Item # 99

SEMINOLE COUNTY GOVERNMENT
AGENDA MEMORANDUM

(Continued from the October 26, 2004 Regular Meeting)

SUBJECT: Appeal of the Board of Adjustment's denial of a (1) special exception to establish a 150 foot tall "ecclesiastical" camouflage communication tower in the A-1 (Agriculture District); and (2) associated variances from 450 feet to 350 feet, 450 feet to 250 feet, 450 feet to 237.4 feet, and 450 feet to 300 feet to reduce the minimum separation distance required between a proposed 150 foot tall "ecclesiastical" camouflage communication tower and properties with single-family residential dwellings; (Bob Chopra / Wireless Facilities / Cingular Wireless, LLC, appellants).

DEPARTMENT: Planning & Development **DIVISION:** Planning

AUTHORIZED BY: Donald Fisher **CONTACT:** Earnest McDonald **EXT:** 7430

Agenda Date 12-14-04 **Regular** ☐ **Consent** ☐ **Work Session** ☐ **Briefing** ☐
Public Hearing – 1:30 ☐ **Public Hearing – 7:00** ☒

MOTION/RECOMMENDATION:

1. **UPHOLD** The Board of Adjustment's decision to deny a (1) special exception to establish a 150 foot tall "ecclesiastical" camouflage communication tower in the A-1 (Agriculture District); and (2) associated variances from 450 feet to 350 feet, 450 feet to 250 feet, 450 feet to 237.4 feet, and 450 feet to 300 feet to reduce the minimum separation distance required between a proposed 150 foot tall "ecclesiastical" camouflage communication tower and properties with single-family residential dwellings; (Bob Chopra / Wireless Facilities / Cingular Wireless, LLC, appellants); or
2. **REVERSE** The Board of Adjustment's decision to deny a (1) special exception to establish a 150 foot tall "ecclesiastical" camouflage communication tower in the A-1 (Agriculture District); and (2) associated variances from 450 feet to 350 feet, 450 feet to 250 feet, 450 feet to 237.4 feet, and 450 feet to 300 feet to reduce the minimum separation distance required between a proposed 150 foot tall "ecclesiastical" camouflage communication tower and properties with single-family residential dwellings; (Bob Chopra / Wireless Facilities / Cingular Wireless, LLC, appellants); or
3. **CONTINUE** the request to a time and date certain.

(Commission District 5 - Carey) (Earnest McDonald, Principal Coordinator)

This item was continued from the October 26, 2004 regular meeting of the Board, by request of the appellants.

Reviewed by:
Co Atty: KR
DFS:
Other:
DCM:
CM:

File No. ph700pdp05

BOARD OF ADJUSTMENT DECISION:

At its regular meeting on August 23, 2004, the Board of Adjustment denied the request for a (1) special exception to establish a 150 foot tall "ecclesiastical" camouflage communication tower in the A-1 (Agriculture District); and (2) associated variances from 450 feet to 320 feet and 450 feet to 300 feet to reduce the minimum separation distances required between a proposed 150 foot tall "ecclesiastical" camouflage communication tower and properties with single-family residential dwellings.

NOTE: This appeal reflects the site plan received for review after delivery of public notices for the Board of Adjustment hearing. This factor explains the discrepancy between the two (2) variances denied by the Board of Adjustment and the four (4) variances stated in the appeal. Even with the discrepancy between the request denied by the Board of Adjustment and the ensuing appeal to the Board of County Commissioners, Section 30.43 of the Land Development Code states that any appeal before the Board of County Commissioners shall be "de novo", which means the request shall be heard anew as if considered for the first time.

STAFF RECOMMENDATION:

Based on the stated findings, staff recommends the Board of County Commissioners uphold the Board of Adjustment's decision to deny a special exception to establish a 150 foot tall "ecclesiastical" camouflage communication tower in the A-1 (Agriculture District) and associated variances. Staff would support the granting of a special exception and associated variances to establish a 150 foot tall camouflage communication tower of an alternative design (e.g., flagpole, steeple, etc.) in the A-1 (Agriculture District).

Staff's recommendation for approval would be conditioned upon the appellants' ability to present a tower design that would be compatible with surrounding residential development and effectively merge, blend into and conform in appearance with existing facilities on the church property. The Board may wish to consider the design alternatives presented as illustrated attachments in this report.

STAFF REPORT		
GENERAL INFORMATION	BOB CHOPRA / WIRELESS FACILITIES / CINGULAR WIRELESS, APPELLANTS 5210 MARKHAM WOODS RD LAKE MARY, FL 32746	A-1 District, LDC Section 124 (b)(23) Communication Towers; LDC Section 30.1364(b) Performance Standards (Minimum Separation from Off-Site Uses / Designated Areas)

BACKGROUND / REQUEST	• The appellants propose to lease a portion of the subject property in order to construct a 150 ft tall ecclesiastical monopole communication tower that would be designed to compliment and conform in appearance with the existing church facility.
	• The subject property is currently occupied by a church and attendant accessory facilities, which comprise part of a larger site owned by Markham Woods Presbyterian Church, Inc.
	
	• **<u>REQUEST FOR SPECIAL EXCEPTION</u>**
	  ○ The existing site is located in the A-1 District, where camouflage communication towers are permitted subject to planning manager approval and the criteria below.
	  ○ The Land Development Code defines a camouflage communication tower as:
	  ▪ A structure designed to merge, blend into and conform in appearance with existing surroundings; and
	  ▪ A structure that does not appear to be unique, unusual or out of place; and
	  ▪ A structure that a reasonable person with normal observational faculties and intelligence would not perceive as a tower; and
	  ▪ A structure with camouflage techniques that does not have negative impacts on the general area in which it would be located.
	  ▪ Based on this definition, the planning manager has determined the proposed "ecclesiastical" tower, while camouflage in design, would not meet the above criteria
	  ○ The Planning Manager has determined that the proposed ecclesiastical monopole does not meet the above criteria.
	  ▪ the proposed tower, while camouflage in design, would not merge, blend or conform in appearance to the existing church due to its proposed height and would thereby appear unique, unusual and out of place with surrounding development. For this reason, a special exception is requested for the proposed tower, as	

allowed by the land development code for structures that fail to meet the definition of a camouflage communication tower.

- **REQUEST FOR VARIANCES**
  - Minimum separation distance is defined as 300 percent of proposed tower height (or 150 ft x 3 = 450 ft), measured from the outer extremity of the base of the tower to the nearest property line of the parcels where residences are located. For the proposed 150 foot tower, the Land Development Code requires a minimum separation distance of 450 ft between the base of the tower and existing single-family uses to the south.
  - The subject property abuts four (4) properties to the south where there are existing single-family residences. The following variances are requested to reduce the minimum separation requirements:

REFERENCE NUMBER *	SE DESIGNATED PARCELS	PROPOSED DISTANCE SEPARATION	VARIANCE AMOUNT REQUESTED
1	02-20-29-300-027A-0000	350.0 feet	100 feet
2	02-20-29-506-0000-0040	250.0 feet	200 feet
3	02-20-29-506-0000-0030	237.4 feet	212.6 feet
4	02-20-29-506-0000-0020	300.0 feet	150 feet

* Reference numbers correspond to Graphical Depiction of Requested Variances attached to this report.

  - The subject property is occupied by an existing church on property designated SE (Suburban Estates) future land use (FLU) and A-1 (Agriculture District), where the separation requirement does not apply.
  - The abutting tract to the west is occupied by a single-family dwelling where the separation requirement does apply. However, section 30.1364(b)(3) of the Land Development Code allows the Planning Manager to reduce separation distances with written consent of property owners within the separation distance.
  - The abutting tract to the west comprises a part of the Markham Woods Presbyterian Church site and is commonly owned by the same entity authorizing the request. By virtue of this authorization, the owner has consented to allowing a reduction in separation distance

between the base of the proposed tower and the abutting tract to the west; no variance is required.

ZONING & FLU

DIRECTION	EXISTING ZONING	EXISTING FLU	USE OF PROPERTY
SITE	**A-1**	**SE**	**CHURCH**
NORTH	A-1	SE	VACANT
SOUTH	A-1	SE	SINGLE-FAMILY
EAST	A-1	SE	SINGLE-FAMILY
WEST	A-1	SE	SINGLE-FAMILY

STANDARDS FOR GRANTING A SPECIAL EXCEPTION; LDC SECTION 30.43(b)(2)

The Board of Adjustment (BOA) shall have the power to hear and decide special exceptions and variances it is specifically authorized to pass under the terms of the land development code upon determination the use requested:

IS NOT DETRIMENTAL TO THE CHARACTER OF THE AREA OR NEIGHBORHOOD OR INCONSISTENT WITH TRENDS OF DEVELOPMENT IN THE AREA:

The trend of development in the area has included other communication towers, including two (2) flagpole towers, 135 ft and 90 ft in height, located to the north of the subject property on property owned by First Baptist Church of Markham Woods, Inc. However, the applicant has submitted documentation to suggest a flag pole design is not compatible with Cingular Wireless' communication infrastructure.

The proposed tower is designed to resemble an ecclesiastical appurtenance and compliment the appearance of the existing church. However, the Land Development Code does not describe the proposed tower design as an acceptable form of camouflage treatment, unlike signs, light poles, utility poles and roof fascias.

Because the proposed ecclesiastical tower, at the height proposed, would not blend into existing surroundings such that a reasonable person with normal observational faculties and intelligence would not perceive its presence as a tower, staff believes an alternative camouflage design would be more appropriate on the subject property. The Board might want to consider alternative design elements, including those identified in the Land Development Code (e.g., utility pole, flag pole, architecturally integrated facility, or steeple design.)

DOES NOT HAVE AN UNDULY ADVERSE EFFECT ON EXISTING TRAFFIC PATTERNS, MOVEMENTS AND VOLUMES:

The proposed tower would not have an adverse impact on existing traffic volumes, since the facility would be unmanned and require a minimum number of vehicle trips for routine service and maintenance.

IS CONSISTENT WITH THE SEMINOLE COUNTY VISION 2020 COMPREHENSIVE PLAN:

The Seminole County Vision 2020 Comprehensive Plan describes the SE (Suburban Estates) FLU as most appropriate for (1) the development of large-lot single-family estates as a desired final land use, (2) providing a transitional use between urban development and general rural uses, and (3) locations where agricultural operations can continue until development occurs for other purposes.

The Comprehensive Plan further describes SE FLU as appropriate for special exception uses like utility structures. With the imposition of staff's recommended conditions, the proposed communication tower would be consistent with the SE FLU designation.

MEETS ANY ADDITIONAL REQUIREMENTS SPECIFIED IN THE CODE SECTION AUTHORIZING THE USE IN A PARTICULAR ZONING DISTRICT OR CLASSIFICATION:

Based on the submitted site plan, the proposed communication tower would not meet the 450 ft minimum separation distance required between a 150 ft tower and four (4) abutting parcels with single-family homes to the south. For this reason, variances from the minimum separation distance required between the base of the proposed tower and the nearest property to the south are requested as a part of this application.

WILL NOT ADVERSELY AFFECT THE PUBLIC INTEREST:

Within the A-1 District, communication towers are allowed as conditional uses. The prior establishment of similar tower structures on adjacent property to the north has defined the character of the area as appropriate for this type of facility.

The proposed incorporation of camouflage design elements, including the ecclesiastical features, would further reduce the visual impact of the proposed tower. However, the proposed height of 150 ft would be substantially taller than the existing church

	buildings the tower would be designed to compliment. For this reason, staff believes an alternative design, as suggested elsewhere in the report, would provide a reasonable alternative for assimilation and the reduction of visual impact to surrounding residential development.
STANDARDS FOR GRANTING A SPECIAL EXCEPTION IN THE A-1 (AGRICULTURE); LDC SECTION 30.124(a)	The BOA may permit any use allowed by special exception in the A-1 (Agriculture District) upon making findings of fact, in addition to those required by section 30.43(b)(2) of the land development code, that the use: ***IS CONSISTENT WITH THE GENERAL ZONING PLAN OF THE A-1 (AGRICULTURE):*** As previously stated, the proposed use would be consistent with the SE FLU and underlying A-1 District zoning with the imposition of staff's recommended conditions. The proposed use would otherwise comply with the dimensional standards of the A-1 District. ***IS NOT HIGHLY INTENSIVE IN NATURE:*** The request would not be highly intensive in nature, if improvements are limited to a camouflage tower system that furthers the policy intent of the Land Development Code, an equipment cabinet, privacy fence, and requisite landscaping as depicted on the submitted site plan. The proposed facility would be self-operating and used exclusively for transmitting and receiving. Routine maintenance visits would occur approximately twice a month. More frequent visits would be required in the event of malfunction or emergency. Proposed ingress/egress to the facility would be provided from Markham Woods Road through the existing church site. ***HAS ACCESS TO AN ADEQUATE LEVEL OF URBAN SERVICES SUCH AS SEWER, WATER, POLICE, SCHOOLS AND RELATED SERVICES:*** The proposed tower would be an unmanned facility, which would require no connection to water or sewer, nor impact school services. Other County services, including police, emergency, and garbage disposal are otherwise available to the site. Electrical power and telephone service would be respectively provided by Progress Energy and BellSouth.
STANDARDS FOR GRANTING A	Separation distances may be decreased or increased by the Board of Adjustment in accordance with the procedural requirements for

VARIANCE; LDC SECTION 30.43 (b)(3)	variances. Prior to granting a variance, the Board of Adjustment must reach a finding that literal enforcement of applicable regulations would result in an unnecessary and undue hardship upon the applicant and determine compliance with the criteria presented in section 30.43(b)(3) of the Land Development Code. The standards relative to variances as otherwise stated below may be considered in determining whether to approve a variance but shall not be determinative as to whether the variance may be granted: ***THAT SPECIAL CONDITIONS AND CIRCUMSTANCES EXIST WHICH ARE PECULIAR TO THE LAND, STRUCTURE, OR BUILDING INVOLVED AND WHICH ARE NOT APPLICABLE TO OTHER LANDS, STRUCTURES, OR BUILDINGS IN THE SAME ZONING CLASSIFICATION:*** Should the Board of Adjustment find that a communication tower is appropriate for the proposed location and thereby approve the requested special exception, reasonable use of the subject property for the purpose of establishing a tower in excess of 79 feet would be dependent upon variances from the minimum separation distance required between the proposed tower and the properties with single-family dwellings to the south. Based on the submitted propagation maps and supporting documentation, the appellants have demonstrated a need to expand Cingular Wireless' service area by establishing a communication tower in the general vicinity of the subject property. The appellants have further indicated that all collocation opportunities, including the 100 foot collocation opportunity to the north, have been explored and determined to be unacceptable for meeting Cingular Wireless' coverage goals and the provision of homogeneous service across its network. Staff has further determined that the proposed tower height is consistent with Cingular Wireless' desire to provide coverage in the areas identified on the attached propagation maps. In general, communication towers require a spacing of approximately 2 to 3 miles to provide the necessary overlap and signaling requirement to optimize performance and coverage to a geographic area. The 150 foot height is requested to compensate for the terrain of the Wekiva River Basin, which the proposed tower would cover. This factor constitutes a hardship, which should be considered by the board if

the requested special exception is approved. Further, the applicant has stated that by approving a tower at the requested height, the need for additional towers in the area would be reduced and/or eliminated.

THAT THE SPECIAL CONDITIONS AND CIRCUMSTANCES DO NOT RESULT FROM THE ACTIONS OF THE APPELLANTS:

The aforementioned special condition resulted from the topography of the area to be serviced by the new tower facility. This is a special circumstance that did not result from the appellants' actions.

THAT GRANTING THE VARIANCE REQUESTED WILL NOT CONFER ON THE APPLICANT ANY SPECIAL PRIVILEGE THAT IS DENIED BY CHAPTER 30 TO OTHER LANDS, BUILDINGS, OR STRUCTURES IN THE SAME ZONING CLASSIFICATION:

Should the Board approve the requested special exception, the granting of variances from the minimum separation distance would not confer special privileges, since reasonable use of the property for expanding Cingular Wireless' service area would be compromised without relief from the minimum separation distance requirements of the land development code.

THAT LITERAL INTERPRETATION OF THE PROVISIONS OF CHAPTER 30 WOULD DEPRIVE THE APPLICANT OF RIGHTS COMMONLY ENJOYED BY OTHER PROPERTIES IN THE SAME ZONING CLASSIFICATION AND WOULD WORK UNNECESSARY AND UNDUE HARDSHIP ON THE APPLICANT:

The literal interpretation of the provisions of Section 30.1364 (Performance Standards) would deprive the applicant of rights commonly enjoyed by other properties in the A-1 District. Without variances from minimum separation distances, a tower no taller than 79 feet in height could be constructed at the proposed location, should a special exception be granted by the Board. Furthermore, the need for a 79 foot tall tower would be negated by the 100 foot collocation opportunity that exists to the north.

THAT THE VARIANCE GRANTED IS THE MINIMUM VARIANCE THAT WILL MAKE POSSIBLE THE REASONABLE USE OF THE LAND, BUILDING, OR STRUCTURE:

The appellants have indicated the proposed tower height of 150

	feet is necessary to overcome the terrain of the Wekiva River Basin, which the proposed tower site would cover. Therefore, staff believes the proposed height and the corresponding request to reduce minimum distance separation distances to be reasonable. ***THAT THE GRANT OF THE VARIANCE WILL BE IN HARMONY WITH THE GENERAL INTENT AND PURPOSE OF CHAPTER 30, WILL NOT BE INJURIOUS TO THE NEIGHBORHOOD, OR OTHERWISE DETRIMENTAL TO THE PUBLIC WELFARE:*** With the demonstration of 150 feet as the minimum height at which a communication tower could be constructed to achieve reasonable use of the subject property, staff believes the grant of a variance from separation distance (with staff's recommended conditions) would be in harmony with the general intent and purpose of the Land Development Code, since special conditions constituting a hardship have been demonstrated by the applicant.
STAFF FINDINGS	When special exceptions and associated variances are requested from minimum separation distance required between a communication tower and properties with existing residences, the Land Development Code requires the following findings: ○ THE AESTHETIC IMPACT OF THE TOWER WOULD BE ENHANCED IN THE FOLLOWING MANNER: • The visual impact of the proposed tower to abutting residential properties could be minimized by design features intended to camouflage its presence and assimilate the same into surrounding development. The proposed "ecclesiastical" method fails to achieve this objective. Staff believes a design more commonly associated as a church appurtenance (e.g., flagpole, steeple, etc.) would be a more suitable design at the requested height of 150 feet. ○ COMPATIBILITY WITH ABUTTING PROPERTY OWNERS WOULD BE MAINTAINED IN THE FOLLOWING MANNER: • The proposed tower is an allowable special exception use under the existing SE FLU and corresponding A-1 District zoning; with staff's recommendations, the proposed use could be made compatible with the existing trend of development in the area, which includes other communication towers on adjacent property to the north.

	○ <u>THE PROPOSED TOWER WOULD FURTHER THE LEGISLATIVE INTENT OF SECTION 30.1362 OF THE LAND DEVELOPMENT CODE IN THE FOLLOWING MANNER:</u> • The appellants have submitted documentary evidence (radio frequency propagation maps and a signed statement from a radio frequency engineer) to support Cingular Wireless' need for a new telecommunications facility of the proposed height in the general area. Furthermore, the proposed height of 150 feet would provide a greater coverage area for Cingular Wireless communication and reduce the potential for additional tower sites in this area in the future. On October 27, 2003, the Board of Adjustment denied a similar request by Cingular Wireless for special exception to establish a 150 foot tall camouflage (monopine) communication tower on the abutting property to the west after finding the request failed to meet minimum separation requirements of the Land Development Code. On February 24, 2004, the Board of County Commissioners upheld this decision. It is important to note that while the findings appear to support the need for a communication tower on the subject property, the legislative intent of the Land Development Code for ensuring compatibility through the assimilation of the proposed tower with the existing church site has not been satisfied by the appellants. The Board's decision to deny the prior application is consistent with the promotion of this policy.
BOARD OF ADJUSTMENT DECISION	At its regular meeting on August 23, 2004, the Board of Adjustment denied the request for a (1) special exception to establish a 150 foot tall "ecclesiastical" camouflage communication tower in the A-1 (Agriculture District); and (2) associated variances from 450 feet to 320 feet and 450 feet to 300 feet to reduce the minimum separation distances required between a proposed 150 foot tall "ecclesiastical" camouflage communication tower and properties with single-family residential dwellings. The Board of Adjustment's denial of the special exception, upon which the variances were dependent, was based on its finding that the proposed communication tower would be an incompatible use in the desired location. With the denial of the special

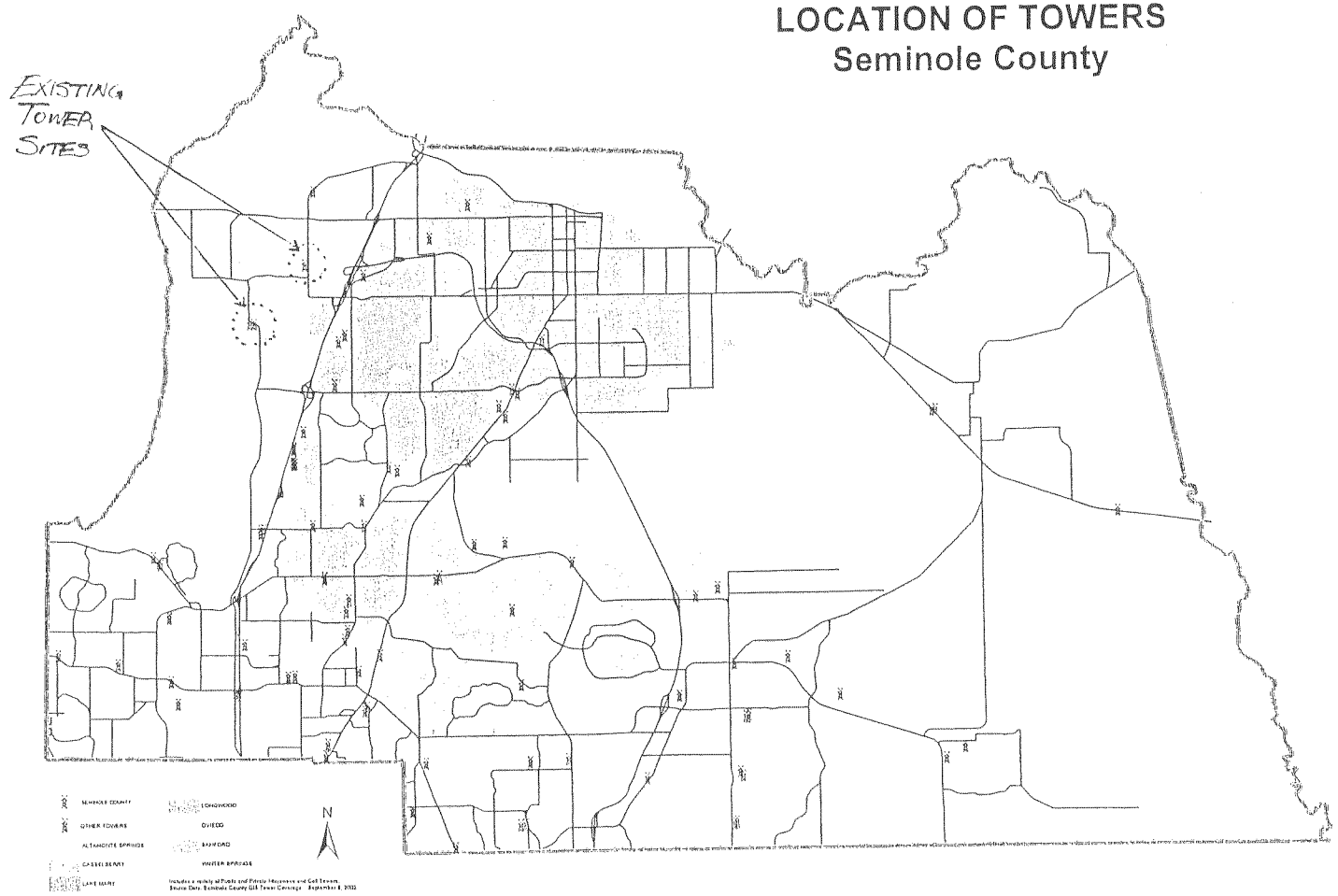
	exception, the associated variances became a defunct issue. **NOTE:** This appeal reflects the site plan received for review after delivery of public notices for the Board of Adjustment hearing. This factor explains the discrepancy between the two (2) variances denied by the Board of Adjustment and the four (4) variances stated in the appeal. Even with the discrepancy between the request denied by the Board of Adjustment and the ensuing appeal to the Board of County Commissioners, Section 30.43 of the Land Development Code states that any appeal before the Board of County Commissioners shall be "de novo", which means the request shall be heard anew as if considered for the first time.
STAFF RECOMMENDATION	Based on the stated findings, staff recommends the Board of County Commissioners uphold the Board of Adjustment's decision to deny a special exception to establish a 150 foot tall "ecclesiastical" camouflage communication tower in the A-1 (Agriculture District) and associated variances. Staff would support the granting of a special exception and associated variances to establish a 150 foot tall camouflage communication tower of an alternative design (e.g., flagpole, steeple, etc.) in the A-1 (Agriculture District). Staff's recommendation for approval would be conditioned upon the appellants' ability to present a tower design that would be compatible with surrounding residential development and effectively merge, blend into and conform in appearance with existing facilities on the church property. The Board may wish to consider the following design alternatives, which are presented as illustrated attachments in this report: o Rooftop design o Rooftop church cross o Freestanding church cross o Church steeple o Flagpole o Existing utility pole Should the special exception be granted, staff recommends the following conditions of approval: 1. The proposed tower shall not exceed 150 feet, as verified by a RF (Radio Frequency) engineer to be the minimum height needed to further Cingular Wireless' communication goals in the immediate area. 2. The proposed tower shall be camouflage in design and

	painted a muted color to blend in with the natural environment. 3. Any improvements and/or additions to the proposed tower shall be submitted for approval to the county. 4. A listed species survey shall be provided prior to final engineering approval. 5. Prior to final engineering approval, a water quality swale shall be provided. 6. Prior to the final development order / approval, an application for full concurrency management shall be provided. Should the associated variances from minimum separation distances be granted, staff recommends the following conditions of approval: 1. Any variance granted shall apply only to the proposed communication tower depicted on the attached site plan. 2. Any variance granted shall be the minimum that would make possible the reasonable use of the property for siting a communication tower, based on the minimum 150 foot height deemed acceptable by an RF engineer for expanding Cingular Wireless' service area. 3. Any variance granted should be conditioned upon certification by a structural engineer of the proposed tower's safe performance in the event of structural failure or collapse. 4. Any additional condition(s) deemed appropriate by the board, based on information presented at the public hearing.

Attachments:

Seminole County communication tower inventory
Staff correspondence
Applicable regulations
Application for special exception supporting material
Application for variances & supporting material
Authorization forms
Engineering & safety information
Propagation maps
Site map
Graphical Depiction of requested variances
Property Appraiser report
Proposed site plan
Photographic simulations
Camouflage communication tower design illustrations
August 23, 2004 Board of Adjustment Meeting Minutes

LOCATION OF TOWERS
Seminole County



Greg Holcomb
01/13/2004 03:16 PM

To: Earnest McDonald/Seminole@Seminole
cc: Don Fisher/Seminole@Seminole
Subject: Agenda Item 58 - Cingular Wireless

I have reviewed item 58 regarding the Appeal of the Board of Adjustment's decision to deny a special exception to establish a 150 ft. tall camouflage communication tower in the A-1 (Agriculture District) and associated variances from 450 feet to 298.67 feet; 450 feet to 307.46 feet; and 450 feet to 353.5 feet for the minimum separation distance required between a proposed 150 foot tall camouflage communication tower and abutting properties with existing single-family residences; (Wireless Facilities, Cingular Wireless, LLC, & Kevin Karr). District – 5 McLain (Earnest McDonald).

The technical review finds that the proposed tower site is a necessity for Cingular Wireless to provide adequate coverage to the area identified by the request. In general, Cell towers require a spacing of approximately 2-3 miles to provide the necessary overlap and signaling requirement to optimize performance and coverage to a geographic area. The coverage maps are consistent with this requirement. The additional height in this area is designed due to the terrain of the Wekiva River basin that is being covered. This request conforms to the industry configuration for cellular coverage.

Please let me know if there is anything additional that you require. Thanks.

Sec. 30.124 Special exceptions.

