements for Cell Towers:

Standards for the location of Cellular Communication Towers were adopted in September of 2001. The purpose behind the Ordinance was to limit the proliferation of towers, which in many instances only contained one antenna array, and to promote co-location.

With respect to sites with residential zoning, the Ordinance encourages cell towers to be located on publicly owned and/or lease properties, public/private utility owned properties, or institutional uses. When new facilities are proposed, they must be located and designed to minimize any negative impact. And the applicant shall provide an explanation as to why the CMS equipment cannot be located on an existing or approved tower.

Review of Request:

Cell Tower Regulations – In review of this application, the staff has asked the applicant if they could take advantage of the TVA/MLGW towers generally to the north of this site. The applicant responded that 1. Legal issues have arisen between property owner and tower owner over the sub-leasing of towers such that the cell tower industry is not as inclined toward using those towers as they once were; 2. The utility towers can only accommodate one user per tower; 3. There a number of serious, life threatening safety issues related to the installation of a cell tower within the confines of these electrical towers and wires; and 4. It is our belief that the intent of the Cell Tower Ordinance was to confirm multiple users on one single facility in lieu of multiple lower level MLGW towers with single service providers.

While the staff continues to support and encourage the use of existing towers (public or private), the response of the applicant does indicate an appreciation for the requirements of the ordinance and meets the intent of the requirements.

Review of Site Plan – The application locates the cell tower and equipment compound near the eastern edge (the point of the triangle) of the site. At this location, the compound and the lower half of the tower will be screened by existing trees from the residential properties to the north of the site. At this location on the site, the compound is at a roughly equal distance from the residential property lines to the north and south.

Cell tower locations in proximity to residential properties are some of the most difficult to address. Clearly, even when there is an existing mature screen to serve as a buffer – as is the case along the north property line of this site, the tower will stand above the height of the trees. In this instance, there is an existing gas line easement not only along the south line of the tower compound but it also extends into the yards of the abutting residences to the south. This leaves little room to add a buffer to these residences. The site indicates a 5 foot wide planting strip along the border of the equipment compound. The applicant is proposing Foster Holly's planted 8 feet on center to provide a dense screen. Foster Holly's can be maintained as Trees and are drought tolerant plants.

Other locations on this site were discussed, but were dismissed because of the property owner's desire to leave room for future building expansion.

RECOMMENDATION: APPROVAL WITH CONDITIONS

S.U.P. 10-232

SITE PLAN CONDITIONS

A Special Use Permit is hereby authorized to allow a Cell Tower on the property located on the east side of Kirby Parkway; +/-437 feet north of Stout Road (and otherwise identified as 2570 Kirby Parkway – Assessors ID 08102700011 and 08102700014) in accordance with the approved site plan and the following supplemental conditions:

1. The Tower shall be a Flush Mount Design (as shown on the Plot Plan Graphic), maximum height 150 feet tall (height does not include lightning rod).
2. The Tower shall be structurally designed to accommodate at least five additional CMCS sectorized antennas.
3. Screening of the equipment compound shall be as shown on the attached plot plan and shall include a six foot tall, sight-proof wooden fence, and a row of an evergreen plant, subject to the review and approval of the OPD.
4. No new curb cuts will be approved for this site.
5. The existing curb cut which will be share by this applicant, will be inspected for ADA compliance. The applicant shall be responsible for any reconstruction or repair that is necessary to meet City Standards.
6. No trees shall be removed as a result of installation of the compound and tower.
7. The tower shall be constructed within two years of approval by the City Council and County Commission. The Land Use Control Board may grant a one year extension through the filing of a correspondence item application with full public notice.
8. The tower and related equipment shall be removed (by this applicant) within 180 days of the cessation of operations. If this applicant is no longer a viable entity, this requirement shall fall to the owner of this property.

GENERAL INFORMATION

Street Frontage: Kirby Parkway649.89

Planning District: Shelby Farms Germantown

Zoning Atlas Page: 2250

Parcel ID: 081027 00011

Zoning History: The current R-10 and Floodway Designations or their predecessors, date back to the adoption of zoning by Shelby County, circa 1960.