(a) The Board of Adjustment may permit any of the following uses upon making findings of fact that the

(1) Is consistent with the general zoning category and plan of A-1 Agriculture;

(2) Is not detrimental to the character of the area or neighborhood or inconsistent with the trends of development in the area or neighborhood; and

(3) Is not highly intensive in nature;

(4) Is not incompatible with the concept of low-density, rural land use;

(5) Does not have an unduly adverse effect on existing traffic patterns, movements, and volumes ;

(6) Has access (where applicable) to urban services such as sewage, water, police, fire, schools, and related services; and

(7) Is consistent with the Seminole County Comprehensive

(b) The Board of Adjustment, in granting any of the uses may place such restrictions and conditions thereon as said Board shall, in its sound discretion, deem necessary to protect the character of the area or neighborhood and the public health, safety, and welfare:

(1) Cemeteries,

(2) Kennels including the commercial raising or breeding of

(3) Hospitals, sanitariums and convalescent homes, veterinary clinics and adult congregate living facilities and group homes when such facilities and homes are approved and licensed by the Florida State Department of Health and Rehabilitative Services.

(4) Public and private nursery schools, kindergartens, middle schools, high schools and

(5) Temporary asphalt plants for purpose of specific public road

(6)

(7) Public utility and service

(8) Fraternal clubs when chartered with the

(9) Country and golf clubs, fishing clubs, fishing camps, marinas, gun clubs, or similar enterprises or clubs making use of land with nominal impacts to natural resources, as determined by the Current Planning Manager.

(10) Privately owned and operated recreational facilities open to the paying public, such as, athletic fields, stadiums, racetracks, and speedways if, the use is located along a major roadway or has immediate accessibility thereto.

(11) Golf driving

(12) Riding stables, provided that no structure housing animals is located nearer than one hundred (100) feet from a property line.

(13) Airplane landing fields and helicopter ports with accessory facilities for private or public

(14) Commercial raising of swine (other than for family

(15) Sewage disposal plants, water plants, and sanitary landfill

(16) Off-street parking lots. When approved, said parking lots

(A) Be provided with a durable, dust-free surface which is properly drained;

(B) Be adequately buffered from adjacent properties and roadways by a landscape

(17) (A) Farmworker housing; either single family or multifamily dwellings, where land use is for bona fide agriculture uses; provided further, that such structures house only those persons, their immediate family or households, employed in carrying out such bona fide agricultural use. Mobile homes may be permitted in lieu of tenant dwellings, provided, however, that approval for mobile homes shall be limited to a time period not exceeding two (2) years after review and finding that the land is used for bona fide agricultural uses.

(B) "Bona fide agriculture purpose," as used herein, shall be determined by reference to the following criteria:

(i) Is the parcel or its adjacent lands being actually utilized in agricultural pursuits by the same owner?

(ii) Does the requested tenant dwelling or mobile home serve a purpose directly, and not indirectly, related to the agricultural laborers or employees and/or other direct purposes?

(18) A mobile home may be permitted as a Special Exception on a lot or parcel of record subject to the following requirements:

(A) Only one (1) single-family mobile home may be

(B) A mobile home placed on a lot or parcel shall bear the Florida Standards Seal or acceptable equivalent.

(C) An approved mobile home shall be subject to all applicable regulations of the zoning classification, i.e., setbacks, land uses.

(D) Where installation of a septic tank is proposed, an acceptable percolation and depth-of-water-table test shall be submitted at the time of application.

(E) If the proposed site is known to be flood prone, an acceptable plan shall be submitted at time of application which details steps to prevent hazard to health and property.

(F) An approved single-family mobile home shall be firmly anchored in accordance with all applicable codes and shall have skirting installed to screen the underside of the structure.

(19) Retail nurseries where products sold are grown on site of

(20) Slaughter of livestock and meat cutting and processing operations, with no retail

(21) Adult congregate living facilities and community residential homes (group homes and foster care facilities) housing more than six (6) permanent unrelated residents.

(22) Landscaping contractors as an accessory use to a wholesale nursery or wholesale tree

(23) Communication

(24) Disposal of tree cuttings or similar organic materials by burning which materials have been transported to the property.

(25) Bed and Breakfast establishments when not located within a platted

(c) A proposed master plan of development shall be submitted at time of application and approval shall be based upon and limited to the extent of said master plan.

(§ 3, Ord. No. 81-59, 9-1-81; § 1, Ord. No. 83-23, 7-26-83; § 11, Ord. No. 87-1, 2-10-87; § 5.104, LDC, through Supp 16; Part XIII, § 3, Ord. No. 92-5, 3-30-92; Part XX, § 1, Ord. No. 92-5, 3-30-92; Part XVIII, § 2, Ord. No. 93-1, 2-23-93; § 15, Ord. No. 94-15, 12-13-94; Ord. No. 96-5, § 3, 7-9-96; Ord. No. 97-18, §§ 14, 25, 5-13-97; Ord.

Sec. 30.1364. Performance standards.

(a) *Setbacks.*

(1) **Communication tower** setbacks shall be measured from the outer extremity of the base of the **communication tower** to the property line of the parcel on which it is located.

(2) **Communication towers** shall be located on parcels which comply with the minimum setback and lot size requirements of the zoning classification assigned to the property on which they are located.

(3) For **towers** located on properties assigned the PUD or PCD zoning classification, the setback requirements for the parcel outlined in the PUD/PCD approval shall apply.

(4) In cases where there are non-conforming residential uses on property which is not assigned a residential zoning classification, a reduction of fifty (50) percent of the side or rear yard setback distance opposite the non conforming residential use shall be permitted by the current planning manager unless the side or rear yard proposed for reduction is assigned a residential land use designation or zoning classification.

(b) *Minimum separation from off-site uses/designated areas.*

(1) **Communication tower** separation shall be measured from the outer extremity of the base of the **tower** to the closest property line of the off-site use as specified in Table 1 below.

(2) Separation requirements for **communication towers** shall comply with the minimum standards established in Table 1 below unless otherwise provided.

(3) Reduced separation distances may be reduced by the current planning manager when written consent as set forth in a recordable instrument is obtained from all property owners within the applicable separation distance.

(4) Separation distances may be decreased or increased by the board of adjustment in accordance with the procedural requirements for variances as set forth in this Code and the substantive determinations as set forth in Table 1 below, when considering whether to approve a special exception, if competent substantial evidence is presented demonstrating unique planning considerations and compatibility impacts.

TABLE 1

MINIMUM SEPARATION FROM OTHER USES

TABLE INSET:

Off-site Use	Separation Distance
Property assigned a single-family (includes modular homes and mobile homes used for living purposes), duplex, or multi-family residential zoning classification or future land use designation or with an existing residential use.	200 feet or 300% height of **tower** whichever is greater except when a variance is granted based upon findings that the aesthetic impacts of the **tower** is enhanced, that compatibility with abutting property owners is maintained, and the approval of the **tower** would be consistent with and further the provisions of Section 30.1362. The standard relative to variances as otherwise set forth in this Code may be considered in determining whether to approve a variance hereunder, but shall not be determinative as to whether the variance may be granted.
Property assigned a non-residential zoning classification or future land use designation or property with an existing non-residential use.	None. Only district setbacks apply.

(c) *Separation distances between **communication towers**.*

(1) Separation distances between **communication towers** shall be and measured between the **communication tower** proposed for approval and those **towers** that are permitted or existing.

(2) The separation distances shall be measured by drawing or following a straight line between the GPS coordinate of the center of the existing or permitted **communication tower** and the proposed GPS

coordinate of the center of the proposed **communication tower** as depicted on a site plan of the proposed **tower**.

(3) The separation distances, listed in linear feet, shall be as set forth in Table 2

TABLE 2

SEPARATION DISTANCES BETWEEN **COMMUNICATION TOWERS**

TABLE INSET:

	EXISTING TOWERS				
DESCRIPTION	LATTICE	GUYED	MONOPOLE 75 FT IN HEIGHT OR GREATER	MONOPOLE LESS THAN 75 IN HEIGHT	CAMOUFLAGE
LATTICE	5,000	5,000	1,500	750	0
GUYED	5,000	5,000	1,500	750	0
MONOPOLE 75 FT IN HEIGHT OR GREATER	1,500	1,500	1,500	750	0
MONOPOLE LESS THAN 75 IN HEIGHT	750	750	750	750	0
CAMOUFLAGE	0	0	0	0	0

(4) A variance from the minimum separation distances between **communication towers** as set forth in Table 2 may be granted when two (2) or more **communication tower** owners or operators agree to co-locate their **communication** antennas on the same **communication tower** and upon findings being made that the aesthetic impacts of the **tower** is enhanced, that compatibility with abutting property owners is maintained, and the approval of the **tower** would be consistent with and further the provisions of section 30.1362. The standard relative to variances as otherwise set forth in this Code may be considered in determining whether to approve a variance hereunder, but shall not be determinative as to whether the variance may be granted.

(d) *Measurement of height.* Measurement of **communication tower** height shall include antenna, base pad and any and all other appurtenances and shall be measured from the finished grade of the parcel on which the **communication tower** is located.

(Ord. No. 96-5, § 29, 7-9-

RECEIVED

SEP 0 8 2004

Staff File # BS2004-019
Staff File # BV2004-108

APPEAL OF BOARD OF ADJUSTMENT DECISION

Cingular Wireless is seeking approval to construct an "ecclesiastical" camouflage-design communications tower next to the Markham Woods Presbyterian Church. Previously, the County issued permits to two of Cingular's competitors for towers located just north of the subject property at the Markham Woods Baptist Church. Notably, however, neither one of those applicants were required to seek either a special exception or variance to construct the new towers. Nevertheless, on August 23, 2004, the Board of Adjustment voted 3-2 to deny Cingular's request for a camouflage tower on the Presbyterian Church property.

Although Staff recommended approval of Cingular's applications, the recommendation was conditioned upon agreeing to an alternative camouflage design, such as a flagpole. Such an alternative, however, is not a feasible option for this site. Cingular respectfully submits that the Board of Adjustment's decision was in error, as it fails to comport with either federal or state law.

EXHIBIT "A"

SEMINOLE COUNTY PLANNING & DEVELOPMENT DEPARTMENT
PLANNING DIVISION
1101 EAST FIRST STREET
SANFORD, FL 32771
(407) 665-7444 PHONE (407) 665-7385 FAX APPL.NO. BS2004-019

COPY

APPLICATION TO THE SEMINOLE COUNTY BOARD OF ADJUSTMENT

Applications to the Seminole County Board of Adjustment shall include all applicable items listed in the Board of Adjustment Process Checklist. No application will be scheduled for Board of Adjustment consideration until a complete application (including all information requested below) has been received by the Planning & Development Department, Planning Division.

APPLICATION TYPE:

☐ **VARIANCE**

☒ **SPECIAL EXCEPTION** Seeking approval for 150' "Ecclisiastical" type monopole. This is an unmanned telecommunications facility w/ supporting ground equipment.

☐ **MOBILE HOME SPECIAL EXCEPTION**

☐ EXISTING ☐ PROPOSED ☐ REPLACEMENT
MOBILE HOME IS FOR
YEAR OF MOBILE HOME SIZE OF MOBILE HOME
ANTICIPATED TIME MOBILE HOME IS NEEDED
PLAN TO BUILD ☐ YES ☐ NO IF SO, WHEN
MEDICAL HARDSHIP ☐ YES (LETTER FROM DOCTOR REQUIRED) ☐ NO

☐ **APPEAL FROM DECISION OF THE PLANNING MANAGER**

	PROPERTY OWNER	AUTHORIZED AGENT*
NAME	Markham Woods Presbyterian Church	Bob Chopra, WFI, Agents for Cingular Wireless
ADDRESS	5210 Markham Woods Road	1101 N. Lake Destiny Rd. Ste. 110
	Lake Mary, FL. 32746	Maitland, FL. 32751
PHONE 1	(407) 333-2030	(267) 973-4228
PHONE 2 (FAX)	(407) 333-3202	(407) 660-4909 (FAX)
E-MAIL		Bob.Chopra@WFINET.com

PROJECT NAME: West Heathrow (CB)

SITE ADDRESS: 5210 Markham Woods Rd., Lake Mary, FL. 32746

CURRENT USE OF PROPERTY: Church

LEGAL DESCRIPTION: Leg Sec 02 Twp 20S RGE 29E E 1/2 of N 3/4 of S 1/2 of NW 1/4 of SE 1/4 (Less N 165 FT + E 50 FT for RD)

SIZE OF PROPERTY: 4.7 acre(s) PARCEL I.D. 02-20-29-300-030B-0000

UTILITIES: ☐ WATER ☐ WELL ☐ SEWER ☐ SEPTIC TANK ☐ OTHER N/A

KNOWN CODE ENFORCEMENT VIOLATIONS None

IS PROPERTY ACCESSIBLE FOR INSPECTION ☒ YES ☐ NO

This request will be considered at the Board of Adjustment regular meeting on 7/26/04 (mo/day/yr), in the Board Chambers (Room 1028) at 6:00 p.m. on the first floor of the Seminole County Services Building, located at 1101 East First Street in downtown Sanford, FL.

I hereby affirm that all statements, proposals, and/or plans submitted with or contained within this application are true and correct to the best of my knowledge.

Bob Chopra, WFI, Agents for Cingular Wireless 6/3/04
SIGNATURE OF OWNER OR AGENT* DATE

* Proof of owner's authorization is required with submittal if signed by agent.

ADDITIONAL VARIANCES

VARIANCE 2:

VARINACE 3:

VARIANCE 4:

VARIANCE 5:

VARIANCE 6:

VARIANCE 7:

VARIANCE 8:

APPEAL FROM BOA DECISION TO BCC

	PROPERTY OWNER	AUTHORIZED AGENT *
NAME	Markham Woods Presbyterian Church	Bob Chopra, WFI, Agents for Cingular Wireless
ADDRESS	5210 Markham Woods Rd.	1101 N. Lake Destiny Rd. Ste. 110
	Lake Mary, FL. 32746	Maitland FL. 32751
PHONE 1	(407) 333-2030	(267) 973-4228
PHONE 2	(FAX) (407) 333-3202	same as above
E-MAIL	N/A	Bob.Chopra@WFINET.com

NATURE OF THE APPEAL Please see attached "EXHIBIT A" for details

BCC PUBLIC HEARING DATE 10/12/04 @ 1:30 p.m.

FOR OFFICE USE ONLY

PROCESSING:

FEE: _____ COMMISSON DISTRICT _____ FLU / ZONING _____

LOCATION FURTHER DESCRIBED AS _____

PLANNER _____ DATE _____

SUFFICIENCY COMMENTS _____

Cingular Wireless LLC

Seeks

Special Exception

In

A-1 Industrial (Zoning District)

For a Proposed
150' "Ecclesiastical" Monopole Tower
Communication Service Facility

Site Name: West Heathrow (B)
5210 Markham Woods Rd., Lake Mary, Fl 32746
TAX PARCEL ID #02-20-29-300-030B-0000; 4.7 Acres

PROJECT DESCRIPTION AND JUSTIFICATION

INTRODUCTION

Cingular Wireless LLC, a subsidiary of Bellsouth Wireless, Inc., a Federal Communications Commission (FCC) licensed operator of commercial mobile radio services in the State of Florida, submits this application to the Seminole County Board of Adjustment for a Special Exception approval in the A-1 Agriculture zoning district in order to construct and operate an unmanned wireless communications service within Seminole County. In addition, a variance to the separation requirements is sought under a separate variance application request. This project description and justification narrative describes the scope of the proposed project by providing specific information regarding the project location, zoning, specifications, and required services.

PROJECT GOAL

Cingular's goal for this proposed site is to enhance the quality of wireless service coverage on Markham Woods Road and the surrounding area west of Heathrow, in addition to providing quality contiguous coverage into Sanford, Heathrow and the Lake Mary areas. This goal will be accomplished in an environmentally sensitive manner and consistent with the policies and ordinances of Seminole County, which the reason why Cingular has chosen to pursue approval for an "ecclesiastical" type monopole tower for this site location

GENERAL PROJECT DESCRIPTION

The subject parcel is located at 5210 Markham Woods Rd., Lake Mary, Fl 32746. The parent tract consists of approximately 4.7 acres and is zoned A-1 Agriculture with a future land use designation of Suburban Estates. The parent tract is currently occupied by the Markham Woods Presbyterian Church. Cingular Wireless proposes to construct a 150' "ecclesiastical" type monopole communications tower (*please see submitted photo simulations*) and place the supporting equipment cabinets on a 9'-6" x 13' concrete pad, within a fenced 60' x 60' lease compound.

Facility Specifications

Cingular's personal wireless service facility consists of three (3) equal "sectors" for three (3) panel antennas each, mounted to a support bracket at approximately 150' above ground level (AGL). The proposed 150' "ecclesiastical" monopole communications tower is designed with the structural capacity to accommodate two (2) future service providers at a lower height. The panel antennas will be approximately 8'-0" tall x 12.5" wide x 7" deep. Attached to each antenna will be coax cable that will run down the inside of the tower to the base and across a cable-bridge into the equipment cabinets located on the aforementioned concrete pad.

The proposed facility will be used strictly as a wireless transmitting and receiving facility. The facility is completely self operating, thus unmanned. Once the facility is operational, technicians from Cingular will visit the site approximately once or twice a month for routine site maintenance. In the event of a malfunction or emergency, more frequent visits will be necessary. Ingress/Egress to the facility is off Markham Woods Road, over an unrestricted access easement to the site. Electrical power and telephone will be supplied from existing utility service providers – Progress Energy and BellSouth respectively.

PROJECT JUSTIFICATION

Necessity and/or Desirability of the Proposed Project

Cingular has quite strong customer demand for continuous quality mobile radio telephone services in Seminole County and particularly in the areas of Lake Mary, Heathrow and Sanford. The Cingular Wireless radio frequency engineer assigned to this area has identified a pressing need for a wireless communication facility in this proposed location of Seminole County to provide quality enhanced and continuous coverage into the areas of Sanford, Heathrow, Lake Mary, and the surrounding area west of Heathrow, as well as enhanced coverage along Markham Woods Road.

The proposed facility was selected after intense investigation of the topographic characteristics of the area, frequency analysis, adjacent cell interconnection capabilities (meaning "seamless radio frequency hand-offs" from cell to cell), existing co-location opportunities within and outside the RF search ring area, and most importantly land-use compatibility.

Siting Analysis

In the site selection and acquisition process, the site leasing agent attempts to find any collocation opportunities with the search ring area or close enough that the site compliments the RF propagation studies and height requirements. This particular search ring affords no collocation opportunities and therefore a "green field" or "raw land" site is sought within the search area.

There are several criteria taken into consideration when attempting to site a tower location within the search ring area and it is always a compromise in blending all the factors together in order to come up with an "ideal" site location. Below are a list of general criteria a site leasing agent must address in locating an optimal site:

A. Compliance with local land use ordinances (Is the use allowed in the zoning district?)
B. Find a willing landlord with sufficient land to locate the site;
C. Find a mutually agreed upon site location on the owner's property;
D. Find a mutually agreed upon ingress/egress to the proposed site;
E. Locate the site where reasonable telephone and electrical runs are present;

Alternative Sites Investigated: The two potential collocation sites within the search ring area lie to the east of the First Baptist Church property located at 5400 Markham Woods Road. The two potential collocation opportunities were two stealth flag pole installations. The first is the 135' T-Mobile flag pole. T-Mobile is at the top and Nextel is collocated at approximately the 120'-125' level. The next available height down on this pole was rejected by Cingular RF as not an acceptable height. The second flag pole is approximately 90' in height and owned by Sprint who are located at the top of the pole. This site was rejected by Cingular RF as being an unacceptable height.

Proposed Site Justification: Please see attached "Engineering & Safety Information"

Additional Benefits:

A. The proposed "ecclesiastical" type monopole tower mitigates the visual impact on the area to the greatest extent possible by locating at the rear northwest portion of the parent tract, taking advantage of the buffer provided by the trees located on the property lines.
B. The proposed tower will afford the collocation opportunity for two more future communications providers (total of three), if technologically feasible for a future provider.

PUBLIC BENEFITS OF THE PROJECT – AN OVERVIEW

The Congress of the United States has found that wireless radio services serve the national interest, and directly or indirectly benefit all of its citizens. Through licensing agreements

the FCC has established the desirability and need for wireless telephone service to facilitate telephone conversations between mobile units and the existing telephone system. The wireless system is intended to function as an extension of the present telephone network, and is intended to provide quality service for the entire nation at a reasonable price. Cingular Wireless LLC is mandated to provide mobile cellular radio service to those service areas of Florida granted under their FCC license. Seminole County is one of those areas granted under their FCC license.

The wireless telephone system divides the service area into a grid system call "cells". Each cell has its own radio receiver and low-power transmitter. The size and location of each cell is based on the anticipated volume of telephone traffic in each cell area. From each cell, calls are sent by radio to and from the mobile hand-held units, and then routed though the public telephone system to fixed (land-line) telephone or routed to other cells and on to other mobile units. A central "switch" routes all of the calls through the wireless system, facilitating the "seamless hand-offs" between cells as the hand-held mobile unit moves through the wireless service area.

Wireless telephone services play an important role in providing communications to individuals, the business community and to emergency service providers. In polls conducted over the past few years, it has been found that individuals purchase wireless services primarily for safety and security reasons. It makes individuals feel safer when traveling for business or pleasure. 911 wireless phone calls from individual customers are approaching 50,000 per day nationwide, and about 50 percent of wireless users have called authorities to report car trouble, medical emergencies, crimes, or drunk driving.

Business owners, managers, and employees have commented on the increase in productivity and better use of their time. Just as the standard (land-line) telephone facilitated the growth of American business in the 20th Century, wireless communications have become an indispensable 21st Century tool of the modern business world.

Most importantly, wireless telephone services play an important role in providing vital communications to relief and emergency workers, i.e. 9-11 disaster in NYC, Hurricane Andrew. In addition, police patrol cars regularly use "mobile data terminals" giving them fast wireless access to key information for critical "on the spot" decision making.

REQUIRED FINDINGS

Granting special exception approval for Cingular's personal wireless service facility will not be detrimental to the health, safety, convenience or general welfare of persons working or residing in the vicinity of the proposed cell site; nor will it be injurious to property, improvements or potential development in the vicinity. Once installed, the unmanned cell site becomes a *passive* use.

CONCLUSION

The proposed site location satisfies Cingular's radio frequency requirements under its FCC license obligations to provide continued, quality "mobile radio telephone service" to the people of Seminole County. Under Seminole County's current ordinance, the "ecclesiastical" type monopole tower should be considered the most unobtrusive to the community, while providing a symbol of faith for the property on which tower will be sited.

SEMINOLE COUNTY PLANNING & DEVELOPMENT DEPARTMENT
PLANNING DIVISION
1101 EAST FIRST STREET
SANFORD, FL 32771
(407) 665-7444 PHONE (407) 665-7385 FAX APPL.NO. BV2004-108

EM

APPLICATION TO THE SEMINOLE COUNTY BOARD OF ADJUSTMENT

Applications to the Seminole County Board of Adjustment shall include all applicable items listed in the Board of Adjustment Process Checklist. No application will be scheduled for Board of Adjustment consideration until a complete application (including all information requested below) has been received by the Planning & Development Department, Planning Division.

COPY

APPLICATION TYPE:

☒ **VARIANCE** Variance necessary from minimum separation requirements from off-site uses for a communication tower that is within 450' of off-site residential future land-use designation

☐ **SPECIAL EXCEPTION**

☐ **MOBILE HOME SPECIAL EXCEPTION**

☐ EXISTING ☐ PROPOSED ☐ REPLACEMENT
MOBILE HOME IS FOR
YEAR OF MOBILE HOME SIZE OF MOBILE HOME
ANTICIPATED TIME MOBILE HOME IS NEEDED
PLAN TO BUILD ☐ YES ☐ NO IF SO, WHEN
MEDICAL HARDSHIP ☐ YES (LETTER FROM DOCTOR REQUIRED) ☐ NO

☐ **APPEAL FROM DECISION OF THE PLANNING MANAGER**

	PROPERTY OWNER	AUTHORIZED AGENT*
NAME	Markham Woods Presbyterian Church	Bob Chopra, WFI, Agents for Cingular Wireless
ADDRESS	5210 Markham Woods Rd.	1101 N. Lake Destiny Rd. Ste. 110
	Lake Mary, FL 32746	Maitland, FL 32751
PHONE 1	(407) 333-2030	(267) 973-4228
PHONE 2	(FAX) (407) 333-3202	(407) 660-4909
E-MAIL		Bob.Chopra@WFINET.com

PROJECT NAME: West Heathrow (B)

SITE ADDRESS: 5210 Markham Woods Rd, Lake Mary, FL 32746

CURRENT USE OF PROPERTY: Church

LEGAL DESCRIPTION: Leg Sec 02 Twp 20S RGE 29E E1/2 of N 3/4 of S1/2 of NW 1/4 of SE 1/4 (Less N 165 FT & E 50 FT for RD)

SIZE OF PROPERTY: 4.7 acre(s) PARCEL I.D. 02-20-29-300-0303-0000

UTILITIES: ☐ WATER ☐ WELL ☐ SEWER ☐ SEPTIC TANK ☐ OTHER N/A

KNOWN CODE ENFORCEMENT VIOLATIONS None

IS PROPERTY ACCESSIBLE FOR INSPECTION ☒ YES ☐ NO

This request will be considered at the Board of Adjustment regular meeting on 7/26/04 (mo/day/yr), in the Board Chambers (Room 1028) at 6:00 p.m. on the first floor of the Seminole County Services Building, located at 1101 East First Street in downtown Sanford, FL.

I hereby affirm that all statements, proposals, and/or plans submitted with or contained within this application are true and correct to the best of my knowledge.

Bob Chopra, WFI, Agents for Cingular Wireless 6/3/04
SIGNATURE OF OWNER OR AGENT* DATE

* Proof of owner's authorization is required with submittal if signed by agent.

ADDITIONAL VARIANCES

VARIANCE 2:

VARINACE 3:

VARIANCE 4:

VARIANCE 5:

VARIANCE 6:

VARIANCE 7:

VARIANCE 8:

APPEAL FROM BOA DECISION TO BCC

	PROPERTY OWNER	AUTHORIZED AGENT *
NAME		
ADDRESS		
PHONE 1		
PHONE 2		
E-MAIL		

NATURE OF THE APPEAL

BCC PUBLIC HEARING DATE

FOR OFFICE USE ONLY

PROCESSING:

FEE: $150 COMMISSON DISTRICT 5 FLU / ZONING SE / A1

LOCATION FURTHER DESCRIBED AS

ON WEST SIDE OF MARKHAM WOODS RD. APPROX. .3 MI SE OF CARTER RD.

PLANNER VB DATE 6/3

SUFFICIENCY COMMENTS

APPLICATION FOR VARIANCE FROM MINIMUM SEPARATION REQUIREMENTS FOR COMMUNICATION TOWER FACILITIES

I. Is a Variance Required?

Per section 30.1364(b) of the Seminole County Zoning Code, minimum separation requirements from off-site uses for communication towers that are to be sited within 200 feet or 300% of the height of the tower (whichever is greater) from property that (a) has a residential zoning classification; (b) has a residential future land use designation; or (c) contains an existing residential use. The proposed "ecclesiastical" monopole tower at issue will be 150' in height. Thus, the applicant must seek a variance if the tower is located within 450' of the off-site uses listed above.

A. **Is there property within 450 feet of the tower that has a residential zoning classification?** No. The property has an A-1 (Agriculture) zoning classification. Thus, no variance is needed from the minimum separation requirements.

B. **Is there property within 450 feet of the tower that contains an existing residential use?** Yes. The owner of the property (Markham Woods Presbyterian Church, Inc.) leases a single-family home that is located on-site. However, Section 30.1364(b) (3) provides that a "reduced separation distance may be approved by the current planning manager when written consent is obtained by all property owners within the applicable separation distance." By the fact that the property owner (Markham Woods Presbyterian Church) is in fact the one seeking the variance, the County has "written consent" that the "property owner within the applicable separation distance" (Markham Woods Presbyterian Church) consents to the reduced separation distance. Additionally, there is a parcel just south of the subject property that contains another single family residence.

C. **Is there property within 450 feet of the tower that has a residential future land use designation?** Yes. The tower is located within 450 feet of another parcel that has a Suburban Estates land use classification. However, the applicant respectfully submits that is meets the requisite criteria (as set forth in "Table 1" of Section 30.1364) for granting a variance from this minimum separation requirement.

II. Does the applicant meet the requirements for a variance?

A variance from the minimum separation requirements for communication towers may be granted based upon findings that: (1) the aesthetic impacts of the tower are enhanced; (2) compatibility with abutting property owners is maintained; and (3) approval of the tower would be consistent with and further the provisions of Section 30.1362.

A. **Have the "aesthetic impacts" of the tower been enhanced?** Yes. The proposal is for an "ecclesiastical" type monopole tower, designed to blend in with the religious nature of the property and as a symbol of faith.

B. **Is compatibility with abutting property owners maintained?** Yes. The property to the north of the subject parcel has an agricultural zoning classification (A-1) currently occupied by another church. This property has two "flagpole" communication towers on its property. The property to the south of the subject parcel contains single family dwellings, however with the proposed "ecclesiastical" monopole tower, it will act as a symbol of faith for the church and the community as opposed to acting as visual obtrusiveness.

C. **Would the approval of the tower be consistent with and further the provisions of Section 30.1362?** Yes. The primary purposes of Section 30.1362 are to (1) accommodate the growing need for communication tower facilities; (2) encourage and direct the location of communication towers to the most appropriate locations, to provide the needs of the communication industry, and to provide for the needs of public and to provide for the protection of private property rights; (3) protect residential areas and land uses from potential adverse impacts of communication towers when placed at inappropriate locations or permitted without adequate controls and regulation; (4) minimize the adverse visual impacts resulting from communication towers through design, siting, screening, and innovative camouflaging techniques; and (5) avoid potential damage to adjacent properties through sound engineering and planning. The proposal for an "ecclesiastical" type monopole tower at this proposed location advances the aforementioned objectives.

Cingular Wireless LLC

Seeks

Special Exception

In

A-1 Agriculture (Zoning District)

For a Proposed
150' "Ecclesiastical" Monopole Tower
Communication Service Facility

Site Name: West Heathrow (B)
5210 Markham Woods Rd., Lake Mary, Fl 32746
TAX PARCEL ID #02-20-29-300-030B-0000; 4.7 Acres

PROJECT DESCRIPTION AND JUSTIFICATION

INTRODUCTION

Cingular Wireless LLC, a subsidiary of Bellsouth Wireless, Inc., a Federal Communications Commission (FCC) licensed operator of commercial mobile radio services in the State of Florida, submits this application to the Seminole County Board of Adjustment for a Special Exception approval in the A-1 Agriculture zoning district in order to construct and operate an unmanned wireless communications service within Seminole County. In addition, a variance to the separation requirements is sought under a separate variance application request. This project description and justification narrative describes the scope of the proposed project by providing specific information regarding the project location, zoning, specifications, and required services.

PROJECT GOAL

Cingular's goal for this proposed site is to enhance the quality of wireless service coverage on Markham Woods Road and the surrounding area west of Heathrow, in addition to providing quality contiguous coverage into Sanford, Heathrow and the Lake Mary areas. This goal will be accomplished in an environmentally sensitive manner and consistent with the policies and ordinances of Seminole County, which the reason why Cingular has chosen to pursue approval for an "ecclesiastical" type monopole tower for this site location

GENERAL PROJECT DESCRIPTION

The subject parcel is located at 5210 Markham Woods Rd., Lake Mary, Fl 32746. The parent tract consists of approximately 4.7 acres and is zoned A-1 Agriculture with a future land use designation of Suburban Estates. The parent tract is currently occupied by the Markham Woods Presbyterian Church. Cingular Wireless proposes to construct a 150' "ecclesiastical" type monopole communications tower (*please see submitted photo simulations*) and place the supporting equipment cabinets on a 9'-6" x 13' concrete pad, within a fenced 60' x 60' lease compound.

Facility Specifications

Cingular's personal wireless service facility consists of three (3) equal "sectors" for three (3) panel antennas each, mounted to a support bracket at approximately 150' above ground level (AGL). The proposed 150' "ecclesiastical" monopole communications tower is designed with the structural capacity to accommodate two (2) future service providers at a lower height. The panel antennas will be approximately 8'-0" tall x 12.5" wide x 7" deep. Attached to each antenna will be coax cable that will run down the inside of the tower to the base and across a cable-bridge into the equipment cabinets located on the aforementioned concrete pad.

The proposed facility will be used strictly as a wireless transmitting and receiving facility. The facility is completely self operating, thus unmanned. Once the facility is operational, technicians from Cingular will visit the site approximately once or twice a month for routine site maintenance. In the event of a malfunction or emergency, more frequent visits will be necessary. Ingress/Egress to the facility is off Markham Woods Road, over an unrestricted access easement to the site. Electrical power and telephone will be supplied from existing utility service providers – Progress Energy and BellSouth respectively.

PROJECT JUSTIFICATION

Necessity and/or Desirability of the Proposed Project

Cingular has quite strong customer demand for continuous quality mobile radio telephone services in Seminole County and particularly in the areas of Lake Mary, Heathrow and Sanford. The Cingular Wireless radio frequency engineer assigned to this area has identified a pressing need for a wireless communication facility in this proposed location of Seminole County to provide quality enhanced and continuous coverage into the areas of Sanford, Heathrow, Lake Mary, and the surrounding area west of Heathrow, as well as enhanced coverage along Markham Woods Road.

The proposed facility was selected after intense investigation of the topographic characteristics of the area, frequency analysis, adjacent cell interconnection capabilities (meaning "seamless radio frequency hand-offs" from cell to cell), existing co-location opportunities within and outside the RF search ring area, and most importantly land-use compatibility.

Siting Analysis

In the site selection and acquisition process, the site leasing agent attempts to find any collocation opportunities with the search ring area or close enough that the site compliments the RF propagation studies and height requirements. This particular search ring affords no collocation opportunities and therefore a "green field" or "raw land" site is sought within the search area.

There are several criteria taken into consideration when attempting to site a tower location within the search ring area and it is always a compromise in blending all the factors together in order to come up with an "ideal" site location. Below are a list of general criteria a site leasing agent must address in locating an optimal site:

A. Compliance with local land use ordinances (Is the use allowed in the zoning district?)
B. Find a willing landlord with sufficient land to locate the site;
C. Find a mutually agreed upon site location on the owner's property;
D. Find a mutually agreed upon ingress/egress to the proposed site;
E. Locate the site where reasonable telephone and electrical runs are present;

Alternative Sites Investigated: The two potential collocation sites within the search ring area lie to the east of the First Baptist Church property located at 5400 Markham Woods Road. The two potential collocation opportunities were two stealth flag pole installations. The first is the 135' T-Mobile flag pole. T-Mobile is at the top and Nextel is collocated at approximately the 120'-125' level. The next available height down on this pole was rejected by Cingular RF as not an acceptable height. The second flag pole is approximately 90' in height and owned by Sprint who are located at the top of the pole. This site was rejected by Cingular RF as being an unacceptable height.

Proposed Site Justification: Please see attached "Engineering & Safety Information"

Additional Benefits:

A. The proposed "ecclesiastical" type monopole tower mitigates the visual impact on the area to the greatest extent possible by locating at the rear northwest portion of the parent tract, taking advantage of the buffer provided by the trees located on the property lines.
B. The proposed tower will afford the collocation opportunity for two more future communications providers (total of three), if technologically feasible for a future provider.

PUBLIC BENEFITS OF THE PROJECT – AN OVERVIEW

The Congress of the United States has found that wireless radio services serve the national interest, and directly or indirectly benefit all of its citizens. Through licensing agreements

the FCC has established the desirability and need for wireless telephone service to facilitate telephone conversations between mobile units and the existing telephone system. The wireless system is intended to function as an extension of the present telephone network, and is intended to provide quality service for the entire nation at a reasonable price. Cingular Wireless LLC is mandated to provide mobile cellular radio service to those service areas of Florida granted under their FCC license. Seminole County is one of those areas granted under their FCC license.

The wireless telephone system divides the service area into a grid system call "cells". Each cell has its own radio receiver and low-power transmitter. The size and location of each cell is based on the anticipated volume of telephone traffic in each cell area. From each cell, calls are sent by radio to and from the mobile hand-held units, and then routed though the public telephone system to fixed (land-line) telephone or routed to other cells and on to other mobile units. A central "switch" routes all of the calls through the wireless system, facilitating the "seamless hand-offs" between cells as the hand-held mobile unit moves through the wireless service area.

Wireless telephone services play an important role in providing communications to individuals, the business community and to emergency service providers. In polls conducted over the past few years, it has been found that individuals purchase wireless services primarily for safety and security reasons. It makes individuals feel safer when traveling for business or pleasure. 911 wireless phone calls from individual customers are approaching 50,000 per day nationwide, and about 50 percent of wireless users have called authorities to report car trouble, medical emergencies, crimes, or drunk driving.

Business owners, managers, and employees have commented on the increase in productivity and better use of their time. Just as the standard (land-line) telephone facilitated the growth of American business in the 20th Century, wireless communications have become an indispensable 21st Century tool of the modern business world.

Most importantly, wireless telephone services play an important role in providing vital communications to relief and emergency workers, i.e. 9-11 disaster in NYC, Hurricane Andrew. In addition, police patrol cars regularly use "mobile data terminals" giving them fast wireless access to key information for critical "on the spot" decision making.

REQUIRED FINDINGS

Granting special exception approval for Cingular's personal wireless service facility will not be detrimental to the health, safety, convenience or general welfare of persons working or residing in the vicinity of the proposed cell site; nor will it be injurious to property, improvements or potential development in the vicinity. Once installed, the unmanned cell site becomes a *passive* use.

CONCLUSION

The proposed site location satisfies Cingular's radio frequency requirements under its FCC license obligations to provide continued, quality "mobile radio telephone service" to the people of Seminole County. Under Seminole County's current ordinance, the "ecclesiastical" type monopole tower should be considered the most unobtrusive to the community, while providing a symbol of faith for the property on which tower will be sited.

AGENT AUTHORIZATION

Please accept this signed and notarized document authorizing Cingular Wireless and its agent, Wireless Facilities, Inc., to act as agents for the property owner in the submission of any applications and supporting documentation, and to attend and represent the property owner at all meetings and public hearings pertaining to the installation of a Cingular Wireless unmanned telecommunications facility located at 5214 Markham Woods Rd Lake Mary, FL 32746.

Markham Woods Presbyterian Church, Inc

Signature: By: James A Barks
Owner

James A Barks
Print Name

President
Title

STATE OF FLORIDA

COUNTY OF Seminole

The foregoing instrument was acknowledged before me this 28 day of May, 2004 by James A. Barks. He/she is personally known to me or has produced _____ as identification.

(NOTARY SEAL)

Malinda H. McAdow
Signature of Notary

Malinda H. McAdow
My Commission DD307753
Expires June 19, 2008

(Printed or typed name of Notary Public)

To: Bob Chopra

AGENT AUTHORIZATION

Please accept this signed and notarized document authorizing Cingular Wireless and its agent, Wireless Facilities, Inc., to act as agents for the property owner in the submission of any applications and supporting documentation, and to attend and represent the property owner at all meetings and public hearings pertaining to the installation of a Cingular Wireless unmanned telecommunications facility located at 5214 Markham Woods Rd Lake Mary, FL. 32746.

Markham Woods Presbyterian Church, Inc

Signature: By: James A. Barker
Owner

James A. Barker
Print Name

President
Title

STATE OF FLORIDA

COUNTY OF Seminole

The foregoing instrument was acknowledged before me this 28 day of May, 2004 by James A. Barker. He/she is personally known to me or has produced _____ as identification.

(NOTARY SEAL)

Malinda H. McAdow
Signature of Notary

Malinda H. McAdow
My Commission DD307753
Expires June 19, 2008

(Printed or typed name of Notary Public)

cingular WIRELESS

SITE

West Heathrow

Engineering and Safety Information

Site Name

Overview and Site Objective

The proposed new cell West Heathrow is required to improve the RF signal strength and coverage for the existing cellular system in the area north of Lake Mary Boulevard, West of I-4, along Markham Woods Road. The new West Heathrow cell is also required to provide the necessary capacity relief to decrease overflow and blocking on the alpha face of the Lake Mary Cell.

Tower Height Requirements

Several factors have to be considered when determining the height for the new West Heathrow cell. In this particular case, neighboring trees, surrounding towers and terrain of the area dictate that the minimum tower height for this cell site to meet the objectives of coverage and traffic relief in the area effectively should be 150 feet.
The two potential collocation sites within the search ring area lie to the north at the First Baptist Church property located at 5400 Markham Woods Rd. The two potential collocation opportunities were two stealth flag pole installations. The first is the 135' Voice Stream (now known as T-Mobile) flag pole. T-Mobile is at the top and Nextel is collocated at approximately the 120'-125' level. The next available height down on this pole would be 100'. This height has been rejected by Cingular as an unacceptable height to meet coverage goals, as well as Nextel being a potential interferer to Cingular. The second flag pole is approximately 90' in height and owned by Sprint who is at the top of the pole. The 70' available on this site was also rejected by Cingular as being too low in height. All of Cingular's engineering and testing for this proposed cell has been optimized around a 150' height, which is only attainable at the Presbyterian Church location.

Neighboring Sites

Site Name	Address	County	Tower Ht.	Gnd. Elev.
Lake Mary	40 Skyline Dr.	Seminole	200' AGL	62' MSL
Payola	935 Wallace Ct.	Seminole	120' AGL	57' MSL
Towne Center	1050 Rinehart Rd.	Seminole	120' AGL	65' MSL
Sanford Mall	5405 Orange Blvd.	Seminole	180' AGL	39' MSL

• MSL - Mean Sea Level AGL - Above Ground Level

The ground elevation for the West Heathrow site is approximately 56' MSL. With the ground elevation at this level, the required antenna centerline to meet the objective will be 150'.

FAA Status

It is the policy of Cingular Wireless to notify the FAA of construction and modifications of all cell sites and to comply with any and all regulations.

Safety

The proposed West Heathrow cell site will be 150 feet above ground level. The Decibel Products antenna model 854DG90VTESX is four feet in length and would be mounted for a centerline of 148 feet, putting the tip height at 150 feet and the lower tip at 146 feet. The maximum proposed power per sector is 400 Watts (based on 100 Watts per channel for 4 channels per sector).

The FCC's OET Bulletin 65 (Edition 97-01), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields," provides guidelines for predicting radio frequency (RF) field levels which can used in evaluating FCC RF safety compliance. Using the predictive methods described in OET Bulletin 65 and the FCC-adopted standards for general public Maximum Permissible Exposure (MPE) defined in Appendix A to OET Bulletin 65, the following evaluation for the West Heathrow cell site was performed:

Base (feet)	(mW/cm^2)*		
10	0.000022	0.003794	1/ 263
20	0.000031	0.005411	1/ 184
50	0.000010	0.001795	1/ 556
100	0.000073	0.012525	1/ 79
150	0.000074	0.012712	1/ 78
200	0.000002	0.000275	1/ 3631
250	0.000030	0.005191	1/ 192
300	0.000030	0.005162	1/ 193
350	0.000005	0.000875	1/ 1142
400	0.000008	0.001451	1/ 688
450	0.000037	0.006465	1/ 154
500	0.000096	0.016490	1/ 60
550	0.000130	0.022415	1/ 44
600	0.000225	0.038876	1/ 25

* milliWatts/square centimeter

** FCC's Maximum Permissible Exposure at 880 MHz is 0.58 mW/cm^2

The data presented in the table above confirm that the West Heathrow cell site will pose no RF safety hazard to the general public.

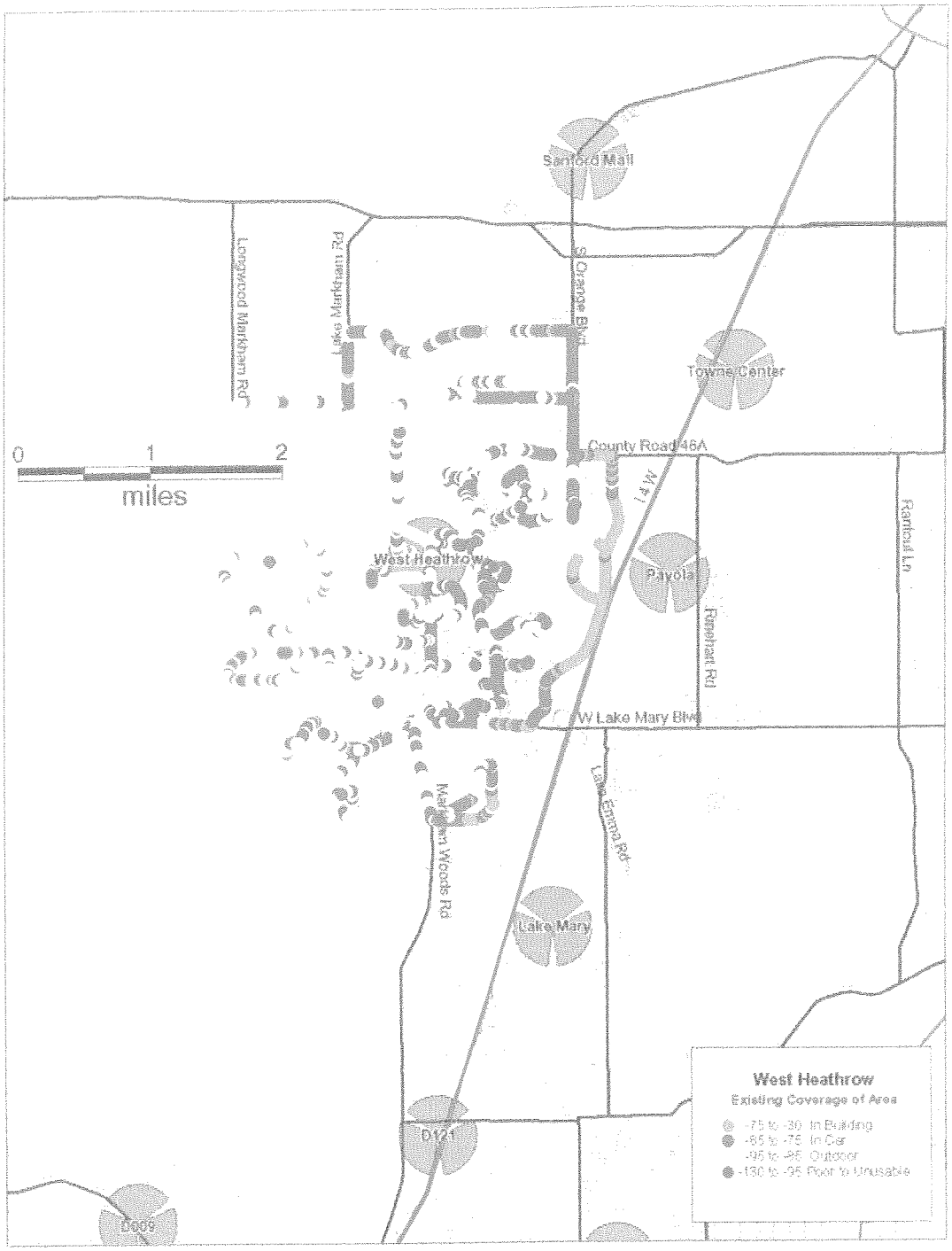
Attachments

The following plots are from drive data collected during a crane test of the proposed site:

1. The existing present coverage in the area.
2. The proposed coverage of just the new cell at 150 feet.
3. The proposed coverage of just the proposed cell at 100 feet.
4. The proposed coverage at 150 feet and existing coverage combined.
5. The proposed coverage at 100 feet and existing coverage combined.

The following plots are from software generated propagation:

1. The propagation of the existing coverage..
2. The proposed propagation of 150 feet at the Presbyterian Church.
3. The proposed propagation of the Presbyterian church by itself.
4. The proposed propagation of 100 feet at the Baptist Church.
5. The proposed propagation of 115 feet at the Baptist Church.



Sanford Mall
Longwood Markham Rd
Lake Markham Rd
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Towne Center
County Road 46A
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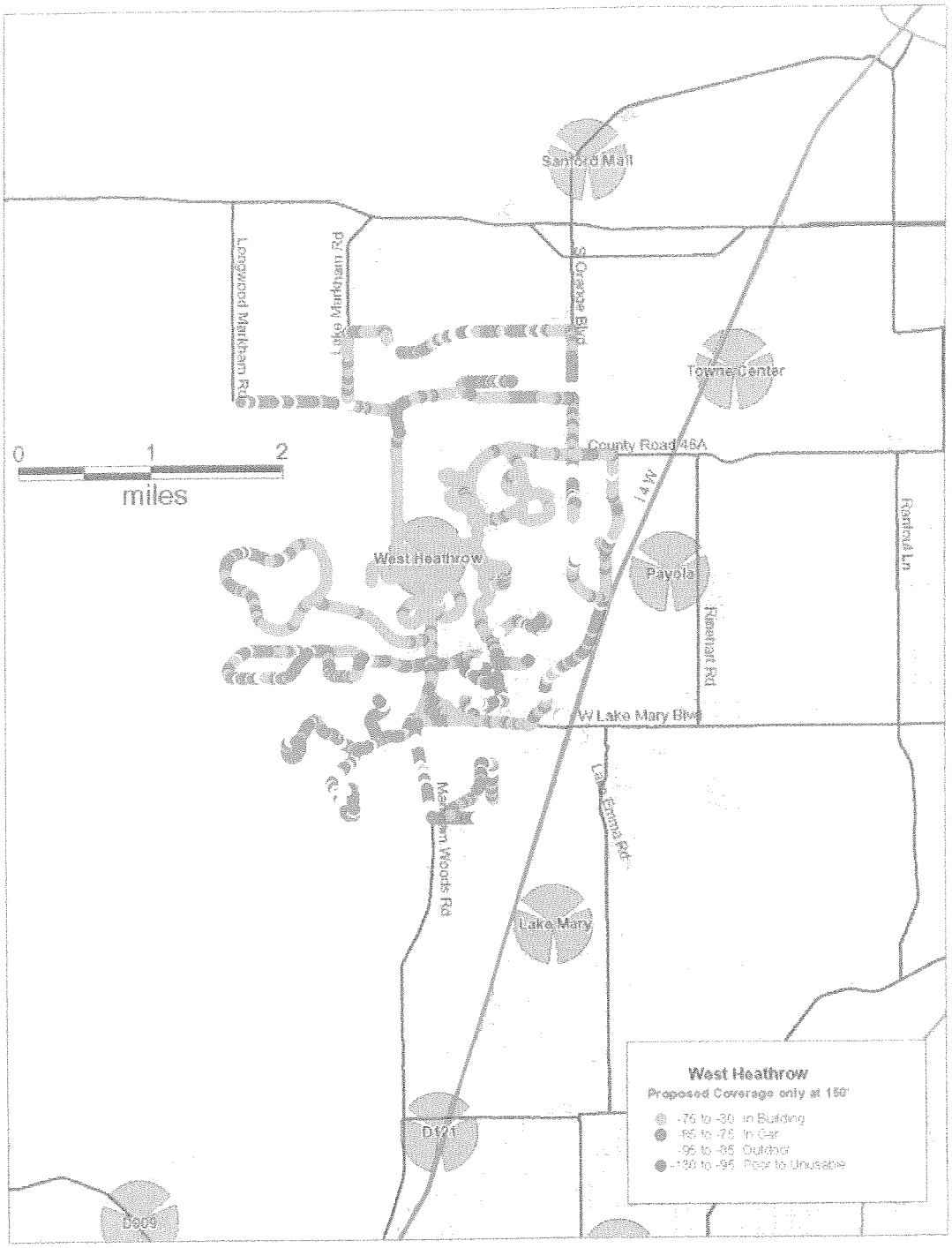
miles
I 4 W
Rantoul Ln
West Heathrow
Payola
Rinehart Rd
W Lake Mary Blvd
Markham Woods Rd
Lake Emma Rd
Lake Mary
D121
D009
West Heathrow
Existing Coverage of Area
-75 to -30 In Building
-85 to -75 In Car
-95 to -85 Outdoor
-130 to -95 Poor to Unusable


Sanford Mall
Longwood Markham Rd
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County Road 46A
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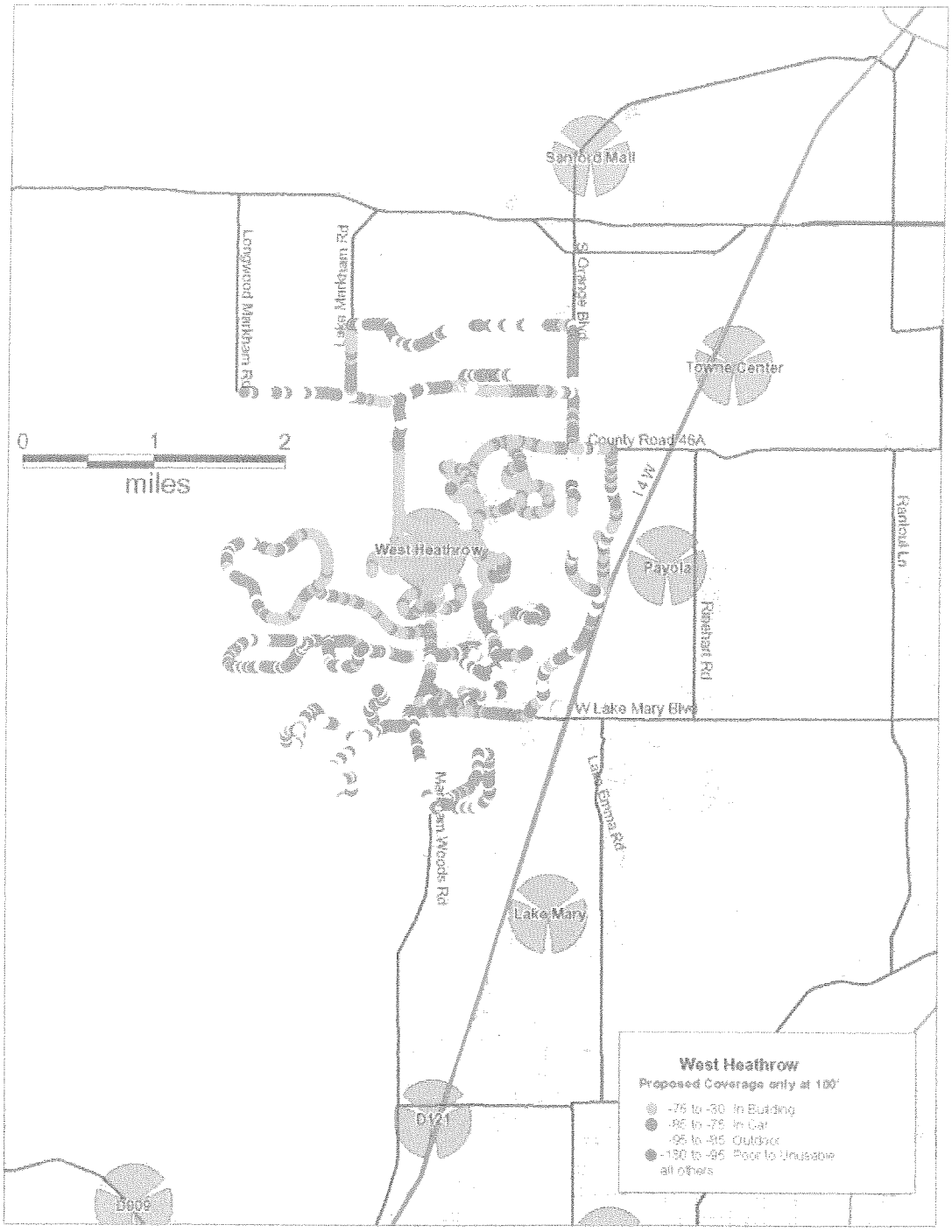
Rinehart Ln
West Heathrow
Payola
Rinehart Rd
W Lake Mary Blvd
Markham Woods Rd
Lake Emma Rd
Lake Mary
D121
D009
West Heathrow
Proposed Coverage only at 150'
-75 to -30 In Building
-85 to -75 In Car
-95 to -85 Outdoor
-130 to -95 Poor to Unusable