DEPARTMENTAL COMMENTS

The following comments were provided by agencies to which this application was referred:

City Engineer:

1. Standard Subdivision Contract as required in Section 500 of Subdivision Regulations.

Curb Cuts/Access:

2. No new curb cuts will be approved for this site.
3. Any existing nonconforming curb cuts shall be modified to meet current City Standards or closed with curb, gutter and sidewalk.
4. All existing sidewalks and curb openings along the frontage of this site shall be inspected for ADA compliance. The developer shall be responsible for any reconstruction or repair necessary to meet City standards.

Site Plan Notes:

5. Provide internal circulation between adjacent phases, lots, and sections. Common ingress/egress easements shall be shown on the final plats.
6. Required landscaping shall not be placed on sewer or drainage easements.

City Fire Division: No comments received.

City Real Estate: No comments received.

City/County Health Department: The Water Quality Branch & Septic Tank Program has no comments.

City Board of Education:

The subject property does not appear to be adjacent to any property which has been identified as belonging to Memphis City Schools (MCS). No identifiable impact on MCS' school-aged population nor MCS' property interests.

Construction Code Enforcement: No comments received.

Memphis Light, Gas and Water:

MLGW has reviewed the referenced application, and has no objection, subject to the following conditions:

- **It is the responsibility of the owner/applicant** to identify any utility easements, whether dedicated or prescriptive (electric, gas, water, CATV, telephone, sewer, drainage, etc.), which may encumber the subject property, including underground and overhead facilities. No permanent structures will be allowed within any utility easements.
- **It is the responsibility of the owner/applicant** to pay the cost of any work performed by MLGW to install, remove or relocate any facilities to accommodate the proposed development.
- **It is the responsibility of the owner/applicant** to comply with the **National Electric Safety Code (NEC)** and maintain minimum horizontal/vertical clearances between existing overhead electric facilities and any proposed structures.
- **Landscaping is prohibited** within any MLGW utility easement without prior MLGW approval. It is the responsibility of the owner/applicant to comply with Memphis/Shelby County Zoning Ordinance - Landscape and Screening Regulations.
- **It is the responsibility of the owner/applicant** to contact **TN-1-CALL @ 1.800.351.1111**, before digging, and to determine the location of any underground utilities including electric, gas, water, CATV, telephone, etc.
- **It is the responsibility of the owner/applicant** to submit a detailed plan to MLGW Engineering for the purposes of determining the availability and capacity of existing utility services to serve any proposed or future development(s). Application for utility service is necessary before plats can be recorded.
 - All residential developers must contact MLGW's Residential Engineer at 901-528-4855 for application of utility services.
 - All commercial developers must contact MLGW's Builder Services at 901-367-3343 to initiate the utility installation process.
- **It is the responsibility of the owner/applicant** to pay the cost of any utility system improvements necessary to serve the proposed development with electric, gas or water utilities.

AT&T/Bell South: AT&T Tennessee has no comment.

Memphis Area Transit Authority (MATA): No comments received.

OPD-Regional Services: No comments received.

OPD-Plans Development: No comments received.

Memphis Park Commission: No comments received.

Neighborhood Associations:

Kirby Trace Neighborhood Association: No comments received

Keswick-Stornaway Neighborhood Association: No comments received

Letter of Opposition Attached

From: dennis patrikios [patrikios44@gmail.com]

Sent: Monday, January 03, 2011 2:58 PM

To: Jones, Donald

Subject: cell tower ,kirby parkway.

my name is dennis patrikios ,6617 sulgrave dr.memphis, we received your notice about the tv tower they want to build across from our house, and we strongly oppose to it, on the grounds of the dangerous radiation it ommits during operation. this is very bad for our health and at the same time devalues our propperty.....please keep me inform for any related action by this company , so we take the future steps for legal action. thank you ,dennis