Sanford Mall
Longwood Markham Rd
Lake Markham Rd
S Orange Blvd
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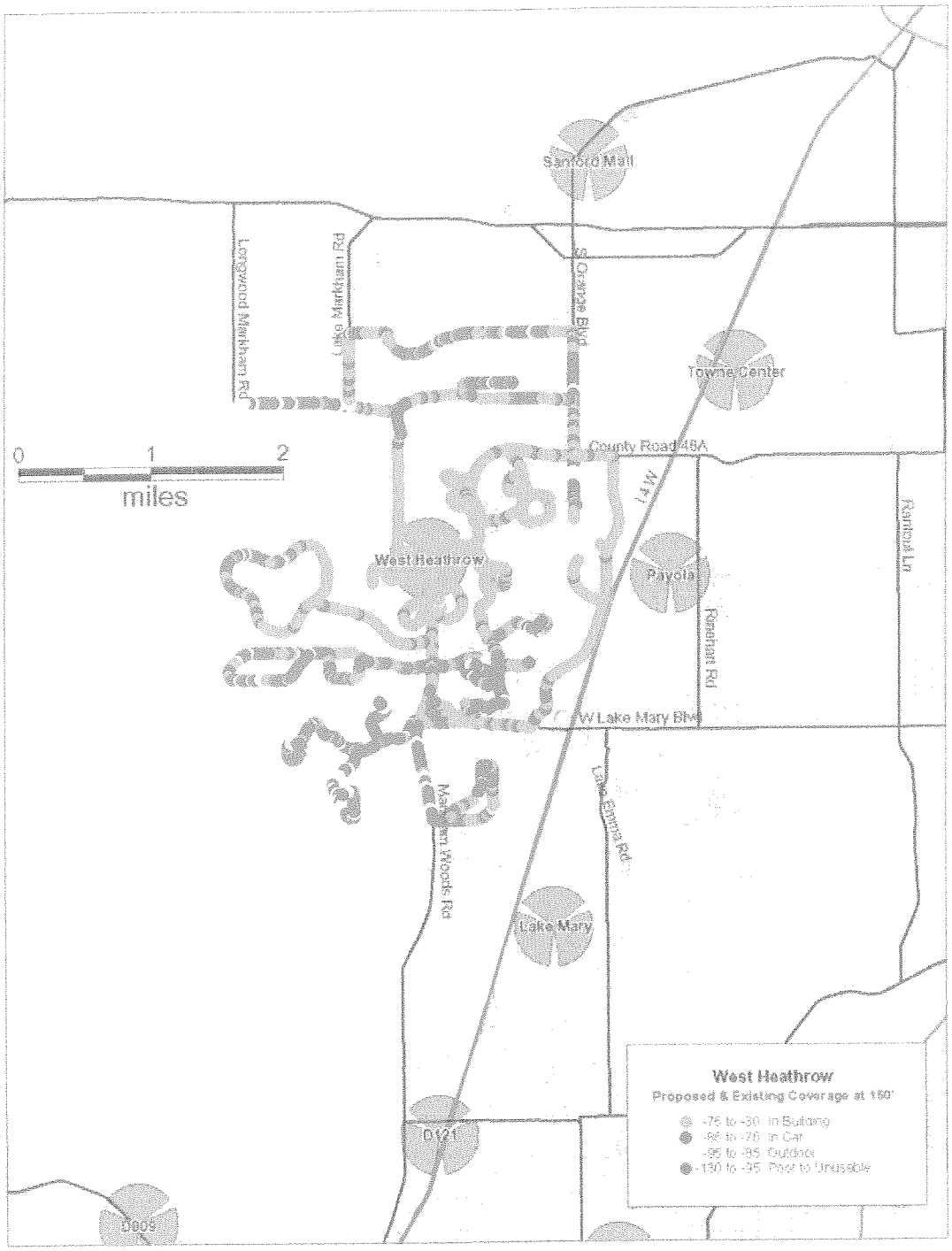
miles
County Road 46A
I 4 W
Rantoul Ln
West Heathrow
Payola
Rinehart Rd
W Lake Mary Blvd
Markham Woods Rd
Lake Emma Rd
Lake Mary
D121
D009
West Heathrow
Proposed Coverage only at 100'
-75 to -30 In Building
-85 to -75 In Car
-95 to -85 Outdoor
-130 to -95 Poor to Unusable
all others


Sanford Mall
Longwood Markham Rd
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Ranch Ln
West Heathrow
Payola
Rinehart Rd
W Lake Mary Blvd
Markham Woods Rd
Lake Emma Rd
Lake Mary
D121
D009
West Heathrow
Proposed & Existing Coverage at 150'
-75 to -30 In Building
-95 to -75 In Car
-95 to -85 Outdoor
-130 to -95 Poor to Unusable

Sanford Mall
Longwood Markham Rd
Lake Markham Rd
S Orange Blvd
Towne Center
County Road 46A
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West Heathrow
Payola
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W Lake Mary Blvd
Markham Woods Rd
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Proposed & Existing Coverage at 100'
-75 to -30 In Building
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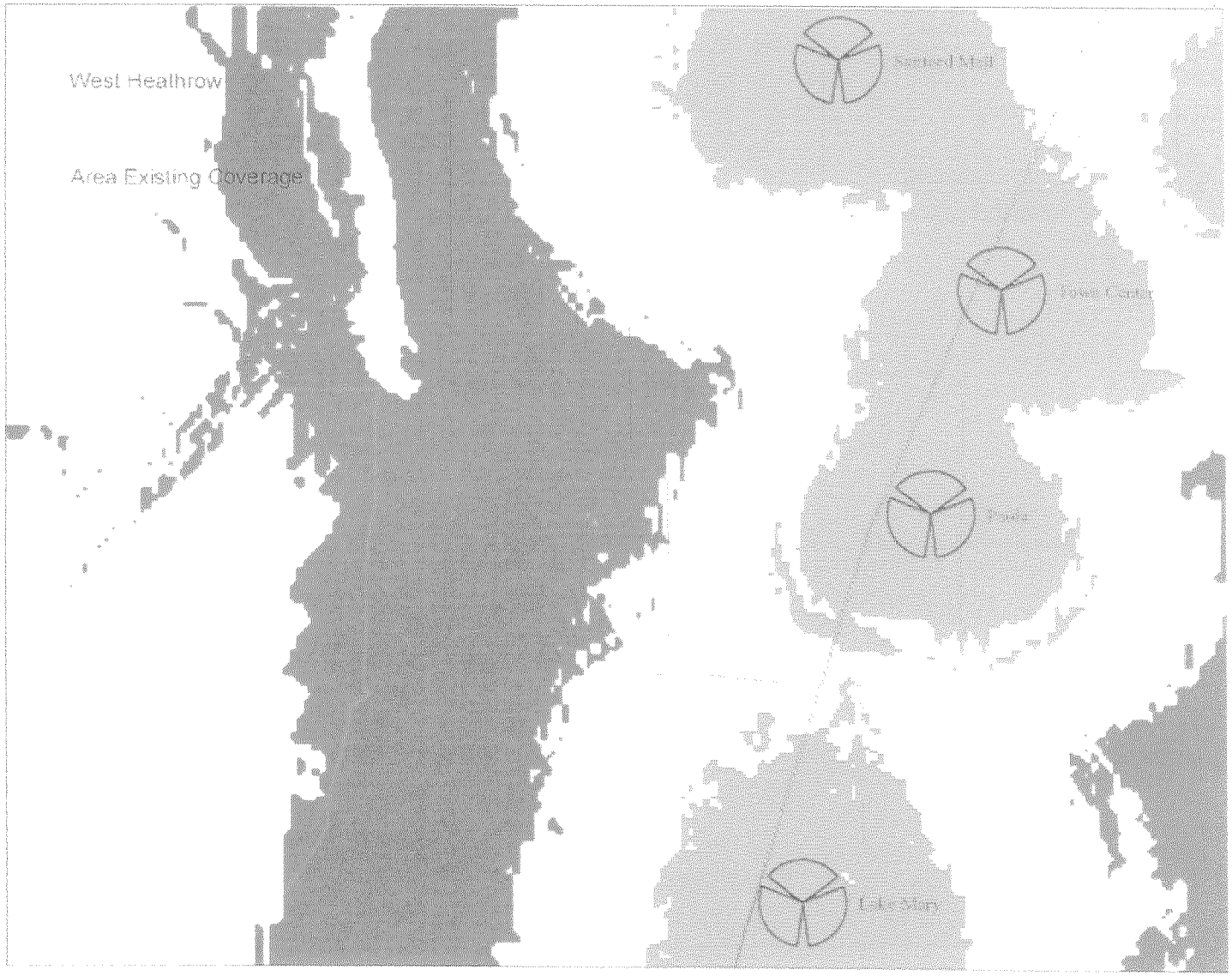
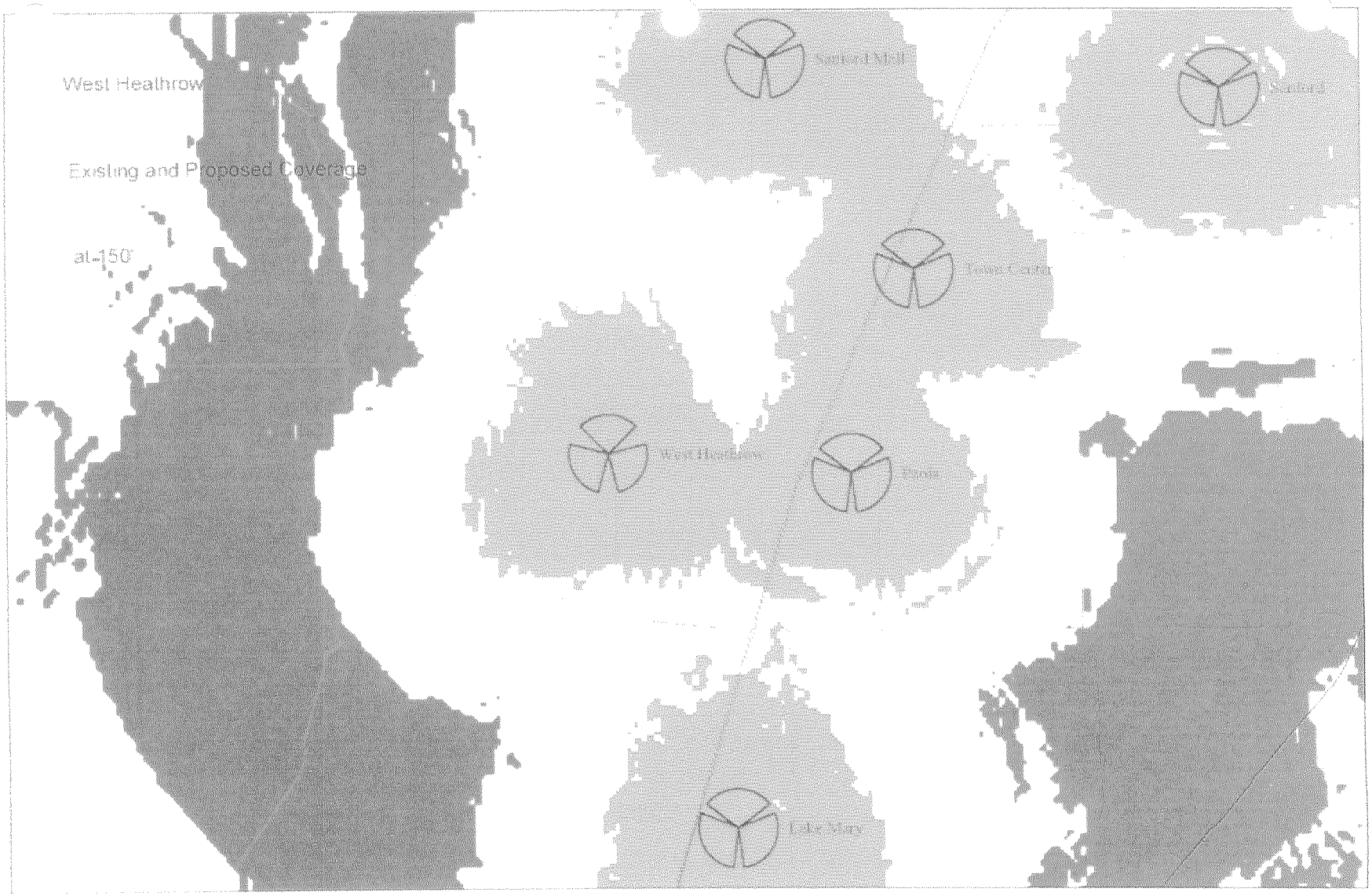
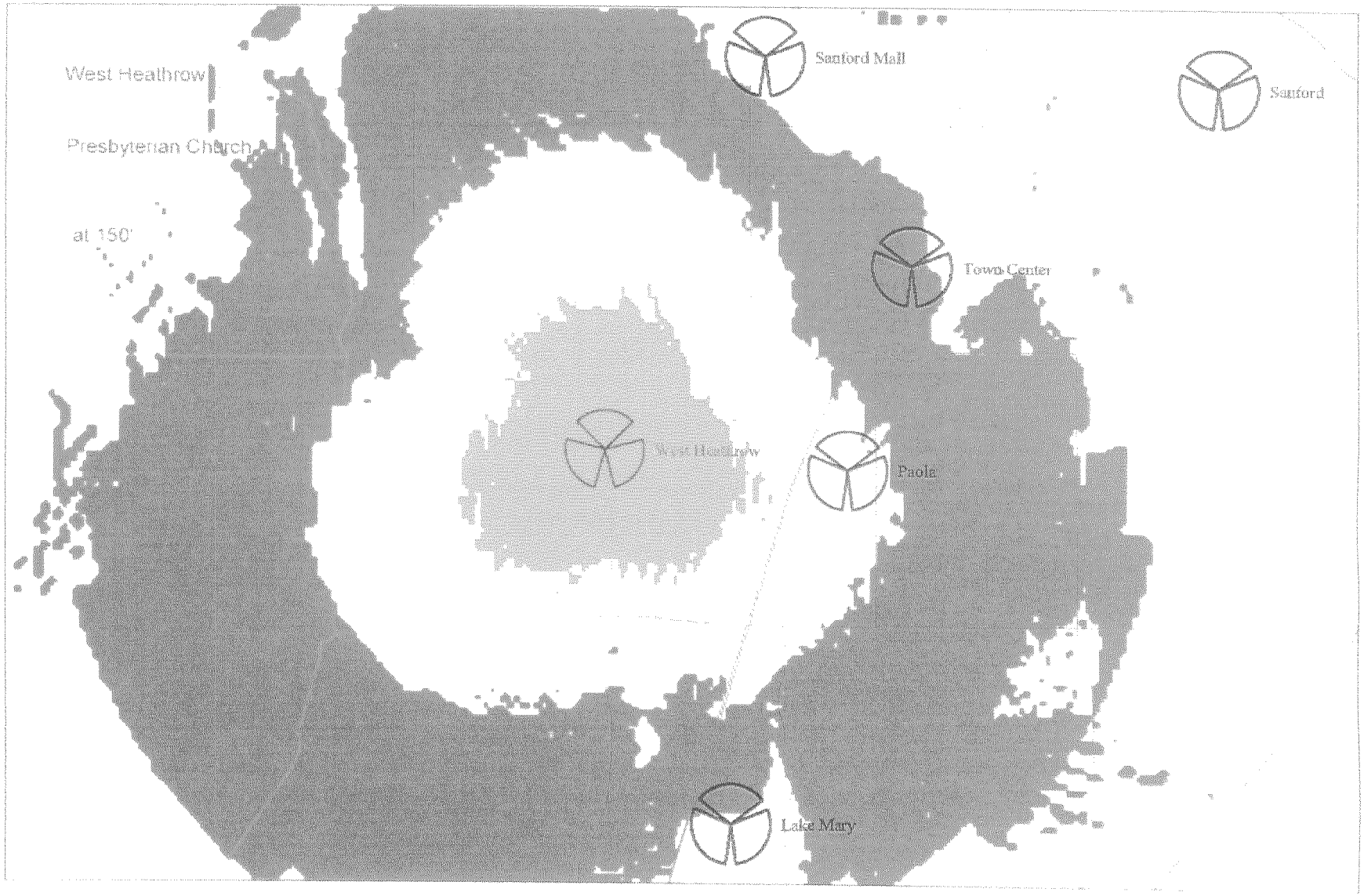
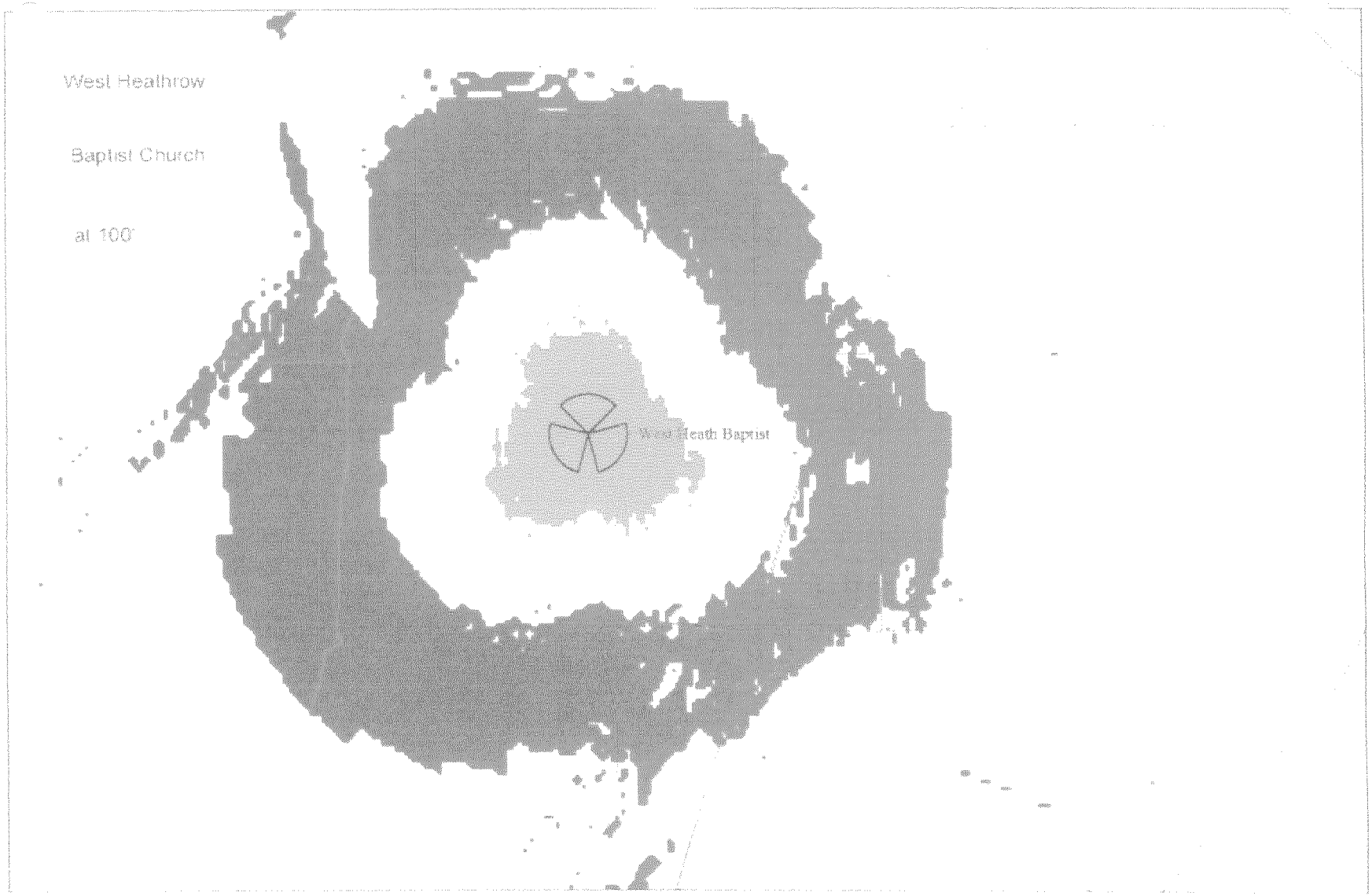
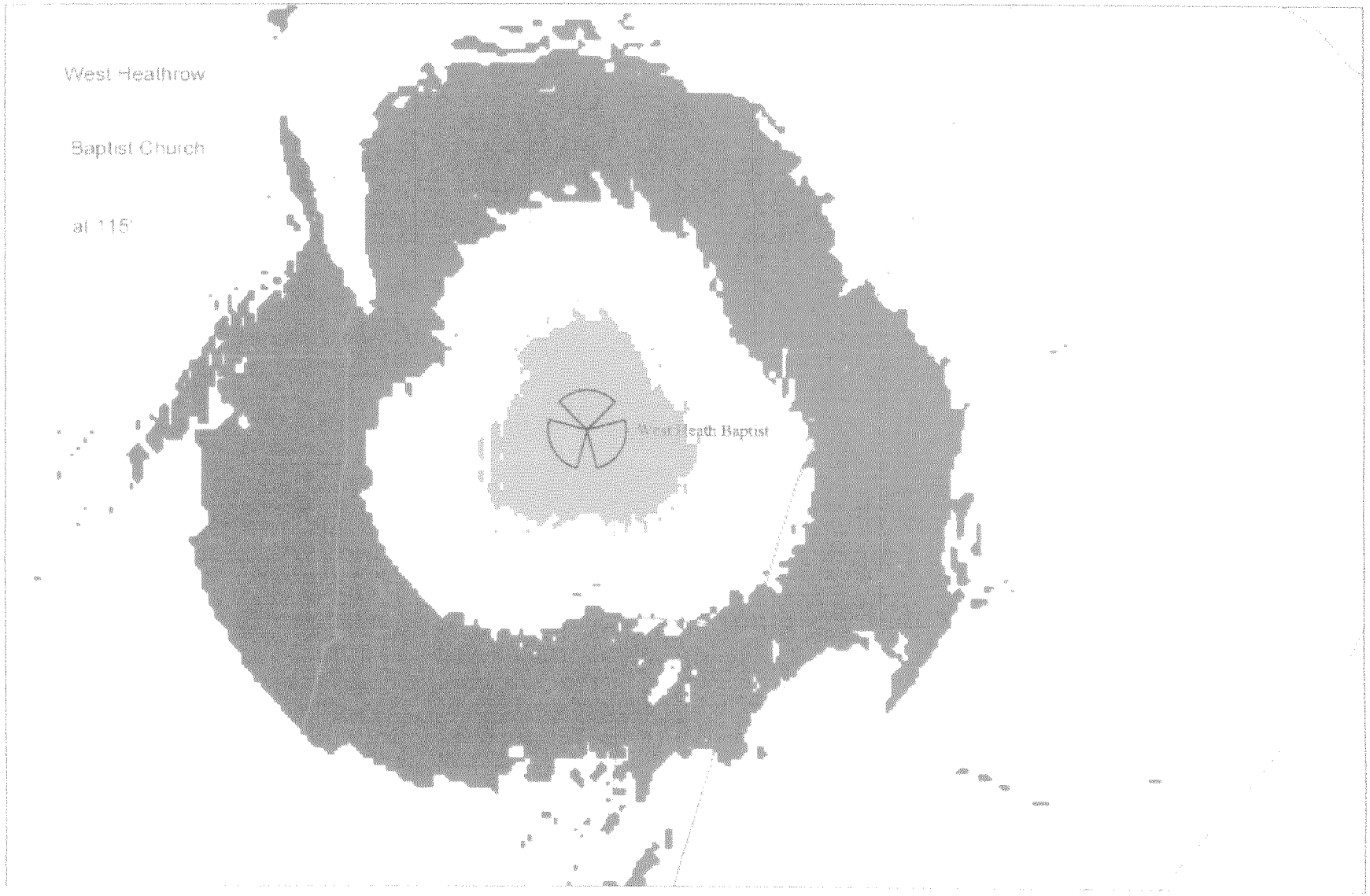

West Heathrow
Area Existing Coverage

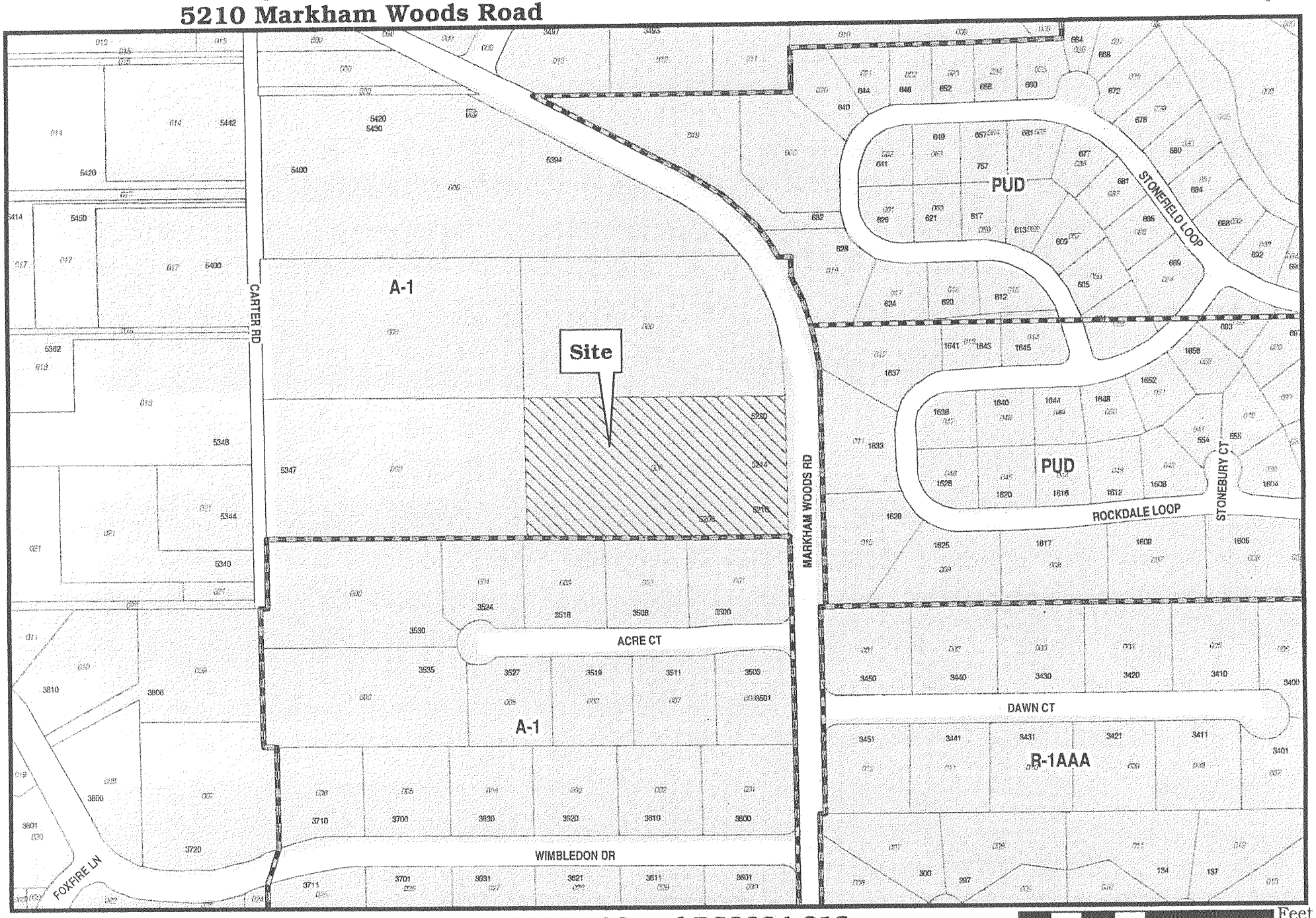

West Heathrow
Existing and Proposed Coverage
at 150'


West Heathrow
Presbyterian Church
at 150'
Sanford Mall
Sanford
Town Center
West Heathrow
Paola
Lake Mary


West Healthrow
Baptist Church
at 100'
West Heath Baptist


West Heathrow
Baptist Church
at 115'
West Heath Baptist

Bob Chopra / Wireless Facilities
Cingular Wireless, LLC
5210 Markham Woods Road



Parcel: 02-20-29-300-030B-0000 / District: 5

BV2004-108 and BS2004-019
August, 2004

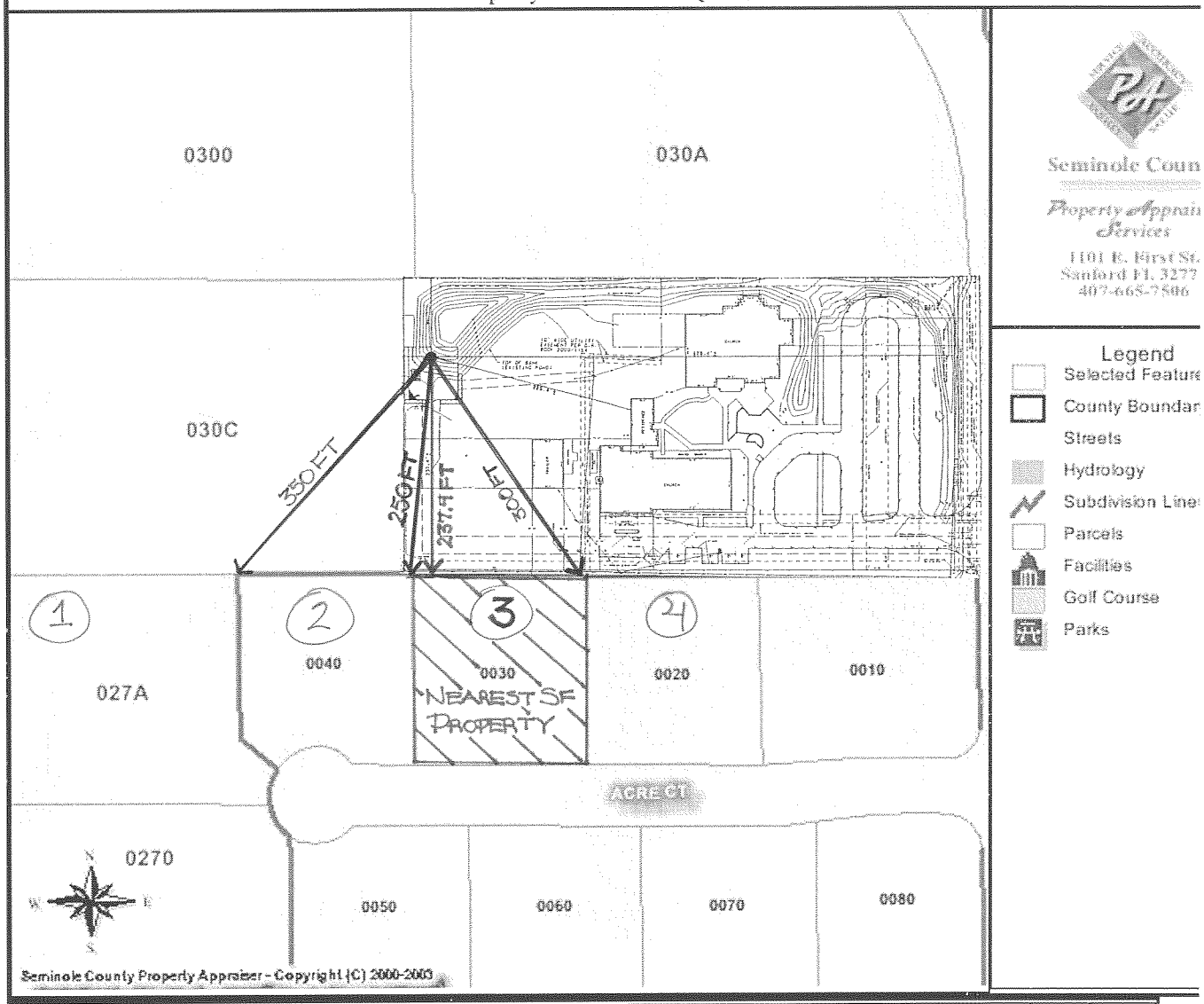
Feet
0 150 300 600

Seminole County, Florida

Property Appraiser Services

Your Source for Property Information... Quick, Convenient, Accurate

H.W. "Bill" Suber CFA, A



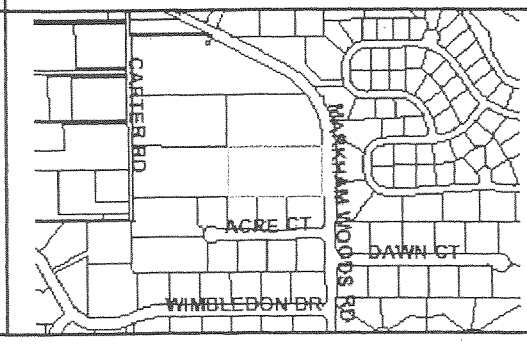
Rec	Parcel	Owner	Owner Addr	City	State	Zip
1	022029300030B0000	CHURCH MARKHAM WOODS	5210 MARKHAM WOODS RD	LAKE MARY	FL	32746

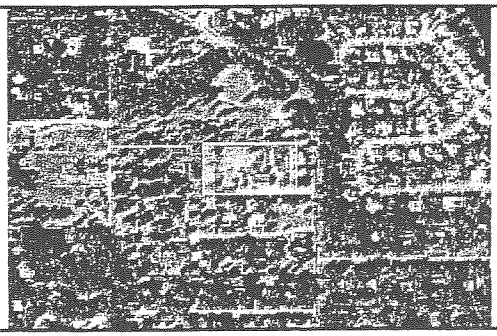
Personal Property Please Select Account

PARCEL DETAIL

REAL ESTATE | PERSONAL PROP. | TAX ROLL | SALES SEARCH | Back

Seminole County
Property Appraiser Services
1101 E. First St.
Sanford FL 32771
407-665-7506





GENERAL

Parcel Id:	02-20-29-300-030B-0000	Tax District:	01-TX DIST 1 - COUNTY
Owner:	CHURCH MARKHAM WOODS	Exemptions:	36-CHURCH/RELIGIOUS
Own/Addr:	PRESBYTERIAN INC		
Address:	5210 MARKHAM WOODS RD		
City,State,ZipCode:	LAKE MARY FL 32746		
Property Address:	5210 MARKHAM WOODS RD LAKE MARY 32746		
Facility Name:			
Dor:	71-CHURCHES		

2004 WORKING VALUE SUMMARY

Value Method:	Market
Number of Buildings:	3
Depreciated Bldg Value:	$1,068,668
Depreciated EXFT Value:	$58,220
Land Value (Market):	$164,500
Land Value Ag:	$0
Just/Market Value:	$1,291,388
Assessed Value (SOH):	$1,291,388
Exempt Value:	$1,291,388
Taxable Value:	$0

SALES

Deed	Date	Book	Page	Amount	Vac/Imp
WARRANTY DEED	03/1993	02575	0160	$681,400	Improved
WARRANTY DEED	11/1986	01791	1240	$4,600	Vacant
WARRANTY DEED	01/1983	01517	1196	$180,000	Improved
WARRANTY DEED	01/1977	01114	0839	$15,000	Vacant

Find Comparable Sales within this DOR Code

2003 VALUE SUMMARY

2003 Tax Bill Amount:	$0
2003 Taxable Value:	$0

DOES NOT INCLUDE NON-AD VALOREM ASSESSMENTS

LAND

Land Assess Method	Frontage	Depth	Land Units	Unit Price	Land Value
ACREAGE	0	0	4.700	35,000.00	$164,500

LEGAL DESCRIPTION

LEG SEC 02 TWP 20S RGE 29E E 1/2 OF N 3/4 OF S 1/2 OF NW 1/4 OF SE 1/4 (LESS N 165 FT & E 50 FT FOR RD)

BUILDING INFORMATION

Bld Num	Bld Class	Year Blt	Fixtures	Gross SF	Stories	Ext Wall	Bld Value	Est. Cost New
2	MASONRY PILAS	1989	12	9,550	1	BRICK COMMON - MASONRY	$486,672	$597,143
	Subsection / Sqft		OPEN PORCH FINISHED / 120					
3	MASONRY PILAS	1993	20	9,263	1	BRICK COMMON - MASONRY	$499,178	$578,757
	Subsection / Sqft		OPEN PORCH FINISHED / 400					
	Subsection / Sqft		OPEN PORCH FINISHED / 616					

BUILDING INFORMATION

Bld Num	Bld Type	Year Blt	Fixtures	Base SF	Gross SF	Heated SF	Ext Wall	Bld Value	Est. Cost New
1	SINGLE FAMILY	1978	6	1,473	1,473	1,473	CB/STUCCO FINISH	$82,818	$92,534

EXTRA FEATURE

Description	Year Blt	Units	EXFT Value	Est. Cost New
ALUM PORCH W/CONC FL	1987	448	$1,264	$2,912
WOOD DECK	1987	350	$700	$1,750

MOBILE HOME COMM	1984	2,520	$40,320	$50,400
MH A/C PKG	1984	2,520	$2,520	$3,150
COMMERCIAL CONCRETE DR 4 IN	1989	3,000	$3,750	$6,000
COMMERCIAL ASPHALT DR 2 IN	1989	17,500	$9,078	$14,525
POLE LIGHT STEEL	1989	2	$308	$308
POLE LIGHT STEEL	1989	2	$280	$280

NOTE: *Assessed values shown are NOT certified values and therefore are subject to change before being finalized for ad valorem tax purposes.*
**** If you recently purchased a homesteaded property your next year's property tax will be based on Just/Market value.*

BACK ● PROPERTY APPRAISER HOME PAGE ● CONTACT

PROJECT INFORMATION

SCOPE OF WORK:	PROPOSED UNMANNED TELECOMMUNICATIONS FACILITY
SITE ADDRESS:	5210 MARKHAM WOODS ROAD LAKE MARY, FLORIDA 32746
COUNTY:	SEMINOLE
LATITUDE:	N28° 46' 33.1"
LONGITUDE:	W81° 22' 57.3"
JURISDICTION:	SEMINOLE COUNTY
PARCEL ID #:	02-20-29-300-0308-0000
ZONING:	A1-AGRICULTURE
CURRENT USE:	CHURCH
PROPOSED USE:	PROPOSED 150' 3 CARRIER ECCLESIASTICAL MONOPOLE
PROPERTY OWNER:	MARKHAM WOODS PRESBYTERIAN CHURCH 5210 MARKHAM WOODS ROAD LAKE MARY, FLORIDA 32746
PROPERTY CONTACT PERSON:	FRANK BELL (407) 333-2030
TOWER COLOR:	GALVANIZED
PARENT TRACT:	4.7 ± ACRES

A /E DOCUMENT REVIEW STATUS

Status code

1	✓	Accepted - With minor or no comments, construction may proceed
2		Not accepted - Please resolve comments and resubmit

Acceptance does not constitute approval of design details, calculations, analysis, test methods or materials developed or selected by the subcontractor and does not relieve subcontractor from full compliance with contractual obligations.

	ENG	CONST				
Reviewed	✓					

By: E Bedrins Date: 5/27/04

cingular WIRELESS

SITE NAME: NFB-WEST HEATHROW

RF REVISION

RF REVISION # 1.0

RF REVISION DATE 01/26/04

DRAWING INDEX

		REV
NFB-REYNOLDS AIRPARK-01	TITLE SHEET	0
NFB-REYNOLDS AIRPARK-02	SITE PLAN	0
NFB-REYNOLDS AIRPARK-03	COMPOUND PLAN	0
NFB-REYNOLDS AIRPARK-04	LANDSCAPE PLAN	0
NFB-REYNOLDS AIRPARK-05	TOWER ELEVATION AND ANTENNA ORIENTATION PLAN	0
NFB-REYNOLDS AIRPARK-06	COAX COLOR CODING AND IDENTIFICATION DETAIL	0
NFB-REYNOLDS AIRPARK-07	FOUNDATION LAYOUT	0

NOTES

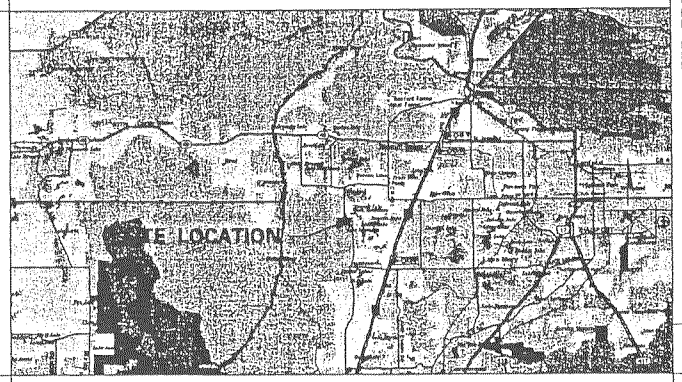
1. SEE THE FOLLOWING NOTES, SYMBOLS AND DETAILS, BECHTEL DOCUMENT NUMBER 24782-000-A3-EF-00001 FOR THE IMPLEMENTATION OF THIS SITE DESIGN PACKAGE:

CONCRETE AND REINFORCING STEEL NOTES	(DETAIL 102)
RF NOTES	(DETAIL 116)
SITE WORK GENERAL NOTES	(DETAIL 619)
STRUCTURAL STEEL NOTES	(DETAIL 620)
GROUNDING NOTES	(DETAIL 621)
ELECTRICAL INSTALLATION NOTES	(DETAIL 622)
GENERAL NOTES	(DETAIL 623)
GREENFIELD TVSS NOTES	(DETAIL 624)

2. ALL BECHTEL SAFETY PROCEDURES MUST BE ADHERED TO AS PER EXHIBIT B1.
3. SUB-CONTRACTOR SHALL INCLUDE ANTENNA SYSTEM SWEEP TESTING PER BECHTEL DOCUMENT 24782-801-3PS-EFY0-00001 REV A.
4. POWER TO BE PROVIDED BY PROGRESS ENERGY: 1-866-372-4663
   TELCO TO BE PROVIDED BY BELLSOUTH: 727-535-8157.

VICINITY MAP

DIRECTIONS:
FROM I-4 IN ORLANDO, FL. TRAVEL NORTHEAST TO EXIT #50. TURN LEFT ON LAKE MARY BLVD AND HEAD WEST APPROXIMATELY 1 MILE TO MARKHAM WOODS ROAD. TURN RIGHT HEADING NORTH AND TRAVEL APPROXIMATELY 1 MILE. SITE IS ON THE LEFT HAND SIDE OF THE ROAD.



SCOPE OF WORK

(INCLUDING BUT NOT LIMITED TO)

1. INSTALL NEW 150' ECCLESIASTICAL TOWER (DESIGN BY OTHERS)
2. INSTALL NEW CONCRETE SLAB FOR NEW OUTDOOR EQUIPMENT.
3. INSTALL NEW CABLE SUPPORT BRIDGES.
4. FURNISH AND INSTALL NEW ELEC. SERVICES WITH METER AND DISCONNECT.
5. FURNISH AND INSTALL ALL UNDERGROUND UTILITITES.
6. INSTALL NEW MOUNTS AND ANTENNAS AND CABLES.
7. INSTALLATION OF TELECOMMUNICATIONS EQUIPMENT.

IMPORTANT NOTICE

THE EXISTING CONDITIONS REPRESENTED HEREIN ARE BASED ON VISUAL OBSERVATIONS, AND INFORMATION PROVIDED BY OTHERS. KCI TECHNOLOGIES, INC. CORPORATION CANNOT GUARANTEE THE CORRECTNESS NOR COMPLETENESS OF THE EXISTING CONDITIONS SHOWN AND ASSUMES NO RESPONSIBILITY THEREOF. CONTRACTOR AND HIS SUB-CONTRACTORS SHALL VISIT THE SITE AND VERIFY ALL EXISTING CONDITIONS AS REQUIRED FOR PROPER EXECUTION OF PROJECT. REPORT ANY CONFLICTS OR DISCREPANCIES TO THE CONSULTANT PRIOR TO CONSTRUCTION.

APPLICABLE BUILDING CODES AND STANDARDS

SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

BUILDING CODE:
FLORIDA BUILDING CODE (FBC), LATEST EDITION

WIND SPEED:
BASIC WIND SPEED PER FBC- WINDSPEED 110 MPH (3 SEC. GUST) (90 MPH FASTEST MILE)
EIA/TIA-222-F: 95 MPH BASIC WIND SPEED

ELECTRICAL CODE:
NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70, NATIONAL ELECTRICAL CODE, LATEST ADOPTED EDITION.

LIGHTNING PROTECTION CODE: NEPA - 2000, LIGHTNING PROTECTION CODE

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE
AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION
TELECOMMUNICATIONS INDUSTRY ASSOCIATION/ELECTRONIC INDUSTRIES ASSOCIATION (TIA /EIA) 222-F, STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES; INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) B1, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM, IEEE 1100 (LATEST EDITION), RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT, IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE"); TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS, TELCORDIA, GR-1503 COAXIAL CABLE CONNECTION. FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

PROJECT INFORMATION

1. THIS IS AN UNMANNED AND RESTRICTED ACCESS EQUIPMENT ROOM AND WILL BE USED FOR THE TRANSMISSION OF RADIO SIGNALS FOR THE PURPOSE OF PROVIDING PUBLIC CELLULAR SERVICE.
2. CINGULAR WIRELESS CERTIFIES THAT THIS TELEPHONE EQUIPMENT FACILITIY WILL BE SERVICED ONLY BY CINGULAR WIRELESS EMPLOYEES AND THE WORK ASSOCIATED WITH ANY EQUIPMENT CANNOT BE PERFORMED BY HANDICAPPED PERSONS. THIS FACILITY WILL BE FREQUENTED ONLY BY SERVICE PERSONNEL FOR REPAIR PURPOSES. PURSUANT TO CHAPTER 553 PART 5A OF THE FLORIDA STATUTES, THIS FACILITY IS EXEMPT FROM THE REQUIREMENTS OF THAT STATUTE. PURSUANT TO THE AMERICANS WITH DISABILITIES ACT (ADA), APPENDIX B, SECTION 4.11. (5)(b).THIS FACILITY IS EXEMPT FROM THAT ACT.
3. THIS FACILITY WILL CONSUME NO UNRECOVERABLE ENERGY AND IS EXEMPT FROM THE FLORIDA ENERGY REVIEW CODE.
4. NO POTABLE WATER SUPPLY IS TO BE PROVIDED AT THIS LOCATION.
5. NO WASTE WATER WILL BE GENERATED AT THIS LOCATION.
6. NO SOLID WASTE WILL BE GENERATED AT THIS LOCATION.
7. SEE ATTACHED SURVEY FOR LEGAL DESCRIPTION, EXISTING GRADE INFORMATION, LOCATION PLAN AND OTHER SITE INFORMATION.
8. CINGULAR WIRELESS COMMUNICATIONS MAINTENANCE CREW (TYPICALLY ONE PERSON) WILL MAKE AN AVERAGE OF ONE TRIP PER MONTH AT ONE HOUR PER VISIT.

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FLORIDA LICENSE NO. EB0000444
ENGINEER: DARRYL J. KROEZE, P.E.
FLORIDA REG NO. 54389

NFB-WEST HEATHROW
5210 MARKHAM WOODS ROAD
LAKE MARY, FLORIDA 32746

cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	5/26/04	ISSUED FOR ZONING	MB	DK	DK
A	5/25/04	ISSUED FOR REVIEW	MB	DK	DK

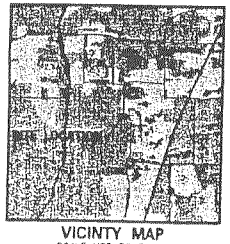
SCALE: AS SHOWN | DESIGNED: DARRYL KROEZE | DRAWN: M. BURNS

CINGULAR WIRELESS

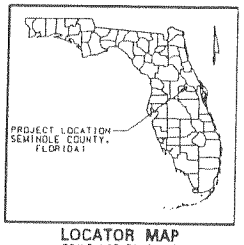
TITLE SHEET

BECHTEL JOB NO.	DRAWING NUMBER	REV
24782-350	NFB-WEST HEATHROW-01	0

KCI JOB#:100226CC



VICINTY MAP
SCALE: NOT TO SCALE



LOCATOR MAP
SCALE: NOT TO SCALE

LEGEND:

- A = AND
- (P) = PLAT DATA
- (C) = CALCULATED DATA
- (F) = FIELD DATA
- (D) = DEED DATA
- BTS = BASE STATION TRANCEIVER SUBSYSTEM
- △ = BENCHMARK
- ℄ = CENTERLINE
- CONC = CONCRETE
- — 23 — = CONTOUR ELEVATION DATA
- ELEV. = ELEVATION
- FAA = FEDERAL AVIATION ADMINISTRATION
- F.D.O.T. = FLORIDA DEPARTMENT OF TRANSPORTATION
- FL = FLORIDA
- GPS = GLOBAL POSITIONING SATELLITE
- ⊕ = GROUND RING
- ⊖ = GUY WIRE
- ID = IDENTIFICATION
- INC. = INCORPORATED
- MES = MITERED END SECTION
- M.O.L. = MORE OR LESS
- NAD = NORTH AMERICAN DATUM
- NAVD88 = NORTH AMERICAN VERTICAL DATUM 1988
- NCFS = NO CORNER FOUND OR SET
- NO. = NUMBER
- OHW = OVERHEAD WIRES
- PKWY = PARKWAY
- ⟶ = SIGN
- TOB = TOP OF BANK
- TOS = TOP OF SLOPE
- TYP = TYPICAL
- ⊖ = UTILITY POLE
- W/ = WITH
- FIR = FOUND IRON ROD
- FIP = FOUND IRON PIPE
- FCM = FOUND CONCRETE MONUMENT
- SIR&C = SET IRON ROD & CAP 5/8" LB #6901
- FP/K&D = FOUND PARKER-KALON NAIL AND DISK
- SP/K&D = SET PARKER-KALON NAIL AND DISK
- REF. PT. = REFERENCE POINT
- LP = LIQUID PROPANE

FLOOD NOTE:

THE PROPOSED CINGULAR WIRELESS LEASE AREA APPEARS TO FALL WITHIN ZONE C AS SCALED FROM FLOOD INSURANCE RATE MAP, COMMUNITY, 120289 PANEL NUMBER 0020 C, EFFECTIVE DATE 01/16/1987.

80 0 40 80 160

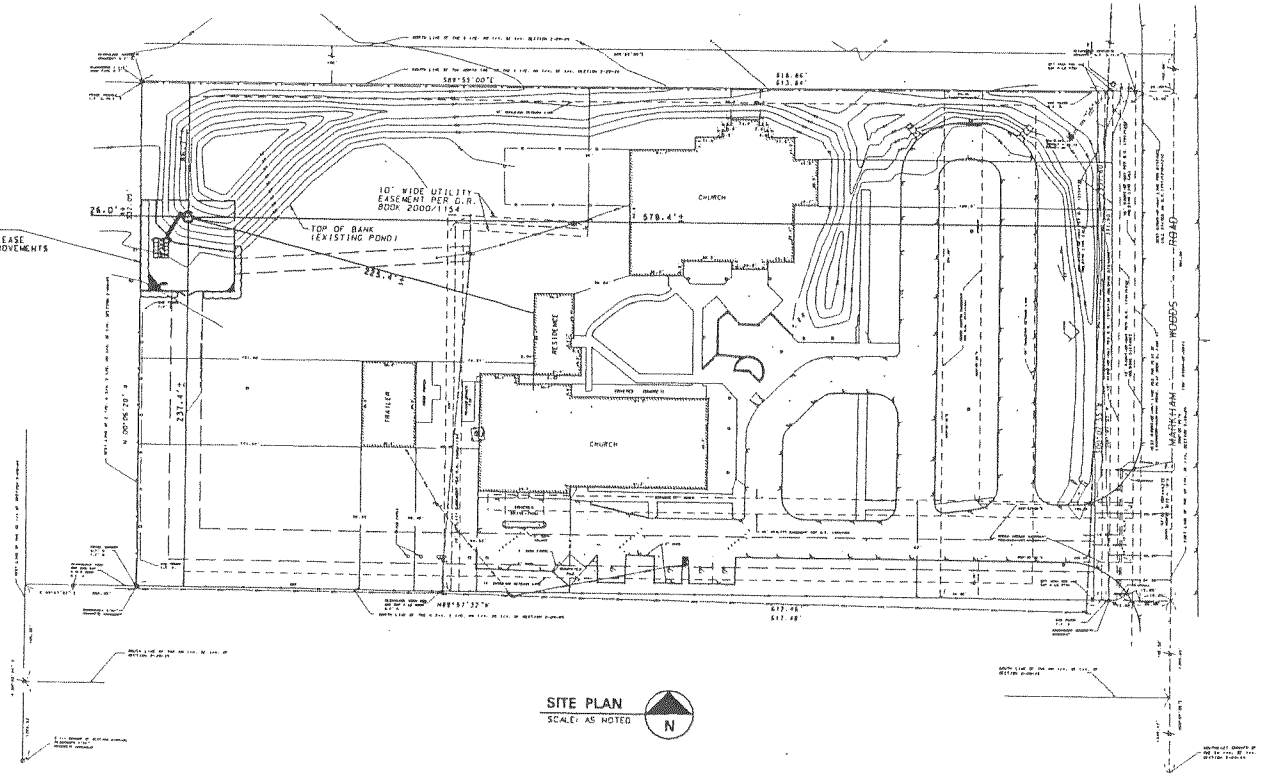
FOR 24"x38" DRAWINGS GRAPHIC SCALE: 1 INCH = 40 FEET

FOR 11"x17" DRAWINGS GRAPHIC SCALE: 1 INCH = 80 FEET

PARENT TRACT DESCRIPTION:

THE EAST 1/2 OF THE NORTH 3/4 OF THE SOUTH 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SECTION 2, TOWNSHIP 20 SOUTH, RANGE 29 EAST, SEMINOLE COUNTY, FLORIDA, LESS THE EAST 1/2 OF THE NORTH 165 FEET OF THE SOUTH 1/2 OF THE NORTHWEST 1/4 OF THE SOUTHEAST 1/4 OF SAID SECTION 2, AND LESS THE RIGHT-OF-WAY OF MARKHAM WOODS ROAD.

CONTAINING 4.671 ACRES, MORE OR LESS



SITE PLAN
SCALE: AS NOTED

N

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cingular WIRELESS

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A	5/25/04	ISSUED FOR REVIEW	MB	DK	DK

SCALE: AS SHOWN | DESIGNED: DARRYL KROEZE | DRAWN: M. BURNS

05/27/04

CINGULAR WIRELESS

SITE PLAN

BECHTEL JOB NO.	DRAWING NUMBER	REV
24782-350	NFB-WEST HEATHROW-02	0

KCI JOB#:10042361CC

\CD's\NFB-02.dgn 5/26/2004 4:04:52 PM

CONSTRUCTION NOTES

1. FIELD VERIFICATION:
   SUBCONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK. CINGULAR WIRELESS ANTENNA PLATFORM LOCATION AND ANTENNAS TO BE INSTALLED.
2. COORDINATION OF WORK:
   SUBCONTRACTOR SHOULD COORDINATE RF WORK AND PROCEDURES WITH CONTRACTOR.
3. CABLE LADDER RACK:
   SUBCONTRACTOR SHALL INSTALL CABLE LADDER RACK, IAW MS 24782-000-TMA-CPF-00001 CABLE TRAY, AND FURNISH CONDUIT AS REQUIRED TO SUPPORT CABLES TO THE NEW BTS LOCATIONS.
4. GRAVEL SURFACE IN AREAS OF COMPOUND THAT ARE DISTURBED DURING CONSTRUCTION SHALL BE REPLACED TO ORIGINAL CONDITION BY SUBCONTRACTORS.
5. ALL WORK TO BE PERFORMED BY THE SUBCONTRACTOR UNLESS OTHERWISE NOTED.

SITE NOTES

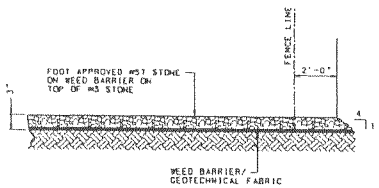
1. THE MINIMUM LOWEST ELEVATION SHALL NOT BE LESS THAN 4" ABOVE CROWN OF ROAD OR THE FEDERAL AND/OR COUNTY FLOOD CRITERIA ELEVATION, WHICHEVER IS HIGHER. CONTRACTOR SHALL SUBMIT AN ELEVATION SURVEY PRIOR TO POURING SLAB AND A FINAL SURVEY UPON COMPLETION OF PROJECT.
2. WORK OUTSIDE OF THE PROPERTY LINE INCLUDED IN THIS SET OF DRAWINGS SHALL BE, BUT NOT LIMITED TO DRIVEWAYS, GRADING TO ASPHALT LINE AND UTILITY CONNECTIONS.
3. EXISTING TREES WITHIN BUILDING FOOTPRINT SHALL BE REMOVED CONTRACTOR SHALL PROCURE PERMIT.
4. CONTRACTOR AND SUB-CONTRACTORS SHALL VERIFY ALL UTILITY SERVICE CONNECTIONS LOCATIONS PRIOR TO SUBMITTING BID AND PROCEEDING WITH WORK. IT IS RECOMMENDED THAT THE CONTRACTOR VISIT THE SITE AND VERIFY ALL DIMENSIONS AND NOTES BEFORE SUBMITTING BID AND PROCEEDING WITH WORK.
5. IN ORDER TO AVOID ANY CONFLICTS, CONTRACTOR SHALL COORDINATE ALL HIS PRACTICAL TRADES.

GENERAL EROSION CONTROL NOTES

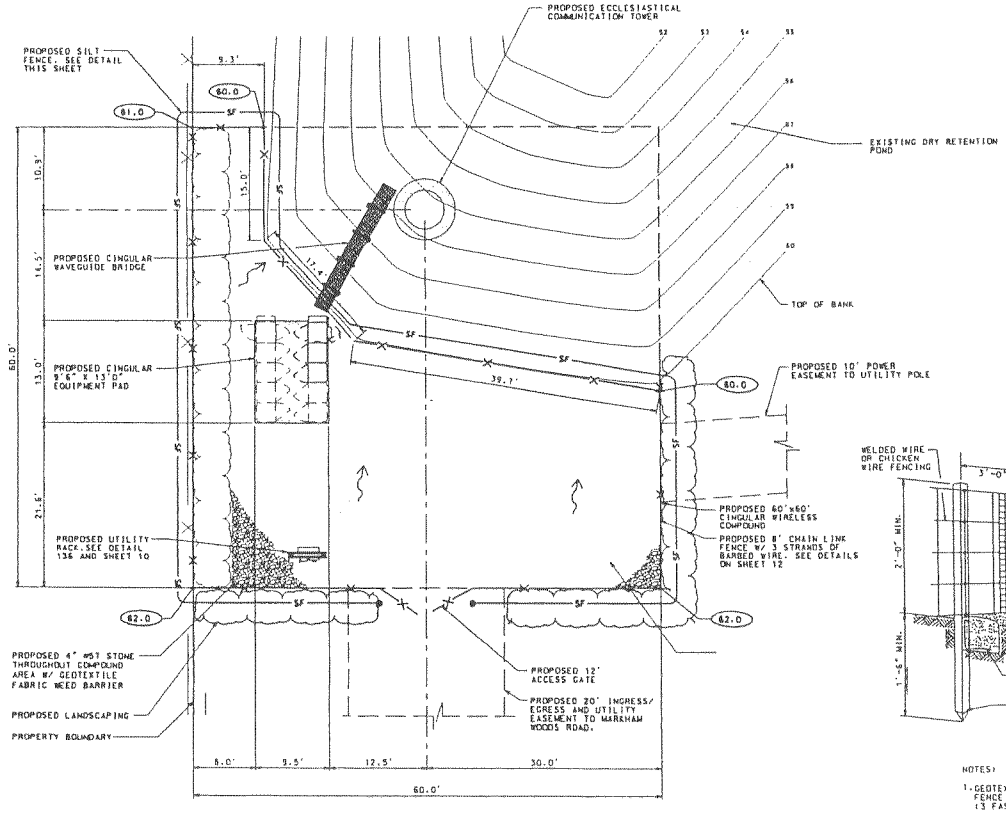
ALL WORK SHALL CONFORM TO THE WATER MANAGEMENT DISTRICT GUIDELINES REGARDING PREVENTION OF ANY OFF-SITE RUNOFF. EROSION/SEDIMENTATION BARRIERS SHALL BE PLACED AT ALL LOCATIONS OF ANY POSSIBILITY OF RUNOFF THAT COULD OCCUR TO THE ADJOINING PROPERTIES. THESE BARRIERS SHALL BE BARRICADED AS SHOWN ON THE DETAIL.

THE SITE CONTRACTOR IS TO PROVIDE EROSION CONTROL AND SEDIMENTATION BARRIER (HAY BALES AND/OR SILTATION CURTAIN) TO PREVENT SILTATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS AND WATERWAYS. SHOULD SILTATION OCCUR TO ANY OF THE ABOVE, THE SITE CONTRACTOR SHALL REMOVE SAID SEDIMENTATION AND RESTORE ANY DAMAGED AREAS AS REQUIRED.

IN ADDITION, THE SITE CONTRACTOR SHALL PLACE STRAW, MULCH, OR OTHER SUITABLE MATERIAL ON THE GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE. THE SITE CONTRACTOR SHALL SWEEP ALL STREETS WITHIN PUBLIC RIGHT-OF-WAYS AS NECESSARY, TO REMOVE DIRT BEING TRANSPORTED FROM SITE BY CONSTRUCTION VEHICLES. IF IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE SITE CONTRACTOR IS TO REMOVE AND CLEAN SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES.



COMPOUND DETAIL
NOT TO SCALE

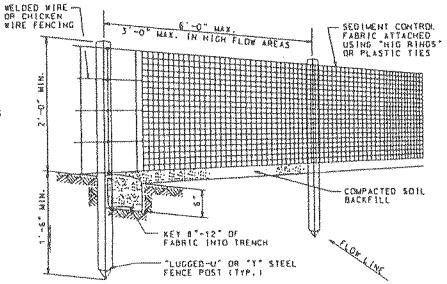


COMPOUND PLAN
SCALE: AS NOTED
N
TRUE NORTH

LEGEND

—— SF ——	= SILT FENCE
—— LOC ——	= LIMITS OF CLEARING

FOR 24"x36" DRAWINGS
GRAPHIC SCALE: 1/8" = 1'-0"
FOR 11"x17" DRAWINGS
GRAPHIC SCALE: 1/16" = 1'-0"



SILT FENCE DETAIL
NOT TO SCALE

NOTES:

1. GEOTEXTILE FABRIC TO BE FASTENED SECURELY TO FENCE POST BY WIRE TIES OR HOG RINGS. (3 FASTENERS PER POST)
2. ENDS OF INDIVIDUAL ROLLS OF GEOTEXTILE SHALL BE SECURELY FASTENED TO A COMMON POST OR OVERLAPPED 3' MINIMUM.
3. THIS DEVICE IS INTENDED TO CONTROL SHEET FLOW ONLY. IT WILL NOT BE USED IN AREAS OF CONCENTRATED FLOW WITH A DRAINAGE AREA OF ½ ACRE OR MORE.
4. ALL SILT FENCING SHALL BE INSTALLED PRIOR TO COMMENCING ANY LAND DISTURBING ACTIVITIES, AND SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION ACTIVITIES ARE COMPLETED.

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FLORIDA REG NO.: 00000

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LAKE MARY, FLORIDA 32746

cingular WIRELESS

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A	5/25/04	ISSUED FOR REVIEW	MB	DK	DK

SCALE: AS SHOWN | DESIGNED: DARRYL KROEZE | DRAWN: M. BURNS

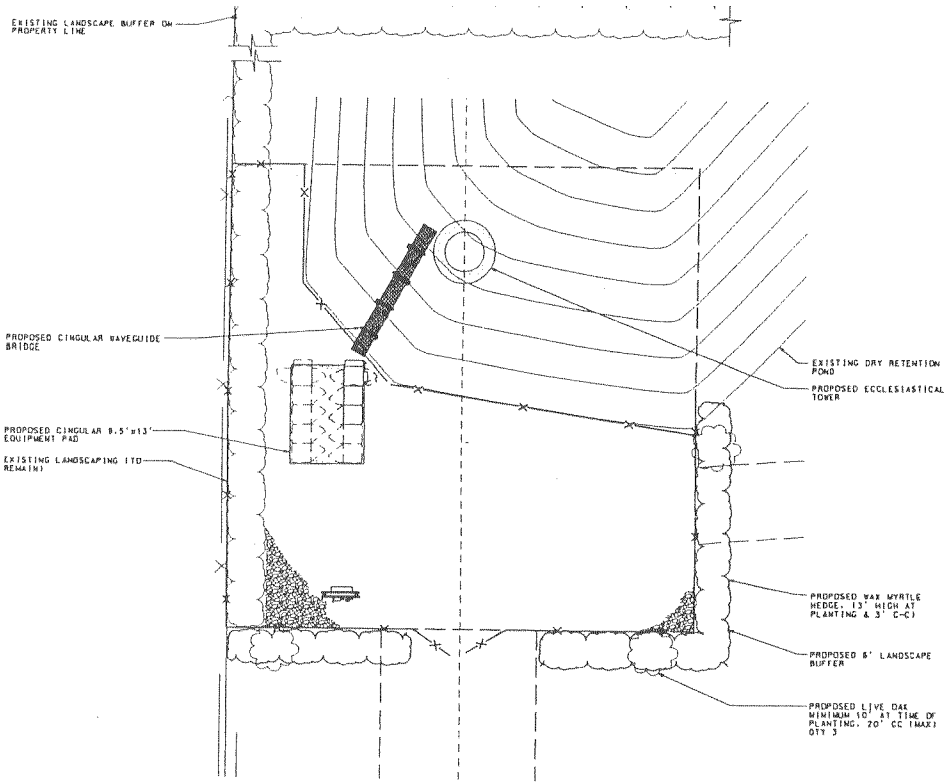
05/26/04

CINGULAR WIRELESS

COMPOUND PLAN

BECHTEL JOB NO.	DRAWING NUMBER	REV
24782-350	NFB-WEST HEATHROW-03	0

REF: J:\DWG\1100\2361CC



LANDSCAPE PLAN

SCALE: AS NOTED

N
TRUE NORTH

VEGETATIVE PLAN

SPACING	COMMON NAME	SIZE/REMARKS
20' O.C.	LIVE OAK	TREES SHALL BE MIN. 10' HEIGHT AT TIME OF PLANTING
3' O.C.	WAX MYRTLE	SHRUBS SHALL BE MIN. 3' HEIGHT AT TIME OF PLANTING

FOR 24"x36" DRAWINGS
GRAPHIC SCALE: 1/8" = 1'-0"

FOR 11"x17" DRAWINGS
GRAPHIC SCALE: 1/16" = 1'-0"

GENERAL PLANTING NOTES

ALL PLANTS SHALL BE HEALTHY, VIGOROUS MATERIAL FREE OF PESTS AND DISEASE.

ALL PLANTS SHALL BE CONTAINER-GROWN OR BALLED AND BURLAPPED.

ALL TREE SHALL BE STRAIGHT TRUNKED, FULL HEADED AND MEET ALL REQUIREMENTS SPECIFIED ON TREE STAKING DETAIL.

ALL PLANTS ARE SUBJECT TO THE APPROVAL OF THE OWNERS REPRESENTATIVE BEFORE, DURING, AND AFTER INSTALLATION.

ALL TREES SHALL BE GUYED OR STAKED AS SHOWN.

ALL PLANTS AND PLANTING AREAS SHALL BE COMPLETELY MULCHED AS SPECIFIED ON TREE STAKING DETAIL.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING COURSE OF THE WORK, STRUCTURES, SITE APPURTENANACES, ETC. WHICH OCCURS AS A RESULT OF THE LANDSCAPE CONSTRUCTION.

THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.

THE CONTRACTOR IS RESPONSIBLE FOR FULLY MAINTAINING ALL PLANTING (INCLUDING, BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZATION, ETC.) OF PLANTING AREAS AND LAWNS UNTIL THE WORK IS ACCEPTED IN TOTAL BY THE ENGINEERS REPRESENTATIVE.

THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR BEGINNING AT THE DATE OF TOTAL ACCEPTANCE. THE CONTRACTOR SHALL MAKE ALL REPLACEMENTS BEFORE OR AT THE END OF THE GUARANTEE PERIOD.

THE OWNERS REPRESENTATIVE WILL APPROVE THE STAKED LOCATION OF ALL PLANT MATERIAL PRIOR TO INSTALLATION.

AFTER BEING DUG AT THE NURSERY SOURCE, ALL TREES IN LEAF SHALL BE ACCLIMATED FOR TWO (2) WEEKS UNDER A MIST SYSTEM PRIOR TO INSTALLATION.

ANY PLANT MATERIAL THAT DIES, TURNS BROWN OR DEFOLIATES (PRIOR TO TOTAL ACCEPTANCE OF THE WORK) SHALL BE REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, SIZE AND MEETING ALL SPECIFICATIONS.

STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK", LATEST EDITION, REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUANTITY REQUIREMENTS FOR PLANT MATERIAL.

ALL TREE PROTECTION MEASURES SHALL BE INSTALLED PRIOR TO GRADING.

THERE ARE NO TREE SAVE AREAS.

ALL BUFFERS AND TREE SAVE AREAS ARE TO BE CLEARLY IDENTIFIED WITH FLAGGING AND/OR FENCING PRIOR TO COMMENCEMENT OF ANY LAND DISTURBANCE.

EROSION CONTROL MEASURES SHALL BE MAINTAINED AT ALL TIMES. IF FULL IMPLEMENTATION OF THE APPROVED PLAN DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IMPLEMENTED TO CONTROL OR TREAT THE SEDIMENT SOURCE.

ADDITIONAL EROSION CONTROL DEVICES TO BE USED AS REQUIRED BY THE COUNTY.

DISTURBED AREAS LEFT IDLE FOR TWO TO FOUR WEEKS, AND NOT TO FINAL GRADE, WILL BE ESTABLISHED TO TEMPORARY VEGETATION (D41). DISTURBED AREAS LEFT IDLE FOR FOUR WEEKS OR MORE WILL BE ESTABLISHED TO PERMANENT VEGETATION (D42). ALL AREAS TO FINAL GRADE WILL BE ESTABLISHED TO PERMANENT VEGETATION WITHIN TWO WEEKS.

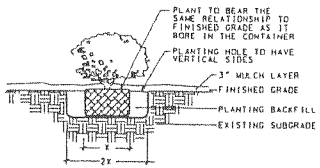
WHEN HAND PLANTING, MULCH (HAY OR STRAW) SHOULD BE UNIFORMLY SPREAD OVER THE SEEDED AREA WITHIN 24 HOURS OF SEEDING.

DURING UNSUITABLE GROWING SEASONS, MULCH WILL BE USED AS A TEMPORARY COVER (D431). ON SLOPES THAT ARE 4:1 OR STEEPER, MULCH WILL BE ANCHORED.

THE COUNTY LAND DISTURBANCE PERMIT MUST BE DISPLAYED ON SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A COUNTY ROAD OR STREET.

EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY GRADING ON SITE.

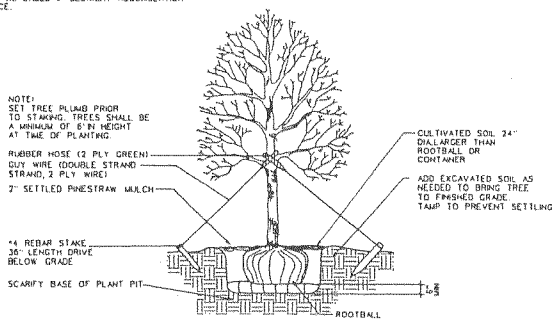
SEDIMENT /EROSION CONTROL DEVICES MUST BE CHECKED BY THE DEVELOPER AFTER EACH STORM EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE.



SHRUB /GROUNDCOVER PLANTING DETAIL (KCI-1 / 04)

NOT TO SCALE

1. LAYOUT BED.
2. ROTOTILL BED TO 12" DEPTH. INSTALL PLANTS AND MULCH. WATE THOROUGHLY.
3. IF UNABLE TO ROTOTILL DUE TO TREE ROOTS, DIG HOLE FOR EACH PLANT 12" WIDER AND 6" DEEPER THAN CONTAINER.



TREE STAKING AND GUYING DETAIL (KCI-2 / 04)

NOT TO SCALE

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ENGINEER DARRYL J. KROEZE, P.E.
FLORIDA REG NO. 53599

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cingular WIRELESS

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A	5/25/04	ISSUED FOR REVIEW	MB	DK	DK

SCALE: AS SHOWN | DESIGNED: DARRYL KROEZE | DRAWN: M. BURNS

CINGULAR WIRELESS

LANDSCAPE PLAN

BECHTEL JOB NO.	DRAWING NUMBER	REV
24782-350	NFB-WEST HEATHROW-04	0

KCI JOB#:1004235.1CC

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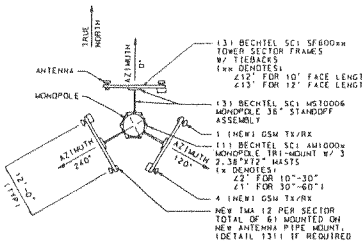
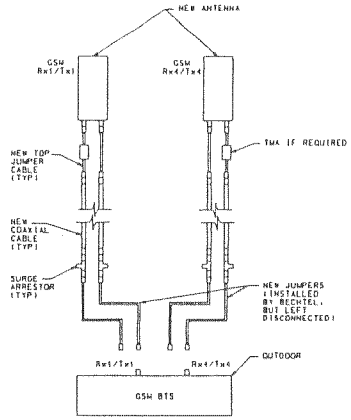


PLAN VIEW

BECHTEL SC:	ROHN PN:	MTS PN:
AM10001	MRMS23806	MT-C8261
AM10002	MRML23806	MT-C8262
MST0006	MSP3450	MT-1191
SF60012	T5210372	MT-C8284
SF60013	T5212372	MT-C8285

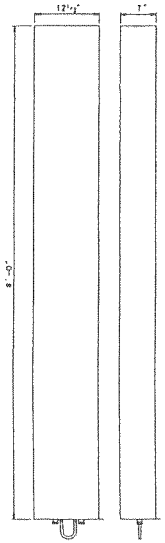
TWO TO THREE ANTENNA PER SECTOR WITH STANDOFF HORIZONTAL SEPARATION CONFIGURATION MONOPOLE MOUNTING

DETAIL 612 / 04
NOT TO SCALE



2 - ANTENNAS PER SECTOR CONFIGURATION FOR GREENFIELD SITES

DETAIL 019W / 04
NOT TO SCALE

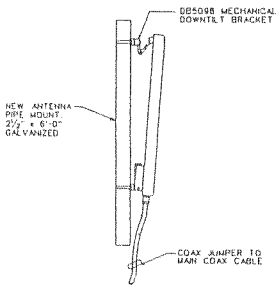


PLAN VIEW — SIDE VIEW

ANTENNA MODEL

SCALE 24"x36": 1" = 1'-0"
SCALE 11"x17": ½" = 1'-0"

WEIGHT: 37.0 LB'S
DECIBEL: 858D9973E5X

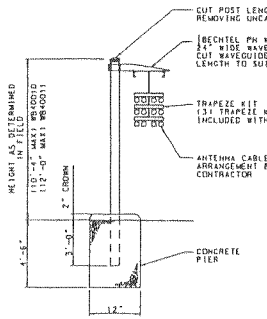


DOWNTILT ASSEMBLY DETAIL

611A / 04
NOT TO SCALE

NOTES:

1. ANTENNA MOUNT, ANTENNA AND CORRESPONDING MOUNTING HARDWARE TO MEET OR EXCEED THE CURRENT WIND SPEED RATING AS OUTLINED IN THE FLORIDA BUILDING CODE, CHAPTER 16 SECTION 1606.
2. ANTENNA MUST BE GROUNDED.
3. REPLACEMENT/ADDITIONAL ANTENNAS TO BE MOUNTED ON EXISTING ANTENNA MOUNTS UNLESS OTHERWISE NOTED.
4. CENTER BRACKET IS NOT USED ON A 4' ANTENNA.



BECHTEL SC:	MTS PN:
WB40010	WBX2108
WB40011	MT-C8118

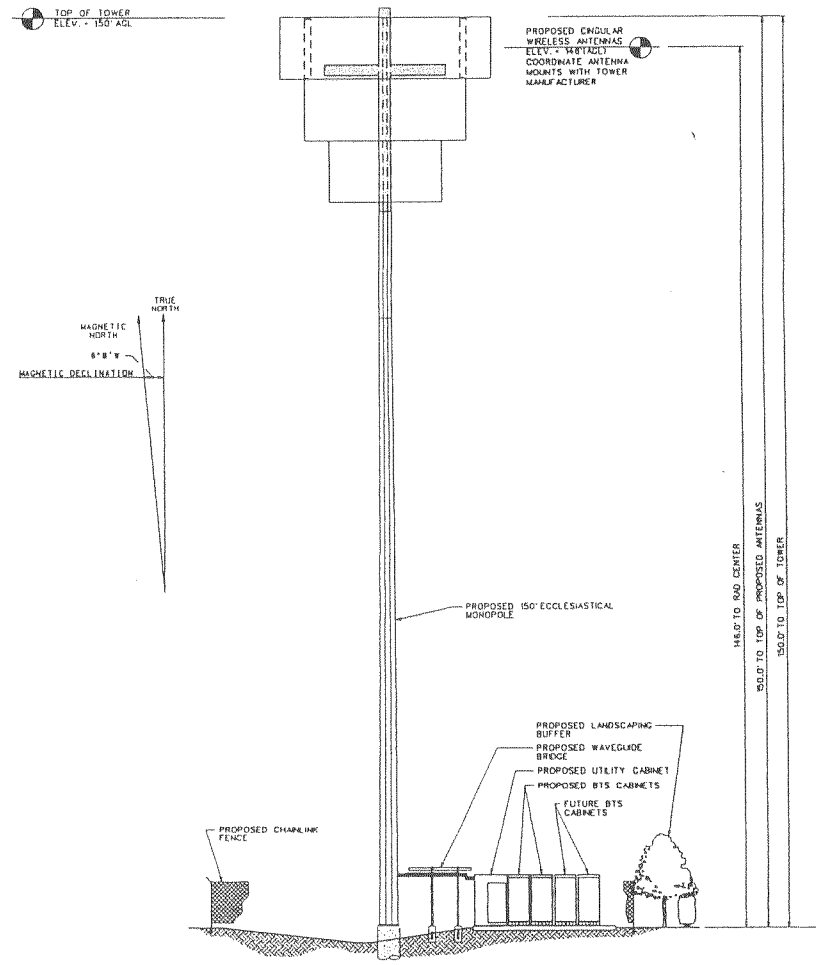
24" X 10' WAVEGUIDE BRIDGE W/2 BURIAL POSTS

155A / 04
NOT TO SCALE

NOTES:

1. WHEN USING COMPONENTS AS SHOWN IN STANDARD DETAILS, MAXIMUM ALLOWABLE SPAN BETWEEN SUPPORTS ON A CONTINUOUS SINGLE SECTION OF BRIDGE CHANNEL SHALL BE 9 FEET FOR 10 FEET BRIDGE CHANNEL.
2. WHEN USING COMPONENTS FOR SPLICING BRIDGE CHANNEL SECTIONS, THE SPLICE SHOULD BE PROVIDED AT THE SUPPORT, IF POSSIBLE, OR AT A MAXIMUM OF 2 FEET FROM THE SUPPORT.
3. WHEN USING COMPONENTS, SUPPORT SHOULD BE PROVIDED AS CLOSE AS POSSIBLE TO THE ENDS OF WAVEGUIDE BRIDGES, WITH A MAXIMUM CANTILIVER DISTANCE OF 2 FEET FROM THE SUPPORT TO THE FREE END OF THE WAVEGUIDE BRIDGE.
4. CUT BRIDGE CHANNEL SECTIONS SHALL HAVE RAW EDGES TREATED WITH A MATERIAL TO RESTORE THESE EDGES TO THE ORIGINAL CHANNEL, OR EQUIVALENT, FINISH.
5. WAVEGUIDE BRIDGES MAY BE CONSTRUCTED WITH COMPONENTS FROM OTHER MANUFACTURERS, PROVIDED THE MANUFACTURER'S INSTALLATION GUIDELINES ARE FOLLOWED.
6. DEVIATIONS FROM STANDARDS FOR COMPONENT INSTALLATIONS ARE PERMITTED WITH THE RESPECTIVE MANUFACTURER'S APPROVAL.
7. DEVIATIONS FROM WAVEGUIDE BRIDGE FOUNDATIONS REQUIRE ENGINEERING APPROVAL.
8. THE DESIGN IS BASED ON ASCE 7-98, 3 SECOND GUST WIND SPEED OF 110 MPH, EXPOSURE C, ELEVATION AT GRADE.
9. THIS DESIGN IS BASED ON 24" WIDE WAVEGUIDE BRIDGE AND (12) 1½" DIA COAX CABLES AND MAX. POST SUPPORT SPACING OF 10'-0".

NOTE:
3 SIDED, 3 CARRIER WITH CROSS ON EACH SECTOR



NOTES:
1. ELEVATION SHOWN FOR REFERENCE ONLY. DO NOT USE FOR DIMENSIONING.

TOWER ELEVATION

NOT TO SCALE

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FLORIDA LICENSE NO. EB0000488
ENGINEER: DARRYL J. KROEZE P.E.
FLORIDA REG. NO. 53930

NFB-WEST HEATHROW
5210 MARKHAM WOODS ROAD
LAKE MARY, FLORIDA 32746

cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	5/26/04	ISSUED FOR ZONING	WB	DK	DK
A	5/25/04	ISSUED FOR REVIEW	WB	DK	DK

SCALE: AS SHOWN | DESIGNED: DARRYL KROEZE | DRAWN: M. BURNS

CINGULAR WIRELESS

TOWER ELEVATION AND ANTENNA ORIENTATION PLAN

BECHTEL JOB NO.	DRAWING NUMBER	REV
24782-350	NFB-WEST HEATHROW-05	0

KCI JOB#: 10042361CC

\CD\NFB-05.DGN 5/26/2004 4:05:38 PM

CABLE MARKING TAGS:

1. SECTOR ORIENTATION/AZIMUTH WILL VARY FROM REGION TO REGION AND IS SITE SPECIFIC. REFER TO RF REPORT FOR EACH SITE TO DETERMINE THE ANTENNA LOCATION AND FUNCTION OF EACH TOWER SECTOR FACE.
2. THE STANDARD IS BASED ON EIGHT COLORED TAPES-RED, BLUE, GREEN, YELLOW, ORANGE, BROWN, WHITE, AND SLATE(GREY). THESE TAPES SHOULD BE READILY AVAILABLE TO THE ELECTRICIAN OR CONTRACTOR ON SITE.
3. USING COLOR BANDS ON THE CABLES, MARK ALL RF CABLE BY SECTOR AND CABLE NUMBER AS SHOWN ON "CABLE MARKING COLOR CONVENTION TABLE".
4. ALL COLOR CODE TAPE SHALL BE 3M-35 AND SHALL BE INSTALLED USING A MINIMUM OF (3) WRAPS OF TAPE AND SHALL BE NEATLY TRIMMED AND SMOOTHED OUT SO AS TO AVOID UNRAVELING.
5. ALL COLOR BANDS INSTALLED AT THE TOWER TOP SHALL BE A MINIMUM OF 3" WIDE AND SHALL HAVE A MINIMUM OF 3/4" OF SPACING BETWEEN EACH COLOR.
6. ALL COLOR BANDS INSTALLED AT OR NEAR THE GROUND SHALL BE A MINIMUM OF 3/4" WIDE.
7. ALL COLOR CODES SHALL BE INSTALLED SO AS TO ALIGN NEATLY WITH ONE ANOTHER FROM SIDE-TO-SIDE.

RF SYSTEM DESIGN PLAN:

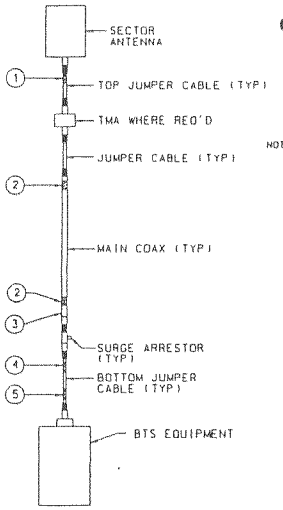
ITEM NO.	ITEM DESCRIPTION	SECTOR A AZIMUTH 0°	SECTOR B AZIMUTH 120°	SECTOR C AZIMUTH 240°	TOTAL	SUPPLIED BY:
1.	ANTENNAS	854DG69OVTESX-(2)	854DG69OVTESX-(2)	854DG69OVTESX-(2)	6	BECHTEL
2.	ANTENNA MOUNT KIT	*	*	*	6	BECHTEL
3.	MECHANICAL TILT	0	0	0		BECHTEL
4.	RADIATION HEIGHT FROM GROUND	150	150	150		
5.	TRX TYPE	EDGE	EDGE	EDGE		
6.	ANTENNA JUMPER ANDREW (LENGTH)	LDF4-50A (2) TBD IN FIELD	LDF4-50A (2) TBD IN FIELD	LDF4-50A (2) TBD IN FIELD	6	BECHTEL
7.	DIN CONNECTOR (ANDREW)	L4PDM-RC (2)	L4PDM-RC (2)	L4PDM-RC (2)	6	BECHTEL
8.	DIN CONNECTOR (ANDREW)	F4PDMV2-C (2)	F4PDMV2-C (2)	F4PDMV2-C (2)	6	BECHTEL
9.	BOTTOM JUMPER LENGTH	TBD IN FIELD (2)	TBD IN FIELD (2)	TBD IN FIELD (2)	6	
10.	DIN CONNECTOR (ANDREW)	L7PDF-RPC	L7PDF-RPC	L7PDF-RPC	---	BECHTEL
11.	POLYPHASER (SURGE ARRESTOR)	APTDC-DFDM-WB (2)	APTDC-DFDM-WB (2)	APTDC-DFDM-WB (2)	6	BECHTEL
12.	BIAS-T	-----	-----	-----	---	CINGULAR
13.	DUPLEXER	-----	-----	-----	---	BECHTEL
14.	TMA	LGP17401	LGP17401	LGP17401	6	CINGULAR
15.	FEEDER DIAMETER	1 5/8" LDF7-50A	1 5/8" LDF7-50A	1 5/8" LDF7-50A	---	BECHTEL
16.	FEEDER LENGTH	150 FT. (4)	150 FT. (4)	150 FT. (4)	2040 FT +10%	BECHTEL
17.	COAX CABLE GROUND KIT	SGL7-15B4 (8)	SGL7-15B4 (8)	SGL7-15B4 (8)	---	BECHTEL
18.	CABLE TRAY MOUNTING KIT	MT-C8718	MT-C8718	MT-C8718		CC
19.	WEATHER PROOF KIT	221213 (ANDREWS)			(6)	CC
20.	PIN OUT CONNECTOR (RJ-45)	AT8X8SC-2224 (SUPERIOR ESSX)			(3)	BECHTEL
21.	T-1 (OSP CAT-5e)	24-04PES4-5GP (SUPERIOR ESSEX)				BECHTEL
22.	SHIELD GROUND CONNECTOR KIT	53490-1 (AMP, INC.)				BECHTEL
23.	COLOR CODE	SEE LATEST CINGULAR CABLE MARKING GUIDELINES DETAIL 150M/05				

PER RFDS REV. 1.0 DATED 01-26-04

SPECIAL NOTE:
TABLE PROVIDED AS A COURTESY FOR INFORMATION ONLY CONTRACTOR SHALL TAKE-OFF ITEM INDIVIDUALLY TO VERIFY QUANTITIES

SUBCONTRACTOR TO VERIFY W/ CONTRACTOR LATEST REVISION TO RF DESIGN DATA

* COORDINATE WITH TOWER MANUFACTURER

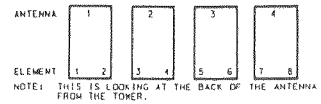


CABLE MARKING LOCATIONS DIAGRAM

DETAIL 150M 06 REV. 2
NOT TO SCALE

CABLE MARKING LOCATIONS TABLE			
NO.	TAPE	TAG	LOCATIONS
1.	X		EACH TOP-JUMPER SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS.
2.	X		EACH MAIN COAX SHALL BE COLOR CODED WITH (1) SET OF 3" WIDE BANDS NEAR THE TOP-JUMPER CONNECTION AND WITH (1) SET OF 3/4" WIDE COLOR BANDS JUST PRIOR TO ENTERING THE BTS OR TRANSMITTER BUILDING.
3.		X	CABLE ENTRY PORT ON THE INTERIOR OF THE SHELTER.
4.	X		ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER.
5.	*	*	ALL BOTTOM JUMPERS SHALL BE COLOR CODED WITH (1) SET OF 3/4" WIDE BANDS ON EACH END OF THE BOTTOM JUMPER.

(* - DENOTES TAG OR TAPE.)
ALL RF CABLE SHALL BE MARKED AS PER CABLE MARKING LOCATIONS TABLE ABOVE:

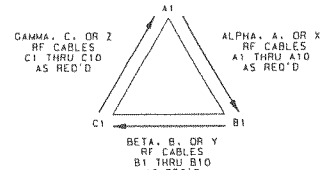


NOTE: THIS IS LOOKING AT THE BACK OF THE ANTENNA FROM THE TOWER.

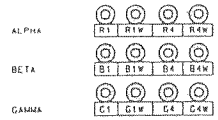
CABLE JUMPER COLOR CODE TABLE

ANTENNA	1		2		3		4	
ELEMENT	1	2	3	4	5	6	7	8
SECTOR								
ALPHA	R1	R1W	R2	R2W	R3	R3W	R4	R4W
BETA	B1	B1W	B2	B2W	B3	B3W	B4	B4W
GAMMA	G1	G1W	G2	G2W	G3	G3W	G4	G4W

NOTES: THE FIRST LETTER STANDS FOR THE COLOR OF THE TAPE. R=RED, B=BLUE, G=GREEN
THE NUMBER STANDS FOR THE NUMBER OF STRIPS TO PLACE ON THE COAX.
THE W STANDS FOR A WHITE STRIP TO BE PLACED ON THE COAX RUNNING TO THE SECOND ELEMENT OF EACH JUMPER.



ANTENNA SECTOR AND CABLE DEFINITION



WAVEGUIDE BRIDGE LAYOUT

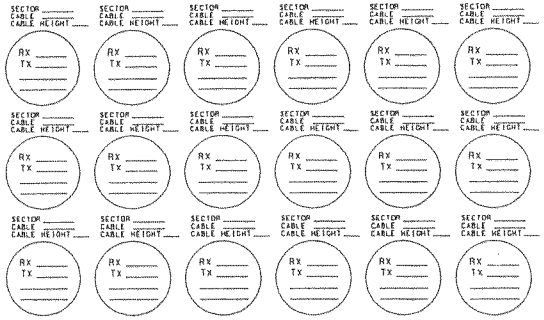
GSM LINE TAG

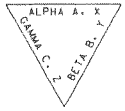
TO PROVIDE ADDITIONAL IDENTIFICATION RF CABLES SHALL BE IDENTIFIED WITH A METAL TAG MADE OF STAINLESS STEEL OR BRASS AND STAMPED WITH THE SECTOR, ANTENNA POSTION, AND CABLE NUMBER. THE ID MARKING LOCATIONS SHOULD BE AS PER "CABLE MARKING LOCATIONS TABLE". THE TAG SHOULD BE ATTACHED WITH CORROSION PROOF WIRE AROUND THE CABLE. THE TAG SHOULD BE LABELED AS SHOWN ON THE "GSM LINE TAG" DETAIL.

CABLE MARKING TAGS

CABLE PORT DIAGRAM

CAUTION: HARMFUL RF ENERGY EXISTS ON THESE LINES.





TOWER PLAN VIEW

NOTES:
A. CONTRACTOR SHALL FILL OUT THE CABLE PORT DIAGRAM UPON COAX INSTALLATION. CABLE PORT DIAGRAM WILL BE AFFIXED TO THE INTERIOR SHELTER WALL NEAR THE CABLE ENTRY PORT TO AID IN CABLE IDENTIFICATION. THE CHART IS INTENDED TO BE USED TO RECORD THE LINE AND CORRESPONDING ANTENNA POSITION ON THE TOWER AT THE TIME OF INSTALLATION.

B. ONE COMPLETED COPY PLUS TWO BLANK COPIES OF THE CHART SHOULD BE POSTED IN THE SHELTER IN A PROTECTIVE PLASTIC SLEEVE.

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FLORIDA LICENSE NO. EB0000088
ENGINEER DARRYL J. KROEZE P.E.
FLORIDA REG. NO. 53088

NFB-WEST HEATHROW
5210 MARKHAM WOODS ROAD
LAKE MARY, FLORIDA 32746

cingular WIRELESS

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	5/26/04	ISSUED FOR ZONING	MB	DK	DK
A	5/25/04	ISSUED FOR REVIEW	MB	DK	DK

SCALE: AS SHOWN DESIGNED: DARRYL KROEZE DRAWN: M. BURNS

05/27/04

CINGULAR WIRELESS

COAX COLOR CODING & IDENTIFICATION DETAIL

BECHTEL JOB NO.	DRAWING NUMBER	REV
247B2-350	NFB-WEST HEATHROW-06	0

KCI JOB#1100423501CC

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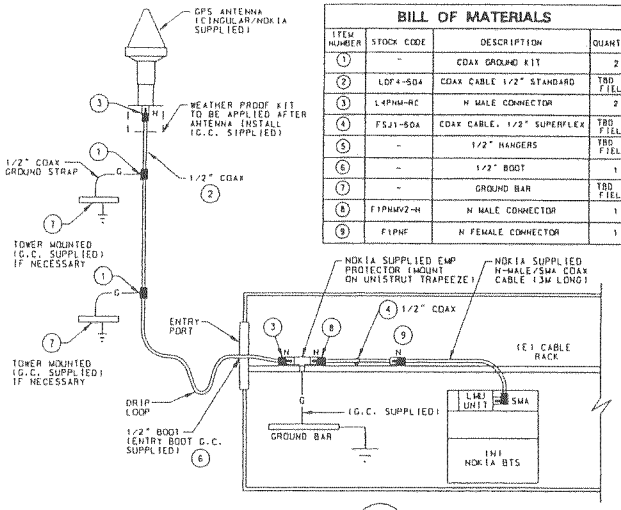
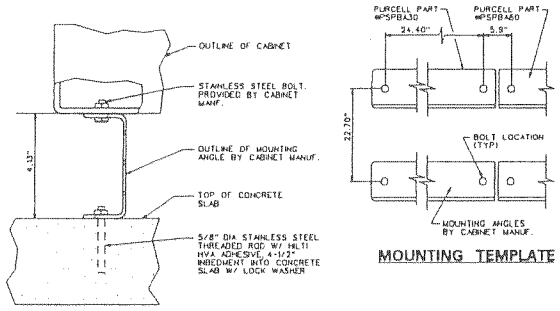


BILL OF MATERIALS			
ITEM NUMBER	STOCK CODE	DESCRIPTION	QUANTITY
1	-	COAX GROUND KIT	2
2	LDF4-50A	COAX CABLE 1/2" STANDARD	TBD IN FIELD
3	L4PNM-RC	N MALE CONNECTOR	2
4	FSJ1-50A	COAX CABLE, 1/2" SUPERFLEX	TBD IN FIELD
5	-	1/2" HANGERS	TBD IN FIELD
6	-	1/2" BOOT	1
7	-	GROUND BAR	TBD IN FIELD
8	F1PNMW2-H	N MALE CONNECTOR	1
9	F1PNF	N FEMALE CONNECTOR	1

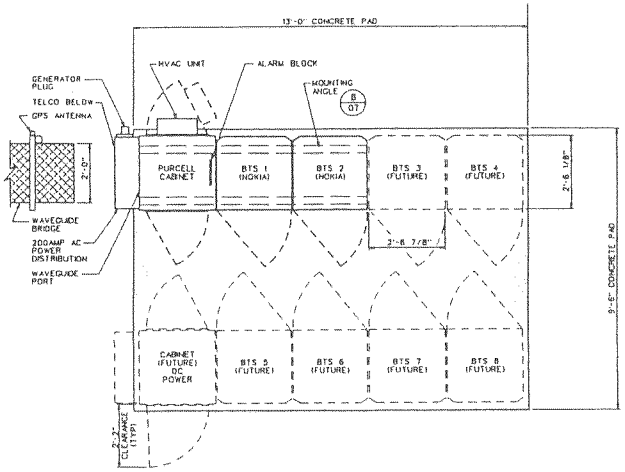
GPS CABLE DETAIL (KM / 07)

NOT TO SCALE



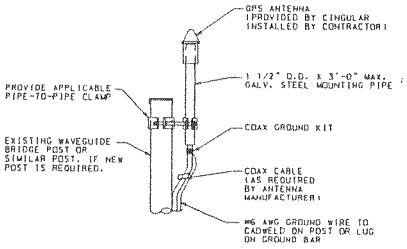
CABINET ATTACHMENT (B / 07)

NOT TO SCALE



EQUIPMENT LAYOUT (H / 07)

NOT TO SCALE



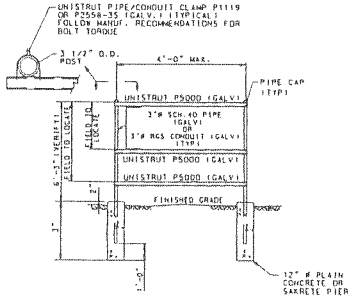
ELEVATION

NOTES:

1. LOCATION OF ANTENNA MUST HAVE CLEAR VIEW OF SOUTHERN SKY AND CANNOT HAVE ANY BLOCKAGES EXCEEDING 25% OF THE SURFACE AREA OF A HEMISPHERE AROUND THE GPS ANTENNA.
2. ALL GPS ANTENNA LOCATIONS MUST BE ABLE TO RECEIVE CLEAR SIGNALS FROM A MINIMUM OF FOUR (4) SATELLITES. VERIFY WITH HANDHELD GPS BEFORE FINAL LOCATION OF GPS ANTENNA.

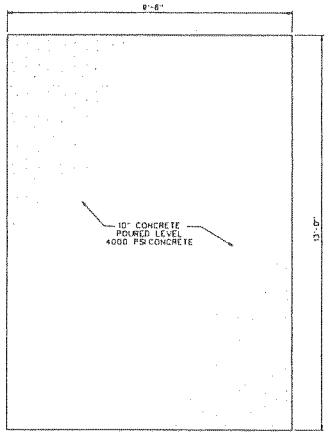
E911-GPS ANTENNA PIPE MOUNT (135 / 07)

NOT TO SCALE

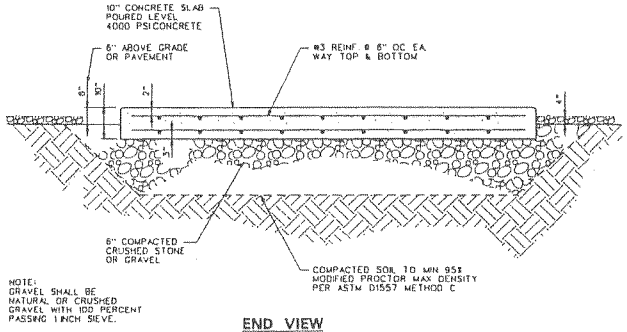


METER AND DISCONNECT MOUNTING RACK (136 / 07)

NOT TO SCALE



PLAN VIEW



END VIEW

CONCRETE EQUIPMENT PAD/ SLAB ON GRADE (D / 07)

NOT TO SCALE

KCI TECHNOLOGIES ENGINEERS and PLANNERS

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FLORIDA REG. NO.: 53080

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cingular WIRELESS

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A	5/25/04	ISSUED FOR REVIEW	MB	DK	DK

SCALE: AS SHOWN | DESIGNED: DARRYL KROEZE | DRAWN: M. BURNS

CINGULAR WIRELESS

FOUNDATION LAYOUT

BECHTEL JOB NO.	DRAWING NUMBER	REV
24782-350	NFB-WEST HEATHROW-07	0

KCI JOB#: 10042351.CC

LD1 \NFB-07.dgn 5/26/2004 4:02:02 PM

NFB-West Heathrow Photo Sims Rec'd 6/4/04

NFB-WEST HEATHROW SEMINOLE COUNTY

SEMINOLE COUNTY
FLORIDA'S NATURAL CHOICE

PHOTOGRAPHIC SIMULATIONS JUNE 2004

Prepared for:

BECHTEL Inc.

Prepared by:
Mike Murphy
KCI Technologies, Inc.
813-740-2300

KCI

Aerial Map of West Heathrow Site Indicating Positions of Observational Views

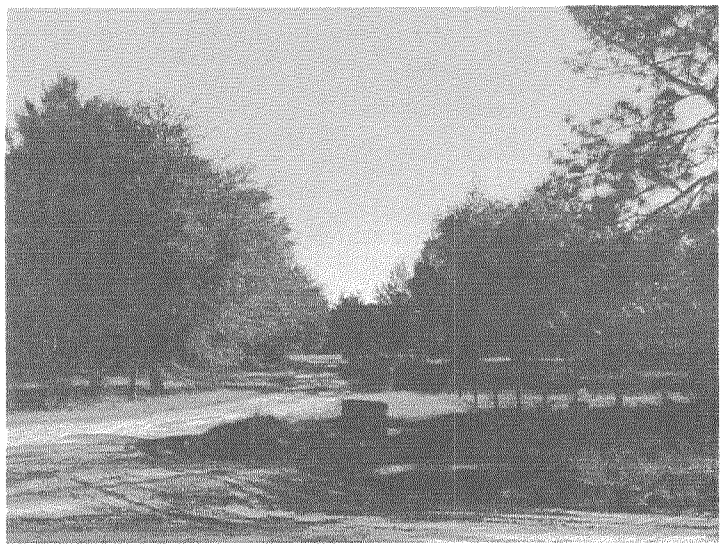
EXISTING SITE

LINE OF SIGHT TO PROPOSED TOWER FROM VIEW 1

VIEW 1

NORTHWEST OF SITE
ON FOUNTAINHEAD DRIVE

EXISTING SITE WITH PHOTOGRAPHIC SIMULATION OF PROPOSED 150' ECCLESIASTICAL MONOPOLE CAN NOT BE SEEN FROM THIS LOCATION



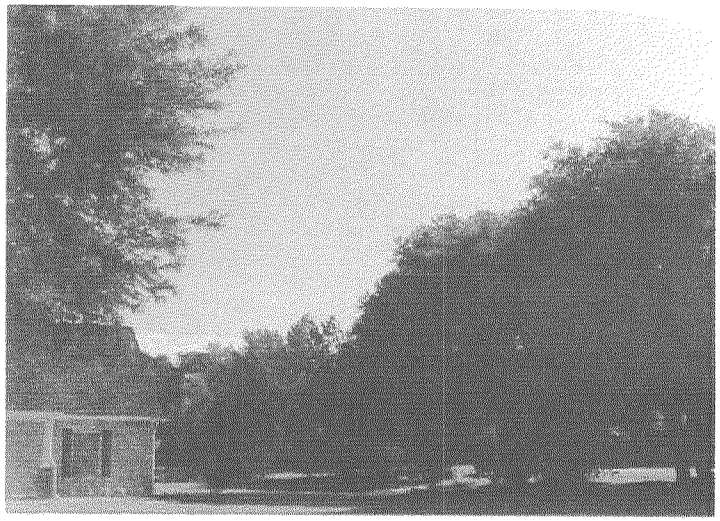
EXISTING SITE

LINE OF SIGHT TO PROPOSED TOWER FROM VIEW 2

VIEW 2

WEST OF SITE
ON CARTER ROAD

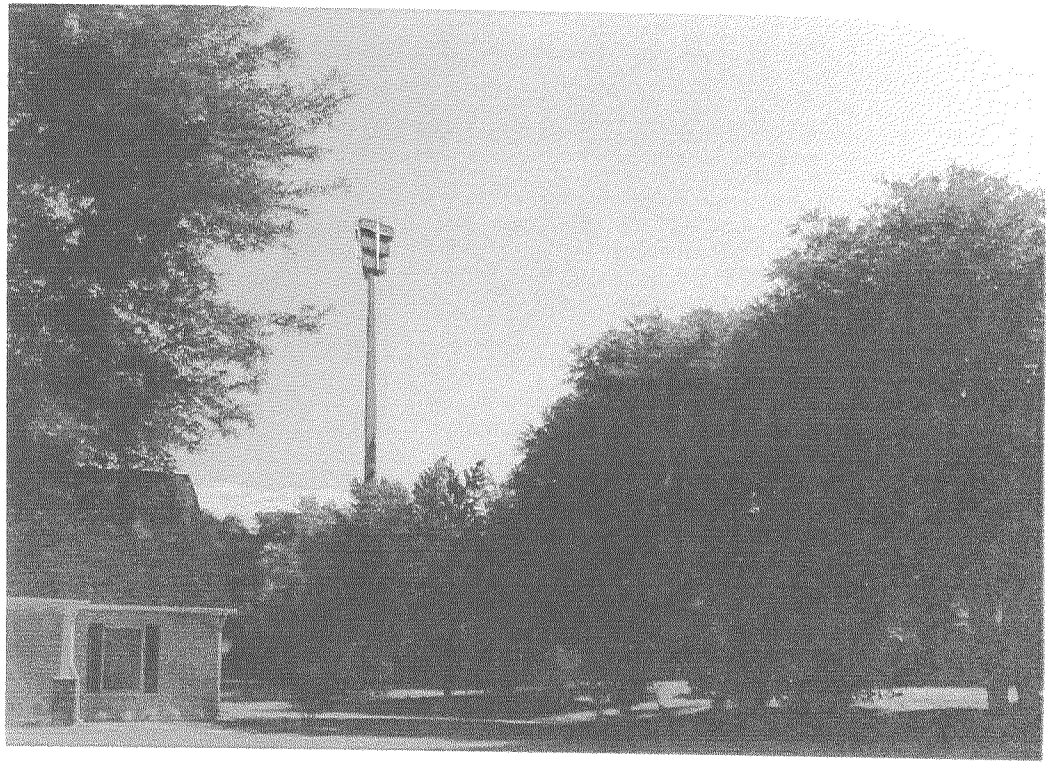
EXISTING SITE WITH PHOTOGRAPHIC SIMULATION OF PROPOSED 150' ECCLESIASTICAL MONOPOLE



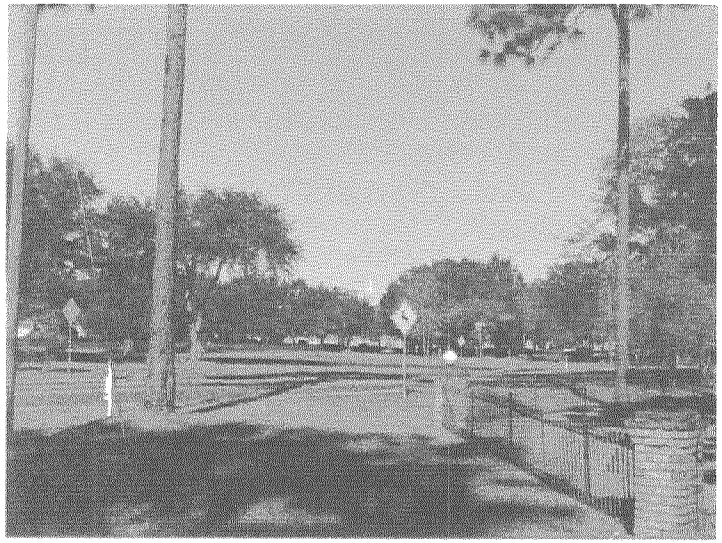
EXISTING SITE

LINE OF SIGHT TO PROPOSED TOWER FROM VIEW 3

VIEW 3
SOUTHWEST OF SITE
ON ACRE COURT



EXISTING SITE WITH PHOTOGRAPHIC SIMULATION OF PROPOSED 150' ECCLESIASTICAL MONOPOLE



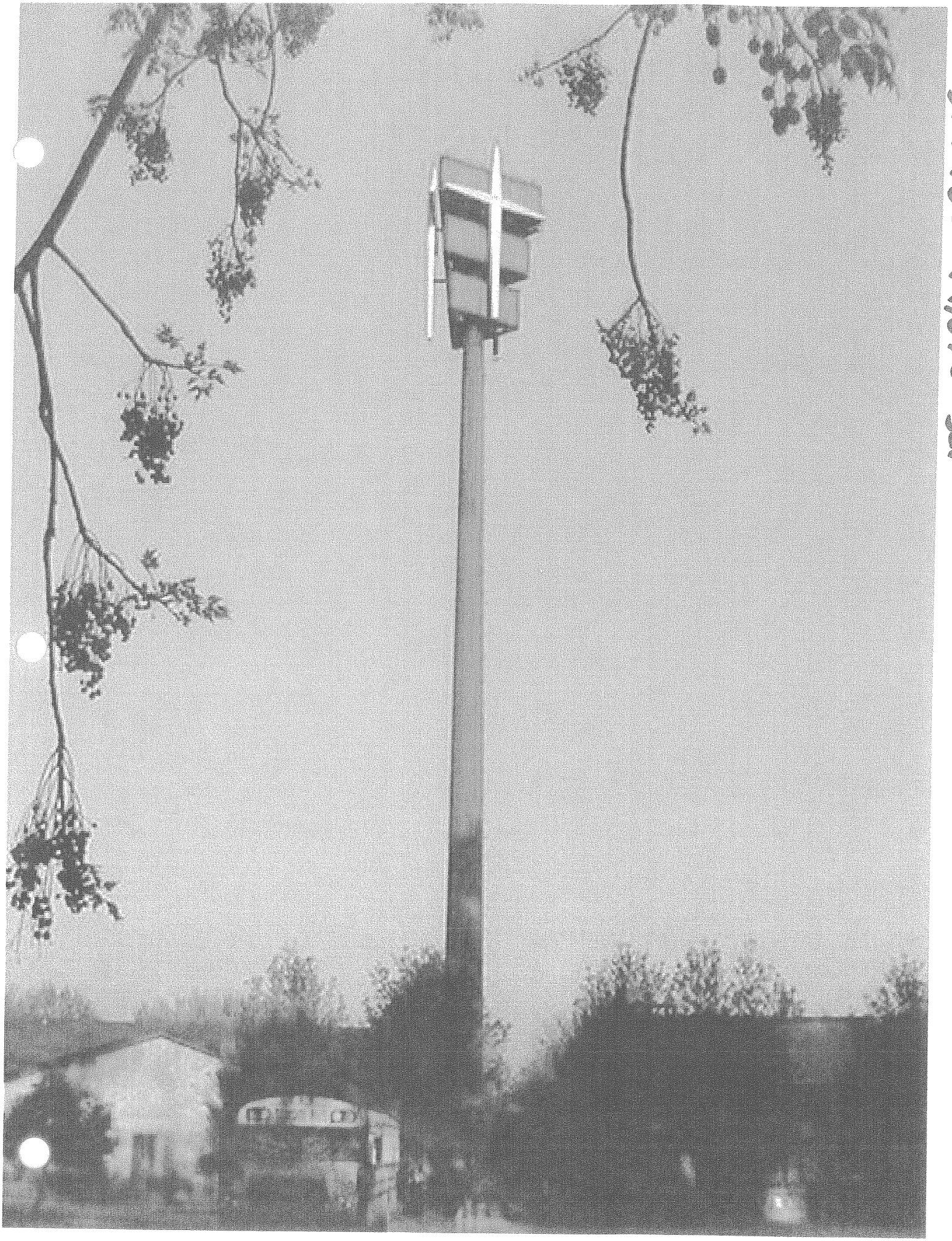
EXISTING SITE

LINE OF SIGHT TO PROPOSED TOWER FROM VIEW 4

VIEW 4

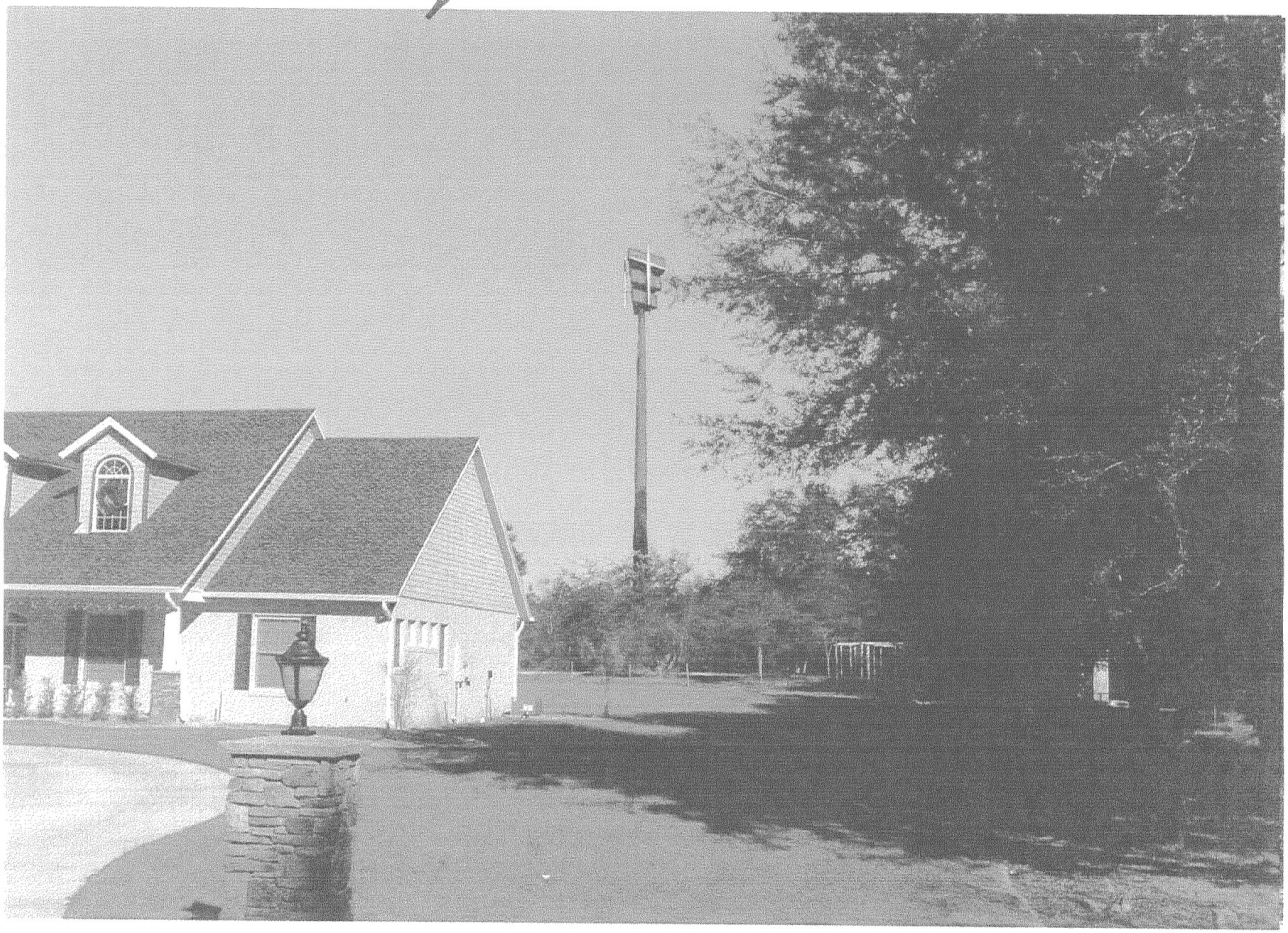
SOUTHEAST OF SITE
ON DAWN COURT

EXISTING SITE WITH PHOTOGRAPHIC SIMULATION OF PROPOSED 150' ECCLESIASTICAL MONOPOLE



SAMPLE PHOTO. SIM

SAMPLE Only



For visual reference only. Actual visibility is dependant upon weather conditions, season, sunlight and viewer location.

WEST HEATHROW
NFLNB-CINGULAR

Created By: Mike Murphy

KCI Technologies, Inc.

SAMPLE only

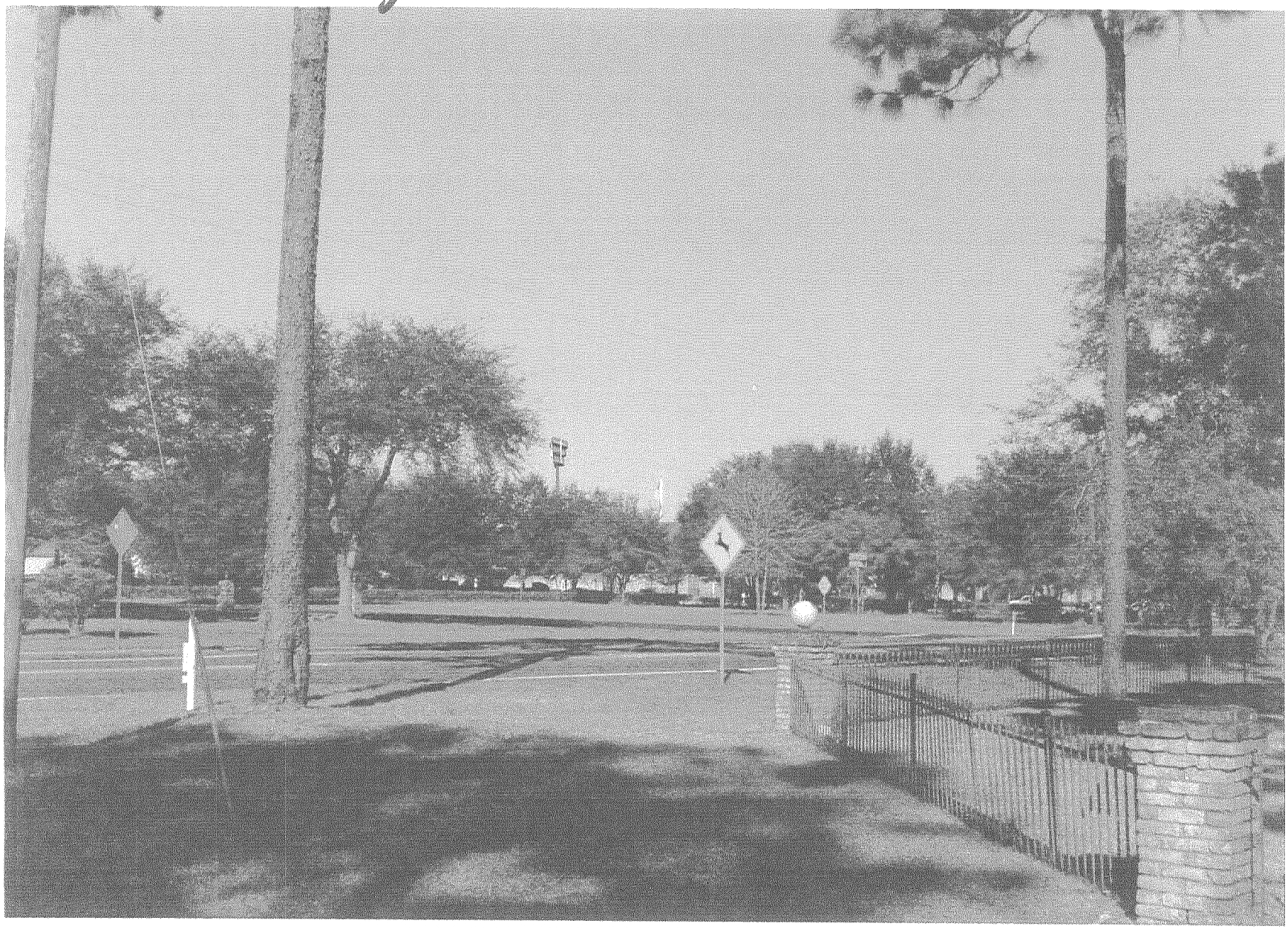
For visual reference only. Actual visibility is dependant upon weather conditions, season, sunlight and viewer location.

WEST HEATHROW
NFLNB-CINGULAR

Created By: Mike Murphy

KCI Technologies, Inc.

Sample Only



For visual reference only. Actual visibility is dependant upon weather conditions, season, sunlight and viewer location.

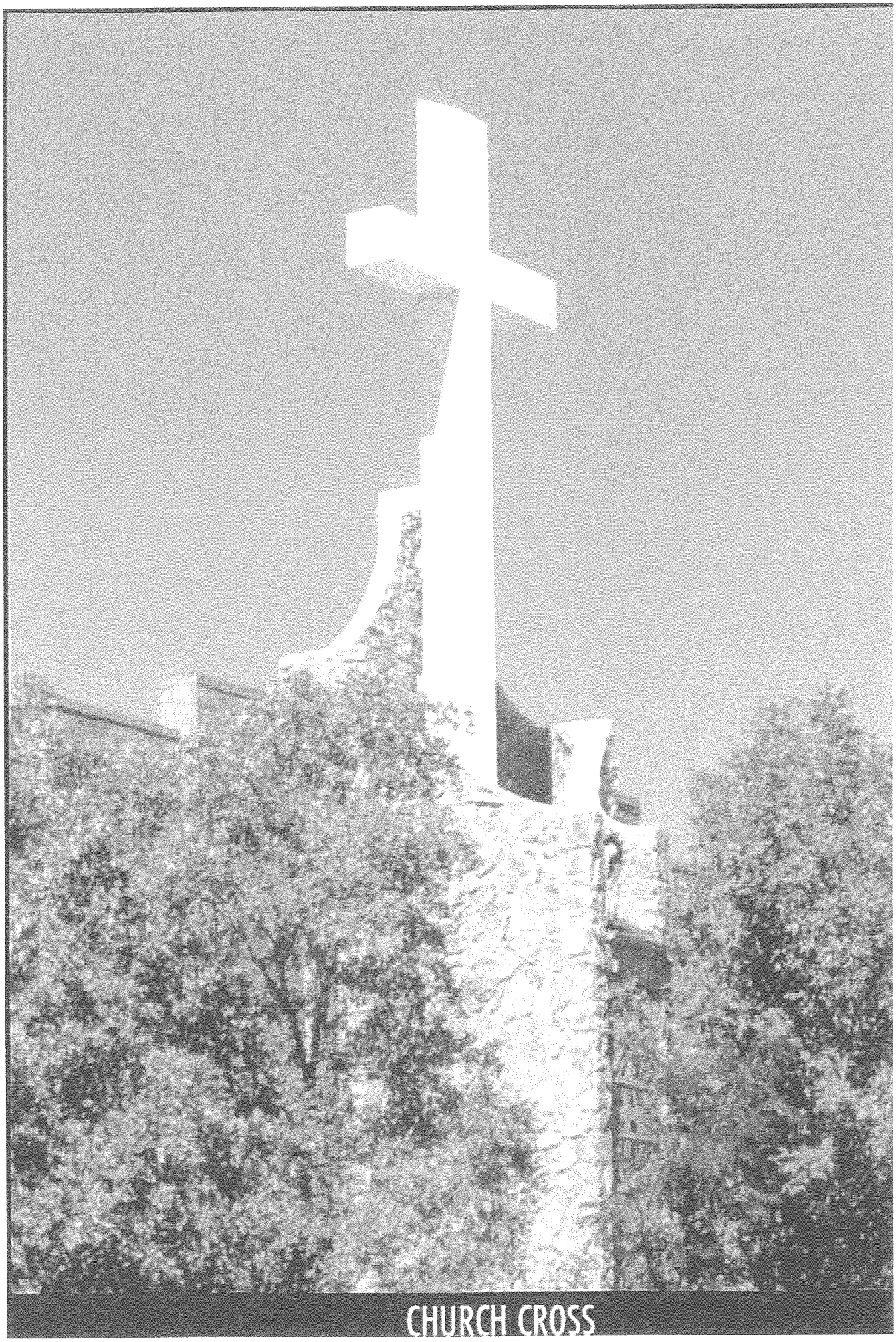
WEST HEATHROW
NFLNB-CINGULAR

Created By: Mike Murphy

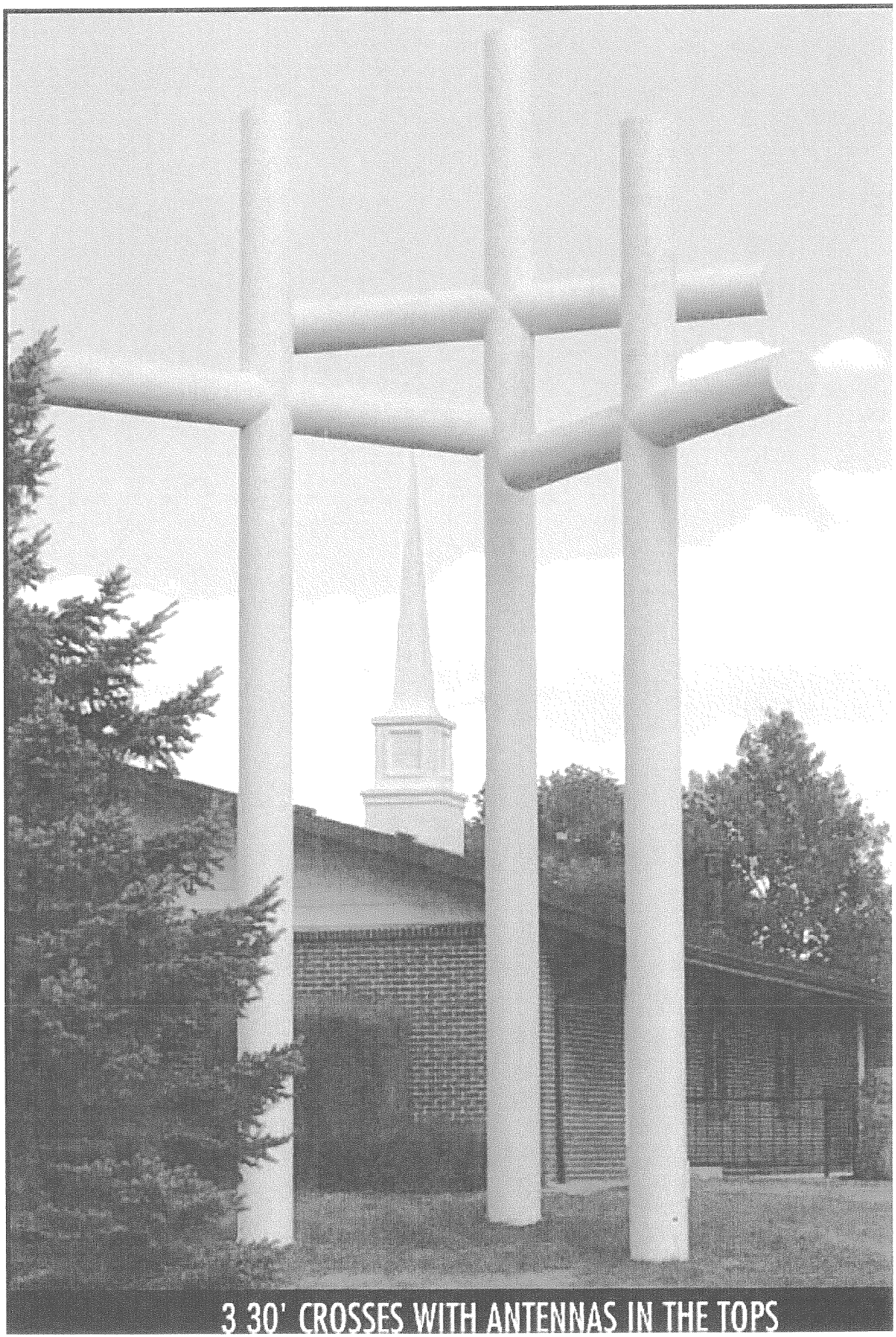
KCI Technologies, Inc.

ROOF TOP WITH RF FRIENDLY SPANISH TILES

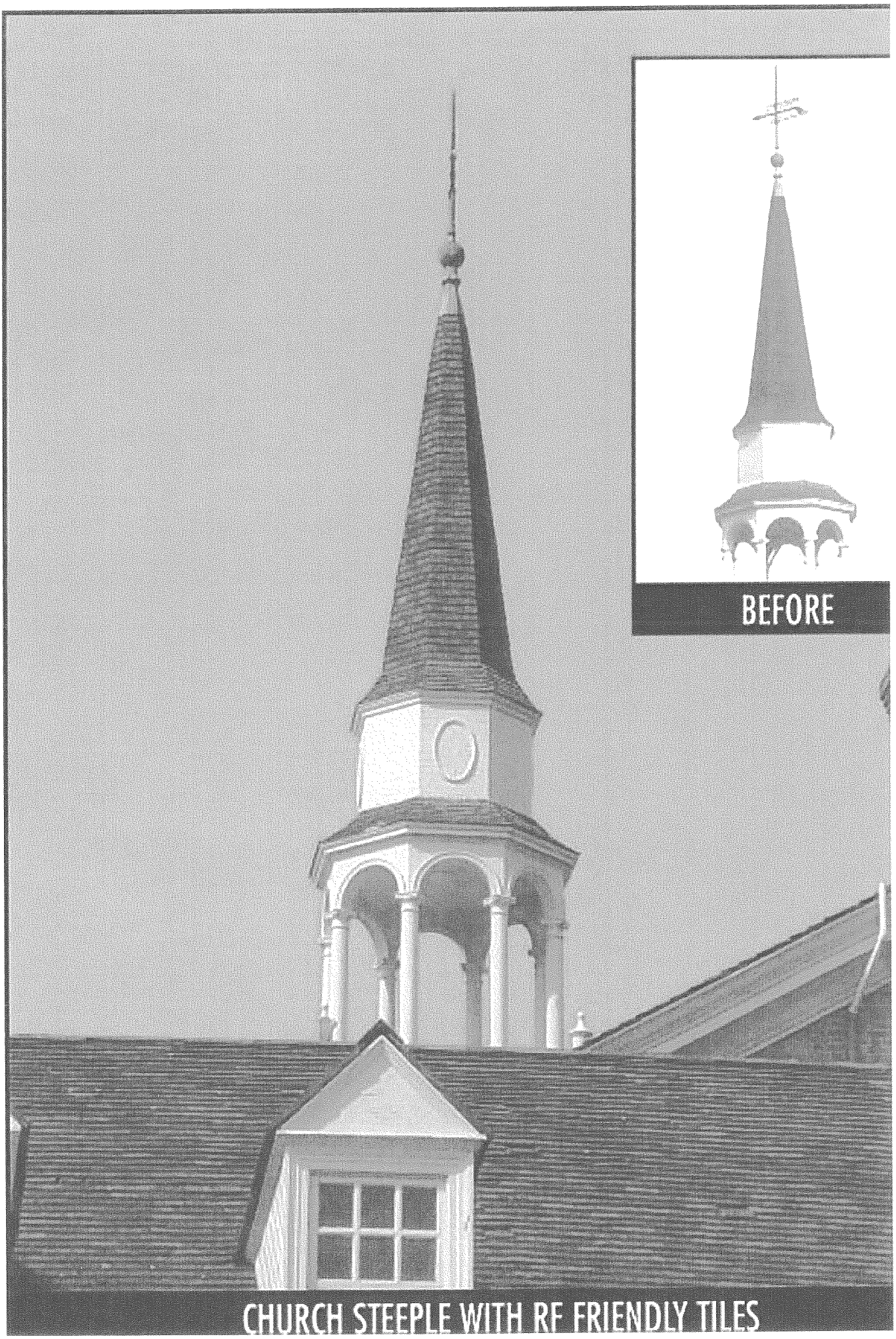
FILM WRAP OVER ANTENNAS



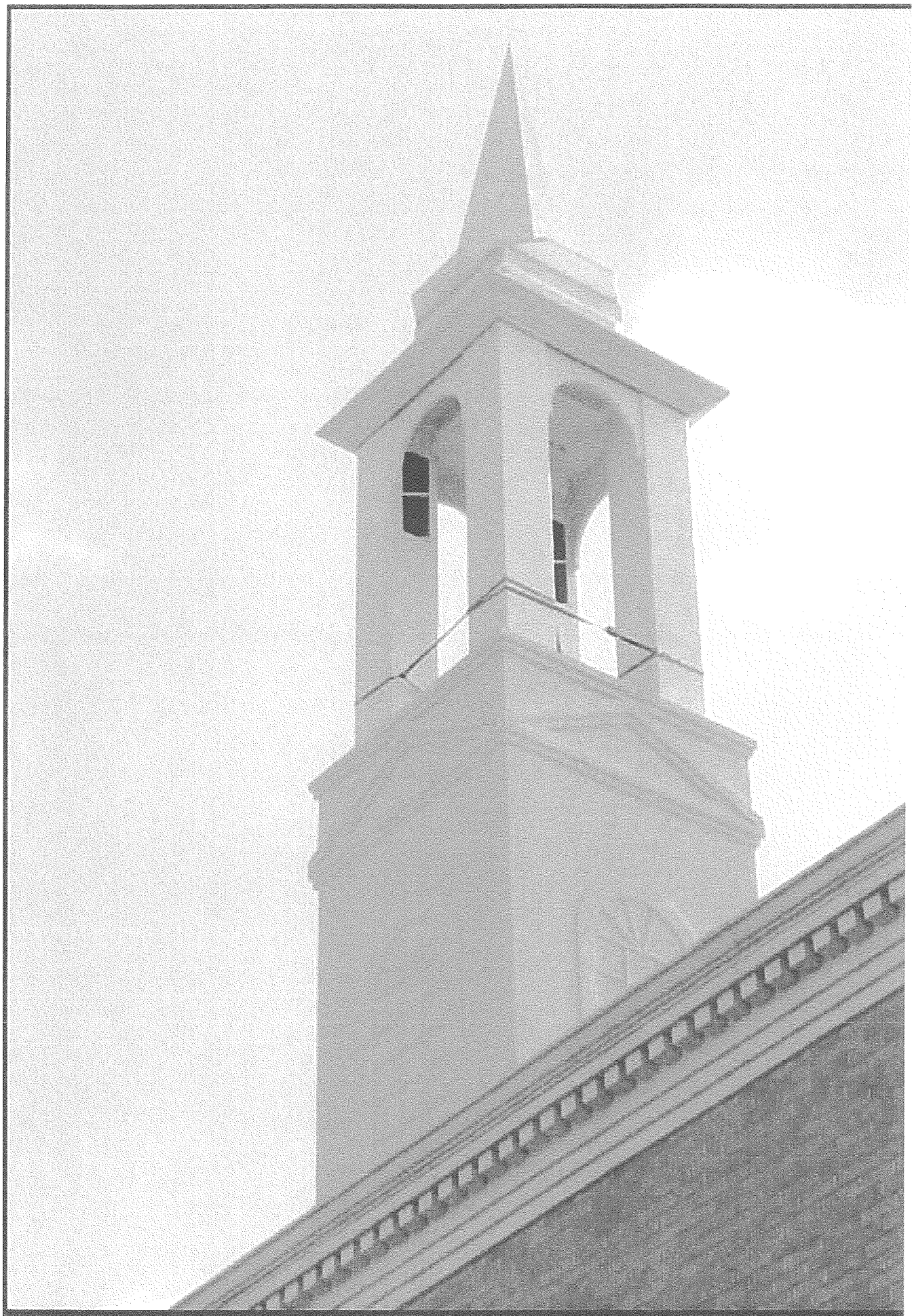
CHURCH CROSS



3 30' CROSSES WITH ANTENNAS IN THE TOPS



CHURCH STEEPLE WITH RF FRIENDLY TILES



CHURCH STEEPLE ANTENNAS IN THE LEGS

45' FLAG POLE 14" DIAMETER

3 FLAG POLES 25" DIAMETER 85' TALL

97' LIGHT POLE WITH 2 CARRIERS FLUSH ON OUTSIDE AND 2 INSIDE R

30' LIGHT POLE WITH RADOME AND LIGHT ABOVE

wp.fowler@att.net
07/12/2004 09:45 AM

To emcdonald@co.seminole.fl.us, ssherman@seminolecountyfl.gov
cc dmerkt@seminolecountyfl.gov
bcc
Subject 150ft celltower on Markham Woods Road

I would like to add a few comments for your consideration regarding the pre-application meeting I attended a couple of weeks ago regarding the 150 ft. Cingular celltower at the Presbyterian church
on Markham Woods Road. I'll list them :

- during the meeting several reasons were cited for the prior failed attempts by Cingular and the church before the BOA and the county commissioners. One that was not mentioned was the breaking of variances. A couple of BOA members and even more county commissioners pointed at this in their questioning and obviously felt uncomfortable with the close proximity of this tower to residences. I hope those concerns will come into play regarding your recommendation because this has been proven to be a huge point of concern.

- Cingular is suppose to exhaust their search for nearby locations that do not break variances. The church about 0.2 miles to the north has not heard from Cingular. They have 20+ acres of land, taller trees on the north side of the property, is willing to talk to Cingular regarding a tower, and the vast majority of their site will NOT break any variances if a tower is placed there.

- During the commissioner meeting a couple of residents brought up the fact that Cingular has bought AT&T Wireless and there is a big AT&T cell currently on the west side of International Parkway. Cingular never answered what they are going to do with those new celltowers. I would think reuse of towers would be a very high priority.

- Part of their presentation before the commissioners was a slide showing their current celltowers in the Heathrow/Lake Mary/Sanford area. I did not see this as part of their submitted documentation, maybe I missed it. Anyway, this slide looked more convincing for their NOT to be a need because of the proximity of their towers. I hope you'll get this slide and look at the proximity of the current towers. It looks very sufficient to me.

- Please keep in mind that the Cingular proposal is for two collocation locations on this celltower. Since this will be the largest tower in the area by far I'm sure they'll have no problem leasing that space to other companies. Remember that roaming revenues can be huge for collocation leasing. Rather than improving their own network I'm sure this opportunity for roaming revenue is a big part of their reasoning for the tower at this location.

- the King residential development is proposed against the north property line of the Prebyterian church. I understand it is not part of your consideration at this time but if the celltower goes in as well as this King residential community you'll have about a 330ft wide parcel of property with a 150ft cellsite stuck between residences on the north and south side of the property. Do you think

this is wise to allow? Also keep in mind that the new proposed location of the celltower is much closer to Markham Woods Road. That will look even worse.

- if they come back with a proposal for a flagpole that would go against what they have already stated in the earlier meetings. They said they'd need an external antenna structure, unlike other cell companies. If they come back with a shorter monopine why not collocate at a tower to the north?

Any of these concerns is grounds to not recommend this proposal but I would think that the multitude of reasons stated by citizens in close proximity to this proposal is sufficient reason to not give this your endorsement.

There are many people quite upset over this so please let me know when county staff has made a decision so I can let everyone know.

I thank you for your time and God Bless.

paul fowler & family
3524 acre ct

Diane Merkt/Seminole
07/16/2004 11:50 AM

To Earnest McDonald/Seminole@Seminole
cc
bcc
Subject Fw: Seminole County Communication Tower Plan

Diane Merkt, Executive Assistant
Commissioner Daryl G. McLain
Chairman and District 5
Seminole County Board of Commissioners
407-665-7209 ph
407-665-7958 fax

----- Forwarded by Diane Merkt/Seminole on 07/16/2004 11:55 AM -----

"Quentin R. Beitel" <qbobbe4@att.net>
07/16/2004 10:18 AM

To <kgrace@co.seminole.fl.us>, <dmclain@seminolecountyfl.gov>, "Dick Van Der Weide" <lstabler@co.seminole.fl.us>, "Brenda Carey" <bkcarey@cfl.rr.com>, <win2004@bellsouth.net>
cc
Subject Seminole County Communication Tower Plan

Seminole County needs a plan to deal with Communications Towers. In individual face to face discussions we have the Markham Woods Association has identified this need. Those of use on Markham Woods Road are again faced with the request by Cingular to erect a Cell Tower. We do not want nor is there a need for this cell tower. Enclosed for your review are some concerns from the Cingular Pre-Application Hearing. This information was emailed to E. McDonald, Planning Department.

Quentin (Bob) Beitel
President
Markham Woods Association
407-333-1436

-----Original Message-----

We would like to add a few comments for your consideration regarding the pre-application meeting we attended a couple of weeks ago regarding the 150 ft. Cingular celltower at the Presbyterian church on Markham Woods Road. They are:

- during the meeting several reasons were cited for the prior failed attempts by Cingular and the church before the BOA and the county commissioners. One that was not mentioned was the breaking of variances. A couple of BOA members and even more county commissioners pointed at this in their questioning and obviously felt uncomfortable with the close proximity of this tower to residences. We hope those concerns will come into play regarding your recommendation because this has been proven to be a huge point of concern.

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There are many people quite upset over this so please let me know when county staff has made a decision so we can let everyone know.

DebbieYero@aol .com
07/26/2004 05:50 PM

To plandesk@seminolecountyfl.gov
cc
bcc
Subject 5210 Markham Woods Road

COPY

I would like to express my opposition to the installment of the cellular tower behind the Presbyterian church on Markham Woods Rd. I feel that to build such an obtrusive and commercial structure in the middle of a completely residential area is unnecessary and should be avoided at all costs. Living very close by, such a structure would directly affect me, and I am sure that the many others living in the surrounding area feel the same way. I hope that you will take into consideration the feelings of those who live here now and will most likely still be living here years from now. Thankyou.

Debbie Yero
3431 Dawn Court
Lake Mary, FL 32746

COPY

"Steven Smith "
<ssmith412@cfl.rr.com>
07/26/2004 02:14 PM

To <plandesk@seminolecountyfl.gov>
cc <paul.fowler@convergys.com>
bcc
Subject against proposed cell phone tower @ 5210 markham woods rd.

To whom is may concern:

I spoke at the last meeting on this cell phone tower issue and am unable to attend tonight because of a sick child ;however, my husband and I live at 3700 Wimbledon Drive in Shannon Downs subdivision and we would be directly affected by this tower. We specifically chose to buy our house in this area because it was solely residential. This tower is too tall and an eyesore even as a cross or tree and will drop our property values. It will be seen from our backyard and my daughter will be forced to play underneath high frequency radiation 24 hours a day!

Cell phone towers belong in commercial areas where no one is living underneath it's exposure 24 hours a day. I know the board is not allowed to consider health affects of high frequency radiation but as I mentioned at the last meeting we don't always know the health risks of certain items in our environment early on. For instance my grandparents showed me ads from the 1920's were cigarette smoking was actually billed as good for you and we all know what happened with that.

As at the last Seminole county meeting on 2/24/04 the proposed cell phone tower should be defeated again. They do not belong so close to our hard earned and worked for houses.

Thank you,

Dr. and Mrs.. Steven J. and Chris A. Smith

COPY

Fayeglovermk@aol .com
07/26/2004 01:22 PM

To plandesk@seminolecountyfl.gov.
cc
bcc
Subject Cellular Site Proposal

I am not in favor of this cellular site proposal on 5210 Markhamwoods Rd. Based on the company using the cross that my Jesus shade his blood for our sins as a cover up. ABSOLUTELY NOT!!!!!!

Sincerely Yours,
Faye Glover
5348 Carter Rd
Lake Mary, FL 32746